EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

TRUSTEE COUNCIL MEETING

Thursday, May 29, 1997 5:15 o'clock p.m.

> Rae Building 123 3rd Avenue

Seward, Alaska

3

1

2

4

5

6

7

8

9

10

11

TRUSTEE COUNCIL MEMBERS PRESENT:

U.S. DEPARTMENT OF COMMERCE - NMFS:

12

13

14

15

16

17

18

19

20 21

22

23

24 25

MR. FRANK RUE (Chairman) STATE OF ALASKA - DEPARTMENT OF FISH AND GAME: Commissioner STATE OF ALASKA -MR. CRAIG TILLERY Trustee Representative DEPARTMENT OF LAW: for the Attorney General STATE OF ALASKA - DEPARTMENT MS. MICHELE BROWN OF ENVIRONMENTAL CONSERVATION: Commissioner U.S. DEPARTMENT OF INTERIOR: MR. DAN SAKURA for MS. DEBORAH WILLIAMS Special Assistant to the Assistant Secretary U.S. DEPARTMENT OF AGRICULTURE -MR. DAVE GIBBONS for U.S. FOREST SERVICE MR. PHIL JANIK Regional Forester

> MR. BILL HINES for MR. STEVE PENNOYER

Director, Alaska Region

Proceedings electronically recorded then transcribed by: Computer Matrix, 3520 Knik Ave., Anchorage, AK - 243-0668

1	PUBLIC TESTIMONY	PAGE:
2	Ms. Molly Burton	23
3	Mr. David Lodge	26
4	Ms. Linda Clayton	37
5	Mr. A. J. Paul	39
6	Mr. Bud Rice	41
7	Mr. Chuck Adams	43
8	Mr. John Hendricks	43
9		
10	·	
11		
12	-	·
13		
14		
15		
16		
17		
18	·	
19		
20		
21		
22		
23		
24		
25		

members would like to make, and I'll let each of you introduce yourselves here in a second. And then the public, we would 2 invite the public to come up and tell us what you're thinking, what you'd like to see the Trustee Council consider or whatever. 5 And, actually, if you all want to move forward it might 6 be a good idea, too. It sort of, boy, you look just way back 7 there, it's really hard to imagine talking to an audience that far away. MS. McCAMMON: It's just typical classroom 10 behavior, to take that last row. 11 CHAIRMAN RUE: I thought it was movie theater 12 behavior. 13 MS. McCAMMON: Movie theater behavior. 14 CHAIRMAN RUE: And finally, I guess, Molly, 15 we'll be seeing the film "Alutiig Pride". 16 17 MS. McCAMMON: Right. CHAIRMAN RUE: Is that right? 18 19 MS. McCAMMON: Yes. 20 CHAIRMAN RUE: Okay. So with that, Molly, why don't I turn it over to you to introduce yourself and then 21 perhaps other Council members introduce themselves. 22 23 MS. McCAMMON: You want us all to do 24 introductions now?

CHAIRMAN RUE: Yeah.

25

this. You have three of the Trustees here and three of the alternates here. You have a direct line to the Council at this point.

It's the Council's goal to get out every year, at least once, to one of the communities in the spill area. So far the Council's been to Cordova, to Kodiak, this year we're going to Seward today, with the idea of making sure that spill area residents have an opportunity to speak directly to the Council members.

Just to put this all in a little perspective, I mean everybody's familiar with the 1989 oil spill. In 1991 the governments settle their claims against Exxon for a total of \$900,000,000.00 in civil fines. Those monies go to a joint Federal/State Trustee Council made up of three State and three Federal Trustees. All decisions that the Council takes to spend that money has to be unanimous. So all these guys here, it takes 6-0 votes not, 5-1 or 4-2, it's not majority. It really requires everyone to work together cooperatively to decide what is the best action for restoration in the spill area.

A lot of the early years in the Restoration Program was spent on trying to figure out how you actually restore an injured ecosystem. There really had never been an event like this of such magnitude covering 1,500 miles of shoreline, I mean, just a hugh expanse. And I think in the early years

like that. So those are the kinds of monies that funded things like the SeaLife Center, that funds all of the research projects.

Just going back to kind of the first aspect of the program real quickly, habitat protection. Up on the walls there you can see all of the maps that show the various areas of the spill area and the acquisitions that we've been working on. The first map over there shows the general outline of the spill affected area. And one of the things the Council made as a major policy was that habitat protection in the spill area would have geographic balance. That there would be protection in Prince William Sound, on the Kenai Peninsula area and then in the Kodiak/Afognak Archipelago. So a geographic balance. In other words, we're not just going to do habitat protection down in Kodiak, we're not just going to do it in Prince William Sound but there was a real desire to see that it was balanced throughout the spill area.

We were very pleased that last week the Department of Interior signed a purchase agreement with English Bay Corporation which will add about 30,000 acres to Kenai Fjords National Park and another 2,000 acres to the Alaska Maritime Refuge. This is the most recent agreement in terms of our overall program and it's something that we're very proud of to have worked with the corporation so successfully. I think it's a perfect example of something that brings benefit to the

Peninsula, as I mentioned, the recently concluded agreement with English Bay Corporation. There's still inholdings within the park that are owned by Port Graham Corporation, they've indicated at this point that they're not interested at this point, but we hope that in the future we'll still have some discussions with them.

In addition the Council has taken a lot of action on the Kenai River. This has been an important priority of both Governor Knowles and the Federal Trustees. This included the recent package that Department of Interior negotiated with the Kenai Native Association. This was recently signed for over 3,000 acres of the Kenai River and the Moose River, which is a drainage of the Kenai.

It also includes, oh, probably 2,000 other acres of sites along the Kenai, the main stem Kenai, that have been protected under our Small Parcel Program. Here in Seward, at Lowell Point, there's 19 acres there that the Trustee Council has authorized to be purchased that provides critical access to the Cane's Head Recreational Site. And it's some of the only beach front in intertidal area along that portion of the beach there to be protected. Grouse Lake, which is close by to Seward is a recent Forest Service acquisition under our program and they haven't decided exactly how it will be managed. One of the possibilities is a future campground and -- but providing public access for recreation.

birds, fish genetics, things like that.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

So we toured that facility this afternoon and having been here the last time in July when it was just a hole in the ground with some rebar sticking up is truly impressive now to look at that.

One of the things that we're facing now is that it's been more than eight years since the 1989 oil spill, so we're coming up basically on the 10th anniversary of the spill in 1999. And as we approach that anniversary the Council is actually -- although in the past few years we've been working mainly on implementing the Restoration Plan we're now at the phase of the Council facing some major decisions. basic major decision facing them is how to spend the rest of the funds. Since 1994 as a result of public input and Council decision, the Council agreed to set up this Restoration Reserve Account, and basically take money off the table put it into an account for long term restoration needs after the year 2001. And there wasn't a decision made at that time on how those funds would be earmarked; would they go to habitat protection; to research? Would it all be spent in, you know, just the next 10 years after that or would there be some kind of a program for making it a perpetual endowment? How would these funds be used, managed? Those kinds of questions.

So that the Council has now decided that their ready to soon make a decision on that and we've embarked upon a public

for the future of our science program? We've been spending millions of dollars now and it all seems to be going somewhere to start answering some questions and to have some future there and to start putting down some initial thoughts for the Council to consider. So Dr. Spies has prepared a memo and kind of a draft proposal for consideration and he'd like to share some elements of that with the Council and with the public today.

So Dr. Spies.

DR. SPIES: Thank you very much, Molly, I appreciate the opportunity to do this and in the spirit of trying to get the discussion kicked off as to what the most appropriate uses of the Restoration Reserve I did prepare this position paper, which is essentially to try and identify the role that ongoing research could have in addressing the restoration needs of the EVOS Trustee Council. I think when the Council established the Restoration Reserve it recognizes that its mission may indeed extend beyond the year 2001 when the last payment from Exxon is made.

And now, through our studies, it's become clear that not only the initial and lingering effects of the spill were important but they've combined with natural variability in the system in such a way to influence the abundance of the injured species over time and it's going to take a long time for some species to recover. Witness the kind of meager herring fishery that just got off the ground for the first time in several

William Sound are important things to know. So we even have to identify in time and space those critical biological creatures of the environment that need to be protected for a healthy ecosystem.

It is also important to characterize the natural variability in the ecosystem to better protect and manage its resources. We know that there are great changes that have gone on throughout the spill area ecosystem. Witness, for instance, the 1978 shift in the northern Gulf of Alaska to an ecosystem that was dominated by shrimp in many inshore areas to one that's dominated by bottom feeding fish. And this was all connected back to natural variability in a way that we don't completely understand but it certainly has to do with the atmosphere and interaction of the atmosphere with oceans and currents. And these kinds of things can take place on scales of decades and even in centuries, so some sort of long term view of this I think would be great kind of legacy to leave behind.

I think some of the practical management implications of the kind of information that's building in momentum from Council research as well as research sponsored by other agencies would include, for instance, the prohibition of new fisheries on forage fish to protect the apex predators, the birds and mammals that feed on them. This is an action taken by the North Pacific Fisheries Management Council recently.

major apex predators, such as sea birds and marine mammals.

1.0

Just to mention a couple of guiding principles that might earmark a successful program of this type. Some sort of inflation proof endowment with a conservative annual expenditure so that we can in fact attack some of these long term problems and cycles in the natural environment. We think that something like four to \$5,000,000.00 a year might be an effective level of funding for such a program.

That the geographic scope be the northern Gulf of Alaska in order to encompass the important oceanographic and biological features that affect our near-shore systems and affect the resources that we value so dearly in that system.

We think it should be administered by a core of professional staff not affiliated with a particular agency.

And I think the evolution of the EVOS process has shown the value of such a development in providing a neutral and a very professional sort of approach to the problems.

This program, I think, should also actively engage the public, stakeholders and managers, as we are striving to do currently. Also it could be mostly institutional, involve most of the major resource agencies, University of Alaska, the Alaska SeaLife Center, the Prince William Sound Science Center, the Auke Bay Laboratory and so forth.

It, I think, would be important also to leverage with other research and monitoring efforts in the northern Gulf of

What would you like me to say? CHAIRMAN RUE: 1 MS. McCAMMON: No. 2 CHAIRMAN RUE: Oh, turn it back to me, okay. 3 Yes, I'm turning it back to you. MS. McCAMMON: 4 CHAIRMAN RUE: Well, we are going to have 5 formal process though..... 6 MS. McCAMMON: Yes. 7 CHAIRMAN RUE:and this is just kicking 8 the ideas off. 9 MS. McCAMMON: Yes. 10 So it's good to have people 11 CHAIRMAN RUE: thinking about it. Basically the next item on the agenda was 1.2 for individual Trustee Council members to say whatever they'd 13 like, comment on the day here in Seward or thoughts they might 14 15 have about the future of the Restoration Program. Are there Council members who would like to speak to any of the issues? 16 17 MS. BROWN: I'd just like to congratulate the I think what we've seen today is very impressive. 18 community. 19 It makes me feel real good about the actions we've taken. we're mostly here to listen, so I'm eager to move on to the 20 public comment portion. 21 22 CHAIRMAN RUE: Okay. Dave Gibbons. 23 MR. GIBBONS: Yeah, I'm representing Phil Janik 24 and he's really sorry not to be here. He just signed the

Tongass Land Management Plan last Friday and he's a little and

25

MS. McCAMMON: Well, we're recording the meeting just so that goes into the record.

CHAIRMAN RUE: Oh, that might be helpful, yeah. There must be something on your mind. Yeah.

MS. McCAMMON: Molly.

MS. BURTON: Should I come up there?

MS. McCAMMON: Yeah.

CHAIRMAN RUE: Sure, please do.

MS. BURTON: My name is Molly Burton, I'm the community facilitator, I'm the little guy on the end of the EVOS Trustee Council Programs. And so I'd like to extent my welcome to you. I kind of almost wouldn't know that you were going to be here because I happened to John Hendricks last week and he said -- he mentioned that there -- he thought you guys were coming. But I'm a little disappointed because I was not notified and called about five minutes to five and found out about this meeting. So I didn't have all my notes or anything to be prepared for this.

But in view of that fact I want to speak to the community coordinator and the recent resignation that happened. And note that that position is important because if that position was filled I'm sure I would have been notified of this meeting. So it's, you know, just to make the point that I hope that you still support the community facilitator and coordinator program because it's real important to have good

think, would be something that would be good for the tribe to work with you on that if you decide to fund that. I don't -- I'm not sure what the viewpoints are as far as how much it would be involved with it, but still I think it would be good to have the artifacts go back to the different communities that they want, you know, just so that they would have something there.

And it doesn't -- you know, just because I work for the tribe and for you doesn't mean that I am not concerned as a regular citizen either. I kind of walk in two worlds as far as the Native viewpoints and the non-Native viewpoints because the nature of the community -- you know, today life, you know. We're all concerned with conserving the lands and that kind of thing.

Some people are real strong in their viewpoints that they don't like the habitat acquisition that much. I'm not one of those. I think that it's good as long as the promises are kept that the Natives that are able to do their subsistence on the land if they want to. You know, keeping in mind the game and that kind of thing is still available for that.

But anyway, I'm glad that you came to Seward and thank you.

CHAIRMAN RUE: Thank you. Molly, did you.....

MS. McCAMMON: Yeah, Mr. Chairman. Molly, I

guess I want to extend, first of all, my deep apologies for not

well as being an educator in marine subjects at the Alaska

Vocational Technical Center which is just about one mile down
the road from us.

I'll give you a little bit of background to let you know where I'm coming from. I've spent 45 years connected with the maritime industry throughout the world. About 20 years here in the states, most of it in Alaska. Seven of those years were spent sailing on oil tankers, so I can see the other side of the coin when we're looking at oil spills. And a lot of the time has been spent as an educator educating ships' officers and commercial fishermen in a variety of marine science techniques.

One thing we haven't addressed and I believe not enough money is being spent on is prevention. We all see prevention as a way to alleviate all the problems of the amelioration. We're spending a lot of time here tonight talking about how to prevent future problems and to enhance the environment, cleanups and so on. There would be no need for any of that if the spill hadn't occurred. And we're probably still not further forward today than we were eight years ago with regard to prevention. I'm familiar with all the work that's being done by the RCAC and I believe we are safer now than we were the night that the Exxon Valdez sailed into trouble. We now have better escort systems in the Sound but we're still working with old technology. We haven't got the best tug boats yet,

just down the road, dreamed up two years before the spill the idea that there could be a major spill in the Sound. applied to the Department of Education for software to enhance a radar simulator that we have at the AVTEC and the amazing thing is that just six months before the spill we did get this complex software which has Prince William Sound database with all the water depths, the mountain heights, the topography and the coastline of Prince William Sound, all of it digitized to an accuracy of plus or minus eight yards. And that allows us to training tanker captains to drive up and down on the radar scope and have emergency scenarios, loss of power, loss of steering, bad weather conditions, icebergs, can all be featured into the simulator which is now 12 years old. It's kind of bit long in the tooth. But the interesting thing is we had that facility six months before the oil spill. Joe Hazelwood never came along and none of the Exxon captains came along.

1

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

We've been using that simulator since the spill for training operators of the rescue tugs, the service vessels, as we call them, the ship escort vessels, for training commercial fishermen in tanker avoidance, for training the tug boat operators in iceberg avoidance techniques. And just this weekend, for example, we had some top naval architects from Massachusetts across in Seward doing some simulations for proposed placing of sentinel tug boats at predetermined spots in Prince William Sound that would be available to rush out to

has improved a great deal over the last 12 years since we had our simulator. Computers have got faster. The ability to put land masses on bridge windows, wheelhouse windows, with computer projection systems can make very realistic visual displays of docks, land, mountains, buoys, so that you can drive a simulated ship, almost like the real thing. The same thing that you've noticed on television documentaries about Army/Air Force training for Dessert Storm in this virtual reality kind of displays they have. Very realistic. The military couldn't work today without simulation.

1

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Another way in which simulation is being used locally is in Anchorage at Merrill Field, the University of Alaska-Anchorage has just spent \$11,000,000.00 on an air traffic simulator. Senator Ted Stevens pushed very hard to get the funding for that, together with the university, and now they have a superb aircraft simulator at Merrill Field which is training air traffic controllers and pilots in accident There are big simulators for marine work around prevention. the nation. I've attended one of the best ones down in Dania, Florida, which is near Fort Lauderdale. And that was a \$13,000,000.00 installation. Probably the best in the world when it comes to computer simulation. There's one big drawback with those simulators, the instructor are all non-Alaskans. They have no interest whatsoever in the Alaskan environment, most of them have never set foot in Alaska, so they have no

teoth. It so old, in fact, that the company that made it said they're not making any spare parts and if it breaks down we've had it. There's just no spares available. Most electronic machines are made to have a working life of six to eight years. Once you get a 12 year old electronic machine it's on its last legs and you -- even though it's useful, spares become a problem.

So maybe one project you could consider is spill prevention from the way of better simulation. We know simulation works, everyone else uses it and there are plenty of marine simulators throughout the nation but we haven't got one in Alaska and -- well, they're the main points I had to mention.

Oh, what about the value to the Council, you people, of such simulation? Well, it's a very public -- it invites the press. A lot of people attend it. A lot of mariners, a lot of commercial fishermen would attend it. A lot of tug boat operators, a lot of pilots. It's very visible. It's a visible way of spending the funds. When you spend them on trees and land, especially at remote places, like the Eyak Tribe, for example, land it's not visible to a large part of the state. But some simulation with invites to the public to come and view it and the press might be good publicity.

I think that's all I needed to say and if you have any questions I'll be glad to answer them. Commissioner Brown

this kind of --- this is pure research, can be done on a simulator very quickly rather than spending millions of dollars driving ships up and down. You see, the simulator can have breakdowns with no damage. You can try all the worse scenarios you like, the worst weather conditions, complete loss of steering combined with complete loss of power, and you see on the simulator exactly what's going to happen with no danger to the public or the environment. There's no other way you can do that. So I think the simulator is a very good research tool just as insitu-burning is a research tool or chemical dispersant is a research tool.

Thank you. Did you have a question?

to do that.

CHAIRMAN RUE: No. I was just going to say I think Michele Brown would probably love to come and drive your simulation sometime.

MR. LODGE: Yeah, she did mention it.

MS. BROWN: Yeah, if we have time I would love

CHAIRMAN RUE: Thank you. Does anyone have a question for Dennis?

MR. LODGE: Or any question, maybe, from the audience?

CHAIRMAN RUE: Yeah.

MR. LODGE: Well, I've gone on a bit long there, but we feel it is important and that very, very little

a-few years down the road between educated mariners and 1 uneducated ones. But the whole industry is changing 2 dramatically at the moment with the U.S. Coast Guard buying into International Maritime Organization rules. The whole 4 licensing system in the USA and the training system is now 5 bending toward international agreements being formulated in 6 London and Geneva. And the Coast Guard are having to buy into 7 this so the whole system is in a state of flux. But one thing 8 that the International Maritime Organization insists on is that in future all mariners must have hands-on training on 10 simulators because that's the way to go. Just like the 11 12 military goes that way. 13 CHAIRMAN RUE: Well, Dennis, I think there may be others in the audience who want to speak and..... 14

MR. LODGE: Yeah, I've gone on too long.

CHAIRMAN RUE: Well, no. Thank you very much that's very helpful, it's good to hear.

15

16

17

18

19

20

21

22

23

24

25

Are there others out in the audience who would like to.....

MR. LODGE: If not, I'll come back.

CHAIRMAN RUE: Yeah, that's fine. That's fine.

Anyone else out there like to address the Council on any issue?

Yeah, come forward. Let us know your name and.....

MS. CLAYTON: Hi, my name is Linda Clayton, I live here in Seward and I'm associated with the University of

God forbid, we ever have to have another oil spill.

Thank you.

CHAIRMAN RUE: Thank you, Linda. Any questions for Linda?

MR. SAKURA: Actually, Mr. Chairman, I'd like to say a few words and one is I'm the Interior Department representative and I work for the Assistant Secretary for Fish and Wildlife and Parks, who oversees both the Park Service and the Fish and Wildlife Service. And I would just like to thank the people in Seward for their strong support of the land acquisitions. Mayor Bankford, you know, the members of the City Council, the environmental community here, the business community, the tourism community. We had an excellent signing ceremony with Secretary of Interior just last week.

In terms of the science program I know that the Department of Interior and National Park Service fully supports a strong integrated science program as a part of an overall land management effort and we strongly support the science effort and very much appreciate your comments it that regard.

Thank you.

CHAIRMAN RUE: Okay. Other questions from Council members?

(No audible responses)

CHAIRMAN RUE: Any other members of the public like to come forward? Yeah.

Mr. Paul?

(No audible responses)

CHAIRMAN RUE: No. Thank you, A.J. Anyone else in the audience like to give their comments, their thoughts? There must be someone.

MS. McCAMMON: It's too quiet.

CHAIRMAN RUE: Yeah, it's way too quiet.

They're all waiting for the movie.

MR. RICE: I'd like to kind of step forward in the future. Excuse me, I'm Bud Rice, National Park Service, but I'm sort of curious if anybody has a -- on the panel here has a vision as to how the Trustee Council will be -- or who will have management oversight of the endowment? What are we going to do after 2001; will the Council continue as it is or will it be modified or changed drastically in some way? Any vision or thoughts about that?

I guess I get to go first. I don't -- Bud, I think that's a very good question, I think that's exactly the kind of thing that the Council is going to have to look at. Personally, I think the idea of multi-agency with a public process to involve the public has worked well. There has been criticisms of it, but I still think you don't get parochial agency views as much as you would, I think, if one agency or one entity were managing it. You get much broader prospective, I think. So I

university component. With sort of a broader independent group to see how this money would go. Again, hearing the views of the public I may very well change that but at least initially my thinking was we should go away and something else should take our place.

CHAIRMAN RUE: Other Council member want to -- or others want to venture a vision?

(No audible responses)

CHAIRMAN RUE: Okay. Any other members of the public like to give us their thoughts?

MR. GIBBONS: Or vision.

CHAIRMAN RUE: Or vision, yeah.

MR. ADAMS: My name is Chuck Adams, I'm a resident of Seward and I just want to say that I agree with what Bob Spies said. Two things in particular. I think setting up some sort of endowment so that there's money in perpetuity for whatever needs might arise is a good idea. And the other thing he said that I just wanted to reemphasize is, you know, when you look at these maps, you know, there's a lot of land acquisitions, and that's great, but a lot of these sea critters they spend their entire lives at sea or -- and I know there's no way to protect them, other than research, so I really thing that research needs to be the future of this -- where it's going.

Thanks.

college system back in 1876 I believe it was. That was a long view on education and it's worked for Texas for a long, long time and as an administrator within that system and looking at things, you have a mechanism here in the future to help you with that and the fact that your Permanent Fund here in Alaska is rather favorably known throughout the United States as being a well-managed, very foresightful, thoughtful thing. If you do choose to take the long look and you do choose a trust, you do choose to invest in the future. I would suggest that you already have mechanisms here in Alaska that are more than able to help you and make that come true and make it come true in a very effective way. You don't have to look very far here. And investment in the future you already have the mechanisms, you already have established the way to go and the means with which to do it.

Thank you very much.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CHAIRMAN RUE: Thank you very much, John, I think that's important advice. Are there other members of the audience who would like to come forward and address the Council? Or any questions of Council members?

MS. BROWN: Can I just ask one?

CHAIRMAN RUE: Yeah, Michele.

MS. BROWN: To follow up on your question -- on your comment and you're thinking in terms of having the funds actually managed by the same folks? Do you also have a view on

1	(No audible responses)		
2	CHAIRMAN RUE: Council members, do we want to		
3	take a Molly, should we take a short break and then we're		
4	going to have the movie? How's the program going to work?		
5	MS. McCAMMON: Yeah, we take maybe a 10 minute		
6	break or 10 or 15 minute break and then start the film.		
7	CHAIRMAN RUE: And everybody is invited to stay		
8	for the film.		
9	MS. McCAMMON: Yes, please do.		
10	CHAIRMAN RUE: Great. As long as there are no		
11	other comments then, thank you all very much.		
12	(Off record - 6:31 p.m.)		
13	Note: The film "Alutiiq Pride: A Story of		
14	Subsistence" was viewed. At the end of the film, Chairman Rue,		
15	asked for any further comment and there being none, thanked the		
16	audience and concluded the meeting at approximately 7:20 p.m.		
17	(END OF PROCEEDINGS)		
18			
19			
20			