ALASKA LEGISLATURE COMMITTEE FILES, 1989-1990 8672
5954 HOUSE RESOURCES

358

OTHER STRIKE TEAM EQUIPMENT AND PERSONNEL WERE USED EXTENSIVELY DURING THE EXXON VALDEZ OIL SPILL RESPONSE. THERE ARE ALSO EMERGENCY RESPONSE TEAMS AVAILABLE FROM THE ENVIRONMENTAL PROTECTION AGENCY. THESE TEAMS HAVE EXPERTS IN WATER QUALITY AND AIR MONITORING AND CAN BE OF VALUABLE ASSISTANCE TO AN ON SCENE COORDINATOR ESPECIALLY IN THE EVENT OF A HAZARDOUS CHEMICAL RELEASE. THE NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION UNDER THEIR NOAA HAZMAT PROGRAM IN THE EVENT OF AN OIL SPILL OR HAZARDOUS CHEMICAL RELEASE CAN AND DO ROUTINELY PROVIDE OFFICERS TO COME AND SERVE ON THE OSC'S STAFF AND WHO ACT AS SCIENTIFIC SUPPORT COORDINATORS. THESE PEOPLE ARE EXTREMELY VALUABLE AS THEY CAN ASSIMILATE SCIENTIFIC DATA AND ADVISE THE OSC ON THE VIABILITY OF CERTAIN CLEANUP TECHNIQUES FOR DIFFERENT TYPES OF SHORELINES. THE NOAA COMPUTERS ARE USED FOR SPILL TRAJECTORY FORECASTING TO PREDICT WHERE SPILL OIL WILL BE TRAVELING SO THAT SHORELINE PROTECTION STRATEGIES CAN BE EVOLVED. NOAA ALSO CAN PROVIDE INFORMATION CONCERNING RESOURCES AT RISK AND PRIORITIES FOR THEIR PROTECTION.

NATIONAL RESPONSE MECHANISM - THERE IS A DOCUMENT KNOWN AS THE NATIONAL CONTINGENCY PLAN WHICH GENERALLY LAYS OUT A PLAN FOR COORDINATED ACTION AMONGST FEDERAL AGENCIES. THERE IS A NATIONAL RESPONSE TEAM WHICH MEETS IN WASHINGTON DC AND CONSISTS OF THE DEPARTMENT OF AGRICULTURE, THE NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION, THE DEPARTMENT OF DEFENSE, THE DEPARTMENT OF ENERGY, HEALTH AND HUMAN SERVICES, THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE DEPARTMENT OF THE INTERIOR, THE DEPARTMENT OF JUSTICE, THE DEPARTMENT OF LABOR, THE DEPARTMENT OF STATE, THE COAST GUARD AND THE ENVIRONMENTAL PROTECTION AGENCY. THE NATIONAL RESPONSE TEAM IS CO-CHAIRED BY THE COAST GUARD AND THE ENVIRONMENTAL PROTECTION AGENCY. ON THE NATIONAL LEVEL THE NATIONAL RESPONSE TEAM FUNCTIONS MOSTLY AS A POLICY MAKING BODY FOR PLANNING AND COORDINATION. ON THE REGIONAL LEVEL WE HAVE AN ALASKA REGIONAL RESPONSE TEAM. THIS IS ALSO CO-CHAIRED BY THE COAST GUARD AND THE ENVIRONMENTAL PROTECTION AGENCY. ON A REGIONAL LEVEL THE ALASKA REGIONAL RESPONSE TEAM IS VERY ACTIVE IN CONTINGENCY PLANNING. AN EXAMPLE OF THIS IS THE DISPERSANT USE GUIDELINES WHICH THE ALASKA REGIONAL RESPONSE TEAM HAS IN PLACE FOR COOK INLET AND PRINCE WILLIAM SOUND. THE ALASKA REGIONAL RESPONSE TEAM MAINTAINS AN ACTIVE DISPERSANT WORKING GROUP WHICH IS PRESENTLY INVOLVED IN DEVELOPING GUIDELINES FOR PRE-PERMITTING FOR THE USE OF IN SITU BURNING. THE REGIONAL RESPONSE TEAM IS ALSO DEEPLY INVOLVED IN WILDLIFE PROTECTION GUIDELINES AND GUIDELINES AND ANNEXES TO BE INCLUDED IN ALASKA'S REGIONAL PLANS FOR THE USE OF VOLUNTEERS FOR OIL SPILL CLEANUP.

CONTINGENCY PLANNING - CONTINGENCY PLANNING IS A VITAL PIECE OF THE PICTURE AS IT RELATES TO OIL SPILL RESPONSE. THE COAST GUARD FEDERAL ON SCENE COORDINATORS MAINTAIN CONTINGENCY PLANS FOR THEIR AREAS OF RESPONSIBILITY. THESE PLANS CONTAIN INFORMATION ON THE GEOGRAPHIC AREA, RESOURCES AT RISK, NOTIFICATION LISTS OF PERSONNEL AND AGENCIES TO BE CONTACTED AND WHO TO WORK WITH IF A SPILL OCCURS IN A PARTICULAR AREA. THE PLANS CONTAIN INFORMATION ON WHAT EQUIPMENT IS AVAILABLE FROM VARIOUS OIL SPILL CLEANUP

COOPERATIVES WHICH MAY BE OPERATING IN THE AREA AND HOW TO ACCESS THAT EQUIPMENT. AS A RESULT OF THE EXXON VALDEZ SPILL THE PRESIDENT DIRECTED THAT A NATIONWIDE REVIEW OF CONTINGENCY PLANS BE UNDERTAKEN. THE REVIEW WAS TO BE MADE WITH THE ON SCENE COORDINATORS TAKING INTO ACCOUNT THE WORST CASE SCENARIOS WHICH COULD OCCUR IN THEIR AREAS AND THE ON SCENE COORDINATORS WERE ASKED TO COME UP WITH PERSONNEL AND EQUIPMENT SHORTFALLS WHICH THEY COULD SEE WOULD ARISE IF THEY HAD TO RESPOND TO THAT WORST CASE SCENARIO. THE ALASKA CONTINGENCY PLANS FOR THE COAST GUARD HAVE BEEN REVISED AND REVIEWED BY MEMBERS OF THE ALASKA REGIONAL RESPONSE TEAM. THE SHORTFALLS HAVE BEEN PROVIDED TO THE NATIONAL RESPONSE TEAM. A SIX MONTH CONTINGENCY PLANNING STUDY REQUIRED BY THE PRESIDENT HAS BEEN COMPLETED BY THE NATIONAL RESPONSE TEAM AND THIS DOCUMENT SHOULD BE PUBLISHED FOR THE CONSUMPTION OF THE GENERAL PUBLIC SHORTLY. AND A FINAL WORD ON CONTINGENCY PLANNING IS THAT THE NEED FOR GOOD CONTINGENCY PLANS DOES NOT PERTAIN ONLY TO THE FEDERAL RESPONSE MECHANISM. INDUSTRY CONTINGENCY PLANS ARE MORE VITAL TO THIS PROCESS THAN ANY GOVERNMENT PLAN BE IT STATE OR FEDERAL. BY MAKING EQUIPMENT REQUIREMENTS AN INTEGRAL PART OF THE INDUSTRY PLANS WE FEEL THAT THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION IS VERY MUCH ON THE RIGHT TRACK IN THEIR RECENT INITIATIVES ON FACILITY CONTINGENCY PLANNING.

SPILLS OF NATIONAL SIGNIFICANCE - THE EXXON VALDEZ OIL SPILL COINED A NEW PHRASE IN THE LEXICON OF OIL SPILL CLEANUP RESPONSE - THAT IS A SPILL OF NATIONAL SIGNIFICANCE. THE COAST GUARD AND EPA AND THE NATIONAL RESPONSE TEAM ARE EXAMINING THE NATIONAL POSTURE OF THE NATIONAL RESPONSE MECHANISM TO SEE WHAT CHANGES, IF ANY, ARE REQUIRED TO DEAL WITH SPILLS OF NATIONAL SIGNIFICANCE. WE HAVEN'T SEEN ANYTHING CONCRETE COME OUT ON THAT YET, BUT WE CAN VISUALIZE A PRE-PLANNED RESPONSE ORGANIZATION, A WATCH QUARTER AND STATION BILL, IF YOU WILL, THAT ADDRESSES THE TYPE AND FORM AND PERSONNEL NEEDS THE COAST GUARD WOULD DEEM NECESSARY TO RESPOND AGAIN TO A NATIONALLY SIGNIFICANT EVENT.

INCIDENT COMMAND SYSTEM
(ICS)

There are three very important components in the fire suppression organization system (ICS) which allows all agencies to interchange forces and effect a positive managerial and operational control of the suppression and support activities. This system has vastly improved the efficiency and effectiveness of all the nation's forest fire suppression efforts. It is especially effective in Alaska where such a large area is protected by only a few fire forces and dependency on interagency force sharing is critical.

ORGANIZATION STRUCTURE:

A standard organization structure identifies positions which are specific to various duties and identifies those job responsibilities each position will perform in the organization. The structure utilizes an Incident Commander as the person in charge and a staff of section chiefs for Operations (actual on line fire fighting), Plans (information and planning), Service (all logistical support), Finance (cost accounting) and Safety (assures operations are safe).

There are many subsequent positions ranging from aircraft managers and fire behavior analysts to the actual fire fighter.

This system is effective for emergencies such as floods, earthquakes, fires or other disasters.

TRAINING

A curriculum of courses, which prepares the employees for specific jobs in the Incident Command System organization, blends experience with formal training in order to qualify for the position. The courses are structured to be presented in individual sessions ranging from one day to two weeks, depending on complexity. The basic criteria in each course is standard nationwide with adjustments made for local area special situations.

CERTIFICATION

The training courses, experience, physical fitness and actual performance are evaluated by management. Once the qualifications are determined, each individual is issued a certification card which indicates what jobs can be performed, nationwide. The employees carry the card as validation of their qualifications. During interagency mobilization of forces, the receiving agency used this as valid confirmation of the individuals qualification. A manual for the ICS system is available upon request.

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CORRECTION

THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY

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CAREER LADDER TO INCIDENT COMMANDER/AREA COMMAND

YEAR	COURSES	HOURS	INCIDENT COMMAND SYSTEM POSITION
	I-620	40	Incident Commander/Area Command
15	I-520	80	Incident Commander/Multi-Branch
14			Incident Commander/Multi-Division
13	I-400, I-420	64	Incident Commander/Multi-Leader
12			Planning Section Chief/Multi-Division
11			Logistics Section Chief/Multi-Division
10	I-430	40	Operations Section Chief/Multi-Leader
	I-440	32	Planning Section Chief/Multi-Leader
	I-450	36	Logistics Section Chief/Multi-Leader
9	I-354	28	Facilities Unit Leader
	I-355, I-255	28	Ground Support Unit Leader
	I-356, I-252, I-253	40	Supply Unit Leader
8	I-348	24	Resources Unit Leader
	I-346	6	Situations Unit Leader
	I-244	32	Field Observer
	I-248	8	Status Check-In Recorder
7	I-470	40	Air Operations Branch Director
	I-378, I-376, I-374	96	Air Attack Group Supervisor
	I-375	32	Air Support Group Supervisor
6	I-271	34	Helibase Manager
	I-272	8	Helispot Manager
5	I-339	10	Division/Group Supervisor
4	I-330, I-220	54	Strike Team Leader
	I-390	36	Single Resource Boss
3	S-230, S-260, S-270	56	Crew Boss
2	S-110, S-111, S-112	56	Squad Boss
1	S-130, S-190	44	Fire Fighter
15 yrs	36 classes	924 hrs	27 Positions

NIIMS SUMMARY

100 training courses

2,220 course hours

96 positions

18 special Alaska positions

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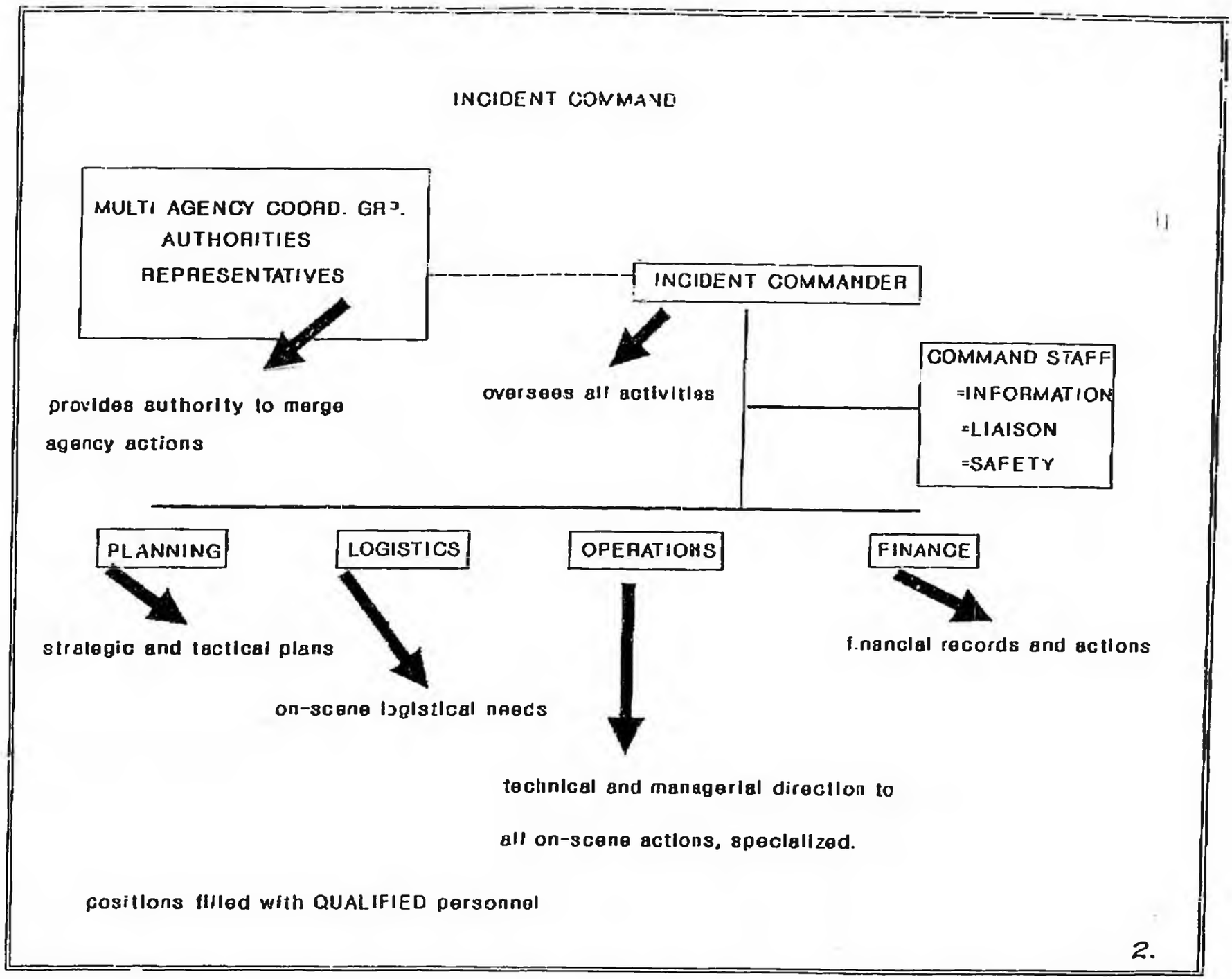

INCIDENT COMMAND
MULTI AGENCY COORD. GR?.
AUTHORITIES
REPRESENTATIVES
INCIDENT COMMANDER
COMMAND STAFF
=INFORMATION
=LIAISON
=SAFETY
provides authority to merge
agency actions
oversees all activities
PLANNING
LOGISTICS
OPERATIONS
FINANCE
strategic and tactical plans
on-scene logistical needs
financial records and actions
technical and managerial direction to
all on-scene actions, specialized.
positions filled with QUALIFIED personnel

MANAGEMENT OPTIONS

MULTI-AGENCY COORDINATING GROUP

M A C

the combination of facilities, equipment, personnel, procedures, and communications integrated into a common *system with responsibility for* coordination of assisting agency resources and support to agency emergency operations.

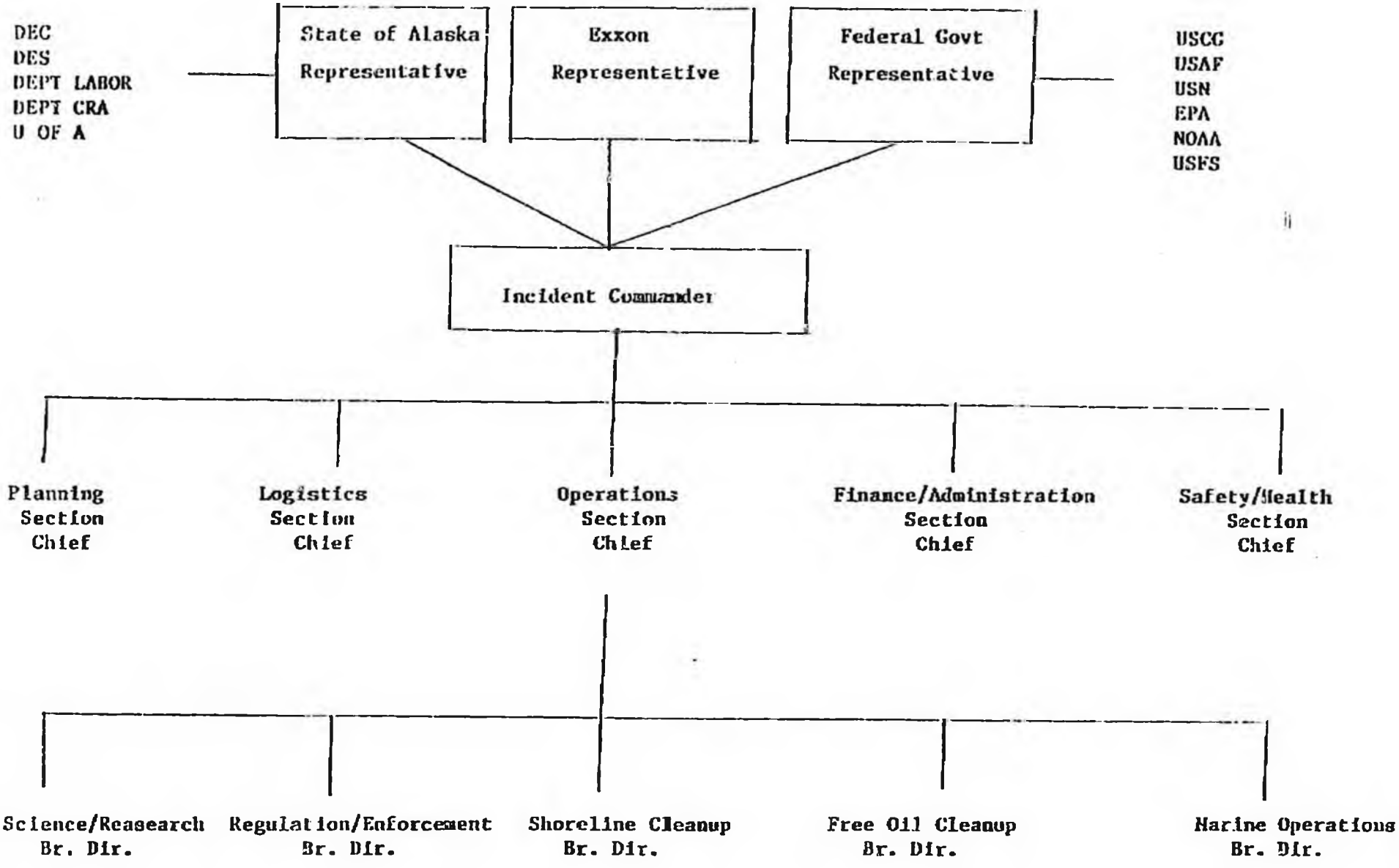
STRATEGY

UNIFIED COMMAND

a method for all agencies or individuals who have jurisdictional responsibility, and in some cases, those who have functional responsibility at the incident, to contribute to:

- determining overall objectives
- selection of strategy

TACTICS


DEC
DES
DEPT LABOR
DEPT CRA
U OF A
State of Alaska Representative
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USN
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NOAA
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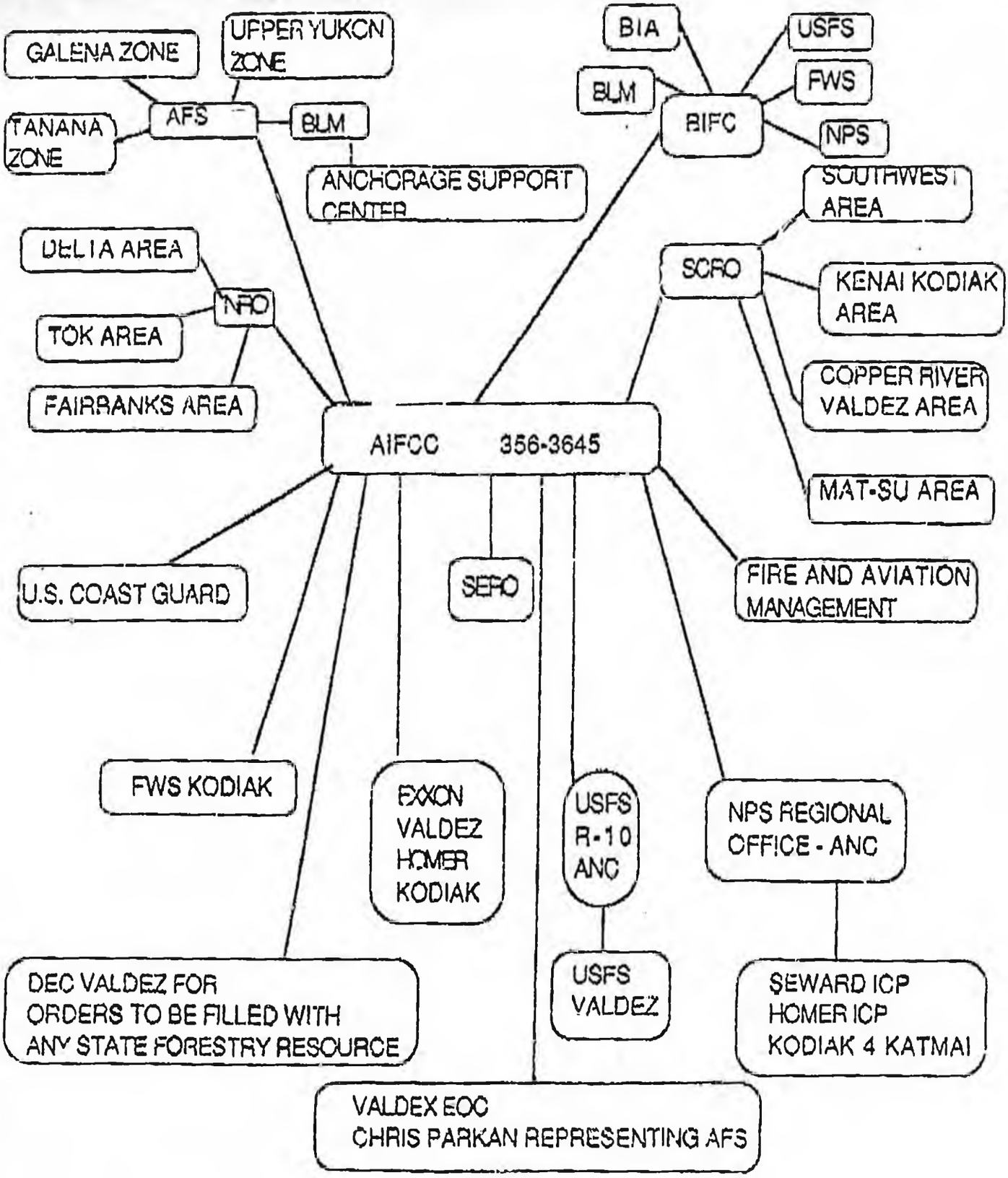

OIL SPILL ORDER FLOW
AIFCC IS PROCESSING ORDERS FOR MANPOWER, SUPPLIES, EQUIPMENT AND AIRCRAFT

OIL SPILL PUBLIC HEARINGS

STATEMENT OF
MIKE WILLIAMS
Vice President for Environmental Planning & Control
Alyeska Pipeline Service Company
to the
Senate and House Resources Committees and the
Senate Oil and Gas Committee
on
January 25, 1990

Thank you for inviting Alyeska Pipeline Service Company to respond to the EXXON VALDEZ Oil Spill Commission's Executive Summary. My name is Mike Williams. I am Vice President for Environmental Planning and Control at Alyeska. Shortly after the EXXON VALDEZ spill, I was transferred by my employer, British Petroleum, to lead the team that developed and implemented Alyeska's new Tanker Spill Prevention and Response Plan that I will describe later during my testimony.

My career with BP began in 1958 as an apprentice on board tankers. Ultimately, I earned an unlimited master's license. During the construction of the pipeline, I was assigned to the Marine Department of Sohio. Alyeska has testified recently to the House Resources Committee on two primary features of the Commission's report affecting Alyeska. Apart from today's remarks, we would prefer to make detailed comments after the final report is published, and in response to legislation that might be proposed.

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government agencies. Alyeska, shippers and government personnel, along with representatives of potentially impacted communities are involved in this exercise.

Alyeska wishes to cooperate with the Legislature in an examination of the Oil Spill Commission report. We urge, in the process of consideration of any new legislation related to oil spills, that the Legislature include comprehensive analysis of federal and state laws which we believe to be essential to effective, fair and responsible legislation. For the most part, we at Alyeska believe that existing law provides an adequate framework for the management of oil spills.

Alyeska's goal is to determine and meet public expectations for prevention efforts and response capability in Prince William Sound. We feel compelled to remind you that even as Alyeska achieves that goal, you still must resolve difficult issues such as the appropriate role for state government in Prince William Sound spill response and the appropriate blend of federal, state and private efforts in the rest of Alaska. During the next year, enactment and implementation of comprehensive federal legislation will establish major new components of a national prevention and response system.

If I may reiterate Alyeska's earlier testimony to the House Resources Committee, we believe that we have implemented all of the preventive strategies, within Alyeska's ability to act, recommended to the Commission by ECO.

Our utilization of the Incident Command System, based on community suggestions, is strongly supported by the Commission. We look forward to fine tuning these prevention efforts and perhaps adding new ones, in response to the public review scheduled by the Department of Environmental Conservation and by the Regional Citizens Advisory Committee.

While reviewing the Commission's recommendations, you must independently evaluate the direct and indirect costs to the state. Yesterday, Commissioners estimated that implementation of all of its prevention recommendations for Prince William Sound would cost six cents per barrel. Alyeska's prevention and response costs already exceed that level. Not counting administrative and other costs, we are now spending around $50,000,000 per year, which equals over seven cents per barrel at an average throughput of 1.9 million barrels per day. That cost per barrel will rise with inflation and declining throughput, and does not include the anticipated cost of the citizens advisory council estimated at approximately $2 million per year. Many believe that other areas cannot support the level of protection now in place for Prince William Sound. Obviously, important public policy issues are involved as the Legislature establishes standards for industry and makes appropriations for oil spill programs. We hope that before creating new programs, you determine whether existing ones, with adequate funding, can be molded to meet new demands.

Alyeska agrees with the Commission's conclusion that regulation of industry meet the expectations of Alaska citizens.

In our opinion, the best way to achieve this goal is through a constructive professional relationship between industry and its regulators. For this to work, regulations must be rational, scientifically based, and predictable. It is critical that agencies - especially the DEC - are adequately funded. Without adequate funding, the DEC is unable to develop and implement clear and concise regulations. Without adequate funding, the agency cannot employ enough qualified employees to interpret and enforce these regulations across all walks of industry. Without good, clear, concise and scientifically accurate regulations, it is difficult -if not impossible - for industry to operate free of controversy with an agency. With funding, both sides benefit.

On the subject of our relationship with the DEC, Alyeska desires to establish a constructive relationship consistent with the need for safety and our prerogative to make daily operational decisions. The Commission has expressed concern about DEC access to the Valdez Marine Terminal. During discussions in November 1989 with DEC personnel in Valdez, we renewed our commitment to provide escorted access to the DEC in Valdez without delaying or impeding the regulatory process. In turn, we believe that state law should require all local and state government agents to conduct an exit interview after inspecting a facility and should, as a matter of course, provide written documents generated as a result of a site visit. At the present time, we do not receive this type of feedback from DEC inspectors in Valdez.

Alyeska also agrees with the Commission recommendation that the company employ an executive whose principal responsibility is to achieve compliance with environmental regulations. That is my job which Alyeska's new President, Jim Hermiller, created this fall. Alyeska has created a new division, which I head, employing approximately 50 people with an additional 100 people employed under contract as crews on the Emergency Response Vessels and as spill response workers. For the past nine months, I have focused much of my energy on directing the development of a new spill prevention and response plan for Prince William Sound. Ultimately, I will be responsible for environmental compliance companywide and will provide internal review of contingency planning and preparedness and response to spills.

I would like to make two other brief comments on the Commission's Executive Summary. First, despite Alyeska's stated willingness to appear and testify, the Commission did not have time to hold public hearings on the integrity of pipeline operations or on the redoubled efforts of federal and state regulators to evaluate pipeline operations in light of the lessons of EXXON VALDEZ. If time had permitted, the Commission would have learned that the Bureau of Land Management and the Alaska Department of Natural Resources, with input from the Department of Environmental Conservation, have established a task force with Alyeska to review pipeline spill prevention and contingency response planning and preparation. This process began with commissioning a comprehensive risk assessment, funded by Alyeska and directed by the regulators

and Alyeska. The Office of Pipeline Safety in the United States Department of Transportation is conducting a thorough review of Alyeska's corrosion programs.

In addition to greatly increased regulatory attention to the pipeline, there is government oversight of the regulators. The General Accounting Office, at the request of Congress, is auditing the coordination and effectiveness of these and other regulatory controls of the pipeline. Although we do not claim perfection, we believe the Commission's conclusions about the pipeline are premature and fail to recognize the greatly increased regulatory oversight and Alyeska's rejuvenated desire to understand and meet public expectations by working cooperatively with all regulatory agencies and concerned citizens. The Legislature should evaluate Alyeska's ability to work constructively with these enhanced regulatory efforts prior to creating new, duplicative authorities.

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understanding of the plan approved by the DEC in 1987 and the response initiated by Alyeska.

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In a report to Congress this summer, the GAO concluded that Alyeska's level of preparation to attempt to clean up the "most likely spill" in 48 hours was consistent with, and in most cases better than, national and international standards. The State's approval of the plan in 1987 reflects a perception, apparently embodied in State regulation, that the risk of a catastrophic event was very low and did not justify the expense of massive on-site capability. Of course, the spill in March has led

to a reassessment of the risk of catastrophe and the proper level of preparation for it.

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During testimony to the Oil Spill Commission on August 31, 1989, Theo Polasek, Vice President for Operations, described Alyeska's response to the spill, its efforts to mobilize resources from around the world and its cooperation with and support of Exxon's containment and clean-up. A copy of

Mr. Polasek's testimony is attached. We hope it assists your understanding of Alyeska's response to the spill.

We have agreed that new prevention and response systems must be activated while judicial processes sort out last spring's events. I would like to conclude by briefly summarizing the prevention and response systems that I mentioned earlier. Alyeska unequivocally agrees with the Commission that recovery of all the oil from a catastrophic spill is impossible and, therefore, prevention is the first priority. Programs to prevent tanker accidents in Prince William Sound include:

1. Tanker crew members returning from shore leave are tested for alcohol if their conduct or breath odors indicate consumption.

2. Tanker masters are given a breathalyzer test within one hour prior to sailing.

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Alyeska is funding and working with an independent citizens advisory committee that represents a cross-section of the community, to evaluate these new measures and assist our training and diligence. Our goal for Alyeska is to meet our responsibility to the people of Alaska while operating the pipeline efficiently. We are receptive to your suggestions, on behalf of your constituents.

Thank you for the opportunity to comment today.

STATEMENT OF
MIKE WILLIAMS
Vice President for Environmental Planning & Control
Alyeska Pipeline Service Company
to the
Senate and House Resources Committees and the
Senate Oil and Gas Committee
on
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STATEMENT OF

THEO L. POLASEK
VICE PRESIDENT, OPERATIONS
ALYESKA PIPELINE SERVICE COMPANY

BEFORE THE

ALASKA OIL SPILL COMMISSION

AUGUST 31, 1989

Mr. Chairman, Members of the Commission:

THE ALYESKA PIPELINE SERVICE COMPANY ("ALYESKA")
INITIAL RESPONSE TO THE EXXON VALDEZ GROUNDING

I. INTRODUCTION

At 12:04 a.m. on March 24, 1989, the Exxon Valdez, loaded with 1,264 155 barrels (53,094,510 gallons) of Alaska North Slope crude oil and proceeding at a speed of 12 knots, collided with Bligh Reef in Prince William Sound. The Exxon Valdez ruptured eight of its eleven cargo tanks along the full length of the vessel and three water ballast tanks. Within the first twenty to thirty minutes, 115,000 barrels (4.1 million gallons) of oil gushed out of the damaged tanks. By 3:23 a.m., the Exxon Valdez had lost 138,000 barrels (5.8 million gallons) of oil into Prince William Sound. By 5:30 a.m., that figure had risen to 242,000 barrels (10.1 million gallons). The initial daylight aerial reconnaissance at 7:27 a.m. revealed an oil slick 1,000 feet wide and four to five miles long.

The amount and instantaneous nature of the discharge made the Exxon Valdez oil spill the largest in U.S. history. By any measure, the discharge of approximately 260,000 barrels of oil over such a short period of time was a catastrophe. Alyeska's State and federally approved plan detailed a response to the "most likely" size spill, a spill 175 times smaller than the Exxon Valdez catastrophe. This is one of the significant differences which illustrates the enormity of the task faced by Alyeska in the first hours after the grounding.

This catastrophic spill occurred with extraordinary speed, at night, in winter conditions, with ice in the water and snow on the ground. Charged with carrying forward the initial response to the spill, Alyeska began mobilizing immediately for that response and, in fact, responded with more equipment and personnel than is discussed in the approved Oil Spill Contingency Plan for Prince William Sound (Contingency Plan). The Contingency Plan focused primarily on the "most likely" size spill of 1000 - 2000 barrels. It also clearly warned that environmental damage was inevitable in any spill exceeding 4,000 barrels.

The Contingency Plan emphasized that environmental damage from catastrophic spills can be mitigated only if all available resources, including dispersants and burning, were brought into play. The simple truth is that no catastrophic oil spill has ever been contained solely by mechanical means.

The State of Alaska, through its Department of Environmental Conservation, had fully reviewed and approved the

Contingency Plan. The U.S. Department of the Interior, specifically the Bureau of Land Management, had also approved the Oil Spill Contingency Plan pursuant to the stipulations to the Federal Grant of Right-of-Way for the Trans-Alaska Pipeline.

These approvals were not idle exercises. All those who reviewed the plan were informed that, as already discussed, a hypothetical spill of "only" 4,000 barrels would result in oil on the shoreline. This was true even assuming all methods of cleanup could be used and optimal conditions for cleanup existed. In a catastrophic spill, where cleanup was limited only to mechanical recovery, the environmental damage, as detailed in the Contingency Plan, would be much more significant. Such was the case in the Exxon Valdez grounding.

This month the General Accounting Office (GAO) testified in Cordova that the nation's ability to deal with a spill of the Exxon Valdez magnitude is limited at best. As the GAO testified in Cordova on August 10, 1989 before the House Subcommittee on Coast Guard and Navigation, no contingency plan in the country could adequately address a spill of this magnitude. At the same time, the GAO also noted no area of the country had a plan as good as Alyeska's.

II. ALYESKA'S OIL SPILL CONTINGENCY PLAN

A. Background

In 1980, the Alaska legislature enacted A.S.46.04.030, which prohibits an oil terminal facility from operating without an oil spill contingency plan approved by the Alaska Department of Environmental Conservation ("ADEC"). Regulations promulgated by ADEC pursuant to that statute in 1981 include a requirement that an oil spill contingency plan estimate the size of the spill "most likely to occur" at the facility subject to the plan, and that the contingency plan applicant maintain sufficient equipment to contain and cleanup the "most likely spill within 48 hours." Prior to 1980, Alyeska had submitted its contingency plan to the Alaska State Pipeline Coordinator's Office (SPCO) and then to the Alaska Department of Natural Resources (DNR) for approval pursuant to the State right of way agreements; Alyeska's contingency plan continues to be reviewed by both DNR and ADEC.

During the formulation of its 1987 Contingency Plan, Alyeska engaged an outside consulting firm to assess the magnitude of the "most likely spill." The conclusion reached was that the most statistically probable spill during the 30-year lifetime of the Terminal was between 1,000 and 2,000 barrels. This assessment was specifically noted in the Contingency Plan, wherein Alyeska stated that "the most likely

spill volume for vessels underway in trade with the Valdez Marine Terminal during the expected 30-year operating lifetime of the Marine Terminal is 1,000 barrels."

On January 4, 1989, the tanker Thompson Pass spilled approximately 1,700 barrels of oil into the harbor at the Marine Terminal. At the time, it was the largest tanker spill Alyeska had experienced. Its volume was also within the range projected as most likely by Alyeska's experts. It took Alyeska several days to recover approximately 95 percent of the oil spilled. State officials, including Commissioner Kelso, have agreed that Alyeska's cleanup response to that spill was wholly satisfactory.

Alyeska is a service company that operates a pipeline and terminal facility as common agent for the seven owners of the Trans Alaska Pipeline System. Alyeska does not own or operate any tanker vessels. There is no statutory or regulatory requirement that a terminal operator have or maintain a contingency plan for tanker operators in Prince William Sound. Nonetheless, during the approval process for the 1987 Contingency Plan, ADEC directed Alyeska to incorporate within the Plan three hypothetical oil spill response scenarios: (1) a Port Valdez spill of 5 to 60 barrels; (2) a tanker accident in the Valdez Arm involving a spill of approximately 4,000 barrels; and (3) a catastrophic spill of 200,000 barrels resulting from a failure of a tanker cargo tank within Prince William Sound. By its express terms, the catastrophic scenario only addresses incidents that occur through some "failure of the tanker crude tanks and does not discuss other disaster possibilities such as collision . . . " (Contingency Plan at p.3-54.)

On June 11, 1987, ADEC officially approved Alyeska's 1987 Contingency Plan for the subsequent three year period. This approval was confirmed by letter on March 4, 1988, several months after Commissioner Kelso had taken office. Alyeska has previously given a copy of the 1987 plan to the Commission.

B. The Scenarios

1. Introduction

Misinformation abounds on what a scenario is and what a scenario is not. All scenarios in the approved plan, including both the 200,000 and 4,000 barrel scenarios, were intended to illustrate the types of resources that would be marshalled for the specific circumstances of that scenario, to suggest chronological order of response actions, and to roughly estimate response times, recovery of oil, and damage to the environment. The scenarios were limited expressly to the

assumptions discussed and were not intended to be "promises," "assurances," or "guarantees" that any spill could be contained and cleaned up within a particular time or without environmental damage.

The express language of the Contingency Plan embodies this characterization. For example, it states that "[i]t is impractical to make specific plans for every circumstance variation; therefore, it must be recognized that flexibility is an integral part of these procedures and that judgments will have to be made by trained field personnel." (Contingency Plan at p.3-5.)

This flexibility specifically contemplates, in part, a three-pronged attack against any oil spill by means of dispersants, in-situ burning, and physical removal techniques. "Each spill situation must be assessed in light of the full range of spill response options available." (Contingency Plan at p.3-6, emphasis added.)

2. The 4,000 Barrel Scenario

The assumed conditions under the 4,000 barrel scenario placed the spill on June 22 at 6:00 a.m. (near the summer solstice with almost perpetual daylight) and during continuously mild sea conditions. Notwithstanding these optimal assumptions, this scenario, which was 65 times smaller than the 260,000 barrel Exxon Valdez spill, specifically contemplated that 1,600 barrels (40%) would reach the shores and require a two-month cleanup period of "washing down the beaches and picking up appropriate oil debris on the beach." The scenario further expressly assumed that 1,000 barrels would be treated with chemical dispersants and that 400 barrels would be consumed by weathering and evaporation. Accordingly, only 1,000 barrels (25%) were predicted to be recoverable by mechanical means despite uninterrupted conditions highly favorable to mechanical recovery and the limited amount of oil spilled.

3. The 200,000 Barrel Scenario

The discussion of a 200,000 barrel spill scenario follows and builds upon the assumptions and predictions of the 4,000 barrel scenario. What is clear regarding the 4,000 barrel scenario -- that with the equipment provided and extensive use of all available response techniques (dispersants, burning and mechanical recovery), there would nevertheless be a significant environmental impact -- becomes even clearer in a 200,000 barrel catastrophic spill scenario. In fact, the environmental impact of a catastrophic spill would be greatly magnified.

The specific conditions hypothesized under the 200,000 barrel scenario were chosen because they provide the possibility of responding to a catastrophic spill with all available tools: mechanical recovery, in-situ burning and dispersants applications. Those conditions involve a "failure of the tanker crude tanks" approximately 30 miles from the Marine Terminal, during the summer solstice, and with seas of less than five feet. (Contingency Plan at p.3-54.) The scenario further assumes the immediate and extensive use of in-situ burning and dispersants. It states that preventing "the oil from impacting the shore lines at all . . . can be done of course only by dispersing the oil at sea, or allowing an open burn of the oil at sea." (Contingency Plan at p.3-56, emphasis added.)

Despite the assumed ideal conditions and prompt and extensive use of burning and dispersants, the 200,000 barrel scenario, like the 4,000 barrel scenario, projects a considerable percentage of oil to reach the shoreline. (Contingency Plan at pp.3-55 and 3-56.) As a result, the scenario contemplates "a long term cleanup of the spill on the various beaches of Prince William Sound." (Contingency Plan at p.3-56.) Moreover, it concludes that not even best efforts would completely clean up a spill and that removal of the remaining oil will be left to natural dispersion and degradation. (Contingency Plan at p.3-56.)

As the foregoing discussion illustrates, even under the ideal conditions upon which the 200,000 barrel scenario is based, a large percentage of the oil was predicted to reach the shore. When one considers the actual conditions on the first day of the Exxon Valdez spill, the numerous differences explain why even more oil than described in the plan scenario should have been expected to impact the coastline of Prince William Sound and also why the beach cleanup effort would take longer:

- The season was late winter rather than the summer solsti . Thus, instead of perpetual daylight, Alyeska was forced to conduct much of its response in the dark. Significantly, the darkness also hampered the U.S. Coast Guard's ability to assess the situation during the first few hours following the grounding.

- The winter conditions meant that the response crews had to contend with ice and snow along the Terminal transportation routes, at the equipment staging areas, and on the loading docks as they readied the initial response equipment.

- The Exxon Valdez spill did not result from a "failure of the tanker crude tanks" as specifically assumed in the catastrophic scenario, and the Contingency Plan expressly excluded "other disaster possibilities . . . " In contrast to a relatively slow leak of a tank failure, the grounding on Bligh Reef resulted in an extraordinarily rapid loss of the vessel's cargo.

- The fact that the Exxon Valdez struck Bligh Reef with considerable force created the possibility that the vessel could have broken apart or slipped off the reef and capsized, thus causing an even greater spill. Moreover, there was the potential of a massive fire, causing even greater danger to human life.

- These dangers demanded that lightering operations be given the highest priority, thereby significantly affecting the U.S. Coast Guard's and Alyeska's priorities in the initial response effort. Since lightering involves case by case decision-making, which will vary widely depending upon individual circumstances, it was excluded from the catastrophic spill scenario in the approved Contingency Plan.

- Alyeska, and subsequently Exxon, were only permitted to test, but not to use, dispersants.

- Despite a successful in-situ burn, Alyeska and Exxon were not again allowed to use in-situ burning before the abrupt change in weather conditions.

III. ALYESKA'S RESPONSE TO THE EXXON VALDEZ GROUNDING

Alyeska's response to the Exxon Valdez grounding originated in the Valdez Emergency Response Center, and was supported by the Emergency Center in Anchorage.

A. Mobilization of Equipment and Personnel

At 0027 on March 24, the Exxon Valdez notified the U.S. Coast Guard Vessel Traffic Service that it had struck Bligh Reef. The U.S. Coast Guard, in its capacity as the federal On-Scene Coordinator, notified Alyeska's Marine Operations Supervisor at 0030 that the Exxon Valdez was aground. At that time, nine Alyeska marine operations people were immediately available to initiate an oil spill response.

Also at 0030, at the direction of the U.S. Coast Guard, the tug Stalwart was dispatched to the spill site to be available to help stabilize the Exxon Valdez or to rescue the crew if necessary. The Stalwart arrived at the scene at 0245, taking up position to respond to the safety needs of the crew and to provide critical support in efforts to maintain the stability of the Exxon Valdez, thereby preventing a much more serious spill. Shortly after the Stalwart reached the scene, the pilot boat transporting Coast Guard and ADEC personnel arrived.

After the Stalwart had been dispatched, the Marine Operations Supervisor began notifying (1) key Alyeska personnel in Valdez who were designated by the Contingency Plan to coordinate the spill response, (2) personnel in Alyeska's Anchorage Emergency Center, (3) other off-duty Alyeska personnel, and (4) independent contractors. It is important to keep in mind the role of the Anchorage Emergency Center. The Valdez Emergency Response Center is our operational center, controlling the call-out of Alyeska personnel, directing the mobilization and use of on-site equipment and materials, coordinating activities with the Coast Guard and others, and identifying and requesting backup support from the Anchorage Emergency Center. The Anchorage Center initiates large-scale equipment and personnel mobilization upon confirmation of an actual oil spill and the size of that spill. The Anchorage office personnel provide the command backup to Valdez and the worldwide call-out for reinforcements.

By 0115, designated personnel arrived at the Marine Terminal and opened Alyeska's Valdez Emergency Response Center. At approximately 0130, the Emergency Center in Anchorage was established.

Upon the Coast Guard's notification of the grounding, Alyeska began mobilising all available oil response equipment. The Valdez Emergency Response Center placed a call through the Valdez Small Boat Harbormaster for additional commercial vessels that could be used in the response. It also contacted the cooperative groups, Cook Inlet Response Organization and Alaska Clean Seas, and asked them to mobilize their personnel and equipment. Alyeska's Anchorage Emergency Center began a world-wide mobilization of personnel and equipment.

Alyeska had contracted for oil recovery barges to arrive on March 24 by mid afternoon. By the end of the first day, Alyeska also had placed six to eight commercial vessels at the scene of the oil spill and mobilized numerous other vessels at the Marine Terminal for use in transporting boom and other equipment to the spill site.

Alyeska also mobilized all available manpower to combat the disaster. When the *Exxon Valdez* ran aground, the "A" shift of the Marine Operations Technicians was on duty at the Marine Terminal. The "A" shift of the Power, Vapor, Oil Movement and Storage ("PV/OM&S") Operations Technicians was also on duty at the time. The Marine Operations Supervisor directed his shift, along with personnel from the PV/OM&S shift and Crowley Marine Corporation (an independent contractor) personnel, to begin immediate preparation for the transportation of equipment and personnel to the spill site. Shortly thereafter, the Marine Operations Supervisor and others at Alyeska began contacting additional off-duty personnel in anticipation of a full-scale response to the disaster.

The actual number of additional people working on the oil spill rose rapidly from the first notification. By 0200 four off-duty Alyeska personnel and four Earthmovers personnel had arrived at the Marine Terminal. By 0330, sixteen Alyeska off-duty personnel had been integrated into the oil spill response effort. That number rose to 28 by 0457. At 0600 and continuously thereafter, Alyeska had an estimated 120 people working on various phases of the oil spill response.

By noon, Alyeska also had contracted for the services of 32 day shift workers and 20 night shift workers from two independent contractors. An additional 100 workers were available if needed from a third independent contractor. Ample personnel were therefore available as additional equipment began to arrive in Valdez.

B. Equipment Immediately Available

The approved Contingency Plan states the quantity and type of equipment that Alyeska was to maintain at the Marine Terminal. ADEC Commissioner Kelso acknowledged to the National Transportation Safety Board ("NTSB") that Alyeska in fact had on hand and available for immediate use all necessary equipment required by the Contingency Plan for an initial response in Prince William Sound. For example, the Contingency Plan required approximately 11,000 feet of boom to be on hand for an initial response. Alyeska had on hand over twice that amount of boom within the first 24 hours of its initial response.

C. Deployment of Boom

At 0321, the Coast Guard informed Alyeska's Emergency Response Center that at least 138,000 barrels had escaped from the *Exxon Valdez*. Along with current weather data, this information was used to create a computer-generated projection of the path of the oil slick. The projection indicated that

the oil slick would drift into the shipping lanes and away from the shoreline where the Exxon Valdez was stranded and that the shoreline of Prince William Sound would not be threatened for several days.

After arriving at the scene, Alyeska initially deployed diversionary boom to protect the immediately threatened shores of Bligh Island and Reef Island. Alyeska then deployed containment boom at the leading edge of the oil slick (four to five miles from the Exxon Valdez) to attempt to control the oil in preparation for in-situ burning and dispersants application. This strategy proved successful until the abrupt change in weather.

Initially, Alyeska did not encircle the Exxon Valdez with boom. As the U.S. Coast Guard has agreed in testimony before the NTSB, booming was inadvisable given the following facts:

1. The vast majority of the spill had already occurred and moved away from the vessel.

2. The priority given by the U.S. Coast Guard to lightering the Exxon Valdez meant that the integrity of any containment around the vessel would have been lost upon entry of the lightering ship and tugs into the containment area and from the backwash of those vessels.

3. Booming the ship potentially could have concentrated highly explosive vapors around the Exxon Valdez while the crew and government officials were still on board.

D. Dispersants and In-Situ Burning

The approved Contingency Plan plainly indicates that in the case of a catastrophic oil spill, such as the Exxon Valdez tragedy, the use of dispersants and in-situ burning would comprise the principal strategy for combatting the oil spill. It states that preventing "the oil from impacting the shoreline at all . . . can be done of course only by dispersing the oil at sea, or allowing an open burn of the oil at sea." (Contingency Plan at p.3-56.) Moreover, the 200,000 barrel scenario emphasizes "how important it is to have dispersants approved so that they can be used very effectively to prevent the continuing input of oil into the small bays and shorelines in Prince William Sound." (Ibid.)

On March 24, Alyeska had on hand in Alaska the dispersants required by the Contingency Plan.

At 0238 Alyeska orally requested permission to apply dispersants as the Coast Guard had indicated oil was in the water. At approximately 0630, the Coast Guard concluded that Alyeska should initiate the formal approval process for dispersant use. Employees at the Emergency Response Center in Valdez immediately began preparing all necessary approval forms, which required information such as the size of the spill, depth of the water, chemical properties of the oil spilled, and weather conditions in the area. The documentation supporting Alyeska's request to use, not just test, 50,000 gallons of dispersant was telecopied to the Coast Guard at approximately 0842.

At 1200, the Regional Response Team commenced formal discussion of the issue of dispersant use. (RRT Minutes, NTSB Exhibit 10C at p.3.) At 1510, the On-Scene Coordinator agreed only to permit dispersant testing on the leading edge of the slick. The actual test was conducted at 1800. During the period, additional quantities of dispersant and delivery equipment had begun to arrive in Alaska.

Shortly after the dispersant test, Exxon assumed responsibility for obtaining approval for dispersant use. Final approval for dispersant use was not received until the evening of March 26. According to the RRT Minutes, much of this delay is attributable to the desire of the Regional Response Team to give mechanical recovery the highest priority despite the clearly articulated strategy of the Contingency Plan to rely primarily upon dispersants and in-situ burning.

Similar delays were encountered when Alyeska attempted to contain portions of the oil and burn it. Commander Dennis D. Rome of the 17th Coast Guard District testified before the NTSB that the Exxon Valdez spill presented a good opportunity to employ an in-situ burn. In fact, the entire Regional Response Team considered burning to be a "viable option," but recognized that the key factor to be considered was whether ADEC would issue a burn permit. (RRT Minutes, at p.1263.)

The Regional Response Team received Alyeska's request for a burn permit at 1500 on March 24. Pending their decision, Alyeska continued to mobilize the necessary resources for in-situ burning, such as fireproof boom and ignition sources. The test burn eventually conducted near Goose Island at 2045, Saturday, March 25 successfully disposed of approximately 15,000 gallons of oil. However, at no other time was Alyeska or Exxon permitted to employ in-situ burning to combat the spill. By late Sunday the abrupt change in the weather made burning impractical.

E. Mechanical Recovery and Lightering

By the time Alyeska's Marine Manager, Larry Shier, was first notified by the Coast Guard at 0045 that the Exxon Valdez was leaking oil, Alyeska had begun mobilization procedures for its oil spill response. Among these procedures was the loading of the contingency barge with appropriate oil recovery equipment and the readying of the tug Pathfinder to tow the barge to the scene.

Although the barge was not required by the approved plan to be loaded, Alyeska's usual practice was to preposition on the barge six connexes with various types of boom and other supplies, and a Vikoma seaskimmer with its power pack. At the time of the Exxon Valdez oil spill, however, the barge had been partially off-loaded so that the barge and its equipment could be cleaned and restored following their use in the 1,700 barrel Thompson Pass oil spill. Reloading was delayed when a severe winter storm damaged a portion of the barge while it was moored during its restoration. Although slightly damaged, the barge was operational and indeed was used without further repair in the response on March 24.

Prior to loading the barge, the barge had to be moved from its normal protected moorage location in Alyeska's Small Boat Harbor to the Fluor Dock where the loading crane could operate. Throughout the morning, equipment was transported by forklift and truck to the dock and loaded by crane onto the barge. Approximately 50,000 pounds of equipment was loaded during the morning of March 24, including over 10,000 feet of boom, the Vikoma seaskimmer and its power generator, 2 bladders, air compressors, a light plant, a generator, additional fuel drums and fuel cans with equipment, machinery spares, SCADA communications equipment, an outhouse, duffel bags, rubber gloves and boots, life jackets, a 4-inch pump, absorbent pads, visqueen rolls, anchors, chains, buoys, rope, miscellaneous spare parts, repeaters, personal safety gear, float suits, respirators, and gas detectors.

Given the magnitude of the spill and its distance from the Marine Terminal, Alyeska made the decision that the barge be loaded with equipment beyond what was specified in the Contingency Plan -- a decision supported by the On-Scene Coordinator, Commander McCall of the United States Coast Guard. That process was hampered by (1) the prevailing winter conditions, including snow and ice at the Fluor and Crowley docks, on the roads leading to the Fluor and Crowley Docks and the Small Boat Harbor, on the launching ramp at the Small Boat Harbor, and on the barge, and (2) darkness. The transportation of the barge to the spill site was further complicated by the

large number of icebergs along the sea route to the Exxon Valdez and the distance to the scene.

Alyeska personnel in the air and at the scene determined that the most effective means of responding to the massive oil slick was to deploy the mechanical recovery equipment on the barge halfway between the Exxon Valdez and the leading edge of the slick. This decision permitted the mechanical recovery equipment to operate where the oil slick would be the thickest rather than at the leading edge where the oil slick was the thinnest. Lt. Commander Falkenstein, the Coast Guard's Executive Officer, testified before the National Transportation Safety Board that this was the proper strategy for dealing with the immense spill.

Although the nineteen Alyeska personnel accompanying the barge began mechanical recovery operations immediately upon their arrival, they were confronted with an extraordinarily difficult task. Equipment that Alyeska, with the approval of the State of Alaska and the federal government, had assembled for use in responding to a "most likely spill" of 1,000 to 2,000 barrels was now being employed to combat an oil spill 175 times larger. ADEC's former Contingency Plan expert Paul O'Brien recently acknowledged the impossibility of the situation when he stated, "[n]owhere in the world are enough resources in one place to deal with a spill of up to 200,000 barrels." Commander McCall has also concurred with this conclusion that a spill of this size could not be cleaned up solely by mechanical means. Similarly, the Exxon Valdez Oil Spill -- A Report to the President prepared by the U.S. EPA and U.S. DOT (May 1989) noted that "[t]he magnitude of the spill was beyond the physical capability of skimmers and booms currently being used in the United States."

By Friday night, Exxon began assuming its responsibility for various phases of the oil spill response, including lightering, dispersants and public information. Alyeska provided Exxon with logistical contacts, commitments, and the estimated time of arrival of equipment that had been requested by the Emergency Centers. Alyeska placed its resources and support network at Exxon's disposal and assumed a supporting role in all further activities regarding the spill. Alyeska officials continued to meet with Exxon personnel as they were brought up to speed on the cleanup. Exxon formally announced to the RRT that responsibility for the spill cleanup had shifted to Exxon at noon on Saturday.

The phased transition to Exxon was completed by late Sunday afternoon; but Alyeska continued to assist Exxon in a support role for an additional two to three weeks.

ADEC was well aware that Exxon would take over full responsibility for cleanup and containment of a large spill from an Exxon tanker. Larry Dietrick, Director of the Division of Environmental Quality of ADEC, testifying before the House Interior Subcommittee on Water, Power and Offshore Energy Resources in Valdez on May 7, 1989 stated that ADEC knew the contingency plans of the various shipping companies provided that they would take over a major spill response.

In fact, the issue of vessel owners' contingency plans was raised with ADEC in 1986 as a part of ADEC's plan approval process. In a July 16, 1986 letter to Paul O'Brien of ADEC, Alyeska noted that it "would request assistance from a specific individual owner company if the spill were of a magnitude that we felt additional response would be necessary. If an individual owner company preferred to assume responsibility for a spill after our initial response, Alyeska would continue to work with and coordinate the final cleanup of the spill." Moreover, ADEC and the Coast Guard participated in an oil spill drill in May 1988 in which Alyeska provided the initial response and the hypothetical spiller took over responsibility as it was able. The major purpose of that drill was to test procedures that were planned for use in a transition of response management and control from Alyeska to a spiller.

F. Summary

Alyeska was required by the State of Alaska to develop an oil spill contingency plan that includes the discussion of various oil spill scenarios in Prince William Sound. The resulting 1987 Contingency Plan constituted a set of guidelines to direct a full and effective cleanup of an oil spill "most likely to occur." With the assistance of expert consultants and the concurrence of relevant federal and state agencies, Alyeska determined the magnitude of that "most likely" oil spill to be between 1,000 and 2,000 barrels.

Prior to March 24, 1989, the only major marine oil spill in the twelve years of the Trans-Alaska Pipeline's operation fell precisely within that range: 1,700 barrels released by the Thompson Pass in January 1989. Alyeska recovered 95 percent of that spill, indicating its capability to perform as required by State regulation. When assessing Alyeska's response to the catastrophic Exxon Valdez oil spill -- a spill which each of the foregoing entities agreed was "highly unlikely" -- one must not forget that the equipment required by the Contingency Plan was intended to recover oil from a spill 175 times smaller than the Exxon Valdez oil spill, under ideal working conditions, and with extensive use of dispersants and in-situ burning. Even under the 4,000 barrel scenario which was 65 times smaller than the Exxon Valdez

spill, over 40 percent of the spilled oil was predicted to reach the shoreline.

The immense size of the Exxon Valdez spill, combined with the tremendous rate at which oil escaped from the vessel, created an extremely dangerous situation for Alyeska oil spill crews. The situation was exacerbated by the darkness, winter conditions, icebergs along the sea route, and Alyeska's inability to gain prompt approval for use of dispersants and in-situ burning. These conditions during the first 72 hours made it impossible to recover the oil prior to its contact with the shores of Prince William Sound.

The Contingency Plan was, unfortunately, quite accurate in that respect. Although questions of "what if . . . " are important in terms of prospective corrective measures, hindsight alone simply has no place in gauging the adequacy of Alyeska's response to the Exxon Valdez disaster. No one, not the Federal government, not the State of Alaska and not Alyeska, had stockpiled equipment and materials sufficient to respond to a catastrophic spill if the standard for an effective response is that there be no, or very limited, environmental damage.

The facts are that: (1) despite the hour, weather, and conditions, Alyeska was able to respond to this spill with more equipment and personnel than outlined in the plan approved by the State of Alaska and the federal government; (2) Alyeska's support of the successful lightering operation that required tankers to move into the dangerous Bligh Reef waters to off-load the million barrels of oil that remained on the Exxon Valdez after its grounding prevented 80 percent of the Exxon Valdez cargo (42 million gallons) from being discharged into Prince William Sound; (3) although several contingency plans existed in the State of Alaska for oil discharge, only Alyeska's Contingency Plan was current, fully approved, and improved over the years from experience; (4) the 4,000 barrel and 200,000 barrel scenarios of the Contingency Plan expressly stated that even with the prompt use of all available containment methods, including dispersants and burning, considerable environmental damage and oiled shorelines would occur; and (5) no response action, or failure of response action, by Alyeska during the first day of the spill would have significantly affected the course or environmental impact of the spill. The tremendous size of the Exxon Valdez spill, combined with the rapid rate at which oil escaped from the vessel, created a situation that was unmanageable.

Neither government nor Alyeska had expected or prepared for a response to a catastrophic spill that would

prevent oil from reaching the shoreline and that would eliminate environmental damage.

As stated, the "what if . . . " questions are important in terms of prospective measures. Alyeska has learned from this experience as have all parties involved in contingency planning.

IV. LESSONS LEARNED AND SUGGESTIONS FOR THE FUTURE

Given the scope of this catastrophe, Alyeska's response was the best available under the circumstances. We recognize this is little comfort to all of us who live in Alaska and treasure Prince William Sound.

Collectively, the State of Alaska, the federal government and industry had accepted the risk that if a catastrophic situation occurred, there would not be a means by which the oil could be kept off the shoreline. It was a risk that was accepted at least partly because all agreed the likelihood of such a huge spill was minimal and it was expected that the environmental impacts could be mitigated if all available means, including dispersants and in situ burning, were used. Having faced the reality of a highly improbable, but catastrophic spill, the need to increase prevention efforts to minimize the possibility of any such event occurring ever again are recognized by all.

No one disputes that the response actions did not result in the recovery of the entire spill. The Contingency Plan predicted that result for spills 65 times smaller. To the extent the response actions were unable to recover more oil and further minimize the spill's impact, we must look to joint government and industry decisions as to the size and scope of response capability to be maintained in Prince William Sound. Obviously the diffuse committee-based decision-making process used in the response to the spill is not ideally suited to crisis management.

The communication structure between the On-Scene Coordinator, Exxon, the Regional Response Team, and others did not flow in a manner consistent with the communication structure that was practiced and implemented during earlier drills and previous oil spills. The emphasis on certain roles and the strength of influence exercised by some interested parties within the Regional Response Team caused a variance between the structure that had been practiced and drilled and the structure that was actually utilized in responding to this crisis. This fact emphasized the unfortunate reality that the Coast Guard was the On-Scene Coordinator, not the On-Scene Commander.

Alyeska believes that its spill response was effectively organized to ensure timely actions. Alyeska's command structure, which went into effect at the outset of the cleanup effort, conformed with the hierarchical structure outlined in the Contingency Plan. The spill response effort was coordinated from two emergency centers, one in Anchorage and the other in Valdez. The Valdez Emergency Center went into full operation at 1:15 a.m. Friday morning and began implementing the response according to the approach outlined in the Contingency Plan. The Anchorage Emergency Center went into operation at about 1:30 a.m. Friday morning.

During the first several hours of the spill response, the Emergency Center in Anchorage contacted all necessary contractors and suppliers. Operations at the Valdez Emergency Center were structured much the same way as in Anchorage. The Terminal Superintendent oversaw operations, making sure that deployment of all equipment, materials and personnel proceeded smoothly and that appropriate government agencies were consulted.

The measures taken after the spill, as outlined most fully in the Tanker Spill Prevention And Response Plan submitted by Alyeska, will reduce the prospect of an accident of this type occurring again. Mr. Hermiller will describe that plan to you in Alyeska's presentation tomorrow. Moreover, Alyeska has dramatically increased its cleanup capabilities by stockpiling large amounts of dispersants and oil spill equipment to limit significantly any damage in the unlikely event that all preventive safeguards unexpectedly fail.

Prior to the spill, Alyeska, the State of Alaska and the Coast Guard all believed that the prevention programs in existence for Prince William Sound were comprehensive and sufficient to minimize any risk of an incident similar to the Exxon Valdez tragedy. Indeed, the biggest concern was that a vessel might lose power and drift into a rock before help could get there. That was one of the situations prevention efforts emphasized. No one believed that a ship could roam eight to nine miles off-course and ram a well-marked reef.

Although Alyeska cannot guarantee that its new program is foolproof, it has instituted a system that makes it less likely that a vessel will "derail." These safeguards should go a long way toward preventing accidents of the Exxon Valdez type, although they obviously cannot eliminate all risk.

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TWENTY-FOUR HOUR CHRONOLOGY

OF EVENTS FOLLOWING

THE GROUNDING OF THE EXXON VALDEZ

MARCH 24, 1989 THROUGH MARCH 26, 1989

PREPARED FOR THE

ALASKA OIL SPILL COMMISSION

GLOSSARY OF TERMS

TERMS:

ADEC	--	The Alaska Department of Environmental Conservation.
ADDSPAC	--	Aerial/Dispersant Delivery System Package.
AG	--	The Alaska State Attorney General.
Alaska Clean Seas	--	A cooperative group from Prudhoe Bay that assisted with equipment and personnel.
ALASCOM	--	Alaska Communications, Inc.
Alyeska	--	The Alyeska Pipeline Service Company that manages the Trans-Alaskan Pipeline and operates an ocean-going tanker terminal near the town of Valdez, Alaska.
BWT	--	Ballast water treatment.
CIRO	--	Cook Inlet Response Organization, a cooperative group that assisted with oil spill response equipment and personnel.
Clean Bay	--	A San Francisco oil spill cooperative group that provided oil spill response equipment.
Clean Sound	--	A Seattle-based oil spill cooperative group.
Crowley	--	Crowley Maritime Corporation, a company that furnishes tugboats and crews to the Alyeska Terminal for oil spill response and tanker escorts on a contract basis.
Crowley Dock	--	The tugboat dock at the Terminal.
ECA	--	The Alyeska Emergency Center in Anchorage.
ERB	--	The Emergency Response Building at the Valdez Terminal, where the Terminal stores much of its emergency response equipment.
Earthmovers	--	Earthmovers of Fairbanks, Inc., a company that furnishes heavy machinery operators to Alyeska on a contract basis.

Fender	--	A very large, inflatable, bumper hung over a ship's side to protect it during lightering.
Fluor Dock	--	A staging and loading dock at the Alyeska Terminal.
Lightering	--	The process of bringing two ships or barges alongside each other so that oil may be pumped from one vessel into another through lightering hoses.
NTSB	--	The National Transportation Safety Board.
OCC	--	The Operations Control Center at the Terminal is the center for monitoring and controlling the flow of oil through the pipeline. The OCC is manned twenty-four hours a day.
OSCP	--	The Alyeska Oil Spill Contingency Plan.
PCM	--	A Portable Communications System, a small trailer-like building containing communications equipment, that was airlifted to Reef Island.
Price	--	Price Construction Company, a company that supplies contract laborers for Alyeska.
PWS	--	Prince William Sound.
RRT	--	The Regional Response Team operates under the direction of the On-Scene Coordinator, a designated government official, and is composed of representatives from the United States Coast Guard, the Alaska Operations Office, the Environmental Protection Agency, the Alaska Department of Environmental Conservation and other state and federal agencies.
SCADA	--	Supervisory Control and Data Acquisitions, Alyeska.
Strike Force	--	The Pacific Strike Force, the United States Coast Guard's oil spill response group.
Terminal	--	The Alyeska Pipeline Service Company terminal facilities in Valdez.

USCG	--	The United States Coast Guard.
VEC	--	The Valdez Emergency Center.
VECO	--	A company that provides contract labor to Exxon.
Westmark	--	Hotel used by Exxon in Valdez, Alaska for its command center.

PEOPLE:

Allen, Al	Spiltec, outside consultant to Alyeska on dispersants and burning.
Baldridge, John	Alyeska, "B" Shift Supervisor, Valdez.
Barnum, David	Alyeska, "A" Shift Lead Technician, Valdez.
Birkner, Alice	Director, International Bird Rescue Center.
Bogart, James	Alyeska, OCC, Valdez.
Bohlmann, Kevin	Alyeska, "A" Shift Marine Technician, Valdez.
Borgen, Harvey	Exxon Shipping Co., West Coast Fleet Manager.
Brennan, Thomas	Alyeska, Associate Manager Public Relations, Anchorage.
Brouhard, Harold	Alyeska, Marine Technician, Valdez.
Brown, Rex	Alyeska, Ballast Water and Treatment Supervisor, Valdez.
Buhite, Tom	Alyeska, Field Environmental Specialist, Anchorage.
Burke, Keith	Alyeska, Manager of Operations, Planning and Logistics Support, Anchorage.
Cirigliano, Tom	Exxon, Public Relations.
Cornett, Don	Exxon, Public Relations.
Cox, Don	Exxon Pipeline.
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Delozier, Mark	United States Coast Guard.
Derifield, Michael	Alyeska, Pipeline/Terminal Controller, Valdez.
Dietrich, Steven	Alyeska, Vice President of Administration, Anchorage.
Dragnich, Don	Exxon.
Dupree, Barbara	Alyeska, Secretary to Valdez Terminal Superintendent, Valdez.
Dupree, George	Alyeska, Manager of Supervisory Control and Data Acquisitions, Valdez.
Durly, Kenneth	Alyeska, Field Environmental Specialist, Anchorage.
Eldridge, Barry	Cook Inlet Response Organization.
Falkenstein, Thomas	United States Coast Guard.
Fletcher, David	Alyeska, OCC, Valdez.
Gallaher, Kathy	Alyeska, Senior Materials Coordinator for Operations, Planning, Logistics and Support, Anchorage.
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Greenlee, David	Alyeska Equipment Manager, Valdez.
Groundwater, Lance	Alyeska, "A" Shift Marine Maintenance Technician, Valdez.
Hazelwood, Joseph	Exxon, Captain of the EXXON VALDEZ.
Heffernan, Frank	Alyeska, Oil Movements, Anchorage.
Henman, Ivan	Alyeska, Vice President of Environment & Engineering, Anchorage.
Heinze, Harold	Atlantic Richfield Company.
Hilliker, Ben	Alyeska, Manager of Environmental Impact, Anchorage.

Holmes, R. D.	Alyeska, "C" Shift Marine Technician, Valdez.
Howitt, William	Alyeska, Manager of Engineering, Anchorage.
Hutton, David	Crowley Tug Operations Manager.
Iarossi, Frank	Exxon Shipping Company, President.
Jenne, Theron	Alyeska, Manager of Supervisory Control and Data Acquisitions, Anchorage.
Jernigan, Jerry	Alyeska, Purchasing Supervisor, Anchorage.
Jones, Gail	Alyeska, Insurance and Claims, Anchorage.
Johnson, Mark	Alaska Clean Seas.
Johnson, Brian	Alyeska, OCC Controller, Valdez.
Jordan, Neal	Alyeska, Supervisory Control and Data Acquisitions Technician, Valdez.
Kent, Richard	Alyeska, "A" Shift Lead Maintenance Technician, Valdez.
Kiml, Edward	Alyeska, Security Supervisor for Southern District, Valdez.
Kiml, Patricia	Alyeska, Secretary of the Marine Operations Department, Valdez.
Koszarek, Phillip	Alyeska, "B" Shift Marine Technician, Valdez.
Lawn, Dan	Alaska Department of Environmental Conservation.
Lawrence, David	Alyeska, Lead Marine Technician, Valdez.
Lieto, Joseph	Alyeska, Operations, Planning and Logistical Support, Anchorage.
Lindblom, Gordon	Dispersant consultant for Exxon Shipping Company.
Ludlow, Les	Arco Pipeline Company.
Macy, Charles	Alyeska, "D" Shift Technician, Valdez.
McCall, Steve	Commander and On-Scene Coordinator, United States Coast Guard.

McElrath, Howard	Alyeska, Warehouse Supervisor, Valdez.
McKay, Mac	Alyeska, "A" Shift Marine Maintenance Supervisor, Valdez.
Meidinger, Glenn	Alyeska, "A" Shift Maintenance Technician, Valdez.
Mercer, Ellis	Alyeska, Manager of Contracts & Materials, Anchorage.
Mikkelsen, Richard	Alyeska, Environmental Advisor, Anchorage.
Nelson, Edward	Admiral United States Coast Guard.
Nelson, George M.	Alyeska, President, Anchorage.
Nelson, George N.	British Petroleum.
O'Donnell, Charles	Alyeska, Terminal Superintendent, Valdez.
Oftedal, Willard	Alyeska, Power Vapor/Oil Movement & Storage Maintenance Supervisor, Valdez.
Parker, Bruce	Biegert Aviation.
Polasek, Theo	Alyeska, Vice President of Operations, Anchorage.
Prevost, Mike	Alyeska, "A" Shift, Marine Maintenance Technician, Valdez.
Pugh, Roderick	Alyeska, Manager of Power Vapor/Oil Measurement & Storage, Valdez.
Pyburn, Brent	OSR, Ltd. (England) Service Centre Manager.
Rassinier, Craig	Exxon Shipping Company, Environmental Conservation Coordinator.
Robinson, Claude	Alyeska, Engineering Project Manager, Valdez.
Rogers, Ed	MarkAir.
Runnels, John	Alyeska, "D" Shift Supervisor, Marine Operations, Valdez.
Ruskauff, Donald	Alyeska, Anchorage.

Sarich, John	Alyeska, Supervisory Control and Data Acquisition, Terminal Maintenance Supervisor, Valdez.
Sarnacki, Walter	Alyeska, "C" Shift Marine Operations Supervisor, Valdez.
Shier, Lawrence	Alyeska, Manager of Marine Operations, Valdez.
Smith, William	Alyeska, "C" Shift Marine Technician, Valdez.
Smith, Perry	Exxon, Houston.
Smith, Richard	Exxon Shipping Company, Staff Engineer.
Smith, Susan	Alyeska, Warehouse Materials Handler, Valdez.
Staker, Lamont	Alyeska, Valdez, "B" Shift Supervisor, Marine Maintenance, Valdez.
Strub, Charles	Alyeska, Manager of Pipeline & Terminal Equipment Support, Anchorage.
Taylor, Duane	Alyeska, Manager of Safety, Valdez.
Van Hout, Martin	Alyeska, "B" Shift Technician, Marine Maintenance, Valdez.
Von Bargen, Lyle	Alyeska, Public Relations, Valdez.
Warner, Darrell	Exxon, Pipeline Company, President.
Whitcom, Frank	ALASCOM.
Wilkinson, Ronald	Alyeska, Manager of Oil Movement, Anchorage.
Williams, Joel	Alyeska, Power/Vapor - Oil, Measurements and Safety, Terminal, Valdez.
Wilson, James	Alyeska, Marine Specialist, Valdez.
Wolk, Ronald	Alyeska, Manager of Environment Department, Anchorage.

MARINE VESSELS AND EQUIPMENT:

Alyeska's marine spill response equipment includes the following equipment:

Marco Class V skimmer
Marco Class VII skimmer
Yellow Grayling workboat
Black Grayling workboat
Black Monark workboat
Yellow Monark workboat
Contingency Barge, a floating work station

During the response, the following tugboats were on lease to Alyeska by Crowley Maritime Corporation:

THE PATHFINDER
THE STALWART
THE SEA FLYER
THE KAVIK
THE CHAMPION
THE SAN FRANCISCO

In order to assist in the response, the following vessels of opportunity were placed under contract during the response by either Alyeska or Exxon:

ALBA II
ALLEN V
BATTLE BORN
BLUE FOX
BORODKIN
BOSTON WHALER
BULLDOZER 2
CATALINA
COHO II
CORY ANNA
DANIEL FOSS
DETTINGER
DORENE
EARLY TIME
FOSS Barge
GLACIER ISLAND
GREGORIEF
HELINKA "B"
HELVEKA
ITSMCOP
JEFFERY FOSS
MISS KITTY
M/V CONSTRUCTOR
ORCAS
NORTHERN GIRL
OUTRAGE
PAPA MAX
PATTY ANNE
PERRY
RICKY
RUBY III
RUSH
S. EDGE
SEA HAWK
SEA RUBY
SEA VIEW
SEAVIES
SEDGE
SMITTY - KAY
SNOPPY 3
STEVEN DANIEL
THE 21

KOMPKOFF
LITTLE SHELLY
LPH Trig
LCM SEA HAWK
LUCKY DOVE
MIDNIGHT SUN
MILLIE V
TITAN
TODEMOFF
TOTEMOFF
TRES SUARTES
VICTORY MAID
VINCE PEEDE
VLASKOFF

Immediately prior to the spill or shortly thereafter, the following oil tankers were in or around Prince William Sound:

ARCO INDEPENDENCE
ASPEN
CHEVRON CALIFORNIA
EXXON BATON ROUGE
EXXON VALDEZ

When notified of the spill, the USCG dispatched the pilot boat CHIRIKOF to the scene.

0470A

FRIDAY MARCH 24, 1989

Approximate Time

0001 Valdez Terminal reports weather conditions at the Terminal: Calm wind, cloudy, the temperature is 33 degrees.

0004 The EXXON VALDEZ is hard aground on Bligh Reef.

0027 Captain Hazelwood (Exxon) reports to the USCG in Valdez that the tanker is aground and is leaking oil.

0030 The USCG notifies Barnum, Alyeska's acting Supervisor of the Marine Department's "A" Shift at the Terminal, of the grounding.

0030 Pursuant to USCG order, the tug STALWART is dispatched from Alyeska's Marine Terminal to assist and stabilize the EXXON VALDEZ.

0030 The tug SEA FLYER is ordered to stand by at Crowley Dock.

0030 Alyeska Operations Control Center ("OCC") night personnel commence notification procedures and mobilization of Alyeska personnel and equipment. The on-duty Marine Operations crew totals 11 persons of which 9 are immediately available for response.

0032 The OCC notifies Shier, the Terminal's Manager of Marine Operations, of the grounding.

0034 The OCC notifies Robinson, the Terminal's Engineering Project Manager, of the grounding.

0035 Shier notifies Hutton, Crowley Operations Manager, of the grounding to ensure that a rescue tug has been dispatched to the grounding site.

0038 The EXXON VALDEZ reports weather conditions at Bligh Reef: Drizzle, wind at 10 knots, slight seas, visibility 10 miles.

0040 The USCG orders the CHIRIKOF to Bligh Reef for reconnaissance.

0042 The USCG orders Port Valdez closed to tanker traffic.

FRIDAY MARCH 24, 1989

Approximate Time

0045 Before going to the VEC, Shier stops at the USCG Center in Valdez to gather the most current information from Commander McCall (USCG). McCall says there is oil in the water, but there is no indication as to the amount. Falkenstein (USCG), Delozier (USCG), and Lawn (ADEC) will be sent to assess the damage.

0045 Barnum meets with Alyeska's "A" shift and orders them to (1) check and ready all boats in the Terminal small boat harbor; (2) take all available boom to Fluor Dock for loading; (3) put the Sea Packs in the water for towing to site; and (4) generally gather all necessary supplies and equipment. Barnum contacts Crowley and arranges for them to move the contingency barge to Fluor Dock.

0045 The OCC notifies Mikkelsen, the on-call Duty Officer for Alyeska's Anchorage operations, that the EXXON VALDEZ is aground on Bligh Reef, loaded with 1.3 million barrels of oil.

0050 Mikkelsen contacts Henman, the Vice President of Alyeska's Environment and Engineering Department, who in turn notifies Alyeska's President, Nelson.

0050 The OCC notifies Lawn (ADEC) of the spill.

0052 The OCC notifies Hunt (BLM) of the spill.

0100 The tug PATHFINDER is ordered to standby.

0100 Barnum assigns Frank, the acting Lead Technician of the "A" Shift, to oversee loading of the contingency barge at the Fluor Dock, where an effort is made to load as much equipment as possible due to the distance of the spill site from the Terminal.

0100 Bohlmann, "A" Shift Marine Technician, moves connexes by forklift from the east end of the Marine Operations parking lot to Fluor Dock.

FRIDAY MARCH 24, 1989

Approximate Time

0100 A pilot boat will transport Coast Guard and ADEC pollution personnel to the EXXON VALDEZ to evaluate the situation.

0105 Commander McCall (USCG) calls Barnum and inquires about how much dispersant Alyeska has on hand. Barnum informs McCall that Alyeska has fifty drums, and McCall responds that Alyeska should secure as much dispersant as possible. Barnum asks if McCall is now authorizing dispersant use, but McCall replies no.

0115 Wilson (Alyeska) and Hutton (Crowley) open the Valdez Emergency Center ("VEC").

0123 Nelson notifies Warner (Exxon) that the EXXON VALDEZ has run aground in Prince William Sound.

0130 Henman opens the Emergency Center in Anchorage ("ECA").

0130 The SEA FLYER's mate and deckhand depart on line boats to move the contingency barge from the Terminal's small boat harbor to Fluor Dock where equipment is being staged.

0135 Mikkelsen arrives at the ECA.

0136 Nelson calls the VEC for an update and orders that all media inquiries be referred to the ECA.

0138 Following the USCG briefing, Shier arrives at the Terminal. Checking in at the Terminal gate, Shier meets Meidinger and gives him a ride into the Terminal.

0148 McKay arrives at the Terminal and reports to Shier. He spends approximately one-half hour discussing the situation with Barnum and Shier.

0148 Coast Guard representatives in Valdez contact the Coast Guard Air Station at Kodiak to request a helicopter overflight at first light.

0200 Day, "B" Shift Maintenance Technician, arrives at the Terminal and is instructed to go to the Emergency Response Building ("ERB") to ready equipment. One priority is staging the Yokohama fenders.

FRIDAY MARCH 24, 1989

Approximate Time

0200 The contingency barge arrives and is tied to Fluor Dock for loading.

0202 The VEC receives a status report from Crowley concerning additional Crowley vessels and barges located in Alaska.

0206 High tide fails to refloat the EXXON VALDEZ.

0209 Shier directs the ECA to contact Biegert Aviation to obtain additional dispersant and application systems.

0210 Lieto, a member of Alyeska's Logistical Support Group, contacts Security Aviation and ERA Aviation to locate all available aircraft and crews to place under contract to Alyeska.

0215 Hilliker, Alyeska's Manager of Environmental Impact, reports to the ECA and is informed that the extent of damage to the tanker is still unknown.

0225 Jernigan, Alyeska's Purchasing Supervisor, is ordered to report to Alyeska's Anchorage offices to begin contract efforts.

0227 The CHIRIKOF crew reports that the oil slick has extended a half mile south of the ship.

0230 Bohlmann finishes moving four connexes from the ERB to Fluor Dock with a forklift. He continues moving supplies to the barge and assists in removal of snow from the barge until his shift ends.

0230 The VEC receives an updated report that the EXXON VALDEZ is aground in six fathoms of water.

0230 The first Sea Pack from the BWT building is placed in the water and moored at the Small Boat Harbor.

0230 Within the hour, Robinson (VEC) runs oil spill computer models which indicate that the oil is headed away from land and should not impact the shoreline for several days.

0230 Frank and Holmes are on the barge clearing one to two inches of snow and slush away from the mounting rings which are to be used for lashing the Vikoma Seaskimmer and HIAB, which the Earthmovers personnel are moving from the temporary shop building to Fluor Dock.

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Approximate Time

0236 Robinson orders that Allen (Spiltec), Alyeska's oil spill consultant, be notified and be brought in for consultation purposes.

0238 Shier orally requests permission to use dispersants from McCall (USCG).

0238 McCall (USCG) informs the VEC that the EXXON VALDEZ is still aground, that there is an oil sheen on the water and more oil is leaking.

0245 The STALWART arrives at the EXXON VALDEZ on Bligh Reef to stabilize the ship and rescue the crew if necessary.

0249 USCG Strike Team assistance is requested. Four Strike Team members are scheduled to arrive at Cordova airport at 1530.

0254 Polasek, Alyeska's Vice President of Operations, reports to the ECA.

0256 Shier and Nelson discuss use of equipment and people. They decide to call out 11 additional Alyeska personnel and 15 contractors.

0256 The VEC receives a weather update: Winds north at 10 knots, visibility 10 miles, lots of ice.

0300 An inventory is conducted of all radios, battery chargers and other necessary equipment needed for communications.

0300 The VEC contacts Runnels, "D" Shift Supervisor, and orders him to mobilize his off-shift crew.

0300 An additional tug, the KAVIK, is leased from Crowley.

0300 The VEC contacts Price AHTNA Construction Company and requests 15 additional people.

0300 Alyeska begins contracting with private vessels to supplement the response to the spill.

0305 Iarossi (Exxon) contacts the ECA.

0310 Lieto obtains a list of all available aircraft from ERA Aviation and informs ERA that Alyeska would place all available aircraft under charter.

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Approximate Time

0315 Staker, the Supervisor of the off-duty Marine Maintenance crew, is instructed to call in the "B" Marine Maintenance Shift.

0315 McKay calls two of his technicians, Kent and Groundwater, and directs them to report to the Terminal to assist in rigging equipment for loading onto the barge.

0320 Falkenstein, Delozier and Lawn board the EXXON VALDEZ and are escorted to the bridge by an unidentified crew member. Falkenstein and/or Delozier gauge the vessel's tanks and report that approximately 138,000 barrels of crude have spilled. Falkenstein and/or Delozier inform Alyeska that although the tanker is stabilized, the starboard slop tank, the wing tank, and 5 center tanks are damaged.

0324 Shier reports to Nelson and Henman that the USCG reports 138,000 barrels have already spilled, and that the tanker should lose more oil.

0325 The VEC receives a weather update: Wind east at 15 knots, 3 foot seas over the next 48 hours, winds may shift from northeast to southeast.

0327 Shier informs the ECA that the USCG and ADEC are at the spill site, that he has directed Alyeska personnel to begin locating additional skimming equipment, self-propelled and other, from cooperatives, CIRO and Alaska Clean Seas, and that Alyeska has called in sufficient personnel to mobilize all available equipment at first light. Twenty to twenty-five people have been called to report in at 0500, and there are off duty personnel as well. Polasek advises Shier to protect the shoreline and recover as much oil as possible, and informs him that Exxon is preparing a team to be dispatched to the tanker. Harvey Borgen will be in charge of that team.

0330 Runnels has contacted seven of the eleven people on his shift and ordered them to report to the Terminal.

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Approximate Time

0345 Allen (Spiltec) is contacted and told to prepare to fly to Valdez.

0350 O'Donnell and Runnels report to the VEC.

0400 Falkenstein (USCG) and Delozier (USCG) contact McCall and request a medical technician be dispatched to the vessel to take blood and urine samples.

0400 Between 0400 and 0600, Henman directs Hilliker to contact Biegert Aviation to arrange for aircraft for dispersants, and members of the Logistics Support Group arrange to stage all available dispersants in Alaska in Anchorage.

0400 Borgen (Exxon) reports to the ECA that Exxon has mobilized a response team, that Biegert Aviation has been contacted for dispersants and that Cornett (Exxon) is en route to Valdez.

0400 O'Donnell authorizes Smith, Material Handler in the Valdez Warehouse, to issue any items needed.

0400 Kiml, Security Supervisor at the Terminal, calls Stevens to lease the VINCE PREDE to transport personnel to the spill site. Kiml gets no answer, calls the police to go to Stevens' house and wake Stevens up. Stevens calls Kiml five to ten minutes later, and Alyeska arranges lease.

0401 Polasek informs Borgen that McCall (USCG) will make the decision to use dispersants and offers Alyeska's assistance in making arrangements for skimmers and sorbents.

0410 Henman informs Heinze (Arco) that equipment is going out and that Alyeska has spoken to Exxon and suggested that Exxon arrange for dispersants from Arizona.

0410 Alyeska arranges to send a plane from Anchorage at 0630 to conduct a visual assessment of the spill.

0414 The USCG contacts the EXXON BATON ROUGE and instructs it to proceed to the grounding site to prepare for lightering of the EXXON VALDEZ. Estimated time of arrival is 1100.

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Approximate Time

0415 The USCG directs Alyeska to treat lightering as the number one priority and to transport lightering equipment to the spill site. The USCG, however, is unable to advise the VEC how close the EXXON BATON ROUGE will be able to maneuver to the EXXON VALDEZ, creating uncertainty as to how much lightering hose is needed.

0415 Runnels, Alyeska's "D" shift supervisor, arrives at the Marine Terminal.

0416 McKay is notified by Barnum that he is to supervise the loading of lightering equipment on the SEA FLYER and that this should take priority over barge loading.

0420 Smith (Exxon) contacts Henman at the ECA.

0420 Alyeska notifies the National Response Center of the spill.

0425 The VEC is informed that the USCG is concerned about the stability of the EXXON VALDEZ.

0426 Iarossi (Exxon) contacts Nelson.

0427 Henman informs Shier that Exxon will be arranging for equipment and that Alyeska will assemble a list of contacts for Exxon.

0430 Shier requests helicopter spray rig from CIRO.

0430 Upon learning that the USCG does not have an adequate communications system, Alyeska's Manager of Supervisory Control and Data Acquisition ("SCADA"), Jenne, calls Whitcom at ALASCOM to determine if a mobile satellite station would be available. Whitcom says he will check. Jenne tells him that Alyeska wants it, and cost is not a consideration.

0436 Shier directs that an Alyeska representative be sent to interface with the USCG and ADEC.

0445 McCall (USCG) calls the VEC with an update: Lightering is the priority; 400,000 barrels are to be pumped off within thirty-six hours using two 6-inch hoses.

0450 The Bird Rescue Research Center in California is called and told to assemble the bird cleaning crew.

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Approximate Time

0457 The VEC requests that the pipeline be slowed down.

0458 The VEC issues orders to expedite all lightering gear and strip any available lightering hose from the other ships at the Terminal berths. O'Donnell, Shier and Runnels decide that the contingency barge should be loaded with containment equipment and that lightering equipment should be moved separately to the spill site in a tug. Shier places Marine Technician Koszarek in charge of collecting and loading lightering equipment on the tug.

0458 Shier updates O'Donnell at the VEC: The EXXON BATON ROUGE is due on the scene at 1000. The USCG remains concerned about the stability of the EXXON VALDEZ, that it will shift on the rocks and suffer further damage. The Strike Force is now activated.

0500 Lightering fenders are being prepared for transport from the Terminal with additional 6-inch cargo transfer hoses.

0500 Jernigan (ECA) alerts Eldridge (CIRO) and Johnson (Alaska Clean Seas) of the spill and asks that they report inventory and stand by their offices at 7:00 a.m.

0506 Shier calls Nelson to relay McCall's (USCG) order that lightering and stabilizing the EXXON VALDEZ are to have first priority. Cleanup and boom equipment will be sent later. The tug will not go to the spill site until all available hose has been located and loaded on board. Shier informs the ECA that Alyeska personnel are collecting all available lightering hoses from tankers at the Terminal.

0507 The VEC orders McElrath, Valdez Warehouse, to order two additional trucks of sorbent.

0511 The VEC orders Alyeska personnel to check with all tankers at berth for any available 6-inch lightering hose.

0511 Shier informs the ECA that the EXXON VALDEZ can be refloated once 400,000 barrels of oil are lightered from it.

0515 Robinson reports that a helicopter will arrive at first light, with backup to be arranged if needed.

FRIDAY MARCH 24, 1989

Approximate Time

0515 The VEC begins to lease smaller boats for assistance with response. McCall (USCG) approves sending Bogart to USCG headquarters to act as liaison.

0522 Shier advises Hutton of lightering priority. The SEA FLYER will take lightering equipment to the spill site.

0523 VEC sends Bogart to the USCG headquarters to act as a liaison.

0526 In response to the VEC's earlier inquiry, Alyeska personnel report that they have located two 50' x 8" hoses aboard the tanker ASPEN and one 3'3" x 8" hose aboard the tanker ARCO INDEPENDENCE, but have not located any 6" hose.

0528 Shier provides Lawn (ADEC) with an update.

0529 Following its normal routine, members of the Marine Operations Department "B" shift arrive. All members of supervisor Baldridge's crew report, except Day, who had reported at 0200, and Baldridge, who had reported at 0415.

0530 At about this time, Ed Kiml starts fielding calls from local boat owners offering boats for hire. He continues to field these calls and prepares a list, which is passed on to others in the VEC.

0539 O'Donnell arranges with the ERA to obtain 6 passenger helicopters.

0540 To expedite deployment of lightering gear, the VEC directs that fenders be partially inflated en route and then inflated completely on site.

0540 The VEC is informed that the USCG estimates the spill to be 210,000 barrels.

0545 Iarossi (Exxon) informs the ECA that Exxon is mobilizing a spill team to depart from Houston at 1400.

0545 Polasek informs Iarossi (Exxon) that Alyeska has contacted Alaska Clean Seas, CIRO, state and federal agencies, and the bird rescue experts.

FRIDAY MARCH 24, 1989

Approximate Time

0600 Along with the regular Alyeska work shifts, 20 additional Alyeska personnel have responded to the initial call-out and have arrived at the Terminal, and a total of 120 Alyeska personnel are already working on various aspects of the spill response in Valdez and Anchorage.

0600 Jernigan advises local sorbent companies, United and Crowley, to be available.

0600 Parker (Biegert Air) returns an earlier ECA telephone call regarding ADDSPAC availability, and the ECA directs him to Exxon personnel.

0600 In response to his earlier call, Jenne is informed that an ALASCOM satellite station is available, and he directs ALASCOM to move it to Valdez. Jenne is still not sure it will be needed, but wants to be prepared if it is.

0606 The VEC informs the ECA that Alyeska is establishing a remote control center for Exxon at the Westmark Hotel in Valdez.

0606 Shier recommends that the ECA acquire all available containment boom, skimming devices, and suckers from Alaska Clean Seas and CIRO.

0615 Alyeska personnel are loading hoses, Yokohama fenders, and a compressor aboard the SEA FLYER.

0621 Nelson reports that McCall (USCG) has indicated that dispersants can be used. Nelson expresses his hope that the USCG will stand by this decision.

0621 Nelson indicates to George N. Nelson (BP) that oil is starting to flow to the southwest, will flow across shipping lanes, and will probably hit the shore on Naked Island. It should not impact Cordova.

0623 Exxon issues a press release: "Exxon Shipping Company officials are en route to the scene. Immediate response to the spill is being handled by crews from the pipeline terminal, with management of the operation being transferred to Exxon officials as they arrive. Alyeska crews will support Exxon personnel."

0630 McCall (USCG) orders Alyeska to fax him a formal request for dispersant use.

FRIDAY MARCH 24, 1989

Approximate Time

0645 Cornett (Exxon) is in the ECA and learns that the center tanks 1-5 and the starboard tanks 1, 3 and 5 on the EXXON VALDEZ were punctured.

0645 Alyeska arranges for delivery of the following equipment: 7500-8500 feet of boom from Prudhoe Bay, 7300 feet of boom from CIRO, 8000 gals. dispersant from Anchorage, and additional dispersant from Kenai.

0651 Wilkinson (OCC) directs a reduction in the rates of oil flow through the pipeline.

0657 Shier reports to Polasek that the USCG concurs that no exclusion booming is to be done. Instead, boom should be used to divert the oil to open water, where skimmers will operate at the leading edge of the slick.

0657 Shier informs the ECA that McCall (USCG) has asked Alyeska to start the application process for dispersants. The EXXON VALDEZ is in Zone 2, and McCall has talked with Cordova fishery biologists. Shier also states that Lawn (ADEC) reports that the EXXON VALDEZ has lost oil from tanks 1, 2, 3, 4 and 5 center, 1, 3, and 5 starboard, and starboard slop tank. Slick is now 1,000 feet wide and 1.5 miles long.

0700 Meidinger moves the 45-ton crane to the ERB to load the Yokohama fenders onto flatbed trucks to transport them to Crowley Dock.

0700 Stevens advises the VEC that the contract boat VINCE PEEDE has been loaded with food and other supplies and is ready to depart.

0700 Alyeska contacts CIRO and orders additional dispersants.

0706 Toll (USCG) arrives at the Terminal.

0716 Polasek informs Pyburn (Service Centre Manager at OSCR, Ltd., England) that Alyeska is trying to get as much skimming equipment as possible. Pyburn indicates that equipment from England will arrive the next day.

FRIDAY MARCH 24, 1989

Approximate Time

0720 Lieto coordinates the procurement of an additional skimmer from Esso.

0724 Nelson informs Webster that the USCG has approved dispersant use at least around the tanker and "supposedly" in PWS itself.

0730 Crews begin loading lightering gear at Crowley Dock. The fenders are loaded first, followed by air hose, a compressor, large lightering hose, and miscellaneous small gear (e.g., flanges, gaskets, reducers, stud bolts.)

0800 Thus far, 25 private contractors have been called out.

0800 Delozier (USCG) and Lawn (ADEC), on-board the EXXON VALDEZ, advise Alyeska not to boom the ship until receiving authorization.

0800 Early this morning, Jenne consults with Dupree (SCADA) regarding the best place to locate the Portable Communications Module ("PCM"), and they decide to place it on Reef Island.

0805 Lieto contacts Ed Rogers (MarkAir) and is told that a DC-8, loaded with dispersants, is en route and a C-130 is en route to Phoenix to pick up an ADDSPAC.

0805 Nelson and Polasek depart the ECA for a helicopter overflight of the grounding site.

0810 Pugh, the PV/OM&S Manager, arrives at the Terminal and assists the VEC by arranging for helicopters. Throughout the remainder of the day, he also arranges to bring in equipment (i.e., hoses, bladders, pumps) from Alyeska pump stations and to have Alyeska personnel and contract labor called in.

0811 Mercer, Manager of Contracts and Materials, directs Jernigan to find and secure any available flat deck barges, supply boats and tank barges in Kenai, Homer, or any other local area. Mercer also directs Jernigan to arrange transfer to Valdez of boom, bladders, and tanks supplied by Alaska Clean Seas.

0842 A FAX is sent to the USCG requesting the use of dispersants.

FRIDAY MARCH 24, 1989

Approximate Time

0859 O'Donnell discusses the spill situation with McCall (USCG) and updates Baldridge, the "B" Shift Supervisor who will direct Alyeska's on-site response, on the size and location of the spill.

0900 Allen and several Alyeska personnel from Anchorage arrive at the Terminal on the first flight from Anchorage. En route they circle the EXXON VALDEZ for 15-20 minutes while Allen takes photos. They observe the STALWART and a USCG launch present at the grounding site.

0910 Alyeska gives its helicopter to the USCG so that they may proceed to the EXXON VALDEZ in order to conduct blood and urinalysis tests on Capt. Hazelwood.

0912 The VEC is informed that Terminal personnel need to load the last Yokohama fender and pick up lightering hose from the ARCO INDEPENDENCE. The estimated departure time of the lightering equipment is 0945.

0930 Film taken at 0930 shows the spill to be 2 miles wide and 3 miles long, extending in a south to southwest direction from the reef.

0942 Dupree (SCADA) updates O'Donnell on the VEC and Exxon/Westmark communications systems coordination.

0952 The VEC determines personnel requirements for the night crew call-out and arranges for fifteen people from Price Construction Company (an independent contractor), all of "C" Shift, three mechanics, and one crane operator to assist in cleanup operations. The VEC contacts Sarnacki, "C" Shift Supervisor, with orders to mobilize his off-duty crew for emergency call-out.

0954 The VEC is informed that the Valdez animal shelter has been set up for bird cleanup.

0959 Arrangements are being made by Ken Durley, Alyeska Field Environmentalist Specialist, with CIRO to air transport two helicopters, an ADDSPAC, two technicians, fire boom, a helitorch, and dispersant.

1000 Robinson receives notification from the USCG that their FAX machine in Valdez is malfunctioning. The USCG requests that Alyeska FAX its dispersant request directly to three other members of the RRT.

FRIDAY MARCH 24, 1989

Approximate Time

1010 Loaded with lightering equipment, the SEA FLYER pulls away from Crowley Dock at 0950, after the USCG gives the Master a waiver of the cold-water survival suit requirement. On its way out, the tug stops at the ARCO INDEPENDENCE's berth to load additional hoses. Nine Alyeska people are on board.

1012 The VEC arranges for Martech to send an 85 foot boat from Seldovia.

1012 The VEC is informed that four 6,000 gallon DRA tanks and six 4,000 gallon bladders are en route to Valdez. In addition, by about this time, approximately 13,000 feet of sea boom is on its way to the Terminal from various locations around the state.

1035 The pilot boat CHIRIKOF surveys and approaches the EXXON VALDEZ for lightering.

1050 The barge is pulled away from Fluor Dock by the two Garylings and headed to the PATHFINDER.

1127 Nelson and Polasek arrive at the VEC.

1128 Alyeska is informed that dispersant and burn equipment is to be shipped by CIRO on Northern Air Cargo, leaving at 1400.

1130 A computer analysis of the ship's stability indicates that if the ship comes off the reef, it might roll over within 30 to 90 seconds.

1137 The tug PATHFINDER, with the contingency barge and Class V and VII skimmers in tow, departs the Terminal en route to the spill site under Baldridge's command. Two 26-foot Graylings and two 26-foot Monark workboats also depart the Terminal under their own power. Equipment with the barge includes three Vikoma Sea Packs (4,800 feet of sea boom), approximately 3,000 feet of sorbent boom, 7,000 feet of sea curtain containment boom, two 1,000 gallon bladders, a light plant, air compressor, life raft and at least 20 bales of sorbent pads. In addition to the bladders, the tug has a 2,500 gallon slop tank, and the Class V and VII have a combined capacity of 120 barrels.

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Approximate Time

1200	Alyeska hires 32 contract laborers employed for the day shift and 20 employed for the night shift on behalf of Exxon.
1200-1300	The EXXON BATON ROUGE is on site to offload the EXXON VALDEZ (USCG quote "3-4 hours before offloading is possible"); broken ice may inhibit skimmer operations and oil recovery.
1205	The SEA FLYER arrives alongside the EXXON BATON ROUGE with lightering equipment, starts offloading hoses and fills Yokohamas with air.
1209	Throughout the morning, Alyeska had been contacting potential sources in the state for supporting oil barges. Dietrich decides to lease two 30,000 barrel barges, one from Seward and one from Homer, and directs both to begin moving toward Valdez immediately.
1214	The VEC dispatches a message to all pipeline pump stations directing that any available bladders, pumps and hoses be shipped to the Terminal immediately.
1230	At about this time, McKay lands on the deck of the EXXON VALDEZ in a helicopter. McKay observes that the SEA FLYER is next to the EXXON BATON ROUGE, pressuring up the fenders it had brought out.
1244	Howitt, Manager of Engineering in Anchorage, and Shier discuss mobilizing additional personnel. VECO should have 30 to 40 people available at a moment's notice and another 100 people at longer call. The decision is made to provide for at least a 40-50 person camp in Valdez.
1245	Henman informs George N. Nelson (BP) that dispersants are on the way and it seems that the USCG is favorable regarding their use, but he has not heard the final word.
1306	Foss Maritime Company confirms that the FOSS Barge 255 with the 3,000 hp. tug JEFFREY FOSS in Cordova, and the FOSS Barge 248-P1 and tug STACEY FOSS in Homer are immediately available.
1313	The ECA is informed by Gillette (Exxon) that 100 drums of dispersant will leave Houston at 0800 on 3/25 and fly directly to Valdez.

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1322 Rassinier (Exxon) calls the ECA from a stopover in Seattle for an update. Rassinier discusses equipment availability with Henman, and requests that Alyeska explore gaining permission for in situ burning.

1337 Rassinier (Exxon) and Shier coordinate bird rescue efforts.

1400 Alyeska arranges to have dispersant and fire systems shipped via Northern Air Cargo aircraft.

1401 Exxon requests lists by 1600 of contractual commitments made for it by Alyeska.

1420 Exxon informs the ECA that, due to the depth of the water near Bligh Reef, the **EXXON BATON ROUGE** will have to distance itself from the **EXXON VALDEZ** during the lightering process.

1438 McCall (USCG) updates Shier.

1442 Between 0200 and 0300, Kent, Groundwater and Prevost, "A" Shift Marine Maintenance Technicians, proceed by helicopter to the **EXXON VALDEZ**. Falkenstein approaches Kent and requests direct communications with Alyeska's command center. Falkenstein states "when you get back [to the Terminal], tell them I want direct communications and no dispersants."

1444 There are 50 drums of dispersant at the Terminal and 314 drums elsewhere in the State for a total of 364 drums. The decision is made to stage all drums of dispersant not in Valdez at the Anchorage Airport since potential weather problems in Valdez could otherwise ground all flights.

1454 The **PATHFINDER** arrives at the spill site with the contingency barge and response equipment, 1/2 mile south of Bligh Reef Buoy.

1500 The RRT receives Alyeska's request for a burn permit. Pending this decision, Alyeska continues to mobilize the necessary resources for in situ burning, such as fireproof boom and ignition sources.

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1500 The **PATHFINDER** begins tying Sea Packs to the barge for deployment of booms while other Alyeska personnel begin to deploy boom along the leading edge of the spill.

1510 The USCG grants permission only for a dispersant test on the leading edge of slick in Zone 1.

1515 Class V and VII skimmers cut loose from the contingency barge and begin skimming approximately 3 miles from the **EXXON VALDEZ**.

1517 The VEC receives a report that oil is on shore at Reef Island; oil is approximately 50 feet off shore of Bligh Island; oil is headed towards Glacier Island; and the shipping lanes are almost closed. Clean Sound is on alert.

1524 The VEC is informed that two remaining Sea Packs have been checked out and are ready to go. Shier orders the Sea Packs dispatched.

1530 The **PATHFINDER** goes into the heaviest part of the slicks to start its skimming operations, but encounters gas levels too high for the safety of the crew and goes to a location 1-1/2 miles south of the **EXXON VALDEZ**.

1540 One sea skimmer is not operating properly.

1545 The **SEA FLYER** completes placing the second fender along the portside of the **EXXON VALDEZ**.

1600 Oftedal and Williams assist booming operations by directing vessels from the air.

1603 Mercer discusses with Nelson opening 100 rooms in a temporary camp at the Terminal.

1617 The **CHAMPION** is underway from Crowley Dock to the Terminal small boat harbor to pick up the two remaining Sea Packs.

1620 A mechanic, delivered by the USCG, is on site and working on the skimmer deployed from the contingency barge.

1625 Allen (Spiltec) reports that the dispersant test will be conducted in about two hours. Commander McCall wants to observe.

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1630 The skimmer is repaired by the USCG mechanic and deployed into the water.

1640 Ruskauff, an Alyeska Contracts Engineer, confirms arrangements for the contract boat, **M/V CONSTRUCTOR**, from General Marine Services to proceed to Valdez.

1647 Runnels reports that the lightering operations are on hold by USCG order, pending word from a naval architect from Houston.

1650 The VEC is informed that the landing craft **ITSWOOP** is expected to arrive in Valdez at 2100 and will be loaded with bladders and fittings at Fluor Dock.

1656 Robinson (VEC) requests that Allen (Spiltec) send a helitorch and spill bucket from Oregon for tomorrow afternoon.

1658 The tug **CHAMPION** departs for the spill site with two more Sea Packs.

1704 Pugh approves a request for additional contractors for tonight's shift.

1707 Pump Station 1 ("PS 1") and PS 2 are ordered to send 10,000 and 20,000 gallon bladders, all of their pumps, and all of their 3" and 4" hose.

1709 McCall (USCG) arrives at the Emergency Center.

1715 The VEC is informed that the **CHAMPION** and two Sea Packs should arrive at the spill site at 2200.

1716 Ruskauff confirms status report from Foss Maritime that the tug **JEFFERY FOSS** and the **FOSS** barge departed Cordova late in the afternoon on 3/24 for the spill site at Alyeska's request.

1720 McCall (USCG) and Robinson leave the VEC for the training room for briefing and later will leave for a flyover.

1720 The VEC leases three contract boats located at the boat harbor in Valdez. Two of the boats will work tonight, assisting in deploying boom.

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1727 The ECA requests that the VEC contact CIRO to arrange the shipment of diagonal retaining braces for bucket helicopter arms.

1741 It is reported that the road between PS 1 and PS 2 is blocked by snow, delaying the transportation of oil spill response equipment from Prudhoe Bay.

1745 Eighty barrels have been offloaded from the Class VII Skimmer into the **PATHFINDER's** slop tank.

1800 The initial dispersant test is conducted.

1800 1,000 ft. of fire boom is expected to arrive in Valdez from BP at 2300 on 3/25.

1800 The "A" shift is on duty, as well as twenty-six Price personnel. Of these contractors, 14 are assigned to shore support and 12 are deployed at the spill site.

1800 Boats currently under contract include the **M/V CONSTRUCTOR, GLACIER** with ODI skimmer, **JEFFERY FOSS** and barge, and **DANIEL FOSS** and barge. An ADDSPAC from San Francisco is expected to arrive in Anchorage at 0600. 314 barrels of dispersant are available for mobilization to Anchorage for staging.

1800 The **VINCE PEEDE** departs for the spill site carrying Sarnacki (Baldridge's relief), his "C" crew, as well as food and clothing.

1805 The VEC is informed that the Exxon group has arrived at the Westmark.

1810 One of the deployed Sea Packs fails when the boom and main cuff are torn.

1813 Two DRA tanks for recovering oil are being staged at Fluor Dock.

1834 Heffernan (ECA) confirms with VEC arrangements to pick up 40 VECO people from Kenai arriving at Valdez airport at 0835 on 3/25.

1843 The VEC is informed that Exxon has made arrangements with the **BATTLE BORN** to transport 3 of their people to the tanker.

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1852 Alyeska receives a FAX from CIRO providing a supplemental list of material and equipment subject to the CIRO/Alyeska use agreement. The equipment includes bladders, skimmers, boom and dispersant and burn equipment.

1854 Alyeska is informed that the ADDSPAC from San Francisco is expected to arrive in Anchorage at 0600 on 3/25. The crew must rest until 1600 tomorrow afternoon.

1857 The helicopter from the recent dispersant test reports that they could see some separations in the oil.

1908 The VEC orders ERA Helicopter 371 EH to be prepared for another flyover at first light tomorrow morning.

1910 All recovered oil containers, including those on the Class V and VII and the **PATHFINDER** slop tanks, are full. Therefore, skimming operations cease until additional storage capacity arrives. Brown requests the USCG's permission to discharge recovered oil into the center tanks of the contingency barge.

1919 The USCG states that its preliminary response to VEC's request regarding offloading of oil into the barge is "no".

1930 The **SEA FLYER** proceeds with the **EXXON BATON ROUGE** towards the **EXXON VALDEZ**.

1955 The **CHAMPION** is abeam Bligh Reef buoy.

1956 The USCG calls the VEC and reports that a Sea Pack is underwater.

2000 The **CHAMPION** prepares to take the torn Sea Pack to shallow water for repair while the **PATHFINDER** moves another Sea Pack into position for deployment.

2009 Baldridge provides the VEC with an update: **PATHFINDER** full, Class VII full, Class V broken down with belt problems, work boats available, Sea Pack is being repaired; priority is to boom the ship when clearance is granted, although booming cannot be done now because the process of placing fenders and lightering may destroy the boom.

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2025 The ALBA II is being loaded with boom equipment at the Terminal.

2025 Four tanks arrive at the Terminal.

2030 The contract divers arrive at the EXXON VALDEZ.

2030 The CHAMPION finishes deploying two Sea Packs.

2030 The VINCE PEEDE arrives at the spill site with a crew change. Baldridge decides to remain on scene, and he and Sarnacki share supervisory duties on-site. Sarnacki and Baldridge establish three principal objectives for crew: 1) exclusionary booming to protect Bligh Island; 2) diversionary booming from the stern of the EXXON VALDEZ to as close to Bligh Reef buoy as possible to divert spill into deep water; and 3) continued skimming operations.

2030 Bohlmann, a Marine technician, comes out with the crew change and is assigned to the Class V skimmer. When he arrives, mechanics are changing a skimmer belt which had apparently been cut by a metal bar while in operation.

2032 The USCG tells the VEC that "the most visible impact for use of the boom" is to run it along the west side of Bligh Island and put a skimmer at the end. The USCG states that they have not had any "burps" around the ship lately.

2035 The CHAMPION is dispatched to retrieve the sunken Sea Pack.

2039 The VEC is informed that lightering will start in 2-4 hours.

2040 Pugh and others meet with Exxon personnel when they arrive on Friday evening. Exxon personnel are briefed in the VEC about the location of Alyeska equipment and Alyeska activities to date.

2043 The VEC orders Baldridge to run boom from the stern of the EXXON VALDEZ and angle it towards Bligh Reef buoy. The VEC is sending 700 ft. of additional boom. Sea Packs are to be held in reserve.

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2056 Marine Operations gather boom stationed at Berths 1, 4, and 5. The ALBA II will transport the boom to the site.

2056 The USCG relays VEC instructions for the BLUE FOX to proceed to the spill site and assist the PATHFINDER, and for the ITSWOOP to pick up bladders and hose at the Terminal.

2100 The VEC is informed that the USCG Pacific Strike Team and two C-130's will arrive in Valdez in the morning with boom and High Seas Barrier Skimmer, which will be loaded aboard the cutter SEDGE and transported to the site.

2100 The first connex of containment boom is deployed.

2100 Between 2100 and 2340, Howitt provides a status report to George N. Nelson (BP).

2100 Between 2100 and 2340, Rassinier (Exxon) provides Howitt at the ECA with a dispersant report: the Southern Air Transport C-130 is carrying 100 to 150 drums, and is estimated to arrive at 1630 on 3/25; the MarkAir C-130 is carrying an ADDSPAC and a half load of dispersants and is expected to arrive in the morning of 3/26; the USCG C-130 is expected to arrive with the Pacific Strike Team at 0800 on 3/25; the Southern Air 707 from Houston is carrying 140 to 160 drums; the ConAir DC-6 from British Columbia is carrying 800 to 1000 drums; the C-130 from Phoenix is carrying an ADDSPAC and is estimated to arrive at 0600 on 3/25.

2130 One Monarch is deploying a connex of boom off the barge; one Grayling is standing by to deploy more boom; the SEA VIEW is off the bow of the barge for spotlight deployment; one Grayling is shuttling people and supplies to the tanker.

2133 The CHAMPION reports that the Sea Pack that had sunk has resurfaced and is performing properly.

2144 The VEC is informed that a Convair is leaving Kenai at 0845 on 3/25 carrying 40 people from a VECO work crew.

2154 The EXXON BATON ROUGE is all fast alongside the EXXON VALDEZ.

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2200 Three tugs are currently in use chasing icebergs that were threatening both the dive boats and the boom.

2210 Dave Maiera reports to the VEC that the Mortec MV GLACIER is under contract and has left Homer and will arrive at the spill site at approximately 2300 tomorrow with an ODI skimmer from CIRO.

2215 The first lightering hose is connected between the EXXON VALDEZ and the EXXON BATON ROUGE.

2215 The barge, which is one-half mile south of Bligh Reef buoy, is under way in tow with the PATHFINDER to Bligh Reef buoy. The Class V and VII skimmers and the Sea Packs are also in tow. The goal is to deploy diversionary boom from the tanker to the buoy.

2215 Alyeska sends out additional containment boom from the Terminal on the ALBA II.

2225 The barge is stationary. Deployment of the second segment of boom begins. The Yellow Monarch and the Yellow Grayling connect boom from the EXXON VALDEZ to the buoy.

2230 The Class V skimmer is repaired.

2238 The second lightering hose is connected between the EXXON VALDEZ and the EXXON BATON ROUGE. Before lightering can commence, divers will conduct an underwater damage survey of the hull.

2300 R. Smith (Exxon) gives preliminary advice not to allow the EXXON VALDEZ to move from the reef due to fear of capsizing.

2300 The Black Monarch deploys the third connex of boom off the barge. The Black Monarch with the GLACIER ISLAND is conducting spotlight detail.

2310 The inside connex of boom is deployed by a Black Grayling off the portside of the barge.

2316 Howitt and Rassinier (Exxon) coordinate the location, the estimated arrival and the logistics of transporting dispersants to Valdez.

2320 The SEA VIEW offloads the last segment of boom from the top of the connex to other segments.

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Approximate Time

2345 Pete Sarnacki and his crew deploy diversionary boom.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

TESTIMONY ON OIL SPILL COMMISSION REPORT
JOINT HOUSE/SENATE RESOURCE COMMITTEES
SENATE SPECIAL COMMITTEE ON OIL AND GAS HEARINGS

JANUARY 24, 1990

I appreciate the opportunity to comment on the Oil Spill Commission's Report. The Commission has labored long and hard and has heard from many Alaskans in developing its recommendations. The report covers many topics and suggests many ideas. Some can be implemented quickly; others would require more discussion and specific development.

Today I would like to provide an overall reaction to the recommendations of the Commission. I will speak generally to each subject area and in some cases comment on specific recommendations. I am presenting this testimony on behalf of the Administration.

OVERVIEW

The Commission report proposes broad new initiatives in some areas and suggests ways to improve existing capabilities in others. The two most ground-breaking recommendations address prevention and government takeover of spill response.

The Commission has recommended that the State develop a very specific and comprehensive, hands-on approach to regulating movement of petroleum products. The report recommends a variety of steps to accomplish this. These include such items as setting state standards for tankers, establishing harbor offices to regulate tanker movement, establishing a vessel control system, establishing a citizens' commission to oversee transportation, and so on.

The prevention initiatives deserve very specific review and consideration. Certain initiatives would require extensive changes in state law. Moreover, a key consideration is the relationship between state and federal law.

The Administration's approach to these recommendations is to conduct a careful review and to analyze the recommendations more specifically with regard to cost, institutional needs, legal implications, and so on. We will be developing legislative proposals as a result of this review, which is already underway. A key consideration will be to determine the cost of each of the proposals, as both the Administration and the Legislature will need to assess the resources to be devoted to the proposals. At the same time, Congress is considering federal oil spill legislation. We are hopeful of favorable legislation from Congress. The final form of our proposals will depend in part on what actions Congress takes.

The second most significant finding of the report addresses government takeover of spill command. Under existing state and federal law, the federal on-scene commander may take over a spill response if the responsible party is not responding appropriately. Alaska law allows state takeover of a spill if the State determines that containment or cleanup activities by the responsible party are not adequate. State law does not expressly provide for immediate government takeover of spill response. To do this would be an extremely significant change in approach. The statutes now on the books clearly put the burden of the response on the industry. We support this fundamental change in approach. If the Legislature also wants the state to take on this additional role, we will need to find substantially increased resources. We will also need to review the associated liability issues.

Other approaches may also be worth considering. At present, state law provides for and requires planning for a unified government response to a spill. State law does not require a unified industry response to a spill, among the various parties that may bear some responsibility. The terminal operator, tanker owner and operator, product owner, producer and other party may all bear some responsibility. We may want to consider requiring a unified industry response.

We have one comment about the report document. We would suggest that the Commission use graphics that show the full extent of the spill in its report. The map included in the summary is current only as of June 30 and does not show all the affected areas.

PREVENTION RECOMMENDATIONS

The most significant finding of the Commission report is that the State should play a role in prevention that is far more extensive than any the state has played in the past. The report speaks to the need for prevention to be established as policy and for the attitudes of all participants in oil transportation to change.