

NATIONAL TRANSPORTATION SAFETY BOARD
Department of Transportation

MARINE ACCIDENT REPORT

Adopted: October 16, 1967

Released: October 24, 1967

COLLISION SS TEXACO MASSACHUSETTS (U.S. REGISTRY)
AND MV ALVA CAPE (BRITISH REGISTRY)
June 16, 1966

ACTION BY NATIONAL TRANSPORTATION SAFETY BOARD

This accident was investigated by the U.S. Coast Guard under the authority of R. S. 4450 (46 USC 239) and the regulations prescribed by 46 CFR 136. The Marine Board of Investigation was conducted in a public proceeding in New York, N. Y., beginning July 5, 1966. The Coast Guard report of that investigation and the Commandant's action thereon is included in and made a part of this report.

The Department of Transportation Act, effective April 1, 1967, assigned responsibility to the National Transportation Safety Board for determining the cause of transportation accidents and reporting the facts, conditions and circumstances relating to such accidents. Accordingly, the Board has considered those facts contained in the Coast Guard report of the investigation pertinent to its statutory responsibility to make a determination of the cause. For the convenience of the public, the Board's action, the Coast Guard report of the Marine Board of Investigation, and the Commandant's action are being published as one document. By such publication, the Board does not adopt the portions of the Coast Guard report which are directed to activities within the exclusive jurisdiction of the Department of Transportation and the U.S. Coast Guard.

The National Transportation Safety Board finds that the cause of the accident with attendant loss of life was failure of the persons in charge of the navigation of the SS TEXACO MASSACHUSETTS and the MV ALVA CAPE to exercise due caution. The masters of both vessels were ultimately responsible for the safe navigation; however, the vessels were under the control of the pilots at time of the collision and it was their duty to provide expert direction to the safe navigation of the vessels. The ALVA CAPE, as the burdened vessel, failed to keep out of the way of the TEXACO MASSACHUSETTS, and, in the opinion of the Board, the ALVA CAPE was primarily responsible for the accident. However, when collision was imminent, both vessels failed to sound the danger signal and to take evasive action as was incumbent upon them. The TEXACO MASSACHUSETTS failed to sound the signal to indicate her engines were going at full speed astern. The fatalities were caused by the explosion and burning of the naptha cargo which leaked from the ALVA CAPE after the collision.

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/ JOSEPH J. O'CONNELL, Jr.
Chairman

/s/ OSCAR M. LAUREL
Member

/s/ JOHN H. REED
Member

/s/ LOUIS M. THAYER
Member

/s/ FRANCIS H. McADAMS
Member



DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

Address reply to:
COMMANDANT (KVI-3)
U.S. COAST GUARD
WASHINGTON, D.C.
20591

.5943/ALVA CAPE -
TEXACO MASSACHUSETTS
A-3 Bd

14 AUG 1966

Commandant's Action

on

The Marine Board of Investigation convened to investigate the collision of the SS TEXACO MASSACHUSETTS and the British M/V ALVA CAPE with fire and loss of life on 16 June 1966

1. The record of the Marine Board of Investigation convened to investigate subject casualty has been reviewed and the record, including the Findings of Fact, Conclusions and Recommendations, is approved subject to the final determination of the cause of the casualty by the National Transportation Safety Board and the following comments.
2. In order to reconstruct the sequence of events and times leading to the casualty, it is necessary to add one hour to the times reported by the TEXACO MASSACHUSETTS, since they were on Eastern Standard Time, and to subtract about two minutes from the reported times of the ALVA CAPE.
3. The pilots of both vessels have wide experience in the piloting of large oceangoing vessels in restricted waters. They each have held a federal First Class Pilot's License for over 20 years. It is tragic that this casualty occurred while both vessels were under the control of qualified and experienced pilots, well versed in the Rules of the Road and the local peculiarities of current, custom and special circumstances. Both pilots testified that at first sighting there was no confusion or misunderstanding as to the developing crossing situation. The TEXACO MASSACHUSETTS was privileged and the ALVA CAPE was burdened and thereby required to keep out of the way of the TEXACO MASSACHUSETTS by directing her course to starboard so as to cross astern of the other vessel or, if necessary, to slacken her speed or to stop or reverse. At any rate she was duty bound to avoid crossing ahead as required by Article 22 of the Inland Rules of the Road. The ALVA CAPE acknowledged this situation by returning the one short-blast whistle of the TEXACO MASSACHUSETTS. Neither vessel sounded the danger signal indicating that the course or intention of the other was in doubt. The testimony of the pilot of the ALVA CAPE indicates that he did not go full astern with the anchor down to help reduce the speed of his vessel until two minutes after he had acknowledged a crossing situation. This full astern was held for two minutes. At approximately a minute and a half before the collision the pilot of the ALVA CAPE thought he had checked his

vessel and therefore stopped the engines. At about a half minute before the collision, the engines were again put at full astern and remained so until the collision.

4. At the time of the casualty the pilot of the TEXACO MASSACHUSETTS was serving under the authority of his federal license since the vessel was under Enrollment and its navigation was required to be under the control of such federally licensed pilot. The pilot of the ALVA CAPE was also serving under the authority of his federal pilot's license since his employment was conditioned upon possession of a federal license.

5. Further investigation under the administrative procedures provided by the Suspension and Revocation Proceedings Regulations concerning the evidence of negligence and violations of the Rules of the Road for preventing collisions has been initiated. It is considered that such action at this time will adequately dispose of the remedial aspects and referral to the U. S. Attorney having jurisdiction for possible criminal prosecution is not indicated at this time.

6. In surveying the damage to the TEXACO MASSACHUSETTS following the casualty, it is noted that despite being in the close proximity of the burning ALVA CAPE for a considerable period of time, only her structural appurtenances such as the starboard fibrous glass reinforced plastic lifeboat and the furnishings in two state rooms where the port holes were open were damaged by fire. This minimal damage and its confinement can only be attributed to the construction of the vessel's interior of incombustible material. In addition, none of the TEXACO MASSACHUSETTS' empty, highly volatile and non gas-free cargo tanks ignited. This is attributed to the prompt action of the foam monitors which were covering the after deck with a blanket of cooling foam and that her cargo tank openings were closed and her cargo tanks remained intact.

7. The Board concluded that this tragedy was marked by many instances of bravery and heroic action, not only on the part of some of the crewmembers of the vessels involved, but also of the many fire fighting and rescue vessels that unselfishly participated and assisted. This assistance was rendered by four Coast Guard tugboats, six Coast Guard 40-foot utility boats, five New York City fire boats, five New York City police launches, three Navy tugboats, one Coast Guard helicopter and ten commercial tugboats. Many of these vessels and their crews have been identified and recognized by numerous State and private organizations. In addition, the Coast Guard recommended and the Secretary of the Treasury has awarded Silver Lifesaving Medals to Mr. William B. Thorup, Jr. and Mr. Joseph B. Snyder, Second and Third Mates of the TEXACO MASSACHUSETTS.

Numerous Coast Guard personnel were recognized by appropriate awards or letters of commendation. The Secretary of Commerce on the recommendation of the U. S. Maritime Administration and with the concurrence of the Secretary of the Treasury awarded a Gallant Ship Citation and Plaque to the JULIA C. MORAN with ribbon bars to the crew; Distinguished Service Medal to her Captain, Mr. George Sahlberg, and Meritorious Service Medals to his crew and to Messrs. Thorup and Snyder, Second and Third Mates of the TEXACO MASSACHUSETTS.

8. The value of bridge-to-bridge radiotelephone as an anti-collision navigational aid has been recognized and under study for some time. In those areas where it has been used, it has provided a significant contribution to safety. A legislative proposal requiring certain vessels to be equipped with bridge-to-bridge radiotelephone has been prepared and is now being processed for submission to Congress.



P. E. TRIMBLE
Acting



TREASURY DEPARTMENT
UNITED STATES COAST GUARD

Address reply to:

Commander,
Third Coast Guard District
Governors Island
New York, N. Y. 10004

5943-022851
14 November 1966

From: Marine Board of Investigation
To: Commandant (MVI)

Subj: SS TEXACO MASSACHUSETTS, O.N. 290306 and MV ALVA CAPE
(British); collision and fire on 16 June 1966, with loss
of life

- Findings of Fact -

1. The American tankship SS TEXACO MASSACHUSETTS and the British tankship MV ALVA CAPE collided at or about 1412 EDST, 16 June 1966, at the junction of Bergen Point West Reach of Kill Van Kull and Newark Bay South Reach (C&GS Chart 285). Naphtha cargo from the damaged number one starboard cargo tank of the ALVA CAPE spilled on the water. An explosion occurred and fires ensued on the ALVA CAPE, the TEXACO MASSACHUSETTS and the attending tugs MV LATIN AMERICAN and MV ESSO VERMONT resulting in the death of thirty-three persons; nineteen from the ALVA CAPE, eight from the tug ESSO VERMONT, three from the TEXACO MASSACHUSETTS, and three from the tug LATIN AMERICAN. Most of the survivors were taken to hospitals in the area and found to be suffering varying degrees of injury; from burns, ingestion of smoke, contusions, abrasions, exposure, shock, strain and anxiety. Fourteen of these persons were reported to have remained incapacitated for a period in excess of seventy-two hours. Number one starboard cargo tank of the ALVA CAPE was holed and the stem of the TEXACO MASSACHUSETTS incurred slight damage. All four vessels involved sustained extensive fire damage.

2. The vessels involved in the casualty were:

Name:	TEXACO MASSACHUSETTS	ALVA CAPE
Official Number:	290306	185954
Service:	Tankship	Tankship
Gross Tons:	16,515	11,252



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(Vessel Data continued)

	TEXACO MASSACHUSETTS	ALVA CAPE
Net tons:	10,174	6,421
Length:	604'8"	546'7"
Breadth:	78.3	69'4"
Depth:	44.3	38'6"
Propulsion:	Steam	Diesel
Horsepower:	15,000	6,400
Home Port:	Wilmington, Del.	London, England
Owners:	Domestic Tankers, Inc. 129 S. State Street Dover, Del.	Alva SS Co., Ltd. London, England
Agent:		Navcot Corp. 11 Broadway New York, N.Y.
Master:	Richard F. Pinder Kings Highway P.O. Box 64 Clarksboro, N.J.	Graham C. Lewis 37 Brynyfran Avenue Trethomas, Mon. England, Great Britain
License:	Master Oceans #336628	Master Certificate of Competency #77572
Certificate:	Z-376438	
Last Inspection for Certification:	Biennial	
Date:	5 January 1965	Cargo Ship Safety Equip- ment Certificate issued
Port:	Port Arthur, Texas	at London, England on
Last Inspection:	Mid-period Reinspection	12 November 1965. Lloyds
Date:	25 January 1966	Survey #57747, 14 May
Port:	Port Arthur, Texas	1962, London, England.
	Drydock Examination	
Date:	18 April 1966	
Port:	Jacksonville, Fla.	
Name:	ESSO VERMONT	LATIN AMERICAN
Official Number:	260175	217380
Service:	Tug	Tug
Gross Tons:	197	165
Net Tons:	82	112
Length:	95.2	97.2
Breadth:	25.1	23.6
Depth:	10.6	10.2
Propulsion:	Diesel	Diesel
Horsepower:	1,200	1,000
Home Port:	Wilmington, Del.	Wilmington, Del.
Owners:	Humble Oil & Refining Co., P.O. Bin C. Bayonne, N.J.	Texaco, Inc. 229 S. State St. Dover, Del.

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(Vessel Data Continued)

Master:	ESSO VERMONT John Sherry 58-29 84th Place Elmhurst, N.Y.	LATIN AMERICAN Robert W. Mann 65 Gladstone W. Islip, N.Y.
License:	Master Bays, Sounds & Rivers #318109	1/C Pilot Freight & Towing Vessels #339924
Certificate:	Z-164540	Z-1070738

3. The following persons lost their lives as a result of the casualty:

SS TEXACO MASSACHUSETTS

<u>NAME</u>	<u>ADDRESS</u>	<u>CAPACITY</u>
PINDER, Richard F. Lic. #336628 Z-276438	Kings Highway P.O. Box 64 Clarksboro, N.J.	Master
CHANTRE, Pedro Felipe Z-673030	934 San Antonio Avenue Port Arthur, Texas	FWT
ELINAN, Francisco Cabezas Z-817566-D1	2140 SW 16th Terrace Miami City, Florida	Ordinary Seaman
<u>TUG LATIN AMERICAN</u>		
RAYMOND, Lewis E., Jr. Lic. #321744 BK-09797	East Merion Long Island, N.Y.	Chief Engineer
OLSEN, Petro Lic. #356436 Z-806252	7808 14th Street Brooklyn, N.Y.	Engineer
FUENTES, Pedro Z-35278-D2	18 Willowbrook Road Freehold, N.J.	Cook
<u>TUG ESSO VERMONT</u>		
SHERRY, John Lic. #318109 Z-164540	58-29 84th Place Elmhurst, N.Y. 11373	Captain
BENTSEN, Olav I. Z-17356	48-19 187th Street Flushing, N.Y. 11363	Deckhand

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VERCELLI, Robert Z-1150320	919 Raleigh Avenue Toms River, N.Y. 08753	Deckhand
PLUNKETT, Daniel J. Lic. #326330 BK-025974-D1	1142 Howard Drive Westbury, N.Y. 11590	Chief Engineer
MORTENSEN, Jacob A. Z-233983	37 Eldridge Avenue Staten Island, N.Y.	Steward
HERR, Glenn Lic. #353922 Z-1111097	R. D. #1 Box 187-A Shamokin, Pa.	Ass't Engineer
RERECICH, Antonio G. Lic. #324090 Z-156306	1202 Drew Avenue Franklin Square, N.Y.	Mate
WINGATE, Charles B. Z-58325	17 Brittle Lane Hicksville, N.Y.	Deckhand
<u>MV ALVA CAPE</u> LEWIS, Graham C.	37 Brynyfran Avenue Trethomas, Mon. England, Great Britain	Master
WITTMACK, Klaus H.M.	221 Itzehoe Graf Ranzaustr. 22 Germany	Chief Officer
FEHR, Erwin F.	2000 Hamburg Fu Zeppelinstr. 32 Germany	Second Officer
STRANGE, Kenneth L.	2, Lonsdale Avenue Romford, Essex England, Great Britain	Radio Officer
BUEHRMANN, Hans J.	2304 Labol, Ostlandstr. 38 Germany	Chief Engineer
SCHMIDT, Werner H.R.	2, Hamburg 70 Pillauerstr. 10b Germany	Second Engineer

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STUHMER, Joachim W.	2308 Preetz/Holstein Ihlsol 3, Germany	Third Engineer
ARBATZAT, Ewald E.	2171 Suederbusch-Wingst Bergkampstr. Basbeck Germany	Third Engineer
ROHE, Fritz T.	225 Husum Osthusumerstr. 107 Germany	Pumpman,
Chan Sing Chung	101, Maple House Souk Estate Kowloon, Hong Kong	2nd Steward
Shek Kwok Cheung	819, Pik Hoi House, 7/Flr., Choi Hung Estate Kowloon, Hong Kong	Pipefitter
Kan Kee	29, Wing Kwong St. 6/Flr. Hungham Kowloon, Hong Kong	2nd Cook
Hui Yui	No. 1093, Canton Road 2/Flr. Kowloon, Hong Kong	Boatswain
Li Yun Hung	103, Canton Road 1/Flr. Kowloon, Hong Kong	Sailor
Cheung Cheung	No. 2, Tung Cheong St. 1/Flr. Tai Po Market Kowloon, Hong Kong	Quartermaster
Lau Tim	6, Tsun Fat St. Tokarwan 4/Flr. Kowloon, Hong Kong	Quartermaster
Au Ho Yau	550, Castle Peak Rd. 6/Flr. Kowloon, Hong Kong	Greaser
Chan Chak Man	610, Block 3, Kwun Tong Estate Kowloon, Hong Kong	Chief Steward

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Shu Tat Cho 3, Block 38, Grd. Flr. Chief Cook
New Area, Chi Wan Shan
Kowloon, Hong Kong

4. The following persons were reported to have been incapacitated for more than 72 hours as a result of injuries sustained by reason of the casualty:

<u>MV ALVA CAPE</u> LANCE, Charles	62-02 102nd Street Forest Hills, N.Y.	Navcot Corp. Vessel's local agent
Au Hin Tong	3 Sheung Vill. N.T. Kowloon, Hong Kong	Greaser
Ho Cheung	25, Western Street Sai Ying Pun, Hong Kong	Ass't Steward
Kan Shui	88, Wai Ching Street Grd. Flr. Kowloon, Hong Kong	Fireman-Cook
<u>SS TEXACO MASSACHUSETTS</u> CALASCIBETTA, Francisco Z-1049707-D1	38 Charter Street Boston, Mass.	FWT
CATALANO, Stephen Z-1212600	75-14 Juniper Blvd. So. Middle Village, N.Y.	Pantryman
DENBOW, Russel K. Z-374562-D1	340 Ray Street Portland, Me.	Galleyman
DEVANEY, Frederick M. Z-782350	c/o Son, Medrick USAF, Jacksonville, Ark.	BR Utility
GALVAO, Manuel R. Z-1209179	100 Charlton Street New York, N. Y.	Wiper
NOEL, Louis Z-572150	1331 Delaware Drive Port Arthur, Texas	2nd Cook
SILVA, Manuel Z-914069	41 Market Street Cambridge, Mass.	Messman
SERRANO, Efrain Z-913892	823 E. 143rd Street New York, N.Y.	Ordinary Seaman

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TRAHAM, Homer
Z-374562-D1

5927 David Street
Groves, Texas

Bosun

Tug LATIN AMERICAN
LARSEN, Sigurd A.
Z-975490

1265 Boulevard
Bayonne, N. J.

Deckhand

5. At the time of the casualty the weather was clear, wind southwesterly 15-20 knots; sea calm; flood tide; air temperature 76°F; sea temperature 65°F.

6. Prior to getting underway on 16 June 1966, the TEXACO MASSACHUSETTS was moored port side to the south side of Pier 35, Bayonne Terminal of Texaco Inc., Bayonne, New Jersey. The pier is located on the west side of Bergen Point about 1/2 mile north of the junction of Newark Bay South Reach and Kill Van Kull.

After waiting for a southbound cargo vessel to pass clear, the TEXACO MASSACHUSETTS was backed out of the slip on a slow astern bell and the last mooring line was taken aboard at 1258 EST. An announcement was made by VHF radio that the TEXACO MASSACHUSETTS was leaving the Bayonne Pier and proceeding to sea via St. George. A response to this broadcast was not requested and none was received. A whistle signal of one long blast was sounded. Eastern Standard Time was being used by the TEXACO MASSACHUSETTS while Eastern Daylight Saving Time was being used by the ALVA CAPE.

The master, Richard F. Pinder; the Third Officer, Joseph Snyder; the quartermaster, Joseph Small, Jr., and the Texaco docking pilot, Patrick Kelly, who was to conn the TEXACO MASSACHUSETTS as far as St. George, Staten Island, were on the bridge.

At 1303 the TEXACO MASSACHUSETTS had cleared the pier and a stop bell followed by dead slow ahead was given as she commenced her turn to the right. At 1303 1/2 a stop bell was rung as the vessel was clear of the pier and moving down Newark Bay South Reach. The next engine maneuver was half ahead at 1305 with the TEXACO MASSACHUSETTS stemming a flood tide of less than one knot.

After clearing the pier the tug LATIN AMERICAN was shifted from the stem to the port bow. Her bow line was made fast to the port bow of the TEXACO MASSACHUSETTS, just aft of the break of the fo'c'sle head, about 150' from the stem.

At 1307 when Newark Bay Channel Lighted Buoy 1 (LL 1526) was about 100 feet on the starboard beam, the bow of a ship, later identified as the ALVA CAPE, was observed across

Bergen Point. The latter vessel was proceeding in a westerly direction and her bow had passed under the Bayonne Bridge. Her speed was estimated at five to six knots with the bow wave clearly visible. The TEXACO MASSACHUSETTS had at this time accelerated to a speed of about two knots and was proceeding fair in the channel on a course of approximately 205 degrees true. Ten degrees left rudder was applied, a whistle signal of one short blast was sounded and engine speed was reduced to slow ahead. The ALVA CAPE answered with a one blast whistle signal.

At 1308 1/2 the engine speed was reduced to dead slow ahead. At 1309 the rudder, which had been momentarily eased, was placed twenty degrees left and the engine speed was increased to half ahead to execute the turn around Bergen Point. The bow of the ALVA CAPE was then observed to be abeam of Bergen Point Light 12A, (LL 1516). She appeared to be slightly on her own starboard side of the channel and not to be changing course or speed. A one short blast whistle signal was sounded by the TEXACO MASSACHUSETTS which was answered by one short blast from the ALVA CAPE. The TEXACO MASSACHUSETTS at this time was about one ship length south of Newark Bay Channel Lighted Buoy 1 (LL-1526) and her speed had increased to 2 1/2 or 3 knots.

After hearing the answering one blast whistle signal the ALVA CAPE was observed to take a sudden sheer to port toward the Staten Island shore. The pilot of the TEXACO MASSACHUSETTS then became aware that he could not cross the bow of the ALVA CAPE and with the ships 1 1/2 or 2 ship lengths apart, an engine order for full astern was given at approximately 1309 1/2 and answered with approximately 70 revolutions per minute astern. A three short blast whistle signal from the ALVA CAPE was heard and at 1310 1/4 or 1310 1/2 the ALVA CAPE was observed to drop her starboard anchor. At 1312 the stem of the TEXACO MASSACHUSETTS made contact with the starboard side of the ALVA CAPE in way of number one tank, penetrating it to a depth of approximately twelve feet.

At the time of the impact the heading of the TEXACO MASSACHUSETTS was approximately 184°T with the vessels at about right angles to each other.

The TEXACO MASSACHUSETTS was backed away and at 1314 was anchored with one shot of chain to the port anchor in a

position about one ship length from the ALVA CAPE.

As the TEXACO MASSACHUSETTS backed away, naphtha cargo gushed from the hole in Number 1 starboard cargo tank of the ALVA CAPE and spread over the water between the vessels. A large amount of naphtha vapor was visible above the naphtha on the surface of the water.

7. The ALVA CAPE had arrived in New York Harbor during the evening of 14 June 1966 with a cargo of 132,854 barrels of naphtha from Karachi, Pakistan, and anchored off Stapleton, Staten Island.

On 16 June 1966 the ALVA CAPE got underway at 1314 EDST for the Esso Terminal at Bayway, New Jersey, under the direction of Humble Oil and Refining Company docking pilot, Donald Baker. Her draft was about 27 feet forward and 29 feet aft.

At 1352 while proceeding through Kill Van Kull in a westerly direction the engine was placed on half ahead and the speed of the ship was estimated to be five or six knots. At 1406 the pilot ordered the engine speed reduced to slow ahead due to the possibility of traffic coming out of Newark Bay South Reach. Shortly thereafter, the pilot sighted the TEXACO MASSACHUSETTS and heard her one short blast whistle signal which he answered with one short blast. At 1409 the engine speed was reduced to dead slow ahead.

The tug ESSO MASSACHUSETTS was made up to the port bow, being towed by the ALVA CAPE, and the tug ESSO VERMONT was following astern. The pilot, using his portable VHF radio, directed the tug ESSO VERMONT to come up to the starboard bow and that vessel proceeded to overtake the ALVA CAPE.

When under the Bayonne Bridge, the ALVA CAPE sounded a one short blast whistle signal and upon receiving no answer, the pilot ordered the engine stopped at 1410. The pilot estimated the speed of the ALVA CAPE to be four or five knots at the time of the stop bell. Before the stern of the ALVA CAPE cleared the Bayonne Bridge, the pilot sounded another one short blast whistle signal which was answered immediately by the TEXACO MASSACHUSETTS. It appeared to the pilot that the TEXACO MASSACHUSETTS was changing course and drifting to the eastward toward the ALVA CAPE, leaving insufficient room for the ALVA CAPE to pass under her stern.

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At 1411, when in a position abeam of Kill Van Kull Buoy 12 (LL 1515), the engine was placed full astern. The starboard anchor was dropped and the tug ESSO MASSACHUSETTS was ordered to go half ahead, pushing on the port bow.

Three short blasts of the whistle were sounded by the ALVA CAPE. The tug ESSO MASSACHUSETTS was ordered full ahead. The engine of the ALVA CAPE remained full astern until 1413 according to the engine room bell book. The bridge bell book was not located after the fire. The ESSO VERMONT stood by near the starboard quarter of the ALVA CAPE. Upon observing that the TEXACO MASSACHUSETTS would not pass ahead of the ALVA CAPE, the pilot again gave a full astern bell at 1414 and the collision occurred soon thereafter. Upon impact, the bow of the ALVA CAPE fell to the left.

Pilot Baker, using his portable radio, directed the tugs to notify the Coast Guard and the Fire Department, to secure all portholes, doors and fans and to back away from the ALVA CAPE. The tug ESSO VERMONT laid to in a position midway between the bow of the ALVA CAPE and the bow of the TEXACO MASSACHUSETTS. The last engine order recorded in the engine room bell book was a stop bell at 1418. An explosion occurred a minute or two later.

8. After backing away from the ALVA CAPE the master of the TEXACO MASSACHUSETTS ordered the tug LATIN AMERICAN to let go. The crew members of the tug appeared to be affected by the naphtha vapors and experiencing some difficulty in slacking the tugboat's line to the vessel. The engine of the LATIN AMERICAN was heard to be racing. The general alarm of the TEXACO MASSACHUSETTS was sounded and the switch in the pilot house was locked in the closed position.

At 1415 EDST the tug LATIN AMERICAN, which was then near the bow of the TEXACO MASSACHUSETTS, exploded and fire and debris could be seen flying from that direction. The explosion was followed by fire which completely engulfed the area between the two tankships. Seconds later there was an explosion sounding like the ignition of vapors on the ALVA CAPE. Several other explosions were heard later. Some of these explosions were heard after the crew members had abandoned ship and were in the water.

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The wheelhouse of the TEXACO MASSACHUSETTS filled with smoke and the windows were blackened. Fire was visible on the water and some of the vapors were burning 50 or 60 feet above the water. The fire immediately spread to the naphtha on the water on the starboard side of the vessel.

The tug ESSO VERMONT which was between the bows of the TEXACO MASSACHUSETTS and the ALVA CAPE became engulfed in the flames. The TEXACO MASSACHUSETTS was stemming the tide when her anchor was dropped. The ALVA CAPE commenced to align herself with the current and her stern swung clockwise through the wind, approximately 270 degrees, and fetched up alongside the TEXACO MASSACHUSETTS. Both vessels were then headed in a southerly direction with the stern of the ALVA CAPE extending 50 or 60 feet beyond the stern of the TEXACO MASSACHUSETTS. The ALVA CAPE was burning profusely with the fire from that vessel sweeping over the stern of the TEXACO MASSACHUSETTS. Flames and dense black smoke were coming from the after starboard plastic lifeboat which was still in place. The tug ESSO VERMONT became wedged between the bows of the two ships, burning intensely.

9. After the collision but before the explosion and fire ensued, the master of the ALVA CAPE ordered the ship's cargo steam smothering system energized and all necessary fire-fighting equipment broken out. One fire hose was led out on the starboard side of the main deck, forward of the bridge but pressure was not obtained on the fire main at that time. After the explosion the master gave orders to the persons on the bridge of the ALVA CAPE to abandon ship. There is no indication that the cargo steam smothering system was ever energized; however, after leaving the vessel some of the crew members observed water gushing from several locations on the fire main under the catwalk of the blazing ship.

There were two reciprocating steam fire pumps in the engine room of the ALVA CAPE. One of these pumps was already in operation at low speed, supplying cooling water to the refrigerating plant. It was necessary only to open one crossover valve and increase the speed of the pumps to supply pressure to the fire main. The boiler and the generator were still in operation when the surviving engineers left the engine room and the lights remained on.

10. There were seven deck foam monitors installed on the TEXACO MASSACHUSETTS. Four of these monitors were located on the boat deck amidships, two were located on the after boat deck, and one was located on the catwalk, approximately half way between the after house and the midship house. The midship house was about 225 feet from the after house.

Several 1-1/2 inch fire hoses, fitted with all-purpose nozzles had been led out during unloading operations and remained on deck but were not utilized to fight the fire.

After the explosion the Second Officer, William B. Thorup, Jr., opened the valve to the foam monitor located on the starboard after end of the boat deck amidships prior to leaving the area due to the heat and smoke. Pressure was later placed on the system and foam from this nozzle was directed onto the after deck. The deck foam system, the main boilers and auxiliary machinery system continued in operation after the vessel was abandoned.

11. Fire broke out on the ALVA CAPE forward on both sides and aft on the starboard side. Most of the crew members abandoned the vessel by jumping into the water from the port side or over the stern.

The Master, Third Officer, Pilot, two Quartermasters and Radio Operator, who were on the bridge, descended to the midships boat deck and jumped over the port side into the water without life jackets.

After the final stop bell the Second Engineer, who had proceeded topside to investigate, returned to the engine room and reported that there had been a collision. Shortly thereafter, flames were observed over the engine room sky light and the engineering personnel evacuated the machinery spaces.

A number of off-duty crew members were standing on the stern at the time of the casualty. Most of these persons as well as those in the accommodation spaces obtained life jackets from their quarters before jumping overboard from the after end of the vessel.

12. When the bridge of the TEXACO MASSACHUSETTS became enveloped in black smoke, the Master together with the

Sandy Hook Pilot and the Quartermaster proceeded aft and were followed by the Docking Pilot and the Third Officer.

The Master decided that it was too late to attempt to lower a boat and ordered everybody off the vessel. The majority of the crew members entered the water from the stern. Some jumped and others went down a mooring line that had been lowered over the side and made fast on deck by the Second Officer and the Third Officer. The last man down the line was the Third Officer, Joseph Snyder. By the time he entered the water the fire on the surface had spread to the immediate area and the end of the line had commenced to burn.

The Third Officer gave his life preserver to the Chief Pumpman. He then removed his trousers, tied off the legs, and gave them to another crew member who was without a life saving device. He also assisted the Docking Pilot and the Chief Pumpman to shoal water and saved the bridge bell book.

After the explosion the First Assistant Engineer, Leroy Smith, proceeded to the Engine Room, reported that one of the towboats was on fire and directed that the fire pump be started. Smoke continued to enter the engine room area even after the blowers in the ventilation system had been secured. The Chief Engineer proceeded topside and observed the flames on the surface of the water to starboard. He telephoned the engine room, directed that the firemen and oiler be sent topside, and then joined the other engineers. Later, the officers evacuated the machinery spaces leaving the main boilers and essential auxiliary machinery in operation. By this time the ALVA CAPE had swung into a position alongside and the stern of the TEXACO MASSACHUSETTS was being swept by flames and smoke. Three of the engineers and the Second Pumpman were subsequently removed from the vessel by a Coast Guard helicopter.

13. Some of the survivors made their way to shoal water after abandoning their vessels. The majority were taken from the water by a number of tugboats, pleasure boats, New York City Police boats and Coast Guard vessels on the scene. One of the survivors remained on board the tug LATIN AMERICAN and one survivor remained on board the TEXACO MASSACHUSETTS until after the fires had been extinguished.

Nineteen of the deceased from the ALVA CAPE, eight from the ESSO VERMONT, one from the TEXACO MASSACHUSETTS and two from the LATIN AMERICAN were retrieved from the vessels and from the water and processed by the New York City Police Department Missing Persons Unit. Two of the deceased from the TEXACO MASSACHUSETTS were dead on arrival at the Bayonne Hospital, Bayonne, New Jersey. One of the injured persons from the LATIN AMERICAN died later from burns at the U. S. Public Health Service Hospital, Staten Island, New York.

14. Three New York City fire boats, approximately ten tugs and a number of Coast Guard vessels proceeded to the scene to assist in combating the fires. Fireboat No. 8 maneuvered into a position between the bows of the blazing ALVA CAPE and the TEXACO MASSACHUSETTS to combat the fires. By 1524 EDST the fires on the TEXACO MASSACHUSETTS and the tug LATIN AMERICAN were extinguished and both vessels were taken in tow by commercial tugs. At 1655 the fire on the ESSO VERMONT was reported extinguished and it was towed away and grounded north of Shooters Island. The fire on the ALVA CAPE was subsequently extinguished by the New York City Fire Department at about 1840 on 16 June.

The ESSO VERMONT was refloated on 17 June and towed to a shipyard. The following day transfer of the ALVA CAPE's cargo of naphtha to barges was commenced. That vessel, which had grounded after the collision, was refloated on 20 June 1966 and towed to Anchorage 49C, New York Harbor, where off loading of the cargo was continued.

15. At the time of the casualty the TEXACO MASSACHUSETTS had salt water ballast in tanks number 3 center, number 5 center, number 7 center, and number 5 wing tanks in preparation for a voyage to Port Arthur, Texas. There are 27 cargo tanks on the TEXACO MASSACHUSETTS. These tanks are numbered 1 through 9 with three tanks abreast. The cargo hatch and ullage opening covers were closed at the time of the collision. The TEXACO MASSACHUSETTS was certificated for the carriage of flammable or combustible liquids of Grade B and had completed discharging a cargo of gasoline at 0500 on 16 June.

The ALVA CAPE's cargo of naphtha, destined for Bayway, New Jersey, had been loaded at Karachi, Pakistan on 16 May 1966.

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The flash point (Pensky Martens, closed cup) was -25 degrees Fahrenheit. The Reid vapor pressure at 100°F of a cargo sample taken at Karachi, Pakistan was found to be 7.5 lbs. The Reid vapor pressure at 100°F of a cargo sample taken after the casualty was determined to be 8.4 lbs.

16. The vessels involved sustained the following damage as a result of the casualty:

M/V ALVA CAPE - The vessel was holed on the starboard side in way of No. 1 cargo tank and completely gutted by fire above the main deck level. Combustible bulkheads in the accommodation spaces forward and aft, as well as the furnishings therein, were completely destroyed. Steel plating in the superstructure and various deck fittings were distorted by the heat. The aluminum lifeboats were destroyed and the paint was burned off the entire hull of the vessel.

SS TEXACO MASSACHUSETTS - The stem was set in slightly between the 19 and the 26 foot waterlines. Several shell plates on the starboard quarter as well as some of the bulkheads and deck plating in that area were slightly distorted by the heat. Number 3 lifeboat, which was constructed of fibrous glass reinforced plastic, was destroyed by fire. Repairs to the TEXACO MASSACHUSETTS have been completed to the satisfaction of the Officer in Charge, Marine Inspection, New York.

Tug DSSO VERMONT - The vessel was completely gutted by fire above the main deck level. The main and boat decks buckled fore and aft and the superstructure plating was distorted by the heat. The fixed CO2 system was not discharged and the controls were found melted in a closed position.

Tug LATIN AMERICAN - The machinery space above the main deck and some of the living spaces were damaged by fire. The aluminum lifeboat was destroyed. There was some distortion of deck and bulkhead plating due to the heat.

CONCLUSIONS

1. That the cause of the collision was the failure of the pilots of the TEXACO MASSACHUSETTS and the ALVA CAPE to exercise due caution when their vessels were approaching each other at the junction of the narrow channels, and the failure of the burdened ALVA CAPE to keep out of the way of the privileged TEXACO MASSACHUSETTS.
2. That the initial explosion was caused by naphtha vapors rising from the naphtha on the surface of the water being drawn into the diesel engine of the tug LATIN AMERICAN.
3. That there is evidence of negligence on the part of the pilot of the ALVA CAPE, in that he wrongfully failed to navigate that vessel with caution, notwithstanding the fact that information of the proximity and approach of another vessel was available to him from visual observations. There is evidence of violations of the Inland Rules of the Road on the part of the pilot of the ALVA CAPE, in that he failed to keep out of the way of the privileged TEXACO MASSACHUSETTS in disregard of Article 19 (33 USC 204), in that he failed to take proper precautions to avoid crossing ahead of the TEXACO MASSACHUSETTS in violation of Article 22 (33 USC 207) and by his failure to timely slacken speed, stop, or reverse when approaching the TEXACO MASSACHUSETTS in disregard of Article 23 (33 USC 208). There is also evidence of violations of Article 18, Rule III of the Inland Rules of the Road (33 USC 203) and the Pilot Rules for Inland Waters (33 CFR 80.1) on the part of the pilot of the ALVA CAPE, in that he failed to sound the danger signal of not less than four short and rapid blasts of the steam whistle when the ALVA CAPE approached the TEXACO MASSACHUSETTS under circumstances which would indicate doubt as to the course or intention of that vessel.
4. That there is evidence of negligence on the part of the pilot of the TEXACO MASSACHUSETTS, in that he wrongfully failed to navigate that vessel with caution, notwithstanding the fact that information of the proximity and approach of another vessel was available to him from visual observations. There is evidence of violations of the Inland Rules of the Road and the Pilot Rules for Inland Waters on the part of the pilot of the TEXACO MASSACHUSETTS, in that he failed to sound the danger signal of not less than four short and rapid blasts of the steam whistle upon failing to understand the course or intention of the ALVA CAPE in disregard of Article 18, Rule III (33 USC 203) and 33 CFR 80.1, and by his failure to sound three

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short blasts on the whistle when the engine of the TEXACO MASSACHUSETTS was going full astern in disregard of Article 28 (33 USC 213).

5. That there is no evidence that any personnel of the Coast Guard or any other government agency, or any other person, contributed to the casualty.

6. That no aids to navigation nor any uncharted or incorrectly charted objects were involved.

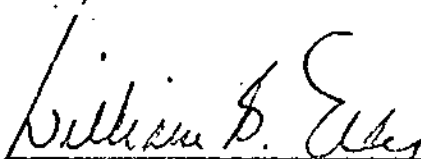
7. That this casualty could have been prevented by strict compliance with the Inland Rules of the Road and the Pilot Rules for Inland Waters.


8. That any doubt concerning the course or intention of the other vessel could have been readily resolved by the use of bridge-to-bridge radiotelephone, if the vessels had been so equipped.

9. That the actions of many of the crewmembers of the vessels involved in assisting their shipmates, and of the numerous persons on the several tugboats, pleasure boats, New York City Police Department and Fire Department boats and Coast Guard vessels who were engaged in the rescue of survivors, or fire fighting, were highly commendable.

RECOMMENDATIONS

1. That further investigation under the Suspension and Revocation Proceedings be initiated in the cases of Donald W. Baker, pilot of the ALVA CAPE and Patrick Kelly, pilot of the TEXACO MASSACHUSETTS concerning their parts in the casualty.
2. That the case be referred to the U. S. Department of Justice for possible prosecution of Donald W. Baker, docking pilot, for his operation of the ALVA CAPE in a reckless and negligent manner in violation of 46 USC 526 1(a).
3. That the case be referred to the U. S. Department of Justice for possible prosecution of Patrick Kelly, docking pilot, for his operation of the TEXACO MASSACHUSETTS in a reckless and negligent manner in violation of 46 USC 526 1(a).
4. That the Commandant continue his efforts to effectuate a requirement for bridge-to-bridge radio telephone aboard vessels in navigable waters of the United States.


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