

UNITED STATES COAST GUARD

REPORT OF INVESTIGATION INTO THE CIRCUMSTANCES SURROUNDING THE INCIDENT INVOLVING NORTHERN EDGE SINKING (5 DEAD)

ON 12/20/2004



MISLE ACTIVITY NUMBER: 2264168 ORIGINATING UNIT: MSO PROVIDENCE MISLE ACTIVITY OWNER: COMMANDANT (G-MRI) MISLE ACTIVITY CONTROLLER: COMMANDANT (G-MRI) MISLE CASE NUMBER: 213971

I. INCIDENT BRIEF

At approximately 1644 on December 20, 2004 the F/V NORTHERN EDGE a 75ft scalloper with a crew of six persons was fishing (towing two dredges) 45 NM SE of Nantucket, MA when, according to an eye witnesses account, the vessel suddenly listed to the starboard side. At the time of the incident five of the six crewmen were on deck and the captain was in the wheelhouse. As the vessel listed the crew ran to the stern.

Two crewmen cut the liferaft loose and it fell in the water. Another crewmen jumped in the water to retrieve the raft. Grabbing the liferaft painter lanyard (line) the crewman swam back to the vessel attempting to hand the lanyard to another crewman on the stern so they could attempt to open it. The vessel then rolled further knocking him underwater before completing the lanyard exchange.

Once the crewmen resurfaced, he swam back to the liferaft, popped it open and climbed in. While in the raft the crewman saw three of his shipmates on the stern and the forth crewman in the water attempting to swim to towards the liferaft. The crewman attempting to swim to the liferaft disappeared in the waves. The vessel then suddenly capsized and the three remaining crewmen on the stern went in the water.

The crewman in the liferaft attempted to call for his shipmates but heard or saw no one. The captain was never seen on deck. The crewman in the liferaft found the survival kit and used the flares to hail other vessels working in the area. The crewman was picked up by the F/V DIANE MARIE approximately 40 minutes after the sinking. None of the other 5 missing crewmen were found and are presumed dead.

Drug and alcohol testing was not conducted due to the lapse in time between the incident and the survivor returning to port. The survivor did not return to port until 36 hours after the accident.

Possible illegal emigration issues have been forwarded to INS.

See IO narrative in correspondences for more details on the casualty investigation.

II. EXECUTIVE SUMMARY

Incident Summary

At approximately 1644 on December 20, 2004 the F/V NORTHERN EDGE a 75ft scalloper with a crew of six persons was fishing (towing two dredges) 45 NM SE of Nantucket, MA when, according to an eye witnesses account, the vessel suddenly listed to the starboard side. At the time of the incident five of the six crewmen were on deck and the captain was in the wheelhouse. As the vessel listed the crew ran to the stern.

Two crewmen cut the liferaft loose and it fell in the water. Another crewmen jumped in the water to retrieve the raft. Grabbing the liferaft painter lanyard (line) the crewman swam back to the vessel attempting to hand the lanyard to another crewman on the stern so they could attempt to open it. The vessel then rolled further knocking him underwater before completing the lanyard exchange.

Once the crewmen resurfaced, he swam back to the liferaft, popped it open and climbed in. While in the raft the crewman saw three of his shipmates on the stern and the forth crewman in the water attempting to swim to towards the liferaft. The crewman attempting to swim to the liferaft disappeared in the waves. The vessel then suddenly capsized and the three remaining crewmen on the stern went in the water.

The crewman in the liferaft attempted to call for his shipmates but heard or saw no one. The captain was never seen on deck. The crewman in the liferaft found the survival kit and used the flares to hail other vessels working in the area. The crewman was picked up by the F/V DIANE MARIE approximately 40 minutes after the sinking. None of the other 5 missing crewmen were found and are presumed dead.

Drug and alcohol testing was not conducted due to the lapse in time between the incident and the survivor returning to port. The survivor did not returned to port until 36 hours after the accident.

Possible illegal emigration issues have been forwarded to INS.

See IO narrative in correspondences for more details on the casualty investigation.

Incident Involved: Marine Casualty, Reportable

Level of Investigation: Informal IMO Classification: Routine USCG Classification: Major Marine Casualty Was this a Serious Marine Incident? Yes Was a Marine Board Convened by Commandant? No

Personnel Casualty Summary

Total Missing = 0Total Dead = 5

Total Injured = 1 Total at Risk, Not Injured = 0 Total People at Risk = 6 Other Personnel (Not at Risk) = 0

Vessel(s) Status Summary

Actual Total Loss(es) = 0 Total Constructive Loss, Salvaged = 0 Total Constructive Loss, Unsalvaged = 1 Damaged = 0 Undamaged = 1

Property Damage Summary/Total Damage

Vessel(s) = \$600000* Cargo = \$ Facility(s) = \$ Other = \$

* Includes estimates

Waterway Mobility Summary

Vessel Delays (including speed restrictions): None

III. ACTIONS IN RESPONSE TO THIS REPORT

Actions on Recommendations

Safety Recommendation #6009: 1. Review 1999 Fishing Vessel Task Force Report

For Coast Guard Headquarters (G-MOA). Recommendations submitted in the 1999 Fishing Vessel Task Force Report entitled "Living to Fish, Dying to Fish" should be reviewed and implemented to the greatest extent possible. Implementing these recommendations would drastically improve the safety of all commercial fishing vessels by providing much needed safety requirements currently not required at this time.

Date Created: 03/30/2005 Current Owner Unit: COMMANDANT (G-MOA) Date Last Modified: 07/21/2005 3:34:45 PM Priority: Normal

Endorsement(s):

>USER: ______./MSO Providence >TIME: 03/30/2005 15:21 >STATUS: --->Forward >NEW OWNER: D01 M For review and endorsement

>USER:

./D01 M

>TIME: 05/05/2005 11:46 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence Returned for revision.

>USER:

./MSO Providence

>TIME: 05/06/2005 10:55 >STATUS: Return for Revision--->Forward >NEW OWNER: D01 M Forward recommending approval.

>USER: //D01 M >TIME: 06/27/2005 15:20 >STATUS: Forward--->Forward >NEW OWNER: COMDT MOA

(m) Concur with recommendation of IO. Numerous safety recommendations made by Coast Guard Investigating Officers over the years regarding fishing vessel casualties have addressed the important factors of vessel seaworthiness and crew competency. These recommendations have been consistently basic and straightforward: Regulatory oversight, licensing and/or competency standards for navigation and seamanship, seaworthy boats, adequate survival equipment, and safety conscious resource and industry management regimes. There continues to be resistance in the commercial fishing community to the implementation of standards that ultimately could save the lives of scores of fishermen. Many nations with significant fishing fleets impose higher standards than the United States imposes on its fishing vessels. There needs to be a change to the culture that accepts the high risks of fishing as part of the job and a move toward national standards consistent with international fishing vessel standards. The "Living to Fish, Dying to Fish" report provides a road map to effect change.

>USER:

W./COMDT MOA

>TIME: 07/21/2005 15:33

>STATUS: Forward--->Final Agency Action

>NEW OWNER: COMDT MOA

The Final Agency Action has been determined and approved by W. D. Rabe by direction of the Commandant.

Final Agency Action:

Concur- Acceptable Action > ./COMDT MOA >07/21/2005 15:34:

We concur with this recommendation. We are currently conducting a review that is evaluating all facets of the Commercial Fishing Vessel Safety Program in conjunction with a regulatory development project and strategy development process. All recommendations from past studies, including the 1999 Fishing Vessel Safety Task Force report, as well as recommendations from marine casualty investigation reports are being considered in the review. Upon completion of the review, we will endeavor to implement those recommendations identified as most likely to be effective and feasible in an effort to improve commercial fishing vessel safety.

W. D. Rabe By direction

Required Actions:

Proposed Start Date: 03/30/2005 Proposed Completion Date: 03/30/2005 Actual Start Date: 03/30/2005 Actual Completion Date: 03/30/2005

Estimated Effort to Complete: 0 Staff Days Action Status: Action Commentary:

Safety Recommendation #6010: 2. Establish Formal Training Standards for Operators and Crew

For Coast Guard Headquarters (G-MOA). This investigation revealed a lack of licensing and crew competency credentials or certificates by all individuals onboard. With the exception of the survivor, none of the fishermen had formal training of any type related to vessel safety or emergency response. Witness accounts revealed at least two of the deckhands simply did not react to the vessel sinking in a manner consistent with someone who received basic survival training. Core competencies in vessel handling and basic survival training to include use of equipment already mandated on fishing vessels would ensure that the masters and crews have the minimum training to help them know how to increase their survivability.

2.a. Operator License. Obtain legislative authority and require that operators of certain commercial fishing vessels hold a vessel operator's license. Practical considerations will call for various grandfather clauses, phase-in schedules, and exemption provisions; however, the extent of such exemptions should be minimized. (From 1999 Fishing Vessel Task Force Report, Table 5-2, Recommendation 2.2)

2.b. Operator's License Prerequisite for Federal fishery Permits. Obtain legislative authority and require that operators of commercial fishing vessels holding a federal fishery permit have a vessel operator's license. The absence of a licensed mariner on fishing vessels leads to lack of accountability. A licensed mariner would be accountable for ensuring proper safety equipment is maintained, ensuring safety orientations and drills are conducted, and that the vessel is operated in a safe and prudent manner. (From 1999 Fishing Vessel Task Force Report, Table 5-2, Recommendation 2.3)

2.c. Crew Competency Certificate. Obtain legislative authority and require that certain crewmembers working aboard commercial fishing vessels hold a crew competency certificate similar to a merchant mariners' document. This initiative should follow the implementation of a licensing program for commercial fishing vessel operators. (From 1999 Fishing Vessel Task Force Report, Table 5-2, Recommendation 2.5)

Implementing these requirements would substantially improve the overall the safety of all commercial fishing vessels by ensuring masters and crewmen are qualified for their respected positions and trained in basic life saving skills.

Date Created: 03/30/2005 Current Owner Unit: COMMANDANT (G-MOA) Date Last Modified: 07/21/2005 3:36:53 PM Priority: Normal

Endorsement(s):

>USER:

./MSO Providence

>TIME: 03/30/2005 15:23 >STATUS: --->Forward >NEW OWNER: D01 M For review and endorsement.

>USER: ./D01 M

>TIME: 04/15/2005 07:52 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence Returned for revision.

./MSO Providence

>TIME: 04/15/2005 10:35 >STATUS: Return for Revision--->Forward >NEW OWNER: D01 M revised 4/15/05

>USER:

./D01 M

>TIME: 05/05/2005 11:48 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence Returned for revision.

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>USER: K./D01 M

>TIME: 06/27/2005 15:21

>STATUS: Forward--->Forward

>NEW OWNER: COMDT MOA

(m) Concur with recommendation of IO. The issue of licensing or some proof of competency for commercial fishing vessel operators and crew has been the subject of numerous safety recommendations by Coast Guard investigators following fishing vessel casualties. Until Congress enacts such changes, the unfortunate and probably avoidable circumstances that led to the untimely death of five individuals aboard the F/V NORTHERN EDGE will likely be repeated.

>USER: ./COMDT MOA

>TIME: 07/21/2005 15:36
>STATUS: Forward--->Final Agency Action
>NEW OWNER: COMDT MOA
The Final Agency Action has been determined and approved by W. D. Rabe by direction of the Commandant.

Final Agency Action:

Concur- Alternate Acceptable Action > ./COMDT MOA >07/21/2005 15:36:

We concur with the intent of this recommendation. We support efforts to improve crew competency at all levels of operation of commercial fishing industry vessels. One possible means to achieve such an improvement would be to implement requirements for licensing and certification of crewmembers; however, numerous requests for the necessary legal authority to implement such requirements have been unsuccessful in the past and there is no indication that a new request would be successful. Therefore we are seeking alternative methods to improve crew competency. One possibility under consideration is to require that emergency drills, which are already required to be conducted on commercial fishing vessels, be witnessed by the Coast Guard to ensure their effectiveness and successful completion.

W. D. Rabe By direction

Required Actions:

Proposed Start Date: 03/30/2005 Proposed Completion Date: 03/30/2005 Actual Start Date: 03/30/2005 Actual Completion Date: 03/30/2005

Estimated Effort to Complete: 0 Staff Days Action Status: Action Commentary:

Safety Recommendation #6011: 3. Establish Informal Training Standards for Operators and Crew

For Coast Guard Headquarters (G-MOA). This investigation revealed that no informal training or drills were conducted with the crew before departing the port or during the fishing trip. Core competences in vessel handling and basic survival training to include use of equipment already mandated for the vessel would ensure that the master and crew had the minimum training necessary to possibly survive an incident such as this. The investigation revealed that some of the crewmembers did not know how to react to the

emergent situation and subsequently perished. Informal training and drills conducted with this crew could have increased the crew's awareness and may have helped them effectively react to the emergency. Below are specific recommendations for informal training standards:

a. Drill Conductor Training. Re-evaluate required training for drill conductors considering course content and duration, refresher training, and market-driven availability of third party organizations able and willing to train conductors. (From 1999 Fishing Vessel Task Force Report, Table 5-2, Recommendation 2.1)

b. Safety Awareness Drills. Amend 46 CFR 28.270 to require: (1) safety awareness instruction for each crewmember, (2) moving equipment hazards instruction for each crewmember, and (3) vessel operator logging of drill dates/times, participants, and drill conductor. (From 1999 Fishing Vessel Task Force Report, Table 5-4, Recommendation 4.2)

c. Safety Briefings. Establish regulations requiring initial and periodic crew safety briefings pertaining to vessel specific machinery and deck hazards. (From 1999 Fishing Vessel Task Force Report, Table 5-4, Recommendation 4.6)

Implementing these requirements would substantially improve the overall the safety of all commercial fishing vessels by ensuring masters and crewmen are properly trained and are continuously training in the event of fire/flooding or abandonship at sea.

Date Created: 03/30/2005 Current Owner Unit: COMMANDANT (G-MOA) Date Last Modified: 07/21/2005 3:38:18 PM **Priority: Normal**

Endorsement(s):

>USER: ./MSO Providence >TIME: 03/30/2005 15:24 >STATUS: --->Forward >NEW OWNER: D01 For review and endorsement.

./D01

>USER: >TIME: 04/15/2005 14:21 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence Return to LCDR J. Williams per her request.

>USER: Williams, Jennifer F./MSO Providence

>TIME: 04/15/2005 14:23 >STATUS: Return for Revision--->Forward >NEW OWNER: D01 M for review and endorsement

>USER: ______./D01 M >TIME: 05/05/2005 11:48 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence Returned for revision.

>USER: ./D01 M

>TIME: 06/27/2005 15:23

>STATUS: Forward--->Forward >NEW OWNER: COMDT MOA

(m) Concur with recommendation of IO. There continues to be resistance from the commercial fishing community to the implementation of mandatory standards that ultimately could save the lives of scores of fishermen. There needs to be a change to the culture that accepts the high risks of fishing as part of the job and a move toward nationwide safety standards. Bringing fishing vessels under the umbrella of federal inspection regulations would allow the Coast Guard to enforce compliance. The voluntary fishing vessel inspection program has gained ground and made some impact on safety in the industry, but until enforceable regulations are implemented, the percentage of voluntary compliance will likely remain relatively stagnant.

>USER: ./COMDT MOA

>TIME: 07/21/2005 15:37

>STATUS: Forward--->Final Agency Action

>NEW OWNER: COMDT MOA

The Final Agency Action has been determined and approved by W. D. Rabe by direction of the Commandant.

Final Agency Action:

Concur- Alternate Acceptable Action > ./COMDT MOA

>07/21/2005 15:38:

We concur with the intent of this recommendation. This recommendation and the issues it addresses are being included in the comprehensive review of the Fishing Vessel Safety program currently underway and, where appropriate, will be included in the current regulatory development project.

W. D. Rabe By direction

Required Actions:

Proposed Start Date: 03/30/2005 Proposed Completion Date: 03/30/2005 Actual Start Date: 03/30/2005 Actual Completion Date: 03/30/2005

Estimated Effort to Complete: 0 Staff Days Action Status: Action Commentary:

Safety Recommendation #6012: 4. Establish Safety Standards for Survival Equipment

For Coast Guard Headquarters (G-MOA). This investigation revealed that none of the crewmembers wore a pfd or immersion suit while working on deck. Furthermore, the pfd/immersion suits were not readily accessible to the deck area where the crewmembers commonly work. If the crew on deck were wearing PFDs at the time of the incident, it may have increased their chance for survival by allowing them much needed floatation to swim to the liferaft. If the crewmembers were able to retrieve and don their immersion suits, they would have further been protected from the cold water thus significantly increasing their ability to reach the liferaft or survive for a longer period of time in cold water.

4.a. Wear PFDs on Deck. Establish regulations requiring the wearing of personal flotation devices (PFDs) in designated areas on deck. Encourage innovation for designs (e.g., inflatable) that do not interfere with work. (From 1999 Fishing Vessel Task Force Report, Table 5-4, Recommendation 4.10)

4.b. Location of stowage for survival suits when working on vessels during in cold-water months: Regulations already require the stowage of immersion suits to be readily accessible to the individual for whom it intended, from both the individual's work station and berthing area. The Commercial Fishing Industry Vessel Advisory Committee and CFVS Program Manager should charter a focus group to study this issue and develop guidance for fishing vessel operators and Coast Guard CFVS Examiners to help them determine what locations are considered "readily accessible" for different size and type of fishing vessels.

Implementing this recommendation would save countless fishermen's lives by giving them the ability to stay afloat during a fast sinking or man overboard situation, thus

allowing time for their shipmates, other vessels or Coast Guard SAR assets to find and rescue them.

Date Created: 03/30/2005 Current Owner Unit: COMMANDANT (G-MOA) Date Last Modified: 07/21/2005 3:39:43 PM **Priority: Normal**

Endorsement(s):

>USER: Williams, Jennifer F./MSO Providence >TIME: 03/30/2005 15:25 >STATUS: --->Forward >NEW OWNER: D01 M For review and endorsement.

----->USER:

./D01 M

>TIME: 04/15/2005 07:54 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence Returned for revision.

>USER: Williams, Jennifer F./MSO Providence >TIME: 04/15/2005 10:36 >STATUS: Return for Revision--->Forward >NEW OWNER: D01 M revised 4/15/05

>USER: ./D01 M

>TIME: 05/05/2005 11:49 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence Returned for revision.

>USER: ./MSO Providence >TIME: 05/06/2005 11:14 >STATUS: Return for Revision--->Forward >NEW OWNER: D01 M Forward recommending approval.

>USER: D01 M

>TIME: 06/27/2005 15:24

>STATUS: Forward--->Forward

>NEW OWNER: COMDT MOA

(m) Concur with recommendation of IO. Bringing fishing vessels under the umbrella of federal inspection regulations would allow the Coast Guard to enforce compliance. The voluntary fishing vessel inspection program has gained ground and made some impact on safety in the industry, but until enforceable regulations are implemented, the percentage of voluntary compliance will likely remain relatively stagnant. With federal regulations in place, the focus of the CFVS program can shift to enforcement rather than education.

>USER:

COMDT MOA

>TIME: 07/21/2005 15:38

>STATUS: Forward--->Final Agency Action

>NEW OWNER: COMDT MOA

The Final Agency Action has been determined and approved by W. D. Rabe by direction of the Commandant.

Final Agency Action:

Concur- Alternate Acceptable Action

./COMDT MOA

>07/21/2005 15:39:

We partially concur with this recommendation. The Coast Guard raised the possibility of requiring the wearing of personal flotation devices (PFDs) with the Commercial Fishing Industry Vessel Safety Advisory Committee (CFIVSAC) during the development of the original safety regulations. At that time, the CFIVSAC recognized the benefits of wearing some form of buoyancy aid while working on deck, but also noted many PFDs work to the detriment of safety by limiting the mobility of the wearer and being susceptible to being snagged on deck fittings and fishing gear. As a result, the CFIVSAC recommended that PFDs not be required to be worn. Now however, there are PFD designs that do not restrict the wearers' mobility and fit under traditional fishing outerwear so that they no longer present snag hazards. Type V commercial hybrid inflatable devices are allowed for use on vessels of 40 feet or more in length under 46 CFR 28.110, but there are none currently produced. Type V fully inflatable devices have been approved by the Coast Guard and have become widely available. As a result, we will consider asking the CFIVSAC to revisit this issue. We will include the issue of stowage and accessibility of survival gear in the current regulatory development project, as well as consider submitting it to the CFIVSAC.

W. D. Rabe By direction

Required Actions:

Proposed Start Date: 03/30/2005 Proposed Completion Date: 03/30/2005

Actual Start Date: 03/30/2005 Actual Completion Date: 03/30/2005

Estimated Effort to Complete: 0 Staff Days Action Status: Action Commentary:

Safety Recommendation #6013: 5. Conduct Research and Development

For Coast Guard Headquarters (G-MOA). This investigation revealed that none of the crewmembers were wearing immersion suits, pfds, or worksuits. These items of personal survival gear are bulky and cumbersome to move around in. If personal survival gear was more conducive to fishing, it is probable that fewer fishermen would be opposed to wearing them on deck or designated areas and more fishermen would survive immersion into the water.

This investigation also revealed a common practice among scallop vessels to keep their scupper gates closed to prevent their catch from washing overboard. If the scupper gates were open on this vessel at the time of the casualty, it would have had a positive affect on the vessel's stability by allowing trapped water and scallops off the vessel.

Below are specific recommendations for research and development:

a. Immersion Suits. Develop an immersion suit that allows greater freedom of movement and is easier to don. (From 1999 Fishing Vessel Task Force Report, Table 5-6, Recommendation 6.3)

b. Work Suits. Develop a full-body protective suit that can allows freedom of movement, can be comfortably worn in moderate temperatures, and provides reasonable protection against hypothermia. (From 1999 Fishing Vessel Task Force Report, Table 5-6, Recommendation 6.4)

c. Scupper Gates. Develop scupper gates with the capability for remote operation in case of emergencies or design scupper gates with expanded metal that allows for drainage of the deck while keeping the catch on deck.

d. Winch equipment settings. Develop guidance for fishermen to properly set winch drum motor brakes pressures enabling them to slip when the dredge encounters resistance above a certain threshold. Presently, most of the winch equipment in service have the ability to have the brake pressures adjusted.

The development and regulatory requirement of this type of personnel safety gear and vessel equipment would lead to substantially improving the overall the safety of all commercial fishing vessels. Implementing these recommendations would provide the crew with valuable time that could enable them an opportunity to survive a casualty or prevent one from happening.

Date Created: 03/30/2005 Current Owner Unit: COMMANDANT (G-MOA) Date Last Modified: 07/21/2005 3:40:59 PM Priority: Normal

Endorsement(s):

>USER:

./MSO Providence

>TIME: 03/30/2005 15:26 >STATUS: --->Forward >NEW OWNER: D01 M For review and endorsement

>STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence Returned for revision.

>USER: ./D01 M

>TIME: 06/27/2005 15:27

>STATUS: Forward--->Forward

>NEW OWNER: COMDT MOA

(m) Concur with recommendation of IO. However, this recommendation should be addressed to and by the fishing vessel industry and its equipment manufacturers.

>USER:

./COMDT MOA

>TIME: 07/21/2005 15:40

>STATUS: Forward--->Final Agency Action

>NEW OWNER: COMDT MOA

The Final Agency Action has been determined and approved by W. D. Rabe by direction of the Commandant.

Final Agency Action:

Concur- Alternate Acceptable Action > ./COMDT MOA

>07/21/2005 15:40:

We partially concur with this recommendation. We will include the topic of scupper gates and freeing ports in our comprehensive review of the Commercial Fishing Vessel Safety Program and the current regulatory project. As for the other specific recommendations regarding immersion suits, work suits, and winch equipment settings, we do not believe further action is necessary for the following reasons:

(1) The performance of approved immersion suits is based on longstanding international regulations and standards. The ability to don the suits is evaluated in both ambient and very cold conditions, and there is no indication historically, or in the context of this casualty, that the ability to don the immersion suits was insufficient if they are properly maintained.

(2) Approved Type III and Type V deck/work suits and "float coats" that allow freedom of movement, can be comfortably worn in moderate temperatures, and that provide reasonable protection against hypothermia are already widely available.

(3) Development of guidance for setting winch drum motor brake pressures would be complex and of questionable value. There are numerous variables that can affect proper brake pressure, including weight and drag of fishing gear, condition of the brake, speed of the vessel, length of the towed gear, and tidal currents. Winch drum motor brake pressure must be carefully monitored to account for the existing fishing conditions, and voluntary guidance could not cover every possible variable.

W. D. Rabe By direction

Required Actions:

Proposed Start Date: 03/30/2005 Proposed Completion Date: 03/30/2005 Actual Start Date: 03/30/2005 Actual Completion Date: 03/30/2005

Estimated Effort to Complete: 0 Staff Days Action Status: Action Commentary:

Safety Recommendation #6014: 6. Ensure vessels comply with regulatory standards

For Coast Guard Headquarters (G-MOA). All dockside examinations are voluntary and the discovery of any discrepancies during a voluntary dockside examination is not considered to be a violation. If fishing vessel regulations allowed for periodic inspections or mandatory examinations with the authority to enforce all safety regulations at the dock, the required vessel standards, drills and training deficiencies could have been effectively enforced. Below is a specific recommendation for compliance with regulatory standards:

a. Safety Inspections. Obtain legislative authority to require commercial fishing vessels to undergo periodic vessel safety inspections with the authority to enforce such standards at the dock. This effort would require the development of expanded standards in addition to the limited standards currently contained in 46 CFR 28. (From 1999 Fishing Vessel Task Force Report, Table 5-3, Recommendation 3.8)

Implementing this recommendation would ensure commercial fishing vessels are meeting federally required safety regulations. Presently commercial fishing vessels are not subject to Coast Guard inspection. The dockside voluntary fishing vessel examiner program only addresses life saving equipment requirements and the program is "voluntary". It does not take into account the condition of the structural, engineering and navigation systems, which are vital in determining how safe a vessel is.

Date Created: 03/30/2005 Current Owner Unit: COMMANDANT (G-MOA) Date Last Modified: 07/21/2005 3:42:14 PM Priority: Normal

Endorsement(s):

>USER: Williams, Jennifer F./MSO Providence >TIME: 03/30/2005 15:28 >STATUS: --->Forward >NEW OWNER: D01 M For review and endorsement.

>USER: ______./D01 M >TIME: 05/05/2005 11:47 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence

Returned for revision.

>USER:

./MSO Providence

>TIME: 05/06/2005 11:16 >STATUS: Return for Revision--->Forward >NEW OWNER: D01 M Forward recommending approval.

>USER: ./D01 M

>TIME: 06/27/2005 15:27

>STATUS: Forward--->Forward

>NEW OWNER: COMDT MOA

(m) Concur with recommendation of IO. The voluntary fishing vessel inspection program has gained ground and made some impact on safety in the industry, but until enforceable regulations are implemented, the percentage of voluntary compliance will likely remain relatively stagnant.

>USER:

./COMDT MOA

>TIME: 07/21/2005 15:41

>STATUS: Forward--->Final Agency Action

>NEW OWNER: COMDT MOA

The Final Agency Action has been determined and approved by W. D. Rabe by direction of the Commandant.

Final Agency Action:

Concur- Alternate Acceptable Action > ./COMDT MOA >07/21/2005 15:42:

We concur with the intent of this recommendation. We agree that there is a need to improve the compliance of commercial fishing industry vessels with requirements designed to improve their safety; however, numerous requests by the Coast Guard in the past for the legislative authority to require mandatory, periodic safety inspections for commercial fishing industry vessels have been turned down. In light of this, we are evaluating the extent of all current authorities the Coast Guard has to enforce safety standards on commercial fishing industry vessels as part of a comprehensive review of the Commercial Fishing Vessel Safety Program.

W. D. Rabe By direction

Required Actions:

Proposed Start Date: 03/30/2005 Proposed Completion Date: 03/30/2005 Actual Start Date: 03/30/2005 Actual Completion Date: 03/30/2005

Estimated Effort to Complete: 0 Staff Days Action Status: Action Commentary:

Safety Recommendation #6015: 7. Expand Safety and Stability Standards

For Coast Guard Headquarters (G-MOA). Fishing industry vessels are subject to greater dynamics in stability and watertight integrity due to the fact that their cargo operations are conducted at sea when subjected to weather and sea conditions. Having loading and operating parameters established and available prior to operating is extremely important

to ensuring the safety of all vessels and crew. If this vessel had a stability test to determine its capabilities when operating (i.e. dragging/loading), in particular sea conditions and in a loaded and unloaded configuration (i.e. fuel and water tank levels, deck and hold cargo) the captain would have been better informed of the stability status of his vessel on that evening. This investigation revealed that the vessel's tow cable hung up, causing a sudden list that compromised its stability. If the tow cable could have been effectively slacked or disconnected, the vessel might have recovered. Below are specific recommendations for safety and stability:

a. Stability Regulation Project. Complete project requiring stability letters for all commercial fishing vessels greater than, or equal to, 50 feet in length. Also establish watertight integrity and subdivision requirements for commercial fishing vessels less than 50 feet in length. Evaluate impact and feasibility of eliminating "grandfather" provisions. (From 1999 Fishing Vessel Task Force Report, Table 5-4, Recommendation 4.1)

b. Fishing vessel equipment: Prescribe standards for winch motor brake systems being used in conjunction with towing cables to be set to a particular limit allowing it to slip if the tow cable reaches a certain tension.

c. Good Marine Practices. Develop good marine standards and practices for application to equipment, materials, designs, and operations on commercial fishing vessels. (From 1999 Fishing Vessel Task Force Report, Table 5-4, Recommendation 4.14)

Implementing these recommendations would substantially improve the overall safety of all commercial fishing vessels by determining first and foremost whether the vessel is a stable platform and what sea state and cargo capacity limits the vessel can safely operate under.

Date Created: 03/30/2005 Current Owner Unit: COMMANDANT (G-MOA) Date Last Modified: 07/21/2005 3:43:37 PM Priority: Normal

Endorsement(s):

>USER: Williams, Jennifer F./MSO Providence >TIME: 03/30/2005 15:34 >STATUS: --->Forward >NEW OWNER: D01 M For review and endorsement.

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>USER: ______./D01 M >TIME: 05/05/2005 11:47 >STATUS: Forward--->Return for Revision >NEW OWNER: MSO Providence

Returned for revision.

>USER:

./D01 M

>TIME: 06/27/2005 15:28 >STATUS: Forward--->Forward

>NEW OWNER: COMDT MOA

(m) Concur with recommendation of IO. Deaths within the fishing industry persist due to a culture that eschews safety in favor of the bottom line. Despite the significant advances in safety for vessels operating at sea, and general adherence by most operators to those standards and requirements, the problem remains that there is still a small percentage of operators willing to cut safety corners and push stability limits, even if it means putting a crew at risk. The regulatory tools at the Coast Guard's disposal, as legislated by Congress, are limited and need to be expanded.

>USER:

./COMDT MOA

>TIME: 07/21/2005 15:42

>STATUS: Forward--->Final Agency Action

>NEW OWNER: COMDT MOA

The Final Agency Action has been determined and approved by W. D. Rabe by direction of the Commandant.

Final Agency Action:

Concur- Alternate Acceptable Action > ./COMDT MOA >07/21/2005 15:43:

We partially concur with this recommendation. We are actively working on a regulatory project that includes proposed stability regulations for vessels of less than 79 feet in length. However, the proposed requirements would only apply to vessels that are newly constructed or substantially altered after the regulations enter into force. This is due to the Commercial Fishing Industry Vessel Safety Act's (P.L. 100-424) explicit prohibition against requiring the alteration of a vessel or associated equipment that was constructed or manufactured before the effective date of the regulation. Requirements for safety of deck equipment will also be considered as part of the same regulatory project; however, the Coast Guard does not have authority to mandate design features of this equipment. Nonetheless, the Coast Guard does have authority to tailor regulations that consider the shortcomings of existing equipment in vessel operations and will seek to do so.

W. D. Rabe By direction

Required Actions:

Proposed Start Date: 03/30/2005 Proposed Completion Date: 03/30/2005

Estimated Effort to Complete: 0 Staff Days Action Status: Action Commentary:

Safety Alerts

Actual Start Date: 03/30/2005 Actual Completion Date: 03/30/2005

IV. FINDINGS OF FACT

Subjects of the Investigation

Vessels. The following vessels were subjects of this investigation. Particulars for each vessel follow.

Vessel Name: Flag: Vessel Identification Number: Call Sign: Status: Role: Vessel Class, Type, Sub-Type: Gross Tonnage(GRT): Net Tonnage(NRT): Deadweight Tons: Length: Home/Hailing Port: Keel Laid Date: **Delivery Date:** Place of Construction: **Builder Name: Propulsion:** Horsepower: Master: **Classification Society:** Owner:

DIANE MARIE United States of America 1041740

Undamaged Transiting Vicinity of Primary Subject Fishing Vessel, Fish Catching Vessel, General

91.9

NEW ORLEANS, LA, UNITED STATES TRI MINH DO

SEA ROVER FISHING INC 1860 TANGLEWOOD DRIVE NE

ST PETERSBURG, FL, 33702 US FIVE STARS SEAFOOD INC 19597 CHEF MENTEUR HWY

Operator:

NEW ORLEANS, LA, 70129

Inspection Subchapter: Most Recent Vessel Inspection Activity:

Vessel Name: Flag: Vessel Identification Number: Call Sign: NORTHERN EDGE UNITED STATES 607574 WQZ3265

i of myesugation	
Status:	Total Constructive Loss: Unsalvaged
Role:	Involved in a Marine Casualty
Vessel Class, Type, Sub-Type:	Fishing Vessel, Fish Catching Vessel, General
Gross Tonnage(GRT):	
Net Tonnage(NRT):	
Deadweight Tons:	
Length:	75.7
Home/Hailing Port:	
Keel Laid Date:	
Delivery Date:	
Place of Construction:	PORT CANAVERAL, FL, UNITED
	STATES
Builder Name:	CANAVERAL SHIPBUILDING
	CORPORATION
Propulsion:	
Horsepower:	
Master:	
Classification Society:	
Owner:	K & R FISHING ENTERPRISES, INC
	84 FRONT STREET
	NEW BEDFORD MA 02740

NEW BEDFORD, MA, 02740 K & R FISHING ENTERPRISES, INC 84 FRONT STREET

Operator:

NEW BEDFORD, MA, 02740 LAPOINTE, ROGER 62 THOMAS ST New Bedford, MA, 02740 US

Inspection Subchapter: Most Recent Vessel Inspection Activity:

Facilities. The following facilities were subjects of this investigation. Particulars for each facility follow.

Parties and Organizations. The following people and organizations were subjects of this investigation.

Status: Role: Gender: Age:

Not at Risk Witness M

SSN: Birth Date: Email Address: Phone Number(): Address(Home/Primary Residence):



Comments:

CROWLEY, GLEN E Status: Role: Gender: Age:

SSN: Birth Date: Email Address: Phone Number(): Address(Friend/Relative): Dead Subject of Investigation M 45

020-52-2583 05/04/1959

Comments:

Status: Role: Gender: Age: SSN:

Birth Date: Email Address: Phone Number(Work): Address(Primary Place of Business): Not at Risk Other M

(508) 971-3316 Marine Safety Consultants, Inc. 26 Water Street Fairhaven, MA 02719 USA US

Comments:

FLORES, JUAN M Status: Role: Gender: Age: SSN: Birth Date:

Dead Subject of Investigation M

455-11-3291

Email Address: Phone Number(): Address(Primary): Comments: Status: Injured Role: Subject of Investigation Gender: Μ Age: SSN: Birth Date: **Email Address:** Phone Number(): Address(Home/Primary Residence): Comments: Status: Not at Risk Role: Subject of Investigation Gender: Μ Age: SSN: Birth Date: Email Address: Phone Number(Phone Number): Address(Home/Primary Residence): Comments: Not at Risk Status: Role: Other Gender: Μ Age: SSN: Birth Date: Email Address: Phone Number():

Address(Home/Primary Residence):

Comments:

Prior crewmember - not on board at

time of incident.

LOPES, CARLOS A

Status: Role: Gender: Age: SSN: Birth Date: **Email Address:** Phone Number(Phone Number): Address(Home/Primary Residence): Dead Subject of Investigation Μ 48 047-50-1904 07/12/1956



Comments:

MORENO, ERIK I Status: Dead Role: Subject of Investigation Gender: Μ Age: SSN: 528-50-0127 Birth Date: **Email Address:** Phone Number(): Address(Home/Primary Residence):

Comments:

Richards, Raymond Status: Role: Gender: Age: SSN: Birth Date: **Email Address:** Phone Number(): Address(Home/Primary Residence):

Dead Subject of Investigation Μ

007-80-2467



Comments:

K & R FISHING ENTERPRISES, INC Status: Role: Email Address:

Not at Risk Subject of Investigation

Phone Number(): Address(Primary Place of Business):

84 FRONT STREET

NEW BEDFORD, MA 02740

Comments:

NATIONAL MARINE FISHERIES SERVICEStatus:Not at RiskRole:OtherEmail Address:508-281-9222Address(Primary Place of Business):ONE BLACKBURN DRIVE

GLOUCESTER, MA 01930

Comments:

Status: Role: Email Address: Phone Number(Work): Address(Work): Not at Risk Other

POC

508 994-7300 18 North Water Street New Bedford, MA 02740 US

Comments:

Drug and Alcohol Testing. The following people have been determined by the Coast Guard, Law Enforcement Personnel, and/or the Marine Employer to have been directly involved in a Serious Marine Incident as defined in 46 CFR 4.03-2:

LOPES, CARLOS A; Subject of Investigation ; Subject of Investigation MORENO, ERIK I; Subject of Investigation FLORES, JUAN M; Subject of Investigation CROWLEY, GLEN E; Subject of Investigation Richards, Raymond Subject of Investigation

Response Resources. The following incident response resources were subjects of this investigation.

Resource Name:	ESCANABA
Resource ID:	
Kind:	Vessels
Sub-Kind:	Other

Report of Investigation	
Type:	
Resource Name: Resource ID:	ESCANABA
Kind:	Vessels
Sub-Kind:	Other
Type:	
Resource Name:	HH60J - 6001
Resource ID:	6001
Kind:	Aircraft (Helicopter)
Sub-Kind:	
Type:	
December Mensee	
Resource Name:	HH60J - 6001 6001
Resource ID: Kind:	
Sub-Kind:	Aircraft (Helicopter)
Type:	
Resource Name:	HH60J - 6032
Resource ID:	6032
Kind:	Aircraft (Helicopter)
Sub-Kind:	······································
Type:	
51	
Resource Name:	НН60Ј - 6032
Resource ID:	6032
Kind:	Aircraft (Helicopter)
Sub-Kind:	
Type:	
Resource Name:	HH60J - 6032
Resource ID:	6032
Kind:	Aircraft (Helicopter)
Sub-Kind:	
Type:	
Resource Name:	HU25C - 2140
Resource ID:	2140
Kind:	Aircraft (Fixed Wing)
Sub-Kind:	American (Prixed Wing)
Type:	
-) P	
Resource Name:	HU25C - 2140
Resource ID:	2140
Kind:	Aircraft (Fixed Wing)
Sub-Kind:	

Report of Investigation	
Type:	
Resource Name: Resource ID: Kind: Sub-Kind: Type:	HU25C - 2140 2140 Aircraft (Fixed Wing)
Resource Name: Resource ID: Kind: Sub-Kind: Type:	HU25C+ - 2133 2133 Aircraft (Fixed Wing)
Resource Name: Resource ID: Kind: Sub-Kind: Type:	WMEC - 907 907 Vessels Other
Resource Name: Resource ID: Kind: Sub-Kind: Type:	WPB - 1330 1330 Vessels Other

Other Subjects. The following were subjects of this investigation.

Waterway Segment(s). The following waterway segment(s) were subjects of this investigation.

ATLANTIC DEEP WATER ACCESS Role: Location Local Name: Segment #21 Description: Atlantic Ocean. ATLANTIC DEEP WATER SPINE ACCESS

Incident Information

Location(s).

Description	Latitude	Longitude
ATLANTIC DEEP WATER ACCESS	42 16.8936 N	070 42.7452 W
ATLANTIC DEEP WATER ACCESS	42 16.8936 N	070 42.7452 W
ATLANTIC DEEP WATER ACCESS	42 16.8936 N	070 42.7452 W
ATLANTIC DEEP WATER ACCESS	42 16.8936 N	070 42.7452 W

Sequence of Events.

12/20/2004 12:00:00 to 12/20/2004 12:00:00 (Estimated):

• •	ival suits and ers LANTIC DE	d personal flotat	CCESS
Subject(s) and Details:			
<u>Name</u>	Type	<u>Status</u>	Role
LOPES, CARLOS A	Party	Dead	Subject of
			Investigation
Details Filed: Detail Des			
			lation. Life jackets were not required on
the vessel and the require they were stored in the b			ble at the time of the sinking because
they were stored in the b	Party	Injured	Subject of
	1 urty	injuicu	Investigation
Details Filed: Detail Des	cription		investigation
		as required by regul	lation. Life jackets were not required on
			ble at the time of the sinking because
they were stored in the b	-		
MORENO, ERIK I	Party	Dead	Subject of
			Investigation
Details Filed: Detail Des			
			lation. Life jackets were not required on ble at the time of the sinking because
they were stored in the b			
FLORES, JUAN M	Party	Dead	Subject of
			Investigation
Details Filed: Detail Des	cription		6
	-	as required by regul	lation. Life jackets were not required on
			ble at the time of the sinking because
they were stored in the b	-		
CROWLEY, GLEN E	Party	Dead	Subject of
	• .•		Investigation
Details Filed: Detail Des			lation I if is late many and a suited on
			lation. Life jackets were not required on ble at the time of the sinking because
they were stored in the b			e e
Richards, Raymond	Party	Dead	Subject of
•	•		Investigation
Details Filed: Detail Des	cription		C
			lation. Life jackets were not required on
			ble at the time of the sinking because
they were stored in the b	erthing area in	side the main house	е.

12/20/2004 12:00:00 to 12/20/2004 12:00:00 (Estimated):

Condition Class: Person

Report of Investigation Condition Type: Personnel Condition Subject Type: Person Location: Known; US Waters Description: ATLANTIC DEEP WATER ACCESS Latitude: 42 16.8936 N Longitude: 070 42.7452 W Subject(s) and Details: Name Type Status Role Subject of LOPES, CARLOS A Party Dead Investigation **Details Filed: Personnel Condition** Human Factors: Human Factor: Type of training Factor Type: **Psychological Factors** Factor Sub-Type: Training Description: According to interviews with the survival and a past crewman Captain Lopes did not conduct the required training. Latent Unsafe Condition: Yes Merchant Mariner: No Injured Subject of Party Investigation **Details Filed: Personnel Condition** Human Factors: Human Factor: Type of training Factor Type: **Psychological Factors** Factor Sub-Type: Training Description: Crewman received no training or orientation after reporting on this vessel. Latent Unsafe Condition: Yes No Merchant Mariner: Subject of MORENO, ERIK I Party Dead Investigation **Details Filed: Personnel Condition** Human Factors: Human Factor: Type of training Factor Type: **Psychological Factors** Factor Sub-Type: Training No record of crewman recieving any training on this Description: vessel. Latent Unsafe Condition: No Merchant Mariner: No Subject of FLORES, JUAN M Party Dead Investigation Details Filed: Personnel Condition Human Factors: Human Factor: Weaknesses observed in training Factor Type: **Psychological Factors** Factor Sub-Type: Training Description: No record of crewman recieving any training on this vessel. Latent Unsafe Condition: No

Report of investigation				
Merchant N	Inrinar		No	
		Doutr	Dead	Subject of
CROWLEY,	GLEN E	Party	Dead	Subject of
		~		Investigation
Details Filed:		Conditio	n	
Human Fac				
	n Factor:		Type of trainin	
	Factor Type:		Psychological	Factors
	Factor Sub-Typ	pe:	Training	
	Description:		No record of c	rewman recieving any training on this
vessel.	Latent Unsafe	Condition	No.	
1		Condition	n: No	
Merchant M	Aariner:		No	
Richards, Ray		Party	Dead	Subject of
Kichaius, Ka	ymonu	Fally	Deau	
	_	~		Investigation
Details Filed:		Conditio	n	
Human Fac				
	n Factor:		Type of trainin	
	Factor Type:		Psychological	Factors
	Factor Sub-Typ	pe:	Training	
vessel.	Description:		No record of c	rewman recieving any training on this
	Latent Unsafe	Condition	n: No	
1		Condition	1. 110	
Merchant N	Aariner:		No	
12/20/2004 12:00:00 to 1	12/20/2004	12:00:00) (Estimated):	
Condition Class:	Vessel, Fa	cility. E	Equipment, Gear, or	Cargo
		•	quipment Condition	
Subject Type: I			quipinent condition	
• • • •	-			
Location: Know	,			
	1		DEEP WATER AC	
Latitu	de: 42 16.89	936 N	Longitude: 070 42.	7452 W
Subject(s) and De	etails:			
Name Type		Status	Role	
NORTHERN		Vessel		ctive Involved in a Marine
NORTHERN	LDOL	V C35C1		
			Loss: Unsalva	aged Casualty
Details Filed:	Material/E	quipmei		
System:			Lifesaving	
Sub-System			Immersion Suits	
Component	•• ••		Readily Accessible	and anite in the analy heathing area did
Details:	or the orite to 1	na racdil		val suits in the crew berthing area did
	л me suits to t	be readily	accessible during this ca	isuaity.
Cite:				
	10/00/0004	10.00 0		
12/20/2004 12:00:00 to 1	12/20/2004	12:00:00) (Known):	

Condition Class: Vessel, Facility, Equipment, Gear, or Cargo Condition Type: Stability Condition

Subject Type:

Location: Known; US Waters

Description: ATLANTIC DEEP WATER ACCESS

Latitude: 42 16.8936 N Longitude: 070 42.7452 W

Subject(s) and Details:

Name	<u>Type</u>	<u>Status</u>	Role
NORTHERN EDGE	Vessel	Total Constructive	Involved in a Marine
		Loss: Unsalvaged	Casualty

Details Filed: Detail Description

The NORTHERN EDGE was not required to comply with the stability regulations (46 CFR Part 28.500) because it was less than 79ft in length.

The owner never had any stability testing done on the vessel so there is no information available to determine how stable or unstable the vessel could have been from the point of construction in 1979 until the time of the accident. The owner reported that there were only two noteworthy modifications to the vessel throughout its years of service. In 1987 the owner removed the net wheels from the gantry "A" frame, welded the stern ramps closed and installed the aft shucking house. In 2003, the "A" frame was relocated from the stern of the vessel to an area amidship around and over the wheelhouse, relocated the boom pedestals to behind the wheelhouse and installed port and starboard outriggers. The relocation of the "A" frame, which is estimated to weigh approximately 3,000 lbs in 2003 would have been a modification reviewed by a "qualified individual" had the vessel, been over 79ft length. Based on interviews with past captains there is no evidence to suggest that these modifications had a negative effect on the vessel's stability, or that the vessel was unstable or needed special care other than normal stability factors all vessels need such as balancing liquid tank levels, hold and deck cargoes. Additionally, the amount of cargo onboard at the time of the casualty is not indicative of an overloading situation. (There was an estimated 9,000 to11, 000 lbs of scallop meat in the hold and 10 bushels/ approximately 500 lbs of scallop on the deck. During the previous twelve months, the vessel landed on average 16,000 lbs of scallop and as much as 28,000 lbs).

1. Deck scuppers (Freeing ports)

Deck scuppers are designed to allow seawater to quickly clear the maindeck and reduce the free surface affect of water getting trapped or moving around on deck possibly affecting the vessel's ability to maintain stability. The NORTHERN EDGE had five scupper openings on each side with the four most aft ones having gates installed so they can be closed when the crew had scallops on deck. At the time of the accident all the scupper gates were in the closed position allowing sea water to become trapped on deck and not allowing the vessel to right itself as the slack was taken out of the tow cable. If the vessel had a scupper gate control system that could remotely open all the scupper gates in case of emergencies or had scupper gates designed to allow the water to drain and keep scallops on deck, such as expanded metal, there is a good possibility that the vessel could have recovered when the tow cable was slacked.

2. Watertight doors/Hatches/Engineroom vents

Mr. **Sector** stated the watertight door (WTD) leading to the engineroom and main house (galley) was open at the time of the accident. The open engineroom door allowed seawater to ingress into the engineroom resulting in uncontrolled down flooding. The open galley door allowed water to enter the main house thus adding more weight to the starboard side further disabling the vessel from righting itself. Based on interviews with the previous two captains the engineroom and main house WTD's are left open for the convenience of the crew. The engineroom door was left open for three general reasons:

- a. Allows captain and crew to monitor the space for problems while working on deck
- b. The crew uses the space for heat when shucking when working on deck.
- c. Ensures enough air is getting to the main engine to prevent performance problems.

The galley door is left open basically because they had an interior door to keep the weather out so there was no need to open and close the WTD unless in coming water was a problem. Both captains made it clear that if there were any weather concerns they would close the doors and secure the crew from working on deck. The general rule they used is that when the crew is on deck or the weather is not to rough the doors are open.

Fishing vessel equipment (adjustment/modifications)

Mr. Stated that the vessel was either in the process of making a starboard turn or the starboard dredge got hung up causing the vessel to list. Either scenario points to a potential problem with the dredges. During interviews with the past two captains and a crewman all stated that there is a way to adjust the drag on the winch drum air brakes to allow the drum to slip incase of a hang up. There is no guidance available to captains that would provide them information on recommended setting for their winch brakes. Settings made available to captains based on the size and weight of loaded dredges along with other factors such as the speed of the vessel and depth of water could enable captains to use a piece of equipment that already exists. While this may not prevent future dredge hang up casualties it could prevent the heavy initial lists such as the one that took place during this accident thus allowing the captain time to take the necessary actions to right the vessel.

12/20/2004 12:00:00 to 12/20/2004 12:00:00 (Estimated):

Condition Class:	Policy, Procedures, or Regulations
Condition Type:	Policy, Regs, and Procedures Condition
Subject Type:	Regulations
Location: Known	n; US Waters
Descri	ption: ATLANTIC DEEP WATER ACCESS
Latituc	le: 42 16.8936 N Longitude: 070 42.7452 W

Subject(s) and Details:

<u>Name</u>	<u>Type</u>	<u>Status</u>	Role
NORTHERN EDGE	Vessel	Total Constructive	Involved in a Marine
		Loss: Unsalvaged	Casualty

Details Filed: Detail Description

Fishing vessel regulations do not require the carrying of lifejackets if vessels have survival suits. Neither life jackets nor survival suits are required to be worn by crewmen at any time; they are just required to be accessible to the crew. At the time of the incident, the captain was on the bridge and all five crewmen were on deck working. Wearing life jackets by the crew would have given them a greater chance of survival. The life jacket's ability to keep them floating would buy them additional time to possibly reach the raft or get picked up by another vessel before the cold water temperature affected their ability to stay afloat.

12/20/2004 16:30:00 to 12/20/2004 16:30:00 (Estimated):

Action Type: Deck Operations - Fishing Operations Action Class: Bring aboard and load catch Location: Known; US Waters Description: ATLANTIC DEEP WATER ACCESS Latitude: 42 16.8936 N Longitude: 070 42.7452 W

Subject(s) and Details:

Name		Type	<u>Status</u>	Role
LOPES, CAR	RLOS A	Party	Dead	Subject of
, -				Investigation
Details Filed	: Detail De	scription		
tow the star	board dredge	e got hung up c		d starboard dredge. During the the starboard side and take wate s.
2/20/2004 16:44:00 to	12/20/2004	- 16:44:00 (K	Inown):	
Event Type:	Fouling			
Event Class:	In Fishin	g Gear		
Event Subclass:				
Location: Know	n; US Wat	ers		
Descr	iption: AT	LANTIC DE	EP WATER ACCES	S
Latitu	ide: 42 16.8	8936 N Lo	ngitude: 070 42.7452	W
Subject(s) and D	etails:			
Name		Type	<u>Status</u>	Role
NORTHERN	I EDGE	Vessel	Total Constructive	Involved in a Marine
			Loss: Unsalvaged	Casualty
Details Filed	: Detail De	scription	-	-
While cond	lucting a tow	with the port a	nd starboard scallop dredg	es dragging one or both of the
			tripped the vessel to the s	tarboard side.
2/20/2004 16:45:00 to Event Type: Event Class:	12/20/2004 Flooding	- 16:45:00 (K	Inown):	tarboard side.
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass:	12/20/2004 Flooding Progressi	16:45:00 (K	Inown):	tarboard side.
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know	12/20/2004 Flooding Progressi vn; US Wat	- 16:45:00 (K ive - out of c ers	Inown): ontrol	
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr	12/20/2004 Flooding Progressi vn; US Wat iption: AT	- 16:45:00 (K ive - out of c ers LANTIC DE	Enown): ontrol CEP WATER ACCES	S
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr	12/20/2004 Flooding Progressi vn; US Wat iption: AT	- 16:45:00 (K ive - out of c ers LANTIC DE	Inown): ontrol	S
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D	12/20/2004 Flooding Progressi m; US Wat iption: AT ide: 42 16.8	16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo	Cnown): ontrol CEP WATER ACCES ngitude: 070 42.7452	S W
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u>	12/20/2004 Flooding Progressi /n; US Wat iption: AT ide: 42 16.8 etails:	- 16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u>	Enown): ontrol EP WATER ACCES ngitude: 070 42.7452 <u>Status</u>	S W <u>Role</u>
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D	12/20/2004 Flooding Progressi /n; US Wat iption: AT ide: 42 16.8 etails:	16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 <u>Status</u> Total Constructive	S W <u>Role</u> Involved in a Marine
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN	12/20/2004 Flooding Progressi vn; US Wat iption: AT ide: 42 16.8 etails:	16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel	Enown): ontrol EP WATER ACCES ngitude: 070 42.7452 <u>Status</u>	S W <u>Role</u>
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN Details Filed:	12/20/2004 Flooding Progressi /n; US Wat iption: AT ide: 42 16.8 etails: EDGE	16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 <u>Status</u> Total Constructive Loss: Unsalvaged	S W <u>Role</u> Involved in a Marine
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN Details Filed: Initial Sour	12/20/2004 Flooding Progressi /n; US Wat iption: AT ide: 42 16.8 etails: EDGE Elooding f ce:	16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 Status Total Constructive Loss: Unsalvaged Downflooding	S W <u>Role</u> Involved in a Marine Casualty
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN Details Filed: Initial Sour Area Subm	12/20/2004 Flooding Progressi (n; US Wat iption: AT ide: 42 16.8 etails: EDGE Etails: EDGE Flooding	16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel Details	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 <u>Status</u> Total Constructive Loss: Unsalvaged Downflooding STBD side maindec	S W <u>Role</u> Involved in a Marine Casualty k
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN Details Filed: Initial Sour Area Subm	12/20/2004 Flooding Progressi /n; US Wat iption: AT ide: 42 16.8 etails: EDGE Elooding f ce:	16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel Details	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 <u>Status</u> Total Constructive Loss: Unsalvaged Downflooding STBD side maindec	S W <u>Role</u> Involved in a Marine Casualty
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN Details Filed: Initial Sour Area Subm Route of W	12/20/2004 Flooding Progressi vn; US Wat iption: AT ide: 42 16.8 etails: I EDGE : Flooding 1 ce: erged: 'ater into Ves	16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel Details	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 <u>Status</u> Total Constructive Loss: Unsalvaged Downflooding STBD side maindec	S W <u>Role</u> Involved in a Marine Casualty k
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN Details Filed: Initial Sour Area Subm Route of W doors. Subdivision	12/20/2004 Flooding Progressi vn; US Wat iption: AT ide: 42 16.8 etails: I EDGE : Flooding 1 ce: erged: 'ater into Ves	- 16:45:00 (K ave - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel Details sel:	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 <u>Status</u> Total Constructive Loss: Unsalvaged Downflooding STBD side maindec Through open engin	S W <u>Role</u> Involved in a Marine Casualty k
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN Details Filed: Initial Sour Area Subm Route of W doors. Subdivision Watertight	12/20/2004 Flooding Progressi /n; US Wat iption: AT ide: 42 16.8 etails: EDGE Etails: EDGE : Flooding ce: erged: 'ater into Ves n Standard: Subdivisions Doors Fitted:	- 16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel Details sel: Intact:	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 Status Total Constructive Loss: Unsalvaged Downflooding STBD side maindec Through open engin Two Compartment Intact Yes	S W <u>Role</u> Involved in a Marine Casualty k eroom and galley watertight
2/20/2004 16:45:00 to Event Type: Event Class: Event Subclass: Location: Know Descr Latitu Subject(s) and D <u>Name</u> NORTHERN Details Filed: Initial Sour Area Subm Route of W doors. Subdivision Watertight Details Filed: Details Filed: Northern Route of W doors. Subdivision Watertight Details Filed: Details Filed: Details Filed: Details Filed: Details Filed: Northern Route of W doors. Subdivision	12/20/2004 Flooding Progressi (n; US Wat iption: AT ide: 42 16.8 etails: EDGE Etails: EDGE Flooding ce: erged: fater into Ves Subdivisions Doors Fitted: por Type:	- 16:45:00 (K ive - out of c ers LANTIC DE 3936 N Lo <u>Type</u> Vessel Details sel: Intact:	Enown): ontrol EEP WATER ACCES ngitude: 070 42.7452 Status Total Constructive Loss: Unsalvaged Downflooding STBD side maindec Through open engin Two Compartment Intact	S W <u>Role</u> Involved in a Marine Casualty k eroom and galley watertight

Door Type: Door Status at Time of Event: Reason Door was Open:

Were High Level Alarms Fitted: Last Functional Test Date: Watertight, manual hinged open-operative-local Access to galley

Yes Date Unknown

Status During Incident: Audible Alarm: Visual Alarm: Were Alarms Understood:

Unknown Unknown Yes

12/20/2004 16:46:00 to 12/20/2004 16:46:00 (Estimated):

Event Type: Capsize Event Class: Tripped Event Subclass: Location: Known; US Waters Description: ATLANTIC DEEP WATER ACCESS Latitude: 42 16.8936 N Longitude: 070 42.7452 W

Subject(s) and Details:

Name	<u>Type</u>	<u>Status</u>	Role
NORTHERN EDGE	Vessel	Total Constructive	Involved in a Marine
		Loss: Unsalvaged	Casualty

Details Filed: Detail Description

After the starboard or both dredges fouled the vessel was listing to starboard. According to the survivor at the time of the incident the scuppers gates which are used to keep the scallops from falling over the side through the scuppers/freeing ports on the maindeck were closed trapping water behind them. Attempts were made by the crew to open the gates but they were unsuccessful. The captain did release the brake on the winch drum allowing the dredge tow cable to slack but the vessel remained on a starboard list. The survivor indicated that the seas were striking the vessel from the portside. He also reported that the engineroom and main house WTD's located on the STBD side were also open at the time.

12/20/2004 16:47:00 to 12/20/2004 16:47:00 (Estimated):

Event Type:	Sinking
Event Class:	Damage Control Efforts Not Possible
Event Subclass	s:
Location: Kn	own; US Waters
De	scription: ATLANTIC DEEP WATER ACCESS
Lat	itude: 42 16.8936 N Longitude: 070 42.7452 W

Subject(s) and Details:

<u>Name</u>	<u>Type</u>	<u>Status</u>	Role
NORTHERN EDGE	Vessel	Total Constructive	Involved in a Marine
		Loss: Unsalvaged	Casualty

Details Filed: Detail Description

After capsizing to the starboard side the vessel sank.

12/20/2004 16:55:00 to 12/20/2004 16:55:00 (Estimated):

Event Typ Event Cla Event Sub Location:	iss:	LANTIC DE	EP WATER A ngitude: 070 42	
Subject(s)) and Details:			
Name		<u>Type</u> Party	<u>Status</u> Dead	<u>Role</u> Subject of
				Investigation
Detail	ls Filed: Injury Det	ails		C
	d death occur:		Yes	
	Was Death Imm	nediate	No	
	Cause of Death:		Drowning	
	Nature of Event	-		Injury- Exposure
	Date of Death K	nown:	Yes	
	Date:	clared Death:	12/20/2004	
	Declared B		Captain	
	Organizatio			II Providence
	Was Diving Inv		No	
Di	d injury occur:		No	
	the Person Missing:		No	
Su	bject to Chemical Exp	osure: 1	No	
Ex Ex	sposed to Biological Har sposed to a Confined S sposed to Other Hazard arrative Summary:	pace/Respiration	No	letter of presumed death issued.
	ES, CARLOS A			
LOIL		Darty	Dead	Subject of
	25, CHILOS H	Party	Dead	Subject of
Datail		·	Dead	Subject of Investigation
	ls Filed: Injury Det	·		5
	ls Filed: Injury Det d death occur:	ails	Yes	5
	ls Filed: Injury Det d death occur: Was Death Imm	ails	Yes No	5
	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death:	ails	Yes No Drowning	Investigation
	ls Filed: Injury Det d death occur: Was Death Imm	ails nediate Causing Death	Yes No Drowning	5
	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death: Nature of Event	ails nediate Causing Death	Yes No Drowning : Noncontact	Investigation
	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death: Nature of Event Date of Death K Date: Date of Det	ails nediate Causing Death fnown: clared Death:	Yes No Drowning Noncontact Yes 12/20/2004	Investigation
	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death: Nature of Event Date of Death K Date: Date of Dec Declared B	ails nediate Causing Death fnown: clared Death: y:	Yes No Drowning Noncontact Yes 12/20/2004 Captain	Investigation Injury- Exposure (presumed dead)
	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death Nature of Event Date of Death K Date: Date of Dec Declared B Organizatio	ails nediate Causing Death fnown: clared Death: y: on:	Yes No Drowning Noncontact Yes 12/20/2004 Captain USCG OCM	Investigation
Di	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death Nature of Event Date of Death K Date: Date of Dec Declared B Organizatio Was Diving Inv	ails nediate Causing Death fnown: clared Death: y: on:	Yes No Drowning Noncontact Yes 12/20/2004 Captain USCG OCM No	Investigation Injury- Exposure (presumed dead)
Di	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death Nature of Event Date of Death K Date: Date of Dec Declared B Organizatio Was Diving Inv d injury occur:	ails nediate Causing Death fnown: clared Death: y: on:	Yes No Drowning Noncontact Yes 12/20/2004 Captain USCG OCM No No	Investigation Injury- Exposure (presumed dead)
Di Di Is	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death Nature of Event Date of Death K Date: Date of Dec Declared B Organizatio Was Diving Inv	ails nediate Causing Death Inown: clared Death: y: y: n: olved:	Yes No Drowning Noncontact Yes 12/20/2004 Captain USCG OCM No	Investigation Injury- Exposure (presumed dead)
Di Di Is Su	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death: Nature of Event Date of Death K Date: Date of Death Declared B Organizatio Was Diving Inv d injury occur: the Person Missing: bject to Chemical Exp	ails nediate Causing Death Chown: Clared Death: y: y: n: olved:	Yes No Drowning Noncontact Yes 12/20/2004 Captain USCG OCM No No No	Investigation Injury- Exposure (presumed dead)
Di Is Su Ex	ls Filed: Injury Det d death occur: Was Death Imm Cause of Death: Nature of Event Date of Death K Date: Date of Dec Declared B Organizatio Was Diving Inv d injury occur: the Person Missing:	ails nediate Causing Death fnown: clared Death: y: or: olved: osure:	Yes No Drowning Noncontact Yes 12/20/2004 Captain USCG OCM No No No No	Investigation Injury- Exposure (presumed dead) II Providence

Report of Investigation			
Narrative Summary:	Mr. Lopes	was not recovered, l	etter of presumed death issued.
	D	.	
	Party	Injured	Subject of
			Investigation
Details Filed: Injury Det	ails		
Did death occur:		No	
Did injury occur:	~	Yes	
Nature of Event	Causing Inju	ries: Contact Injur	ry- Fall into water
Severity:			
Injury Description: Type:		Hyperthermi	0
Body Region	· ·	Ankle/Foot	a
Aspect:	1.	Left	
System/Orga	an:	Lon	
, ,			
Was Diving Inv	olved:	No	
Is the Person Missing:		No	
Subject to Chemical Exp	osure:	No	
Exposed to Biological Ha	zorde	No	
Exposed to Biological Ha			
Exposed to d Commed S Exposed to Other Hazard		No	
Narrative Summary:	Mr.		a liferaft approximately 40 minutes after
		wearing just his jea	
MORENO, ERIK I	Party	Dead	Subject of
			Investigation
Details Filed: Injury Det	ails		
Did death occur:		Yes	
Was Death Imm		No	
Cause of Death:		Drowning	
Nature of Event	-		njury- Exposure
Date of Death K	nown:	Yes	
Date:	land Deathy	12/20/2004	
Date of Dec Declared By	lared Death:	Captain	
Organizatio		USCG OCM	I Providence
Was Diving Inv		No	1110vidence
Did injury occur:	orved.	No	
Is the Person Missing:		No	
Subject to Chemical Exp	osure:	No	
Exposed to Biological Ha		No	
Exposed to a Confined Sp			
Exposed to Other Hazard		No	latter of program d dooth issued
Narrative Summary:	MIT. MOTEN	o was not recovered	, letter of presumed death issued.
CROWLEY, GLEN E	Party	Dead	Subject of
· · · , - · ·			Investigation
Details Filed: Injury Det	ails		0
Did death occur:		Yes	
Was Death Imm	ediate	No	
Cause of Death:		Drowning	
Nature of Event	Causing Dea	th: Noncontact I	njury- Exposure
Date of Death K	nown:	Yes	
Date:		12/20/2004	

mvesugution	
Date of Declared Death:	
Declared By:	Captain
Organization:	USCG OCMI Providence
Was Diving Involved:	No
Did injury occur:	No
Is the Person Missing:	No
Subject to Chemical Exposure: No	
Exposed to Biological Hazards No	
Exposed to a Confined Space/Respiration	Hazard: No
Exposed to Other Hazards: No	
Narrative Summary: Mr. Crowley wa	as not recovered, letter of presumed death issued.
Richards, Raymond Party	Dead Subject of
	Investigation
Dataila Filadi Injumy Dataila	mvestigation
Details Filed: Injury Details	V
Did death occur:	Yes
Was Death Immediate	No
Cause of Death:	Drowning
Nature of Event Causing Death:	Noncontact Injury- Exposure
Date of Death Known:	Yes
Date:	12/20/2004
Date of Declared Death:	
Declared By:	Captain
Organization:	USCG OCMI Providence
Was Diving Involved:	No
Did injury occur:	No
Is the Person Missing:	No
Subject to Chemical Exposure: No	
Exposed to Biological Hazards No	
Exposed to a Confined Space/Respiration	Hazard: No
Exposed to Other Hazards: No	
Narrative Summary: Mr. Richards w	as not recovered, letter of presumed death issued.

12/22/2004 11:43:00 to 12/22/2004 11:43:00 (Known):

Action Type:Other Actions - Drug and Alcohol Use and TestingAction Class:Take Drug Test - Post-casualtyLocation:Unknown

Subject(s) and Details: Name	Type	<u>Status</u>	Role
LOPES, CARLOS A	Party	Dead	Subject of
			Investigation
Details Filed: Drug and	Alcohol Test I	Details	
Sample Collection			
Reason for San	nple:	Post Accident	
Directed to get	DOT Test:	No	
Chemical Test	Sample Provided	: No	
Reason: Not A	vailable		
Field Sobriety Test			
Field Sobriety	Test Performed:	No	
Drug Analysis			

Report of Investigation		
Analyzing Laboratory:		
DOT Protocols Used:	Yes	
Test Results:		
Medical Review Officer/Coroner:		
MRO/Coroner Conclusions:		
Sample Transferred and Chain		
of Custody Complete:	Yes	
Drug Re-Analysis		
	Injured	Subject of
1 arty	Injuica	0
		Investigation
Details Filed: Drug and Alcohol Test D	etails	
Sample Collection		
Reason for Sample:	Post Accident	
Directed to get DOT Test:	No	
Chemical Test Sample Provided:	No	
Reason: Not Available		
Field Sobriety Test		
Field Sobriety Test Performed:	No	
Drug Analysis		
Analyzing Laboratory:		
DOT Protocols Used:	Yes	
Test Results:		
Medical Review Officer/Coroner:		
MRO/Coroner Conclusions:		
Sample Transferred and Chain		
of Custody Complete:	Yes	
Drug Re-Analysis		
MORENO, ERIK I Party	Dead	Subject of
		Investigation
Details Filed, Days and Alashal Test D		mvestigation
Details Filed: Drug and Alcohol Test D	etans	
Sample Collection	D	
Reason for Sample:	Post Accident	
Directed to get DOT Test:	No	
Chemical Test Sample Provided:	No	
Reason: Not Available		
Field Sobriety Test		
Field Sobriety Test Performed:	No	
Drug Analysis		
Analyzing Laboratory:		
DOT Protocols Used:	Yes	
Test Results:		
Medical Review Officer/Coroner:		
MRO/Coroner Conclusions:		
Sample Transferred and Chain		
of Custody Complete:	Yes	
Drug Re-Analysis		
FLORES, JUAN M Party	Dead	Subject of
		Investigation
Details Filed: Drug and Alcohol Test D	etails	2
Sample Collection	•••••	
Reason for Sample:	Post Accident	
Directed to get DOT Test:	Yes	
Chemical Test Sample Provided:	No	
Reason: Not Available	1.0	
Field Sobriety Test		
Field Sobriety Test Performed:	No	
ried Souriety restrementation	110	

Investigation		
Drug Analysis		
Analyzing Laboratory:		
DOT Protocols Used:	Yes	
Test Results:		
Medical Review Officer/Coron	er:	
MRO/Coroner Conclusions:		
Sample Transferred and Chain		
-	Vac	
of Custody Complete:	Yes	
Drug Re-Analysis		
CROWLEY, GLEN E Party	Dead	Subject of
		Investigation
Details Filed: Drug and Alcohol Test	Details	8
-	Details	
Sample Collection		
Reason for Sample:	Post Accident	
Directed to get DOT Test:	No	
Chemical Test Sample Provide	d: No	
Reason: Not Available		
Field Sobriety Test		
Field Sobriety Test Performed:	No	
Drug Analysis		
Analyzing Laboratory:		
DOT Protocols Used:	Yes	
Test Results:	105	
Medical Review Officer/Coron	or:	
MPO/Coronar Conclusions:		
MRO/Coroner Conclusions:		
Sample Transferred and Chain		
Sample Transferred and Chain of Custody Complete:	Yes	
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u>	Yes	
Sample Transferred and Chain of Custody Complete:		Subject of
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u>	Yes	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party	Yes Dead	Subject of Investigation
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test	Yes Dead	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u>	Yes Dead Details	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u> Reason for Sample:	Yes Dead Details Post Accident	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u> Reason for Sample: Directed to get DOT Test:	Yes Dead Details Post Accident No	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u> Reason for Sample:	Yes Dead Details Post Accident No	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u> Reason for Sample: Directed to get DOT Test:	Yes Dead Details Post Accident No	U
Sample Transferred and Chain of Custody Complete: Drug Re-Analysis Richards, Raymond Party Details Filed: Drug and Alcohol Test Sample Collection Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available	Yes Dead Details Post Accident No	U
Sample Transferred and Chain of Custody Complete: Drug Re-Analysis Richards, Raymond Party Details Filed: Drug and Alcohol Test Sample Collection Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available Field Sobriety Test	Yes Dead Details Post Accident No d: No	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u> Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available <u>Field Sobriety Test</u> Field Sobriety Test Performed:	Yes Dead Details Post Accident No	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u> Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available <u>Field Sobriety Test</u> Field Sobriety Test Performed: <u>Drug Analysis</u>	Yes Dead Details Post Accident No d: No	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u> Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available <u>Field Sobriety Test</u> Field Sobriety Test Performed: <u>Drug Analysis</u> Analyzing Laboratory:	Yes Dead Details Post Accident No d: No No	U
Sample Transferred and Chain of Custody Complete: <u>Drug Re-Analysis</u> Richards, Raymond Party Details Filed: Drug and Alcohol Test <u>Sample Collection</u> Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available <u>Field Sobriety Test</u> Field Sobriety Test Performed: <u>Drug Analysis</u> Analyzing Laboratory: DOT Protocols Used:	Yes Dead Details Post Accident No d: No	U
Sample Transferred and Chain of Custody Complete: Drug Re-Analysis Richards, Raymond Party Details Filed: Drug and Alcohol Test Sample Collection Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available <u>Field Sobriety Test</u> Field Sobriety Test Performed: Drug Analysis Analyzing Laboratory: DOT Protocols Used: Test Results:	Yes Dead Details Post Accident No d: No No Yes	U
Sample Transferred and Chain of Custody Complete: Drug Re-Analysis Richards, Raymond Party Details Filed: Drug and Alcohol Test Sample Collection Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available <u>Field Sobriety Test</u> Field Sobriety Test Performed: Drug Analysis Analyzing Laboratory: DOT Protocols Used: Test Results: Medical Review Officer/Coron	Yes Dead Details Post Accident No d: No No Yes	U
Sample Transferred and Chain of Custody Complete: Drug Re-Analysis Richards, Raymond Party Details Filed: Drug and Alcohol Test Sample Collection Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available <u>Field Sobriety Test</u> Field Sobriety Test Performed: Drug Analysis Analyzing Laboratory: DOT Protocols Used: Test Results: Medical Review Officer/Coron MRO/Coroner Conclusions:	Yes Dead Details Post Accident No d: No No Yes	U
Sample Transferred and Chain of Custody Complete: Drug Re-Analysis Richards, Raymond Party Details Filed: Drug and Alcohol Test Sample Collection Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available Field Sobriety Test Field Sobriety Test Performed: Drug Analysis Analyzing Laboratory: DOT Protocols Used: Test Results: Medical Review Officer/Coron MRO/Coroner Conclusions: Sample Transferred and Chain	Yes Dead Details Post Accident No No No Yes er:	U
Sample Transferred and Chain of Custody Complete: Drug Re-Analysis Richards, Raymond Party Details Filed: Drug and Alcohol Test Sample Collection Reason for Sample: Directed to get DOT Test: Chemical Test Sample Provided Reason: Not Available <u>Field Sobriety Test</u> Field Sobriety Test Performed: Drug Analysis Analyzing Laboratory: DOT Protocols Used: Test Results: Medical Review Officer/Coron MRO/Coroner Conclusions:	Yes Dead Details Post Accident No d: No No Yes	U

V. CAUSAL ANALYSIS

The Initiating Event of the Incident

Initiating Event:

Fouling (12/20/2004 4:44:00 PM)

Production Factors

Active Human Failures - Execution Errors - Attention Failures - Inattention errors Other Inattention Error; Fouling: 12/20/2004 4:44:00 PM, ATLANTIC DEEP WATER ACCESS, NORTHERN EDGE

Preconditions

LUCs in People - Limitations of the person - Psychological conditions No documented crew training in preparing for abandoning ship or combating flooding.

Person: 12/20/2004 12:00:00 PM, ATLANTIC DEEP WATER ACCESS, LOPES, CARLOS A

Workplace Factors

LUCs in Supervision - Rules/Regulations not enforced Required training was not conducted or enforced by owner. Vessel, Facility, Equipment, Gear, or Cargo: 12/20/2004 12:00:00 PM, ATLANTIC DEEP WATER ACCESS, NORTHERN EDGE

Organization Factors

LUCs in Human Resources - Inadequate Training (of Line Managers) Captain provided no crew training as required by regulation. Person: 12/20/2004 12:00:00 PM, ATLANTIC DEEP WATER ACCESS, LOPES, CARLOS A

Defense Factors

Defenses that were in place but failed due to inadequacy - Improper use of defensive equipment

Watertight doors were left open.

Flooding: 12/20/2004 4:45:00 PM, ATLANTIC DEEP WATER ACCESS, NORTHERN EDGE

Defenses that could reasonably have been expected but were never put in place - Absence of training

Crewmen were not trained by vessel's captain as required by regulations.

Personnel Casualties: 12/20/2004 4:55:00 PM, ATLANTIC DEEP WATER ACCESS, FLORES, JUAN M

Failures of Defense Against Subsequent Events in the Incident

Subsequent Event #1:

Flooding (12/20/2004 4:45:00 PM)

Defense Factors

Defenses that were in place but were disabled - Engineered defenses deactivated to meet conflicting goals

Crew had both watertight doors. The engineroom door was left open to allow the heat from engineroom to warm crew working on deck. The main house door was open for crew convenient.

Flooding: 12/20/2004 4:45:00 PM, ATLANTIC DEEP WATER ACCESS, NORTHERN EDGE

Subsequent Event #2:

Capsize (12/20/2004 4:46:00 PM)

Defense Factors

Defenses that were in place but were disabled - Engineered defenses deactivated to meet conflicting goals

Maindeck watertight doors were left open leading to the engineroom and main house allowing water to access those spaces, which led to the vessel capsizing. The engineroom door was left open for heat for the crew working on deck and air intake for the main engine. The house door was left open for convenient. Flooding: 12/20/2004 4:45:00 PM, ATLANTIC DEEP WATER ACCESS, NORTHERN EDGE

Subsequent Event #3:

Sinking (12/20/2004 4:47:00 PM)

Defense Factors

Defenses that could reasonably have been expected but were never put in place - Missing engineered defenses

Maindeck watertight doors should have been closed.

Flooding: 12/20/2004 4:45:00 PM, ATLANTIC DEEP WATER ACCESS, NORTHERN EDGE

Defenses that could reasonably have been expected but were never put in place - Absence of training

Train crewmen on what to do in the event of maindeck flooding (open scupper gates, close watertight doors).

Person: 12/20/2004 12:00:00 PM, ATLANTIC DEEP WATER ACCESS, LOPES, CARLOS A

Subsequent Event #4:

Personnel Casualties (12/20/2004 4:55:00 PM)

Defense Factors

Defenses that were in place but failed due to inadequacy - Improper or inadequate personal protective equipment

Survival suits were on board but stored in the berthing area and inaccessible to the crew during the sinking.

Person: 12/20/2004 12:00:00 PM, ATLANTIC DEEP WATER ACCESS, LOPES, CARLOS A

Defenses that could reasonably have been expected but were never put in place - Missing engineered defenses

Watertight doors leading to engineroom and main house were open allowing water to access the vessel.

Flooding: 12/20/2004 4:45:00 PM, ATLANTIC DEEP WATER ACCESS, NORTHERN EDGE

Defenses that could reasonably have been expected but were never put in place - Absence of briefings

No crew orientation training was conducted.

Person: 12/20/2004 12:00:00 PM, ATLANTIC DEEP WATER ACCESS, LOPES, CARLOS A

Defenses that could reasonably have been expected but were never put in place - Absence of training

No monthly required crew training was conducted by captain.

Person: 12/20/2004 12:00:00 PM, ATLANTIC DEEP WATER ACCESS, LOPES, CARLOS A

VI. REFERRAL FOR ENFORCEMENT ACTION

The following referrals for enforcement action have been made as a result of this investigation and represent those instances where the Coast Guard has gathered evidence that indicates one or more alleged violations or offenses may have occurred. Any determinations as to whether or not one or more actual violations or offenses have occurred are documented in the appropriate Coast Guard enforcement activities.

n/a

APPENDIX 1 - EVIDENCE

2264168 #1 : Document/CG	-2692 Report of Marine Accident, Injury or Death
Location: Collected By:	01/05/2005 5:10:00 PM MSO Providence USCG Gathered; LT , MSO Providence 3rd Party Witness; ,
Tracking:	Sid Faity Willess,
Attachments:	
- image.pdf; MS	O PROVIDENCE; .; 01/05/2005;
	vork done in 07/31/03. 01/06/2005 4:00:00 PM
	MSO Providence
	USCG Gathered; LT MSO Providence
Tracking:	USCG Witness; ,
Attachments:	
- image1.pdf; M	SO PROVIDENCE; 01/06/2005;
2264168 #11 Document/Or Invoice from purchase of Collection Information:	of hydrostatic release for liferaft.
	01/06/2005 4:05:00 PM
Location:	MSO Providence
-	USCG Gathered; LT MSO Providence
5	USCG Witness; ,
Tracking: Attachments:	
	SO PROVIDENCE; 01/06/2005;
2264168 #12 : Document/W	Vritten Statement
	r. written statements.
Collection Information:	r
Date/Time:	01/10/2005 9:06:00 AM
Location:	MSO Providence
-	USCG Gathered; LT MSO Providence
5	USCG Witness; ,
Tracking: Attachments:	
	O PROVIDENCE; .; 01/10/2005;
muge.put, mb	, 01/10/2003,

2264168 #13 Document/Written Statement

Report of Investigation	
interview at Ma	rine Safety Consultants on Dec 23, hard copy and wave file.
Collection Information:	
	01/10/2005 12:19:00 PM
	MSO Providence
•	USCG Gathered; LT MSO Providence
•	USCG Witness; ,
Tracking:	
Attachments:	O D OVIDENCE: 01/10/2005
	O PROVIDENCE; 01/10/2005;
- FURTADO Peo 01/10/200	dro stm 04-1488.doc; MSO PROVIDENCE; .; .;
	ERN EDGE INTERVIEW.wav; MSO PROVIDENCE;
	01/19/2005;
	ERN EDGE INTERVIEW.wav; MSO PROVIDENCE;
	01/19/2005;
	ERN EDGE INTERVIEW.wav; MSO PROVIDENCE;
	/19/2005;
- 03-01-NORTH	ERN EDGE INTERVIEW.wav; MSO PROVIDENCE;
.; 01	/19/2005;
- 02-01 <u>-NO</u> RTH	ERN EDGE INTERVIEW.wav; MSO PROVIDENCE;
	/19/2005;
	ERN EDGE INTERVIEW.wav; MSO PROVIDENCE;
	/19/2005;
- Part2-NORTH	ERN EDGE INTERVIEW CONT.wav; MSO PROVIDENCE;
	.; 01/19/2005;
2264168 #14 : Document/W	ritten Statement
	ation about November compensation trip
Collection Information:	
	01/11/2005 12:48:00 PM
	MSO Providence
Collected By:	USCG Gathered; LT MSO Providence
Witnessed By:	USCG Witness; ,
Tracking:	
Attachments:	
- image.pdf; MS	O PROVIDENCE; .; 01/11/2005;
2264168 #15 : Electronic/Di	6 6
	OCEAN REIGN to Group- SWH.
Collection Information: Date/Time:	01/14/2005 2:33:00 PM
	MSO Providence
	USCG Gathered; LT MSO Providence
-	USCG Witness; ,
Tracking:	
i iuckiiig.	

Attachments:

- NorthernEdge.wav; MSO PROVIDENCE;

01/14/2005;

	Report of Investigation
L	2264168 #16 : Document/Written Statement
	Master OCEAN REIGN statement.
	Collection Information:
	Date/Time: 01/14/2005 3:17:00 PM
	Location: MSO Providence
	Collected By: USCG Gathered; LT , MSO Providence
	Witnessed By: USCG Witness; ,
	Tracking:
	Attachments:
	- image.pdf; MSO PROVIDENCE; .; 01/14/2005;
	2264168 #17 Document/Other Document
	E-mails to and from Northern Edge during the November 11, 2004 trip
	Collection Information:
	Date/Time: 01/14/2005 3:12:00 PM
	Location: MSO Providence
	Collected By: USCG Gathered; LT , MSO Providence
	Witnessed By: USCG Witness;
	Tracking:
	Attachments:
	- image.pdf; MSO PROVIDENCE; .; 01/14/2005;
	2264168 #18 : Document/Other Document
	December 16, 2004 trip e-mails.
	Collection Information:
	Date/Time: 01/14/2005 3:46:00 PM
	Location: MSO Providence
	Collected By: USCG Gathered; LT MSO Providence
	Witnessed By: USCG Witness; ,
	Tracking:
	Attachments:
	- image.pdf; MSO PROVIDENCE; .; 01/14/2005;
	······································
	2264168 #19 : Document/Written Statement
	final interview
	Collection Information:
	Date/Time: 01/18/2005 11:56:00 AM
	Location: MSO Providence
	Collected By: USCG Gathered; LT , MSO Providence
	Witnessed By: USCG Witness; ,
	Tracking:
	Attachments:
	- image.pdf; MSO PROVIDENCE; 01/18/2005;
	2264168 #2 Document/Drawing or Diagram
	Picture with sketches showing modifications made to the Northern Edge in February of
	2003.
	Collection Information:

Report of Investigation Date/Time: 01/05/2005 5:19:00 PM Location: **MSO** Providence Collected By: USCG Gathered; LT , MSO Providence Witnessed By: USCG Witness;, Tracking: Attachments: - image.pdf; MSO PROVIDENCE; .; 01/06/2005; 2264168 #20 : Document/Written Statement Interview with Captain from the F/V DIANE MARIE Collection Information: Date/Time: 01/18/2005 12:05:00 PM Location: MSO Providence Collected By: USCG Gathered; LT , MSO Providence Witnessed By: USCG Witness;, Tracking: Attachments: - image.pdf; MSO PROVIDENCE; ; 01/18/2005; 2264168 #21 : Document/Written Statement Interview with Collection Information: Date/Time: 01/18/2005 12:06:00 PM Location: **MSO** Providence Collected By: USCG Gathered; LT MSO Providence Witnessed By: USCG Witness;, Tracking: Attachments: - image.pdf; MSO PROVIDENCE; .; 01/18/2005; 2264168 #22 : Document/Written Statement Captain of the Chris and Amy. Collection Information: Date/Time: 01/19/2005 10:36:00 AM Location: MSO Providence Collected By: USCG Gathered; LT, MSO Providence Witnessed By: USCG Witness; . Tracking: Attachments: - image.pdf; MSO PROVIDENCE; .; 01/19/2005; 2264168 #23 : Document/Written Statement was a pass captian on the NORTHERN EDGE. Collection Information: Date/Time: 01/19/2005 10:39:00 AM Location: MSO Providence Collected By: USCG Gathered; LT MSO Providence Witnessed By: USCG Witness;,

Deport of Investigation
Report of Investigation Tracking:
Attachments:
- image.pdf; MSO PROVIDENCE; .; 01/19/2005;
2264168 #24 : Document/Written Statement
PO statement about the November 11, 2004 boarding.
Collection Information:
Date/Time: 01/19/2005 10:42:00 AM
Location: MSO Providence
Collected By: USCG Gathered; LT MSO Providence
Witnessed By: USCG Witness; ,
Tracking:
Attachments: - image.pdf; MSO PROVIDENCE; .; 01/19/2005;
- Image.pdf, MSO PROVIDENCE,, 01/19/2003,
2264168 #25 : Document/Other Document
Information from NMFS on NORTHERN EDGE on December 20, 2004.
Collection Information:
Date/Time: 01/19/2005 10:56:00 AM
Location: MSO Providence
Collected By: USCG Gathered; LT MSO Providence
Witnessed By: USCG Witness; ,
Tracking:
Attachments: - image.pdf; MSO PROVIDENCE; .; 01/19/2005;
- image.pdf; MSO PROVIDENCE;; 01/19/2005;
2264168 #26 Document/Written Statement
, crewman
Collection Information:
Date/Time: 02/09/2005 11:10:00 AM
Location: MSO Providence
Collected By: USCG Gathered; LT MSO Providence
Witnessed By: USCG Witness; ,
Tracking:
Attachments:
- image.pdf; MSO PROVIDENCE; ; 02/09/2005;
2264168 #27 Document/Written Statement
Captain
Collection Information:
Date/Time: 02/09/2005 12:10:00 PM
Location: MSO Providence
Collected By: USCG Gathered; LT MSO Providence
Witnessed By: USCG Witness; ,
Tracking:
Attachments:
- image.pdf; MSO PROVIDENCE;; 02/09/2005;

Report of Investigation	
2264168 #28 Document/0	Other Document
Vessel permits and bro	ken trip regulation information
Collection Information	:
Date/Time:	02/09/2005 12:19:00 PM
Location:	MSO Providence
Collected By:	USCG Gathered; LT , MSO Providence
Witnessed By:	USCG Witness; ,
Tracking:	
Attachments:	
- image.pdf; M	SO PROVIDENCE; .; 02/09/2005;
2264168 #29 : Document/V	Written Statement
Owner	
Collection Information	
Date/Time:	
	MSO Providence
•	USCG Gathered; LT , MSO Providence
•	USCG Witness; ,
Tracking:	
Attachments:	
- image.pdf; M	SO PROVIDENCE; 02/14/2005;
2264168 #3 : Physical/Con	ventional Photo
Still photos of Norther	
Collection Information	6
Date/Time:	
	MSO Providence
	USCG Gathered; LT MSO Providence
•	USCG Witness; ,
Tracking:	
Attachments:	
- image1.pdf; N	ISO PROVIDENCE; .; 01/06/2005;
0 1	ISO PROVIDENCE; .; 01/06/2005;
- image1.pdf; N	1SO PROVIDENCE; .; 01/06/2005;
- image1.pdf; N	ISO PROVIDENCE; .; 01/06/2005;
- image1.pdf; N	4SO PROVIDENCE; 01/06/2005;
	ISO PROVIDENCE; .; 01/06/2005;
• •	1SO PROVIDENCE; .; 01/06/2005;
- image1.pdf; N	4SO PROVIDENCE; .; 01/06/2005;
2264168 #4 : Document/O	ther Document
Survey report	
Collection Information	
Date/Time:	01/06/2005 1:55:00 PM
Location:	MSO Providence
Collected By:	
Witnessed By:	
Tracking:	
Tuoking.	

Report of Investigation
Attachments:
- image1.pdf; MSO PROVIDENCE; .; 01/06/2005;
2264168 #5 Cocument/Other Document
Landings between 01/20/04 & 12/11/04
Collection Information:
Date/Time: 01/06/2005 1:56:00 PM
Location: MSO Providence
Collected By: USCG Gathered; LT MSO Providence
Witnessed By: USCG Witness; ,
Tracking:
Attachments:
- image1.pdf; MSO PROVIDENCE; .; 01/06/2005;
2264168 # Document/Other Document
Fishing vessel examiner report 9/4/03.
Collection Information:
Date/Time: 01/06/2005 1:59:00 PM
Location: MSO Providence
Collected By: USCG Gathered; LT , MSO Providence
Witnessed By: USCG Witness; ,
Tracking:
Attachments:
- image1.pdf; MSO PROVIDENCE; .; 01/06/2005;
2264168 #7 : Document/Other Document
Invoice for purchase of Hydrostatic release for EPRIB.
Collection Information:
Date/Time: 01/06/2005 3:24:00 PM
Location: MSO Providence
Collected By: USCG Gathered; LT MSO Providence
Witnessed By: USCG Witness; ,
Tracking:
Attachments:
- image1.pdf; MSO PROVIDENCE; .; 01/06/2005;
2264168 #8 : Document/Other Document
Liferaft servicing report from 11/24/04.
Collection Information:
Date/Time: 01/06/2005 3:30:00 PM
Location: MSO Providence
Collected By: USCG Gathered; LT MSO Providence
Witnessed By: USCG Witness; ,
Tracking:
Attachments:
- image1.pdf; MSO PROVIDENCE; .; 01/06/2005;
2264168 #9 Document/Other Document

Invoice for welding and moving the vessel's gantry crane in February 20, 2003. Collection Information:

Date/Time:01/06/2005 3:44:00 PMLocation:MSO ProvidenceCollected By:USCG Gathered; LTWitnessed By:USCG Witness; ,

Tracking: Attachments:

- image1.pdf; MSO PROVIDENCE; .; 01/06/2005;

APPENDIX 2 - CORRESPONDENCE

29766 - Subpo	ena for Boa	tracs		
Source	:	USCG		
Type:		Incoming		
Receiv	ed:	At MSO Providence on 01/10/2005 3:44:00 PM		
Attach	ments:			
	- image.pdf	; MSO PROVIDENCE; .; 01/11/2005;		
29767 - Subpo	oena K&G F	ishing		
Source		USCG		
Type:		Incoming		
• •		At MSO Providence on 01/10/2005 3:45:00 PM		
Attach				
- image.pdf; MSO PROVIDENCE; .; 01/11/2005;				
29768 - Subpo	ena Novoa			
Source		USCG		
Type:		Incoming		
• •		At MSO Providence on 01/10/2005 3:45:00 PM		
Attach	ments:			
	- NEsubpoe	ena.pdf; MSO PROVIDENCE; .; 01/10/2005;		
29801 - Repre	sentation ltr	for Mr. Flores and		
Source		USCG		
Type:		Incoming		
		At MSO Providence on 01/11/2005 8:57:00 AM		
Attach	ments:			
- image.pdf; COMMANDANT (G-MOA); Post, Kelly M.; 02/17/2005;				
31402 - 1999]	Report on Fi	shing vessel casualty task force		
Source	:	USCG		
Type:		Incoming		
Receiv	ed:	At MSO Providence on 02/14/2005 11:57:00 AM		
Attach	ments:			
	- fvctf.pdf;	MSO PROVIDENCE; .; 02/14/2005;		
31549 - IO Na	rrative			
Source	:	USCG		
Type:		Incoming		
Receiv		At MSO Providence on 02/16/2005 3:19:00 PM		
Attach				
- IO narrative.doc; MSO PROVIDENCE; .; 05/06/2005;				