From: Chief, Merchant Vessel Inspection Division
To: Commandant
Via: Chief, Office of Merchant Marine Safety

Subj: Marine Board of Investigation: collision, ATLANTIC DEALER with the PATCO and tow of tank barges, Delaware River, 22 May 1952, with loss of life

1. Pursuant to the provisions of Title 46 C.F.R. Part 136, the record of the Marine Board convened to investigate subject casualty, together with its Findings of Fact, Conclusions and Recommendations, has been reviewed and is forwarded herewith.

2. The lightering tanker ATLANTIC DEALER of 10,286 g. t., built in 1945 at Chester, Pa., owned by the Atlantic Refining Company, departed from Port Arthur, Texas, with a full load of crude oil on board, destined for Philadelphia. While upbound in the Delaware River, the ATLANTIC DEALER on the morning of 22 May 1952 approached Tinicum Range to the left of mid-channel at a speed of 18 to 15 knots. On the same morning the motor tug PATCO of 105 g. t., towing the loaded tank barge PATOIL on the port side and the unloaded tank barge PATTERSON NO. 3 on the starboard side, departed Millingsport, N. J., downbound for Chester, Pa. This unduly towing arrangement also approached Tinicum Range to the left of the channel. The weather was fine and clear with a light westerly breeze with ebb tide running at about two knots. Tinicum Channel is approximately three miles in length and is subject to the Narrow Channel Rule, Article 25 (33 U.S.C. 210). Both vessels became confused with respect to the course and intentions of the other. Although collision-avoiding action was taken, the ATLANTIC DEALER and the tank barge PATOIL alongside the port side of the tug PATCO collided, causing the tug to list sharply to starboard, ship water over her stern and sink. As a result of this casualty, three crew members on board the tug PATCO lost their lives by drowning. Their names are as follows:

William C. Everard, [License No. [REDACTED]], Master
John Hall, [License No. [REDACTED]], Chief Engineer
Russell Lynch, [License No. [REDACTED]], Cook
3. The above are the following findings of fact:

"1. The tanker ATLANTIC DEALER and a tow composed of the tug PATCO and the tank barge PAT-BCO NO. 3 and PATOLL were involved in a collision in Tidewater Channel, Delaware River, on 22 May 1952 at about 0315 EST. As a result of the collision the tug was swamped and sunk with the loss of three crew members. Others suffered injuries to a varying extent, none seriously. No death or injury was suffered by any of the crew of the ATLANTIC DEALER and her hull damage was slight. The PATOLL incurred an indentation in the hull where the bow of the DEALER came in contact, causing a displacement of framing and plating in the way of her starboard quarter.

"2. The ATLANTIC DEALER is a turbo-electric driven tank vessel, T-2, 6,000 h.p., of 10,296 gross tons, 504' long, built in 1945 at Chester, Pa. She was loaded from Fort Arthur, Texas, to the Atlantic Refining Company pier at Fort Mifflin, Philadelphia, with a full load of crude oil in bulk and drawing an estimated 29,111 forward, 30,061 aft at the time of collision. She is owned and operated by the Atlantic Refining Company, 260 S. Broad Street, Philadelphia, Pa., and was under the command of [redacted], who was acting in the dual capacity of master and pilot under the authority of his license. Her navigating gear had been in constant use during the voyage and was in good condition.

"3. The PATCO, official number 249752, is a diesel driven uninspected tug of 105 gross tons, 68.3' long, built of steel materials at Houston, Texas in 1942. The tug and both barges are owned by the Terminal Transport Company, 213 South Broad Street, Philadelphia, but the tug was being operated by [redacted], agent, of 1301 Cambridge Street, Camden, N. J. She was under the command of [redacted] of [redacted].

"4. The PAT-BCO NO. 3, official number 174359, is a tank barge of 556 gross tons, 165' long, built at Pascagoula, Miss., in 1939. At the time of the collision she was light and her regularly assigned master was not on board, but she carried a deck hand, [redacted] of [redacted]. Mr. [redacted] holds no seaman's documents of any kind.

"5. The PATOLL, official number 173100, is a tanker barge of 367 gross tons, 110.2' long, built of steel at Wilmington, Delaware in 1936. At the time of collision, this barge was fully loaded with
Chief, USCG Division to
Commdant

7 November 1952

(ATLANTIC DEALER - PATCO a-3 Bd)

low pressure distillate and
was on board as master. Mr. holds a valid-
dated Merchant Mariner's document, endorsed for tankerman,
all grades.

"6. The PATCO, towing the barges PATTERSON NO. 3 and PATTOIL,
sailed from Killingfort, N. J. for Chester, Pa. at about 02:15
EST on 22 May 1952. The tow was made up with the tug between the
two barges, the PATTERSON NO. 3 on her starboard side, bow fore-
most and the PATTOIL on her port side, stern foremost. The stern
of the PATTOIL was made fast to the bow of the PATTERSON NO. 3 and
the tug was at the after end of the tow, in such a position that
her stern protruded behind the vessels alongside.

"7. The weather prior to and at the time of the collision was
fine and clear, with a light westerly breeze and the ebb tide was
running with a velocity of about 2 knots. The DEALER was equipped
with radar, in good operating condition, but it was not in use be-
fore or during the collision. Neither the PATCO nor the barges
were so equipped.

"8. Those who lost their lives as a result of the casualty
were:

William C. Rogers, [redacted]
Master

John Hall, [redacted]

Russell Lynch, [redacted]

"9. The testimony given by the witnesses from each vessel contains
so many conflicting versions of signals, maneuvers and navigation, that
the description of the events leading up to the collision are given with
no attempt at reconciliation.

"10. The ATLANTIC DEALER, fully loaded with crude oil, arrived at
Delaware Breakwater on the evening of 21 May and proceeded up the Bay
under the command of her master. An uneventful passage ensued and Sun
Shipyards was passed at reduced speed at about 03:00. Her engines were
then run full ahead as she entered the Eggystone Range. As she
alter course entering the Tunicum Range or near the center of the channel, a down current tow, clearly lighted, was observed ahead on the starboard bow, showing a green side light at an estimated distance of a mile and a half to two miles.

"11. A two blast signal was sounded by the DEALER, but no answer to the signal was heard by any of her personnel. With the angle on the tow increasing slightly as the two vessels closed, another two blast signal was sounded, with no answering signal from the tow. Her engines were then put on a slow bell and at this point it was noticed that the tow had closed in the green light and was showing a red, and that the angle on the bow was rapidly decreasing. The engines were then stopped and run full astern as it became apparent that the tow was swinging to her own starboard. A danger signal was sounded and the two blast signal repeated again and an answering danger signal, followed by one blast was heard from the tow. According to the DEALER's witnesses, the vessel was on a steady course until just before the collision, when the rudder was ordered full right, but none were of the opinion that her heading changed appreciably, since she was stopped or nearly so as the vessels collided.

"12. The bow of the DEALER came in contact with the starboard bow of the PATCO, and the tow passed down the port side of the DEALER. There was no sign of fire as the vessels separated, and the DEALER was anchored immediately. A lifeboat was launched and other vessels attracted to the scene searched for men in the water. Coast Guard patrol boats also appeared shortly after the collision, lending their efforts in the search.

"13. According to the surviving witnesses from the tow, the PATCO, on leaving the dock at Millingsport, N. J., squared away in the channel and passed Tunicum Gas Buoy 5-T close on her starboard side as she proceeded down the channel. An inbound steamer was observed at the other end of Tunicum Channel showing a green side light, about a mile and a half away. The tow was proceeding at full speed with the full strength of the ebb tide, but no one could give an intelligent estimate of her speed. A one blast signal was heard from the approaching vessel and a one blast signal was blown in answer, the rudder ordered right. As the vessels closed with no apparent change in headings, a four blast signal was blown followed by a single blast, and an answering one blast signal was heard from the vessel ahead. The rudder was then ordered full right and the tow was swinging sharply when the collision occurred.
Chief, MVI Division to Commandant

7 November 1952
(ATLANTIC DEALER - PATCO 4-3 8d)

"14. When the bow of the PATCO came into contact with the bow of the PATOLL, the PATCO was squeezed between the barges, causing her bow to elevate, her stern to go down, and a heavy list to starboard, causing water to pour over her stern. The tug crew immediately left their stations and scrambled aboard the barges as the tug swamped, as far as known, the engines were still on full ahead when she went down. The PATOLL drifted away when her towing lines parted, but the PATISON NO. 3 remained fast to the tug by one line. A later survey of the position of the sunken tug showed her to be 126° (T), 2,800 yards from Chester Range Rear Light, or approximately 300 feet northerly of the centerline of the channel. Several days later the tug was raised and showed little evidence of damage other than a collection of silt and mud.

"15. As the vessels collided, the man at the wheel left the master lying on deck, the man on watch in the engine room called the chief engineer, but made no attempt to do anything else as he ran out of the engine room. The crew members in the forecastle were awakened by the impact and both made attempts to get out of the starboard door. The surviving deck hand remembered the cock being behind him as he was swept away by the onrushing water."

4. The Board made the following Conclusions:

"1. Although the testimony of the PATCO witnesses indicates otherwise, it is considered that she was navigating on her left hand side of the channel and her presence there was the principal cause of the collision. Her failure to maintain a proper and efficient lookout, especially when the forward end of the tow was some distance ahead, with numerous deck obstructions to vision, was considered contributory.

"2. The tug sank about midway between the center line and northern edge of Tinicum Channel and all her navigating crew who survived, testified she was always on her own right hand side, and they also testified that the tow was being steered to the right at all times while being navigated in relation to the DEALER. First under an easy right and then a hard right rudder, the tow had been making a swing to starboard for three or more minutes before the collision.
And she turned on the right-hand side of the channel to begin with, this course change would have carried her ashore north of the Tincum Channel. The conclusion is inevitable that she began her course change on the left-hand side in order to reach the point where she sank.

"3. It is also considered that this was an unwieldy tow, a light and loaded barge on either side, a condition that probably influenced the master to place the tug as far aft as possible to provide the greatest radius effect. The position of the barges and the full strength of the tide, a favorable current, may have added to the unwieldiness and this condition should have been recognized by those on board, at least to the extent of an alert watch and an efficient lookout.

"4. The testimony regarding the whistle signals heard by the PATCO witnesses was not considered adequate or acceptable. The wheelman, who was also acting as mate, was a licensed engineer and had no endorsements for any deck rating. The master, who might have given more adequate testimony, was lost, but the wheelman stated that he was in charge of the watch and the master about to turn in. Similar testimony was given by the man in charge in the engine room, who was certified as an ordinary seaman.

"5. On the other hand, the DEALER witnesses were in complete agreement as to the signals sounded by their vessel and those heard from the PATCO. The testimony of the master of the DEALER, that he considered a starboard to starboard passing practical and possible without a change of course, was borne out by the record of his course recorder which shows a steady course of 090 - 091 for about three minutes before the collision. It further bears out the testimony of the DEALER witnesses that the way was off, or practically off, at the moment of impact, for the full astern movement employed before the collision would have in all probability changed her heading had she gathered any steam. It is therefore concluded that the DEALER did not change course and was approximately on the center line from the time she entered Tincum Channel. No logs or records of any kind were kept on the PATCO that bore on her performance or navigation.

"6. However, it is considered that the DEALER's navigation deserves comment. She had developed full speed as she entered the Tincum Channel and maintained about 13 or 14 knots until no answer was heard to the second signal for the proposed passing. She was at or near the center line of the
Tinicum Channel at all times.

"7. Had the DEALK entered the channel on her own right hand side and made an effort to navigate as required by the rules, the possibility existed that she might have avoided the collision by her action alone. However, under the conditions, where there was ample room for a clear passing, without a course change, and the master took her way off as soon as the proposed passing was in doubt, are considered circumstances supporting his judgment. Hence, the hypothetical port to port passing or a quick reduction in speed, are considered circumstances that only the master could cope with and at best are questions of judgment.

"8. In addition to their contradictory testimony, the Board also took notice of the conduct of the survivors of the PATCO after the collision. The mate at the wheel left the master lying on the deck where the force of the collision had thrown him. No effort was made to assist the fallen man in any way and his body was later found in the same place. The man on watch in the engine room never stopped to ascertain whether the sleeping chief engineer heard his warning; he left the engine room with the engines on full speed and took no steps to assure himself of the safety of any others. Similar criticism can be leveled at the one survivor from the forecastle, but his action is ameliorated somewhat if his unsupported version of being swept away by the rush of water is accepted.

"9. Notice was also taken of the lack of a master on board the PATCO at the time of the collision. However, since Captain ... of the PATCO, was licensed, it is considered there was no violation of the provisions of the certificate of inspection."

5. The Board made the following recommendations:

"1. Since the PATCO was an uninspected tug with no consequent requirements regarding certificated personnel, nor were those who had documents required to have them as a condition of employment, no action under R.S. 1450 is deemed advisable in these cases. And since there was no evidence of negligence or deliberate infraction of rules on the part of the DEALK's personnel, no further action is recommended against them.
"2. It is recommended that the PATCO be cited for violation of Rule 25 of the Inland Rules, in that she failed to navigate on her own right hand side of the channel.

"3. It is also recommended that the PATCO be cited for violation of Article 29 of the Inland Rules, in that she failed to have a lookout.

"4. It is also recommended that the acting mate, Elmer Robinson, be cited for violation of Rule 25 of the Inland Rules, in that he failed to navigate on his own right hand side of the channel, and it is further recommended that he be cited for neglecting to post a proper lookout as required by Article 29 of the Inland Rules."

R. FINDINGS

6. Conclusion 7 of the Board to the effect that the navigation of ATLANTIC DIALR been in conformance with the statutory pilot rules she might have avoided the collision, is concurred with. The ATLANTIC DIALR in approaching Tinicum Range at a speed of 13 to 14 knots in mid or to the left of mid-channel did not conform with the precautions required by ordinary practices of seamen under the circumstances and violated the Narrow Channel Rule (33 U.S.C. 210) and thus contributed to the cause of the subject collision.

7. Recommendation paragraph 3 of the Board that the PATCO be cited for violation of Article 29 of the Inland Rules in that she failed to have a lookout is presently disapproved. The subject is being carefully reviewed and studied in the light of recent judicial decisions to determine whether or not the statutory pilot rules authorize the assessment and collection of civil monetary penalties for the neglect to keep a proper lookout. Pending such determination, action to assess and collect civil monetary penalties for neglect to keep a proper lookout should be held in abeyance.

8. Recommendation paragraph 4 of the Board to the effect that civil monetary penalties be assessed against the mate on watch on board the tug PATCO at the time subject casualty occurred for violation of Rule 25 and Article 29 of the Inland Rules, is also disapproved. The evidence in the record clearly indicates that the navigation of the tug PATCO was in charge of the master of the vessel immediately prior to the collision, as a result of which the master perished by drowning.

9. Subject to the foregoing remarks, it is recommended that the Findings of Fact, Conclusions, and Recommendations of the Marine Board of Investigation be approved.

/s/ P. A. OVENDEN
P. A. OVENDEN
Chief, NVI Division to Commandant

NVI 7 November 1952
(Atlantic Dealer - Patco 8-3 6a)

First Important to NVI memorandum of 7 November 1952

From: Chief, Office of Merchant Marine Safety
To: Commandant

Subj: Marine Board of Investigation; collision, Atlantic Dealer with tug Patco and tow of tank barges, Delaware River, 22 May 1952, with loss of life

Forwarded, recommending approval.

/s/ H. C. Shepherd
H. C. Shepherd

Approved: Nov 25 1952

/s/ Merlin O'Neill
Merlin O'Neill
Vice Admiral, U.S. Coast Guard Commandant