

Regional Citizens' Advisory Council

The Observer

A publication of the Prince William Sound Regional Citizens' Advisory Council

VOLUME 7, No. 1/WINTER 1996-97

Inside this issue

- **Volunteer profile:** Dick Tremaine pilots Scientific Advisory Committee into smooth waters. Page 2.
- **Seldovia barge:** Location of mini-barge subject of on-going talks. Page 3.
- **Fire response:** RCAC report identifies ways to beef up fire response readiness. Page 3.
- **Sticky standard clarified:** With the help of a working group, the state defines "best available technology." Page 4.
- **Questions and answers:** RCAC and SERVS work on concerns. Page 4.
- **So what's the big deal?** Risk assessment significant for several reasons. Page 5.
- **Planners pleased:** First oil spill symposium in Valdez comes off without a hitch. Page 6.
- **The hunt begins:** RCAC hires Smithsonian to help study ballast-borne nuisances in Prince William Sound. Page 7.
- **Disappointing:** Local provisions changed at the last minute from National Invasive Species Act. Page 7.

Risk assessment pinpoints ways to make oil transportation safer

A combination of improved procedures and changes in tug escort systems would significantly reduce the risk of crude oil spills in Prince William Sound, according to the final report of an 18-month study. The report was released December 16.

The Prince William Sound Risk Assessment Project identified and ranked risks in the current (1995) oil transportation system. The

study analyzed the source of those risks, and identified measures to mitigate, or reduce the chances of oil spills occurring.

The study also analyzed the effectiveness of safeguards instituted since 1989. It found that those safety measures have reduced the risk of oil spills 75 percent, and that the single most effective safeguard to date is the tanker escorts.

The study makes eight recommendations for further reducing the risks of an oil spill.

1. Capture human error on tethered tug: Develop and institute formal procedures to improve "capture" of human error on the tethered tug in the Valdez Narrows. This measure would reduce the risk that a human error on the tethered tug will result in a powered grounding of a laden

Continued on Page 5

Shippers announce plans, changes

In response to the findings of the Prince William Sound Risk Assessment, the three major shippers of North Slope crude – ARCO, BP and SeaRiver – have promised significant changes to the escorts that accompany laden tankers through Prince William Sound.

- **Bigger tug at Hinchinbrook:** A high horsepower tug will be brought into service at Cape Hinchinbrook. This tug would reduce the risk of a grounding in the shallow water areas of the Gulf of Alaska. The likely candidate is an 11,200 HP vessel currently stationed in Brazil. The new tug is expected to be in place by April 1997.

- **Tractor tug in the Valdez Narrows:** The shipping companies will conduct sea trials with a new tractor tug, the Crowley Protector class, as soon as the tug is available. If sea trials demonstrate that the Protector is equal to or better than the tugs currently in service in the Valdez Narrows, it will be put into service as soon as possible.

However, the Protector would be an interim measure, until a final decision is made about the best tug or tugs to use. Its relatively low horsepower (5,500)



The entire fleet of escort vessels now in service will be re-evaluated as part of the shipping companies' plans to make tanker transits safer.

makes it unlikely to be selected for longterm use.

- **Upgrade the fleet:** Alyeska and the shippers will develop a plan for upgrading the current tug fleet. The plan is to take into consideration the findings of the risk assessment and the state's new "best available technology" regulations (see story, page 4). The plan to replace the existing fleet will be completed by the end of March 1997. Shippers say they expect to have at least two new tugs in service by the year 2000.

- **Tug operations in Narrows:** The shippers have already added

a second person to the bridge of the tugs escorting in Valdez Narrows. In addition, tug procedures will be revised as soon as possible.

- **Other escort revisions:** The shippers and Alyeska will work with the U.S. Coast Guard and the Alaska Department of Environmental Conservation (ADEC) on other revisions to the escort system. Specifically, they will work toward stationing a tug in Central Prince William Sound. Placement of this tug would reduce the current risk of collision between laden tankers and returning escorts; it would also be available to assist incoming tankers.

NON PROFIT ORG.
U.S. POSTAGE PAID
ANCHORAGE, AK
PERMIT NO. 836

People

Volunteer profile: Dick Tremaine

It was May 1, 1976, the end of ski season in Alta, Utah. Dick Tremaine was a ski bum. His first choice was to head out to a ranch in Montana, but he had missed the ride. Now his choices – based on rides available – were California, the east coast and Alaska. He was born and raised in Delaware, so forget the east. California was too crowded. That's how Dick Tremaine ended up in Alaska.

Flash forward 20 years and Dick Tremaine is an economist and, in his spare time, chairman of RCAC's Scientific Advisory Committee (SAC). Tremaine has chaired SAC since his first meeting in 1994.

"Nobody else wanted it," he said. "It wasn't offered. I was told 'you're the chair.' It was a time of some divisiveness and I was seen as neutral."

Tremaine, an Anchorage resident since 1987, dove into RCAC as his form of community service. "It was a way to use my experience and background as an economist and biologist."

In his 20 years off-and-on in Alaska, Tremaine has seen a lot of the state. He first lived in Fairbanks, but the next year found himself in Shishmaref, elbow-deep in seal guts as a fish and game

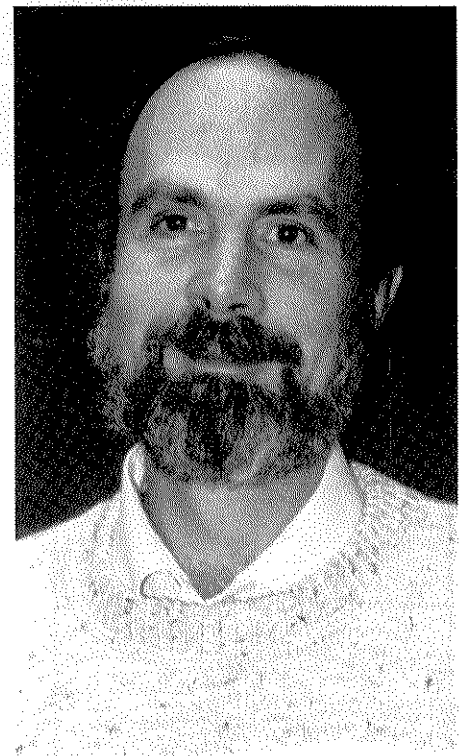
employee working on life history studies of seal and walrus. He worked in Dutch Harbor and Akutan during the height of the crab fishery. He built houses in Fairbanks and, as part owner of Water Wagon there, delivered water at 50 below. In 1983, Tremaine and his wife, Mary Paige, returned to school in Delaware, where he earned a masters degree in economics.

With masters in hand, Tremaine returned to Alaska in 1987. He spent more than three years as a fisheries economist with the North Pacific Fisheries Management Council (NPFMC), then worked several years with a consulting firm before striking off on his own in 1993. Most of his current work

involves the NPFMC, but he has also worked extensively with rural groups putting together community development quotas (CDQ) programs and individual fishing quota (IFQ) loan programs.

Tremaine is pleased with the work of the Scientific Advisory Committee over the past couple of years. A highlight has been the mental health demonstration project, which used Cordova as a pilot community to test strategies for helping people cope with the aftermath of a technological disaster, in this case, the Exxon Valdez oil spill.

"It has been extremely rewarding to see this study work," Tremaine said. "We've heard that people are using these tools to



Dick Tremaine

"Some would say we haven't done enough. Some say we've overstepped our bounds. I think that means we're probably about right."

– Dick Tremaine

something we all need to be worried about," he said. "It's tremendously important, the implications go way beyond oil. It's a big issue and it's not going to go away."

Tremaine has his pet peeves about RCAC, and as a committee member, he does get frustrated at times, such as when the Board of Directors doesn't go along with the committee's recommendations. But he thinks the organization is effective.

"While we meander and stumble, we manage to give a lot of the oversight that was intended. Some would say we haven't done enough. Some say we've overstepped our bounds. I think that means we're probably about right. As a group, we have done studies and projects that have led to better procedures, better practices, better oil spill contingency plans. That's our purpose. We are succeeding. We could do better, we could do worse. We're probably doing just fine."

Hyce takes new slot as Valdez Deputy Director

RCAC) has hired Lynda Hyce Deputy Director in Valdez. Hyce, a former oil spill worker and past member of the RCAC Board of Directors, started work Nov. 4.

Hyce's post is a new position within RCAC, added to provide more breadth to RCAC's presence in Valdez.

Prior to joining the RCAC staff, she worked several years with Hartech on the Komi Oil Spill Project in Northern Russia. Hyce represented the City of Whittier on the RCAC Board from 1990 to 1993.

Hyce holds a bachelor's degree in Natural Resource Management from Alaska Pacific University. During the Exxon Valdez oil spill response, she was employed by VECO as area coordinator in Whittier. She later served as Whittier Coordinator for the state Local Response Program, and as acting city manager.

More recently, Hyce worked for the State of Idaho, on the Snake River Nutrients Management Plan, and on a pollution control project in the Everglades Agricultural Area in Florida.

Hyce believes she brings to RCAC some historical and institutional knowledge, as well as project management expertise.

"I like being in Valdez because I

like to focus on real-time issues. A lot of the activity here is real-time. That makes this job very compelling and exciting," she said.



Lynda Hyce

She said the new position in Valdez will help RCAC broaden its scope of interest in Valdez, and foster more communication with Alyeska, SERVS and the U.S. Coast Guard Marine Safety Office.

"What I see – and it's a big part of my decision to work for RCAC – is that this type of organization is vital to solving environmental problems," Hyce said. "It is building a bridge between citizens, industry and regulators; it is the only way we will ever solve environmental problems. That's why I'm here."

cope. We have been able to help in an area that everybody else missed. Nobody was dealing with it. We've come up with something that would be of use in any number of instances, in many other communities."

Tremaine is also excited about working on the issue of non-indigenous species invading Prince William Sound through ballast water. This is a worldwide problem, but no one knows yet whether and to what degree it is a problem in Alaska. Tremaine is a member of RCAC's working group, formed recently to begin addressing the issue.

"Non-indigenous species is

Valdez, Soldotna residents appointed to RCAC committees

A member of the Soldotna City Council and two Valdez residents experienced in oil spill response have been appointed to RCAC advisory committees.

Sara Pearson, of Soldotna, was appointed to the Terminal Operations and Environmental Monitoring (TOEM) Committee. Pearson, an office administrator, is a member of the Soldotna City Council.

Grady Harker and Joseph Jabas, both of Valdez, were seated on the Port Operations and Vessel Traffic Systems (POVTS) Committee and

the Oil Spill Prevention and Response (OSPR) Committee, respectively. Harker is prevention lead at SERVS. Jabas has nine years' experience as an oil spill response supervisor at the Valdez Marine Terminal.

The RCAC Board of Directors made the committee appointments at a quarterly meeting, Sept. 27, in Anchorage.

Committee members serve two-year terms. They advise the RCAC Board of Directors, Executive Committee and staff on technical issues.

Response and planning

Measures suggested to improve fire response

Response to fire on a tanker – at berth or underway in Prince William Sound – would be improved with better coordination, more detailed incident command procedures, and training of land-based fire fighters to support marine fire-fighters. Those were among the findings of a study commissioned by RCAC.

Based on the study findings, released in September, RCAC has recommended the following measures:

- Revisions to the U.S. Coast Guard's fire response plan for Prince William Sound;
- Formation of a maritime incident response team to provide technical expertise to an incident commander;
- Development of a marine fire fighting training program to teach land-based fire fighters how to assist in a marine incident; and
- Acquisition of a portable air compressor to allow expanded use of self-contained breathing apparatus.

RCAC's recommendations, approved by the RCAC Board of

Directors in September, are based on an independent analysis of fire response in the Prince William Sound region. The study was conducted by Hildebrand and Noll, Associates, a Maryland consulting firm that specializes in hazardous materials planning and emergency response.

The study looked at the resources and response capabilities at the Valdez Marine Terminal, as well as resources available through the city fire departments of Valdez and Cordova, which would likely be called upon to help in a major tanker fire.

The study found that Alyeska's emergency planning and response capabilities at the Valdez Marine Terminal exceed federal requirements and national standards. Furthermore, Alyeska's emergency response team training "is generally equal to, and in some cases exceeds what is normally required for a larger facility with greater hazards and risks," such as a refinery or chemical plant.

Strengths notwithstanding, the consultants identified four areas

for improvement.

Communications and coordination: "Emergency planning groups seem to be divided along political, geographic, and business lines with each organization looking after its own special interests as opposed to working as a team," the report said. Alyeska's Terminal Fire Department, the Valdez Fire Department, the Cordova Fire Department and the U.S. Coast Guard Marine Safety Office need to work as a team toward safe and effective emergency response.

Fire response planning: The fire response plan for Prince William Sound does not provide enough detail about the command structure, the incident command system or the logistical plan to support prolonged fire fighting operations, the study concluded.

Mutual aid agreements: People

interviewed for the study agreed that no single agency or organization has the resources to handle all aspects of a large scale marine fire. Yet there are no mutual aid agreements to establish how resources would be shared in a big emergency.

Incident command structure: There is no clear incident command system in place for managing a major marine fire in the Prince William Sound region. The study also found confusion about who would serve as incident commander in different situations.

The U.S. Coast Guard Marine Safety Office in Valdez has completed a draft revised fire response plan for Prince William Sound. The plan was developed by a task force formed, in part, in response to RCA fire report and recommendations.

Chevron praised for table top drill exercise

by Becky Lewis & Lisa Ka'aihue
RCAC staff

Chevron Shipping Company conducted a major table top drill Aug. 28, in Valdez. It was a unique drill with a unique scenario. Thanks to Chevron's cooperative efforts, staff and volunteers of RCAC were an integral part of the drill from initial planning to the final evaluation.

Chevron last drilled its emergency response system in Valdez in 1992. Rather than repeat that two day exercise involving deployment of approximately 50 vessels, eight aircraft, and 600 personnel, Chevron decided to focus the 1996 drill on the people who would be called upon to deal with environmental issues in an incident.

This resulted in an emergency operation center mostly staffed by the environment people. There was very little staffing of the other sections normally used in a major drill or spill such as the Incident Command, the Finance Section, and the Operations Section.

The response team consisted of people from Chevron's core response team, and employees from various Chevron facilities throughout the U.S. One person from RCAC participated as a player in the Environment Section.

Although there was no

deployment of equipment, personnel were sent into the field to conduct shoreline clean-up assessment (SCAT). SCAT is a valuable tool to determine the appropriate clean-up techniques, if any, to be used on a particular stretch of beach. The day before the drill, Chevron held a training session, and all the participants had a chance to learn about SCAT during a hands-on field exercise.

At Chevron's invitation, RCAC was able to fully participate in all aspects of this drill from the design, to the play, to the evaluation. RCAC also fully staffed its normal room in the Valdez Emergency Operations Center to perform its four primary tasks during a drill or spill: observe, verify, inform, and advise.

One RCAC Board member took advantage of Chevron's observer program and viewed all the aspects of the drill throughout the day. Additionally, RCAC staff had the opportunity to speak to both the drill participants and the observer group about the council's mission and role in a spill or drill.

From the beginning to the end of this drill, Chevron demonstrated its commitment to solicit and consider citizen comments during this drill. RCAC commends Chevron for its efforts to fully integrate a citizens' group such as the RCAC.



The Alaska Responder 650 is towed by a fishing vessel in Seldovia during a demonstration of the nearshore response system in 1994.

Fate of oil spill barge in Seldovia unknown

Talks are continuing in the effort to find a way to keep a small oil response barge in lower Cook Inlet.

In the meantime, the Alaska Responder 650 remains in Seldovia. The City of Seldovia wants to keep the barge, but the small community can't afford to pay the operating and maintenance costs.

Under a policy change last year, the state will no longer pay for operating, maintenance and training associated with the barge.

Larger communities with spill response equipment, such as Kodiak and Ketchikan, are able to cover those costs, but small communities can't because of their much smaller budgets.

The barge was built and placed in Seldovia in 1994 as part of a demonstration project funded by the Alaska Department of Environmental Conservation

(ADEC). Nearshore response is the effort to contain and recover spilled oil before it reaches shore.

The state is hoping another city or entity will take over the Seldovia barge and negotiations are underway with several entities.

RCAC, the City of Seldovia and Cook Inlet RCAC have been working with ADEC since last spring to resolve the problem. So far, a solution has been elusive. However, the City of Homer, the Kenai Peninsula Borough and CISPRI, the spill response cooperative for Cook Inlet, are also participating in the talks and some sort of joint arrangement may yet emerge.

Plans for spill response corps and depots – using local residents and vessels – were included in state legislation passed following the Exxon Valdez oil spill.

Prevention & response

Sticky state standard almost pinned down

A vague state law requiring use of the best available technology in oil spill prevention and response has finally been nailed down, and regulations are expected to be finalized by the end of January.

Under state law, entities required to have oil spill contingency plans must use the best available technology at the time the plan is submitted or renewed. However, the law didn't say anything about what the standard meant or how it should be achieved.

Last spring, the Alaska Department of Environmental Conservation (ADEC) pulled together a working group of citizens, industry representatives and department officials to develop regulations.

From RCAC's perspective, the most important aspects of the regulations are periodic review of specific response equipment; a procedure for ensuring that the best available response equipment is used; and the criteria for analyzing what constitutes best available technology.

The regulations spell out three different methods the ADEC will use to determine whether spill prevention and response plans fulfill the requirement for best available technology.

1. Existing performance requirements: If there is already a performance requirement within the law, meeting that requirement will satisfy best available technology. For example, shippers must inspect towing equipment every two months and record the results. Since that is a performance

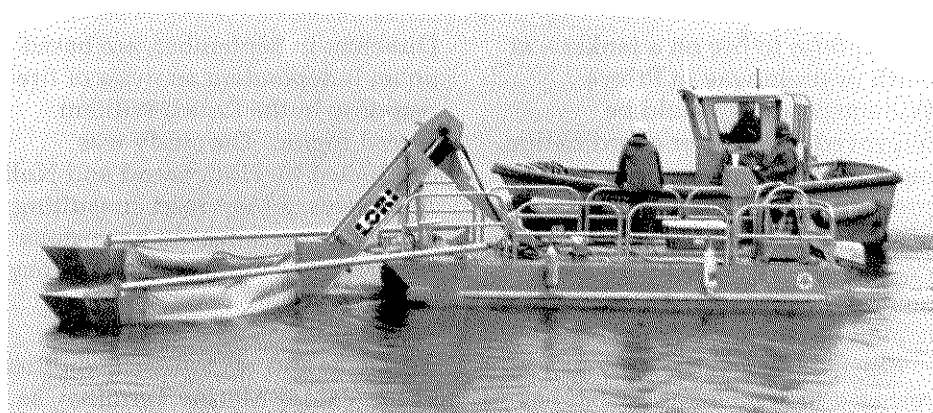
requirement, no further demonstration of best available technology will be needed.

2. Response equipment: Individual pieces of response equipment used to meet the state's planning standard will be reviewed through a technology review conference to be conducted by ADEC every five years. The conference will allow ADEC to assess whether the best available technology is being used in response equipment and procedures. ADEC will be able to require use of proven new technology if it is determined to be significantly superior to that in use.

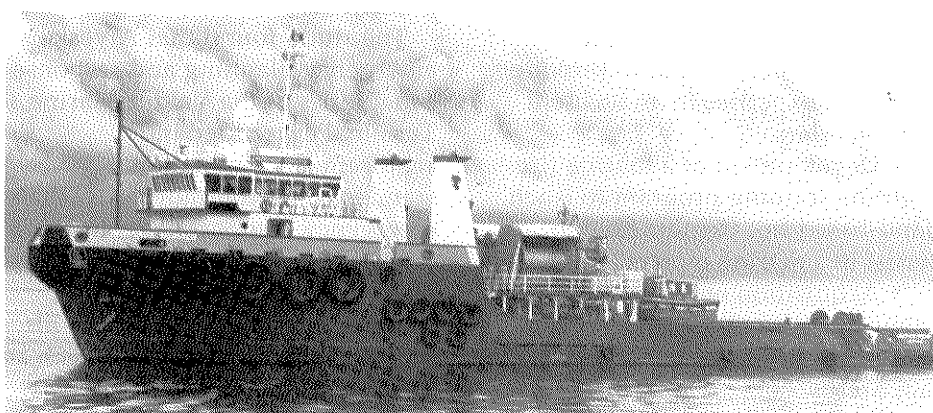
3. Case-by-case assessment: Some aspects of spill prevention and response – tanker escorts, among them – will be reviewed on a case-by-case basis to determine best available technology. The regulations include eight criteria to determine what constitutes best available technology. From RCAC's perspective, one of the most important criteria is that the technology be the best in use in other similar situations and available to the applicant.

RCAC's contingent on the working group included Bill Lindow, who represents the Prince William Sound Aquaculture Corporation on the RCAC Board.

"We didn't get everything we wanted, but it is better," Lindow said. "I feel much better with language that explains how technology from the conference will be used. . . . Maybe the most important thing is we were able to make improvements to the response equipment through the technology conference."



Best available technology? Equipment used to prevent and respond to oil spills, such as the skimmer above, and the Heritage Service escort vessel, below, must reflect the best technology available. New regulations spell out how the state will determine if that standard is being met. Photos by David Adams.



Update: Appeals on tanker contingency plans drag on

Debate continues in court over several aspects of the approval and appeals process used in the Prince William Sound oil spill contingency plans for tankers. Three separate appeals – two by the oil industry and one by fishermen – are in state superior court.

In November, 1995, the Alaska Department of Environmental Conservation (ADEC) approved the tanker contingency plans with conditions. Most of those conditions have been met.

Some of the original petitions objecting to the contingency plans have been resolved or denied. In one case, the City of Cordova dropped out for lack of funds, despite its concern for protection of the Copper River Flats.

The industry appeals in Judge Karen Hunt's court are over process, while the fishermen's suit argues that the state should not

have approved the contingency plans in the first place.

- Alyeska Pipeline Service Co. and four shipping companies are appealing a decision by the Alaska Coastal Policy Council, the body that handles resource agency decisions regarding coastal areas. In the appeals process, the Coastal Policy Council applied the law that was in effect at the time the plans were submitted. The law was subsequently changed and this suit argues that the new law should have been applied instead of the old one.

- Alyeska Pipeline Service Co. and three shipping companies are challenging the jurisdiction of the Coastal Policy Council over oil spill contingency plans.

- Cordova District Fishermen United (CDFU) is challenging ADEC's approval of the oil spill contingency plans on grounds that the plans do not comply with the statutory requirements.

Air permit enforcement questioned

RCAC is asking state regulators how they plan to enforce compliance with Alyeska's air quality permit without any inspectors in Valdez.

In a Dec. 23 letter to the Alaska Department of Environmental Conservation (ADEC), RCAC asked for a record of ADEC actions "to enforce the air quality control permit for the Valdez Marine Terminal, explanations for those actions, and outline of the plan for

monitoring and inspecting the facility in the future."

In recent months, Alyeska has exceeded the emissions allowed by the permit because of corrosion-caused holes in the piping of the terminal's Vapor Recovery System.

Enforcement of Alyeska's air permit will become even more important in the next few years as vapor controls at the tanker loading berths come on line.

SERVS, RCAC talking about concerns

RCAC and Alyeska have agreed to on-going discussions about the readiness of Alyeska's response arm to respond to a major oil spill.

RCAC's Oil Spill Prevention and Response (OSPR) Committee began asking questions last spring about training, personnel, equipment and fishing vessels that are all part of Alyeska's Ship Escort/Response Vessel System (SERVS).

Several observations led the committee to question whether SERVS was prepared for a major spill and whether funding was sufficient to mount the level of response required by state law.

Alyeska did not release detailed financial, budget and long range planning information, but SERVS'

officials spent a full day with an RCAC group in October to discuss the concerns in detail. The information provided did much to resolve RCAC's concerns about SERVS' operations. However, some issues are still outstanding and additional meetings will be held to talk about them.

Specific areas likely to be addressed include experience and training for SERVS supervisors, equipment readiness, training in equipment operation, and drills.

To help resolve the concerns, SERVS has invited RCAC to visit facilities, participate in drills and exercises, and participate in SERVS' re-vamping of its training programs.

Study recommends changes to reduce risk of tanker spills

Continued from Page 1
outbound tanker.

2. Manage tanker and fishing vessel traffic: Continue efforts already begun by the U.S. Coast Guard to coordinate interactions between fishing vessels and tankers. This measure would reduce the risk of collisions between fishing vessels and tankers.

3. Improve ice navigation: Develop and implement ice detection and tracking procedures, to reduce the risk that a tanker's efforts to avoid ice will result in a powered grounding in Valdez Arm.

4. Tug at Hinchinbrook: Provide a tug at Hinchinbrook Entrance capable of saving a tanker in all operating conditions. A more powerful tug will reduce the risk of a drift grounding in situations where the existing escort vessels are unable to save a large tanker that has propulsion or steering failure.

5. Improve management systems: Shipping companies should continue to improve formal management systems to reduce human and organizational errors. Improved systems would reduce the frequency of powered groundings caused by human error and increase the chances that human errors will be recognized and corrected before an accident occurs.

6. Better data: Provide real time data on weather, ice and currents to reduce the frequency of accidents by providing better information about existing conditions.

7. Double hulls: Proceed with schedule for phasing out single-hull tankers and phasing in double hulls, pursuant to OPA 90. Double

hulls will reduce the frequency of accidents that result in spilled oil.

8. Revised escort: Additional revisions to the escort system are needed in the Central Sound and the Gulf of Alaska, to reduce the risk of drift groundings of inbound tankers and reduce risk of collision with SERVS vessels. These revisions are likely to include stationing a tug in the central area of Prince William Sound. The existing system, in which at least two vessels closely escort each laden tanker through the Sound, would be eliminated.

The Prince William Sound Risk Assessment Project was conducted by technical experts from Rensselaer Polytechnic Institute/LeMoyne College, George Washington University, and Det Norske Veritas, an international maritime consulting company. The project was directed and sponsored by a steering committee composed of five Prince William Sound crude oil shipping companies, RCAC, the U.S. Coast Guard, the Alaska Department of Environmental Conservation, and Alyeska Pipeline Service Co. Funding for the \$2 million project was provided by the shipping companies, RCAC and the U.S. Coast Guard.

A panel of the National Academy of Sciences Marine Board is conducting a peer review of the methodology used in the study. However, the Marine Board will not review the findings and recommendations. The peer review is expected to take two to three months.

Implementation

The Steering Committee has appointed three subcommittees to implement the recommendations. One will address vessel management, another the escort

Spill prevention



Ice in the tanker lanes is a significant hazard. Unseen ice did major damage to the tanker Overseas Ohio. The Prince William Sound Risk Assessment study concluded that the risk is not just from the ice itself. Maneuvering to avoid ice also carries risk.

vessels, and the third, management of vessel traffic in the Sound.

Some of the recommendations are already being implemented.

Risk Assessment: So what's the big deal?

What's the big deal?

The mission of the Prince William Sound Risk Assessment Project was simple: to improve the safety of oil transportation in Prince William Sound.

The project is significant because it provides the first system-wide perspective; it provides a solid basis for making decisions about safety improvements; and it was a truly cooperative project among citizens, industry and regulators.

The mix of contractors and models used in the study provided checks and balances, ensuring both the integrity of the project and a high level of confidence in the findings. It also has national and international implications because it represents the first risk management study of this kind to be applied to marine oil transportation.

What we learned

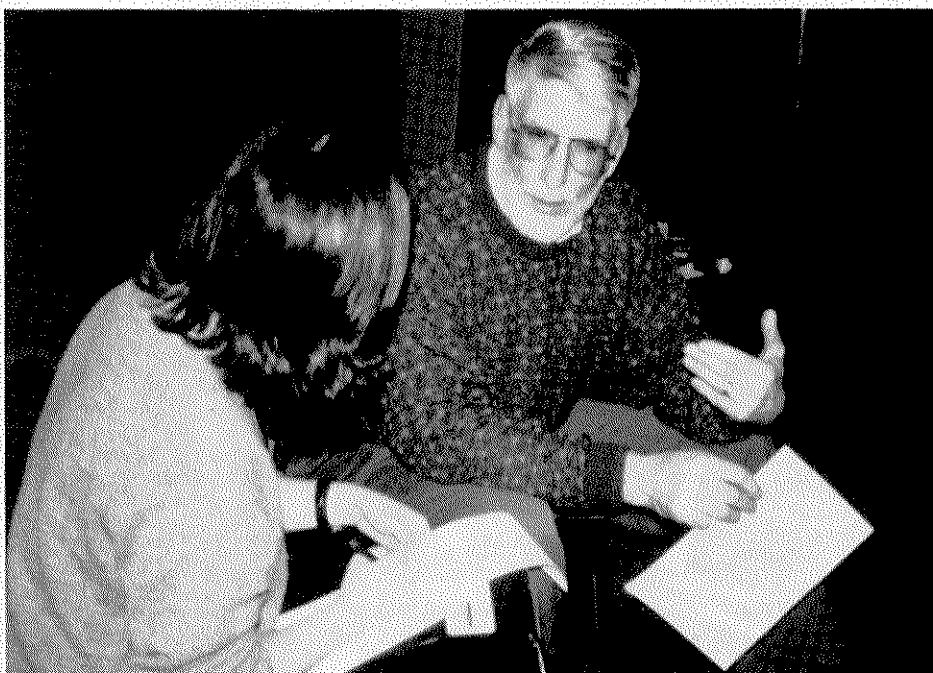
- Changes instituted since 1989

have reduced the risk of oil spills in Prince William Sound 75 percent.

- The single most effective of those improvements is the escort system.
- Risk can be reduced further through system-wide changes and measures that target specific accident scenarios.
- The system must be examined as a whole. Some risk reduction measures actually increase risk elsewhere in the system.

Models have limits

Models do have limits. In some cases, potential risk reduction measures were not assessed because they could not be modeled mathematically. The models are not a perfect reflection of reality. They are mathematical probabilities based on information available. The models are best used by understanding their limitations and using a good deal of common sense.



RCAC Board President Tex Edwards speaks to a reporter after the Dec. 16 press conference announcing the findings of the Prince William Sound Risk Assessment. Edwards and Michelle O'Leary represented RCAC on the study's Steering Committee.

Spill prevention

Valdez oil spill symposium gets good reviews

Approximately 350 people attended the first oil spill prevention symposium, Oct. 8-11, in Valdez. The symposium, titled "Prevention is the Key," featured an on-water demonstration of spill response vessels and equipment, technical papers and presentations, panel discussions and speeches.

The event was organized by Alyeska Pipeline Service Company/Ship Escort Response Vessel System (SERVS) and Prince William Sound Community College.

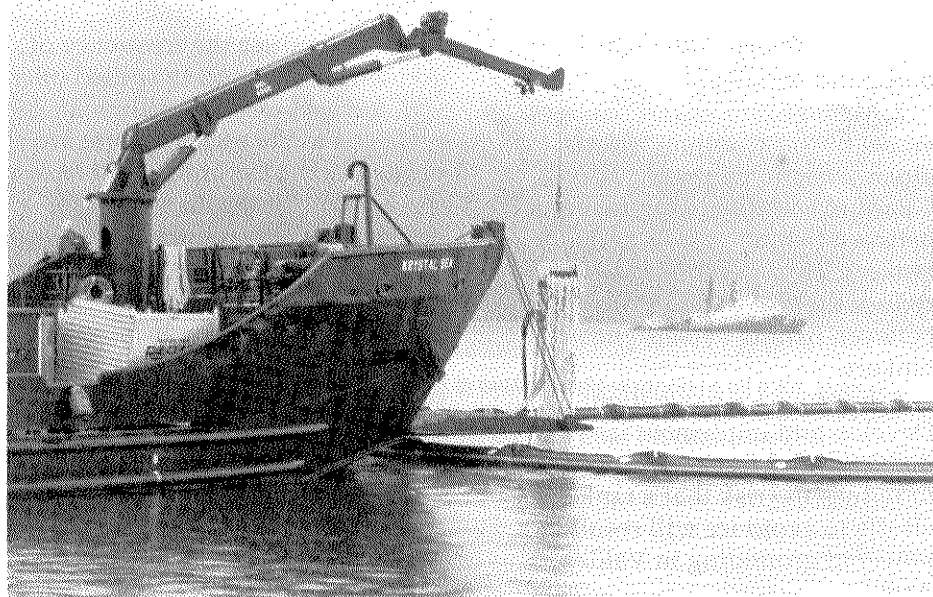
Topics addressed in the panels included escorts, enhancements to safe shipping since the Oil Pollution Act of 1990, spill response considerations, drills and training, citizen oversight, preparedness planning, prevention and response, and oil spill regulations and legislation.

Participants came from across the country and Europe. Special guests included Chris Harris, of the United Kingdom Coast Guard. Harris served as incident commander for the 1993 Braer spill in Shetland, and the Sea Empress spill in Wales last February. Former Alaska Governors Bill Sheffield and Wally Hickel were guests of honor at the symposium banquet.

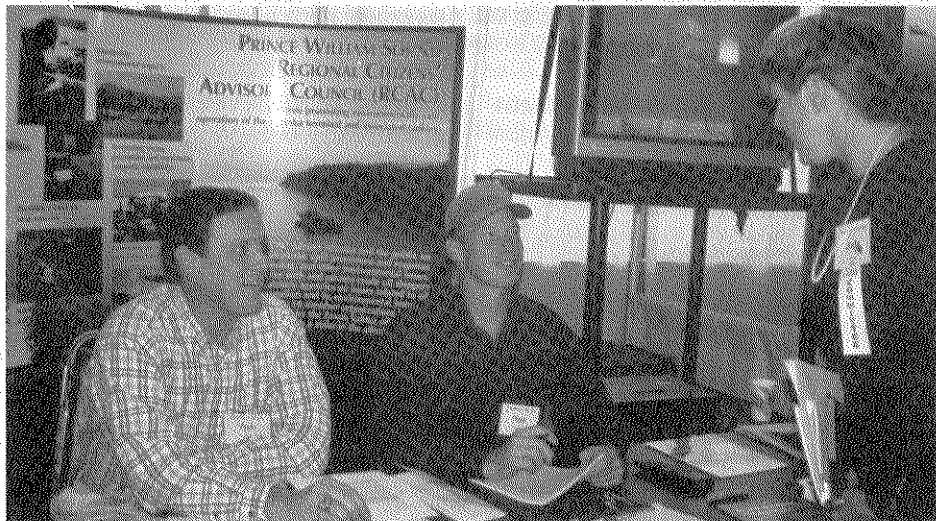
Arguably, the most popular event of the symposium was the on-water equipment and tactics demonstration. From the vantage point of tour boats supplied by Stan Stephens' Tours, participants were able to observe close-hand a range of spill response exercises at the Valdez Marine Terminal and in Port Valdez.

Sharon Hillman, SERVS' primary coordinator for the symposium, said the event was very successful, but there were lessons to take from it, as well. The next time, they would probably schedule fewer concurrent sessions and reduce the number of panel discussions. Hillman also said she would like to see additional co-sponsors – such as the U.S. Coast Guard, RCAC and the State of Alaska – to broaden the perspective of the steering committee. Very tentative plans are to hold the next symposium in spring of 1998, with the idea that it would be held alternate years with the International Oil Spill Conference.

Copies of the proceedings are available (\$40 plus shipping) from Alyeska/SERVS, c/o Contingency Planning, P.O. Box 109, Valdez, Alaska 99686, or from Prince William Sound Community College.



Scenes from the Valdez Oil Spill Symposium, Oct. 8-11: Clockwise from top: The on-water demonstration included the Krystal Sea operating a rope mop skimmer, and boom deployment (below). Gary Richardson, Alyeska Vice President for SERVS, visits with former Governor Wally Hickel at the symposium dinner. (Bottom left) Helicopter demonstrates dispersant drop. (Left) Tom Sweeney and Paul McCullom staff RCAC's information booth at the symposium. All photos except RCAC booth by David Adams.



Air and water

RCAC picks up ball on non-indigenous species

RCAC has retained the research division of the Smithsonian Institution to assist RCAC in determining whether Prince William Sound is at risk from invasion by non-indigenous aquatic nuisances carried in the ballast of arriving tankers.

The Smithsonian Environmental Research Center will do a literature search and, over a two-week period, take samples of clean ballast water from incoming tankers and treated ballast from the ballast water treatment facility. (Clean ballast is carried in tanks not used for oil. Dirty ballast is carried in the same tanks used for oil and must be treated at the

terminal before it can be discharged into Port Valdez.)

The consultants will participate in a working group organized by RCAC, assist RCAC in a one-day workshop to be held March 25, and make recommendations on their findings, if appropriate. The March 25 workshop is a joint effort of RCAC and the U.S. Fish and Wildlife Service; it will focus on future evaluation of non-indigenous species invasions in Prince William Sound.

According to the Smithsonian proposal, there is reason to be concerned about non-indigenous species here. Although research is relatively sparse, especially at high

latitudes, studies done since 1989 "indicate that non-indigenous species are abundant throughout the globe and NIS often form the majority of common species in ports, bays and estuaries, they have major ecological effects and serious economic impacts."

The consultants said the worldwide movement of ballast water appears to be the single largest source of coastal invasions by non-indigenous species today.

There is no certainty that Prince William Sound has been invaded by non-indigenous species. It is possible that high-latitude communities are able to resist invasion because of the severe

conditions. However, it is also possible that such invasions are or have occurred and have not become evident yet.

The sampling program will be only a pilot study and will not provide any conclusive answers about the presence or threat of non-indigenous species. As part of the pilot study, however, the consultants will identify the non-indigenous species most likely to be invading Prince William Sound.

The sampling program includes treated ballast water because the Ballast Water Treatment Facility treats only oil contamination and would probably not eliminate biological contaminants.

Prince William Sound provisions dropped from act

In a last-minute flurry of activity, provisions important to Prince William Sound were dropped from a new federal law designed to prevent importation of aquatic nuisances through ballast water.

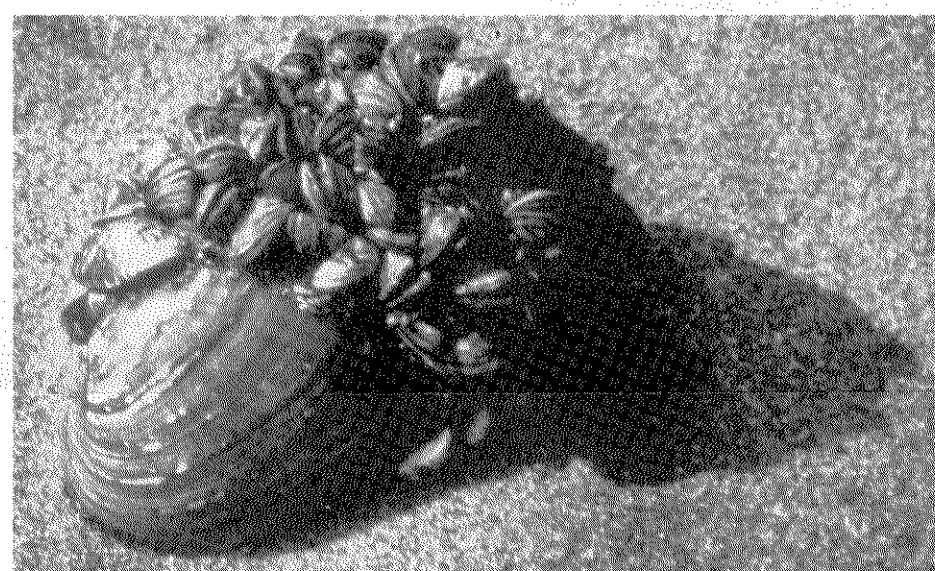
Shortly before Congress adjourned in early October, the Senate approved a House version of the National Invasive Species Act (NISA) of 1996. NISA reauthorizes an earlier act, the National Aquatic Nuisance Prevention and Control Act of 1990, and broadens it to a national focus.

Aquatic nuisances – also called non-indigenous species – have created major problems in, among other ports, the Great Lakes and San Francisco Bay. The aquatic nuisances were likely introduced through ships off-loading ballast water. The non-indigenous species are able to establish themselves

and proliferate, free of the predators in their "native" waterways that would normally keep them under control.

NISA establishes voluntary guidelines for ships to exchange segregated ballast water at sea, to avoid bringing potentially invasive aquatic species into U.S. waters. (Segregated, or clean ballast, is seawater stored in tanks not used for cargo. Seawater carried in cargo tanks, called "dirty" ballast, must be treated before it can be discharged.)

In the earlier version of NISA, the voluntary ballast exchange applied to all ships carrying ballast into U.S. waters from outside the Exclusive Economic Zone, which would have applied to most TAPS trade tankers. It also included a study of Prince William Sound to examine patterns of invasions of aquatic nuisance species and estimate the effectiveness of ballast



Invaders. Zebra mussels attach to a native clam in the Great Lakes. No one knows if Prince William Sound could have similar problems. Photo courtesy Minnesota Sea Grant.

water exchange in reducing potential invasions.

However, in late September, the act was amended in the House. Coastwise trade – ships traveling between domestic ports – was exempted and the Prince William Sound study was deleted. Subsequently, a different study was inserted to determine whether the ballast water treatment facility at the Valdez Marine Terminal can be modified to handle non-indigenous aquatic species.

The exemption for coastwise trade ignores two important possibilities: 1) that organisms indigenous to other U.S. ports could invade Prince William Sound through ballast water, with

potentially detrimental effect, and 2) that some domestic ports have already been invaded by exotic organisms, which could be introduced into Prince William Sound through ballast water picked up in the contaminated port.

No one knows if aquatic nuisance species are a problem in Prince William Sound. However, experts are warning port officials all over the country to act before aquatic nuisances show up. A scientist at the University of California at Berkeley said 231 non-indigenous species have been identified in San Francisco, and a new organism establishes itself there every 15 weeks.

RCAC board meetings set

RCAC Board of Directors meetings have been scheduled for 1997. The annual meeting will be March 13 and 14, in Valdez.

The spring meeting will be May 8 and 9, in Seldovia. Sept. 25 and 26, the board will meet in Kodiak.

The winter meeting will be Dec. 4 and 5, in Anchorage.

In addition to the quarterly meetings, the board will convene for a planning workshop, Jan. 31 and Feb. 1, and for a budget work session, March 28. Both of those meetings will be in Anchorage.



The Tatitlek Alutiiq Dancers, led by instructor Karen Katelnikoff (far left) were a big hit when they performed at RCAC's annual Volunteer Appreciation Party, Dec. 5, in Anchorage. The dancers are Jordan Geffe, Margie Allen, Angelique Gregorieff, Deserae Stellwag, Tanya Totemoff, and Nanci Kompkoff. Matthew Kompkoff is the drummer.

Back page

Consultants selected

S.L. Ross Environmental Research Ltd., of Canada, has been awarded two contracts to provide information to RCAC on dispersants and in-situ burning in oil spill response. RCAC will use the consultant's reports as it develops policies and recommendations on the use of dispersants and in-situ burning.

S.L. Ross Environmental Research specializes in oil spills and their control. The firm has conducted 25 studies on dispersants, and 30 studies on in-situ burning.

Under the dispersants project, S.L. Ross will conduct a literature search and deliver a report on dispersants use. The report will include discussion of issues such as environmental effects of dispersants, effectiveness of dispersants now stocked in Alaska, policies and practices in other Northern countries, and the fate and effects of dispersants and dispersed oil. The consultant will also provide an annotated bibliography in data base format.

RCAC has had an interim policy on dispersant use in 1993. The report is expected to provide information the council needs to adopt a formal policy on dispersant use.

S.L. Ross Environmental Research will do a similar report and bibliography on in-situ burning of spilled crude oil. In that project, the consultant will research the effects of burning and the technology associated with it. Among the questions to be addressed in that report are the

effectiveness of burning North Slope crude, environmental considerations, and smoke reduction techniques.

Both reports are to be completed by Feb. 10, 1997.

Applied Biomonitoring was selected to conduct a pilot study using caged bivalves to monitor the effects of treated ballast water on the marine environment of Port Valdez. The purpose of the pilot study is to confirm that the bivalve – probably blue mussels or Pacific oysters – will survive and grow at a certain depth in the water near the Valdez Marine Terminal.

EVS Environmental Consultants was awarded a new contract to continue working with RCAC on environmental monitoring issues associated with the ballast water treatment facility at the Valdez Marine Terminal. Dr. Peter Chapman, of EVS, has been a consultant to RCAC since August 1994.

The firm of **Dames & Moore** has been retained to collect information and prepare a report on bioremediation, as a method of treating spilled oil. The report will be completed by mid-April.

Sierra Research has been selected to review vapor control technology and maintenance at the Valdez Marine Terminal. The project is expected to take two years.

Prince William Sound Regional Citizens' Advisory Council

The Prince William Sound Regional Citizens' Advisory Council (RCAC) is an independent, non-profit organization formed after the 1989 Exxon Valdez oil spill to minimize the environmental impacts associated with the terminal and tanker fleet.

The RCAC has 18 member organizations, including communities impacted by the Exxon Valdez oil spill, a Native regional corporation and groups representing commercial fishing, aquaculture, environmental, tourism and recreation interests in the impact area.

RCAC is certified under the federal Oil Pollution Act of 1990 as the citizen advisory group for Prince William Sound, and operates under a contract with Alyeska. The contract, which is in effect as long as oil flows through the pipeline, guarantees RCAC's independence, provides annual funding, and ensures RCAC the same access to terminal facilities as state and federal regulatory agencies.

The mission of RCAC is citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers.

Board of Directors

George Wuerch	Alaska State Chamber of Commerce
Stan Stephens	Alaska Wilderness Recreation & Tourism Assoc
Vacant	Community of Chenega Bay
Keith Gordaoff	Chugach Alaska Corporation
Margy Johnson	City of Cordova
Michelle Hahn O'Leary	Cordova District Fishermen United
Tex Edwards	City of Homer
Blake Johnson	Kenai Peninsula Borough
Kristin Stahl-Johnson	City of Kodiak
Wayne Coleman	Kodiak Island Borough
Charles Christiansen	Kodiak Village Mayors Association
Charles K. Weaverling	Oil Spill Region Environmental Coalition
Bill Lindow	Prince William Sound Aquaculture Corp.
Tim Volstad	City of Seldovia
Dennis Lodge	City of Seward
Gary Kompkoff	Community of Tatitlek
Mike Gallagher	City of Valdez
Bill Walker	City of Valdez
Marilynn Heddell	City of Whittier

Executive Committee

Tex Edwards - President
Michelle Hahn O'Leary - Vice president
Charles K. Weaverling - Secretary
Bill Lindow - Treasurer
Marilynn Heddell - Member at-large

Staff

Anchorage (Internet: pwsrccac@alaska.net)
Stan Stanley, Executive Director
Marilyn Leland, Deputy Director
Linda Robinson, Financial Operations Manager
Daphne Jenkins, Information Systems Manager
Sandra Arnold, Executive Assistant/Volunteer Coordinator
Andrea Archer, Administrative Assistant
Patty Ginsburg, Public Information Director
Leann Ferry, Community Liaison
Lisa Ka'ahue, Project Manager
Joe Banta, Project Manager
Becky Lewis, Project Assistant

Valdez (Internet: rcac@alaska.net)
Lynda Hyce, Deputy Director
Joe Bridgman, Project Manager
Joel Kopp, Project Assistant
Rica Salvador, Administrative Assistant

750 W. 2nd Ave. Suite 100
Anchorage, AK 99501-2168
Phone: 907/277-7222
FAX: 907/277-4523

154 Fairbanks Drive, P.O. Box 3089
Valdez, AK 99686
Phone: 907/835-5957
FAX: 907/835-5926

Toll free in Alaska: 800 478-7221

Publications, reports available

Copies of most documents are available to the public free of charge. A handling fee will be charged for large documents and requests of more than 10 documents. The following are recent publications and reports.

Publications

- "RCAC Retrospective: The successes and lessons of a citizens' advisory group." 12/6/96 (Ref. #5006.645)
- "1995 Year in Review." (Ref. #5.9.511.95)
- "The Observer," RCAC newsletter, published since 1991.

Consultants' Reports

- Marine Fire Response and Emergency Planning for Prince William Sound, Alaska. Author: Hildebrand and Noll Associates. 9/6/96. (Ref. #C/700.621).
- Long-Term Environmental Monitoring Program, Annual Report for 1995. Author: Kinnetic Labs., Inc. 6/1/96 (#C/4.5.4022D)

- Drill Monitoring Annual Report 1995. Author: Tim Jones. (#2070.605).

Advice & Comments (1996)

- Letter to the Alaska Division of Governmental Coordination regarding assessment of the Alaska Coastal Management Program. 12/17/96 (#2.2.2565)
- Comments to ADEC regarding proposed regulations for "best available technology." 12/2/96. (#2.2.2569)
- Comments to ADEC on Kodiak Subarea Plan 10/18/96. (#2.2.2567)
- Comments to ADEC on proposed regulations for "best available technology." 10/18/96 (#2.2.2568)
- Letter to ADEC Commissioner Brown regarding nearshore response system in Seldovia. 9/30/96. (#2.2.2566)

