DEPARTMENT OF TRANSPORTATION

COAST GUARD

MARINE CASUALTY REPORT

SS FROSTA (NORWEGIAN), M/V GEORGE PRINCE; COLLISION IN THE MISSISSIPPI RIVER ON 20 OCTOBER 1976 WITH LOSS OF LIFE

U.S. COAST GUARD
MARINE BOARD OF INVESTIGATION REPORT

AND

COMMANDANT'S ACTION

REPORT NO. USCG 16732/73429

LROSTA

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16. Abstract

On 20 October 1976 the Norwegian tankship FROSTA and the American ferry GEORGE PRINCE collided at Mile 120.8 above Head of Passes (AHP) on the Lower Mississippi River. The GEORGE PRINCE was struck on the portside, amidships by the bow of the FROSTA, pushed up river a short distance and then capsized to starboard throwing the full load of vehicles and passengers into the water. Seventy six persons perished; their bodies have been recovered and identified. Eighteen passengers survived. One passenger is missing and presumed dead.

This report contains the U. S. Coast Guard Marine Board of Investigation report and the Action taken by the Commandant to determine the probable cause of the casualty and the recommendations to prevent recurrence.

The Commandant has determined that the probable cause of the casualty was that both vessels were operated without due caution and regard for the dangers of collision. Both vessels were burdened by Rule 21 and 25 of the Western Rivers Rules to avoid collision. Neither vessel took any early and substantial action to do so.

17. Key Words	18. Distribution Statement
Foreign; tankship; ferry boat; maneuvering; underway; collision; capsizing; Western River; rules of the road; piloting; whistle signals; autopsy; drowning; life preservers; fatigue; intoxication	This document is available to the public through the National Technical Information Service, Springfield, Virginia 22151.

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SS FROSTA (NORWEGIAN), M/V GEORGE PRINCE;
COLLISION IN THE MISSISSIPPI RIVER ON 20
OCTOBER 1976 WITH LOSS OF LIFE

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DEPARTMENT OF TRANSPORTATION
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16732/GEORGE PRINCE -
FROSTA
18 APR 1978

Commandant's Action

on

The Marine Board of Investigation convened to investigate the circumstances surrounding the collision between the SS FROSTA (Norwegian) and the M/V GEORGE PRINCE, O.N. 236825 in the Mississippi River on 20 October 1976 with loss of life

The record of the Marine Board of Investigation convened to investigate the subject casualty has been reviewed; and the record, including the findings of fact, conclusions, and recommendations is approved subject to the following comments.

REMARKS

1. The most crucial determination to be made in the investigation of this tragic casualty is the application of the Western Rivers Rules of the Road. The Board determined in conclusions 2 and 6 that the situation involving the FROSTA and GEORGE PRINCE was one of special circumstances governed by Rule 25. This determination is concurred with.

Although the courses that the vessels pursued until collision were physically crossing, certain circumstances of the case made application of the crossing rule (Rule 19) impossible. When the GEORGE PRINCE entered into the stream, it was already in a close quarters situation with FROSTA. At this point the ferry was turning and presenting a changing aspect to FROSTA and may have been expected to do any one of three things: head down river, cross directly to the west bank, or stop and wait for the FROSTA. There was obviously doubt as to its ultimate intention because of the common practice of ferry vessels to keep clear of large upbound or downbound vessels. Further the suddenness of the encounter provided inadequate time for either Pilot Colombo or Captain Auletta to properly evaluate the situation. Under Rule 25 the doubt as to GEORGE PRINCE's future movements left Colombo with only one option: to stop the FROSTA and sound the danger signal. Pilot Colombo

recognized the situation required some action on the part of at least one of the vessels in order to avoid a dangerous situation. He chose to continue on his course and speed and proposed that the GEORGE PRINCE maneuver to keep out of his way. However, the GEORGE PRINCE did not acknowledge this proposal. The close proximity of the vessels required that at the least Colombo take emergency evasive action immediately after his first proposal went unanswered. He compounded the error by continuing without taking any action to check the advance of the FROSTA. From the outset, Colombo's only prudent action in this situation would have been to sound the danger signal and stop the FROSTA, and then only proceed after a passing agreement had been made between the vessels.

The GEORGE PRINCE proceeded apparently oblivious to the approaching FROSTA. Captain Auletta of the GEORGE PRINCE for reasons unknown failed to answer the FROSTA's signals and did not let his intentions be known. Most probably Auletta never sighted the FROSTA, never heard FROSTA's whistle signals or Colombo's radio transmissions. A reasonably alert watch would have sighted the FROSTA. Even considering that Auletta was aware of FROSTA's presence he had no right to proceed into collision without taking any evasive action. Auletta's disregard for the dangers of collision and lack of prudent seamanship is inexcusable.

2. The proximate cause of this casualty cannot be attributed to only one vessel. Both vessels were operated without due caution and regard for the dangers of collision. Both vessels were burdened by Rules 21 and 25 of the Western Rivers Rules to avoid collision. Neither vessel took any early and substantial action to do so.

3. Although it is not possible to determine exactly to what degree Auletta was impaired by the .09 blood alcohol content, the effects of the alcohol have to be considered a major contributing factor in this casualty. Numerous studies have been made into the effects of alcohol on people, particularly persons operating motor vehicles. Persons with a blood alcohol content (BAC) of less than .10 are impaired to some degree (persons with a BAC of .10 are considered legally intoxicated in most states). Three areas where the effects of alcohol are well pronounced at a BAC less than .10 are; (1) steadiness, orientation and balance; (2) attention, memory and information processing; and (3) peripheral vision and visual field. For example, the rapidity of the eyes to adapt to darkness is reduced; detection of moving targets at low levels of illumination is affected; and mental attentiveness begins to decrease. It is widely accepted that the effects of alcohol are magnified if a person is fatigued. It is imperative that the deck watch of any vessel be in complete control of their faculties. Taking into account the slow reactions of most vessels (compared to motor vehicles) there is little room for errors in judgment in close quarters situations. The evidence adduced in this casualty investigation indicates that Auletta was not in full control of his faculties. It is inconceivable that a mariner with Auletta's experience could ignore or fail to note the presence of the approaching FROSTA unless his faculties were impaired.

4. The seventh paragraph in finding of fact 8 states "the regulations, 33 Code of Federal Regulations, Part 26, which dictate the outfitting with bridge to bridge radio do not similarly dictate the method or circumstances of the use beyond requiring a constant listening watch." This statement is incorrect. Title 33 CFR 26.04 speaks to the use of the designated frequency (156.65 MHz, Channel 13 VHF). Paragraph (b) of 33 CFR 26.04 states "Each person who is required to maintain a listening watch under section 5 of the Act shall, when necessary, transmit and confirm, on the designated frequency, the intentions of his vessel and any other information necessary for the safe navigation of vessels."

5. Lolis Gagnard, Captain of the OLLIE K. WILDS, the alternate ferry on this run, testified that the windows in his pilothouse were closed and he did not hear FROSTA's whistle signals. Further, he testified that the windows were usually closed this time of year due to the cold.

Upon review of prior casualties involving the GEORGE PRINCE it was noted on one occasion the GEORGE PRINCE was involved in a collision which followed a similar scenario as this casualty. The captain of the GEORGE PRINCE on that occasion testified that prior to collision he did not hear the whistle signals of the other vessel. This was due to the windows in the pilothouse being closed. The sounding of vehicle horns and yelling of passengers aboard the GEORGE PRINCE were also unheard by the captain in the pilothouse.

In all probability most of the windows were closed in the pilothouse of the GEORGE PRINCE prior to the collision. This may have prevented Auletta from hearing the FROSTA's signals. If the pilothouse windows are closed it is imperative to post a lookout outside in order to listen for signals from other vessels.

COMMENTS ON CONCLUSIONS

1. Conclusion number 4 is not concurred with. (See paragraph 2 of Remarks)

2. Conclusion number 5 is concurred with in part. Failure to keep a proper lookout is not a violation of 33 USC 351 but is negligence.

Although it would have been prudent on Auletta's part to signal his intention, he cannot be in violation of 33 USC 344 (Rule 19) since that rule did not apply.

3. Conclusion 6 is concurred with in part. The second sentence of the second paragraph of the conclusion implies that Colombo had the right to choose which rule he would follow. This is not concurred with. The actual risk or danger of collision and physical circumstances determine the duties of both vessels. In this case the suddenness of the encounter necessitated the application of Rule 25.

ACTION CONCERNING THE RECOMMENDATIONS

1. Recommendation: That no action be taken in the case of Egidio P. Auletta since no remedial purpose would be served in light of his death.

Action: No further action will be taken with respect to Egidio P. Auletta's part in this casualty.

2. Recommendation: That further investigation be initiated under the civil and criminal penalty procedures into the violations enumerated in conclusion 5 with respect to the Department of Highways, State of Louisiana, the owner and operator of M/V GEORGE PRINCE.

Action: This recommendation is disapproved. The negligence alleged in conclusion 5 was that of Egidio P. Auletta and there is no indication that his actions were directed by the State of Louisiana. Therefore it would be improper to proceed against the State for Auletta's negligence.

With respect to the alleged violations of the Rules of the Road enumerated in conclusion 5 as modified in my comments, the penalty statutes 33 USC 354 and 355 provide for penalties against vessel personnel and the vessel, not the owner. Therefore the Commander, Eighth Coast Guard District has been directed to initiate further investigation under the civil penalty procedures concerning the M/V GEORGE PRINCE.

3. Recommendation: That further investigation under the civil and criminal penalty procedures be initiated in the case of Nicholas F. Colombo, the Pilot of SS FROSTA, concerning his part in the casualty.

Action: The Commander, Eighth Coast Guard District has been directed to initiate further investigation under the civil penalty procedures in the case of Nicholas F. Colombo.

4. Recommendation: That further investigation under the civil and criminal penalty procedures be initiated in the case of Kjell Sletten, the Master of SS FROSTA, concerning his part in the casualty.

Action: The Commander, Eighth Coast Guard District has been directed to initiate further investigation under the civil penalty procedures in the case of Kjell Sletten.

5. Recommendation: That the Commandant seek legislation amending the Rules of the Road for Western Rivers to give the right of way to stream traffic over crossing traffic.

Action: The draft rules for U. S. waters being developed by the Rules of the Road Advisory Committee would update the Western Rivers Rules including the recommended amendment. Legislative action has been initiated to implement these rules.

6. Recommendation: That the Commandant seek legislation amending the Bridge to Bridge Radiotelephone Act, 33 USC 1201-1208, to require its application to all passenger-carrying ferry vessels whether or not such passengers are carried for hire.

Action: The Port Safety and Law Enforcement Division at Coast Guard Headquarters will initiate action looking toward amending legislation.

7. Recommendation: That the Commandant seek legislation amending the Rules of the Road for Western Rivers, Rule 25, 33 USC 350, so that it contains a caveat concerning communications by inserting the phrase "particularly failure to communicate with one another" immediately after the words "special circumstances".

Action: Recommendation 7 is not concurred with. The failure to communicate would not necessitate a departure from the rules in all cases. Rules 21 and 24 of the Western Rivers Rules provide adequate guidance for the proper action to be taken in the event one vessel fails to communicate its desires or intentions.

8. Recommendation: That the Coast Guard intensify and extend its boarding program of uninspected vessels, particularly free ferries such as M/V GEORGE PRINCE, to include surveillance of operation. Such surveillance should emphasize Rule 24(c), the departure signal of the Western Rivers Rules of the Road, and its counterpart in other rules.

Action: The Merchant Vessel Inspection Division at Coast Guard Headquarters is developing a boarding program for the inspection of safety equipment aboard uninspected commercial vessels. This recommendation will be given consideration with respect to application of a surveillance program in conjunction with the boarding program.

9. Recommendation: That consideration be given to requiring active and positive participation by all ferry vessels in the planned Vessel Traffic Services for the Lower Mississippi River particularly where such vessels are operating in response to commuter traffic in lieu of maintaining a fixed, advertised schedule.

Action: When proposed regulations are issued for mandatory participation in the New Orleans VTS system, a requirement will be included that ferry vessels participate. In the interim letters will be sent to all ferry vessel operators in the New Orleans VTS area urging their participation in the existing voluntary VTS system.

10. Recommendation: That the Commandant seek authority for prescriptive sanctions against Federal pilotage licenses for the navigable waters of the United States when a pilot's performance indicates the need for such action whether or not the questionable performance occurred while the pilot was operating under the authority of his Federal license.

Action: Legislation relating to the problem is presently in Congress. Also, the entire subject of jurisdiction relative to Federal pilot licenses is currently under review at Coast Guard Headquarters.

O. W. SILER
Admiral, U. S. Coast Guard
Commandant

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS
U. S. Coast Guard
400 Seventh Street S.W.
Washington, D.C. 20590

16732/SS FROSTA/
M/V GEORGE PRINCE

9 September 1977

From: Marine Board of Investigation
To: Commandant (GMMI-1)

Subj: SS FROSTA (NO) JXLS and M/V GEORGE PRINCE, O.N. 236825; collision at Mile 120.8 AHP, Lower Mississippi River on 20 October 1976 with loss of life

1. FINDINGS OF FACT:

On 20 October 1976, at about 0615 (all times CDT), the Norwegian Tankship SS FROSTA and the American Ferry M/V GEORGE PRINCE collided at Mile 120.8 above head of passes (AHP) on the Lower Mississippi River. M/V GEORGE PRINCE was struck on the portside, amidships by the bow of SS FROSTA, pushed upriver a short distance and then capsized to starboard throwing her full load of vehicles and passengers into the water. Seventy-six persons, including the entire M/V GEORGE PRINCE crew of five perished; their bodies have been recovered and identified. Eighteen persons, all passengers, survived. One passenger is missing and presumed dead. During salvage operations, a partial human remain was recovered and is insufficient for identification purposes.

Of those persons that died, 18 bodies were removed from the mostly submerged hull of M/V GEORGE PRINCE on the day of the collision. Fifty-seven bodies and the partial remains were recovered during subsequent vehicle salvage operations on 23 through 30 October 1976. One body was recovered and identified on 22 May 1977.

M/V GEORGE PRINCE was raised the evening of 21 October 1976 and towed to the Louisiana Department of Highways' Shipyard at Plaquemine, Louisiana where it was subsequently declared beyond economical repair.

SS FROSTA suffered superficial damage to the stem and propeller. She resumed her voyage on 23 October 1976, departing Baton Rouge, Louisiana for Houston, Texas.

2. DESCRIPTION OF VESSELS INVOLVED:

NAME:	FROSTA	GEORGE PRINCE
OFFICIAL NO.:	C15410	236825
RADIO CALL SIGN:	JXLS	WY 7460
SERVICE:	Tankship	Ferry
GROSS TONS:	22,850.04	259.11
NET TONS:	13,791.64	184

YEAR BUILT:	1961	1937
LENGTH:	664.67 feet	120.3 feet
BREADTH:	89.85 feet	34.4 feet
DEPTH:	48.05 feet	7.0 feet
PROPULSION:	Steam Turbine	Diesel
HORSEPOWER:	16,800	670
RUDDERS:	One	Two
SPEED:	17 knots	12 mph
HOME PORT:	Bergen, Norway	Baton Rouge, LA
OWNER:	A/S Ludwig Mowinckels Rederi Bergen, Norway	State of Louisiana Department of Highways P. O. Box 44245, Capital Sta. Baton Rouge, LA 70804
OPERATOR:	Same	Same
MASTER:	Kjell Sletten Etne, Norway	None
LICENSE:	Master	N/A
PILOT:	Nicholas F. Colombo	Egidio Auletta
LICENSE:	Master of Steam and Motor Vessels, any gross tons on rivers, First Class Pilot of Steam and Motor Vessels of any gross tons on Lower Mississippi between Scotts Bluff Light Mile 234.4 and Head of Passes, Radar Observer	First Class Pilot of Steam and Motor, Ferry Vessels of not over 300 Gross tons on the LMR at Mile 120.7 AHP between East and West Banks on established Ferry route; also, from Reserve, LA (Mile 137.7 AHP) on the East Bank to Edgard, Louisiana (Mile 138.2 AHP) on the West Bank on the established Ferry Route; Radar Observer Operator of Mechanically propelled passenger carrying vessels of not more than 100 Gross Tons upon the Gulf of Mexico, not more than 100 miles offshore, between Apalachicola, Florida and Brownsville, TX
Z OR BOOK NUMBER:	None	Z 114-30-1163
LAST INSPECTION BY U. S. COAST GUARD:	Letter of Compliance	Certification
DATE:	10 January 1975	15 November 1968 (Surrendered 2 July 1969)
PORT:	New Orleans, LA	New Orleans, LA
AGENT:	Gulf Motorships, Inc. 535 Gravier St. New Orleans, LA	None

3. DEAD AND INJURED:

(a) Crew of GEORGE PRINCE - Known Dead

Name: Egidio Paul Auletta
Pilot
SSN: 114-30-1163
Address: Route 2, Box 1204, Destrehan, LA
NOK: Wife - Wanda

Name: Nelson Octave Eugene, Sr.
Deck Hand
SSN: 434-12-5395
Address: P. O. Box 261, St. Rose, LA
NOK: Wife - Georgiana

Name: Douglas Anthony Ford
Deck Hand
SSN: 437-60-9569
Address: Route 1, Box 235, Boutte, LA
NOK: Wife - Darlene

Name: Jerry Randle
Engineer
SSN: 437-90-7027
Address: 1356 E. Harding, Apt. #1, New Sarpy, LA
NOK: Wife - Elwin

Name: Ronald Wolfe
Deck Hand
SSN: 438-02-5634
Address: 440 Turtle Creek Lane, St. Rose, LA
NOK: Mother - Mrs. Elizabeth Wolfe

(b) Passengers - Known Dead

Name: Mark Abadie
SSN: 435-13-4719
Address: 2204 Cypress, LaPlace, LA
NOK: Parents - Mr. and Mrs. Amedee J. Abadie

Name: Hurest Anderson, Jr.
SSN: 438-98-4806
Address: 404 Orange Loop, LaPlace, LA
NOK: Parents - Mr. and Mrs. Hurest Anderson, Sr.

Name: Glen Aubrey Barreca, Sr.
SSN: 587-05-6358
Address: 214 Clayton Street, Norco, LA
NOK: Wife - Janice

Name: John Wayne Basso
SSN: 437-96-8836
Address: Route 1, Box 138 A1, Independence, LA
NOK: Wife - Holly

Name: Thomas E. Beasley
SSN: 434-76-9875
Address: 122 E. Tomeny Drive, Destrehan, LA
NOK: Wife - Patsy

Name: Anthony Breaux
SSN: 437-86-3691
Address: 481 Apricot, LaPlace, LA
NOK: Wife - Marilyn

Name: Jerry Mark Brown, Jr.
SSN: 437-74-6636
Address: 124 B Elm Loop, LaPlace, LA
NOK: Wife - Elvera

Name: Martin Hughes Campbell
SSN: 437-92-3937
Address: 101 Lorraine, Destrehan, LA
NOK: Mother - Mrs. Barbara Seiler Guerra

Name: Jim Harvey Carter, Sr.
SSN: 435-62-0109
Address: Route 1, Box 293, Ponchatoula, LA
NOK: Wife - Linda

Name: Harry Joseph Clement
SSN: 436-96-6788
Address: Route 1, Box 31, Woodhaven Road, Tickfaw, LA
NOK: Wife - Kim

Name; Richard Cobb, Jr.
SSN: 260-84-9431
Address: 802 East Church Street, Hammond, LA
NOK: Father - Mr. Richard Cobb, Sr.

Name: Oscar Henry Dermondy
SSN: 216-94-1893
Address: 94 Houston Place, Kenner, LA
NOK: Wife - Suyapa

Name: Dwight Larance Dobson
SSN: 347-50-2369
Address: Route 4, Box 150, Hammond, LA
NOK: Wife - Margaret

Name: Melvin Dright, Jr.
SSN: 437-50-4513
Address: 1013 31st Street, Apt. 23, Kenner, LA
NOK: Wife - Ruby

Name: Herman Eugene, Jr.
SSN: 436-76-5973
Address: P. O. Box 139, South Fig Street, Garyville, LA
NOK: Parents - Mr. and Mrs. Herman Eugene, Sr.

Name: Lenwood Fenroy
SSN: 434-84-3218
Address: Route 1, Box 1721, LaPlace, LA
NOK: Wife - Viola

Name: Al Fleming
SSN: 436-98-4321
Address: East Street, Garyville, LA
NOK: Parents - Mr. and Mrs. Ernest Fleming

Name: Charles Frank, Jr.
SSN: 438-58-8714
Address: 1420 1/2 Elm Street, Metairie, LA
NOK: Wife - Helen

Name; Benny Ray Fuller
SSN: 429-02-9768
Address: 3400 Kent Avenue, Apt. 306, Metairie, LA
NOK: Wife - Teresa

Name: Jimmy Dale Gast
SSN: 345-38-2662
Address: Lot 32, Riverside Trailer Park, Destrehan, LA
NOK: Wife - Brenda

Name: Ervin Wayne Gehegan
SSN: 438-80-2393
Address: Route 4, Box 25W, Hammond, LA
NOK: Wife - Elsie

Name: Otis Ervin Gehegan
SSN: 435-30-7106
Address: Route 1, Box 123 B, Tickfaw, LA
NOK: Wife - Maxine

Name: John Albert Goldston, Jr.
SSN: 241-76-5076
Address: 4888 Sherwood Blvd., Castlebrook Apt. 403, Baton Rouge, LA
NOK: Wife - Cathy

Name: Oscar William Green
SSN: 426-42-7450
Address: P. O. Box 425, Ridgeland, LA
NOK: Wife - Ellen

Name: Ronnie Earl Hall
SSN: 436-94-4667
Address: 1236 Johnson, Destrehan, LA
NOK: Wife - Beverly

Name: Joseph Gene Harris
SSN: 439-96-7755
Address: 1200 Maple Street, Tallulah, LA
NOK: Parents - Mr. and Mrs. Jonathan E. Harris, Sr.

Name: Paul David Harris
SSN: 439-70-8017
Address: 1216 Bellevue Drive, LaPlace, LA
NOK: Wife - Betty

Name: Willie Dale Harris
SSN: 436-88-8875
Address: 1200 Maple Street, Tallulah, LA
NOK: Wife - Barbara

Name: Joseph Virgil Hastings, Jr.
SSN: 411-22-8867
Address: 147 Bonner, Kenner, LA
NOK: Wife - Ann

Name: Henry Hills, Jr.
SSN: 438-46-0752
Address: 305 Bonita, Hammond, LA
NOK: Wife - Elizabeth

Name: Larry Edward Hills
SSN: 435-82-4140
Address: 807 East Church Street, Hammond, LA
NOK: Parents - Mr. ad Mrs. Henry Hills, Jr.

Name: Hollis Ray Hodges
SSN: 260-56-4839
Address: 3759 Catalina Drive, Cocoa, Florida
NOK: Wife - Lucille

Name: Edgar Joseph Holmes
SSN: 428-56-5944
Address: 165 E. Pecan Street, Ponchatoula, LA
NOK: Wife - Nilwon

Name: James Wilburn Hughes
SSN: 408-52-4383
Address: Route 1, Box 135 A2, Independence, LA
NOK: Wife - Delma

Name: Timothy Mark Hymel
SSN: 432-72-8928
Address: 607 Cedar Street, Reserve, LA
NOK: Wife - Beatrice

Name: Robert Malcolm Jones, Jr.
SSN: 435-02-6422
Address: 4522 Parkdrive North, Metairie, LA
NOK: Father - Robert M. Jones, Sr.

Name: Lindsay Francis LeBlanc
SSN: 435-88-2630
Address: 634 West B. Street, Norco, LA
NOK: Wife - Rhonda

Name: Mary Linda Lightsey
SSN: 263-88-1525
Address: Christina Trailer Park, Lt #10, Destrehan, LA
NOK: Father - Wiley Lightsey

Name: Lonie Marts
SSN: 436-76-5384
Address: 3025 Dawson Street, Kenner, LA
NOK: Wife - Daisy

Name: Charles McKeithen
SSN: 438-28-4295
Address: 4004 Connecticut Avenue, Kenner, LA
NOK: Wife - Dorothy

Name: Joseph Kelly Michelli
SSN: 437-76-4722
Address: Route 3, Box 60, Hammond, LA
NOK: Wife - Claudette

Name: Hubert Minor, Jr.
SSN: Unknown
Address: 912 Compromise Street, Kenner, LA
NOK: Father - Hubert Minor, Sr.

Name: Roosevelt Mixon
SSN: 438-34-4662
Address: 315 Morey, Kenner, LA
NOK: Wife - Josephine

Name: Anthony Monistere
SSN: 433-48-1124
Address: Route 3, Box 85, Hammond, LA
NOK: Wife - Eula

Name: Barry Patrick Moore
SSN: 434-72-0164
Address: #8 Schill Avenue, Kenner, LA
NOK: Wife - Carliss

Name: William Howard Moore
SSN: 433-06-1900
Address: 722 Terrace, New Sarpy, LA
NOK: Parents - Mr. and Mrs. John Moore, Jr.

Name: Robert Tillman Newton, Sr.
SSN: 425-80-2829
Address: Route 4, Box 212, Van Cleave, MS
NOK: Wife - Vera

Name: Joseph Collie Nicolosi, Sr.
SSN: 438-24-0793
Address: Route 3, Box 118 (Alida St.), Hammond, LA
NOK: Wife - Ruby

Name: Terry Eileen Norton
SSN: 165-26-9271
Address: 1600 Airline Highway, Kenner, LA
NOK: Daughter - Mrs. James E. Spencer

Name: Benjamin Franklin Pape, Jr.
SSN: 460-80-2773
Address: Route 1, Box 293F, Ponchatoula, LA
NOK: Wife - Terry

Name: Eddie Joseph Plaisance, Jr.
SSN: 438-34-4662
Address: 6008 Flagler, Metairie, LA
NOK: Wife - Mary

Name: Larry Joseph Pontiff
SSN: 436-68-4727
Address: 932 Minden Street, Kenner, LA
NOK: Wife - Virginia

Name: Kevin Michael Pritchett
SSN: 436-21-8474
Address: Route 1, Box 104 (Lorraine St.), Destrehan, LA
NOK: Parents - Mr. and Mrs. George Pritchett

Name: Jeffrey Waylon Quarles
SSN: 430-87-2615
Address: 5918 Latting Street, Pine Bluff, AK
NOK: Wife - Deborah

Name: Darrel Michael Rodriguez
SSN: 437-90-9818
Address: Star Route, Ponchatoula, LA
NOK: Wife - Joann

Name: Killian Emile Schafer, Jr.
SSN: 437-68-0652
Address: 105 Drude Drive, Ponchatoula, LA
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Name: Elmore Anthony Schexnayder
SSN: 433-44-8953
Address: 465 Maple Loop, LaPlace, LA
NOK: Wife - Dorothy

Name: Ronald Lewis Schexnayder
SSN: 439-88-1021
Address: 635 Marino Drive, Norco, LA
NOK: Wife - Jennifer

Name: Adolph Smith, Sr.
SSN: 435-34-1220
Address: Route #2, 152 4th Street, Destrehan, LA
NOK: Wife - Lucille

Name: Ivory Joe Smith
SSN: 439-88-6324
Address: Little Hope Street, Garyville, LA
NOK: Wife - Linda

Name: Arthur Rubin Snyder
SSN: 426-54-5008
Address: P. O. Box 517, LaPlace, LA
NOK: Wife - Margie

Name: Richard Mark Songy, Sr.
SSN: 437-86-6569
Address: 558 Apple Street, Norco, LA
NOK: Wife - Janet

Name: Michael James Stewart
SSN: 436-94-8775
Address: 1700 Mason Smith Avenue, Metairie, LA
NOK: Parents - Mr. and Mrs. James O. Stewart

Name: Anita Poole Stadler
SSN: Unknown
Address: #10 Christina Trailer Park, St. Rose, LA
NOK: Husband - Dudley

Name: Rafael Tolentino
SSN: 584-14-5772
Address: 105 Gordon, Lot #4, Destrehan, LA
NOK: Wife - Juanita

Name: Michael Nestor Webre
SSN: 436-66-3741
Address: 1209 Lynette Street, Metairie, LA
NOK: Wife - Kathleen

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SSN: 437-90-9961
Address: East Church Street, Hammond, LA
NOK: Wife - Patricia

Name: Johnny Henderson Williams, Jr.
SSN: 436-98-4739
Address: 505 Mockingbird Lane, St. Rose, LA
NOK: Parents - Mr. and Mrs. Johnny Williams, Sr.

Name: Leon Charles Williams
SSN: 434-78-3347
Address: 630 Compromise Street, Apt. F, Kenner, LA
NOK: Wife - Charlette

Name: Steven Allan Williamson
SSN: 419-18-2933
Address: 71 Lucaya Drive, Kenner, LA
NOK: Father - Mr. Billy R. Williamson

Name: Eastmon George Willie
SSN: 437-76-2779
Address: Route 1, Box 293, Ponchatoula, LA
NOK: Wife - Sherlene

(c) Passenger - Missing and Presumed Dead

Name: Anestasia Wanko
SSN: Unknown
Address: 410 South Broad Street, New Orleans, LA
NOK: Father - Richard Wanko

(d) Passengers - Injured and incapacitated more than 72 hours

Name: Leroy Acosta
Address: 301 Greenwood, LaPlace, LA 70068

Name: Charles Allen
Address: Route 2, Destrehan, LA 70047

Name: Kenneth Becnel
Address: 113 Destrehan Drive, Destrehan, LA 70047

Name: Erwin Blue
Address: P. O. Box 132, New Sarpy, LA 70078

Name: Brian Broussard
Address: P. O. Box 6443, Gonzales, LA 70737

Name: David Broussard
Address: Route 1, Box 461, Prairieville, LA 70769

Name: Charles Chatelain
Address: 10317 Stuart Place, River Ridge, LA 70123

Name: Blair Duhe
Address: 507 Good Hope Street, Norco, LA 70079

Name: Allen Fisher
Address: 255 W. 2nd Street, LaPlace, LA 70068

Name: Milton Lachney
Address: 410 Milling Street, Luling, LA 70070

Name: George Lingo
Address: Route 3, Box 75D, Hammond, LA 70401

Name: Dan McLendon
Address: 210 River Oaks, Destrehan, LA 70047

Name: Charles Maples
Address: Destrehan, LA 70047

Name: Charles Naquin
Address: Lot 56, Bonura Drive, St. Rose, LA

Name: Barry Neyrey
Address: 703 N. Starrett, Metairie, LA 70003

Name: Vincent Pardo
Address: Route 1, Box 119, Tickfaw, LA 70468

Name: Richard Respess
Address: 109 Tudor Avenue, River Ridge, LA 70123

Name: Gene Woolverton
Address: 148 W. Tomeny Drive, Destrehan, LA 70047

4. WEATHER CONDITIONS:

(a) The weather prevailing on the Mississippi River, near Luling, Louisiana at the time of collision was a clear, crisp, pre-dawn darkness without fog, haze or other local environmental impairment to visibility. A weather observation by the National Weather Service at the National Weather Observation Site at Moisant International Airport, New Orleans, Louisiana at 6 AM on 20 October 1976 was:

Visibility:	8 Miles
Precipitation:	None
Sky Cover:	5/10 of sky was obscured by stratocumulus clouds. Base of cloud deck was 1500 feet.
Wind:	From North Northwest at 13 knots with gusts to 20 knots.

This observation site is less than seven miles from the scene of the collision and is indicative of the conditions which prevailed at the time and place of collision.

(b) The Mississippi River stage and flow as measured at New Orleans (Carrollton Gage), Louisiana, Mile 102.8 AHP some 18 miles down river from the point of collision, on 20 October 1976 were:

(1) Maximum flow velocity 2.2 feet/second or 1.5 mph
(2) Average flow velocity 1.7 feet/second or 1.16 mph
(3) River Stage was 2.04 feet above mean sea level

The observed flow supports the current of one to two mph estimated by witnesses at the scene of the casualty.

5. RADAR:

SS FROSTA is equipped with two radar sets. They were last inspected at Houston, Texas on 27 May 1976 by R.C.A. Service Company on behalf of the Norwegian Telecommunications Administration.

(a) Raytheon 1660/12S (10 Centimeter)

Scope Face:	16" Diameter
Power:	60 KW Peak Power
Antenna:	12 feet
Ranges (Mi):	1/2, 1 1/2, 3, 6, 12, 24, 48
Presentation:	Relative Motion
Range Resolution:	20 yards
Bearing Resolution:	1.5^{o}
Range Accuracy:	1.0%
Bearing Accuracy:	$\pm$1%

(b) Raytheon 1645/6x (3 Centimeter)

Scope Face:	16" Diameter
Power:	45 KW Peak Power
Antenna:	6 feet
Ranges (Mi):	1/2, 1 1/2, 3, 6, 12, 24, 48
Presentation:	Relative Motion
Range Resolution:	20 yards
Bearing Resolution:	1.5^{o}
Range Accuracy:	1.0%
Bearing Accuracy:	$\pm$1%

Both sets were operating at the time of the collision. Neither radar was utilized by bridge personnel during the time interval between sighting of M/V GEORGE PRINCE and the collision.

M/V GEORGE PRINCE is equipped with two radar sets, both are Raytheon, Model 3100.

(a) Raytheon 3100

Scope Face:	7" Diameter
Power:	7 KW Peak Power
Antenna:	Fixed Radome
Ranges (Mi):	1/2, 2, 4, 8, 16, 32
Presentation:	Relative Motion
Range Resolution:	25 yards
Bearing Resolution:	$3\ 1/2^{o}$
Range Accuracy:	$\pm$2%
Bearing Accuracy:	$\pm$1%

At the time of raising of M/V GEORGE PRINCE, on 21 October 1976, the radar set mounted at the overhead was turned off, the other radar set located on a pedestal to the left of the helm, just aft of the port throttle controls, was turned on.

The four radar sets involved in this casualty were not of the collision avoidance/automatic target plotting type. There was no requirement for the vessels to be so equipped.

6. VHF RADIOS:

FROSTA:

Manufacturer:	Storno Maritime Radiotelephone Storno Ved Amagerbanen 21 Copenhagen S., Denmark
Type of Radio:	Fixed installation
Model:	CQF 13-2
Frequency Range:	152-174MHZ
Power Output:	25 watts
Channels available:	1 through 14, 16, 18 through 28
Antenna tip location:	Approximately 14 meters above load water line on midship house
Voltage:	Various

PILOT'S RADIO:

Manufacturer:	Motorola Communications and Electronics
Type of radio:	Hand Portable
Model:	H33FFN-1170E NSP
Frequency Range:	156-163MHZ
Power Output:	1 or 5 watts selectable
Channels installed:	13, 16, 12 and 6
Antenna:	Short whip attached to unit, approximately 6 inches long.
Voltage:	15 VDC
Battery Life:	8 hours on Nickel-Cadimum Battery Pack (based on 5% transmit, 5% receive and 90% standby on 5 watt position)

GEORGE PRINCE:

Manufacturer:	Harris Communications, Inc.
Type of Radio:	Fixed installation
Model:	RF 442
Frequency Range:	156-162 MHZ
Power Output:	25 watt or 1 watt selectable
Channels available:	6, 7A, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18A, 19A, 22; Coast Guard 26, 27 and 28; 2 Weather Band Channels
Antenna tip location:	7 feet above housetop, 28 feet above water
Voltage:	12VDC

7. SS FROSTA

SS FROSTA was built in 1961 by Bremer Vulkan Schiffbau and Maschinenfabrik, Vejesack, Germany. The vessel has a typical tankship profile for those built in the early 1960's with the exception of four deck mounted, independent tanks, two forward and two aft of the midship house. SS FROSTA does not have a bulbous bow. The vessel has a raised forecastle with a flared, raised solid bulwark around the periphery of the forecastle

deck. The main deck between the forecastle and midship house has two longitudinally mounted independent tanks. A catwalk connects the forecastle and midship house. The top of the tanks with attendant piping, expansion domes and walkways do not project into the line of sight between the bridge and forecastle bulwark, but do encroach into the line of sight between the center of the bridge and the deck edge. This effectively enlarges the area of the blind spot forward, which would otherwise result from a raised forecastle and a navigation position aft of the bow and inboard of the deck edge, by a small amount. This effect from the tanks can be negated by moving outboard to the extreme limits of the enclosed bridge or to the bridge wings. The midship house contains quarters and the navigating spaces of the vessel. The navigating bridge is the fourth deck above the main deck with open bridge wings that extend outward to the extreme breadth of the hull. The well, or main deck area between the midship house and the after house, is fitted with the two remaining independent tanks. The after deckhouse contains quarters, various support spaces, the engine room and machinery casing.

At the time of delivery, speed trials were conducted. The vessel was ballasted to load draft. Turning circles of an average of 0.44 statute miles were executed at an average speed of 14.9 knots. A stopping test was conducted with the vessel going ahead at 15.75 knots, (94 RPM). "Stop Engines" and "Full Astern" was given and it took 8 minutes and 27 seconds to come to a dead stop. During that time, 6,840 feet were covered.

SS FROSTA is outfitted to carry Letter of Compliance (LOC) cargos, or cargos that require containment, handling and control considerations beyond that of normal petroleum cargos. The carriage by foreign vessels of these chemical cargos which pose potential, unusual risks to life and property into U. S. ports, is regulated by special interim regulations published in the Federal Register, Vol. 38 No. 115 of 15 June 1973. These regulations, 46 CFR 154, provide for the issuance of Letters of Compliance by the U. S. Coast Guard to vessels of foreign registry which meet the standards and conditions of the interim regulations.

SS FROSTA was first inspected by the U. S. Coast Guard for the carriage of hazardous chemical cargos in bulk on 10 October 1969 and was then issued a Letter of Compliance dated 7 November 1969. The last LOC inspection was conducted on 10 January 1975 in the port of New Orleans, Louisiana.

At the time of the casualty, the SS FROSTA had International, National and United States Certificates on board which covered her trading and indicated her compliance with all applicable U. S. Regulations.

8. VOYAGE OF SS FROSTA

SS FROSTA departed Rotterdam, the Netherlands on 4 October 1976, in ballast, bound for Baton Rouge, Louisiana. The voyage was uneventful and without port of call prior to arrival at the sea buoy off the South West Pass of the Mississippi River where she embarked a bar pilot at 2010, 19 October 1976.

Pilotage for the Lower Mississippi River from the Gulf of Mexico to Baton Rouge, Louisiana, for foreign vessels and U. S. vessels under registry, is supplied by three pilot associations. The Associated Branch Pilots cover passage from sea to Pilottown, Louisiana, Mile 1.9 AHP, Crescent River Port Pilot Association from Pilottown to the port of New Orleans and the New Orleans-Baton Rouge Steamship Pilots' Association for the river between New Orleans and Baton Rouge.

In addition to the pilot, a normal deck watch on SS FROSTA for transitting the Mississippi River consists of the master who remains up and about, a mate on watch, a helmsman, a relief helmsman who also serves as a lookout when directed, and a man on the forecastle as an anchor watch when directed by the pilot or the master. The anchor watch is not required for the entire passage.

At 0335, 20 October 1976, the vessel was slowed to permit the exchange of pilots. The river pilot was relieved by Nicholas F. Colombo, the New Orleans-Baton Rouge Steamship Pilot Association pilot whose radio call is NOBRA 51. This change took place in the vicinity of the Chalmette Slip at Mile 90.5 AHP.

At the time Pilot Colombo boarded SS FROSTA, the Master, Kjell Sletten; First Mate, Helge Aeso, and a helmsman were on the bridge.

The ship's two radars were on. The 3 cm radar was set on the 1 1/2 mile range and the 10 cm radar was set on the 3 mile range. The ship's VHF radio was set on channel 13 and all vessel equipment was operating normally. Both pilothouse doors were open.

Vessels such as SS FROSTA are required to be outfitted with channel 13, bridge to bridge radio, for the sole purpose of exchanging navigating information between vessels. The regulations, 33 Code of Federal Regulation, Part 26, which dictate the outfitting with bridge to bridge radio do not similarly dictate the method or circumstances of use beyond requiring a constant listening watch.

Pilot Colombo brought with him a hand held portable VHF transceiver that is equipped with four channels. Channel 13 is used for navigation, channel 16, marine emergency or distress, channels 12 and 6 for directing assisting tugs and general message traffic.

Pilot Colombo asked for a speed which would give approximately 12 mph, the speed he chose for the river transit. On SS FROSTA, 60 RPM has been established as half ahead, maneuvering and gives 9.9 knots, 11.4 mph. This speed was subsequently used by the pilot as his basic speed.

Pilot Colombo informed the master that an anchor watch was required from Saxonholm Light, Light List Volume II, CG Publication 160, entry 2262, Mile 86 AHP to the Fairview Ranges, Light List Volume V, CG Publication 161, Mile 115 AHP.

All requests and subsequent commands by the pilot were given in English and understood by the watch.

The transit through New Orleans to the Huey P. Long Bridge, Mile 106.1 AHP, was not unusual. As Pilot Colombo encountered vessel traffic, he would call on channel 13, come to a verbal agreement for passing and then exchange whistle signals in confirmation of the verbal agreement.

The Huey P. Long Bridge is the line of demarcation between Inland and Western Rivers' Rules of the Road with the Western River Rules applying above the bridge. Shortly after SS FROSTA passed this point, the master left the bridge to return to his cabin one deck below.

At 0509, when the vessel was rounding 12 Mile Point, Mile 109 AHP, the pilot ordered full ahead for two mintues after which he again returned to half ahead, 60 RPM. Pilot Colombo estimated at this speed, he was making good 10 to 10.5 mph over the ground which compares favorably with turns for 11.4 mph stemming a 1.1 mph average current.

In the vicinity of Kenner Shipyard, Mile 113.3 AHP, SS FROSTA met a downbound vessel with NOBRA 34 aboard. Pilot Colombo and NOBRA 34 agreed to a "two whistle" passing which, among the pilots, means a meeting situation where the two vessels pass starboard side to starboard side.

At the Fairview Range, Mile 115 AHP, the pilot informed the ship's personnel that they could secure the anchor watch which was done. From this time to the collision, no one was on the forecastle of SS FROSTA. Shortly after passing the Fairview Range, SS FROSTA met another downbound vessel with NOBRA 36 piloting. Pilot Colombo again came to a two whistle agreement for passing by radio which was accomplished without incident. Just below St. Rose Point, Mile 118 AHP, Pilot Colombo called on channel 13 checking for downbound traffic to which he received no response. While still below St. Rose Point, the midnight to 0600 watch was relieved by the oncoming 0600 - 1200 watch of Peder Gasvaer, Mate, and Arne Henriksen, Helmsman. The relief was without incident and no equipment outages or malfunctions existed which required report between the watches. The mate took up his position at the engine order telegraph, overseeing the operation of the watch, the carrying out of the pilot's commands and the monitoring of the helmsman's response to the pilot's commands. The mate on watch was also responsible for calling the master should circumstances or pilot performance dictate. While the master did not remain on the bridge, he testified that he was solely and ultimately responsible for the safe navigation of SS FROSTA.

After rounding St. Rose Point, Colombo was called by, and met, the towboat LEANDER, JR. and its tow of two shell barges. In this instance, Pilot Colombo and Howard Glen Phelps, the Pilot of M/V LEANDER, JR.,

verbally agreed, on channel 13, to a one whistle passing which was confirmed with whistle signals. This signified to the parties involved an agreement to pass port side to port side. This passing was accomplished in the vicinity of Gnots Fleet between Mile 119 and 120 AHP. Because of construction work on the main pier for a new bridge at Mile 121.55, Local Notice to Mariner's #39, 22 September 1976, Pilot Colombo began "widening out" or steering for the main channel opening approximately 1,300 feet wide and adjacent to the West Bank.

When SS FROSTA was about a mile below the Luling-Destrehan Ferry crossing, Pilot Colombo observed a ferry vessel which later proved to be M/V OLLIE K. WILDS, make the transit from West Bank to East Bank. Because of the distance involved, no crossing agreement was considered necessary and no communications or whistle exchanges were attempted by either vessel. In between St. Rose Point and the new bridge construction site, two vessels were moored to grain loading piers on the East Bank, M/V PACIFIC SAGA at Bunge Grain Elevator, Mile 119.9 AHP and M/V POLYVIKING at St. Charles Grain Elevator, Mile 120.6 AHP. As SS FROSTA approached a point even with the stern of M/V POLYVIKING moored to the St. Charles Grain Elevator pier, Pilot Colombo observed a ferry departing the East Bank ferry landing, Mile 120.7 AHP, and because of its general upriver heading, showing only the after range light.

The St. Charles grain elevator pier projects some 400 feet into the river and, when hosting a vessel the size of M/V POLYVIKING at 118,440 deadweight tons, effectively screens the ferry landing and vessels maneuvering in the vicinity of that landing until the landing is broad on the bow, about 45° relative to the observer on an upbound ship. For a vessel such as SS FROSTA shaping up to pass through the bridge construction and tending towards the West Bank side of the river, the earliest the East Bank landing is visible is when the upbound vessel is one quarter of a mile downriver from the landing.

Upon sighting the departing ferry, M/V GEORGE PRINCE, Pilot Colombo called twice, "NOBRA 51 calling Luling Ferry" using his hand held transceiver on channel 13. He paused about 15 seconds between calls to listen for a response. Receiving no response on channel 13, Pilot Colombo initiated a two whistle signal indicating his desire to pass ahead of the ferry. This signal in a crossing situation is similar to using two blasts in a meeting situation. It is understood between pilots to mean leaving one another starboard to starboard, or in this case, for the ferry to give way and go under SS FROSTA's stern. The two blast signal in this situation has no standing or meaning in the Western River Rules of the Road. At the time Pilot Colombo sounded the whisle signal, the ferry was about one quarter mile away having already made his turn to port and proceeding across the river towards the West Bank landing showing his red sidelight.

The master, one deck below the bridge, looked out his cabin port in response to the whistle signal and observed the small vessel about one quarter mile away emerging from behind the bow of M/V POLYVIKING.

After waiting a short while, Pilot Colombo again repeated his radio calls on channel 13 followed immediately by a second two blast signal. Again, no response was heard from the ferry, either whistles or radio communication. M/V GEORGE PRINCE has an amber whistle light which operates simultaneously with the whistle. No one on the bridge of SS FROSTA observed the light in response to any radio call or whistle signal.

At the second two blast signal, the master again looked out his port and became concerned because of the lack of resolution in the situation. He left his cabin for the bridge at a half walking, half running pace.

Pilot Colombo thought he perceived a slight course change to starboard or upriver on the part of the ferry with an almost immediate return to the original heading. He became concerned after the ferry apparently resumed its original heading across the river and directly into the path of SS FROSTA.

At this point, Pilot Colombo began continuous radio calls to the ferry, sounded the danger signal continuing with repeated blasts of the whistle to gain the ferry pilot's attention and ordered SS FROSTA full astern.

Mate Gasvaer, after ringing up full astern on the engine order telegraph, turned to call the master to the bridge on the ship's telephone only to meet the master entering the bridge.

Up to this point, Colombo made no attempt, other than backing full to avoid the inevitable collision, expecting to the last that the ferry would turn and pass under SS FROSTA's stern in response to Colombo's two whistles. Colombo felt that a turn to starboard, a maneuver ordinarily dictated by the Rules of the Road, would only bring about a collision when the ferry turned under SS FROSTA's stern, a maneuver which never came. Other reasons Pilot Colombo never seriously considered a turn to starboard were because of the bridge construction some 0.85 miles upriver and the blind corner he would find himself between the bridge construction on one hand and the levee and M/V POLYVIKING on the other.

Upon his arrival, the master observed the ferry 500 to 600 feet away still on a constant bearing. Shortly after he made this observation, the ferry passed out of sight under the bow. As the bow of SS FROSTA contacted M/V GEORGE PRINCE, the personnel on SS FROSTA's bridge felt a slight bump and then the vibrating of the screw coming up to 60 RPM astern taking way off the vessel. This vibration is a characteristic of SS FROSTA when turning 50-60 RPM's astern.

SS FROSTA had slowed to about eight mph at the time of collision, which occurred at Mile 120.8 AHP and approximately 275 yards from the West Bank. Pilot Colombo warned the watch not to let go the anchor for fear of hitting the ferry. As the ferry appeared on the port side of SS FROSTA, the bridge watch observed M/V GEORGE PRINCE in a nearly totally capsized attitude, bow up and the bottom of the ferry toward the ship.

No one on the ship observed the turning over of the ferry until it had started to settle in an inverted aspect and to drift down SS FROSTA's port side. The ferry was then some 30 feet distant and a vehicle with lights on was observed floating down the port side between the two vessels. The master noting the drifting ferry and realizing SS FROSTA's momentum was continuing to carry her upriver, ordered the engines stopped to avoid hazarding any possible survivors with the churning screw and prop wash. The master ran to starboard and saw only an inverted rescue boat from M/V GEORGE PRINCE floating down the starboard side.

Noticing the capsized ferry, Pilot Colombo began calling for assistance of any vessels in the area to come and aid in the rescue of survivors. He also reported the collision to the Coast Guard via channel 13. The calls on channel 13 for assistance as well as the previous attempts by Pilot Columbo to contact M/V GEORGE PRINCE prior to collision were heard by Howard Glen Phelps on M/V LEANDER, JR.

After SS FROSTA's momentum had carried her clear of the overturned ferry and possible survivors, with her bow falling off to starboard because of the effect of backing a single screw vessel, Pilot Colombo ordered dead slow ahead and the rudder hard a port. The vessel was slow to respond and Pilot Colombo ordered slow ahead to regain steerage way and continue upriver to a safe anchorage.

Pilot Colombo switched the ship's VHF from channel 13 to 16 and again reported the collision to the Coast Guard.

The master and pilot acted independently but in concert to broadcast messages for help, maneuver the ship and make ready the launching of SS FROSTA's lifeboats. After determining to bring SS FROSTA to a safe anchorage, Pilot Colombo proceeded upriver and through the new bridge construction to a point adjacent to the East Bank some 450 yards off the levee at Mile 122.0 AHP. SS FROSTA was anchored at 0635 and launched two of her boats to return to the point of collision in a futile search for survivors. Throughout the hectic actions after the collision, no persons from M/V GEORGE PRINCE were observed in the water by personnel on SS FROSTA.

9. LULING-DESTREHAN FERRY:

The Luling-Destrehan ferry route is one of three ferry routes operated by the Louisiana Department of Highways, District 2. The other routes are a foot ferry between Taft and Norco and another vehicle ferry between Edgard and Reserve. The pilots of the Luling-Destrehan ferry sometimes serve on the other routes.

The ferry landings at Luling-Destrehan are made of small pontoons connected to a shell road which traverses the levee connected by a small ramp. The ferries make their landings on the outboard side of the pontoon which is held in place by single piles at each corner.

At the river stage existant on 20 October, the pontoons were at their most riverward extension. The ferry landing at Luling on the West Bank of the Mississippi River at Mile 120.8 AHP is at the end of a shell road which drops from the top of the levee to the water's edge in a generally downriver direction. Immediately below the ferry landing is a water intake. The pump house is set back from the river edge and presents no interference to vision downriver. There is no obstruction to the upriver view before the bridge construction. The West Bank of the river in this area is protected by a concrete matting which extends from 8 feet above mean sea level to 60 feet below mean sea level.

The ferry landing at Destrehan on the East Bank is located at Mile 120.7 AHP and because of the lack of scouring action, is not protected by a concrete matting revetment. The ferry landing on this side has a parking area on the river side of the levee adjacent to the pontoon landing and extending outward from the shell road on the downriver side.

Shore side development adjacent to the landing on the East Bank consists of a large grain elevator, pier and elevated conveyors for the discharge of grain laden barges and the loading of barges or deep draft bulk carriers. This large complex is 400 feet downriver from the Destrehan ferry landing, and from the position of the landing pontoon, extends 300 feet further out into the stream. Large ocean going vessels moor outboard of the pier, and in many cases, extend beyond the pier in an upriver direction. To facilitate large vessel mooring, a large multi-pile dolphin is located 75 feet upriver between the ferry landing and the upriver pier head.

On the day of the casualty, M/V POLYVIKING was moored to the elevator pier, extending 190 feet beyond the upriver extreme of the pier and adding its breadth of 130 feet to the riverward extension of the complex. This combination caused a blind spot from the East Bank ferry landing downriver, such that everything to an observer's left of a bearing of 160°T from the pontoon was obscured.

Upriver, there is no similar obstruction, although barge fleet mooring buoys are located near the East Bank between the ferry landing and the bridge construction. On the day of the casualty, no barges were moored to the buoys.

Ferries, when operating on the Luling-Destrehan run, always make their landings running upriver. This gives the ferry track a figure eight configuration. The normal routine is for a ferry to head upriver into the current for a distance then turn to cross the river letting the current carry the ferry downriver while making this crossing. This brings the ferry downriver of the opposite landing and again in position to turn upriver into the current for the landing. The extent of the figure eight track is affected by the orientation of the two landings and the strength of the current.

The line of sight distance between landings, at this river stage, is 2400 feet requiring approximately three minutes to cross at 12 mph and four minutes at 8 mph when adding in the upriver runs of the route.

Departing from the West Bank landing, being upriver, requires a run into the current only sufficient to clear the pontoon and then turn for the East Bank. In extreme currents, the upriver run is extended so that the ferry, when carried by the current, will end up somewhere slightly downriver of the East Bank landing. Due to congestion with the grain elevator, there is not much room to run upriver on the East Bank approach.

The departure from the East Bank is not only current dependent but must extend some distance upriver to gain a degree of downriver visibility. The configuration of the grain elevator complex and any moored vessels screens the radar presentation of the ferries to the same degree that vision is obscured.

On days when the elevator is handling grain, a dust cloud forms in the area of the loading operation which further hampers vision depending on the wind direction. No such grain handling operations were in progress on the morning of 20 October 1976.

10. M/V GEORGE PRINCE:

M/V GEORGE PRINCE was built in 1937 at Slidell, Louisiana, and subsequently rebuilt to its present configuration at Avondale, Louisiana.

Until 2 July 1969, M/V GEORGE PRINCE was operated by a joint parish agency on behalf of the State of Louisiana under Coast Guard inspection and certification. On 2 July 1969, Charles R. Graves, Equipment Specialist for the State, requested that Coast Guard inspection of the ferry end and surrendered the Certificate of Inspection then in force.

The ferry service of which M/V GEORGE PRINCE is a part moved out from under the umbrella of mandatory vessel inspection laws by becoming a free service and not "carrying passengers for hire".

M/V GEORGE PRINCE as currently outfitted for service is a flat decked, single superstructure, catamaran hulled vessel. Each hull is an identical watertight, 10 compartment, flat bottomed, pontoon type structure 16 feet 3 inches wide by 120 feet 5 inches long. Eighteen of the 20 compartments have flush deck screw and strongback type scuttles fitted in the vehicle deck. The two hulls are joined by the over laying vehicle deck and its under deck support structure. The inter-hull water space is 18 feet across. The vehicle deck edge protrudes beyond the hulls four feet on each side and end. The resultant vehicle deck is 128 feet 5 inches long by 58 feet 6 inches wide.

A steel deck house of 21 feet 8 inches wide by 13 feet long is mounted 61 feet aft of the bow and centered athwartships. This deck house contains the upper engineroom, a passenger waiting room, a storeroom and a head. Atop this deck house there is a second level which is reached

by an outside stairway at the after end of the deck house. The upper level contains a pilothouse fitted with two radars, three VHF radios, two of which are portable, two sets of engine throttles or consoles, a single wheel and a navigation light panel.

The normal operating position of the pilot is to use the starboard console where he has the engine controls at his right hand, the wheel and overhead mounted radar, a rudder angle indicator amidships in front of him and a second radar mounted on a pedestal aft of, but in way of, the port console.

The pilothouse has three large square windows across the front, two windows and a door in each side and three windows across the back bulkhead. The pilothouse is fitted with an electric space heater, window mounted air conditioner and lounge chair.

There is a button to activate the whistle at each console. M/V GEORGE PRINCE also has a 100 watt amber whistle light mounted on the pilothouse top which operates simultaneously with the whistle, giving an added dimension of visibility to whistle signals.

M/V GEORGE PRINCE and M/V OLLIE K. WILDS normally serve the Luling-Destrehan ferry route. M/V GEORGE PRINCE, the larger of the two, operates on a twenty-four hour schedule with M/V OLLIE K. WILDS serving as the split shift boat augmenting the ferry service during the hours of 0530-1000 and 1400-1900 daily. M/V GEORGE PRINCE changes crews every eight hours, and on 20 October 1976 was operating with the midnight to eight AM crew consisting of the Pilot, Egidio "Eugene" Auletta, the Engineer, Jerry Randle, and three deck hands. This five man watch is normal, but the ferry can, and does, operate with one deck hand less. The pilot has charge of the vessel operation and supervises the engineer and deck hands in the performance of their duties.

Two deck hands are responsible for loading the vehicles aboard, controlling the positioning and order of boarding in the case of very large vehicles and motorcycles. After loading, the two deck hands are sometimes used as lookouts, one fore and one aft on the vehicle deck. In the ordinary course of business, however, a single deck hand in the pilothouse serves as the lookout. The third deck hand, when present, is used in routine housekeeping of the ferry.

If the deck hands are used as lookout on the vehicle deck, there are no provisions for communications with the pilothouse short of hand signals, banging on the deckhouse or running up to the pilothouse.

11. VOYAGE OF M/V GEORGE PRINCE:

On the morning of 20 October 1976, M/V GEORGE PRINCE operated normally during the early part of the shift when it was the only boat. At about 0515, the crew of M/V OLLIE K. WILDS arrived to put that boat in operation and did so without incident proceeding to the West Bank landing to pick up its first load upon departure of M/V GEORGE PRINCE from that landing at about 0530.

During peak traffic hours, the ferries do not maintain a set schedule. M/V GEORGE PRINCE will load and go with M/V OLLIE K. WILDS following behind into the just vacated landing. Because of her smaller capacity, M/V OLLIE K. WILDS will discharge and load faster than M/V GEORGE PRINCE and will time her departure for the opposite bank when M/V GEORGE PRINCE is about three quarters loaded, arriving just in time to take M/V GEORGE PRINCE's place.

In the morning hours, the heaviest pedestrian and vehicle traffic is from East to West Bank so that the ferries are carrying full loads from East to West and less than full loads on the return leg.

No communication was exchanged between the two ferry boats by whistle or radio during their joint operation on 20 October 1976. Pilot Gagnard of M/V OLLIE K. WILDS observed nothing unusual in the operation of M/V GEORGE PRINCE for the duration of operation between 0530 and 0600.

During the interval of tandem operation, both boats had completed one round trip, and shortly after 0600, M/V OLLIE K. WILDS was loading on the West Bank preparing to start her second round trip while M/V GEORGE PRINCE was loading on the East Bank in preparation of completing her second round trip of joint operation.

M/V GEORGE PRINCE was berthed starboard side to the pontoon, bow upriver, loading the vehicles through the starboard loading gate, an opening 13 feet wide in the railing located some 20 feet back from the bow. The vehicles loaded normally with large trucks and motorcycles waiting while cars and small trucks drove onboard. M/V GEORGE PRINCE took a full load of vehicles consisting of 20 cars, 8 trucks, and 6 motorcycles and an unknown number or pedestrians. Of the passengers aboard that morning, there is no accounting for those in vehicles versus pedestrians. Approximately 20 pedestrians were crowded into the passenger waiting room in an attempt to avoid the pre-dawn chill.

The first vehicle aboard, a 1966 Chevrolet 3/4 ton pick-up driven by Charles Allen, circled the deck house to the left by proceeding across the foredeck, down the port side, across the stern to starboard, and up the starboard side stopping just aft of the starboard loading gate facing forward and on the outboard side.

The next vehicle in line, a 1975 Ford pick-up driven by Charles Chatelain, followed and parked inboard of Mr. Allen so that there were two vehicles abreast just forward of the deck house. Succeeding vehicles followed, stopping in line behind the first two until the area on both sides and the after deck were filled. This left a space immediately in front of the pilothouse, which was filled by a car, making a row of five cars across the foredeck. Then another row of five vehicles was begun at the forward railing. The first one in that area was a blue Ford Gran Torino which was parked on the starboard side. To facilitate offloading, this car was backed into position. Next came a 1973 Plymouth station wagon

driven by Gene Woolverton, followed by a 1965 Chevrolet pick-up owned by Erwin Blue. The row was completed by two other vehicles. Lastly, the space between the two rows of cars was saved for large vehicles so they could pull straight across the deck, parking athwartships, in line with the port gate ready for discharge. On the morning of October 20th, a red 1976 GMC pick-up truck with a white camper, owned by Dan McLendon, drove straight across first and parked on the left side of the exit ramp. Next came a large 1974 Kenworth dump truck, operated by D & M Trucking of LaPlace, LA and driven by Allen C. Fisher, which was parked in front of the port exit gate. Behind McLendon's vehicle came a light blue 1970 Toyota Corona driven by Barry Neyrey. Neyrey was followed by at least two other cars. The last four-wheeled vehicle on was a car driven by David Broussard which parked on the starboard side behind the dump truck. Six motorcycles then pulled on board filling up the spaces between parked vehicles, three of which were driven on by survivors Leroy Acosta, Richard Respess and Kenneth Becnel. These three motorcycles were all parked along the right side of the dump truck.

M/V GEORGE PRINCE made a short departure from the East Bank landing turning for the West Bank landing after a short run upriver and then proceeding almost directly across the river. M/V GEORGE PRINCE continued silently and without change in course or speed into collision with SS FROSTA.

SS FROSTA struck M/V GEORGE PRINCE on the port side in way of the deck house which placed the center of impact some 38 feet 3 inches forward from the stern. The blow caused SS FROSTA to penetrate the port hull, opening the port engine room to free communication with the river. SS FROSTA's bow opened the port hull to a depth of about 3 feet.

The momentum of SS FROSTA carried M/V GEORGE PRINCE upriver for a short distance until it capsized by rolling to starboard. As the ferry capsized, it was driven under by SS FROSTA with a second point of contact between the two occurring between an unknown portion of SS FROSTA's hull and the bottom aft portion of M/V GEORGE PRINCE's starboard hull.

The deck load of vehicles was thrown clear with the exception of one motorcycle which became entangled in M/V GEORGE PRINCE's railing and was recovered at the time the ferry was raised. Only one vehicle was observed to remain afloat, passing down the port side of SS FROSTA until it filled with water and sank. All other vehicles apparently sank immediately.

Eighteen passengers and crew were trapped in various compartments of the hull and drowned. An unknown number of passengers were carried to the bottom with their vehicles, of whom four remained in their vehicles until salvage. The survivors and remainder of deceased had made exits of the vessel and vehicles.

12. SURVIVORS:

A total of 18 persons survived the casualty. Passengers in vehicles with a line of sight downriver became aware of the relative motions of the two vessels about the time that the second set of two whistles, sounded by SS FROSTA, went unanswered by M/V GEORGE PRINCE. At this point, most of these individuals focused their attention upon the approaching tanker with varying amounts of concern. However, motion about the deck of the ferry did not begin until later. Realization that collision was imminent spread throughout most of the passengers at about the time the danger signal, sounded by SS FROSTA, was beginning. Passengers left their vehicles and, in a general movemement away from the point of collision, headed for the life jacket lockers which were mounted at the four corners of the vehicle deck.

Those who survived were all forward of the pilothouse at the time of the collision with the exception of two men, Vincent Pardo and Charles Chatelain. Mr. Pardo was a foot passenger riding on the port bow near the life jacket locker. When he realized that the vessels were going to collide, he began running aft. He made it as far as the starboard side amidships, alongside the deckhouse, when the collision occurred. Mr. Chatelain, whose 1975 Ford pick-up truck was parked on the starboard side next to the deckhouse, facing forward. He heard yelling and saw people running prior to the casualty, but decided it would be safer inside his vehicle which is where he stayed. He escaped through either the windshield or rear window of the cab as his vehicle sank.

Two of the survivors rode in the passenger area, Blair Duhe and George Lingo. Mr. Lingo exited through the forward door and ran toward the bow. His actions were prompted by the sight of people running on deck outside. After passing behind the dump truck, he found himself between a car and a pick-up truck in the forward row of vehicles at the time of collision. Mr. Duhe, also, went through the forward door of the passenger area. He followed almost the same path as Mr. Lingo. However, when he came between the car and the truck, he jumped into the back of the truck and was there when the ferry was hit.

Parked on the port side amidships, next to the rail, was Milton Lachney in a 1972 Ford Galaxie. He observed the ship coming upriver and exited his car about the time the danger signal began. He ran forward and was even with the front of the deck house at impact.

Charles Allen, whose 3/4 ton Chevrolet pick-up truck was parked next to the starboard rail and just behind the entrance ramp, observed people running on deck. When someone yelled for him to get out, he did so and ran forward along the starboard side. Just short of reaching the life jacket locker, he jumped on the hood of the first car in the forward line. From there, he jumped to the hood of the next car inboard. He was there at the time of the collision.

Allen Fisher, the driver of the Kenworth dump truck facing toward the tanker, began flashing his lights and blowing the air horn in an effort to attract attention. Mr. Fisher had time to sound five to six blasts of the air horn and exit the truck prior to SS FROSTA striking the ferry. Mr. Fisher got out of the vehicle in time to hear the last two blasts of the danger signal. Realizing the vessels were about to collide, Mr. Fisher held onto the pick-up truck next to him until the time of impact.

On the left of the dump truck, facing the same direction, was the 1976 GMC pick-up driven by Dan McLendon. Riding with him were Charles Maples and Charles Naquin. The three men were facing downstream and could see the approaching tanker as soon as the ferry cleared M/V POLYVIKING, moored below the landing. Initially, they casually discussed the situation without concern, as they assumed everything was under control. As the vessels got closer to each other, Mr. Naquin got out and began yelling at the pilothouse. Then, the other two men jumped out. Mr. Maples and Mr. Naquin both proceeded to starboard, went behind the dump truck and headed forward again. Mr. Maples, after stumbling upon initial impact, made it to the forward handrail and held on. Mr Naquin was between the second car from the starboard railing and a pick-up, in about the same position as George Lingo. Mr. McLendon ran to the starboard side and then forward, making it almost to the bow when the ferry was hit.

The 1970 Toyota Corona driven by Barry Neyrey was behind Mr. McLendon's pick-up truck. Mr. Neyrey's first knowledge of trouble was when he saw people running. He got out of his car and realized the situation when he saw the approaching tanker. Mr. Neyrey then ran forward to the starboard life jacket locker and grabbed a life jacket. At this point, the ferry was struck.

Brian and David Broussard were in the 1972 Chevrolet behind the dump truck. David was driving while Brian was asleep. Shortly after departure from the landing, David noticed the lights of the dump truck going on and off and he became alarmed that the dump truck might back into him. The next thing he saw were the riders of the motorcycles parked next to him, begin to run. He got out of the car and saw the ship. He then went to the passenger side of the car and woke up Brian, his cousin. Both men ran toward the forward starboard life jacket. After initial impact, as water began rising on deck, both men jumped over the handrail.

On the right side of the dump truck were three motorcycles driven by Richard Respess, Leroy Acosta and Kenneth Becnel. Mr. Respess, who was parked at the port rail, observed the approach of the tanker, and about the time the danger signal was blown, ran to the life jacket locker on the port side and began throwing life jackets out for others to use. He was at this location when the collision occurred.

Mr. Acosta was behind Mr. Respess. He was also observing the approach of SS FROSTA. When the danger signal began, he ran to the forward handrail and held on until the collision.

Mr. Becnel was toward the rear of the dump truck and observed the tanker coming as did Messrs. Respess and Acosta. When the danger signal began, he ran away from the ship toward the starboard life jacket locker. He hadn't quite made it there when the ferry was hit.

Ervin Blue, whose 1965 Chevrolet pick-up was parked in the forward row of cars, got out and stood on deck near the forward handrail for the ride across the river. From there he observed the developing situation and, as the collision was about to occur, he grabbed the handrail and held on.

Mr. Gene Woolverton, whose 1973 Plymouth Station Wagon was parked in the second position from the starboard side in the forward row of vehicles, observed the approach of the tanker. He got out of his car for a better look and when it was apparent that the vessels were going to collide, headed for the life jacket locker on the starboard side of the bow. Before he reached the locker, he was thrown into the water.

Of the above mentioned 18 survivors, 14 were thrown clear of the vessel and vehicles and were unhampered in reaching the surface of the water. Three others, Allen Fisher, Dan McLendon and Barry Neyrey were under M/V GEORGE PRINCE initially. Allen Fisher, found himself under the overturned ferry and stated that, after hitting his head on the deck, he went down and came up, breaking the surface on the second attempt, about 3 feet from the vessel. Dan McLendon, who was at the starboard life jacket locker, was caught under the vessel and climbed over an unknown structure in order to get to the surface. Barry Neyrey, who was also at the starboard life jacket locker, hit his head on the vessel the first time he went towards the surface. Like Mr. Fisher, he went down and came up a second time successfully reaching the surface. Finally, as mentioned earlier, Charles Chatelain stayed in his vehicle and escaped after it was thrown into the river and was sinking.

Although most of the survivors were heading for life jacket lockers at the time of the collision, only one man, Barry Neyrey, had the use of a life jacket prior to reaching the water. Two others, Charles Allen and Dan McLendon, found life jackets while they were in the water, which they used for a short period of time. None had time to properly don the life jackets.

13. M/V OLLIE K. WILDS, M/V POLYVIKING AND RESCUE:

M/V OLLIE K. WILDS finished loading at the West Bank landing shortly after 0600. Pilot Gagnard observed the vehicles boarding M/V GEORGE PRINCE at the East Bank to be slowing down and knew from past experience

that she was about three quarters loaded. Since this was the normal point in the cycle of events for his departure, he cast off and threw his bow out a little ways into the river. As he did so, he observed an upbound vessel in the vicinity of Bunge Grain Elevators some 0.7 to a mile downriver. A vessel at this distance left him sufficient room to make a river crossing so he continued swinging into a cross river course which would also let the current aid in carrying him to a point just below the East Bank landing. Because of the distance to the upbound ship and because the maneuvering room is restricted adjacent to and below the East Bank landing, he concentrated on navigating M/V OLLIE K. WILDS and made no further observations of the upbound ship. As M/V OLLIE K. WILDS approached a point three quarters of the way across the river, Gagnard observed M/V GEORGE PRINCE depart the landing and last saw her as they passed some three boat lengths apart.

The landing was uneventful, and discharging of vehicles was about to start when M/V OLLIE K. WILDS' engineer opened the pilothouse door to tell Gagnard that a passenger waiting on the pontoon had yelled that a ship had run over the ferry. Gagnard ran out of the pilothouse and told his deck hand to cast off, which he did after the departure of a single truck from M/V OLLIE K. WILDS' load of about 15 vehicles. Gagnard ran back into the pilothouse and heard NOBRA 51 reporting the collision with the ferry on channel 13. He asked NOBRA 51 if the ferry had sunk and received only the repeated statement "He went in front of me and I ran over him" in reply. This was the first communication he heard from SS FROSTA having never heard any previous communication or whistles in his closed and heated pilothouse.

A policeman who had ridden over in the pilothouse from the West Bank used one of M/V OLLIE K. WILDS' portable radios, the one on 39.5 mhz, to report the collision to the Hahnville police and request assistance on the West Bank.

After casting off, M/V OLLIE K. WILDS proceeded slowly toward the now visible overturned ferry. Gagnard proceeded cautiously so as not to run over any possible survivors while his engineer swept the scene with the ferry's searchlight. A deckhand and the policeman proceeded to the vehicle deck to launch the rescue boat.

As M/V OLLIE K. WILDS drifted slowly up to the overturned M/V GEORGE PRINCE, life jackets were thrown overboard in hope of aiding any persons in the water. As the two ferries touched, M/V OLLIE K. WILDS' passengers took two long benches from the waiting room and bridged the gap between the survivors perched on the overturned hull and M/V OLLIE K. WILDS' vehicle deck. Sixteen survivors were rescued in this manner. The rescue boat of M/V OLLIE K. WILDS had, in the meantime, successfully retrieved Mr. McLendon from the water and delivered him to M/V OLLIE K. WILDS.

After removing the survivors from M/V GEORGE PRINCE's overturned hull and with it still afloat, M/V OLLIE K. WILDS departed for the West Bank landing where the survivors were discharged to waiting transportation for the trip to the hospital.

Gagnard remained aboard M/V OLLIE K. WILDS until 1400 that day when he left. M/V OLLIE K. WILDS remained tied to the West Bank landing serving as a host platform for rescuers, their equipment, representatives of law enforcement agencies, the Coast Guard and state agencies.

M/V POLYVIKING laying at her berth at the St. Charles Grain elevator had completed cargo loading the previous night, and now, after completing fumigation of her cargo, was ready to get underway and turn for sea.

On the bridge was the Pilot, Meyer Watson, NOBRA 39, the Chief Mate, Per Sjong and the First Officer, Arthur Benneche. At about 0600, the pilot tried unsuccessfully to raise his two assisting tugs on channel 13 with repeated calls. The two tugs, M/V SALLY R. and M/V ALMA S., had just finished turning another vessel for sea at Bunge Grain Elevator and had moored at the St. Charles pier just aft of M/V POLYVIKING to await the pilot's call. When NOBRA 39 was unsuccessful in raising the tugs on channel 13, he sent a crewmember to the dock to alert the crews. The pilot finally succeeded in raising the crew of M/V ALMA S. about 0614 and told them to proceed to the port bow in preparation for turning M/V POLYVIKING's bow downriver. During Pilot Watson's attempts to raise his tugs on channel 13, he heard several calls by NOBRA 51 to the "ferry boat crossing from the East Bank to the West Bank." He did not hear any reply from M/V GEORGE PRINCE.

Before M/V ALMA S. could cast off, William Wattingly, the operator of M/V ALMA S. heard NOBRA 51, Colombo on channel 13, announce he had run over the Destrehan Ferry and calling all boats in the area to rescue survivors in the water. M/V ALMA S. cast off and proceeded slowly towards the now visible, overturned M/V GEORGE PRINCE with the survivors standing on it. Fifteen yards before reaching M/V GEORGE PRINCE, Wattingly heard a man call for help. The crew got a life ring to him and pulled him to the side of the towboat. It took about 5 minutes to retrieve the man, Mr. David Broussard, who was near shock.

After drawing alongside M/V OLLIE K. WILDS, Wattingly asked Gagnard what to do with the survivor; he was directed to the West Bank landing and the expected arrival of aid.

14. SEARCH AND SALVAGE:

Word of the casualty was received at the Coast Guard Captain of the Port office immediately from the pilot of SS FROSTA on VHF radio. Two helicopters

were deployed to begin an air search for suvivors in the water. One of the helicopters was subsequently sent to pick up a Coast Guard diving team at Lakefront Airport on Lake Pontchartrain. The divers were in the air at 0714 and arrived on scene at 0725. The Coast Guard divers were placed on the vessel with radios at 0734. The divers checked the hull of the vessel for suvivors by tapping along the length of it and listening for response from any possible survivors. At 0833, the divers reported that there were no signs of life and that other divers were needed to search the inside of the hull for bodies.

At approximately 0950, personnel of the SMIT LECLAR diving firm arrived on the scene in response to the news media reports of the ferry collision and capsizing. They offered their professional services in searching the submerged hull for possible survivors and victims.

Mr. Andy Webb, in consultation with the Coast Guard divers, discussed methods of searching the hull. Since the civilian divers were equipped with air line masks and were less restricted in their movements, Mr. Webb determined that his diver, Mr. Fred Hurt, would attempt immediately to enter the hull. Mr. Hurt and his tender, Mr. Eisenhauer, arrived on scene with their equipment aboard M/V SKIP which tied off to the downstream side of the ferry's bow which then protruded some 30 feet above the water as she lay grounded on the West Bank revetment.

At approximately 1030, Mr. Hurt entered the water and descended along the inverted and inclined vehicle deck to the deckhouse of M/V GEORGE PRINCE. This descent and all of the subsequent searches were done by touch since underwater visibility was zero due to the sediment-laden river water. The initial descent brought Mr. Hurt to the starboard side doorway into the passenger compartment. This door was found open. Immediately inside the door, he found two victims whom he carried to the surface with the aid of his tender retrieving his air and communications line.

The next descent, Mr. Hurt took a downline which he tied off to a pipe just inside the passenger compartment doorway to aid in orientation. Upon re-entry, he found a total of seven more bodies which he returned to the surface one by one. All victims were found lying on the overhead which in the vessel's position was the bottom of the compartment.

Based on a lack of positive information and the fact that he had not had time to search out the hull prior to becoming involved in body recovery, Mr. Hurt assumed he was in the pilothouse and did not realize otherwise until he had removed all nine bodies from the compartment and was then able to conduct a search for engine controls, helm and other indications of a pilothouse.

Once he determined that it was not the pilothouse, he so informed people on the surface and was directed to make a search for and of the pilothouse before exhausting his down time.

Mr. Hurt left the passenger door and dropped down to the next level of the superstructure which turned out to be the pilothouse. After searching for a door on the starboard side and finding none, he proceeded around the front of the house finding only intact windows and thence to the port side where on the first pass he missed the door but found one open or missing window. Before attempting to enter by way of the window, one final check brought him to the door. Initial attempts to open the door were hampered by the force of the current and frustrated his attempts at entry until he found a latch to hold the door in an open position. It had taken about 10 minutes to gain access after he left the passenger compartment.

The first victim he found was large, weighing approximatley 200 pounds. In the absence of a down line which was on the opposite side and with the large victim in his grasp, Mr. Hurt had to be again pulled to the surface by his tender. He again returned to the pilothouse to find a victim about 160 pounds whom he retrieved without difficulty.

On his third descent to the pilothouse, he confirmed the fact that it was the pilothouse by touch search of the fixtures. Finding no further victims and with his down time running out, he tried to locate the engineroom only to end up in the passenger compartment again by entering a previously undiscovered door on the starboard house front which was also open. After realizing he was again in the passenger compartment, he exited and found the next door to port which was open and led to the storeroom. After determining that the compartment was cluttered with a quantity of rope, he exited to start his ascent and relief.

Mr. Eisenhauer, who had been relieved of his duties as tender to prepare for a dive, was briefed by Mr. Webb and Mr. Hurt. He then entered the water to search the engineroom. He entered the door to the storeroom and followed the interior longitudinal bulkhead to the engineroom door. Upon entering the engineroom, he immediately checked the upper corners for air pockets and found none. Dropping back down, he found four bodies in the forward doorway to the engineroom which he brought up one by one.

An unsuccessful search of the remainder of the engineroom was conducted with difficulty due to his air line becoming entangled in machinery.

Mr. Eisenhauer returned to the storeroom forward of the engineroom and found a body in the bathroom doorway which was retrieved. A further search of the storeroom turned up another body just inside the forward doorway.

The last thing Mr. Eisenhauer did prior to expending his down time was to return to the engineroom and discover yet another body entangled on some cross members. With the retrieval of this last body, Mr. Eisenhauer returned to the surface, secured his gear and departed the scene in the company of the SMIT LECLER personnel.

The search of M/V GEORGE PRINCE's hull by the divers did not locate any air pockets and resulted in recovery of all 18 bodies of those persons trapped in the hull. A total of 9 bodies were found in the passenger waiting room, 2 in the pilothouse, 5 in the upper engineroom and 2 in the storeroom/bathroom area.

The coordination and responsibility for salvage of M/V GEORGE PRINCE and search for vehicles was assumed by the Director of Administration for the State of Louisiana, Mr. Charles Roemer, at approximately 1440.

At 1630, the Crane Barge AVON SENIOR arrived on scene to make preparations for salvage of M/V GEORGE PRINCE. That afternoon and throughout the night, preliminary work was completed and M/V GEORGE PRINCE was turned over in preparation for raising the following day.

On 21 October 1976, the Crane Barge AVON SENIOR began salvage operations by lifting steel cable slings which had been placed about the overturned ferry. At about 1720, with lifting operations in progress, representatives of the Coast Guard Marine Inspection Office in New Orleans noticed a developing oil slick in the area of the overturned M/V GEORGE PRINCE; a few minutes later, the ferry broke away from the bottom of the river. At 2000, the vessel's pilothouse was visible above the surface of the water. Progress continued until approximately 2200 when the vessel had been lifted enough to permit dewatering operations to begin. At this point, the Coast Guard opened the Mississippi River to limited marine traffic.

After about 30 minutes of dewatering, the ferry was boarded by officers of the New Orleans Marine Inspection Office who proceeded directly to the pilothouse to examine the condition of navigating equipment and controls, and to gather logbooks and other documents. The vessel's magnetic compass was on heading 078°, the rudder angle indicator displayed a reading of 4° right rudder, all switches in the running light panel were in the "ON" position. One of the Raytheon Mariner Pathfinder Radar Sets that was aboard had the "power" switch in the "ON" position. The power switch of the Harris RS440 VHF Radio transceiver was also in the "ON" position, the selector switch was set on channel "13".

Two independent sets of MORSE engine controls, one on each side of the pilothouse, were examined although it was not possible at the time of the initial inspection to determine which set had been in use at the time of the casualty. Both of the starboard throttles were in the "full ahead" position; the port set of controls showed the starboard throttle in "neutral" and the port throttle at "full astern". Two personal flotation devices were found in the wheelhouse. A portable AM radio was located on a table at the starboard after end of the pilothouse, the power switch was in the "OFF" position.

The vessel's logbooks and other documents were found in a small plywood box on the floor of the wheelhouse. A few other documents found in various places in the pilothouse were placed with the plywood box and all were removed from the vessel at 2330 on 21 October by an officer from the New Orleans Marine Inspecion Office.

A preliminary examination of the contents of the plywood box produced a half-pint Seagram's V.O. Whiskey bottle wrapped in a paper bag. The bottle contained approximately one inch of liquid.

At 1430 on the afternoon of 22 October, the documents removed from M/V GEORGE PRINCE were inventoried at the marine inspection office in New Orleans by members of the Coast Guard and a representative of the Louisiana Department of Highways. More than a hundred separate documents or groups of documents were examined; the Coast Guard retained 11 of the items and returned the remainder to the Highway Department. The whiskey bottle and paper bag were delivered to the New Orleans offices of the Federal Bureau of Investigation for shipment to the FBI Laboratories in Washington, D.C. where they were examined for fingerprints and analysis of the bottle contents. No latent fingerprints of value were found on either the bottle or the paper bag. The liquid in the bottle was found to be whiskey as indicated on the bottle label.

On 27 October 1976, the Forensic Laboratory of the Orleans Parish Coroner's Office released results of blood alcohol and toxicology examinations conducted in conjunction with the autopsy performed on Eugene Auletta. Pilot Auletta's blood was found to contain 0.09 percent alcohol. No other drugs were found to be present. Gray's Attorney's Textbook of Medicine, (Vol IV, 1976, Chapter 133) states that:

> With .04 or .05 per cent alcohol in the blood the probability of causing an accident is not different from that with no alcohol. . .Above this level the probability of causing an accident rises increasingly more sharply. At .10 per cent alcohol in the blood the probability is six or seven fold.

It should be noted that although Gray's Textbook refers specifically to accidents involving motor vehicles, Dr. Frank Minyard, Coroner of Orleans Parish, concluded that at the time of the collision Pilot Auletta had been drinking, was at the end of a full watch and was experiencing some degree of impairment.

The vessel was completely raised by the morning of 22 October 1976. At 1224, M/V D. W. GRIFFITH began pushing the recovered vessel to the Louisiana Department of Highways yard at Plaquemine, Louisiana.

15. HULL DAMAGE TO M/V GEORGE PRINCE:

Upon raising M/V GEORGE PRINCE, the point of contact between the two vessels became visible. It was a "V" shaped notch on the port side, the center of which was 38 feet 3 inches from the after end of the vessel. The width of this opening on the outboard edge of the vessel was 16 feet 6 inches. The damage extended inward 8 feet 2 inches which placed it 4 feet 2 inches into the number four compartment of the port pontoon. This left the outboard portion of number four compartment open to the river. The inboard half of the compartment, which housed the port

engine, was initially proctected from flooding by a longitudinal bulkhead on the centerline of the pontoon that runs its entire length. However, this bulkhead was later torn in the salvage operation by a cable placed in the damaged area. This opened the engine compartment to flooding. On deck, the handrails between the point of impact and the stern were pushed aft, and those that remained with the vessel were piled up on the stern handrail of the vessel.

Another area of damage was found when the vessel was surveyed at the Louisiana Department of Highways yard at Plaquemine, Louisiana. This was on the starboard pontoon, in the area of the compartment furthest aft, the number five compartment. The bottom plating aft of the transverse bulkhead between compartments four and five along the rise of the rake was set up about 12 inches. The bulkhead itself was also set up about 12 inches, having three tiers in it. The shell plating on the inboard or port side of the pontoon was holed near the bulkhead as a result of the upward movement of the bottom plating. Inside the number five compartment, the number three bottom frame (from the stern), and the intermediate frame between frames four and five on the port skin of the pontoon were upset. On the centerline bulkhead, the number one bulkhead stiffener was upset. On the starboard skin, frames four, five and six were torn away from the shell about 4 inches. The hole, mentioned above, in the pontoon allowed water to enter the number five port compartment. The damage to the transverse and centerline bulkheads allowed water to enter number four port and number five starboard respectively.

16. ACTIVITIES OF BOARD MEMBERS SUBSEQUENT TO THE COLLISION:

On 22 October 1976, the members of the Board embarked in a Coast Guard helicopter and flew over the scene of the collision. The purpose of the flight was to orient the members of the Board to the relative positions of the ferry landings, landmarks and a general familiarization of the river characteristics in the vicinity of the collision. At the time of the overflight, M/V GEORGE PRINCE had been raised and was enroute under tow to Plaquemine, Louisiana, SS FROSTA had departed for Baton Rouge, Louisiana and various vessels were being staged for the vehicle salvage operation to follow.

During subsequent deliberations of the Board, Captain R. M. Thomas and Captain J. M. Duke rode M/V OLLIE K. WILDS while it was operating on the Luling-Destrehan ferry route and observed operations from a ferry pilot's perspective.

CONCLUSIONS:

1. M/V GEORGE PRINCE was under the navigational control of Egidio P. Auletta when she departed the East Bank ferry landing at about 0613 on 20 October 1976. Auletta's specific actions during that crossing cannot be determined but are deduced from observations of M/V GEORGE PRINCE. Auletta turned almost immediately for the West Bank because the current was slow and the volume of commuter traffic made it attractive to make the crossing as rapidly as possible. M/V GEORGE PRINCE proceeded mute and without significant change of course or speed into collision, at about 0615, with SS FROSTA at about Mile 120.8, AHP, Lower Mississippi River, approximately 800 feet from the West Bank.

2. The departure of M/V GEORGE PRINCE directly into a river crossing in the presence of stream traffic created a situation wherein risk of collision existed and was governed by Rule 25 of the Rules of the Road for Western Rivers. Had Auletta announced his departure with the three blast signal required by Rule 24(c) and upon encountering SS FROSTA signaled his intention to proceed by a one blast signal as provided in Rule 19(a), the situation would have been a rude but acceptable crossing situation governed by Rule 19. 33 CFR 95.15, a Western River Pilot Rule that prohibits ascending or descending vessels from crossing in front of stream traffic, did not apply. Although this pilot rule was intended to govern vessels following the so called points and bends custom, it would have been applicable to M/V GEORGE PRINCE had Auletta followed the normal ferry route and travelled several hundred yards upstream before turning into his cross river course.

3. Due to complacency, fatigue and/or the effects of alcohol consumption, Auletta failed to detect the approaching SS FROSTA until seconds before collision. It is probable that his failure to detect SS FROSTA did not persist much beyond the sounding of the danger signal by SS FROSTA when a scant 500 to 700 feet separated the two vessels. At this point, collision was inevitable. M/V GEORGE PRINCE's momentum in combination with a strong starboard quarter wind and a beam current had been taken beyond the point of human remedy, her maneuverability notwithstanding. Auletta still had time to turn his vessel to a glancing blow which would have lessened the impact of collision and enhanced survivability of persons aboard M/V GEORGE PRINCE, but he did not. Testimony is inconsistent with regard to the speed of M/V GEORGE PRINCE's engines immediately prior to collision. It is possible that Auletta made some attempt to slow or stop his engines but did not persist and returned them to full ahead. Any such action, if occurring, was transitory and too late to significantly alter the speed of M/V GEORGE PRINCE.

4. The primary cause of the casualty was the navigation of M/V GEORGE PRINCE along the Luling-Destrehan ferry crossing without regard to, and awareness of, river traffic and the risk of collision therefrom. We cannot imagine a more vivid example to prove that keeping a proper lookout is the first rule of seamanship.

5. There is evidence of violation of:

33 USC 349	failure to sound a signal upon departing a dock
33 USC 351	failure to keep a proper lookout
33 USC 346	failure to slacken speed, or if necessary, stop and reverse when approaching another vessel so as to involve risk of collision
33 USC 344	failure to signal intentions when crossing
33 USC 350	failure to navigate with caution until danger of collision is over
46 USC 1461(d)	use of a vessel in a negligent manner so as to endanger life, limb and property

on the part of Egidio P. Auletta in his navigation of M/V GEORGE PRINCE.

6. SS FROSTA was under the exclusive navigational control of the Pilot, Nicholas F. Colombo, from the time M/V GEORGE PRINCE was observed leaving her East Bank landing until the two vessels collided. Colombo promptly and correctly assessed M/V GEORGE PRINCE's presence as a situation involving risk of collision and sought agreement for a safe passage through calls on VHF radio and the sounding of whistle signals. Colombo viewed the situation as one covered by a local custom wherein small vessels such as M/V GEORGE PRINCE give way to large vessels in stream traffic. This custom recognizes the relative maneuverability of small and large vessels but does not, and cannot, supersede or alter the requirements of burden provided in the Rules of the Road without a mutual agreement to the contrary.

The proximity of the two vessels in a sudden encounter dictated a situation covered by Rule 25 where SS FROSTA had a shared burden to avoid collision, and Colombo was obligated to act accordingly. Had Colombo not held the situation to be extraordinary under Rule 25, he would then have had the sole burden to keep clear of M/V GEORGE PRINCE under Rule 19 as "the vessel which has the other to starboard". In the face of his burden, Colombo chose to adhere to custom and sought twice by unanswered whistle signal and with numerous radio calls to shift the total burden of avoidance to M/V GEORGE PRINCE. Despite an absence of any agreement, SS FROSTA continued without change of course or appreciable change of speed into collision with M/V GEORGE PRINCE about two minutes after Colombo's initial sighting of the ferry. This casualty is a classic example of the tragic consequences which can result from conflict between established custom and the law when each mandates a different response by the persons involved.

7. Subsequent to sighting the ferry at about 0613, Colombo called twice on channel 13 with a short pause between calls to listen for a response. Receiving no response, he sounded a two blast whistle signal about ninety seconds before collision. Awaiting a response to his whistle signal and making additional radio calls consumed thirty seconds and culminated with Colombo sounding a second two blast whistle signal approximately one minute before collision. Colombo observed M/V GEORGE PRINCE turn to starboard and immediately return to its cross-river

heading. This apparent change was not a deliberate course change by the ferry but normal movement in a seaway colored by Colombo's anticipation that the ferry would turn away.

Colombo now became concerned that M/V GEORGE PRINCE was not going to turn as he had anticipated, and with 30 to 45 seconds left before the collision, he sounded the danger signal, ordered full astern and repeated his radio calls on channel 13. Once he had sounded the danger signal, Colombo commenced sounding repeated whistle blasts and awaited the effect of astern power. SS FROSTA began to slow in response to astern power approximately 15 seconds before collision as the ferry started out of sight under SS FROSTA's bow.

8. Having chosen first to follow custom and then failing to reach an agreement on a transfer of burden with his radio calls and the first two blast whistle signal, Colombo should have considered M/V GEORGE PRINCE unresponsive and taken rapid, decisive action to avoid collision.

9. Colombo did not consider a small turn to starboard practical because he expected the ferry to eventually turn away consistent with custom and common practice, thus, a gradual starboard turn on the part of SS FROSTA would, in his mind, have resulted in collision. A more radical starboard turn would have placed SS FROSTA in jeopardy of collision with the moored M/V POLYVIKING and put SS FROSTA into a blind corner formed by the bridge construction ahead and the East Bank to starboard.

A turn to port by SS FROSTA in this situation would have sent a burdened vessel across the path of the other vessel, a suspect maneuver at best and not the choice of a prudent seaman. This is particularaly true here since SS FROSTA was already favoring the West Bank and was severely limited as to the amount of left movement she could tolerate. Colombo's choice to not change course, given the circumstances, was a rational one.

10. By his own reasoning, Colombo was left with a single option to fulfill his burden and that was to change his speed of advance. Because of SS FROSTA's bulk and the risk of collision ahead, additional speed was not a viable alternative.

Colombo was obligated to slow SS FROSTA. Due to the proximity of M/V GEORGE PRINCE, such slowing to be effective required the early application of astern power. Had Colombo decisively slowed SS FROSTA when his first two blast whistle signal went unanswered, the collison could have been avoided. This was the reasonable and prudent course of action, and the rationale by Colombo that there was too little time to maneuver is unfounded. Had early slowing of SS FROSTA not been a total cure, it would have at least extended the time for alternative action by both vessels and would have lessened the impact of collision in the absence of such action.

It is concluded that SS FROSTA proceeded into extremis at an imprudent speed and that such action contributed to the cause of the casualty and the severity thereof.

11. There is evidence that Nicholas F. Colombo navigated SS FROSTA in a negligent manner in violation of 46 USC 1461(d).

12. SS FROSTA's Master, Kjell Sletten, exercised supervision of navigation of his vessel through visits to the pilothouse, personal observations from his cabin and by the presence of the Mate, Peder Gasvaer, on the bridge. Among the mate's duties was the responsibility to call the master should the situation dictate. The circumstances which would require such a call were not defined for confined waters such as the Mississippi River, and the decision of what necessitated a call was left to the discretion of the mate on watch. In this instance it is apparent that Peder Gasvaer's threshold for notifying the master was the sounding of the danger signal and Colombo's command for full astern. While the cause of the casualty cannot be attributed to a numerically deficient bridge watch, the presence of the master, whose primary concern was the safe operation of his vessel, would have aided in the evaluation of the situation. Sletten, less experienced in the conflicts of the river traffic, and hence, less reliant on the feeling that the ferry would eventually give way, may have experienced an early concern for the lack of resolution and might have acted earlier.

Sletten's abdication of responsibility for safe navigation of SS FROSTA to the pilot, while passive, is nonetheless accountable. His was the duty to insure the safe and proper navigation of SS FROSTA.

13. There is evidence that the Master, Kjell Sletten, permitted SS FROSTA to be used in a negligent manner in violation of 46 USC 1461(d).

14. SS FROSTA struck M/V GEORGE PRINCE on the port side just abaft the midpoint of her length. The force of the collision drove SS FROSTA's stem 8 feet into M/V GEORGE PRINCE's side. So impaled and in the absence of any pivotal force sufficient to free her, M/V GEORGE PRINCE was driven upstream until her starboard deck edge submerged and she capsized, all of which happened very quickly. Although M/V GEORGE PRINCE's watertight integrity was compromised as a result of the collision, her capsizing was the direct result of SS FROSTA's momentum and not the result of progressive flooding. The severity of this casualty, in terms of human life, was a direct result of M/V GEORGE PRINCE's rapid capsizing on top of her load of vehicles and passengers. Any positive action on the part of either M/V GEORGE PRINCE or SS FROSTA which would have substantially changed the point of impact or the momentum of collision would have enhanced passenger survivability.

15. Some passengers on M/V GEORGE PRINCE were aware of SS FROSTA's presence and were anxious over the lack of resolution in the developing situation. That anxiety was tempered somewhat by the feeling that the ferry would eventually maneuver to avoid the large vessel as they had observed in past situations. Since no warning of danger came from M/V GEORGE PRINCE herself, it was not until the sounding of the danger signal by SS FROSTA that anxiety turned to general panic. Awareness of danger was a cascading affair where the flight of one passenger away from SS FROSTA and towards the life jacket lockers alerted those he

passed, and their flight or shouts in turn alerted others. Since the only survivors were those who were in the fore part of the ferry, generally at or near the forward rail away from sliding vehicles, the degree of awareness of those alongside and aft of the superstructure is not known.

Eighteen persons never escaped from the interior spaces of M/V GEORGE PRINCE. All who were left inside after capsizing were drowned almost immediately as the public spaces flooded through doorways, windows and other hull openings. No spaces available to the passengers and crew were capable of air entrapment to any significant degree.

Most persons who died were trapped under the overturned hull or in their vehicles and could not find a clear path to the surface before their breath was expended. An undetermined number of persons may have surfaced and because of injury or the inability to swim, did not survive.

16. As a result of the collision, 76 persons aboard M/V GEORGE PRINCE died. Their bodies were recovered and identified. One passenger who was aboard M/V GEORGE PRINCE, Anastasia Wanko, is missing and presumed dead. All 18 survivors from M/V GEORGE PRINCE suffered various degrees of reported incapacitation in excess of 72 hours. There were no injuries or deaths aboard SS FROSTA as a result of this casualty.

17. The partial human remains recovered on 25 October 1976 are those of Anastasia Wanko.

18. There is no evidence that equipment or material failure on either SS FROSTA or M/V GEORGE PRINCE caused or contributed to the cause of the casualty.

19. Life saving equipment ordinarily provided was only peripherally involved in this instance of catastrophic accident. Life saving equipment is designed to facilitate escape from an untenable vessel and then preserve life until rescue. The suddeness of collision and abrupt capsizing was beyond the scope of the life saving equipment provided, although life jackets floating free aided two persons in gaining the safety of the overturned ferry. Had the capsized ferry not remained afloat and served as a rescue platform, life jackets would have been measurably more significant. The rescue boat of M/V OLLIE K. WILDS served its intended purpose of limited rescue but could not have coped with a large number of survivors in the water.

20. The response of M/V OLLIE K. WILDS, commercial towboats and Coast Guard units was commendable. Their prompt response aided in the early resolution of this casualty and would have been instrumental in saving lives had the collision not been the tragic combination of circumstances that led to the almost immediate death of those persons who were lost. Of particular note was the rescue of David Broussard by M/V ALMA S. and of Dan McClendon by the rescue boat from M/V OLLIE K. WILDS because of their vulnerability in not reaching the hull of M/V GEORGE PRINCE.

21. Had the Bridge to Bridge Radiotelephone Act, 33 USC 1201-1208, included ferry vessels such as M/V GEORGE PRINCE and further required active transmission by all vessels in crossing, meeting and overtaking situations, Colombo might have been alerted to the ferry's unreliability earlier and, therefore, acted in a more cautious manner.

22. The discharges of diesel oil into the Mississippi River on the morning of 20 October 1976 and 21 October 1976 were violations of the Federal Water Pollution Control Act of 1972 and were caused by releases from M/V GEORGE PRINCE's fuel oil storage tanks due to the actions of capsizing and subsequent salvage operations.

23. Collision avoidance radar is recognized as having value in detecting collision threats in open waters, and in analyzing solutions in multi-ship situations; however, had collision avoidance radar been installed on both M/V GEORGE PRINCE and SS FROSTA, the circumstances surrounding the collision indicate that this type of device would not have supplied any information to the pilot of either vessel that was not already available by other means.

24. In the tragic case of the collision between M/V GEORGE PRINCE and SS FROSTA the Board feels that the primary lesson is that the indispensable element of safe navigation is people. In the past, Marine Boards of Investigation have made great strides in the enhancement of marine safety through improved standards of performance of those persons directly accountable to Coast Guard authority.

There can be no doubt that it was the actions of people in the developing situation between M/V GEORGE PRINCE and SS FROSTA that caused, contributed to and compounded the nature of the casualty. While each of the persons involved can be held accountable for his part in the casualty, there is no current mechanism to control or limit their future participation in marine commerce had the Board concluded such prescriptive sanctions were appropriate.

RECOMMENDATIONS:

1. That no action be taken in the case of Egidio P. Auletta since no remedial purpose would be served in light of his death.

2. That further investigation be initiated under the Civil and Criminal Penalty Procedures into the violations enumerated in Conclusion 5 with respect to the Department of Highways, State of Louisiana, the owner and operator of M/V GEORGE PRINCE.

3. That further investigation under the Civil and Criminal Penalty Procedures be initiated in the case of Nicholas F. Colombo, the Pilot of SS FROSTA, concerning his part in the casualty.

4. That further investigation under the Civil and Criminal Penalty Procedures be initiated in the case of Kjell Sletten, the Master of SS FROSTA, concerning his part in the casualty.

5. That the Commandant seek legislation amending the Rules of the Road for Western Rivers to give the right of way to stream traffic over crossing traffic.

6. That the Commandant seek legislation amending the Bridge to Bridge Radiotelephone Act, 33 USC 1201-1208, to require its application to all passenger-carrying ferry vessels whether or not such passengers are carried for hire.

7. That the Commandant seek legislation amending the Rules of the Road for Western Rivers, Rule 25, 33 USC 350, so that it contains a caveat concerning communications by inserting the phrase "particularly failure to communicate with one another" immediately after the words "special circumstances".

8. That the Coast Guard intensify and extend its boarding program of uninspected vessels, particularly free ferries such as M/V GEORGE PRINCE, to include surveillance of operation. Such surveillance should emphasize compliance with the Rules of the Road giving particular attention to Rule 24(c), the departure signal of the Western River Rules of the Road, and its counterpart in other Rules.

9. That consideration be given to requiring active and positive participation by all ferry vessels in the planned Vessel Traffic Services for the Lower Mississippi River particularly where such vessels are operating in response to commuter traffic in lieu of maintaining a fixed, advertised schedule.

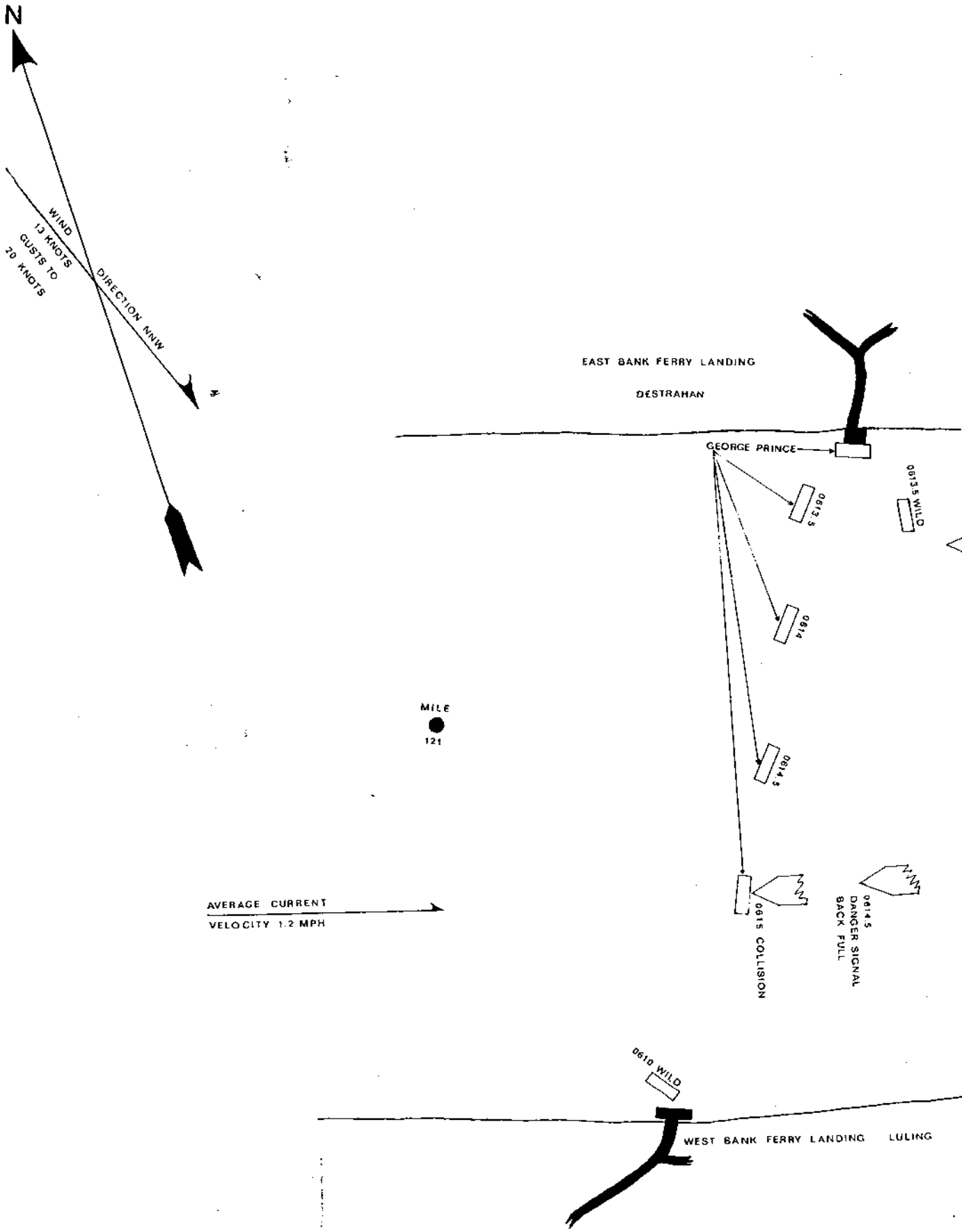
10. That the Commandant seek authority for prescriptive sanctions against Federal pilotage licenses for the navigable waters of the United States when a pilot's performance indicates the need for such action whether or not the questionable performance occurred while the pilot was operating under the authority of his Federal license.

W. E. CALDWELL
Rear Admiral, U. S. Coast Guard
Chairman

R. M. THOMAS
Captain, U. S. Coast Guard
Member

J. M. DUKE
Captain, U. S. Coast Guard
Member

P. C. LAURIDSEN
Commander, U. S. Coast Guard
Member and Recorder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121
AVERAGE CURRENT
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BACK FULL
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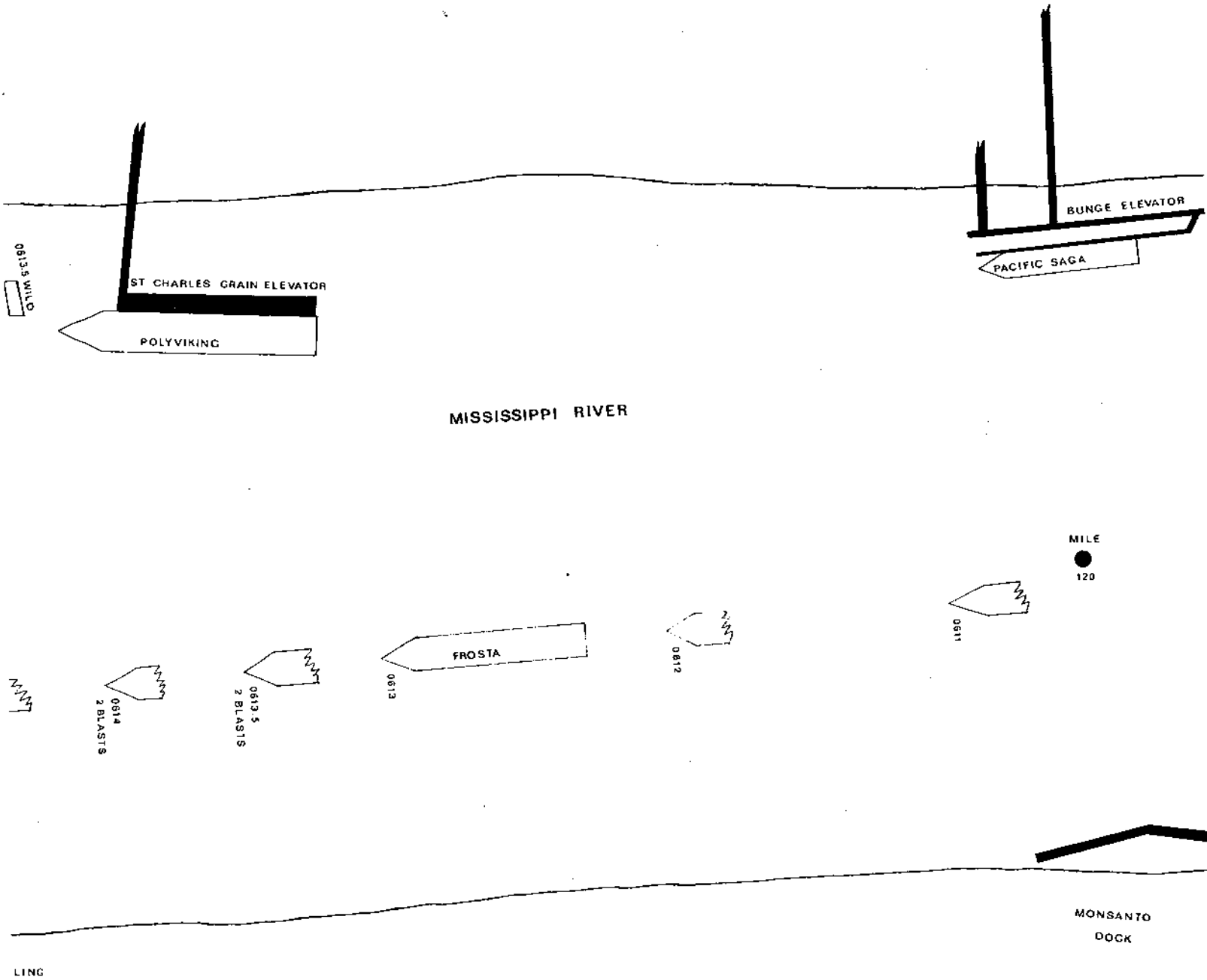
WEST BANK FERRY LANDING
LULING


BUNGE ELEVATOR
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MISSISSIPPI RIVER
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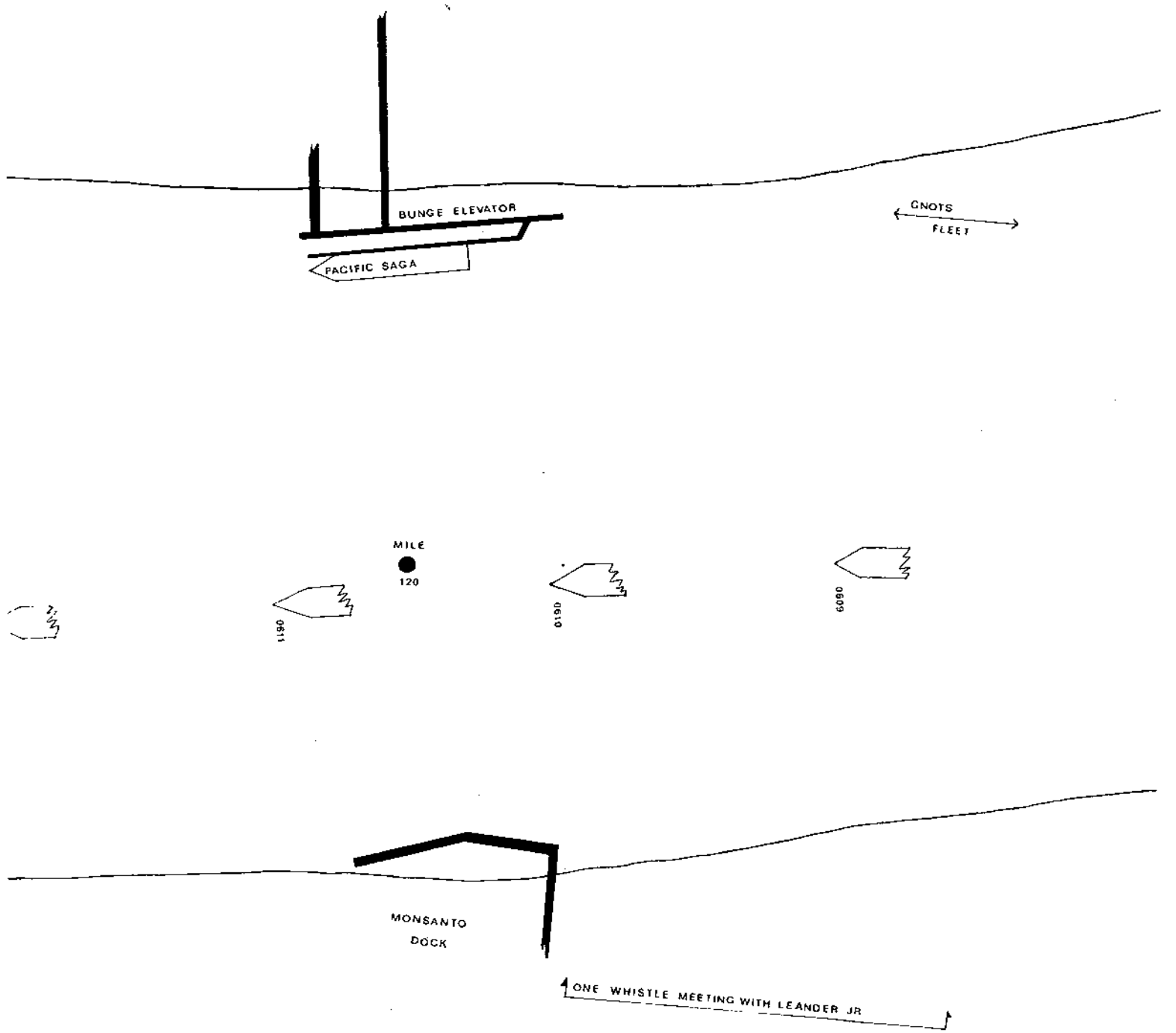
0613.5
2 BLASTS
0614
2 BLASTS
MONSANTO
DOCK
LING

2 of 3


BUNGE ELEVATOR
PACIFIC SAGA
GNOTS
FLEET
MILE
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MONSANTO
DOCK
ONE WHISTLE MEETING WITH LEANDER JR

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