SHETLAND ISLANDS OIL SPILL

OVERSIGHT HEARING
BEFORE THE
SUBCOMMITTEE ON
OVERSIGHT AND INVESTIGATIONS
OF THE
COMMITTEE ON
NATURAL RESOURCES
HOUSE OF REPRESENTATIVES
ONE HUNDRED THIRD CONGRESS
FIRST SESSION
ON
SHETLAND ISLANDS OIL SPILL AND ITS IMPLICATIONS FOR OIL
TRANSPORTATION AND SPILL RESPONSE IN THE UNITED STATES

HEARING HELD IN WASHINGTON, DC
FEBRUARY 4, 1993

Serial No. 103–3

Printed for the use of the Committee on Natural Resources

U.S. GOVERNMENT PRINTING OFFICE
70–544
WASHINGTON : 1993

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0–16–041252–8
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SHETLAND ISLANDS OIL SPILL AND ITS IMPLICATIONS FOR OIL TRANSPORTATION AND SPILL RESPONSE IN THE UNITED STATES

THURSDAY, FEBRUARY 4, 1993

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to call, at 11:22 a.m., in room 1324, Longworth House Office Building, Hon. George Miller (chairman of the subcommittee) presiding.

OPENING STATEMENT OF CHAIRMAN MILLER

Mr. MILLER. The subcommittee will come to order. The first order of business will be for me to extend my apologies to the witnesses and to the audience and to others for the delay in this hearing. We had a meeting with President Clinton, and unfortunately we were not notified of that meeting until very late last night, and I was not able to apprise people prior to this morning. I hope that you understand; meetings with the President weren't something that ordinarily interrupted my schedule the last couple of years.

The committee meets today to hold a hearing on the recent oil spill in the Shetland Islands and its implications for the United States. Nearly 4 years ago, national concern about the vulnerability of our coastal environment was raised dramatically by the Exxon Valdez oil spill in Alaska. In response, the Congress passed OPA 90, the Oil Pollution Act of 1990, which was intended to significantly improve our oil spill prevention and response capabilities.

The focus of today's hearing is on both the event in the Shetlands, and what we might learn from it. How are we better able to look toward the implications of OPA 90 with that event in mind, and is there more that needs to be done as we start to review the law against the actualities of the implementation of that law?

As this committee has done for a number of years, it has continued to engage in oversight of OCS, of oil spills, and their implications not only with respect to our jurisdiction of the Alaska situation but also on the Outer Continental Shelf of the United States.

Our first witness has had much experience with oil industry operations in the Shetland Islands and the North Sea and has been closely involved in the response to the January oil spill. We are very pleased and honored to have Mr. Malcolm Green, who is the
executive director of the Shetland Islands Council, join us this morning, and we look forward to his testimony.

Mr. Green, if you would come forward. Welcome to the committee, and again, my apologies, especially since you have been so generous with your time and your effort to help this committee. My apologies for our late start this morning. I hope it has not inconvenienced you to a great extent, and I want you to proceed in the manner in which you are most comfortable. We look forward to your testimony. Your entire statement will be put in the record, and you may proceed in the manner which you think will be the most helpful.

Thank you.

STATEMENT OF MALCOLM E. GREEN, CHIEF EXECUTIVE, SHETLAND ISLANDS COUNCIL, LERWICK, SCOTLAND

Mr. Green. Thank you, Chairman.

If I could perhaps begin by setting the scene for those who don't know where Shetland is—and there are a lot of people in that category—and describing what the Islands Council is and what its responsibilities are, so you get a feel for how we can then react to this kind of severe incident.

Shetland stands in the North Sea. It stands fairly close to the conflux of the Atlantic and the North Sea itself. It is quite small. It is beyond Orkney, and it doesn't often appear on the maps within the United Kingdom. When they show weather, for example, they usually miss Shetland out. When they show nature programs, they occasionally miss Shetland out. But that is where it is; it is in the North Sea almost equidistant between Scotland and Norway, and to the west above it are the Faroe Islands, which belong to Denmark.

Shetland didn't always belong to the U.K., which it is part of. It used to be part of Norway, so it has had a strong history, a history of lots of invasions—if that is the right word. Invasions in the past were carried out with a degree of violence; invasions in the recent past are commercial invasions to do with, at the turn of the century, the fishing industry, which brought a lot of people into Shetland and out again. In the last three decades we have had the invasion and the absorption into the economy and the social infrastructure of Shetland of the oil industry.

[The map follows:]
I can show you on the more detailed map Shetland itself, and I think you have, Mr. Chairman, a copy handy to look at in detail. It shows Shetland itself. It is not big. You are looking at something about 70 miles, or thereabouts, long—perhaps a bit longer—and not too wide. It is a collection of islands, of which some are populated. They all are under the jurisdiction of the Shetland Islands Council. It is the single local authority.

In the United Kingdom you have two levels of government. You have the national government and local government, and the two work reasonably well together, but there is obviously a tension, and that has shown itself in the recent past with a degree, quite a severe degree, of centralization of authority and power towards Westminster. Shetland is, first of all, part of Scotland and recognizes that it is different in lots of ways.

The Islands Council is made up of 25 elected representatives, elected every 4 years. They don't stand on party ticket; they don't stand on national policy at all. They stand based on the direction and the push that comes from their constituents. It is a very good example of democracy at work. The responsibility that they have is fairly broad. Within the Islands, they are responsible for social services, education, roads and transport. And that includes responsibility within Shetland for providing the equivalent of a bridge between islands. We run inter-island ferries, roll on/roll off ferries, and charge for them, keep the cost low for users. We are responsible for housing and for the development of industry and commerce within Shetland, and we put quite a bit of money into that. Education, leisure, and recreation. We have a very strong system, though it is part of a joint committee on police and fire. So we cover virtually everything including the national issues like defense and, indeed, what happens in the seas beyond our jurisdiction.

We are unique, along with the Orkney Islands, in that we have a significant oil terminal on Shetland, and ours takes out from what are called the Brent Systems. They are owned by 32 oil companies who operate in the North Sea. The terminal itself is a trans-shipment point for oil, and it is the largest trans-shipment port in Europe. Its turnover in cash terms and in terms of the product that it shifts is greater than the Port of London. It handles around 700 to 1,000 tankers a year, and it is shifting something on the order of a million barrels a day at the moment. It is starting to decline but is still very active.

The Council owns the site on which the terminal is built, and it charges a rent for that. It also has agreements with the oil industry in the terminal, and it gets what was intended to be the effect of a royalty or a barrelage charge. It also gets an import charge for oil coming into the terminal, and it charges for oil going out. It is not, though, as rich as has been described in the press. It does fairly well with its interface with the industry, but it recognizes that it is there as a part of the local economy.

Very important, it has additional powers that most local authorities don't have. In fact, no other except Orkney in the United Kingdom has these powers, and that is the ability to manage and operate the port of Sullom Voe. That gives it fairly extensive powers on pilotage and the management of ships and tankers in and out of Sullom Voe, these 700 that I mentioned earlier.
If you were to draw around the Shetland Islands—as is drawn on most international charts—a 10-mile exclusion zone around the coastline on the west side, that has been achieved by agreement with the Council and the tanker users. But it is voluntary, and this is where we start to come into the problems that may or may not lead to tanker incidents around the coast.

If there are tankers that are due to come to uplift oil from Sullom Voe, or indeed gas, the Council has a schedule which tells us who they are, who owns them, where they are from, what they have been doing, what their record is, when the last safety inspection was, and where they are coming from. We start to talk to them from the port control at Sullom Voe when they are about 200 miles away, and then we start to monitor them when they get closer so that we have got a clear idea of where they are, where they are coming from, what their track is, and then we overfly them using a helicopter when they get within range of Shetland.

The reason for that is that, as you probably know, tankers do in some instances discharge their ballasts. They clean their tanks at sea, and that causes pollution. If we see this happening, then we ban that tanker. We don’t allow it to uplift oil from the terminal; they don’t get to go back again, so the sanction is a commercial sanction. If we find that the tanker has done anything we think is less than the standard which we think is appropriate for using the terminal, we ban it. It is a commercial sanction; it is not any other than a commercial sanction.

The Council members—as I said, 25 in number—are elected every 4 years, and they sit on a variety of committees. They have the authority to make a lot of decisions within Shetland as a group. They don’t have individual authority, but as groups of two or more and, indeed, as committees they have a great deal of authority. They delegate quite a lot of that to the executive, which is a staff in total of 2,500, of which I am the chief executive. So I take my direction from the Council and make sure that it is carried out by delegation down through the various departments, most of which interface with the committee.

In the case of the *Braer* grounding, that is what is described as the application of emergency powers within Shetland by the Council. In that case I have a great deal of authority to act without having to refer decisions to the Council, to act, obviously, in an emergency. If I declare a state of emergency, which I did in this case, then I can take quite significant and fast action.

In the case of the *Braer*, we expected it to happen or something like it to happen, and had been warning the Government of this possibility for some time. As I said, in the waters where we have authority, which is around the Sullom Voe area, we can do a great deal to ensure that the standards that are applied there—seamanship and management of tankers, the state of the tankers themselves—are of a standard acceptable to Shetland. We have coined the label “the Shetland standard,” which we want to try and persuade other people beyond our jurisdiction to adopt, and this is part of the message I have today to do with international standards.

The *Braer* itself, as has been said elsewhere, was an accident waiting to happen. We don’t know what caused it. There is a lot
of speculation which the Council and I are staying clear of, because the U.K. Government's Marine Accident Investigation Branch will carry out an initial investigation to determine whether there needs to be a formal judicial inquiry into the incident. That will take time to take place, and we have to wait for that to happen. That is the way it has to happen, and there is no point in trying to speculate on it.

What the Council has done in order to get awareness raised, not because of this incident but because of the likelihood of it happening either in Shetland or elsewhere in the world, is organize a conference in March this year in Shetland, and the items on the agenda are those which will surround this kind of accident. They are to do with improving and raising the standards of the management of ships at sea, particularly those that are carrying dangerous cargo, and it isn't extreme to say that what we are after is the ability to manage tanker traffic and other hazardous cargo traffic internationally at the same standard as occurs with the management of air traffic internationally.

We have some way to go to raise the standard of management at sea to that level, but it has to happen because the conservative estimate of the cost of clean-up in this case is at least 50 million pounds, and it may be higher—50 million pounds, $80 million, or thereabouts. That cost is what has to be taken into account after an event of this nature, and there are other events around the world. The Exxon Valdez is one example.

So there has to be an investment, in the Council's opinion, in standards of ship management at sea to reduce dramatically the chance of this kind of thing happening. And those are fairly straightforward things, like ensuring that tankers don't operate at the margin that commercial competition dictates. It isn't the tanker or the tanker owners' fault necessarily that these things happen. It is the commercial regime in which they operate, and that commercial regime will always be close to the safety margin if the governments of the world don't insist on standards at sea similar to, if not better than, standards of management in the air.

If I could mention briefly the response that took place towards the specific incident—and I don't want to dwell on it because our concern is to do with trying to make sure that this kind of thing doesn't happen again, trying to encourage others to participate in that. I heard at 6:30 in the morning. I got a phone call to say that there was a tanker adrift without power to the south of Shetland, and the estimate then was that it was some 10 miles away. There is no certainty about that, and there is no certainty as to how long it had been in that condition, but there is fairly good and a fairly widespread weight of evidence to indicate it was several hours before the news actually got to me. It got to the Coast Guard earlier, but not a great deal earlier.

It was then necessary to mobilize the people that I was responsible for at that time, which essentially was the emergency control room. At that time we had no idea whether it was going to drift past Shetland and miss it altogether—it was certainly coming towards Shetland—or whether it was going to hit where it did hit, the southernmost point.
So we set up the emergency center in the center in Shetland, which is in Lerwick, in the capital of Shetland, and started to monitor it. That center was set up and fully staffed by 9:00 a.m. We had people down by helicopter from Sullom Voe, which is some 50-odd miles away from the incident site. They were down there by 7:00 a.m. to monitor from the shore and from the airport what was happening.

The responsibility in the U.K. is twofold for this kind of incident, and it depends on the geography or the location of the pollution itself. If it is at sea, it is almost, in fact, up to the shoreline, then it is the responsibility of the U.K. Government's Department of Transport and, in particular, the Marine Pollution Control Unit of that Department. They have the same degree of authority as I have in an emergency situation to act. They, for example, are responsible for initiating, managing, and controlling the spread of dispersants to break up the oil slicks on the surface, and that was one of the things that caused most of the problems for us with the local residents.

The Council is responsible for all that happens beyond the shoreline, but it also has an additional responsibility. Because of the existence of Sullom Voe and the existence of the Act that allows us to run marine pollution control units of our own, it has some responsibility at sea.

The Coast Guard are also involved. They are a separate branch of the Department of Transport. So are, to a limited extent, the police and the fire units if they are needed. So there is a variety of agencies involved, none of whom are responsible to a single individual or single entity.

What we did was set up a joint response center to deal with that particular incident. That was up and running by lunch time that day, which was about an hour or so after the *Braer* had hit the shore, and it worked very well, but it worked on the basis of cooperation. I, by agreement with all the agencies concerned, acted as controller and coordinator for the whole of the operation.

It could have gone wrong if the cooperation hadn't been as good as it was. People were operating at very high levels of tension and stress, working probably 18 hours a day in these conditions, and it would have been possible for somebody to snap and for something to go seriously wrong. It didn't happen. All concerned rose to the challenge and, in my opinion, dealt with it extremely well.

Despite the warnings about low morale, depression, and so on that can hit a community after this, there is a very clear determination in Shetland to beat this problem, what is left of it, and to go on into the future and to try and persuade all those concerned, all those who have authority, to take action on ship management and traffic, to do something positive to try and stop this thing happening.

The response indicates that quite a few birds and mammals were killed by the oil, they were polluted by it. The media, the press, enjoy or seem to want to focus on issues like dead birds, oiled animals, and so on. That is dealing with the aftermath. A lot of money is raised for these kinds of things. What the Shetland Islands Council has done is said that it doesn't want to get into that kind of arena because that is dealing with the effect. It wants to con-
centrate on dealing with the cause of these incidents. So it has set up what is called the Marine Environment Foundation whose purpose is to raise money to continue the work that this conference in March will begin, to raise consciousness, to try and encourage people around the world to operate at a safer and better standard environmentally.

Thank you.

[Documents submitted by Mr. Green follow:]
The concern of the Shetland Islands Council for improvements in vessel traffic management is contained in the following draft proposals for action which may go for debate to the International Conference, Managing the Marine Environment in Shetland in March this year.

1. There should be an international convention requiring vessels carrying oil and other hazardous cargoes to comply with reporting requirements, passage planning and agreed routes, through vessel traffic management systems administered by coastal states on a basis of local control.

2. In areas of environmental and economic sensitivity mandatory, traffic separation schemes and areas of avoidance should be established.

3. Surveillance systems, sufficient for the purpose, and under local control, manned by properly qualified staff should be provided under an internationally accepted funding regime to manage the passage of traffic as proposed in 1. and 2. above.

4. Sufficient powers of intervention in potential casualties should be available to the vessel traffic management systems together with assistance to provide protection to coastal communities.

5. National Governments should take steps to ensure that ships are properly operated in accordance with existing International conventions and regulations. In order to make this certain they should create the financial climate which will remove the pressure for shipowners to operate at the margins, merely to stay in business.
2. Mr. G. Miller  
Committee on Natural Resources  
US House of Representatives  
Washington DC

6. There should be a return to direct links between the flag-state, the base of operation of the beneficial owner and the nationality of the complete crew to ensure a coherent management structure with adequate accountability. Language commonality and proper efficient training principles should be underpinned financially and administratively by the national Government.

Yours sincerely

[Signature]

Chief Executive
Mr. George Miller  
Chairman, Sub-committee Oversight & Investigations  
Committee on Natural Resources  
U.S. House of Representatives  
Washington DC 20515-6201  
U.S.A.

Dear Mr. Miller

Thank you for your letter of 25th January 1993 inviting me to testify at a hearing before the Sub-committee on Oversight and Investigations on 4th February at 9.00 a.m. The purpose of the hearing being to examine and consider the events surrounding the grounding of the vessel m/v Braer, on Shetland on 5th January 1993, in order to examine what measures may be taken to help prevent such disasters in the future.

The responsibility for dealing with the incident is shared between the U.K. Government and the Shetland Islands Council. In broad terms the national Government is responsible for controlling pollution at sea whilst the local Government body, in this case Shetland Islands Council, is responsible for the effects of pollution beyond the shoreline and on land. This incident is different from most in that pollution from air-born droplets was experienced some distance inland.

Shetland Islands Council also has additional exceptional powers which give it some authority over certain harbour areas in Shetland and especially the harbour area at Sullom Voe, site of Europe’s largest transhipment oil terminal. For this reason the Council is particularly well equipped to deal with oil spills but it has to be said that the severe weather conditions precluded any attempt to control and contain this spillage and indeed it was the weather which eventually dispersed and, we hope, disposed of the cargo and the fuel oil.

The impact of the incident has yet to be properly measured. The Council has commissioned an impact assessment study which will seek to establish, amongst other things, the likely final cost of the incident and this in turn should provide an indication as to whether the compensation available will be sufficient. First estimates should be available in about two weeks.
2.

Mr. G. Miller  
Committee on Natural Resources  
Washington DC

In the meantime, some businesses in Shetland face growing difficulty because of the lack of cash flow which would have been achieved by normal seasonal harvesting at this time of, for example, salmon. Other longer term effects include the damage which may have been done to Shetland's image as a clean place whose products sold on the reputation of freedom from taint. It has to be emphasised that because of the nature of the cargo – light crude – and the extreme severity of the weather, the pollution effects were not as serious or as visible as they might have been, but nevertheless a very large quantity of oil was spilled on the Shetland coast and the damage to our image is likely to persist.

Obviously Shetland intends to win the battle for recovery and in my opinion it will do so quite quickly and effectively. The people are hardy and resourceful and have had to deal with ill-fortune caused by isolation and severe weather in the past and will do so this time.

Part of that resourcefulness shows itself in foresight and in careful planning for the future. The Council has an excellent interface with the oil industry at Sullom Voe and has taken careful steps to try and secure a reasonable financial future for the community. Another example of foresight, particularly appropriate at this time, is the Marine Environment Conference scheduled in Shetland in March this year at which issues fundamental to the avoidance of a Braer type of incident are due to be debated. You already have an invitation to attend and speak at this conference and I hope you will be able to do so. In order to assist you and the enquiry and to emphasise the essential international nature of the conference I attach a copy of the brochure.

As you will appreciate, the impact of this incident is complex and widespread and there is hardly anyone in this community who will not be affected. The Council is determined to do all it can to mitigate the effects but is committed to prevention rather than cure, as evidenced by the creation of the Marine Environment Foundation. This is designed to raise awareness of the danger to the seas internationally and of the need to raise standards in the management of the marine environment, not only around Shetland, but everywhere. Shetland cannot do this on its own. We hope that your enquiry will contribute towards the objectives which need to be shared by everyone.

As you will appreciate, whilst I can give you information about the incident, how we dealt with it and what we now propose to do; there are certain areas on which I cannot at the moment comment. The U.K. Government has prime responsibility for establishing cause for this incident through its own enquiry and we, and others, must await the result of that enquiry before attempting to attach fault or blame to anyone.
3.

Mr. G. Miller
Committee on Natural Resources
Washington DC

Notwithstanding that, Shetland has been damaged and we must all work together to
do our best to avoid an inevitable similar disaster here, or elsewhere unless
standards are significantly improved. I look forward to meeting you later in the week.

Yours sincerely

[Signature]

Chief Executive
"The Sea is the lifeline of the world. The measures we take to protect and sustain that lifeline, at a time when it is under serious threat, should be an example for others to follow"
Situated at the crossroads of the North Sea and the Arctic Ocean, the Shetland Islands are in a unique geographical position to monitor the destructive impact of man's actions on the marine environment.

A newly aware of the need to reverse the damage which continues to be inflicted on an increasingly massive scale, the Shetland Islands Council is sponsoring MANAGING THE MARINE ENVIRONMENT: THE SHETLAND STANDARD, a major worldwide Conference on vital marine environmental issues.

The Conference, which will be staged in the Shetland Islands from 30 March to 1 April, 1993, will represent an unparalleled opportunity for governments, international agencies, marine experts, senior company executives and other interested parties to debate the following topics:

- Control of Pollution of the Sea
- Sea Fisheries Management
- Decommissioning of Offshore Installations and Submarine Pipelines
- Port and Shipping Management and Control Standards

The ultimate aim will be to formulate a worldwide agenda for action relevant to all four issues: a positive statement of intent by those in a position to influence, monitor and motivate environmental management as a coherent force.

By doing so, the Conference will be initiating and establishing the Shetland Standard as an acknowledged measure of marine environmental quality at a time when there is an urgent need to translate the political will shown at the Rio Summit into a concerted effort to rescue the world's seas from everlasting damage.

Conference Chairman:
Mr. S. Thomason CBE.
Convener, Shetland Islands Council.
The sea is many things to many people.

To some, a source of energy, food and wealth. A natural avenue to establishing world trade links or waging wars. An open door to man's unending quest for new horizons.

To others, a complex place of wonder and abundance with an extraordinarily diverse ecosystem which supports a stunning variety of animal, fish, bird and plant life evolved over millions of years.

Too often, the sea is something to be exploited in the name of industrial and commercial activity.

Fuelled by the present lack of international agreement on ways to monitor and control this activity, it is perhaps not surprising that this exploitation of the sea has been transmuted into a serious threat to our marine environment.

Pollution, the extraction of oil and gas, shipping and fishing are all recognised elements in what has become an evermore issue of world-wide concern.

Stimulated by media attention, the overview is one of economic benefit set against the discharge and dumping of toxic waste.
materials, offshore oil spills from shipping, the devastation of fish stocks and other natural marine habitats.

The lasting global images are those of littered beaches, estuaries and shorelines contaminated by a mixture of hydrocarbons and other synthetic chemicals, seabirds coated in oil, the netting of dolphins and the slaughter of seals.

MANAGING THE MARINE ENVIRONMENT. THE SHETLAND STANDARD Conference will take place against this background and the acceptance that many of the existing marine environmental problems occur despite the imposition of restrictive licences and international regulation.

It is all the more urgent, therefore, that delegates address the serious threat to the world's seas with a view to producing a definitive Agenda for Action which will project the Shetland Standard as a realistic long-term measure to reverse a disturbing global trend.

The Shetland Islands Council welcome enquiries from all who wish to participate in the Conference and contribute to the debate which will provide a unique opportunity to influence a new approach to utilising the resources of the sea without destroying the marine environment.
Topic: Control of Pollution of the Sea

Delegates to the MANAGING THE MARINE ENVIRONMENT: THE SHETLAND STANDARD Conference will be asked to address the control and monitoring of pollution in a local, national and international context. By doing so, the Conference will seek to formulate proposals— which are not only applicable to the role of the individual control authority but interface on a worldwide basis.

The experience gained from a number of appropriate Shetland Islands Council initiatives will be central to discussion. This includes the Council's success in setting up new legislation, in the form of the Zeland County Council Act 1974, to deal with coastal management, the formation and operation of the Shetland Oil Terminal Environmental Advisory Group and a unique and innovative approach to pollution removal and prevention as demonstrated in a system of Sealed Bids for oil-spill problems.

Likewise, the Council's use of an anti-pollution helicopter surveillance scheme and involvement in KIMU, the Europe-wide local authority anti-pollution action group, will be seen as topical at a time when there are mergings of Government proposals to establish United Kingdom environmental protection agencies.

This threatens loss of local accountability and control, and the financial implications of central government legislation, represent areas of major concern to existing pollution authorities.

Similarly, the Conference will use an overview of measures taken to monitor and reduce pollution of the sea in other parts of the world as an essential ingredient of the workshop group's deliberations on what procedures should be adopted to establish the enforcement of agreed regulations in international waters, for example, the development of an International Antarctic Convention.
A keynote speaker will present an overview of traditional and existing sea fisheries management practices as a background to the Conference debate at a time when the future ownership of fish stocks is a crucial issue of worldwide interest.

Workshop discussion will address the question of whether fish quotas should transfer from being a common resource to that of private property in line with the Icelandic decision of 1985 when quotas within territorial waters came under the ownership of that country's fishing companies.

MANAGING THE MARINE ENVIRONMENT: THE SHETLAND STANDARD delegates will be asked to examine the implications of such a radical change on a worldwide basis, highlighting the possible effect on the fish catching industry and communities which are heavily dependent on fishing.

It will also be the task of the workshop to reach a conclusion on whether there should be restrictions on quota sales in order to safeguard the rights of communities to fish nearby waters. Likewise, delegates will seek to determine whether ownership of quota should remain with national governments - with allocation by licence to fishing vessels - pass to Producer Organisations or to the owners of fishing vessels.

By doing so, the workshop group will formulate an Agenda for Action which will project the Shetland Standard as the most efficient and equitable method of managing future fishery resources.
The prospect of a gradual decline in North Sea oil and gas production over the next 25 years has stimulated debate on the environmental impact of decommissioning offshore installations and submarine pipelines.

Yet Government, the oil and fisheries industries and marine biologists are at variance on how best to undertake the clearance of the seabed.

MANAGING THE MARINE ENVIRONMENT: THE SHETLAND STANDARD will be a forum for translating debate into positive thinking: an opportunity to produce agreed proposals which will become the basis of a workable approach to a vital area of future environmental concern.

The economic implications of decommissioning will be central to conference considerations which will also take into account the views of the oil and fisheries industries at a time when there is an argument in favour of retaining selected platform components as material for inshore artificial reefs.
The Acrone Calls and the Exxon Valdes have become synonymous with high profile shipping disasters which have had potentially catastrophic effects on the marine environment and which have also been analysed for profound effects on international shipping practice.

Yet there are many other areas of day-to-day concerns regarding the manner in which ships and ports conduct their business. The aging of the world tanker fleets, the poor return on investment due to over-congesting, the continued reduction in maintenance of ships, the flight from traditional flags and the consequent reduction in the number and quality of crews, letters of wishes and contentious practices in what can be seen as a general decline in shipping standards.

This is particularly noticeable as the ship藉ure interface and leads to in creating port and port-state intervention in what should be flag-state laws.

MANAGING THE MARINE ENVIRONMENT: THE SHETLAND STANDARD will be an opportunity to readdress the balance by influencing tighter monitoring and control of operating standards at both local and international level.

Ship owners, ship charterers, Classification Societies and marine insurers will seek to project new thinking on issues such as shipboard working practices and manning, port state inspection, pre-arrival information and the control and monitoring of traffic in coastal waters.

Workshop debates will also encompass the availability of professional marine staff, the impact of hydrography, the relevance of modern navigational practices, the experience of VTS into international and other ship-board operational processes.

Where applicable, the Shetland experience of declining ship operating standards will be used to stimulate discussion. This, in turn, is expected to lead to initiatives capable of world-wide application in improving the standards of operation of the world tanker fleet.
The Shetland Islands Council's decision to sponsor and stage MANAGING THE MARINE ENVIRONMENT: THE SHETLAND STANDARD represents a commitment to the concept of exceptional quality.

Already developing and applying the Shetland Standard to selected activities and products which carry the Shetland name, the council is of the opinion that the same principles should, where possible, be applied to the measures taken to protect the world's marine environment.

MANAGING THE MARINE ENVIRONMENT: THE SHETLAND STANDARD will bring together those who are in a position to influence, motivate and monitor marine environmental management as a coherent force.

It will be in keeping with the spirit of the Shetland Standard that delegates will be encouraged to use persuasion rather than enforcement as the means of finding real and lasting solutions to the problems which currently face the marine environment.

Further information on the Conference arrangements can be obtained by contacting: Mrs Barbara Rae, Conference Co-ordinator, Centre for Environmental Management and Planning (CEMP), 33 St Machar Drive, Old Aberdeen AB2 1RY, Scotland, UK. Tel 0224 272179/272483 Fax 0224 487658.
CONFERENCE MURMUTÉA

Shetland Islands Council

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Disclaimer: All information contained in this brochure is correct at the time of publication but subject to change without notice. Shetland Islands Council reserves the right to change the programme at its discretion.
Malcolm Green, Chief Executive of the Shetland Islands Council (Scotland), today urged the United States Government to join an international effort to prevent further oil spills from ocean-going tankers. In testimony before the House Natural Resources Committee, Mr. Green proposed that ocean-going tankers should be subject to the same kind of radar and radio control as the air traffic control system that has been in place throughout the world for many years.

Testifying in the wake of three major tanker spills that have occurred during the past two months, Mr. Green said that the governments of the world can no longer ignore the fact that oil spills at sea have a global environmental effect. He made the following specific recommendations for change:

--- ships carrying oil and other hazardous cargoes should be required to file voyage plans just as airplanes file flight plans, and to communicate with traffic controllers in local areas before deviating from their agreed route

--- when sailing in local coastal areas, tankers should be monitored on radar by people who are knowledgeable about local waters, hazards, currents and tides

--- mandatory traffic separation lanes should be established in heavily traveled areas which are environmentally sensitive

--- tankers should be registered and crewed in the same country where the owner is based, to assure there is a common language between the owner and the crew, and proper training of crew members.

--- international conventions and regulations governing operation of tankers should be strictly and uniformly enforced by all nations
The Shetland Islands, in the North Sea just west of Norway, are home to the Sullom Voe Oil Terminal, the largest oil shipping port serving the North Sea oil fields. Prior to the BRAER grounding, the Shetland Islands Council organized an international conference on "Strategies For Improving the Marine Environment", to bring together representatives of governments and other relevant interests from around the world to discuss ways to reduce the risks posed by the exploration, drilling and ocean transportation of oil and other hazardous products. The conference is scheduled to begin on March 29, 1993 in Lerwick.

"We are no longer living in an age when clipper ships carried cargoes of silk and spices," said Green. "Today, when a supertanker full of oil spills its cargo, enormous environmental and economic damage is done. The nations of the world, and the shipping industry, must cooperate to create an international traffic management system that prevents oil spills like the EXXON VALDEZ, the AEGEAN SEA, the BRAER, and the MAERSK NAVIGATOR."
Mr. MILLER. Thank you. Thank you very much for your testimony.

You said at one point in your testimony that out of economic and commercial necessity tankers operate to some extent at the commercial margin and because of commercial regimes of competition that are placed on them. That is a well-recognized argument in the debates around whether or not to impose additional regulatory command and control on tankers and requirements on the owners of the cargo and the owners of the ships. But it also appears, from where I sit, that the Shetlands were able to provide your Council some ability to, in fact, override those arguments of commercial necessity, if you will, in terms of the protocols that you have established. Why in the Shetlands and not in many other areas, if any other areas, of the world to that extent?

Mr. GREEN. Chairman, the answer is that the interface with the oil industry at Sullom Voe is one which is carried out by the Council on behalf of the community.

When oil first came to Shetland—there was a great deal of oil in the East Shetland Basin—it was a fact that it had to come ashore somewhere, and the only place it could come ashore was Shetland. So the practical, pragmatic answer to that particular problem, which could have led to the Council staying entirely clear of it and leaving it to the Government, was that the Council decided to control it by participation, and it has done so ever since.

The Sullom Voe Association, as it is called, is a management body which sits over the management of the terminal; 50 percent of the directors are Council members, and 50 percent are oil industry representatives. It is because of the significant involvement in a commercial interface by the community that these safeguards have been applied, and they are not being applied purely for esoteric or environmental reasons on their own. There is a significant fishing industry in Shetland, and now there is a significant salmon farming industry. Shetland, by large measure, markets itself internationally with an image of purity, clear clean air, clear clean waters around its shores from which its products come and from which we sell and get our own commercial benefit. It is to safeguard those that very stringent controls are applied through the Sullom Voe Association and in the various legal interfaces that exist, and it has to be said that the agreement of the oil industry terminal managers. They give us information on tankers, where they have traded with them elsewhere, and they are as keen as we are to apply these standards of management at the port, but the initiative has come from the Council.

Mr. MILLER. Many of those criteria that you just set out, in fact, existed—and this is why we looked at Sullom Voe—at the time of the Exxon Valdez oil spill in Alaska. The oil had to come ashore but, in fact, leaves Alaska at one point. What you are telling us is that you were able to use that as leverage to get a regime that the people of the Shetlands felt comfortable with and that would provide for their protection. Let me ask you two questions with respect to that—really one question for the moment.

That is, when the negotiations took place between the people of Alaska and the Federal Government and the oil industry, many representations were made about how that facility would be run.
I don't expect you to comment on those, but those representations were made, and then from that time to the 10 years later when you got to the Exxon Valdez, you saw a steady erosion of those standards of operation. The margins of safety just continued to erode to such a point that on the night of Exxon Valdez, of course, there was absolutely no ability to cope with a spill of that magnitude.

How are you able to maintain the standards and the margins that you set some time ago and, as of today, feel that you are still able to maintain and prevent the erosion of the margins of safety?

It is somewhat of a political question because the pounding constantly comes in from the operators that you have got to keep changing this because they can't afford to operate in that fashion.

Mr. GREEN. We have this as well, and I will give examples of it. I think there are two main areas in which we have managed to have sufficient control to insist upon standards. The first is that the Council moved to buy the land on which the terminal was to be built and in doing so then had the leverage to ensure that it was built to a particular standard environmentally, and as far as Shetland is concerned, it could insist upon it being returned to green field after it was finished with. That was also part of the planning condition.

The Council then and now has probably more significant powers than you may have in some of your local administrative areas, but I'm not too sure.

The other one is that the Council then worked very hard and, I think, very competently to have enacted through Parliament what is called the Zetland County Council Act. It used to be that the name of the county was Zetland prior to the creation of the Shetland Islands Council in the 1970s. It is that Zetland County Council Act that carries in it quite significant powers to operate and manage harbors and ports, particularly those around the terminal, and to insist upon particular standards in the operation of those ports. We have that one.

We also have a variety of legal deals done with the oil industry. For example, there is one called the Port and Harbor Agreement which brings us income, but it also allows us to insist, for example, on the maintenance of the jetties. The terminal is served by four jetties, four tanker jetties, and the oil is shipped over those from the holding tanks on to the tankers.

The deal with the industry—this is a 25-year deal due for renegotiation in a few years time—is such that the Council gets a payment for every barrel, every ton of oil, that goes over those jetties, but it also owns the jetties as well. It owns the hardware of those jetties from the shoreline out to the point where oil is transshipped on to the tankers. That ownership gives it the ability to insist, through the agreement, on the standard of maintenance for those jetties.

Now there has to be commercial tension between the Council in insisting on those jetties being maintained at a particular standard—as they stand in the sea and the sea is quite corrosive—and the need of the oil industry to keep its costs down. But the Council has, in a sense, the last word on these issues, and it will insist upon standards that it thinks are appropriate. They are quite severe standards for the maintenance of those jetties because while
the throughput of the terminal is declining, as it is now—going down and will go down towards the end of the century—it also is the case that the weather, as you have seen, in January and at other times of the year around Shetland is very severe. It can be severe even in the relatively sheltered waters around Sullom Voe.

We need standby jetties in case anything happens, as happened 15 years ago with the Esso Venesia. A jetty purely to take on a tanker that can't get on to an existing jetty. So we have insisted that those four jetties are retained and not decommissioned as the industry would like to do. So that, as I said, leads to tension, but the reasons for doing it, we believe, are the appropriate ones. And we do have the authority to insist upon them either by special legislation, which we have, which gives us additional powers, or by straightforward commercial deals to do with rental or legal agreements that give us the ability to insist.

Mr. MILLER. When the Braer became disabled, you were made aware of that by the ship?

Mr. GREEN. The police told me.

Mr. MILLER. So that you did not have command and control of the ship at that point. Is that correct?

Mr. GREEN. That is correct. What happens is that the interface and the responsibility is with the Coast Guard, and they are not part of the administration in Shetland. They exist in Shetland, but they are a Department of Transport branch. It was the Coast Guard who talked to the ship.

Mr. MILLER. What was the time, or do you know yet, from the time the ship became disabled to the time you were able to respond?

Mr. GREEN. I don't know when it—

Mr. MILLER. It is not clear yet?

Mr. GREEN. No.

Mr. MILLER. They haven't fixed a time yet?

Mr. GREEN. We could tell you from the time that I heard about it. It was then 11:20 or 11:30 when it finally grounded. Prior to that, it had been unmanned for about 2 hours. It was drifting without anybody on for about 2 hours.

Mr. MILLER. The channel that the Braer was going through, was that at one time considered to also be under your command and control?

Mr. GREEN. No.

Mr. MILLER. In the early debates, it was never debated to extend the system to that area?

Mr. GREEN. No. It is an international channel.

Mr. MILLER. And the Braer picked that route because of weather?

Mr. GREEN. Well, we would need to ask the Braer why it was going that way, but it was, as far as we can see, a track which was legitimate.

Mr. MILLER. I'm sorry?

Mr. GREEN. The track it was on was legitimate. It wasn't, as far as we know, in an area where it shouldn't have been.

Mr. MILLER. I understand that, but it could have taken the northern route. Is that correct?

Mr. GREEN. Yes, it could.
Mr. Miller. Would that have been a normal route or a regular route, or are both of them used?

Mr. Green. Both.

Mr. Miller. They are both used.

Mr. Green. Yes.

Mr. Miller. You mentioned also in your testimony the fact that you in the Shetlands apparently watch the histories of various ships. Is that correct?

Mr. Green. Yes.

Mr. Miller. And if those ships, or the companies, I guess, are engaged in various practices, the Council has the ability to keep that ship from entering the port?

Mr. Green. Yes.

Mr. Miller. How do you arrange for those histories? How is that information passed on to you.

Mr. Green. Well, if you take the Braer itself, it had been at Sullom Voe almost a hundred times itself to collect cargoes of oil over the years—different names but the same ship. We do, at the terminal as well, put people on board to check out the variety of things that need to be done to ensure that the safety standards are those that are necessary.

Mr. Miller. So this isn’t a matter of a central classification system; this is a matter of your own histories and logs and information that you gather with regard to those ships that call on Sullom Voe.

Mr. Green. That is right.

Mr. Miller. And you gather that from—

Mr. Green. Wherever we can.

Mr. Miller. Wherever you can. So if they have incidents in other ports, other parts of the world, you continue to gather that information.

Mr. Green. Yes.

Mr. Miller. I was in London right after the tragic fire in the Underground, and at that point the authority responsible for the Underground was engaging an outside entity that looks at industrial systems and all kinds of large systems for reviews of safety. What kind of review do you anticipate to be undertaken with respect to the grounding and its interrelationship with your system?

Mr. Green. The initial investigation is what is called an inspector’s inquiry. It is by the Marine Accident Investigation Branch from the Department of Transport, but the manner in which it can conduct an inquiry is quite severely set out in the relevant legislation.

For example, the inspector in his report isn’t permitted to attribute blame for an incident like this. The intention of the inquiry initially essentially is to see if there are any lessons to be learned about the management of tankers or management of ships at sea.

The Council has obviously got an interest in this for itself and also on behalf of the people of Shetland, and has resolved that it wishes the inquiry, whatever it is, to be held in public, to be held in Shetland, and using terms of reference which are acceptable and have been agreed by the Council on behalf of the community. The same thing has been said about the inquiry by Lord Donaldson, which is an inquiry into the issues to do with tanker management
around the shores, that it should be held in Shetland because that is where the incident happened, that it should be held in public, and it should be using terms of reference that have been agreed with the community by the Council.

I think that the second one has certainly been rejected by the Government and they are going to conduct the inquiry in London. They may come and look at Shetland, but they aren't going to conduct it even in Scotland, it is going to be in London.

The inspector's inquiry is prescribed by statute, and I suspect that the answer we get to the request, when we do get an answer, for it to be in public on Shetland and on terms of reference acceptable, will be that we will have to wait for this initial inquiry. The next stage is the equivalent of a judicial inquiry, a formal hearing by the sheriff principal of the area, and that becomes an adversarial attempt to try and identify blame.

So these things are off yet; there is some way to go.

Mr. MILLER. The port facility at Sullom Voe, as I am led to understand it, is somewhat more analogous in this country, I guess, to our airline system in terms of the command and control that you have over those ships and maybe a seagoing example may be more like a pilot on a ship that enters San Francisco Bay or the Columbia River System or what-have-you, where the pilot takes over the control of that ship. Had you had that kind of system in place in this area where the Braer was, would you have known sooner that it was disabled? Would you be able to read that from your current system?

Mr. GREEN. If it had been trading or intending to trade with Sullom Voe, we would have known because, as I say, we talk to those tankers. What we don't have is a surveillance system beyond the area around the harbor of Sullom Voe or the north end of Shetland. We don't have a surveillance system. Surveillance systems are the responsibility of the national government.

Mr. MILLER. If a ship of this size stops making progress, it is going to become apparent at some point on the control system that this ship is not making way, and that prevents the ship from making a series of decisions that they may decide are very good for their careers, for their companies, for their ship, but may be very bad in the end in terms of not wanting to yell for help at the earliest moment.

Mr. GREEN. Yes.

Mr. MILLER. I think that the first instinct is, "I can fix this," but the fact may be, if you were objective and you looked at the surrounding area, whether it was in Prince William Sound or the Shetland Islands or San Francisco Bay, an objective person looking at that situation might decide there is no time to fix that and other actions have to be taken to try to prevent the worst-case scenario.

So that is really the distinction, as I understand it. Had they been coming to your port, you would have been talking to them, except they might not have been giving you the information you would have needed at that particular moment, especially as the weather turned out to be a factor.

Is that a fair summation of the distinctions?
Mr. GREEN. It is. It would have been better, or better controlled perhaps, if they had been trading with us at Sullom Voe, but it wouldn't have been foolproof.

Mr. MILLER. I understand that.

Mr. GREEN. Because there is no monitoring system at all of ships beyond the range of our radar—and that is in the harbor area that we are responsible for—and there is no legislation, there is no international standard, that says if part of your equipment fails, whatever it is, you have to report straight away or you have a black box on board that monitors and identifies what happened precisely when it happened, and the master becomes liable for not taking specified action to correct that straight away. There is nowhere the ability to actually interfere with the master's control of the ship no matter what state it is in, and that needs to be reviewed.

Mr. MILLER. We clearly have the ability now, with the locator systems, satellite systems. All sorts of people who are in private boats sail up and down the coast of California with a great deal of confidence because they are in contact with the satellite. Their skills sometimes don't match up when they lose that contact with the satellite, but in any case, for a moment they are very happy because they believe they know within 100 feet or 100 yards of where they are at all times. I forget what the name of the system is, the guidance system.

We found in Desert Storm that we couldn't quite undertake the battle plan because as we sent the tanks out at night, they kept getting lost, so we quickly had to make these available to commanders of the tanks in the desert.

So the system no longer really needs to be one that, as I understand it, would be dependent upon Sullom Voe. It can be a system that can monitor tankers worldwide, because it is a very inexpensive system now to put on the bridge of a tanker, and again, if the tanker stops making way, given how these things are calibrated, somebody is going to know that if they are paying attention. So a tanker's ability to founder for whatever given period of time really now is no longer necessary to accept, and these are inexpensive enough that you can afford one for a 40-foot boat or any size boat; they are available to the general public.

It seems to me that that kind of information, if not command and control, but that information, is now readily available should the industry and the various governments decide that that can improve the margins of safety.

Mr. GREEN. I think the hardware certainly exists, but if you like, it is the software——

Mr. MILLER. GSD is what I'm talking about, I'm informed.

Mr. GREEN. It is the people who actually make it work, and unless governments themselves insist upon particular standards at sea that allow the commercial regime to lift its game, it is going to cost more to do it. Unless that game is lifted to the point where safety and the grounding of tankers in circumstances where grounding perhaps need not have happened changes—unless the game is lifted—the hardware/software isn't going to be a great deal of use.
If you can see them and you can't interfere with them, or if they are not obliged to report to you or to some authority straight away the instant something happens, as happens in the air, then it isn't going to be a great deal of use just to see it.

Mr. MILLER. I don't want to put words in your mouth, but this is the second time I think you have alluded to this. In fact, the command and control, your ability to control that tanker in those designated areas—again, whether they are in Shetlands or in other areas that pose a threat—is really the key ingredient.

Mr. GREEN. Yes, and it is a national government responsibility. I don't want the Shetland Islands Council to have to do this in its own area; it has to be international, it has to be worldwide, for it to work.

Mr. MILLER. It is highly resisted by the owners of large ships.

Mr. GREEN. It is, but unless it is done these kinds of incidents are going to continue to increase. And eventually it is going to be impossible to clean up the pollution that is left behind. We were lucky in this instance.

Mr. MILLER. One final question because, for the purposes of this committee and not necessarily for you, we are looking at two different systems here and trying to measure some of that. That is, when the people who work for you at the Council, the people running the port at Sullom Voe, when they make a decision that traffic by an individual tanker, for whatever reason, whether it is for weather, for questions about the tanker, the crew, or what-have-you, when that decision is made, is that it? That is final?

Mr. GREEN. Yes.

Mr. MILLER. Now we have had certain allegations and some evidence suggesting that at times when our Coast Guard and others thought that the winds were too high or the weather was improper in the instance of Prince William Sound, that decisions were made to slow traffic down or to space the ships at greater length, that that was then overridden at the national level. Can the owner of a tanker company pick up the phone and call somebody in London and say, “I've got to get this tanker out of here at 8 o'clock tonight”?

Mr. GREEN. No. We have absolute authority within the harbor area for which we are responsible. It is important to say that last piece: We are responsible for it. It is not a case of draconian control; we are responsible for the traffic of ships within that area, for the pilotage of them and for their safety while they are there. So we don't let them in if it is not safe; we don't let them go out if it is not safe.

Mr. MILLER. Two entirely different systems.

Let me thank you very much for your testimony, and also let me thank you for your invitation to the conference in March. We didn't get into them in detail, but let me also thank you for the recommendations that you have left with the committee with respect to international regulations on tanker traffic that I think will be of great interest to us and to the other committees of jurisdiction. I will also make sure that your invitation to the conference is forwarded to President Clinton.

Mr. GREEN. Thank you very much.
Mr. MILLER. Thank you. Thank you very much for your time and for your information.

Mr. GREEN. Let me say thanks for the invitation. I have enjoyed it. It is my first visit to the United States. I got here before my luggage—

[Laughter.]

Mr. MILLER. That is another system. It is not in our jurisdiction. And let me tell you, as one who flies across this country every weekend, that system can't be fixed.

Mr. GREEN. Thank you.

Mr. MILLER. Thank you very much, and we hope you enjoy your stay.

PANEL CONSISTING OF NINA SANKOVITCH, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL, NEW YORK, NY, ACCOMPANIED BY SARAH CHASIS, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL, AND DIRECTOR OF THE COASTAL PROJECT; AND SCOTT STERLING, PRESIDENT, PRINCE WILLIAM SOUND REGIONAL CITIZENS' ADVISORY COUNCIL, ANCHORAGE, AK, ACCOMPANIED BY TEX EDWARDS, BOARD OF DIRECTORS, REGIONAL CITIZENS' ADVISORY COUNCIL (RCAC), AND CHAIRMAN, RCAC PORT OPERATIONS AND VESSEL TRAFFIC SYSTEMS COMMITTEE

Mr. MILLER. The next panel will be made up of Nina Sankovitch, who is a senior attorney for the Natural Resources Defense Council, accompanied by Sarah Chasis, a senior attorney for the Natural Resource Defense Council; and Scott Sterling, who is the president of Prince William Sound Regional Citizens Advisory Council, who will be accompanied by Tex Edwards, who is on the board of directors of the Regional Citizens' Advisory Council.

Welcome to the committee. We look forward to your testimony. Again, my apologies for earlier this morning, and we will recognize you in the order in which we called you, if that is all right with you.

Nina, we will start with you.

STATEMENT OF NINA SANKOVITCH, ESQ.

Ms. SANKOVITCH. Thank you. Good afternoon, Mr. Chairman.

The Natural Resources Defense Council appreciates this opportunity to offer testimony on the implementation of the Oil Pollution Act of 1990. NRDC has worked on the issue of oil pollution for over 20 years, and in December of this year we issued this report, "Safety at Bay," which details oil spill prevention and response in the United States and implementation of the OPA 90.

The recent tanker spills of disastrous proportions, the 23 million gallons spilled from the *Aegean Sea* off the coast of Spain, the 24 million gallons spilled from the *Braer* of the Shetland Islands, and the potential 84-million-gallon spill from the *Maersk Navigator* off the coast of Indonesia, have underscored the fundamental problems which underlie the transportation of oil products.

Despite the passage of OPA 90, these problems persist not only in foreign waters but also off the sensitive and productive coastlines of the United States. Accidents may always occur in naviga-
tion, but accidents do not have to become disasters, and the num-
ber of accidents that occur can be reduced.

In our testimony, we will present the controls and measures that
should be implemented to eliminate the causes of spills and to min-
imize spills when they do occur. We will also summarize the find-
ings of our report, "Safety at Bay," regarding the inadequate imple-
mentation of the Oil Pollution Act and will recommend how key
provisions of OPA 90 should be promptly developed and imple-
mented.

First, it is important to understand the conditions of the world
tanker fleet today. The world tanker fleet is aging. By 1996, 62 per-
cent of the world’s fleet will be 15 years old or older, including
many of the world’s largest oil tankers, and 27 percent will be 25
years old or older. Older tankers run higher risks of structural de-
terioration and failure.

A recent report that was issued by the Shell International Petro-
leum Company said that close to 20 percent of the world tanker
fleet is substandard, and the U.S. Coast Guard has reported find-
ings of tankers entering U.S. waters with structural deficiencies, in-
cluding paper-thin plating, excessive wastages, missing vents and
hatches, soft patching in piping, and unsatisfactory repairs.

In addition, the huge majority of oil tankers are single-hulled; 95
percent of the tankers that come into U.S. waters are single-hulled,
and even by the year 2000, 75 percent will still be single-hulled.

Finally, the world tanker market is in a slump. There is a sur-
plus of tankers available to carry oil products, and the result is
stiff competition among tanker owners, with resulting pressure to
cut costs to remain competitive.

Given these facts about the world tanker fleet, it is vital that
strong regulatory measures be in place to ensure that vessels navi-
gate safely and that when an accident does occur the risks of a spill
can be avoided, can be prevented, or reduced.

Unfortunately, many key measures for preventing and minimiz-
ing spills are lacking worldwide and in the United States. For ex-
ample, the significant risks posed by single-hulled vessels has not
been addressed in this country or internationally. OPA 90 requires
the Coast Guard to develop regulations for single-hulled vessels by
August of 1991. These regulations have not even been proposed.

We recommend that the Coast Guard promptly issue regulations
requiring single-hulled vessels to utilize measures for reducing oil
spills. These should include the use of tug escorts; advanced navi-
gation aids like the GSD; prohibitions against carrying oil cargo in
the wing tanks of the vessel, thereby creating, in effect, a double
hull; increasing training requirements for crew; and increasing the
number of crew required on board; and using rapid cargo transfer
systems to move oil from a damaged tank to one that is intact.

The expansion of vessel traffic services has also not occurred in
this country as envisioned under OPA 90. Vessel traffic service—
VTS—systems monitor vessel traffic, alert vessels to potential haz-
ards, and under OPA 90's statutory mandate even control traffic
where necessary to avoid accidents. In ports where VTS operates,
collision and grounding accidents have been averted and oil spills
avoided.
OPA 90 mandated that a study be undertaken to determine which ports could benefit from a new or expanded vessel traffic service. The Coast Guard's Port Needs Study found that 11 ports clearly benefit from new or expanded VTS systems. However, other ports that we have identified as needing expanded or new VTS systems were put low on the priority list or even identified as not meriting expanded VTS.

I was told today by the Coast Guard that they are planning a 5-to-7-year expansion of VTS but this plan hasn't been made available to Congress or to the public. We recommend that that plan be made available and that the schedule be expedited so that we don't have to wait 5 to 7 years to have expanded VTS in this country.

Tug escorts are another important spill prevention measure that has yet to be adequately utilized. Tug escorts help tankers navigate and maneuver in difficult areas or under emergency circumstances like loss of engine power. This was recently illustrated by some near misses in Alaska, where engine failure or loss of steerage resulted in trouble for the tanker.

OPA 90 mandated that tug escorts be required in Prince William Sound, Rosario Strait, and in Puget Sound. In addition, the Coast Guard is required to designate additional areas that, because of environmental sensitivity or navigational hazards, should have tug-escort requirements.

However, the Coast Guard has only issued proposed rules for Prince William Sound, Rosario Strait, and Puget Sound, and has not even proposed any additional areas for tug-escort requirements. The rules it has proposed for Prince William Sound, Rosario Strait, and Puget Sound are inadequate to ensure that tug escorts will be helpful in preventing spills. For example, speed limits aren't set, and there is no requirement that a line be maintained between the towing vessel and the vessel being escorted.

We recommend that the Coast Guard promptly designate additional areas where tug escorts are required, including areas that are difficult to navigate and environmentally sensitive, and that it promulgate strict requirements for tug escorts, including speed limits, development of tug-escort plans, and requiring to be connected.

Tanker-free zones are another important spill-prevention measure. By preventing tankers from traveling in or near environmentally sensitive areas, the risks of spills in these areas can be reduced to zero. For example, there currently exists a voluntary agreement among oil shipping companies that bring oil down from Alaska to the Lower 48 by which tankers will stay 50 miles off the coasts of Canada, Washington, Oregon, and California. That is a voluntary agreement. In addition, there is an area that the International Maritime Organization has designated off the Florida Keys which restricts tanker traffic.

OPA 90 required the Coast Guard to study areas of navigable waters and the exclusive economic zone that should be designated as zones where the movement of tankers should be limited or restricted. This is a crucial study that we believe has not received the priority it deserves. According to OPA 90, the study was to have been completed by August of 1992. However, we understand that it may not be completed until 1995. We recommend that the Coast Guard study be completed expeditiously and that tanker-free zones
be designated sufficiently far enough offshore to protect sensitive coastlines of the United States. The Coast Guard should also aggressively pressure the IMO for approval of such designations.

In addition to improving spill prevention in this country, we have to improve how we plan for oil spills. Thorough pre-spill planning is essential to ensure that the most effective response possible to oil spills is mounted. OPA 90 requires owners and operators of vessels and facilities that handle oil to develop response plans and to enter into binding contracts for spill response equipment.

The Coast Guard has developed an interim final rule on vessel response plans, and EPA has developed proposed rules but not yet any binding regulations on facility response plans. The guidance that was provided by the Coast Guard and basically copied by EPA is comprehensive with respect to plan format and content. However, the limits on the amount of equipment that must be contracted for are set at levels too low to ensure that enough equipment will actually be available to control and clean up the oil if there is a worst-case spill.

In addition, the salvage requirements that are set for vessels are much too general to ensure that salvage capability is quickly available in the event of a grounding, collision, or engine failure. It is also not clear whether the pre-rigged towing package—whereby the vessel is able to initiate a tow to a tug instead of a tug having to throw a line up to a vessel, which can be difficult in bad weather—it is not clear whether that will be required on tankers. Rapid salvage response and perhaps the pre-rigged towing package could have possibly prevented the Braer's engine failure from turning into a disaster for the Shetland Islands.

In short, under the proposed facility and vessel response regulations, facilities and vessels will not be prepared to control and clean up the worst-case spills as required under OPA 90. We recommend that the Coast Guard and EPA quickly finalize their response plan regulations and, in doing so, increase the amount of equipment that must be contracted for by vessel and facility owners and operators. In addition, the Coast Guard should develop specific requirements for pre-rigged towing packages and salvage capabilities for vessels.

The OPA 90 also requires contingency planning by the government on the local and national levels. The area and national contingency plans were to be finished by August of 1991. The area contingency plans are slowly being finalized by the Coast Guard, but the national contingency plan is far from complete by EPA. We recommend that the Coast Guard require development of the area contingency plans as soon as possible in time for incorporation into vessel and facility plans and that the U.S. EPA issue their revised national contingency plan before August 1993, again, in time for incorporation into vessel and facility planning efforts.

In conclusion, OPA 90, passed unanimously by Congress, was a promise that spill prevention and response would dramatically improve. Unfortunately, more than three-and-a-half years after the Exxon Valdez and more than 2 years since passage of OPA 90, key prevention and response measures still have not been implemented and others have been watered down.
If the recommendations made in our testimony were implemented, we believe that much of the promise of OPA 90 would be fulfilled and that the transport and transfer of oil would finally be made safer, reducing the risk of oil spill disasters and setting a model for other nations currently struggling with the issues of oil spill prevention and response.

Thank you.

[Prepared statement of Ms. Sankovitch follows:]
TESTIMONY OF
THE NATURAL RESOURCES DEFENSE COUNCIL
BEFORE
THE HOUSE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
OF THE COMMITTEE ON NATURAL RESOURCES
ON
THE IMPLEMENTATION OF THE OIL POLLUTION ACT OF 1990

February 4, 1993
Prepared By:
Nina Sankovitch, Esq.
Sarah Chasis, Esq.
NRDC
Good morning, Mr. Chairman and members of the Subcommittee. The Natural Resources Defense Council (NRDC) greatly appreciates this opportunity to offer testimony on the implementation of the Oil Pollution Act of 1990. NRDC has worked on the issue of oil pollution for two decades and released in December of 1992 a report entitled Safety at Bay, in which we reviewed the status of oil spill prevention and response in the United States and implementation of the Oil Pollution Act.

I. INTRODUCTION

The recent tanker spills of disastrous proportions—the 23 million gallons spilled from the Aegean Sea off the coast of Spain, the 24 million gallons spilled from the Braer off the Shetland Islands in Scotland, and the potential 84 million gallon spill from the Maersk Navigator off the coast of Indonesia—have underscored the fundamental problems which underlie the transportation of oil products. Despite the passage of the Oil Pollution Act of 1990, these problems persist not only in foreign waters, but also off the sensitive and productive coastlines of the United States, placing fisheries, shorelines, and the public health at risk.

Accidents may always occur in navigation but accidents do not have to become disasters, and the number of accidents that occur can be reduced. Sound, proven oil spill prevention and minimization measures are available to make oil transportation safer but they have not been implemented. It is time to take action to ensure that these measures are implemented, and that our nation's coastlines and natural resources are protected from the potentially devastating impacts of oil spills.

In our testimony, NRDC will present the controls and measures that should be implemented to eliminate the causes of spills or to minimize the impacts of spills when they do occur. We will summarize the findings of our report Safety At Bay regarding the inadequate implementation of the Oil Pollution Act of 1990 and recommend how key provisions of that Act should be promptly developed and implemented.

But first it is important to understand the conditions of the world tanker fleet today. The world tanker fleet is aging: by 1996, 62 percent of the world fleet will be 15 years or older (including many of the largest oil tankers) and 27 percent will be 25 years or older. Older tankers run higher risks of structural deterioration and potential failure. A recent Shell International Petroleum Company report (referenced in a January 27, 1993 New York Times article) said that more than half of the world's 3,200 or so oceangoing tankers are more than 15 years old and close to 20 percent of the world tanker fleet is substandard. According to Admiral J. Kime, Commandant of the U.S. Coast Guard, in a speech he gave in September 1992, tankers currently entering United States waters have been found with structural deficiencies, including "paper-thin plating, excessive wastage, missing vents and hatches, soft patches in piping and unsatisfactory repairs."
The huge majority of oil tankers are single-hulled: 95 percent of the tankers coming into U.S. waters are currently single-hulled and even by the year 2000, it is estimated that 75 percent of the tankers entering U.S. waters will still be single-hulled.

And finally, the world tanker market is in a slump, with a surplus of tankers available to carry oil products. The result is stiff competition among the tanker owners, with resulting pressure to cut costs to remain competitive.

Given these facts about the world tanker fleet, it is vital that strong regulatory measures be in place to ensure that these vessels navigate safely and that when an accident does occur, the risks of a spill can be prevented or reduced. Unfortunately, many key measures for preventing and minimizing spills are lacking worldwide and in the United States.

II. MEASURES FOR PREVENTING AND MINIMIZING OIL SPILLS

The Oil Pollution Act (OPA) mandates that measurable and enforceable actions be undertaken by any vessel traveling in U.S. waters, by oil transfer and storage facilities, and by the government, to reduce the risks posed by spills. NRDC has found that many of the regulations necessary to translate these mandates into action have been delayed and others are being implemented in a manner inconsistent with the Act itself. Moreover, the Act ignores a number of important issues of spill prevention.

A. Preventing Oil Spills

1. Double Hulls

Double hulls are one of the most effective means of preventing oil spills. The Coast Guard recently confirmed this in its report to Congress entitled “Alternatives to Double Hull Tank Vessel Design” (December 1992). The report found no design as effective as the double hull for the prevention of oil spills due to groundings, the most prevalent type of casualty in U.S. waters. It also found that four recent spills from tanker groundings in the U.S. would have been avoided if the vessels had had double hulls. (The World Prodigy spill off Rhode Island in 1989, the Presidente Rivera spill in the Delaware Bay in 1989, the American Trader spill off California in 1990, and the B.T. Nautilus in New York Harbor in 1990.) In light of these findings, we think that Congress should consider speeding up the lengthy timetable set in OPA for phasing in double-hulled tankers (through 2015).

Despite recognition of the importance of double-hull protection, recent Coast Guard regulations have seriously compromised the efficacy of the double hull requirement. The Coast Guard’s interim final rule on double hulls, issued in August 1992, requires inadequate inter-hull spacing for double hull construction on tankers and barges, fails to provide much-needed guidance on hull strength and corrosion protection, and does not require protection of bunker fuel tanks.

We recommend that the Coast Guard revise its interim final rule to require inter-hull spacing equivalent to the breadth of the vessel divided by 15 or 2 meters, whichever is greater, as has
been recommended by experts, plus increase standards for hull strength and corrosion protection. We also recommend that the phase-in schedule for double-hulled tankers be accelerated.

2. Single Hulls
Given the current long phase-in period (through 2015) for full implementation of the double hull requirements, Congress required the Coast Guard to develop, by August 1991, interim operating and structural measures for single-hulled vessels that would reduce the risks posed by these vessels. The Coast Guard has yet to release even a proposed rule mandating interim measures. The result is that marine and coastal environments are still exposed to the risks of thinly-hulled vessels carrying millions of gallons of oil, without additional protections. We recommend that the Coast Guard promptly issue regulations requiring single-hulled vessels to utilize measures for reducing oil spill risks. These should include tug escorts, compliance with vessel traffic control systems, advanced navigation aids, wing tank cargo restrictions, and tank level monitoring devices.

3. Vessel Traffic Services
Vessel Traffic Service (VTS) systems monitor vessel traffic, alert vessels to potential hazards, and even control traffic where necessary to avoid accidents. In ports where VTSs operate, collision and grounding accidents have been averted and oil spills avoided. OPA mandated that a study be undertaken to determine which ports could benefit from a new or expanded Vessel Traffic Service. The Coast Guard's Port Needs Study found that eleven U.S. ports would clearly benefit from new or expanded VTS systems. However, the Coast Guard has made no specific recommendation to Congress to implement these findings. Moreover, there appears to be a serious question as to whether the report properly concludes that certain areas do not need a new or expanded VTS system. For example, the Port Needs Study concluded that there was no benefit from expanding VTS coverage in San Francisco Bay. However, the state of California, the local Coast Guard and NRDC all have supported expansion of VTS coverage in San Francisco Bay.

We recommend that the Coast Guard seek funding to implement and expand VTS systems in areas where such systems could substantially reduce the risks of oil spill damage to environmentally sensitive marine and coastal environments and that Congress act on their recommendations.

4. Tug Escorts for Tankers
Tug escorts help tankers navigate and maneuver in difficult areas or under emergency circumstances. This was recently illustrated by one near miss in the Valdez Narrows which could have resulted in a disastrous spill had the tanker not had a tug escort.

OPA mandated that tug escorts be required in Prince William Sound and in Puget Sound; in addition, the Coast Guard is to designate other areas that, because of environmental sensitivity or navigational hazards, should have tug escort requirements. However, the Coast Guard has only issued proposed rules for Prince William Sound and Puget Sound and has not yet
proposed any additional areas for tug escort requirements. Furthermore, the rules it has
proposed for Prince William Sound and Puget Sound are inadequate to ensure that tug escorts
will be helpful in preventing spills. The result is that the oil spill risks associated with loss of
tanker engine failure, congested traffic conditions, and narrow and difficult passages, persist.

We recommend that the Coast Guard promptly designate additional areas where tug escorts
are required, including areas that are difficult to navigate and environmentally sensitive, and
that it promulgate strict requirements for tug escorts, including speed limits and development
of tug escort plans.

5. Tanker-Free Zones

Government control of tanker traffic can also be effectively implemented through the use of
tanker-free zones. By preventing tankers from traveling in or near environmentally sensitive
areas, the risks of spills in these areas can be reduced. For example, there currently exists a
voluntary agreement among the oil shipping companies by which tankers bringing Alaskan
crude oil to California will remain fifty nautical miles off the coast until approach to port.
There is also an IMO-approved area to be avoided which restricts tanker traffic off the
Florida Keys.

The Oil Pollution Act required the Coast Guard to study areas of navigable waters and the
exclusive economic zone that should be designated as zones where the movement of tankers
should be limited or restricted. The Coast Guard is currently focusing on ten areas for
possible tanker exclusion zones: Montauk (Long Island), Santa Barbara, and along the coasts
of Washington, Oregon, California, the Eastern Gulf of Mexico, and sections of the Atlantic
coastline.

This is a crucial study that has not received the priority it deserves. We understand it may
not be completed until 1995. We recommend that the Coast Guard study be completed
expeditiously and that tanker-free zones be designated sufficiently far enough offshore to
protect sensitive coastlines of the United States. The Coast Guard should also aggressively
pressure IMO for approval for such designations.

B. Planning for Oil Spills

1. Vessel and Facility Response Plans

Thorough pre-spill planning is essential to ensure the most effective response possible to oil
spills. OPA requires owners and operators of vessels and facilities that handle oil to develop
response plans and enter into binding contracts for spill response equipment. The Coast
Guard has developed proposed rules—but not binding regulations—on vessel response plans
and EPA has developed proposed rules—but not binding regulations on facility response plans.
The guidance is comprehensive with respect to plan format and content; however, the limits
on equipment that must be contracted for are set at levels much too low to ensure that enough
equipment to control and clean up the oil will be available in the event of a worst-case spill.
In addition, the salvage requirements for vessels are much too general to ensure that salvage
capability is quickly available in the event of a grounding, collision, or engine failure. Rapid
salvage response might have prevented the *Braer's* engine failure from turning into a disaster for the Shetland Islands.

In short, under the proposed facility and vessel response regulations, facilities and vessels will not be prepared to control and clean up a worst case spill. We recommend that the Coast Guard and EPA quickly finalize their response plan regulations and in doing so, increase the amount of equipment that must be contracted for by vessel and facility owners/operators. In addition, the Coast Guard should develop specific requirements for salvage capabilities for vessels.

2. **National and Area Contingency Plans**

OPA requires contingency planning by the government on the local and national levels. However, the Area and National Contingency Plans, which were to be finished by August 1991, are far from being finalized; in some ports, development of the Area Plan has not even begun. The result is that governmental planning for oil spills has not improved very much since the *Exxon Valdez* spill over three years ago. We recommend that the Coast Guard require development of the Area Contingency Plans its area committees as soon as possible, but no later than August 1993, in time for incorporation into vessel and facility plans. The United States EPA, responsible for revision of the National Contingency Plan, should issue the revised plan before August 1993, again in time for incorporation into vessel and facility planning efforts.

C. **Paying for Oil Spills**

1. **Natural Resources Damage Assessment**

The full costs of an oil spill include damages to natural resources, such as loss of wildlife. Any assessment of such damages must take into account all values associated with the impacted resources. OPA required the National Oceanic and Atmospheric Administration (NOAA) to develop regulations for assessment of natural resource damages by August 18, 1992. However, NOAA has only issued limited proposed rules for damage assessment. Now that a panel of expert economists, including two Nobel laureates, convened by NOAA has endorsed the use of contingent valuation (subject to strict guidelines) as a valid means of assessing natural resource damages, NOAA should move to complete its rulemaking.

We recommend that NOAA move quickly to adopt regulations that support use of contingent valuation, as recommended by the panel of experts.

D. **Loopholes In the Oil Pollution Act**

Important measures that can be taken to prevent oil spills were virtually ignored in the Oil Pollution Act. One of the most important is pilotage.

Pilots are responsible for the safe navigation of vessels. OPA ignores significant issues of pilotage, including distinctions between state and federal pilots, which allow for different standards and oversight of pilots and varied enforcement of pilotage requirements; the need for pilots to be independent (not employed by the vessel owner); the exemption of certain oil-
carrying vessels from pilotage requirements; and the need for different requirements for pilots depending on the size of the vessel. The result is that pilotage continues to be under-regulated, leading to serious risks of spills due to pilot error. We recommend that a comprehensive scheme be adopted by Congress to ensure that pilots are competent and prepared for the vessels and routes that they pilot.

III. CONCLUSION
The Oil Pollution Act of 1990, passed unanimously by Congress, was a promise that spill prevention and response would dramatically improve. Unfortunately, nearly four years after the Exxon Valdez and more than two years since passage of OPA, key prevention and response measures still have not been implemented and others have been watered down. In addition, important issues like pilotage were not adequately addressed in the Act.

If the recommendations made in our testimony could be implemented, we believe that much of the promise of the Oil Pollution Act would be fulfilled and that the transport and transfer of oil would finally be made safer, reducing the risks of oil spill disasters, and setting a model for other nations currently struggling with the issues of oil spill prevention and response.
# Delays in Implementation of OPA's Oil Spill Prevention and Response Provisions

<table>
<thead>
<tr>
<th>Provision</th>
<th>Scheduled Action</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interim Measures for Single-Hulled Vessels</td>
<td>Final Regulations by August 18, 1991</td>
<td>No regulations have been proposed</td>
</tr>
<tr>
<td>2. Vessel Traffic Service Study</td>
<td>Submission of study to Congress with recommendations for implementation by August 18, 1991</td>
<td>Study has been completed but the Coast Guard does not intend to submit recommendations with the report to Congress</td>
</tr>
<tr>
<td>4. Designation of Additional Areas where Tug Escorts are Required</td>
<td>Initiate designation of areas by February 1991</td>
<td>No areas have been proposed for designation</td>
</tr>
<tr>
<td>7. National Contingency Plan</td>
<td>Revision of NCP issued by August 18, 1991</td>
<td>Revision of NCP has not been completed</td>
</tr>
<tr>
<td>8. Area Contingency Plans</td>
<td>ACPs to be completed by February 1992</td>
<td>No ACPs have been completed</td>
</tr>
<tr>
<td>9. Natural Resource Damage Assessment</td>
<td>Final Regulations issued by August 18, 1992</td>
<td>Proposed Regulations were issued in March 1992 but not for all assessment requirements under OPA</td>
</tr>
</tbody>
</table>
Mr. MILLER. Thank you.
Ms. Chasis.
Ms. CHASIS. I'll wait and help answer questions, if I can.
Mr. MILLER. Okay. Thank you.
Mr. Sterling, welcome to the committee. We look forward to your testimony, and it will be put in the record in its entirety. You may proceed as you desire.

STATEMENT OF SCOTT STERLING

Mr. STERLING. Thank you very much, Mr. Chairman.

My name is Scott Sterling. I represent the city of Cordova, Alaska, on the Prince William Sound Regional Citizens' Advisory Council, and I currently serve as the Council's board president. With me is Mr. Tex Edwards, who represents the city of Homer, Alaska, on the RCAC board and also chairs our Port Operations and Vessel Traffic System Committee.

We are here today because one of the most important lessons of the Exxon Valdez oil spill was that the oil industry can learn much from the people who live and work in the areas at risk, the people with the most to lose from that risk.

RCAC's eighteen member organizations are the communities and boroughs impacted by the 1989 Exxon Valdez oil spill as well as Alaska Native, recreation, tourism, and environmental groups. Our policy decisions are made by the 19-member board of directors, and they are appointed by and serve at the pleasure of those member entities. Our work is guided by our contract with Alyeska Pipeline Service Company and the Oil Pollution Act of 1990. Although the RCAC was organized before the passage of OPA 90, we are certified by the President as an alternative council that meets the intent of that law.

I wish to thank the committee for inviting us today especially to talk about the wreck of the tanker Braer in Shetland in January of this year and what lessons we believe can be brought to bear for our situation in Alaska and, indeed, for the coastlines around our country.

Every major oil spill is an opportunity to gain knowledge for use at home, and for that reason RCAC sent a team of three of us to the Shetland Islands shortly after the Braer incident began on January 5. Our purpose was to carry home whatever lessons we could gather about the events leading up to it, the causes, the response, and the outcomes.

What does the Braer tell us about our own gaps in spill prevention and vulnerabilities we might not have been aware of before? Are there practices or systems that we can learn from to improve our own environmental safety?

As with the Exxon Valdez, the full implications of the Braer will play out over time, but a few important items are clear. First, we must—emphasize must—have a system on an international basis for monitoring tankers and providing aid and assistance to tankers in distress. It was gratifying to hear you, sir, talk knowledgeably about the need for that and the technology that is in place today that can be utilized.

Second, we need to ask ourselves whether we are vulnerable to the same scenario in Alaska as the result of the Braer breakup. We
believe the answer is clearly yes. Many of us believe that the sequence of events involving the *Braer*—that is, bad weather, loss of power, and then a tanker on the rocks—can very likely account for the next big oil spill in the waters of Alaska.

Because of the *Braer* grounding, we are informed that the Coast Guard in Valdez is evaluating the safety of the tankers as they transit through Hinchinbrook Entrance between the Gulf of Alaska and Prince William Sound. The conditions at that point rival those of Shetland for some of the worst weather in the world.

At present, an assist tug and a so-called ERV, or escort response vessel, accompany loaded tankers from the Valdez Marine Terminal to Seal Rocks, which are right outside Hinchinbrook Entrance. There are safety limits for those escort vessels. They don't escort in sustained winds over 40 knots. When the weather gets rough, escort vessels may be forced to hang back in the Sound or even head back to the terminal, leaving the tanker to sail alone in precisely the conditions they probably shouldn't be exposed to in the first place. This doesn't happen all the time, but it does occur.

So why do tankers leave the terminal at all if the weather is bad? The answer is that the tankers don't often know what the conditions will be until they get out into the Sound. There aren't enough weather reporting stations to monitor conditions, and I would like to underscore that this is one of the positions and problems that should be looked at very carefully by the Congress in trying to help us increase our margin of safety in Prince William Sound.

The truth of the matter is that the technology for weather reporting buoys exists, and in fact, in the immediate aftermath of *Exxon Valdez* NOAA blanketed the Sound with reporting stations, but then NOAA took those stations away.

We have investigated at the RCAC weather buoys and weather reporting technology, and it all exists, it is all on the market, and it is all available. The question is one of funding, and to that we must look to the Congress and to industry to help provide the funds necessary to increase our protection.

One of the facts about the spill in Shetland was that the violence of the weather had a silver lining in that it dispersed much of the oil into the water column. That isn't to say that the water column was saved from injury or that life in the immediate marine environment escaped harm, but we saw nothing like we saw in Prince William Sound in the spring and summer of 1989.

The Norwegian Gullfaks crude spilled by the *Braer* acts nothing like the heavy, sticky, North Slope crude that is transported in the TAPS trade. Gullfaks crude is light, easily dispersed, and doesn't adhere to every surface, and that is very different from North Slope crude.

While the weather may have mitigated shoreline damage in Shetland, we also think it is important to note that the weather made salvage and lightering impossible. I'm sure Mr. Green and numerous other people who were involved directly in the response in Shetland could tell everyone that the level of frustration of not being able to do anything was high, because salvage and lightering are two tools in the toolbox for oil spills that you want to have
available and use whenever you can, and unfortunately they couldn't.

Among the salient points regarding the management of the spill response, we made the following observations. Number one, the Shetland Islands Council appeared to react swiftly and authoritatively to the crisis. Number two, the joint response effort clearly and publicly included salvage personnel and representatives of the P and I club insurers in the response management. Number three, the Joint Response Committee appeared, at least externally, to speak with one coherent and coordinated voice. Number four, the Joint Response Committee succeeded in providing timely and accurate information to the press and the public without sensationalizing events, and the press appeared to respond positively to that approach. Number five, overall we had the impression that the government closest to the people with the most to lose played a very strong and active role in dealing with the situation.

You will note that these observations come from people whose basis of comparison was the handling of the Exxon Valdez spill, and with that comparison in mind we would now like to move to talk to OPA 90 and certain provisions that we think, with regard to implementation, we should address.

We believe the Braer and, for that matter, the Aegean Sea and the Maersk, point out how important it is that OPA 90 be implemented at a much faster pace. We echo the Natural Resources Defense Council in its call for a more aggressive approach to implementing and enforcing OPA 90. It seems to us that the Coast Guard requires more staff, more qualified assistance, and maritime consultants, along with appropriate funding, to accomplish that goal.

Section 4111 of OPA 90 requires that the Coast Guard assess tanker navigation safety standards and look at, among other things, the potential use of electronic vessel tracking systems and the need to limit or prohibit movement of tankers in certain areas. As Nina pointed out in her testimony, the Coast Guard has estimated the report will not be submitted until early 1995. We, too, believe that this work should be put on the front burner. We need to identify critical areas, set up the vessel traffic systems, and, where appropriate, prohibit tanker traffic altogether. We can't accomplish any of that work unless we start expediting the basic research and acquire the knowledge to make good decisions.

We strongly urge the Congress to help the Coast Guard focus more of its resources into marine safety and protecting the marine environment. I would like to emphasize, however, that RCAC's direct experience with the Coast Guard has been very positive. Coast Guard officials seek our comments and give our input due and serious consideration. We have worked together cooperatively and instructively. We believe that relationship between RCAC and the Coast Guard has lived up to the expectations of OPA 90.

With regard to Prince William Sound and the Gulf of Alaska in particular, the situation right now is much better in terms of response equipment and resources than it was in 1989 and presently compares quite favorably with other ports. For example, Alyeska Pipeline Service Company's drill activities meet or exceed both
Alaska and Federal requirements. Major, all-systems drills are being conducted twice a year.

In 1992, Alyeska had nine drills at the Valdez terminal, including two that were surprise exercises. Smaller equipment exercises are held much more frequently, often on a weekly basis, and these drills are held with a full-time RCAC monitor and participation by RCAC citizen volunteers and staff in order to establish our role in the actual response to the next oil spill.

The drills enable response personnel to become knowledgeable and proficient in the strengths and weaknesses of equipment and procedures, and we continue to support drilling on a very active and frequent basis as much as government and industry can possibly do.

If there is another Exxon Valdez—and I like to use the word "if," but I must say that most of us always just say "when we have our next spill," rather than if—we should be in much better shape to respond and mitigate the damages.

Another note of progress in Prince William Sound is that in 1992 Alyeska publicly committed to build a dedicated emergency response operations center in Valdez as part of its settlement with the State of Alaska of claims resulting from that disaster. But while the response capability in the Sound is much better than before, there are still significant gaps, and I will speak more about those in just a minute.

We would like to make the following point. People have a tendency to assume that OPA 90 is more comprehensive than it is. The Prince William Sound RCAC has major concerns about the adequacy of oil spill response capabilities outside Prince William Sound but within what we now call the Exxon Valdez impact area, and as most people know, that area extends for over 2,000 miles of Alaska coastline.

Kodiak Island was hit very hard by the oil from the Exxon Valdez, yet Kodiak and the other areas in the Gulf of Alaska and our sister communities along the coastline have nowhere near the level of response resources in place that we have in Prince William Sound. The question of responsibility for cleaning up a spill, especially after the first 72 hours, continues to be a serious concern for us. Alyeska has taken the position that they are merely a response action contractor obligated by their contracts with tanker owners and operators to manage only the initial response.

On the other side of the coin, Alyeska has begun efforts, especially in Kodiak, to establish a community response center there, and under Alaska State law we are required to set up local emergency response depots and trained cadres of volunteers in oil spill response. We are very frustrated with the State of Alaska, at the slow pace of implementing that law, but that is not particularly a federal concern.

Another separate area of concern for us is towing, and this relates back to the questions posed by the Brager in terms of the ability of tugs to tow a tanker in distress. Crude oil tankers leaving Valdez carry the so-called Prince William Sound emergency towing package. One problem is that there is a tremendous disparity in how that package is installed and used by different owners on different vessels.
The towing equipment is buried on some tankers such that it could take a crew of 8 up to 4 hours to deploy it if they still have power to use the winches. Lacking power, it could take the crew 2 days to deploy it, and even in the best case it can take 8 people 45 minutes to deploy, and even that is not good enough. Arco and Exxon have towing packages that can be deployed by 2 people in 15 minutes.

We don't know for sure, but it is questionable whether even the Arco or Exxon regime would have done the *Braer* any good. Even if the *Braer* had the package and the *Star Sirius*, let's say, pulled up, as she did, without the crew and captain on board, it wouldn't have mattered anyway.

However, we are informed and are making inquiries into the fact that the Norwegian Government and industry, the State oil company in Norway, are experimenting with a towing package system that self-deploys, and we intend to look further into that to see whether it might have some applicability in the TAPS trade.

We have a very critical navigation situation in Valdez Narrows because the Narrows is a passage that, at its narrowest point, provides only .5 nautical miles of navigable water. A towing package would not be of much use in the Narrows because a tanker can go on the rocks in well under 15 minutes. The only chance of preventing such happenstance is that if an escorting tug could push the tanker away from the grounding. It is not clear to us that escort tugs and ERVs now being used in the Narrows are capable of doing the job.

In conclusion, we would like to emphasize our view that we can no longer treat our oceans like garbage dumps capable of taking prolonged abuse and neglect. The United States has been the leader, and should continue to be the leader, in correcting the imbalance between commercial enterprise and energy needs on one hand and stewardship of our environment on the other. Prince William Sound RCAC urges the Congress to heed the lessons to date of the *Braer* spill. We need an international system to monitor tankers in the system in distress, and we need faster implementation of OPA 90.

In our area, weather reporting stations in Prince William Sound would be a major boost to accident prevention. We need to further address boosting response capabilities in the path of the *Exxon Valdez* outside Prince William Sound, and we are striving and wish to work with industry and government to answer outstanding questions about escort and towing capabilities.

Thank you very much for this opportunity to speak, and we will try and answer any questions.

[Prepared statement of Mr. Sterling follows:]
Background

My name is Scott Sterling. I represent the City of Cordova on the Prince William Sound Regional Citizens Advisory Council and currently serve as the council’s board president. With me are Rick Steiner of Cordova, who recently returned from the Shetlands, and Tex Edwards of Homer, who also sits on the RCAC Board of Directors.

One of the most important lessons of the Exxon Valdez oil spill was that the oil industry can learn much from the people who live and work in the areas of risk - the very people with the most to lose from that risk.

The Prince William Sound Regional Citizens’ Advisory Council - RCAC - is a national experiment in providing citizens with a voice in corporate decisions that affect them and their communities. At its core, the RCAC is citizens promoting environmentally safe operations of the Alyeska terminal and the tankers that transit Prince William Sound.

It does so by monitoring the environmental impacts of terminal and tanker operations and by advising Alyeska, other industry groups and regulatory agencies on permits, regulations, site-specific standards, practices and oil spill prevention and response.

The work of the RCAC is guided by its contract with Alyeska Pipeline Service Company and the Oil Pollution Act of 1990 (OPA 90). Although the RCAC was organized before passage of OPA 90, it is certified as an alternative council that meets the intent of Sec. 5002 of OPA 90.
Structure

RCAC's 18 member organizations are communities and boroughs impacted by the 1989 Exxon Valdez oil spill, as well as Native, recreation, tourism and environmental groups. Policy decisions are made by the 19-member Board of Directors. Directors are appointed by, and serve at the pleasure of the member organizations they represent.

Much of the work of RCAC is done by citizen committees composed of volunteers with interest, experience and background in specific fields. Each committee has at least one member of the Board of Directors.

The committees are organized around specific technical fields, such as oil spill prevention and response, terminal operations-environmental monitoring. The committees work for the council, with assistance from staff provided by the council.

Shetland Incident

Every major oil spill is an opportunity to gain valuable knowledge for use at home. For that reason, RCAC sent three of us to the Shetland Islands shortly after the Braer incident began Jan. 5. Our purpose was to carry home whatever lessons we could gather, about the events leading up to it, causes, response and outcome of the Braer.

What does the Braer tell us about our own gaps in spill prevention, and vulnerabilities we might not have been aware of before? Are there practices or systems that we can learn from to improve our own environmental safety?

Just as with the Exxon Valdez oil spill, the full implications of the Braer spill will play out over time. But a few important items have emerged.

First, we must have systems on an international basis for monitoring tankers and providing aid and assistance to tankers in distress.

Secondly, we need to ask ourselves whether we are vulnerable to the same scenario that resulted in the Braer break-up. In Alaska, the answer is clearly yes. Many of us believe that sequence of events – bad weather, loss of power, tanker on the rocks – will account for the next big oil spill there.

Because of the Braer grounding, the Coast Guard in Valdez is evaluating the safety of tankers in Hinchinbrook Entrance, the gateway to Prince William Sound from the Gulf of Alaska. Conditions there rival the Shetlands for some of the worst weather in the world.

An assist tug and a so-called ERV, escort response vessel, accompany loaded tankers from the Valdez Marine Terminal to Seal Rocks, right outside Hinchinbrook
Entrance. There are safety limits for those escort vessels; they don't escort in sustained winds over 40 knots.

When the weather gets rough, escort vessels may be forced to hang back in the Sound or even head back to the terminal, leaving the tanker to sail alone in precisely the conditions they probably shouldn't be exposed to in the first place. This doesn't happen all the time, but it does happen.

So why do they leave the terminal at all if the weather is that bad?

Because they don't know what the conditions are until they get there. There aren't enough weather reporting stations to monitor conditions. The technology is there; in fact, in the aftermath of the Exxon Valdez spill, NOAA blanketed the Sound with reporting stations. But they took them back out again.

RCAC has done some investigating into weather buoys, but it's a money issue: something you in this room can influence.

The fact that the violence of the weather in the Shetlands had a silver lining — in that it dispersed much of the oil into the water column — should not be taken as comfort to us. The Norwegian Gullfaks crude spilled by the Braer acts nothing like the heavy, sticky North Slope crude. Gullfaks crude is light, easily dispersed and doesn't adhere to every surface. Very different stuff from what came out of the Exxon Valdez. And while the weather may have mitigated shoreline damage in the Shetlands, it was the weather that made salvage and lightering impossible.

Among the salient points regarding the management of the spill response, we offer the following observations:

• The Shetland Island Council appeared to react swiftly and authoritatively to the crisis.
• The joint response effort clearly and publicly included salvors and P and I club representatives in the response management.
• The joint response committee appeared, at least externally, to speak with one coherent and coordinated voice.
• The joint response center succeeded in providing timely and accurate information to the press and the public without sensationalizing events; the press appeared to respond positively.
• Overall, we had the impression that the government closest to the people with the most to lose played a very strong and active role.
OPA 90 /Tanker Navigation Safety Report

The Braer incident points up how important it is that OPA 90 be implemented at a much faster pace. We do echo the Natural Resources Defense Council in its call for a more aggressive approach to implementing and enforcing OPA 90.

A study on tanker navigation safety standards, required under Section 4111, is supposed to assess, among other things, the potential use of electronic vessel tracking systems and the need to limit or prohibit movement of tankers in certain areas. Currently, the Coast Guard estimates the report will be submitted in early 1995.

This work must be put on the front burner. The Coast Guard should bring retired mariners into the OPA 90 staff and get this work done. We need to identify critical areas, set up vessel tracking systems and in some cases, prohibit tanker traffic altogether. We strongly urge you to help the Coast Guard focus more of its resources into marine safety and protecting the marine environment.

I don't want to let this opportunity go by without mentioning that our direct experience with the Coast Guard has been very positive. Coast Guard officials seek our comments and give our input due and serious consideration. We've worked together cooperatively and constructively. The relationship between RCAC and the Coast Guard has lived up to the expectations of OPA 90.

Prince William Sound/Gulf of Alaska

In terms of response equipment and resources, the situation right now in Prince William Sound is much better than it was in 1989 and compares quite favorably with other ports.

Alyeska's drill activities meet or exceed state and federal requirements. Major, all-systems drills are conducted twice a year. In 1992, Alyeska had nine drills at the terminal, including two that were surprise exercises. Smaller equipment exercises are held much more frequently, often on a weekly basis.

These drills enable response personnel to become knowledgeable and proficient in the strengths and weaknesses of equipment and procedures. If there is another Exxon Valdez, we should be in much better shape to respond and mitigate the damages.

In 1992 Alyeska publicly committed to build a dedicated emergency operations center in Valdez, as part of its settlement with the State of Alaska over the Exxon Valdez.

But while the response capability in Prince William Sound is much better than before, there are still significant gaps in prevention. I'll speak more about that in a minute.
People have a tendency to assume that OPA 90 is more comprehensive than it is. We have major concerns about the adequacy of response capabilities outside Prince William Sound. Kodiak Island was hit hard by oil from the Exxon Valdez, yet Kodiak and other areas in the Gulf of Alaska have nowhere near the level of response resources that we have in the Sound. The question of responsibility for cleaning up a spill, especially after the first 72 hours, continues to be a serious concern for us. Alyeska has taken the position that they are merely a response action contractor, obliged by their contracts with tanker owners and operators, to manage only the initial response.

**Towing**

Another area of concern is towing, which relates back to questions posed by the Braer incident in terms of the ability of tugs to tow a vessel in distress. Crude oil tankers leaving Valdez carry the so-called Prince William Sound Emergency Towing Package. One problem is that there is tremendous disparity in how the package is installed and used.

That towing equipment is so buried on some tankers that it could take a crew of 8 up to four hours to deploy, if they still have power to use winches. Lacking power, it could take the crew two days to deploy. Even in the best case, it takes 8 people 45 minutes to deploy.

And that's not even good enough. ARCO and Exxon have towing packages that can be deployed by two people in 15 minutes. Even the ARCO or Exxon packages would not have done the Braer any good, because there was no one to initiate the deployment.

We have a different situation in the Valdez Narrows, a passage that at its narrowest provides only 0.5 nautical miles of navigable water. A towing package is useless in the Narrows, because a tanker will go on the rocks in well under 15 minutes. The only chance there is if the escorting tug can push the tanker away from grounding. It is not clear that the assist tugs and ERVs now being used in the Narrows are capable of doing the job.

**Closing**

Before I conclude, I want to say that humankind can no longer treat our oceans like infinite garbage dumps, capable of taking prolonged abuse and neglect. This country has been the leader, and should continue to be the leader, in correcting the imbalance between commercial enterprise and energy needs on the one hand, with stewardship of the environment on the other.
RCAC urges you to heed the lessons to date of the Braer spill. We need international systems to monitor tankers and assist them in distress, and faster implementation of OPA 90.

In Alaska, weather reporting stations in Prince William Sound will be a major boost to accident prevention. We need to address response capabilities in the path of the Exxon Valdez outside the Sound. And we must answer outstanding questions about escort and towing capabilities.

Thank you for the opportunity to speak today. We would be happy to try to answer any questions.
Mr. MILLER. Thank you very much for your combined testimony. I am getting a sense that this hearing has already started to make sense in terms of some directions that the Congress and the new Administration might take.

One of the frustrations of being a legislator sometimes is, when you work very hard to pass a law, that law is then put into the hands of people who are hostile to it and have no sense of urgency about the implementation of it. That obviously feeds into those who were critical of you ever engaging in the process of passing the law the first time. I would hope that with the new Administration, the new Secretary of Transportation, that there are some opportunities to fill in these voids.

Clearly, one of the wise things we did was make room in that law for RCAC, because your testimony points out the fact that you are filling a rather substantial void where the political system and all of the tugs and pulls of the special interests in Washington or in Anchorage are unable so far to meet that demand. So we appreciate your time.

Let me just begin where you left off on the issue of the escort tugs. After Exxon Valdez, all of a sudden every ship was escorted by a tug, and the theory was, well, maybe if you had done that in the beginning, there wouldn't have been a problem. And you saw news clip after news clip of the tugs following the ships leaving the port, going through the Sound.

There is a press report that, after the near miss in October, they lost steering capability. Was that it?

Mr. Edwards—whoever wants to respond.

Mr. EDWARDS. Mr. Chairman, actually the Kenai, 120,000-deadweight tons, had a rudder angle indicator casualty. Two set screws on the sending unit on the rudder arm itself were loose, and although they did have steering control they did not know that, so in the wheelhouse the master and the pilot were obliged to assume that they had lost steering, and they treated the emergency, or apparent emergency, in that manner.

The pilot appropriately asked for the tug escort to come up to the starboard bow to attempt to push the ship away from Middle Rock. At the same time, we radioed and asked for other tugs to come from the terminal and assist. At about the same time that the tug began to push, as near as the POVTS—Port Operation Vessel Traffic System—committee staff has been able to determine, the engineer responded in the steering flat, was able to manually steer from that location, and the ship also began to steer.

The newspaper article was accurate in praising the people who put the system in place in the beginning. It should be pointed out that tankers were always escorted through Valdez Narrows with one tug. That escort system was expanded in 1989.

Mr. MILLER. In the article, it suggests that the next trip through there were four tugs. Is that accurate?

Mr. EDWARDS. Only if wind conditions demanded it. The Coast Guard guidelines state that between 30 and 40 knots the tug escort is doubled and above 40 knots they do not transit.

It is not clear in the incident of the Kenai that the tug actually pushed the ship away. The steering was reestablished at about the same time. The same report from our staff indicates that on a larg-
er tanker, or if there actually had been a steering casualty, the
critical element of response time would have made the outcome
very doubtful. That is one of the areas we are looking at very close-
ly at this time.

Mr. MILLER. In reading the article—and I am trying to just clar-
ify the facts here because I am not clear on this—they say that the
next trip had four tugs. You are saying that is because conditions
required that to take place, or was that in response to what hap-
pened to the Kenai?

Mr. EDWARDS. I am not sure exactly what the situation was with
the next tanker. I do know that the Coast Guard policy and the es-
cort response to that policy is that under certain wind conditions
there are more escort vessels.

Mr. MILLER. Mr. Sterling, you raised the issue of whether this
is a proper match of equipment in terms of mission and whether
the tugs that are currently engaged in the escort have the required
capability to deal with these kind of emergencies. Specifically, you
raised the issue of whether they have the ability to push a tanker
as opposed to being a towing operation. Would you care to elabo-
rate on that? What is the issue there? Is it the type of tug, the size
of the tug, or the crew, or what is it?

Mr. STERLING. Well, all the relevant factors are being studied.

Mr. MILLER. Studied by?

Mr. STERLING. RCAC. We have set up what is called the Disabled
Tanker Towing Study Group.

Mr. MILLER. Is that with the Coast Guard?

Mr. STERLING. It is the Coast Guard, RCAC, and the Prince Wil-
liam Sound Tanker Owner and Operators Association

Mr. EDWARDS. And Alyeska.

Mr. STERLING. And Alyeska.

Mr. EDWARDS. And the ADC.

Mr. STERLING. Right, and the Alaska Department of
Environmental——

Mr. MILLER. Give us a list of who is not involved. [Laughter.]

Mr. STERLING. It is a major study, and in the end it may cost
well over a half-million dollars, but the purpose of the study is to
establish as definitively and as “once and for all” as we can an hon-
est and objective assessment of present operating conditions, equip-
ment, and training, a qualitative comparison of those with the al-
ternatives that are available, and recommendations as to what
would be the best and safest system to use in the TAPS trade in
Prince William Sound.

We are subject to a protocol with the group that calls for all re-
ports to be evaluated and distributed and reviewed by everybody
before they are released, so we don’t have anything to offer other
than to assure the Congress and the world that the study is well
under way and that we are closely pursuing the question of what
is the best complement of towing and assistance for the TAPS-
trade tankers.

Mr. MILLER. And that comes under the heading of what is your
capability to respond and what is your response time in the event
of an incident that threatens the integrity of the tanker.

Mr. STERLING. That is right.
Mr. Edwards. The Kenai incident alone, even independent of the study, raises doubt as to whether the equipment we have with a larger tanker or a genuine rudder casualty will be able to handle that situation.

In the Valdez Narrows and in any constricted waters anywhere in the world, the key element is response time, and there have been a number of other studies conducted. We have researched that literature. Clearly, it seems to have been established that having escort vessels already made fast is one of the elementary principles in constricted waters.

Mr. Miller. Made faster to the tanker.

Mr. Edwards. Correct. And there are a variety of types of equipment available to do that.

There is a question about the safety of making fast a conventional-style tug, and we are looking at other equipment that might do that job a lot better.

Mr. Miller. Are there tugs that you can make fast? When I worked on a tug, you could be made fast in the wrong place and it wouldn't be of terrible help in that particular incident; you would have to go around and be made fast somewhere else.

Mr. Edwards. Precisely, and in Puget Sound where Arco is transiting at 10 knots, whereas in the Narrows where it is 6 knots, Arco Marine has contracted with Foss to build a 7,000-horsepower cycloidal propulsion tractor tug which is towed stern-to-stern and, in the case of a steering casualty, tows in an indirect manner. In other words, it can break and steer the tanker at the same time, which is obviously a significant advantage.

Mr. Miller. Are they expensive?

Mr. Edwards. Compared to what?

Mr. Miller. That is my second question.

Mr. Edwards. We have looked at that question, and the answer is yes, the initial outlay is expensive. On the other hand, this is a piece of machinery which would be a long-term investment and which would be in demand anywhere in the world people are moving oil.

Mr. Miller. Sarah.

Ms. Chassis. Yes, I just wanted to jump in. Under California's oil spill law there are harbor safety committees that were established, and it is our understanding that they have made recommendations about the use of tractor tugs in San Francisco and Los Angeles. We can get you information on that, but they felt strongly that those ports should deserve the same level of protection as Puget Sound and some of the other areas where these are used.

Mr. Miller. When you get into areas of restricted waterways, you get close to my house here. What do we have? About a thousand tankers a year cross the bay at San Francisco, come under the Golden Gate, depending on how the economy is doing, but that is about the number. Is that fair to say?

Ms. Chassis. I think that is roughly right. I don't know exactly.

Mr. Miller. But we have not gone through an upgrade of escort vessels in San Francisco. Is that correct? I mean that is the study that you are talking about?

Ms. Sankovitch. Escort vessels aren't required now in San Francisco.
Mr. MILLER. I understand that.

Ms. SANKOVITCH. And then this Harbor Safety Management Committee made their recommendation that there be tug escorts and made specific recommendations of what kind of vessel would serve as a tug escort so you wouldn't have the problems that they have in Prince William Sound now.

Mr. MILLER. A thousand tankers come through the Golden Gate each year. Obviously many more ships make that trip throughout the year, and obviously there is a very good safety record. A couple of bad incidents, but essentially a good safety record. That is what you are bumping up against here, I assume. The industry suggests, "Look, we have been doing this, and we have been doing it right, and we have improved the radar system in the bay since the collision. We don't need these other things in this bay." How do you weigh that in that discussion?

Ms. SANKOVITCH. The Harbor Safety Management Committee is made up of industry representatives as well as Coast Guard, State, and environmental representatives. Somehow there was a consensus that was able to be reached.

Mr. MILLER. Where is that in terms of implementation?

Ms. SANKOVITCH. It is just a recommendation so far, and we can get more information to you about that. Someone in our San Francisco office serves on the committee for San Francisco Bay.

Mr. MILLER. What can you tell me about the question of the VTS system for San Francisco?

Ms. SANKOVITCH. I was told today by the Coast Guard that they are planning on expanding the VTS north of the San Rafael Bridge, which was a recommendation that we had made already in 1990 in a report we issued then and which the local Coast Guard has wanted, but the time frame for that, again, is 5 to 7 years I understand. When the Coast Guard comes up, maybe you can ask them. I just was told that.

Mr. MILLER. All right. I will ask them why that is.

The arrangement that we have with the TAPS tankers—is that correct—it is just the TAPS tankers that have entered into the agreement not to go within 50 miles? So that doesn't apply to other tanker traffic that might be moving north or south along the coast?

Ms. CHASIS. That is right. It is something like 85 percent of the tankers transiting. But what about the other 15 percent? And shouldn't there be consideration given to requiring that those go 50 miles offshore as well?

Mr. MILLER. So if a tanker leaves Longworth or Richmond and goes to Long Beach or L.A. or Sterile Bay or somewhere, they are not held to that agreement because they didn't originate in the TAPS trade?

Ms. CHASIS. Correct. It is only tankers carrying the Alaskan crude oil, and there is no clear enforcement mechanism for that agreement, it is purely voluntary, and the companies self-monitor.

Mr. MILLER. And that does not apply then either to large barge traffic that might be carrying petroleum products.

Ms. CHASIS. That is correct. In talking to people in California, there is a lot of concern about this whole question of how far offshore tankers should be required to transit, and also there is concern about tanker transit through the marine sanctuaries. Tankers
come within 2 nautical miles of the Caroline Islands, apparently within a mile and a half of Point Reyes, and there is a lot of concern about the adequacy of those buffers to protect those areas.

Under the Monterey Bay Marine Sanctuary, there is a study going on as to how to direct tanker transport. We think that this is perhaps one of the most important questions that blows from the *Braer* incident, the need to establish these tanker-free zones. This is not something that has been done extensively in this country, and not something I think the Coast Guard is necessarily eager to do, but we think that that is something that should be a very high priority.

Mr. MILLER. To read your testimony and to listen to you, it seems to me that what you are suggesting is that, while clearly we are moving on implementation of the OPA 90 legislation, there are obviously gaps because it hasn't been fully implemented. That is understandable, but you are also suggesting that there are gaps because there are simply some issues that were not addressed in that legislation. Is that fair to say?

Ms. SANKOVITCH. Yes, it is.

Mr. MILLER. And, again, I am not quite clear on whether there is authority should the Coast Guard decide or should other studies decide to go to the kind of command and control system that the earlier witness, Mr. Green, testified to—whether that would be available or not.

Ms. SANKOVITCH. Under the Oil Pollution Act the Coast Guard VTS systems are given authority to control traffic in situations of navigational hazard like congested traffic or bad weather. I know in New York Harbor there have been restrictions placed in certain conditions of weather where certain dredging operations were going on. So it has been exercised in New York Harbor. I don't know about elsewhere.

Mr. MILLER. But it is not a general method of operation at this point.

Ms. SANKOVITCH. That is correct.

Mr. MILLER. Okay.

Mr. STERLING. Mr. Chairman, just to illustrate, the situation in Alaska is that local jurisdictions, such as the city of Cordova, the city of Valdez, we have very limited power legally over the operation of our ports and harbors. Our jurisdiction is limited, and mainly we proceed under State law. It is the Captain-of-the-Port zone and the Federal authority that really lay the groundwork for how we manage the operation of tankers and other vessels in our port and harbor areas. In the event of an oil spill we are stuck with the fact that it is the Federal Government and the State of Alaska that assume control and power over what happens.

Local municipalities, we are not exactly analogous to Shetland Islands Council, but the fact is that the Shetland Islands Council enjoyed a great deal of not only the legal power it needed to act and does act in Sullom Voe, but it is the 25 councillors and the employees and the staff and Mr. Green that people know, and that is whom they work with, and we don't have that sort of regime available to us.

Mr. MILLER. That is the issue that is raised in this hearing, and fortunately we were able to have Mr. Green with us. Matching po-
litical rhetoric and action sometimes is difficult—in case anybody
doesn't know that—but the fact is that we continue to talk all the
time about local control and local government and the government
closest to the people is best for the people, and all of those prin-
ciples. But it is interesting, when those principles run up against
large economic interests, we decide that maybe we know better in
Washington. What we are really saying is, we can insulate those
interests from the interests of the people that might clash with
those interests.

Now if I can follow that sentence, so can you.

The point being this, that I think if you asked people in the San
Francisco Bay whether they wanted a positive command and con-

trol system of all tanker traffic and if they were informed of the
volume of that traffic, the answer would be yes, because that was
basically the answer after we had the collision in the bay.

If you asked all the people that worked hard and benefit and will
enjoy the experience of the Monterey Marine Sanctuary, whether
they want it to be tanker-free, the answer will be yes. But if you
take that answer and bring it back to Washington, it will get fil-
tered and sifted and modified and rounded off until, “Maybe so,
maybe not, we are studying it, we will look at it next year.”

That is entirely different than the desires of the people who live
in the affected areas, and clearly when we talk about this and
when we investigate it, Exxon Valdez, the problem is when you say,
“We need to know what the weather is.” If you know the weather,
you are going to be responsible for your actions, but if you can go
out there and then you can make a decision when your tanker is
under way that you are going to proceed without the tugs, you are
essentially home free if you make it.

If you said, “Gee, I can’t go out there, let’s turn this baby
around”—if you have got the room—“and let’s go back to the port,”
the problem is, your berth is already taken because the oil is com-
ing down the pipeline, and it is on schedule, and you have got to
be out of there in 18 hours. As we found out in the investigation,
those who try to interrupt that throughput of oil on that system
run into all kinds of political ramifications right up the levels of
government, and that is the distinction.

The same thing is true in the area I represent. I have five or six
refineries, all of whom rely heavily on their port facilities, and
there are certain economics of that port. There is scheduling, and
that tanker is leaving at 3:00 in the afternoon, and at 4:30 some-
body else is coming through the gate to take that place. So those
are the pressures.

But I suspect that people who thought that that weather would
impact their coast, their livelihood, and all of the rest of it might
make different decisions. The clash of what Mr. Green called the
commercial regimes for the most part up to date have overridden
those considerations, and but for accidents, we are not very good
at responding to that.

Your Council, as distinguishable as it is from Shetland’s, is still
probably the model in the United States, but it was only a horren-
dous event that overrode the normal political systems here which
said you have got to give some voice to local individuals. Even in
the system of the Coast Guard, people were there trying to say
throughout the operation of that facility, you know, there are days when the wind is a little high here and the ice is moving around a little too much, but the overriding concern was the schedule of the port as opposed to the rest of the system.

Mr. Edwards. A quick note in light of two of those observations: The accident of the *Braer* has prompted the Captain of the Port in Valdez to look specifically at Hinchinbrook Entrance as possibly reenacting the same type of a problem. There have been a few ships that have exercised their judgment and not sailed out into the Gulf of Alaska in certain weather conditions, but he is considering making that a Coast Guard decision where there would be certain tide and weather considerations where he would say, "You will not go through Hinchinbrook Entrance."

Mr. Miller. I think it is a very unfair and somewhat unrealistic decision to ask a master of a vessel to make. We all believe he should, and he clearly has the authority, but we also understand all of the other decisions and the ramifications from that decision, whether it is small vessel traffic in San Francisco Bay or tankers in Prince William Sound. That is why the public likes to have the Coast Guard in between them, because you don't want to leave those decisions to people who would naturally have a series of conflicts about that decision.

Mr. Edwards. Exactly, and RCAC will support his decisions when he needs to make them, and we hope that his superiors will also support that, and today we would enlist political support for using that judgment.

Mr. Miller. Yes, Ms. Sankovitch.

Ms. Sankovitch. That raises another issue, which is the importance of having an independent pilot on board—that is, a pilot who is not part of the crew and not hired by the company. Now under the Oil Pollution Act, a State pilot—that is, an independent pilot—is required on vessels in Prince William Sound, but that same requirement hasn't been extended to the Lower 48.

I have spoken with pilots in the New York area who have said that as a State pilot, independent pilot, they are free to tell a vessel owner, "Your radar isn't working," or "The weather is too bad; I'm not moving." But the pilot who is part of the crew would probably not have that same flexibility.

Mr. Miller. We have pilots for two reasons, if I am historically correct, both for that independent decision making and knowledge of the waterway.

Thank you very much for your testimony.

I also want to enter into the record a letter from Assemblyman Sher on hearings that they just had which address some of the issues that you raised about the California situation, and we will be working with Assemblyman Sher on these issues and with your report.

[The letter follows:]
Dear Congressman Miller:

The California Assembly Natural Resources Committee conducted an oversight hearing on California’s Oil Spill Prevention and Response Act (OSPRA) on January 25, 1993. At that hearing we discussed several issues, which witnesses agreed could only be addressed at the federal and international level. I am writing to ask you to review these issues during the February 4, 1993 hearing of the Committee on Natural Resources Committee on the federal Oil Pollution Act of 1990 (OPA 90).

California’s Oil Spill Prevention and Response Program

OSPRA requires California to establish a comprehensive oil spill program. While the program will have many elements, key features include a $100 million contingency fund, contingency plan requirements for tankers and oil handling facilities, and harbor safety regulations. OSPRA requires that the program provide the best achievable protection to the California coast with requirements regarding both oil spill prevention and response.

The hearing participants all agreed that, while California needs to be prepared to respond to an oil spill, prevention should be our first priority. OSPRA requires that our program include provisions regarding tug escorts for tankers in selected harbors. Improved navigational equipment and rescue capability for disabled tankers. However, two preventative measures require federal participation for implementation.

Locating Tanker Routes 35 Miles Offshore

Testimony received by the committee strongly supported moving tanker routes further offshore as the best means for preventing oil spills. This testimony is consistent with the recent voluntary industry agreement to keep tankers in the California-Alaska trade at least 50 miles off the coast.

This agreement improves protection from spills for several reasons. First, a grounding such as the one which occurred in the Shetland Islands is less likely to occur if tankers are kept far offshore because there would be more time for rescue tugs to react. The Exxon was only 11 miles off shore when it lost power. Second, the further offshore tankers are operating, the fewer restraints there are to maneuvering, thereby reducing the chance of collision.
Finally, should a spill occur from a tanker located more than 30 miles from the coast, the spill is likely to be contained or to dissipate before it reaches the coast.

Unfortunately, the industry's voluntary agreement does not cover all tankers which operate off California. State oil spill officials have attempted to encourage oil tankers to operate more than fifty miles from the coast, but the state has only limited authority over vessels outside of state waters. Thus we need the help of the federal government in requiring tankers to operate at least fifty miles off coast. I understand that keeping tankers this far off shore may require changes to international conventions but California has no ability to seek these changes while the federal government can.

Vessel Traffic Service

The second preventative measure which requires federal assistance are vessel traffic services (VTS). OSPRA recognizes that the Coast Guard has preemptive authority over navigational issues like VTS but requires our state officials to negotiate to provide VTS in three locations in California - Los Angeles/Long Beach, San Francisco Bay, and the Santa Barbara Channel. OSPRA also requires negotiation to determine if other areas need these systems.

Currently, expansion and upgrade of the VTS system in San Francisco Bay has been approved. Establishment of a VTS system in Los Angeles/Long Beach has slipped a year because of federal budget problems, but I understand that funding is contained in the present budget.

VTS agreements covering the Santa Barbara Channel and other areas have not been reached. One of the reasons, according to the Coast Guard, is that it has insufficient funds to install these systems. Pursuant to section 8870.21 of the Government Code, contained in OSPRA (enclosed), our state program has the authority to raise funds to pay for a VTS system which is approved and operated by the Coast Guard. Thus the criteria for Coast Guard negotiation on VTS in California should be the safety value of the proposed system and not available funds.

In conclusion, tanker routing and VTS systems are indispensable pieces of a comprehensive oil spill program. We need to rely on the cooperation of the federal government to put these pieces in place.

Thank you for any assistance which you can render on these issues.

Sincerely,

[Signature]

Byron D. Price, Jr.
Assembly Natural Resources Committee

attachment: Oil Spill Prevention and Response Act
remand any oil spill contingency plans to the originating party with recommendations for amendments necessary to ensure that the coastline is protected.

8078.20. (a) Any party responsible for a tanker or barge shall notify the Coast Guard within one hour of the disability if the disabled tanker or barge is within 12 miles of the shore of the state. The administrator and the Office of Emergency Services shall request the Coast Guard to notify the Office of Emergency Services as soon as possible after the Coast Guard receives notice of a disabled tanker or barge within 12 miles of the shore of the state. The administrator shall attempt to negotiate an agreement with the Coast Guard governing procedures for Coast Guard notification to the state regarding disabled tankers.

(b) Whenever the Office of Emergency Services receives notice of a disabled tanker or barge, the office shall immediately notify the administrator. If the administrator receives notice from any other source regarding the presence of a disabled tanker or barge within 12 miles of the shore of the state, the administrator shall immediately notify the Office of Emergency Services.

(c) For the purposes of this section, a tanker shall be considered disabled if any of the following occur:

1. Any accidental or intentional grounding which creates a hazard to the environment or the safety of the vessel.

2. Loss of main propulsion or primary steering or any component or control system which causes a reduction in the manovering capabilities of the vessel. For the purposes of this paragraph, "loss" means that any system, component, part, subsystem, or control system does not perform the specified or required function.

3. An occurrence materially and adversely affecting the vessel’s seaworthiness or fitness for service, including, but not limited to, fire, flooding, or collision with another vessel.

4. Any occurrence not meeting the above criteria, but which creates the serious possibility of an oil spill or an occurrence which may result in an oil spill.

(d) For the purposes of this section, a barge shall be considered disabled if any of the following occur:

1. The towing mechanism becomes disabled.

2. The tugboat towing the barge becomes disabled through occurrences defined in subdivision (c).

8078.31. (a) The administrator shall attempt to negotiate an agreement with the Coast Guard by December 31, 1991, for a vessel traffic service system to protect the harbors of the state. The administrator may include in the agreement provisions for vessel traffic monitoring and communications systems for areas of the coast outside of harbors or negotiate a separate agreement. Any such separate agreement shall be negotiated by December 31, 1993. The purpose of the vessel traffic service and the vessel traffic monitoring and communications systems shall be to aid navigation by providing satellite tracking, radar, or other information regarding ship locations and traffic to prevent collisions and groundings.

(b) If the administrator cannot negotiate an agreement on VTS systems pursuant to subdivision (a) by December 31, 1991, the administrator shall, in consultation with the Coast Guard, develop a plan for implementing vessel traffic service systems pursuant to subdivision (a) for the harbors of Los Angeles/Long Beach, the harbors of San Francisco, San Pablo and Suisun Bays, and the Santa Barbara Channel, and any other areas where establishing a vessel traffic service system or vessel monitoring and communications system is recommended by the Coast Guard. The plan shall provide for the regions described in this subdivision, and any other system and regions recommended by the Coast Guard, or recommended by the administrator and approved by the Coast Guard. The plan shall be completed by December 31, 1992. Only systems which will be operated by the Coast Guard shall be included in the plan. The system shall be installed and in operation by December 31, 1993. The plan shall be amended to reflect changes in Coast Guard recommendations, operations, and changes in the agreements specified in subdivision (a). If the administrator cannot comply with this deadline, he or she shall report to the Legislature on the reasons.

(c) The administrator shall attempt to provide funding for a VTS and vessel monitoring and communications system through voluntary funding by the maritime industry. If agreement on voluntary funding has not been reached by July 1, 1992, the administrator shall establish a revenue system that reflects the commercial maritime activity of each of the respective harbors or areas for which there is a VTS or vessel monitoring and communications system. Using this revenue system, the administrator shall fund the VTS system and vessel monitoring and communications system. The moneys collected pursuant to this subdivision shall be deposited in the Vessel Safety Account, which is hereby created in the Oil Spill Prevention and Administration Fund. Moneys in the Vessel Safety Account are continuously appropriated solely to carry out the purposes of this section. Other than the fees imposed by this subdivision, no funds from the Oil Spill Prevention and Administration Fund may be used for VTS or vessel tracking monitoring and communication systems. The administrator shall adopt regulations to implement this subdivision. The administrator may adopt regulations prohibiting barges and tankers from accepting or unloading oil at marine terminals if a barge or tanker is not in compliance with vessel traffic service and vessel traffic monitoring and communications system equipment.

(d) All other vessel traffic service and vessel traffic monitoring and communications systems deemed necessary by the administrator, but not approved by the Coast Guard, shall not be
operating either tankers or dry cargo vessels.

Any member appointed from the categories listed in paragraphs (3), (5), (7), (8), and (18) shall have navigational expertise. An individual is considered to have navigational expertise if the individual meets any of the following conditions:

(A) Has held or is presently holding a position on a commercial vessel that includes navigational responsibilities.

(B) Has held or is presently holding a shore-based position with direct operational control of vessels.

(D) Has held or is currently holding a position having responsibilities for permitting or approving the docking of vessels and operations around harbor facilities.

The administrator shall appoint a chairperson for each harbor safety committee from the membership specified in this subdivision. Each member of a harbor safety committee shall be reimbursed for actual and necessary expenses incurred in the performance of committee duties.

(c) Each harbor safety committee shall be responsible for planning for the safe navigation and operation of tankers, barges, and other vessels within each harbor. Each committee shall prepare a harbor safety plan, encompassing all vessel traffic within the harbor. For the purposes of this section, "vessels" means vessels as defined in Section 21 of the Harbors and Navigation Code.

(d) The administrator shall adopt regulations and guidelines for harbor safety plans in consultation with the port authorities of the harbors listed in subdivision (a), and other affected parties. The regulations and guidelines shall require that the plan contain a discussion of the comparative aspects of the recommendations of the harbor safety committee. With respect to harbor safety plans, the administrator shall give his or her highest priority to the development of regulations and guidelines concerning tug escorts as contained in paragraph (1) and shall expediently adopt that portion of the regulations and guidelines relating to tug escorts so that the harbor safety committee for the harbors of San Francisco, San Pablo, and Suisun Bay can expeditiously conform to the requirements of paragraph (1). The regulations and guidelines shall ensure that each plan includes all of the following:

(1) A recommendation determining when tankers must be accompanied by a tugboat or tugboats, of sufficient size, horsepower, and pulling capability, while entering, leaving, or navigating in the harbor. The harbor safety committee for the harbors of San Francisco, San Pablo, and Suisun Bay shall give its highest priority to the adoption of tug escort recommendations and shall immediately adopt interim recommendations prior to the completion of the entire harbor safety plan. The administrator shall be guided by the recommendation of the harbor safety committee.
Mr. MILLER. Yes.

Ms. CHASIS. Could I raise one last point? It is sort of ironic to me that we haven't really focused at all on the double-hull question. You know how hard fought that issue was in enactment of OPA 90, and now we have a recent Coast Guard report which says: yes, double-hulls are clearly more effective in controlling the major sources of spills in the United States—i.e., groundings—than any other alternative, and four major spills that occurred, two in 1989 and two in 1990, would have been avoided with double-hulls.

In light of that, one thing we would like you to think about is whether or not this very long phase-in requirement for double-hulls extended through 2015 should be speeded up.

Mr. MILLER. It is very much part of this discussion and this oversight. It has been a part of the discussions both with people in the Merchant Marine and Fisheries Committee and also with the authors of the original amendment about that timetable, because I think there is some concern that we get to a point here. Maybe the Coast Guard can address this, but at some point out of economics you start to get a horrible mix of ships; you have some real old ones you are trying to hold on to until you have to make that decision. It is of concern, especially given some of the other studies done on conditions of ships. So it is part of the mix here.

Thank you very much for your help and your testimony before the committee. We appreciate it.

Next will be Rear Admiral Arthur E. Gene Henn, who is the Chief of the Office of Marine Safety, Security, and Environmental Protection, for the U.S. Coast Guard, who will be accompanied by Commander Ed Rollison and Margie Hegy from the Office of the Chief of Navigation and Waterway Safety.

Welcome to the committee. We appreciate your willingness to testify and the information that you have provided. Your entire statement will be placed in the record. Proceed in the manner in which you are most comfortable, but if you would also feel free to comment on previous testimony where you think you can help expand or complete the record, that would also be appreciated.

Admiral Henn, please go ahead.

STATEMENT OF REAR ADMIRAL ARTHUR E. GENE HENN, CHIEF OF THE OFFICE OF MARINE SAFETY, SECURITY, AND ENVIRONMENTAL PROTECTION, U.S. COAST GUARD HEADQUARTERS, ACCOMPANIED BY COMMANDER ED ROLLISON; AND MARGIE HEGY, FROM THE OFFICE OF NAVIGATION SAFETY AND WATERWAY SERVICES, U.S. COAST GUARD HEADQUARTERS

Admiral HENN. Thank you very much, Mr. Chairman. Good afternoon. It is a pleasure to be here.

I might just lead in by saying that I have two fine folks with me to help me answer some of the questions that you and your committee might have. Principally, I will feel very comfortable answering any questions dealing with maritime safety, environmental protection, port-State and flag-State responsibilities, and of course, OPA 90 implementation.

Ms. Hegy has particular expertise in the navigational arena and things dealing with areas of exclusion zones and things like that,
and Commander Rollison has been a commanding officer of Vessel Traffic Service [VTS] San Francisco, so he has a great deal of background in that area. I say this just so you know where our expertise lies.

Sir, you mentioned that the written statement will be entered. I have a general statement I could read, but I really think the thrust of what we can give you today is going to be principally in response to your questions.

I think that from my standpoint, both the Commandant and I, here at home and internationally, have said time and time again that we believe OPA 90 is, in fact, the next best thing to sliced bread; I say with true feeling, that certainly Congress responded to the will of the American people in a time when all of us—and I'm saying the Federal Government, State government, local government, industry, and even the environmental proponents, the good stewards of our environment—did not take as active a role as they should have. I am referring to the decade of the eighties; I term it "the decade of disaster" as far as the enhancement of and progress in maritime safety and environmental protection.

I also am very pleased to say that having the biggest part of implementation of OPA 90 within my responsibility—over 60 or so regulatory projects, over 30 studies, and over 30 reports to this body—that I am pleased with the progress that we have made. On the one hand, I am very proud of what we have done; I prefer we would have done some of it sooner, but I am proud of the advancements that we have made.

I would report to you, sir, that taking this sense of Congress, taking this sense of the U.S. public, the whole host of customers that we have out there in this fine country of ours, and including the good stewards of the environment, such as Nina Sankovitch and her organization, Greenpeace, and the whole host of others that we work with, on the international scene, at the International Maritime Organization, we are advancing beyond what is in OPA 90—indeed, putting together a universal regime where many of the things that we wish we had today will be in place, where the safety nets will be there to minimize casualties and certainly mitigate the results of those casualties when they occur. We are a leader in the international scene on that.

We have done some things during the past several years—and I am talking since the passage of OPA 90—within the International Maritime Organization that, to tell you the truth, sir, we could not have advanced if it hadn't been for the passage of OPA 90, the shot heard around the world. The message that was sent was that it is no longer business as usual, there is a new wind blowing, and it is time to change the way we play the ball game.

So that is the statement I would like to give you, sir, and certainly we stand ready to answer questions, and as we go through the questioning I will certainly try and piggy-back on some of the statements that were made by the previous panels.

[Prepared statement of Admiral Henn follows:]
DEPARTMENT OF TRANSPORTATION

U.S. COAST GUARD

STATEMENT OF REAR ADMIRAL ARTHUR E. "GENE" HENN

ON THE SHETLAND ISLANDS OIL SPILL AND
IMPLEMENTATION OF OPA 90

BEFORE THE

COMMITTEE ON NATURAL RESOURCES

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

HOUSE OF REPRESENTATIVES

FEBRUARY 4, 1993
Rear Admiral Arthur Eugene Henn became Chief, Office of Marine Safety, Security and Environmental Protection at Coast Guard Headquarters, Washington, D.C., in June 1991. Prior to this assignment, Rear Admiral Henn was Commander of the Maintenance and Logistics Command, Atlantic.

Earlier assignments included that of Operations and Engineering Officer on the Coast Guard cutter Chincoteague; Assistant Chief, Merchant Marine Technical Branch, New Orleans, LA; and Special Project Action Officer, Merchant Marine Technical Division, Coast Guard Headquarters.

He was also Marine Inspector and Senior Investigating Officer, Marine Inspection Office, Philadelphia, PA; Chief, Engineering Branch and Chief, Marine Technical and Hazardous Materials Division, Coast Guard Headquarters; Captain of the Port, New York; Commander, Group, New York; Commander, Subsector, New York, Maritime Defense Zone, Atlantic; and Chief, Operations Division and Chief of Staff, Eighth Coast Guard District, New Orleans, LA.

A 1962 graduate of the Coast Guard Academy, Rear Admiral Henn earned combined master of science degrees in naval architecture, marine engineering and metallurgical engineering from the University of Michigan in 1968. Also, he is a 1982 graduate of the Army War College.

His decorations include the Legion of Merit, two Meritorious Service Medals, four Coast Guard Commendation Ribbons, Coast Guard Unit Commendation Ribbon, Coast Guard Achievement Medal and two Commandant’s Letter of Commendation Ribbons.

Rear Admiral Henn is a member of the American Society of Naval Engineers, American Bureau of Shipping, International Cargo Gear Bureau, Marine Index Bureau, Marine Engineering Council of Underwriters Laboratories and the Sealift Committee of the National Defense Transportation Association.

During the past 20 years, he has represented the United States Coast Guard as a member of delegations to the International Maritime Organization, a United Nations specialized agency. He heads United States delegations to meetings of the Maritime Safety and Marine Environment Protection Committees of IMO.

A native of Cincinnati, Ohio, Rear Admiral Henn is married to the former Susan Frances Pedritti, also from Cincinnati. They have two grown children, David and Jennifer.
Good morning, Mr. Chairman and distinguished members of the subcommittee. I am Rear Admiral Gene Henn, Chief of the Coast Guard's Office of Marine Safety, Security, and Environmental Protection. I appreciate this opportunity to bring you up to date on the recent Shetland Islands Oil Spill and to discuss some of the issues it raises as they relate to the Oil Pollution Act of 1990 (OPA 90). I would also like to update you on various OPA 90 accomplishments and additional measures which are underway to curb marine pollution.

BRAER SPILL

In the early morning hours of January 5, 1993, the Liberian tankship BRAER lost power in gale force winds while navigating the passage between Fair Isle and Shetland Isle in the North Sea. The British Coast Guard was alerted, and evacuated most of the 34-man crew by helicopter. Ship's engineers remained aboard and worked over the next five hours attempting to repair the machinery, thought to have failed from fuel contamination. Tug assistance from the major oil terminal at Sullom Voe, only 40 miles to the north, was impeded by heavy weather.
After drifting almost six hours, the BRAER grounded at Garths Ness, a rocky headland near the southwestern tip of the Shetland Islands. Powerful winds and heavy seas continued to buffet the tanker for several days until it broke up. The tanker lost virtually all of its 24 million gallons of North Sea light crude oil, over twice the amount spilled by the EXXON VALDEZ, in an ecologically sensitive area.

Extremely poor weather and sea conditions prevented initial response efforts, while at the same time they helped to disperse the oil. On January 6, the United Kingdom (U.K.) Department of Transport dropped 100 metric tons of chemical dispersants onto the spill to help break up the oil and mix it into the water column. (The effectiveness of the chemical dispersants has been debated.) As weather and seas permitted, response crews deployed containment boom to protect some shoreline areas. Since it involved relatively light oil, the spill tended to disperse and evaporate more readily, and will continue to break up through the normally stormy winter in the area.

The BRAER was a single hulled tankship, 17 yrs old, current in its classification society inspection. At the time of the casualty, the BRAER was enroute Quebec, Canada from a North Sea oil port in Norway, using a common navigational route for such vessels.
A United States offer to provide technical, operational, and research assistance was made on January 11, 1993, but it was declined by the U.K. Government.

While regrettable, the T/V BRAER incident provides us with a sobering opportunity to examine our own marine environmental protection program -- its strengths and weaknesses, and the progress we have made since EXXON VALDEZ. I must note at the outset, however, that the transportation of oil has inherent risks, and no currently feasible system of environmental protection will provide a 100% safeguard against accidents.

A wide array of issues were raised by the incident, but I'd like to begin with those most closely related to the casualty itself.

PREVENTION ISSUES

LOSS OF POWER
The BRAER's loss of power for 5½ hours before grounding on the rocks captured public attention and highlighted frustration with the variety of risks involved in transporting oil. Despite the vast breadth of legislation and international attention on the heels of the EXXON VALDEZ spill, major accidents continue, and in fact propulsion failures were not addressed specifically in OPA 90.
Oil spill prevention is complex and multifaceted. Solutions are necessarily aimed at different fronts -- structural integrity, crew competence, operational procedures, maintenance, navigational controls, technology, and financial responsibility; all are aimed at reducing risk. While propulsion failure isn't a new problem, we've collectively made substantial headway. Our data on U.S. waters shows that between 1981 and 1991, thirty-two tankships suffered propulsion failures. Of those, six ultimately went aground. None spilled oil.

Could it happen here? Unfortunately, we're no less vulnerable than Scotland or any other coastal nation. Transportation of oil involves inherent risk to some degree, but we have many regulatory systems in place to reduce the risks. We are aggressively implementing our myriad new taskings from OPA 90, and we continue to evaluate risks -- both circumstantial and causal -- to further identify weak points and options for improving the U.S. spill prevention infrastructure.

ABANDONMENT

One of the more widely reported aspects of the BRAER spill was the Captain's order to abandon ship an hour before tugs arrived. Without a crew aboard the BRAER, tugs were unable to get lines on the tanker to arrest its drift toward the rocks.

Speculation in hindsight is rampant, but I wouldn't be too quick to second-guess the Captain's judgment in such a situation.
Dozens of human lives were at stake. While I am awed by the magnitude of the oil spill and its potentially severe effects on the environment, we simply don't use human life as currency for preventing environmental damage.

ESCORTS

The BRAER's loss of power and abandonment before tugs could arrive also highlight the issue of escorts for tank ships. The purpose of escort tugs is primarily to provide a backup in the event of mechanical problems such as the BRAER encountered or as a check against navigational error. This is an issue most recently dealt with legislatively by OPA 90. Section 4116(c) of the Act required us to issue regulations defining certain areas where single-hulled tankers larger than 5,000 gross tons transporting oil in bulk would be required to be escorted by two towing vessels. Three areas -- Prince William Sound, Alaska; Rosario Strait and Puget Sound, Washington -- were specified in the law. We published a Notice of Proposed Rulemaking on July 7, 1992 (57 FR 30058). The response to this Notice has highlighted the complexity of the escort issue. We must balance the large capital and operational costs with the benefits. Associated complexities include the need to develop relevant and feasible horsepower standards and the need to consider new escort propulsion technologies. These issues and others arising from response to the Notice are currently being studied.
The reality is that the BRAER incident occurred outside the type of confined and heavily traveled waters for which OPA 90 specified escort requirements. We expect, however, to learn much from the rulemaking regarding the costs, benefits, and feasibility of tanker escorts. As we gain experience from implementation of the current mandates, we will have a clearer view of the applicability of such provisions to vessels in more open waters.

TANKER FREE ZONES
The proximity of the BRAER incident to the oil terminal at Sullom Voe naturally drew attention to the voluntary 10-mile tanker free zone which has been in effect around the Shetland Islands since the terminal was opened in 1979. The Shetland Islands Council recently proposed to the International Maritime Organization (IMO) that an area to be avoided be established in the vicinity, and IMO has endorsed this proposal. In the case of the BRAER casualty, however, the ship was reportedly navigating beyond this 10-mile tanker free zone.

Domestically, and at Congress' direction (Section 4111(b)(7) of OPA 90), the Coast Guard is evaluating whether certain areas within U.S. navigable waters and the 200-mile Exclusive Economic Zone should be designated, in which tanker operation would be limited or prohibited. We're working quickly, and we're anxious to conclude the study and implement its findings. It is a significant undertaking, however, and we must carefully balance a
variety of national needs and interests. The report will be delivered to Congress as geographic segments are completed, with final delivery of all segments by 1995.

VESSEL TRAFFIC SERVICES (VTS)
One of the paradoxes of the BRAER casualty was its proximity to Sullom Voe, which offers a widely acclaimed Vessel Traffic Service (VTS) System for the port and terminal area just 40 miles to the north. At about 20 miles offshore, the BRAER was outside the range and the jurisdiction of the VTS.

We don't know if VTS would have helped avert the oil spill. How might a VTS have helped? A VTS might have reduced the time required to detect and respond to the loss of propulsion. It would not have prevented the engineering failure.

Domestically, we have completed the OPA 90 mandated study of VTS for U.S. ports. That study has given us a much improved perspective of our own VTS needs and has positioned us for a dramatic expansion in VTS installations.

Since the passage of OPA 90, the Coast Guard has reactivated VTS New York and expanded service in other areas. New VTS's are being established in New Orleans, Los Angeles/Long Beach, and other critical ports. Rulemaking is underway to make participation in these VTS's mandatory, consistent with the provisions of OPA 90.
Internationally, the IMO is considering alternatives for mandatory offshore reporting in circumstances other than port entry. It is anticipated that this reporting would be linked to established VTS systems. The Coast Guard will remain actively involved in these negotiations.

DOUBLE HULLS
The BRAER was a single hull vessel and its loss calls to mind the intense debate, both domestically and internationally during recent years, on the benefits of tankers with double hulls. Most recently, the Department of Transportation submitted to Congress an in-depth report, commissioned by the Coast Guard and conducted by the National Academy of Sciences, on alternatives to double hulls. The key conclusions of the report were that there is currently no other design which offers equivalent protection, but that continued evaluation of new technologies was warranted. The outcome of these debates has forever changed the face of tanker construction, and it has left us with margins of environmental protection that are orders of magnitude greater than we knew a few short years ago. Domestic regulations require double hulls for new tankers built after June 30, 1990. These regulations also require existing single hull tankers to be retrofitted with double hulls starting in 1995. International regulations will require double hulls on new tankers starting in July 1993 and will require existing single hull tankers to be retrofitted or retired not more than 30 years after delivery. Despite this extraordinary progress, the BRAER brings home the realization
that no improvement in the prevention arena is a cure-all. A double hull would not have helped prevent the BRAER spill.

PREPAREDNESS ISSUES

RESPONSE PLANS
I am not fully familiar with the BRAER’s level of preparedness to respond to its own spill. I can, however, describe the preparedness regime in which we would find ourselves if a BRAER incident occurred in our waters. I’ll begin with the benefits of the OPA 90 mandated vessel response plan.

As you know, the stringent vessel response planning requirements of OPA 90 become effective on February 18, 1993. Under those requirements, a tanker which was involved in such an incident in navigable waters of the U.S. would have in place an extensive response plan designed to ensure effective response to loss of its entire cargo in adverse weather. Key among the many required provisions of the plan would be the identification, and contract (or other approved means) to ensure the availability, of private personnel and equipment necessary to remove a worst case discharge, or threat of discharge, to the maximum extent practicable. Coupled with this provision, the plan would also identify a qualified individual fully authorized by the owner to implement removal actions. I cannot emphasize enough that a major benefit of the new vessel plan requirements is that they require owners to think through their response activities in
advance, and we have learned throughout the years that planning is more important than the plan. I am convinced that compliance with these provisions will immeasurably improve the quickness and efficiency of response along our shores, and will constitute a major step toward protecting our marine environment. As you know, publication of the interim final regulations implementing these planning requirements is scheduled for February 5, 1993. In an effort to ease the burden attendant with preparing these plans, and to compensate for the delay in publishing the regulations, we have provided the industry with extensive written guidance in the form of Navigation and Vessel Inspection Circular Number 8-92.

I would be remiss if I did not note here that a foreign flag tanker in transit passage in our Exclusive Economic Zone would not be subject to this rule unless the tanker had previously been in a U.S. port and had contemplated the transit.

Also relevant to vessel response plans, I cannot help pausing to note that the "worst case discharge", (i.e., discharge in adverse weather conditions of a vessel's entire cargo), which has been widely criticized as an unreasonable planning standard, is exemplified by the BRAER spill.

Finally, on this subject, I would like to note that we played an integral part in negotiating the international standard for response plans that is now articulated in Regulation 26 of Annex
I of International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78). In addition to tankers over 150 gross tons, this requirement will apply to cargo vessels over 400 gross tons.

ON BOARD RESPONSE EQUIPMENT

Another preparedness issue which is somewhat tangential to the loss of the BRAER is the carriage of on board response equipment. This has been a subject of ongoing debate during the rulemaking arising from Section 4202(a)(6) of OPA 90. Our Notice of Proposed Rulemaking proposed a requirement for the carriage of an emergency towing package which may, in the future, help to prevent such accidents as the BRAER grounding. The circumstances surrounding the BRAER spill suggest that on board oil containment boom or skimmers would not have been of value. The BRAER incident therefore tends to validate the posture the Coast Guard has so far taken on shipboard equipment. The comment period on this rulemaking is closed and development of the final rule is underway. There continues to be much debate regarding the safety, effectiveness and feasibility of tanker-deployed equipment. In the long run, this is an area that is technology sensitive and is likely to need periodic reexamination.
AREA CONTINGENCY PLANS

I cannot leave the assessment of our preparedness for a BRAER-like incident without touching on the status of the Area Contingency Plans that were mandated by OPA 90. These plans will form the shoreside complement to the vessel response plans. They will provide the mechanism for the necessary coordination among Federal, State, and local agencies during a spill response. The plans will be significant enhancements over existing local contingency plans, but their greatest advantage comes from the fact that they will be developed by Area Committees made up of relevant Federal, State, and local agencies, and will involve local industry, environmental groups and academics. This Area Committee/Area Plan concept, by broadening the planning process, will establish response relationships and enhance coordination during the stress of actual response. We are well along with the large task of realizing these genuine benefits. July 1993 has been set as the target date to have all Area Plans in place. I am absolutely convinced that a BRAER-type spill occurring under an OPA 90 preparedness regime, from the vessel side and shoreside, will be handled with an efficiency never before seen.

RESPONSE ISSUES

DISPERSONS

The BRAER incident has not raised a broad array of response issues. The severity of the weather precluded any immediate containment efforts and limited the response to application of
dispersants. While the severity of the weather limits human response, it does expedite natural dispersion of the oil. There has been much debate on the effectiveness of the dispersants used in the BRAER incident but it would not be productive for me to enter that debate. I would like to emphasize that should a BRAER incident occur off our coast, our National Response System, as detailed in the National Contingency Plan and implemented by the Area Contingency Plans, provides for structured, planned, knowledgeable decision-making to ensure effective use of dispersants in appropriate circumstances.

RESPONSE CAPABILITY

An incident of the BRAER's magnitude makes us reflect on our own response capabilities. The Coast Guard's National Strike Force, whose mission is to provide specialized equipment and technical support for major incidents, has been greatly enhanced through OPA 90. A third strike team was commissioned at Fort Dix, New Jersey and the National Strike Force Coordination Center (NSFCC) was established at Elizabeth City, North Carolina to oversee strike team operations, training, and equipage. In addition, the NSFCC will oversee the expanded new Federal, State and private exercise programs of OPA 90.

We have dramatically boosted our response capability by purchasing extensive OPA 90-authorized response equipment for prepositioning at various sites around the country. We are beginning to deliver this equipment to 19 major sites and expect
to have it all delivered by May 1994. In addition, we have supplied each of our Captains of the Ports with significant "first response" equipment for their use during more routine spills. This equipment has already been effectively used in response. OPA 90 clearly promotes growth in the private sector's ability to provide its own response equipment. While there is a long way to go, the evolution of organizations such as the Marine Spill Response Corporation and the National Response Corporation are strong indicators that OPA 90 is having the desired effect.

For response to truly major incidents, we have developed a special organizational concept which we call the Spills of National Significance protocol. This protocol would draw on existing federal resources, and, within the context of the National Contingency Plan, would restructure them to better deal with spills that overwhelm the resources of the spill area.

Supported by OPA 90, research and development into new response technologies continue, and it is now better coordinated (through the Interagency Coordinating Committee on Oil Pollution Research) to promote efficient use of research and development funds.
FINANCIAL RESPONSIBILITY

The ability to pay for the damages caused by oil spills is always an issue in cases of the magnitude of the BRAER. Under the liability regime established by OPA 90, a vessel the size of the BRAER would have had to demonstrate financial responsibility nearly seven times greater than that required under the existing international liability regime. Much of the international shipping community has stated that it is not prepared to comply with the OPA 90 financial responsibility provisions. This has delayed the development of realistic and functional financial responsibility implementing regulations while we diligently seek resolution. I can assure you we are sparing no effort to bring this difficult issue to closure with the issuance of appropriate regulations. In the meantime, some comfort can be taken in the fact that nearly all tankers currently serving the United States carry at least $500 million in pollution liability coverage, which exceeds the OPA 90 limits.

ADDITIONAL MEASURES

While not particularly related to the Shetland Islands spill, I would like to give you a brief look at some other key initiatives that are planned or underway to reduce the risks of further environmental damage.
We have been an active proponent of, and will be an active participant in, the International Maritime Organization's new Subcommittee on Flag State Implementation. Among the primary issues on the Subcommittee's agenda is the establishment of guidelines and standards for flag states, classification societies, and organizations acting on behalf of flag states. These standards will do much to raise existing substandard performance in ensuring compliance with international pollution conventions.

Domestically, we have regulatory initiatives to close gaps in the coverage between Federal and state pilotage provisions in New York, Los Angeles/Long Beach, and Barbers Point, HI. In addition, we are working with the National Academy of Science's Marine Board in their study of pilotage issues.

The Marine Board, with funding assistance from the Coast Guard, is studying the status of salvage capabilities in U.S. waters. This study will provide key information to assess gaps in salvage coverage and to seek means to compensate for those gaps.

**SUMMARY**

I have touched on a number of current marine environmental protection issues and initiatives directly or indirectly related to OPA 90. Incidents such as the BRAER grounding give us all a chance to reflect on where we are, how far we have come and where
we have yet to go in protecting America's marine environment. Overall, we are doing very well. I believe OPA 90 has brought us unprecedented progress on the road to environmental protection in the two and a half years since its enactment and our posture in both prevention and response capability has been significantly enhanced. That progress could not have been achieved without the combined and aggressive efforts of the public, industry, and the environmental community, working with us in the framework set by Congress. We, of course, have more to do and we look forward to the continued joint efforts between government, industry and the public in achieving full implementation of OPA 90.

I would be pleased to answer any questions you may have.
Mr. MILLER. Thank you, and obviously we are pleased to hear your statement of purpose.

Obviously, the *Exxon Valdez* was a very traumatic event for this nation and called into question a whole series of conflicting issues. To a great extent, those issues were reconciled in the oil spill legislation. In some cases even where committees spoke, the Floor of the House spoke even stronger and, I think, were echoing what we were hearing from our constituents—whether or not they would ever be impacted—that tragedy and the attention given to it was simply unacceptable to them.

I think the Coast Guard is clearly viewed as the “thin blue line,” if you will, between the recurrence of that and the prevention of those actions. It is a very serious charge, because I think if you talk to anybody in the industry, as I often do, they realize the last thing they need is another one of these events. It was true after the blow-out at Santa Barbara—it is certainly true after the *Exxon Valdez* and the *Braer*—that there is nothing like one of these events to sort of focus the mind and the pocketbook of the industry.

But there is still a tendency to slide back as time removes the event from your current and urgent concerns. That is true of the public, and that is true of the industry, but we cannot let that be true of the Coast Guard, because your charge is to do this every day, as difficult as that task is.

The previous panel mentioned a number of requirements of OPA 90 that have not been met, regulations that have not been proposed, and I wonder if you might comment on that and what you really believe the schedule is, and also if you could tell us what are the major impediments to the production of those regulations and the proposals for regulations.

Admiral HENN. Yes, sir.

Mr. MILLER. I realize that is a mouthful, but it kind of goes to the crux of our reliance on the Act.

Admiral HENN. Well, sir, I share your concerns. I understand the importance of that question itself. It is one that I ask myself day in and day out, and I have to tell you, the Commandant asks me that same question fairly frequently.

But to sum it up this way, I think we are about a third of the way toward where we want to be. I have said in many forums that I eat and sleep OPA 90. I estimate that we will have implemented the Coast Guard portions of OPA 90 as I leave my watch, which looks to be the summer of 1994, and I think that the major issues, those that had congressionally mandated deadlines, for the most part have been met. Certainly with regard to vessel response plans and facility response plans, those interim rules will be on the street as of this Friday. I mean published in the *Federal Register*; they are already out in xeroxed copies.

The one issue that I think is not where I want it at the present time is the issue that Nina brought up on the single-hulled vessels, the existing ships. There was a deadline—this was a congressionally mandated deadline—of August 18, 1991, to have the final regulations in place. We don’t have those in place, and we don’t have them in place because, as we have told the subcommittees that we normally appear before, we don’t have the answers, and neither does the international regime, neither does Government, and nei-
ther do the stewards of our environment, those who are dedicated
full time to that, such as some of the groups like Greenpeace and
others; the answers just aren't there. However, we think we have
the answers fairly well developed, but we are not 100 percent
there.

We are going to get a Notice of Proposed Rulemaking out on the
single-hulled vessels fairly quickly. I expect that that will be out
in the next month or two. What has delayed it has been the fact
that, working through the International Maritime Organization,
seeing what other nations are trying to do, meeting with those who
have come up with what they think are good engineering alter­
natives, seeing if, in fact, those are good engineering alternatives
or if they are good money-making devices for an individual or cor­
poration. Congress did give us specific guidance. They said, "What­
ever you do must be technically feasible and also economically rea­
sonable," and therein is the real hang-up.

If we just had to provide an engineering solution, sir, we could
come up with that. I certainly have the talent within my organiza­
tion to come up with a good engineering solution. I'm not sure the
world would want to pay for it, but to meet the mandate that you
have given us of being economically and technically feasible, that
is where the real hang-up is.

I can go into some other specifics, but let me kind of drop back
a little bit and answer the root of your question of, why have there
been these general delays? Why two and a half years after OPA 90
was passed, why don't you have it all done, regardless of those
items that have congressional deadlines on them? And, I have to
tell you, you know, the old story of the comic strip character that
said, "We have met the enemy, and it is us."

Our Government, to be fair to the public that we serve, has put
constraints on the way we do rulemaking. It takes about 200 days
to get a rule through the system and on the streets, except in emer­
gency situations where life is in imminent danger. That is just the
system that we have set up within the Administration. I am, of
course, talking about my own Department, the Department of
Transportation, which the Coast Guard is a part of.

I deal within that regime. I recognize that there is a good side
and a bad side to it, but it is a regime that works. It ensures that
we don't do anything screwy. It does ensure that there is input to
our regulations from the public, and certainly that is demanded by
the Administrative Procedures Act.

There are some deadlines just as a result of our form of govern­
ment. Certainly within the Executive Branch, the rulemakings
must go through OMB and through the Department, and that too
is important, and there are good reasons for that. So there are
some delays there.

Obviously, there are some outside delays that we have been faced
with, such as the two moratoriums that we have had on rule­
making just during the past year. It wasn't just a moratorium on
sending the rules up, but it was actually a moratorium on working
on the rules, unless they had congressional mandates and a couple
of other kickers that would allow them to go forward.

But I think within the best intentions of our Government, we
were told to go back and look at standing regulations that were in
place and see if we couldn’t do away with regulations that were still lying around that had served their purpose. Sir, we did find some of those, and we did do away with some of those. So that, I think, was a fairly good idea, but it has set us back somewhat.

I am very pleased with where we are on the response plans. As you know, OPA 90 says that industry must have their vessel response plans and their facility response plans to the Coast Guard by the 18th of this month. Now some—some who have not taken the time to become well informed or understand the rulemaking, or some who just intentionally want to not understand it—would say that February 18 is a wall and that the industry is not going to be able to meet it, that the storage and transportation of oil as we know it in the United States today will cease, the lights will go out, and we will all die of cold. I want to tell you, absolutely, it is hogwash. It is almost nonsense even making that statement, but obviously there is a segment out there that is still saying that today.

The response plans must be in to us by the 18th. The vessel owners and the facility owners must be in compliance with their plan by August 18, 1993. There is a 2-year window from the 18th of this month for the Coast Guard to take final approval action on those plans. I won’t bore you with all the details here, but we have done some things to make sure that industry and the public know how we are going to make this regime work and that on February 19 the oil will be flowing and it will be flowing, we think, more safely than it is today.

There are a lot of red herrings that have been hung out, a lot of smoke and mirrors that have been put up with regard to this issue. One of them is, a lot that has been said about the national contingency plan not being published as it was supposed to have been, and I tell you that is a true statement. EPA has the lead on that. I am not trying to badmouth the EPA. The Coast Guard is the second biggest player in that. However, there are 12 other agencies involved.

The reason that it is a red herring is that what we have told people with regard to the response plans is: “Use the present national contingency plan. The modifications are some style, some rearrangement, some substantive, but not horrendously different from what we have now. If you use the present national contingency plan, we are going to accept that in this first response plan submittal, if you have done it in accordance with the guidance we put out several months ago, which the final rules are going to look just like. If you do that, your plan is going to be valid for 5 years because it is going to be a good plan, and then you can fine-tune 5 years from now with the national contingency plan,” which I hope is published within maybe the next few months.

Then there is another red herring that has been hung out saying, well, the area committees, and the area contingency plans are just in planning, but their work isn’t done, and part of a vessel’s response plan, part of a facility’s response plan, requires us to have information in there that only can be obtained from the area contingency plan. We have put this out in writing, and we have talked about it to every forum we could talk to—that the area contingency plans are a beefed-up version of the local contingency plans which
the Coast Guard has had in place with industry for over two deca-
des now. So again, we have told industry, and we have told the
public that if in your response plans you use the information in the
present local contingency plans—and we have made those available
to folks who need them—your plan will be good for the next 5
years, and indeed it will be a good plan.

There has been a lot of concern that EPA has not come out with
their rulemaking on the facilities. I cannot address that for EPA,
but I can tell you the Coast Guard has put out its rulemaking. In
fact, the interim final rules will be printed in the Federal Register
this Friday for both vessels and those facilities for which the Coast
Guard is responsible.

However, again, working with the public and industry, we have
said that you don't need to make a response plan for EPA and a
response plan for the Coast Guard. We, the Coast Guard, are will-
ing to put our stamp on an EPA-approved plan. In the interim, if
it is a Coast Guard-regulated facility, we will put our stamp on
your plan, and if the EPA wants anything additional, you can nego-
tiate that with them, but we have a regime in place that, again,
as I say, the oil is not going to stop flowing come the 19th of this
month.

I think I will just stop there, sir, and see if you want to attack
another area or if you would like some more information on this
particular issue.

Mr. MILLER. Let me ask you with respect to the first issue you
raised on the double-hulls. Am I correct that the decision is, in fact,
made that you are going to have double-hulls for U.S. traffic?

Admiral HENN. Yes, sir.

Mr. MILLER. But there is a tension between that and inter-
national standards and traffic and what-have-you. Is that accurate?

Admiral HENN. Well, there is, sir, but we have successfully nego-
tiated that internationally, and indeed the international standard
for new tankers will be double-hulled.

I think the thing we have to bear in mind is that here in the
United States, if you are going to have a U.S.-flag tanker or you
are going to bring a new tanker in—and our date for defining a
new tanker is as of the enactment in 1990—it must be a double-
hulled tanker, and then of course the ones out there, most of which
are single-hulled, have this phase-out period.

There are some differences, some tension, between the United
States and the international community, and I will discuss that if
you would like, sir.

Mr. MILLER. Yes, I would.

Admiral HENN. The hang-up is this. I say we have successfully
negotiated the double-hull standard internationally; we did. I head-
ed the U.S. delegation that made that all happen, and the delega-
tion had three congressional staff members on it to assist us. They
did provide a great deal of assistance, and the world took note of
that.

The implementation date for new tankers is somewhat different
for the international world, but that is only for them to trade in
places other than the United States.
Mr. MILLER. Whether under American flag or foreign flag, if you are doing business in U.S. waters, you are going to be double-hulled.

Admiral HENN. Yes, sir. Now that pill went down hard within the international community. They have ways of doing this, and certainly they have stuck me in the eye before the international community—since I was representing the United States—prior to accepting the double-hull standard. But the important point was that we successfully negotiated.

They also proceeded to set up a regime for existing vessels, a phase-out period much like what we have in the United States. In fact, their phase-out schedule is slightly quicker than our phase-out schedule.

Mr. MILLER. Why is that?

Admiral HENN. There was a general feeling that, for the reasons stated by other panels, there was a need to phase out the existing tankers quicker, that it could be done quicker. Frankly, sir, I think part of it was, they wanted it to be different than the OPA 90 timetable, and we certainly understand the international politics of that.

Mr. MILLER. But that would suggest that our phase-out and our guidelines aren't based in either economics or technology but based in what?

Admiral HENN. I think they are based in economics and technology, sir, and I say that knowing congressional staff members worked on that timetable—I know many of the members here also took a look at that timetable.

The timetable in OPA 90 takes into account the fact that we have a coastal U.S. tanker fleet that is fairly old and there is going to be some time needed to actually bring these new tankers in just for our own coastal trade; and, there were real-world considerations that there would not be the capacity to transport oil in the United States, or the capacity needed, if in fact you varied markedly from that timetable.

Mr. MILLER. Has that turned out to be true?

Admiral HENN. Looking at the timetable itself, and looking at some of the industry association runs that have been made on those numbers, I believe that to be true, sir.

Mr. MILLER. Because one of the concerns that was raised on the other side of that issue was that if you gave the long lag time and you knew you had this second bite at the apple at the international level, that that could also be used as leverage to come back and try to weaken these standards later. It now appears that that, in fact, is not going to take place.

Admiral HENN. No, sir.

Mr. MILLER. But it also mildly draws into question in my mind as to whether or not, as I say, those guidelines are really now based upon factual evidence with respect to the commercial restraints, as you say, and/or technology and the economics of this business, because with all due respect, I'm sure a lot of people did a lot of work about those guidelines but that is not how we arrived at them.

I mean people made different cases for different dates, but the sequence of events that has happened since then has suggested
that those weren't necessarily accurate. There was a suggestion that nobody was going to bring oil to the United States because of either liability or double-hulls. Well, that has turned out not to be true, so obviously there is going to be a larger universe of ships available for this trade than people were saying who said, "If you don't give us 2015, we will never be able to phase it in."

So I just raise that as an issue, now that you have gone through these difficult negotiations, whether you look back and the same rationales that were driving that date are true today or we think they are as valid as people suggested they were at that time.

Admiral HENN. Yes, sir, I think that is a very telling point that you make, and I look at it this way. First of all, internationally, IMO took a look at the phase-out schedule. They ran the same numbers or used basically the same approach. I recognize it is somewhat of a soft analysis to do this, but the fact that they came up with a phase-out schedule for the world fleet that pretty well matches the U.S. fleet—we are talking about a couple of years difference here or there—is supportive of the fact that we probably did it pretty much right.

The other thing is, we have to look at the fleet that we are dealing with. As you know, most of the double-hulled tankers that are being built now—and there are a number of them being built in the range of 90,000 deadweight to 150,000 deadweight—are pretty good-size ships.

The U.S. coastal fleet that is so vital to our Nation, at least the movement of oil as we know it, is more the handy-size tankers; we are talking the 30,000 to 50,000 deadweight. The world is not building those type of tankers right now for double-hulls; that type of fleet is not going to be available to us unless we build a U.S. fleet.

We could, of course, I suppose, through congressional action, do away with the restrictions that exist now for trading between U.S. ports; that that must be a U.S.-flag vessel to do that—a foreign vessel couldn't do that. But if you say we will handle that one legislatively, you are still faced with the fact that the double-hulled tankers that are being built right now are the big tankers to move oil across the Atlantic, and the Pacific—not necessarily to run up and down our coast.

Mr. MILLER. Thank you.

Commander Rollison, are you familiar with the Natural Resources Defense Council report, "Safety of the Bay"?

Commander ROLLISON. Yes, sir, I have read it.

Mr. MILLER. What is your impression of it?

Commander ROLLISON. It is a very informative report.

Mr. MILLER. Does it accurately portray the circumstances?

Commander ROLLISON. There may be some inaccuracies in it.

Mr. MILLER. What would those be? And I am not trying to set up a point of contention, I am just bouncing off my reading of it and what you might technically disagree with.

Commander ROLLISON. Since I don't have it memorized and didn't come prepared to speak to that, I would like to—

Mr. MILLER. Well, if I might submit that question to you in writing, because I think it would be helpful to us to have that.
Admiral HENN. Mr. Chairman, if I might just put a little footnote on what Ed has said, certainly we would be more than pleased to respond in writing, but we, the Coast Guard, think the report that Nina and her folks have put together is a fair assessment. You know, you can always quibble on dotting i's and crossing t's, but to give you one example, if you look at the table which says "Delays in Implementation of OPA Oil Spill Prevention and Response Provisions," I've got no argument with that table; that is an accurate reflection. Monthly, I put out a table which deals with 100 items, and my table will pretty much match up with this table.

Regarding the conclusions which the group brings in that report, I think we all recognize that certainly it has a spin of an environmental group whose day-to-day thrust is being the good stewards of the environment, and we need those folks, and that is exactly what they should be doing.

But no, we have no real differences with that report, and I found it to be a very informative and, in fact, very good report.

Mr. MILLER. Let me, if I might, turn to a couple of California issues, some because they are involved in the TAPS. I assume, Commander, you could respond to these.

The voluntary 50-mile limit, what is your impression of that?

Commander ROLLISON. I am not conversant with that, no, sir; that is out of my field.

Admiral HENN. Sir, Margie can respond to that.

Mr. MILLER. If you would.

Ms. HEGY. Sir, the voluntary 50-mile limit, I think, seems to be very effective. I think that it is great that the oil companies and the State were able to work out that agreement. That, of course, will be one of the things that we will be looking at and reporting to you on when we submit our report to the Congress on the tanker-free zone study which was required by OPA 90.

I have heard groups speak previously that it was due in Congress in August and it is still not complete. That is a monumental study. That is the one where we were tasked with evaluating areas of the navigable waters and the exclusive economic zone to determine if tanker traffic should be limited or prohibited.

In the legislative history of the Act, Congress indicated a specific interest in areas that were under moratorium from oil and gas drilling, also the Santa Barbara Channel and Montauk Point. The Coast Guard chose the eight Minerals Management Service planning areas that are under moratorium from oil drilling as our study areas and also Montauk Point and the Santa Barbara Channel. There have been a lot of documents gathered, and a lot of effort put forth, to bring this study to conclusion, but because of the importance of it we have not been able to complete it.

Just to provide you with a brief overview, if you are interested, we are identifying the resources in these areas, we are determining where vessels transit in these areas, and we are trying to determine the volume of tankers in these areas. We have worked very closely with the Minerals Management Service to do trajectory analysis to show us where oil would go if it were spilled from a tanker in its present traffic pattern, what the probability would be that it would reach a coast or an environmental resource within a specified 3-, 10-, or 30-day period, and also where we would have
to move vessels in order to reduce that risk. We are doing a risk analysis as well. It is a major undertaking. It encompasses the entire West Coast, the East Coast, and the eastern portion of the Gulf of Mexico, and we hope to have the West Coast portion of that study to you by the end of 1993.

Mr. MILLER. What is your understanding of the voluntary limit? I am making an assumption, and tell me if I am correct, that that has not turned out to be burdensome to the signatories of that agreement.

Ms. HEGY. Not from the information that I have, sir.

Mr. MILLER. How does that work? When you exit San Francisco Bay, do you have to go out 50 miles before you head north or south, or do you head out of there on an angle, or what is the protocol?

Ms. HEGY. That is one of the things that our tanker study will have to consider.

Mr. MILLER. What are they doing under their agreement?

Ms. HEGY. I am not sure how that works, sir. There is presently a traffic separation scheme that is internationally adopted in place in San Francisco, and vessels are using that. They have been using it, and it has been in place for quite some time.

One of the other parts of the study that we are going to have to look at prior to making our report to you is the fact that the tankers are not going to go away; they still need to go into port. So if there are areas that are environmentally sensitive where tankers should be kept out, we have to make some provision for them to come into port, and maybe other vessel-routing measures such as traffic separation schemes are necessary in order to do that.

Someone earlier mentioned the Monterey Bay Sanctuary. The Coast Guard is working with NOAA, and we are going to be conducting a study to determine what the vessel-routing needs off the California coast are and also what regulations relating to vessels should be promulgated for the Monterey Bay Sanctuary.

Mr. MILLER. Commander, what is the status of the VTS in San Francisco Bay?

Commander ROLLISON. It is alive and well, sir. It is working just fine.

Mr. MILLER. No, no. What is the status of the notion of whether you are going to expand that? Are you going to expand that beyond San Rafael Bridge?

Commander ROLLISON. Yes, sir.

Mr. MILLER. Are you going to use that up the river?

Commander ROLLISON. Absolutely. We have plans in place, and we are proceeding actively to secure the property, to expand surveillance, add radar sites and camera sites all the way up river to the weapons station.

Mr. MILLER. So that would include the weapons station.

Commander ROLLISON. Yes, sir, right up to the San Rafael Bridge, the SP Railroad Bridge near the weapons station. We are going to put a camera site at Ozol, a radar site at Mare Island, and a radar site at Chevron.

Mr. MILLER. That is to be completed when?

Commander ROLLISON. The third quarter of fiscal year 1994.

Mr. MILLER. Are there any impediments? Is that a funding matter, or is the funding on line for that?
Commander ROLLISON. We have all the funding necessary to go forward with our property acquisition and utility acquisition, depending upon funding in 1994.

Mr. MILLER. Where are you with respect to this discussion around escort vessels, tugs, and the right mix of tugs, and whether they should be used or not used in San Francisco Bay? Is that an ongoing proposition, or has that not been raised?

Admiral HENN. Sir, we are taking a look at that. We have another study going into that.

I think some of the discussion brought up whether a tractor tug is better than a conventional tug. I think some of the things you said probably give the answer. There is a yes and no answer. A tractor tug is better in some cases; a conventional tug is better in others; depending on the ship or the port, you might want one over the other. But we are taking a look at that.

One of the things that we do right now—in areas where the Captain of the Port is concerned, for one reason or another—the Coast Guard Captain of the Port can specify when tugs have to be used. Out on the West Coast in Seattle, they go so far as to also specify the horsepower and the dimensions of the tug that are appropriate for a certain deadweight tanker, so it gets pretty specific. In the port of New York, when I was Captain of the Port there, we didn’t find a need to do that. But in certain areas, obviously, it is more important than others. Also, for the most part, in the port of New York we had a fairly soft bottom, and that is not the case in all the ports of the United States.

Mr. MILLER. That is the assumption, that this bottom could absorb one of these tankers without breaching the integrity of the tanker.

Admiral HENN. Yes, sir.

Mr. MILLER. That is not the safety system that most Americans have in mind when they think about this. Let me just make that clear.

Admiral HENN. Oh, I recognize that, sir.

Mr. MILLER. The good news is, it is up on a sandy beach.

Let me ask you a follow-on to that question. This whole issue that was raised earlier this morning on the question of a positive command and control system in busy ports—again, I appreciate the safety record and what, in fact, appears to be an improved safety record over the last couple of years.

But, you know, people who fool with statistics tell you that a time comes when you are due, and some people would argue that the shuttle accident was right on schedule, that that is about when you could expect that system to engage in some kind of major failure. You know, you do a thousand trips across the bay in San Francisco, and you say, “Well, in five years we are going to have the study done to take a look at this.” That sounds like 25,000 trips, and it sound like you are reaching the point where the confluence of events takes over, and the question is, are you, in fact, prepared?

Let me ask you, what kind of debate is taking place within the Coast Guard and the Department of Transportation about this issue of, in fact, positive command and control or what we would equate here to the Shetland harbor model and/or our air control
system because of the movement of traffic? We know, when the economy picks up, the West Coast can get real busy in the waterways rather quickly. You can look south of San Francisco Bay Bridge, and you have got more people out there lightering one another and moving around and at anchor than you may know what to do with.

So where are we in this debate? Is this just simply dismissed as a Shetlands model—that that is interesting, what they did in the Shetland Islands, but we are not looking at that? Or where is this debate?

Admiral HENN. I think the debate is in several areas on that whole issue, sir. For years, the Coast Guard has had the authority and used the authority at the Captain-of-the-Port level to manage the flow of traffic on either a daily or an incident type basis. You know, limiting traffic to just one direction. We do that day in and day out, particularly on the rivers with regard to barge traffic at low water times.

On another piece of the issue though, the VTSSs, of course we have done a study and we have taken a look at where we think VTSS should be and a priority regime on which ones should go in first. That has been done; that has been looked at. So we have something in place that is working; and we have a study that looks at the VTSS regime.

Now if you get to an incident where a casualty has occurred, what do we do there? That involves the National Contingency Plan where the authority and the regime on how to control it is already set up, right down to who is the man with the hot potato, who is in charge at the local level, and that is the Federal On-Scene Coordinator. It spells out whether it is going to be the Coast Guard or the EPA. So I think there are at least three areas to that issue, sir. I am not sure I have covered all that you were thinking of.

Mr. MILLER. Am I correct that in one of your studies you determined that a positive VTSS system was not necessary for Prince William Sound? Is that correct?

Commander ROLLISON. It is correct, yes, sir.

Mr. MILLER. That raises questions in my mind about what were the criteria that you used. What sifted that out? I mean we are constantly told that this is some of the more challenging weather and ships from time to time have been surprised by ice activity, have been surprised by winds, and again, when we go back and look at the Coast Guard logs and concerns, these issues are not unusual in that area.

Commander ROLLISON. As the Admiral points out, the Captain of the Port in each zone has always had, and still has, the authority to close the bay, close the harbor, close the channel, or do whatever he considers necessary in response to whatever condition has arisen. In Prince William Sound specifically, we have all the control necessary now to control that tanker traffic.

Mr. MILLER. We also have substantial evidence that that control system has been politically challenged, in the case of high winds, in the case of slowing tanker traffic through that Sound. So you have the appearance of all of the control necessary, but the past record is that control may not, in fact, be in the hands of that individual at any particular time, or if it is exercised, it may not be
exercised for the duration of a period of time necessary for the circumstances to pass.

So I am suggesting that when we talk about positive control, we are talking about control that can be implemented based upon the circumstances as they are at that time as opposed to the circumstances paired against the political considerations. Obviously TAPS presents a special problem because you have got one heck of a lot of oil coming down that slope and that pipeline, and you have got limited capacity at that port, and you have got schedules that have been predetermined on a fairly regular basis about the usage of that port, and when you start tinkering with that a lot of ripples appear from that initial decision.

We constantly hear that the Coast Guard in fact has that control. I tend to believe you do have the authority, but I don't know that we have provided the political setting in which that authority can be exercised. You know, just as a lot of judges have authority to throw politicians who got caught drunk driving in jail, but until MADD—Mothers Against Drunk Driving—came along, nobody had the political will to do so. That authority, it is on the books, I agree with you, but is it there in fact?

Admiral HENN. I believe it to be there, sir. In fact, I believe we use it day in and day out. I did when I was Captain of the Port in New York. Even under ice conditions I specified what size tug would escort ships going through the port of New York up to Albany. As I said, those were decisions that we made day in and day out, and other Captains of the Port do that as part of their normal regime.

However, the local Captain of the Port cannot make a decision on whether there is going to be a VTS there or not.

Mr. MILLER. I understand that.

Admiral HENN. That, of course, rightfully, should be a Headquarters-level decision, and that is why we did that study and put the priorities there. But it is more than on paper, sir; we exercise it every day.

Mr. MILLER. I won't belabor the point, but obviously it is crucial to the confidence of the public in a system that we think we developed with oil spill liability. Of course it only comes into question, unfortunately, after an incident has taken place, and then we find out whether people did or did not. You start taking depositions and you find out that there may even have been an immediate debate about whether, "Gee, should we do this or shouldn't we, or who should we call before we make this decision?" That, all of a sudden, then violates the confidence that the public has in the system.

But I guess just to tell you that that, I think, is a very major concern—when we see both the options and the expense and the technology become more and more friendly to that kind of system—not to have that in place. Certainly in an area like San Francisco Bay I think it raises those questions for us.

Admiral HENN. Sir, if I could just add a footnote on that.

Mr. MILLER. Yes.

Admiral HENN. I think I am getting a better sense of the question, and I haven't addressed it, I think, very well. The thing I think is important for us to know here is that the authority we vest in the Captain of the Port is an immense authority: his authority
to tell a vessel to leave port, and his authority to tell a vessel it will not leave port. We carefully select people for those Captains-of-the-Port positions for that reason.

In addition, the line of authority that that Captain of the Port operates under with regard to that decision-making goes from the Commandant to a District Commander (someone of flag rank), to the Captain of the Port, (no one in between), and that authority is given to the title; we are very precise on that. That is why that man can make those decisions, that is why he doesn't get second-guessed when he makes those decisions, and I think that is very important, that is very vital, and I think the rest of the world, when they look at the Coast Guard of the United States as being a model for flag-State and port-State activities and control, authority, and responsibility, that that regime is vital to that.

Mr. MILLER. You are not going to get any disagreement out of me, but I guess to some extent I am a little cynical because I am in the world of politics and I know what happened in Alaska. I think the pressures are different in New York than they are in San Francisco or Alaska. You may make a decision one day, or one month, in New York or San Francisco about an APL ship, and the next time you make the decision you may be affecting a Shell Oil ship or an Exxon ship, and you may never get back to that company again.

In Alaska, that person is sitting there making decisions basically about one single company, a number of different ships but essentially one entity that has one mission in life, and that is to move oil from the Arctic Circle to the Lower 48. That is a difficult position for that person to be in.

One of the reasons we had the oversight hearings and the investigation and the whole business was to try to strengthen the ability of the Coast Guard to implement that system as it should be and as we are led to believe it is. I am just asking the question now a couple of years later whether that is the case and whether the failure to have a positive VTS system on an ongoing basis diminishes the capability of making that one-time decision, because I think when masters and companies have to deal with you telling them to follow this route or to slow down or to speed up, that becomes the regime that then over time becomes compatible. Whereas one day if you assert yourself and say, "We are not leaving port today," that becomes a confrontation. There is a world of difference between those two orders of business, as the airline industry shows; they tell you to land, they tell you to circle, they tell you to go somewhere else. That is the normal course of business, and the pilot is taken off the hook, and the port captain of the entity of Alyeska, or Chevron, or whoever it is, he or she is taken off the hook also because that is part of the daily procedure.

I think the person that makes that decision at Sullom Voe is in a much different political position because that is the ordinary course of doing business. That is the issue I am raising, and I don't know how to make it any clearer. It is our confidence in your sense of mission that causes me to raise that issue because I believe that the people in the Coast Guard, and the record shows that the people in the Coast Guard, raised these concerns and then were pressured by people not in the Coast Guard.
That is the concern I raise, and it is a very difficult political issue when you are living in a one-company town for the person who is on line there, standing in the public interest, because the parties never change. That is much different than in the port of San Francisco where you are dealing with dozens and dozens of shipping companies and thousands of different events that take place. I just raise that as a concern of this committee, and clearly it is a concern of the people in Prince William Sound.

But I won't keep you any longer. I do have some questions that we would like to submit to you in writing, and if you could respond to those in a timely fashion we would appreciate it, and I thank you very much for your time and your help this morning. Thank you.

Admiral HENN. Thank you, sir.

Mr. MILLER. Again, my apologies—I didn't give them to you at the outset of your testimony—for the delay. I am sorry if it has upset your schedule.

Thank you.

[Whereupon, at 2:03 p.m., the subcommittee was adjourned.]
MEAMORANDUM

TO: Democratic Members, Subcommittee on Oversight and Investigations

FROM: Chairman George Miller

SUBJECT: Hearing on the Shetland Islands Oil Spill

On Thursday, February 4 at 9:45 a.m. in 1324 Longworth the Subcommittee on Oversight and Investigations will hold a hearing on the recent Shetland Islands oil spill and its implications for oil transportation and spill response both internationally and in the U.S. This oversight hearing will focus in part on the status of implementation of the Oil Pollution Act of 1990 ("OPA 1990," P.L. 101-380) - which the Committee helped write in response to the 1989 Exxon Valdez oil spill in Alaska - and will include testimony on additional measures that need to be taken to better protect natural resources from oil spills.

Providing testimony on the Shetland Islands oil spill will be Malcolm Green, executive director of the Shetland Islands Council, a local Shetland government entity involved both in the response to the spill and in the operations of the marine oil terminal at Sullom Voe. Raising concerns about the implementation of OPA 1990 will be Nina Sankovitch of the Natural Resources Defense Council. Scott Sterling of the Prince William Sound Regional Citizens Advisory Council (authorized under OPA 1990 to monitor operations of the Alyeska terminal and Trans-Alaska Pipeline System tanker traffic) will provide a perspective on what has changed in Alaska since Exxon Valdez. Mr. Sterling traveled to the Shetlands to observe the spill and response efforts. Rear Admiral Arthur E. Gene Henn, Chief of Marine Safety for the U.S. Coast Guard will provide the Administration's perspective on the Shetland spill and issues related to implementation of OPA 1990.
Background

I. Shetland Islands Oil Spill

The Shetland Islands are located about 200 miles north of Aberdeen, Scotland. The region has abundant marine and bird life and is renown for its salmon fisheries. The largest maritime oil terminal in the United Kingdom, which receives oil produced by offshore rigs in the North Sea, is located at Sullom Voe on the north end of the main island of Shetland.

On January 3, 1993, the tanker M/T Braer sailed from the oil terminal at Mongstad, Norway loaded with over 26 million gallons (600,000 barrels) of crude produced from offshore oil rigs in the Norwegian North Sea. The Braer, which was registered in Liberia and managed by the B&H Ship Management Company of Stamford, Connecticut, was bound for Quebec City, Canada.

According to a recent statement released by the U.S. owners, the Braer's captain responded to a bad weather forecast by following a route which passed through a 25 mile strait to the south of Shetland. En route, gale force winds and rough seas "resulted in damage which allowed water to enter the tanks which were supplying fuel to the vessel's generators and her main engine." The loss of power, which occurred about ten miles away from the southern tip of Shetland, resulted in the tanker being pushed by storm winds and currents and running aground on rocks at Garths Ness on the morning of January 5. Prior to rescue tugs arriving at the scene, the crew of the Braer had been taken off the tanker by the Shetland Coastguard.

Despite the presence of oil spill response equipment at the Sullom Voe oil terminal and a mobilization of supplies from elsewhere in Europe, efforts to contain the spill were futile in the face of continuing severe weather. Dispersants, which are controversial as to toxicity, proved to be ineffective. Pounded by the seas for days, the Braer broke into pieces, spilling the entire cargo.

Although damages from the Braer spill are still being assessed, two characteristics are significantly different from the Exxon Valdez spill: 1) the oil spilled in the Shetland is much lighter and dissipates more quickly than the heavy North Slope crude which was spilled in Alaska; and 2) the extremely severe weather and exposure to heavy seas in the Shetland is expected to break up the oil more quickly than the comparatively sheltered waters of Prince William Sound.

II. Debate in Europe

Following in the wake of another major oil spill on December 3, 1992 when the Greek tanker Aegean Sea hit the rocks at Coruna,
Spain, the *Braer* disaster has inspired a flurry of activity and concern in Europe related to prevention of oil spills.¹ British government inquiries into the specific facts of the Braer accident have not been completed.

An irony of the Shetland oil spill is that the island’s oil terminal at Sullom Voe is widely considered to maintain among the highest safety standards and best procedures of any marine transportation center in the world. The operational features of the Sullom Voe terminal which could be considered for adoption elsewhere include:

- a computer system which keeps track of the safety record of tankers. The harbor master has absolute power to ban unsafe tankers from the coastal waters of Shetland;

- a "positive" vessel traffic control system (comparable to the system used internationally for air traffic control) where all tanker movements are under the strict control of the harbor master;

- the use of sophisticated "tractor" tugs (which can apply pressure in any direction) as escorts to assist tankers coming into or leaving port.

The strict Sullom Voe standards were inspired by a severe spill within months of the terminal opening in 1978 and have resulted in an excellent safety record since then. However, much of the recent debate in Europe has focused on concerns that unilateral actions by any one port or country may not be sufficient to deal with the problems of international oil traffic. A perspective on the extent of these problems comes from Shell oil company which concluded that 20 percent of the tankers it inspected in 1992 failed to meet international safety standards. In addition, half of the world’s 3,250 oceangoing oil tankers are more than 15 years old.²

Among the measures being considered by the European Community are:

1) establishing exclusion zones which prohibit tankers from environmentally sensitive areas;

¹In addition, on January 20, the *Maersk Navigator*, carrying oil from the Persian Gulf to Japan, collided with another oil and tanker and caught fire off the northwest coast of Sumatra.

²The *Braer* is 17 years old and the *Aegean Sea* which ran aground in Spain is 19 years old. A survey of international oil spills in 1991 found that three-quarters of the oil came from vessels over 15 years old.
2) increasing the financial responsibility of shippers for environmental damage (the *Prestige*, which carries $700 million in pollution insurance, could be liable for as little as $10 million under existing international conventions);

3) improving international tanker safety, crewing and inspection standards and banning vessels from all European ports which fail to meet the tougher standards;

4) increasing radar coverage and surveillance of tankers;

and,

5) requiring the accelerated phase out of older vessels and the incorporation of double hulls for new construction (the U.N. International Maritime Organization (IMO) has adopted double hulls as the standard for new construction beginning in July 1993).

III. Response in the United States

As the *Oil and Gas Journal* recognized on January 25, 1993, the "safety record of the world tanker industry is rapidly growing worse." Yet the American Petroleum Institute notes that "the incidence and volume of U.S. tanker spills have been dramatically declining....in the first half of 1992, the most recent period for which data are available, there was not a single major spill reported in U.S. waters." In addition, the oil industry-sponsored Marine Spill Response Corporation is in the process of establishing cleanup vessels and crews in 16 locations across the country.

What is subject to debate, however, is the extent to which the recently improved safety record in U.S. waters and the lack of major accidents are the result of the provisions of the Oil Pollution Act of 1990, self-imposed improvements in industry safety standards, or simply good luck. The recent Shetland spill should inspire a review, both by the Congress and the Administration, of the status of oil spill prevention measures in the U.S.

A. Oil Pollution Act of 1990 ("OPA 1990")

Considered by many to be landmark legislation, OPA '1990 placed expanded regulatory responsibilities on the Coast Guard. From the perspective of NRDC in their *Safety at Bay* report, the Coast Guard has not implemented major provisions of OPA 1990 properly nor have statutory deadlines been met. NRDC also
concludes that in certain areas, the law is not sufficient. Especially in light of concerns raised by the Shetland Islands spill, key provisions of OPA 1990 which should be considered include:

1) **Double Hulls** - Double hulls are required for new construction and existing vessels are phased out by the year 2015. NRDC is concerned that the Coast Guard has failed to promulgate interim measures to improve safety for single hulled vessels in the interim period before double hulls are required.

2) **Vessel Traffic Services (VTS)** - No port in the U.S. has a "positive" control VTS system such as that operated in Sullom Voe at the Shetland. Only relatively few U.S. ports have any VTS systems to monitor vessel traffic. In addition, the Coast Guard has not proposed any new systems.

3) **Tanker Exclusion Zones** - OPA 1990 requires the Coast Guard to do a study of tanker exclusion zones for environmentally important coastal areas, but does not mandate the designation of any particular zone. The study has not been completed.

4) **Liability/Financial Responsibility** - OPA 1990 increased federal liability limits for oil spills and expressly preserves the rights of states to enact higher limits. Many states have unlimited liability laws. The Coast Guard has not issued regulations implementing the OPA 1990 requirements for tankers owners or operators to demonstrate adequate financial responsibility.

5) **Spill Contingency Planning** - The Act requires contingency plans for oil spills to be developed nationally (EPA) and locally (Coast Guard). The plans have not been completed.

6) **Natural Resource Damages** - NOAA has not issued regulations covering the assessment of damages to natural resources from oil spills.

**B. Exxon Valdez/Trans-Alaska Pipeline System ("TAPS")**

One of the Committee's primary interests in OPA 1990 are the provisions affecting the Trans-Alaska Pipeline System ("TAPS"). Over 20 percent of the oil produced in the U.S. is transported by TAPS. Tankers from Alaska provide the majority of oil refined on the West Coast. In addition to writing provisions included in OPA 1990, the Committee held a series of hearings on the Exxon

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3 In considering new legislative initiatives, it should be recognized that the primary jurisdiction for many important aspects of OPA 1990 belongs to the Merchant Marine and Public Works Committees.
Valdez oil spill and safety and environmental matters related to TAPS during the 101st Congress.

In part modeled after the Shetland Islands Council, the Prince William Sound Regional Citizens Advisory Council ("RCAC") is authorized under OPA 1990. The intent was to increase the level of citizen participation in oversight and monitoring of TAPS which is operated by Alyeska, an oil company consortium.

According to RCAC, Alyeska has substantially upgraded its response equipment and resources and the situation in Prince William Sound "compares quite favorably with other ports." Despite the improvements, however, RCAC has identified "significant gaps in prevention." Among the concerns identified by RCAC are the need for:

- improved tanker monitoring and weather reporting stations in Prince William Sound, where conditions can rival the Shetlands as among the worst in the world; and

- increased emphasis on escort and towing capabilities (although OPA 1990 requires tug escorts for tankers in Prince William Sound, the state-of-the-art "tractor" tugs such as those used at Sullom Voe in the Shetland may be needed.)

The same scenario that led to the Shetland Islands spill - bad weather, loss of power, tanker on the rocks - remains of great concern in Alaska. As a recent example, a tanker chartered by B.P. lost steering control and came within 100 yards of the rocks at Valdez Narrows on October 20, 1992. In addition, three tankers lost power in Alaska's Cook Inlet after drawing ice into their cooling systems during the month of December.

A witness list and a copy of the Executive Summary from NRDC's "Safety at Bay" report are attached. Please contact me or Jeff Petrich of my staff (5-1714) with any questions.
SAFETY AT BAY
A Review of Oil Spill Prevention and Cleanup in U.S. Waters

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Natural Resources Defense Council
December 1992
EXECUTIVE SUMMARY

The Oil Pollution Act (OPA) mandates that measurable and enforceable actions be undertaken by any vessel traveling in U.S. waters, by oil transfer and storage facilities, and by the government, to reduce the risks posed by spills. NRDC has found that many of the regulations necessary to translate these mandates to action have been delayed and others are being implemented in a manner inconsistent with the Act itself. Moreover, the Act ignores a number of important issues of spill prevention.

The need for prompt Coast Guard and Congressional action to address these failings is underscored by the following:

- **The world tanker fleet is aging.** According to the International Salvage Industry Survey completed in April 1992, by 1996 62 percent of the world fleet will be 15 years or older (including many of the largest oil tankers) and 27 percent will be 25 years or older. Older tankers run higher risks of structural deterioration.

- **Existing tankers are not all in good shape.** According to Admiral J. William Kime, Commandant of the U.S. Coast Guard, tankers currently entering United States waters have been found with structural deficiencies, including "paper-thin plating, excessive wastage, missing vents and hatches, soft patches in piping and unsatisfactory repairs."

- **The tanker business is in a slump, which may lead companies to cut corners.** Economic concerns in the 1980s resulted in reduced crew sizes in some companies and the construction of tankers with 18 percent less steel in their hulls than those constructed in the 1970s. Further cuts could increase risks of human error. Coast Guard studies have shown that the majority of oil spills are caused by human error.

- **Oil traffic is increasing.** Due to the failure of the country to adopt needed energy conservation measures, oil imports are expected to increase, raising the number of oil vessels traveling in U.S. waters. In the Gulf of Mexico alone, tanker traffic is estimated by the State of Louisiana to double by 2007.

Perhaps most importantly, oil spills continue to occur routinely in U.S. waters. Thousands of spills are reported every year, spilling millions of gallons of oil. For example, in 1992 the Shoko Maru spilled over 96,000 gallons of crude oil into the Texas City Channel and a leak at an offshore well in Louisiana spilled at least 30,000 gallons before the well caught fire; in 1991 there were 677 spills in the Port of New Orleans, 398 spills in New York Harbor, 239 spills in Port of Hampton Roads, 235 spills in Port of Philadelphia, 130 spills in...
Seattle and 116 spills in Boston Harbor. The amount of oil spilled in these ports alone in one year exceeded 300,000 gallons. Over the past several years, barges alone have accounted for millions of gallons spilled.

Key regulations that have been delayed or that are too weak to fulfill the mandates of the Oil Pollution Act, include:

A. Preventing Oil Spills

Double Hulls:
Double hulls are one of the most effective means of preventing oil spills. Recognizing this Congress required the phase-in of double hulls and required the Coast Guard to develop design requirements for double hulls. However, the interim final rule on double hulls, issued in August 1992, requires woefully inadequate inter-hull spacing for double hull construction on tankers and barges, fails to provide much-needed guidance on hull strength and corrosion protection, and does not require protection of all tanks carrying oil. The result is that the double-hull protection envisioned by Congress has been significantly reduced under Coast Guard regulation. We recommend that the Coast Guard revise its interim final rule to require inter-hull spacing equivalent to the breadth of the vessel divided by 15 or 2 meters, whichever is greater, as has been recommended by experts.

Single Hulls:
Given the long phase-in period (through 2015) for full implementation of the double hull requirements, Congress required the Coast Guard to develop, by August 1991, interim operating and structural measures for single-hulled vessels that would reduce the risks posed by these vessels. The Coast Guard has yet to release even a proposed rule mandating interim measures. The result is that marine and coastal environments are still exposed to the risks of thinly-hulled vessels carrying millions gallons of oil. We recommend that the Coast Guard promptly issue regulations requiring single-hulled vessels to utilize measures for reducing oil spill risks. These should include tug escorts, compliance with vessel traffic control systems, advanced navigation aids, wing tank cargo restrictions, and tank level monitoring devices.

Vessel Traffic Services:
Vessel Traffic Service (VTS) systems monitor vessel traffic, alert vessels to potential hazards, and even control traffic where necessary to avoid accidents. In ports where VTSs operate, collision and grounding accidents have been averted and oil spills avoided. OPA mandated that a study be undertaken to determine which ports could benefit from a new or expanded Vessel Traffic Service. The Coast Guard’s Port Needs Study, a cost/benefit analysis of the issue, is based on
faulty assumptions and cannot form the basis of a comprehensive plan to improve and expand VTS systems in United States ports. The result is that VTS expansion remains limited and new systems have not been proposed, much less funded. We recommend that the Coast Guard seek funding to implement and expand VTS systems in all areas where such systems could substantially reduce the risks of oil spill damage to environmentally sensitive marine and coastal environments.

Tug Escorts for Tankers:
Tug escorts help tankers navigate and maneuver in difficult areas or under emergency circumstances. OPA mandated that tug escorts be required in Prince William Sound and in Puget Sound; in addition, the Coast Guard is to designate other areas that, because of environmental sensitivity or navigational hazards, should have tug escort requirements. However, the Coast Guard has only issued proposed rules for Prince William Sound and Puget Sound and has not yet proposed any additional areas for tug escort requirements. Furthermore, the rules it has proposed for Prince William Sound and Puget Sound are inadequate to ensure that tug escorts will be helpful in preventing spills. The result is that the oil spill risks associated with loss of tanker engine failure, congested traffic conditions, and narrow and difficult passages, persist. We recommend that the Coast Guard promptly designate additional areas where tug escorts are required, including areas that are difficult to navigate and environmentally sensitive, and that it promulgate strict requirements for tug escorts, including speed limits and development of tug escort plans.

B. Planning for Oil Spills

Vessel and Facility Response Plans:
Thorough pre-spill planning is essential to ensure the most effective response possible to oil spills. OPA requires owners and operators of vessels and facilities that handle oil to develop response plans and enter into binding contracts for spill response equipment. The Coast Guard has developed guidance—but not binding regulations—on vessel response plans and facility response plans. The guidance is comprehensive with respect to plan format and content; however, the limits on equipment that must be contracted for are set at levels much too low to ensure that enough equipment to control and clean up the oil will be available in the event of a worst-case spill. The result is that facilities and vessels are not prepared to control and clean up a worst case spill. We recommend that the Coast Guard increase the amount of equipment that must be
contracted for by vessel and facility owners/operators.

National and Area Contingency Plans:
OPA requires contingency planning by the government on the local and national levels. However, the Area and National Contingency Plans, which were to be finished by August 1991, are far from being finalized; in some ports, development of the Area Plan has not even begun. The result is that governmental planning for oil spills has not improved since the Exxon Valdez spill over three years ago. We recommend that the Coast Guard require development of the Area Contingency Plans its Area Committees by August 1993, in time for incorporation into vessel and facility plans. The United States EPA, responsible for revision of the National Contingency Plan, should issue the revised plan by August 1993, again in time for incorporation into vessel and facility planning efforts.

C. Paying for Oil Spills

Financial Responsibility:
The Oil Pollution Act requires vessel owners or operators to demonstrate that they have the assets or insurance adequate to cover the costs of an oil spill up to OPA’s statutory limits. The Coast Guard, however, has delayed in releasing regulations implementing the financial responsibility requirements. The result is that pre-OPA standards apply and inadequate coverage in the event of spills persists. We recommend that the Coast Guard promptly issue regulations implementing the financial responsibility provisions of OPA.

Natural Resources Damage Assessment:
The full costs of an oil spill include damages to natural resources, such as loss of wildlife. Any assessment of such damages must take into account all values associated with the impacted resources. OPA required the National Oceanic and Atmospheric Administration (NOAA) to develop regulations for assessment of natural resource damages by August 18, 1992. However, NOAA has only issued limited proposed rules for damage assessment. The result is that government agencies are allowed to continue to assess damages without taking into account all the true and complete costs of an oil spill. We recommend that NOAA promptly issue regulations requiring full assessment of costs, including use and nonuse values as defined in OPA.

Other important measures that can be taken to prevent oil spills were virtually ignored in the Oil Pollution Act. These include:
Pilotage:
Pilots are responsible for the safe navigation of vessels. OPA ignores significant issues of pilotage, including distinctions between state and federal pilots, which allow for different standards and oversight of pilots and varied enforcement of pilotage requirements; the need for pilots to be independent (not employed by the vessel owner); the exemption of certain oil-carrying vessels from pilotage requirements; and the need for different requirements for pilots depending on the size of the vessel. The result is that pilotage continues to be under-regulated, leading to serious risks of spills due to pilot error. We recommend that Congress and the states pass comprehensive legislation to ensure that pilots are continually competent and prepared for the vessels and routes that they pilot.

Pipelines:
Faulty underwater pipelines have spilled millions of gallons of oil spilled into marine and coastal environments. Yet, OPA does not make provisions for improving underwater pipeline operations, other than recommending research into pipeline alarm systems. Legislation recently passed by Congress, amending the Hazardous Liquid Pipeline Safety Act, does address many issues related to pipeline spills but regulations have yet to be implemented and problems remain. The most serious of these is that there is no all-inclusive requirement for mapping and inspecting underwater pipelines. The result is that there is no assurance that an aging pipeline infrastructure is being adequately maintained or inspected. We recommend that a full mapping, inspection, and maintenance program for all underwater pipelines be carried out and that the recent Pipeline Act amendments be implemented promptly and effectively.

Tanker-Free Zones:
Zones where tanker traffic is prohibited or restricted prevent oil spills from tankers in environmentally sensitive areas. These zones have been implemented to varying degrees off the coasts of Alaska, Washington, Oregon, and California and off the Florida Keys. OPA requires the Coast Guard to study which areas would benefit from tanker-free zones but the study is far from being completed. The result is that the most effective way to protect sensitive coastlines is not being utilized. We recommend that the Coast Guard promptly designate tanker-free zones to protect areas of environmental sensitivity.

Recent reports issued by the Petroleum Industry Research Foundation, Inc. (an industry-funded non-profit organization that prepared their report for the Department of Energy) and Richard Golob of World Information Services (an
organization that tracks oil spills worldwide) have stated that there have been improvements in the tanker industry since the passage of OPA. However, industry's improvement efforts, although laudable, are largely voluntary prevention and response measures which are unregulated and unenforceable. Nor have these efforts been instituted industry-wide by all tanker and facility owners and operators. In order to ensure nationwide, uniform improvements in oil spill prevention and response, the Coast Guard and EPA must enact comprehensive regulations implementing the Oil Pollution Act, and Congress must implement pilotage, pipeline, and tanker-free zone legislation. In addition, the Department of Transportation must promptly issue effective regulations implementing recent amendments to the Hazardous Liquid Pipeline Safety Act.
# DELAYS IN IMPLEMENTATION OF OPA'S OIL SPILL PREVENTION AND RESPONSE PROVISIONS

<table>
<thead>
<tr>
<th>PROVISION:</th>
<th>SCHEDULED ACTION:</th>
<th>STATUS:</th>
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<tbody>
<tr>
<td>1. Interim Measures for Single-Hulled Vessels</td>
<td>Final Regulations by August 18, 1991</td>
<td>No regulations have been proposed</td>
</tr>
<tr>
<td>2. Vessel Traffic Service Study</td>
<td>Submission of study to Congress with recommendations for implementation by August 18, 1991</td>
<td>Study has been completed but the Coast Guard does not intend to submit recommendations with the report to Congress</td>
</tr>
<tr>
<td>4. Designation of Additional Areas where Tug Escorts are Required</td>
<td>Initiate designation of areas by February 1991</td>
<td>No areas have been proposed for designation</td>
</tr>
<tr>
<td>7. National Contingency Plan</td>
<td>Revision of NCP issued by August 18, 1991</td>
<td>Revision of NCP has not been completed</td>
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<tr>
<td>8. Area Contingency Plans</td>
<td>ACPs to be completed by February 1992</td>
<td>No ACPs have been completed</td>
</tr>
<tr>
<td>9. Natural Resource Damage Assessment</td>
<td>Final Regulations issued by August 18, 1992</td>
<td>Proposed Regulations were issued in March 1992 but not for all assessment requirements under OPA</td>
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</table>
Date: February 1, 1993
To: Jeff Petrich
From: Warner Chabot
Re: Oil Spill Oversight Hearing - 50 Mile Buffers for Oil Tankers

Summary

Enclosed is relevant information for Thursday’s Oil Spill Oversight Hearing. This information concerns voluntary and legal options for:
- keeping oil tankers at least 50 miles from shore,
- strict response rules for oil tankers operating w/in 50 miles from shore.

I hope that you’ll consider some questions to Thursday’s witnesses to explore state and federal authority and incentives to provide a 50 mile buffer and to require tough spill response capabilities for tankers within the 50 mile zone.

Background

A major issue raised by the recent spills and the near miss off N. Carolina is how much of a safety buffer should exist for oil tankers transiting the coast? In California, almost 90% of our imported oil comes down from Alaska, much of it travels fairly close to shore. Last May, the members of TAPS made a landmark voluntary agreement to keep their tankers 50 miles off California’s coast (enclosed press release/fact sheet has good arguments).

Are Voluntary Buffers Enough?

Many agree that a 50 mile buffer may be the single most important policy to protect our coast from disabled tankers or spills at sea. But is a voluntary buffer agreement enough? Can state/federal incentives or mandatory rules guarantee compliance with the buffer? If yes, how should state and/or federal officials enforce such rules.

The California Approach

Under state oil spill legislation, California’s Office of Oil Spill Prevention & Response (OSPR), is now writing regs to require oil spill plans for tankers. To (continued)
memo to Jeff Petrich
re: 50 mile tanker buffers

'enforce' this 'voluntary' agreement, California plans to require tough spill response requirements for any oil tanker operating within 50 miles from shore. Oil tankers operating outside the 50 mile zone would be exempt from the requirements.

But oil industry leaders oppose this state requirement. They claim California doesn't have the legal authority to require response standards for vessels beyond 3 miles from shore. As we fight this battle over the next few months in California, it will help California if we can generate federal support for mechanisms to enforce a 50 mile buffer.

Can Federal Rules Enforce a 50 Mile Buffer for Oil Tankers?

I hope that you will consider encouraging Congressman Miller to raise some questions to the Alaskan and Coast Guard witnesses to explore these issues, ie:

• Do they think 50 mile buffers for oil tankers are a good idea?
• What information has the Coast Guard produced (to date), on their OPA required study of tanker exclusion zones. (Note: One C.G. official told me that a contractor hired to complete this study, produced an inadequate report and that the C.G. is now planning to complete the effort in-house. But there is no timetable for a completed report other than meeting a 1995 deadline).
• Should a 50 mile buffer policy be "enforced" by requiring tougher spill response requirements for tankers within 50 miles?
• Can this policy be best enforced by state or federal officials? (if so, how?)
  - What can states do?
  - What can the federal government do?

Attachments May 92 Oil Industry Press Release/Fact Sheet on Voluntary 5 Mile Oil Tanker Buffer

cc. Kate Anderton & Mary Beth Beetham (c/o Congressman Hamburg)
    Karen Chapman (c/o Congresswoman Anna Eshoo)
WEST COAST VOLUNTARY VESSEL AVOIDANCE ZONE
for
Alaskan Crude Oil Trade

AGREEMENT:
The below mentioned member companies of the Western States Petroleum Association agree to establish a minimum offshore West Coast routing distance of 50 miles for loaded marine tankers transporting Alaskan crude oil between Alaska and California ports.

PURPOSE:
To establish a voluntary minimum loaded marine tanker operating distance offshore the west coast mainland, until approach to port, to provide an additional buffer for coastal resource protection in the unlikely event of an incident. (Exceptions noted below.)
The offshore routing distance is based on trajectory studies which analyzed oil outflow, probability of shoreline pollution, current set and drift, access to a disabled vessel and vessel salvage.

EFFECTIVE DATE:
June 1, 1992

AFFECTED FLEETS:
The following member companies who own, operate, manage, or charter vessels will voluntarily comply with this Voluntary Vessel Avoidance Zone:

ARCO Marine, Inc. BP Oil Shipping Co. Shell Oil Co.
Exxon Shipping Co. W. Coast Shipping Co. UNOCAL Texaco
Phillips Petroleum Co. Chevron Shipping Co. Mobil Oil Corp.

(Companies not owning U.S. vessels will advise their time-charter carriers to comply.)

Exceptions: It shall be understood that the ship's Master shall always be the final authority and is empowered to deviate from this agreement in the interest of safety. Masters may also deviate from this agreement if permission to proceed through the Vandenberg AFB missile range and/or the U.S. Navy Pacific Missile Test Range is denied. Deviations shall not be based on an economic decision.
The following report was received from the Director of the International Oil Pollution Compensation Fund on February 4, 1992:

The BRAER incident occurred in the early hours of Tuesday, January 5, 1993. Experts representing the International Oil Pollution Compensation Fund (IOPC Fund) and Assuranceforeningen Skuld (the Skuld P&I Club, the shipowner's insurer) were at the scene of the incident in the afternoon of the same day. The IOPC Fund and the Skuld Club opened a claims office in Lerwick (Shetland) on January 8. The IOPC Fund's Claims Manual, giving explanations of the claims procedure, was made available in the Claims Office from that date.

Claims forms have been made available in the Claims Office. More than 670 claims forms have been issued. Some 30 have been returned, most of these during February 2 and 3. However, only four are complete and these have all been approved and are ready for payment. One salmon farmer submitted a claim, and within five working days, during which time some further information was requested, an advance payment of £150,000 was made. 130 sheep farmers have registered, requesting assistance for the purchase of additional feed, and the first payments totalling £9,300 are about to be made by the Skuld Club.

The IOPC Fund and the Skuld Club have, from the very beginning, enjoyed close contacts and excellent cooperation with the Shetland Islands Council as well as with the United Kingdom Government. The Shetland Islands Council and the IOPC Fund/Skulld Club have together acted to assist sheep farmers in order to enable them to bring in feed for sheep which could not graze on contaminated grassland. There have also been discussions between the Shetland Islands Council, the IOPC Fund/Skulld Club and the fishermen's representatives concerning the extent of the fishermen's losses.

The IOPC Fund and the Skuld Club have made liquid funds available for the rapid payment of claims and for making advance payments to persons suffering financial hardship. The United Kingdom's Scottish Office has set up a special Bridging Fund in order to ease cash flow within the compensation system. This Bridging Fund is not a separate compensation scheme, but will make advances in respect of loss or damage admissible under the Civil Liability Convention and the International Fund Convention.

A copy of an explanatory notice issued by the IOPC Fund and Skuld Club is attached.
PUBLIC NOTICE

Explanatory note by Assuranceforeningen Skuld and the IOPC Fund concerning compensation and advance hardship payments following the BRAER accident

COMPENSATION SYSTEM

Compensation to the victims of the accident will be available under UK legislation governing compensation for pollution damage based on international treaties. The compensation will be funded primarily by the Shipowner's insurers (Assuranceforeningen Skuld and the International Group of P&I Clubs) up to an amount of approximately £5.5 million. If the total compensation due exceeds this amount, additional compensation up to approximately £48 million is available from the International Oil Pollution Compensation Fund (IOPC Fund), which is an intergovernmental organisation with 86 Member States including the UK.

The total amount available to meet claims resulting from the accident is therefore approximately £54.5 million. Present indications are that this amount will be sufficient to meet the compensation claims expected. The insurers and the IOPC Fund will therefore proceed on the assumption that all legitimate claims will be met in full.

TYPES OF CLAIMS

In order to obtain compensation, claimants should demonstrate that they have suffered loss or damage as a consequence of the BRAER accident and the amount of their loss or damage. Examples of acceptable claims are costs of cleaning property, fishing vessels or other boats, costs of replacement feed for livestock, costs of transportation for moving livestock, and loss of income or profit by fishermen, crofters and fish farmers.

CLAIM PROCEDURE

The Skuld Club and the IOPC Fund have opened a joint office (the BRAER Claims Office) at 80 Commercial Street, Lerwick. Persons who have suffered loss or damage and want to make a claim for compensation as a result of the accident are invited to contact this office. They will then receive a claim form together with a claims manual explaining the procedure for processing their claim. A completed claim form with supporting documentation should be submitted to this office for consideration.

Submission of claims does not in any way affect claimants' right to bring action in court. It goes without saying that claimants may seek legal advice if they consider this to be necessary.

Claims will be considered as soon as the documentation referred to in the claim form has been submitted. The Skuld Club and IOPC Fund will settle and pay legitimate claims through the BRAER Claims Office as soon as possible.

ADVANCE HARDSHIP PAYMENTS

Claimants who suffer financial hardship as a result of the accident and cannot submit fully documented and quantified claims for the time being, or who suffer hardship while their claims are under consideration, may apply for an advance payment. Applications for advance payments will be considered immediately. The government has made funding available to help hardship payments to be made promptly.

Applications for advance payments must be made in writing to the BRAER Claims Office and should be accompanied by documentation explaining how the accident has affected the claimant's financial situation. The receipt of advance money will not prejudice the claimant's position in respect of the claim itself, but any advance payments will be deducted from the final settlement of the claim.

THE BRAER CLAIMS OFFICE

Until further notice the BRAER Claims Office will be open between 0930-1530 hours on Mondays to Fridays, and between 0930-1500 hours on Saturdays. The staff at the office will do their best to answer any questions regarding the claims procedure and will assist in completing the claim form.

The Braer Claims Office, 80 Commercial Street, Lerwick, Shetland
Tel: 0695 45320/4940 Fax: 0695 2970
The International Oil Pollution Compensation Fund (IOPC Fund) is a worldwide inter-governmental organization which was set up in October 1978 for the purpose of providing compensation for oil pollution damage resulting from spills of persistent oil from laden tankers.

The IOPC Fund operates within the framework of two international conventions establishing a legal regime for compensation for damage caused by oil spills from laden tankers, namely the 1969 International Convention on Civil Liability for Oil Pollution Damage (Civil Liability Convention or CLC) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention). The CLC deals with the liability of shipowners for oil pollution damage. This convention lays down the principle of strict liability for shipowners and creates a system of compulsory liability insurance. The shipowner is normally entitled to limit his liability to an amount which is linked to the tonnage of his ship. The Fund Convention, which is supplementary to the CLC, establishes a system of additional compensation.

The IOPC Fund was established to administer the regime of compensation created by the Fund Convention. The organization has its headquarters in London.

The main function of the IOPC Fund is to provide supplementary compensation to those suffering oil pollution damage in Fund Member States who cannot obtain full compensation for the damage under the CLC. The compensation payable by the IOPC Fund in respect of any one incident is limited to 900 million (gold) francs equivalent to 60 million Special Drawing Rights (approximately €46 million or US$86 million), including the sum actually paid by the shipowner or his insurer under the CLC.

[Excerpt from the 1991 Annual Report of the IOPC Fund]
The recent spate of major tanker accidents spared the United States. In fact, Golob's Oil Pollution Bulletin reports that, since January 1991 we have had the lowest level of tanker spills in 14 years. Two years do not establish a trend however, when we average several years between megaspills. We should feel lucky, not reassured: there have been at least seven power or steering failures involving laden tankers in Prince William Sound since the Exxon Valdez spill. Any of those tankers might also have become a household name, especially the Kenai, which lost power once in 1990, and had steering system problems last October. In the second incident, the Kenai missed Middle Rock in Valdez Arm by about 100 yards.

This version of Russian roulette is not limited to Alaskan waters. The same tankers in those seven incidents, for example, called a total of 48 times at San Francisco Bay Area ports in 1991. The point is that these incidents can occur on any tanker at any time or place. In the case of the Braer, which lost power 10 miles from the Shetland Islands in a full gale, it was the wrong time and place.

In the 20-odd years I have studied major oil spills, the world tanker safety record has not improved. It's time we tried a fresh approach. We should focus, for the first time, on spill prevention rather than response. Once oil is on the water, the best possible response amounts to nothing more than unsatisfactory damage control.

We should keep our eye on the big picture -- basic reform of tanker safety -- not our traditional search for the simple explanation and the quick fix. Had Captain Hazelwood been drinking, and why was he in his cabin when the Exxon Valdez hit Bligh Reef? Why was the Aegaeon S.S. operating without a pilot? Did the master and crew of the Braer abandon ship too soon? The equivalent questions, with their fixation on the details of the most recent disaster, may be appropriate following an airline accident. Safety systems for the airline industry are strong enough that minor adjustment is all that is needed. This piecemeal habit of mind, however, misses the point when it comes to the basic inadequacies of tanker safety.

Why does the tanker industry have such a poor safety record globally, and why may it get even worse? A glut of aging tankers, many built in the early 1970s when crude oil prices surged, has put competitive pressure on tanker rates. Although tankers over 15-years old account for a disproportionate share of casualties, decisions to build modern tankers are being postponed. A significant per cent of United States flag tonnage is over 30-years old.

Tanker operators are having to pare operating costs, and industry critics -- and insiders -- say that explains the shift to flags of convenience in the world fleet. More than 1,600 ships were registered in the United Kingdom when the Braer was built in 1975. Now there are fewer than 300. Low taxes, lax safety standards, and fewer restrictions on crew levels and training have made the Bahamas, the Cayman Islands, Cyprus, and Malta the fastest growing tanker fleets in the world. While Panama and Liberia, "home" to nearly one third of all tankers, have terrible maritime safety records, casualty rates for Turkey, Greece, South Korea, the Philippines, and St. Vincent and the Grenadines are even worse.
The Oil Pollution Act of 1990, our major federal reaction to the Exxon Valdez spill, includes a multiplicity of requirements for spill response but no comprehensive approach to spill prevention. Moreover, some of the Act's few prevention elements—the financial responsibility and unlimited liability requirements and improved Vessel Traffic Service radar systems for some ports—are mired in the federal regulatory and budget processes. One other provision of the Act deserves mention: after 20 years of inconclusive debate at the International Maritime Organization, the United States unilaterally required that double hulls be phased in by the year 2015. Double hulls do not prevent accidents, of course, although in accidents less severe than the Braer's they may reduce the amount of oil that spills.

What is a realistic prescription for improved tanker safety?

Tanker Design—The alarming frequency of power and steering failures indicates inadequate redundancy and maintenance standards in those systems. To get rid of the rust buckets, there should be disincentives for bringing old tankers into our ports and incentives for construction of new vessels. Some of these changes will be expensive, will take time to phase in, and may need the approval of the International Maritime Organization to be most effective. We have not, however, been aggressive about taking unilateral action. Australia and Norway have the reputation of being much tougher than other nations in refusing entry to old or substandard vessels.

Vessel Traffic Services—Ports in the United States could learn a great deal from our air traffic control systems. This area of port safety actually deteriorated for some years: as a cost-cutting measure, the Reagan administration shut down the VTS vessel monitoring systems in New Orleans and New York and tried to close them in several other busy ports. The United States could gain an inexpensive increment in vessel safety by installing state-of-the-art equipment to cover not only our ports but also tanker lanes close to our outer coasts. Then we should consider hiring highly qualified VTS operators and giving them some of the authority that we take for granted with air traffic controllers.

Tug escorts—Increasingly, major world oil ports are requiring specially designed tugs to escort tankers through hazardous areas. The tugs' function is to control the tanker in the event of a power or steering failure. The irony of the Braer accident is that Sullom Voe in the Shetland Islands is the international leader on tug escorts. In this country, the Louisiana Offshore Oil Port, a consortium of five oil companies, and ARCO, Exxon, and BP Puget Sound are beginning to catch up. France and South Africa have also stationed salvage tugs along their coasts to respond to emergencies like the Brae, that occur outside of ports. These are medium-cost prevention measures that provide maximum benefit in the highest risk areas.

Tanker routes—The Braer disaster provided further proof that there are places of such environmental or economic importance that tankers should not be allowed, or not allowed under certain weather conditions, or not allowed unless there are salvage tugs on standby. The State of California has recently gained voluntary agreement of shippers to keep laden tankers on the Valdez run at least 50 miles off the state's coast. Mandatory changes in routes, being sought by the European Community since the Braer, normally require the imprimatur of the International Maritime Organization, and that approval can take years to obtain. France and Italy are not waiting; they just banned vessels carrying oil or hazardous cargoes from the straits between Sardinia and Corsica. The United States should also move to institute both unilateral and IMO-sanctioned coastal protection.

Crews—With human error by far the largest cause of tanker accidents, the United States should both take unilateral action and push the international maritime community for higher standards on Manning, issues such as crew size, training, and even language. The Braer, for
example, had a Greek, Filipino, and Polish crew. Crews often lack a common language these
days, and the maritime industry is rife with Tower of Babel horror stories about some flag-of-
convenience vessels.

Implementation and enforcement -- If we continue the approach of recent decades,
progress will be painfully slow. The International Maritime Organization, a United Nations
organization that often appears to function as an industry association, is the traditional forum
for debating maritime rules. For too long, the IMO decision making process has been
dominated by tradition and industry-defined economic considerations rather than safety
concerns. When changes are finally agreed on, implementation and enforcement generally are
left to the nations where ships are registered.

The U.S. tanker industry is understandably concerned when this country adopts new
safety requirements unilaterally. Safety costs money. Regulations that primarily affect U.S.
companies can put them at a competitive disadvantage. Higher standards enforced only by the
more responsible nations and implemented by the more responsible tanker companies help
drive the trend to flags of convenience. The ocean may look like a level playing field, but it's
not. Nonetheless, if the United States and other safety-conscious nations cannot reform the
IMO process, we must start to protect ourselves with restrictions adopted outside the IMO, but
ones that do not penalize the responsible operators.

We can not eliminate human error or mechanical failure, the primary causes of tanker
accidents, but some industries have a far superior safety record. The Alaska Oil Spill
Commission, appointed to investigate the Exxon Valdez spill, concluded that we would average
about 10 airline disasters each week if the airline industry had a safety record similar to that
predicted for the Valdez tanker trade. That we don't is not attributable to some superior
technology unavailable to tankers. The airline industry has a better record because the public
demands it; anything less is unacceptable. The lesson for tanker safety is simple: we either
abandon our business-as-usual approach and insist on comprehensive reform, or we should not
be surprised when some of the next megaspills are in our back yard.
To: Jeff Petrich  
From: Burr Heneman  
Date: February 2, 1993  
Subject: Oil Spill Oversight Hearing

Summary

This memo includes information relevant to the oversight hearing Thursday and supplements the oped piece I faxed you Monday. This provides more detail on issues of:

- Harbor safety - tug escorts, pilotage, and Vessel Traffic Service systems (VTS);
- Outer coast protection - tanker routes (you have good information on this from Warner Chabot), salvage tugs, and VTS;
- Tanker design, age, inspection, manning.

For more information from the environmental community on these subjects, I'd say NRDC is the best place to go on pilotage issues nationally, Center for Marine Conservation on tugs, and either of us on tanker routes and VTS.

Harbor Safety

Background

First, let me paint a little picture of how things work in one U.S. port - San Francisco Bay (which includes Oakland, Richmond, Stockton, Benicia, etc. as well as San Francisco - and contrast it with Sullom Voe, which is typical of the European ports that are aggressive about marine safety. Your Shetland witness may be too polite to go into all of this. (I was given an excellent introduction to Sullom Voe by its safety officer last summer.)

An incoming tanker checks in with San Francisco VTS. The VTS equipment is and obsolete, 20-year old system that may finally be upgraded next year. (As we understand it, the upgraded system will still not provide coverage the entire way from the Carquinez Strait Bridge to the Exxon refinery in Benicia. That entire run is in Chairman Miller’s district, and we hope he will press the Coast Guard on what it would take to overcome the technical problems that Coast Guard thinks precludes that coverage.) The Coast Guard’s VTS is advisory, not mandatory, although ships tend to take the occasional advice offered partly out of concern for their liability. The VTS is operated by a combination of Coast Guard uniformed personnel, usually with little experience, and civilians, long-term employees who have not been on a ship in a long, long time. Pilots generally do not give VTS operators a lot of respect. In every way - equipment, training, and authority - it's very different from air traffic control.

Most tankers take on a pilot at the pilot boat as they enter the traffic separation scheme off the Golden Gate. Some tankers have deck officers qualified to act as pilots. Pilotage is another rat’s
nest of varied state and federal requirements, with some vessels requiring only federally licensed pilots and some requiring state-licensed pilots. California's pilot-licensing requirements (which apply only to San Francisco Bay) are much tougher than the federal requirements. Even so, the state system is pathetically unable to weed out poor pilots, some of whom are a menace on the water. Also, each state-licensed pilot is an independent businessman; they work for themselves, and there is no employer for quality control. The tanker masters that have enough experience in San Francisco Bay know who the good and bad pilots are and will insist on one of the good ones for a challenging job. The masters who have not been to San Francisco Bay often don't know enough to turn down a bad pilot. It's a pretty loose system, with plenty of room for error.

Unless the tanker is going to an anchorage, the agent for the vessel arranges for assist tugs to berth the tanker. Soon San Francisco will be unusual in this country (along with Puget Sound and Prince William Sound) in requiring state-mandated escort tugs, starting just outside the Gate. Unfortunately, there are no state-of-the-art escort tugs in the region, but then the state tug escort system, as now written, does not require meaningful tug escorting. There are no performance standards that set out what is expected of an escort vessel (ability to turn the vessel, or to stop it in a certain distance, in case of a power or steering failure), and no requirement that the escort vessels actually demonstrate an ability to be effective at the normal operating speeds of tankers in San Francisco Bay. Furthermore, there is no requirement or incentive in the proposed regulations to require the tanker or tug industries to upgrade the escort equipment.

There are no federal requirements yet for tug escorts. The Coast Guard has started a proposed rulemaking for tug escorts for Prince William Sound and Puget Sound. Their first run at that was one of the weakest proposals I've ever seen: the Coast Guard essentially suggested leaving everything up to the master, pilot, and tug operator in each instance.

Each of these elements is very different in Sullom Voe. The VTS system is the best equipment available, and it's mandatory. The local Harbour Authority trains and hires the pilots and VTS operators and they take turns doing both jobs. That means that the VTS operator on duty is always a current, experienced pilot, and when the VTS operator and pilot are talking to each other, they are peers and, in essence, team mates.

Similarly, the Harbour Authority owns the escort tugs, which are state-of-the-art tractor tugs. No other kind of tug makes any sense at all for tankers traveling at speeds greater than 3 or 4 knots.

Recommendations

1) VTS - Coast Guard needs to get serious about designing and installing modern systems in virtually all of our major ports, and Congress needs to give them the money and direction. OPA '90 required Coast Guard to do something, and they came out with a Port Needs Study (August 1991) that was so strange that it concluded there would be "positive net benefit" to installing systems at ports such as Corpus Christi, Port Arthur, and Houston/Galveston, but a "negative net benefit" for San Francisco, Santa Barbara, Anchorage/Cook Inlet, and southern Chesapeake Bay! In reality, probably all 23 ports Coast Guard studied should have some
form of VTS. Guidance from Congress would be timely now since Coast Guard is starting a new national study with a new advisory group.

2) Pilotage - We need tougher federal requirements for pilot training and recertification, since they are the one standard that applies everywhere. NRDC should have more detailed recommendations.

3) Tug Escorts - Perhaps Congress can give some additional direction to Coast Guard on this one. Judging by the proposed rule making for Prince William and Puget sounds, Coast Guard wants to take the easy way out. Industry is fond of saying tug escorts might prevent 10% of the accidents, but if one of those prevented is a major spill, the savings pay for many years of escorting in many ports.

The direction to the Coast Guard could be that, unless Coast Guard makes findings that there isn't a need, there is a presumption of the utility of tug escorts at, say, the 10 U.S. ports with the highest volume of traffic (number of vessel movements and/or tonnage) of oil barges and tankers. The Coast Guard should also understand that there should be performance standards for each port and some demonstration that the tug equipment available can meet the performance standards. Of course, the standards should be designed to meet hazard conditions of each port, not to allow use of whatever tugs happen to be available (San Francisco's mistake). Further, the Coast Guard, not industry, should have the final say in designing the performance standards and choosing a national system for certifying tugs for tanker escort service.

Outer Coast Protection

Recommendations

1) VTS - Some areas outside ports need VTS. Santa Barbara Channel and the Florida Straits are good examples. So far, Coast Guard is confining its studies to areas that are too close to ports.

2) Tanker routes and salvage tugs - These two topics are interrelated because, if ocean-going tugs are not available, tankers should be kept farther offshore. The rough calculation comes from answering two questions: In a given area, how fast will a disabled tanker drift given conditions? and how many hours away is the nearest salvage tug? With the answers to those questions, one can calculate how far offshore tankers should be.

Warner gave you comments on tanker routes. We would suggest that salvage tugs should be added to the equation.

Tanker Design

Recommendations

A huge subject, of course. We'll only mention a couple of points. Congress took a major step with OPA '90 in unilaterally requiring the phase-in of double hulls for tankers entering our ports. The International Maritime Organization process has proved that it does not work, or doesn't work except over geologic time. IMO has been talking about double hulls for over 20
years. After the recent tanker spills, the European Community and some of its member states have also gotten impatient enough to take some unilateral actions. We need to encourage U.S. tanker operators to reduce the average age of our fleet, and we need to follow Australia’s lead in cracking down on old, poorly maintained tankers from other countries. As we understand it, Australia is being aggressive about denying entry to the rust buckets. In this country, that is Coast Guard’s responsibility. If they don’t have enough authority, they should tell you what they need.

Another series of questions for Coast Guard could be about the terrible failure rate of tanker power and steering systems, at least compared to airliners. In the other piece I faxed you, I mentioned the 7 such failure involving laden tankers on Prince William Sound since the Exxon Valdez spill. One of those tankers, the Kenai, narrowly missed Middle Rock. Those same failure are happening elsewhere, as well. These failures happen wherever there are vessels. An Exxon tanker lost power just outside the Golden Gate last summer. Fortunately, it wasn’t bad weather, and they got it fired up again before it got into trouble. How can these things happen so often? Is there inadequate maintenance? Is there inadequate redundancy in power, steering, and navigational systems?
February 18, 1993

Representative George Miller  
Subcommittee on Oversight and Investigations  
House Committee on Natural Resources  
Washington, D.C. 20515-6201

Re: Implementation of the Oil Pollution Act of 1990

Dear Mr. Miller:

Thank you again for inviting NRDC to testify at last week's hearing concerning implementation of the Oil Pollution Act of 1990. We remain very concerned with the manner in which the Coast Guard is implementing its duties under the Oil Pollution Act and are hopeful that your hearing can lay the groundwork for pushing them to implement OPA more aggressively.

One important issue which was not discussed at the hearing (although it was mentioned in our testimony) is the issue of how vessels plan for salvage assistance under the Interim Final Rule for Vessel Response Plans. Despite OPA's requirement that vessel owners contract for spill removal equipment, which includes equipment for mitigating or preventing oil spillage, the Coast Guard's Interim Final Rule does not require that vessel owners contract for salvage services: it only requires that by 1998 vessel owners identify salvage companies that can arrive to the port nearest where the spill occurs (not even on-scene) in twenty-four hours. In addition to violating the explicit language of Section 4202(a)(5)(C)(iii), this requirement contradicts the recommendation of the Negotiated Rulemaking Committee on Vessel Response Plans that salvage services be contracted for and that they be on-scene within 12, 18 hours.
or 36 hours depending on the location of the spill (36 hours for spills occurring more than 50 miles from shore). To demonstrate the potential for how the Coast Guard's Interim Final Rule will be complied with by the vessel owners, I've attached a letter from a company "promising" salvage resources: as you can see from the letter, no assurance is offered that salvage resources will be available in the event of a spill in U.S. waters.

Salvage services, which include the supply of assistance tugs and the transfer of cargo from the damaged vessel to another vessel (lightering) are an important and effective spill prevention measure, as well as a spill response action. For example, prompt assistance of a salvage tug can avert or minimize the loss of cargo from a stranded or grounded vessel. Salvage of the cargo remaining on board the Exxon Valdez reduced the potential for an even more disastrous outcome. Timely salvage assistance to the Braer may have prevented its disastrous grounding after the vessel loss power.

The importance of marine salvage was underscored in a 1982 study carried out by the National Research Council entitled "Marine Salvage in the U.S.", which concluded that:

"There are approximately 60 to 70 marine salvage operations in U.S. offshore waters annually with little change expected in the next two decades. Of these, two or three have potentially serious public consequences - cases involving hazardous cargoes or imminent threat to human life or the environment.... The need to maintain the capability to conduct salvage operations relates more to the potential consequences that can ensure of a casualty requiring salvage occurs and no salvage is conducted, than to the number of casualties that require a salvage response. Given current or foreseeable [salvage] capability, some easily conceivable maritime accidents cannot be salved at all."

The Committee then recommended that the national statement of salvage policy (10 US 7361-7367) be updated to recognize "the vital role that salvage plays in minimizing the public consequences of maritime casualties."

Unfortunately, national recognition of the importance of marine salvage has not occurred and salvage capability in the United States has declined. The remaining salver on the west coast recently was threatened with bankruptcy and it was only through a buyout by an east coast salver that these important salvage resources remain available for west coast casualties. By requiring vessel owners to contract for salvage services, as required under OPA and recommended by the Negotiated Rulemaking Committee, the Coast Guard can
ensure that some degree of salvage resources are maintained and perhaps even increased in the U.S.

It is important to note that the National Research Council has again convened a panel to review the issue of salvage capability in the United States, as well as to consider the issue of whether OPA liability should apply when a salvor intentionally jettisons oil cargo in order to prevent a larger accident (the committee was convened at the request of the U.S. Navy). NRDC serves on that committee and would like to invite you to a symposium being held on February 23 to discuss the issue of jettison of cargo (I've attached information on that symposium).

Thank you for your interest in these issues of spill prevention and response. Your continued support and monitoring of the Oil Pollution Act is vital to its eventual proper implementation.

Sincerely,

Nina Sankovitch
Senior Project Attorney

cc: Jeff Petrich
    Rear Admiral Arthur E. Henn (USCG)
    Captain Gerry Willis (USCG)
    Captain Robert North (USCG)
    Captain Richard P. Fiske (US Navy)
    William L. Peck (US Navy)
    Scott Sterling (PWS RCAC)
    Ann Rothe (NWF)
This letter confirms that, in the event that Smit Americas, Inc. and its affiliates experience an oil spill incident and request response services, Smit Americas, Inc. ("Smit") intends to respond to the extent possible within the United States of America. Response services to be provided are as follows:

"Salvage and Firefighting"

This letter of intent permits Smit Americas, Inc. and its affiliates to identify Smit as an available salvage and firefighting response resource in Contingency Plans developed in compliance with the requirements of the Oil Pollution Act of 1990. Provided however, that Smit makes no representation or guarantee as to response times or adequacy of resources.

Commercial terms to be negotiated on a case by case basis.

Smit Americas, Inc. is to be contacted as a preferred salvage contractor, if possible, in any salvage projects.

In an emergency, you can contact us 24 hrs. a day at (713) 931-2150.

Very truly yours,

Smit Americas, Inc.

Albert A. Pronan
President
SYMPOSIUM ON
THE PURPOSEFUL JETTISON OF CARGO
February 23, 1993
Washington, D.C.

AGENDA

Meeting Location:
Lecture Room
National Academy of Sciences
2101 Constitution Avenue
Washington, D.C.
202-334-3119

Hotel:
St. James
950 24th Street NW
Washington, D.C. 20037
202-457-0500
FAX: 202-465-6484

0800 Continental Breakfast Available in Meeting Room

0830 1.0 Welcome, Symposium Objectives and Organization; Video Presentation
Welcome from the U.S. Navy Supervisor of Salvage
Welcome from the U.S. Coast Guard

0900 2.0 Significance of Jettisoning

0930 3.0 Purposeful Jettison of Cargo: Decision Framework

0945 BREAK

1000 4.0 Legal Status of Jettisoning

1030 4.1 Presentation of Legal Issues
Philip Berns, Department of Justice
Fred Burgess, Le Boeuf, Lamb, Leiby, and Macrae
Robert Nicholas, Exxon Shipping Company
V. Lee Okarma Rees, Graham & Dunn

The National Research Council is the principal operating agency of the National Academy of Sciences and the National Academy of Engineering to serve government and other organizations.
1130 5.0 Importance of Spill Size on the Environmental Effects of a Spill Incident Rainer Engelhardt, Marine Spill Response Corporation

1215 LUNCH in Meeting Area

1300 6.0 Oil Spill Trajectory Modeling Jerry Galt, NOAA

1345 7.0 Panel Discussions

♦ Kenneth Edgar, Diversified Technologies
♦ Roger Gale, BP North America
♦ Don Jensen, U.S. Coast Guard
♦ Tim McKinna, Texas General Land Office
♦ John Driscoll, Smit International Americas Inc.
♦ Anne Rothe, National Wildlife Federation
♦ Steven Van Dyke, Maritrans and West of England P&I Club

7.1 Information Needed to Support a Defensible Decision to Jettison Cargo

1500 BREAK

1515 7.2 Decision Making: By Whom and How? Gordon Paulsen

1630 8.0 Plenary Discussion and Closing Comments

1730 RECEPTION

January 14, 1993
2 February 1993

The Honorable George Miller
Chairman
House Natural Resources Committee
1324 Longworth Office Building
Washington, D.C. 20515

RE: Oil Spill Oversight Hearing - 50 Mile Buffers for Oil Tankers

Dear Chairman Miller:

The Pacific Coast Federation of Fishermen's Associations (PCFFA), represents working men and women in the west coast fishing fleet. Our members' livelihoods, as well as the shoreside industries and communities they support, depend on a clean and healthy marine environment. We wish to thank you and your committee for scheduling an oil spill oversight hearing on this issue of great importance to the nation's fishing industry.

PCFFA supports legislation to establish mandatory shipping lanes a minimum of 50 nautical miles from shore for oil tankers and other ships carrying large quantities of bunker oil. It also supports a Congressional petition to the International Maritime Organization (IMO) for the establishment of shipping lanes a minimum of 50 nautical miles from shore throughout the world.

The recent disaster in the Shetland Islands makes clear the danger of tankers operating too close to shore. What happened in the Bay of Quendale could easily happen along California's Big Sur or Lost Coast, both national treasures, off the Oregon and Washington coast, New England, the Carolinas, or the Florida coast and Keys. Most of these areas have been protected from offshore oil development, and the potential for spills from drilling, as a result of Congressional moratoriums, but remain vulnerable to catastrophic spills from a tanker grounding or sinking.

Moving oil tankers and other larger carriers of bunker a minimum of 50 miles from shore would provide the time necessary to respond to a vessel that has lost power or become disabled, or respond to a spill resulting from a collision, fire or sinking. Obviously, the creation of offshore tanker lanes will not prevent all spills resulting from tanker operations since there are still ports tankers must move in and out of, nevertheless the establishment of lanes a minimum of 50 nautical miles from shore, together with tug escorts in and out of ports, should help to minimize the occurrence of tanker-related spills.
For the west coast fishing industry, legislation mandating offshore tanker lanes is extremely important. First, and foremost, is the damage done to our marine environment -- fish and shellfish resources -- when a major spill, such as the Braer or the Exxon Valdez, occurs. Even in those areas not directly affected by a spill, the fishing industry would have difficulty marketing uncontaminated product because of public perception that all fish from that region was unsafe to eat. Further, as we found out in Prince William Sound, it takes years to clean up a coastal oil spill.

Second, without legislation requiring tankers transiting the coast to be a specified distance offshore, there will continue to be the threat to the coast of a major oil spill. The U.S. Fish & Wildlife Service, in its recovery plan for the southern sea otter, has identified, correctly, a major oil spill as the single greatest threat to the recovery of this listed species. However, rather than attacking the oil spill problem directly, USFWS’ Venture-based otter recovery team has suggested instead the animals be spread up and down the California coast so that a major oil spill would not wipe out the entire population. This “solution” only compounds the fishermen’s problem: a) it does nothing to minimize the potential for such a spill, and b) threatens our state’s shellfish fisheries, including those for abalone and sea urchin, by expanding the otter range from central California into the productive shellfish grounds to the north and south. As an alternative to the USFWS plan, PCFFA and other fishery groups suggested to USFWS the establishment of tanker lanes 50 miles offshore the otter’s range to protect the animals from the catastrophic spill, but those recommendations fell on deaf ears in the last, and unabashedly pro-oil, administration. We are hoping Secretary Babbitt will change this and call for a recovery plan that protects the otter and the fishery. But just the potential for a major spill presents an eminent danger now to California’s multi-million dollar shellfish fishery.

On 8 January, PCFFA sent a letter to senator Barbara Boxer suggesting both legislation and a Congressional petition to the IMO on tanker lanes. We did this knowing of her interest in the past on this issue when she was a member of the House. We are grateful that you and the Natural Resources Committee are taking up this issue and we look forward to working with you and your staff in the development of federal standards to protect our nation’s coast and its fishing industry from tanker-related oil spills.

Sincerely,

W.P. "Zeke" Grader, Jr.
Executive Director
February 3, 1993

Mr. Jeff Petrick

Washington, D.C. 20515

dear Mr. Petrick:

I would like to add our concerns to those in both the fishing and conservation communities regarding near-shore oil tanker traffic. We applaud last year's voluntary agreement on the part of West Coast oil shippers to keep a minimum distance of 50 miles offshore. However, we strongly feel that some sort of federal regulatory oversight be provided to assure total industry compliance with the 50 mile distance.

Such a regulation would add a vital buffer in case of a catastrophic event at sea or disabled vessel drifting toward shore. Based on recent events off the coasts of North Carolina and Scotland, I am sure you can see the value of such lanes to the fishing, aquaculture, and tourism industries of the West coast, as well as the Nation.

The Pacific States Marine Fisheries Commission, established through an act of Congress in 1947, addresses issues that fall outside state or regional management council jurisdiction, issues that cannot be resolved within an individual state, and coastwide and national issues that affect the Pacific fisheries. We have a deep commitment to the protection of marine fisheries habitat, especially highly productive near-shore areas.

Please feel free to contact me at any time.

Sincerely,

Stephen H. Phillips
Habitat Biologist

cc: PCFPFA

PFMC

"To promote the conservation, development and management of Pacific coast fishery resources through coordinated regional research, monitoring and utilization"
Additional recommendations for the
Subcommittee on Oversight and Investigations
House Committee on Natural Resources
from Rick Steiner, of Cordova, as provided to RCAC

- Because OPA 90 is taking so long to implement, should establish
interim protective measures. For example, establish voluntary "areas to be
avoided"

- Marine Inspection Program is, by Coast Guard's own admission,
ineffective. Needs to be beefed up, especially inspection of foreign vessels

- Consider re-establishing independent marine inspection service,
answerable only to the Coast Guard. One of the problems now is that inspectors
are non-mariners who rotate out after a year or two. Marine inspection service
needs retired career mariners.

- Review standards of open-registry countries (flags of convenience),
especially of nations that are not IMO signatories.

- Review and compare standards of all International Association of
Classification Society (IACS) members and non-member classification
societies. Congress should consider the concept of assigning some liability for
inadequate surveys that result in an oil spill.

- Improve the Marine Safety Information System (MSIS), the casualty
reporting system

- Use Lloyd's "Sea Data System" to evaluate the condition of all vessels
bound for U.S. ports.
• Involve maritime unions in discussions of tanker safety, even if it has to be on a confidential basis.

• Institute special licensing training requirements for VLCC/ULCC (very large crude carriers and ultra-large crude carriers).

• Analyze the incentives (fines, rewards) paid by shippers and/or charterers to hold vessel to schedule. This practice can force the master to take unnecessary risks. Congress might consider making such incentives illegal.

• Pursue development in the IMO of international consensus on natural resource damages so that governments will be able to collect natural resource damages from oil spills.

• Initiate major research into the human factors that we know cause 80% of all tanker accidents.
Status of Current Projects

**Port Operations and Vessel Traffic Systems**

**Disabled tanker towing study**

Year-long study evaluating the capability of existing emergency towing equipment and practices; also to examine alternatives to enhance escort and assist capabilities for disabled tankers. Study is funded by RCAC and the Prince William Sound Tanker Association. Non-funding sponsors are the U.S. Coast Guard, the Alaska Department of Environmental Conservation and Alyeska. The study began in October and should be completed in fall of 1993.

*Status:* Report on Phase I is being revised. (Reviewing and evaluation of existing and alternative towing equipment and practices). Part II is in progress - computer modeling and simulation scenarios.

**Fire prevention task force**

A joint task force was organized by the POVTS and TOEM Committees to assess current capabilities for responding to terminal and tanker fires. The task force includes representatives of the POVTS, TOEM, Alyeska and other oil industry representatives, the U.S. Coast Guard and the City of Valdez. The task force will develop recommendations for improvements, if needed.

*Status:* Alyeska, City of Valdez and tanker owners have agreed in principle to hold cooperative fire drills.

**T/V Kenai report**

POVTS staff reviewed information available about the October 20, 1992 incident in which the tanker Kenai experienced steering problems in Valdez Narrows. Contrary to newspaper reports, the RCAC found insufficient information to determine whether the tug escort saved the tanker from grounding.

**Safety of navigation survey**

Approximately 300 to 400 people who use marine navigation system in Prince William Sound are being surveyed to determine attitudes about suitability of current navigation aids and escort procedures. The results will be used to develop recommendations for improvements.

Weather reporting upgrades

POVTS members and staff are working with the National Data Buoy Center, a branch of the National Oceanic and Atmospheric Administration, on obtaining additional weather reporting stations in Prince William Sound. Currently, there aren't enough reporting stations to determine from the port what weather conditions are in Hinchinbrook Entrance and the middle of Prince William Sound.

Scientific
Long term environmental monitoring project (LTEMP)

This two-year study is designed to collect baseline data and monitor oil-related impacts on the ecosystems and organisms of Prince William Sound and the Gulf of Alaska. The overall purpose of the study is to determine present conditions and potential future impacts of oil transportation within the study area. The study is monitoring hydrocarbon concentrations and characteristics in nearshore sub-tidal sediments and accumulations of hydrocarbons in the tissue of blue mussels. Field surveys are conducted twice a year in Prince William Sound and the Gulf of Alaska.

Status: The first sampling began March 19 and was expected to take approximately two weeks.

Socio-economic impact mitigation

A multi-year study was begun to assess the social, cultural and economic impacts of oil spills for the purpose of developing future mitigation strategies for communities in the region. The first phase of the study, most of which was completed in 1992, consisted of focus groups in selected representative communities to confirm impacts identified in earlier public testimony.

RCAC and its consultants will work with residents in nine communities selected from the 18 identified as impacted by the Exxon Valdez oil spill, to develop specific strategies for dealing with the impacts of a future spill.

Status: Focus groups were held in Kodiak, Ouzinkie, Port Graham, Cordova and Seward. Notes compiled from the focus groups are available to the general public. Phase II, to identify data and procedures to develop mitigation strategies and review literature, is underway.

Bibliography - Bibliography of bibliographies on natural sciences in Exxon Valdez impact area.

Status: Underway

Current research profile - Database of active research projects: A concise guide to what research is ongoing and through time what research has been done.

Status: Underway
Oil Spill Prevention and Response

Contingency planning

The first project RCAC tackled in 1989 was to review and comment on Alyeska's oil spill contingency plan for Prince William Sound. Under a steering committee structure organized by the State Department of Environmental Conservation, RCAC works with industry and regulators to review, revise and finalize the Prince William Sound Tanker Spill Prevention and Response Plan. The steering committee and its working groups are consensus-driven. RCAC also submits its own comments and suggestions for contingency plans.

Status: The Mechanical Assessment Working Group is finalizing its interpretation of equipment requirements for Prince William Sound response plans. The requirements will determine the type and quantity of storage modules need for nearshore response.

Nearshore response

Nearshore response is an element of response planning that has been a primary focus of RCAC's Oil Spill Prevention and Response (OSPR) Committee. RCAC chaired a multi-agency/organization working group formed to develop contingency plans for responding to spilled oil that threatens shoreline. Outside the working group process, OSPR sponsored several studies on the concept of providing nearshore response through a cooperative of coastal communities using resources and personnel from the communities. Now that the nearshore plans have been completed, the OSPR Committee is focusing much of its effort on gaps in response, specifically, response after the initial 72 hours and response outside Prince William Sound.

Status: RCAC has a representative on a state work group developing a nearshore demonstration project using local resources and personnel.

Drills and simulations

Since 1990, RCAC has participated in, monitored and critiqued spill drills, deployment exercises and spill simulations conducted by industry. Staff, directors and committee volunteers participate in the major drills. In 1992, RCAC representatives participated in major drills conducted by Chevron and Alyeska.

At the Alyeska drill in October, RCAC first used a draft Emergency Response Plan spelling out the organization's role in the event of a major spill and procedures for operating during an incident.

RCAC also began using a contractor to monitor and evaluate drills and exercises on a consistent basis. RCAC assisted industry and regulatory agencies in drill planning and post-drill evaluations. RCAC representatives submit written critiques and comments after every
drill or exercise observed.

Status: RCAC will participate in major drills April 7-8 (Tesoro) and October 5-7 (BP).

**Terminal Operations and Environmental Monitoring**

**Ballast water treatment**

Public concerns over ballast water at the Valdez Marine Terminal led the TOEM Committee to conduct a review of sampling and analysis programs at the ballast water treatment plant. With state funding, three programs were reviewed: sampling and testing of influent; sampling and testing of effluent; and sampling and testing to determine toxicity.

RCAC has reviewed Alyeska's literature-based materials balance calculation study and is recommending that a "dip and sample" study be conducted.

Status: RCAC issued formal recommendations for improvements in sampling and monitoring program. Depending on response to recommendations, RCAC may initiate an independent monitoring program.

**Air quality in Valdez**

At issue is whether Alyeska will be required to install vapor recovery system to control emissions from tanker loading. Alyeska would like to be exempted from requirements of Clean Air Act and hopes to show that benzene emissions from tankers do not constitute a significant share of the benzene that Valdez residents are exposed to. RCAC retained independent specialists to conduct peer review of methods used and conclusions reached in Alyeska's Valdez air health studies (VAHS). RCAC's scientists concluded that terminal sources contribute a significantly higher percentage of the benzene in Valdez air than Alyeska's study found.

After monitoring air quality in Valdez and Seward for two weeks, Alyeska concluded that benzene in Valdez is in line with a coastal community surrounded by mountains. An addendum to VAHS raised only slightly the estimates of cancer risk and amount of benzene attributable to terminal. EPA has asked many of the same questions raised by RCAC. Alyeska has reiterated that it will not install vapor controls unless health risk is shown or the law requires it.

Status: Alyeska is developing its response to EPA's questions. RCAC's panel of independent scientists is reviewing the addendum to the Valdez Air Health Study.

**Occupational Exposure**

The Terminal Operations and Environmental Monitoring (TOEM) Committee is gathering information on government inspection reports that address exposure to air toxics. The first step is a literature-based search to determine whether workers are being protected from unhealthy exposure to benzene and other pollutants.
Community Information and Education

"The Observer"

RCAC publishes an eight-page quarterly tabloid distributed to approximately 13,000 households in the Exxon Valdez impact area. The last issue was published in February; the next "Observer" will come out in April or May.

Video

RCAC produced a 10-minute general information video, "A Voice for Prince William Sound." The video has been distributed to member organizations, other interested groups, government agencies and libraries throughout the impact area. Copies are available free of charge from RCAC.

"Then & Now"

A reader-friendly 20-page booklet on changes and improvements in oil spill prevention and response since 1989. The booklet is expected to be available in May 1993. (3/12/93)

RCAC Handbook

A comprehensive guide to RCAC, designed primarily for new council and committee members as an orientation tool.

General council-wide

Regulatory comments/OPA 90 implementation

RCAC comments on federal rulemaking, as well as state laws and regulations, pertaining to oil spill prevention and response, crude oil tankers and terminal operations.

RCAC participated on the federal negotiated rulemaking committee on vessel response plans.

RCAC has submitted comments on rules for vessel response plans, escort vessels in Prince William Sound, facility response plans, double hulls standards, tank level monitoring devices, and use of automatic pilot.

OPA 90 Symposium

Co-sponsored with Cook Inlet RCAC and the U.S. Coast Guard, a symposium Feb. 5 on implementation of the Oil Pollution Act of 1990.

Formation of Prince William Sound "Association"

Alyeska, the Prince William Sound Tanker Association, the Alaska Department of Environmental Conservation and the U.S. Coast Guard are considering organizing an "association" as described in OPA 90. RCAC is being asked to provide comment and input since the association would likely affect RCAC's relationships with industry and agencies.

projects status 3/16/93
Executive Director's Letter

The members of the Prince William Sound Regional Citizens' Advisory Council are representatives of the Exxon Valdez Oil Spill's affected communities and boroughs, Native groups, commercial fishermen, and aquaculture, environmental and other organizations in Prince William Sound and the Gulf of Alaska. We have 18 different entities with 18 different voices.

When council directors meet to discuss issues, they naturally bring to the table different interests, concerns, motivations and points of view. Attend our meetings and you will witness discussions that are intense, powerful, penetrating, sprinkled with humor, at times heated, but always filled with a probing examination of perspectives and loaded with issues. Boring is not in our vocabulary.

From the very first meeting I attended, I was struck by the diversity of perspectives applied to a multiplicity of matters. No matter what the issue, however, one strong and enduring constant has always characterized the results—good and reasonable decisions.

Our directors will continue to make good and reasonable decisions under the direction offered by our long range plan. During 1992 the Council journeyed through a long range planning process designed to guide the organization. This plan will help RCAC increase its effectiveness, improve the organization and maintain a clear focus. Our long range plan emphasizes that directors are part of something larger than themselves or their individual organizations. The Council's purpose of "Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers" requires that broader concern and commitment.
Welcome to the 1992 Annual Report of the Prince William Sound Regional Citizens' Advisory Council. As you read our report, please note any questions or comments. We welcome feedback from anyone interested in preventing oil spills and oil pollution in the Exxon Valdez impact area.

During 1992, the Prince William Sound RCAC citizen-volunteers and staff from the Oil Spill Prevention and Response (OSPR) and Port Operations and Vessel Traffic Systems (POVTS) committees participated in numerous working groups and committees. Examples include a working group organized to develop a plan for heading off spilled oil that threatens shorelines, a federal committee charged with negotiating oil spill contingency plans for tank vessels carrying crude oil, and a work group studying options for towing disabled tankers at sea.

Prince William Sound RCAC's participation in such groups illustrates how citizen involvement in regulating and overseeing crude oil industry operations helps to change the relationship between industry and communities from confrontation to consensus.

In 1992, the council also commissioned multi-year studies of socio-economic mitigation measures for coastal communities affected by oil spills, and the first phase of an independent environmental monitoring study. These long-term scientific studies are expected to yield valuable insight and information. Both studies are being supervised by the council's Scientific Advisory Committee (SAC).

In Valdez, the council's Terminal Operations and Environmental Monitoring Committee (TOEM) executed the council's review of Alyeska's study of harmful air emissions from the Valdez Marine Terminal. The council's process included review by a panel of independent scientists and public meetings. Although Alyeska criticized the process of times and ultimately declined to follow the council's main recommendation for controlling such emissions, the process demonstrated that local citizens are fully capable of reviewing and understanding complex scientific studies and policies that affect their communities.

The RCAC's newest committee, the Community Information and Education Committee (CIEC), laid a strong foundation in 1992 for public outreach and communications, much-needed work that promises to make all the council's efforts more effective.

Our best wishes for a safe and pollution-free 1993.
Responsibilities

The work of the Regional Citizens' Advisory Council is guided by its contract with Alyeska and the Oil Pollution Act of 1990. The RCAC exists independently of both, but its funding and work plan stem from the contract and its certification under OPA 90.

Contract
The contract between Alyeska and the Regional Citizens' Advisory Council is explicit about RCAC's independence:

"The independence, and public perception of independence, of the Committee is of overriding importance to the Committee in fulfilling its functions and in meeting public needs. This contract shall be interpreted in such a way as to promote the independence, both actual and perceived, of the Committee from Alyeska . . . Alyeska shall have no right . . . to have any degree of control over the formation or operation of the Corporation . . ."

Under the terms of its contract, the RCAC provides specific services to Alyeska and the public. They include:

* Review, monitor and comment on:
  - Alyeska's oil spill response and prevention plans;
  - Alyeska's prevention and response capabilities;
  - Alyeska's environmental protection capabilities; and
  - the actual and potential environmental impacts of terminal and tanker operations;

* Increase public awareness of:
  - Alyeska's oil spill response and prevention capabilities,
  - Alyeska's environmental protection capabilities, and
  - actual and potential environmental impacts of terminal and tanker operations;

* Comment on/participate in monitoring and assessing the environmental, social and economic consequences of oil related accidents;

* Provide input on actual or potential environmental impacts in or near Prince William Sound;

* Comment on the design of measures to mitigate the potential consequences of oil spills and other environmental impacts of terminal and tanker operations;

* Participate in development of the spill prevention and response plan; annual plan review; periodic review of operations under the plan, including training and conducting exercises;

* Comment on/participate in selection of research and development projects.

The contract states that the council may work on other related issues not specifically identified when the contract was written.

The RCAC was initially funded at $2 million per year. The funding level is reviewed every three years.
OIL POLLUTION ACT OF 1990
RCAC's contract with Aleska pre-dates the Oil Pollution Act of 1990 (OPA 90), but the similarities are not coincidental. Many of the people involved in the establishment of the RCAC also actively promoted citizen involvement provisions in the federal law.

OPA 90 establishes two demonstration projects in Alaska—two in Prince William Sound, the others in Cook Inlet—designed to promote cooperation between local citizens, industry and government; build trust and provide citizen oversight of environmental compliance by oil terminal facilities and tankers.

The RCAC is certified by the President of the U.S. as the voluntary alternative advisory council for Prince William Sound. The law specifically allowed for an exiting organization to meet the requirement for a citizen group. As the certified advisory council for Prince William Sound, RCAC's job is to:

- Advise and make recommendations on policies, permits, and site-specific regulations relating to the oil terminal and tankers;
- Monitor the environmental impacts of the terminal and tankers;
- Monitor terminal and tanker operations that affect or may affect the environment in the terminal vicinity;
- Review the adequacy of oil spill prevention and contingency plans for crude oil tankers operating in Prince William Sound;
- Advise and make recommendations on port operations, policies and practices;
- Recommend standards and modifications for terminal and tanker operations to minimize the risk of oil spills and other environmental impacts, and enhance prevention and response.

RCAC recommends ways to minimize the risk of oil spills and other environmental impacts. COURTESY ALASKA PIPELINE SERVICE CO.
History

The Regional Citizens' Advisory Council grew out of the Exxon Valdez oil spill of 1989. The idea of a citizens' group to advise Alyeska Pipeline Service Company, which operates the trans-Alaska pipeline and terminal on behalf of the oil company owners, had been proposed by local residents before. The Exxon Valdez oil spill generated a change in leadership and attitude at Alyeska; the new leadership sought citizen involvement.

The concept of a citizens' advisory group was adapted from Scotland, where the local governing body in the Shetland Islands is a partner with industry in the operations of the Sullom Voe Terminal.

The Exxon Valdez experience had demonstrated that the oil industry could learn from people who live and work in the region affected by the terminal and tanker operations. A moral imperative also emerged from the Exxon Valdez: that those people with the most to lose from an oil spill ought to have a voice in the decisions that put their lives and communities at risk.

In July 1989, Alyeska's new President, Jim Henniller, pulled together a group representing various communities and interests in the areas impacted by the oil spill to work with Alyeska on revisions to its oil spill prevention and response plan for Prince William Sound.

In December 1989, the Regional Citizens' Advisory Council incorporated as a non-profit corporation. In February 1990, after six months of negotiations, RCAC and Alyeska signed a contract. RCAC had insisted on absolute independence from Alyeska, access to Alyeska facilities, a guaranteed source of annual funds and assurances that the contract would last as long as oil flows through the pipeline. Alyeska agreed to all four conditions.

Under the terms of the contract, RCAC provides specific services to Alyeska and the public. They include environmental monitoring; research; local and regional input on contingency planning; environmental and oil transportation issues; and public information about Alyeska's capabilities in oil spill prevention, spill response, and environmental protection.

While the contract between RCAC and Alyeska stands on its own, the relationship is reinforced and codified by provisions in the Oil Pollution Act of 1990 (OPA 90), the federal law enacted in response to the Exxon Valdez.

OPA 90 established two pilot projects—one in Prince William Sound, the other in Cook Inlet—for citizen involvement in contingency planning and environmental monitoring of oil terminal and tanker operations. OPA 90 requires that terminal operators or industry cooperatives in those two areas establish and fund citizens' advisory groups. The law specifically allows existing voluntary organizations to be certified as the citizen groups. RCAC qualified as an alternative group meeting the intent of OPA 90. As such, RCAC must be recertified by the President every year.
Organizational Structure

CAC's membership consists of communities in the path of the Exxon Valdez oil spill, and interest groups with a significant stake in the environment and resources at risk from marine oil transportation in the region. The 18 member organizations include villages, towns, small cities and boroughs, Native and conservation groups, tourism and recreation interests, commercial fishing and aquaculture.

Each member organization appoints a representative to the RCAC Board of Directors, frequently referred to as "the council." Member organizations have one seat each on the board, with the exception of Valdez, which has two seats. Board members serve at the pleasure of the organizations they represent, so long as they comply with RCAC bylaws and policies. Board members serve two-year terms; there is no limit to the number of terms a director may serve.

Much of RCAC's work is conducted through volunteer committees. The committees, with support from RCAC staff, design and implement work plans and formulate advice and recommendations for the board of directors' consideration. Although formal advice and comments must be approved by the board, committees frequently work directly with industry and government agency representatives on a range of projects.
RCAC Member Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Member Type</th>
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<tr>
<td>City of Cordova</td>
<td>Charter (1989)</td>
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<tr>
<td>City of Homer</td>
<td>Charter (1989)</td>
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<tr>
<td>Kenai Peninsula Borough</td>
<td>Charter (1989)</td>
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<td>City of Kodiak</td>
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<td>Kodiak Island Borough</td>
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<td>City of Seward</td>
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<td>City of Valdez</td>
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<td>City of Whittier</td>
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<td>Community of Chenega Bay</td>
<td>Charter (1989)</td>
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<tr>
<td>Community of Tatitlek</td>
<td>Charter (1989)</td>
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<tr>
<td>Alaska State Chamber of Commerce</td>
<td>Charter (1989)</td>
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<tr>
<td>Cordova District Fishermen United</td>
<td>Charter (1989)</td>
</tr>
</tbody>
</table>

EX-OFFICIO MEMBERS (Class II non-voting)

ADDED THROUGH 1992 BY AMS AMENDMENT:

- Alaska Department of Military and Veterans Affairs, Division of Emergency Services
- Alaska Department of Environmental Conservation
- Alaska Department of Fish and Game
- Alaska Department of Natural Resources
- U.S. Coast Guard
- U.S. Department of Interior, Office of Environmental Affairs
- U.S. Environmental Protection Agency
- U.S. Forest Service
- U.S. National Oceanic and Atmospheric Administration

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1. 157
2. RCAC Member Organizations
RCAC Board of Directors '92

Board members are seated and officers elected at the annual meeting in March

**Representative**

Charles Christiansen (Kodiak Village Mayors Assoc.) ........................................ 1989-91; 1992
Wayne Coleman (Kodiak Island Borough) ............................................................... 1989
Tex Edwards (City of Homer) ..................................................................................... 1992
Larry Evander (Community of Chenega Bay) ............................................................. 1992
Mike Gallagher (City of Valdez/Seat 2) ..................................................................... 1992
Chris Gates (City of Seward) ..................................................................................... 1989
Keith Gordoff (Chugach Alaska Corp.) ..................................................................... 1989

Robert Dailey, July 1992, Michael Brown, Nov. 1992

John Herschelb (Prince William Sound Aquaculture Corp.) ...................................... 1992
Lynda Hyce (City of Whittier) ..................................................................................... 1990

Andy Mack (Kami Institute of Commerce) ................................................................. 1991

Carol Till, December 1992

Replacing by Floyd Heinbuch, December 1992

Carla Marks (Alaska State Chamber of Commerce) ............................................... 1992
Michelle O'Leary (Cordova District Fishermen United) ........................................... 1991

Darrel Olsen (Community of Tottilek) ..................................................................... 1992
Ann Rothe (National Wildlife Federation) ................................................................. 1989
Kristin Stahl-Johnson (City of Kodiak) ................................................................. 1991

Stan Stephens (Alaska Wilderness Recreation & Tourism Assoc.) * ...................... 1992

Scott Sterling (City of Cordova) ................................................................................ 1990
Bill Walker (City of Valdez/Seat 1) ............................................................................. 1989

Ivan L. Widom (City of Seldovia) ............................................................................. 1992

* Stephens represented the Alaska State Chamber of Commerce 1990-1992

**Executive Team**

President: Scott Sterling
Vice President: Keith Gordoff, Lynda Hyce
(July-December), Tex Edwards (December)
Secretary: Michelle O'Leary
Treasurer: Bill Walker
Member-at-Large: Andy Mack, Ivan Widom
(December)

**Ex-Officio Members (non-voting)**

Jerry Brossia
(Alaska Dept. of Natural Resources)
Bruce Van Zee
(U.S. Forest Service)
Cindy Gilder
(U.S. Environmental Protection Agency)
CDR Bill Hutmacher
(U.S. Coast Guard)
Simon Matson/Steve Provant
(Alaska Dept. of Environmental Conservation)
Doug Mutter
(U.S. Dept. of Interior, Office of Environmental Affairs)
Pete Petram
(Alaska Dept. Military and Veterans Affairs, Division of Emergency Services)
Claudia Slater
(Alaska Dept. of Fish and Games)
John Whitney
(National Oceanic & Atmospheric Admin.)

Board members John Herschelb, Ann Rothe and Michelle O'Leary.
The work of RCAC is both product—written documents—and process. The written work of RCAC primarily takes two forms:

- **REPORTS AND STUDIES**—These projects are usually done under contract with consultants, typically experts in specific fields. The consultant frequently works very closely with and under the direction of the committee that is sponsoring the project. Reports and studies may be used to formulate RCAC’s position on specific issues, or to educate the committee or council as a whole.

- **ADVICE AND COMMENTS**—RCAC gives advice and comments on a wide range of issues.

-Federal rulemaking - As part of the regulatory process to implement the Oil Pollution Act of 1990, the U.S. Coast Guard and the U.S. Environmental Protection Agency issue "notices of proposed rulemaking" and invite public comment. RCAC submits comments on pertinent issues.

- State regulations - RCAC formally comments on state laws and regulations related to terminal and tanker operations, and environmental impacts of marine oil transportation.

- At the council and committee level, RCAC advises Alyeska, regulatory agencies and the oil industry on matters pertaining to terminal and tanker operations, oil spill prevention and response, and other ways to prevent and mitigate adverse environmental impacts of marine oil transportation.

RCAC also works cooperatively with industry and regulatory agencies, through working groups, joint studies and task forces. RCAC is a member of the Prince William Sound Tanker Spill Prevention and Response Plan Steering Committee, a multi-organizational group organized by the State of Alaska to develop revisions to the Prince William Sound plan. RCAC has also participated in working groups formed to develop consensus on state and federal oil spill regulations.
Role of Committees

RCAC depends heavily on the efforts of volunteers. Much of RCAC's work is done through five committees, consisting of experts, citizens with interest, knowledge and experience in specific fields, and members of the board. Committee members are appointed by the Board of Directors in an annual application and selection process. Each committee must have at least one board member.

The committees design and implement work plans and formulate advice and recommendations for consideration by the board of directors. Some of the committees also work directly with Alyeska, other industry groups and regulatory agencies through cooperative working groups, task forces and other issue-specific projects.

The council provides staff to assist each committee. Although individual staff members may work exclusively with one committee, all staff are accountable to the Executive Director. Most committees meet once or twice a month, with dates and times set by the committee itself depending on convenience and availability of the members. Because committees members usually live in different communities, meetings are frequently held by teleconference. Although it varies from committee to committee, most try to hold at least one in-person meeting per quarter.

The time committee members devote to RCAC varies greatly, but prospective committee members should anticipate working 10-20 hours per month. Committee volunteers are reimbursed for travel and other expenses, but do not receive stipends.

The committee structure is stipulated in RCAC's by-laws and in the Oil Pollution Act of 1990 (OPA 90). The committees have no authority independent of the council and are accountable to the council. However, committees may approve contracts up to $10,000, direct consultants and manage their own budgets after the council approves the annual budget.

All RCAC committees work with Alyeska through liaisons assigned to them by Alyeska. Some state and federal agencies also assign liaisons to selected committees.
Committees

Much of the council's work is done through volunteer committees, consisting of council members and other citizens with interest, experience, and background in a given field. The committees work for the council, with assistance from staff provided by the council. All official policy is presented to the full council for approval and further action. Public members of the committees are selected through a formal application process conducted annually. (* Denotes member of the board.)

COMMUNITY INFORMATION AND EDUCATION COMMITTEE

The Community Information and Education (CIEC) Committee was organized in 1992 to promote public awareness of oil spill prevention and response issues, the environmental impacts of marine oil transportation and efforts to mitigate those impacts.

The CIEC promotes communication between the RCAC and communities in the Exxon Valdez impact area; advises RCAC of information needs; identifies ways to improve communications between communities, RCAC and Ayeska; and educates Alaskans about the history, relationship and respective roles of RCAC and Ayeska.

Projects begun in 1992 include publication of a booklet on changes since 1989 in oil spill prevention and response; an RCAC handbook; a speakers' bureau and other public outreach activities.

Committee Chair: Joceylan Barker
Members: Rick Kurtz
          Andy Mack*/Jim La Belle*
          John Parker

OIL SPILL PREVENTION AND RESPONSE COMMITTEE

The mission of the Oil Spill Prevention and Response (OSPR) Committee is to minimize the risks and impacts associated with oil transportation through strong spill prevention and response measures, adequate contingency planning and effective regulations.

The OSPR Committee monitors and comments on federal regulations implementing the Oil Pollution Act of 1990; reviews and comments on the Prince William Sound Tanker Spill Prevention and Response Plan; identifies strengths and weaknesses in prevention and response efforts; represents RCAC in the technical working groups of the Prince William Sound Steering Committee; and monitors and evaluates spill drills, exercises and training.

In 1992, the OSPR Committee completed work on the Nearshore Response Plan Working Group, chaired by an OSPR member; drafted final comments on the Prince William Sound nearshore response plans for the council; represented RCAC in the federal rulemaking process for...
vessel response plans; prepared final comments on the vessel response plan rulemaking; drafted comments on facility response plan rulemaking; established a drill monitoring program; completed a report on Alaska's Oil and Hazardous Substance Release Response Fund ("470 Fund"); and developed the concept of a nearshore strike team demonstration project, which was subsequently endorsed by RCAC and established by the state legislature.

**COMMITTEE CHAIR:** Floyd Heimbuch

**MEMBERS:**
- Wayne Coleman*
- Tom Capeland
- Gail Evonoff
- John Herschleb*
- Lynda Hyce*
- Charles Lundfelt
- Skip Richards
- Tim Robertson
- Patti Sounders
- Gordon Scott

### PORT OPERATIONS AND VESSEL TRAFFIC SYSTEMS

The Port Operations and Vessel Traffic Systems (POVTS) Committee monitors port and tanker operations in Prince William Sound. In 1992, the POVTS Committee worked with government agencies and industry groups, including Alyeska, to co-sponsor a major study of escort and towing equipment and procedures in Prince William Sound.

The committee also gathered data on tanker structural integrity, designed a survey of mariners to assess the adequacy of navigation aids in Prince William Sound, and began to seek ways to improve weather reporting and forecasting capabilities in Prince William Sound.

POVTS and TOEM formed a task force to determine the present capabilities of handling terminal and tanker fires and determine the potential consequences of a major tanker fire.

The POVTS Committee is based in Valdez.

**COMMITTEE CHAIR:** Stan Stephens/*Tex Edwards*

**MEMBERS:**
- Bill Conley
- Chris Gates*
- Jeff Guard
- Vince Kelly
- Peter Kott
- Dennis Lodge
- Vince Mitchell
- Tom McAlister

![Escort and response vessels corral a tanker during Chevron's Spill Drill in March.](Image)
The Scientific Advisory Committee (SAC) provides scientific assistance and advice to the other RCAC committees on technical reports, scientific methodology, data interpretation and position papers. SAC recommends research priorities and policy, and reviews proposals. SAC reviews research sponsored by RCAC to ensure compliance with high contractual, scientific and technical standards.

SAC began two multi-year studies in 1992. The socio-economic study is assessing the social, cultural and economic impacts of major oil spills in order to develop mitigation strategies for communities in the spill-affected region. Most of the study's first phase—consisting of focus groups in selected communities—was completed in 1992.

SAC also completed the groundwork on an environmental monitoring program to establish a baseline for determining potential long-term effects of oil transportation and provide information for potential future impacts. Beginning in March 1993, field surveys will be conducted twice a year.

**Committee Chair:** Kristin Stahl-Johnson

**Members:** Sharon Ani, Ph.D.
Ivan Frohne
James Hemming
Lynda Hurst
Gary Kompafl
John Morrell
A. J. Paul, Ph.D.
Chuck Smythe, Ph.D.
James D. Stewart
Carol Wilson

The Terminal Operations and Environmental Monitoring (TOEM) Committee evaluates operations at Alyeska's marine terminal with respect to their effect on the environment and identifies actual and potential sources of chronic pollution. TOEM recommends modifications to minimize risk and mitigate the impact of terminal facilities and operations in the vicinity of the terminal. Major projects in 1992 were an independent review of an air health study conducted by Alyeska, and evaluation of sampling and testing programs at the marine terminal's ballast water treatment plant. TOEM also commented extensively to Alyeska and regulatory agencies on permits and site-specific regulations affecting air and water quality.

**Committee Chair:** Scott Sterling/ Greg Winter/
Dave Dengel

**Members:** Bob Benda
Dave Dengel
Julie Howe
Judy Kilgawa
E.A. Jim Levine
George Slikodal
Stan Stephens
Dennis Ulvestad
Activities

■ DISABLED TANKER TOWING STUDY

After more than a year of negotiations, RCAC, the Prince William Sound Tanker Association, Alyeska, the U.S. Coast Guard and the Alaska Department of Environmental Conservation agreed to co-sponsor a year-long study of towing and escort capabilities in Prince William Sound.

The study is evaluating the capability of existing emergency towing equipment and practices, and examining alternatives to enhance escort and assist capabilities for disabled tankers. Approximately two-thirds of the funding is from RCAC with the balance provided by the Prince William Sound Tanker Association. The study began in October 1992 and is expected to be completed in the fall of 1993.

■ NAVIGATION SAFETY SURVEY

The groundwork was laid for a survey of people who use the marine navigation system in Prince William Sound. Approximately 300 to 400 “users” will be surveyed to determine attitudes about suitability of current navigation aids and escort procedures. The results will be used to develop recommendations for improvements.

■ FIRE PREVENTION TASK FORCE

RCAC initiated a joint task force to assess current capabilities for responding to terminal and tanker fires. The task force includes representatives of RCAC, Alyeska and other oil industry representatives, the U.S. Coast Guard and the City of Valdez. The task force will develop recommendations for improvements, if needed.

■ T/V KENAI REPORT

RCAC staff reviewed information available about the October 20, 1992 incident in which the tanker Kenai experienced steering problems in Valdez Narrows. Contrary to newspaper reports, the RCAC found insufficient information to determine whether the tug escort saved the tanker from grounding.

■ SOCIO-ECONOMIC STUDY

A multi-year study was begun to assess the social, cultural and economic impacts of oil spills for the purpose of developing future mitigation strategies for communities in the region.

The first phase of the study, most of which was completed in 1992, consisted of focus groups in selected representative communities to confirm impacts identified in earlier public testimony.

RCAC and its consultants will work with residents in nine communities selected from the 18 identified as impacted by the Exxon Valdez oil spill, to develop specific strategies for dealing with the impacts of a future spill.
ENVIRONMENTAL MONITORING

The contract was signed for a two-year environmental monitoring program, beginning in March 1993, to establish a baseline for determining possible long-term effects of oil transportation and provide information for potential future impacts in the study area. The study will monitor hydrocarbon concentrations and characteristics in nearshore sub-tidal sediments and bioaccumulations of hydrocarbons in the tissue of mussels collected intertidally. Field surveys will be done twice a year, in late winter and summer, with samples taken at seven to nine sites in Prince William Sound and the Gulf of Alaska. Samples will be tested for the full spectrum of hydrocarbons.

OIL SPILL CONTINGENCY PLANNING

RCAC works on a continuing basis with industry and regulators to review, revise and finalize oil spill contingency plans. The so-called "c-plans" are required documents that spell out how a tanker or facility would respond to an oil spill.

Much of RCAC's work in contingency planning takes place in a steering committee organized by the State Department of Environmental Conservation to address revisions to the Prince William Sound Tanker Spill Prevention and Response Plan. The steering committee and its technical working groups, all of which operate by consensus, include industry, government and citizen representatives.

RCAC also submits its own comments and suggestions for oil spill contingency plans, outside the steering committee process.

NEARSHORE RESPONSE

Nearshore response is an element of response planning that was a primary focus of efforts in 1992. RCAC played a leading role in the cooperative development of contingency plans for responding to spilled oil that threatens shoreline. An RCAC board member chaired the inter-disciplinary technical working group that developed the major nearshore response plan for Prince William Sound.

RCAC also sponsored several studies on the concept of coastal community cooperatives using local resources and personnel to respond to the threat of oil in the nearshore environment. A demonstration project using local resources was approved by the state legislature.

RCAC identified gaps in nearshore response plans developed by industry and advocated greater response efforts, including pre-positioning of equipment, outside Prince William Sound and after the initial 72 hours.

HATCHERY PROTECTION PROGRAM AND AREA RESPONSE CENTER MOBILIZATION PLANS

RCAC advised Alyeska during development of new chapters in its comprehensive spill response plan and praised the results. The new components address hatchery protection and mobilization of area response centers. However, RCAC urged Alyeska to protect hatcheries outside Prince William Sound, as well, and provide more specifics about the area response centers.
**BALLAST WATER TREATMENT**

RCAC recommended specific changes and improvements to the testing and sampling programs at Alyeska's ballast water treatment plant, in order to detect and discourage dumping of unauthorized ballast, and assess the effectiveness of ballast water treatment.

The recommendations were based on three state-funded studies directed by RCAC and completed in 1992. The studies evaluated sampling and testing of influent (contaminated ballast water as it goes into the treatment plant); sampling and testing of effluent (treated ballast released into the Port of Valdez); and sampling and testing to determine toxicity of the effluent.

RCAC also monitored developments at the state and federal levels on water quality standards. RCAC commented on Alyeska's proposed revisions to its "Best Management Practices," a federally-authorized description of how contaminated ballast water is handled. At the state level, RCAC formally opposed plans by the Alaska Department of Environmental Conservation to lower water quality standards.

**AIR QUALITY IN VALDEZ**

RCAC commissioned a panel of independent scientists to review the methods and conclusions of a major study of air quality in Valdez conducted by Alyeska. RCAC held several public meetings on the air quality issue in an effort to present rational and fair information to Valdez residents about the risk of benzene exposure, and strengths and weaknesses of the Alyeska study.

At issue is whether Alyeska will be required to install a vapor recovery system to control emissions from tanker
The emissions contain significant amounts of benzene, a known carcinogen.

Alyeska's study concluded that vapors emitted during tanker loading account for an insignificant amount of the benzene to which Valdez residents are exposed. RCAC's panel—Valdez Air Study Review Committee—disputed aspects of Alyeska's study and concluded that sources at the marine terminal contribute a significantly higher percentage of the benzene in Valdez air than Alyeska's study found.

RCAC formally recommended that Alyeska voluntarily install a vapor recovery system. Alyeska responded that it will not install vapor controls unless and until a health risk is attributed to terminal sources or Alyeska is required to do so.

PUBLIC EDUCATION

RCAC published four issues of its tabloid newsletter, "The Observer," which is distributed free of charge to approximately 13,000 households in the Exxon Valdez impact area, as well as industry and government. The newsletter documents the work of RCAC and includes pieces by and about Alyeska.

A special edition of the Observer in July 1992 addressed proposed federal regulations regarding requirements under the Oil Pollution Act of 1990 for vessel response plans. The Observer is available to the public on request.

RCAC produced a 10-minute introductory video, "A Voice for Prince William Sound," on RCAC's origins, structure and purpose. The video was distributed to RCAC member organizations, government agencies, libraries and other interested groups throughout the impact area.

A series of advertisements were published in newspapers throughout the region to alert the public to issues and events. Topics addressed in the ads included studies on air quality in Valdez, public forums on spill prevention and response, Alyeska's Ship Escort/Response Vessel System and the importance of citizen attention to industry operations.

PUBLIC PRESENTATIONS

Members of the RCAC Board of Directors, committee members and staff appeared before public groups to talk about the work of RCAC and specific issues.

In addition to routine board member reports to member organizations, presentations were given to the Alaska State Chamber of Commerce, the Resource Development Council, the Homer City Council, the Arctic Science Conference, Minerals Management Service Information Transfer Meeting, and the Kodiak Island Borough Local Emergency Planning Commission.

The Executive Director made community presentations in Cordova, Whittier, Seward, Seldovia and Kodiak, and to shareholders of Tatitlek Corporation. The Oil Spill Prevention and Response Committee also gave talks on nearshore response in Kodiak, Seward and Valdez.

OPA 90 IMPLEMENTATION

RCAC monitors the federal rulemaking process, in which agencies write regulations to implement the requirements of the Oil Pollution Act of 1990. RCAC reviews and comments on proposed rules that pertain to oil spill prevention and response, crude oil tanker and terminal operations, in the area impacted by the Exxon Valdez oil spill.

In 1992, RCAC commented on draft federal rules for vessel response plans, escort vessels in Prince William Sound, facility response plans, use of automatic pilot, discharge removal equipment for vessels carrying oil and policies regarding appointment and responsibilities of area committees. RCAC also represented the public on a federal negotiated rulemaking committee on vessel response plans.
STATE OF ALASKA LAWS AND REGULATIONS

RCAC monitors enactment and enforcement of state laws and regulations pertaining to oil spill prevention and response, crude oil tankers and terminal operations. In 1992, RCAC conducted a study on how the state's spill response fund is used, advised state officials on requirements for professional spill responders, called response action contractors, and advocated stricter interpretations of Alaska's oil spill law.

NEW MEMBERS ADDED

Three organizations became members of RCAC, resulting in three additional seats on the Board of Directors. The new member entities were the Alaska Wilderness Recreation and Tourism Association, the community of Tatitlek and the community of Chenega Bay.

LONG RANGE PLANNING

RCAC held a series of retreats to narrow the organization's focus and develop a long range plan.

BUDGET NEGOTIATIONS

Consistent with provisions of its contract with Alyeska, RCAC began negotiations with Alyeska to determine the funding level for the next three years. Under the contract, RCAC received $2 million a year for the first three years, with subsequent funding levels to be renegotiated every three years.

AUDITS

Three audits were conducted in 1992. Alyeska audited RCAC’s performance of services under its contract. The U.S. General Accounting Office (GAO) conducted a comprehensive audit of RCAC as the alternative advisory group meeting the requirements of federal law under the Oil Pollution Act of 1990. The GAO audit is expected to be released in the spring of 1993. RCAC’s routine annual financial audit was conducted by KPMG Peat Marwick.

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Reports & Studies	COMPLETED IN 1992

AIR QUALITY VALDEZ

“Multi-media Fate and Effects of Airborne Hydrocarbons in the Port Valdez Region”
—Multimedia Environsoft Corp. (March 14, 1992)

“Interim Report, Review of the Valdez Air Health Study”
—Valdez Air Study Review Committee (March 19, 1992)

“Review of the Valdez Air Health Study”
—Valdez Air Study Review Committee (August 25, 1992)

WATER QUALITY/BALLAST WATER TREATMENT

“Sampling and Analysis of Influent to the Alyeska Ballast Water Treatment Plant”
—Beak Consultants, Inc. and ABL Consultants Ltd. (April 30, 1992)

“Design of A Sampling and Testing Plan for Ballast Water Effluent”
—Investigative Science, Inc. (August 24, 1992)

“Toxicity Study Review for Alyeska Marine Terminal Ballast Water Treatment Plant”
—Richard S. Caldwell, Ph.D. and Donald R. Buhler, Ph.D., Northwestern Aquatic Sciences (Sept. 16, 1992)

SPILL RESPONSE PLANS

“Status of RCAC Comments on PWS Tanker Oil Spill Prevention and Response Plans,”
—Falls Creek Environmental (January 1992)

“Report on National and Regional Contingency Plan and Response System as it Applies to Oil”
—BCSB (February 1992)

“Justification for Requiring the Use of NBMS ICS in Vessel Response Plans”
—Incident Management Associates, Inc. (July 23, 1992)

“Comments on Regulatory Impact Analyses for Vessel Response Plans and Section 5005 Requirements”
—Michele Straube, Esq. and Ruth Ruttenberg, Ph.D.

“Alaska’s Oil and Hazardous Substance Release Response Fund”
—BCSB (December 1992)

NEARSHORE RESPONSE

“Capital Equipment Study and Recommendations for the Alaska Coastal Communities Cooperative”

“An Analysis of Oil Spill Mechanical Recovery Operations of the Prince William Sound Nearshore Response Plan”
—Porter Associates, Inc. and ECO, Inc. (June 9, 1992)

“Coastal Communities Oil Spill Cooperative for Alaska: Feasibility Study”
—International Spill Technology Corporation (June 1992)

“White paper: Wildlife Rescue Comments”
—Charles Kelley Weaverling (July 17, 1992)

OTHER COMPLETED REPORTS

“An Improved Navigation Aid System for Prince William Sound”
—ECO Engineering, Inc. (January 8, 1992)

—“Annotated Bibliography” (Draft Current Research File; Select Biological Bibliography: Kelp and Blue Mussels; Select bibliography with Abstract: Kelp and Blue Mussels)
Prince William Sound Research (February 15, 1992)

“Department of Environmental Conservation Overview”
—BCSB (August 1992)
The Honorable George Miller  
1522 Longworth H.O.B. 
Washington D.C. 20515

February 8, 1993

Dear Congressman Miller,

We have just learned of your February 4, 1993 hearing on on spill oversight. In the hopes that the administrative record is still open, we are submitting the enclosed proposal to use the Monterey Bay National Marine Sanctuary and the proposed Central Coast National Marine Sanctuary (H.R. 3099, Panetta) as an expanded sea otter refuge.

Since the reason sea otters in California were listed as a threatened species is due primarily to the risks posed by oil spilled at sea, we recognize that any effort towards recovery and de-listing will require a reduction of those risks. We believe that our proposal could help to reduce the potential for oil spills along the south-central coast of California, leading to protection of the sea otter and conservation of shellfish resources and valuable shellfish fisheries.

I expect to be in Washington D.C. the week of February 22-26 for meetings with the American Seafood Harvesters Association and the National Fisheries Institute. I will contact your staff for an appointment.

Thank you for your consideration of our proposal.

Sincerely,

Steven L. Rebuck  
Executive Director
EXPANDED SEA OTTER REFUGE

Zonal Management
Based on Suitable Habitat

Prepared by the Ocean Sanctuary Coalition of San Luis Obispo
P.O. Box 1520
San Luis Obispo, CA 93406
805/544-5415
EXECUTIVE SUMMARY

In September 1992, the National Oceanic and Atmospheric Administration (NOAA) will dedicate the waters offshore North-Central California as the Monterey Bay National Marine Sanctuary (MBNMS). In addition, site evaluation work has begun on a companion sanctuary - the Central Coast National Marine Sanctuary (CCNMS).

It appears that the MBNMS and CCNMS could be utilized to protect sea otters and conserve shellfish fisheries by implementing a program of "zonal-management" for the sea otter in California, pursuant to the 1980 recommendations of the Marine Mammal Commission (MMC).

In 1986 the U.S. Congress passed Public Law 99-625 to legalize experimental translocation of sea otters to San Nicolas Island, Ventura County. In response to concerns by local commercial and recreational fishermen, Congress approved a "management zone" of sea otters. An agreement between the U.S. Fish and Wildlife Service (USFWS) and the State of California, as represented by the California Department of Fish and Game (CDFG) was signed in August of 1987. This Memorandum of Understanding (MOU) remains intact. However, in views of many, including CDFG, USFWS has not lived up to the MOU.

In August of 1991 the USFWS released a revision of their 1982 sea otter recovery plan. The Draft Southern Sea Otter Revised Recovery Plan (DSSORRP) has drawn fire from coastal cities and counties, CDFG, and numerous fishing organizations. The DSSORRP offers range expansion as the only remedy to threats generally acknowledged to face sea otters in the foreseeable future. The revised plan provides no genuine protection to sea otters or their habitat.

Extensive scientific data, gathered by CDFG confirms the experience of commercial and recreational divers that significant harvests of shellfish, regardless of the extent of regulation and level of law enforcement, cannot co-exist within the sea otter range. Thus the DSSORRP requires elimination of fisheries, but does not protect sea otters from oil spill risks, such as offshore oil and gas leasing and development, adjacent to the sea otter range pose considerable real threats, yet USF&WS has not recommended deletion of these tracts.

Our proposal seeks to protect sea otters by identifying the primary threat--that of massive oil spills at sea--as an activity appropriately managed within the MBNMS and CCNMS boundaries. As recently suggested by the USFWS regional director, improvement as the establishment of a traffic separation scheme could reduce oil spill risks, meet recovery goals and potentially meet delisting criteria. This is after all the goal of protective legislation. Ultimately, sea otters could be protected in perpetuity while allowing for continued use of shellfish resources outside the refuge by those that desire them for recreation or commercial use.
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ACKNOWLEDGMENTS

Author Steve Re buck, Executive Director of Ocean Sanctuary Coalition, San Luis Obispo County. Other acknowledgments include Richard Murphy, Energy Planner of Obispo County Planning and Building Department, and Cay Phipps, Conservation Director of the Central California Council of Divers.
I. SUMMARY

Goal
The goal of this proposal is to protect the sea otter, *Enhydra lutris*, its habitat and the remaining shellfish fisheries to the north of San Francisco Bay and south of Point Conception, outside the current sea otter range.

Proposal
To utilize the proposed Monterey Bay National Marine Sanctuary (MBNMS/HR 734, 1st session-100th Congress), and the proposed Central Coast National Marine Sanctuary (CCNMS/H.R. 3099) as an "expanded sea otter refuge." This proposal applies the concept of *zonal management* to effectively manage the sea otter and maintain the health and stability of the remaining shellfish fisheries. The expansion of the otter range is based on the availability of suitable habitat while maintaining the economic integrity of the shellfish industry. Map I below relates the existing otter range to that of the proposed Monterey Bay National Marine Sanctuary and the proposed Central Coast National Marine Sanctuary.

Map I
Existing Refuge and Range
The entire Pacific population of sea otters (Enhydra lutris) came under international protection with the ratification of the International Fur Seal Treaty of 1911.

The California population received State legislative protection in 1913, when the sea otter was listed in Section 4700 of the Fish and Game Code. The 1914 population was assumed to be approximately 50 animals located between Pfeiffer Pt. and Pt. Sur.

In 1941 the State of California created a sea otter refuge. Initially there were two disjunct zones, one bounded by Malpaso Creek and Swiss Canyon Arroyo and the second located between Castro Canyon and Dolan Creek. During 1959 the reserve was extended into one continuous zone encompassing all land west of Highway 1 to the State's three mile territorial distance offshore from Carmel River south to Santa Rosa Creek near Cambria.

Between 1914 and 1938 the sea otter population in California grew to an estimated population of 310. CDFG conducted sporadic surveys of the sea otter population using a variety of methods. By 1959 the population was estimated at 1,050. Table I provides information of the range utilization and population increase of the sea otter along the central coast of California.

With the passage of the Marine Mammal Protection Act of 1972 (MMPA), protective jurisdiction was passed from the California Department of Fish and Game (CDFG) to the U.S. Fish and Wildlife Service (USFWS). During the mid-1970's CDFG attempted to gain a waiver to the taking provisions of the MMPA. This attempt to regain management jurisdiction was thwarted by the 1977 listing of the sea otter in California as a threatened "species" under the Endangered Species Act of 1973 (ESA). The State of California opposed the listing (eg: sea otter’s habitat was not threatened, they were not being exploited, there was no disease or predation interfering with growth of the population and existing regulatory mechanisms were adequate).

There is also an unresolved issue concerning the taxonomic status of the sea otter in California. Some argue the animal is a slightly isolated population of that found in Alaska, which could be used to bolster the California population should an oil spill or other malady affect them. Others support the separate sub-species designation, Enhydra lutris nereis, and argue against mixing the races. USFWS supports the conclusions of Wilson that there are three distinct sub-species in the north Pacific. CDFG on the other hand concludes Wilson represents only the most recent work and is not conclusive. The taxonomic debate continues.

In 1991, the U.S. Fish and Wildlife Service (USFWS) released a revision to their 1982 Recovery Plan for sea otters in California. The sea otter in California was listed as a

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1 USFWS 1984, et al.
2 USFWS DSSORRP, Introduction, Systematics pg 1
3 Wilson, et al 1991
4 CDFG Comments, DSSORRP pg 4
Table 1. Range Utilization and Population of the Sea Otter Along the California Coast, 1914 to 1984 (USFWS); plus 1992/USFWS/CDF&G Joint Spring Survey.

<table>
<thead>
<tr>
<th>Year</th>
<th>Link of Range</th>
<th>Increase in Range in Kilometers (km)</th>
<th>Average Increase in km per Year</th>
<th>Linear km of Habitat to 20 ft Deep</th>
<th>Total km of Range</th>
<th>Total Est. Pop*</th>
<th>Total Count of Individuals</th>
<th>Years Between Estimates</th>
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<tr>
<td>1914</td>
<td>Pt. Serum</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>1955</td>
<td>Pt. Lobos</td>
<td>Avg. 3.20 3.80</td>
<td>108</td>
<td>153.5</td>
<td>800</td>
<td>5</td>
<td>2</td>
<td>1955</td>
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<tr>
<td>1957</td>
<td>Pt. Salmon</td>
<td>Avg. 3.00 8.50</td>
<td>125</td>
<td>170.9</td>
<td>880</td>
<td>2</td>
<td>1957</td>
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<tr>
<td>1959</td>
<td>Pt. Joe</td>
<td>Avg. 3.00 6.00</td>
<td>137</td>
<td>192.2</td>
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<td>2</td>
<td>1959</td>
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<td>Pt. Carrizo</td>
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<td>Pt. Solimar</td>
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<td>170</td>
<td>217.0</td>
<td>1,050</td>
<td>2</td>
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<tr>
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<td>880</td>
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<td>1975</td>
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<tr>
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<td>125</td>
<td>170.9</td>
<td>880</td>
<td>2</td>
<td>1981</td>
<td>1981</td>
</tr>
</tbody>
</table>

TOTALS: 123 209 342 1.34 1.61 2.09 353 70

* Ground count initiated 1982.
* No records, rough assumptions made (see text).
* Square kilometers of foraging habitat along Point con beach are considered 0.80 km² per linear km of sandy beach.
* Some small cove included.
* Poor weather conditions during the survey led to a lack of confidence in the final figure. Also some large gaps included.
* No estimate included.
* Median count during calendar year.
* (additional information provided by D. Miller 1983)
threatened "species" in 1977. The Draft Revised Southern Sea Otter Recovery Plan (DRSSORP) by USFWS offers range expansion as the only remedy to threats generally acknowledged to be facing sea otters in the foreseeable future. The revised plan provides no genuine protection to sea otters or their habitat.

Extensive scientific data, gathered by the CDFG, confirms the experiences of commercial and recreational divers that significant harvests of shellfish, regardless of the extent of regulation and level of law enforcement, cannot co-exist within the sea otter range. Thus the DRSSORP requires elimination of fisheries, but does not protect the sea otter.

Currently, the sea otter in California ranges from Pt. Ano Nuevo, San Mateo County and Pismo Beach, San Luis Obispo County. The 1991 spring survey of sea otters was 1941 animals compared to 1992's count of 2,101.

Chart I below shows seven of the highest otter population densities along the central coast. Five of these seven locations are located with the boundaries of the proposed Central Coast National Marine Sanctuary. These numbers are based on 1990 USFWS data.

Chart I.

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5 USFWS 1991, DRSSORP ex. sum.
6 USFWS 1991, Otter Census
II. LEGAL FOUNDATION

Zonal management of sea otters in California was first recommended to the U.S. Fish and Wildlife Service (USFWS) by the U.S. Marine Mammal Commission (MMC) in a letter to USFWS Director, Lynn A. Greenwalt by MMC Executive Director, John R. Twiss Jr., 2 December 1980:

"...recognize the ultimate need for 'zonal management' of the California sea otter pursuant to which the sea otter would be restored to additional sites within its former range although not to each and every area it once inhabited. Such 'zonal management' would be based upon an optimum sustainable population can and should be achieved with reference to the 'health and stability of the marine ecosystem' and that historic levels and distribution are not necessary to satisfy that goal..." (Exhibit 1).

Fish and Wildlife Amendment to the ESA: PL 99-625

Existing provisions of the Marine Mammal Protection Act (MMPA) allow for research programs involving depleted populations such as the sea otter in California, but not for long-term management and containment of an experimental population once research is completed. Therefore, progress toward recovery of the sea otter in California population pursuant to the Endangered Species Act (ESA) would result from the establishment of a second breeding colony. To remedy this limitation, Congress passed P.L. 99-625 on November 7, 1986 (Exhibit 2). P.L. 99-625 broadened USFWS authorization for long term management of an "experimental population".

USFWS chose San Nicolas Island (Ventura County) and surrounding waters as a "translocation zone" for their experiment. In numerous state, county, city, and other public meetings, USFWS promoted their capabilities at containment.

In accordance with provisions of P.L. 99-625, a "management zone" that includes all of the Southern California Bight south of Pt. Conception and offshore islands except San Nicolas be maintained as an "otter-free" zone by use of "non-lethal" capture techniques. This would result in containment of the translocated population, and the de facto containment of southward expansion of the donor population at Pt. Conception.7

Memorandum of Understanding (MOU)

In August 1987, USFWS and the California Department of Fish and Game signed a Memorandum of Understanding (MOU). In this MOU the USFWS and CDFG mutually agreed and understood 16 different provisions. One provision, number 10, states:

"The USFWS agrees to initiate a process to develop, in consultation with CDFG, a long-term management plan immediately following approval and completion of the decision-making process regarding translocation. Among other factors, the plan shall include discussions, strategies and milestones relative to determinations concerning delisting of the Southern (California) sea otter population, additional protections necessary to restore the population

7 USFWS Sea Otter Translocation FEIS 1987
to the non-depleted and non-threatened status, zonal management for the mainland population, including limitations on the northern expansion of the mainland population (emphasis added), and an approach to defining Optimum Sustainable Population (OSP), in accordance with requirements of the MMPA, taking into consideration the amount of suitable habitat available in California. (Exhibit 3)

Unfortunately, USFWS has not lived up to this MOU in the eyes of many observers, including CDFG. Although CDFG has adequately trained personnel available for the containment program in the "no-otter" management zone, 5 years into the program, USFWS still has difficulty fielding a dive team. The fact that USFWS has made minimal attempts at containment during the past five years should not be used to discredit the containment program. CDFG has demonstrated on numerous occasions that their capture techniques can be successful.

Monterey Bay National Marine Sanctuary (H.R.734 & HJR 4148)
The draft EIS and management plan for the Monterey Bay National Marine Sanctuary "preferred alternative" sanctuary boundary included approximately 30% of the sea otter population, advocated by the National Oceanic and Atmospheric Administration’s Sanctuaries and Reserves Division. Substantial public and political support for the largest sanctuary boundary alternative, No. 5, lead the Bush Administration to direct NOAA staff to revise the final management plan and EIS. Alternative No. 5 would encompasses approximately 48% of the current sea otter mainland population.

Central Coast National Marine Sanctuary (H.R. 3099)
H.R. 3099, the Central Coast National Marine Sanctuary, is legislation that would establish a marine sanctuary off the central coast of California, encompassing approximately 22% of the mainland sea otter population. Congressman Leon Panetta introduced H.R. 5973 on October 27, 1990 which was later reintroduced as H.R. 3099 on July 30, 1991. H.R. 3099 proposes Congress find the waters off the central coast of California to have special national cultural, educational, research and economic significance.

In addition, the County of San Luis Obispo Board of Supervisors has requested NOAA expand a "non-active" National Marine Sanctuary candidate, Morro Bay, to include outer waters (Estero Bay and beyond). NOAA is considering this proposal as they modify their Site Evaluation List (SEL) criteria. NOAA staff has indicated the proposal demonstrates merit and will likely meet the new SEL bio-geographical criteria. If the Morro Bay site is not expanded and activated by NOAA, the county will submit a formal nomination package (occurs after NOAA has revised SEL criteria). A call for new nominations is expected in 1992. The draft reauthorization bill of the National Marine Research, Protection, and Sanctuaries Act includes language requiring NOAA to conduct a study of the Morro Bay/Central Coast site candidate, as defined by the agencies revised SEL. Information on the marine resource of the central coast are provided in exhibit 5, a summary publication prepared by the County of San Luis Obispo.

The two charts below, Chart II and Chart III, depict the distribution of sea otters within their established range off the central coast relative to the Monterey Bay Marine Sanctuary preferred alternative and boundary alternative 5.
Draft Southern Sea Otter Revised Recovery Plan

In August 1991, USFWS released a Draft Southern Sea Otter Revised Recovery Plan (DSSORRP). The agency has redefined the recovery criteria and suggests that "The establishment of a contiguous population containing 5,400 individuals ranging between Pt. Conception and the California/Oregon border."

The attached exhibits listed below are by those agencies and organizations opposed to the revised plan. Those opposed include:

- California Department of Fish and Game (Exhibit 9)
- Pacific Coast Federation of Fishermen's Associations (Exhibit 10)
- Central California Council of Divers (Exhibit 11)
- California Seafood Council (Exhibit 12)
- Resolutions from counties
  - Del Norte
  - Humboldt
  - Mendocino
  - Sonoma
- Resolution from cities
  - Eureka
  - Lakeport
  - Fortuna
  - Ft. Bragg
  - Trinidad
Support of the revised plan is provided by:

- Friends of the Sea Otter (Exhibit 15)

The Marine Mammal Commission (MMC) is the nation's highest authority on marine mammals. MMC is part of the Executive Branch of the federal government. Responding to the USFWS DSSORP, MMC submitted 13 pages of comments and recommendations, much of it critical:

"Precisely what is being proposed or recommended is not clear. Likewise, the pros and cons of the apparent proposal/recommendation are not identified and described in sufficient detail to allow meaningful evaluation." (pg. 2, Exhibit 16)

More recently, MMC contacted USFWS concerning rumors that a second draft would be released "without significant changes" (Carl Benz pers. comm., et al). MMC reiterated its 8 Nov 1991 comments that the DSSORP included:

"...a number of uncertainties concerning the nature of, rational for, proposed or recommended changes in the Recovery Plan. In light of these uncertainties, the Commission recommended a second draft revision be done..." (Exhibit 16)

III. FACTORS THREATENING THE OTTER

Impacts

The sea otter population in California was listed as a threatened "species" (not immediately threatened with extinction). Its small population, limited range and threats from offshore oil spills were cited as reasons for the listing. The State of California and others disputed the sea otter meeting the necessary criteria for listing. Because the population was stable or growing the available habitat was not threatened, disease and predation were at levels not threatening to the population, and otters were not being exploited beyond those of observation.

One threat, little known and not recognized at the time the listing was take occurring in the set-net fishery targeting on halibut. Since 1984, the California Legislature has passed several bills designed to reduce such taking to levels approaching zero. Factors like El Nino and flipper tag entanglement were not considered as contributing to the population leveling out during the early and mid-1980's.

Oil and Gas Development

Offshore oil and gas leasing and resulting development, adjacent to the sea otter range are considered real threats to the sea otter, yet the USFWS has not recommended deletion of

* Defined in the Marine Mammal Protection Act as harassment or unauthorized killing. Species covered by the ESA and MMPA are automatically considered depleted. Depleted species may not be taken.
these tracts. Instead, USFWS has promoted translocations as a solution and primary protection from oil spill risk, dividing the ranks of environmentalists and fishermen who actually have similar concerns when it comes to offshore oil development.

In 1986, the USFWS authored a Formal ESA Section 7 Consultation and Biological Opinion on the San Miguel Project, an offshore oil and gas project to be located off Point Sal in the Northern Santa Maria Basin. In an attempt to gain MMS support for the then proposed translocation to San Nicolas Island, USFWS offered the following:

"As described in the Service's proposed translocation plan, there is a clear and direct linkage between successful establishment of a second colony of sea otters, the outcome of subsequent Section 7 consultations, and the overall recovery of the species. Therefore, it is clearly possible that future conflicts between OCS oil and gas development and sea otters can be significantly diminished or avoided if the recovery effort is accelerated and a second colony can be established over the next 5-10 years." (Exhibit 17)

The U.S. Department of the Interior, Minerals Management Service (MMS), proposed leasing plans for the Santa Barbara Channel and northern Santa Maria Basin, northward to areas offshore Morro Bay, as a part of their 1992-1997 Comprehensive Program. These tracts have been deleted from the proposed final plan. Should these tracts have been included in the final plan, 52% of the sea otter population would have been threatened. The Secretarial Issue Document (SID) for the proposed final plan gave some consideration to this threat. As shown on the map below, the SID proposed a leasing alternative that would have created a coastal buffer to protect the sea otter. San Luis Obispo County has consistently requested such a buffer should lease sales occur off the central coast. Map II shows the otter buffer relative to existing and proposed tracts in the Santa Maria Basin. Twenty-four tracts would have been deferred if this option was selected by the Secretary of Interior rather than deferring the entire Southern California Planning Area from lease sale consideration. The Santa Maria Basin will not be considered for leasing until the 1997-2003 Comprehensive Program is prepared.

The California Coastal Commission (CCC) has recognized the environmental sensitivity of the northern Santa Maria Basin. On March 20, 1981, the CCC issued a determination that portions of Lease Sale 53 were inconsistent with the Commission's federally certified California Coastal Management Program (CCMP). Specifically, the CCC objected to leasing of four Northern California basins, of which 29 tracts were located in the northern Santa Maria Basin. Nineteen of the proposed 87 tracts considered in the 1992-97 program were among the 29 the CCC formally objected to in 1981. On August 27, 1983, the CCC found Lease Sale 73 in the Santa Maria Basin to be inconsistent with the CCMP. All 45 of the Santa Maria Basin tracts considered in the 92-97 program were among those objected to by the Coastal Commission. Map III represents this activity by the California Coastal Commission.

**Vessel & Tanker Traffic**
Correspondence to the California Coastal Commission from Texaco Trading and Transportation Inc. Gaviota Terminal manager, Dan Mihalik, provided data showing 122 million barrels of oil transported annually offshore the sea otter range by approximately 950 oil tankers. Texaco also estimates 3,200 vessels passing the sea otter range and an additional
25 million barrels of fuel for an estimated total of 147 million barrels of crude and processed oil. (Exhibit 18). Texaco suggests transport of oil should occur outside 25 miles from shore:

"The option would keep the tankers at least 25 miles from shore except when they approach the entrance to San Francisco."

In response to concerns expressed by Congressman Frank Riggs (Exhibit 19) the USFWS regional director, Marvin Plenert (Exhibit 20) responded:

"To further minimize the oil spill risk would require restricting vessels to traffic separation lanes 40 to 60 miles offshore, and the Coast Guard has informed us that it does not currently have the authority to require this traffic restriction. However, should such lanes become established, and adequately enforced, then the recovery criteria for delisting the southern sea otter could be adjusted."

Such a mechanism has been discussed by USFWS before. The FEIS for the Translocation of Southern Sea Otter, May 1987 states:

"Through the Secretary of the Interior, legislation would be proposed to establish a shipping fairway and traffic separation scheme (TSS) along the central California coast from San Francisco to Pt. Conception at a distance of at least 15 nautical miles from shore, and to require mandatory use of the route and TSS by all U.S. Flag carriers". Vol. 1, Pgs. III-31 & 32 (Exhibit 21).

The subject of vessel shipping fairways along the central California coast was also discussed at an October 4, 1984 meeting of the USFWS Interagency Project Review Team (IPRT) in San Francisco (Exhibit 22).

The Department of the Interior has the apparent ability to reduce the threat of tankering and other shipping posed to sea otters.

**On-Shell Oil & Gas Facilities**

The supporting infrastructure for oil and gas activity on the central coast poses a significant threat to nearshore sea otter habitat. On August 3, 1992, Unocal Corporation's twelve inch pipeline, located on bluffs above fossil point near Avila Beach, ruptured. At least three sea otters were killed as a result of this spill, see Map IV. The spill consisted of approximately one hundred twenty-five barrels of San Joaquin Valley heavy crude oil. Approximately 80-120 barrels was spilled into the nearshore environment. The relatively remote geographic character of the incident lead to a slower then desired response. Clean Seas, the Coast Guard, and FORT, Fishermen Oil Response Team, were deployed on site for cleanup. The nearshore nature of the incident, primary intertidal and kelp forest communities, has made it extremely difficult for a successfully cleanup of the area. Four days after the accident, the third dead oiled sea otter was discovered.

A similar accident occurred at Shell Beach, south of Avila Beach, in 1985. No known sea otters were found dead as a result of the spill but kelp forest communities were degraded. Shell Beach is one of five highest sea otter densities in the existing otter range.
H.R. 4045 (exhibit 23), legislation to reauthorize and amend the Endangered Species Act, would make available grant monies to fund the development of a habitat conservation plan. Under Title III of the legislation, "The Candidate Species Conservation Planning Assistance Program" outlines the criteria to obtain grant funding. To qualify for the grant, the habitat conservation plan must, A) cover an area sufficiently large in size to encompass adequate suitable habitat within which the species can be maintained over the long-term; B) include reasonable measures such as land acquisition, regulatory controls, exotic species controls, and active land management that will fully mitigate and offset the effects of any activities permitted under the plan that adversely affect the species, and C) include adequate measures for funding its implementation. The plan is a cooperative agreement between the Secretary of Interior and agency requesting the funding.

The Candidate Species Conservation Planning Assistance Program would provide assistance to coastal counties for the inventory of all on-shore oil & gas infrastructure within the coastal zone adjacent to the existing sea-otter range and proposed refuge. These habitat conservation plans could provide information on the integrity of pipelines and other industrial infrastructure that pose a significant threat to the suitable sea otter habitat. Essentially, an implemented comprehensive plan would help prevent an accident such as the one that occurred in Avila Beach and could be integrated into the counties general plan.

**IV. CONCLUSION**

The basic components of this plan remain in place, i.e. P.L. 99-625, the current Southern Sea Otter Recovery Plan, the Memorandum of Understanding and the Federal Rule. The proposed Monterey Bay National Marine Sanctuary and Central coast National Marine Sanctuary identify protections for resources and unique habitats. Identification of research objectives could provide financial support for state and federal programs.

All parties appear to agree that the sea otter translocation program at San Nicolas Island should continue. Even fishery organizations which have previously opposed the program have recently offered "conditional support." These conditions are predicated on a workable "zonal-management" program as recommended by the Marine Mammal Commission.
Fishermen believe CDFG should take the lead in containment and be provided adequate ESA Section 6 funding.

In addition, fishermen have founded an oil spill preparedness training program. The Fisherman's Oil Response Team (FORT) has trained over 100 commercial fishermen and crew members in the basic mechanical procedures associated with containing and recovering spilled oil at sea. Approximately 3 dozen commercial vessels have been surveyed for deployments during spills.

Commercial abalone divers, members of the California Abalone Association (CAA) have recently offered their vessels and diving skills to the CDFG Oil Spill Prevention and Response Office (OSPRO) for specialized wildlife recovery training. Some CAA members have received FORT training and are awaiting classes in wildlife handling to be scheduled by FORT associates, Clean Seas. Additional programs in wildlife and hazardous materials are subject to CDFG and Cal-OSHA approval.

USFWS has repeatedly cited the EXXON VALDEZ oil spill in the DRSSORRP, yet USFWS fails to acknowledge that the commercial fishing industry is well along in efforts to field oil spill response teams along the California coast. These teams have received approved training for effective rescue and cleanup action. Even without training, Alaskan commercial fishermen proved their capabilities as the only early responders to the EXXON VALDEZ spill.

V. RECOMMENDATIONS

This proposal represents a compromise. We have an opportunity to protect sea otters from risks associated with spilled oil—the reason for their listing. Supporters of this proposal will have to advise the U.S. Congress. The following points are suggested:

1. Congress must recognize the need for "zonal management" programs in California. This may require additional amendments to the Endangered Species Act and Marine Mammal Protection Act;

2. Congress must require traffic separation lanes offshore California at sufficient distance to protect sea otters and other living marine resources;

3. Congress must provide adequate funding for research, management, and protection of resources existing in the proposed National Marine Sanctuaries of California.

4. Congress should place permanent bans on OCS oil and gas activity in the Santa Maria Basin, Central and Northern California Planning Areas.

5. Congress and the State Assembly should place performance standards on the upgrade of existing on-shore oil & gas pipelines adjacent to suitable sea otter habitats. (e.g. Unocal Corporation - Avila Beach Tank Farm/Pipeline & Guadalupe Dunes Oil Field).
6. Congress should adopt H.R. 4045, "Candidate Species Conservation Planning Assistance Program" in order for adequate on-shore and off-shore planning for purposes of implementing a suitable habitat conservation plan.

Map V.
LIST OF EXHIBITS

3. MOU Aug 1987, USFWS Regional Director/CDFG Director. 5pp.
11. CEN-CAL, 1 Nov 1991, Comments: DSSORRP
13. Resolutions: Cities
14. Resolutions: Counties
16. MMC, 8 Nov 1991, comments: DSSORRP. 13pp
17. Formal Endangered Species Consultation—Offshore oil/Gas Development and Production in Northern Santa Maria Basin, San Luis Obispo County, California
Sea Otters, Kelp Communities and Fisheries: A Brief Overview

While many may dispute the sea otters role in shaping the nearshore environment, including their impact on shellfish fisheries, one may safely conclude that sea otters and shellfish fisheries cannot coexist. Data collected over the past twenty-five years by the California Department of Fish and Game has convincingly documented the preclusion of abalone, sea urchin and some clam fisheries. Similar data on possible preclusion of the south-central coast Dungeness crab fishery is currently being collected.

Some scientists have argued that sea otters, by removing macroinvertebrates, thereby enhance kelp, primarily giant or pea kelp, *Macrocystis pyrifera*, an economically valuable species, and therefore offer an economic tradeoff. However, Foster and Schiel of Moss Landing Marine Laboratory summarized:

"Observations at selected sites in the northeastern Pacific have led to two generalizations: (1) kelp communities on nearshore, subtidal reef exist in one of two stable states, forested with few large sea urchins or deforested with abundant large sea urchins, and (2) changes of state are controlled by keystone predator, the sea otter. In contrast, many observations made both within and outside the sea otters' range in California indicate that these subtidal communities are spatially and temporally variable. Our review of over 220 descriptive surveys of such communities in California that occur outside the range of the sea otter shows that sea urchin grazing effects can be highly variable in the absence of sea otters and deforestation by sea urchins is the exception (<10% of the sites surveyed). In addition, the communities do not exist in two states controlled by otters, but rather exhibit a dynamic range of composition where the above "states" are uncommon extremes."

The following excerpts are taken from the available literature on sea otter interactions with fisheries. These excerpts demonstrate what is known about sea otter impacts on inshore fisheries. Two CDFG baseline studies exist: (1) Point Estero studies (Ebert 1968a, 1968b) included in Wild and Ames (1974); and (2) Preoperational baseline studies for the Diablo Canyon Nuclear Powerplant by Gotshall, Laurent, Owen, Grant, Law (1984). These excerpts are by no means complete. They do, however, demonstrate the available literature and the need for continued work, possibly through the proposed marine sanctuaries research program or possible budget expansion of the USFWS otter research monies, ESA Section 6 funding, Candidate Species Conservation Planning Assistance Program as proposed in legislation H.R. 4045.

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Foster, M.S., D.R. Schiel (1987), Kelp Communities and Sea Otters: Keystone Species or just Another Brick in the Wall? Chapter 5, Van Blaricom & Estes, the Community Ecology of Sea Otters, Springer-Verlag, Heidelberg, pp.92-115

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References: Fisheries/Sea Otter Interactions


PROPOSED
CENTRAL COAST NATIONAL MARINE SANCTUARY
BOUNDARY ALTERNATIVE 2
ARGUELLO CANYON - SANTA LUCIA BANK

Bathymetry - 200 Meter Intervals
Dear Congressman Miller:

We have been advised by NRDC that your committee will be holding hearings on February 4, 1993 regarding oil spill prevention and response and other issues associated with the transportation of oil by marine tanker along the California coast. We would like to take this opportunity to provide you with some relevant information and to express our grave concerns about the increased threat to the California coast arising from the January 13, 1993 decision by the California Coastal Commission to authorize tankering from Santa Barbara (Gaviota Marine Terminal) to Los Angeles. In addition to the January 13 decision to permit tankering by the Pt. Arguello partners, on February 17, 1993, the Commission will consider granting a new permit to the Gaviota Marine Terminal, and the State Lands Commission will then consider granting a new lease to enable this tankering to begin.

The attached letter from the Environmental Defense Center to the Coastal Commission outlines our objections to the process and substance of the Coastal Commission's decision to permit tankering. We believe that decision contravenes policies of the California Coastal Act and the requirements of the Santa Barbara County Local Coastal Plan. In practical terms, we are convinced that this decision will result in permanent marine tankering, not only of OCS oil from the Pt. Arguello project, but also from the Exxon Santa Ynez Unit project, which is expected to begin production within the year. This result is contrary to express commitments made ten years ago by both Exxon and Chevron to transport their OCS production to refineries by pipeline, and not marine tanker. We also believe it is contrary to the Commission's obligations under the Coastal Zone Management Act.
We are particularly outraged by the fact that the Pt. Arguello partners have succeeded in manipulating the Coastal Commission to sacrifice the central California coast and the Santa Monica Bay to the permanent threat of tankering in order to stop the marine tankering recently initiated by Chevron from Martinez to Los Angeles. In essence, the Pt. Arguello partners agreed to cease what we would characterize as an illegal activity as a bargaining chip in order to obtain a permit from the Commission to tank from Santa Barbara to Los Angeles. We believe that tankering from Martinez is inconsistent with Chevron's approved OCS plan, and that, pursuant to the Code of Federal Regulations, 15 C.F.R. 930.86, upon request by the Commission, the Secretary of the Interior could and should take action to suspend that activity. The Commission's capitulation to Chevron was therefore not only unwise but unwarranted.

The upcoming decisions by the California Coastal Commission and the State Lands Commission relating to permits for the marine terminal at Gaviota are destined to open the door to additional tankering by Exxon, despite the fact that a pipeline exists with capacity to carry Exxon's full production to its previously designated refineries in Texas. Having opened the door to tankering by granting a permit to Chevron, the Coastal Commission will be hard pressed to deny a similar permit to Exxon. To add insult to injury, while the Pt. Arguello partners appear to have agreed to use only double bottom, double hulled tankers, Exxon has claimed an absolute right to use single hulled tankers to transport its oil.

We believe that the most effective method of oil spill prevention is the elimination of the opportunity for marine tankering wherever possible. Based on recent spills in Spain, Scotland and in U.S. Coastal waters, it should be self-evident that not enough is being done to prevent spills, and that when they occur they are impossible to contain and clean up. Because of our profound disappointment with the recent actions of the Coastal Commission, we urge your committee to pursue federal initiatives to eliminate the threat posed by marine tankering of oil to the California marine environment, and its coastal-dependent fishing and tourist industries.

We would be pleased to provide any additional information which may be useful to your committee. Thank you for your consideration of our concerns.

Sincerely,

AMERICAN OCEANS CAMPAIGN

By

Jane Zimmer
Special Counsel

ENVIRONMENTAL DEFENSE CENTER OF
SANTA BARBARA
By
Linda Krop

cc: Hon. Barbara Boxer
Hon. Dianne Feinstein
Hon. Michael Huffington
Sen. Gary Hart
Assemblyman Jack O'Connell
Gray Davis, State Lands Commission
Leo McCarthy, State Lands Commission
Gov. Pete Wilson
Thomas Gwyn, California Coastal Commission
James Strock, Cal-STA
Douglas Wheeler, Resources Agency
Supervisor Naomi Schwartz
Supervisor Tom Rogers
Gerald Meral, Planning and Conservation League
Darryl Young, Club of California
Bob Sollen, Sierra Club- Los Padres Chapter
Ann Notthoff, NRDC
Hollister Ranch Owners Association
Citizens Planning Association
Surfrider Foundation
Steve Dunn and Alan Hur, Commercial Fishermen
Get Oil Out
Greenpeace
Heal the Bay
League of Women Voters of Santa Barbara
League for Coastal Protection
Richard Charter, Local Government Coordination Program
February 18, 1993

TO: The Honorable Congressman George Miller
VIA FAX (202) 225-5609

Re: OPA '90, Salvage, Fire-fighting, Lightering

Dear Sir:

We would like to present our view of OPA '90 interim final rules as relates to salvage, fire-fighting and cargo-lightering. We feel that the regulations established under the mandate to the U.S. Coast Guard (USCG), although specific with regards to spill-response, do not adequately require preventative measures to mitigate or prevent the substantial threat of the worst case discharge as defined by OPA '90.

As evidence of our competency on this issue, we submit our experience of being under contract since 1979 to the Dept. of the Navy, Naval Sea Systems Command, Office of the Supervisor of Salvage and Diving (NAVSEA-SUPSALV), to provide salvage and salvage-related services. Capt. R. Fiske (SUPSALV-Code 00C) can confirm our experience, capabilities, and expertise as it relates to salvage and fire-fighting. Our company is also represented on the Executive Committee of The International Salvage Union (ISU).

Salvage and fire-fighting is clearly the first line of defense against the substantial threat of the worst case discharge. The USCG recognizes this fact when they define "the substantial threat" in Navigation and Vessel Inspection Circular 8-92 (NVIC 8-92) as "any incident involving a vessel that may create a significant risk of discharge of fuel or cargo oil. Such incidents include but are not limited to groundings, strandings, collisions, hull damage, fire, explosion, loss of propulsion, flooding, on-deck spills or other similar occurrences."

The interim final rules (DOP, USCG, 33 CFR Part 150, et al., Response Plans; Interim Final Rules), however, have virtually eliminated the "real" requirement for a vessel operator to ensure the availability of capable and experienced salvage and fire-fighting resources. Presently, a vessel operator only must certify that they have written consent of a salvor and fire-fighter. Response times, resource descriptions, personnel experience, are not clearly defined as criteria to determine
February 18, 1993
Page 2

TO: The Honorable Congressman George Miller

capabilities. A dangerous situation results, where "yellow-page" salvors and fire-fighters are being utilized in response planning.

We have presented similar thoughts in a letter to the staff of Vice President Gore; copy herewith attached.

We thank you for your courtesies. If any additional information is required, please feel free to contact the undersigned.

Very Truly Yours,

Steven G. Newes
Project Coordinator

SGN/sgn

attachment
February 16, 1993

White House Office on Environmental Policy
Old Executive Office Building
Room # 286
Washington, D.C. 20501

ATTN: Katie McGinty
RS: OPA'90

Dear Katie,

We were given your name by the Office of The Vice President. We want to express our concerns regarding the need for the government to place minimum standards on salvage and firefighting contractors being named in oil operator response plans being submitted in accordance with the Oil Pollution Act of 1990.

Following the grounding of the " Exxon Valdez", Congress passed the Oil Pollution Act of 1990 in an effort to curtail the possibility of another such environmental disaster. The U.S. Coast Guard has subsequently become the lead agency charged with defining and implementing the Oil Pollution Act of 1990 by issuing Navigation and Vessel Inspection Circulars (NVICs) to oil operators. These NVICs have been expressive and detailed as to standards required to be met by spill response contractors that must be retained by all oil carriers that operate throughout the United States. However, the detailed standards and criteria set for spill response address only what occurs after the oil has left the vessel and becomes a pollutant. No standards have been established for salvage and firefighting responders; the industry best capable of protecting the environment by keeping the oil in the vessel.

The Oil Pollution Act of 1990 clearly is intended to deal with a "substantial threat of such a discharge". In NVIC 8-92, a substantial threat is described as "any incident involving a vessel which may create a significant risk of discharge of fuel or cargo oil. Such incidents include but are not limited to groundings, strandings, collisions, hull damage, fire, explosion, loss of propulsion, flooding, on deck spills or other similar occurrences." The mandate for a strong salvage response is inherent in the language of OPA'90.

OPA'90 had as a primary intent that salvage and firefighting be an integral part of any plan to protect the environment. In addition to the clear intent of the law, it is an uncontestable fact that a well directed salvage effort has done far more to protect the
environment than can ever be accomplished by cleaning up after a spill. Never the less, the implementing NVICs have avoided the setting of any minimum standards, requirements or response time for salvage and firefighting.

The result of not setting standards for salvage and firefighting is now as clear as the intent of OPA'90 is to protect the environment. Operators are selecting no cost itinerants, foreign salvors with no domestic assets, consultants and general contractors who can demonstrate no effective presence, no experience, and no assets in the areas that they are claiming to be able to protect. The only standard required by oil operators is that the people they identify in their contingency plans for salvage and firefighting be free of charge.

Our company, Donjon Marine Co., Inc. has been in marine salvage and salvage related services for over 30 years. Our emergency response capability is well known by the U.S. Coast Guard and U.S. Navy. We have been under contract to the U.S. Navy since 1979 for the provision of salvage and salvage related services.

With the passage of OPA'90, we recognised the need for establishing committed salvage and firefighting capability throughout the United States. In an effort to accomplish this we have been acquiring additional assets and enhancing our response capability around all U.S. coasts. However, companies like ourselves, who have gone to an expanded response level in order to help satisfy the intent of OPA'90, are being passed over in the operator's mandatory contingency plans in favor of the "no cost, no benefit" contractors previously mentioned.

Just a few words about the current state of affairs in the U.S. salvage industry. The failure of government, the marine industry and the underwriting community to recognize the value of salvage as the leading tool in spill prevention has resulted in significant loss of salvage capability over the years. Today, we are the only salvage group continuing to offer a significant salvage and firefighting capability. We still maintain professional full time experienced crews, vessels on standby and a nationwide geographic response. Our intentions are not necessarily self serving in asking that the obvious intent of OPA'90 be implemented. By requiring clear standards of the salvage industry in the enforcement of legislation, the marketplace will then create competition and choice. We welcome the expansion of the industry and would enjoy the competition and sharing among professionals. There would be no national oil spill response organizations like MPA or NRC without OPA'90 and the detailed regulations promulgated by the U.S. Coast Guard. The escalation of local spill response by dozens of contractors around our coasts and rivers would not have
occurred but for the legislative mandate. One might argue that the result has been initial overkill but we believe that the marketplace will evolve to create a more mature, stable and stronger emergency response capability in the near future.

It is also important to point out that salvage and firefighting providers being named under OPA'90 are using express disclaimers stating, "no representation or guarantee as to response times or adequacy of resources." It is difficult to comprehend how this language could be acceptable to the U.S. legislature which enacted OPA'90. The current message is clear. Enough money has been spent preparing for spill response. Get a salvage and firefighting contractor for nothing. What is also unfortunate is that many of those espousing the selection of no cost, no benefit salvage are former military officers now serving private industry as consultants.

We have attempted, without success, to convince the Coast Guard to place even minimum guidelines on salvage and firefighting response contractors that are named in the oil operator's response plans. Although the Coast Guard agrees that all of the no cost, no benefit contractors being named will be unable to effectively respond, they do not seem to be willing to do anything further.

We request that you consider this problem and the consequences associated with not placing minimum response standards on salvage and firefighting. Action in this matter is necessary in order to mitigate a potentially disastrous situation. You can imagine what public reaction will be when the next oil laden ship is in distress off one of our coasts, response time becomes critical, and the vessel operator's Coast Guard approved contingency plan's response is to call a salvage company that is no more than a name on a piece of paper.

Please give us a call on this most important issue.

Sincerely,

DONJON MARINE CO., INC.

John A. Witte
President

cc: Nina Sankovitch, Esq.  Fax 212-727-1773
February 4, 1993

The Honorable George Miller
Chairman
Committee on Natural Resources
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I respectfully request that the following statement be included in the record of your hearings today on the Shetland Islands tanker spill.

Yours sincerely,

(Jonathan Wills)

Mr. Chairman and Members of this Committee: my family, friends and neighbors are especially grateful for the interest you have taken in the sad events we have been through in the past month. It is heartwarming to know that our concerns are shared by members of the US Legislature and it gives us hope that we can work together to prevent this ever happening again.

I am a writer and wildlife guide and have lived in the Shetland Islands for most of the past 30 years. I have reported on the oil and shipping industries since 1972, when oil was first discovered off Shetland, and have been involved in several TV films about tankers, most recently "Slick Operators", aired in January 1990 by Channel 4 UK, which led the Alyeska Pipeline Service Company to embark on the illegal Wackenhut covert surveillance operation against my friend Mr Charles Hamel of Alexandria, VA.

I was the first reporter to file on the Braer story, at 7.15am on 5th January, and have been doing little else but write, broadcast and think about it ever since. I am writing a book
about the wreck for an Edinburgh publisher and am currently in Washington doing research. The deliberations of your committee are an important source for me.

I come from a Shetland family with strong maritime connections. My grandfather was a shipwright and my uncles were both merchant seamen. I hold a Boatman's Licence from the UK Department of Transport and have over 20 years' experience handling small boats all around the Shetland coast. I am a former attending boatman at Britain's most northerly lighthouse, on the Muckle Flugga rocks, and at Noss Island National Nature Reserve.

The wreck of the US-owned tankship Braer on the Shetland Islands, 5th January 1993, was not an "accident". It was a crime. Its effects have been drastic enough, but far less than anticipated when the islanders watched the tanker drifting helplessly onto the rocks on that dreadful morning.

This was a very strange oilspill. The lightest crude oil ever involved in a major tanker wreck happened to meet the longest North Atlantic storm for a hundred years. In winds of up to 100 miles an hour, a great deal of the oil became airborne, carried in the clouds of salt spray which commonly cover our islands to a height of 300 feet during winter gales. People, farm animals, houses, vehicles, cropland and pastures were drenched in crude oil. Fifteen square miles were seriously affected. The stench of the oil was noticeable up to 40 miles downwind of the wreck.

The storm that drove the tanker ashore also removed the worst visual effects of the spill relatively quickly. Mother Nature cleared up the spill for us, this time. Next time we won't be so lucky, unless NASA or someone can figure out a way to send a 14 day hurricane to corral the spilled oil into a semi-circular bay, churn it up with seawater into something like a toxic salad dressing, and then spread and dilute it with the tides - as a toxic cloud in the sea, rather than a slick on the sea. For that, as we have just discovered in Shetland, is the only way to deal with an oilspill of 84,500 tonnes (twice the "official" figure for the Exxon Valdez).

Some rich fishing grounds have had to be closed, to eliminate the slightest risk of tainted fish being landed for sale. Boats are tied up with nowhere to fish. Several salmon farms have been affected by the invisible cloud of oil spreading under the water. Most of our fish farms have escaped but, like the fishing fleet, all now face ruin because of the damage done to the commercial reputation of island businesses. Our hitherto pristine environment is the basis of marketing strategies for our fish, shellfish, beef and lamb.
I said the loss of the Braer was a crime. So, Whodunnit? There are several prime suspects.

First the shipowner, who knowingly allowed his vessel to put to sea for a midwinter voyage at 60 degrees north with no back-up generators or duplicated fuel supply, and with an anchoring system which he knew could not possibly be used in very heavy weather, should the vessel lose all power.

Second suspect must be the Captain, who continued on his course towards a channel notorious for its violent tides and wild seas (fully described in the pilot book for the area), knowing that even worse weather was imminent, and that he had a serious problem in his engine room.

The Captain must also explain why he failed to summon tug assistance when his steam boiler failed, why he did not immediately declare a Mayday when he lost power and found his ship in grave and imminent danger; and why he failed to leave a heavy towline hanging over the stern when he abandoned ship 44 minutes before the arrival of the tug which he had belatedly requested.

The third suspect is the marine insurance industry which for years has offered cover to vessels whose design made them inherently unsafe, and which has failed to use its commercial power to promote better standards of ship design, construction, maintenance, crewing and seamanship.

The fourth suspect, I am sorry to say, is the British Government. The Government was warned, as long ago as 1979, of the danger from unwatched and uncontrolled tankers passing the Shetland Islands (and other parts of the British coast).

After 11 years of pleading from Shetland Islands Council, the UK Government finally wrote to the International Maritime Organisation of the UN on 9th July 1990, asking the IMO's sanction for a purely advisory 10-mile exclusion zone for vessels of over 5,000 grt on the west and north coasts of the islands. In a move subsequently described as "active discouragement" of rogue tankers, the zone was marked on the charts for the first time. That was all.

That letter in July 1990 was written by a senior official of the UK Department of Transport, expressing the Government's concern at the danger of a tanker disaster in Shetland and describing the exact circumstances of the Braer "accident", two and a half years before it happened.

After this expression of concern the UK Government did nothing to improve shore-based surveillance of shipping around the coast of Shetland. When asked to commission new radars and a
traffic control scheme, the Government replied that the amount of traffic around Shetland (some 1,000 large ships a year, plus about 500 tanker sailings from the Shetland oil port of Sullom Voe) did not justify such action.

The Government did not follow the example of Shetland Islands Council, a local authority representing just 22,000 people, which in 1979 had pioneered a tanker safety scheme for the port of Sullom Voe, in partnership with BP, Exxon and other major shareholders in the terminal. Unlike the Council, the Government did not enforce no-go areas in the waters under its control, it did not use helicopters to spy on tankers, computerised radars to track them, nor tugs to escort them in confined channels.

The Government preferred to let things slide. And they, as much as anyone, let the Braer slide into those rocks.

The UK Government's inquiry into the cause of the Braer disaster has begun. It is being held in secret by the Department of Transport, which was responsible for the failures listed above.

That is why many of us in Shetland hope to see a full inquiry held in the United States. We know that in your country you do these things properly - in public.

The situation with tankers around the global ocean is now so serious that we cannot wait for the results of inquiries, and the passing of new national and international laws, valuable as they may be. There is an urgent need for immediate, common-sense measures which can reduce the chances of another disaster, not next year but next month.

I suggest the following as urgent priorities:

1. The technology has been available for several years now to link remote radar scanners by ordinary telephone lines to computer-controlled display screens. Targets such as large tankships can be acquired and tracked automatically, with the equipment programmed so that if a ship suddenly loses speed, stops or strays out of lane, an alarm sounds.

A Dutch company, INA of Rotterdam (a subsidiary of the Racal electronics corporation) is one of several manufacturers offering this technology at moderate cost. The INA system is operating at the Dutch port of Scheveningen, and at the general commercial port of Lerwick. A similar system has operated at Sullom Voe
tanker harbour for the past 15 years. The entire coastline of France is also covered by radar, a result of the Amoco Cadiz disaster in 1978. The British Government has left most of the Shetland coast as a massive radar blind spot. You have the same problem on most of the coastline of the US. Even with the US Coast Guard's admirable plans for Differential GPS linked to a new Vessel Traffic Service, radar will still be required.

In my opinion, radar cover of dangerous and environmentally sensitive coastlines is essential, particularly where shipping lanes pass through confined channels such as the Fair Isle Channel and Hinchenbrook Entrance, Alaska. Existing cover is either absent or deficient on much of the coastlines at risk in Europe and North America. It can and must be improved.

2 Inspection.

Surveillance is little use on its own. We may just end up with a good radar picture of a tanker going aground, but be powerless to prevent it. So we have to be able to intercept, identify, advise and maybe even direct vessels when they are steering into trouble.

A simple but expensive way to do this is to send in the Navy to patrol shipping lanes. "Sending a Gunboat" would make tanker skippers think twice before taking risks for commercial gain. And a Naval patrol, of course, has the radar on board already.

The alternative, which is probably cheaper, is to spot-charter all-weather helicopters to check out and identify rogue ships.

What I am suggesting here is really an air traffic control system for tankers. If these ships had just been invented, no-one would think of sending them to sea without a traffic-control system (nor sailing a single-skinned, loaded tanker into the sea ice of the Gulf of St Lawrence in January, which was the Braer's intended course).

3 Escorts.

Experience in Alaska and Scotland strongly suggests that large vessels carrying dangerous cargoes should in certain weathers and tides be escorted by ocean-going salvage tugs when passing within 12 miles of the coast and certainly when transiting confined channels studded with rocky islands.
There are plenty of these tugs available for hire. They should be stationed at strategic points, so as to reach casualties within four hours - the time it took the Braer to drift 10 miles on 5th January.

Since Exxon Valdez there have been various proposals to improve tanker safety with double hulls, intermediate oil-tight decks, transponders, better maintenance and higher standards of crewing and seamanship. These are all worthwhile and desirable. But they will all take time. Time is what we do not have, after two months which have seen the Aegean Sea disaster off Spain, the Braer off Shetland, a serious fuel oil spill from an Estonian tanker in the Baltic, and the disastrous collision and fire in the Malacca Straits involving the tankship Maersk Navigator. In the two weeks after the wreck of the Braer, three other tankers were in serious difficulties around the Shetland coast, one of them within two miles of the wreck.

The surveillance, inspection and escorting measures I have suggested can all be done now, without the need for new laws and international agreements. They will cost money but I am convinced that they can prevent the next Braer disaster, which is lying in wait tomorrow off Shetland, Cape Hatteras, the Florida Keys and Alaska, among other lovely places.

As my friend Dan Lawn from Alaska said when he saw what the wind and the sea had done to the Braer's oil, "I think Mother Nature sent us this as a warning. What she's saying to us is 'Stop doing this to me!'")

Mr. Chairman and Committee Members, please accept our special thanks for your work at this time and your efforts in the future to put an end to these senseless and totally avoidable "accidents".

END