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COAST GUARD INVESTIGATIONS: BUZZARDS BAY TANK BARGE GROUNDING AND OIL SPILL, APRIL 27, 2003

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***[Sources:** Primary source is information edited from the U.S. Coast Guard informal accident investigation, Misle Activity #1784825, MSO Providence. Misle Case # 114243 obtained under the Freedom of Information Act as well as several news articles previously appearing in GCMA Newsletters #23, 27, and 34. GCMA File #M-417. GCMA abides by the spirit of the Privacy Act and removed the personal identification of mariners to protect their privacy.]*

BUZZARDS BAY OIL SPILL BLACKENS NATION'S TOWING INDUSTRY

An article in the June/July 2004 issue of Professional Mariner (PM) blows the lid off an oil-spill that occurred on April 27, 2003 off the Massachusetts coast involving the uninspected tug EVENING TIDE and the inspected tank barge BOUCHARD 120.

While reports in other trade journals briefly mention that the U.S. Attorney for the District of Massachusetts that Bouchard Transportation Co. agreed to plead guilty to violation of federal law and pay a criminal fine of $10 million, PM mentions some of the details of the case that we had not seen in print elsewhere.

The size of the fine, $10 million for a 98,000-gallon oil spill, eclipses the $7,000,000+previously paid for the 1996 SCANDIA-NORTH CAPE oil spill in neighboring Rhode Island of over 828,000 gallons. Points revealed in the PM article of particular concern to our mariners include:

- ñThe EVENING TIDEôs mate allowed the boat to drift off course and toward the rocks when he left the pilothouse for an extended period to work at the stern of the towboat.ò (We have concerns related to the two-watch system and lookout issues among others that the Coast Guard narrative of the accident addresses.)
- The mate failed to monitor the radio and thereby missed a warning call sent by a nearby vessel.
- Other company employees previously questioned the company about the mateôs competency.

The Boston Globe reported in June 2003 that the cost for cleaning up the spill had already passed the $34-million figure ï an amount reported by both the Coast Guard and the responsible party. They also reported that the crew was not tested for alcohol use until at least 18 hours after the barge hit an underwater obstacle.

The Coast Guard, published a Notice of Proposed Rulemaking following the SCANDIA-NORTH CAPE accident (Docket #USCG-2001-8773) that went into effect on June 20, 2006 that revises the requirements for chemical testing following a serious marine incident by ensuring that alcohol testing is conducted within two hours of a serious marine incident. This is a predictable outcome of hundreds of serious marine incidents where alcohol testing either was was delayed or never performed.

The Boston Globe reported in June 2003 that ñé critics in New England and elsewhere are worried over the prevalence of retired Coast Guard employees that go on to work for the marine industry they regulated. Bouchard hired as a consultant (a) retired Coast Guard Assistant Commandant for Marine Safety and Environmental Protection.ò GCMA believes it is about time that Congress reconsidered the ethics of the ñrevolving doorò policy. Unfortunately, this probably wonôt happen soon since this practice permeates many other federal agencies!

THE IMPACT ON MARINERS WHEN BARGE OPERATOR IS FINED $10 MILLION FOR BUZZARDS BAY OIL SPILL

A federal magistrate ordered New York-based Bouchard Transportation to pay a $10 million dollar fine, the largest oil spill fine in New England history.

The fine is for the April 27, 2003 incident when their barge ñB-120ò being towed by the companyôs tug EVENING TIDE veered outside a channel and onto the rocks of south-eastern Massachusettsô Buzzardôs Bay. About 330 tons of the bargeôs cargo of 13,600 tons of Number 6 oil spilled into the waterway and eventually washed ashore in nearby watershed and migratory bird habitat areas.

Following Bouchardôs November 18th guilt plea, federal magistrate Marianne Bowler followed recommendations from the U.S. Attorney and the U.S. Fish and Wildlife Service that $7,000,000 of the fine be used to improve the damaged wetlands. According to court documents, the incident occurred on a clear, sunny day while an unqualified mate was at the helm of the vessel.

GCMA received an e-mail from one of our members in the northeast that stated: ñThe Bouchard captain (who was in

the rack and off-watch at the time)received no legal assistance from Bouchard. He was fired, lost his home and family. He is being sued by the state of Massachusetts.ò We are trying to verify this information.

The e-mail continues: ñThe risk of operating a tugboat in the state of Massachusetts far outweighs the rewards. This is the best reason for union representation I can think of!ò

We can think of many other good reasons why tug- and towboatmen should seriously consider working together to attain union representation at this particular point in time. Only if you organize and express your concerns about the future direction of the industry can you be adequately represented and make the necessary changes in the towing vessel regulations.

Views of Lower-Level Mariners Must Be Considered

GCMA points out that there is a tremendous difference between the regulations that govern the mariners who work on inspected vessels from those who work on uninspected towing vessels. We are working to reduce this inequity by our proposals for towing vessel inspection that appear in GCMA Report #R-276.

While GCMA is not hesitant in speaking out on the safety and human issues that affect ñlower-levelò mariners, we are NOT a labor union and we do NOT have a permanent presence in the nationôs capital and especially on Capitol Hill to counteract the well-funded industry lobbyists from organizations like the American Waterways Operators across the Potomac River.

New Towing Vessel Regulations Are Coming:
Will Your Voice Be Heard?

This is only the second time since 1972 when Congress opened up the regulations governing the entire towing industry for change. The first time led to the licensing changes that went into effect in May 2001 and will continue until May 2006. These changes altered the Operator of Uninspected Towing Vessel licenses into Master/Mate of Towing Vessels and created the new Apprentice Mate/Steersman ñlearnerôs permitò type of license. Mariners complained that some of the newly licensed individuals under the old licensing system ñcouldnôt run a boat.ò Now, they have one year of pilothouse training under supervision to learn their job.

The Buzzards Bay oil spill stirred up the public even more than the SCANDIA/NORTH CAPE oil spill off the Rhode Island Coast in 1996 and the T/B MORRIS J. BERMAN oil spill that closed the beaches in San Juan, PR, in 1994. The public in Oklahoma is up in arms about the Webbers Falls accident that took 14 lives while residents of south Texas are still dealing with the Queen Isabella Causeway collapse that took 8 lives in 2001. The Coast Guard knows what really happened in both these tug and towboat accidents and is hard pressed by industry to do its traditional ñcover-up.ò

TUGBOAT MATE GOES TO PRISON
FOR 2003 BUZZARDS BAY OIL SPILL
***Source**: The Boston Globe, Sept. 21, 2005*

A tugboat operator was sentenced yesterday to five months in prison for causing a massive oil spill in Buzzards Bay two years ago that killed hundreds of migratory birds, closed shellfish beds, and contaminated 90 miles of shoreline.

"This was extremely serious negligent conduct, rising to the level of recklessness," said U.S. Magistrate Judge Robert B. Collings, adding that he had to send ■ to prison **to send a message to others who navigate oil barges.**

■, 54, of Jacksonville, Fla., had pleaded guilty to violating the Clean Water Act and the Migratory Bird Act. He admitted that while serving as first mate aboard the EVENING TIDE on April 27, 2003, he left the helm unattended for 15 minutes to secure a towline connected to a barge carrying 4.1 million gallons of fuel oil.

An alert from a nearby tugboat, warning that the barge had strayed outside the channel and was headed for rocks, went unheeded because ■ left behind his hand-held radio, according to federal prosecutors.

Bouchard Transportation Co., which owned the barge, pleaded guilty last year to violating environmental laws, paid a $9 million fine, and agreed to pay cleanup costs, which have already exceeded $38 million, according to federal prosecutors.

During his sentencing hearing yesterday, ■ declined an offer from the magistrate to speak, but in a letter to the court he apologized for his actions and asked to be allowed to continue working.

"I was remiss in my duties as Officer of the Watch in not insuring that the barge was in safe water," Hill wrote, adding, "I will be forever sorry and ashamed for this negligence."

But, Assistant U.S. Attorney Jonathan Mitchell, who had recommended five months in prison and five months of home confinement for ■, argued that the first mate had been involved in several mishaps in the weeks before the oil spill and was "an accident waiting to happen."

According to Mitchell, ■ slammed another Bouchard tugboat into a Philadelphia dock the month before the oil spill; nearly steered the EVENING TIDE into rocks near Hell's Gate in New York two days before the spill; and caused $15,000 in damage to part of the EVENING TIDE's towing system the night before the spill.

Bouchard was "on notice that ■ was a problem," said Mitchell, telling the court that at least three captains had reported to the corporation that they believed ■ needed more training.

■'s lawyer, Peter Ball, argued that ■ had an exemplary career as a seaman, was never involved in any major accident, and wasn't completely responsible for the oil spill.

"Although the government questions his competence because ■ bumped into a dock and had a tow wire foul on his watch, these are fairly routine incidents in the rough-and-tumble world of tugboating, which is a contact sport," Ball wrote in a sentencing memorandum to the court.

Ball urged the magistrate to sentence ■ to probation, noting that ■ had been fired from his job and forced to declare bankruptcy, and will undoubtedly lose his seaman's license.

[GCMA Comment: ■'s license and z-card were suspended outright beginning 2 September 2005. Once

the (eight month) suspension is served, his credentials are returned to him. At that point, he will be on probation for one year. If, during probation, ■ violates any law relating to marine safety or uses illicit drugs or abuses alcohol, these credentials will be revoked.]

The captain of the EVENING TIDE was on board but off duty at the time of the spill. Hill says the captain plotted an errant course, which had the tugboat approach the channel in Buzzards Bay from the wrong angle, according to Ball's sentencing memorandum.

THE COAST GUARD INVESTIGATION CONDUCTED BY MSO PROVIDENCE

Introduction

This narrative summary was submitted by MSO Providence in June 2005 while the criminal investigation was still ongoing. Due to the ongoing criminal investigation, not all information normally reviewed by the Coast Guard for a marine casualty investigation was permitted to be reviewed or examined. However, a significant amount of information was obtained that allowed for an informative summary to be written and submitted with the casualty investigation report.

[GCMA Comment: You will note that the Coast Guard's investigation is not complete because the criminal case had precedence. However, the investigation makes a number of significant points that we highlight.]

This case arises from the 27 April 2003 grounding of the loaded tank barge ñB-120ò in the western end of Buzzards Bay, Massachusetts. The grounding holed the number 2 starboard tank parallel to and near the centerline of the vessel resulting in a medium spill of #6 oil; approximately 98,000 gallons.

The tank barge was being towed 1200 ft. astern by the uninspected tow vessel EVENING TIDE. The mate was on watch at the time of the grounding (approximately 1615); he had left the wheelhouse for the after control station where he worked on shortening the tow in preparation for transiting the Cape Cod Canal. At the aft control station the Mate had control of the main engine throttles and the towing winch. Here, he also had a view of the tow winch though his view forward was blocked by the wheelhouse. Before entering the Cape Cod Canal, the tank barge would have been shifted alongside or pushed ahead of the EVENING TIDE.

While the mate was out of the wheelhouse the vessel went off course. The UTV CARL RAY, which was following close behind and likewise shortening her tow, attempted to warn the mate by radio that he appeared out of position and standing into danger. However, he was unable to raise the EVENING TIDE in time because the Mate did not have a radio with him and had not posted the deckhand in the wheelhouse.

Environmental Conditions:

1620 Local mean time (corrected for DLST) was the time when the oil was spotted and reported by the tug CARL RAY.
Moon: 3 days from New Moon.
Visibility: It was clear and daylight
Wind: Observed BUZM3, 207 degrees true @ 13 kts.
(Predicted by NWS) at NW 15-20 kts.
Seas: 0 feet
Swells: 4-6 ft SSW (period 6 to 9 seconds))
Current: (by location):
162027 April, 2003: **Ref. Sta. 2066, 0.8 mile N.W of, Penikese Island,** --Flood, 050 degrees true, 1 kts. (4.8nm East of grounding position. This is the current information apparently in use on the EVENING TIDE.

1600 27 April 2003: Approximate time the Mate left the wheelhouse. **Browns Ledge; 318** degrees true, > 0.50 kts. Rotary shifting clockwise. (Speed is an average and could be significantly higher) (Source: NOS Tidal Current Table 2003 Atlantic Coast of North America)
(The current was 68 degrees to the right of the vessel's course which would have pushed it to the left (north) of its track; to the north of Buzzards Bay LB "1" (LLNR 16000).

Findings of Fact:

1. United States Coast Pilot 2 (32nd Ed. 20031 addresses the entrance to Buzzards Bay as follows:
"(118) The western entrance has a clear width of 4.3 miles between Sow and Pigs Reef and Hen and Chickens. The bottom in this entrance is irregular and rocky, and there are spots with depths of 17 to 34 ft. Because these shoal areas are surrounded by deeper water, vessels of 16-foot draft or more **must exercise extra** caution when entering the bay.
ñ(119) The best guides for entering the bay from the westward are Buzzards Bay Entrance Light, Cuttyhunk Light, and the lighted buoys in the entrance.
"(126) Tides and Currents - At Hens and Chickens Lighted Gong Buoy 3, the tidal current is rotary, turning clockwise...."
*[**Note:** This information was not listed in the EVENING TIDE Voyage Plan.]*

2. The draft of ñB-120ò was listed as 25 ft 06 inches fore and aft in the Voyage Plan and log. The rocks that she hit had a minimum depth of 22 ft.

3. U.S. Coast Guard Aids to Navigation Team, Woods Hole, inspected the aids to navigation in the vicinity of the grounding and found them watching properly at their charted positions.

4. The Waterways Analysis Management System (WAMS) report for the area was dated 1999. The report indicated that users of the waterways had made no requests or recommendations for improvements to the waterway other than comment that the first buoy in the channel was hard to see at night. The characteristics of the buoy's light were changed from isophase (equal light to dark) 6 seconds to flashing 2.5 seconds to correct the problem. It was also renamed from SEVENTEEN FOQT LEDGE LB 1 to BUZZARDS BAY MAIN CHANNEL LB 1 for clarity of the channel markings. This is the buoy adjacent to the grounding, which occurred during daylight.

The WAMS study also revealed that the majority of commercial users were tug and barge units. The major cargo was petroleum product. The study also mentioned that the state pilot's (N.E Marine Pilots) preferred transit was to "split

the first two buoys of the channel. This is a natural alignment coming from sea via the traffic separation scheme. The EVENING TIDEôs track brought the vessel close aboard the Buzzards Bay LB "1".

5. The Coast Guard marine casualty database was searched there was no record of a prior grounding on these rocks.

6. Manning - EVENING TIDE: An industry standard of two watch sections; Master, deckhand and engineer in one section with the Mate, a deckhand and engineer in the other section. Each watch section standing two 6-hour watches per day. This is the **maximum** number of hours allowed by law. Each vessel has two complete crews that alternate a 20-day schedule normally. One of the Captains apparently acts as the Senior Captain and provided a watch guide applicable to both crews. ■ appears to have been the ñalternate Captainò.

The statute states: *46 U.S.C. 8104 (h). "On a vessel to which section 8904 of this title applies, an individual licensed to operate a towing vessel may not work for more than 12 hours in a consecutive 24-hour period except in an emergency."

The Master and mate had joined the vessel on 24 April, 2003 at Eagle Point, PA, three days prior to the grounding. It was Mate ■s third trip on the EVENING TIDE, each with the same Master. During his first two tours the vessel covered much of the East Coast of the United States from New England to Florida and had gone to the Bahamas.

■ was first licensed in Sept. 1985 as a 50-ton Master. ■ upgraded his license, and at the time of the incident, held a license for master, steam or motor vessels, of not more than 1600 gross register tons, oceans route. His license was also endorsed for 3000 tons (ITC) for near coastal waters, master of towing vessel near coastal waters with a radar endorsement. .e had no prior incidents on record with the Coast Guard at the time of the grounding)

7. Navigation of the EVENING TIDE, and hence the barge, was accomplished using a computer based electronic chart with interface from a differential global positioning system (DGPS). The vesselôs "tracks" are defined by a preset database of "waypoints." The vessel's course changes at each "waypoint". The vessels progress and position relative to the track line is displayed on the electronic chart with the information input from the DGPS.

Paper charts were stored aft of the wheelhouse. These charts were properly maintained with published Notice to Mariner's corrections. The master, ■■ was as unaware that the EVENING TIDE's paper chart of the area, Chart 12318, had the same or similar track lines as the electronic chart already drawn on the chart. This indicates the lack of use of paper charts and reliance on the electronic chart system.

Applicable Voyage Planning Regulations
33 CFR §165.100 Regulated Navigation Area: Navigable Waters Within the First Coast Guard District

*[**Note:** This portion of the regulations deals with the requirement for **voyage planning** for that special regulated area.]*

3) Voyage planning. (i) Each owner or operator of a towing vessel employed to tow a tank barge shall prepare a written voyage plan for each transit of the tank barge.

(ii) The watch officer is authorized to make-modifications to the plan and validate it as necessary.

(iii) Except as provided in paragraph (d)(3)(iv) of this section, each voyage plan must contain:

(A) A description of the type, volume, and grade of cargo.

(B) Applicable information from nautical charts and publications, including Coast Pilot, Coast Guard Light List, and **Coast Guard Local Notice to** Mariners, for the destination(s).

(C) Current and forecasted weather, including visibility, wind, and sea state for the destination(s).

(D) Data on tides and tidal currents for the destination(s).

(E) Forward and after drafts of the tank barge, and under-keel and vertical clearances for each port and berthing area.

(F) Pre-departure checklists.

(G) Calculated speed and estimated times of arrival at proposed waypoints.

(H) Communication contacts at Vessel Traffic Service (VTS) (if applicable), bridges, and facilities, and port-specific requirements for VHF radio.

(I) The master's standing orders detailing closest points of approach, special conditions, and critical maneuvers.

(iv) Each owner or operator of a tank barge on an intra-port. transit of not more than four hours may prepare a voyage plan that contains:

(A) The information described in paragraphs (d)(3)(iii)(D) and (E) of thisÅsection.

(B) Current weather conditions including visibility, wind, and sea state. This information may be entered in either the voyage plan or towing vessel's log book.

(C) The channels of VHF radio to monitor.

(D) Other considerations such as availability of pilot, assist tug, berth, and line-handlers, depth of berth at mean low water, danger areas, and securite calls.

(4) Navigation restriction areas. Unless authorized by the cognizant COTP, no tank barge may operate in-

(i) The waters of Cape Cod Bay south of latitude 42[deg]5[min] North and east of longitude, 70[deg]25[min] West; or

(ii) The waters of Fishers Island Sound eat of longitude 72[deg]2[min] West, and west of longitude 71[deg]55[min] West.

(e) In addition to the authority for this part 165, this section is also authorized under authority of section 311, Pub. L. 105-383.

[CGD1-98-151, 63 FR 71770, Dec. 30, 1998, as amended by CGD01-98-151, 64 FR 12749, Mar. 15, 1999; USCG-1999-5832, 64 FR 34715, June 29,1999; CGD01-98-151, 65 FR 35838, June 6, 2000]

Notably the EVENING TIDE Voyage Plan has no information from nautical references, no closest point of approach guidance, and no data on the currents in the area transited, no mention of any special circumstances or critical maneuvers etc...

The BOUCHARD template for a voyage plan is less than 1/2 page long and does not allow sufficient space for any detailed, risk-mitigating details. By design it meets the bare bone regulation requirements that are themselves vague.

[GCMA Comments: Note the above criticism of both the voyage plan and the voyage planning regulations.]

Note that tank barge ñB-120ò is less than 10,000 gross tons and the location and the location of the grounding is **not** a "designated area of pilotage waters"

In accordance with 46 CFR 15.812 (Table above), Mate ■ was qualified to serve as pilot provided he satisfied requirement 3. of the table that he "Maintains current knowledge of the waters to be navigated", and note 2. that requires "One round trip within the past 60 months." However, the review of the EVENING TIDE log showed that the Mate had not made a round trip of Buzzards Bay while on watch on the EVENING TIDE. Logs from the other Bouchard tugs he had served on were not available for review due to the criminal investigation.

[GCMA Comment: This is one significant point that the Coast Guard's investigation should have followed. Was ■ properly qualified for his position or not? It is a question that should have been answered.]

During Mate ■ôs prior two trips on the EVENING TIDE, they covered much of the Atlantic East Coast from New England to Florida and the Bahamas. With over 1.5 hours left on Mate ■s watch (1200-1800), the EVENING TIDE was approximately 2 nautical miles from "designated pilotage waters" which begin at Coxen's Ledge and include Buzzards Bay. Once in the designated pilotage waters, 12 round trips over the route are required to serve as pilot. In this case it appears the Master would have had to relieve the Mate to comply with the regulations as it does not appear that Mate Hill had 12 round trips of Buzzards Bay. The Master would likely have violated work hour limit regulations to accomplish the relief.

[GCMA Comment: The implication is that the EVENING TIDE was not manned properly to conduct its voyage.]

A review of Coast Guard data showed only 21 active tank barges over 10,000 GT nationwide at the time of the grounding. These vessels require a First Class Pilot while in designated areas.

10. " BOUCHARD" was a member of American Waterways Operators (AWO) and enrolled in **Responsible Carrier Program**. The AWO is the national trade association for the American tugboat, towboat and barge industry. The Responsible Carrier Program provides a template for tug/barge safety policy, procedure and standards as well as a third party audit program. The EVENING TIDE carried a copy of a manual referred to as the "RESPONSIBLE CARRIER PROGRAM" which followed the AWO template in providing its company policy, procedure and standards. This manual does not address the procedure for shortening or adjusting tow length. The Coast Guard investigation could not determine if a written procedure existed at the time of the grounding or what actual practice was done day to day. Notably, the CARL RAY was shortening its tow and both the Mate and Master were involved.

[GCMA Comment: It is a potential violation of the twelve-hour rule of both licensed officers were involved in this evolution.]

11. The entire tug and barge crews were tested for dangerous drugs and alcohol ; all results were negative. The testing was accomplished the afternoon of the day following the grounding at about 1340 and 1730. The crew was removed from the vessels in two sections and taken ashore for testing. The drug screening consortium collectors would not travel to the anchored vessels causing significant delay in collecting specimens. Due to the significant delay, more than 21 hours, between the incident and testing, the results of the alcohol testing are not relevant to the case. However, the first Coast Guard responders on scene who encountered the Master, Mate and others detected no sign of intoxicants. Station Woods Hole, at a distance of 6 miles from the anchorage where the vessel's stopped, could have been directed accomplish timely alcohol testing. However, with immediate and overriding concern for spill mitigation and understanding that the consortium collectors were called caused an oversight.

12. The grounding and spill were first reported to the Coast Guard by the CARL RAY which contacted Station Woods Hole at approximately 1725 after hearing no report from the EVENING TIDE. The Station advised Group Woods Hole who called for the EVENING TIDE without immediate reply. The CARL RAY log shows they spotted the oil and advised the EVENING TIDE at 1620. The Bouchard dispatcher stated he was called at about 1635 reporting the spill and his location. Bouchard Policy requires the vessel personnel to report groundings and spills to the Bouchard dispatcher and the Incident Command Team to make notifications to local, state and federal authorities. This is in conflict with 46 CFR Part 4 and 33 CFR 160.215 (Notice of Hazardous Condition) which require the Master to make immediate notification to the closest Coast Guard Group or Marine Safety Office. A radio call to Group Woods Hole would have been sufficient and allowed for immediate relay notification to the Captain of the Port. Instead there was a delay of approximately 70 minutes.

[GCMA Comment: It is company rules like this one that put mariners between a rock and a hard place.

13. The Captain of the EVENING TIDE, was interviewed aboard the EVENING TIDE on 29 April by a Coast Guard investigator, he stated:

- He had been in his bunk at about 1600 when he heard the tow being shortened.
- He thought it was too rough to shorten the tow because the vessels were in the trough of the swells and were rolling.
- He went to the after control station and stopped the winch, then went into the wheelhouse, spotted the green buoy at some distance off the starboard side. He asked the Mate about the buoy who replied they were in plenty of water.
- He stated that the significance of the green buoy off the starboard side did not mentally register with him entirely so he went below for coffee. While getting coffee he heard the phone ring in the wheelhouse which was the CARL RAY calling to report the oil.
- He stated that all the vessel systems were operating properly.

- He made no mention of having instructed the mate on a position or time to shorten the tow.
- He made no mention of the deckhand not being utilized in the process of shortening the tow.

14. On Mate ■'s prior watch, he had an incident where the starboard tow wire was run out and apparently lost; causing a significant delay and cost.

15. The master of the CARL RAY stated he had not been on watch but was helping with shortening their tow. He was transiting from Carteret, NJ to Portland, ME. He stated the current in that location sets to the North. He noted that local mariners set themselves up to the south of buoys I & 2 to make a northerly course through the buoys so as to leave room for, outbound vessels

The EVENING TIDE was ahead of him between buoys 2 and 4 when he spotted the oil; he called them on the radio, obtained their cell phone number and called to tell them of the oil. The first response from the EVENING TIDE was "Oh my God" emphasized their need to advise the authorities.

When he had first noted that the EVENING TIDE appeared to be out of position, he tried to call on the radio but at first he got no response. Then someone answered but he could not understand the response until it sounded as though someone else got on the radio.

16. The mate on watch on the CARL RAY, had called the EVENING TIDE four or five times before getting an answer . He stated his initial calls were when they were 3 nautical miles west of Buoy "1". Once contact was made, he stated that they were making 6.3 knots but would not overtake the EVENING TIDE.

17. Mate ■ was not questioned aboard the EVENING TIDE beyond his identity, his time with Bouchard and his time aboard the EVENING TIDE. He was advised by the Coast Guard investigator that due to the "strict liability" standard applied to criminal prosecution of oil spills, he should obtain legal counsel prior to making any statement. Once he had obtained counsel, he was interviewed but gave few details:

- He did claim that the Master added the standing orders to the voyage plan after the grounding.
- He stated that after a Bouchard training period he worked as a mate but had asked for additional time as a training mate. There had been an agreement for the additional training time but he was called to go to the EVENING TIDE as the mate. After one trip on the EVENING TIDE he was asked to stay on as the Mate and he agreed since the barges were smaller than ones he had worked on prior Bouchard tugs.
- He started to make comment about his deckhand but his attorney stopped him from completing it.

18. Of the two crew aboard the ñB-120ò the tankerman on watch, was in the galley when he heard and felt the grounding. He stated he mostly heard it, it had sounded like the towline had parted. He went outside and saw the oil in the notch. He told barge captain, who stated he neither heard nor felt anything. The barge crew notified the EVENING TIDE of the oil just after the CARL RAY had called. The barge crew then started sounding tanks.

19. The deckhand on watch aboard the EVENING TIDE, stated he had been in the upper engineroom doing maintenance. His first knowledge of the grounding came when Mate ■ called him and stated they may have a spill and to take a look. When asked about his duties on watch in general, he replied that he does cleaning and maintenance, works the deck, lines and winches and checks on the Mate and brings him coffee. He made no mention of standing lookout or assisting in the wheelhouse in any way. He had been with Bouchard about 6 months. This was his first trip on the EVENING TIDE. He had joined the vessel on 5 April.

Analysis

1. Grounding on a charted rock next to a floating aid to navigation is prima facie evidence of negligence. A prudent mariner would not abandon his navigational and vessel control duties in any circumstance; much less in the proximity of charted hazards However, there is no indication of mens rea[(1)] on the part of Mate ■. In fact, it appears he thought he was doing what was expected by shortening the tow himself; though his judgment was seriously flawed. *[(1)**Vocabulary: Mens rea** =a guilty mind. A mental state following a guilty act. To be a criminal offense, the act usually must be illegal and accompanied by a requisite mental state.]*

Complete analysis could not be accomplished as the U.S. Attorney's office requested the Coast Guard suspend its safety investigation during their criminal investigation. Many questions remain as to the causes of the Mate's behavior. Mate ■ just went through a mate-training period. How he was trained and what examples were set for him is not known. Much written policy was available but that does of necessarily reflect the true practice and culture he experienced with Bouchard, his first tank barge company. Was he unaware of the rotary current affecting his vessel because the computer presented him the wrong current reference station? If so, did the predicted following current of the wrong reference station lull him into a false sense of security? While, there were instructions to never leave the wheelhouse unattended, what was the procedure for shortening the tow? Mate ■ had on his previous watch somehow lost a tow wire causing a delay and significant cost to the company. Did this prior incident influence his actions leading to the grounding? These and many other questions would be worth pursuing. Considering the Mate's lengthy service without incident, whatever human factors lead to such poor decision-making needs to be scrutinized and understood.

[GCMA Comment: Leaving these important questions unanswered appears as a major flaw in this investigation. It covers up many of the practices the Coast Guard ignored for over 30 years in regard to properly training towing vessel officers. The need to punish the mariner and extract payment from his company appears to have been the overriding consideration in this accident.]

2. Studies, including Coast Guard studies show that "sleep deficit" occurs after the first day of this routine of 6 hours on, 6 hours off, increasing in its effect on cognitive abilities (alertness) each day. Calling for the master's assistance for non-emergencies increases his/her sleep deficit and exceeds

work hour limits set by law. Therefore, many functions must be accomplished by a single deck officer or timed to occur during watch changes. The Mate had an incident on his prior watch where a tow wire was lost; this incident may have negatively impacted his rest during his ñoffò period prior to the grounding. It may also have impacted his working relationship with the assigned deckhand if he had been involved.

In this staffing situation a single person was on watch with complex as well as mundane tasks to be completed. There are enumerable details to be aware of as the transit progresses and the nature of the marine environment changes. This must be accomplished day in day out, while in sleep deficit, with no additional direct oversight or assistance to help catch human slips or errors.

[GCMA Comment: This incident deserved further investigation. We do not believe the investigation report has validity without delving into matters such as this.]

3. Since the Differential Global Positioning System (DGPS) constantly displays the vessel's position with great accuracy with no labor required by the watch officer, more traditional piloting techniques such as plotting fixes, parallel indexing, turn bearings or ranges, danger bearings or ranges, highlighting hazards and shoal water etc. are no longer in use. Further, regulation (33 CFR 164) does not require fixes of towing vessels. Observing the accurate vessel position on an electronic chart allows the operator to make an immediate steering correction as needed without the labor of calculating predicted or observed set and drift. This works well as long as attention is paid to the electronic equipment and it remains functioning normally. But a piece of situational awareness is lost to the technology. In this case Mate ■ did not need to know the predicted current to maintain the intended track as long as he paid attention to the electronic chart.

[GCMA Comment: Mate ■ could not pay attention to the electronic chart while absent from the pilothouse. It is questionable whether his assigned deckhand was trained on this equipment and could have alerted him if he had been called to the pilothouse.]

[GCMA Comment: This investigation report is notably lacking in statements taken from vessel crewmembers as is normally found in investigations of this nature.]

The tide and current was displayed for him as well; though the data was apparently based on the wrong reference station. It could be that Mate ■ perceived no threat of being set off track while away from the wheelhouse due to a lack of or incorrect knowledge of local currents.

4. The standard of area familiarity to serve as pilot is very low. As stated above, one (1) round trip in the past 60 months is the only requirement. Comprehensive voyage planning can compensate for lack of local knowledge, but that was not accomplished in this voyage. The lack of both contributed to loss of the Mate's situational awareness.

5. There apparently were watch guidelines for the EVENING TIDE established by the tugôs Master that required the wheelhouse to always be manned. However, there were no written procedures found for shortening the tow.

- ñIf an after steering station is provided, it should have all the means for the control of the vessel's movement from the spot. The captain should be able to steer, adjust engine direction and speed, direct the operation of the towing winch, use a searchlight, sound the whistle, and give orders through a loud-hailer and intercom. The route from the pilothouse to aft should be an easy passage, clear of obstructions.ò

- ñA good lookout should always be maintained both visually and by radar. In poor visibility and at night, good practice is to have the seaman on watch in the pilothouse as the lookout. This watch-standing seaman should know or have been trained in how to steer the tug both with hand gear and by autopilot; what gauges to monitor. With this knowledge, he can safely relieve the watch officer for short periods, if necessary. The wheelhouse should never be left unattended when the tug is underway." (Blank, A. Modern Towing, Cornell Maritime Press, 1989, 99, 312).

The (text cited) above indicates that it is common for the officer to leave the wheelhouse and work at the after station, that the deckhand should be posted in the wheelhouse when the officer leaves but should have specific training. The deckhand did not indicate this as one of his duties. He did not indicate any surprise that he was not called to man the wheelhouse when Mate ■ went to the after steering station. This being first trip on the EVENING TIDE, having joined on April 5, the question is what was his training for lookout and wheelhouse duties and more importantly, what was the real day to day practice aboard the EVENING TIDE.

[GCMA Comment: It appears that the ability of the investigator to investigate this case in depth was unnecessarily constrained.]

Conclusions

Numerous factors could have contributed to Mate ■'s loss of situational awareness that lead to the grounding and oil spill. It is the very purpose of the licensed deck officer to maintain situational awareness so as to keep his vessel, crew and cargo safe. Still, this is a recurring theme even among officers with good records. Distraction and complacency seem almost unavoidable over a lengthy career the contributors to loss of situational awareness and must be identified and mitigated to the maximum extent possible particularly if single individuals are to be left with such responsibilities.

The criminal investigation for ■, the mate on watch at the time of the incident, resulted in the mate being sentenced to five months in prison for negligence. The Coast Guard will pursue suspension and revocation of ■'s operator's license for negligence.

Recommendations

33 CFR §165.100(d)(3). Regulated Navigation Area, Voyage Plan Requirements be re-written with greater detail, specific expectations and should provide examples. An additional requirement to keep the voyage plans for a given

period should be added with the specification that they be provided to the OCMI on request.

The voyage plan is a tool for the towboat operator to maintain and maximize situational awareness. Used properly and taken seriously it forces the operator to be cognizant of numerous significant details that could prove to be safety critical. It also serves to synchronize the Master and the Mate as a team with a check and balance of the navigation plan.

As written, a bare bones plan will satisfy the regulations (but) do little for the safety enhancement that was the intent. In this casualty, the voyage plan was written on a Bouchard template that sets a low standard for planning. It made no mention of when or how to shift the tow, it provided no information from charts, Coast Pilots, Tide or Current tables etc. It served no useful purpose as written. ***The template is not designed to be useful, only to create a facade of meeting the regulations.***

The requirement for keeping the plans and making them available to the OCMI on request allows for "pre-casualty" enforcement. ***To date there has only been post-casualty enforcement of the regulation. Presently the regulations are too vague to enforce their true intent.***

2. A Towing Safety Advisory Sub-Committee should be formed to assemble "best practices and templates for voyage planning with input from current tow vessel operators. ***The need for quality voyage planning extends beyond the waters of the First Coast Guard District.***

[GCMA Comment: What are the chances of these two comments in italics from ever seeing the light of day!]

[GCMA Comment: The Towing Safety Advisory Committee was given this task statement in St. Louis on September 21, 2006. This group specifically failed to extend the concept of voyage planning several years earlier.]

3. The entire Regulated Navigation Area should be designated as "pilotage waters" which would require increased familiarity with the waters under 33 CFR §15.812 regulations.

4. 46 CFR §15.812 should be re-evaluated regarding the 10,000 GT delineation for tank barge pilot requirements. The ñB-120ò spill from a single tank caused a medium spill with severe consequences. Only 21 barges in the active fleet meet this specification which, in designated ñpilotage waters" requires a First Class Pilot. Yet much smaller tank barges are fully capable of causing severe environmental damage; the kind of damage that calls for a "strict liability" criminal standard. The 10,000 GT delineation appears irrelevant and ill-conceived in regard to risk mitigation.

5. NOAA Chart 13218 should show a current diagram for the rotary current at the BROWN'S LEDGE reference station #1991. The current diagram would make the condition readily apparent to the mariner. Shown on offshore charts, the current diagram is at least as significant on inshore waterways plied by loaded tank barges.

THE UNITED STATES ATTORNEY'S CRIMINAL CASE

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS
UNITED STATES OF AMERICA v. ■

Information

The United States Attorney Charges That:

1. At all times relevant to this information, Bouchard Transportation Company, Inc. (ñBTCò) was a privately held, New York Corporation with its principal place of business in Hicksville, New York.

2. At all times relevant to this information, BTC was in the business of the marine transportation of oil and other types of petroleum products, primarily by means of tugboats and barges. BTCôs operations were centered along the eastern seaboard of the United States and the Gulf' of Mexico.

3. At all times relevant to this information, the Defendant, ■, was a resident of Jacksonville, FL and had been employed by BTC as a tugboat Chief Mate since August 2002.

4. On or about April 27, 2003, a tugboat owned and operated by BTC, named the EVENING TIDE was traveling n route from Philadelphia, Pennsylvania to Sandwich, Massachusetts. The EVENING TIDE departed from Philadelphia on April 24,. 2003.

5. During this trip, the EVENING TIDE was hauling a barge named the BOUCHARD B-120 (the "B-120") to the Mirant Canal Generating Plant located on the Cape Cod Canal in Sandwich. The ñB-120,ò built in 1975 is a single-hull vessel that weighs 7.912 gross tons and is 376 feet long. The ñB-120ò is comprised of ten separate tanks, five on the port side and five on the starboard side of the vessel.

6. The ñB-120ò is an un-powered barge and it can only be moved with the assistance of a tugboat. The primary means by which a tugboat, such as the EVENING TIDE, moves the ñB-120ò is by either towing it , using one of its two steel cables that extend off the stern of the tugboat, or by pushing the barge. The ñB-120ò has a large triangular shaped notch in her stern, which a tugboat like the EVENING TIDE can slip into in order to push the barge.

7. On April 7, 2003, the ñB-120ò was loaded with approximately 99,000 barrels of #6 oil also known as Bunker C fuel. Number 6 oil is a thick, viscous, and adhesive petroleum product that is used primarily by power plants. Measured in gallons, the ñB-120ò was carrying approximately 4.1 million gallons of #6 oil as it traveled through Buzzards Bay on April 27, 2003. With a load of this size, the draft of the ñB-120ò (i.e., the depth to which the barge extended into the water) was approximately 25 feet, six inches.

8. For this voyage from Philadelphia to Sandwich, the EVENING TIDE had a crew of six individuals,. comprised of a captain. a mate; two deck hands, a chief engineer and an assistant engineer. The defendant, ■, was the mate on the

voyage, having been assigned to the EVENING TIDE in February 2003.

9. The crew worked in six-hour shifts, with each shift consisting of either the captain or the mate, one deckhand, and one of the engineers. The un-powered ñB-120ò was manned by a two-person crew, a captain and a mate, who worked in six-hour shifts. As a general matter, the crew of the EVENING TIDE worked on the boat for three weeks at a time, followed by three weeks off.

10. The duties of the mate are to be in charge of all aspects of the tugboat operations during the twelve hours each day when the mate is on-duty and the captain is off-duty. According to Bouchardôs Responsible Carrier Plan, when on duty the mate is responsible for, among other things, "navigat[ing] the vessel in a safe and prudent manneré complying all applicable U. S. Coast Guard Inland Navigation Rules.ò According to the Plan, the mate must also ñobserve BTCôs look-out policy, by maintaining a ñproper look-out by sight and hearing as well as by all means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and the risk of collision. According to the Plan, the mate is also responsible for maintaining radio communications with other vessels during his watch.

11. The duties of the mate were also set forth in the EVENING TIDEôs ñWatchstanding Orders,ò a BTC document issued by the EVENING TIDEôs captain ■■ in January 2001. Among other things, these standing orders, a copy of which were kept in the EVENING TIDEôs wheelhouse, stated that the mate or captain shall ñNever leave the bridge unattended while underway or at anchor unless properly relieved.

12. The duties described in both the. Responsible Carrier Plan and (the captainôs) ñWatchstanding Ordersò were consistent with applicable Coast Guard regulations. These regulations include Rule 5 of the Coast Guard Navigational Rules:: ñEvery vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make full appraisal of the situation and of he risk of collision.ò Coast Guard regulations also require that towing vessels, ñmaintain a continuous listening watch on the designated calling channel.ò

13. At the stern of the tug is a second set of navigational controls, called the aft controls, which enable the mariner to maneuver the vessel while operating the cable winch. From the aft controls, the marinerôs view of what is in front of the vessel is obstructed by the wheelhouse. For that reason, when operating the tug from the aft controls, a prudent mariner would post another crewmember as a look-out in the wheelhouse or on the bow to ensure that, the vessel continues on its heading and is not nearing any other object.

14. The defendant, ■, was initially assigned to the informal mate training program at Bouchard for a few weeks, in which he served alongside an experienced captain as an extra person during the captain's shift. ■ was then promoted out of the training program to be a full mate aboard that other BTC tugboats ï the ELLEN BOUCHARD and then the J. GEORGE BETZ ï prior to being assigned to the EVENING TIDE. ■ possessed all of the licenses, certifications, and training required by the Coast Guard to serve as a tugboat mate.

The Clean Water Act and the Oil Pollution Act

15. In the Federal Water Pollution Control Act (the "Clean Water Act"), as amended by the Oil Pollution Act, 33 U.S. Code §132l(b)(1), Congress has declared that it is the policy of the United States that there should he no discharges of oil or hazardous substances into or upon the navigable waters of the United States or the adjoining shorelines.

16. The Clean Water Act makes it a crime for a person to negligently discharge oil into or upon the navigable waters or contiguous zone of the United States, in such quantities as may be harmful. *[33 U.S. Code §1321(b)(3) and §1319(c)(1).]*

17. The Clean Water Act defines a "discharge"[(1)] as any spilling, leaking, pumping, pouring, emitting, emptying or dumping. The Clean Water Act defines ñOilò as oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge and oil refuse. *[(1)33 U.S. Code §1321(a)(2). (2)33 U.S. Code §1321(a)(1)]*

18. Federal regulations promulgated under the Clean Water Act define a "harmfulò[(1)] quantity of oil as including any discharges of oil that cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines. *[(1)40 CFR §110.3].*

19. The Clean Water Act defines the "navigable waters"[(1)] of the United States as the waters of the United States and the territorial seas, which are defined to be water extending three (3) miles seaward of the low tide mark. *[(1)33 U.S. Code §§1362(7) and 1362(8)]*

The Oil Spill

20. The weather on the afternoon of April 27, 2003 was bright and clear, with winds at 10-15 knots out of the North. The sea swells that day were running three to five feet in a southwesterly direction. All the navigational, communications, mechanical and steering component systems aboard the EVENING TIDE were in good working order throughout that day.

21 On April 27. 2003, ■was in charge of the vessel during the noon to 6:00 PM shift. The EVENING TIDE Captain was of duty for that shift, having; been on duty for the 6.00 A.M. to noon shift.

22. In the late afternoon, the EVENING TIDE approached the entrance to Buzzards Bay Channel, as delineated by the first of a series of red and green navigational buoys which clearly mark the channel. The first navigational buoy a ship encounters as it enters the Buzzards Bay Channel from the south is a green navigational buoy located at 41°25ô48ò North and 71°02ô18ò West (hereinafter ñthe first Buzzards Bay Buoy.ò The opening of the channel is approximately a mile

wide.

23. All of 'these navigational buoys as well as the hazards in Buzzards Bay and the depths of the various rocky shoals in this area, are clearly marked on the widely used navigational charts published by the National Oceanic and Atmospheric Administration {"NOAA"). These NOAA charts for Buzzards Bay were on-board the EVENING TIDE on April 27, 2003, both in paper form and on the navigational software installed on the shipôs computer.

24. As the EVENING TIDE was approaching the entrance to Buzzards Bay Channel, it was towing the ñB-120ò using the steel cable off the stern of the EVENING TIDE, which was connected to a cable wire of 'the bow of the ñB-120.ò At this time, the length of the tow wire connecting the EVENING TIDE to the ñB-120ò was approximately 1,200 feet.

25. Prior to the noon to 6:00 PM shift, the captain instructed ■ **NOT** to adjust the tow cable until the vessel was nearing the Cape Cod Canal.

26. During the approach to the first channel buoy, ■ left the wheelhouse and proceeded to the stern of the EVENING TIDE to pull in the tow wire.

27 During this period, there was no one in the wheelhouse of the EVENING TIDE. ■ remained at the stern (controls) of the EVENING TIDE for approximately fifteen minutes. At no point did he seek assistance from other crewmembers to serve as a look-out to ensure that the vessel stayed on course. ■ also knew that he had left his hand-held radio in the wheelhouse, so he was not able to communicate with other vessels in the area while he was at the stern (controls). It was during this period that ■ lost his awareness of the vesselôs heading.

28. ■ôs conduct in failing to assign a crewmember to relieve him in the wheelhouse and to monitor the radio, violated the Responsible Carrier Plan, the captainôs Watchstanding Orders, applicable Coast Guard regulations, and industry standards.

29. A second tugboat, the CARL RAY, which is owned and operated by a different company, was also traveling northeast towards Buzzards Bay Channel on the afternoon of April 27, 2003. Like the EVENING TIDE, the CARL RAY was towing a bare loaded with oil. The CARL RAY was approximately two nautical miles behind the EVENING TIDE.

30. Prior to reaching the entrance to Buzzards Bay Channel, at approximately 4:10 p.m., the mate on the CARL RAY attempted to contact the EVENING TIDE several times. After initially not receiving a response, he spoke with ■ and stated that the CARL RAY would be slowing down to shorten its tow wire.

31.Shortly thereafter, the captain of the CARL RAY, who joined his mate in the wheelhouse of the CARL RAY, observed the route the EVENING TIDE was traveling as it approached the First Buzzards Bay Buoy. The captain of the CARL RAY initiated radio contact with the EVENING TIDE because the EVENING TIDE was approaching the Buzzards Bay Channel at the extreme left-hand side of the channel instead of heading for the center of the channel, as is customary. The captain of the CARL RAY was concerned that the EVENING TIDE was approaching more shallow areas of Buzzards Bay, punctuated by several reefs, which exist just outside the marked channel. Immediately to the northwest of the First Buzzards Bay Buoy is an area of several rocky reefs that lie 22 feet below the surface. By contrast, the depths within the marked Buzzards Clay Channel range between 42 and 63 feet.

32. Because ■ did not take his radio with him and had failed otherwise to maintain radio communication, the captain of the CARL RAY, despite efforts to reach the EVENING TIDE over the radio for several minutes, was tunable to warn anyone on the EVENING TIDE.

33. After he returned to the wheelhouse. ■ initiated a radio call to the CARL RAY in which he stated that he was having difficulty bringing in his tow wire. The captain of the CARL RAY asked ■if he was where he wanted to be in the channel, in reference to the highly unorthodox approach the EVENING TIDE was taking. The CARL RAY received a garbled response.

34. After this brief exchange between the CARL RAY and ■ the EVENING TIDE and the ñB-120ò passed the First Buzzards Bay Bung on the wrong side; that is, outside the clearly-marked channel. As direct result of ■ôs negligent failure to notify the captain, to post a look-out, to maintain radio contact, and- to remain generally aware of the situation, the EVENING TIDE and ñB-120ò were approximately a quarter mile on the wrong side of the First Buzzards Bay Buoy.

35. 'The ñB-120ò struck a rock outcropping to the northwest of the First Buzzards Bay Buoy as it traveled outside Buzzardôs Bay Channel. This reef is marked on the NOAA navigational charts as being at a depth of 22 feet.

36. At the time of the accident, the EVENING TIDE and the ñB-120ò were traveling at a speed of approximately 6 knots. The impact of the barge striking the rocks at this location ripped a twelve-foot long gash slightly to the starboard side of the keel line on the bottom olof the ñB-120.ò The hole in the bottom of the barge, which was constructed of thick steel, was as wide its one foot at certain points and up to twenty one inches deep. The damage caused by this collision with the reef was, limited to the #2 tank on the starboard side of the ñB-120.ò

The Impact of the Oil Spill

37. As a result of this collision with the reef. approximately 98,000 gallons of #6 oil was released into Buzzards Bay from the gaping hole in the ñB-120.ò

38. The discharge of this heavy, sticky oil was especially harmful to the fragile bird population in this area. More than 450 federally-protected birds were recovered dead after coming into contact with the #6 oil discharged from the ñB-120.ò An untold number of others were washed out to sea.

More than half of the birds killed were Common Loons, Red Throated Loons, Common Biders or Black Scoters. Oil from this spill also caused the death of a wide variety of other protected birds, including Black Backed Gulls, Dunlins, Herring Gulls, Long-tailed Ducks, Black Ducks, Buffleheads, Canada Geese, Common Terns, Gannets, Greater Scaups, Mergansers, Grebes, Swans, Razorbills, Scoters, Willets, and Yellowlegs. Only a small number of birds that came into contact with the oil from this spill were rehabilitated and returned to the wild.

39. The oil spill also caused the immediate closure of thousands of acre of shellfish beds in Buzzards Bay, a large portion of .which remained closed for several months following the oil spill. Oil from the ñB-120ò soiled over ninety males of Massachusetts beaches and coastline. The total cost of cleaning up this oil spill is still being determined and it is expect: to run into the tens of millions of dollars. The long term impact from the release of this oil into the water, in terms of marine life, the bird population and the overall ecology of Buzzards Bay will not be known for several years. 10

Count One – 33 U.S. Code §§1319(c)(1) and 1321(b)(3)

The United States Attorney further charges that:

40. Paragraphs 1ï 39 are re-alleged and incorporated by reference as set forth herein.

41. On or about April 27, 2003 in Buzzards Bay, in the District of Massachusetts and elsewhere that the defendant, ■, negligently caused the discharge of a harmful quantity of oil from the barge ñB-120ò into and upon the navigable waters of the United Statesé all in violation of 33 U.S. Code §§1319(c)(1) and 1321(b)(3).

Count Two – 16 U.S. Code §§703 and 707(a)
(Migratory Bird Treaty Act)

The United States Attorney further charges that:

42. Paragraphs 1ï 39 are re-alleged and incorporated by reference as set forth herein.

43. On or about April 27, 2003 in Buzzards Bay, in the District of Massachusetts and elsewhere, the defendant, ■, without being permitted to do so by regulation as required by law, did cause the death of migratory non-game birds, all in violation of the Migratory Bird Treaty Act, Title 16, U.S. Code §§703 and 707(a) and Title 50, Code of Federal Regulations, §21.11.

s/ United States Attorney
s/Assistant U.S. Attorney
s/Senior Criminal Enforcement Counsel, E.P.A.
s/First District Legal Officer, U.S. Coast Guard

COAST GUARD RECOMMENDATIONS BASED ON THEIR INVESTIGATION

Safety Recommendation #6060: Development of Standard Voyage Plans for the Towing Industry

This investigation revealed that even where required by regulation, comprehensive voyage planning is not accomplished. The "defensive tool" intended was not used in this case and a mate lost situational awareness with dire consequences. No industry standard was found for voyage plans for today's tank barge towing industry.

Investigating Officer's Recommendation:

1. The Towing Safety Advisory Committee consider establishing a sub-committee to develop "best practices" voyage planning guidance applicable to the tank barge towing industry. Voyage Plans are a defense against human error that is typically seen in lost situational awareness. A misguided standard that requires a cumbersome process or does not dovetail with todayôs electronic navigation tools would be counter-productive. Input from current towboat operators asked to provide comprehensive best practices guidance would yield optimal voyage planning tools with practical application. The value of voyage planning in the tank barge towing industry extends beyond Buzzards Bay and the First Coast Guard District Regulated Navigation Area and a national standard should be established.

Headquarters, Investigation & Analysis:

Concur with investigating officer. Working with industry partners is the most efficient mechanism for change. Involving those that work within the framework of the regulations and applying best practices will likely result in a process that is amenable to all involved while providing an industry-wide standard. (m)

The Final Agency Action has been determined and approved by X X direction of the Commandant.

Final Agency Action Approved by the Commandant:

We concur with this recommendation. We will forward this recommendation to the Towing Safety Advisory Committee (TSAC) and request that they consider developing "best practices" voyage planning guidance for the towing industry. In addition, we will request that the TSAC review the overall issue of voyage planning for towing vessels and consider if other actions may also be taken to improve the proper use of voyage planning to promote marine safety.

[GCMA Comment: The Coast Guard presented this as a "Task Statement" to the Towing Safety Advisory Committee at the TSAC Meeting in St. Louis, MO, on September 21, 2006.]

[GCMA Comment: TSAC previously was tasked with voyage planning but opted out of taking effective action on inland waters and on rivers. However, the Coast Guard accident report on the destruction of the Queen Isabella Causeway Bridge in September 2001 cited inadequate voyage planning as one of the principal causes of that fatal bridge allision, one of the most serious towing accidents in the past decade. GCMA brought this to the attention of TSAC members at the St. Louis meeting.]

Safety Recommendation #6061: First District Regulated Navigation Area and Designed Pilotage Waters.

Recommendation by First District Marine Safety Staff:

This investigation revealed that the lack of area familiarity by the mate on watch was major factor in the grounding, which was outside designated pilotage waters.

33 CFR §165.100 defines First Coast Guard District waters as a Regulated Navigation Area pertaining only to single hulled tank barges. Current designated pilotage waters were established in 1989 by individual Captains of the Port (COTP) whose criteria for the designation is now unknown.

As this case illustrates, hazards are present outside those designated areas.

Recommendations:

All the waters of the regulated navigation area be designated as pilotage waters under 46 CFR §15.812. This would effectively increase operator familiarity with the waterway. Tank barges under 10,000 GT pilotage familiarity standards would increase from one (1) round trip in 60 months to 12 round trips over the same route.

Implementing an increase in area familiarity would be an effective defense against poor situational awareness that led to this casualty

The Final Agency Action has been determined and approved by Captain Mary Landry, Chief Marine Safety Division by direction of the Commander, First Coast Guard District.

Final Agency Action: Concur- Accetable Action

MSO Providence, in coordination with the First Coast Guard District, initiated the Notice of Proposed Rulemaking (NPRM) process regarding a revision of the First District's Regulated Navigation Area for tank barges carrying petroleum products.

Safety Recommendation #6062: 46 CFR §15.812 Tank Barge Pilotage Delineation.

"This investigation revealed that the mate on watch during the grounding had very little area familiarity. Had he not grounded, he likely would have entered designated pilotage waters where he did not have sufficient round trips to act as a pilot.

46 CFR §15.812 delineates different pilotage requirements for vessels below and above 10,000 Gross Tons. Only 21 tank barges were identified to be over 10,000 GT in the active U.S. fleet. The measurement for pilotage requirements should be based on the bargesô capacity to do environmental harm, which relates to cargo capacity. Most single hulled tank barges in service under 10,000 GT have the capacity to cause significant environmental harm and should meet a higher pilotage standard.

Recommendations:

Eliminate the 10,000 Gross Tons delineation and replace it with an individual cargo tank capacity criteria taking into consideration whether the barge is single or double hulled.

Implementing these requirements would substantially increase master/mate familiarity with waterways and is not a significant hurdle that would cause undo hardship the industry. This defensive measure would pay for itself in decreased exposure to risks. Many operators already have the required trips and the regulation change could have a grace period to allow other operators to gain the necessary required trips or obtain First Class Pilot endorsements.

Endorsement(s):

Concur with the Investigating Officer. The risk-based decision-making process should be utilized to revisit the requirements for pilots in the towing industry. Standards should be updated to reflect the risks and actual consequences involved in transporting petroleum products and hazardous materials by barge through environmentally sensitive areas. (m)

Final Agency Action: Do Not Concur- No Action Necessary

We **do not concur** with this recommendation. We do not believe that the investigation has established the need for the recommended change. Other actions, such as asking. the Towing Safety Advisory Committee (TSAC) to develop "best practices" voyage planning guidance for the towing industry, could be equally effective. In addition, the Officer in Charge, Marine Inspection (OCMI) for the waters where this casualty occurred could establish a "designated area" as defined in 46 CFR §15.301, which would increase the pilotage requirements for inspected, seagoing tank barges for those waters.