ALASKA LEGISLATURE COMMITTEE FILES, 1989-1990 8672
6592 SENATE RESOURCES

PART 2

Discussion of selected information needs

1. MIGRATORY BEHAVIOR OF EGG-BEARING FEMALE KING CRAB ALONG THE NORTH SHORE OF THE ALASKA PENINSULA

Justification: Insufficient information is currently available on the onshore-offshore migration pattern of egg-bearing red king crab in the North Aleutian Basin (NAB). In the Kodiak region, female king crab exhibit an annual onshore-offshore migration pattern (Powell and Nickerson 1965, NPFMC 1980). Due to limited winter surveys, this behavior is not documented for the NAB. McMurray et al. (1984) questioned whether females undergo an onshore-offshore migration, and suggested that remaining in warmer nearshore waters would enhance egg development.

Whether or not gravid females exhibit an onshore-offshore migration is important to the Sale 92 decision process because it affects the potential for increased hydrocarbon exposure to developing eggs and therefore affects the risk assessment. If studies indicate that females do not migrate to deeper offshore areas, the information would provide justification for additional protection to nearshore areas through adoption an alternative lease sale configuration or mitigation measures.

Methodology: Conventional winter field surveys along the North Aleutian Shelf and inner Bristol Bay would be necessary to document the nearshore distribution of egg-bearing female king crab.

Timing: Currently depressed NAB king crab populations may restrict the acquisition of data necessary for proper analysis. Consequently, two or more winter field surveys may be required.

Cost: Estimated cost for this study is 100,000 to 150,000 dollars.

2. IMPORTANCE OF THE NORTH ALEUTIAN SHELF AS A MIGRATORY FEEDING AREA FOR GRAY WHALES

Justification: The relative importance of the North Aleutian Shelf to the overall eastern Pacific gray whale population is currently unknown. Although small numbers of gray whales have been reported feeding in nearby waters during migration and while on the breeding grounds (Sund 1975, Darling 1977, Wellington and Anderson 1978, Norris et al. 1982, and Brueggemann et al. 1987), the majority are not known to begin feeding intensively until they reach the northern Bering Sea (Rice and Wolman 1971, Zimushko and Ivashin 1980, Lowry et al. 1982). However, Gill and Hall

(1983) reported that once gray whales moved into nearshore and estuarine waters along the north side of the Alaska Peninsula, many of them began feeding. During three spring aerial surveys, 50-80 percent of the whales seen within 1 kilometer (km) of shore between Unimak Pass and Naknek were trailing mud plumes or were on their sides characterizing feeding behavior (Gill and Hall 1983). This observation is important because it indicates that a significant percentage of the eastern Pacific gray whale population may utilize coastal areas along the North Aleutian Shelf for "migratory" feeding.

The significance of such "migratory" feeding areas is currently unknown. Gill and Hall (1983) suggested that the use of such feeding areas might be a requisite for survival, due to several prior months of near fasting and the energy demands resulting from a long migration. Consequently, additional studies are needed to provide accurate estimates of: 1) the number of gray whales that utilize this area as feeding habitat; 2) the length of time that feeding occurs in the area; and 3) the principle prey species. If information is obtained that shows the North Aleutian Shelf nearshore area is of critical importance to gray whales, it should significantly influence the reasoned choice between alternatives through supporting selection of an alternative lease sale configuration or the adoption of mitigating measures restricting activities in the nearshore area during the spring migration period.

Methodology: The MMS should consult with the NMFS on designing conventional field studies to address this information need. This study should also be coordinated with the on-going OCSEAP endangered whale monitoring study.

Timing: A minimum of two years of field surveys would be required.

Cost: The study cost is not anticipated to exceed 400,000 dollars.

3. EFFECTS OF OIL CONTAMINATION ON EELGRASS BEDS ALONG THE NORTHERN SHORELINE OF THE ALASKA PENINSULA

Justification: Oil contamination of eelgrass beds is likely if an oilspill reaches the northern shoreline of the Alaska Peninsula. Contamination may reduce productivity of these plants, cause outright mortality, and alter substrates so that recolonization by plants may be hindered. If the growth of these plants is affected, or the plant surfaces are contaminated, the implications could be severe. For instance, the world populations of black brant and emperor geese rely on Bristol Bay eelgrass beds, particularly those found in Izembek Lagoon, as a primary food source prior to their strenuous fall migration. It is also suspected that the eelgrass beds are utilized by herring stocks for spawning substrates.

In order to adequately evaluate the risks to this critically important habitat, and the species dependent upon eelgrass beds, it is essential that there be a better understanding of the potential effects of oil contamination on these plants and their substrates. The final EIS did not adequately address the issue on how long impacts might persist or how the long-term disruption to eelgrass beds might affect waterfowl. However, it did state that East Coast eelgrass beds affected by disease required over 30 years to recover. This suggests that very significant long-term impacts might result from oil contamination. If the proposed studies found this to be true, the information would provide strong justification to support an alternative lease sale configuration or mitigation measures which would lower the risk of oil contamination to these important habitats.

Methodology: In situ field studies should be conducted utilizing various types of hydrocarbon contaminates at varying concentrations.

Timing: The study schedule should be flexible to ensure that long-term impacts are adequately documented. It is anticipated that monitoring will be required for at least three to five years.

Cost: Estimated study costs are not projected to exceed 500,000 dollars.

4. ANALYSIS OF OIL SPILL RESPONSE CAPABILITIES

Justification: To date, an analysis of oilspill response capabilities in the Bering Sea has not been conducted. Considerable information is available that could be utilized in this analysis. This information includes: 1) Coast Guard oilspill logs and response capability evaluations for major oilspill events in U.S. waters; 2) reports on international oilspill events and subsequent cleanup efforts; 3) oilspill response exercises conducted by the Coast Guard and the oil industry; 4) manufacturer equipment specifications; 5) oilspill behavior reports; 6) industry oilspill contingency plans; and 7) meteorological and oceanographic studies of the NAB. The analysis should not only focus on equipment capabilities, but also on the capability to deploy equipment and to logistically support cleanup operations.

The study results could 1) allow the MMS to include an oilspill response capability judgement into their analyses of impacts in Environmental Impact Statements; 2) provide a basis for evaluating the effectiveness of current mitigative measures such as oilspill contingency plans; 3) justify development or adoption of different mitigation measures to reduce oilspill risks; or 4) support adoption of alternative lease sale configurations

Methodology: The study should provide the following information: 1) describe equipment, personnel, and logistical capabilities currently available or anticipated by industry; 2) develop several oilspill scenarios and analyze industry's response capabilities under each scenario; and 3) develop a set of standards for evaluating oilspill contingency plans.

Timing: The study could be completed in one year.

Cost: Estimated study costs could range from 15,000 to 25,000 dollars.

Bristol Bay residents resist oil exploration

By MAURA DOLAN
Los Angeles Times

ADN 11/3/85

DILLINGHAM — To the thousands who net the huge Pacific salmon that inhabit Bristol Bay and its tributary rivers in southwestern Alaska, fishing is a matter of survival.

In the frenzy of the summer salmon season, fishermen have been known to brandish guns and ram each others' boats as they compete for a catch that will sustain them when the waters turn to ice and the harbor closes for the long, bitter winter. The massive catch on the bay, which measures roughly 230 miles at its widest point, nets a year's livelihood: cash earned from sales to nearby canneries and meals for months to come on salmon that has been dried or frozen.

"If we lost our fish here, I would guess it wouldn't take more than five years for us to become a ghost town, along with about nine villages on the Nushagak River," said Dillingham Mayor Leon Braswell, 40, a fisherman who wears blue jeans and work boots to the unmarked wood framed building that is Dillingham City Hall. "Fishing is all we have."

Now, after fending off intrusions by foreign fishermen and successfully demanding better prices from the canneries, Braswell and the people of Dillingham are attempting a feat that few believe can succeed. They are fighting to prevent oil companies from punching holes in the bottom of Bristol Bay, which environmentalists and fishermen view as part of a calculated effort by oil companies to set the stage for drilling in other areas now off limits for environmental or political reasons.

The U.S. Department of the Interior has tentatively decided to permit the oil industry to drill next year in a 5.6-million-acre site in Bristol Bay, situated on the western side of the Alaska Peninsula just north of the Aleutian Islands.

The plan represents a key test for Secretary of the Interior Donald Hodel's willingness to buck environmentalist opposi-

See Page J-2, BRISTOL

Bristol Bay may be test case for oil industry

Continued from Page J-1

tion as he tries to forge ahead with the federal government's offshore leasing program, which suffered significant political setbacks under the direction of former Secretary James Watt.

What makes Alaska tempting as a vehicle for prying open the door to offshore drilling in environmentally sensitive areas, critics say, is the fact that the 49th state wields substantially less political clout than more populous states, such as California.

Industry officials concede that even the harsh seas and frigid temperatures of the north are easier to overcome than opposition to drilling by California's powerful congressional delegation.

With a population of only 479,000, Alaska has one member in the House of Representatives. California, with a population of 25 million, has 45 representatives.

For people here, the Bristol Bay struggle matches California's battle in the intensity of local feelings, although unlike the Californians, people in Bristol Bay spend little time worrying about aesthetics for tourism or air pollution. Rather, they fear that an oil spill would destroy the fish and the economy of this wind-blown region that Natives call the Bush.

If finalized, the plan would place oil exploration at the side of the nation's largest salmon fishery, the state's largest herring fishery and the home or migration corridor of a million marine mammals.

The oil industry says fishing and oil exploration can coexist and points to a relatively good safety record in other waters off this state.

"There is no one who is reasonable and fair who will tell you there won't be accidents," conceded Thomas Cook, the Alaska exploration representative for Chevron U.S.A. Inc. "But I think the industry's record is very good. Even catastrophes like the Santa Barbara (Calif.) blowout (of 1969) had only a temporary effect and didn't eliminate fishing or do any permanent damage to the environment."

Gov. Bill Sheffield strongly opposes the offshore leasing plan, a position that pits the state against an industry that has made Alaska rich.

Oil revenue finances about 80 percent of the state budget. Oil money made it possible for Alaska to abolish the state personal income tax in 1980. Indeed, the oil industry generates so much money that every resident receives an annual payment — this year $404 — from interest earned off oil revenue.

But the state has threatened to sue the federal government unless it delays exploration in Bristol Bay for 10 years.

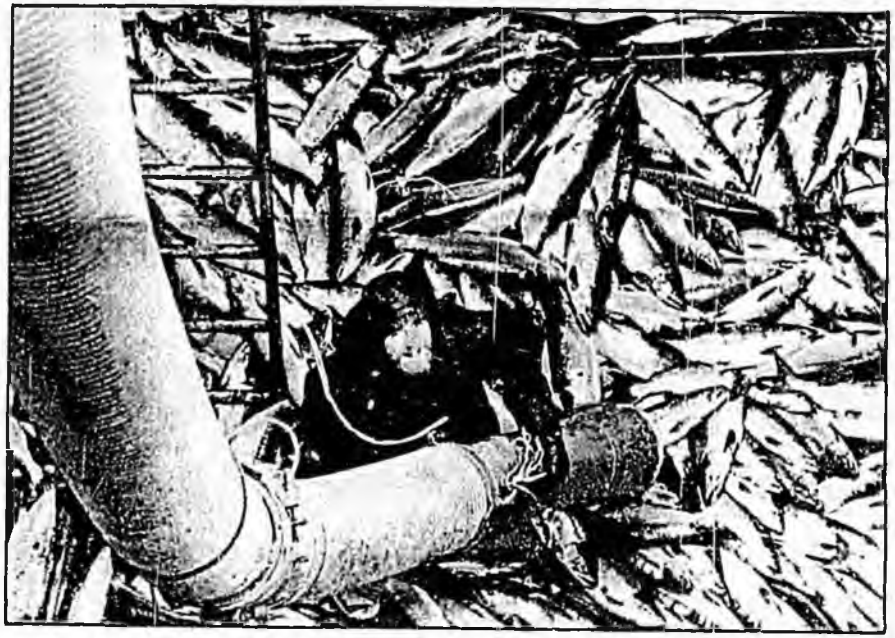
"Obviously, it's not that we're against oil and gas," Sheffield said recently. "We've had a very good working relationship with the oil and gas industry. But on Bristol Bay, we just had to draw the line."

Fishing in Bristol Bay is a $1 billion-a-year industry that employs 10,000 workers seasonally. Unlike onshore drilling in Prudhoe Bay to the north, located in state territory with royalties paid directly to the state, a discovery in the federal waters off Bristol Bay would add little to Alaska's pocketbook.

Prudhoe Bay production is expected to peak in the next couple of years and decline after that. The state, therefore, is anxious to nourish and sustain its other industries, like fishing, to fill the vacuum when the oil is gone.

"You don't have oil spawn and come back and reproduce," Sheffield said. "Oil will run out sometime, hopefully not for a long time. But fishing, if we manage it right, will be around forever."

In Bristol Bay, environmentalists cite Department of the Interior estimates that the proposed drilling site contains 279 million barrels of oil, a small amount in comparison with other federal offshore areas where drilling is planned. In a government ranking of hydrocarbon resources, Bristol Bay is rated lower in potential than waters off either Southern, Central or Northern California.



Daily News file photo

Commercial fishing is a $1 billion-a-year industry in Bristol Bay and employs 10,000 people.

Oil company officials say that industry assessments of Bristol Bay's energy potential are more optimistic than those of the federal government.

Chevron's Cook said that, if Hodel caves in on Bristol Bay, "we'd have some very serious concerns as to whether there is any credibility" in the federal offshore leasing program

During the last few years, oil companies have plucked Natives and village officials from these shores and flown them to Louisiana and Texas for all-expense paid excursions intended to show that oil operations will not harm fishing.

Some who took the trips and visited industry research offices in Houston and fished off derricks in Louisiana returned mollified.

But others, like fisherman Harvey Samuelsen, were not convinced.

"Of course they have hurricanes in Louisiana, but they don't have drifting ice like we have up here," said Samuelsen, 59, who heads a fisherman's union here.

"Bristol Bay gets some of the worst weather in the world. And, like I tell everybody, this is a national treasure.... Bristol Bay feeds a lot of people throughout the world."

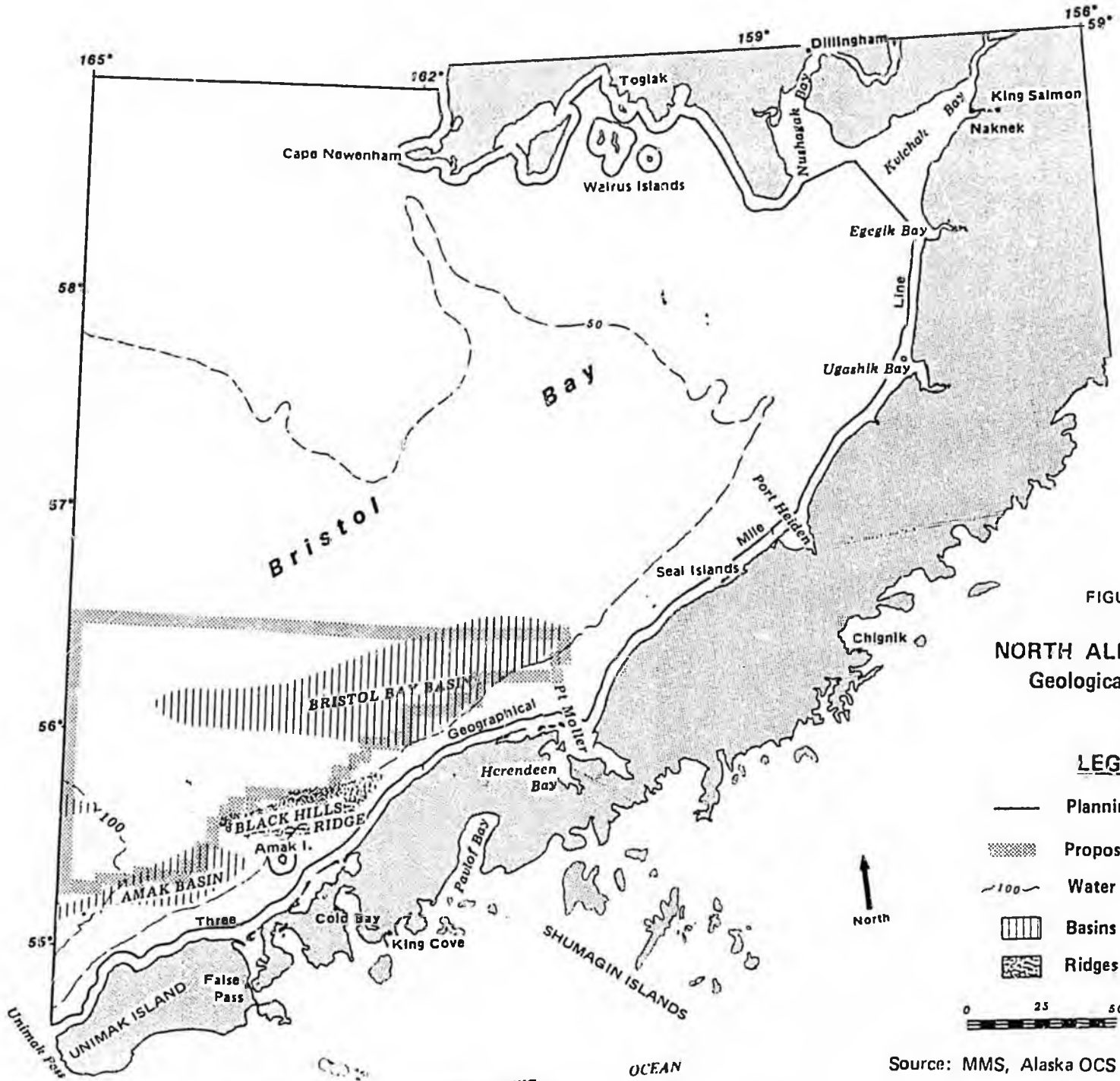


FIGURE III–1

NORTH ALEUTIAN BASIN
Geological Structures

LEGEND

- Planning Area Boundary
- Proposed Lease Sale Area
- 100 Water Depth in Meters
- Basins
- Ridges

Source: MMS, Alaska OCS Region, 1983

TESTIMONY ON HJR 32 & SJR 11
by
Joseph Chythlook, President
Aleknagik Natives, Limited
and
Member of AFN Board for Bristol Bay Villages
April 3, 1989

Madam Chairman and Committee Members:

I thank-you for affording us this opportunity to testify on this matter.

I want to speak strongly in support of both HJR 32 and SJR 11 which seek to delay any oil and gas activity in the OCS Lease Sale 92 area.

As stated in Senator Zharoff's SJR 11, "Bristol Bay and the North Aluetian Basin support the world's largest sockeye salmon fishery, a world class herring fishery, and major components of the king crab, tanner crab, and groundfish resources of the Bering Sea." Furthermore, these fisheries are the biggest employers of people who live in our area. The numbers of individuals employed average well over 10,000 per year, and the value of the salmon alone has a wholesale average of $250,000,000. I have no doubt that any oil company would not be able to come to any where near these figures in benefits to local economy. As in other areas, they would leave with their pockets full and ours empty.

I also fully agree with Governor Cowper that "the Bristol Bay area coastal habitats and fish and wildlife resources are highly vulnerable to oil spill damage and disturbance." Furthermore, the oil industry just recently demonstrated to all of us that they are not prepared and able to contain and clean up "any" oil spills, even in the HARBOR. And they tell us they can in the Bering Sea and off Bristol Bay. I think I have good reason to disagree.

And as far as technology and safety is concerned, these are only as good as the people who deal with them. And,as long as people are "human" the possibility of error is ever present. The one little "mistake" in Valdez is going to affect many l[illegible] in Prince William Sound for months and years to come. We can do without any "repeat" of this in Bristol Bay and North Aluetian Basin.

Therefore, I want to see any gas and oil activity delayed and, if possible, any further plans for leasing in Bristol Bay and North A uetian Basin cancelled.

Thank-you.

APR 05 '89 10:21 LEG. AFFAIRS - DILLINGHAM

TELECOPY COVER SHEET

Dillingham Legislative Information Office

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FROM: Dillingham Susan Flensburg Dusty Christensen PHONE: _____

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TESTIMONY ON SJR-11 (BRISTOL BAY LEASE SALE 92) before the Senate Special Committee on Oil and Gas. By Susan Flensburg, Bristol Bay Coastal Resource Service Area, P.O. Box 849, Dillingham, Alaska 99576. April 3, 1989

I am testifying on behalf of the Bristol Bay CRSA Board which is an elected body responsible for developing a coastal management plan and representing the region on various resource development issues. There are a number of reasons why the people in our region feel the legislature should support SJR 11 and HJR 32 to stop or at least postpone oil and gas activity in Bristol Bay.

The most obvious reason is the recent oil spill disaster in Prince William Sound. Industry has shown us they have neither the response or clean up capability to handle an oil spill in rough or even calm weather conditions. Bristol Bay is known for having some of the worst weather conditions in the world. The federal government's analysis of LS 92 acknowledged that the mechanical recovery of oil is totally ineffective in high sea states which occur most of the time in Bristol Bay. In short, the technology doesn't exist to clean up an oil spill in the weather conditions characteristic of Bristol Bay.

You have already heard from Senator Zharoff and others about the unparallelled fish and wildlife resources in Bristol Bay -- the world's largest red salmon fishery, the Togiak herring fishery which is the biggest in the state, and one of the largest congregations of marine mammals. These resources are of obvious economic importance to the state's commercial fishing and tourism industries as well as the subsistence way of life for western Alaska. The federal government concluded there was a high probability that one or more spills exceeding 1,000 barrels of oil would occur with a greater risk associated with tankers. If oil production occurs in Bristol Bay and tanker transportation is determined a more economically attractive alternative than a pipeline, which is left up to the oil companies to decide, tankers would be routed through Unimak Pass. Unimak Pass is the major gateway for salmon, marine mammal and bird populations entering and leaving the Bering Sea. Navigation through Unimak Pass is difficult and is usually complicated by storms and heavy fogs. In short, an oil spill in this area could have a devastating impact on the commercial fishery.

The benefits of oil development in Bristol Bay to the region and state are few if any at all. The state receives absolutely no revenues or royalties from development in the Outer Continental Shelf but will bear the brunt of any environmental damage and losses to the commercial fishery in the event of an oil spill. There would be very few jobs available for local residents and no major onshore facilities likely to be developed.

The commercial fishery is the backbone of the regional and local economies in Bristol Bay. The legislature is considering mandatory borough formation in rural areas, such as Bristol Bay, to help pay for educational and other services. Much of our revenue base will depend then upon a healthy commercial fishery and employment this industry provides. Existing and future boroughs in southwest Alaska will be hard pressed to make it on their own without a significant return from the raw fish tax and borough imposed taxes on the commercial fisheries. An oil spill could destroy this revenue base.

The Bristol Bay CRSA Board remains adamantly opposed to any oil and gas activity in Bristol Bay now or in the future and believes there is overwhelming justification for this committee and the legislature to unanimously support both SJR 11 and HJR 32, and to seek a congressional ban on future lease sales in Bristol Bay.

TESTIMONY ON SJR 11 (LEASE SALE 92)

By Gusty Chythlook
General Delivery
Aleknagik, Alaska 99555

April 3, 1989

Thank you for the time to testify. My name is Gusty Chythlook. I have lived all my life in Bristol Bay and like most people from here depend on commercial fishing and subsistence for my livelihood. I also serve on the Bering Sea Fishermans Association Board of Directors and the Bristol Bay Coastal Resource Service Area Board.

The major oil spill near Valdez has put alot of mixed feelings as to the oil companies clean up measures they may have. It would be a great risk to our fisheries to allow them to explore and develop oil in the North Aleutian Basin, Sale 92 area.

The potential quantity of oil from this area is so small to be risking our billion dollar fisheries. We have nearly 2,000 commercial drift net holders for salmon alone with investments in fishing vessels in excess of $100,000 each. A major oil spill here like the one in Prince William Sound could jeopardize all this. This does not even include our ten year old herring fishery which is worth in excess of ten million dollars.

We do not want to see oil exploration or development in Bristol Bay because of the risks of an oil spill to our commercial salmon and herring fisheries. If we can not stop oil development, it should not be allowed until the oil companies prove they can clean up an oil spill without damaging the commercial fisheries and subsistence resources of Alaskans, especially in Bristol Bay.

For all of these reasons, I ask you to please support Senate Joint Resolution 11. Thank you.

11-10-85 ADN

Bristol Bay leases: Not there, not now

When it comes to oil, Alaska is America's equivalent of Saudi Arabia. And with so many promising places to look for oil here, one of the last places should be Bristol Bay, home of a billion-dollar fishing industry. But Bristol Bay is at the top of the feds' list: Over the state's objections, the U.S. Department of the Interior tentatively plans to sell leases there in January.

The leasing would occur in the heart of the world's largest red salmon fishery. The area is also rich in bottomfish. Ten thousand people depend on those fish for jobs and thousands more depend on the area's fish, seals, walrus, and other wildlife for food. A major oil spill threatens destruction of the fishing industry and an end to the subsistence way of life in the area; the jury is still out on the long-term effects of chronic small spills and routine pollution, including disposal of drilling muds, on areas with offshore drilling, especially in sensitive subarctic waters.

The oil industry says its record shows fishing and offshore oil can live together, and sometimes it can. Yet, based on industry experience, the federal government's environmental impact study predicts at least one oil spill of 10,000 barrels in Bristol Bay and indicates the industry's clean-up techniques won't work in the heavy seas common to the area.

Gov. Bill Sheffield wants the sale put off for 10 years and has vigorously lobbied Interior Secretary Donald Hodel for a delay. It's an uphill battle.

Even the Alaska congressional delegation, usually so quick to defend the state's interests against the insensitivity of a distant federal government, supports the oil industry's desire to have the sale as scheduled.

Interior Secretary Hodel must consider the national interest as well as Alaska's interest. But fish from the area are important to international trade, And declaring Bristol Bay off limits to oil drilling would hardly hurt the nation's quest for domestic sources of oil; the government estimates the oil there amounts to a three-week supply for the United States.

In spite of Gov. Sheffield's lobbying, Secretary Hodel isn't likely to delay the Bristol Bay sale. If he doesn't, the governor has said he will sue to stop the leasing. He should. There are still some places where oil development isn't worth the risk. Bristol Bay — with so little oil and so many fish — is such a place.

H J R
36

STATE OF ALASKA
1989 LEGISLATIVE SESSION

BILL VERSION: HJR 36
PUBLISH DATE: HOUSE 4/17/89

FISCAL NOTE

REQUEST:

Revision Date:
Title: Oppose Cap on Fed Fish & Wildlife Funds
Sponsor: Hoffman,Larson,Shultz,Menard,Navarre,Hudson, Davidson
Requestor: House Resources Committee

Agency Affected: Dept.Fish & Game
BRU:
Component:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES	-0-	-0-	-0-	-0-	-0-	-0-
TRAVEL	-0-	-0-	-0-	-0-	-0-	-0-
CONTRACTUAL	-0-	-0-	-0-	-0-	-0-	-0-
SUPPLIES	-0-	-0-	-0-	-0-	-0-	-0-
EQUIPMENT	-0-	-0-	-0-	-0-	-0-	-0-
LAND & STRUCTURES	-0-	-0-	-0-	-0-	-0-	-0-
GRANTS, CLAIMS	-0-	-0-	-0-	-0-	-0-	-0-
MISCELLANEOUS	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	-0-	-0-	-0-	-0-	-0-
FEDERAL FUNDS	-0-	-0-	-0-	-0-	-0-	-0-
OTHER	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART-TIME	-0-	-0-	-0-	-0-	-0-	-0-
TEMPORARY	-0-	-0-	-0-	-0-	-0-	-0-

ANALYSIS: (Attach a separate page if necessary)

Prepared by: House Resources Committee
Division: Representative Curt Menard, Chairman
Phone: 465-4944
Date: 4/14/89

Approved by Commissioner:
Agency:
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May 4, 1989

M E M O R A N D U M

TO: Senator Bettye Fahrenkamp, Madam Chair
Senate Resources Committee

FROM: Representative Lyman Hoffman

RE: House Joint Resolution 36 Opposing a Ceiling on Federal Appropriations from the Pittman-Robertson and Dingell-Johnson Funds for Wildlife and Sport Fish Restoration Projects

---

I respectfully request a public hearing on this important resolution at your earliest convenience.

Included is background information about these federal funds that are allocated to the states and used for sport fish, wildlife, and access projects.

The federal FY90 proposed budget seeks to cap the Dingell-Johnson and Pittman-Robertson appropriations at $100 million.

A strong message to the federal government from the Alaska Legislature is needed.

If there are questions concerning this resolution, please contact my office at your convenience.

Thank you.

P.O. Box 763 Bethel, Alaska 99559 (907) 543-3543

MEMORANDUM

State of Alaska
DEPARTMENT OF FISH AND GAME

TO: Alison Elgee
Director
Office of Management and Budget
Governor's Office

DATE: February 6, 1989

FILE NO.:

TELEPHONE NO.: 465-4100

SUBJECT: FY 90 Proposed Federal Aid Cap

FROM: Don W. Collinsworth
Commissioner
Department of Fish and Game

The federal FY 90 budget submitted to Congress by the Office of Management and Budget proposes a $100 million cap on both the Dingell-Johnson (D-J) and Pittman-Robertson (P-R) appropriations. As you know, these funds are derived from taxes and duties paid on sporting equipment and fuel by sportsmen and other recreational users. By law, these funds are allocated to the states and can be used only for specific activities for sport fish, wildlife, and access projects.

This proposed cap would have the following monetary impact to Alaska:

	FY 89 Appropriations	FY 90 Appropriation With Cap	Loss of Funds
D-J Program (Sport Fish Programs)	$ 8,975.0	$4,700.0	$4,275.0
P-R Program (Wildlife Programs)	5,126.0	4,008.0	1,118.0
Totals	$14,101.0	$8,708.0	$5,393.0

Such a reduction would have a devastating impact on our Sport Fish and Wildlife Conservation Divisions. Significant cuts in management and research programs would be necessary and personnel layoff would be definitely required.

While I am confident you are already aware of this proposal, I wanted to apprise you of its significant impact on our department and its programs, and the need to forward the

information to our Congressional delegation. Should you have questions or need further information, I would be pleased to provide it.

Thank you.

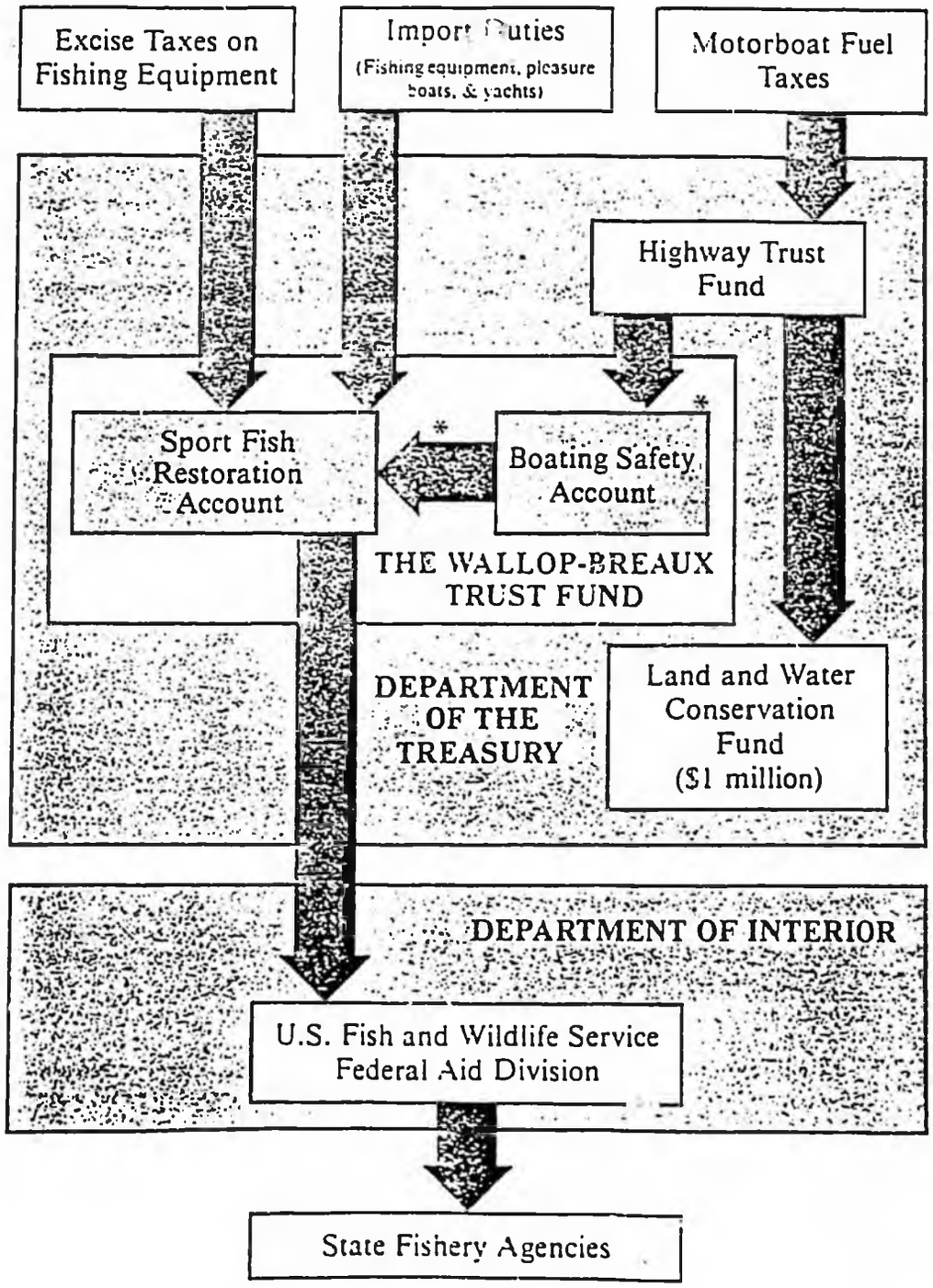
cc: Governor Steve Cowper

John Katz, Special Counsel for State/Federal Relations, Washington, D.C.

Lew Pamplin, Director, Division of Wildlife Conservation, ADF&G

Norval Netsch, Director, Division of Sport Fish, ADF&G

Figure 2. Flow of the Three Primary Sources of Wallop-Breaux Funds



*For Fiscal Year 1987 and 1988 the first $60 million from the motorboat fuel tax is authorized by Congress to go into the Boating Safety Account, with the remainder going into the Sport Fish Restoration Account. The Boating Safety Account is administered by the U.S. Coast Guard.

BACKGROUND INFORMATION

Since statehood the U.S. Department of the Interior, U.S. Fish and Wildlife has provided funding to the State of Alaska, Department of Fish and Game (DFG) in accordance with the Federal Aid to States in Fish and Wildlife Restoration Acts. The Dingell Johnson (DJ) Program provides funding for sport fish restoration and the Pittman-Robertson (PR) Program provides funding for wildlife restoration. The federal government provides an allotment to each state based on the state's land area and number of licensed anglers and hunters. Allotments are limited to 5% of the total apportionments. Alaska is one of three states which receives the maximum allowed annual allotments.

Funds allotted to the states are derived from excise taxes on certain sporting goods. In 1985 the DJ Program was amended, significantly increasing the funds available for allotment beginning in FY 86. Revenues were increased through an expansion of the number of sporting goods subject to the excise tax, an allocation of the federal gasoline excise tax (the portion attributed to outboard motor users), and an imposition of import duties on custom yachts.

DFG must submit annual project proposals to U.S. Fish and Wildlife for approval to secure the State's available allotments. Federal participation is limited to a maximum of 75% of eligible costs and the State must provide the balance. Activities involving enforcement of fish and game regulations, or public relations activities conducted to promote DFG are specifically excluded from eligibility. The eligible purposes for funding are as follows:

Dingell Johnson (DJ) Program

Projects must be for the restoration, conservation, management, and enhancement of sport fish, and for provision of public use and benefits from these resources. Under the terms of the program, sport fish are limited to aquatic, gill-breathing, vertebrate animals, bearing paired fins, and having material value for sport or recreation.

The additional funds resulting from expansion of the DJ Program in 1985 are required to add to the existing state sport fishery program and not to substitute for or supplant other traditional funding sources. The state funded sport fish program includes all sport fish related expenditures by DFG, not just the required matching portion for federal funding. To comply with the maintenance of effort requirements, U.S. Fish and Wildlife requested that DFG establish its state funded sport fisheries base program by using FY 85 state funding or the average of FY 83 - FY 85.

The U.S. Department of the Interior determines whether substitution for or supplanting of state funding has occurred on a statewide sport fisheries program basis rather than project by project. This allows federal funds to be used for a particular project that has traditionally been state funded as long as the total state dollars spent on the sport fisheries program does not decrease. In other words if equivalent state funds are spent for traditionally federally funded projects or the state funded sport fisheries program increases proportionally for the federally funding of a traditionally state funded project, then supplanting will not have occurred and DFG will have complied with maintenance of effort requirements.

The U.S. Department of the Interior has also approved adjustments in the state funded sport fisheries base program when statewide budgets fluctuate. Base reductions must be justified and the percentage of reduction for state funded sport fish activities cannot be greater than the percentage of reduction for the whole department. The purpose of the maintenance of effort provision is to prevent the state funded sport fisheries program being targeted for reductions with the intent of using federal funds to replace state funds.

Ten percent of the total state apportionment is set aside by U.S. Fish and Wildlife for approved projects for recreational boating access facilities. Any portion of the 10% that is not expended or obligated within two years lapses back to the federal government. Not more than 10% of the State's annual apportionment may be spent on aquatic education projects. To date DFG has not spent any federal funds on aquatic education programs.

Fittman-Robertson (PR) Program

Projects must be for the restoration, conservation, management, and enhancement of wild birds and wild mammals, or to provide for public use of and benefits from these resources. Projects for the education of hunters and archers in the skills, knowledge, and attitudes necessary to be a responsible hunter or archer are also eligible for PR funding. Expenditures for wolf control are specifically excluded.

Budget Information for States

Agency: Dept. of Interior, U.S. Fish & Wildlife Service (DANIELL JOHNSON)
CFDA Program Title: Federal Aid in Fish Restoration
CFDA Program Number: 15.605
Budget Account Number: 14-8151-0-7-303

State/Territory	FY 1988 Actual Obligations	(Amounts in 000's) Estimated Obligations FY 1989 Carryover	FY 1989 New BA	FY 1990	1990 State Estimated % of Total Based on Program Formula
Alabama	$2,024	$512	$2,473	$1,583	1.68 %
Alaska	8,012	0	7,361	4,700	5.00
Arizona	3,934	200	3,209	2,026	2.18
Arkansas	1,621	2,227	2,606	1,634	1.77
California	7,794	1,208	7,361	4,700	5.00
Colorado	2,806	1,835	3,681	2,343	2.50
Connecticut	987	956	1,472	940	1.00
Delaware	871	695	1,472	940	1.00
District of Columbia	639	109	486	313	0.33
Florida	3,949	226	3,312	2,045	2.25
Georgia	2,388	924	2,974	1,877	2.02
Hawaii	1,096	1,471	1,472	940	1.00
Idaho	2,524	147	2,488	1,596	1.69
Illinois	4,480	489	3,106	1,977	2.11
Indiana	2,770	872	2,311	1,490	1.57
Iowa	2,485	638	2,149	1,300	1.46
Kansas	2,379	401	2,179	1,372	1.48
Kentucky	2,799	758	2,429	1,500	1.65
Louisiana	1,993	880	2,356	1,490	1.60
Maine	1,626	600	1,472	940	1.00
Maryland	1,756	575	1,472	940	1.00
Massachusetts	1,428	530	1,472	940	1.00
Michigan	8,624	0	5,521	3,649	3.75
Minnesota	5,697	194	5,329	3,368	3.62
Mississippi	1,809	583	2,046	1,311	1.39
Missouri	4,482	338	3,813	2,477	2.59
Montana	2,398	1,446	3,327	2,173	2.26
Nebraska	2,110	1,312	1,943	1,245	1.32
Nevada	1,919	2,187	2,267	1,441	1.54
New Hampshire	1,732	709	1,472	940	1.00
New Jersey	1,530	766	1,472	940	1.00
New Mexico	3,104	5	2,650	1,714	1.80
New York	3,768	54	3,725	2,453	2.53
North Carolina	2,146	926	2,135	1,349	1.45
North Dakota	1,595	3	1,605	1,010	1.09
Ohio	3,802	2,287	3,901	2,477	2.65
Oklahoma	3,089	324	2,753	1,719	1.87
Oregon	3,256	1,280	3,519	2,304	2.39
Pennsylvania	3,165	878	3,695	2,377	2.51
Rhode Island	1,628	939	1,472	940	1.00
South Carolina	1,810	90	1,664	975	1.13
South Dakota	2,023	185	1,796	1,130	1.22
Tennessee	2,624	552	2,621	1,733	1.78
Texas	7,048	862	7,361	4,700	5.00
Utah	2,866	51	2,459	1,550	1.67
Vermont	1,634	898	1,472	940	1.00
Virginia	2,536	391	2,311	1,491	1.57
Washington	3,413	1,251	3,342	2,164	2.27
West Virginia	1,312	223	1,472	940	1.00
Wisconsin	5,397	1,050	5,064	3,274	3.44
Wyoming	2,224	0	2,252	1,438	1.53
American Samoa	405	167	486	313	0.33
Guam	438	115	486	313	0.33
Northern Mariana Isl	778	86	486	313	0.33
Puerto Rico	1,071	1,017	1,472	940	1.00
Trust Territory	0		0	0	0.00
Virgin Islands	458	22	486	313	0.33
Indian Tribe Set Asi	0		0	0	0.00
Undistributed	6,619	1,063	7,192	6,000	N/A
Total	$58,909	$ 38,507	$ 154,384	$ 100,000	99.98 %

BUDGET INFORMATION FOR STATES

Agency: Department of the Interior, Fish and Wildlife Service
CFDA Program Title: Federal Aid in Wildlife Restoration
CFDA Program Number: 15.611
Budget Account Number: 14-9923-0-2-303

State/Territory	FY 1988 Actual Obligations	Estimate Obligations Carryover	New BA	FY 1990	1990 State Estimated % of Total Based on Program Formula
Alabama	$2,114	$504	$1,820	$1,660	1.77%
Alaska	4,452	74	4,505	3,999	4.38
Arizona	2,655	344	2,345	2,062	2.28
Arkansas	1,789	112	1,738	1,597	1.69
California	4,315	851	3,929	3,441	3.82
Colorado	2,242	262	2,510	2,255	2.44
Connecticut	754	275	741	666	0.72
Delaware	609	18	597	533	0.58
District of Columbia	0	0	0	0	0.00
Florida	1,843	39	1,934	1,700	1.88
Georgia	2,303	1	2,324	2,121	2.26
Hawaii	954	1,169	597	533	0.58
Idaho	1,714	155	1,923	1,735	1.87
Illinois	2,229	816	2,078	1,872	2.02
Indiana	1,381	704	1,718	1,561	1.67
Iowa	1,724	140	1,677	1,511	1.63
Kansas	1,856	44	1,892	1,697	1.84
Kentucky	1,870	0	1,718	1,574	1.67
Louisiana	1,997	280	2,036	1,718	1.98
Maine	1,048	268	1,152	1,024	1.12
Maryland	987	0	1,018	918	0.99
Massachusetts	1,292	100	915	828	0.89
Michigan	4,427	733	3,713	3,310	3.61
Minnesota	2,675	231	2,859	2,571	2.78
Mississippi	1,606	36	1,666	1,492	1.62
Missouri	3,792	60	2,767	2,444	2.69
Montana	2,571	402	2,828	2,537	2.75
Nebraska	1,463	813	1,615	1,449	1.57
Nevada	2,310	1,885	1,831	1,623	1.78
New Hampshire	663	0	597	533	0.58
New Jersey	1,122	0	926	845	0.90
New Mexico	2,755	183	2,222	1,964	2.16
New York	3,132	205	3,209	2,840	3.12
North Carolina	4,120	0	2,067	1,843	2.01
North Dakota	1,439	38	1,378	1,239	1.34
Ohio	2,747	710	2,273	2,020	2.21
Oklahoma	1,889	29	1,862	1,713	1.81
Oregon	2,514	1,078	2,520	2,228	2.45
Pennsylvania	4,120	0	4,155	3,727	4.04
Rhode Island	623	169	597	533	0.58
South Carolina	1,807	178	1,255	1,071	1.22
South Dakota	1,610	934	1,656	1,419	1.61
Tennessee	2,488	52	2,561	2,332	2.49
Texas	4,294	1,326	4,824	4,295	4.69
Utah	1,848	0	1,892	1,696	1.84
Vermont	601	7	597	533	0.58
Virginia	2,254	26	2,242	2,049	2.18
Washington	2,238	1,049	2,047	1,821	1.99
West Virginia	1,418	0	1,306	1,180	1.27
Wisconsin	3,022	926	3,158	2,822	3.07
Wyoming	1,885	162	1,934	1,670	1.88
American Samoa	215	175	175	153	0.17
Guam	176	123	175	153	0.17
Northern Mariana Islands	217	84	175	153	0.17
Puerto Rico	450	0	432	385	0.42
Trust Territory (excluding NMI)	0	0	0	0	0.00
Virgin Islands	167	0	175	153	0.17
Indian Tribe Set Aside	0	0	0	0	0.00
Undistributed	6,823	843	7,534	8,200	
Total	$115,605	$18,613	$110,387	$100,000	100.00%

6-0985A.
Utermohle
3/9/89

IN THE HOUSE BY HOFFMAN

HOUSE JOINT RESOLUTION NO.

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

Opposing a ceiling on federal appropriations from the Pittman-Robertson and Dingell-Johnson funds for wildlife and sport fish restoration projects.

BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

WHEREAS the current federal budget submitted to the Congress by the Office of Management and Budget proposes a ceiling of $100,000,000 on appropriations for the federal aid to wildlife restoration program, known as the Pittman-Robertson program, and for the sport fish restoration program, known as the Dingell-Johnson program; and

WHEREAS federal funds for the Pittman-Robertson program and the Dingell-Johnson program are derived from taxes and duties on sporting equipment and fuel paid by sportsmen and other recreational users of wildlife and fish resources; and

WHEREAS Pittman-Robertson funds and Dingell-Johnson funds are allocated among the states and can be used only to support specific activities related to wildlife, sport fish, and public access projects; and

WHEREAS the proposed ceiling on Pittman-Robertson funds and Dingell-Johnson funds will drastically affect the activities of the divisions of wildlife conservation and sport fish in the Alaska Department of Fish and Game by a 40 percent reduction in funding for research and management on wildlife and sport fish and for acquisition of public access; and

WHEREAS the sport hunting and sport fishing industries in the state provide thousands of jobs and generate millions of dollars to the state economy; and

WHEREAS subsistence users of the state's wildlife and fish resources annually harvest millions of pounds of these resources for personal use and benefit from the active research and management of wildlife and fish resources supported by the Pittman-Robertson program and the Dingell-Johnson program;

BE IT RESOLVED that the Alaska State Legislature respectfully expresses its strong opposition to the proposal to place a ceiling on appropriations for the Pittman-Robertson program and the Dingell-Johnson program.

COPIES of this resolution shall be sent to the Honorable George Bush, President of the United States; the Honorable Dan Quayle, Vice-President of the United States and President of the U.S. Senate; the Honorable Jim Wright, Speaker of the U.S. House of Representatives; the Honorable George J. Mitchell, U.S. Senate Majority Leader; and to the Honorable Ted Stevens and the Honorable Frank Murkowski, U.S. Senators, and the Honorable Don Young, U.S. Representative, members of the Alaska delegation in Congress.

HJR 41

STATE OF ALASKA
1989 LEGISLATIVE SESSION

BILL VERSION: CSHJR 41 (RES)
PUBLISH DATE: HOUSE 4/20/1989

FISCAL NOTE

REQUEST:

Revision Date:
Title: Congressional Oversite of Tanker Safety
Sponsor:
Requestor: House Resources Committee

Agency Affected:
BRU:
Component:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES	-0-	-0-	-0-	-0-	-0-	-0-
TRAVEL	-0-	-0-	-0-	-0-	-0-	-0-
CONTRACTUAL	-0-	-0-	-0-	-0-	-0-	-0-
SUPPLIES	-0-	-0-	-0-	-0-	-0-	-0-
EQUIPMENT	-0-	-0-	-0-	-0-	-0-	-0-
LAND & STRUCTURES	-0-	-0-	-0-	-0-	-0-	-0-
GRANTS, CLAIMS	-0-	-0-	-0-	-0-	-0-	-0-
MISCELLANEOUS	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	-0-	-0-	-0-	-0-	-0-
FEDERAL FUNDS	-0-	-0-	-0-	-0-	-0-	-0-
OTHER	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART-TIME	-0-	-0-	-0-	-0-	-0-	-0-
TEMPORARY	-0-	-0-	-0-	-0-	-0-	-0-

ANALYSIS: (Attach a separate page if necessary)

Prepared by: House Resources Committee
Division: Representative Cliff Davidson, Chairman
Phone: 465-2487
Date: 4/18/89

Approved by Commissioner:
Agency:
Date:

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

HJR 72

No. 1

STATE OF ALASKA
1990 LEGISLATIVE SESSION

BILL VERSION: HJR 72
PUBLISH DATE: HOUSE 1/31/90

FISCAL NOTE

REQUEST: House Transportation Committee

Revision Date:
Title: ~~requirements~~ relating to the carriage of oil in double hull tankers
Sponsor: cotten, Kubina, menard, Davis
Requestor: House Transportation Committee

Agency Affected: Revenue Dept
BRU:
Components:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-0	-0-	-0-	-0-

CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-

REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY	-0-	-0-	-0-	-0-	-0-	-0-

ANALYSIS: (Attach a separate page if necessary)

Prepared by: [signature] House Transportation Committee Phone: 465-4858
Division: House Transportation Committee Date: 1/30/90

Approved by Commissioner: [signature] Date: 1/30/90
Agency:

Distribution (by preparer):
- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

February 5, 1990 SENATE JOURNAL p. 2327

HJR 72

CS FOR HOUSE JOINT RESOLUTION NO. 72 (Resources) by the Resources Committee,

Relating to requirements for the carriage of oil in double-hulled tankers.

was read the first time and referred to the Resources Committee.

February 5, 1990 SENATE JOURNAL p. 2334

HJR 72

Senator Fahrenkamp, Chair, moved and asked unanimous consent that the five-day notice and publication requirements be waived on CS FOR HOUSE JOINT RESOLUTION NO. 72 (Resources) (Relating to requirements for the carriage of oil in double-hulled tankers) for the Resources Committee meeting on February 7. Without objection, it was so ordered.

February 8, 1990 SENATE JOURNAL p. 2375

HJR 72

The Resources Committee considered CS FOR HOUSE JOINT RESOLUTION NO. 72 (Resources) (Relating to requirements for the carriage of oil in double-hulled tankers) and recommended do pass. The report was signed by Senator Fahrenkamp, Chair, and concurred in by Senators Kerttula, Halford, Frank, Eliason, Zharoff and Sturgulewski.

Previous zero fiscal note from the House Transportation Committee.

CS FOR HOUSE JOINT RESOLUTION NO. 72 (Resources) was referred to the Rules Committee.

Shipbuilders Council of America
1110 Vermont Avenue, N.W.
Washington, D.C. 20005-3553
202-775-9060

January 12, 1990

Stan

To The Editor:

Your January 9 article, "Double Bottom Doubts" presents several arguments for why Congress should not mandate double bottoms and double hulls on oil tankers entering U.S. ports as a solution to preventing catastrophes such as the EXXON VALDEZ oil spill. Several of those arguments are based on incorrect facts and deserve to be clarified for your readers.

The article cautions Congress on not mandating a technological solution when there may be more cost-effective ways to deal with the problem of safety. Your example of a less costly alternative is to require tankers to have internal vacuum pumps that could hold oil in if the hull of a ship is ruptured. This option would certainly be cheap, and in fact, is the alternative strongly endorsed by the oil industry. The question is would it be an effective alternative.

Naval architects and other experts in the field of tanker designs have recommended vacuum pumps as an added safety feature, but they are by no means being recommended as a substitute or viable alternative to a double bottom or hull. In the case of a collision, a vacuum pump would provide no protection in reducing or preventing a spill. Any time a tank is ruptured on its side, the pump could not possibly maintain air tightness in the tank which is how this system works. It has been estimated that a vacuum pump would be effective in less than 10 percent of tanker accidents. By comparison, a double hull would be effective in 90 to 96 percent of all collision incidents and 70 to 96 percent of all groundings. No other technology or safety feature can provide anywhere near the protection of a double hull.

The Coast Guard conducted an analysis following the VALDEZ accident and concluded that as much as 60 percent of the oil spilled would have been prevented if the ship had a double bottom. That estimate is based strictly on actual tanks punctured. It does not take into account the amount of oil from those punctured tanks which would not have been lost because it would have been trapped in the empty space between the two hulls. Although your article referred to this study, it is troubling that a 60 percent reduction was treated as "no big deal". Sixty percent of 11 million gallons is 6.6 million gallons. I doubt very seriously that pollution prevention of 6.6 million gallons of oil would be considered a little thing by the people of Alaska and elsewhere who have witnessed the vast destruction to Alaska's wildlife, marine life, and its coastal waters. A spill of 6.6 million gallons would constitute the third largest oil spill disaster ever in American waters!

Eight of eleven oil tanks on the EXXON VALDEZ were punctured.

Since the Coast Guard study, naval architects and engineers have examined the actual ship and estimate that only three of the eleven tanks would have been punctured with a double bottom resulting in a 75 percent spill reduction. The reason for fewer tanks actually being punctured is based on the fact that a double bottom ship comes much harder aground which prevents ship movement resulting in additional tank damage after the initial impact. The oil industry has long argued that because a double bottom makes the ship ground firmer that it could cause the ship to capsize, or sink, or at a minimum make salvage more difficult. Studies, and actual case analysis, by the Coast Guard and Office of Technology Assessment have determined just the opposite. A firm grounding is beneficial in the salvage operation. Had the EXXON VALDEZ come off Bligh Reef, for example, it would have sunk according to the Coast Guard.

The less oil spilled and the slower the rate of discharge, the more time available for cleanup response. The VALDEZ lost its 11 million gallons of oil in five hours. If it had been a double hull ship, the actual oil lost would have occurred over a 12 to 24 hour time period. This would have allowed more time for response and would have reduced the overall cleanup effort by 75 percent.

The mere suggestion that mandating double hulls is premature ignores the benefits of double hulls, and the long history of this issue. Former President Jimmy Carter instructed the Coast Guard to make double bottoms mandatory in 1976 and to negotiate that requirement internationally. The International Maritime Organization, IMO, a United Nations affiliate, rejected the U.S. proposal because of oil industry opposition world wide. The same situation exists today. In 1978, the oil industry's more cost-effective alternative was to require segregated ballast tanks. Segregated ballast tanks only cover 40 percent of a ship's periphery. As the EXXON VALDEZ illustrated, segregated ballasts provide very little oil spill prevention in a grounding. In the case of a collision, they do provide some protection if the point of contact occurs in that 40 percent area where a ballast tank is located. Today, as in 1978, the oil industry is arguing that there is a better, more cost-effective solution - vacuum pumps. Even though vacuum pumps, as I mentioned earlier, are inexpensive and do provide some benefit, IMO rejected them two years ago as ineffective.

The Alaska Oil Spill Commission, in its December 8 report, recommends double hulls for tankers and several additional design upgrades such as auxiliary thrusters, a navigation display system, an automated cargo control system, and centralized bunker tanks. The Commission's analysis shows that with all of these features incorporated into tankers, the increase in capital construction cost would be ten percent. Over the fifteen year life of a 250,000 dwt tanker such as the VALDEZ, the increased capital cost would result in an increase in the cost of a gallon of gas at the tank of only $0.0013 or .1 percent of a penny.

This cost increase does not factor in the operational savings that would be realized with a double hull tanker. For example, the oil in the bottom of the cargo tanks on a single hull tanker cannot be pumped out for lack of pressure. This results in wasted cargo carrying capacity. With a double hull tanker, all the oil could be offloaded because the portion at the bottom would be drained from below in the space between the two hulls.

A double hull tanker would also lower the cost of vessel insurance.

Tanker safety and double hulls have been studied exhaustively. The argument to wait for the completion of yet another study by the National Academy of Sciences only postpones long overdue safety upgrades. Now is not the time for study, but for decisive concrete action. It is interesting to note that the Committee on Tank Vessel Design, which was formed to do the study for the National Academy of Sciences, does not even include a shipyard representative. One would think that a panel dedicated to the study of ship designs would benefit from the experience and expertise of a shipbuilder. The panel will, nevertheless, include at least two representatives from the oil industry.

Since the late 1970s, there have been no safety upgrades to oil tankers. This record clearly illustrates industry's lack of dedication to safety and its unwillingness to impose self-discipline. The only way to provide the maximum protection to our environment is for Congress to endorse the House passed version of the oil spill bill which mandates double bottoms and double hulls. Anything short of a legislative mandate will result in a less than acceptable alternative.

Sincerely,

John J. Stocker
President

Mr. Stanford Erickson
General Manager
THE JOURNAL OF COMMERCE
110 Wall Street
New York, NY 10005

Double Bottom Doubts

A STRONG BILL TO COVER THE COST OF cleaning p oil spills stands on the verge of congressional passage. he most controversial issue facing the House-Senate conference committee when it meets this week is whether nkers entering U.S. ports should be required to have uble bottoms and, eventually, full double hulls. The need r greater tanker safety is unquestioned, but Congress hould be wary of mandating a specific technological solu-ion when there may be more cost-effective ways to deal ith the problem.

A double bottom is a second underside on a tanker, eparated from the outer hull by an air space as much as 8 feet thick. A double hull is an upward extension of this tructure to cover the entire hull. According to U.S. Coast Guard studies, double hulls help keep a vessel's oil tanks ntact even when its outer hull is ruptured in an accident, liminishing the size of oil spills and preventing many of hem.

When it approved the oil spill legislation last Novem-er, the House provided that all tankers entering U.S. ports must have double bottoms within seven years and the nore-costly double hulls within 15 years. The Senate man-dated that all new tankers be built with double hulls, unless the secretary of transportation determines that they will not enhance safety, but it imposed no requirements on the estimated 8,800 tankers now in service around the world.

Just under 600 of those tankers now have double hulls; 12 of them operate under the U.S. flag.

The debate over the merits of double bottoms is an old one. Back in 1978, the United States pushed the Interna-tional Maritime Organization, a United Nations affiliate, to require all tankers to have them. When resistance from other countries killed that initiative, Congress backed off from requiring them on ships in U.S. waters, mandating instead that smaller tankers have either crude oil washing systems, which clean tanks in an environmentally safe manner, or segregated ballast tanks, which form a buffer between the cargo tanks and certain parts of the hull.

As international interest in enhancing tanker safety has increased over the last decade, other nations have taken the lead on double hulls. Scandinavian countries are considering requiring all tankers entering their ports to have double hulls. In an effort to achieve the same end through economic means, Finland, at year's end, started taxing single-hulled tankers calling at its ports 30 cents a barrel, while charging double-hulled tankers only a fraction as much.

Double hulls would help reduce the number of spills stemming from low-impact accidents. But they would not necessarily reduce the number of large-scale catastrophes. In the case of the Exxon Valdez, which spilled 11 million gallons of oil despite segregated ballasts, a full double hull would not have reduced the spill by more than half, accord-ing to a Coast Guard analysis.

And in some cases, double hulls actually may make spills worse. Flooded double bottoms make ships more difficult to salvage. Seawater in between the hulls increases instability and weight, which under some circumstances causes a ship to capsize or sink. Vaporized oil between the hulls can pose a fire hazard to salvage workers' cutting torches.

The limited protection double hulls afford doesn't come cheap. Installing one adds from $5 million to $20 million to the $90 million cost of an average new tanker. The Coast Guard estimates the costs in the lower end of that range; tanker operators figure it to be near the high end.

Mandating double hulls is premature, because there may be more efficient ways of enhancing tanker safety. One alternative is to require tankers to have internal vacuum pumps that could hold oil in if the hull is ruptured. Another lower-cost alternative is to reduce current allow-able tanker loads by about 20% by limiting storage of oil above the waterline. This would reduce the internal pres-sure that forces oil into the water when the hull is rup-tured.

At the behest of the Coast Guard, a panel of the National Academy of Sciences is examining tanker safety. The interim report, due in June, is expected to yield information about the relative costs and benefits of double hulls and other alternatives.

Congress should not prejudge the results of that study by mandating double hulls at this time. In the wake of the disastrous Exxon Valdez spill, there is good reason to require enhanced safety features for oil tankers. But Con-gress should allow tanker operators to adopt or develop the most cost-effective technology to reduce spills, rather than mandating a specific technological fix.

The following information was taken from:
An Assessment of Tanker Transportation Systems in Cook Inlet and Prince William Sound

Prepared for: Alaska Oil Spill Commission

Prepared by: Engineering Computer Optecnomics, Inc.

Section V.8 - Cost of Improved Tankers

Figure V - 6 illustrates the increased cost of improved tankers based on the improved 70,000 deadweight ton Cook Inlet crude carrier and the improved 250,000 deadweight ton Prince William Sound crude carrier. Both of these crude carriers incorporate the engineering subsystems discussed within this section, with cost data verified by U.S. shipyards, and are governed by the following factors:

- Single ship bid from U.S. shipyard (Nov. 1989) with a 1992 delivery;
- Service speed is 14 knots;
- Designed for ice operations in Cook Inlet/Prince William Sound;
- Main propulsion - diesel engine(s); and,
- Hydraulic unit for auxiliary thruster and cargo pumps.

Figure V - 6 also shows that the construction cost of a 70,000 deadweight ton, single hull tanker, is approximately 85 million dollars, whereas the cost of an improved B/15 double hull tanker (separation between the inner and outer hulls is the tanker's beam divided by 15), of the same deadweight, is 93 million dollars. This 8 million dollar increase in construction cost equates to a cost increase of 9.4 percent for the Cook Inlet crude carrier.

From the same graphic, it is shown that the cost of a 250,000 deadweight ton, single hull tanker, is approximately 175 million dollars, whereas the cost of an improved B/15 double hull tanker, of the same deadweight, is approximately 192 million dollars. The computed cost increase of 17.2 million dollars equates to a cost increase of 9.8 percent for the Prince William Sound crude carrier.

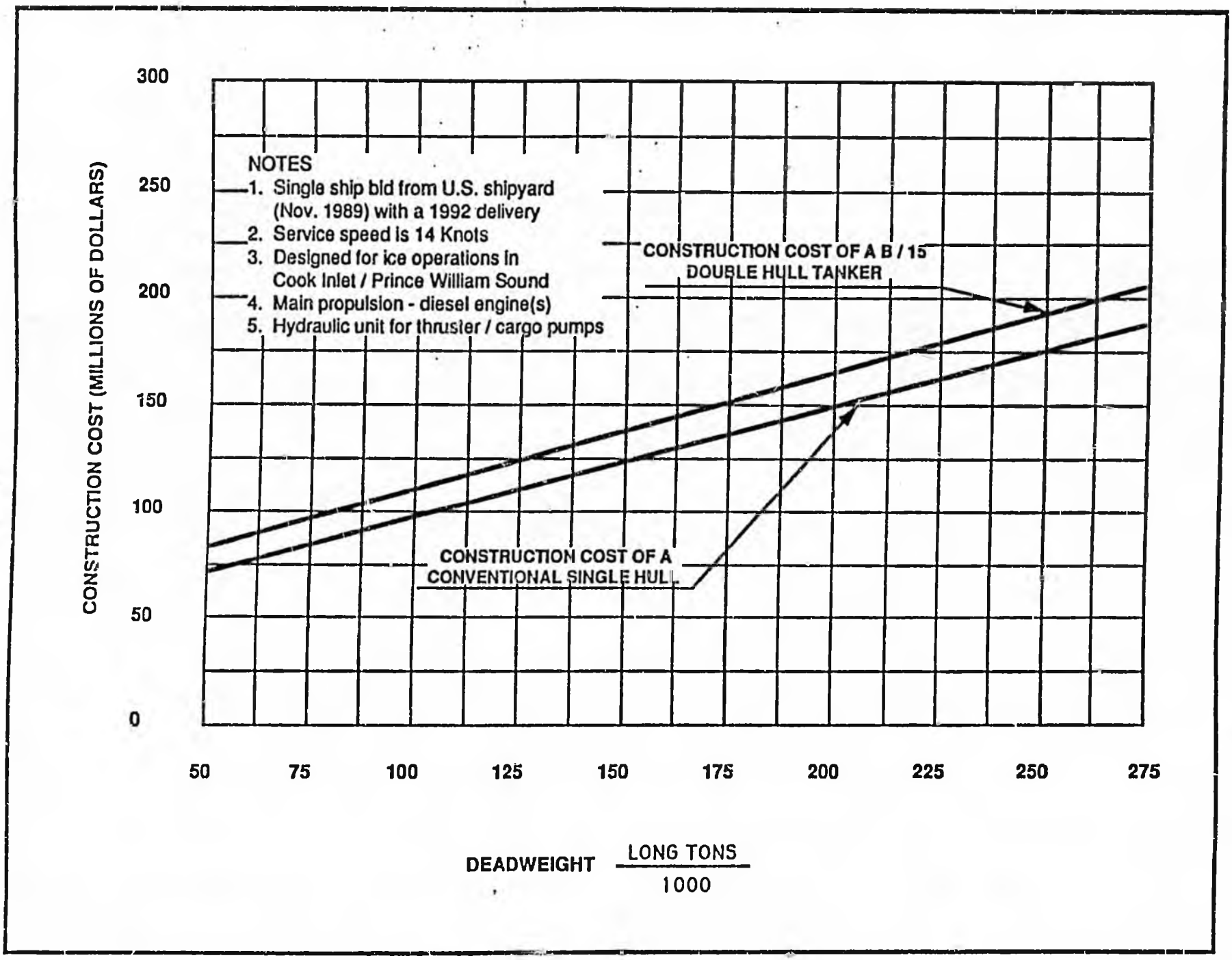

NOTES
1. Single ship bid from U.S. shipyard (Nov. 1989) with a 1992 delivery
2. Service speed is 14 Knots
3. Designed for ice operations in Cook Inlet / Prince William Sound
4. Main propulsion - diesel engine(s)
5. Hydraulic unit for thruster / cargo pumps
CONSTRUCTION COST OF A B / 15 DOUBLE HULL TANKER
CONSTRUCTION COST OF A CONVENTIONAL SINGLE HULL
CONSTRUCTION COST (MILLIONS OF DOLLARS)
300
250
200
150
100
50
0
50
75
100
125
150
175
200
225
250
275
DEADWEIGHT LONG TONS / 1000

FIGURE V - 6

FEDERAL REGULATION AND OVERSIGHT

Congress has mandated a comprehensive system to protect the safety of oil and gas transportation, but for lack of enthusiasm and underfunding enforcement has been a failure. The quality of federal oversight of oil transportation in Alaska was typified by the U.S. Coast Guard, whose safety and regulatory efforts gradually declined for most of the decade leading up to the *Exxon Valdez* disaster.

The Coast Guard supported safe traffic monitoring systems and design standards, including double-hulled tankers, when the trans-Alaska pipeline system was approved in 1973. But by 1978, after strong industry opposition to double hulls in international regulatory forums, the Coast Guard backed off its support. The Coast Guard also imposed stringent safety inspections and vessel monitoring practices during the early years of tanker operations after the opening of the pipeline in 1977. Inspection and monitoring efforts waned noticeably after parallel state inspections were stopped in 1979, and gradually thereafter as Coast Guard funding and resources for these activities declined.

Some federal agencies performed admirably in events surrounding the spill — notably the U.S. Army Corps of Engineers and the U.S. Navy in cleanup response efforts and the Coast Guard itself in successful measures to salvage the ship and the unspilled cargo. As a rule, however, federal authority must be reinvigorated in several ways if it is to provide significant leadership in the safety and oversight of maritime oil transportation.

"Figure out what 25 percent of the nation's oil is worth."

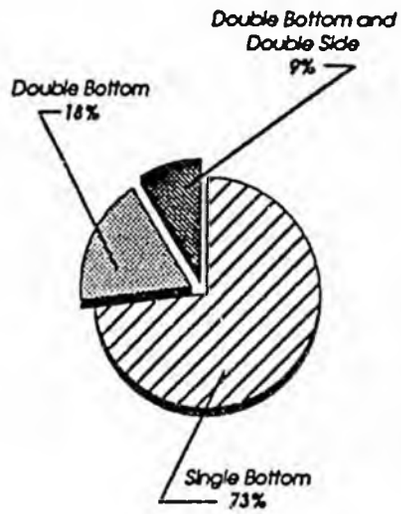
Rep. George Miller, California
House Committee on Interior and Insular Affairs hearing, May 1989

Recommendation 28
Double hulls and vessel design

Double hulls and other technological advances in tank vessel design should be required on an accelerated timetable, including prohibition of nonqualifying vessels, regardless of flag registry, in all U.S. waters.

The loss of oil from the *Exxon Valdez* wreck would have been substantially less if the vessel had had a double hull of appropriate design. A U.S. Coast Guard study undertaken after the accident indicated that up to 60 percent less oil — about 6 million gallons — would have entered the water if the *Exxon Valdez* had been equipped with a double hull. Double hulls already are required for chemical tankers and gas carriers to provide maximum protection to cargo tanks. A study for the Alaska Oil Spill Commission by ECO, Inc., of Annapolis, Maryland, says double hull design "provides the highest probability of surviving damage, either from a collision or grounding, with no loss of cargo."

Hull designs of the 93 tankers registered for Alaska trade.



Technical measures to reduce risk of accident and oil spillage have been advocated by naval engineers and others over the past two decades, but this advocacy has not produced significant voluntary changes in the way the industry does business. Suggestions regarding multiple screws, horsepower enhancement and other design overbuilding proposals to enhance safety have received only a negative response. Required changes are necessary, particularly as the size and carrying capacity of modern supertankers has increased.

Recommendation 29
Mandatory traffic control

Mandatory traffic control systems should be installed in due course in Cook Inlet, Prince William Sound and all waters of the U.S. where an equivalent or greater risk occurs.

Any of several common practices relating to positive vessel traffic control would have prevented the *Exxon Valdez* from straying so far off course as to run aground on Bligh Reef. The wreck would not have occurred if there had been a traffic control system covering operations to Hinchinbrook Entrance, as was promised by owners of the trans-Alaska pipeline system at the time the system was approved. The wreck would not have occurred if Loran C retransmit or radar had provided reliable coverage to Hinchinbrook Entrance, as was promised by the owners. And the *Exxon Valdez* wreck would not have occurred if the Coast Guard had not, according to regular, informal practice, given permission to the vessel to move outside established tanker lanes.

The *Exxon Valdez* wreck would have been less likely if the vessel had been traveling at lower speed and would not have occurred if the captain had

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

P.O. Box Y, State Capitol
Juneau, Alaska 99811-3100
Mail Stop 3100
(907) 465-3991

July 7, 1989

MEMORANDUM

TO: Representative Mike Davis

ATTN: Barnaby Dow

FROM: Karla Hartk Hart
Legislative Analyst

RE: Oil Tankers: Regulation and a Profile of Tankers Operating in Alaska
Research Request 89.352

You asked for a profile of oil tankers serving Valdez, including their age, size, history of repairs and the number with double bottoms. For purposes of comparison, you requested similar information for Japanese, South Korean and Norwegian tankers. This information is presented following an introduction which provides background on the regulatory and legal basis for standards imposed on oil tankers.

Tanker Regulation and Industry Controls

Cabotage laws are laws designed to reserve to a nation's own ships the coastwise trade between a nation's ports. The chief cabotage law of the United States, known as the Jones Act, provides that merchandise transported between points in the United States must be transported in vessels built in the United States, documented under the laws of the United States, and owned by citizens of the United States--all requirements for U.S. flagging (registry). For the most part, the cabotage laws consider ports in the U.S. territories and possessions to be U.S. ports.[1]

Flags of convenience (FOC) shipping, or open registry of vessels, allows ships to fly the flag of the country in which they are registered, with corporate or individual ownership by a national of another country. Such registry has been used by many owners, particularly owners domiciled in developed countries, for the tax, regulatory, and cost advantages attained. Nations which allow open registry have laws limiting requirements regarding disclosure of ownership, earnings, and profits as well as operating information. These laws also permit large flexibility of manning, insurance, classification, and operating

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[1]Ernst G. Frankel, Regulation and Policies of American Shipping, Auburn House Publishing Company, 1982, p. 59.

procedures. In 1982, Liberia controlled roughly three-quarters of the FOC tonnage. Tankers are the majority of the FOC ships;[2] however, due to the Jones Act, few of the tankers operating in Alaska are FOC ships.

Ship classification is an international marine industry means of self-regulation. Classification societies are non-governmental organizations which establish and administer vessel standards for the design, construction, and periodic survey of merchant ships and other marine structures. Classification certifies adherence to established standards, thus representing that a vessel possesses the structural and mechanical fitness required for its intended service. Classification is voluntary, although it may be essential for underwriting or selling a vessel. Classification societies also act on behalf of many governments in certain inspection functions. Major international classification societies, such as the American Bureau of Shipping and Lloyd's Register of Shipping (United Kingdom), offer worldwide representation and have fairly similar standards. There is greater variation among the smaller classification societies and various classification societies have different total loss experiences.[3] Additional information on classification is found in the American Bureau of Shipping brochure (Attachment A).

A large number of U.S. government departments have jurisdiction over various aspects of regulation, advocacy, control, and supervision related to the U.S. shipping industry.[4] Because some overlap in the jurisdiction of these federal agencies has occurred over time, it is sometimes difficult to define the exact responsibility of each particular federal agency.[5]

States are limited in their ability to regulate tankers. In a 1978 U.S. Supreme Court decision, Dixie Lee Ray v. Atlantic Richfield Company, the court found that the Washington State requirement that tankers either satisfy safety design standards prescribed by state statutes or use tug escorts was invalid under the supremacy clause of the federal constitution. Title II of the Ports and Waterways Safety Act (46 USCS Section 391a) mandates federal regulations be issued to set minimum standards for tanker design and to protect the marine environment; thus, states cannot impose stricter design requirements. As we

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[2]Frankel, Regulation and Policies of American Shipping, pp. 74-75.

[3]Thomas Tucker, vice-president, American Bureau of Shipping, personal communication, June 1989.

[4]Federal agencies with important roles in U.S. maritime transportation include the Department of Commerce (National Oceanic and Atmospheric Administration), Department of Transportation (Office of the Secretary, U.S. Coast Guard and Maritime Administration), Department of Defense, Department of State, Department of Energy, Environmental Protection Agency, Federal Maritime Commission, Interstate Commerce Commission, Federal Trade Commission, and Department of Justice.

[5]Frankel, Regulation and Policies of American Shipping, p. 13.

discussed, you may wish to have the Division of Legal Services evaluate the extent to which Alaska may impose standards upon tankers if you are considering legislation.

Tankers Participating in the Alaska Trade

A list of the tankers transporting North Slope crude oil is not readily available. Tankers operating in Alaska must file proof of financial responsibility with the Alaska Department of Environmental Conservation (DEC) (AS 46.04.040). As of August 25, 1988, there were 95 tankers with approved proof of financial responsibility through June 30, 1989. Of these, two were liquid natural gas tank vessels (excluded from this memorandum) and an unknown number were used for carrying refined fuel products. The DEC does not collect details on the trade of each vessel; however, roughly two-thirds of the tankers have filed proof of financial responsibility which is limited to the Trans-Alaska Pipeline System trade. On the two occasions I have contacted Alyeska Pipeline Service Company personnel in Valdez (September 1987 and April 1989) they were unable to provide a listing of tankers which pick up crude oil at the marine terminal.

The export ban on Alaska North Slope crude oil effectively limits tankers operating out of Valdez to those of U.S. flag, with the exception of tankers carrying oil to an Amerada Hess refinery on St. Croix in the U.S. Virgin Islands (which is exempted from the Jones Act). Presently, nine Liberian flagged tankers have proof of financial responsibility on file with the DEC.

The rating, size, age, type, hull, flag, classification society, casualties, and ownership details for each of the 93 tankers involved in the Alaska trade are provided in Attachment B. Of these tankers, 18 percent (17) have double bottoms and an additional nine percent (eight) have double bottoms and double sides. Attachment C, a March 5, 1989 Anchorage Daily News article entitled "Rough seas leave mark on vessels laden with oil," provides further information on the condition of tankers operating in Alaska.

Comparison of Tankers

Using published data, the 93 tankers with FY 89 proof of financial responsibility in Alaska are compared in the following table with tankers having Japanese, South Korean and Norwegian owners.[6] In summary, tankers serving Alaska are slightly smaller and significantly older, with a lower rating and more casualties than the Japanese, South Korean and Norwegian owned

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[6]Japan and South Korea were selected because of the potential for exporting Alaska crude oil directly to those nations. Norway was selected because it has ownership of a large fleet of tankers and is a northern seagoing country with offshore oil activities.

tankers. Information on which of these foreign-owned tankers have double bottoms is available through Lloyd's Registry in London, whom I did not contact.

Table 1
Comparison of Oil Tankers

	Number of Tankers	Mean MDWT	Mean Age	Mean Rating	Tankers With Highest Rating	Mean Number of Casualties/Tanker Total	Mean Number of Casualties/Tanker "Important"
Alaska Trade	93	106	18	2.9	7%	5.8	0.5
Japan Owned	212	121	9	4.0	38%	0.5	0.1
South Korean Owned	16	111	14	3.5	6%	0.1	0.1
Norwegian Owned	152	111	11	3.4	23%	0.2	0.2

Note: MDWT = thousand deadweight tons

Source: Arthur McKenzie, 1989 Guide for the Selection of Tankers, The Tanker Advisory Center, Inc., New York.

Ratings from one (low) to five (high) are assigned to each tanker to suggest the probability that the vessel will perform satisfactorily for a prospective charterer. The assigned ratings are reviewed annually by the Tanker Advisory Center. Important factors in assigning each rating include the vessel's age, flag, classification society, layup date, parent owner, size of the owned tanker fleet, changes in ownership, and the number, type, frequency and severity of reported casualties.[7]

A casualty is any reported event which probably results in an insurance claim, fine or detention by port authorities. Worldwide, about 13 percent (plus or minus two percent) of the tankers each year sustain a reported casualty. Approximately two to three percent of these vessels annually sustain an important casualty, including damage probably rendering a vessel unseaworthy, breakdown requiring a tow, explosion/fire in cargo tanks or pumproom, cargo spill, a death, a fine, or detention by authorities. It has been documented that over eighty-five percent of all marine casualties are caused by human

[7]Arthur McKenzie, 1989 Guide for the Selection of Tankers, Tanker Advisory Center, Inc., New York.

error, not by vessel structural or mechanical failures.[8] During the past two decades, less than 0.5 percent of the oil carriers were, on average, total losses annually.[9]

A comparison of the casualties of tankers serving Alaska with those of other tankers requires caution. The extreme weather conditions encountered by tankers transporting oil from Valdez may be such that Japanese tankers, for example, might suffer significantly higher casualty rates than presently experienced if they too were operating in the Gulf of Alaska.

Additionally, the reporting of casualties may not be consistent for vessels of different flags of registry. The vast majority of tankers in the Alaska trade are of U.S. registry. The tankers of Japanese, South Korean and Norwegian ownership represent a wide variety of flags--including flags of convenience. McKenzie notes that it is not possible to either prove or disprove a bias in the reporting of casualties.[10]

* * *

I hope this information is helpful. If you have questions, please call.

Attachments

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[8]American Bureau of Shipping, "Classification: Promoting the security of life and property on the seas," undated brochure (1981?), 16 pp.

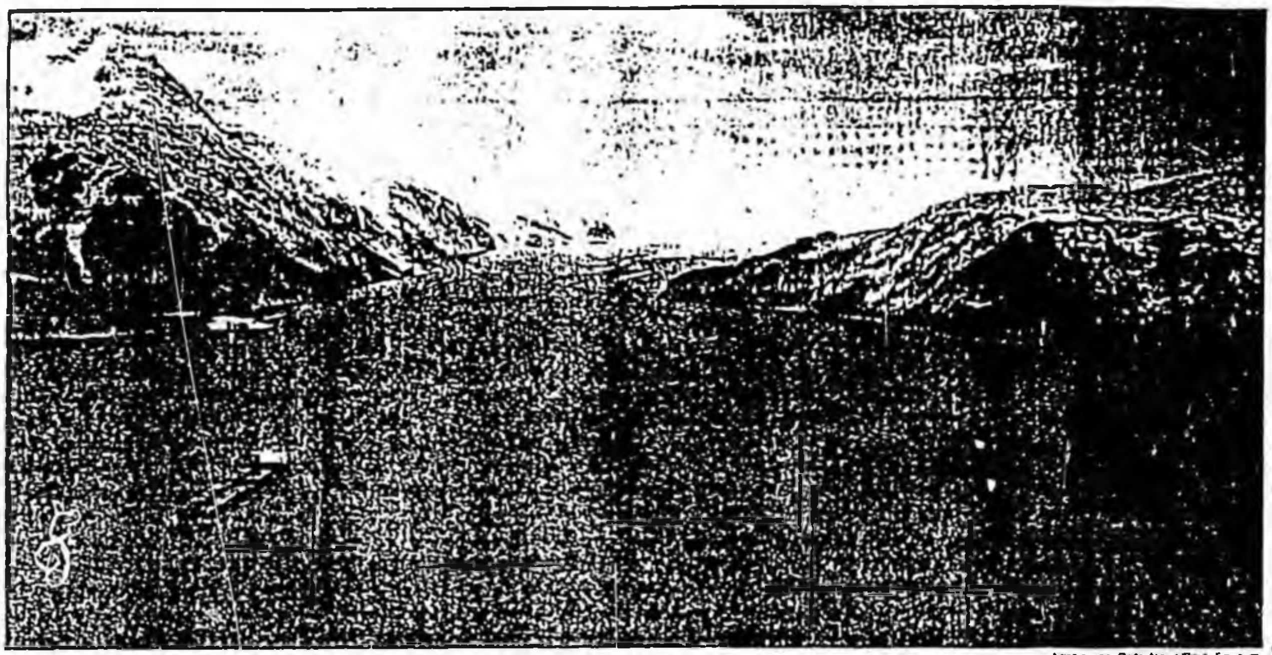
[9]McKenzie, 1989 Guide for the Selection of Tankers, pp. 2 and 8.

[10]McKenzie, 1989 Guide for the Selection of Tankers, p. 3.

[An]chorage Daily News

OES ANCHORAGE, ALASKA, SUNDAY, MARCH 5, 1989 PRI[CE]

VALDEZ TANKER FLEET HAS TAKEN A BEATING



Anchorage Daily News/Paul Souders

The oil tanker Exxon Long Beach sails through the Valdez Narrows for Prince William Sound after loading at the port facility in Valdez.

Anchorage Daily News map

Rough seas leave mark on vessels laden with oil

By PATTI EPLER
Daily News reporter

A decade of sailing the world's roughest seas has taken its toll on the giant tankers that carry millions of gallons of North Slope crude oil from Valdez to the Lower 48.

The Valdez fleet now includes some of the world's worst tankers, according to one ranking, and a rising frequency of spills and hull cracks is causing concern about how safe Alaska waters are from a devastating oil spill.

Two January oil spills in Port Valdez have sharpened focus on the issue of the tanker fleet's soundness and prompted shipping industry scrutiny of the vessels.

Records and reports obtained under the Freedom of Information Act, a search of state files and interviews with shippers and government officials reveals:

- An increasing number of structural failures — mainly hull cracks — has prompted the Coast Guard and the American Bureau of Shipping to put the Alaska fleet under closer review. Coast Guard records show the number of hull cracks in tankers has doubled since 1984.
- About 20 percent of the fleet is rated undependable by a former tanker officer who provides the only rating service for potential charterers.

Please see Page A-9, TANKERS

[...]ner merge [...]edia giant

[...]c., would have a total value [illegible] including long-term debt, and annual revenue of [illegible].

[The] deal would create a media giant, making it a substantial force in both the production and distribution of movie and television programming, as well as in magazines and book publishing.

The merger would insure Time W[arner] [illegible] as one of a handful of global media giants able to produce and distribute information in virtually any medium.

The agreement is subject [illegible]

Please see Back Page, GIANT

WEATHER

Sunny today with north winds to 20 mph; stronger gusts [illegible]. High near 25. Clear tonight and not as [illegible] above to 5 below zero. Outlook for Monday: Continued sunny. High near 25.

High Saturday	25
Low Saturday morning	14
9 p.m. temperature	[illegible]
Barometer	29.82
Humidity	43%
Wind	[illegible]
Normal high March 4	29
Normal low March 4	13
Record high March 4 (1984)	[illegible]
Record low March 4 (1954)	[illegible]

STATE, NATIONAL WEATHER FORECASTS PAGE A-2

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Alaska [illegible]	B-3
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[illegible]	[illegible]
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Letters	F-4
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Metro	B-1
Obituaries	B-4
[illegible]	F-2
Scott McMurren	D-1
Sports	C-1
[illegible]	B-1
Today in Anchorage	D-10
Travel	D-1
We Alaskans	K-1

FOR HOME DELIVERY CALL 257-4[illegible]

For [illegible] or missed paper [illegible] call before 10 a.m.

[...]ase raises issue of computer security

Protecting computer data [illegible] become a $3 billion-a-year [illegible] is that each [illegible] locking up data threatens to [illegible]

these conflicting concerns. Private companies are also moving more assertively to [illegible] computer systems

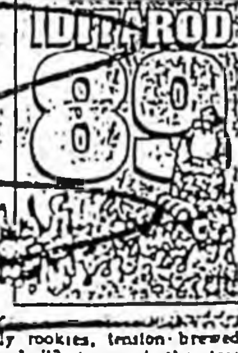
[illegible] but about such topics of national security as nuclear weapons and the [illegible] computer chips

The first day is a tough one

By [illegible]
Daily News reporter

Libby Riddles parked her truck on Fourth Avenue to await the start of the [illegible] Dog Race early Saturday morning and tried to remember if she'd ever been [illegible] on a March day in Anchorage.

"I [hate] the first day so much and in the past it's been a real headache," said Riddles, the 1985 champ from [illegible] Creek. "So this year I really concentrated on preparing and making the pre-race less neurotic. I think it worked."



Riddles slowly sipped coffee out of a Styrofoam cup. Conversation had to be yelled over the [illegible] hundreds of barking dogs, but she was at ease to the last drop.

"The last cup of cappuccino before I hit the trail," said Riddles, who was starting her fifth Idita[rod] [illegible]

For others, particularly rookies, tension brewed. What had they forgotten? What would the trail

A tugboat trails the tanker Exxon Long Beach through the Valdez Narrows, about three-quarters of mile wide at its narrowest. The tug is required in case the tanker loses power.

TANKERS: Wear of rough seas shows in the cracks of steel hulls

Continued from Page A-1

> "How many times can you flex a piece of steel before whatever imperfections are in it come to fail?"
>
> — Coast Guard Lt. Cmdr. Tom Purtell

• Tanker owners and operators have paid only token fines for oil spills caused by hull cracks, equipment problems or general sloppiness. The Coast Guard, which has the main authority over tankers, hasn't fined a tanker more than $1,000 in at least four years. And the state Department of Environmental Conservation has issued more than 150 notices of violation to tankers in the past five years but only once has tried to collect money for costs or [illegible]

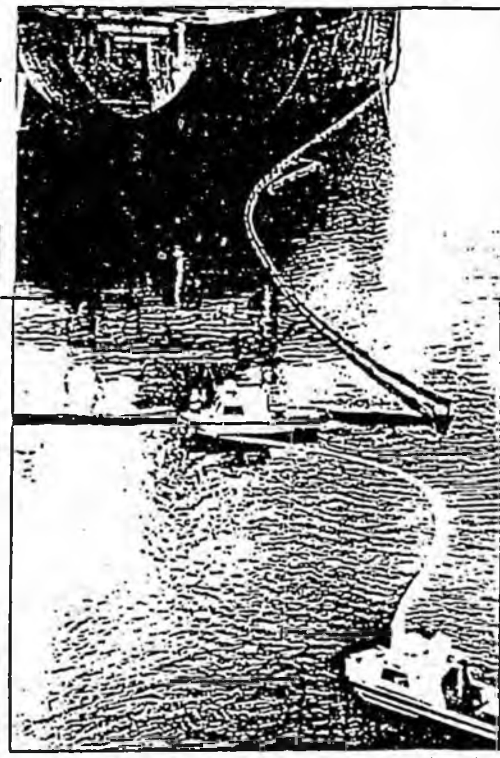
• Alaska tankers have a higher rate of structural failures than any other class of U.S. commercial ship, mainly due to the rough weather they encounter.

The Gulf of Alaska, a place the textbooks call "the mother of storms," can generate seas as tall as a five-story building and winds up to 150 miles per hour. Even the relatively benign 28-foot swells that are routinely storm-driven shoreward across the vast North Pacific can bend the steel hull of a heavily loaded tanker like a wire coat hanger.

"If you bend a coat hanger once a day, it's going to take a long time to break," says Coast Guard Lt. Cmdr. Tom Purtell, author of a recent report on the structural soundness of American shipping. "But if you bend it once a minute you might get it to fail in a day.

"It's the same stresses for a ship. How many times can you flex a piece of steel before whatever imperfections are in it come to fail? A ship exposed to the extremes of the environment persistently is going to suffer a higher frequency of failure."

U.S. Coast Guard Cmdr. Steve McCall says that overall the Valdez tanker fleet is still in good shape.



Crews on two small boats clean up oil spilled into Valdez Harbor while the tanker Mobil Arctic loads oil. Alyeska officials said the oil may have been left over from a January spill.

Tankers have made more than 11,300 voyages up and down the West Coast since the trans-Alaska pipeline began operating in 1977, creating the so-called TAPS trade. Despite early fears of catastrophic oil spills, the shippers' environmental record has been very good. Two major spills happened when tankers ran aground — one off the coast of Washington in 1980 and one last week near Honolulu — and two in the Gulf of Alaska from hull cracks, both involving the same tanker, the Stuyvesant.

Since 1977, there have been about 400 oil spills in Port Valdez, nearly all less than a barrel in size, according to oil company and state records.

Over time, the worst ships are being scrapped from the fleet because, as Alaska oil production declines and pipelines carry more oil from the West Coast to the east, fewer ships are needed, shippers say.

But with no new tankers being built, state and federal officials and some tanker owners are concerned repeated stress on remaining tankers could result in more major spills.

"Overall, I think the fleet is in very good condition," says Cmdr. Steve McCall, head of the Coast Guard's Valdez office. "Whether or not another 10 years from now it'll be a real problem, we don't know."

Now, the New York-based Tanker Advisory Center gives about 23 percent of the Valdez tanker fleet its lowest rating, and another 13 percent rank only fair. More than 33 percent are rated very high.

Arthur McKenzie, a former tanker officer who runs the service to [illegible] the shortcomings of a tanker's [illegible] generally considers the [illegible] tankers to be in good shape.

Still, about 18 of the 80 tankers that regularly call at Port Valdez have earned his lowest rating, based mainly on their age, ownership and the number of casualties — collisions, strandings, groundings, machinery and structural problems — they've had.

According to his 1987 ratings guide, which included information on 3,200 tankers worldwide, one regular visitor to Port Valdez — the Cove Leader, which spilled about 2,500 gallons of crude into the port earlier this year — had more casualties on its record than all but one other tanker. Two other Cove ships that frequent the Valdez trade also had higher numbers of casualties than most other ships in the world.

Last April, the Coast Guard decided to look for any trends of structural problems in the U.S. oceangoing commercial fleet, much the same as the Federal Aviation Administration is trying to pinpoint a pattern of problems with the nation's airlines. The Coast Guard examined the records of 603 ships, including 263 freighters and 230 tankers, and reviewed casualty reports from 1980 through 1986.

Purtell, who headed the study, and his investigators noted a "strong trend" in the number of cracks being reported in tankers plying the North Pacific. "While TAPS tankers make up only 13 percent of the entire fleet, they accounted for 52 percent of all the structural failures during 1984 through 1986," their report said.

The investigators were surprised to find that younger ships actually had three times as many structural failures as ships more than 20 years old, the age generally considered "old" by the Coast Guard. Most of the Alaska tankers were built in the past 20 years.

"The real intention of that report is to acknowledge the TAPS trade as an extreme service that really requires a higher degree of attention," says Purtell.

As a result of the study, Coast Guard headquarters has told all offices to give "special consideration" to the TAPS tankers. When in dry dock, the ships are to be given an especially thorough structural inspection and checked for internal fractures that could spread to the hull. Requests to stay longer in dry dock by tanker operators could signal a problem.

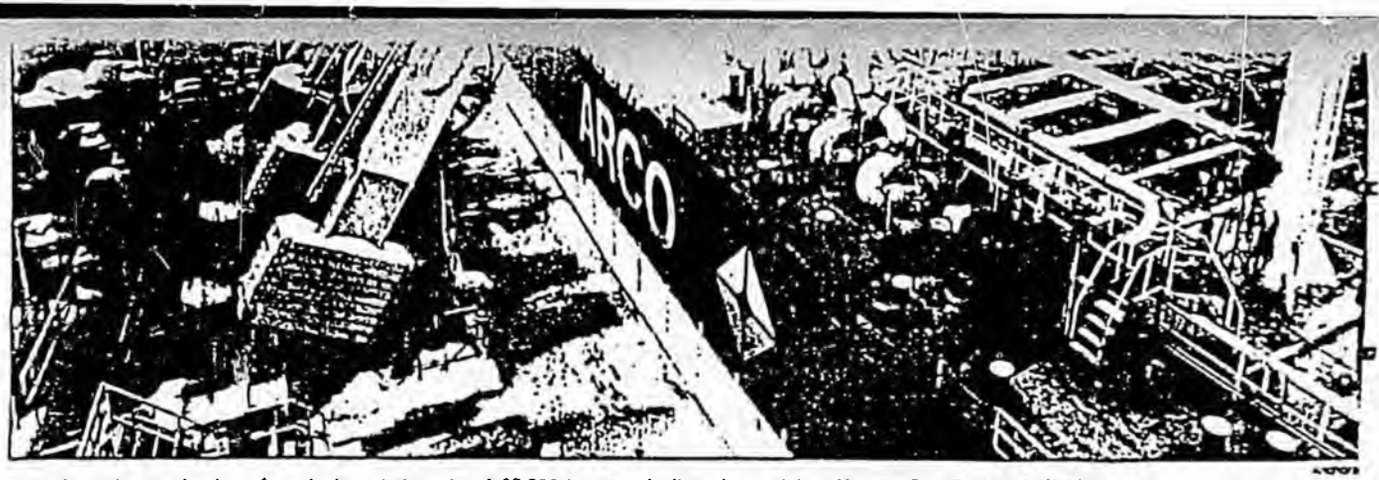
In January, two tankers calling at Port Valdez sprang leaks from hull cracks within a two-week period. People began asking if the tanker fleet was getting old, and the American Bureau of Shipping decided to investigate.

"In this case, we looked into it rather thoroughly," says Tom Tucker, vice president of the New Jersey-based organization that oversees design and construction standards for the U.S. shipping industry. "We determined it was a problem unique to the (Alaska) service." The bureau has alerted all West Coast surveyors and inspectors to be on the watch for stress problems with the fleet.

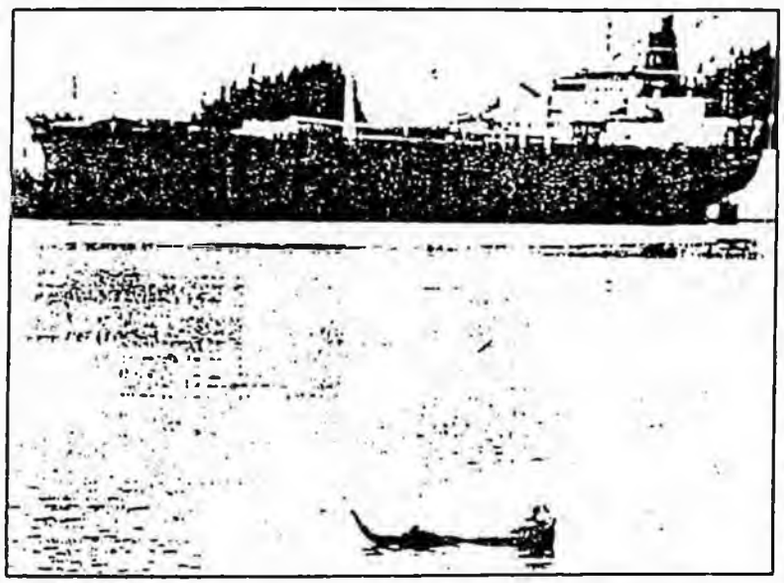
Bureau inspectors examined the two ships, the Thompson Pass and the Cove Leader, researching original designs and performance records. They ruled out construction flaws, he says.

Instead, the bureau believes unusual stress and strain on TAPS tankers comes from [illegible] of Alaska storms. Hurri-

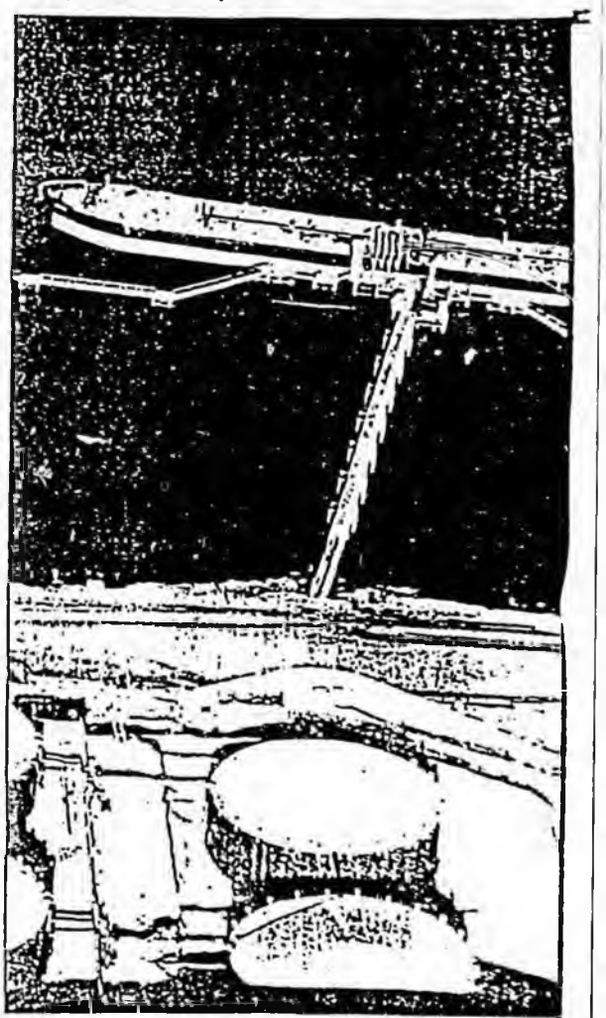
Please see Page A-12
TANKERS



Three huge booms load an Arco tanker at the rate of 95,000 barrels of oil an hour at the Alyeska Port Facility in Valdez.



A sea otter floats in Valdez Harbor. In background an oil tanker sits in port.



A tanker finishes loading North Slope crude stored at Alyesk

TANKERS: Fleet shows the wear

Continued from Page A-9

cane-force winds are common, and the Navy has measured seas up to 40 feet high, says Gary Hufford, chief regional scientist for the National Weather Service.

Geographic and oceanographic conditions also combine to produce long, rolling swells, 12 feet high in winter, eight feet in summer. "That's a phenomenal height," Hufford says.

Across this environment sails the oil tanker, unable to venture too far off course to avoid the weather. The tankers "are taking all those big waves right on the beam," notes Hufford. "They're always getting pounded from the side."

Tanker operators describe a process called "hogging and sagging" to explain what happens to the long, heavy tankers when a wave passes under. As the wave lifts the ship, bow and stern "hog" — go down in the water. When the wave passes, the middle "sags" as the bow and stern come back up.

Tankers are designed to be flexed over and over again without failing, but the repetition of stress or concentration of stresses in one area seems to be causing cracks to appear more frequently than anticipated, much as in the wire coat hanger analogy, according to tanker operators, the Coast Guard and others.

"The trouble with any trade route that is basically north to south," says Roger Gale, BP Oil Co.'s manager of marine operations, "is how do you dodge something that is crossing over you? You either have to stop and wait until it passes or go like hell. And most of the ships don't have that kind of speed."

The key to lessening stress on a tanker is the skill of the ship's master in steering through the rough seas. "The real issue here is do the people on board the ship know when to slow down a little bit, change the course a little bit," says Gale. "It's amazing how a few degrees change in course to shift the wind can make the ship ride a little bit easier."

About 75 tankers a month call at Alyeska's pipeline terminal in Port Valdez. The two largest — the ARCO Independence and the ARCO Spirit — are as long as an aircraft carrier and twice as heavy when loaded. At 262,000 deadweight tons each — the sum of cargo and fuel — those two are medium-sized in terms of today's supertankers; the biggest now runs more than 500,000 tons.

Each of the two ARCO ships can carry 2 million barrels, or 84 million gallons, of crude oil. The 21 cargo tanks on each ship are so big that the crew sometimes paddles around in rafts to inspect the tanks.

The Coast Guard requires tankers to be dry-docked and inspected about every two years. A Coast Guard inspector as well as an American Bureau of Shipping surveyor examines each tanker while it's out of the water.

The big tanker operators — Arco, Exxon Corp. and BP — say catching small cracks before they become big ones is the best way to prevent oil spills. The companies spend millions of dollars a year on inspection and maintenance, and have staffs of marine engineers and inspectors to keep their fleets in good shape.

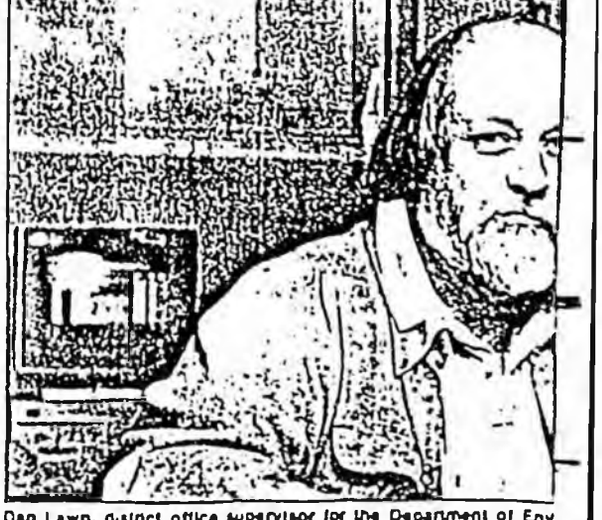
BP is Alaska's largest oil producer and it's biggest shipper. Arco and Exxon each own about 10 tankers that sail to Valdez; BP, which is prohibited from owning ships under the Jones Act because it's a British company, charters 22 tankers that move its Alaska crude to the West Coast and Panama.

BP keeps abreast of its rented fleet through its port captains, former tanker officers who check the ships at most ports they enter. A staff of marine superintendents and engineers inspect the tankers about once a year to look for cracks and pits and other potential problems, according to Gale and Fred Garibaldi, vice president of transportation for BP Oil.

They point out that no oil company wants to see its oil spilled into the ocean — the loss of the cargo as well as cleanup costs run into the millions of dollars before it's settled.

Several independent tanker companies own ships regularly hired under short-term or one-time charters for the Valdez trade. And some operators and of-

Please see Page A-11, / TANKERS



Dan Lawn, district office supervisor for the Department of Env

is hard on the hulls

Continued from Page A-10

ficials are concerned that the smaller companies, with less money to spend on expensive inspection and maintenance programs, may need more of a push from regulators like the Coast Guard to maintain sound ships.

A check of state Department of Environmental Conservation records shows the state issued more than 150 "notices of violation" to tanker operators in the past five years for oil spills caused by general sloppiness in operations as well as hull fractures. But in that time, the state has only once — in August 1984 — followed through with its threat to seek monetary penalties for oil spills. That case involved a 2,500 gallon spill from the ARCO Anchorage and the state collected its costs of $1,495.

Usually, DEC sends the notice to the tanker operator, waits for an explanation of why the spill occurred, then suspends the case, threatening to reopen cases should similar incidents occur.

Although similar incidents involving the same tanker have occurred, according to DEC's records, the DEC has never reopened a case.

For instance, the Thompson Pass, which in January was responsible for the largest oil spill in Port Valdez history, had received nine notices of violation from DEC prior to the most recent spill. Four of those were for hull cracks — the same problem that occurred in January and allowed 70,000 gallons of crude oil to spill. In 1981, according to a letter in DEC's files, the Coast Guard was especially concerned because similar fractures were found in all six sister ships to the Thompson Pass.

DEC records show the state used to collect at least its costs for investigating an oil spill, but hasn't routinely attempted to do even that since the early 1980s.

Dan Lawn, head of the DEC's Valdez office, says he doesn't have the staff, money or time to pursue cases against companies when most spills are so small. He thinks the tanker companies pay attention to the notices and are bothered by them, even though the state takes no follow-up action.

Larry Dietrick, the DEC's director of environmental quality, says even though state law allows for hundreds of thousands of dollars in penalties, the DEC's oil spill regulations have limited fines to a "dollars-per-barrel" penalty rate, with $63 per barrel about the most the state can assess. So, he says, the state wouldn't have been able to collect much money from the tanker spills, unless it could prove negligence or some serious disregard for the environment.

The DEC had not been aware of the recent Coast Guard report on hull cracks in the TAPS tankers until the Coast Guard supplied it to the Daily News.

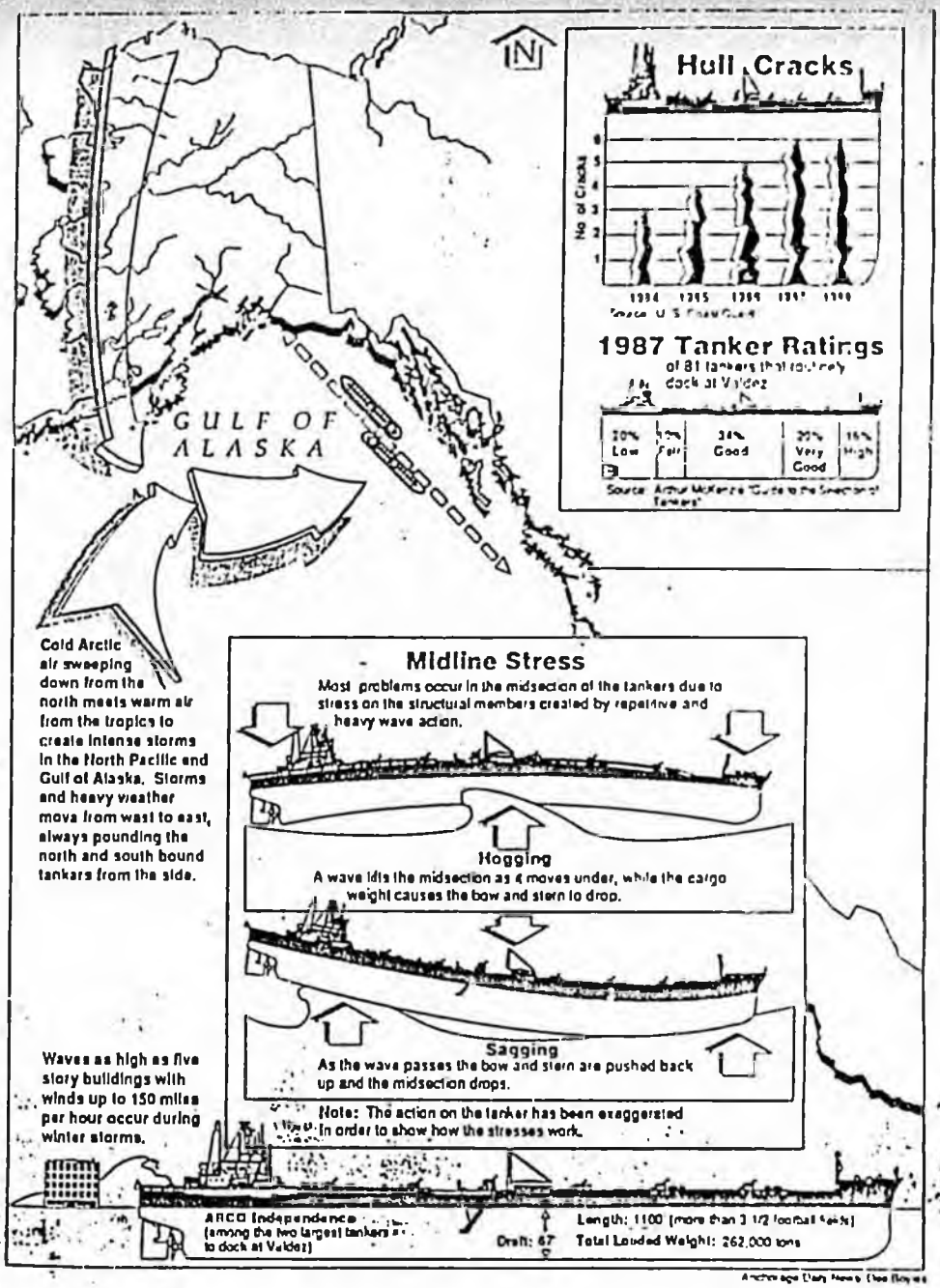
Dietrick says the DEC will review the report and likely pay more attention to tankers that sustain hull cracks. However, no increase in staff or funding is planned for the Valdez office, he says.

The Coast Guard is required by law to assess a fine for an oil spill. Coast Guard records show that for the past four years the fines have averaged only a few hundred dollars per incident, and none has been more than $1,000.

In fact, tanker operators pay as big a penalty for hydraulic fluid being washed overboard in a heavy rain as they do for a hull crack. Coast Guard officials say they are limited to a $5,000 penalty under the federal Water Pollution Control Act.

Cmdr. Craig Eisenbeiss, a Coast Guard hearing officer who spent four years as head of the Valdez office, says structural problems historically may have been viewed as something beyond the control of the operator.

McCall, the Coast Guard's current Valdez commander, notes that companies pay a heavy price to clean up spills, a penalty in itself.



Letters

We Can Build Tankers That Won't Spill Oil

To the Editor:

The Exxon Valdez is a recently delivered, modern, crude-oil carrier of about 150,000 tons cargo capacity, built in a United States shipyard in compliance with Coast Guard and other regulatory-body requirements. It was operated under the American flag by a presumably competent marine operating subsidiary of a major oil company. The immediate cause of its grounding March 24 appears to be human error and will be the subject of extensive investigations and hearings.

It is quite possible and well within ship design and construction technology to build oil tankers that will not leak oil in case of grounding or collision or, in the very rare case of a severe collision at high speed, would leak very little oil. This means mandating construction of oil tankers with a double hull, i.e., an inner bottom and fore-and-aft bulkheads about 6 to 8 feet from the outer hull for the full length of that part of the hull used for cargo. The space between the inner and outer hull would be empty when the tanker is loaded and used for ballast on the return voyage. This type of construction is required for ships carrying liquid natural gas, about 50 of which are operating, many of them about the size of the Exxon Valdez.

Two of the largest L.N.G. carriers have suffered severe grounding casualties while fully loaded. Despite severe bottom damage, not a single gallon of cargo was lost, nor was there significant pollution of the sea or air. If these had been fully loaded single-hull oil tankers, the loss of oil would have been of the magnitude of the Exxon Valdez casualty.

A simple calculation indicates that the increase in gasoline price at the pump for double-hull tankers would be about half a cent per gallon.

In view of the horrendous environmental destruction and enormous cost of the cleanup efforts that are the result of major oil spills, and the inevitability of human error, this must be an acceptable price to pay for environmentally secure oil transportation. EDMUND G. TORNAY

New York, April 3, 1989

The writer is a naval architect.

Now Try the Pipeline

To the Editor:

Our technology to prevent oil spills is so advanced that the likelihood of a major oil spill from tankers carrying Alaskan oil south to the United States is practically nil. That is the gist of the voluminous response the oil companies wrote to my March 11, 1973, letter to you recommending a single pipeline land route, rather than their combined pipeline-tanker land-sea route.

The all-overland route would have carried Arctic oil through Canada's Mackenzie Valley via Edmonton and obviated the use of tankers.

Whether or not Exxon is able to contain the March 24 oil spill in Prince William Sound and prevent a major environmental catastrophe to the shellfish, finfish, bird and marine mammal populations, the use of tankers to transport Alaskan oil to the lower 48 states is unnecessary and should be phased out as fast as a single overland pipeline route can be developed. JULIAN KANE

Hempstead, L.I., March 26, 1989

The writer is senior professor of geology at Hofstra University.

Fossil-Fuel Moratorium

To the Editor:

I would like to go on record as being completely opposed to your repeated editorial view that, despite the disastrous oil spill in Prince William Sound, the United States should continue to pump oil and ship it through these waters. The last paragraph of "Oil on the Water, Oil in the Ground" (editorial, March 30) correctly stated that "Washington can't afford to assume that the Exxon Valdez accident

David Suter

was a freak that will never happen again," but it neglected to say that another one or two "accidents" of this magnitude could wipe out the fishing industry of southeast Alaska.

The argument for continued exploration of the Arctic National Wildlife Refuge can be countered in several ways. First, there is absolutely no proof that oil exists under the tundra; second, the preliminary incursions into that area have already damaged the fragile vegetation covering the permafrost (I flew over this terrain three years ago and saw the evidence), and third, any large-scale oil drilling in the refuge will disrupt the migration of caribou, to say nothing of the effect on other wildlife.

It is becoming increasingly evident that we should put a moratorium on the use of fossil fuels. California is being forced to consider this option to prevent further pollution. So should we all. JUDITH P. SULZBERGER

New York, April 1, 1989

Preserve the Refuge

To the Editor:

The oil to be found in the Arctic National Wildlife Refuge, you say (editorial, March 30), would generate at least $10 billion in royalties for Alaska and the Federal Government. Your hypothetical offer of $10 billion in unspecified land somewhere in exchange for permission to the oil companies to devastate irreversibly a mere "few thousand acres" naïvely assumes that land is fungible. It's not, and it is the very uniqueness of an ecosystem such as the Arctic wildlife refuge that demands we preserve it, not waste it. We just don't know the effect that oil exploration would have on that fragile environment.

It will apparently take more crises like the fiasco in Prince William Sound before we understand we have a global responsibility to preserve what little remains of pristine wilderness. R. MATTHEW PETTIGREW JR.

Philadelphia, March 31, 1989

Cockamamie Reasoning

To the Editor:

In your March 30 editorial, you decide that the oil in the unspoiled part of Alaska is too valuable to keep underground. You reason it is worth $10 billion, and $10 billion is surely too much to give up for the absolute purity of the refuge. Just think of the sum as 20 B-1 bombers that don't work.

As for your cockamamie reasoning that the venture isn't too risky because there have been 10,000 runs from Valdez without a major spilling of oil: What difference does it make how much oil safely reaches its destination before missing its mark? The area is ruined as surely on the 10,000th try as it would have been on the first. PATRISHA McLEAN

Garrison, N.Y., March 31, 1989

May 5, 1989

MR. SPEAKER, THIS WEEKEND THE HOUSE INTERIOR SUBCOMMITTEE ON WATER AND POWER RESOURCES WILL BE IN VALDEZ TO CONDUCT HEARINGS ON THE DISASTER NOW SPREADING THROUGHOUT SOUTH CENTRAL ALASKA.

NEXT WEEK CONGRESS WILL HOLD HEARINGS IN WASHINGTON ON THE OIL SPILL.

TODAY, I AM ASKING FOR THIS BODY'S SUPPORT OF A JOINT RESOLUTION THAT WILL HELP ESTABLISH THE STATE'S PRESENCE DURING THE UPCOMING HEARINGS. HJR 41 CALLS ON CONGRESS TO INVESTIGATE THE EVENTS AND CIRCUMSTANCES THAT LEAD UP TO THE OIL SPILL AND TO EXAMINE CHANGES THAT WILL HAVE TO BE MADE TO INSURE SAFE PASSAGE OF OIL FROM THE PORT OF VALDEZ.

IN THIS MEASURE WE ARE CALLING FOR AN EXAMINATION OF THE COAST GUARD ABILITY TO ENSURE SAFE PASSAGE; TO ENSURE TANKER CREWS ARE PROPERLY CERTIFIED; TO ENSURE THAT OIL SPILL CONTAINMENT EQUIPMENT IS INCLUDED ON EACH VESSEL; AND TO EXAMINE CHANGES IN ENFORCEMENT THAT CAN HELP PREVENT THIS TRAGEDY FROM EVER HAPPENING AGAIN.

IN ADDITION, CONGRESS IS URGED TO EXAMINE THE CONDITION OF THE TANKER FLEET AS A WHOLE; TO EXAMINE THE BEST TECHNOLOGY, INCLUDING THE USE OF BOW THRUSTERS AND DOUBLE HULLED TANKERS.

IN A RECENT LETTER TO THE NEW YORK TIMES NAVAL, ARCHITECT EDMUND TOURNAY WRITES THAT DOUBLE HULLED TANKERS ARE IN USE TODAY FOR SHIPPING LIQUIFIED NATURAL GAS. SOME OF THESE SHIPS HAVE SUFFERED SEVER GROUNDINGS WHILE FULLY LOADED. DESPITE SEVERE BOTTOM DAMAGE, NOT AN OUNCE OF CARGO WAS LOST.

YEARS AGO, THIS BODY PASSED A MEASURE TO REQUIRE DOUBLE HULLED TANKERS. THAT MEASURE WAS STRUCK DOWN BY THE SUPREME COURT AS AN INFRINGEMENT OF FEDERAL LAW. MR. SPEAKER, WE NEED CONGRESS TO ACT TO AVERT ANOTHER TRAGEDY.

HJR 41 WILL LET THEM KNOW THAT TANKERS SAFETY IS A TOP PRIORITY HAS WE CONSIDER THE FUTURE OF TRANSPORTING OIL FROM ALASKA.

Alaska Center for the Environment

700 H Street, Suite 4 • Anchorage, Alaska 99501 • (907) 274-3621

Recommendations For Regulatory Change

I. Overview

II. Issues that need to be examined

A. Safety and vessel construction regarding marine transportation of oil.

The federal Ports and Waterways Safety Act (PWSA) regulates the design, construction, operation, and movement of bulk cargo vessels that carry oil and hazardous substances. The current regulations adopted under the PWSA are inadequate regarding the protection of the marine environment from spills. More stringent regulations must be adopted.

Strengthened vessel construction regulations should include:

1. Vessels that transport oil and hazardous substances must be double-hulled.

2. Vessels that transport oil and hazardous substances must be equipped with bow thrusters for maximum maneuverability.

3. Tanker size must be limited to a volume no larger than that which can be dealt with in a worst-case spill, as demonstrated by successful completion of simulation drills and attested to by impartial spill cleanup experts not associated with the oil companies, or running larger tankers at less than maximum capacity to achieve that result.

B. Bonding

The state and federal governments should require the posting of adequate bonds from terminal, pipeline and tanker operators which can be immediately used to initiate government-directed containment and cleanup operations. There are numerous precedents for this sort of bonding in other environmental regulatory statutes.

C. Oil Spill Contingency Plans

As the Exxon-Valdez incident indicates, there is a huge discrepancy between the response capability stated in contingency plans and the real operational performance when a spill actually occurs. Plans are drafted to comply with regulations, but unless the regulations require periodic compliance monitoring and enforcement, they are of minimal value. Similarly, the requirements become meaningless unless the responsible agencies are adequately funded to carry out their mandates.

We endorse the California Coastal Commission's use of a compliance representative who calls surprise drills to test contingency plan claims.

It is imperative that the government require successful completion of simulation drills, including immediate revision to upgrade any deficiencies and rerunning the drills until all kinks are worked out.

Backup equipment should be mandatory, so that when, as here, a barge is down for repairs, there is no interruption in response capability.

Mandatory stockpiles of all necessary equipment for containing the spill and cleaning oiled wildlife should be located around the state. Any contingency plan that calls for flying in equipment is inadequate and should be rejected.

Individual tankers should be required to have their own Spill Prevention, Control and Countermeasure Plans that include a spill response plan effective during the critical 24-48 period immediately following a spill.

Regulations should provide for public comment on SPCC plans so that local expertise can be incorporated into the plan.

D. Evaluation of Cleanup Capability

In order to assess the existing oil spill response capability of potential polluters, a systematic evaluation of available cleanup resources needs to be done. This evaluation should inventory the equipment necessary for each stage of a complete response from the point of the spill to the point of disposal of the recovered oil and contaminated sand, vegetation, etc.

E. Research fund

A federal and industry-supported fund should be established to study habitat recovery and research the long-term effects on wildlife. Studies should be conducted by a qualified, independent institution.

F. Revitalization of Test Tank

Congress should provide funding for the currently defunct Oil and Hazardous Materials Simulated Test Tank to test the effectiveness of oil spill cleanup equipment.

G. Compensation and Liability

Congress should enact a comprehensive oil spill liability and compensation regime that includes international, national, and state components. This program should:

1. Fairly assign risks and internalize cost of handling and transporting oil among potential spillers.

2. Ensure rapid repair, restoration, and rehabilitation of damaged or destroyed natural resources. (See Superfund law for analog.)

3. Completely and quickly reimburse victims and compensate the public for loss of use and enjoyment of natural resources.

4. Provide more effective incentives to prevent oil discharges.

H. Other Concerns

1. There should be a fully equipped federal response center in or adjacent to Prince William Sound. Currently, the closest one is hours away by plane in Stockton, California.

The government should require the oil companies in Alaska to fund such a center, including establishment and training of a dedicated oil spill response team whose responsibility it would be to respond to spills throughout Alaska.

2. The Vessel Traffic System (VTS) for the Sound needs to be re-examined. Specifically, the VTS should incorporate an alarm feature that would sound when a vessel goes outside authorized lanes. The Coast Guard should be authorized, and required, to close the shipping lanes to all traffic when ice or other obstructions are reported. The Coast Guard should not allow deviation from the safe shipping lanes.

3. EPA Region X, and possibly EPA Headquarters, has decided in the last few years to put enforcement of Clean Water Act requirements for SPCC plans on a low priority when they react to cleanups. We need to focus on both preventive and response actions; and EPA must strictly enforce SPCC plan regulations.

4. EPA must take a stronger position with Alyeska. Historically, Alyeska is one of the worst polluters of air and water in Alaska, which renders the Sound even more susceptible to oil spill damage. EPA should revise the draft NPDES permit to match the more stringent state permit for allowable surface water discharges. In addition, EPA must step in and enforce the Clean Air Act as it applies to emissions from tankers and the terminal.

5. Seasonal drilling restrictions should be codified in federal law to protect endangered species and ensure effective spill cleanup. Specifically, exploration, drilling and transportation of oil should be prohibited during bowhead whale migration and during broken ice season unless industry can demonstrate (and independent experts are willing to confirm) its ability to detect, contain, clean up and dispose of oil spills in ice-laden waters.

6. Criteria should be established for effective oil spill response to be taken by the state, Coast Guard and/or EPA if a spiller fails to comply with containment and cleanup standards.

7. EPA should prepare an environmental impact statement to evaluate the impact of in-situ burning and chemical dispersants used as part of an oil spill response.

C. CURTIS

-- Draft --

Exxon Valdez-Related Actions/Demands

1. Ecologically sound and effective cleanup initiatives need to be carried out by federal and state government officials, Exxon/Alyeska, and private/non-profit concerns -- now and in the coming months/years. In addition, intensive scientific efforts are needed in two other related areas: (1) damage assessments of the impacted natural resources (the ecosystem and critters); and (2) in-depth ecological research into the long-term effects of the spill on the waters, ocean beds, marine life and their food chains, the beaches, coastlines and other affected areas.

2. There should be no exploration for or production of oil or gas in the Arctic National Wildlife Refuge. In addition to the Refuge, the Secretary of Interior needs to remove highly sensitive and controversial offshore areas from the Department of Interior's Outer Continental Shelf (OCS) Oil and Gas Leasing Program that are located offshore southern and northern California, in Georges Banks off the New England coast, the Florida Keys, Bristol Bay off Alaska, off the North Carolina coast, and in the coastal and nearshore waters, submarine canyons and the shelf-break zone of the mid-Atlantic.

3. Improvements are needed in oil tanker design, operating requirements and personnel/manning standards. Such improvements might well include: double bottoms for tankers; increased vessel space allocated to protectively located segregated ballast tanks (PL/SBT); upgraded vessel traffic service (VTS) in Prince William Sound, and other congested U.S. ports, harbors and traffic fairways; and increased Coast Guard inspection of Alaskan pipeline trade vessels. Complementing those measures, current personnel policies need to be significantly improved in order to reduce the risk of human error. These include: restrictions on eligibility for masters' licenses that would exclude anyone with a "driving while intoxicated" conviction or a history of alcoholism; more stringent and more frequent physical exams; more frequent license renewals; increased minimum manning requirements for vessels (e.g., a dedicated radar aide); more stringent retraining and refresher courses, as well as monitoring for alcohol and drug abuse on the job. Despite all of these types of measures, given that oil spills are still likely to occur, oil and other hazardous spill contingency plans need to be routinely tested (to determine response time, ability to deploy personnel, and working condition of necessary equipment). In addition, industry using the Port of Valdez and all other ports with heavy oil and other hazardous cargo traffic should be required to maintain an adequately staffed, full-time emergency response team.

4. A comprehensive regime for oil spill liability and compensation is needed, including legislative reform to prohibit Exxon from deducting oil-spill cleanup expenses.

5. Special measures should be taken to protect the health and welfare of Native Americans.

6. Reagan-Bush budget/Coast Guard budget - The environmental protection budget of the Coast Guard should be fully restored.

7. RCRA - oil industry exemption from RCRA regulation should be dropped...other oil-related spinoffs

8. "Worst case" scenario analyses should be conducted in all EISs under NEPA. This provision, which was dropped by the Reagan adimistration, should be restored.

9. Energy Efficiency/CAFE standards.

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

P.O. Box Y, State Capitol
Juneau, Alaska 99811-3100
Mail Stop 3100
(907) 465-3991

October 2, 1987

MEMORANDUM

TO:

ATTN:

FROM: Karla Hart
Legislative Analyst

RE: Double Hulls on Oil Tankers: Cost of Construction
Research Request 88.039

You requested an historical perspective on legislation requiring double hulls on oil tankers operating in Alaska waters (especially Cook Inlet), and you had questions regarding the cost difference in double hull versus single hull tanker construction.

Historical Perspective

Of overriding significance in any discussion of State legislation requiring design standards on oil tankers is the 1978 Supreme Court decision, Dixy Lee Ray v. Atlantic Richfield Company. The Supreme Court found that the Washington State requirement that tankers either satisfy safety design standards prescribed by State statutes or use tug escorts was invalid under the supremacy clause of the Federal Constitution. Title II of the Ports and Waterways Safety Act (46 USCS Section 391a), mandates federal regulations be issued to fix minimum standards for tanker design and to protect the marine environment; thus, states cannot impose stricter design requirements.

During the 1976 consideration of Alaska Senate Bill 406 relating to marine transportation of crude oil, amendments were presented which would have required tankers to have double hulls. Not much discussion of the double hull issue exists in the committee records on file at the Legislative Library, and that which does exist addresses the economics of double hulls rather than the performance. The double hull requirement did not appear in the final legislation, Chapter 266, SLA 1976.

At the national level, regulations requiring double hulls or bottoms were considered during the 1970s but never adopted.[1] Mr. Perinsky, Office of Costs, National Maritime Administration, believes the main reasons for not requiring either were economics and the adoption of regulations requiring other safety features in oil tankers.

Tankers Presently Operating in Alaska

Alyeska Pipeline terminal personnel in Valdez estimated that there are over one hundred tankers licensed to call in Valdez. Not all make regular visits. Approximately 75 tankers per month turn around in Valdez. Of those, Chuck O'Donnell, Marine Manager of Alyeska terminal, estimates that 25 percent are double bottomed. I was unable to locate a source that monitored or recorded which tanker vessels operating in Alaska had double bottoms or hulls.

According to staff at Exxon and Chevron, tankers which have double hulls or bottoms are not used exclusively for crude oil transporation. Exxon has a world wide fleet of 80 tankers. Two of these ships have double bottoms and both are used on the east coast to transport refined products. Mr. Paoli, Marine Engineering, Exxon Company International, also estimated that SOHIO had perhaps four double bottomed ships used to transport crude oil. Mr. Hilliard, Chevron Public Affairs office, said Chevron's 70,000 dead weight tons (DWT) tankers which call frequently in Valdez have single hulls. However, their 39,000 DWT double hull (double bottom with protectively located ballast tanks providing protection to the sides) tankers are also used to transport crude oil in Alaska, including Cook Inlet.

Construction Costs of Double versus Single Hull Tankers

You asked if retrofitting a double hull onto a single hull tanker was possible and, if so, what the cost would be. Mr. Cherrix, Chief of the Office of Naval Architecture, National Maritime Administration responded that yes, retrofitting a double hull was probably possible, although, he questioned the feasibility. Mr. Perinsky said that his office had never studied the cost of a retrofit. During the 1970s when the topic was raised, the cost was considered too high to be a serious alternative to other pollution controlling options. Neither source was aware of a double hull retrofit ever taking place.

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[1] The terms double bottom and double hull are not interchangeable. A double bottom tanker does not have protective spaces on the sides, only the bottom. A double hull is essentially two hulls with protective space continuing up the sides of the tanker.

Mr. Perinsky said there has been very little tanker construction in the United States in recent years. He was able to provide rough figures for the additional cost of double hull tanker construction from the first quarter of 1977.[2]

35,000 DWT	$38 million single hull +	$6 million double hull
56,000 DWT	$47 million single hull +	$9 million double hull
92,000 DWT	$59 million single hull +	$6 million double hull
265,000 DWT	$117 million single hull +	$36 million double hull

He stressed that these are rough estimates based on construction taking place at various shipyards in the United States at that time. Variations in cost reflect differences in construction and shipyards. For purposes of comparison, he was aware of a 40,000 DWT single hull tanker being constructed in the United States this year at a cost of approximately $68 million. The added cost of a double hull in 1977 was 10-31 percent above the single hull construction costs.

* * *

I hope this information is helpful. If you have additional questions, please call.

---

[2]Mr. Perinsky used the term double hull in discussing the costs of construction. Based on later conversations with Exxon and Chevron, I believe these may be estimates for double bottoms rather than double hulls.

HJR 92

CANADA
UNITED STATES
NATIONAL PARK
MOUNTAINS
Cape Fairweather
Icy Point
Cape Spencer
NORTH MARBLE ISLAND
SOUTH MARBLE ISLAND
WILLOUGHBY ISLAND
BEARDSLEE ISLANDS
INIAN ISLANDS
Glacier Bay Lodge
Campground
North
15 Kilometers
15 Miles
National Park
Trail
Elevations are shown in meters, with feet in italics
glaciation

from Marvin Jensen
Superintendent
Glacier Bay Nat'l Park

3/90

GLACIER BAY NATIONAL PARK - SUBSISTENCE FISHING ISSUE

Introduction

This paper provides a summary of the National Park Service position on subsistence activities as related to Glacier Bay National Park. Although the Alaska National Interest Lands Conservation Act specifically provided for subsistence uses in many new national parks in Alaska, it did not authorize subsistence activities in Glacier Bay National Park. The legislative history of the Act further clarifies that subsistence use was to be allowed in the Preserve, but not in the Park.

Statutes and Regulations Regarding Subsistence Issue

- Federal Statutes

  o National Park Service Organic Act, 1916: "The service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified ... by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." 16 U.S.C. Sec. 1.

  o Redwood National Park Act, 1978: "individually and collectively, these areas derive increased national dignity and recognition of their superb environmental quality through their inclusion jointly with each other in one national park system preserved and managed for the benefit and inspiration of all the people of the United States; and that it is the purpose of this Act to include all such areas in the system and to clarify the authorities applicable to the system. ... The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress." 16 U.S.C. Sec. 1a-1.

  o Alaska National Interest Lands Conservation Act (ANILCA), 1980: "Subsistence uses by local residents shall be allowed in national preserves and, where specifically permitted by this Act, in national monuments and parks." 94 Stat. 2383, Sec. 203. Subsistence uses are not specifically permitted in section 202(1) of the Act, which created Glacier Bay

National Park, whereas other sections of the Act creating other national parks do intentionally contain language specifically permitting subsistence uses.

- Legislative History

  o Senate Report No.96-413, 1979: "Subsistence uses will be allowed within the preserve, but not in the park." VI. Committee Amendments, Title II - National Park System, Section 202(1): Glacier Bay National Park and National Preserve.

  o Senate Report No.96-413, 1979: "Gates of the Arctic, Mount McKinley, Katmai, and Glacier Bay National Parks -- are intended to be large sanctuaries where fish and wildlife may roam freely, developing their social structures and evolving over long periods of time as nearly as possible without the changes that extensive human activities would cause." VI. Committee Amendments, Title II - National Park System, Overview, p. 137.

  o Congressional Record, House of Representatives, November 12, 1980: "Subsistence uses ... are not allowed in the park. ... Subsistence uses ... are allowed in the preserve in accordance with the provisions of this Act." H 10539.

Summary

The aggregate of the laws and regulations concerning national parks, and particularly Glacier Bay National Park, mandate that the National Park Service manage the Park in such a way that the landscapes and the naturally diverse ecosystems of plants, mammals, birds, fish, and other life forms be protected in an unimpaired state for their scientific value and the enjoyment of present and future generations.

Alternative Actions

(1) Prohibit subsistence use of Glacier Bay National Park in accordance with ANILCA and the management mandates of the National Park Service Organic Act.

(2) Propose revised and new regulations which would allow a closely monitored, consumptive, "food source" style fishery, for local residents, in the Park for a specified period of time while data is collected showing the extent of resources taken and the overall effect of such taking on the Park. If research and data reveal that any levels of such a "food source" fishery can occur without impairing park purposes including protecting park resources, visitor enjoyment, and scientific values then the NPS would consider supporting further regulations to allow designated levels of "food source" fishing, or legislative changes to allow "subsistence" fishing, any such uses being subject to continued monitoring and regulation.

§ 2.3 Fishing.

(a) Except in designated areas or as provided in this section, fishing shall be in accordance with the laws and regulations of the State within whose exterior boundaries a park area or portion thereof is located. Nonconflicting State laws are adopted as a part of these regulations.

(b) State fishing licenses are not required in Big Bend, Crater Lake, Denali, Glacier, Isle Royale (inland waters only), Mammoth Cave, Mount Rainer, Olympic and Yellowstone National Parks.

(c) Except in emergencies or in areas under the exclusive jurisdiction of the United States, the superintendent shall consult with appropriate State agencies before invoking the authority of § 1.5 for the purpose of restricting or closing park areas to the taking of fish.

(d) The following are prohibited:

(1) Fishing in fresh waters in any manner other than by hook and line, with the rod or line being closely attended.

(2) Possessing or using as bait for fishing in fresh waters, live or dead minnows or other bait fish, amphibians, nonpreserved fish eggs or fish roe, except in designated waters. Waters which may be so designated shall be limited to those where nonnative species are already established, scientific data indicate that the introduction of additional numbers or types of non-native species would not impact populations of native species adversely, and park management plans do not call for elimination of non-native species.

(3) Chumming or placing preserved or fresh fish eggs, fish roe, food, fish parts, chemicals, or other foreign substances in fresh waters for the purpose of feeding or attracting fish in order that they may be taken.

(4) Commercial fishing, except where specifically authorized by Federal statutory law.

(5) Fishing by the use of drugs, poisons, explosives, or electricity.

(6) Digging for bait, except in privately owned lands.

(7) Failing to return carefully and immediately to the water from which it was taken a fish that does not meet size or species restrictions or that the person chooses not to keep. Fish so released shall not be included in the catch or possession limit: *Provided*, That at the time of catching the person did not possess the legal limit of fish.

(8) Fishing from motor road bridges, from or within 200 feet of a public raft or float designated for water sports, or within the limits of locations designated as swimming beaches, surfing areas, or public boat docks, except in designated areas.

(e) Except as otherwise designated, fishing with a net, spear, or weapon in the salt waters of park areas shall be in accordance with State law.

(f) Authorized persons may check fishing licenses and permits; inspect creels, tackle and fishing gear for compliance with equipment restrictions; and inspect fish that have been taken for compliance with species, size and other taking restrictions.

(g) The regulations contained in this section apply, regardless of land ownership, on all lands and waters within a park area that are under the legislative jurisdiction of the United States.

[48 FR 30282, June 30, 1983, as amended at 52 FR 35240, Sept. 18, 1987]

§ 2.4 Weapons, traps and nets.

(a) (1) Except as otherwise provided in this section and Parts 7 (special regulations) and 13 (Alaska regulations), the following are prohibited:

(i) Possessing a weapon, trap or net

(ii) Carrying a weapon, trap or net

(iii) Using a weapon, trap or net

(2) Weapons, traps or nets may be carried, possessed or used:

(i) At designated times and locations in park areas where:

(A) The taking of wildlife is authorized by law in accordance with § 2.2 of this chapter;

(B) The taking of fish is authorized by law in accordance with § 2.3 of this part.

(ii) When used for target practice at designated times and at facilities or locations designed and constructed specifically for this purpose and designated pursuant to special regulations.

(iii) Within a residential dwelling. For purposes of this subparagraph

REPRESENTATIVE
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RULES COMMITTEE
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House of Representatives

RULES COMMITTEE CHAIRMAN

MEMORANDUM

TO: Rep. Cliff Davidson
Co-Chairman
House Resources Committee

Rep. Curt Menard
Co-Chairman
House Resources Committee

FROM: Rep. Ben Grussendorf

DATE: March 20, 1990

RE: HJR 92, "Relating to subsistence and commercial fishing in Glacier Bay National Park"

The House Rules Committee introduced this bill in response to the concerns expressed by commercial fishermen and subsistence users. The Citizens' Advisory Commission on Federal Areas, at the request of the Park Service, held hearings in Juneau on March 5, 1990, regarding the closing of the entire Park, including three miles offshore, to commercial fishing and subsistence use. This fishing area is of critical importance to the fishing industry. Even though the Park Service has stated verbally that they will not enforce what they consider to be their statutory authority over this area, and will conduct studies to determine if commercial and subsistence use is harmful, we believe that a statement of the State of Alaska's position on this is critical to their consideration of the issues and their interpretations of their statutes.

We would like to request your scheduling of this resolution at your earliest convenience in order for the resolution's passage this session. We realize you have a heavy committee schedule. There are no opposing groups within the state that have testified, with the possible exception of the National Wilderness Society. (There was one individual ostensibly representing them at the hearings supporting the closing of the park.) The Southeast Alaska Conservation Council supports the use of the nonwilderness areas of the Park for commercial fishing and subsistence use.

Thank you for your consideration.

Rep. Cwssenobly

Southeast Alaska Conservation Council

SEACC • P.O. Box 021692 • Juneau, Alaska 99802 • (907-586-6942)

rec'd 3/27/90

March 27, 1990

The Honorable Cliff Davidson
Co-Chair, House Resource Committee
Box V
Juneau, Alaska 99811

Dear Representative Davidson:

Thank you for allowing me the opportunity to testify on behalf of SEACC and the Environmental Lobby in favor of HJR 92, relating to commercial fishing and subsistence in Glacier Bay National Park.

Not <u>all</u> environmental groups agree with SEACC regarding commercial fishing and subsistence uses in Glacier Bay. If I left that impression, I apologize.

Alaskan Environmental groups have varying degrees of opinion regarding the <u>extent</u> to which Glacier Bay should be opened or closed to commercial fishing and subsistence. However, most Southeast environmental groups agree with SEACC that a complete phaseout of fishing, especially in the non-wilderness waters of the park, is inappropriate and premature until any major threats to park resources and values are identified.

In my testimony I suggested the reference in HJR 92 to subsistence fishing should be changed to subsistence uses which would include the collection of bird eggs and spruce roots, etc. My point only was that the language should be changed to address subsistence use in general.

As stated in our position paper we support establishing a process for local people and the Park Service to work together to iron out an appropriate mix of traditional uses and park values that will be in the best long-term interest of both the Park and the people.

Sincerely,

Nevette Bowen

Nevette Bowen
SEACC

cc: Members, House Resources Committee

Southeast Alaska Conservation Council

SEACC • P.O. Box 021692 • Juneau, Alaska 99802 • (907-586-6942)

GLACIER BAY NATIONAL PARK MANAGEMENT

* SEACC supports protection of park values.

* SEACC does not support kicking commercial fishing out of Glacier Bay National Park and adjacent waters.

* SEACC supports the continuation of existing commercial fishing uses in Glacier Bay National Park and adjacent waters.

* SEACC also supports the restoration of traditional subsistence rights in Glacier Bay National Park.

Glacier Bay and its surroundings constitute one of the world's great national parks. SEACC supports the protection of park values to maintain the integrity of this magnificent national treasure.

It is SEACC's position that management of the park must protect park values first, yet equitably provide for appropriate and sustainable levels of historical human uses.

SEACC strongly advocates establishing a process for local people and the National Park Service to work together to iron out an appropriate mix of traditional uses and park values that will be in the best long-term interest of both the Park and the people.

Specifically, we recommend that the Park Service suspend all proposed changes in commercial fisheries management until a local advisory commission and the Park Service have identified and resolved any major conflicts between local uses and park values.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON D C 20240

MAY 5 1982

Memorandum

To: Director, National Park Service

From: Associate Solicitor, Conservation and Wildlife

Subject: Commercial Fishing in Glacier Bay National Park

FACTS: The major portion of what is now Glacier Bay National Park was incorporated into the National Park System through a 1925 proclamation by President Coolidge designating the area as a national monument. 34 Stat. 225 (1925). The boundaries established by that order were modified in 1939 when President Roosevelt enlarged the monument and included certain inland and marine water areas. 53 Stat. 2534 (1939). With the enactment of the Alaska National Interest Lands Conservation Act, Pub. L. No. 96-487, 94 Stat. 2371 (1980) (ANILCA), the monument was redesignated as a national park, further enlarged, and an adjacent national preserve was established. 16 U.S.C. 410hh-1. In addition, subsection 701(3) of ANILCA, 16 U.S.C. § 1132(3), classified most of the park's land area and some of its water zones as "wilderness." The water areas designated as wilderness are Adams Inlet, Hugh Miller Inlet, Charpentier Inlet, Rendu Inlet, Scidmore Bay, part of Dundas Bay, and the water area around the Beardslee Islands. This classification was made in accordance with subsection 3(c) of the Wilderness Act. 16 U.S.C. § 1132(c).

Commercial fishing has occurred in Glacier Bay for many years. For the most part, this activity is concentrated in Glacier Bay and its major inlets and along the coast in the Gulf of Alaska and the Cross Sound. Commercial fishing has also occurred, to some extent, in some of the waters designated as wilderness by subsection 701(3) of ANILCA. The National Park Service (NPS) is developing proposed regulations which would prohibit motorized use in some of those areas. Dundas Bay and a portion of the Beardslee Islands waterway will be left open to motorboat use. These closures will not prohibit the use of the wilderness water zones for emergency purposes.

ISSUE: Are commercial enterprises permissible in Glacier Bay wilderness areas?

CONCLUSION: Section 707 of ANILCA mandates that wilderness areas in Alaska be managed in accordance with the provisions of the Wilderness Act. Subsection 4(c) of the Wilderness Act prohibits commercial enterprises in wilderness areas. Under subsection 701(3) of ANILCA, certain Glacier Bay water areas are designated as wilderness. This classification was imposed to preserve those areas for recreational uses. Although the Wilderness Act vests the Secretary with authority to allow otherwise prohibited aircraft and motorboat activities to occur in designated areas if it is demonstrated that they are "established uses," there is no such exemption for commercial enterprises. Accordingly, the identified Glacier Bay water areas must remain closed to commercial fishing, which we conclude is a commercial enterprise. This closure applies to commercial fishing in a very small portion of the Glacier Bay water zone. Closure is not required by this opinion for those commercial enterprises which are relied upon to realize the recreational and other wilderness purposes of designated areas (e.g., in Alaska, such activities could include expedition support, hunting and fishing guides, trapping, backcountry outfitters and guides, tourboats). See 16 U.S.C. § 1133(d)(6).

The conclusion that commercial fishing is prohibited in Glacier Bay wilderness zones is consistent with subsection 1110(a) of ANILCA, 16 U.S.C. § 3170(a), which provides that certain modes of transportation may be used in conservation system units for traditional activities permitted by law. Because commercial fishing is an activity which is not "permitted" by the Wilderness Act, it cannot occur under subsection 1110(a). When subsection 1110(a) modes of access are used to perform traditional activities permitted by law, such as recreation, they may be prohibited only after notice and hearing and a determination that they are detrimental to the resource values of the unit.

DISCUSSION

A. Requirements of the Wilderness Act.

The Wilderness Act, 16 U.S.C. § 1131 et seq., was enacted in 1964, "[i]n order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition...." 16

U.S.C. § 1131(a). To effectuate this policy, Congress established the National Wilderness Preservation System composed of Congressionally designated federal areas "where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." 16 U.S.C. § 1131(c). Wilderness areas will also "generally [appear] to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable," present "outstanding opportunities for solitude or a primitive and unconfined type of recreation," have sufficient acreage, and contain, as appropriate, "ecological, geological, or other features of scientific, educational, scenic, or historical value." Id.

In order to preserve these values, Congress directed agencies responsible for administering wilderness areas to manage them for the "public purposes of recreational, scenic, scientific, educational, conservation, and historical use." 16 U.S.C. § 1133(b). In subsection 4(c), certain activities, judged to be inconsistent with these wilderness uses, are expressly prohibited:

> Except as specifically provided for in this chapter, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area . . . there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area. 16 U.S.C. § 1133(c) (emphasis added).

In recognition of the administrative and public use difficulties which could result from a blanket application of the subsection 4(c) prohibitions, the drafters of the Act created a limited exemption for certain "established uses:"

> Within wilderness areas designated by this chapter the use of aircraft or motorboats, where these uses have already become established, may be permitted to continue subject to such restrictions as the Secretary . . . deems desirable. 16 U.S.C. § 1133(d)(1) (emphasis added).

This exemption was also extended to measures necessary for the control of fire, insects, and diseases. Id. Under this subsection, the Secretary has discretion to allow these activities to occur. Should it be determined that "established" motorboat or aircraft activity is undesirable in a designated area because, for example, it would be detrimental to wilderness values, the Secretary need not invoke the "established use" exemption. Thus, under the Wilderness Act, a designated area can remain closed to all motorized use, unless paragraph 4(d)(1) is invoked, supported by appropriate administrative findings.

It is important to note that, unlike the use of motorboats and aircraft, established "commercial enterprises" were not exempted from the subsection 4(c) prohibition. This distinction is significant in that it indicates that a "commercial enterprise" which involves the use of a motorboat or aircraft cannot be allowed even if it is argued that the motorboat or aircraft is an "established use." The only exemption for commercial enterprises is found in paragraph 4(d)(6):

> Commercial services may be performed within the wilderness areas designated by this chapter to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the area. 16 U.S.C. § 1133(d)(6) (emphasis added).

As is true of the paragraph 4(d)(1) "established use" exemption, the Secretary has discretion to allow these services to be performed.

B. Requirements of ANILCA.

The Glacier Bay Wilderness, consisting of approximately two million seven hundred and seventy thousand acres, was designated by subsection 701(3) of ANILCA. 16 U.S.C. § 1132(3). Although subsection 701(3) does not delineate boundaries for the wilderness area, it incorporates the official boundary maps described in section 103. 16 U.S.C. § 3103. Reference to maps GLBA-90,004 (October, 1978) indicates that the following water areas were included in the

wilderness portions of the park: Rendu Inlet, Sciomore Bay, Hugh Miller Inlet, Charpentier Inlet, Adams Inlet, part of Dundas Bay, and water areas in the vicinity of the Beardslee Islands. 1/

As Senate Report No. 413 states, this small segment of the Glacier Bay water zone was set aside as wilderness to preserve its suitability for non-motorized recreational water activities:

> Glacier Bay Wilderness consists of about 2,770,000 acres of lands and waters within the expanded Glacier Bay National Park. Almost all of the park, including some salt water areas and all islands will be managed as wilderness. Excluded from wilderness are most of the marine waters ....
>
> X X X X
>
> The Committee adopted the Administration recommendation that some water areas should be specified for non-motorized water recreation. S. Rep. No. 413, 96th Cong., 1st Sess. 217 (1979) (emphasis added).

The original Glacier Bay wilderness proposal, which served as the basis for the Congressional action, verifies this goal. Submitted to Congress in August, 1972, it emphasized that the identified water areas should be included because of their "unique saltwater wilderness opportunities." U.S. Department of the Interior, Wilderness Recommendation - Glacier Bay National Monument 11, 18, 19 (August, 1972) (Wilderness Recommendation). This proposal recommended that Adams Inlet, the Hugh Miller/Charpentier Inlets complex (including Scidmore Bay), and part of Dundas Bay be designated as wilderness. Id. at 18. Congress modified this proposal by adding Rendu Inlet, and the waters around the Beardslee Islands.2/

The Wilderness Act's prohibition of commercial enterprises is applied to the Glacier Bay Wilderness through section 707 of ANILCA, which provides that, "[e]xcept as otherwise expressly provided for in this Act, wilderness designated by this Act shall be administered in accordance with applicable provisions of the Wilderness Act ...." Since ANILCA establishes no exception to the Wilderness Act's subsection 4(c) prohibition

of "commercial enterprises," the specified water areas of Glacier Bay are closed to commercial fishing, which is clearly a commercial enterprise.3/

The Congressional intent to prohibit commercial fishing in Glacier Bay's wilderness waters is supported further by the 1972 Wilderness Recommendation. As indicated in the ANILCA legislative history, subsection 701(3) merely codified, with some additions, the Interior Glacier Bay Wilderness Recommendation. S. Rep. No. 413, supra, at 217. Reference to the Recommendation demonstrates that special consideration was given to commercial fishing in the monument:

> The use of ships, powerboats, and airplanes, and commercial fishing on waters of most of the monument are established by custom and are to continue. Powered vessels are required for safe and reasonable transportation on the major waterways. Therefore, these waters cannot be designated as wilderness, except where specific exclusions are made. Wilderness Recommendation, supra n. 1, at 17 (emphasis added).

After describing the proposed wilderness water areas and noting their "unique saltwater wilderness opportunities," the Recommendation explained, "[m]ost of the water is not proposed because of the existing use of motor-powered vessels and commercial fishing activities." Id. at 18.

Special consideration was therefore given to commercial fishing operations within the monument. Only after reviewing carefully the areas in which such activity occurred did the Administration recommend that certain zones be designated as wilderness. Those recommendations were made with the intent that commercial fishing be prohibited. Thus, by relying upon and assimilating the Interior Wilderness Recommendation, Congress adopted a designation which was designed to exclude commercial fishing from the enumerated wilderness water areas but allow it to occur in non-wilderness zones. Nothing in ANILCA mandates that non-wilderness water areas be closed to commercial fishing. Other commercial activities important to Glacier Bay wilderness purposes are not affected by this ban.4/

The prohibition of commercial fishing in Glacier Bay is consistent with subsection 1110(a) of ANILCA. 16 U.S.C. § 3170(a). That provision indicates that,

> [T]he Secretary shall permit, on conservation system units. . .the use of snowmachines. . .motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities (where such activities are permitted by this Act or other law) and for travel to and from villages and homesites.

The language of this provision, along with its legislative history, support an interpretation that it is only the "activity" or end use (e.g., subsistence, hunting, recreation, commercial enterprise) which must be "traditional" and "permitted" by ANILCA or other law in order to allow utilization of the identified access modes. See, e.g., S. Rep. No. 413, supra, at 247-248, 299; H. Rep. No. 97, Part I, 96th Cong., 1st Sess. 238-239, 305 (1979). In other words, subsection 1110(a) should be construed to mean that the absence of an historical pattern of snowmobile use in an area for recreational pursuits is not a basis for closure to snowmobile travel, instead it must be shown that the activity, e.g., recreation, is not "traditional" or is not "permitted."

In the case of Glacier Bay, it is not necessary to determine if commercial fishing is a "traditional activity." As concluded above, commercial fishing is an activity which is precluded under subsection 4(c) of the Wilderness Act. 16 U.S.C. § 1133(c). For this reason, it is not an activity "permitted" by law and is not covered by subsection 1110(a).

Individuals who are engaged in activities allowed under the Wilderness Act, (e.g., recreation, education, science, etc., 16 U.S.C. § 1133(b)), ANILCA, or other law, however, may utilize the subsection 1110(a) modes of transportation, subject to reasonable regulations. 16 U.S.C. § 3170(a). The use of those methods of access for "traditional" and "permitted" activities may be prohibited only if, "after notice and hearing in the vicinity of the affected unit or area," the Secretary finds that "such use would be detrimental to the resource values of the unit or area."

The proposal to prohibit motorboats in the Glacier Bay wilderness water areas (except Dundas Bay and a portion of the Beardslees) is consistent with the legislative intent for subsection 701(3). See S. Rep. No. 413, supra at 217. In accordance with subsection 1110(a), NPS has made a preliminary determination that motorboat use of these areas would be detrimental to their wilderness values and to park resources. See S. Rep. No. 413, supra, at 217. A final determination on that issue will be made after notice and hearing.

In connection with this issue, it should be noted that the Wilderness Act prohibition on "commercial enterprises" should not be read to preclude traditional commercial activities in other Alaskan wilderness areas. Recreation is among the statutory purposes of wilderness areas. As the legislative history of ANILCA recognizes, guides, outfitters and similar commercial services can be essential to the recreational utilization of Alaskan public interest lands. See, e.g., S. Rep. No. 413, supra, at 171, 308; H.R. Rep. 1045, 95th Cong., 2d Sess. 179 (1978). Moreover, reference to the legislative history of specific park units indicates that recreational activities generally reliant upon hired guides or outfitters are among the Congressionally-authorized uses of areas which have also been designated as wilderness. See, e.g., Denali National Park, S. Rep. No. 413, supra, at 167 (staging for expeditions); Lake Clark, id. at 153 (climbing); Glacier Bay, id. at 164 (white water); Noatak, id. at 156 (hunting and fishing); Wrangell-St. Elias, 16 U.S.C. § 410hh(g) (mountaineering, climbing). Congress also indicated that trapping, subsistence as well as non-subsistence, is considered a permissible wilderness activity. See id. at 308.

When these legislative references are considered in conjunction with the Wilderness Act's exemption for commercial services which are "proper" for realizing wilderness purposes, it is clear that the overall objectives of ANILCA and the Wilderness Act will be served only if the prohibition on "commercial enterprises" is not extended to traditional Alaska activities.

J. Roy Spradley, Jr.

FOOTNOTES

1/ Although Map GLBA-90,004 indicates that Dick's Arm is a wilderness water zone, NPS has determined that this is a map error and that the indicated designation was not intended by Congress.

2/ The Glacier Bay wilderness water zones can be compared to other marine wilderness areas. In Everglades National Park, for example, commercial fishing is authorized within wilderness water areas. In these areas, however, only the submerged lands are designated as wilderness. The supervening water column was excluded from the designation purposely. As the Interior wilderness recommendation noted:

> The parks submerged marine lands contain one of the richest ecosystems known to man. The bottoms are essential to an immense web of animal- and plant-life. . . . Commercial fishing also would continue as before over those portions of the submerged marine-land wilderness. U.S. Department of the Interior, Wilderness Recommendation - Everglades National Park 12 (August, 1974).

Unlike Everglades, the water column in the identified Glacier Bay areas was not excluded from the designated wilderness. Obviously, commercial fishing activity cannot occur in Glacier Bay, as it can in Everglades, without impacting the protected components of the designated wilderness.

3/ Special consideration is provided to commercial fishing in section 205 of ANILCA. 16 U.S.C. § 410hh-4. There it is declared that the Secretary of the Interior "may take no action to restrict unreasonably the exercise of valid fishing rights or privileges" in certain areas, including "the Dry Bay area of Glacier Bay National Preserve." If Congress had intended to allow commercial fishing to occur in the wilderness water areas of the Park, it would have undoubtedly done so in section 205. See S. Rep. No. 413, supra n. 1, at 172. The Malspina Glacier Forelands in Wrangell-St. Elias, for example, contains a wilderness land area which serves as a base for support facilities for commercial fishing operations. Under section 205 these "commercial enterprises" will be allowed to continue. Moreover, section 1314 of ANILCA cannot be relied

upon to exempt commercial fishing. 16 U.S.C. § 3202. Although it allows for the taking of fish on the "public lands," it provides that such activity is subject to applicable State and Federal law. Thus, the Wilderness Act prohibitions must be applied.

4/ Early versions of the precursor to ANILCA - H.R. 39 - included a special exemption for commercial fishing within wilderness areas. See H.R. 39, 96th Cong., 1st Sess. § 612(d) (1979) (House); H.R. 39, 95th Cong., 2d Sess. § 607(j) (1975) (House). Under these proposed sections, commercial fishing would have been permitted in all areas designated under the Act as wilderness, except within national parks. This provision, contained in the House version of H.R. 39, was ultimately rejected in favor of the Senate approach, which included a general administration section in Title VII - section 707 - and listed specific exemptions in section 1315. 16 U.S.C. § 3203. The section 1315 exemptions adopted some of those listed in the House version (i.e., aquaculture, existing cabins, new cabins), added some not found in the House bill (i.e., timber contracts, beach log salvage), and deleted fishery research, commercial fisheries, and several other sections. See H.R. 39, 96th Cong., 1st Sess., § 1315 (1979) (Senate). Thus, Congress chose not to enact a special section to exempt commercial fishing from Wilderness Act management constraints. It should be noted, however, that even if this provision had been included in the Act, it would not have allowed commercial fishing in national park wilderness areas such as Glacier Bay.

bcc:
Solicitor's Docket
Chron-C&W (2)
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Rep Cussendorf / Katherine

Southeast Alaska Conservation Council

SEACC • P.O. Box 021692 • Juneau, Alaska 99802 • (907-586-6942

GLACIER BAY NATIONAL PARK MANAGEMENT

* SEACC supports protection of park values.

* SEACC does not support kicking commercial fishing out of Glacier Bay National Park and adjacent waters.

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It is SEACC's position that management of the park must protect park values first, yet equitably provide for appropriate and sustainable levels of historical human uses.

SEACC strongly advocates establishing a process for local people and the National Park Service to work together to iron out an appropriate mix of traditional uses and park values that will be in the best long-term interest of both the Park and the people.

Specifically, we recommend that the Park Service suspend all proposed changes in commercial fisheries management until a local advisory commission and the Park Service have identified and resolved any major conflicts between local uses and park values.

The purpose of this memorandum is to review legal and regulatory issues related to potential NPS restrictions on commercial, subsistence and personal use fishing in Glacier Bay National Park (GLBA). The memorandum includes a new perspective which could result in a NPS management stance allowing subsistence fishing and a less abrupt end to commercial fishing. Throughout this memorandum the GLBA abbreviation is used to refer to the entirety of Glacier Bay National Park, whereas the name Glacier Bay refers specifically to just the bay.

I. Commercial Fishing

A. Background

The marine waters of GLBA have been fished commercially since at least the 1890s. Commercial fishing continued despite the proclamation of the Glacier Bay area as a national monument in 1925, and its subsequent enlargement in 1939.

Under the Act of June 6, 1934, 43 Stat. 464, the Secretary of Commerce was authorized to "set apart and reserve fishing areas in any of the waters of Alaska . . . and within such areas . . . establish closed seasons during which fishing may be limited or prohibited . . . ." Alaska Fishery Regulations, Bureau of Fisheries, prohibited commercial fishing for salmon "in Glacier Bay