University of Rhode Island DigitalCommons@URI

Theses and Major Papers

**Marine Affairs** 

Spring 1979

# "The Global Hope is Around": An Incident at Salem Sound

K. W. Mathews University of Rhode Island

Follow this and additional works at: https://digitalcommons.uri.edu/ma\_etds

Part of the Environmental Health and Protection Commons, and the Oceanography and Atmospheric Sciences and Meteorology Commons

#### **Recommended Citation**

Mathews, K. W., ""The Global Hope is Around": An Incident at Salem Sound" (1979). *Theses and Major Papers.* Paper 126. https://digitalcommons.uri.edu/ma\_etds/126

This Major Paper is brought to you by the University of Rhode Island. It has been accepted for inclusion in Theses and Major Papers by an authorized administrator of DigitalCommons@URI. For more information, please contact digitalcommons-group@uri.edu. For permission to reuse copyrighted content, contact the author directly.



## UNIVERSITY OF RHODE ISLAND

### "THE GLOBAL HOPE IS AGROUND" AN INCIDENT AT SALEM SOUND

.

MARINE AFFAIRS SEMINAR SPRING 1979

K. W. MATHEWS

#### PREFACE

On February 6, 1978, in the midst of the worst blizzard to hit the Northeast in 100 years, the 682-foot Greek tanker GLOBAL HOPE with more than 340,000 gallons of oil aboard, dragged her anchor and grounded in Salem Sound, Massachusetts, about 15 miles from downtown Boston. An estimated 83,000 gallons of oil escaped the stricken vessel to be deposited on two of the most historic and picturesque coastlines of Massachusetts. Some 2.4 million dollars were expended from the federal pollution fund in cleanup efforts.

As a result of the storm and the damage sustained by the vessel, unusual strains were placed upon the federal on-scene coordinator (OSC). Inasmuch as the famed ARGO MERCHANT stranding case had also occurred off Massachusetts just 14 months before, there was an unusually high degree of local public concern that the pollution response to this new incident be effective and prompt, no matter what field problems had to be over-come because of the extreme weather conditions. This paper relates the chronology of events and examines peculiar problems, planning, and response activities of federal on-scene coordination during the incident. In addition, state and federal agency involvement are described relative to the flexibility, ingenuity, and orchestration required to deal with the myriad contingencies which arose during the response to the grounding and the subsequent pollution under the most extreme weather conditions.

i

## CONTENTS

• • •

		Page
PREFACE		i
PART I	INTRODUCTION	1
II	CHRONOLOGY	5
III	HIGHLIGHTS .	18
	INITIAL RESPONSE	
	PUBLIC AFFAIRS	
	CLEAN-UP	
	POLLUTION FUND	
	VESSEL SALVAGE AND DISPOSAL OPERATIONS	
	STATE AND FEDERAL INVOLVEMENT	
IV	POST MORTEM	30
FOOTNOTES		33
BIBLIOGRAPHY		36
INTERVIEWS		37

#### INTRODUCTION

At 6 A.M., Wednesday, 15 December 1976, the Liberian vessel Argo Merchant, a six-hundred forty foot, thirty thousand, deadweight ton tanker grounded near Fishing Rip on Nantucket Shoals twenty-eight miles southeast of Nantucket Island. Eventually the vessel broke up and expelled her cargo of 7.2 million gallons of No. 6 fuel oil into the turbulent North Atlantic. As in any saga, the impact of the grounding has had wide reprecussions and the incident has served as a bench mark for progress made in the quality and effectiveness of federal and state response efforts to critical pollution incidents.

Captain Walter Folger, USCG, was chairman of the Regional Response Team (RRT) at the time of the Argo Merchant grounding. Himself a Nantucketer, as well as a salty ex-merchant seaman, the Captain had an abiding affection for his beloved Nantucket and a reverent regard for the power of the sea. He

was aware that Nantucket Shoals had seldom relinquished any ship whose folley it was to traverse her shallows. Two days passed before his warnings of the imminent disaster to befall the "Argo" registered with the media. When finally the peril to the grounded tanker became known, frequent press conferences and political inquiries generated, replete with all the jingling harness of TV cameras, floodlights, jockying reporters, and demanding pols. It was in one such spectical that the scene was set for the continuing agony of the "Argo". Captain Folger, in responding to inquiries about Nantucket Shoals, mentioned the catastrophic history of the area. Immediately, a reporter waving his note pad leaped to his feet and in reference to the "Argo's" grounding, exclaimed, "Captain! Captain! Did I understand you to say that this incident was a catastrophe?" The Captain gazed at him over his glasses and responded, "Young man, anytime you try to bring a fully loaded, six-hundred and fifty foot tanker overland, without wheels on it, you've got a catastrophe!"

Under the <u>Federal Water Pollution Control Act</u><sup>1</sup> (FWPCA) and its implementing regulations, the <u>National Oil and Hazardous Substances Pollution Contingency</u> <u>Plan</u><sup>2</sup>, it fell to the Federal government to respond to the pollution threat posed by the Argo Merchant. Due to the Coastal location of the incident, the Coast Guard served as lead agency in directing all response efforts. Two misconceptions prevailed, however. First, many agencies, both state and federal, looked upon the federal effort as being a Coast Guard responsibility. Little interest was shown initially by any agency other than the EPA in supporting a combined state or federal effort. In fact, despite the claims of the Commonwealth of Massachusetts, the state showed no interest whatsoever in the grounding until two days later when the press became concerned. The Commonwealth had been invited to send

a representative to the Regional Response Team some months before. That organization comprised the forum and technical/logistical support organization under the <u>National Contingency Plan</u>. A low level employee from the Commonwealth's Department of Environmental Affairs was appointed. Within two hours of the Argo Merchant's grounding, he was advised and asked to join with the team. Two days and five phone calls later he appeared, with no authority to speak for the Commonwealth. He left two hours later.

The Argo Merchant has been identified as a laboratory phenomenon by research and development types. Never before had such a threat tested the new sciences developed to deal with oil spills in the U.S.<sup>3</sup> By the same token therefederal response machinery was scrutinized and found sluggish at least. Though the On-scene Coordinator (OCS), a Coast Guard Officer, and other Coast Guard forces strove to resolve the struggle between vessel and sea and ultimately between sea and oil, inland, the federal forces galvinized in support of units in the field found themselves beleaguered by the press, politicians and the populace. As a first experience, lines of communication were untried and responsibilities vague.

Over the subsequent months, however, efforts were made by the Chairman of the RRT to streamline the operation of that organization as well as to identify the means for supporting units on the beach. The grounding of the Global Hope provided the testing ground. Though not carrying 7.5 million gallons of number 6 fuel oil, as in the case of the Argo Merchant, the Global Hope was potentially more dangerous due to her proximity to land. The federal response to the incident in Salem Sound was concerted and cooperative in spite of the severest conditions.

The Global Hope would cost the government 2.4 million dollars and the federal/response would extend from February to August 1978.

٠

.

.

...

#### II CHRONOLOGY

Wednesday, 1 February 1978: The Greek registered tanker GLOBAL HOPE was berthed at New England Power Company's facility at Salem, Massachusetts and proceeded to off-load her cargo of number 6 fuel oil. The vessel, a 38,889 deadweight ton tank ship, carried over 8 million gallons for the Salem power station. She was built in 1960 at the Eriksbergs Shipbuilders in Germany. February 1978 found her serviceable but neglected. She appeared to have been worked hard with a bare minimum expended on upkeep. Nearly half her ulage covers had been painted shut, doggings were frozen and deck plating in some areas was rusted in layers.

<u>Saturday, 4 February 1978:</u> Transfer of the vessel's cargo was completed. Some delay had been experienced initially after Coast Guard Personnel inspected the vessel earlier and ordered transfer operations suspended pending repairs to the ship's steam smothering system, a vital part of the ships fire fighting apparatus.

Upon discharge of her cargo, the tanker took on 400 tons of bunker fuel for her power plant, and was brought to anchor in Salem Sound at 8:30 PM in order to heat and separate 88,000 gallons of contaiminated cargo remaining aboard. She anchored in 40 feet of water using 4 shots of chain on the starboard anchor. The anchorage was located 0.8 miles from the northeast tip of an obscure land mass called Coney Island. At the time of the GLOBAL HOPE's anchoring, weather eyes were turned to a building disturbance approaching New England. On Sunday the National Weather Service forecasted a severe winter storm to strike New England on the following day.

Monday, 6 February 1978: Morning hours revealed the solid leaden clouds which herald winter storms in New England. Visibility was good at thirteen miles, and wind speeds ranged from 8 to 17 knots. Late afternoon, however, brought a significant change.

By 6:00 P.M. visibility was reduced to approximately 1000 feet in blowing snow, and windspeeds had increased to 42 knots with gusts up to 61. While the storm grew, the GLOBAL HOPE had remained at anchor in Salem Sound. During late afternoon, however, when buffeted by high winds, the vessel began to drag anchor and drift to the southwest. By 6:10 P.M., Coast Guard Station Gloucester received a message from the vessel that she was flooding in the engine room and at 8:42 PM she reported having grounded on the shoals off Coney Island.

Immediately upon notification of the grounding, procedures for responding to an oil pollution threat were implemented by the Coast Guard. Much of the response was automatic. The end of January had seen the Bouchard Barge 105 split in two during loading while moored in New Hampshire's swift running Piscataqua River. On the same day as the GLOBAL HOPE's grounding, the coastal tanker

HAROLD RHINEHAUER, with over 80 thousand gallons of oil aboard, had run aground in Portland, Maine. The mechanisms for response were well oiled by the time the GLOBAL HOPE grounded and reaction was quick.

Captain Walter Folger, USCG, as Chief of the Marine Safety Division, First Coast Guard District, encompassing roughly the area of New England, was contacted immediately. He was also chairman of the Coastal RRT serving New England. The team was composed of representatives from selected federal and state agencies and functioned to provide government coordination, advice, and support during an actual pollution emergency.<sup>4</sup> Captain Folger had served as the team's chairman during the previous year's ARGO MERCHANT incident.

Another veteran of the ARGO MERCHANT was Captain Lynn Hein USCG, Commanding Officer, U.S. Coast Guard Marine Safety Office, Boston, within whose geographic jurisdiction lay the grounded GLOBAL HOPE. Captain Hein, therefore, would act as the federally appointed OSC for a GLOBAL HOPE oil spill.<sup>5</sup> It would be his job to orchestrate the actual on-scene response. As a result of his experience as OSC during the ARGO MERCHANT incident and two years' involvement with some 600 oil spills of different magnitudes, he would bring a wealth of experience to the scene of the GLOBAL HOPE. He was advised immediately of the stricken tanker's status. With the concurrence of the Chief of the Marine Safety Division and within an hour of the grounding, members of the RRT were telephonically activated by Marine Safety Division watchstanders. Due to the severity of the storm it would be 8 days before the team would be able to convene for a meeting.

Activation of the RRT took place in accordance with federal regulations dictating such action in the event of a potential major oil spill.<sup>6</sup> At the time of the GLOBAL HOPE's grounding, no oil was known to have escaped but she

was acknowledged to be carrying a substantial amount of product and fuel, and her percarious position within sight of one of the most environmentally sensitive and picturesque coastal areas of Massachusetts' north shore, left little room for hesitation.<sup>7</sup>

During the night of 6-7 February, the OSC requested that the Coast Guard's Atlantic Strike Team (AST), based at Elizabeth City, North Carolina, get underway for the Boston area with vital emergency equipment. ADAPTS pumps capable of transferring 1800 gallons of water and petroleum per minute, open water barriers to boom the vessel, and necessary personnel were loaded aboard waiting Coast Guard aircraft. The AST would provide communications support, advice, and physical assistance in oil removal operations. One of three Coast Guard teams located throughout the U.S., the AST possesses expertise in ship salvage, diving, and oil removal methodology techniques.<sup>8</sup> The team is equiped with a substantial amount of emergency response equipment.

The OSC also received authority to use the Coast Guard Cutter SPAR, a 180 foot buoy tender based in Portland, Maine. The SPAR would be used as a delivery platform for the additional pumps and the high seas barrier then located with the AST contingent in New Hampshire at the site of the Barge 105. During this time frame commercial oil spill clean-up contractors in the Boston area were alerted. The Coast Guard White Sage was ordered to stand by at Woods Hole, meanwhile, in the event she were needed.

On 7 February the storm peaked with minimal visibility and high winds being experienced. Some 30 inches of snow were recorded at Boston's Logan Airport with accumulations of over 4 feet elsewhere and insurmountable drifts up to 9 feet throughout the coastal region. Hurricane force winds were experienced

and tides ran 10 to 16 feet above normal along the Massachusetts coast. A state of emergency was declared by the Governor. Highways were clogged throughout the state with drifts piled high over stranded vehicles. Logan Airport was closed to all traffic. The National Guard was activated. Aircraft from Coast Guard Air Station Cape Cod, some 80-odd miles to the southeast, were unable to launch for pollution surveillance overflights. The Coast Guard Cutter DECISIVE, a 210 foot medium endurance cutter rode the storm off Salem harbor after a violent crossing of Massachusetts Bay through 30 foot seas. DECISIVE had responded to orders from her District command to proceed to the GLOBAL HOPE's assistance and remove the tanker's crewmembers to safety.

By dusk on the seventh, it had been snowing for nearly 30 hours. Snow accumulation had paralyzed all transportation systems. Highways were impassable and rail service had been inoperative since the previous eve. Pollution response activity was restricted to radio and telephone communications.

Wednesday, 8 February 1978: Just before first light the blizzard ended, winds slackened, and by 7:00 AM visibility opened to 12 miles. A Coast Guard helicoptor sighted the first indications of pollution: oil emanating from the vessel's stern. The forces which had been galvanized by radio and telephone began to arrive or get underway. AST equipment and personnel from Coast Guard Air Station Elizabeth City arrived at Air Station Cape Cod at 9:55 AM aboard four engine C-130 Hercules Cargo aircraft. They were transferred by helicopter to the GLOBAL HOPE. The Cutter DECISIVE moved in and removed all crew members with the exception of the master, chief engineer, chief mate, and radio operator. Additional equipment and representatives of the owner were air-lifted to nearby Gloucester Coast Guard Station where the OSC had established his initial command post. By late afternoon the Cutter SPAR was moored alongside

the grounded vessel with needed equipment. The 133 foot Cutter WHITE SAGE was underway from Woods Hole with an open-sea containment boom which had been delivered to Air Station Cape Cod. Impassable roads had prevented overland delivery from the airfield.

Having determined that the GLOBAL HOPE posed a substantial threat of pollution, the OSC sought authority under federal law to direct all public and private efforts toward removal or elimination of the threat in the event the o owners did not take adequate action.<sup>9</sup> Authorization was quickly received from **the** Commandant, U.S. Coast Guard. Shortly thereafter a survey of the vessel's engine room revealed flooding with 12 to 18 inches of oil floating on the surface **Mothing**ater. Oil was observed escaping from the vessel's stern, confirming similar reports received from early morning overflights. The heavy seas and grounding had caused damage to the vessel's rudder post and stern frame, and oil had been allowed egress to the ocean.

Although representatives for the owner had engaged a local pollution control contractor to contain and cleanup any oil spilled, the OSC determined that adequate action was not being taken and under authority mandated by the <u>FWPCA<sup>10</sup></u> and its regulations<sup>11</sup> he assumed responsibility for removal of pollutants. AST personnel set up skimming equipment in the engine room and commenced pumping 20-25,000 gallons into the port wing tank and 5-8,000 gallons into the starboard wing tank. Meanwhile, a 500 foot length of 36 inch boom was placed around the stern of the grounded vessel and back anchored to the beach at Coney Island in an effort to contain any escaping oil. Additional boom needed for complete encirclement of the ship could not be delivered due to clogged roads.

A boarding party's initial evaluation disclosed a crack in the stern area

of the hull, damage to several aft tanks, and the broken rudder post. There was free communication with the sea and between several tanks. A light sheen on the water surface was observed between the port guarter and Coney Island.

Throughout the day Coast Guard equipment and personnel arrived on scene. Two members of the Coast Guard's Public Information Assist Team had been able to make their way from Portland, Maine where they had been working a potentially major spill from the coastal tanker HAROLD RHINEHAUER. They joined the OSC at his command post. They would prove invaluable in assisting with public affairs efforts during the forthcoming two weeks. Meanwhile AST resources continued to arrive at Air Station Cape Cod and were being shuttled to staging points near Salem. The two cutters SPAR and WHITE SAGE were off-loading pumps and boom at the vessel and the command post. Massachusetts authorities had been contacted, and state police stood by to provide escorts for equipment and personnel. By nightfall the command post at Gloucester was in full operation.

<u>Thursday, 9 February 1978:</u> The first significant reports of serious pollution began to filter in. AST personnel, in sounding the port wing tank on the morning of the ninth, discovered the loss of some 15,000 gallons of water-oil mixture which had been transferred from the engine room. The tank had been breached and was in communication with the sea. Simultaneously heavy ground swells in the aftermath of the storm grounded the containment boom around the stern of the vessel at low water, rendering it ineffective in trapping the lost oil. Throughout the day reports were received from local residents of oil coming ashore near Marblehead, Massachusetts. Unknown to the OSC, approximately 60,000 gallons of oil escaped the vessel when she grounded. Inspection disclosed heavy concentrations

heretofore hidden by snow. Surveys also revealed the intensity of the storm where wind-driven oil had been deposited on roofs some 40 feet above the usual high water marks.

Contractors were hired to boom the vessel and clean oil from affected shorelines. The National Fish and Wildlife Service was alerted and requested to survey the area. Injury to wildlife would prove to be negligible. Discovery of damage to the vessel and her hard aground position elicited a request by the OSC for assistance from the U.S. Navy's Supervisor of Salvage (SUPSALV). That office specialized in salvage operations for naval activities and possesses the expertise vital to the possible refloating of the vessel.

Aboard the vessel, oil skinning operations continued in the engine room with oil product being stored in secure tanks. A local barge with a 420,000 gallon capacity was contracted and by late afternoon was lightering oil from the grounded ship. Overhead, pollution surveillance flights with OSC observers aboard kept a constant check on the vessel and the nearby shorelines. Weather conditions had improved considerably and the National Weather Service provided the OSC with twice daily forecasts for the Salem area.

By the ninth, conditions had stabilized to the extent that clean up, containment, and oil removal operations were well underway. Aboard the vessel, the Commanding Officer of the AST supervised off-loading of oil. Ashore, clean up activities were being monitored by personnel from Marine Safety Office, Boston.

<u>Friday, 10 February 1978:</u> A Coast Guard Hercules landed at Logan Airport with a SUPSALV representative and additional equipment. The salvage expert reported to the new mobile AST provided command post which had been flown in and convoyed by state police to a location more accessible to the GLOBAL HOPE. That afternoon the OSC, the SUPSALV representative, local divers who had been hired to check the vessel's hull, and the Commanding Officer of the AST determined that the vessel could be refloated at high tide with the assistance of tugs.

Saturday, 11 February 1978: By late afternoon, a "no cure - no pay" contract had been made by the vessel's owners with a salvage firm to refloat the vessel and have it towed to the Bethlehem Shipyard in East Boston. Coast Guard personnel and equipment were placed on standby to assist the salvors upon request, and control of the vessel was returned to the owners. At the same time, the owner's representatives declined responsibility for clean-up which left the OSC with a total and continuing responsibility for removal of oil from affected beaches and the vessel itself.<sup>12</sup> Oil which was being off-loaded from the GLOBAL HOPE was being transferred to a local shore facility for storage while oily refuse from beaches were stockpiled inland.

On 11 and 12 February salvage preparations were undertaken. Ballast was transferred and using tugs the vessel turned 70 degrees to starboard in hopes of refloating at high tide on the afternoon of 13 February.

Monday, 13 February 1978: At high tide salvors were unable to dislodge the vessel. Further inspection revealed more serious bottom damage than had been estimated. Port tanks numbers, 9, 10, and 11 had been breached with center tanks 10 and 11 and starboard tank 11 possibly being flooded through damaged bulkheads. Upon failure to refloat the vessel, the owners indicated no further immediate interest in salvage, and the salvors withdrew from the venture. The OSC reassumed control of the ship.<sup>13</sup>

Beach clean-up continued during hours of daylight. An Environmental

Protection Agency (EPA) Scientific Support Coordinator, requested by the OSC, reported to the command post and proceeded to evaluate the oil's impact on affected shorelines. Clean-up procedures were recommended which would be least disturbing to the environment.

<u>Tuesday, 14 February 1978:</u> Members of the RRT and advisors who had been able to make their way into Boston convened in the Regional Response Center located within the First Coast Guard District's, Marine Safety Division.<sup>14</sup> By that time major highways throughout the area had been opened though the ban on all but emergency use remained. National Guard Military Police patrolled access points into Boston and major highways. Attendees at the team meeting included representatives from the States of Maine, Massachusetts, the EPA, the Atlantic Strike Team, National Weather Service, the Fish and Wildlife Service, the Army Corps of Engineers, the National Marine Fishery Service and Coast Guard legal and public relations representatives.<sup>15</sup> The OSC briefed the team on clean-up activities and the ill-fated attempt to refloat the vessel. Continuing plans called for ballasting to prevent any movement or working of the ship caused by the treacherous and unpredictable weather which characterizes the New England coast in winter.

The Commonwealth of Massachusetts voiced strong opinions that some unnamed federal agency should remove the vessel itself to prevent its becoming a monument. This concern continued to occupy state and local thinking throughout the incident, though the chairman of the RRT explained that the only interest of the RRT and the OSC was the elimination of all pollution threat from the vessel. No federal RRT member agency had statutory authority to undertake salvage for the sole purpose of removing the vessel.<sup>16</sup> Consideration was given

to the possibility that removal of the pollution threat might best be accomplished by removal of the vessel itself, however. To that end, it was agreed that a Navy Harbor Clearance Unit (HCU),<sup>17</sup> experienced in the mechanics of salvage operations, would be requested to survey the vessel to evaluate the possibilities for refloating.

During the week of 14 February removal of oil from the GLOBAL HOPE continued as an interim measure in reducing the threat of further leakage. Ashore, the accumulation of oily debris removed from the beaches became an immiment problem. Officials of the towns in which both primary and secondary dump sites were located refused to grant permission for the continuing storage of oily waste, and so a third site some 45 miles from the scene was selected.<sup>18</sup> In addition, on 18 February small globules of oil were discovered on the Wellfleet Beach area of Cape Cod. Analysis at the University of Rhode Island's oil identification facility confirmed that it was GLOBAL HOPE oil which had travelled across Massachusetts Bay to be deposited on the Cape's inner beach.<sup>19</sup> Two miles of shore line were impacted with an estimated 1000 gallons of oil. Removal action was inititated immediately.

Finally between 17-20 February, the Navy's HCU team completed its inspection and made its report to the OSC. The report was subsequently provided to the on-scene representative of the SUPSALV as well as to civilian salvors. It was SUPSALV's opinion that the GLOBAL HOPE could be patched and refloated, but due to the damage done and poor condition of the vessel there was no assurance of a sustained afloat period.

<u>Friday, 24 February 1978:</u> The RRT again convened in Boston. The OSC briefed the team on the HCU's report and NAVSUPSAL's evaluation as to refloating. Authority had been received by this time from the Commandant of the Coast Guard to remove, sink, or destroy the vessel in order to insure against further

53

pollution.<sup>20</sup> Strong opposition arose, however, against any effort to remove the vessel to sea for disposal. Clearly, the Commonwealth of Massachusetts was opposed to any such action which might, in its opinion, interfere with fishing activities in the nearby Georges Banks. Of major concern to the Commonwealth was the 20-25,000 gallons of oil projected to remain aboard upon sinking.<sup>21</sup> The second RRT meeting closed with no specific resolution of the problem but with the team to be reconvened seven days later, having researched more favorable disposal sites as well as alternative proposals.

Saturday, 25 February 1978: During the five days that followed, the OSC efforts were directed toward clean up and removal and technical evaluations as to off-loading costs and procedures. On 25 February he requested and received approval from the Chief of Naval Operations for the assistance of the SUPSALV in refloating the vessel in preparation for disposal at sea if that were to be the course of action.

<u>Wednesday, 1 March 1978:</u> At 8:30 AM the protection and indemnity club which insured the owners against pollution liability accepted an offer by salvors to refloat the GLOBAL HOPE and tow it to the Bethleham Steel shipyard in East Boston. At the RRT meeting on the same morning, the team was advised of these developments. The membership considered alternate plans should the salvor's efforts fail. Expertise from the RRT member agencies was provided in areas of fisheries, currents, and site location if disposal at sea become necessary.<sup>22</sup> This secondary plan was contingent upon removal of as much oil prior to towing as was feasible, maintenance of the vessels structural integrity, and towage during favorable weather, all contributing to the least pollution and safest passage.

Wednesday, 8 March 1978: Some 340 thousand gallons of oil had been removed from the GLOBAL HOPE. Control of the vessel was transferred to

private salvors after she had been patched and her seaworthiness for the short trip to East Boston assured. As the last tug attached its towing hawser, the GLOBAL HOPE floated free. Several hours later, she was moored at the Bethlehem Shipyard where the remaining oil was removed and more effective repairs initiated. She was sold for scrap and eventually towed to a Gulf Port.

-----

#### III HIGHLIGHTS

Initial Response: One of the more noteworthy aspects of the GLOBAL HOPE incident was the successful organization of the federal response. Transport of equipment and personnel to both the command post and the grounded vessel were paramount concerns. All highways were closed, as were rail lines and the airport, and some degree of ingenuity came into play in ensuring the arrival of resources.

Recognizing the need for state support in ensuring timely delivery of equipment and personnel, state officials were instrumental in providing access to Boston's Logan Airport. In addition, Coast Guard vessels and aircraft were quickly inventoried and pressed into service as the need arose and weather permitted. In the event additional airlift capability would become necessary, giant Army Skycrane helicopters from Fort Eustis, Virginia were placed on alert. As a result of the blizzard, a ban on driving had been issued and civilian tugboat crews and contractors,

who were vital to the response effort, faced possible arrest enroute to the scene. Letters of authorization had to be issued by the OSC, therefore, to insure clearance through police and National Guard check points. Uniformed Coast Guard personnel experienced little interference.

Though physical response to the scene of the grounding was initially prevented by weather, early liaison with state and federal agencies possessing vital equipment and personnel avoided costly delays in bringing resources to bear when lines of transportation were cleared. Upon being alerted to the grounding, communications among the OSC, the chairman of the RRT, and Marine Safety Division personnel were immediate. Conference calls were set up and responsibilities out-lined. Initial efforts evolved around alerting as many resources as possible to allow maximum preparation time to units such as the AST located some 1,100 miles away.

In spite of emergency conditions generated by the storm and the accompanying pressure on the telephone system, communications did not prove a problem. In instances where phone lines were tied up, operators expedited calls when assured that a federal emergency existed. Furthermore, all parties involved in the initial response had been previously alerted to two other potentially major spills which had occurred within two weeks, one in fact having taken place within twenty-four hours. All parties, by the time of the incident, were well aware of alert procedures and anticipated their individual responsibilities. Critical information was passed with minimal confusion.

<u>Public Affairs:</u> Past Experience had proven that continuing promulgation of information via news releases and briefings could do much to facilitate the federal pollution response efforts. In the case of GLOBAL HOPE, initial efforts to insure effective communications with government leaders entailed telephonically

briefing concerned public officials. In addition First Coast Guard District public affairs personnel were alerted shortly after the grounding, and the Coast Guard's Public Information Assist Team contingent, which had responded to a spill in Maine, was advised to proceed to the GLOBAL HOPE command post as soon as possible. The Assist Team members were specially trained in oil spill public affairs. By February 8 they were able to make their way to Salem where they aided the OSC and district personnel in media relations and briefings. Throughout the progress of the federal response, the OSC ensured the availability of timely information to all levels of government and to concerned citizens.

From February 9 through March 8, operations conducted by the OSC in the area of public affiars were continuous. During the first week, briefings of the news media, political figures, and local interest groups occurred daily. Charts and explanations of areas affected, tactics used, and the reasons underlying judgemental decisions characterized all briefing sessions. As significant developments occurred in cleanup and salvage efforts, press conferences and television coverage were scheduled. During the last RRT meetings on February 24 and March 1, local officials were invited as observers and were afforded opportunities to advise the team of their concerns.

In essence, efforts in ensuring current and reliable media coverage and public liaison fostered an understanding of the federal government's role in oil spill response. Furthermore, as a result of scheduled briefings and an active effort to include political and local civic interests, cleanup and salvage efforts progressed unhampered and oftimes were expedited by a spirit of cooperation and involvement.

<u>Cleanup and Disposal</u>: Roughly 85,000 gallons of oil were recovered from beaches after the GLOBAL HOPE spill. Most oil was taken from a 3,200-yard

stretch of the Marblehead promontory and from Coney Island where the vessel had grounded. An additional 1,000 gallons were taken from Cape Cod, 50 miles across the bay, where a drifting pancake of oil had broken up into tar balls and come ashore. Aside from the Cape Cod cleanup, response operations fell into three major work programs which were conducted simultaneously: off-loading of the vessel; shoreline cleanup from Fluen Point to Locust Cove in Marblehead; and shoreline cleanup from Locust Cove to Peach Point.

At the time of the vessel's grounding she had some 88,000 gallons of contaminated No. 6 oil in the No. 6 center tank. She also maintained approximately 35,000 gallons of cargo and more than 200,000 gallons of bunker fuel. Upon grounding, approximately 60,000 gallons of mixed oil escaped from the ship's bunker tanks and the double bottoms in way of the engine room, where she was holed. Subsequently, approximately 15,000 gallons escaped the port wing tank which had been breached. The oil from the wing tank fouled the beaches and shoals of Coney Island itself, and to a minor degree, Castle Island.

Initial responses to the spill included a request by the OSC for continuing Coast Guard overflights of the site. At first, overflights were restricted due to weather conditions, but aircrews were available during any break in weather and were effective in giving timely notification to the OSC of suspected contamination sites. The first over-flight, conducted in conjunction with a search and rescue effort, detected oil escaping from the rudder post area of the vessel. Upon discovery of polluted shorelines, cleanup activity was commenced immediately. Two contractors were ultimately assigned responsibility for separate sections of beach, thereby bringing maximum manpower to bear.

Early in the incident, the Commonwealth of Massachusetts was alerted to the need for designated disposal sites. Location of such facilities continues

to be a responsibility of the state and in the case of Massachusetts required canvassing of local resources. In view of the weather, proximity was important and two locations within 20 miles were initially identified as primary and secondary sites. Due to local resistance to disposal at nearby facilities, however, a third site was selected some 45 miles away at a substantial increase in cost.

At the request of the OSC, two federal officials provided vital environmental expertise. After oil was discovered leaking from the vessel, the U.S. Fish and Wildlife Service was contacted and a representative arrived on scene to evaluate oil contamination of water fowl. The impact was minimal. In addition, a scientific support coordinator from the EPA was requested by the OSC. His analysis of the environmentally-sensitive beach area and recommendations for beach cleanup techniques proved invaluable in deploying contractors and directing removal activity. His report was used well into the summer months as a guide for onscene monitors.

Shoreline cleanup included an innovative hot water blasting technique which previously had not been attempted in the region. Contrived by the EPA Scientific Support Coordinator, the civilian cleanup contractor, and Coast Guard personnel, it involved pressurized hot water being sprayed against boulders and outcroppings. Oil was flushed from the rocks into boomed areas where it was vacuumed from within the contained space. Although steam was available it was considered more damaging to the environment and did not provide the flushing characteristic. Hot water was employed at mid and high tide levels in order to insure maximum flushing action with minimum damage to the fragile shoreline ecology.

Farther inland, tides running 16 feet above the normal high had combined with heavy wave action to deposit 18 inches of oil in some yards. Roofs and the seaward sides of two-story homes were splattered with oil

In cleaning impacted areas, contractors necessarily risked damaging property. Trees had to be cut down in several places to gain access to beaches and heavy equipment had to be moved across property. A major problem involved claims for reimbursement from the federal pollution fund. Claims were made by local citizens who alleged damage done to their property by contractors during the response effort. Under the <u>FWPCA</u> such losses are reimbursable, from the federal pollution fund. Storm damage was not reimbursable, however, since it would have occurred regardless of an oil spill. Causes of specific damages were often resolved by using photographs depicting the condition of the property prior to a contractor's entry.

In an effort to deal with the threat of further pollution from the vessel, the OSC requested and received authority under the <u>FWPCA</u> to treat the vessel as a marine disaster which was creating a substantial threat of continuing pollution.<sup>23</sup> The vessel's precarious position and the presence of more than 300 thousand gallons of oil aboard, encouraged a "substantial threat" determination. Under such a finding, the OSC was empowered to coordinate and direct all public and private efforts aimed at the removal or elimination of the threat. Ultimately, he also was granted the more extreme authority to remove, and if necessary, destroy the vessel itself, by whatever means necessary.

With a "substantial threat" determination in hand, however, AST personnel, pumps, booms, Coast Guard cutters, and civilian vessels were amassed in an effort to remove oil remaining aboard the GLOBAL HOPE. Coast Guard cutters were diverted to the scene with vital equipment, effecting an "end run" around snow-clogged highways. State police escorted equipment and personnel where highways were open. Aboard the vessel, estimations of oil on board were made, the integrity of the vessel checked, and transfer of oil to secure tanks commenced

in preparation for off-loading to barges.

At the time of her grounding, GLOBAL HOPE contained more than 340,000 gallons of oil in some form. At the time of her refloating all but 68,000 gallons had been removed to shore-side facilities. Most of the remainder was stripped at the shipyard. The risk of massive contamination of the coastline was minimized by the expeditious transfer of oil from the vessel, although cleanup of the 60,000 gallons which washed ashore in Marblehead continued until August 2.

<u>Pollution Fund:</u> Under federal regulations, the OSC is tasked with several responsibilities during an oil spill. He must evaluate the magnitude and severity of the incident,<sup>24</sup> he must determine the feasibility of removal,<sup>25</sup> and, finally, he must assess the effectiveness of removal actions.<sup>26</sup> When oil removal action is being conducted improperly by private interests, the OSC is required to take necessary steps to remove the pollutant.<sup>27</sup> He accomplishes this with monies available to him from the \$35,000,000 revolving fund created under the <u>FWPCA</u>.<sup>28</sup> Ultimately, more than 2.4 million dollars was spent from the fund in cleanup, removal, and off-loading costs.

Although some 60,000 gallons of oil had leaked undetected from tanks which were damaged upon grounding, the first indications of a spill from the vessel came in the early morning hours of February 8 when a slick was discovered around her stern. The rudder had been bent and the hull ripped. The likely explanation was that hydraulic oil was leaking from the steering engine. At the time, the owner's representative had engaged a local contractor to contain and remove any discharge, but his actions were judged inadequauate, and the OSC assumed control of cleanup activity.

According to the FWPCA, liability for costs of removing oil which has been or threatens to be discharged from a vessel may fall to its owner or operator if the vessel is over 300 gross tons and uses U.S. ports or navigable water.<sup>29</sup> At the time of her grounding, the GLOBAL HOPE'S owner or operator was liable for removal costs in an amount not to exceed the lesser of \$100 per gross ton or \$14,000,000 dollars. Thus the vessel's liability based on her gross tonnage approached \$2,300,000.<sup>30</sup> However, where a discharge is caused solely by an act of God, the owner or operator is relieved from financial liability.<sup>31</sup> It was likely within this provision that the vessel's owner questioned the propriety of assuming responsibility, claiming the blizzard as the proximate cause of the grounding and oil discharge. He declined responsibility for shoreline removal of oil and thereby, liability under the law. Whatever the resolution of the owner's claim, the fund provided resources with which to hire and reimburse contractors. Contracting assistance was afforded on scene by the First Coast Guard District's Comptroller Division, with the beach cleanup effort arranged for under terms of existing pre-negotiated agreements with contractors. Removal and cleaning of oil from the vessel itself required a new and separate accord, however.

Overall, essential fiscal support was effective. Minor difficulties were resolved quickly, all parties recognizing the need for expeditious handling and resolution of requests. The presence at the scene of personnel schooled in fiscal procedures proved vital to the continuity of cleanup activity. Not only were unforeseen demands satisfied in a seasonable manner, but payments to contractors from the pollution fund were made with minimal delay. In this latter case, contractors had committed themselves to massive investments of time, equipment, and personnel in responding to the incident, and reserve funds would have been exhausted in

short order without timely reimbursements.

<u>Vessel Salvage and Disposal Operations:</u> Salvage of the GLOBAL HOPE was an integral consideration in pollution response planning, for if the vessel could be moved to a local shipyard, the threat of additional contamination as well as mounting costs could be minimized. The Coast Guard and other federal agencies, of course, are not in the salvage business and would not actively become involved in such an undertaking unless, as an option, salvage would facilitate removal of the pollution threat. The possibility of the owner's or liability insurer's embarking on such a project, however, had great appeal from the standpoint of contingency planning. If the seaworthiness of the vessel could be guaranteed for a short trip to a local shipyard and if further pollution could be avoided, dockside facilities could come into play in removing oil at a substantially reduced cost. In addition, shipyard facilities could be employed to ensure seaworthiness of the vessel for future disposition.

Recognizing the possibility of a salvage operation, early on February 9, the OSC requested a SUPSALV representative on scene. One was made available by the Navy immediately, and throughout the GLOBAL HOPE incident he proved to be an invaluable source of expertise and advice to the OSC. Working at times. 16 hours a day, the SUPSALV representative remained on scene throughout the response effort. He reviewed all plans involving the salvage of the vessel and took an active role in orchestrating salvage operations.

On February 9, a civilian salvage representative was granted permission to land at Logan Airport and was escorted to the GLOBAL HOPE command post. He had received notification of the grounding from Lloyd's Intelligence Service and had conferred with the owner's representative. The representative and the salvor contracted for the refloating and removal of the vessel on a "no cure-no pay"

basis, proceeding on limited information as to the integrity of the vessel obtained by divers hired by the OSC. A refloat attempt was made, but failed due to unanticipated bottom damage and flooding of the cargo tanks. Thereafter, the salvor indicated no further interest in salvaging the vessel without further extensive survey and withdrew from the venture.

Control of the vessel was reassumed by the OSC and emphasis returned to elimination of any further pollution threat. The ship was ballasted down to sit heavily on the bottom in order to preclude further damage from storms. Heretofore, the OSC had been operating under authority granted by the Commandant to take such actions as were necessary for the removal or elimination of the pollution threat.<sup>32</sup> After the Navy HCU had examined her, however, it was determined, with SUPSALV concurrence, that with patching and dewatering the vessel could be refloated. Additional authority was granted thereafter, to remove, and if necessary, destroy the vessel.

A proposal to remove and sink the ship at a predesignated spot met with resistance. The danger of pollution from some 20,000 gallons of residue oil which would be left aboard concerned state officials and the National Marine Fisheries Service members of the Regional Response Team. In respnse, the team undertook a study to ensure a suitable location at sea where the GLOBAL HOPE could be sunk. It also developed alternatives to sinking and set priorities on its recommendations, suggesting the vessel be: (1) salvaged and scrapped by the owner or insurer; (2) salvaged and towed to Boston; (3) salvaged and sunk at sea at a designated site; or finally, (4) cleaned and left in place. In the event of a third option, a site was recommended which was remote from established fishing grounds and in a position where the Coast Guard's Oceanographic Unit postulated that any escaping residue oil would be carried out to sea.<sup>34</sup> With the disposal site in hand,

ŧ

the OSC commenced preparation for removal of the vessel.

Before federal efforts could commence, however, civilian salvors convinced the insurer that savings would be realized if the vessel could be refloated by commercial operators rather than by the U.S. Government. The salvors had been supplied with the HCU's evaluations on the vessel's refloatability as well as government estimates of the costs of cleaning the vessel in place. Some 1.6 million dollars was the appraisal figure for cleaning in place, and it was clear that the OSC intended to ensure the off-loading of all possible sources of pollution. In a joint venture and with a plan approved by the OSC, the salvors implemented their salvage operations. During their efforts in readying the vessel, lightering of oil continued and the SUPSALV representative monitored all actions for the OSC. On March 8 the vessel was refloated and towed to a shipyard in East Boston, whereupon she became the property of the salvors. She was held for salvage bids and sold for scrap to a Texas firm.<sup>35</sup>

The salvage of the GLOBAL HOPE solved two major problems. It transferred the vessel to a location where on-board oil was removed expeditiously and less expensively. It also allayed the state's fear of having a 680-foot rusting steel monument to the "Great Blizzard of 78" perched atop Coney Island in Salem Sound.

State and Federal Involvement: Since it occurred within a coastal area, federal on-scencoordination responsibilities in the GLOBAL HOPE incident fell to the Coast Guard and aside from civilian contractor personnel, the Coast Guard provided the mass of personnel in responding to the spill. The interface between the OSC and other agencies of federal and state governments, however, prevailed throughout the orchestration of cleanup, disposal, and off-loading operations.

From other federal agencies, the OSC received scientific support, weather

forecasting, salvage assistance and expertise, ocean current projections, and logistical support. State agencies responded to tasks of a local nature such as identification of disposal sites, clearance over lines of transportation, and identification of waterfowl cleaning and collection facilities. Their efforts were timely and enthusiastic. The spirit of cooperation which prevailed resulted perhaps, from the wide and frequent dissemination of information to federal, state and local interests regarding the incident and to personal contact with government of ficials where their assistance was needed.

Admittedly, since the ARGO MERCHANT incident of 1976, both federal and state authorities have become more aware of their responsibilities under the law. During that occurrence, the danger of 6 million gallons of oil fouling Massachusetts' beaches, shellfish beds, and estuaries was clear and present. Federal, state, local and even international interests were stirred. Although GLOBAL HOPE presented no such massive threat as the ARGO MERCHANT, the OSC was dealing with a more informed response network. Commitment to assisting in the response effort was immediate at all levels of government, and it is a satisfying note that all levels sought opportunities to contribute.

#### IV POST MORTEM ANALYSIS

On August 2, 1978, the GLOBAL HOPE case was closed, cleanup of the Marblehead beach area having been completed. Earlier, the vessel had been towed uneventfully, except for some precarious moments off Key West, to a Gulf port in Texas and the bone yards.

In reviewing the response effort, several salient features deserve a final commentary. The misconception, for example, that the Coast Guard is solely responsible for the cleanup of coastal oil spills has, hopefully, been laid to rest in the First Federal Region. In the past and for whatever reason, the public, the press, state, local, and even some federal authorities tended to subscribe to a belief that the messy business of cleanup was a Coast Guard show. The realities, of course, are that the response is a federal obligation. Although the Coast Guard may act as the lead agency or galvanizing force where the incident falls within its jurisdiction, a consolidated federal response is mandated.<sup>36</sup> Further-

more, state and local governments are not mere bystanders with spectator privileges. Rather, they are vital members of the response network and are expected to inject local considerations and concerns as well as providing state resources where practical. It is to the Commonwealth's credit that throughout the GLOBAL HOPE incident, Massachusetts, in general, made immediate and signal contributions to the response effort. Though there were some occasions in which the Commonwealth of Massachusetts was unprepared to deal with contingencies or accept the consequences attending its dependence on imported oil, the state deserves high marks for its support to field and staff units.

A second feature of the incident in Salem Sound which is noteworthy, was the effective use of public affairs personnel and the informative briefing program which was conducted during the incident. Trained public affairs personnel from Coast Guard Headquarters and the First District's public affairs office were quickly involved. They did much of the legwork in supporting the OSC's public information program. Timely news briefings for the media were scheduled as well as special advisories for governmental officials. As a result, a "well-inhand" atmosphere prevailed throughout the course of the federal response and a spirit of cooperation and involvement was cultivated.

Finally, some credit for success must be given to the peculiar circumstances which surrounded the incident. The RRT had been alerted on two other potentially major spills within the preceding two weeks. Little time was wasted in bringing team members up to speed as to conditions and/or responsibilities.<sup>37</sup> The experience supports arguments for a program of exercises in which mock spills occur and team members and federal/state resources are activated or placed in an alert status. Certainly such exercises would assist in exposing gaps in communications links and weaknesses in state and federal support roles.

In retrospect, when faced with the blizzard and three coexisting potential major spills, the response to the GLOBAL HOPE spill was lauditory. "Monday morning quarterbacking" has and will continue to expose weaknesses in the system, and rightfully so. Though each spill will present its own peculiar properties for which old tactics must be altered and new ones developed, there are common problems which characterize similar spills and in-depth post mortems, hopefully, will identify those areas where policy, guidance, or corrective action are called for.

The incident at Salem Sound exemplifies the quick-response capability which **fias incidente**d within the New England coastal region. In the face of an overwhelming storm and multi-governmental interests, a concerted effort was brought to bear and a spirit of team work nurtured. The successful removal of oil from the shoreline and the disposition of the offending vessel and its remaining oil attest to the dedication and resourcefulness of the federal team and state participants.

#### FOOTNOTES

- 1. >3 U.S.C. 1321 (1972)
- 2. 40 C.F.R. 1510 (1978)
- 3. Certainly the ARGO MERCHANT pales compared to the 145,000,000 gallons of petroleum products equal to 20 ARGO MERCHANTS which was disgorged during the first six months of 1942 within 50 miles of the U.S. Atlantic coast. German submarines effected the equivelent of one ARGO per month during this period. Ocean and coastal environments absorbed the full impact and apparently, to the present, survived the devastation. Impact of Oil Spillage From World War II Tanker Sinkings, MIT Sea Grant Program, Report No. MITSG 77-4, January 1977, p.i.
- 4. 40 C.F.R. 1510.34 (1978)
- 5. 40 C.F.R. 1510.5(c) (1978)
- 6. 40 C.F.R. 1510.34(d) (1978)
- 7. 40 C.F.R. 1510.5(m) (1978)
- 8. 40 C.F.R. 1510.54(a)(1) (1978)
- 9. 3 C.F.R. 1321(d) (1972)
- 10. 33 C.F.R. 1321(c)(1) (1972)
- 11. 40 C.F.R. 1510.41(c) (1978)
- 12. 40 C.F.R. 1510.53(a)(3) and 1510.36(a)(3) (1978)
- 13. Shortly thereafter the hull underwriters declared the vessel a total loss. Though having only a salvage interest, the owners still faced the problem of liability for clean-up due to oil spillage under their protection and indemnity insurance, assuming that they were not exempt under 33 U.S.C. 132 (p)(1). If they could prove that the spillage resulted from an "Act of God" under that section they would be held free of any liability.
- 14. The Marine Safety Division is the unit on the First Coast Guard District Commander's staff which is program manager for field units, which respond to oil spill incidents.

- 15. The RRT is composed of Primary Agencies including the Departments of Commerce, Defense, Interior, Transportation and the EPA. Advisory Agencies are those which can make major contributions during a response effort and may include HEW, Justice, State, etc. Individual states within a region are also invited to attend and hold full voting privileges.
- 16. The Coast Guard is not in the salvage business. Its mission is the protection of life and property at sea, property including the environment. It has no resources nor a mandate to salvage vessels declared a total loss. It does have a mandate to advise mariners if the vessel poses a hazard to navigation. The Army Corp of Engineers does have a responsibility to remove obstructions to navigation. The GLOBAL HOPE posed no such obstruction however.
- 17. A Harbor Clearance Unit is a Navy organization skilled in the evaluation and removal of underwater obstructions. Their skills include diving, explosive ordinance and tactics, and vessel structure.
- 18. The nearby towns felt environmentally threatened by the quantity of oil and debris which was being accumulated. The locality which finally accepted the refuse doubled its usual price for disposal.
- 19. Identification of oil as originating from a particular source is called "oil finger printing." The effectiveness of the technique rests on the principle that oil is chemically affected by its containment facilities and each facility leaves its indelible mark thus creating a "finger print." Using infra red spectroscopy, fluorescence spectroscopy, gas chromatography and thin layer chromatography, weathering effects such as sunlight, water, etc, can be factored out and assuming a sufficient specimen, samples can be compared and tied together.
- 20. 33. U.S.C. 1321(d) (1972)
- 21. At the RRT meeting there was little doubt that at the depth to which the GLOBAL HOPE would be sunk, any residue oil would not escape, having become heavy and immobile due to the cold temperatures. Furthermore, at the proposed location the depth was so great as to preclude any obstruction to bottom fishing, the site being on the southern out skirt of the Georges Bank. Interestingly enough Captain Arthur McKenzie of the Tanker Advisory Center pointed out that probably as much as 100,000 gallons of oil was being discharged at sea on any one day off the Coast of New England by foreign tankers washing tanks. In his opinion 20,000 gallons residue aboard a sunken GLOBAL HOPE wasn't worth worrying about. Apparently the Commonwealth and the National Marine Fisheries Agency were more concerned with the publicity.
- 23. 33 U.S.C. 1321 (1972)
- 24. 40 C.F.R. 1510.42(a) (1978)
- 25. 40 C.F.R. 1510.44 (1978)
- 26. 40 C.F.R. 1510.42(a) (1978)
- 27. 40 C.F.R. 1510.42(c) (1978)
- 28. 33 U.S.C. 1321(k) (1972)

- 29. 33 U.S.C. 1321(d) & (f) (1972)
- 30. Recent amendments to the Federal Water Pollution Control Act have i increased the levels of liability. The new limits were not applicable, however, at the time of the GLOBAL HOPE'S gounding.
- 31. 33 U.S.C. 1321 (1972)
- 32. 33 U.S.C. 1321(d)
- 33. Ibid.
- 34. The Coast Guard's Oceanographic Unit, located in Washington D.C. is capable of providing timely projections of oil spill drift trajectories based on current, tide and weather information.
- 35. THE GLOBAL HOPE had an unremarkable history at the time of her arrival in Salem Sound. Though less than 20 years had passed since her launching, she had been sorely used by her owners. Vestiges of earlier rank and prestige were revealed in the teak decking and mahogany railings of her mid-ship house. Heavy layers of chipped paint, rusted doggings on hatch covers, and clutter throughout testified to her neglect. As GLOBAL HOPE - she had sailed at one time under another name. She had sustained a fire aboard in 1974 and grounded in 1976. Her record since 1977 contained one deficiency letter and several discrepancies, discovered when boarded by Coast Guard inspectors at Salem. None of the latter items had any causal effect in the vessel's grounding and the resultant oil spill in Salem Sound.
- 36. The writer does not treat the comparable role of the EPA in responding to inland (vice coastal) oil spills, and does not suggest that the EPA experiences similar problems. OSC contact with that agency's representatives has generally stemmed from their role as members on the RRT and as scientific support coordinators on scene. They have been a faithful and reliable source of assistance whenever called upon.
- 37. As one wit responded after the second telephone alert, "Stand-bythey come in three's." The humor would be short-lived, for within 12 hours the third spill, the GLOBAL HOPE - did occur. Furthermore, within 48 hours thereafter, a fourth alert would be sent out when over a million gallons of gasoline would spill from a tank at a coastal area fuel storage facility.

#### BIBLIOGRAPHY

#### DOCUMENTARY

## 33 U.S.C. 1321 (1972)

40 C.F.R. 1510 (1977)

Impact of oil Spillage from World War II Tanker Sinkings, MIT Sea Grant Program, Report No. 77-4, January 1977.

#### INTERVIEWS

Captain Walter Folger, USCG. Chairman, Regional Response Team (Coastal), First Federal Region, February 1978 - September 1978.

ŗ

Chief, Marine Safety Division; Office of the Commander, First Coast Guard District, February 1978 - September 1978

Captain Lynn Hein, USCG Commanding Officer, Marine Safety Office Boston, First Coast Guard District. February 1978 - September 1978

Federal On-scene Coordinator, Tank Vessel Global Hope, February 1978 - August 1978

Chairman, Regional Response Team (Coastal), First Federal Region October 1978 -

Chief, Marine Safety Division, Office of the Commander, First Coast Guard District, October 1978 -

Commander Charles Maclin, USN Office of Superintendant of Salvage, Navy Sea Systems Command.

Lieutenant Commander Joseph Marotta, USCG, Chief, Marine Environmental Protection Branch, Marine Safety Division, Office of the Commander, First Coast Guard District, February 1978 -

- Lieutenant Commander Francis Owens, USCG Chief, Commercial Vessel Safety Branch, Marine Safety Division, Office of the Commander, First Coast Guard District, February 1978 -
- Lieutenant (junion grade) Liane Apostolos, USCGR Assistant Chief, Port Safety Branch, Marine Safety Division, Office of the Commander, First Coast Guard District, February 1978 -
- COMMENTARIES: T/V Global Hope Regional Response Center (Coastal) February 1978 - March 1978

Jack Conlon, Environmental Protection Agency

Francis Donovan, Army Corp of Engineers

Marvin Bouson, National Marine Fisheries Service

Allen Jackson, Fish and Wildlife Service

Captain F. Deley, USN

Captain Walter Folger USCG

Captain Lynn Hein USCG

Jerry Totten, Supervisor of Salvage USN.

Captain Arthur McKenzie, Tanker Advisory Center,

Captain John Russel, Marblehead Police

Ralph Hobbs, Jr., Salem Harbor Master

John Wolfgram, Marblehead Harbor Master

Rear Admiral William Schwob, USCG, Commander First Coast Guard District

Lieutenant Commander Barry Chambers, USCG, Commanding Officer, Atlantic Strike Team, National Strike Force

Commissioner David Standley, Department of Environment, Quality Engineering, Commonwealth of Massachusetts

Captain George Landrigan, Salem Harbor Pilot