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ALASKA OIL SPILL COMMISSION

NOVEMBER 14, 1989

ANCHORAGE, ALASKA

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VOLUME II OF II

1 MR. HERZ: But, on the protection side, I still haven't
2 heard a strong case made or real examples, other than the
3 hatcheries, of the sensitive habitat information having been
4 available, making it possible to protect habitats from severe
5 damage or reducing the damage.

6 MR. TRASKY: Well, there were quite a few when we got
7 out way ahead of the spill in Kodiak and Homer. There were a
8 lot of important streams, important entries and stuff which were
9 boomed off. Unfortunately, the equipment was not adequate and
10 the oil got, in some cases, under it anyway. But I think the point
11 is, I mean obviously this was a miserable failure. The people
12 were unprepared and everything else. The equipment wasn't
13 any good. But that isn't -- we're hopeful that this will improve in
14 the future. If in fact the equipment would have been setting at
15 Main Bay to begin with and in Chami Lagoon and these other
16 places, if we had adequate equipment that actually worked and
17 we were prepared, people were ready to move it it could have
18 been a whole lot different story. Sure, it would've still been a
19 mess, but a lot of these areas we wouldn't be trying to take the
20 oil out of four feet of gravel and stuff. It would -- you know, we
21 would have dealt with it much better. Hopefully we could've
22 contained a lot of it at the sight and burned it or whatever. But,
23 yeah, we had some, there were limited success and some of the
24 stuff was actually implemented and information was used. You
25 know, we knew where the oil was gonna go. I mean.....

1 MR. HERZ: But you're underscoring what we've heard,
2 not having to do with living resources and habitats before, but
3 just overall, once the oil is out there, the problem is either the
4 weather doesn't cooperate and the equipment doesn't work, the
5 technology doesn't work, that the response side, even if
6 everything were optimal is pretty weak and pretty ineffective.
7 The Coast Guard says that. Exxon says that. You people say that.
8 I'm trying to merely get a sense of whether the anticipatory
9 activity really can do anything. And you've essentially said no, but
10 if the equipment had been there. There's always these ifs, it
11 seems to me, that the response side.

12 MR. RUE: Mr. Chair.....

13 MR. HERZ:the more we hear.....

14 MR. RUE:they're -- Mr. Chairman, we have said, and
15 I've said it I think, -- Commissioner Wunnicke and I were at a
16 panel the other day and one of the points I made there was the
17 old saying, an ounce -- I didn't make it. This could have been
18 the one Alyeska made. An ounce of prevention is worth a pound
19 of cure. I think that's absolutely true. Everyone agrees that
20 preventing is what we oughta really focus on. I think we all also
21 agree that if you're gonna have a inves -- a problem, inevitably
22 you oughta be as best prepared as you can be given the risk at
23 stake to deal with it.

24 MR. HERZ: Yet its.....

25 MR. RUE:It's about that simple. And then.....

1 MR. HERZ: And in your example, here or Norway or any
2 of the testimony that we have heard where this response side
3 preparedness and equipment response has markedly reduced
4 the damage, prevented damage. I guess I, today, hearing what
5 you people are saying am struck even more strongly than I was
6 ever before that the emphasis has got to be prevention. Because,
7 on the response side, that side of very few examples any place in
8 the world where there has been a successful intervention or a
9 clean up that has picked up a major portion of a major oil spills.

10 MR. TRASKY: What your saying is exactly true. There's
11 never been a major marine oil spill that's ever been successfully
12 contained and clean up. The Coast Guard told the Congress that
13 about 10 years. But, I think the point is that nobody ever really
14 tried; nobody's every had any equipment; nobody ever planned
15 for it -- probably the North Sea, the Norwegians were probably
16 the best prepared. At this point in time, you can be assured the
17 prevention is what we oughta focus on. That oughta be very
18 important. But with human beings running this equipment and
19 these tankers are 14 or 16 years old. I mean the only thing that
20 gets better with age is wine. You know, it isn't old pickup trucks
21 or tankers or anything else. So, I think that we need to be able
22 to, you know -- don't put all your eggs in one basket. Let's be
23 prepared to deal with eventuality. Say an accident does happen
24 that we're not able to prevent or that we can't immediately deal
25 with, let's get the equipment out on site. Let's pick the most

1 important areas. Let's have a plan. Let's think about it. Let's
2 have the people there to deliver it. And let's do it. I mean, you
3 know, we identified this for Cook Inlet in 1979, which was quite
4 a few -- 10 years ago. We identified the sites where this
5 equipment should be located; that there should be equipment
6 there and the conditions under which it should be operated. I
7 mean, this is not a mystery to anybody what needs to be done. I
8 don't -- I mean, I agree. We should focus on prevention, but let's
9 not give up on the other thing and say, hey, nobody's ever done
10 it before. Because nobody tried. Nobody ever needed it and it
11 jumped at us. Here's our opportunity. We know what can
12 happen. Let's prepare for it.

13 MR. HERZ: Do you feel confident that had the staging
14 occurred and we had boom available or containment and clean
15 up equipment available at these pre-determined locations, that
16 there is a high probability that you could have had major impacts
17 on that spill and made major changes in the amount of
18 protection of the habitats?

19 MR. TRASKY: Yeah, I think it would've been significant.
20 They've had been a lot less of a mess than what it is right now.
21 I'm.....

22 MR. PARKER: And you made, you know, you made the one
23 point earlier in that spill technology has not advanced
24 significantly in 20 years 'cause nobody spent a dime on it. So, if
25 you do spend a dime on it, you'll probably have an incomparably

1 better system.

2 MR. TRASKY: This is a real critical point that we
3 identified in our comments on the Alyeska Plan. And what we
4 learned is basically what we knew. The equipment doesn't work
5 over three foot waves, one knot currents and 50 knot winds.
6 And, I think they tested everything in the world in there. Some
7 of it worked better than others. What we need to do is have
8 some kind of a program to advance the technology. Let's have
9 some -- let's get some of the good boom here. And dispersants
10 didn't work, you know -- we're not totally opposed to using
11 dispersants. Let's get some better dispersants that actually do
12 work. Let's test them before hand, so that people actually know
13 how to use them and stuff. I don't think it's -- I think that the
14 idea that you're gonna have a tanker break in half and it's all
15 gonna spread over 200 miles and you're gonna pick it up; that
16 isn't gonna happen, but you can certainly lessen the damage that
17 you would incur and the amount of time.....

18 MR. PARKER: In your discussions, did you ever get into
19 discussing the navy's coagulants and the possible use of them?

20 MR. TRASKY: We've look at all the stuff over the time. We
21 have -- Fish and Game has quite a library built up on this stuff
22 over the last 15 years.

23 MS. SLATER: And actually.....

24 MR. TRASKY: The herding agents.....

25 MS. SLATER: One of the things that the RRT work was

1 gonna do after we had just finished the Prince William Sound
2 Dispersant guidelines just a week or so prior to the spill, one of
3 our next tasks was to take a look at that burning agents, the
4 coagulants and that type of thing and see what we could come up
5 with, if anything, in the way of guidelines and recommendations
6 or use of those products and then we got involved in the probe of
7 this incident that we haven't done anything on that since that
8 time. But we do, we did collect quite a significant stack of
9 literature on those products and I expect that we will go back
10 and look at those elements.

11 MR. RUE: Mr. Chairman, one other....

12 MR. PARKER: Found out a major oil spills no time to do
13 R&D, so let's remember to do it in between.

14 MR. RUE: That's what we're trying to do. Mr. Chairman,
15 if I might. That's exactly -- that's a critical point is we are extremely
16 frustrated when we were testing potentially lethal chemicals
17 during a crisis and we're gonna be working on that over the
18 winter. There will be research and development program, but
19 that needs to be a continuing effort as well.

20 One other point about the information, I think. It is
21 important. I agree with what you're saying about the difficulty in
22 the clean up or in the response, but this kind of information also
23 is useful in prioritizing clean up effort as well. So that, you
24 know, we tried to direct any efforts in cleaning it up to the most
25 sensitive areas and that kind of thing. So, this kind of data is

1 important to factor into that other phase of this whole problem.

2 MR. PARKER: John

3 MR. SUND: I have a simple question. How big a spill?
4 How big a spill are we prepared to handle right now.

5 MR. RUE: A hundred gallons. Well, I'm not sure that
6 we're the best prepared at this point, since I'm not sure we
7 know all the equipment that's out there.

8 MR. SUND: Well, I don't know, you've been out there
9 working on this thing for a long time. Obviously zero is nice, 11
10 million gallons is too big. Right, that's the side boards? Where
11 are we now, I mean.....

12 MR. TRASKY: Actually, we probably been involved in what,
13 15 spills of various kinds, maybe in he last two years. Glacier Bay
14 Tepithela. We've never seen anybody do anything successfully on
15 any of 'em and some of them, of course, were much smaller.
16 How big was the Glacier Bay?

17 MS. SLATER: Well, it never did get between 54,000 and
18 150,000 barrels. We never did get it clear estimate of exactly
19 what spilled there. But, certainly it would be less than that spill,
20 depending upon.....

21 MR. SUND: Less than 50,000 gallons?

22 MS. SLATER: Yeah. According to the U.S. Coast Guard
23 estimate, if you assume the lower amount on the range that was
24 spilled, I think they got, they still got less than 25% recovered
25 or something like that.

1 MR. TRASKY: That was after, though it went wherever in
2 the rips and was so.....

3 MR. SUND: Well, I'm just getting a feel of where we're at.
4 You know, everybody's getting excited about responding here.
5 Today's technology, today, this is November 14th. What are we
6 prepared to handle. If we had another tanker accident, today or
7 in the next few months, what size of spill are we prepared to
8 contain, handle, pickup or at least prevent. Or maybe get easy --
9 prevent from hitting the beach.

10 MR. BARKER: You have to really break that down,
11 Commissioner, by time of year, the kind of weather conditions
12 you're facing, under ice or open water. Those have.....

13 MR. SUND: Take your pick. I don't care. Take your best
14 case, give me a number.

15 MR. RUE: I don't think we can give you a number. I think
16 we oughta take a look at the -- Mr. Commissioner, we oughta
17 take a look at the Alyeska contingency plan, for instance and see
18 what that does. That'd be a good question to ask DEC with their
19 estimate is.

20 MR. SUND: Oh, I ask if to everybody. I get the same
21 answer.

22 MR. PARKER: Well, J O's estimate was that under the
23 best conditions, the present Alyeska plan would get 35-40% of
24 it, which is a lot better.....

25 MR. SUND: Nobody's ever gotten over 20% on any pickup

1 in any history of oil spill in the world, so I don't know why they
2 think they can do better.

3 MR. TRASKY: What are you talking about now; actually
4 cleaning it off the beaches or actually preventing it from doing
5 damage?

6 MR. SUND: Oh, I gave it an easy one; just keeping it off
7 the beaches. I mean, we had, what, 1700 barrels that came out
8 of the Thompson Pass while it was sitting at the dock. I guess
9 they contained and picked that up.

10 MR. PARKER: Meg.

11 MS. HAYES: Do you, does habitat division have access to
12 the information that's being collected under CERKLA?

13 MR. RUE: Commissioner Hayes, we will. Right now a lot
14 of it's -- there isn't any that's been produced in a form that we've
15 got easy access to at this point.

16 MS. HAYES: Do you -- are you going to have to wait until
17 the resolution of the litigation before you have access to it?

18 MR. RUE: I don't believe so. I may let Greg, do you know
19 anything specific that the attorney told us we can't have -- I
20 thought they said we could.

21 MR. ERICKSON: Well, maybe there's some
22 misunderstanding here. The habitat division, along with other
23 division in the department of fish and game and other federal
24 agencies are producing information for the CERKLA process, so
25 (indiscernible) his staff the screen (indiscernible) investigations

1 are providing information to the CERKLA process, so maybe we
2 can clarify that.

3 MR. TRASKY: In fact, we're -- we're anticipating getting
4 this information and using it in the decisions of what should be
5 cleaned up next spring.

6 MS. HAYES: The reason I wondered is that we've heard
7 from various other people, other agency people that, for
8 instance, the maps that DNR is working on is mapping CERKLA
9 information is not allowed to be seen by the people who are
10 making management decisions. I'm just wondering if that's also
11 true within Fish and Game?

12 MR. TRASKY: We weren't aware of it. I think early on
13 there was some question, but I think it was.....

14 MR. ERICKSON: The specific question on those maps
15 have been held publicly to members of the habitat division. I
16 don't know if they're involved or not in using them, but it is a
17 process (indiscernible).

18 MS. HAYES: So, essentially, from your perspective, that
19 would be public information?

20 MR. ERICKSON: No, I did not say that.

21 MR. TRASKY: In fact I think a great deal of information,
22 since a lot of it came out of the habitat guide and a lot of it's
23 come from our field crew, we have a pretty good knowledge of
24 what's in there and never felt that we didn't have access to it
25 when the time, you know, when we need it. I know Tim has

1 been working with them on it. He's on one of the biggest
2 studies in the whole thing. So, no, I wasn't -- I hadn't heard
3 that and it hadn't worked that way.

4 MR. PARKER: I'll make a brief announcement. We're
5 going to obviously have a very late lunch, but we will take some
6 time to eat after we finish with Fish and Game, for the benefit of
7 the rest of the audience so they can adjust themselves. And then
8 resume with our consultant's briefing after we grab a bite to eat.
9 Ed?

10 MR. WENK: I'll be very brief. In response to the Chair's
11 question number six on statutory regulatory change
12 recommendations in your written testimony, you say consistent
13 with Governor Cowper's recommendations to Congress. My
14 recollection here is a little fuzzy and I'd appreciate your helping
15 in terms of when those recommendations were made and how.

16 MR. RUE: They were made when -- this spring and
17 summer definitely had a position on a lot of these issues. I
18 believe a letter was written by the Governor. I'm trying to
19 remember who it was addressed. I know it's been expressed
20 most -- very recently by the Governor's office in Washington, D.C.
21 during deliberations on House -- Senate and House legislation. I
22 saw a summary that was put out within a week, saying we
23 support this part of the House Bill 16, number 85, 84. So it's
24 sort of been an ongoing thing and I think it was initially this
25 summer. Do you have a date, specific date, Bruce, that you

1 recall?

2 MR. PARKER: Is that the Governor's letter to Secretary
3 Skinner?

4 MR. RUE: I believe that's where -- I think Mr. Chairman
5 that all the recommendations here -- I think that all the
6 recommendations are here were in one of two sets of testimony
7 given either by the Governor or Commissioner Kelso before
8 Congress this spring and this rendition we just don't have the
9 citation at the bottom, but we have it at the office. If you'd like
10 us, we can get it to your staff. Would you like that?

11 MR. WENK: It would be appreciated. It leads to a second
12 and last question. You just made reference to representatives of
13 the Governor having testified before, I think you said the House.
14 Is there fairly recent testimony that's been offered by the State
15 to the House -- by recent I mean say September on and was
16 similar testimony offered by the senate which I realize passed
17 it's bill before the House did. It may be a little unfair asking you
18 folks for answers to this question, but only because you cited it
19 so conspicuously here. I don't believe the Commission so far has
20 been copies of this testimony. At least I must confess I haven't
21 seen it. And, we have it? I don't think I've seen it.

22 MS. WUNNICKE: At least I've seen a printed statement of
23 the Governor.

24 MR. SUND: I think, Mr. Chairman, what I ran into back
25 there in Katz's office was they had a lot of responses to issues

1 that were coming up on an ongoing basis on the legislation and
2 somebody proposed an amendment. The Governor had to
3 respond to the amendment. And they had two or three letters
4 running that way, that eventually coalesced in the governor's
5 positions.

6 MR. WENK: Well, rather than put you guys on the spot,
7 which isn't fair and time's running out anyway, could I simply
8 ask staff to furnish copies of this materials to members of the
9 Commission please.

10 MR. PARKER: Mike.

11 MR. HERZ: One quick question. My understanding that
12 Alyeska or contractors for them are preparing a habitat
13 protection portion of their contingency plan. My question is
14 have they been beating on your door for guidance and have you
15 interacted with them on what they're generating for those
16 protection strategies that go in the plan?

17 MR. RUE: Mr. Chairman, I'll have Lance Trasky respond
18 to that.

19 MR. TRASKY: Yes. In fact, we've met with them on a
20 couple of occasions. One of their staff members has spent a
21 considerable amount of time over our office. They're using
22 primarily the Nadum Swatters catalogue, the habitat guide, a lot
23 are based in our library, you know and the information we have
24 on fish and wildlife resources. I don't -- we haven't reviewed
25 that section. Well, yes we have. The stuff's that's in the current

1 plan is totally out of date. It's inadequate. It doesn't -- but we
2 understand that they are updating that and we'll certainly take a
3 real careful look at that.....

4 MR. HERZ: Relative to the earlier question, what I'm
5 interested in is seeing the degree to which they are
6 recommending strategies that seem reasonable in terms of
7 protection. I mean I asked you -- I pushed to get indications of
8 whether protection strategies work with the Exxon Valdez
9 incident and I didn't get a strong positive answer and with that
10 as the perspective, I want to get a sense of what Alyeska's on-
11 paper plan says and how much protection they are going to be
12 think -- you know, stating that they could get from.

13 MS. SLATER: Much of that document isn't done yet and
14 their coastal habitat manual portion or whatever is not done.
15 Like Lance said, what we've done so far is direct Alyeska to the
16 best available information in preparing that information. They
17 did include, in their most recent submittal, they identified a
18 136, 139 sites that they felt were priority areas. And they had
19 little maps and statements about 800 feet of X boom being
20 deployed at this site, you know, in such and such configuration.
21 And basically, our comment on that was I don't know whether
22 any of those response strategies have been field tested. Whether
23 it's just been a paper exercise or whether they've actually gone
24 out and taken a look at the currents at those locations and
25 decided whether the capabilities of the boom could effectively

1 operate under those current conditions and that type of thing.
2 And basically, that's what we spoke to in our comments was, has
3 that been done. And if it hasn't been done, it should be done up
4 front so that when you actually get in a spill response situation,
5 you're not deploying booms in locations only to find out after you
6 get the boat and equipment out there that you have a four knot
7 current and you can't use the material. So, that is one thing that
8 we identified as a question and asked to be addressed in our
9 comments on Alyeska's plan.

10 Another thing that they have done thus far is to basically
11 using a lot of the prioritization that was worked out during the
12 Exxon Valdez as a proposed template for future action. I think
13 that's a real good starting point, but I guess my concern there is
14 that there's going to be information gained from this spill
15 response and from the damage assessment that I would like to
16 evaluated and stacked within a long term plan, along those lines.
17 And to be frank, a lot of decisions were made very quickly and
18 under to gun during the Exxon Valdez response and I'm not
19 convinced that, under a calmer atmosphere with some more
20 thought and reflection, that we couldn't refine some of that
21 material as well. So those are all of the type of points that we
22 raised and recommend that be looked at in reviewing the plan
23 and the Alyeska response.

24 MR. PARKER: Counsel.

25 MR. HAVELOCK: Just, what's the size of the professional

1 work force that you had in the field at Prince William Sound
2 after the spill and after the first -- when it stabilized, if it ever
3 stabilized. I'm just thinking a comparison with DEC or
4 whatever?

5 MR. RUE: The total, we had about 25. We got
6 authorization for 29 positions, but we had about 25 at the high
7 point.

8 MR. TRASKY: Are you just talking about the clean up
9 aspects of it because there were people who were working on
10 commercial fisheries management and damage assessment. So
11 probably, if you add everybody in there was probably in excess of
12 100 people I would guess, if you count Kodiak, Homer,
13 Anchorage, you know. There's I would say in excess of 100. If
14 you count the commercial fisheries management, the
15 subsistence human health studies, the damage assessment and
16 cleanup you probably have over 100.

17 MR. HAVELOCK: How would that compare with DEC's
18 professional staff?

19 MR. RUE: I'm not sure. Lance do you know?

20 MR. TRASKY: Bruce?

21 MR. BARKER: I don't -- bigger, smaller.

22 MS. SLATER: Smaller I think.

23 MR. BARKER: Yeah, the commercial.

24 MR. TRASKY: In Homer, in Kodiak I suspect we probably
25 had more people and I don't know about Valdez. I know, you

1 know, -- I don't know about Prince William Sound. I know in
2 Valdez they had a lot more staff than we did, but as far if you add
3 our comm fish people and damage assessment, I don't know. I
4 think they probably had more people.

5 MR. HAVELOCK: I noticed the considerable overlap in
6 terms of concerns with DEC. Do you have some working
7 protocol as to how you divide work where you have a common
8 interest. Or is there any friction or confusion between what you
9 and DEC do?

10 MS. SLATER: I think that needs to be more thoroughly
11 articulated.

12 MR. RUE: Mr. Chair, I had a question on what -- are you
13 talking about spill response, on contingency planning -- on
14 which aspect.....

15 MR. HAVELOCK: I'm talking the work. I mean it struck
16 me when you were talking about your extensive library, for
17 example, and the work you do on chemical response. They're
18 doing the same stuff.

19 MR. TRASKY: I think it's a very important point that in
20 the state of Alaska, the types of things that are managed by oil
21 spills primarily fish and wildlife resources, fish and wildlife
22 habitats, industry are based on. Like the commercial fisheries,
23 birds, marine mammals, fish. The Department of Fish and Game
24 has that responsibility. That's our area of expertise. And
25 impacts of various activities on those develops a good response

1 on the Department of Fish and Game. DEC's primarily
2 responsibility is pollution, prevention, clean up. And I don't
3 think that there really is any overlap. It is complementary.
4 We've taken our job very seriously. You can't make decisions,
5 complex decisions, without having good information. That's why
6 we have that information. And you can't make 'em without
7 having that information in hand. And that's why people within
8 Fish and Game spend a lot of time determining what kind -- you
9 know, dispersants -- we don't know a lot about dispersants, but
10 if you put it in the water, other than ruining the water quality,
11 the other things that are gonna be harmed are the fish and
12 wildlife that are there. So, that's arbitrary.

13 MR. RUE: I think as we've suggested here, we need to
14 develop a response organization that has clearly defined roles. I
15 think yes there has been confusion as you would expect in this
16 kind of a thing. But I think we should learn from the problems
17 we've had this last time in communication, in decision make,
18 inter-agency coordination and set up a system that provided
19 better for that. And we don't run into the same kind of
20 problems where there're a lot of adhoc things going on and it's
21 very hard to get your point of view across. And we feel
22 particularly strongly because of what Lance just said. The
23 responsibilities that we have are the things that are getting hit.
24 And we feel we need to have a strong role in the decisions about
25 those resources. And so I think developing a better system for

1 inter-agency coordination, a clear definition of roles is
2 important, 'cause there were problems, definitely.

3 MR. HAVELOCK: I guess it's still not clear to me. First of
4 all, do you have any protocols that are now in effect between you
5 and DEC on role management in response to a spill?

6 MR. RUE: I'm not aware of any. Are you, Lance or Claudia.

7 MS. SLATER: Not really.

8 MR. RUE:: Other than RRT, the Regional Response
9 Teams that we talked about.

10 MR. TRASKY: Yeah, DEC's not the heavy develop that sort
11 of thing. We don't have that, but I mean DEC is the state's -- you
12 know, has primary state response. It's only one person tops the
13 Coast Guard, that's DEC. And everybody falls in through there. I
14 mean, there that, everybody understands on that one.

15 MR. HAVELOCK: What kind of a budget do you have for
16 contingency planning with respect to critical habitat areas.

17 MR. RUE: Well, our -- very little. Claudia does it some.
18 She's only partially -- that's only part of her responsibility. She
19 has many others. She reviews lease sales and all sorts of things.
20 And that's it. We're trying to get a position through DEC. One
21 person work on the statewide and regional contingency
22 planning. And, as I said, I think we're gonna have to look in
23 future budget to have part of a person responsible for
24 maintaining those things in a good shape. But, part of a person,
25 a whole person, I don't know. I think that may come out of the

1 contingency planning effort itself.

2 MS. SLATER: For contingency planning per se, we've
3 never really had any specific funding devoted to that. We've had
4 funding devoted to these particular projects, but frankly a lot of
5 what the department has done over the past has just been
6 through initiative of the regional office in making time to
7 participate. I'd sure like to see that change because off the way
8 it's been in the past.

9 MR. RUE: I'm looking to the contingency plan that DEC is
10 gonna come up with as a way to establish a budget. I don't think
11 we'll be very successful as an agency going in and saying, we
12 need two, three, one people to do this. I think DEC needs to
13 take the lead and say, here's what's needed out there. Here's
14 what DNR oughta be doing. Here's what DEC oughta be doing.
15 Here's what Fish and Game oughta be doing. And here's what
16 they need to do a good job of it. And that might be successful
17 because it's a program.

18 MR. PARKER: John.

19 MR. SUND: I'll just put it in perspective. Fish and Games
20 budget from the general fund, I think is about \$33 million a year
21 out of a \$1.8 billion a year state budget. And that doesn't include
22 federal funds. I think that's just the state general funds.

23 MR. RUE: Our division is 2.7 or 2.9 and of that, very little
24 of it is available for contingency.

25 MR. SUND: We spent a hundred million dollars on the

1 Division of Corrections to keep people in jail, just to keep a state
2 perspective of what we think bout this issue.

3 MR. PARKER: That's why I didn't want to create that
4 division, department, I mean. I didn't want to make that
5 department, it was a division.

6 MS. WUNNICKE: Question, Mr. Chairman. I'm a little
7 unclear. When you're talking about the special projects, do you
8 have the same level of information for Cook Inlet that you have
9 for Prince William Sound? You do?

10 MR. RUE: Yes.

11 MS. SLATER: There are some areas of the state where we
12 have real, I think, real good information and there are other
13 areas of the state (indiscernible - fading). Cook Inlet and Prince
14 William Sound, I think are two of the better known areas in
15 Alaska as far as fish and wildlife values go. The further afield you
16 get from that, the bigger gaps you're gonna encounter.

17 MR. RUE: I think Norton Sound we have pretty good
18 information on that.

19 MS. SLATER: Norton is good and the Beaufort is pretty
20 good because all of the attention up there. But Chuckchi is left
21 so.....

22 MR. TRASKY: For a private lease, no. Probably the most
23 risk and least known. Actually one place where we could use
24 this kind of information -- well we have a lot already, but to be
25 really good and do the kind of job that we do in Cook Inlet and

1 Norton Sound and now in Prince William Sound would be in the
2 southeastern Bering Sea, Bristol Bay, Golden Triangle and I
3 think that'd be new development. But again, those funding --
4 that was the old Coastal management energy impact program
5 which allowed us to do that kind of thing. It's no longer there.

6 MR. HAVELOCK: I have a couple of questions for Greg.
7 The -- you've been involved now in the CERKLA process. I
8 suppose in some senses we take those hat in hand to this
9 federally mandated process. Would it make sense for the state
10 to have it's own equivalent of a damage assessment process?

11 MR. ERICKSON: Mr. Chairman, Mr. Havelock, I think
12 there's two aspects to that question -- to the answer to that
13 question. First of all, it's clearly, in part at least and maybe a
14 major part, a legal issue, a question of our obligations under
15 various laws that we operate under and it's also a question of
16 litigation strategy, whether it makes sense to sort of split the
17 sheets on this and go our separate ways. It is, I think probably
18 more than anything else, a question of litigation strategy and our
19 obligations under those laws. And those ar legal questions that
20 I'm not gonna try to address. They should be addressed to the
21 attorney general's office, as I'm sure they've been thinking a
22 great deal about them. I know they have.

23 There are also practical and political factors involved
24 though. The Clean Water Act, which is a federal law, says that
25 injury, damage assessment, and recovery and restoration will be

1 accomplished by trustees that will be appointed for the various
2 resources. And the state is a trustee in this case, and is -- I
3 should say the Governor has appointed Commissioner
4 Collingsworth as the state's trustee in this case. Commissioner
5 Wunnicke raised a question about the balance on that
6 trusteeship, in that trustee ship forum, which I might return to
7 in just a moment.

8 But, that process, the process that's been undertaken by
9 the trustees, is going to go forward whether we are playing a
10 part in the process or not. As a political matter, I think it's
11 unlikely that we're going to want to crawl out from under that
12 tent as confining or as uncomfortable as we may be inside it, and
13 just let the Feds wander off on their own. There's also a
14 practical matter. If we were to undertake these assessments on
15 our own, and it's a practical matter of expertise and resources. I
16 think that it's fair to say that the resources that are available
17 from Exxon, which is partially funding the assessment and
18 impact assessment process right now and from the federal
19 government, would be there for us if we were on our own.
20 That's probably not a major factor. More important, however,
21 though is the a fact that expertise is limited in these areas.
22 Migratory waterfowl, under the current assessment program,
23 most of that work is being done by the federal government
24 because they have the expertise in the Fish and Wildlife Service
25 and their other agencies. Similarly, they've counted on us to do

1 most of the work with regard to salmon, because we have the
2 expertise in that.

3 I doubt if the public would be very sympathetic to
4 duplication of these efforts, even if it was required for litigation
5 and recovery. I think they're other, many important legal points
6 and I've heard sort of discussions on them, but I'm not going to
7 get into those. That's my answer to your question, Mr. Havelock.
8 I'd like to respond to Ms. Wunnicke's point as well.

9 MR. PARKER: Go ahead.

10 MR. ERICKSON: You expressed some concern, as others
11 have, over the apparent imbalance between the one, state
12 trustee, Commissioner Collingsworth, and the three federal
13 trustees, secretaries of the Departments of Agriculture,
14 Commerce and Interior. And I think it's natural that people
15 would see that as sort of an inappropriate kind of balancing and
16 in a sense it hasn't worked that well in some respects. But the
17 reason -- if there are problems with the process, it hasn't been a
18 consequence of the imbalance. Decisions in the trusteeship
19 forums where we participate with the federal government have
20 been made in practice on the basis of each member of that
21 forum having a veto power. And, as a consequence, the problem
22 has not been that we don't have as much power as anybody else.
23 We would much prefer, I think, to go into those forums with the
24 federal government speaking as one voice. But, I don't think
25 that's likely to happen. I think the -- this is my personal

1 opinion, I believe the federal agencies, however, feel that they
2 have responsibilities under the act for specific resources and
3 that it's not likely that they're going to abandon those unless
4 events happen at the federal level that just don't seem to be in
5 the cards. I happen to know, 'cause I spoke to Commissioner
6 Collingsworth about this very question a number of times.
7 Commissioner Collingsworth does not believe that the imbalance
8 has been a problem. There may be problems with the process,
9 but that's not one of them in his view.

10 MR. HAVELOCK: There's been some -- some people have
11 suggested that the litigation tail has wagged the rehabilitation
12 dog with respect to the CERKLA process. Do you just want to
13 comment on that?

14 MR. ERICKSON: Well, there's been suggestions on the
15 other side, too. That the resource agencies haven't been
16 sufficiently sensitive to the litigation requirements. I believe
17 that there are necessarily going to have to be balancing between
18 the exigencies and requirements of litigation and resource
19 management and resource responsibilities that the trustees have
20 as managers, trustees for these resources. Those aren't -- those
21 tensions and difficulties aren't going to go away because of some
22 re-organization or anything. They've just -- management passed
23 some challenges that we're going to have to deal with. And I
24 think good progress is being made on that. I don't think it
25 would be correct to characterize the litigation tail as waving the

1 resource dog.

2 MR. PARKER: In line with that, at a meeting with the
3 Arctic Research Commission, they expressed concern -- this was
4 mostly University Fairbanks types and their colleagues in
5 Washington working at those levels of science of an inhibition of
6 the blow of scientific knowledge, either the litigation process.
7 Does that appear to be a problem now.

8 MR. ERICKSON: Well, it's a problem to those folks who
9 are talking to you. And there's no question the attorney's who
10 are accustom to running litigation have, want to stamp
11 everything litigation-sensitive, you know, confidential. And the
12 maps that Commissioner Hayes was talking about are stamped
13 litigation-sensitive, confidential and I think -- I mean, that's a
14 good example. Those maps are probably -- I don't know that
15 they've actually been used as a management tool, but if the
16 department -- divisions within the department needed to use
17 them, we would find a way to get that information to them. So I
18 don't think it's been a problem in terms of managing the
19 resources. Scientists are -- a major part of their ethic involves
20 free exchange and that's important in science and it's important
21 in litigation that to be sure the other side doesn't have your
22 game plan. Now, as a practical matter, we printed 60 copies of
23 some of these reports and each one is stamped litigation
24 sensitive. Frankly, I don't think any copy, any report that you've
25 put 60 copies out is gonna stay out of the other side's hands for

1 very long. My guess is maybe two weeks, but who knows. It's a
2 management task to balance those differing needs of the
3 differing partners.

4 MR. HAVELOCK: i just have one last question. I'm calling
5 on what I know about your past expertise. You were talking
6 about an ounce of prevention and I wanta know, is there a
7 formula available to measure the cost of an ounce of prevention
8 as measured against wellhead benefit to the state.

9 MR. ERICKSON: I'm sure that with appropriate money for
10 economic consulting contracts we could come up with as many
11 formulas on that as you'd like.

12 MR. HAVELOCK: So, you're saying there's not a particular
13 formula that you can use for saying what a million.....

14 MR. ERICKSON: No sir, not.....

15 MR. HAVELOCK:dollars in investment is gonna cost
16 the state in terms of it's wellhead return.

17 MR. ERICKSON: The relationship between the cost of
18 prevention in this case, and the state's well head value are
19 subject to calculation, but are subject to differences depending
20 on what kind of investment, who makes it, whether it's
21 recovered through taxes or prices and so I'd guess I'd hesitate to
22 apine (ph) off the top of my head. But I guess we could say that
23 as in general, the state participates with quotes around it, in
24 about 20% of, perhaps as much as 25% of the wellhead values,
25 depending on which field, severance tax rates for the

1 (indiscernible). And to the extent that that shows up as a
2 reduced net fact value, we will pay, or not receive, that fraction
3 less.

4 MR. HAVELOCK: Thank you Mr. Chairman.

5 MR. SUND: Seeing as that line of question is now open,
6 what is the tanker tariff? What did we settle on in that
7 litigation?

8 MR. ERICKSON: The current tanker tariff is
9 approximately -- I haven't seen -- I have not seen, since I've
10 taken over my new responsibilities, I haven't been involved with
11 that. But my understanding is the new tariff is in the
12 neighborhood of -- it's not the tanker tariff, but the pipeline
13 tariff, is in the neighborhood of three dollars -- it's in the
14 neighborhood of four dollars a barrel.

15 MR. SUND: And that includes the tanker portion.

16 MR. ERICKSON: No. I'm not aware that the tanker
17 portions have risen, but it's inevitable that they will as the
18 consequence of those.

19 MR. SUND: That's what I'm trying to get a feel for.

20 MR. PARKER: Yeah, tankers are a buck to the Coast and
21 240 to the gulf now.

22 MR. SUND: We asked the wrong gentleman.

23 MS. WUNNICKE: At one time, I think about \$6 total.

24 MR. HAVELOCK: I don't have any further questions.

25 MR. PARKER: Anyone else? Well, Greg, obviously, we're

1 in the assessment for the long haul, since we've created a new
2 division and new over to head it. How long do you think it's
3 gonna run, the whole process?

4 MR. ERICKSON: The assessment phase, I hope, will not
5 be a career.

6 MR. PARKER: Uh, hum.

7 MR. ERICKSON: But I think the restoration in particular
8 is going to be a long undertaking.

9 MR. PARKER: Uh, hum. Any other questions? Thank you
10 very much. We will probably be contacting you in the next six
11 weeks for a good deal more information, but you certainly
12 conveyed a lot today.

13 MR. ERICKSON: Thank you Mr. Chairman. Thank you for
14 the opportunity to be somewhat democratic in our presentation
15 and informal.

16 MS. WUNNICKE: Thank you.

17 MR. RUE: It's a means and method that fish and game
18 used at other meetings within it.

19 MR. PARKER: We're gonna grab a sandwich. Let's go and
20 reconvene here at 2:30.

21 (Off the record)

22 (On the record)

23 MR. PARKER: Presentations are going to be by our
24 consultants on oil tankers, contingency planning, risk
25 assessment, hazard assessment, etc. engineering computer op,

1 technomics, Inc. of Annapolis, Maryland, Virgil Keith, Dan
2 North, Joe Pourchelli behind him, Bob Schultz, and Dick Willis,
3 over here. And Virgil, take it away.

4 MR. KEITH: Thank you Mr. Chairman.....

5 MR. PARKER: Oh, one more announcement. They're
6 going to, in the interest of saving us some time, we're going to
7 spend, be spending all day tomorrow here on the technical side
8 of this and expand a lot of what will be heard here today,
9 tomorrow. So this is going to be a very short version of the
10 whole package.

11 MS. HAYES: Mr. Chairman, I would like to note that in
12 your list of figures on the Exxon Valdez oil spill re-assessment of
13 oil spill clean up technologies. I was quite excited by figure 9-
14 general arrangements of the cosmos. I thought we had finally
15 picked the right consultant company. I was disappointed to find
16 it was only a ship.

17 MR. KEITH: Chairman Parker, Vice-Chairman Wunnicke,
18 Commissioner Hayes, Commissioner Sund, Mr. Havelock, let me,
19 once again, introduce the team. First, my right hand man, Joe
20 Pourchelli's going to be taking the hazard assessment. Joe
21 helped me a great deal on the tanker design too, so the two of us
22 will take the flak on that together. Then he'll be followed by Dan
23 North. Dan did the risk analysis. And then Bob Schultz will do
24 the contingency planning and, of course, the author of another
25 report that Commissioner Hayes is talking about that's been

1 presented to the commission earlier. And then I will take the
2 tanker design and then Dick Willis will follow with the cost,
3 doing the cost benefit analysis. Without further ado, and again in
4 interest of time, we're gonna start with Joe on the hazard
5 assessment and I guess I'm just gonna switch things with you
6 now, Joe.

7 MR. POURCHELLI: Very quickly, the slide that's up there
8 now is a very brief summary of exactly what our hazard
9 assessment chapter discusses. One thing I might add to Virgil's
10 introduction, the report is set in six chapters. The first one
11 being an introduction and chapter two is what you see before you
12 at the moment, is the hazard assessment and so on and so forth
13 as the rest of our speakers will talk to you about very briefly.

14 So, within the hazard assessment, we conducted an
15 identification of hazards within the operating environment. In
16 other words, the hazards to shipping which are present in Cook
17 Inlet and Prince William Sound. We did a quantification of
18 marine traffic for a reason which will become obvious as I go
19 along here. We determined the spill location, where the spills
20 are likely to occur. And then the hazard assessment goes on to
21 develop spill incident rates and spill volumes. And lastly, the
22 hazard assessment calculates spill probabilities and their
23 recurrent intervals. Next slide please, Dick.

24 Again, very briefly, the hazards in Prince William Sound
25 are not not dissimilar, though they have different effects on the

1 level of safety in each of these two areas. Your basic hazard's
2 navigation, if there is such a thing as a basic hazard. But the
3 hazards in Cook Inlet and Prince William Sound are the
4 currents, the wave action, seasonal ice, wind, limited visibility,
5 storms, obviously other marine traffic, an unforgiving bottom.
6 And that I might just take one second on. It's rock. And you run
7 aground in Prince William Sound and Cook Inlet, the likelihood
8 of rupturing your outer hull is very, very high. And then there
9 are numerous detached rocks, shoals, reefs in both areas, and
10 then within Cook Inlet there is, as you're all aware, offshore
11 drilling activities and facilities which present a hazard to
12 shipping operations. Next, please, Dick.

13 In Cook Inlet, these were the three spill locations for a
14 variety of reasons which are explained in detail in the report
15 that we identified as being the high risk, or the areas where the
16 spills are most likely to occur. And as you can see, there's one in
17 the vicinity of the docks up at Nikiski, one at the entrance to
18 Kachemak Bay and one within the Kennedy Entrance as you
19 come in between the Baron Islands and the Chugach Islands.
20 Likewise, in Prince William Sound, the three locations; there's
21 one in the vicinity of the terminal in Valdez, one within Valdez
22 arm itself at the southern extremity in the vicinity of the now
23 infamous Bligh Reef, and lastly one at the entrance to the
24 Hinchinbrook in the vicinity of Seal Rocks.

25 Within each of the two areas, Cook Inlet and Prince

1 William Sound, based on a combination of worldwide tanker
2 accident data and spill data that we maintain within house, and
3 have done so since 1969 in combination with local data that we
4 again maintain ourselves and other people do, namely the Coast
5 Guard, we determined that the three spill ranges that would
6 typify Cook Inlet are the ones that you see before you. That's one
7 of from 300 to a million gallons. And then one, the second one
8 from one to nine million gallons. And the third from nine
9 million to 21 million.

10 Very quickly, why the 300 gallons. 300 gallons is, in very
11 approximate terms, a ton of oil. And below that the majority of
12 the spills come in what I call onesies and twosies, gallons that is,
13 and are the ones that are more typical from oil transfer
14 operations while the ship's out of dock. And in an attempt to
15 weed those out of the major spill analysis that we were doing, we
16 picked the 300 limit. The one million gallons represents the
17 size of one wing tank on a typical 70,000 dead weight tanker,
18 which is about the limit of the size tanker you will get in Cook
19 Inlet. The 1-9 million gallons represents approximately half of
20 the tanks in such a ship. And then the 21 million gallons is the
21 total loss of the ship and obviously that's the biggest you can go
22 with that being the size of the biggest ship. Next one, please,
23 Dick.

24 This is the same sort of presentation for Prince William
25 Sound and they just run at cutoff points at three million gallons,

1 11 million and 75 million gallons. Same rationale. We've
2 obviously got a larger size ship in Prince William Sound. We use
3 a 250,000 deadweight tanker and it's wing tank, single wing
4 tank contents it the three million gallons. The 11 million
5 gallons is a combination of a pair of wing tanks and a center or
6 two center tanks, and very closely approximates the estimate, of
7 course, which came from Exxon Valdez, and then the 75 million
8 gallons is the total contents of a 250,000 ton tanker. Next
9 please, Dick.

10 We went through a process, after determining locations,
11 ranges for the volumes, to determine spill incidence, spill
12 probability and spill recurrent intervals. We use, again, the same
13 data I refer to before. It's a -- one of the problems I should say,
14 before I go on here, with spill data, is especially spills of this
15 size, you very quickly come into -- you can get into small data
16 sets. And therefore have the problem of statistical liability. And
17 it's for that reason and that reason primarily that we have to deal
18 with a data set that is largely than that you would find just in the
19 local area (ie: the Cook Inlet or Prince William Sound). From
20 that we go through a plason (ph) probability distribution to get
21 probabilities and from there recurrence intervals for each of
22 these three spill sizes. And as you see before you, in those three
23 spill ranges, we project them with the 95% -- with variance at
24 95% confidence levels at approximately three years, 25 years,
25 and 66 years for Cook Inlet. In Prince William Sound, which is

1 the next and the last slide, for the comparable ranges, they're at
2 two years, 14 years and 41 years. These are rounded off
3 numbers from the exact numbers that appear in the report.

4 In closing, there are two things that the report points out
5 on these recurrent intervals. On an individual basis, on a
6 individual exposure basis, Cook Inlet is more hazardous than
7 Prince William Sound. However, because of the higher level of
8 traffic, and therefore the greater exposure over a time period
9 that you have in Prince William Sound, your probability of a spill
10 is higher there and therefore your recurrent intervals lower.

11 Now we're gonna move off to Dan North who kinda takes
12 the second half of the total risk assessment package. And he'll
13 be talking about risk analysis.

14 MR. NORTH: Thank you Joe. Dick, could you hold off on
15 that first slide for just a second. When we first became involved
16 in this project, it was decided from our start that the primary
17 focus of the risk analysis would be to expand on the results of
18 the hazard assessment, which Joe just discussed. And what we
19 did was determine what geographic areas would be at risk from
20 those hazards, which Joe identified. We did this by creating
21 projections of oil slicks, using our proprietary computer model.
22 The program predicts the movement of slicks based on a
23 number of variables, which I'll discuss in a minute. So, my
24 intent here is to briefly explain the mechanism of how oil slicks
25 grow and move and then show you a few examples of some of our

1 projections. Okay, first slide. Thanks.

2 The movement of oil slicks is determined, broadly
3 determined by a combination of two types of forces. And those
4 are the spreading forces and transport forces. Briefly, the
5 spreading forces have been described by professor Fay in a three
6 phase spreading model, where he identifies three separate time
7 phases: the gravity inertia phase; the gravity viscus phase; and
8 the viscus surface tension phase. These are what I have just
9 called the spreading forces. These are acting without the
10 transport forces, which we see next.

11 The transport forces are the environmental forces, if you
12 will, which are composed of the vector sum of wind and current.
13 The wind transports an oil slick at a certain fraction of the wind
14 spee, in the same direction as the wind. And current transports
15 an oil slick at the local current speed. That is the current speed
16 that part of the slick is seeing at that time. The graphics I'm
17 gonna show you are some results of our computer model run,
18 and it's important to keep these points in mind when we look at
19 these graphics. The graphics show every where the oil slick has
20 been up to and including the time shown. It's not an
21 instantaneous snapshot of the extent or shape of the slick at the
22 time shot. It shows where it's been at every point up in time to
23 that point. Also, the black area shown may not be continuous.
24 The oil may be broken up into patches. And lastly, it's also
25 important to bear in mind that the models run under typical

1 conditions. I think it's important to emphasize that. We, as Joe
2 mentioned briefly, we've broken that up into typical summer and
3 typical winter conditions. That includes wind, current,
4 temperature, because they all change from summer to winter.
5 And, any real actual spill, such as the Exxon Valdez spill may
6 certainly give a different result in these typical conditions.
7 Typical conditions are the best we can come up with as far as
8 environmental, wind and current conditions. Okay, next one.

9 This is a spill that's originating at Nikiski. It's 168 hours
10 after the spill, which is one week. It's a spill size of nine million
11 gallons and the typical summer wind and current conditions.
12 You can see that it extends in the north all the way up to
13 Anchorage, but not quite into Turnagain or Knik Arms. It goes
14 across Cook Inlet to Drift River, all the way south into Kachemak
15 Bay, impacting the shorelines near Homer and Seldovia and
16 around the tip of the Kenai Peninsula actually, over on the back
17 side. Okay, next one.

18 This is a same size spill, after one week, originating right
19 off the mouth of Kachemak Bay. You can see it doesn't go quite
20 as far north. It goes somewhat past Nikiski. It goes all the way
21 to the west, across Cook Inlet, over to Drift River, covering
22 virtually all of the western shore of Cook Inlet, not quite all the
23 way into Kamishak Bay, down to Cape Douglas, just starting to
24 impact Shudiak (ph) Island. It's surrounded the Barren Islands.
25 It's going into Kachemak Bay, again, impacted the shores around

1 Homer and Seldovia and around the other side of the Kenai
2 Peninsula. Next please.

3 Same size spill, again. This is the intermediate size spill
4 for Cook Inlet. This is spilled at Kennedy entrance, again, under
5 typical summer conditions. We don't go quite as far north again.
6 We go just past Nikiski. However, virtually the whole western
7 shore of Cook Inlet, down past Cape Douglas to Ashugiak (ph)
8 and Afognak Islands, covering all the Kennedy Entrance and the
9 Barren Islands there and all the eastern shore of Cook inlet from
10 Nikiski down to Homer, Kachemak Bay, Seldovia and around
11 again the back of the Kenai Peninsula. Next please.

12 Now we're going to the group of spills in Prince William
13 Sound. This was, again, the intermediate size spill after one
14 week, 11 million gallons spilled right at the Valdez terminal.
15 You can see that it pretty much fills in all of Port Valdez and it
16 started to make it's way out through the narrows and is not quite
17 gotten down to Bligh Island.

18 MR. KEITH: Maybe on that one, if I can just interject. I
19 know you heard Fish and Game bring up the point it's not only
20 the size of the spill, in this case it's the Exxon Valdez size of 11
21 million, but where it occurs. In this particular case, it would
22 make a lot of sense not to give up on the spill equipment, the
23 contingency. Perhaps through the narrows itself, you could
24 block that off and basically attack the spill from the south
25 through the narrows. So, it makes a big point of not only the

1 amount of spill, but where it occurs. So I think this graphic is
2 extremely important.

3 MR. NORTH: This is, to give a little bit of contrast here,
4 is the largest spill we modelled, 75 million gallons. And this is
5 after 28 days, 672 hours. Originating at Bligh Reef, and you can
6 see it covers virtually all of Prince William Sound, has come out
7 through the passages in the southwest part of Prince William
8 Sound, through Hinchinbrook Entrance, completing surrounded
9 Montague Island, has impacted Hinchinbrook Island and then
10 has been carried along the shore of the Kenai Peninsula, up into
11 Cook Inlet, into Kachemak Bay and has just started to impact
12 Chudiak Island.

13 MR. KEITH: Again, I think I'd like to add, again, the
14 Exxon Valdez, the total contents was 50 million gallons. You'll
15 note that this is 75 million. So this is what Joe talked earlier --
16 this is the largest vessel we looked at, a 250,000 ton vessel
17 loosing it's entire content. So, the 75 million gallons again
18 equates to a 250,000 tonner, which does run into Port Valdez
19 and then loosing the entire contents in the cargo.

20 MR. NORTH: And this is back to the intermediate size
21 spill, spilling off Hinchinbrook Entrance, again, 28 days later.
22 Since we start further south, we get out into the offshore
23 currents and into those currents in the southwest passage of
24 Prince William Sound pretty quickly. Transporting the oil again
25 down the Kenai Peninsula and around through the Kennedy

1 Entrance, up all the way into Cook Inlet. You can see that after
2 28 days, virtually all of Cook Inlet all the way up to Anchorage
3 has been impacted at some point or another. We have oil also
4 down to Chudiak (ph) and Afongak Islands.

5 And this is the last slide, I believe. The same size spill,
6 the same location after one week. You see we surrounded
7 Montague Island and are starting to make our way southwest,
8 along the bottom of the Kenai Peninsula. And that's all I have
9 and I've forgotten who's next.

10 MR HAVELOCK: Are you taking questions in between or
11 do you wanta wait until the end.

12 MR. KEITH: I think we'd rather wait until the end, but
13 we can do that either way, however the Commission would want
14 to do it. Perhaps right now, if you've got a quick one, Counsel,
15 we can take that.

16 MR. HAVELOCK: Well, I have two questions about those
17 projections you're just showing. One, it puzzles me when you're
18 showing a projection of a major spill off Hinchinbrook Entrance
19 and you have the whole thing moving up and covering Cook Inlet.
20 Yet, with the -- and flowing to a lot of areas that Exxon Valdez
21 went through. Yet, Exxon Valdez, at the same time, was all over
22 Shelikoff Strait and down -- for also a summer, a late summer
23 spill, or pardon me, an early summer spill and yet you seem to
24 show, you know, in that type of thing that Shelikof Strait without
25 Kodiak is free. Now, that puzzles me.

1 MR. NORTH: Well, after a certain period of time, we --
2 our data we got it was about 35 days before oil from the Exxon
3 Valdez impacted.....

4 MR. HAVELOCK: I was mis-reading maybe the number of
5 days.

6 MR. NORTH: Right. This particular one is just seven
7 days, but the large one we showed before was only 28 days. And
8 indeed, our model does show that after a certain period of time,
9 oil does continue down in the Shelikof Strait there.

10 MR. HAVELOCK: You have it up at the top of Turnagain
11 Arm before it reaches south Kodiak Island?

12 MR. NORTH: Yes, that's correct. You have quite strong
13 currents in Cook Inlet that transport it up there. Whereas, the
14 currents offshore are somewhat more diminished.

15 MR. DOOLEY: They, for the Commission's benefit, when
16 they developed this model, they went ahead and produced their
17 product. Post the development of their model, we then gave
18 them the logs of the spread from the Exxon Valdez to calibrate
19 against. And as you pointed out, Kodiak was 35 days before it
20 was hit. We also had two unusual storms during the Exxon
21 Valdez incidents and this has been used, using the normalized
22 summer and winter current and wind data. So, it's a model, but
23 it's not to be an extrapolation of how the Exxon Valdez oil was
24 transport. Is that.....

25 MR. NORTH: That's correct. That's the emphasis on

1 typical condition. We're not trying to replicate that spill or any
2 other. We're just trying to do a generalized.

3 MR. POURCHELLI: If I'm correct and it's through an
4 Exxon Valdez, after it got down past Kenai, there was a storm, I
5 though, coming out of the northeast, which explains why we got
6 the more skew down at the Shelikof Strait, where this under, as
7 it says on top, typical summer condition where you don't have --
8 the wind actually is, probably went in the other direction. Am I
9 correct on that.

10 MR. NORTH: That's correct, heading out of the
11 southwest.

12 MR. POURCHELLI: It's coming out of the southwest and
13 then you've got a strong current running up and down the axis of
14 Cook Inlet, dominating it.

15 MR. HAVELOCK: I think I rearrange my second question,
16 which was whether you're taking a -- whether there is such a
17 thing as a typical day when you have as many variables as you do.
18 Or is a typical a misleading (indiscernible -coughing) for
19 projecting where the spill is gonna be. For example, I was think
20 if you laid a projection for each days of the summer, you could
21 presumably end up with a multi-colored, or different shaded
22 area to show some sort of a probability factor here. You've got a
23 spill for one day and we don't know how many days suit that day
24 and we don't know how many days would vary, very substantially
25 from it. So, I'm wondering if there's a probability factor that you

1 can build into those projections to give a better idea how likely it
2 is on the summer that you're going to get North Kodiak Island or
3 whether it's gonna go up and fill up the upper part of Cook Inlet
4 and so on.

5 MR. PARKER: I think, Counsel, typical -- the dividing line
6 is when you have gale force winds. Gale force winds are not
7 typical because that's why we call them storms. And, you know,
8 they -- so when you have a storm, you're going to have to adjust
9 to that. So, I think with a model like this you can crank the
10 storm in easily enough, but typical does have a definition in
11 meteorology.

12 MR. NORTH: For the purposes of this report, our model
13 could replicate any sort of environmental condition. But, for the
14 purposes of this report, we felt the best condition to depict
15 would be those typical conditions that we have -- the typical
16 wind and current conditions that we pulled out of the coast pilot
17 and the current tidal tables. Over the course of a week or so, the
18 winds do vary considerably and we've taken into account the
19 percentage of how often the wind blows out of certain direction,
20 at what strength. However, again, we don't take into account a
21 storm, a freak storm. We didn't think that for the purposes here
22 that would be enlightening. We wanted to show what is most
23 likely to happen even though.....

24 MR. HAVELOCK: Well, that's my question. Is it most
25 likely for that theoretical typical day, during the summer may

1 occur not at all, or maybe once or twice.

2 MR. POURCHELLI: But this is not a typical day, Mr.
3 Havelock. What it is, sir, is this represents the distribution,
4 correct me if I'm wrong Daniel, the distribution of average wind
5 directions and average wind speeds over a time period. So, that,
6 if you wanta call that probability distribution that's in there. The
7 only thing it does not do, as you have correctly identified, sir, is
8 if you put in an abnormality in the form of a storm, which is an --
9 is not typical.

10 MR. NORTH: I might also add that the wind data we used
11 is meteorological data that's been accumulated over a number of
12 years that includes calm periods and storms. So, in a sense,
13 they are included in there, but the typical average conditions
14 over a period of time won't -- the storm conditions are included
15 in there, but they're averaged out with the calm conditions and
16 the fact that the wind blows from all different directions over a
17 period of time.

18 MR. KEITH: I think one thing that has to be pointed out
19 and the point is on the Exxon Valdez spill, that spill spread
20 faster into a growing area that what we have on here. So if you're
21 saying in the Exxon Valdez spill that hit Kodiak is more severe
22 than what you're shown here, you're 100% right. And primarily
23 that storm that started on, I think, the following Tuesday and
24 ran for about a week and we had winds of 70 mph. So, those
25 conditions are worse, what you really saw than what you see

1 here.

2 MR. NORTH: Yeah. There were two storms actually.
3 When the spill first occurred, it was calm for a period of about
4 three days, I recall and there was a storm for about 12 hours
5 where the winds blew about 70 knots. Then later on, as the oil
6 got around the bottom of the Kenai Peninsula, there was another
7 storm out of the northeast. Again, for the purpose of the report,
8 I don't know -- I'm not sure what bearing unpredictable storms
9 would have on it. The best we thought would be to get the
10 representative, typical conditions, which includes storms and
11 calm conditions.

12 MR. PARKER: I think to expand it to its ultimate level of
13 sophistication, we do it on a monthly basis through the year and
14 have 12 cycles. That also then take your 10 year storm, your 20
15 year storm and your 50 year storm and crank those in if you
16 wanted to do your, you know.....

17 MR. HAVELOCK: Well, I.....

18 MR. PARKER:exactly what your whole range in spill
19 probabilities might be.

20 MR. HAVELOCK: I suppose what I'm looking at is the use
21 of this type of projection and I assume that the use has
22 something to do with location of spill containment supplies,
23 personnel and so on. And that's my question is to -- is that a
24 correct assumption? Is that -- that is the use of this sort of
25 thing. It's not just a pretty picture, but it is a method of figuring

1 out where you might put a containment resources. And if so,
2 how many days a year would your placement of your
3 containment resources be wildly inappropriate to the
4 dimensions of the spill?

5 MR. SUND: Mr. Chairman, I would propose a second use
6 of this is to say that in general sense of a large quantity oil spill
7 in the water is gonna cause large damage. And whether it goes
8 halfway down Kodiak Island or the whole way down, it doesn't
9 really totally matter, but it is also useful to justify the
10 expenditure of some time or money to try to prevent it from
11 happening.

12 MR. WENK: Do you think it would be possible in your final
13 report to include the actual Exxon Valdez spill coverage or
14 compare it.

15 MR. KEITH: We sent that up to the Commission for
16 validation. We'd be delighted to include that. Like we said, we
17 had to adjust the model for those actual wind conditions and,
18 indeed that was the worst case. We'd be happy to put that
19 Valdez model there.

20 MR. WENK: I think it would be useful to have it.

21 MR. KEITH: We will do that.

22 MR. POURCHELLI: Any further questions?

23 MR. PARKER: i think another interesting point is the
24 wind which put the oil in Shelikof Straits saved upper Cook Inlet
25 to a large degree. How far the oil would've come up the Inlet

1 we'll never know since the wind started blowing at the right
2 time.

3 MR. SUND: Kodiak would say it started blowing at the
4 wrong time.

5 MR. KEITH: Next, Bob Schultz and Dick Willis will team
6 up on the contingency planning.

7 (Tape Changed)

8 (Tape Number 89-11-14-3)

9 MR. WILLIS: First slide, please. Response capability
10 depends on what sort of mechanical recovery systems you have
11 available. The effectiveness of these systems in Cook Inlet and
12 Cook Inlet Sound, which are the two areas considered here, and
13 the effectiveness or possible use of other response methods,
14 such as dispersants and burning and the effectiveness of
15 command and control and planning procedures. Next slide.

16 MR. SCHULTZ: Joe, I think you're off one. It should be in
17 Cook Inlet.

18 MR. POURCHELLI: This one, Bob?

19 MR. SCHULTZ: It says, uhm, no. On the idea of
20 mechanical recovery systems and I will -- Prince William Sound.
21 That's several ahead, but we're okay, I think. When you consider
22 mechanical recovery systems, when you look at such things as
23 contingency plans, current and new contingency plan for Valdez,
24 the equipment is generally rated in terms of pumping capacity.
25 one must be very careful in looking at these kinds of figures to

1 to determine true capability. The pumping capacity, that is the
2 name plate capacity is generally pumping capacity of a skimmer
3 with, perhaps with water and with no head, which is very, very
4 optimistic. Skimming capacity would be considerably less than
5 that. In some cases, we've gone to tested skimming capacities
6 and in most cases these are not available. So, as a general rule of
7 thumb and based on experience, our actual skimming capacity
8 would be reduced to a factor of about a third. And actually, that's
9 probably a bit optimistic. In my experience, very often
10 skimming capacity, in these cases, may be -- that's the right one
11 -- may be as little as 20%. That's based on both oil spill
12 skimmers and industrial skimmers that are simply picking up
13 waste oil on a routine basis every day.

14 The other thing that's very, very important there is
15 encounter rate. Let me take time to give a very quick example.
16 You may have a manufacturer of high capacity skimmers come to
17 you and say that with a half a dozen of his skimmers at Valdez,
18 he could have recovered 60% of the oil that was spilled, after it
19 was on the water. This is something you must examine very
20 carefully because generally the problem with the data is that he
21 doesn't have sufficient encounter rate. In other words, he has
22 six skimmers that have extremely high internal capacity to pick
23 up oil, but he can't get to it fast enough. So you see that he can
24 only go, perhaps at the very fastest, a knot and a half. He can't
25 get around to get to this oil that's all over the place fast enough

1 to recover that sort of thing. So, that's one of the very important
2 points about considering skimmer effectiveness.

3 Are we ready for another one there

4 MR. POURCHELLI: Yes, for connecting oil pumps.

5 MR. SCHULTZ: Okay. Let me, before I go to this one --
6 you can just leave that up there for a minute -- discuss some of
7 the factors that we have to consider particularly in Cook Inlet,
8 when you determine how effective your skimmers are going to
9 be.

10 First of all, the environmental conditions. Many people
11 already have mentioned the extreme ranges of tides and
12 currents in Cook Inlet. That is, say, 30 feet of tide and currents
13 up to eight knots. This makes spill recovery very, very difficult.
14 Containment boom generally fails, and by fails I mean oil will
15 start to go under it when the component of the current
16 perpendicular to the face of the boom is about three-quarters of a
17 knot. When you have a situation where you have six, seven, eight
18 knots great periods of time, the containment boom will not
19 really contain the oil. This does not mean that you cannot use
20 containment boom at all. You just can't use it for all purposes
21 that you use it in other places. In fact, the plan in Cook Inlet
22 would be to deploy the boom in a U or a J formation and proceed
23 down current with the oil and if the current is going seven
24 knots, you go about seven and a half, or eight or so and still are
25 able to recover oil. But, of course you understand that that limits

1 your options and the kinds of things you can do tremendously.
2 For example, if you have high currents like that, you're probably
3 not going to be able to boom off a great many sensitive areas,
4 where the currents are running. One of two things will either
5 happen. one is that the oil will go under the boom where you've
6 put it there or the other thing is that the boom may fail entirely.
7 I mean physically fail, come apart. So, that's one of the things
8 that's very important in Cook Inlet. Another thing that is very
9 important is that Cook Inlet is -- generally has considerable
10 amount of ice in it all winter and everybody can see that right
11 down here in Anchorage from the restaurants along the water
12 front there. There's a lot of ice there. People tell me that ships
13 continue to operate in Cook Inlet, almost all year, but there's
14 always ice there. There's rafted ice and all sorts of, kinds of ice.
15 Even though the large tankers can operate in there, and perhaps
16 some of the very large supply ships that might be used for spill
17 response, a great many other smaller boats and smaller craft
18 cannot be used at all and that would limit your capability to
19 respond. Okay, and, let's see here. The.....

20 MR. POURCHELLI: Still want that one? I'm sorry.

21 MR. SCHULTZ: That's okay. Why don't you just put up the
22 one that shows -- just show the graph there is you would.

23 MR. POURCHELLI: Cook Inlet?

24 MR. SCHULTZ: Yeah. We've done some work and analysis
25 in determining how much area that was covered by spill, could

1 be covered by mechanical recovery devices. If everything was
2 going properly and under extremely ideal conditions, you could
3 perhaps cover as much as -- well, it looks like maybe 18% of it
4 using CIRO equipment only in Cook Inlet. As the oil spreads
5 more than that, your capability goes down. One of the big
6 problems here in equipment is that currently in Cook Inlet they
7 have almost no place to store the recovered oil. So, if you were
8 in fact recovering oil at that rate or covering an area at that rate,
9 your storage capacity would be gone in a very short period of
10 time, probably a few hours, certainly not more than a day. We'll
11 put whatever else you have up there.

12 MR. POURCHELLI: You want Prince William Sound?

13 MR. SCHULTZ: Yeah. Okay. In Prince William Sound,
14 their capability has improved tremendously since the spill. They
15 have many large vessels, large supply vessels, barges and things
16 like that so their capability has increased tremendously. That
17 shows what could be done there under fairly ideal conditions
18 and that is in the event that you respond very, very quickly.
19 These facilities are available, which they are now since the laden
20 vessels are escorted all the way up to the harbor.

21 MR. HERZ: Can I ask a question?

22 MR. SCHULTZ: Certainly.

23 MR. HERZ: It suddenly struck me again, seeing these
24 figures for the third or fourth time looking at them. What
25 assumptions do these make about the skimming capacity. This

1 is labelled name plate capacity?

2 MR. SCHULTZ: No, we were reducing that to about a
3 third of name plate, 'cause in experience that's about what these
4 things can do.

5 MR. HERZ: So that's taking the existing capacity, with
6 the expanded Alyeska armada.....

7 MR. SCHULTZ: Yes.

8 MR. HERZ:and taking about 30% of their name plate
9 capacity over time?

10 MR. SCHULTZ: Yes.

11 MR. HERZ: Thank you.

12 MR. KEITH: Let me add on to that. One of the things and
13 I think -- Joe can you put the other graphic on very quickly,
14 'cause I think it something the Commission can do a work.
15 We're showing that it's important. You've got these oil spill
16 resources in Prince William Sound, as well as Cook Inlet to have,
17 especially in Cook Inlet, to make those resources at Alyeska
18 available for a spill at Cook Inlet. Keeping in mind that these
19 large spills -- the one we're seeing here is a million gallons or
20 the Exxon Valdez at 10 million gallons, have a recurrence
21 interval of 5-10 years. It would make sense to see what you
22 could do -- we think as technicians for you, to make all the
23 resources available you can in a very short period of time. And
24 again, that has to be done very quickly. If something would
25 happen at Cook Inlet, that those resources could come around

1 from Prince William Sound in numbers like 8-12 hours. Then
2 that would be something to set in advance and perhaps at that
3 time the Coast Guard would have to use their vessels or
4 helicopters to escort the vessel, to free up those vessels in
5 Alyeska. We think this is something very important, something
6 that could be done fast, and I think that graphic really points it
7 out.

8 MR. WENK: Quick question. When you site percent of oil
9 spill area, is it easy to convert that to percent of oil spill volume?

10 MR. SCHULTZ: It's area covered -- not too easy, but we
11 could probably do something like that. These things are based
12 on encounter rate which helps a lot. Your -- the oil spill is likely
13 to be broken extensively and how much of this you will
14 encounter -- it may be very thick in some places and it may be
15 almost non-existent in some places.

16 MR. WENK: Would the trimatic (ph) question be more
17 one of the percent of spilled volume, rather than spill area?
18 Because it's the uncollected part that does does ya dirt? I'm just
19 asking a dumb question because I'm thinking about the part that
20 you don't collect that is.....

21 MR. KEITH: Let me try to answer that.

22 MR. WENK: Against the environmental problem.

23 MR. KEITH: I think one looks at oil spills real quick and
24 you see the area covered. You've gotta remember that it's not a
25 uniform patch, especially down in Cook Inlet. That perhaps

1 80% of that oil would be in 20% of the area. So it's hard to tell -
2 - it's basically a search and rescue type thing to find that. So
3 when you look at where the spill, the transport model is, it
4 doesn't mean because you covered that much area that you're
5 necessarily gonna get the thick area.

6 MR. WENK: I understand that completely. But that
7 doesn't answer the question.

8 MR. KEITH: Alright.

9 MR. POURCHELLI: Well, you have to get to the area to get
10 the volume. (Indiscernible - simultaneous talking) you don't
11 know where the volume is within that whole area, it's a little bit
12 difficult to be able to tell you -- convert area to volume for you.

13 MR. WENK: But is it not from the point of view of
14 potential damage to the environment and wildlife and habitat, is
15 it not the volume of oil that is uncollected that's relevant?

16 MR. PARKER: John, maybe you can explain.

17 MR. KEITH: That's correct. I don't know what.

18 MR. SUND: I think it's probably both things Ed, because
19 the potential damage to the environment also has to do with the
20 quantity of oil that attacks or hits any one beach. So you have the
21 same problem there if you have a million gallon spill and you can
22 only recover 100,000 gallons of it, you've got 900,000 gallons
23 floating around. The damage that would cause the environment
24 also has to correlate with all that goes on one beach or on a
25 hundred beaches.

1 MR. WENK: Oh, absolutely.

2 MR. SUND: So I -- my assumption here, 'er internally,

3 maybe I'm wrong, is that we're using given technology,

4 technology available in the world today and the best recovery of

5 any oil spill anyone's ever reported is 20% and this may say you

6 can get into 18% of the area, but I don't think you're gonna get

7 more than 10% of the oil picked up because my.....

8 MR. SCHULTZ: And we agree that Commissioner.

9 MR. KEITH: One of the things I think has to be said is

10 Alaska's the most difficult spot and we looked at spots

11 worldwide to pick up oil. So, it really says the prevention is key.

12 MR. PARKER: Well I think you pretty well nailed it in that

13 area doesn't equate with volume, and volume recovered is always

14 going to be less than the area you sweep. But you can only deal

15 with area, because that's how the oil presents itself.

16 MR. SCHULTZ: That's right. You probably would like a

17 better answer. This area is related to volume, but it's very

18 difficult to determine exactly how. We could say this oil that we

19 have here at a certain period of time, if it were -- if it spread out

20 uniformly and it as a millimeter or a half a millimeter or

21 something like and then we would show you this area and we

22 could say okay this is the volume of oil that we will pick up. But,

23 it doesn't work that way. In some places it's quite thick and it's

24 in patches and wind rows and all sorts of things like that. And

25 in some cases you may have a skimmer that is able to pick up a

1 very large volume of oil, very quickly because he's in an area
2 where this stuff is really heavy. And at the same time, in other
3 places, there may be very little and so you're maybe covering
4 area without recovering a whole lot of oil. But I think these are
5 fairly closely related.

6 MR. WALLIS: The answer to your question is no.

7 MR. PARKER: On this graph, does the peak of the total
8 CIRO, Alyeska and clean seas, is that the mobilization.....

9 MR. SCHULTZ: Yes.

10 MR. PARKER:time when they're all there.

11 MR. SCHULTZ: Yes, that's shows -- CIRO, the Cook Inlet
12 capability is perhaps the least of any in the area. And the help
13 that they would get if it were available or made available by
14 agreement from Alaska Clean Seas and Alyeska would be a
15 tremendous help, particularly Alyeska because they have so
16 much and, particularly, they have so much in storage capacity in
17 these new barges they have there. CIRO is very, very short of
18 storage capacity, in addition to other things.

19 MR. PARKER: What about the 48 hour mobilization time
20 out of Valdez to Cook Inlet then as you show it there.

21 MR. HERZ: Doesn't that assume though that both the
22 weather is very cooperative in terms of what you're able to skim,
23 number one, and then number two that the weather is very
24 cooperative in terms of letting you move equipment from
25 Alyeska to Cook?

1 MR. SCHULTZ: Yes.

2 MR. HERZ: And so, for winter, the probability of being

3 able to do that is relatively low.

4 MR. SCHULTZ: Put your money on prevention.

5 MR. KEITH: In winter, the -- of course the oil will be

6 contained by the ice to a certain extent, but the other thing is

7 you won't be able to skim very much of it and the oil would also

8 be transported by the ice and released in the summer time.

9 MR. SUND: We already know that we don't recover oil in

10 the winter, especially after September 15th. That's not a factor.

11 RICHARD: I'm gonna spend a couple minutes talking

12 about the contingency plans that are in place right now for

13 combating oil. The -- and rather than talk directly about each

14 one, I'd like to talk first about the fact about what we feel is

15 inadequate about them, for the large spill. Now we are talking

16 about the large spill of basically a million gallon pop. And the

17 basic problems that we see is that the present contingency

18 planning uses existing organizations with existing people and

19 attempts to fight an oil spill in that manner. The second part is

20 that they do not use what we feel is a credible scenario for

21 planning. They are based on low volume, high probability spill

22 events, whereby cleaning up the oil is not much different than

23 what the norm -- what you would normally do for -- you're doing

24 it for a short period of time. And the contingency plans are

25 information based and there's very few action guidelines.

1 There's a lot of information in them that you would love to have
2 in an oil spill, but there's very few guidelines from which to act
3 upon.

4 MS. WUNNICKE: Will you accept questions? When you
5 say present contingency plans, have you reviewed the Alyeska
6 contingency plan.

7 RICHARD: Yes I have.

8 MS. WUNNICKE: Do you have the same comment with
9 respect to that?

10 RICHARD: Uh, well we're looking forward to -- we may
11 not be right up to date. I was looking forward to some of the
12 scenario development that they're doing and some of their
13 decision guides they talk about building. But until that happens I
14 still think it's, in my opinion, is still a guideline, a bunch of
15 information you can work from.

16 MR. HERZ: Did you review the state plan, the federal
17 plan, the Alyeska plan, and the Coast Guard plan?

18 MR. SCHULTZ: The problem with the local plan is they
19 forget some things about -- that happens in the large spill that
20 we found in the Exxon Valdez. One, there's an increased
21 complexity in terms of resources, management and manpower.
22 There's an increased complexity in terms of duration, area
23 covered, and environmental sensitivity. And the third and
24 probably the most important one we've seen which you've heard
25 about all day, there's a compressed time frame in which

1 decisions must be made and resources utilized. That time frame
2 is a whole lot different when you're talking about 11 million
3 gallons as when you're talking about 200 million -- 200 gallons.
4 200 gallons, you have some time to figure out exactly what you're
5 gonna do. In 11 million gallons, your decision today or this hour
6 is gonna effect what you're gonna do the rest of the week. The --
7 in the contingency plans that you all are going to be developing,
8 we feel that they should have -- be based on credible scenarios of
9 what might happen. The million gallon spill in the Yukon River,
10 for instance, that Mr. Parker talked about this morning. And
11 they should have credible solutions, what you expect that
12 credible scenario to degrade to. Decisions should be anticipated
13 on the basis of specific goals. What are your -- what are we
14 trying to do? What are we trying to protect, which comes to the
15 next point.

16 A complete prioritization of environmental and economic
17 sensitivities in the area. What's the most important thing you
18 have to do first and then to allocate your resources based on both
19 that prioritization and the anticipated decisions that you've
20 already done by creating the credible scenarios and credible
21 conclusions.

22 Lastly, instead of as we saw before when the contingency
23 plan was based on existing organizations, the last thing that
24 happens in the contingency planning process is creating the
25 organization as an outcome of those anticipated decisions and

1 the demands based on the credible scenario. I think Virg
2 Keith's gonna talk about tankers here for awhile.

3 MR. WENK: Is this a good time to ask questions about the
4 (indiscernible - fading). Let me just ask one because it's come
5 up several times in presentations before the Commission and it
6 has to do with constraints on contingency response. To be
7 specific, there has been some observations that there was a
8 reluctance to contain oil around a damaged tanker because of the
9 potential hazard of the fumes being subject to accidental ignition
10 and creating an explosion that would be a hazard to people and
11 to the ship and so on and so on. There's also a tradeoff that the
12 shippers have in terms of whether or not containment of the
13 spill, in order to limit environmental damage, is given priority
14 over safety for the ship. Did you look into these constraints.

15 MR. SCHULTZ: Yeah, I think that they have been part of
16 an ongoing view of ours since the spill occurred itself. The
17 question of whether it's the safety of the ship and your talking
18 about the safety of the steel and the engine and everything else, I
19 think that was completely secondary. I think the saving of the
20 other 40 million gallons of oil that was on the ship.....

21 MR. WENK: Oil and the ship both.

22 MR. SCHULTZ: Well.....

23 MR. WENK: Sorry, I'm.....

24 MR. SCHULTZ: No, one is -- I think you can separate
25 them. But I don't -- I think we feel that burning is one of those

1 issues that you have to bring out very early in the contingency
2 planning process as you create your scenario. If you were gonna
3 create a scenario of 11 million gallons off Bligh Reef that costs
4 two billion dollars to clean up and we still have the damage that
5 we have, I think that we might have made the decision of
6 burning that thing very quickly. And I think that's where -- how
7 you have to put that decision of the Exxon -- of burning that
8 ship. You have to look at the conclusion of that and then say,
9 what would you have done in that particular case. I think there's
10 been a lot of people that said that if anybody had their druthers,
11 they would have lit it off very quickly to try to get rid of that -- of
12 the spill situation.

13 MR. PARKER: The -- I think we can get into this
14 tomorrow, 'cause the staff has had intensive discussions on
15 accomplishing both at once and creating in effect the dual
16 response. One aimed at saving ship and cargo, the other at
17 containing oil, which tend to be both loaded on the shipper at
18 this time, under present rules and regulations. So, I think, you
19 know, it's an intensive argument that I think we should probably
20 save for tomorrow.

21 MR. KEITH: Alright, next I'm going to take the improved
22 tanker design, and again Mr. Chairman we'll talk about -- I'm just
23 going to tell you the areas that we looked at and we will save the
24 details of it tomorrow if that's acceptable with the
25 Commissioners.

1 First of all, now I think it's important that we get into this
2 group here. So, thanks to your staff and the Commissioners
3 themselves, we went through 2,000 pages of testimony from
4 Cordova, Kenai, here in anchorage. We went through everything
5 on the risk assessment, the risk assessment, the hazard
6 assessment, all the contingency planning to come up with these
7 ideas.

8 MR. PARKER: Excuse me, Virg, you don't wanta say
9 anything about double bottoms, today?

10 MR. KEITH: I am, I'm getting into that.

11 MR. PARKER: Okay.

12 MR. KEITH: I just want to introduce this before we come
13 on the tanker design. Alright. So we get into the various groups.
14 So now, and you can see the third group is improve tanker
15 design and then we'll work from the bottom up to just expedite
16 this.

17 So the first thing that we come up with is this mandatory
18 drug and alcohol testing. And the next is emergency and high
19 risk training. And I think Capt. Elsonsone (ph) talked to you
20 about that before. Capt. Murphy testified to that effect down at
21 Kenai. The next is the port closure system and I know
22 Commissioner Sund recommended that. Possibly that could be
23 done with a state agency as well as the Coast Guard agency -- a
24 dual relationship, I'm thinking almost like the Federal State
25 Land Use Planning Commission that we're used to. The other

1 one is the two person watch standing requirement. Now the
2 two person watch standing requirement, that came from, again,
3 Capt. Murphy and the NTSB on the reports on the Exxon Valdez
4 where there was only one person on the bridge. It was the idea
5 to have two. And then when Commission Sund came back it was
6 also brought up by Meba and some of the other people there that
7 that same philosophy be adopted to the engine room. So that
8 was added on.

9 The next thing is improved loading and unloading
10 procedures. And again, Joe Pourchelli spoke about that earlier.
11 A great deal of the spills are at the terminals so you have to look
12 at the terminals as well as that tanker. When that tanker's at
13 that terminal, recognizing that terminal personnel as dictating a
14 lot that happens on the tanker. So, those person are in the
15 system, what Commissioner Wenk talked about and should be
16 looked at.

17 The other things is this local spill prevention
18 involvement. And I know Marilyn was working on this and I
19 think also Dennis is. But we feel especially up here, because
20 time is so important, you have to involve the local people in both
21 the clean up and the prevention through citizens committees,
22 those types of things, and again, I've heard testimony that forth
23 in Cordova and in Kenai.

24 And then we're talking about the spill response
25 equipment coordination. Again, and we interjected on that.

1 you've got a great deal of equipment in Prince William Sound.
2 You have some equipment in Cook Inlet. When these events do
3 occur that are fairly rare events and thank God they're fairly rare
4 events, but you've got to muster all that equipment very, very
5 early, very quickly to get it down to scene to even stand a
6 change. And then, quite honestly, you don't stand much of a
7 chance. But it's your best shot.

8 Now we go down into the group II. And those group I
9 ideas are mainly institutional ideas. They're low cost ideas.
10 They're something that could be done very quick and they have a
11 fairly rapid payback. Now we go back down into group II, and
12 these are -- now we're getting into some technology. We're
13 getting into longer terms and some more costly items. One is
14 the vessel monitoring system and that certainly has been kicked
15 around for 15 years. The other -- and this is a mandatory vessel
16 monitoring system in both Cook Inlet as well as Prince William
17 Sound. The other is a mandatory traffic separation lanes with
18 one way traffic in the tight spots (ie: Valdez narrows). the other
19 is designated anchorages. And again, you saw that on Joe
20 Pourchelli's area for both Cook Inlet and Prince William Sound.
21 And then we have emergency response pollution control vessels.
22 And then, again, improved loading/unloading design. We're
23 thinking that when you come along, perhaps they'll be new
24 design features on the terminals that one would wanta adopt. In
25 other words, it's a dynamic situation that one would come into.

1 And that is going to take a longer period of time. That may take
2 two to maybe five years to institute, but it has a fairly high
3 payback. You'll see in Dick's things, without stealing his
4 thunder, when we come in to look at the payback for that we're
5 looking at reducing numbers like 40% of the accidents with
6 group II. Where the group I we're looking at numbers like 15%
7 and then final -- and I'm going to come into this and I guess
8 we'll discuss this more tomorrow, we've got the group III
9 design, which is improved tanker design. Now that has a fairly
10 high payback because now we're making that vessel so it's more
11 resistant to these accidents, so should this accident occur, the
12 vessel itself will be able to withstand some of the grounding
13 events, the collision events, so if it happens you don't
14 automatically have a release of cargo. So, we're putting our
15 money into the vessel itself. Please Joe.

16 So, we look in six different areas on the improved tanker
17 design. One is double hulls, definitely the most controversial
18 issue of all. The other is a centralized bunker tanks. And again,
19 we've got schematics in the report all the way through. The
20 other is the automatic cargo control systems. The four item is
21 auxiliary thrusters so we're saying, instead of a twin screw vessel
22 where you've got both of your screws and your rudder at the
23 stern of the ship, look for a single screw vessel. In other words,
24 maintain the efficiency and the safety of the vessel, but put the
25 thruster up forward in the bow where you've got 800-1000 feet

1 away and you don't have something like the DC10, where we've
2 got three hydraulic systems, but there all in the tail of the DC10,
3 right by the number 2 engine. So if something happens to the
4 number two engine, we destroy all three systems. And the other
5 that we think is very key is this precise navigational system. So
6 this is the vessel monitoring system, as well as display on the
7 vessel of the ship where he can -- where that person running
8 the ship can look at the screen, the CRT, find out if he's in that
9 traffic lane or not. He sees that icon on the ship. It's green if
10 he's in the traffic lanes, everything's all right. The minute it gets
11 outside of the traffic lane, it turns red. So it makes it very visible
12 to the person on the bridge of the ship as well as the person
13 monitoring shoreside.

14 And another thing came up and this was from the Cordova
15 fishermen, that vessel monitoring systems should be manned by
16 masters and, I know all the Commissioners heard this
17 testimony, not necessarily Coast Guard personnel, but people
18 that are out there that have handled large tankers that have
19 experience with it so that the state pilot on the ship with a
20 master knows that that person he's talking to has experience
21 with that vessel. Very similar -- we're looking at this would be
22 similar to the way FAA would control aircraft.

23 And the last thing, again, we're stressing safety, is
24 improved life boats. I happen to feel, and I know my partner,
25 Joe Pourchelli, capsized in a lifeboat. The lifeboats that we have

1 for the people on these ships are horrendous. So we just added
2 that to look again at all three areas: environmental protection,
3 efficiency, and safety. And we'll go into those in more detail
4 tomorrow, or I'm prepared to do it now, if you want. But I know
5 you're running behind time. And the last one Joe.

6 While Joe's putting that up, we looked at three versions of
7 double hulls for you, for the Commission, so the Commission
8 would have a wide range of choice. We've got a Type I double
9 hull, which is the double hull that would be required for the
10 most dangerous chemicals to protect it. That is described in the
11 report. A Type II double hull which is a lesser category. The
12 Type II double hull has a beon (ph) 15 double bottom with a
13 double sides of equal to about 30 inches. And then a design that
14 Joe Pourchelli and I came up with where we're looking at a beon
15 (ph) 15 or we're looking at about an eight to 12 foot double
16 bottom, double side wrapped all the way around the skin of the
17 ship. So, it's an entire double hull wrapped on the -- double
18 sides as well as double bottom and again, with a dimension of 8-
19 12 feet.

20 You've got two designs in the report. You have a 70,000
21 ton Cook Inlet crude carrier and a 250,000 ton Prince William
22 Sound Crude carrier. And we looked at those two designs to
23 attempt to see what the costs would be for a conventional vessel
24 of that size, such as the vessels operating there now and then
25 one of this beon (ph) 15 double hull design. And again, for the

1 entire category, we're looking at improvement of about, in cost
2 increase, of about 10% to go to these improved tanker designs.
3 And again, to give you a ball park figure on that, on a 250,000,
4 the new ship would be around \$175 million, so we're looking at
5 an increase of about 15 million, 15-17 million. Down at the
6 other end of the scale, for Cook Inlet, we're looking at a 70,000
7 tonner of around \$90 million so that cost increase for each
8 vessel would be about \$8-9 million. So that gives you the cost
9 increase for both ends of the spectrum.

10 And again, I'm prepared tomorrow to go into detail on
11 each of those subsystems that are in the report.

12 And then finally, having given Dick the cost on the
13 tankers and the rest of it, I'll turn the rest over to Dick Willis.

14 MR. WILLIS: Very good. If we can have the first slide,
15 Joe. As Virgil said, we looked at the transportation system
16 modifications that would be applicable to Prince William Sound
17 and Cook Inlet and attempted to put them within a system that
18 would allow us to do some further analysis to develop costs --
19 what their costs would be and also what their effectiveness
20 would be. One of the things that you should be, as Virgil
21 mentioned, we should be very aware of is Group I and Group II
22 basically are modifications that prevent the accident, whereas
23 the major force of the tanker design in Group III prevents the
24 spill as a result of the accident. So that what you'll be seeing as a
25 combination are the reduction in spill events because of the fact

1 that we reduce accidents, and also the reduction in spill events
2 because of the fact that our improved tanker design will not spill
3 as often as the existing design.

4 These are the costs that are associated with those groups.
5 Basically, those costs have ben broken down into acquisition
6 costs, which are basically those costs that would be -- have to be
7 upfront money to purchase either equipment and/or services to
8 put these systems in place. The annual operating costs are the
9 costs of either maintenance or personnel required to operate
10 these systems and then there are a third category, some vessel-
11 specific costs such as in Group II is the on-board vessel
12 monitoring system, precise navigation system and display.
13 These costs are developed in a number of ways based on either
14 engineering designs and engineer calculations based on what we
15 felt the ship was gonna cost, as Virgil just went through. And on
16 similar activities we have undertaken or similar organizations
17 have undertaken. It's been translated into both cost per barrel
18 of the total modifications and cost per gallon. You'll see in Cook
19 Inlet we're estimating that the costs associated with Group I
20 modifications are 70 cents, 'er seven cents per barrel; Group II
21 modifications, about 21 cents per barrel, and Group III
22 modifications about four cents per barrel; for a total of about 32
23 cents a barrel. That translates into a little less than a penny a
24 gallon.

25 MR. SUND: On the gallons, are those gallons of gasoline

1 or gallons of total product?

2 MR. WILLIS: This is basically a standard type of gallon of
3 about 7.2. We have basically just decided -- the barrels that you
4 have to convert to that, either gasoline or crude, and that's been
5 converted at 7.2 to the ton.

6 MR. KEITH: So, it basically assume there's 42 gallons to
7 the barrel, so it's just simply dividing by 42, so the entire
8 amount transport, not just the.....

9 MR. WILLIS: it doesn't make any -- it's not per gallon. I'm
10 sorry.

11 MR. SUND: Thank you.

12 MR. WILLIS: I didn't understand the question. Okay, next
13 one, Joseph. The same figures for Prince William Sound show
14 that the total cost for the system for group I, II and III are six
15 cents a barrel and a little less than two-tenths of a cent per
16 gallon. Notice the vast difference because obviously the vast
17 difference in throughput of oil through the Valdez port, through
18 Prince William Sound.

19 We then looked, by using a port design safety model that
20 we have developed over a number of years and applied in this
21 case at what type of reduction in oil spills we felt we could get
22 from each of the system modifications. You see from this chart
23 that we expected 14% -- that Group I will reduce the accidents
24 by 14%; Group II modifications will reduce it by 41% and Group
25 III modifications will reduce the accidents by 55% of the

1 remaining accidents. If you do that on a cumulative basis, you
2 can see that we are projecting that we are going to reduce the
3 accidents in these ports by 77%.

4 MR. WENK: Question. It's a matter of semantics. You say
5 reduce the accidents?

6 MR. WILLIS: Reduce the oil spills.

7 MR. WENK: Okay. Isn't it -- isn't most of your improved
8 tanker design related to the double hull which is -- which
9 reduces the consequences of an accident, but by itself isn't it
10 true that the double hull does not reduce the probability of the
11 accident?

12 MR. WILLIS: Yeah, we're talking about a reduction in oil
13 spill. Group I and Group II is, I mentioned are basically reducing
14 accidents as their major focus, where Group III is reducing the
15 consequence of the accident.

16 MR. KEITH: Let me pick that up. The answer to that is
17 no. And when I looked at the improved tanker design, we
18 looked at the six features. We do have the double hull. Obviously
19 that prevents the consequences. We put on auxiliary thrusters,
20 so essentially it gives us the capability.....

21 MR. WENK: Excuse me, then have you separated out
22 those two in Group III. you've got Group I and II separated out
23 into it's components. Wouldn't it be interesting to separate out
24 Group III into the same components you just described so that
25 we can then turn and tell which of Group III are accident

1 prevention and which are consequence mitigated.

2 MR. KEITH: What we've done on all of these is tied right
3 back to the oil spill. So we present the numbers to the
4 Commission that are strictly oil spill. So, in other words, on the
5 first group we know that one in seven accidents would result in
6 an oil spill. We've already taken account for that because we're
7 strictly talking about oil spills, not about accidents. So that's
8 already taken care of in the numbers. So we know that if we
9 have one out of seven collisions would result in an oil spill, the
10 numbers you see up here are strictly oil spills at the top. So it's
11 going right down to the bottom line in looking only at oil spills,
12 not at accidents or not at groundings or anything else. We're
13 looking at that total number of oil spills and going after that.

14 MR. HERZ: Where'd you get those numbers?

15 MR. KEITH: The number of oil spills?

16 MR. HERZ: Reduction. What -- I mean, I don't see a
17 rationale in the report on how you made that step.

18 MR. KEITH: We can do a couple of things. We can go into
19 that tomorrow in some detail, how we attacked on each part of
20 the accident in using the real time simulator that I think
21 Commissioner Sund has. I know Commissioner Parker is well
22 aware of, as well as Commissioner Wenk. So it's a combination.....

23 MR. PARKER: I hear voices from your fellow
24 commissioners saying, do it tomorrow.

25 MR. KEITH: Are you ready for the next one, Dick.

1 MR. WILLIS: Yes. This basically tries to add a graphical
2 field to the fact of both reduction in accidents and the fact of
3 when those accidents will occur in terms of time, showing that
4 Group I modifications will take a much longer time than --
5 Group III modifications will take a much longer time, especially
6 as new tankers are built and put into service. Okay, Joseph.

7 The end result of applying these modifications to the
8 port, you can see in Cook Inlet -- and this is a summary of all
9 spills from 300 gallons up to the largest spill in Cook Inlet. You
10 can see that we, in applying the modifications, we've had the
11 effect of increasing the recurrence interval that you expect to
12 have an accident in from 2.5 -- oil spill in, excuse me -- from 2.5
13 years to 9.2 years. And the same for Prince William Sound, if you
14 show it Joseph. In Prince William Sound we're projecting that
15 recurrence interval goes from 1.7 years existing to 5.5 years
16 with Group I, II and III modifications. Showing that in a
17 different way in the increase in the safety of the port itself.
18 Calling the safety of the port right now in Prince William -- in
19 Cook Inlet as being one. The increase in -- or the change in the
20 port safety index for Cook Inlet would be for Groups I, II, and III
21 modifications onto the system and improvement of about 3.6
22 times over what we have now. In Prince William Sound, that
23 improvement would be about 3.3 times. And I thank you very
24 much for your time.

25 MR. PARKER: Okay. Thank you.

1 MR. SUND: Mr. Chairman we are gonna have time
2 tomorrow to go into the essence of how they go to those
3 numbers?
4 MR. PARKER: Yep.
5 MR. SUND: Okay. thank you.
6 MR. PARKER: The -- Virgil do you have anything more to
7 present at this time?
8 MR. KEITH: I think the only thing I wanta say is that the
9 cooperation that we've had from all involved, Mr. Chairman,
10 especially your staff -- we know Mr. Havelock was out early and
11 handled the simulator and helped set it up and then several of
12 the Commissioners were out and then Dennis Dooley came right
13 at the end and made sure that everything was on track and
14 Marilyn sent us a number of material that we've had that we over
15 as coming up with the ideas. And we again, just want to thank
16 the Commission for allowing to do us, and thank your staff ,sir.
17 MR. PARKER: Okay. We'll hear from Mr. Lathrop now,
18 and then after that, why we'll get into a discussion of this so that
19 everyone will know what the idea of the discussion being what
20 we want to hear from tomorrow. Why don't you sit right down
21 there. I'll bring -- are you gonna use the view graph.
22 MR. LATHROP: I would like to use a view graph.
23 MR. PARKER: Okay, fine.
24 MR. LATHROP: I'd like to speak from here if that's okay.
25 MR. PARKER: No, that's fine.

1 MR. LATHROP: And Mr. Chairman, I have some handouts.
2 Mr. Chairman and members of the Commission, I'm pleased to
3 be given the opportunity to speak here today. My name is John
4 Lathrop. I'm an independent consultant. I have been employed
5 by the Commission to review the work of ECO, but more
6 generally to review the process by which the technical data
7 being developed for this Commission is used to develop a
8 defensible basis for decisions made by the Commission.

9 What I will be focusing on today and now is a brief review
10 of the ECO which we've just heard about. Specifically, I will be
11 laying out an analysis flow chart, trying to see how well that
12 report and that work takes us from the data that we have to what
13 would be an adequate technical support to the Commission for
14 their decision. Then I will discuss the ECO report in terms of
15 further things that we might need to fill in that flow chart to get
16 from the data-base to the technical support for the Commission's
17 decisions.

18 The analysis flow chart I've developed is based largely on
19 the scope of work as laid out by the commission and the early
20 work done this summer in defining what should be done by
21 contractors to the commission. As you can see, in the upper left
22 we start out with the data having to do with accident rates and
23 oil spill responses going through the hazard analysis, resulting in
24 the locations, volumes and probabilities for oil spills. Then, what
25 is termed a risk analysis. I would say this is simply the

1 modelling of the oil spill to depict in the maps which you see at
2 the end of the ECO report, the extent of oil spills versus time.
3 And then something which was not treated as systematically as
4 related in the flow chart, in the ECO reports and the emergency
5 response as it acts to create the mitigated impacts from the
6 spill.

7 To some extent, the results of the ECO work comes down
8 to emergency response doesn't make much different. If you
9 have the spill, it's gonna hit sensitive resources and I think
10 that's a reasonable conclusion to make from the data. But, you
11 should go further than to say that prevention is the key to say
12 that prevention is the key and maybe we should look at the
13 contingency plans to see if they're -- if they can be oriented in
14 particular ways to defend particular environmentally sensitive
15 areas and what decision making structures can we put in place
16 so we have a responsive and adaptive emergency response
17 system to make the best use of what resources can be made
18 available.

19 So, going through this flow chart we see what ECO did
20 was develop basically the impacts from the existing situation.
21 Then there was development of system modifications based on
22 the data and one of my comments about the report is it was not
23 clear in the report how the system modifications were
24 developed or identified. I heard from the presentation today
25 that they seem to be based largely on the results of the hearings

1 that have been conducted so far. The system modifications then
2 were evaluated in terms of what they would cost, what their
3 implications are in terms of tanker safety and safety of the
4 transportation system, and the implications in oil spill response
5 to then basically re-run the whole sequence of hazard analysis,
6 risk analysis and so forth and so on, to get the mitigated impacts
7 after the system modification. Now to some degree, this is
8 idealized and its not entirely clear from the report how this was
9 done, though I understand from conversations with Virgil Keith
10 that this is effectively what was done in evaluating what the
11 system modifications did to reduce the impact.

12 Now, the most important -- from my point of view, as a
13 decision analyst, the most important part of this chart is the
14 output, which is presenting to the Commission a systematic and
15 simple representation of what the risk reductions are and what
16 their costs are so that the Commission has a basis for them to
17 relatively clearly make the tradeoffs between what this is gonna
18 cost and what we're going to get, given that this much cost is
19 invested in terms of risk reduction. So, the question now is, did
20 the work done under the auspices of the Commission result in
21 this basic type of framework to support the Commission in
22 making its recommendation

23 I have several points which will be laid out on these slides
24 and are available on the handouts and in a slightly longer 3-page
25 version of text. There's about 14 points. The first four are

1 essential, missing elements in the reports. These things that
2 may have been done in the course of the work, but they are not
3 presented in the report in at least a clear enough way for me to
4 determine that they were adequately in support of the
5 Commission's work.

6 The first is the risks, as presented in the ECO work are
7 basically in terms of probabilities and oil spill extents as a
8 function of oil spill location and size and time from the spill to
9 one day, seven days; and in one case 28 days.

10 If we are evaluating the emergency response system, it
11 would seem to me that we should be looking at that risk in
12 terms environmental damage and the mitigated impact. Now,
13 I'm speaking here as -- a decision analyst, you know, is about
14 how you try to support decisions made by a policy-making body.
15 I'm not speaking as a person who is familiar with what can be
16 done with emergency response systems in Cook Inlet and Prince
17 William Sound. So the point in my making this point is that this
18 is something we should discuss perhaps in the course of our
19 work shop over the next day or two.

20 We have to do something like this, presenting risks in
21 some form besides the probability in an oil spill extent, if we're
22 going to be evaluating the effectiveness of contingency plans and
23 plan modification. Again, the general gist and focus of the ECO
24 report, and this is not quite doing it justice, 'cause I'm reducing
25 it to about one sentence is, no matter what, if oil spills on the

1 water is gonna hit the shore, this is bad news. Let's focus on
2 prevention. And I think that's actually largely true. But we
3 should be looking at things that could be done on the
4 contingency planning and in case those may be effective. And by
5 the way, they may wind up being cheaper than enforcing a
6 double hulls on tankers.

7 On the second point, we should discuss the importance of
8 resource defense and contingency plan. It's been demonstrated
9 fairly clearly, I think, that to send your emergency response
10 resources to the site of a large spill and have them start to clean
11 that up, you may hope to collect five, 10 or 15% of the oil. Most
12 of the oil spilled is going to get to the shore, so perhaps your
13 emergency response resources and equipment and decision
14 making and manpower, should all be oriented toward scrambling
15 toward resources to be defended, not the oil spill site itself.
16 Again, this did not come out in the ICO report and it is the
17 subject that we should be discussing. We have to do this, again,
18 to evaluate the effectiveness of the contingency plan and any
19 modifications we may want to suggest for those plans.

20 The other two missing elements, again one of them
21 focuses on contingency plans -- the scope of work for the study
22 calls for a systems analysis of the contingency plans, evaluating
23 their sufficiency and capability of response management
24 structure and decision-making processes and the ability of the
25 plan to function as a guide and advisor. We have heard some

1 general conclusions from ECO in that direction, but we haven't
2 hear a systematic analysis of what needs to be done in order to
3 bring those plans into compliance with this ideal.

4 Also, it's fairly well established in the emergency response
5 literature that there is a need for drills and exercises with
6 contingency plans. Again, this is something that was not brought
7 out in the ECO report and if it should be there, we should have it
8 there and discuss that in the next day or two.

9 Finally, the point having to do with the importance of
10 whether or not there should be a requirement for double bottom
11 hulls on tankers and this is a point -- it would be good if ECO
12 could enlighten us on the net reduction or increase in risk by
13 the double hull system. And this has to do with if you have the
14 most, the largest spacing between the inner and outer hulls, you
15 do reduce the capacity of the tanker, so you increase the number
16 of port calls. So now the question is, with that larger spacing,
17 do you increase the number of port calls by enough that in fact
18 you may increase the risk or what is the net change in risk,
19 taking into convone (ph) the fact that the double hulls will
20 decrease the spill, given a collision or a grounding, yet the
21 double hulls will at least with one of the versions would increase
22 the number of port calls and therefore increase the probability of
23 a grounding for a particular volume of throughput in Valdez.

24 To look at the flow chart then, we see that these four
25 points focus around the emergency response mitigated impact

1 and around the characterization of what the system
2 modifications would do in terms of the net change in risk and in
3 terms of what changes we might wanta make on the contingency
4 plan.

5 Going next to another set of points on the ECO report.
6 There's several of them which I would characterize as simply
7 points of clarification. By the way, with almost all these points,
8 I've been in telephone conversation with ECO and in some of
9 these cases I've been satisfied as much as I could from a
10 telephone conversation that these points were addressed in the
11 course of the work, but simply don't happen to appear in the
12 report. So the report, as a basis for policy making,. should be
13 expanded in these directions.

14 First of all, to explain how the system modifications were
15 identified. The overall thrust of the ECO report is to take these
16 system modifications, see how much they reduce the risk and
17 see what they cost and present those results to the Commission.
18 Therefore, it is very important to make clear, did we look at all
19 the system modifications that we should have. Did we look at a
20 range of modification including ones that might've been too
21 extreme and would simply be not to be cost effective, given that
22 the bottom line or the conclusions of the report have to do with
23 the cost-effectiveness at some level, perhaps not dollar for
24 dollar, but in some sense the cost effectiveness for the system
25 modifications we should be clear as to have we been complete in

1 nominating those system modifications for consideration.

2 Point #6, present a rationale for spill location from sizes.
3 Actually, they have spelled out why they arrived at particular
4 sizes, but it's not clear from the report how they arrive at those
5 locations. I know from conversations with Virgil Keith there's a
6 certain amount of logic that went into identify the spill locations,
7 but those should be presented to people to consider.

8 Point #7 is present the rationale for the recommended
9 number and location of emergency response vessels. Perhaps
10 that was in the report. I didn't catch it. It simply mentioned
11 that there should be two in Cook Inlet placed in particularly
12 places and that the existing number of vessels in prince William
13 Sound is adequate. That should be spelled out.

14 In the back, about 1/3 of the ECO report lays out the
15 extent of the spills for, in one case it's for one day and one week
16 and for another case up to four weeks. And in order to make
17 those understandable to people like me and perhaps members of
18 the Commission, we need some discussion on the significance of
19 those times to the spill extent. That significant would cover
20 such things as the effect of weathering on toxicity, the effect of
21 weathering on the ease of cleanup; and maybe most importantly,
22 what emergency response measures become feasible with a long
23 enough lead time. That is, you can do things with 28 days lead
24 time, you can't do with a seven day or a one day sort of lead time.

25 This has been brought up just before my talk that we need

1 some explanation of the calculation that the oil spill reductions.
2 And it would be good to present those reductions separately for
3 each modification so some decisions could be made to
4 recommend some modifications, but not others. Again, in
5 talking on the phone with Virgil Keith, there is a logical sort of
6 methodology which ECO followed, but we should have that
7 presented and discuss it. It would be good to see that laid out
8 line by line, or modification by modification so we'd have the
9 basis for deciding well perhaps we shouldn't recommend all of
10 Group II or all of Group III, but recommend only a particular set
11 of them that seemed to be most effective, if the data will support
12 that.

13 I'll present the rationale and data sources for the cost
14 estimates. Point 10 stands by itself. Point 11, to discuss the
15 differences between the nominal tanker, which was developed
16 for the two tankers, which were developed, and the expected
17 fleet that would result from regulations set.

18 Now this is somewhat of an unclear point, but we should
19 address the fact that the risk reduction stated in the ECO report
20 were based on the two particular tanker designs. What'll happen
21 in the real world in terms of what fleets would come into Prince
22 William Sound and Cook Inlet as a result of the regulations is
23 another question. And that should be discussed. If, in fact, the
24 Commission's gonna be considering the possibility of regulation
25 for the tankers.

1 Finally, and this has been mentioned before my talk, that
2 ECO did run their models and simulate the Exxon Valdez spill
3 and that should be in the report. We'll be going over that.

4 Finally, just a couple of points, almost simply on report
5 writing. And that is to present some graphics to clarify the risk
6 reduction numbers which I see they've already started to do.
7 And some linking up of those probability reductions and the oil
8 spill extents which you see in the back of the report. We see
9 that there's these large black parts of Cook Inlet and Prince
10 William Sound. Particular days delays and sizes of spills and
11 location of spills, it would be good, again, from the point of View
12 of the Commissioners or people like myself to say, aha, with this
13 Group I modifications reduce the probability by this much. What
14 sort of spills are we talking about in terms of what does that
15 reduce probability mean in terms of where those areas go. Now,
16 I would assume again, once we -- if we can start looking at
17 different emergency response measures. Some may be effected
18 at the 28 day and the seven day level, but could not be affected at
19 the one day level. So we would look at differential sorts of
20 effects over the different time delays on the oil spill extent.

21 And finally, this point was brought out to me by Mike
22 Herz. who on the phone says, there's no summary to this report.
23 We should put that in too.

24 That's the extent of my talk, a critique of the ECO report.
25 If there's any questions, I'll entertain them.

1 MR. HAVELOCK: I like it.

2 MR. LATHROP: thank you.

3 MR. PARKER: Okay, thank you Mr. Lathrop. We have 25
4 minutes to discuss this if the Commissioners would return to the
5 table please. And I would like the discussion to focus on what
6 we wish to hear from these gentlemen tomorrow, both ECO and
7 Mr. Lathrop on -- tomorrow as we get into these discussions. I
8 have a note here from Mr. Sund I have to answer. Counsel,
9 perhaps you can lead off and explain the relationship of what you
10 heard, since you liked it so much.

11 MR. HAVELOCK: Well, the reason I like it did point out
12 some areas which I suspect that Virgil can comment on where
13 he anticipates doing some more work. I think it's important to
14 remember in this -- it reminds me of why we're not doing a
15 draft EIF on our report. That is, we're laying something out here
16 for everybody to shoot at and I think that Virgil and the ECO
17 group expect that and I anticipate that the function that he
18 would explain and would appreciate his and it allows him an
19 opportunity to improve his report as he moves from the draft to
20 a final.

21 MR. KEITH: Absolutely.

22 MR. HAVELOCK: So, I -- would you agree that there are
23 some points there that you probably want to address?

24 MR. KEITH; No, I think all the way through. John
25 Lathrop has called, advised us of this. Obviously we were

1 developing this kind of on the run to meet that deadline of yours
2 and I think these things, John had the figures at the end and I
3 asked Dick Willis to do that so you saw the graph and we
4 presented in different form, and we certainly -- I don't see
5 anything that John has presented that would give us any
6 problem in meeting those comments in the final rept.

7 MR. PARKER: I would like some explanation on the
8 sensitive areas focus the Department of Environmental
9 Conservation is spending \$600,000 on contingency plan and
10 that is not going to result in contingency plans and sensitive
11 areas are a part of final contingency plans. I'm at sea as to where
12 we get into sensitive areas. John.

13 MR. SUND: No, I just had another point. I'll follow after
14 he answers that question for you.

15 MR. PARKER: I'm just not sure where sensitive areas
16 came into this.

17 MR. SUND: Maybe my observation here -- it began to
18 strike me after Fish and Game was testifying here today in
19 writing these contingency plans out that there really is two
20 different scopes here, right. I mean their whole discussion was
21 where do you place boom to keep oil from getting into a
22 sensitive area, protection of habitat in other words, and, with
23 John's questioning, well how does their role counter with DEC,
24 they said DEC's in charge of stopping pollution. So if DEC wants
25 to use boom to corral the oil, fish and game wants to use boom to

1 keep the oil from getting into their sensitive area and hope to
2 God someday it'll disappear. It'll either pass by, not show up, or
3 go by very quickly and keep going to somebody else's back yard.

4 MR. HERZ: But DEC doesn't care about whether the oil is
5 there other than the fact that oil is there other than the fact that
6 it's a resources.

7 MR. SUND: I'm just saying that I wrote down those notes,
8 sometimes two or three hours ago and Lathrop comes up and
9 points out, I think again just emphasizing it that in your
10 contingency plan, where are you gonna go. Are you gonna run off
11 to boom off the hatchery or are you gonna run out and try to
12 boom off the spill. And maybe there's a way you do both, but you
13 oughta at least think about where your line of attack is. And I
14 know the guys at Prince William Sound Hatchery down at
15 Biswack, when they heard about it, they bought a bunch of boom.
16 They didn't care about where the oil was, they were booming off
17 the hatchery. I mean that was there first reaction.

18 So I just - for you guy working on contingency plans, I'm
19 planning to keep the oil out of the water myself. That's my
20 focus.

21 MR. HERZ: But, my point when I interrupted you, my
22 point was the sources are a damn both because if it weren't for
23 them we wouldn't care about the oil being out there in the water.

24 MR. SUND: Well, we never have up until the Exxon
25 Valdez.

1 MR. PARKER: Well, in defining sensitive areas, one
2 reason we've had such a great discussion on dispersants is
3 between those who wanta protect the beaches and those who
4 wanta protect the water column, but when you talk about Prince
5 William Sound you are, in effect, talking about a totally sensitive
6 area. The -- there's very few parts of the Sound which either
7 Fish and Game or the Fish and Wildlife Service is not going to
8 put an emphasis on when it comes to the water column which is
9 why they had such difficulties in working out Zone 1, Zone 2,
10 and Zone 3 for dispersants. There was some classic battles
11 involved in that and several years spent in working it out. The
12 same applies to Cook Inlet. My friend, Mr. Flagg, in the back of
13 the room, one of the outstanding, most knowledgeable people on
14 Cook Inlet and it's resources. Possibly there are some areas in
15 the upper Inlet, would you say Loran, where -- that are a little bit
16 sterile, but there's very few places in the lower inlet that you
17 don't have a.....

18 MR. SUND: Out here off the dock.

19 MR. PARKER:high necessity to protect the water
20 column. So, that's kind of why I'm at -- I understand this
21 debate, but I'm still somewhat at sea as to where we're going to
22 get into it tomorrow and the reason I'm bringing it up so
23 everybody can think about it overnight and kind of get their
24 arguments lined up as to where the Commission should involve
25 itself in this particular area.

1 MR. WENK: Mr. Chairman.

2 MR. PARKER: Ed.

3 MR. WENK: First of all, I think what's been presented
4 here today is enormously useful and I think it -- the Commission
5 is confronted with the question of what does it mean. Because,
6 and Mr. Lathrop I think underscored this right off the bat by
7 saying he's coming at this from the point of view of decisions,
8 which the Commission has to make. And it strikes me as having
9 listened, read the reports and listened to these presentations,
10 that we're not quite at that stage where the Commission can
11 indeed make the kinds of decisions that it's going to be
12 confronted with. And I'm not sure how to do this at this stage
13 because time is so short, but here is a suggestion at least. I
14 wonder if it would be useful if, having had the benefit of these
15 presentations, if each commissioner would identify the kinds of
16 decisions that Commissioner thinks ought to be made on the
17 basis of this input of data and analysis. And what may yet be
18 missing that would give them a high degree of confidence in
19 coming to some kind of a conclusion.

20 I'll share right off the bat my own feelings in this regard.
21 I was impressed with taking some of this risk analysis, the three
22 decimal places without having any indications of what the
23 uncertainties were and without having any statement of what the
24 assumptions were and I don't believe the assumptions could be
25 stated to three decimal places. But the fact of the matter is the

1 methodology isn't there. You used it, Virgil, but it's not in the
2 report that -- and it isn't just satisfying a Commissioner. This
3 report is gotta stand up before a peer jury of potentially hostile
4 readers and my feeling is that there -- that the kind of
5 methodology that was used needs to be explained in a good deal
6 more detail in order for at least this commissioner to have
7 adequate confidence. Now you know I mentioned this to you in
8 Annapolis and again in a special phone call. I think though that
9 what one Commissioner feels isn't the point. The question is
10 what are the decisions the whole Commission needs to arrive at
11 and along the lines of the gaps that Mr. Lathrop identified, I
12 think that it would be feasible to identify these such that ECO
13 could then go back and complete the job they've done so well at
14 this stage, but in a timeframe within the Commission can look at
15 a final product and arrive at some kind of conclusions. I'm not
16 sure, speaking only as one, that we're ready to do that and it's
17 the kind of highly technical detail that I'm not sure the
18 Commission needs -- is prepared to deal with. It's the kind of
19 thing that I believe staff are in a far better position to evaluate
20 and respond to.

21 MR. PARKER: Madam Vice-Chairman would you take over
22 for a minute. I.....

23 MS. WUNNICKE: Sure.

24 MR. PARKER:feel we're getting into a gyra (ph) again.

25 MS. WUNNICKE: Any response to Commissioner Wenk.

1 Counsel.

2 MR. HAVELOCK: Yeah. I think that the proposal for the
3 agenda was that we would make some tentative decisions. I --
4 Commissioner Wenk's entirely correct. You're not ready to make
5 final decisions on anything. But in lieu of the time sequence that
6 we're dealing with, the time limitations it seems to me and what
7 is set out for the next two days, you've got a, you know, some
8 proposal that I have made of tentative areas to go into that you
9 may be willing to say yes this looks like maybe the
10 recommendation we're gonna make. You have the opportunity to
11 back off at the next meeting, saying we don't have the data-base
12 to, or whatever, to support this or not enough facts. And I might
13 add, I don't think everything depends on the ECO report at all. I
14 mean, you've been listening to hearings. There's a whole lot of
15 information that you as Commissioners have that go well beyond
16 the scope of this technical report, which you'll remember it's a
17 technical report to support what you otherwise might be doing,
18 rather than being a substitute for the judgement of the
19 Commission.

20 MR. WALLIS: You can look at that another way too, you
21 know.

22 MR. HAVELOCK: So, we get the guidance. What?

23 MR. WALLIS: We can go ahead and make the decisions
24 and have 'em back us up.

25 MR. HAVELOCK: I assume to the extent that you make

1 these tentative decisions and they work up improvements in
2 their report, that that's exactly what'll happen, although I'm
3 trusting their trusting their scientific integrity. I'm sure that if
4 further data causes them to change their mind, they will no
5 doubt tell you.

6 MR. KEITH: All I can say, Mr. Havelock and maybe Joe is
7 right here, we've got the most extensive data-base in the world;
8 over 20,000 casualties. We've got the real time simulator that
9 you've handled, that Commissioner Sund has handled. We put
10 the best available technology available -- sure, we're gonna admit
11 it's not perfect. They're estimates on this thing. We pushed it a
12 long ways to take these groups to kind of -- which is the
13 direction that you originally prodded us on when you can into
14 Annapolis early in the game is we broke this into groups because
15 we knew in that time frame it was impossible to say, take one
16 group at a time and run that through the simulator and get any
17 meaningful data as well as through the data base. So we kind of
18 presented that as a Group I additions, and I think
19 Commissioner, originally we had them called phases and
20 Commissioner Sund changed that to Group to indicate they
21 could all start at the same time. We're very, very confident in
22 those numbers. Now, it's based on the simulator. It's based on
23 the real time simulator. It's based on the data-base. It's going
24 back and each of those improvements that we've stated in there.
25 Whether that be in tanker design and the vessel monitoring

1 system and so on down the line. We've laid those costs wide
2 open and sent the report to anyone around that's had it. If
3 somebody disagrees with those figures on the vessel monitoring
4 system or on the tanker design or anything else, they're free
5 right there to challenge. You know it's got extensive publication.
6 Now if you say you want more data on how we come up with the
7 14% reduction within that group, sure we can go through and
8 show you have it attacks the data base. But basically we've got a
9 computer data base that ECO has developed and maintained over
10 15 years. We do it for the -- run the data base for the United
11 Nations for OTA. We just completed it for GAO on the testimony
12 down in Kenai. And we can show you how it comes in and it
13 attacks those data bases, on that data base for only the oil spill.
14 Again, we tried not to complicate this with looking at collisions
15 and grounds and saying only one out of the seven collisions
16 resulted in oil spill. And again, we talked with Mr. Havelock in
17 this early. We went right to the oil spill, so you're dealing with
18 oil spills in each and every group.

19 Somebody was saying we should give the Commission
20 more alternatives. Well, we looked at the three alternatives. You
21 look at Group I, you can get that improvement with, your word,
22 Esther, on institutional changes almost at no cost to do those
23 things. In fact, we're happy. We look out there now in Prince
24 William Sound and also Cook Inlet, a lot of those are being done.
25 In fact, a lot in Group II are being done. That, to me, says a lot

1 for the type of things that we're doing in there. So then, Group
2 II has a higher cost. If the Commission decides nope, Group II
3 is too expensive, we only wanta stop at Group I, we tried to leave
4 it that way. At the same time, we're ready to admit the most
5 controversial, the toughest one is Group III. And maybe there's
6 other ways to do that. So if one wanted to only stop at Group I
7 and Group II, you could and see that improvement and stop
8 there.

9 And then with regards to that contingency planning, I
10 think that was the subject of a whole additional report that we
11 sent up on the 30th of October that I know Commissioner Herz
12 just got today.

13 MR. HERZ: No, I still haven't got it.

14 MR. KEITH: I gave you my copy.

15 MR. HERZ: This isn't contingency plan. This is.....

16 MR. KEITH: This is the equipment that would go in
17 there.

18 MR. HERZ: Right. But still, I didn't know -- I don't know
19 that anybody on the Commission has seen the contingency plan
20 element that you've done.

21 MS. WUNNICKE: Is there a third.....

22 MR. HERZ: Is there a separate report.

23 MARILYN: Is that what you gave me Virgil?

24 MR. KEITH: Yeah, we sent that out to staff on the
25 addition of comparing the contingency plans and that kind of

1 things. I thought that the staff may wanta re-do that.

2 MR. PARKER: Didn't that get passed out to all the

3 Commissioners?

4 MR. WENK: No, I don't think any of us have seen it.

5 MR. KEITH: So, we tried to do that early so it gave the

6 staff and people a chance so that at least we weren't responsible

7 for holding up the progress.

8 MR. WENK: Well, excuse me. Virgil you understand that

9 there isn't a single number you've provided that I've questioned.

10 MR. KEITH: Absolutely, sir.

11 MR. WENK: What I believe I would feel, speaking again as

12 an individual, more comfortable with is if you did simply explain

13 the methodology that you used. Now Mr. Lathrop several times I

14 think leaned favorably toward what you did with certain

15 assumptions with regard to that methodology, but then

16 footnoted it by saying it was not in the report. And I think I

17 heard that several times. And I think what would add some

18 confidence in terms of your conclusions which you, I know want

19 us to agree with, would be if you told us how your arrived at it.

20 MR. KEITH: Fine.

21 MR. WENK: You don't want us just to say, trust us. I'm

22 sure you don't wanta say that.

23 MR. KEITH: Absolutely not.

24 MR. WENK: Okay.

25 MS. WUNNICKE: Mr. Chairman, as the lease, technically,

1 expert person on this panel, I would like to say that I agree with
2 Counsel. This is very valuable to us, but I don't think it dictates
3 the Commission's decision. We have a wealth of experience
4 sitting on the panel. We have had reams and reams of testimony
5 from knowledgeable people so I'm interested in a reasonable
6 foundation I think, for reasonable decisions and so I'm
7 comfortable with what we have.

8 MR. KEITH: Commissioner Wunnicke, what we tried to
9 do is all the way through is we recognize that decision. We're
10 out here as your technical experts, not to make any decisions,
11 just to line them up in groups and not even to advocate various
12 positions. For instance, on the double hull that Commissioner
13 Parker talked about, we talked about the three ranges. We
14 talked about the Type I, the Type II, again being careful not to
15 advocate any one. Then we took the new one that appeared to
16 be on the horizon that Mr. Pourchelli and the rest of us put
17 together and we decided, well let's expand that one because that
18 one hasn't been done before. All the other ones are out in the
19 rules and regulations and the Code of Federal Regulations. Here
20 is a brand new alternative that the commission -- and the key
21 word is may, may want to consider. Again, and we try to be very
22 careful just to kind of present the alternatives just as suggestions
23 to you.

24 MS. WUNNICKE: Thank you.

25 MR. HERZ: I think what -- Mr. Chairman. I think where

1 this report and the information that you've presented today has
2 sort of placed me relative to making decisions is someplace that
3 perhaps Commissioner Sund has been for a long period of time.
4 He's been poo, poohing the response stuff since.....

5 MR. SUND: No, no, I left it up to you to deal with.

6 MR. HERZ: Well you bailed -- you personally bailed out of
7 it. I think that what particularly.....

8 MR. SUND: I was assigned to a different task.

9 MS. WUNNICKE: Gentlemen, gentlemen.

10 MR. HERZ: But, as particularly been demonstrated in he
11 last 24 or 30 hours of what we have heard here has made it
12 more and more apparent to me that the response side can be a
13 very, very expensive way to go and we see that that is the
14 decision that Alyeska has made or the community has
15 contributed to Alyeska's making. And a tremendous amount of
16 money, I think 27 million dollars is the number that sticks in
17 my memory. That seems like a fairly sizeable upgrade. And the
18 question is the cost effectiveness of it. And I think what we're
19 gonna have to cope with here, over the next couple days as we
20 go through the workshop and move into trying to decide what
21 recommendations we're going to make and which ones are
22 gonna be the most important ones, is weighing of cost
23 effectiveness. My colleague, Mr. Sund has already made his
24 decision that, I don't know if he would give us a dime for the
25 response side. He's gonna put all of his dollars into prevention.

1 But I think that this information has made further concrete that
2 feeling that has been evolving and that we now are at a place
3 where you've given us some fairly concrete date, although I agree
4 with Commissioner Wenk that some of those rationales and how
5 you went and made the steps need to be in here because we're
6 gonna be shot at, particularly if we come out saying that
7 response expenditures don't seem as justifiable as prevention,
8 we're going to be shot at by a very heavy artillery.

9 MR. KEITH: I think one thing -- and you heard it from
10 Fish and Game and we were delighted that Bob Schultz -- I know
11 most of you is literally one of the world's experts on prevention
12 and oil clean up equipment, joined us on this. We tried to make
13 a point though that can't be ignored. In other words, we think
14 on the small spills, the Commission gave us direction to look at
15 large spills. Our smallest spill was a million gallons. Then up
16 into 10 million; then in the case of the 70 million. That's
17 certainly in the small spills that's needed. And you certainly
18 have to give it your best effort. In other words, you heard it from
19 Fish and Game. I think, you know, there could be cases. For
20 instance a spill in Port Valdez, which is very logical, right at the
21 terminal itself; in that case it's very possible you could close off
22 the narrows and attack it from the narrows on in and keep it
23 from going out in Prince William Sound. So, while it's hard to
24 put a number on that, you can't do it on these large spills. We're
25 saying and I think that's why we stressed that, and that's why it's

1 a total subject of a separate report that we gave you is that we
2 think it would be a mistake to throw up your hands at that. In
3 other words, the effort that you're seeing Alyeska doing now is
4 certainly what we feel is a necessary step. We think the people
5 can't be deceived in thinking that if Exxon Valdez, if we had that
6 accident right today we don't feel the results would be much
7 different, because unfortunately, Alaska doesn't have this ideal
8 conditions. And this came up during the testimony at Kenai. So,
9 realistically, you're gonna have days out there like today when it's
10 gonna be darn hard to pick that up.

11 On the other hand, you be lucky like on that good Friday
12 and hit a day that was "atypical" when it was just flat calm and
13 you could make a significant progress on that.

14 MR. HERZ: That's the second time you mentioned us
15 closing off the Arm. What's the width of the channel there and
16 what's the tidal current ?

17 MR. KEITH: it's about 900 yards to Middle Rock and
18 another 900 yards on the other side, so we're looking at
19 approximately a mile, nautical mile. Now the current in there is
20 about a knot. So if we divert the boom, Mr. Schultz that -- the
21 glossy you're looking at is the glossy perpendicular to the boom.
22 So if we could the boom at an angle, perhaps we could do
23 something under certain kinds -- right up in Port Valdez itself,
24 as opposed to Cook Inlet which has much higher currents or
25 other places in Prince William Sound.

1 MR. HERZ: But in terms of the sensitive habitat
2 protection kind of notion, that may be the kind of upgrade that
3 might be doable. You might have to manufacture a totally newly
4 conceived of kind of boom that's deployed in a different kind of
5 way. It's be more like a semi-tidal gate or lock or something.
6 And there may be a number of places where a solution like that
7 might be used. But, when some of us at least, were thinking
8 about the upgrade that would be implemented or could be
9 implemented to save resources that protect sensitive habitats,
10 that's the kind of stuff that we were talking about as putting out
11 as something that you could actually put a cost on and figure out
12 a reduction in damage, potential damage.

13 MR. KEITH: I think Chairman Parker mentioned that
14 earlier. We think that there should be -- you know there hasn't
15 been any R&D in this area for basically the last 10 years. Bob
16 Schultz testified to that. There should be a mounted R& D to
17 look at this and we also on the Commission in addition looking
18 at dispersants is looking at chemical non-dispersants. New ways
19 to attack this. Now, unfortunately, that's not going to be
20 something that's going to be available within the next year or
21 probably within the next five years.

22 MR. SUND: I think, Mr. Chairman, just to clarify my
23 position a little bit here that I have not really advocated not
24 doing the response work here. I think I - Fish and Game kind of
25 gave me a little different approach on it today and I think I tend

1 to agree with them that there is a lot of work that could be done
2 to get ready to protect sensitive critical habitat area. I think you
3 still have to figure out how to pick it up, but where my great deal
4 of frustration has been is the emphasis that is being placed on
5 response versus the emphasis that's being placed on prevention.
6 I don't see any movement by the industry, or the Coast Guard or
7 the regulatory agencies or anybody else really, large effort to
8 prevent. I see a lot of effort getting ready to pick up, other than
9 the escort vessels. I will toss that in, that's somewhat of a
10 prevention aspect.

11 MS. HAYES: Yeah.

12 MR. SUND: So I think that's just an emphasis. Besides, I
13 was put in charge of trying to prevent these things, so I advocate
14 my point of view.

15 MS. WUNNICKE: Mr. Chairman, Mr. Sund's just saved
16 himself from disassociating myself from him. I take this view
17 that if I were in an elevator that was falling, I would still try to
18 jump up just before it hit the ground and.....

19 MR. PARKER: In getting back to sensitive areas, we heard
20 Fish and Game say that they found, I think it was 160 new
21 salmon streams in Prince William Sound in their survey, they
22 didn't know about despire going in there for 30 years.

23 MR. SUND: The fishermen knew about it Mr. Chairman.

24 MR. PARKER: The fishermen knew about it. They
25 regularly poaching them. But, the point I'm making is I'm not

1 quite sure -- again, that's what I want you to think about is where
2 does the Commission come on this. You know, I worked for
3 three years turning out regional profiles on this state and then
4 fish and game, you saw what their documents were. And my
5 colleague and I turned out a lot of documents dealing with these
6 particular areas, and it's a big state and there's a lot of sensitive
7 areas, so other than saying contingency plans could protect
8 sensitive areas, where do we go? Meg.

9 MS. HAYES: I think it would be an improvement from
10 what I understand the current state-of-the art in Alaska of
11 contingency plans is. They have had, at least the ones we know
12 about, identified within the plants. Up until.....

13 MR. WENK: The ones meaning sensitive areas.

14 MS. HAYES: Sensitive areas. I mean until the wreck of
15 the Exxon Valdez it sound as though the contingency plans were
16 mostly expected to be telephone trees of notification of who
17 does what and start pulling out for containment of the oil, if even
18 that far. But not yet gotten to the stage of where do we want to
19 protect? And I think that some recognition of that, even the
20 ones that we know now, realizing that that's -- our knowledge is
21 going to increase would be an improvement on existing rate
22 contingency plans.

23 MR. WENK: Mr. Chairman, I'd like to strongly support
24 this position of my colleague, here. And I think that there's
25 already been a start made in that direction in this identification

1 of Group I, II, III in terms of sensitivity and, as I understand it,
2 using dispersants and so on. But I think that Mr. Lathrop's point
3 just nails home the fact that in the few short hours you've got,
4 and I think ECO makes this point very well in terms of how
5 swiftly the response has to be enacted. That in the few short
6 hours you have, some very important tactical decisions have
7 gotta be made in view of the fact that you can't do everything at
8 once any way, even if you had all the stuff there, number one.
9 Number two, you have the inevitable desire to do everything and
10 the only way you keep your head is by some rehearsals in
11 advance. And this, it seems to me, is where you bring out the
12 sensitive areas once more. Fish and Game might resist
13 identifying the particularly sensitive areas in saying we need all
14 of Prince William Sound as, Mr. Chairman, you said earlier. But I
15 suspect if you told 'em that you're gonna be limited in resources,
16 you have to make a choice; really force 'em to say you can't cover
17 everything. Now then, with this much resource, what do you
18 do? And this is where you've got to the sensitive areas. Then,
19 we have more resources, what's the next thing we do. That
20 gives a totally different direction then, to the contingency
21 response people. Then if it's going out there, doing everything
22 everywhere and succeeding in doing nothing.

23 MR. PARKER: Meg.

24 MS. HAYES: Mr. Chairman, I realize that I should probably
25 wait until tomorrow for this question, but I'm afraid I'll forget it.

1 Yesterday, when we were having testimony, I can't for the life of
2 me recall off the top of my head who said it, but somebody
3 mentioned that the reason there are escort vessels in Prince
4 William Sound and Puget Sound is because the bottom
5 configuration doesn't allow anchoring in the case of the loss of
6 power. And my question is, what is the situation in that regard
7 with respect to Cook Inlet?

8 MR. KEITH: In Prince William Sound, the depth of water
9 is such that anchoring is prohibited. So if anything happens, you
10 don't have a change at anchoring. You've got to get that escort
11 vessel over site. Cook Inlet is such that anchoring is an
12 alternative. You do have high currents. It's a difficult maneuver,
13 but it is an alternative. So in that point of view, Cook Inlet is a
14 plus. That anchoring to be considered is one of the means by
15 which to hold the tanker.

16 MR. PARKER: With a follow on to that of our two day
17 session with the Cook Inlet shippers, which I didn't attend all,
18 but which Dooley did, why the Cook Inlet Shippers were quite
19 strong on that anchors are there first defense. That's why they
20 don't use tugs in Cook Inlet, they use anchors in place of tugs.
21 And I'm not an experienced enough mariner to debate that
22 particular point with them. We were just -- Meg asked about
23 Cook Inlet and why, and escort vessels and so forth and anchors.
24 Do you care to expand anything on what I just said?

25 MR. DOOLEY: I'm sorry I walked in.

1 MR. PARKER: Forget it. We'll do it tomorrow.

2 MR. DOOLEY: Mr. Williams from CIRO is here.

3 MR. PARKER: Yeah, but he's not a mariner either. I'm
4 not gonna make him put on a captain's hat. He's a fisherman,
5 but....

6 MR. _____: (Indiscernible) said by the mariners at
7 that meeting and, in fact, anchors are a viable alternative. There
8 was some discussion about the technique (indiscernible) you
9 have an old laden tanker moving at a certain speed either
10 because of tide, current or because its (indiscernible) the anchor
11 has to be dropped very slowly to slow the vessel down
12 (indiscernible). But most people felt, at least the mariners felt
13 that with guidance of the pilot and the master that
14 (indiscernible) I heard a comment recently about whether
15 anchors could be deployed, whether they'd work or not.
16 (Indiscernible) Kenai Pipeline Facilities anchors were used
17 every time the tanker lands. So those anchors were in working
18 order right here in Cook Inlet, 'cause they use the anchors to
19 slow them down so they will not impact the dock at a high
20 velocity. It's a common maneuver used by the tankers currently.

21 MR. PARKER: And the way they slow 'em down is they
22 bounce it along the bottom just the same way sail boat skippers
23 do so they don't rip their anchor off. John.

24 MR. HAVELOCK: Mr. Chairman, I'd -- this is a fascinating
25 discussion, but I would recommend that you close it out and get

1 Harry Bador for (indiscernible).

2 MR. PARKER: Yes, I was just going to do that. Thank you

3 gentlemen, and we'll see you all tomorrow.

4 MR. WALLIS: Now why didn't you say that when we were

5 approached lunch.

6 MR. PARKER: Harry, come on up.

7 MR. BADOR: I have yet another installment on the daily

8 SeaGrant paper. If you wanta.

9 MR. SUND: Is this a new one or a re-write.

10 MR. BADOR: This is a new one. This is the contract.

11 MR. PARKER: Okay, Harry. For the benefit of the

12 audience, this is Harry Bador. Harry's a natural resource

13 professor at the University of Alaska, Fairbanks. When he's not

14 teaching, he's an attorney, but he would rather teach.

15 MS. WUNNICKE: I thought he was a trapper.

16 MR. PARKER: Right now, this winter, he's a trapper, but

17 he can't get across the Yukon to his headquarters camp.

18 MR. BADOR: Well, it's 56 below in Eagle last week. I'm

19 betting on it's solid now.

20 MR. PARKER: Okay.

21 MR. BADOR: Also for the benefit of folks as to who

22 SeaGrant is, University of Alaska, Fairbanks is a SeaGrant

23 institution and it's director is Ron Dearbourn who put this group

24 together. The group coordinator is Zigmund Flauder (ph) who is

25 currently the environmental law professor at both Harvard Law

1 School and Boston College Law School. Also involved in Allison
2 Reasor who is the director of the National Maritime Law
3 Institute and is currently at Yeal and Ralph Johnson who is a
4 professor of national resources at the University of Washington
5 Law School in Seattle.

6 Basically, what the goal of the research team was is to put
7 together a strategy for a comprehensive oil spill prevention and
8 response system that'll coordinate and supervise planning and
9 contingency operations and enforcement and establish a
10 streamlined command hierarchy. Our concerns in establishing
11 this system was foremost to stay clear of pre-emption
12 challenges, to insure that the state is powerful enough to exert
13 substantive control and at the same time incorporate and be
14 sensitive to local community needs. Three, to be effective in
15 controlling the industry and efficaciously in supervision and its
16 monitoring and its enforcement as well as maintaining the
17 power of emergency requisitioning and the ability to direct
18 industry clean up and prevention activities.

19 And finally, our goal was to achieve a unitary approach
20 which, of course, the focus of this commission is on tankers, but
21 the idea is that tankers are not alone the problem. The problem
22 is the development and trans-shipment of oil in the state of
23 Alaska and pacific waters. And as such, whatever institution or
24 recommendations or modifications that are made must be able
25 to be flexible enough to be able to adapt to the needs to regulate

1 the oil industry along the pipeline, along the production centers
2 of the North Slope, in terminal operations, as well as tanker
3 operations, and potentially of offshore development and drilling.
4 Because, oil is going to be the problem and whether you have a
5 spill along the pipeline corridor or a spill in Bristol Bay or a spill
6 on the tundra of the North Slope, you're gonna be impacting
7 people.

8 And just as a slight digression, I'd like to point out, we do
9 have spills along the pipeline corridor. Between 1979 and
10 1983, 1.5 million gallons was spilled along the pipeline corridor
11 and one of the main problems is that there are leaks that cannot
12 be -- Alyeska cannot detect leaks less than 2,000 gallons per
13 minute. The Still Creek spill, which is 658,000 gallons, Alyeska
14 can't be held responsible for because it was sabotage, but the
15 inability to locate the site of the sabotage, and detect it, was a
16 problem. The Atagin pass spill, which fouled 30 miles of inland
17 stream and repairing environment, was detected by accident by
18 an Alyeska employee because he smelled hydrocarbons in the air.
19 And if the detection system promised by Alyeska that could
20 detect a bullet hole, or a hole the size of a bullet in the pipeline,
21 is an employee's nose, we have a problem.

22 MR. WENK: Excuse me, did you say 2,000 gallons per
23 minute.....

24 MR. BADOR: Two, according to the DEC Fairbanks office,
25 they cannot detect leaks less than 2,000 gallons per minute.

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MR. WENK: per minute. Thanks very much.

MR. BADOR: Now, in fashioning our proposals, it is our sincere belief that the fisheries and oil are Alaskan resources and it's incumbent upon Alaska to find and implement a solution and a strategy for their own wise use and regulation. Thus, what we aim to do is to identify the attributes of a comprehensive and consistent system which usually finds its manifestation in the federal regulation, and apply it to an Alaskan forum. And the fact is that we feel that Alaska, if it is bold enough and creative enough, has the power to fashion its own regulatory scheme to effect appropriate controls over the oil industry and prevent these types of things from happening in the future and, failing to prevent them, to be able to respond more appropriately to a spill, if it does occur. As a result, we have a list of 10 reports which we're submitting over a period of several days in which we are dealing with a recommendation for improved oil spill prevention regulatory system, which involves a task force; the problems of institutional conflicts; the ability of the state to petition for federal rule making under the Administrative Procedures Act, that you've already received; a pre-emption analysis; the ability to have an emergency resource mobilization system; some judicial remedies to the courts of equity; and then, finally what I'll be talking a little bit more on today as time goes down, is the interstate compact as a potential vehicle.

And now it's my point is that when we talk about rule

1 making petitions on the Administrative Procedures Act, we talk
2 about a Citizens Advisory commission and oil regulatory task
3 force or interstate compact, these are merely strategies to
4 implement the overall goal which is effective regulation for the
5 prevention and then improved response of oil spills. So, of the
6 three strategies, we have no preference, except for perhaps the
7 citizens advisory commission/governmental or Governor's Task
8 Force. That might be the most preferably and politically
9 powerful. But others include the rule making and don't sell
10 Rhodes short, and the potentiality of a compact. I'll just quickly
11 go through the idea of an oversight task force and a citizens
12 advisory board and a joint review panel and goal setting that
13 Ralph Johnson developed.

14 The duties of a task force would be -- first of all it's be
15 lodged in the Governor's office and it would be the oversight of
16 state/federal and private oil and gas activity within or near the
17 state. An important function would to assure that the state and
18 federal agencies are carrying out their duties with regard to spill
19 hazards, either from the pipeline, from terminal facilities, or
20 tanker operations. The task force would contract for
21 appropriate studies to be completed. The task force would have
22 responsibility to assist the state and specifically the governor on
23 recommendations that should be made to the Coast Guard, to
24 the Congress on federally pre-empted issues such as vessel
25 design. The task force should advise the Governor on needed

1 state legislation. We're not preempted by the feds, covering
2 such matters are creation, implementation of contingency plans,
3 optimum areas where tankers should pick up pilots and routes
4 and so forth.

5 Another aspect of this regulatory scheme would be a
6 citizens advisory council. Now one of the problems we have with
7 citizen committees, generally, is that they're initially effective
8 'cause there's a lot of motivation there to get down and regulate.
9 But over time, because of their lack of legal power, they tend to
10 be ignored and participation declines.

11 Well, some of the key attributes which we feel would be
12 necessary to provide the necessary motivation and power are as
13 follows: The committee should have subpoena powers both for
14 persons and for documents. These subpoena powers would
15 extend to relevant Coast Guard personnel and files.
16 Alternatively, congressional bill can create and empower
17 committees to instruct the Coast Guard to cooperate with the
18 committee. These meetings, deliberations, files and the entire
19 process of the committee should be public and available to the
20 press and the appropriate state and federal officials and to the
21 Congress. The experience in the San Francisco Bay Conservation
22 Development Commission is very instructive on this. The
23 committee would also be authorized to conduct investigations
24 and make findings and recommendations. These
25 recommendations would normally carry out -- would only carry

1 political weight and that they would not have the power to be
2 adopted by the federal or state agency or by the industry.
3 However, committee recommendation that are not adopted
4 could be used on sort of the lines of Northwest Power Counsel to
5 enjoin agency conduct until a reason justification pointing to
6 compelling circumstances and premised upon a specific finding
7 of fact is published within either 90 or 120 days. This is not a
8 new or innovative idea. I wanta compare it to the fact that we
9 already have that kind of authority through a compact
10 commission in the pacific northwest. You can also look to
11 Columbia Gorge Commission which exercises veto power over
12 forest service conduct.

13 You've received the preemption analysis by Allison Reasor
14 and the plotter work yesterday, so I'll just quickly go over the
15 inter-state compact for about two or three minutes and then
16 open myself up for questions.

17 The inter-state compact is an idea which is sometimes
18 helpful because it transforms state power into federal power.
19 The consent to Congress by -- of a compact does that
20 transformation. And with the compact, you no longer worry
21 about preemption. You no longer worry about impairment of
22 inter-state commerce and supremacy challenges because the
23 powers that the compact would encroach upon, thereby creating
24 that problem of preemption or inter-state commerce is
25 consented to by the Congress. Therefore, congressional consent

1 transforms and federalizes the regulations promulgated by the
2 compact. Now, in order to ensure that these powers aren't later
3 truncated, a compact would have to specifically detail the realm
4 in which it would find itself acting and what tools it would utilize
5 when you go before Congress and say, here, consent to us.
6 Congress would never consent to a blind slate.

7 The other advantage of contracts is that generally they
8 provide greater local accountability, their compact
9 representatives can be accessed much like state representatives,
10 which is sometimes more beneficial than trying to go through
11 the elaborate channels of a bureaucracy, and they also increase in
12 many ways the responsiveness to the state. There is -- I go
13 through in this compact assessment what's involved in a
14 compact and what you need to include, but that's not necessary.
15 You can look through that or ask questions at any time.

16 Our proposals for the use of compact involve three main
17 possibilities that invoke ten recommendations. Our
18 recommendations are the adoption of a response equipment
19 inventory system which also monitors equipment readiness and
20 maintenance; the development of a comprehensive contingency
21 plan incorporating all effected parties to stimulate a streamlined
22 and coordinated command structure; the creation of a single
23 mission enforcement unit to establish an entity with oversight
24 authority concerning Coast Guard standard settings; to invoke
25 technology forcing provisions which mandate the application of

1 spill prevention and recovery innovations when they become
2 available; to adopt strict crew size and qualification standards; to
3 adopt an emergency requisitioning authority; to develop a pre-
4 authorization procedure for decision-making on exigent
5 circumstances such as burning and dispersant use; and to
6 implement on-site and on-tanker surprise inspection authority
7 vested in the appropriate state regulatory agencies.

8 It's important to note that both the Washington and state
9 regulations -- the state regulations which were stipulated away
10 by the ray of the Atlantic Richfield case, and many of the
11 Washington provisions which were loss in the ray of the Atlantic
12 Richfield, would theoretically be able to be applied through a
13 compact. And we talked about the dedicated funds problem. A
14 compact is a delegation of federal authorities so you would be --
15 if the compact delegated that power, the resource assessment
16 charge or risk assessment charge, then the state could exercise
17 it as a delegation of federal power.

18 For that, I'll open myself up for questions for the next 10
19 minutes.

20 MR. PARKER: Okay. Thank you, Harry. I liked what you
21 set here of the inter-state compact is a potentially valuable
22 instrument for ensuring Alaska's rightful place as chief architect
23 for resources planning management, which, up til 1978 is an
24 area I think we're really aiming for and since then seems to have
25 leveled off and kind of taken the status quo which has led us into

1 our present sad state. But, John.

2 MR. SUND: Yeah, Mr. Chairman, just sort of explore a
3 little bit hear with Mr. Bador on inter-state compacts. I though
4 of the idea of some connection of the west coast states more
5 through a political connection through the executive or through
6 the legislative real in order to develop, you know, similar
7 policies or coordinate the policies of which then you could exert
8 the entire west coast political structure to try to affect federal
9 governmental issues. Your approach here is a little bit different.
10 And could you give me an example of a some type of compact on
11 the west coast that exists now, that exerts some type of federal
12 authority? I just need to trigger my memory.

13 MR. BADOR: Yeah, Northwest Power and Planning
14 Council, which is designed to -- it's a compact between Montana,
15 Idaho, Oregon and Washington, and it exerts authority over the
16 Bonneville power administration.

17 MR. SUND: Yeah, but you know they have the authority to
18 allocate water, you know, water rights.

19 MR. BADOR: No, they have the authority to deisitate (ph)
20 such specific things as building codes for conservation of energy.
21 They have the ability to dictate how habitat mitigation and
22 restoration will occur. They have the power to dictate design for
23 the.....

24 MR. SUND: How about water flow?

25 MR. BADOR:any future dam. And anadormous fishery

1 protection, this type of thing. It's a conservation wildlife act as
2 well as a an energy allocation and pricing system. It goes way
3 beyond water. I mean it's not a water allocation compact. It's an
4 energy allocation and conservation compact.

5 MR. PARKER: I think Bonneville still makes the cut on
6 water between.....

7 MR. SUND: I know they do. I've sat on several state
8 commissions -- inter-state commissions on the legislation trying
9 to effect water flow and Bonneville really didn't listen to anybody.

10 MR. BADOR: But see, now, after the Northwest Power
11 Council planning act, what happens is Northwest Power Council
12 has put together a comprehensive plan for the four states. And
13 that includes wildlife, conservation, energy conservation, the
14 whole bit. Now, the BPA acts inconsistently with that plan, the
15 council can hold a hearing, issue a reviewable finding of
16 inconsistency and BPA is enjoined from furthering that conduct
17 or activity until such time they provide a compelling justification
18 for being inconsistent with the plan. Now that is a power which
19 far exceeds your average citizen advisory board.

20 MR. SUND: Yeah. they've done all of that and they still
21 can't affect water flow in favor of fish.

22 MR. BADOR: Yeah. I know. I mean that's.....

23 MR. SUND: Okay, I just wanted.....

24 MR. BADOR: I'm not -- I have to admit I'm not intimately
25 acquainted with what, you know, has been happening recently

1 with the power council, although it is -- generally both
2 representatives from Washington, Oregon, Idaho and Montana
3 are generally fairly happy with what the council has done in
4 empowering them.

5 MR. SUND: I was just trying to get a feel for what an
6 example one -- what you would do here.

7 MR. WENK: Mr. Chairman.

8 MR. PARKER: Ed.

9 MR. WENK: Could I follow up that question on the
10 Northwest Power Planning Council. Perhaps you know I live in
11 the state of Washington. I oughta know the answer to this, but I
12 don't know the answer to it. Could you tell us a little about the
13 decision making dynamics in this sense. You referred to sort of
14 a master plan against which are tested tactical actions of
15 Bonneville.

16 MR. BADOR: That's correct.

17 MR. WENK: How was the plan developed and what are
18 the ground rules -- I don't mean the details of the plan, but what
19 are the ground rules from the point of view of it's adoption.
20 Does it require a complete census?

21 MR. BADOR: No, three-quarter rule is generally the way
22 most compacts work. Three-quarters of the voting
23 representatives, voting for an enforcement or a plan mandate.
24 That's generally -- I'm not sure that that's the way it is with the
25 Northwest Power Council, but as a rule of thumb on how

1 compacts operate, they usually.....

2 MR. WENK: The three-fourths rule.

3 MR. BADOR: What.

4 MR. WENK: You say a three-fourths rule.

5 MR. BADOR: Three-quarters rule, but not three-quarters
6 of the states, three-quarters of the state's voting power. Usually
7 you give each state two or three votes and so state delegations
8 often time split on a particular issue. So, three-quarters of the
9 total voting membership, not three-quarters of the states.

10 MR. WENK: I see.

11 MR. BADOR: And the idea of that is to prevent a particular
12 state from being co-opted by an interest group.

13 MR. WENK: Does the federal representative have a vote?

14 MR. BADOR: No.

15 MR. WENK: Only the states have a vote?

16 MR. BADOR: That is correct. The federal government sits
17 on the council and can participate in the debate, but cannot vote.

18 MR. WENK: Cannot vote.

19 MR. BADOR: And that's what's interesting also about the
20 Columbia River Gorge compact is that, again, that exercises a
21 veto over a federal agency. the condemnation powers of the
22 forest service can be vetoed by the Columbia River Gorge.

23 MR. SUND: I guess, the example is the U.S. Canadian
24 Treaty thing must be a compact then.....

25 MR. BADOR: No, it is not at this point.

1 MR. SUND:on the U.S. side. We have Washington,
2 Oregon, Alaska in a decision making mode, each having one vote.
3 I think the tribes have a vote and the federal members sit on
4 there.

5 MR. BADOR: Okay, yeah, okay on that.

6 MR. SUND: And they have a non-voting federal member.

7 MR. BADOR: Yeah. That's is that the senator fisheries
8 compact?

9 MR. SUND: I don't know what the technical term.

10 MR. BADOR: Because I know at this time, BC is.....

11 MR. SUND: I understand what you're saying.

12 MR. BADOR:not a member of an operating compact
13 with the United, with the states.....

14 MR. SUND: no.

15 MR. BADOR:United States. But that's the power of
16 compact which is interesting is that foreign governments can
17 enter into compacts. We have Canadian provinces right now
18 voting on compacts in the Northeast Fire Prevention and
19 Protection Compact of which Nova Scotia, New Brunswick, and
20 Quebec are voting members and impose -- you know, as voting
21 members they can have some influence over what happens in
22 Maine. And it'd be ideal to involve British Columbia and Yukon
23 Territory in such a compact. 'Cause one of the things to
24 remember about the oil industry is that it just doesn't impact
25 coastal communities. You know, if we had a spill on Yukon River,

1 the subsistence fishery of the Yukon Valley Basin would be
2 devastated. The DEC estimates that at a minimum a major break
3 on the Yukon River would be contained at 500,000 gallons. And
4 at break up that would be impossible to contain. And so, the
5 impact of the oil industry goes way beyond communities. The
6 very interior can be affected. The tributary streams, the Taslina
7 (ph), the Adogan (ph), all of these rivers which are very
8 productive, especially for subsistence. And that's the other thing
9 is that the subsistence community helps us in creating a
10 compact is one of the other aspects of compacts that you have to
11 do to get it to the Congress is to show unique regionalism. Well,
12 we have a subsistence community in Alaska, British Columbia
13 Washington, Oregon and California that depends upon
14 anadamous fishery and the protection of that resource. So any
15 compact designed to regulate the oil industry would have to take
16 into consideration the interests of these subsistence users.
17 'Cause they're our key to the definition of a region, in effect,
18 because that is one of the attributes that makes us -- besides
19 unspoiled coasts and the fact that one-fifth of domestic crude
20 consumption passes along those coasts. the fishery and the
21 dependence upon, for commercial fishing, on Alaskan waters as
22 well as the dependence of a subsistence population. All
23 contribute to making a definitive region by which congress
24 would see that a regional solution would be more appropriate
25 than a broad brush of a federal portrait.

1 MR. PARKER: Harry has volunteered to stay over another
2 day. I guess you still volunteer. Are you gonna be with us
3 Thursday?
4 MR. BADOR: Yep. I'd be happy to.
5 MR. WALLIS: Can I ask one quick question?
6 MR. PARKER: Go ahead Tim.
7 MR. WALLIS: Earlier I think you mentioned that there
8 were three areas: a citizens advisory group, a task force; and a
9 compact.
10 MR. BADOR: Well, no. What the mechanisms.....
11 MR. WALLIS: oh, three mechanisms.
12 MR. BADOR:that we looked at were compacting the
13 state regulatory scheme of having a tri-partite system of citizens
14 advisory commissions; joint review panels of federal, I mean
15 state agencies; and then a Governor's level task force to oversee
16 day-to-day operations. That's one mechanism.
17 Another mechanism is simply petitioning the federal
18 government for rule making under 553E of Administrative
19 Procedures Act, by which the State of Alaska says OK, we're
20 preempted from having double hulls, we will double hulls. We
21 will write a petition with regulatory language and justification
22 and submit it to the Coast Guard. The Coast Guard's gotta act on
23 it. It's put in the federal register and that's another way -- that's
24 a very cheap way to get a big bang for your buck. Because, they
25 has to act on it because all the strictures of administrative

1 procedure law that are invoked once upon a formal request
2 being made.

3 Then the third one is this compact.

4 MR. WALLIS: Who's your appeal.....

5 MR. BADOR: And we're not saying which one is better,
6 although consensus was among the SeaGrant team that the state
7 regulatory system of having a task force, a citizens advisory
8 commission that has these reviewable powers and then joint
9 review committees. So probably these the optimum in that it
10 would be the most adaptable perhaps to dealing with all five
11 sectors of the oil industry in Alaska when the time arises that
12 such a thing is needed.

13 My last comment would be that we do strongly urge that
14 the commission take a stance saying that whatever or
15 institutional recommendations that you make, that you make
16 them flexible enough to adapt and to incorporate areas of
17 concern that are beyond tanker standards. And of course, it's
18 impossible at this point to start going into another inquiry in all
19 these other areas for the technical aspects. But it's not
20 necessary. Just be on record that the oil industry is a potential
21 benefit as well as a potential problem. And we need to create an
22 institutional structure that can institute policies that can adapt
23 to all of the potential challenges to the people of Alaska and the
24 Pacific Rim.

25 MR. PARKER: Okay. Thank you. We'll see you Thursday.