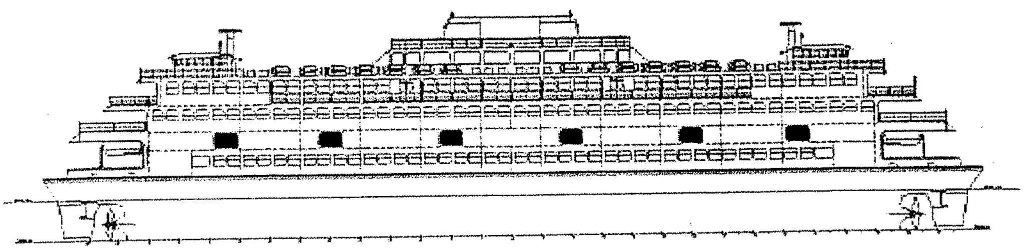
GEORGE G. SHARP, INC.

NEW YORK CITY FERRY SAFETY ASSESSMENT



Developed for the New York City Department of Transportation
by
George G. Sharp, Inc.

APPROVED
U.S. COAST GUARD
SUBJECT TO COMMENTS IN
COMMANDER, COAST GUARD ACTIVITIES
NEW YORK LETTER OF
30 MAR 04/ DD-04000
BY DIRECTION OF THE
OFFICER IN CHARGE, MARINE INSPECTION N
212 COAST GUARD DRIVE
STATEN ISLAND, NY 10305

EXAMINED
U.S. COAST GUARD
SUBJECT TO COMMENTS IN
COMMANDER, COAST GUARD ACTIVITIES
NEW YORK LETTER OF
07 AUG 00/ DDRAFT 10-00
Kenneth R Concepcion
BY DIRECTION OF THE
OFFICER IN CHARGE, MARINE INSPECTION NY
212 COAST GUARD DRIVE
STATEN ISLAND, NY 10305

June 2000

U.S. Department of Homeland Security

United States Coast Guard

Commander
United States Coast Guard
Activities New York

212 Coast Guard Drive
Staten Island, NY 10305
Staff Symbol: MSO
Phone: (718) 534-4290
Fax: (718) 534-4297
Email: Dhall@ACTNY.USCG.MIL

16000
DD-040001
March 30, 2004

New York City
Department of Transportation
Passenger Transport Division
Staten Island Ferry
Attn: Patrick Ryan
1 Bay Street
Staten Island, NY 10301

Subject: NEW YORK CITY FERRY LIFESAVING SAFETY ASSESSMENT

Ref: (a) Your letter March 21, 2004
(b) Title 46, Code of Federal Regulation, Part 199.210(b)
(c) Title 46, Code of Federal Regulation, Part 199.630(f)
(d) Navigation and Vessel Information Circular No. 01-03

I have completed review of your lifesaving Safety Assessment, submitted with ref (a), and find it provides a satisfactory alternative to the installation of 100% primary lifesaving gear per provisions of refs (b) and (c). Your lifesaving Safety Assessment is returned marked APPROVED for the ferry classes contained within the assessment. Approval for the new class ferries currently under construction will be determined after reviewing crew training and witnessing safety drills.

This office must approve any alterations to your current level of primary lifesaving gear listed on the vessel's Certificate of Inspection. Please feel free to contact Lieutenant Douglas Hall of my staff at (718) 354-4284 if you have any questions.

Sincerely,

C. E. BONE
Captain, U.S. Coast Guard
Officer in Charge, Marine Inspection

Enclosures: (1) New York City Ferry Safety Assessment dated June 2000

U.S. Department of Transportation
United States Coast Guard

Commander
United States Coast Guard
Activities New York

212 Coast Guard Drive
Staten Island, NY 10305
Staff Symbol: P&C
Phone: (718) 354-4290
FAX: (718) 354-4297

16000
DeepDraft 10-00
August 07, 2000

George G. Sharp, Inc.
Attn: Charles Barker
Senior Engineer
635 Slaters Lane
Suite 200
Alexandria, VA. 22134

Subject: NEW CONTRUCTION

References: (a) Your letter July 14, 2000
(b) Title 46, U.S. Code of Federal Regulation, Part 199.210(b)
(c) Title 46, U.S. Code of Federal Regulation, Part 199.630(f)

We have reviewed your Safety Assessment, submitted with ref (a), and find that it provides a satisfactory alternative to the installation of primary lifesaving gear per provisions of refs (b) and (c). Your volumes are returned marked "examined."

Final approval for risk reducing features in lieu of carrying primary lifesaving gear will be determined after reviewing crew training and witnessing safety drills. Please feel free to contact Ken Concepcion of my staff at (718) 354-4289) if you have any questions.

Sincerely,

R. E. BENNIS
Captain, U.S. Coast Guard
Commanding Officer, Activities New York

Enclosures: New York City Ferry Safety Assessment (6 copies)

STATEN ISLAND FERRY FLEET

Kennedy Class

John F Kennedy	Official Number 298241
American Legion	Official Number 298830
Gov. Herbert H Lehman	Official Number 298831

Passenger Capacity – 3,500
Vehicle capacity – Approximately 40 cars
Hull – Steel, 2 compartment flooding stability
Length – 277 feet
Width – 69.9 feet
Draft – 13feet 6 inches
Gross Tons – 2,109
Propulsion – Diesel Electric (DC) 4 propulsion engine/generators 6,500 horsepower

Crew
1 Captain and First Class Pilot
1 First Class pilot
1 Mate
6 Deckhands (NC)
1 Chief Engineer
1 Assistant Engineer
2 Oilers (NC)

Barberi Class

Andrew J Barberi	Official Number 629313
Samuel I Newhouse	Official Number 629315

Passenger Capacity – 6,017
Hull – Steel, 2 compartment flooding stability
Length – 320 feet
Width – 70 feet
Draft – 13 feet 6 inches
Gross Tons – 3,335
Propulsion – Diesel Direct Voith 4 propulsion engines 7,000 horse power

Crew
1 Captain and First Class Pilot
1 First Class pilot
2 Mates
7 Deckhands (NC)
1 Chief Engineer
1 Assistant Engineer
2 Oilers (NC)

Austen Class

Alice Austen	Official Number 696013
John Noble	Official Number 696014

Passenger Capacity – 1,280
Hull – Steel, 2 compartment flooding stability
Length – 207 feet
Width – 49 feet
Draft – 8 feet 6 inches
Gross Tons - 499
Propulsion – Diesel Direct Voith 2 propulsion engines 2,600 horse power

Crew
1 Captain and First Class Pilot
2 Mates, (1 Navigating, 1 Non Navigating)
4 Deckhands (NC)
1 Chief Engineer
1 Oiler (NC)

New Construction
Guy V Molinari
Sen. John J Marchi
Unnamed at this time

Passenger Capacity – 4,400
Vehicle Capacity – Approximately 28 cars
Hull – Steel, 2 compartment flooding stability
Length – 320 feet
Width – 70 feet
Draft 13 feet 6 inches
Gross Tons – 3,20
Propulsion – Diesel Electric (AC) 3 propulsion/generators 10,000 horsepower

Crew
Undetermined at this time

1.1 References:

(a) 46 CFR Subchapter W, Lifesaving Systems for Certain Inspected Vessels
(b) NVIC 1-97, Shipboard Management and Contingency Plans for Passenger Vessels
(c) 46 CFR Subchapter H, Passenger Vessels
(d) NVIC 9-97, Guide to Structural Fire Protection
(e) 46 CFR Subchapter K, High-Capacity Small Passenger Vessels
(f) NVIC 8-93, Equivalent Alternatives to 46 CFR Subchapter H Requirements Related to Means of Escape, Safe Refuge Areas, and Main Vertical Zone Length
(g) Washington State Ferries Risk Assessment Final Report, June 30, 1999

1.2 Background.

The new ferry for New York City must comply with the lifesaving equipment requirements of reference (a). These requirements, which became effective on November 1, 1998, contain significant changes from past equipment requirements for the New York City Ferries. While this issue is of immediate importance for the new ferry, all New York City Ferries will have to comply with this requirement by October 1, 2003.

The new Ferry must comply with Subparts A, B, C, and E of reference (a). Subpart F contains optional exemptions for vessels on non-SOLAS Routes.

Significant changes in the new rules include:

- SURVIVAL CRAFT. 46/199.201(b) requires lifeboats and liferafts to accommodate all people on board, plus 25%. 46/199.630(g) reduces this requirement to a combination of lifeboats, liferafts, and inflatable buoyant apparatus (IBA) to accommodate 67% of the people on board. This alternative applies to vessels on protected routes, and assumes that for limited periods an IBA can accommodate 150% of its rated capacity.

- MARINE EVACUATION SYSTEMS. If there is not a suitable embarkation point for survival craft, marine evacuation systems will have to be installed. Embarkation decks 3 meters or more above the waterline require marine evacuation systems (46/630(d)(1)).

- SAFETY ASSESSMENT. 46/199.630(f) allows a safety assessment to support alternatives to full survival craft equippage. Passenger vessels may conduct a Safety Assessment, subject to approval by the local Coast Guard Officer in Charge, Marine Inspection (OCMI), that would assess the scope and degree of risks that the vessel would encounter, and determine alternatives to the survival equipment requirements. The Safety Assessment would have to consider both navigational safety and vessel management.

1.3 Issue.

What lifesaving requirements are appropriate for the New York City Ferry?

1.4 Discussion.

As an alternative to meeting the lifesaving equipment requirements of 46CFR199.201(b), the new ferry will seek an OCMI approved Safety Assessment, as permitted in 46CFR199.630(f). The guidelines for the Safety Assessment are contained in references (a) and (b). Further guidance on the vessel's safety features are contained in references (c) and (d). References (e) and (f), while not strictly applicable, contain useful interpretations and Coast Guard philosophies for vessels carrying in excess of 1000 passengers that will provide important background material for the OCMI approved safety assessment. Reference (g) studies safety issues similar to those that will be considered in this assessment.

The New York City Ferry fleet has provided many years of safe, reliable passenger service for its customers. It is not the intent of this study to introduce changes to this successful operation simply for the sake of change. Safety can be improved by analyzing potential catastrophic accidents and preparing contingency plans for those scenarios. Accident likelihood can be reduced through enhanced safety procedures and improved management. Accident consequences can be mitigated through the development of an effective casualty response plan. Reference (g) concluded that there are few scenarios on a typical commuter ferry run that would necessitate the evacuation of passengers into survival craft. This is equally true for the New York City ferries. Evacuation takes time, and exposes passengers to physical hazards. Seeking safe refuge aboard the ferry and awaiting rescue is a safer alternative. If passenger evacuation becomes necessary, the safest place for passengers to disembark is at the terminal, where normal passenger egress occurs. In the event of an emergency, ships force and external assets will stabilize the situation and the ferry will be brought into the terminal under its own power or with tug assistance. In the unlikely event that the ferry cannot be brought into the terminal, such as intentional grounding after damage, passengers will be transferred to another ferry, and then brought into the terminal.

1.5 Supporting Comments:

- The ferry will operate on a short, restricted route, with excellent emergency rescue resources readily available, including other ferries, tugboats, fireboats, police boats, USCG vessels, passenger vessels and local harbor traffic, and helicopters.
- The ferry operates entirely within Vessel Traffic Service (VTS) New York's area of responsibility. VTS New York has communication with all vessel traffic in the area, full radar coverage from multiple sites, and video cameras. VTS New York would be instantly aware of any problems with the ferry's operation.
- The ferry is designed to two-compartment subdivision, the highest level of damage survivability required by the Coast Guard. There are safe areas immediately adjacent

Enclosure (2) to NVIC 01 03

Company: ALL STATEN Island ferry vessels
OCMI Zone:

Vessel:
Date:

(All questions should be answered as if the possible accident scenarios may lead to vessel evacuation.)

Accident Scenarios: Which aspects contribute to the occurrence of each listed incident below?	No	Yes	If yes, identify mitigating factors that address the risk of the accident scenario.	Likelihood of evacuation: Low	Med	High
1. FIRE						
a. Port Aspects that contribute to a fire						
1. Does the port have hazardous cargo vessel traffic?		X	VLS NY	X		
2. Are there other port aspects?		X	" " FDNY Fire Boats, Some USG	X		
b. Operational Aspects that contribute to a fire						
1. Are open flames used for services (sterno for catering) or entertainment (pyrotechnics)?	X					
2. Are additional flammables used (alcohol, candles)?	X					
3. Is smoking permitted?	X					
4. Does hotwork/welding take place with passengers onboard or within 6 hours of carrying passengers?	X					
5. Are portable heaters used in any space?		X	manned spaces (RM) & Kitchen oil (Fire Ext in Space	X		
6. Are any small appliances (possibly unauthorized) used that could cause a fire?		X	All Fixed, Manned Type Fire Ext in space (Annually Maintained)	X		
7. If the vsl carries cargo, could a fire start that involves that cargo?	X					
8. Does vsl carry materials that could chemically react and result in a fire?	X		MRV change w/ installation of Emission Control			
9. Are there any other sources of ignition that are inherent to the vessel's operation?	X					
c. Vessel Aspects that contribute to a fire						
1. Does the vessel lack compliance with current structural fire protection regulations (pre-1972 vessel)?		X	Kennedy Class, Asbestos Furnishings / Sprinkler Wet, Limited Sprinklers on Car Deck & Fire Doors throughout	X		
2. Are there type 6 and/or 7 spaces (table 72.05-10) with combustible furnishings, veneers or trim (capable of excess smoke production)?		X	Kennedy Class Same as C.1.	X		
3. Is the vessel constructed from any flammable materials?	X					
4. Does the vessel use unique machinery (e.g. hand-oiled, coal fired, gasoline, hydraulic systems, turbines, large boilers)?	X					
5. Does the vessel use flexible fuel or lube oil lines near hot surfaces?	X					
6. Are flammables other than fuel in fixed tanks (e.g. sterno, compressed gasses, paint) stored on the vessel?	X		New Marpol Emission Control Same as C.1.			

7. Are any fuel or oil lines subjected to vibration that could cause fatigue and fracture/failure over time?		X	Rounds, Reg INSP's. Routine Fixed CO_2	X		
8. Are there hot surfaces in the machinery space capable of igniting combustibles solids or liquids that might come in contact with the hot surface?		X	Same as 7.	X		
9. Does a potential exist for a fire caused by the electrical system?		X	Same as 7. + No [illegible] onboard [illegible]	X		
10. Could activities in Galley or involving cooking result in a fire?	X					
11. Is there a potential for a fire caused by hot exhaust gases or related to the exhaust stack?		X	No flammable [illegible] in Galley / [illegible]	X		
12. Minimally or periodically unattended machinery plants? (Automation)	X					
13. Are there other vessel aspects?	X					
			Overall score for fire?	10 X		

<u>All questions should be answered as if the possible accident scenarios may lead to vessel evacuation.</u>

Accident Scenarios: Which aspects contribute to the <u>occurrence</u> of each listed incident below?	No	Yes	If yes, identify mitigating factors that address the risk of the accident scenario.	Likelihood of evacuation: Low	Med	High
2. COLLISION/ALLISION						
a. Port Aspects that contribute to a collision/allision						
1. Is the vessel exposed to high commercial traffic areas within the port?		X	VTS, Radar			
2. Does the port lack traffic schemes or separation zones?	X					
3. Does the port have narrow channels or obstructions?		X	Fixed Short [illegible] VTS, 1st class pilots o/L	X		
4. Are the aids to navigation unreliable?	X					
5. Do recreational vessels hinder the vessel or cause the vessel to alter course?		X	Seasonal traffic, vsl maneuverable [illegible] VTS	X		
6. Does the port have high speed vessel traffic?		X	VTS, Lic Pilots, Aluminum	X		
7. Are there port specific weather conditions, natural occurrences or sea states to consider?		X	Pax Assist Ltd by OCMI VTS measures Radar (Pilots)	X		
8. Does the port hold <u>frequent</u> marine events or activities that attract large numbers of vessels?	X		3 per YR - Planned events w/ [illegible] [illegible] (Planning)	X		
9. Are there stationary obstructions (e.g. bridges, jetties) to consider?		X	1st Class [illegible] - Fixed Radar - VTS - Radar	X		
10. Are there any other port aspects?	X					
b. Operational Aspects that contribute to a collision/allision						
1. Does the vessel encounter crossing situations on its route?		X	All portions of Route - VTS - Pilots	X		
2. Does the vessel's schedule cause fatigue situations for the crew?	X					
3. Does the vessel operate at night?		X	VTS - Radar - Pilots	X		
4. Does the vessel's route require numerous course changes?	X					
5. Does the vessel routinely operate in restricted visibility?		X	VTS - RADAR - Pilots - Safe speed - Lb	X		
6. Is a collision/allision likely to cause flooding?		X	2 Compt Subdivisions - Bilge Systems - Live Wtch	X		
7. Are there other operational aspects?	X					
c. Vessel Aspects that contribute to a collision/allision						
1. Does the vessel lack back-up systems for emergency steering or power?	X					
2. Are propulsion systems engine room control only?	X					
3. Does propulsion type (e.g. paddle wheelers) limit maneuverability?	X					
4. Minimally or periodically unattended machinery plants? (Automation)	X					
5. Are there other vessel aspects?	X					
			Overall score for collision/allision?			

All questions should be answered as if the possible accident scenarios may lead to vessel evacuation.

Accident Scenarios: Which aspects contribute to the occurrence of each listed incident below?	No	Yes	If yes, identify mitigating factors that address the risk of the accident scenario.	Likelihood of evacuation: Low	Med	High
3. GROUNDING (POWERED OR DRIFT)						
a. Port Aspects that contribute to a grounding						
1. Is the operating area characterized by shallow water?		X	Fixed Route - Pilot - VTS - Radar - GPS - ATON	X		
2. Is the topography of the waterway seabed/bottom likely to cause flooding in case of grounding?	X					
3. Are the aids to navigation unreliable?	X					
4. Do tides, ~~currents~~, and bottom topography raise stability concerns in case of grounding?		X	EVAC Plan in Place (Boats on board) + ADLS (5 FT [illegible])	X		
5. Are there port specific weather conditions, natural occurrences or sea states to consider?		X	[illegible]	X		
6. Are there other port aspects?	X					
b. Operational Aspects that contribute to a grounding						
1. Does the vessel's schedule cause fatigue situations for the crew?	X					
2. Does the vessel operate at night?		X	VTS - Radar - Pilots - GPS	X		
3. Does the vessel's route require numerous course changes?	X					
4. Does the vessel routinely operate in restricted visibility?		X	See 2.6.5			
5. Are there other operational aspects?	X					
c. Vessel Aspects that contribute to a grounding						
1. Does the vessel lack back-up systems for emergency steering or power?	X					
2. Are propulsion systems engine room control only?	X					
3. Is the vessel constrained by draft?	X					
4. Does propulsion type (e.g. paddlewheelers) limit maneuverability)?	X					
5. Minimally or periodically unattended machinery plants? (Automation)	X					
6. Are there other vessel aspects?	X					
			Overall score for grounding?	X		

All questions should be answered as if the possible accident scenarios may lead to vessel evacuation.

Accident Scenarios: Which aspects contribute to the occurrence of each listed incident below?	No	Yes	If yes, identify mitigating factors that address the risk of the accident scenario.	Likelihood of evacuation: Low	Med	High
4. SECURITY THREAT (TERRORISM)						
a. Port Aspects that contribute to a terrorist/security threat						
1. Is the port area a target for a security threat?		X	VST - Sea Marshals, NVD. HLS - Fire Sec Plan	X		
2. Are there other port aspects?	X					
b. Operational Aspects that contribute to a terrorist/security threat						
1. Can the operation be considered a target for a security threat?		X	VSP. NVD - FSP. Sea Marshal -	X		
2. Does the vessel operate with a high capacity of passengers?		X	" " " "	X		
3. Is the vessel part of a transportation system?		X	" " " "	X		
4. Are there other operational aspects?	X					
c. Vessel Aspects that contribute to a terrorist/security threat						
1. Is the vessel considered a high visibility vessel?		X	Some of H.R.I	X		
2. Is the vessel considered a historical or national icon vessel?		X	" " "	X		
3. Minimally or periodically unattended machinery plants? (Automation)	X					
4. Are there other vessel aspects?	X					
			Overall score for security threat (terrorism)?	X		

All questions should be answered as if the possible accident scenarios may lead to vessel evacuation.

Accident Scenarios: Which aspects contribute to the occurrence of each listed incident below?	No	Yes	If yes, identify mitigating factors that address the risk of the accident scenario.	Likelihood of evacuation: Low	Med	High
5. LOSS OF POWER/PROPULSION						
a. Port Aspects that contribute to loss of power/propulsion						
1. If shore power is used inport, is there a history of power interruptions?		X	Vsl Commuter Service - No [illegible] + Security	X		
2. Are there other port aspects?	X					
b. Operational Aspects that contribute to loss of power/propulsion						
1. Does vsl have history of temporarily losing power or propulsion?		X	Prop MAC Redundancy - Partial loss not total	X		
2. Is there a potential for losing power when adding or removing a generator from the electrical distribution?		X	Redundant Systems	X		
3. Could sudden addition of service or emergency electrical load cause of power or propulsion control?		X	Vsl in port [illegible] Propulsion [illegible]	X		
4. Are there other operational aspects?	X					
c. Vessel Aspects that contribute to loss of power/propulsion						
1. Can fire in a single space cause loss of power?		X	Emergency Gensets in Sep location - Portables	X		
2. Can fire in a single space cause loss of propulsion?		X	Portable fire [illegible] - Fixed CO_2 System	X		
3. Can a collision cause loss of power?	X					
4. Can a collision cause loss of propulsion?		X	[illegible] Tugs - Vsl Assist	X		
5. Would loss of power cause a collision/allision?	X					
6. Can a grounding cause a loss of power?	X					
7. Can a grounding cause a loss of propulsion?	X					
8. Would loss of power increase risk of grounding?		X	Redundant Sys (20 sec) Proximity of help	X		
9. Would loss of propulsion increase risk of grounding?						
10. Minimally or periodically unattended machinery plants?	X					
11. Are there other vessel aspects?	X					
			Overall score for loss of power/propulsion?	X		

Comments/Additional Challenges:

Reviewers:

Company Representative: [signature]

USCG Representative: [signature], LT

Enclosure (2) to NVIC 01 03

Summary of Subchapter W Hazard Assessment Matrix

(for Passenger Vessels of 100 GT or More in Specific Services)

Company: S.I. Ferry	Vessel: Hill Class
OCMI Zone:	Date: 17 Feb 04

Accident Scenarios	Low	Medium	High
1. Fire	X		
2. Collision/Allision	X		
3. Grounding	X		
4. Security Threat	X		
5. Loss of Power/Propulsion	X		
Cumulative Score:			

Low: The accident scenarios are well mitigated, and the vessel is not likely to become untenable leading to an evacuation. A vessel will only be assigned a score of "low" when all accident scenarios are scored as "low." A "low" score is an indication that some or all of the required survival craft do not need to be carried depending on SSMCP.

Medium: The accident scenarios are only partially mitigated resulting in the potential for evacuation.

High: The accident scenarios are not well mitigated. Accident scenario will likely cause untenable conditions that require evacuation.

2.0 Risk Assessment. The navigation and vessel safety conditions within the vessel's planned operating area.

This section will consider the port and its navigating conditions, the vessel and its crew, and the hazards and risks faced by the ferry. This information is based upon interviews, casualty histories, and published information about the port.

2.1 The scope and degree of risks or hazards to which the vessel will be subject during normal operations.

2.1.1 The Ferry.

The new JFK Class ferry is designed for carrying about 4400 passengers and 30 vehicles. Seating capacity is planned for about 2575 passengers. Passenger accommodations are provided on the Main, Saloon, Bridge, and Hurricane Decks. Passenger access is provided on the main deck and saloon deck. Vehicles drive aboard on the main deck, using two lanes.

2.1.2 The Route.

The Staten Island to Manhattan ferry route is 5.2 miles long. A round trip is completed in one hour. Each leg of the transit takes approximately 18 minutes. Loading and unloading of passengers at each terminal takes approximately 12 minutes.

The ferry route keeps the vessels on the extreme right side of the main ship channel, Anchorage Channel. The ferry leaves St. George Terminal, Staten Island, crosses the Anchorage Channel, and follows the east side of the channel until passing Governors Island. After passing Governors Island, the ferry turns east in the vicinity of the entrance range to the East River, and then turns North, crosses the East River, and heads to Whitehall Terminal, Manhattan. Upon leaving Whitehall Terminal, the ferry heads west across Anchorage Channel, then follows the west side of the Anchorage Channel back to Staten Island, crosses the Kill Van Kull, and heads to St. George Terminal, Staten Island.

For most of its route, the ferry runs parallel to the vessel traffic flow. At the terminals, however, the ferry crosses perpendicular to the prevailing vessel traffic flow (Anchorage Channel, East River, Kill Van Kull). In addition, the ferry often maneuvers close to the terminals, which can also contribute to operational risk. The navigating risk is highest near the two terminals.

The Coast Pilot strongly encourages mariners to avoid transiting close to the ferry slips at Whitehall and St. George Terminals.

2.1.3 The Crew.

The Crew and their license requirements are as follows:

Position	License
1 Captain	Inland Master Unlimited
1 Assistant Captain	1st Class Pilot Unlimited (Upper Bay, North River Battery to George Washington Bridge, East River to Execution. Rock, Kill Van Kull)
1 Mate	Inland Mate
6 Deckhands	None
1 Chief Engineer	Chief Coastal Unlimited
1 1st Engineer	3rd Assistant Engineer
1 Oiler	None

All positions require break-in training.

2.1.4 The Schedule.

The ferry serves the public 24 hours per day, 7 days per week, year round. The schedule follows.

Weekdays

Midnight-6 a.m.	1 trip per hr
6-8 a.m.	3 trips per hr
8-9 a.m.	4 trips per hr
9 a.m. -3:30 p.m.	2 trips per hr
3:30-4:10 p.m.	3 trips per hr
4:10-7 p.m.	4 trips per hr
7 p.m.-midnight	2 trips per hr

Weekends

11:30a.m. – 7p.m.	2 trips/hr
Other times	1 trip/ hr

2.2 The existing vessel traffic characteristics and trends, including traffic volume; the sizes and types of vessels involved; potential interference with the flow of commercial traffic; the presence of unusual cargoes; and, other similar factors.

2.2.1 VTS New York.

The single most important safety feature in the ferry's operating area is the presence of the Coast Guard's VTS New York.

VTS New York uses 13 radar sites and 18 cameras to continually monitor vessel traffic movement in New York's Upper Bay (as well as other areas that don't affect the ferry's operation). The VTS is staffed 24 hours per day, 7 days per week, with 6 watchstanders (minimum). The watch consists of a Watch Supervisor, a VTS Duty Officer, and 4 watchstanders who rotate through three positions (Sector Operators) on a continual basis.

During inclement weather, special events, and port emergencies, the VTS acts as an information clearing-house, collecting information from operators and passing it on to others who need that information. During such times the VTS Watch Supervisor and Duty Officer both remain on site in the watch office, and in extraordinary situations such as bad weather or marine events, extra staff is brought in.

A vessel checks in with VTS 15 minutes prior to its entry into VTS New York's AOR, on VHS Channel 11. Deep draft vessels should already have provided the port with 24 hour advanced arrival notification. VTS watchstanders enter the vessel's name and characteristics into the computer tracking system, if not already on file. The vessel provides the VTS with its Sailing Plan, and VTS provides the vessel with any port advisories that will affect the vessel's transit. The sailing plan includes the following information:

- Vessel name and type
- Current position
- Destination and ETA
- Intended route
- Length overall
- Deepest draft
- Dangerous cargo, if any

For vessels with pilots, this exchange of information is usually made with the pilot, who is intimately familiar with the port and local operating conditions. For tugs and other vessels, the vessel operator passes the information.

After check-in, the Coast Guard watchstander "launches" an icon on the computer screen that represents the vessel as it makes its transit. The radar provides a simultaneous reading of the vessel's position. If the tracking icon and the radar position grow too far apart, the watchstander will either update the icon position or contact the vessel to see if there is a problem.

Throughout the transit in the Upper Bay the vessel maintains communication with the VTS on Channel 14. Traffic updates and critical port information is passed continually on this channel.

The VTS watch communicates with New York City emergency services (police, fire, and rescue) by means of a "911" land line and by Channel 17.

Vessels are required to notify the VTS if there is any change to the sailing plan, and must also notify the VTS upon leaving the VTS AOR.

2.2.2 Surrounding Vessel Traffic.

The Upper New York Bay is one of our nation's busiest commercial waterways. The VTS receives approximately 800 vessel movement reports on a given day, over half of which are in the vicinity of the ferry route.

Generally, collision risk is highest in the area of greatest vessel traffic congestion. The point of greatest vessel traffic congestion on the Ferry route is the section from St. George Terminal to Robbins Reef. Waterway usage statistics indicate that the vast majority of the large vessel traffic in the New York Upper Bay is using either the Kill Van Kull or the Military Ocean Terminal. Traffic operating North of this area comprises less than 20% of the port's total traffic.

In the vicinity of Whitehall Terminal the traffic consists mostly of smaller vessels, including commuter ferries, tug and barge traffic, and passenger vessels offering dinner and sightseeing cruises. These vessels are typically local operations that are very familiar with the ferry's operation.

Three commuter ferry companies operate high-speed vessels. They carry anywhere from 149 to 350 passengers, and operate at speeds of approximately 30 knots. They operate out of Pier 11, at the foot of Wall Street on the East River, and their route can cross the ferry route. Their speed increases the collision risk, particularly in reduced visibility conditions, but there are mitigating factors that reduce the risks for New York City Ferry passengers:

- High speed commuter ferry operations are conducted during peak commuter times, when other ferries are running, so post-casualty assistance would be immediately available.

- The commuter ferries are between 90' and 125' in length, and would likely not inflict passenger-threatening damage to the New York City Ferry, although they might sustain significant damage to themselves in a collision.

- The high-speed ferries don't carry vehicles or dangerous cargo, so a resulting fire would be unlikely.

- The high-speed ferries maintain contact with VTS for special navigating conditions, and are very familiar with the New York City Ferry operating procedures.

Tugs often bring tows down the East River on hawser, cross the ferry route, and make up their tow on the North River. These operations occur at low speed, and the vessels are small when compared to the ferry. The New York City Ferry Operators are well aware of these tug and barge activities, and exercise care in their vicinity, particularly in bad weather or when strong currents are present.

The consequence of a ferry collision depends on the characteristics of the other vessel. Obviously, larger vessels carry the greatest risk of severe consequences resulting from a collision. As noted previously, the likeliest interaction with larger vessels will occur in the vicinity of St. George Terminal and Robbins Reef.

2.3 The port and waterway configuration and variations in local conditions of geography, climate, and other similar factors.

The main ship channel in the Upper Bay, Anchorage Channel, is approximately ½ mile wide, with a navigational depth of 45 feet. Entering the Upper Bay from the Narrows, the Stapleton Anchorage is to the west, extending from near the Verrazano Narrows Bridge to the Ferry Terminal at St. George, Staten Island. The Bay Ridge Anchorage on the Brooklyn side extends from Bay Ridge to Erie Basin.

Secondary Channels connect the Upper Bay with various terminals in the harbor. To the east, Bay Ridge Channel, Red Hook Channel, and Buttermilk Channel follow the Brooklyn Piers from The Narrows to East River. To the west, Claremont Terminal Channel and Pierhead Channel follow the New Jersey Piers.

The Kill Van Kull, at the northern end of Staten Island, connects Upper Bay and Newark Bay in New Jersey. Vessels entering Kill Van Kull must pass directly in front of the Ferry Terminal at St. George, Staten Island.

At the Battery, the Anchorage Channel splits, leading to the North (Hudson) River, and the East River (a tidal strait).

Shoals in the Upper Bay include Bay Ridge Flats, with depths of 5 to 20 feet on the east side of Anchorage Channel, and Gowanus Flats at the north end of Bay Ridge Flats. Jersey Flats, west of Anchorage Channel, is much shallower, with depths up to 6 feet.

2.4 Environmental Factors.

Weather plays an important role in navigation through its effect on visibility and on currents. Fog in the harbor is more closely related to land-type fog, and is common in the winter on clear, cold mornings. In the spring and early summer, the harbor is susceptible

to advection fog. Fog usually peaks in the morning on the ferry route. Dense fog conditions, with visibility less than 0.25 miles, occur 28 days in an average year. The 24 hour, year round service schedule makes it necessary for the ferry to operate in reduced visibility, as well as all other weather conditions. VTS New York monitors local visibility conditions through operator reports, and provides regular updates to vessels transiting the area.

Harbor currents are another important issue. Spring currents include strong ebb tides, and currents can be particularly difficult in the vicinity of the "Spider," an area North of Governors Island at the mouth of the East River. Wind has a strong effect on currents, thus affecting tabular current predictions. The strongest winds are out of the west through northwest at 13 to 15 knots, from January through April.

Ferry operators are well aware of these visibility, currents and wind effects, and are able to compensate on their own vessel. A significant risk for the ferries from environmental factors is from operators of other vessels. Ferry operators monitor other vessels closely when these conditions exist, since other operators may not be as familiar with environmental effects in the local operating area.

3.0 A comprehensive shipboard safety management and contingency plan that is tailored to the particular vessel, is easy to use, is understood by vessel management personnel both on board and ashore, is updated regularly.

3.1 Guidance to assist the vessel crew in meeting the demand of catastrophic vessel damage.

Contingency plans are provided in Appendix A for:

Fire and Explosion
Collision, Flooding, and Grounding
Loss of Power/Loss of Steering
Miscellaneous Contingencies.

3.2 Procedures to mobilize emergency response teams.

These procedures are included in the contingency plans, Appendix A. On the vessel, crew members will make up emergency response teams as per the Watch, Quarter, and Station Bill. External resources are summoned by VHS Radio. The two primary calls always go to USCG VTS New York and the Ferry Terminal Supervisor. VTS and the Terminal Supervisor mobilize the external response teams, contacting NYPD and FDNY by landline (911) or VHS Radio, Channel 17. The ferry can also make direct contact via VHS Channel 17, although initial contact through the VTS and Terminal Supervisor are preferred.

3.3 Procedures for moving passengers from the vessel's spaces to areas protected from fire and smoke, to embarkation areas, and off the vessel. The procedures must include provisions for passengers with physical or mental impairments.

These procedures are included in the contingency plans, Appendix A. The ferry is divided into two main vertical zones, and the uninvolved main vertical zone provides safe refuge from a fire. The ferries are designed for rapid access and egress for all passengers, including those with impairments. During rush hour operations, about 4400 passengers are disembarked within a 12 minute turnaround period. Crowd control will be handled by the crew and the PA system, until external help arrives. This external help will be in the form of the NYPD and FDNY marine units, as well as the USCG.

3.4 Lists of external organizations that the operator would call for assistance in the event of an incident.

As stated in paragraph 3.2, the ferry operator calls for assistance to the USCG VTS and the terminal supervisor. Once the call for assistance goes in, there are many high-quality resources readily available to provide that assistance. Section 4 describes these emergency response resources in detail.

3.5 Procedures for establishing and maintaining communications on board the vessel and with shoreside contacts.

This is included in the contingency plans, Appendix A. Continuous contact is maintained with VTS New York and the Ferry Terminal Supervisor during normal operations.

3.6 Guidance on theoretical, practical, and actual simulation training that includes the personnel or organizations identified in the plan so they can practice their roles in the event of an incident.

Appendix B contains guidance on training, indoctrination, and safety management programs.

4.0 Emergency Resources. This section describes the external emergency response resources available to the ferry.

4.1 New York City Police Department (NYPD).

The NYPD has marine units that operate 24 hours per day, 7 days per week. There are three bases, Charlie Base, Adam Base, and George Base. Charlie Base is located in Brooklyn, by the 69th Street Pier, and would be the first responder in an emergency involving the ferry. Adam Base, located in Howard Beach near JFK Airport, is about 40 minutes away from the ferry. George Base, located in College Point near LaGuardia Airport, is also about 40 minutes away from the ferry.

Charlie Base could have a boat on scene at the ferry within 15 minutes of a distress call, at any point in the ferry's run. During peak commuter hours this time may be reduced because the Harbor Charlie patrol boat remains underway during that time. Charlie Base has three 55' boats, a 36' boat, and a 30' boat. One of the 55'boats is designated to carry the SCUBA team, which is available 24 hours per day. Each boat carries three officers, except the 30' boat, which carries 2 officers.

The Adam and George Bases are similarly equipped, although they each have only one 55' boat.

To supplement the Police Harbor Patrols there is an emergency police helicopter stationed in Brooklyn that can deploy swimmers anywhere on the ferry run within 5 minutes of a distress call. In addition, the 122nd Precinct Headquarters Building is across the street from the St. George terminal, and police can board vessels there to be carried out to the ferry in an emergency.

4.2 New York City Fire Department (FDNY).

The FDNY has marine units that operate 24 hours per day, 7 days per week. There are three bases in the vicinity of the ferry operating area. These bases, Marine Companies 9, 1, and 6, are located in Staten Island, Greenwich Village, and Brooklyn Navy Yard, respectively.

Marine Company 9, which would be the first responder in a ferry emergency, has a 134' fireboat with 8 monitors, 20,000 gpm total capacity, and a single monitor maximum capacity of 7,500 gpm. This vessel is operated by a 7 person crew. Marine Company 1 in Greenwich Village has a fireboat with similar capacity, and Marine Company 6 has a fireboat with about one half of that capacity.

In the case of a major emergency, a "special call" would be made. Within 10 minutes, a full first alarm assignment would be at the ferry terminal, consisting of three 5-person engine companies, two 6-person ladder companies, a 6-person rescue company, a 6-person "fast truck," and a Battalion Chief. These fire fighters would either wait for the

ferry to arrive in the terminal, or be transported out to the ferry by either a fireboat or another ferry.

4.3 United States Coast Guard.

The USCG Station New York has at least one 41' patrol boat at the ready status (B-0) 24 hours per day, 7 days per week. A second 41' patrol boat is B-0 in the summer, B-2 in the winter. Station New York has a total of four 41' patrol boats and two RHI's for emergency response purposes.

At the Military Oceans Terminal the USCG has two 65' and two 140' cutters, one of which is typically on B-6 status.

Further away, the USCG has resources at Kings Point and Sandy Hook, which are on B-0 status and are less than one hour away from the ferry operating area.

4.4 Other Ferries.

The rescue vessel of choice in an emergency would be another ferry. During most operating hours there are a minimum of two ferries operating at the same time. In the case of an emergency, the operating ferry would head to the nearest terminal, discharge passengers, and then go to the aid of the other ferry. By then rescue calls would have been called in, and emergency personnel can board the operating ferry.

In the middle of the night, only one ferry operates. Due to crew rotations and watch procedures, there is a 2 ½ hour period each night when a second full engineering crew is not on duty, and a 4 ½ hour period each night when a second full deck crew is not on duty. During these times, a rescue ferry could be mobilized in less than an hour.

The operator of a ferry encountering an emergency would contact the ferry terminal supervisor (on watch 24 hours per day, at each terminal). The operator would specify what help is required. If another ferry were required, the terminal supervisor would commence vessel preparations. In the terminal there is a qualified engineer and an oiler on duty 24 hours per day. These engineers would immediately start up the rescue ferry plant. As with the engineers, there are five deckhands on duty 24 hours per day. These personnel would be immediately dispatched to ready the ferry and embark emergency personnel as required. During these preparations the terminal manager would recall a Captain, which would be either a Port Captain or one of the Captains from the oncoming watch. There are two Port Captains for the ferry system, and one is available on call at all times.

When the Captain arrives, the ferry would be ready to go. This entire evolution can be carried out in less than one hour.

4.5 Miscellaneous Assets.

Beyond the dedicated emergency assets listed above, there are many other resources in the Upper Bay area that might be called upon during an emergency.

4.5.1 Towing Vessels.

United Pilots towing vessels are available on call 24 hours per day, 7 days per week. While not emergency responders, they would be called upon to tow a disabled ferry back into port.

4.5.2 Army Corps of Engineer (ACOE) Vessels.

The ACOE operates debris collecting vessels during daylight hours, 7 days per week. The vessels are either catamaran design or tow catamaran type barges that have nets stretched between the hulls to pick up floating debris. They are operated by U.S. Federal Employees with appropriate licenses. These vessels have large deck areas and could serve as platforms for ferrying passengers or equipment in an emergency.

4.5.3 General Harbor Traffic.

The high volume of traffic in New York's Upper Bay almost guarantees that there will be a vessel in the immediate vicinity of a ferry if it has an emergency. A study of vessel traffic by VTS New York showed that for February 2000, there was an average of 10 vessels per hour at St. George every night during the hours of 2-3 am, excluding ferry vessels. The least number of non-ferry vessels recorded for that hour was 5, and the most was 19. There was a towing vessel underway in the vicinity during that hour on every day of the study.

A. Contingency Plans

This Appendix contains contingency plans for all of the mishaps that could be reasonably anticipated. These mishaps were selected through analysis of historical records, interviews of operators, stakeholders, and outside experts, and through engineering analysis.

For each of the three broad classes of mishap (Flood, Loss of Power, and Fire) there is a general discussion of anticipated casualties, prevention and mitigation measures. This general discussion is followed by detailed step-by-step contingency plans.

A.1 Collision, Flooding, Grounding

A.1.1 Collision, Flooding, Grounding Response

There is a risk of a collision, flooding, and grounding for the ferry. Only collision carries a significant potential of passenger injury, but all three will be covered in this section.

The preferred response to collision and flooding is to head to the nearest terminal and evacuate the passengers. Grounding does not pose any immediate physical danger to the passengers, but they must be removed from the grounded vessel as soon as it is safe to do so.

If the ferry cannot proceed to the nearest terminal, other actions must be taken to stabilize the situation. Intentional grounding of the ferry in the nearest shoal area will eliminate any danger of sinking. The ferry's route keeps it on the right side of the channel, and shallow areas are always nearby. If the ferry loses all power and starts to drift, the anchor can be deployed to prevent drifting.

In a collision, flooding, or grounding situation, the USCG, FDNY, and NYPD can be called upon for emergency assistance. This assistance can include crowd control and supplying standby vessels. Other standby vessels can be drawn upon from local vessel traffic, salvage tugs that are on continual recall notice, and other ferries.

The best way to get passengers off of the ferry safely is to reach a terminal and disembark as in normal operations. Under every contingency, the operator's first priority is to reach a terminal. In the unlikely event that the ferry cannot reach a terminal, the primary platform for evacuating ferry passengers is another ferry. This ferry-to-ferry evacuation will be done by means of a gangway specially designed for this purpose. The passengers will cross the gangway at main deck level under the supervision and assistance of crewmembers and emergency response personnel. The gangway will be stored at the terminal and brought out with the rescue ferry, along with emergency responders, to conduct the rescue. It will be capable of use on all ferries, to provide maximum versatility for fast response.

A.1.2 Collision, Flooding, Grounding Prevention and Mitigation

Collision, flooding, and grounding safety for the ferry is achieved by a coordinated package of prevention and mitigation features made available both by design and operational measures.

A.1.2.1 Collision, Flooding, Grounding Prevention Measures

The bridge team on the ferries is the most important collision prevention measure. License requirements, on-the-job training, and a drug testing program are all in place to ensure that passengers are provided a safe navigating team at all times.

The next most important collision prevention measure is VTS New York. The round the clock monitoring of Upper Bay traffic and periodic advisories makes the ferry route safe to operate upon.

The ferry itself has two pilothouses, each fully equipped and capable of operating the ferry independently. Using the other pilothouse underway can compensate for any navigation equipment failure, although the change from one pilothouse to the other is not instantaneous. Navigation equipment in each pilothouse includes a magnetic compass, gyrocompass and repeater, radar, VHF radio, and internal sound-powered phones.

A.1.2.2 Collision, Flooding, Grounding Mitigation Measures

The ferry will be designed to two compartment flooding standard. The main deck will not be submerged after any transverse watertight bulkhead is breached and two adjacent compartments are flooded. This is the U.S. Coast Guard's most stringent passenger vessel flooding standard.

Flooding due to mechanical failure (of pipes, valves, packing, etc.) will affect only one compartment. Flooding of one compartment will not seriously endanger the ferry.

NEW CONSTRUCTION
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A.1.3 Collision

Inform the Captain

Inform the engine room

Notify VTS by VHF Radio

Notify Ferry Terminal Supervisor by VHF Radio, have Manager call emergency services by "911" landline. Request FDNY and NYPD assistance as required, from marine patrols as well as land based assets to meet ferry at terminal.

Make an announcement over the PA system providing a status report to passengers

Assemble passengers at the assembly station

Head to the nearest terminal.

Assemble the damage control party

Locate the damage and assess its extent

Start all available pumps for dewatering

Isolate the damaged area, control the flooding, and reduce the free surface

Disembark passengers.

Locate and assess the damage

In case of fire, take actions as described under "Fire and explosion"

If there is any danger to passengers from the collision damage, take immediate action to stabilize the situation. Such action could be intentional grounding of the vessel, dropping anchor, or maneuvering the vessel alongside a barge or other rescue platform. Take actions described under "Abandon Ship."

A.1.4 Flooding

Inform the Captain

Inform the engine room

Notify VTS by VHF Radio

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline if required. Request FDNY and NYPD assistance as necessary.

Head to the nearest terminal.

Assemble the damage control party

Locate the damage and assess its extent

Start all available pumps for dewatering

Isolate the damaged area, control the flooding, and reduce the free surface

Disembark passengers.

A.1.5 Grounding

Inform the Captain

Inform the engine room

Notify VTS by VHF Radio

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline if required. Request FDNY and NYPD assistance as necessary.

Conduct damage survey of internal spaces

Refer to section on Abandon Ship if passenger evacuation is necessary.

A.1.6 Abandon Ship

If at the terminal, evacuate through normal passenger egresses.

Abandon underway only after all other options have been exhausted

Assemble passengers in area of safe refuge until the emergency situation is stabilized.

Announce over the PA system the nature of the emergency and the intended action

Board local emergency response personnel from NYPD, FDNY, and USCG.

Bring second ferry alongside, place gangway between the two ferries at the main deck level.

Give instructions to the passengers on donning a lifejacket (if deemed necessary) and exiting to the rescue vessel.

Direct passengers to points of safety off the ferry.

Loss of Power/ Loss of Steering

A.2.1 Loss of Power/ Loss of Steering Response

The primary response for loss of power underway is to obtain assistance from a local towing vessel. There are local towing vessels on call 24 hours per day, and there are numerous towing vessels underway in the vicinity at any given time.

To stabilize the situation until help arrives, the ferry carries an anchor that can be deployed in an emergency.

A.2.1 Loss of Power/ Loss of Steering Response Prevention and Mitigation

Not under command and loss of power safety for the ferry is achieved by a coordinated package of prevention and mitigation features made available both by design and operational measures.

A.2.1.1 Loss of Power/ Loss of Steering Response Prevention Measures

The ferry has a live engine room watch to immediately respond to problems that would lead to loss of power.

The new construction propulsion system is diesel-electric (AC) with three diesel generators (one being a standby) in the engine room driving two motors on each shaft. There will be two shafts, one on each end of the vessel. Any single component failure in this system has a complete backup to prevent loss of power.

The existing K class is diesel electric (DC) with 4 diesel generators. The Kennedy class is designed to operate safely on 3 and can dock with only 2.

The Barberi class is diesel direct Voith with 4 engines, 2 on each end supplying power to the propulsion unit on each end. 1 engine can drive a prop unit on either end.

The Austen Class is diesel direct voith with 2 engines, 1 for each end. The Austen class can dock with 1 engine operating 1 prop unit.

Similarly, if there is trouble with one navigation bridge, there is a second, physically separate navigation bridge available for use.
The ferry machinery is well maintained, regularly inspected, and routinely tested just prior to being placed in service for a day's work.

A.2.1.2 Loss of Power/ Loss of Steering Response Mitigation Measures

The trained and licensed engine room crew will respond quickly to casualties before they result in a loss of power.
If a loss of power occurs, the ferry carries an anchor that will hold it in place until the situation is stabilized and assistance can be obtained.

A.2.2 Loss of Power/ Loss of Steering

Inform the Captain

Inform the engine room

Notify VTS by VHS Radio

Notify Ferry Terminal Supervisor by VHS Radio, request assistance tug if necessary

Use other propulsion shaft, if possible

Engage local steering

Post lookouts and establish lines of communication between the steering gear room and the bridge

Deploy the anchor or run the vessel aground if necessary

Make an announcement over the PA system providing a status report to the passengers

Assemble passengers if necessary

Have a tugboat push the vessel back to dock and evacuate passengers

Refer to section on Abandon Ship if passenger evacuation is necessary.

A.3 Fire and Explosion

A.3.1 Fire and Explosion Response

There are three fire scenarios that are of concern for the ferry: Car deck fires; engine room fires; and, passenger space fires.

In all three fire scenarios, the basic response is to head to a terminal and evacuate the passengers via their normal exit points. Simultaneously, operators will attempt to control the fire and call for help to the Coast Guard VTS, the Ferry Terminal Supervisor, FDNY, and the NYPD, all by VHS radio. All four of these entities maintain 24 hour radio watch.

While the nearest terminal will typically be selected for the passenger evacuation, local circumstances such as prevailing winds may make proceeding to the farther terminal a better option. All else being equal, the Staten Island terminal is preferred since one terminal there is physically separated from the rest of the terminals.

In the event of a fire and simultaneous loss of power, a towing vessel would be called in, and the FDNY fireboat would be used for fire fighting resources. Standpipes at each end of the ferry are available to energize the fire main from the FDNY Fireboat.

The passengers will be directed by the ferry crew to assemble in a safe refuge during the initial fire response. Safe refuge for both car deck and engineroom fires is the Saloon Deck, which is insulated from the car deck by both A-60 insulation and the car deck sprinkler system. The saloon deck and the decks above are divided into two main vertical zones. Passengers will be assembled in the main vertical zone that is farthest from the fire.

For passenger compartment fires, passengers will be assembled in the main vertical zone that does not have the fire. This protection will be sufficient for the 10 to 15 minute run back to the terminal.

Once at the terminal, the plan is to dock and disembark passengers as normal. NYPD and FDNY personnel will assist the ferry crew in handling the crowd. The car deck sprinkler system will be enhanced directly beneath the passenger egress area to provide extra protection in this area. This plan may be modified as circumstances dictate.

FDNY will direct the fire fighting effort. See Section 4 for a discussion of FDNY response capabilities. FDNY may direct passengers to remain in their area of safe refuge until the fire is brought under control.

A.3.2 Fire and Explosion Prevention and Mitigation

Fire safety for the ferry is achieved by a coordinated package of prevention and mitigation features made available both by design and operational measures.

A.3.2.1 Fire and Explosion Prevention Measures

Combustibles are kept to an absolute minimum in the passenger accommodation spaces.

Furnishings are case type, metal framed and fire resistant, with non-combustible or approved veneers and trims (where installed), all combined keep the fire load well below the permissible 11 lbs/ sq. ft.

Smoking is prohibited on the ferries and the snack area has only minimal heat producing sources.

A.3.2.2 Fire and Explosion Mitigation Measures

Structural fire protection is installed as per 46 CFR Subchapter H

Combustibles are widely and evenly distributed, preventing isolated areas of high fire load.

Public spaces are all large and open, which would prevent a fire from going undetected.

By means of Bridge-operated fire doors, the ferry's public spaces are divided into two main vertical zones of approximately 150 feet in length. Similarly, the decks are isolated from each other by Bridge-operated fire doors for each stair access.

The car deck has an installed sprinkler system and A-60 insulation. The sprinkler system coverage is enhanced at both ends to knock down smoke and reduce heat in the event of a passenger evacuation from the Saloon Deck. The sprinkler system also has a standpipe at both ends, where FDNY can hook up their hoses to provide water to the system from a non-ferry source. The ferry is never far from a terminal. In the event of a car deck fire, there will be adequate time to complete a voyage and conduct a rescue from ashore.

The engine room has a dedicated CO2 system.

Fire hoses and portable extinguishers are located in convenient locations to put out small fires as they occur.

A.3.3 Car Deck Fire and Explosion

Inform the Captain.

Notify VTS by VHF Radio

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal.

Close fire doors.

Head to safest terminal, with preference being to the Staten Island side.

Inform the engine room and start fire pumps

Energize the car deck sprinkler system

Sound the general alarm

Announce over the PA system the nature of the emergency

Assemble firefighting party

Evacuate passengers to an area of safe refuge (stage 1 egress)

Check for injured passengers

Fight and control fire

Instruct passengers on egress route

Arrive in terminal, disembark passengers with the assistance of FDNY, NYPD.

Assist FDNY in fighting fire.

A.3.4 Engine Room Fire

Inform the Captain.

Notify VTS by VHF Radio

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisorr call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal.

Close fire doors.

Head to safest terminal, with preference being to the Staten Island side.

Start fire pumps

Engine room crew fights and controls fire

Sound the general alarm

Announce over the PA system the nature of the emergency

Assemble firefighting party

Evacuate passengers to an area of safe refuge (stage 1 egress)

Check for injured passengers

If fire cannot be controlled, abandon engine room and activate CO2 flooding

If vessel power is lost, notify VTS and Terminal Supervisor. Drop anchor if necessary. Towing vessel will be dispatched by Terminal Supervisor. Make up to towing vessel, proceed to port.

Instruct passengers on egress route

Arrive in terminal, disembark passengers with the assistance of FDNY, NYPD.

Assist FDNY in fighting fire.

A.3.5 Passenger Space Fire

Inform the Captain.

Notify VTS by VHF Radio

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal.

Close the fire doors.

Head to safest terminal, with preference being to the Staten Island side.

Inform the engine room and start fire pumps

Energize the car deck sprinkler system

Sound the general alarm

Announce over the PA system the nature of the emergency

Assemble firefighting party

Evacuate passengers to an area of safe refuge (stage 1 egress)

Check for injured passengers

Fight and control fire

Instruct passengers on egress route

Arrive in terminal, disembark passengers with the assistance of FDNY, NYPD.

Assist FDNY in fighting fire.

A.3.6 Bomb Threat

Inform the Captain

Notify VTS and Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request NYPD assistance from marine patrols if necessary, as well as land based assets to meet ferry at terminal.

Head to safest terminal, with preference being to the Staten Island side.

If at a terminal, call NYPD

If underway, conduct a walk-through search of the vessel.

Upon arrival at terminal, disembark passengers immediately

A.4 Miscellaneous Contingencies

A.4.1 Oil Spill

Identify and secure the source of the spill

If fuelling or transferring oil, stop immediately

Remove or disable potential ignition sources

Inform the Captain

Contain the spill using onboard equipment

Keep passengers away from the affected area

Inform the Coast Guard and Terminal Supervisor

Continue cleanup operations.

A.4.2 Man Overboard

Upon sighting a person overboard, throw a ring lifebuoy with lifeline into the water

Inform the Captain

Contact VTS by VHF Radio

Stop the engines

Launch the rescue boat

Recover the person

Follow the procedures under "Medical Emergency" as appropriate

A.4.3 Emergency on Another Vessel

Maintain contact with the disabled vessel with VHF radio

Inform the Captain

Contact VTS by VHF Radio

Provide assistance if required

Contact shore resources, if appropriate, such as NYPD, FDNY, and towboat or barge companies

Maintain contact with other vessels in the area through VHF channels

A.4.4 Medical Emergency

Render first aid/CPR

Inform the Captain

Inform the Terminal Supervisor

If required, seek medical evacuation help over the VHF radio

Inform NYPD, FDNY

KENNEDY CLASS
SSMCP

KENNEDY CLASS
SHIPBOARD SAFETY MANAGEMENT AND CONTIGENCY PLAN

Indoctrination and voyage tasks

Rescue boat launching and recovering

Fire and explosion response

Collision

Flooding

CO2 release

Grounding

Bomb threat

Medical emergency

Police emergency

Launching buoyant apparatus and inflatable rafts

Emergency steering

Emergency Propulsion

Anchor deployment

Oil spill

Abandon ship

Station Bill/ Muster List

Gale force wind procedures

Operational readiness, maintenance, inspection and drill log of emergency equipment

INDOCTRINATION: VOYAGE TASKS

The following steps are taken in a typical ferry trip.

Passengers assemble in terminal

Embark passengers

Brief passengers on safety measures using public address system

Survey local harbor traffic

Contact local traffic as required

Check harbor conditions

Confirm engine and navigational equipment is operational

Contact VTS and local traffic as required

Scan area around vessel while getting underway, make whistle signals

Maneuver away from berth

Observe and evaluate vessel response

Monitor Route

Communicate with other harbor traffic as required

Evaluate hazards from other traffic

Take evasive action as required

Make crew report to docking stations announcement

Follow docking procedures

Make docking announcements

Use ships whistle, PA system or any other means to warn passengers of danger

Disembark passengers

RESCUE BOAT LAUNCHING AND RECOVERING PROCEDURES

Release the gripes by pulling the slipknots securing them

Remove the rescue boat access ladder from the bulkhead along side the rescue boat. Hang the ladder overboard by attaching its brackets to the top of the bulwark. The ladder should be in a position where it will be in the middle of the rescue boat when it is lowered. Secure the line attached to the top rung of the ladder to the nearest cleat.

Prepare the falls by laying them out on the deck so they will not tangle
(DO NOT TAKE THE TURNS OFF THE CLEAT ON THE DAVITS)

Lift the davit locks at the base of the davit and secure them up

Utilizing the gripes and the hand rails on the rescue boat swing the rescue boat back, without losing momentum swing the front and then the back of the rescue boat overboard. When the boat is swung out reposition the davit locks

Slowly and carefully start to release the falls from the cleats on the davits.
(LEAVE A TURN ON THE CLEAT)

As directed by the Mate, evenly lower the rescue boat to the rail, stop and take a couple of turns on the cleat

Install the drain plug and check the other equipment in the boat

As directed by the Mate, take all but one turn off the cleat and evenly lower the boat to the water (Leave a slight strain on the falls)

The rowers don their life jackets and, one at a time, climb down the ladder into the boat

When ready the aft fall is slacked and let go first then the forward fall

Place the oars in the oarlocks and row together. The Mate will point out the direction of the person in the water

As you reach the person to be rescued try to position the rescue boat stern to the person. Pull the person over the stern and into the rescue boat not over the side. A frantic person may tip the boat over by trying to climb over the side of the boat

Situate the person in the middle of the rescue boat and as low as possible

RESCUE BOAT LAUNCCHING AND RECOVERING
PROCEEDURES

As you row back to the ferry approach so the front of the rescue boat is facing the same direction as that end of the ferry. Use the boat hook to pull the rescue boat to the latter or pass the painter the ferry to assist in making up to the falls

Attach the front fall first then the aft fall. As soon as the falls are attached take a strain on the falls

It is important that a strain is kept on the falls as people exit the rescue boat. This is to insure the falls do not release

As soon as the rescue boat is secured to the falls one Deckhand will exit and one will stay in the rescue boat to insure the safety of the rescue victim

When lifting the rescue boat with people on board two crewmembers will tend each fall

As directed by the Mate, the rescue boat will be raised evenly to the rail. A turn will always be kept on the cleat and the slack taken up between each pull of the falls. Once at the rail additional turns will be added to the cleat

At the rail the Deckhand and rescue victim may exit the rescue boat. If necessary the boat can be raised further, swung in and lowered to the deck of the ferry

As soon as possible bring the ladder on board as to allow the ferry to get underway. The rescue boat has to be swung in before the ferry reaches the terminal

To stow the rescue boat remove the drain plug, raise it above the rail, release the davit locks and swing the front forward and reverse the procedure for swinging it out

Raise it as high as it can go, reposition the davit locks and secure with the gripes, return the ladder to the bulkhead

Fire and Explosion Response

There are three fire scenarios that are of concern for the ferry: Car deck fires; engine room fires; and, passenger space fires.

In all three fire scenarios, the basic response is to head to a terminal and evacuate the passengers via their normal exit points. Simultaneously, the ferry crew will attempt to control the fire and call for help to the Coast Guard VTS, the Ferry Terminal Supervisor, FDNY, and the NYPD, all by VHS radio. All four of these entities maintain 24 hour radio watch.

While the nearest terminal will typically be selected for the passenger evacuation, local circumstances such as prevailing winds may make proceeding to the farther terminal a better option. In the event of a fire and simultaneous loss of power, a towing vessel would be called in, and the FDNY fireboat would be used for fire fighting resources. Standpipes at each end of the ferry are available to energize the fire main from the FDNY Fireboat.

The passengers will be directed by the ferry crew to assemble in a safe refuge during the initial fire response. Safe refuge for both car deck and engine room fires is the Saloon Deck, which is insulated from the car deck by the car deck sprinkler system. For passenger compartment fires, passengers will be assembled on the furthest deck away from the fire. This protection will be sufficient for the 10 to 15 minute run back to the terminal.

Once at the terminal, the plan is to dock and disembark passengers as normal. NYPD and FDNY personnel will assist the ferry crew in handling the crowd. The car deck sprinkler system will be enhanced directly beneath the passenger egress area to provide extra protection in this area. This plan may be modified as circumstances dictate.

Car Deck Fire

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal

Close fire doors

Secure the ventilation

Head to safest terminal

Inform the engine room and start fire pumps

Energize the car deck sprinkler system

Sound the general alarm

Insure the passengers receive informative and reassuring information and directions

Assemble firefighting party

Evacuate passengers to an area of safe refuge

Check for injured passengers

Fight and control fire

Instruct passengers on egress route

Arrive in terminal, disembark passengers with the assistance of FDNY, NYPD,

Assist FDNY in fighting fire

Engine Room Fire

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal

Close fire doors

Secure ventilation

Head to safest terminal

Start fire pumps

Engine room crew fights and controls fire assisted by Deck crew

Sound the general alarm

Insure the passengers receive informative and reassuring information and directions

Assemble firefighting party

Evacuate passengers to an area of safe refuge

Check for injured passengers

If fire cannot be controlled, abandon engine room and activate C02 flooding

If vessel power is lost, notify VTS and Terminal Supervisor. Drop anchor if necessary. Make up to towing vessel, proceed to port

Instruct passengers on egress route

Arrive in terminal, disembark passengers with the assistance of FDNY, NYPD

Assist FDNY in fighting fire

Passenger Space Fire

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal.

Close the fire doors

Secure the ventilation

Head to nearest terminal

Inform the engine room and start fire pumps

Sound the general alarm

Announce over the PA system the nature of the emergency

Assemble firefighting party

Evacuate passengers to an area of safe refuge

Check for injured passengers

Fight and control fire

Instruct passengers on egress route

Arrive in terminal, disembark passengers

Assist FDNY in fighting fire

COLLISION

Notify Ferry Terminal Supervisor by VHF Radio, have supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance as required, from marine patrols as well as land based assets to meet ferry at terminal.

Insure the passengers receive informative and reassuring information and directions

Assemble passengers at the assembly station

Head to the nearest terminal

Assemble the damage control party

Locate the damage and assess its extent

Start all available pumps for dewatering

Isolate the damaged area, control the flooding, and reduce the free surface

Disembark passengers.

Locate and assess the damage

In case of fire, take actions as described under "Fire and explosion"

If there is any danger to passengers from the collision damage, take immediate action to stabilize the situation. Such action could be intentional grounding of the vessel, dropping anchor, or maneuvering the vessel alongside a barge or other rescue platform. Take actions described under "Abandon Ship."

Flooding

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline if required. Request FDNY and NYPD assistance as necessary

Insure passengers receive informative and reassuring information and directions

Head to the nearest terminal

Assemble the damage control party

Locate the damage and assess its extent

Start all available pumps for dewatering

Isolate the damaged area, control the flooding, and reduce the free surface

Disembark passengers

CO2 RELEASE PROCEEDURES

THE ORDER TO FLOOD A COMPARTMENT WITH CO2 CAN ONLY BE GIVIEN BY THE MASTER AND THE CHIEF ENGINEER

In order for the CO2 to be effective all ventilation must be shut, hatches closed, machinery and boilers shut down

Remote machinery shut downs as well as remote CO2 releases, are located inside the engine room entrances from the vehicle deck at either end of the vessel. Identification and instructions for there use are clearly posted above each device

In the event of the remote releases failing the CO2 bottles with local releases are located in the crew's locker room. Identification and instruction for there use are clearly posted by each device

All crewmembers known to have been in the affected space should be accounted for

Prepare for the total loss of propulsion power and control except for systems powered by the emergency generator

Notify the Ferry Terminal Supervisor by VHF radio in order to call emergency services by "911" land line if required. Request FDNY and NYPD assistance as necessary

Insure the passengers receive informative and reassuring information and instructions via the public address system

Ready anchor, prepare for tugs, put the vessel on the safest possible heading and broadcast proper VHF radio calls on channels 13 and 14

Engage emergency systems not already on line

To release the gas:

Vacate the space

Notify the pilothouse of the release

The Chief Engineer will break the glass covering the shutdown and release devices, pull the handles for the affected space and then shut the hatch

An alarm will sound signaling release of the gas in 20 seconds

Grounding

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline if required. Request FDNY and NYPD assistance as necessary.

Conduct damage survey of internal spaces

Take on ballast so the ferry does not move into even shallower water. Especially with raising tide

Prepare to make up to tugs

Dump ballast when tugs arrive and attempt to pull the ferry off its groundings

Refer to section on Abandon Ship if passenger evacuation is necessary

Insure the passengers receive informative and reassuring information and directions

Bomb Threat

Inform the Captain

Notify VTS and Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request NYPD assistance from marine patrols if necessary, as well as land based assets to meet ferry at terminal

Head to safest terminal

If at a terminal, call NYPD or contact NYPD onboard

If underway, conduct a walk-through search of the vessel without causing undue panic

Upon arrival at terminal, disembark passengers immediately

If necessary insure the passengers receive informative and reassuring information and directions

MEDICAL EMERGENCY

As soon as a medical emergency is discovered the Pilothouse must be notified of the location via VHF radio or sound powered phone. The Master will immediately dispatch the crew and police officers via the public address system and VHF radio

The Master will notify the Chief Engineer

Make all necessary radio calls to the Coast Guard and other harbor traffic

The crew and police officers will administer aid and control the crowd

Announcements asking for medically trained persons to report to the emergency's location will be made over the public address system

The Mate will inform the master of the nature and extent of the emergency

The Master will asses the situation and determine which terminal the vessel will dock

Notify the Ferry terminal supervisor by VHF radio of the location, nature and extent of the emergency. THE FERRY TERMINAL SUPERVISOR MUST BE INFORMED IF A DEFIBRILLATOR WAS USED

The Ferry Terminal Supervisor will call "911" with the details of the emergency and arrange to have an ambulance meet the vessel upon it's arrival at the terminal

Upon it's arrival, and if necessary, all passengers will be evacuated from the vessel

The vessel will be placed back in service after the person has been stabilized and removed from the vessel

POLICE EMERGENCY

Whenever police assistance is required the pilothouse must be informed immediately of the location, nature and extent of the disturbance

Police and crew members will be dispatched via the public address system

The Master will asses the situation and decide which terminal the vessel will dock and if further assistance is required

Make all necessary radio calls to Coast Guard and other harbor traffic

Call "Harbor Charley" on VHF channel 17 and prepare to be boarded if needed

Notify the Ferry Terminal Supervisor of the situation. If it is requested The Ferry Terminal Supervisor will Call "911" and have additional emergency services meet the vessel upon it's arrival at the terminal

If no police are onboard the crew's primary responsibility is to protect innocent passengers and segregate them from danger until assistance arrives

LAUNCING BUOYANT APPARATUS AND INFATABLE LIFE RAFTS

The fire and emergency signal for the Hurricane Deck will be used to muster the crew to the buoyant apparatus and inflatable life rafts station

The buoyant apparatus and inflatable life rafts will be deployed in the aid of other vessels in distress and with people in the water.

The ferry has no capabilities of marshaling the rafts. The master will maneuver the ferry as close to the situation as possible and deploy the rafts. Once the painter is freed from the ferry smaller vessels will have to tow the rafts into position.

This operation will have to be a closely coordinated effort between the ferry and the USCG, NYPD, NYFD and other vessels in the vicinity.

As in any emergency situation evolving a ferry the Master must insure the following:
The Chief Engineer is informed
The Ferry Terminal Supervisor is informed
Insure the passengers receive informative and reassuring information and directions

To deploy the buoyant apparatus:
Detach the painter and any other lines secured to the ferry.

Insure passengers do not have their heads out of the windows and there are no people or vessels in the water in the rafts path

Push the raft overboard

To deploy the inflatable apparatus:
MAKE SURE THE PAINTER IS SECURELY ATTACHED TO THE FERRY,

Release the small pelican hook on the metal strap holding the raft to the cradle

Insure passengers do not have their heads out of the windows and there are no people or vessels in the water in the rafts path

Push the entire container out of the cradle and overboard. When the container is in the water pull the painter until it is tight and then give a sharp, hard pull. This will inflate the raft and release it from the container

RELEASE THE PAINTER FROM THE FERRY so it can be towed into position

JOHN F KENNEDY CLASS
EMERGENCY STEERING PROCEEDURES
PAGE 1 OF 2

Immediately upon discovering a steering failure the Master or Assistant Captain will slow or stop the vessel as the situation dictates, verify the pin is still up, if it is energize an alternate steering Motor via the pilothouse control panel located in the center of the rear bulkhead of the Pilothouses and notify the Chief Engineer.

If the above procedure fails to restore Pilothouse control of steering the Chief will attempt to energize and put into operation any of the four steering motors using the control panel located in the Control Room.

In the event all of the preceding operations fail to restore Pilothouse control of steering the following local operation of the steering system and safety procedures will be applied:

The Mate, Marine Engineer and #1 Oiler will muster in the appropriate steering compartment.

The Chief Engineer and the #2 Oiler will remain in the Control Room to Monitor the situation and communications over the sound powered phone.

(Only after the Chief Engineer and Master give the command) the Marine Engineer and the Oiler will put the steering into the local control mode. This is accomplished by aligning the hydraulic valves on the steering unit as the instructions posted at the unit dictates.

Via the sound powered phone the Master will give steering commands to the Mate. These commands will consist of left rudder to turn left and right rudder to turn right followed by the number of degrees to be applied to the rudder in either direction.

The mate will repeat the commands to the Master for verification then relay the verified commands to the Marine Engineer.

JOHN F KENNEDY CLASS
EMERGENCY STEERING PROCEDURES
PAGE 2 OF 2

The Marine Engineer will repeat the command to the Mate for verification then, with the assistance of the oiler, locally operate the steering system using the instructions and trick wheel located at the hydraulic rams.

Upon command from the Master Deckhands # 3,4,5 and 6 ready the anchor for deployment or prepare to make up to a tug

The Master or Assistant Captain makes radio calls and requests possible tug assistance on VHF channel 13. Inform Vessel Traffic Service and the Ferry Terminal Supervisor of the situation.

Insure the passengers receive informative and reassuring information and directions

EMERGENCY STEERING PROCEDURES (KENNEDY CLASS)

IN THE EVENT OF A STEERING CASUALTY THE FOLLOWING PROCEDURES WILL BE FOLLOWED:

STEERING FAILURE: OTHER THAN WITHIN THE PROPULSION UNIT

THE CAPTAIN WILL ASSIGN A CREW MEMBER TO THE PROPULSION ROOM IN ORDER TO COMMUNICATE COMMANDS BY SOUND POWERED PHONE.

THE ENGINEER WILL ASSIGN EITHER HIMSELF OR THE MARINE OILER TO THE PROPULSION ROOM TO EXECUTE STEERING COMMANDS, FOLLOWING POSTED INSTRUCTIONS.

STEERING FAILURE: WITHIN THE PROPULSION UNIT

CAPTAIN WILL TRANSFER POWER TO NON-OPERATING PILOTHOUSE AS CONDITIONS PERMIT. ON CAPTAINS ORDERS C.M.E. WILL SHUT DOWN ENGINES TO THAT PROPULSION UNIT

IN THE EVENT OF A STEERING CASUALTY, THE CAPTAIN WILL NOTIFY VESSEL TRAFFIC SERVICE OF STEERING CASUALY. VESSEL MUST BE PLACED OUT OF SERVICE. CAPTAIN MUST ENSURE THAT THE PORT SUPERVISOR'S OFFICE IS NOTIFIED.

ALL DRILLS MUST BE PROPERLY LOGGED IN THE CAPTAINS DAILY AND OPERATING LOG AND EMERGENCY DRILL LOG.

THESE ARE RECOMMENDED GUIDE-LINES AND NOTHING IN THESE GUIDE-LINES WILL PREVENT THE CAPTAIN FROM USING GOOD MARINE JUDGEMENT TO ENSURE SAFE AND PROPER PROCEDURES ARE FOLLOWED.

JOHN F KENNEDY CLASS
EMERGENCY PROPULSION CONTROL
PROCEEDURES

Immediately upon discovering a propulsion control failure the Master or Assistant Captain will bring the control lever to the stop position and verify the remote control switch located on the propulsion control pedestal is in the correct position (long end of switch pointing forward)

If the switch is in the correct position and switching it back and forth doesn't correct the problem immediately ring the cowbell one time and call the Chief Engineer on the sound powered phone

Upon hearing the cowbell the Chief Engineer will transfer propulsion control to the engine room control mode

Remove the locking pin from the telegraph handle and position the handle to direction and speed required, place the remote control switch on the propulsion control pedestal to the engine room control or off position (long end of the switch pointing down)

The Chief Engineer will apply the telegraph commands to the propulsion system then answer the telegraph with the telegraph located in the control room

The Master will make radio calls and requests tug boat assistance on VHF channel 13, notify Vessel Traffic Service and the Ferry Terminal Supervisor

Insure the passengers receive informative and reassuring information and directions

Upon command from the Master the Mate and DH #3,4,5 and 6 will ready the anchor for deployment or prepare to make up to a tug

ANCHOR DEPLOYMENT PROCEDURES

Notify the Ferry Terminal Supervisor by VHF radio, have supervisor call emergency services by "911" land line. Request FDNY and NYPD assistance as required from marine patrols as well as land based assets to meet the ferry at the terminal

Insure the passengers receive informative and reassuring information and directions

Upon receiving a command from the Master to ready and deploy the anchor the following procedures will be followed under the supervision of the Mate:

If possible the vessel should be stopped or under slight sternway, hold the head or stern into the dominate condition (current or wind). Deploy the anchor from the end that will lead away from the vessel. Allow the vessel to come back easy attempting to hold the vessel straight into the current or wind until the anchor catches and holds

Deckhands #1 and 2 direct passengers out of the way, close the cabin doors in the vicinity of the anchor

Deckhands #5 and 6 remove the lashings or collar on the top end of the anchor shank that hold the anchor in its stowed position

Deckhands # 3 and 4, assisted by Deckhands # 5 and 6 as soon as the anchor is clear, retrieve the anchor line and shackle.

Lay the anchor line out on the deck so it will not tangle when the anchor is dropped

Lead the anchor end of the line out through the forward chock, around the front of the bull work and attach it to the anchor with the shackle, secure the boat end of the line to the forward cleat

All hands push the anchor to a position just inside the gates

When the order is given to deploy insure the line is clear then push the anchor and dolly overboard

Stand clear of the line as it fetches up

To release from the anchor tie a buoy outside of chock, release the anchor line from the cleat. A retrieval vessel will be dispatched to recover the anchor

Oil Spill

Identify and secure the source of the spill

If fuelling or transferring oil, stop immediately

Remove or disable potential ignition sources

Inform the Captain

Contain the spill using onboard equipment

Inform the Ferry Terminal Supervisor to activate the terminal Spill Response Team

Refer to the vessel spill plan

Inform the Coast Guard

Continue cleanup operations

Abandon Ship

Notify the Ferry Terminal Supervisor by VHF radio. The supervisor will notify the Director of Ferry Operations in order to initiate the shore based procedures

Every possible effort to return to either St. George or Whitehall Terminal should be exhausted prior to abandoning ship in the harbor

If conditions onboard permit, dropping the anchor and waiting for tugs to return the ferry to a terminal is the preferred procedure

If at the terminal, evacuate through normal passenger egresses

Abandon ship underway only after all other options have been exhausted

Gangways that will be used during the abandon ship procedure will be stored at both terminals. These gangways will always be ready and easily accessible

The vessel chosen (either a Barberi or Austen class vessel) to perform the rescue will proceed to the closest terminal to off load it's passengers and pick up the gangway and additional terminal deckhands

If this occurs during off hours a vessel will be prepared by the sounding security crew while personnel are called in to get the boat underway

The rescue vessel will approach the stranded vessel by stemming the current and making up end to end

Mooring lines will be run between the vessels from the aft cleats, out of the chocks along the bullwork port and starboard

If the stranded vessel is anchored care must be taken by the rescue vessel not to have the anchor jump or break free

When the boats are secure the gangway will be positioned between the two vessels and the passengers will transfer

Prior to abandoning ship assemble passengers in area of safe refuge until the emergency situation is stabilized

The area of safe refuge will be any area large enough to contain the passengers onboard that provides the safest existing conditions

Announce over the PA system the nature of the emergency and the intended action

Insure the passengers receive frequent, informative and reassuring information and directions regarding donning of life jackets, wearing the proper clothing for prevailing weather conditions, how and when the abandon ship procedure will occur. This will be best accomplished by crew members walking through the spaces giving instructions

Board local emergency response personnel from NYPD, FDNY, and USCG

Give final instructions to the passengers preparing to leave the stranded vessel regarding donning lifejackets and being properly dressed for the prevailing weather conditions and exiting to the rescue vessel

KENNEDY CLASS VESSEL
STATION BILL
(Sister Ships: John F Kennedy, Herbert H Lehman, American Legion)

UPON REPORTING ABOARD THIS VESSEL, IT IS THE RESPONSIBILITY OF EACH CREWMEMBER TO FAMILIARIZE THEMSELVES WITH THE STATION BILL AND MUSTER LIST.

Whenever a Staten Island Ferry vessel is out of service, and without a crew for more then four (4) hours, and prior to being put back in service, the Master will inspect the Pilot House controlled emergency and rescue equipment; the Mate will inspect the deck emergency and rescue equipment; the Chief Marine Engineer will inspect the control room controlled emergency and rescue equipment; and the Marine Engineer and the Marine Oilers will inspect all other below deck emergency and rescue equipment. While on duty and making rounds, or participating in drills, every crewmember will be on close lookout for, and immediately report all deficiencies in emergency and rescue equipment. The Master's and the Chief Marine Engineer's daily logs have designated space to report the results of these daily inspections.

Every crew will participate in weekly fire and rescue drills to ensure that all crews are well trained, and that emergency/rescue equipment is inspected and maintained regularly.

Equipment used during the drills shall vary and be logged.

The entire crew shall familiarize themselves with the location and duties of their assigned station during emergency situations.

The entire crew will drill and familiarize themselves with above and below deck areas of the vessel, as well as the location and use of all emergency and rescue equipment.

Every crewmember must participate in all drills as instructed.

Drills will be performed as if a real emergency exists.

Any crewmember discovering a fire must inform the pilothouse, isolate the passengers from danger, and then attempt to restrict and/or extinguish the fire until the fire team arrives.

Any crewmember discovering a person overboard will immediately throw a life ring or life jacket in the vicinity of the person and then inform the pilothouse.

During emergency situations crewmembers are reminded to stay calm, listen for instructions and signals, rely on the experience you have acquired from the drills, and remember that instruction(s) to the passengers will minimize panic and confusion.

SIGNALS

Upon hearing the following below listed signals, all crewmembers will immediately report to their assigned stations fully prepared to perform their assigned tasks according to the muster list.

General Alarm controls are located in the pilothouse and the control room. It is operated by lifting the knob on the end of the handle and swinging the handle to the right for sound and back to the left for silence.

The ship's whistle controls are located in the pilothouse and are operated electronically by controls in the front of the steering station or manually by a pull cord directly above the steering station.

The Public Address (PA) controls are located in the pilothouse. It is operated by turning the power switch ON and by positioning the operation mode switch to either ALL public spaces or ALL spaces; pick-up the hand set and place approximately six (6) inches from mouth; depress button and speak slowly and clearly (the manual for the system is located in each pilothouse).

FIRE AND EMERGENCY

One (1) continuous blast of the ship whistle and continuous ringing of the general alarm for a period of at least 10 seconds.

The following additional signals will designate the location of the emergency.

Engine Room	One (1) short blast of the whistle and general alarm.
Main Deck	Two (2) short blasts of the whistle and general alarm.
Saloon Deck	Three (3) short blasts of the whistle and general alarm.
Bridge Deck	Four (4) short blasts of the whistle and general alarm.
Hurricane Deck	Five (5) short blasts of the whistle and general alarm.

MAN OVERBOARD

The following announcement over the public address system and whistle signals will be utilized for a rescue operation. The words "man overboard" will not be used. These unusual signals are to minimize panic, confusion, and passenger interference during the rescue operation.

"All crewmembers report to Station Number One (1)" signifies that the rescue operation will be conducted from the New York End of the vessel.

"All crewmembers report to Station Number Three (3)" signifies that the rescue operation will be conducted from the Staten Island End of the vessel.

Launch Rescue Boat	One (1) short blast of the whistle and general alarm.
Retrieve Rescue Boat	Two (2) short blasts of the whistle and general alarm.
Secure Rescue Boat	Three (3) short blasts of the whistle and general alarm.

ABANDON SHIP

Seven (7) short blasts of the ship whistle and general alarm followed by one (1) long blast of the whistle and general alarm.

When the Master announces over the PA system to prepare for abandoning ship and for passenger's to put the life jackets on over their warmest clothing, each deckhand will go to their assigned deck station to aid and assist in the distribution and donning of life jackets. A final check of the passenger's life jackets and clothing will be performed at the evacuation platform.

KENNEDY CLASS VESSEL
MUSTER LIST
(Sister Ships: John F Kennedy, Herbert H Lehman, American Legion)

In the event of a vehicle fire requiring the activation of the sprinkler system, the Marine Engineer and Mate will muster at the control valves located in the Staten Island End engine room entrance. The Marine Engineer will energize the sprinkler zones as directed by the Mate.

In the case of a fire in the engine room, motor room/generator flat, steering compartment or any below deck area, the deck crew will muster outside the effected compartment equipped with hoses, fire extinguishers and axes and await instructions from the Chief Engineer. Each deck crewmember will arrive at the scene with a fire extinguisher. Due to the high amperage produced by the propulsion system, water spray in the motor and generator rooms is extremely dangerous and should be avoided.

FIRE STATIONS

Master	In the pilothouse in charge of all operations; informs the Chief Engineer of the situation; insures notifications are made to the Ferry Terminal Supervisor, FDNY, NYPD, and USCG.
Assistant Captain	In the pilothouse to assist the Master in navigation and communications; closes the fire screen doors; secures ventilation; insures proper information is presented to passengers via the public address system.
Mate	Acts under the direction of the Master; Officer in charge on scene; arrives on scene with an axe; remains in continual contact with the pilothouse via VHF radio.
Bridge Deck Deckhand #1	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; operates the nozzle.
Saloon Deck, Jersey Side Deckhand #2	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; tends the hose behind the nozzle operator.
Saloon Deck, Bklyn Side Deckhand #3	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; operates the hydrant.
Men's Cabin	Acts under the direction of the Mate; arrives on scene with

Deckhand #4	the fog applicator; if two hoses are required, this person will operate the nozzle of the 2nd hose.
New York End Deckhand #5	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; if two hoses are required, tends the 2nd hose behind the nozzle operator; otherwise directs passengers to a safe area.
Staten Island End Deckhand #6	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; if two hoses are required, operates the hydrant for the second hose; otherwise directs passengers to a safe area.
Chief Engineer	In charge in the control room; remains in communication with pilothouse; ensures electrical power is shut off to the affected area; activates the CO2 system if needed.
Marine Engineer	Acts under the direction of the Chief; on scene in charge; ensures that the oilers have lined up bilge and fire systems; starts fire pump and bilge pump.
Oiler #1	Acts under the direction of the Marine Engineer; lines up the valves for the fire systems; if the fire is in the engine room and water is used, tend the nozzle and hose; when the semi portable CO2 system is used, tend the discharge nozzle.
Oiler #2	Acts under the direction of the Marine Engineer; lines up the valves for the bilge system; if the fire is in the engine room and water is used, tend the hose hydrant; when the semi portable CO2 system is used, tend the valve on the bottle; this includes the bottle valves for the individual propulsion generators and motors.

BOAT STATIONS

Master	In the pilothouse in charge of all operations; informs the Chief Engineer of the situation; insures notifications are made to the Ferry Terminal Supervisor, USCG, NYPD.
Assistant Captain	In the pilothouse to assist the Master in navigation and communications.
Mate	Acts under the direction of the Master; on scene in charge of rescue boat launch and recovery operation; remains in continual communications with the Pilothouse; insures 2nd

	pin is lifted immediately and that the Master is notified when lifted.
Bridge Deck Deckhand #1	In the Pilothouse to assist the Master and Assistant Captain; acts as lookout.
Saloon Deck, Jersey Side Deckhand #2	Acts under the direction of the Mate; with assistance from DH#3, moves the ladder from its stowed to operational position; assists in swinging the rescue boat to its lowering position; checks rescue boat equipment; when the boat is ready, enters it and rows.
Saloon Deck, Bklyn Side Deckhand #3	Acts under the direction of the Mate; with assistance from DH #2, moves the ladder from its stowed to operational position; assists in swinging the rescue boat to its launching position; insures the drain plug is in place; when the boat is ready, enters it and rows.
Men's Cabin Deckhand #4	Acts under the direction of the Mate; tends gripes; assists with falls; assists with passenger control.
New York End Deckhand #5	Acts under the direction of the Mate; prepares and tends forward falls.
Staten Island End Deckhand #6	Acts under the direction of the Mate; prepares and tends aft falls.
Chief Engineer	In charge in the Control Room; prepares for erratic maneuvers and high speed return to a terminal.
Marine Engineer	Acts under the direction of the Chief; assists the Chief.
Oilers #1 and #2	Acts under the direction of the Chief Engineer; if released by the Chief Engineer, assist the Deck Crew with crowd control.

DAMAGE ASSESSMENT AND CONTROL

The damage assessment and control team is comprised of the engine room crew. In case of collision, explosion, grounding, flooding, or any other situation that may compromise the vessel's structural integrity, this team (led by the Chief) will immediately dispatch to the scene. They will keep the Master informed of the situation and make recommendations as to the course of action. The team will make what ever emergency repairs are possible

STABILITY LETTER AND GALE FORCE WIND PROCEDURES

New York City
Department of Transportation
Iris Weinshall, Commissioner

Staten Island Ferry
St. George Terminal Building
Staten Island, New York 10301
Tel: 718/390-5214
Fax: 718/981-4941

March 26, 2001

To: All Captains, Assistant Captains, Mates, Chief Engineers, Marine Engineers and Ferry Terminal Supervisors

From: Pamela Cess

Re: Procedures for Operating the Kennedy Class Vessels in Gale Force Conditions

Enclosed, please find a copy of the new temporary stability letter for the Kennedy Class Vessels. These vessels will be required to meet the conditions set forth in the temporary stability letter dated March 6, 2001 in order to sail. Most of these conditions are part of the current stability letter.

Under normal weather conditions the Staten Island Ferry's route is classified as "Protected Waters" and item 2 (b) listed in the stability letter will not apply.

Whenever the United States Coast Guard posts "GALE WARNINGS" for New York Harbor, the Staten Island Ferry's route is classified as "Partially Protected Waters" and item 2 (b) listed in the stability letter must be complied with. The procedure to comply with item 2 (b) is detailed below.

Item 2 (b) states that the maximum number of passenger allowed onboard are 2,830. The Bridge Deck must be closed to all passengers and the Saloon Deck is limited to 2,000 passengers.

The Saloon Deck has a seating capacity of 1,082. The deck space will accommodate 752 standing inside the cabin. Under these conditions passengers are not allowed to ride outside on the horse shoe areas of the Saloon Deck.

In order to ensure that the Saloon Deck capacity does not exceed 2,000:

The Ferry Terminal Supervisor will have the vessel dock in the slip closest to the boarding doors.

The Saloon Deck tie back lines on the discharge end will be in place prior to loading passengers.

The Captain will be in the in shore end Pilothouse carefully monitoring the passenger loading waiting for a signal from the Mate to stop loading.

After the vehicles are loaded the Mate will report to the in shore end of the Saloon Deck to monitor the passenger loading.

The Ferry Terminal Supervisor will be positioned at the terminal boarding doors with a V.H.F. portable radio ready to close the boarding doors.

The Captain will relay the stop loading order to the Ferry Terminal Supervisor via V.H.F. radio who will immediately close the terminal boarding doors.

The Mate and Deckhands assigned to the Saloon Deck will closely monitor the deck. When all the seats are full and the standing passengers reach the in shore end of the snack bar the vessel has a safe load and does not exceed 2,000 passenger limit for that deck.

The Mate must take into consideration the amount of people between the boarding doors and the ferry when determining when to stop loading passengers.

In order to close the Bridge Deck:

The fire screen doors will be closed and Ferry personnel will guard each set of doors. Announcements will be made in the terminals informing the passengers of the upper deck closure.

When this condition is set, the Ferry Terminal Supervisor will notify the NYPD for assistance with crowd control at the Boarding Doors.

C: Jack Larson
Port Office
Terminal Manager's Office
Assignments

U.S. Department of Transporation
United States Coast Guard

Commanding Officer
United States Coast Guard
Marine Safety Center
www.uscg.mil/hq/msc

400 7TH Street, S.W.
Washington, DC 20590-0001
Staff Symbol: MSC-1
Phone: (202) 366-6481
FAX: (202) 366-3877

16710/P007146
Serial: H2-0101968
June 1, 2001

Mr. Chi-Cheng Yang
George G. Sharp, Inc.
100 Church Sueet
New York, NY 10007

Subj: JOHN F. KENNEDY; O.N. 298241, AMERICAN LEGION; O.N. 298830
THE GOV. HERBERT H. LEHMAN; O.N. 298831
Levingston Shipbuilding Hull Nos. 647, 648, and 649
294' x 69' x 20.6' Passenger/Vehicle Ferry (H)
Stability

Ref: (a) MSC letter 16710/P007146 Ser H2-0100999 of April 4, 2001

Dear Mr. Yang:

We received your letter of May 3, 2001 requesting the removal of upper deck passenger and fuel oil consumption restrictions currently enforced on the subject vessels and issuance of permanent stability letters. We note that no permanent ballast has been installed in the subject vessels since our last correspondence (reference (a)) and, as such, the previously submitted calculations remain applicable. The following comments apply:

1. We note that the calculations previously submitted, and accepted in reference (a), indicate that the subject vessels have adequate stability to meet the weather criteria requirements of 46 CFR 170.170 with no restrictions on fuel consumption. Please be aware, however, that the requirement in the vessels' stability letters to maintain at least 30% (8100 gallons) of the fuel capacity onboard at all times is necessary to meet the stability requirements of 46 CFR 171.050. Should you wish to remove this restriction, compliance with all applicable stability criteria (46 CFR 170.170, 171.050, and 171.080(e)) must be demonstrated in all conditions of loading and operating with fuel loads down to 10% capacity.

2. Although insufficient for complete removal of the upper deck passenger restrictions, the calculations accepted in reference (a) do indicate a somewhat lesser restriction on permissible upper deck passenger loading. Accordingly, we have modified the passenger restrictions in the subject vessels' stability letters, when operating on Partially Protected Waters (or under partially protected conditions), to permit:

a. a maximum carriage of 2830 passengers
b. passengers not permitted on the Bridge (uppermost) Deck
c. a maximum of 2100 passengers on the Upper Deck

As previously indicated, when operating on partially protected waters (or when partially protected conditions are declared by the cognizant Officer in Charge, Marine Inspection) it remains the responsibility of the vessels' masters to enforce these additional operating restrictions.

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THE GOV. HERBERT H. LEHMAN; O.N. 298831, Stability

Enclosures (1) through (3) are the revised permanent stability letters for the subject vessels. They are applicable to the vessels as presently configured and outfitted. The vessels' owner is responsible for ensuring that the stability letters are posted under glass or other suitable transparent material in the pilothouses of the vessels so that all pages are visible.

Should you have any questions about any of these comments or the plan review for the subject vessel, please contact the project officer, Mr. Tom Waters, at the phone number listed above.

Sincerely,

for J.W. Mo
J. E. RAWSON
Lieutenant Commander, U.S. Coast Guard
Chief, Major Vessel Branch
By direction of the Commanding Officer

Encl: (1) Stability Letter for JOHN F. KENNEDY; O.N. 298241 dtd June 1, 2001
(2) Stability Letter for AMERICAN LEGION; O.N. 298830 dtd June 1, 2001
(3) Stability Letter for THE GOV. HERBERT H. LEHMAN; O.N. 298831 dtd June 1, 2001

Copy: ACT New York w/encl (1) – (3)

U.S. Department of Transportation
United States Coast Guard

Commanding Officer
United States Coast Guard
Marine Safety Center
www.uscg.mil/hq/msc

400 7TH Street, S.W.
Washington, DC 20590-0001
Staff Symbol: MSC-1
Phone: (202) 366-6481
FAX: (202) 366-3877

STABILITY LETTER

16710/ P007146
Serial: H2-0101969
June 1, 2001

Master, JOHN F. KENNEDY; O.N. 298241
Levingston Shipbuilding Hull 647
294' x 69' x 20.6' Passenger Vehicle Ferry (H)

You are responsible for maintaining this vessel in a satisfactory stability condition at all times and for following the instructions and precautions listed below. All log entries required by 46 CFR 78.17-20 and 46 CFR 78.17-22 shall be made prior to getting underway for each voyage.

A stability test, witnessed by the U. S. Coast Guard, was conducted on the JOHN F. KENNEDY, O. N. 298241, at Staten Island, New York, on July 31, 1998. On the basis of that test, stability calculations have been performed. Results indicate that the stability of the JOHN F. KENNEDY, as presently outfitted and equipped and under all reasonable operating conditions, is satisfactory for operation on Partially Protected Waters, provided that the following restrictions are observed.

SUBDIVISION AND DAMAGE SURVIVAL

When operated as indicated below, calculations indicate this vessel will remain afloat and upright (no more than 7 degrees of list under ideal conditions) with any two major compartments flooded (two-compartment subdivision). A major compartment is the total space between any two adjacent Main Transverse Watertight Bulkheads (MTWB's). For this vessel, these MTWB's are located fore and aft at frames 14, 27, 36, 46, and 62 (vessel compartmentation is symmetrical about amidships frame 0). To maintain the vessel upright after flooding (damage), the forces imposed by wind, waves, and passenger movements must be minimized.

OPERATING RESTRICTIONS

1. ROUTE: Operation on Partially Protected Waters is permitted. Since the route is based upon other considerations in addition to stability, you are cautioned that the route may be further limited to that specified on the Certificate of Inspection.

2. PERSONNEL:

a. Protected Waters: When operating on protected waters, a maximum of 3533 passengers may be carried. A maximum of 1200 passengers may be carried on the uppermost (Bridge) deck. A combined maximum of 2700 passengers may be carried on the uppermost two (Bridge and Upper) decks.

b. Partially Protected Waters: When operating on partially protected waters, a maximum of 2830 passengers may be carried. Passengers are not permitted on the uppermost (Bridge) deck. A maximum of 2100 passengers may be carried on the Upper Deck.

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Subj: JOHN F. KENNEDY; O.N. 298241 STABILITY LETTER

c. Since the personnel capacity is based upon other considerations in addition to stability, you are cautioned that the number of persons carried may be further limited to that specified on the Certificate of Inspection.

3. DRAFT AND TRIM: The vessel is limited to a maximum mean draft amidships (frame 0) of 14 feet, 11 inches as read from the draft marks. Trim should be minimized.

4. VEHICLES: Vehicles may be loaded without restriction provided the maximum draft is not exceeded. Vehicles should be loaded so as to minimize heel and trim.

5. WATERTIGHT DOORS AND BULKHEADS: There are no watertight doors in any of the MTWB's. No watertight bulkheads shall be removed or altered without the authorization and supervision of the cognizant Officer in Charge, Marine Inspection (OCMI).

6. HULL OPENINGS: Any openings that could allow water to enter into the hull or deckhouse should be kept closed when rough weather or sea conditions exist or are anticipated.

7. TANKS: The forward and aft trim tanks shall be pressed full at all times. A minimum fuel load of 30% (8100 gallons) shall be maintained on board the vessel at all times. There is no restriction on the distribution of this minimum fuel load among the vessel's fuel tanks. Any cross-connections between port and starboard tank pairs shall be kept closed at all times when underway.

8. WEIGHT CHANGES: This stability letter has been issued on the following lightship parameters:

Displacement	2014.46	Long Tons (LT)
LCG	0.08	Feet Forward of Amidships (frame 0)
VCG	20.99	Feet Above Baseline

Any alteration resulting in a change in these parameters may invalidate this stability letter. No fixed ballast or any other such weights shall be added, removed, altered, or relocated without the authorization and supervision of the cognizant OCMI. This vessel is fitted with 26,560 lb (11.86 LT) of permanent ballast, in the form of 40 lb. lead pigs, located in the starboard sponson between frames -5 and 5.

9. DECK CARGO: No deck cargo may be carried.

10. BILGES: The vessel's bilges and voids shall be kept pumped to minimum content at all times consistent with pollution prevention requirements.

11. FREEING PORTS: Deck freeing ports shall be maintained operable and completely unobstructed at all times.

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12. LIST: You should make every effort to determine the cause of any list of the vessel before taking corrective action.

This stability letter shall be posted under glass or other suitable transparent material in the pilothouse of the vessel so that all pages are visible. It supersedes any stability guidance previously issued to the vessel.

R. J. PETOW
Commander, U.S. Coast Guard
By direction of the Commanding Officer

OPERATIONAL READINESS, MAINTENANCE, INSPECTION AND DRILL LOG OF LIFESAVING AND FIREFIGHTING EQUIPMENT

Operational readiness, Maintenance, Inspection of Lifesaving Equipment
Fire Fighting Equipment and Drill Log

Operational Readiness:
Whenever a Staten Island Ferry Vessel is out of service, and without a crew for more than four (4) hours, and prior to being put back into service, the Master will inspect all Pilothouse controlled emergency, rescue, operation and navigation equipment; the Mate will inspect the deck emergency, rescue and operation equipment; the Chief Engineer will inspect control room controlled emergency, rescue and operational equipment; the Marine Engineer and the oilers will inspect all other below deck emergency, rescue and operation equipment.

While on duty and making rounds, or participating in drills, every crewmember will be on a close lookout for, and immediately report all deficiencies in emergency and rescue equipment. The Master's and Chief Engineer's daily logs has space provided to report the results of these daily inspections.

Maintenance and inspection of Fire Fighting and Rescue Equipment:
Whenever a Staten Island Ferry Vessel undergoes either a quarterly or annual inspection a copy of the inspection sheets signed by a qualified and competent person will be kept in this log book verifying the criteria set forth in 46 CFR 199.190 is met regarding weekly, monthly and annual inspections and maintenance.

A log book listing each piece of fire, rescue and emergency equipment along with space to report the condition and repair will be onboard each vessel.

Each Master will log and date each piece of fire, rescue and emergency equipment utilized and inspected during drills. Any required maintenance will also be logged and dated.

Each Master will continue the rotation started by the previous Master of fire, rescue and emergency equipment to insure that every piece of equipment listed in the log book is utilized to accomplish the following schedule.

To insure each fire hydrant station and fire extinguisher is inspected once each month a minimum of two hydrants utilized and 10 fire extinguishers examined every drill. All fire screen doors will and ventilation shut downs will be used during each drill.

To insure all the Life rings, buoyant apparatus and inflatable rafts are inspected each month the equipment on one side of one end will be inspected during each drill as well as life rings on one deck.

To insure that the general alarm system is inspected every week the general alarm will be utilizes during every drill.

To insure that each rescue boat is inspected and one is launched every week one rescue boat will be launched and another inspected during every drill.

BARBERI CLASS
SSMCP

BARBERI CLASS
SHIPBOARD SAFETY MANAGEMENT AND CONTIGENCY PLAN

Indoctrination and voyage tasks

Rescue boat launching and recovering

Fire and explosion response

Collision

Flooding

CO2 release

Grounding

Bomb threat

Medical emergency

Police emergency

Launching buoyant apparatus and inflatable rafts

Emergency steering

Emergency Propulsion

Anchor deployment

Oil spill

Abandon ship

Station Bill/ Muster List

Operational readiness, maintenance, inspection and drill log of emergency equipment

INDOCTRINATION: VOYAGE TASKS

The following steps are taken in a typical ferry trip.

Passengers assemble in terminal

Embark passengers

Brief passengers on safety measures using public address system

Survey local harbor traffic

Contact local traffic as required

Check harbor conditions

Confirm engine and navigational equipment is operational

Contact VTS and local traffic as required

Scan area around vessel while getting underway, make whistle signals

Maneuver away from berth

Observe and evaluate vessel response

Monitor Route

Communicate with other harbor traffic as required

Evaluate hazards from other traffic

Take evasive action as required

Make crew report to docking stations announcement

Follow docking procedures

Make docking announcements

Use ships whistle, PA system or any other means to warn passengers of danger

Disembark passengers

RESCUE BOAT LAUNCHING AND RECOVERING PROCEDURES

Release the gripes by pulling the slipknots securing them

Remove the rescue boat access ladder from the bulkhead along side the rescue boat. Hang the ladder overboard by attaching its brackets to the top of the bulwark. The ladder should be in a position where it will be in the middle of the rescue boat when it is lowered. Secure the line attached to the top rung of the ladder to the nearest cleat.

Prepare the falls by laying them out on the deck so they will not tangle
(DO NOT TAKE THE TURNS OFF THE CLEAT ON THE DAVITS)

Lift the davit locks at the base of the davit and secure them up

Utilizing the gripes and the hand rails on the rescue boat swing the rescue boat back, without losing momentum swing the front and then the back of the rescue boat overboard. When the boat is swung out reposition the davit locks

Slowly and carefully start to release the falls from the cleats on the davits.
(LEAVE A TURN ON THE CLEAT)

As directed by the Mate, evenly lower the rescue boat to the rail, stop and take a couple of turns on the cleat

Install the drain plug and check the other equipment in the boat

As directed by the Mate, take all but one turn off the cleat and evenly lower the boat to the water (Leave a slight strain on the falls)

The rowers don their life jackets and, one at a time, climb down the ladder into the boat

When ready the aft fall is slacked and let go first then the forward fall

Place the oars in the oarlocks and row together. The Mate will point out the direction of the person in the water

As you reach the person to be rescued try to position the rescue boat stern to the person. Pull the person over the stern and into the rescue boat not over the side. A frantic person may tip the boat over by trying to climb over the side of the boat

Situate the person in the middle of the rescue boat and as low as possible

RESCUE BOAT LAUNCCHING AND RECOVERING
PROCEEDURES

As you row back to the ferry approach so the front of the rescue boat is facing the same direction as that end of the ferry. Use the boat hook to pull the rescue boat to the latter or pass the painter the ferry to assist in making up to the falls

Attach the front fall first then the aft fall. As soon as the falls are attached take a strain on the falls

It is important that a strain is kept on the falls as people exit the rescue boat. This is to insure the falls do not release

As soon as the rescue boat is secured to the falls one Deckhand will exit and one will stay in the rescue boat to insure the safety of the rescue victim

When lifting the rescue boat with people on board two crewmembers will tend each fall

As directed by the Mate, the rescue boat will be raised evenly to the rail. A turn will always be kept on the cleat and the slack taken up between each pull of the falls. Once at the rail additional turns will be added to the cleat

At the rail the Deckhand and rescue victim may exit the rescue boat. If necessary the boat can be raised further, swung in and lowered to the deck of the ferry

As soon as possible bring the ladder on board as to allow the ferry to get underway. The rescue boat has to be swung in before the ferry reaches the terminal

To stow the rescue boat remove the drain plug, raise it above the rail, release the davit locks and swing the front forward and reverse the procedure for swinging it out

Raise it as high as it can go, reposition the davit locks and secure with the gripes, return the ladder to the bulkhead

Fire and Explosion Response

There are three fire scenarios that are of concern for the ferry: Car deck fires; engine room fires; and, passenger space fires.

In all three fire scenarios, the basic response is to head to a terminal and evacuate the passengers via their normal exit points. Simultaneously, the ferry crew will attempt to control the fire and call for help to the Coast Guard VTS, the Ferry Terminal Supervisor, FDNY, and the NYPD, all by VHS radio. All four of these entities maintain 24 hour radio watch.

While the nearest terminal will typically be selected for the passenger evacuation, local circumstances such as prevailing winds may make proceeding to the farther terminal a better option. In the event of a fire and simultaneous loss of power, a towing vessel would be called in, and the FDNY fireboat would be used for fire fighting resources. Standpipes at each end of the ferry are available to energize the fire main from the FDNY Fireboat.

The passengers will be directed by the ferry crew to assemble in a safe refuge during the initial fire response. Safe refuge for both car deck and engine room fires is the Saloon Deck, which is insulated from the car deck by the car deck sprinkler system. For passenger compartment fires, passengers will be assembled on the furthest deck away from the fire. This protection will be sufficient for the 10 to 15 minute run back to the terminal.

Once at the terminal, the plan is to dock and disembark passengers as normal. NYPD and FDNY personnel will assist the ferry crew in handling the crowd. The car deck sprinkler system will be enhanced directly beneath the passenger egress area to provide extra protection in this area. This plan may be modified as circumstances dictate.

Engine Room Fire

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal

Close fire doors

Secure ventilation

Head to safest terminal

Start fire pumps

Engine room crew fights and controls fire assisted by Deck crew

Sound the general alarm

Insure the passengers receive informative and reassuring information and directions

Assemble firefighting party

Evacuate passengers to an area of safe refuge

Check for injured passengers

If fire cannot be controlled, abandon engine room and activate C02 flooding

If vessel power is lost, notify VTS and Terminal Supervisor. Drop anchor if necessary. Make up to towing vessel, proceed to port

Instruct passengers on egress route

Arrive in terminal, disembark passengers with the assistance of FDNY, NYPD

Assist FDNY in fighting fire

Passenger Space Fire

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal.

Close the fire doors

Secure the ventilation

Head to nearest terminal

Inform the engine room and start fire pumps

Sound the general alarm

Announce over the PA system the nature of the emergency

Assemble firefighting party

Evacuate passengers to an area of safe refuge

Check for injured passengers

Fight and control fire

Instruct passengers on egress route

Arrive in terminal, disembark passengers

Assist FDNY in fighting fire

COLLISION

Notify Ferry Terminal Supervisor by VHF Radio, have supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance as required, from marine patrols as well as land based assets to meet ferry at terminal.

Insure the passengers receive informative and reassuring information and directions

Assemble passengers at the assembly station

Head to the nearest terminal

Assemble the damage control party

Locate the damage and assess its extent

Start all available pumps for dewatering

Isolate the damaged area, control the flooding, and reduce the free surface

Disembark passengers.

Locate and assess the damage

In case of fire, take actions as described under "Fire and explosion"

If there is any danger to passengers from the collision damage, take immediate action to stabilize the situation. Such action could be intentional grounding of the vessel, dropping anchor, or maneuvering the vessel alongside a barge or other rescue platform. Take actions described under "Abandon Ship."

Flooding

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline if required. Request FDNY and NYPD assistance as necessary

Insure passengers receive informative and reassuring information and directions

Head to the nearest terminal

Assemble the damage control party

Locate the damage and assess its extent

Start all available pumps for dewatering

Isolate the damaged area, control the flooding, and reduce the free surface

Disembark passengers

CO_2 RELEASE PROCEEDURES

THE ORDER TO FLOOD A COMPARTMENT WITH CO_2 CAN ONLY BE GIVIEN BY THE MASTER AND THE CHIEF ENGINEER

In order for the CO_2 to be effective all ventilation must be shut, hatches closed, machinery and boilers shut down

Remote machinery shut downs as well as remote CO_2 releases, are located inside the engine room entrances from the vehicle deck at either end of the vessel. Identification and instructions for there use are clearly posted above each device

In the event of the remote releases failing the CO_2 bottles with local releases are located in the crew's locker room. Identification and instruction for there use are clearly posted by each device

All crewmembers known to have been in the affected space should be accounted for

Prepare for the total loss of propulsion power and control except for systems powered by the emergency generator

Notify the Ferry Terminal Supervisor by VHF radio in order to call emergency services by "911" land line if required. Request FDNY and NYPD assistance as necessary

Insure the passengers receive informative and reassuring information and instructions via the public address system

Ready anchor, prepare for tugs, put the vessel on the safest possible heading and broadcast proper VHF radio calls on channels 13 and 14

Engage emergency systems not already on line

To release the gas:

Vacate the space

Notify the pilothouse of the release

The Chief Engineer will break the glass covering the shutdown and release devices, pull the handles for the affected space and then shut the hatch

An alarm will sound signaling release of the gas in 20 seconds

Grounding

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline if required. Request FDNY and NYPD assistance as necessary.

Conduct damage survey of internal spaces

Take on ballast so the ferry does not move into even shallower water. Especially with raising tide

Prepare to make up to tugs

Dump ballast when tugs arrive and attempt to pull the ferry off its groundings

Refer to section on Abandon Ship if passenger evacuation is necessary

Insure the passengers receive informative and reassuring information and directions

Bomb Threat

Inform the Captain

Notify VTS and Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request NYPD assistance from marine patrols if necessary, as well as land based assets to meet ferry at terminal

Head to safest terminal

If at a terminal, call NYPD or contact NYPD onboard

If underway, conduct a walk-through search of the vessel without causing undue panic

Upon arrival at terminal, disembark passengers immediately

If necessary insure the passengers receive informative and reassuring information and directions

MEDICAL EMERGENCY

As soon as a medical emergency is discovered the Pilothouse must be notified of the location via VHF radio or sound powered phone. The Master will immediately dispatch the crew and police officers via the public address system and VHF radio

The Master will notify the Chief Engineer

Make all necessary radio calls to the Coast Guard and other harbor traffic

The crew and police officers will administer aid and control the crowd

Announcements asking for medically trained persons to report to the emergency's location will be made over the public address system

The Mate will inform the master of the nature and extent of the emergency

The Master will asses the situation and determine which terminal the vessel will dock

Notify the Ferry terminal supervisor by VHF radio of the location, nature and extent of the emergency. THE FERRY TERMINAL SUPERVISOR MUST BE INFORMED IF A DEFIBRILLATOR WAS USED

The Ferry Terminal Supervisor will call "911" with the details of the emergency and arrange to have an ambulance meet the vessel upon it's arrival at the terminal

Upon it's arrival, and if necessary, all passengers will be evacuated from the vessel

The vessel will be placed back in service after the person has been stabilized and removed from the vessel

POLICE EMERGENCY

Whenever police assistance is required the pilothouse must be informed immediately of the location, nature and extent of the disturbance

Police and crew members will be dispatched via the public address system

The Master will asses the situation and decide which terminal the vessel will dock and if further assistance is required

Make all necessary radio calls to Coast Guard and other harbor traffic

Call "Harbor Charley" on VHF channel 17 and prepare to be boarded if needed

Notify the Ferry Terminal Supervisor of the situation. If it is requested The Ferry Terminal Supervisor will Call "911" and have additional emergency services meet the vessel upon it's arrival at the terminal

If no police are onboard the crew's primary responsibility is to protect innocent passengers and segregate them from danger until assistance arrives

LAUNCING BUOYANT APPARATUS AND INFATABLE LIFE RAFTS

The fire and emergency signal for the Hurricane Deck will be used to muster the crew to the buoyant apparatus and inflatable life rafts station

The buoyant apparatus and inflatable life rafts will be deployed in the aid of other vessels in distress and with people in the water.

The ferry has no capabilities of marshaling the rafts. The master will maneuver the ferry as close to the situation as possible and deploy the rafts. Once the painter is freed from the ferry smaller vessels will have to tow the rafts into position.

This operation will have to be a closely coordinated effort between the ferry and the USCG, NYPD, NYFD and other vessels in the vicinity.

As in any emergency situation evolving a ferry the Master must insure the following:
The Chief Engineer is informed
The Ferry Terminal Supervisor is informed
Insure the passengers receive informative and reassuring information and directions

To deploy the buoyant apparatus:
Detach the painter and any other lines secured to the ferry.

Insure passengers do not have their heads out of the windows and there are no people or vessels in the water in the rafts path

Push the raft overboard

To deploy the inflatable apparatus:
MAKE SURE THE PAINTER IS SECURELY ATTACHED TO THE FERRY,

Release the small pelican hook on the metal strap holding the raft to the cradle

Insure passengers do not have their heads out of the windows and there are no people or vessels in the water in the rafts path

Push the entire container out of the cradle and overboard. When the container is in the water pull the painter until it is tight and then give a sharp, hard pull. This will inflate the raft and release it from the container

RELEASE THE PAINTER FROM THE FERRY so it can be towed into position

EMERGENCY STEERING PROCEDURES (BARBERI CLASS)

IN THE EVENT OF A STEERING CASUALTY THE FOLLOWING PROCEDURES WILL BE FOLLOWED:

STEERING FAILURE: OTHER THAN PROPULSION UNIT

THE CAPTAIN WILL RING THE COW BELL, ENGINE ROOM WILL TAKE CONTROL, ANSWER ALL COMMANDS GIVEN BY ENGINE ORDER TELEGRAPH, USING EMERGENCY STEERING SYSTEM LOCATED IN CONTROL ROOM.

STEERING FAILURE: PROPULSION UNIT

CAPTAIN WILL TRANSFER POWER TO NON-OPERATING PILOTHOUSE AS CONDITIONS PERMIT. ON CAPTAINS ORDERS C.M.E. WILL OPEN COUPLINGS OR SHUT DOWN ENGINES TO THAT PROPULSION UNIT.

IN THE EVENT OF A STEERING CASUALTY, THE CAPTAIN WILL NOTIFY VESSEL TRAFFIC SERVICE OF STEERING CASUALTY. VESSEL MUST BE PLACED OUT OF SERVICE. CAPTAIN MUST ENSURE THAT THE FERRY TERMINAL SUPERVISOR'S OFFICE IS NOTIFIED.

ALL DRILLS MUST BE PROPERLY LOGGED IN THE CAPTAINS DAILY AND OPERATING LOG AND EMERGENCY DRILL LOG.

THESE ARE RECOMMENDED GUIDE-LINES AND NOTHING IN THESE GUIDE LINES WILL PREVENT THE CAPTAIN FROM USING GOOD MARINE JUDGEMENT TO ENSURE SAFE AND PROPER PROCEDURES ARE FOLLOWED.

ANCHOR DEPLOYMENT PROCEDURES

Notify the Ferry Terminal Supervisor by VHF radio, have supervisor call emergency services by "911" land line. Request FDNY and NYPD assistance as required from marine patrols as well as land based assets to meet the ferry at the terminal

Insure the passengers receive informative and reassuring information and directions

Upon receiving a command from the Master to ready and deploy the anchor the following procedures will be followed under the supervision of the Mate:

If possible the vessel should be stopped or under slight sternway, hold the head or stern into the dominate condition (current or wind). Deploy the anchor from the end that will lead away from the vessel. Allow the vessel to come back easy attempting to hold the vessel straight into the current or wind until the anchor catches and holds

Deckhands #1 and 2 direct passengers out of the way, close the cabin doors in the vicinity of the anchor

Deckhands #5 and 6 remove the lashings or collar on the top end of the anchor shank that hold the anchor in its stowed position

Deckhands # 3 and 4, assisted by Deckhands # 5 and 6 as soon as the anchor is clear, retrieve the anchor line and shackle.

Lay the anchor line out on the deck so it will not tangle when the anchor is dropped

Lead the anchor end of the line out through the forward chock, around the front of the bull work and attach it to the anchor with the shackle, secure the boat end of the line to the forward cleat

All hands push the anchor to a position just inside the gates

When the order is given to deploy insure the line is clear then push the anchor and dolly overboard

Stand clear of the line as it fetches up

To release from the anchor tie a buoy outside of chock, release the anchor line from the cleat. A retrieval vessel will be dispatched to recover the anchor

Oil Spill

Identify and secure the source of the spill

If fuelling or transferring oil, stop immediately

Remove or disable potential ignition sources

Inform the Captain

Contain the spill using onboard equipment

Inform the Ferry Terminal Supervisor to activate the terminal Spill Response Team

Refer to the vessel spill plan

Inform the Coast Guard

Continue cleanup operations

Abandon Ship

Notify the Ferry Terminal Supervisor by VHF radio. The supervisor will notify the Director of Ferry Operations in order to initiate the shore based procedures

Every possible effort to return to either St. George or Whitehall Terminal should be exhausted prior to abandoning ship in the harbor

If conditions onboard permit, dropping the anchor and waiting for tugs to return the ferry to a terminal is the preferred procedure

If at the terminal, evacuate through normal passenger egresses

Abandon ship underway only after all other options have been exhausted

Gangways that will be used during the abandon ship procedure will be stored at both terminals. These gangways will always be ready and easily accessible

The vessel chosen (either a Barberi or Austen class vessel) to perform the rescue will proceed to the closest terminal to off load it's passengers and pick up the gangway and additional terminal deckhands

If this occurs during off hours a vessel will be prepared by the sounding security crew while personnel are called in to get the boat underway

The rescue vessel will approach the stranded vessel by stemming the current and making up end to end

Mooring lines will be run between the vessels from the aft cleats, out of the chocks along the bullwork port and starboard

If the stranded vessel is anchored care must be taken by the rescue vessel not to have the anchor jump or break free

When the boats are secure the gangway will be positioned between the two vessels and the passengers will transfer

Prior to abandoning ship assemble passengers in area of safe refuge until the emergency situation is stabilized

The area of safe refuge will be any area large enough to contain the passengers onboard that provides the safest existing conditions

Announce over the PA system the nature of the emergency and the intended action

Insure the passengers receive frequent, informative and reassuring information and directions regarding donning of life jackets, wearing the proper clothing for prevailing weather conditions, how and when the abandon ship procedure will occur. This will be best accomplished by crew members walking through the spaces giving instructions

Board local emergency response personnel from NYPD, FDNY, and USCG

Give final instructions to the passengers preparing to leave the stranded vessel regarding donning lifejackets and being properly dressed for the prevailing weather conditions and exiting to the rescue vessel

BARBERI CLASS VESSEL
STATION BILL
(Sister Ships: Andrew J Barberi, SI Newhouse)

UPON REPORTING ABOARD THIS VESSEL, IT IS THE RESPONSIBILITY OF EACH CREWMEMBER TO FAMILIARIZE THEMSELVES WITH THE STATION BILL AND MUSTER LIST.

Whenever a Staten Island Ferry vessel is out of service, and without a crew for more then four (4) hours, and prior to being put back in service, the Master will inspect the Pilot House controlled emergency and rescue equipment; the Mate will inspect the deck emergency and rescue equipment; the Chief Marine Engineer will inspect the control room controlled emergency and rescue equipment; and the Marine Engineer and the Marine Oilers will inspect all other below deck emergency and rescue equipment. While on duty and making rounds, or participating in drills, every crewmember will be on close lookout for, and immediately report all deficiencies in emergency and rescue equipment. The Master's and the Chief Marine Engineer's daily logs have designated space to report the results of these daily inspections.

Every crew will participate in weekly fire and rescue drills to ensure that all crews are well trained, and that emergency/rescue equipment is inspected and maintained regularly.

Equipment used during the drills shall vary and be logged.

The entire crew shall familiarize themselves with the location and duties of their assigned station during emergency situations.

The entire crew will drill and familiarize themselves with above and below deck areas of the vessel, as well as the location and use of all emergency and rescue equipment.

Every crewmember must participate in all drills as instructed.

Drills will be performed as if a real emergency exists.

Any crewmember discovering a fire must inform the pilothouse, isolate the passengers from danger, and then attempt to restrict and/or extinguish the fire until the fire team arrives.

Any crewmember discovering a person overboard will immediately throw a life ring or life jacket in the vicinity of the person and then inform the pilothouse.

During emergency situations crewmembers are reminded to stay calm, listen for instructions and signals, rely on the experience you have acquired from the drills, and remember that instruction(s) to the passengers will minimize panic and confusion.

SIGNALS

Upon hearing the following below listed signals, all crewmembers will immediately report to their assigned stations fully prepared to perform their assigned tasks according to the muster list.

General Alarm controls are located in the pilothouse and the control room. It is operated by lifting the knob on the end of the handle and swinging the handle to the right for sound and back to the left for silence.

The ship's whistle controls are located in the pilothouse and are operated electronically by controls in the front of the steering station or manually by a pull cord directly above the steering station.

The Public Address (PA) controls are located in the pilothouse. It is operated by turning the power switch ON and by positioning the operation mode switch to either ALL public spaces or ALL spaces; pick-up the hand set and place approximately six (6) inches from mouth; depress button and speak slowly and clearly (the manual for the system is located in each pilothouse).

FIRE AND EMERGENCY

One (1) continuous blast of the ship whistle and continuous ringing of the general alarm for a period of at least 10 seconds.

The following additional signals will designate the location of the emergency.

Engine Room	One (1) short blast of the whistle and general alarm.
Main Deck	Two (2) short blasts of the whistle and general alarm.
Saloon Deck	Three (3) short blasts of the whistle and general alarm.
Bridge Deck	Four (4) short blasts of the whistle and general alarm.
Hurricane Deck	Five (5) short blasts of the whistle and general alarm.

MAN OVERBOARD

The following announcement over the public address system and whistle signals will be utilized for a rescue operation. The words "man overboard" will not be used. These unusual signals are to minimize panic, confusion, and passenger interference during the rescue operation.

"All crewmembers report to Station Number One (1)" signifies that the rescue operation will be conducted from the New York End of the vessel.

"All crewmembers report to Station Number Three (3)" signifies that the rescue operation will be conducted from the Staten Island End of the vessel.

Launch Rescue Boat	One (1) short blast of the whistle and general alarm.
Retrieve Rescue Boat	Two (2) short blasts of the whistle and general alarm.
Secure Rescue Boat	Three (3) short blasts of the whistle and general alarm.

ABANDON SHIP

Seven (7) short blasts of the ship whistle and general alarm followed by one (1) long blast of the whistle and general alarm.

When the Master announces over the PA system to prepare for abandoning ship and for passenger's to put the life jackets on over their warmest clothing, each deckhand will go to their assigned deck station to aid and assist in the distribution and donning of life jackets. A final check of the passenger's life jackets and clothing will be performed at the evacuation platform.

BARBERI CLASS VESSEL
MUSTER LIST
(Sister Ships: Andrew J Barberi, SI Newhouse)

In the case of a fire in the engine room, generator flat, steering compartment or any below deck area, the deck crew will muster outside the effected compartment equipped with hoses, fire extinguishers, and axes and await instructions from the Chief Engineer. Each deck crewmember will arrive at the scene with a fire extinguisher.

FIRE STATIONS

Master	In the pilothouse in charge of all operations; informs the Chief Engineer of the situation; insures notifications are made to the Ferry Terminal Supervisor, FDNY, NYPD, and USCG.
Assistant Captain	In the pilothouse to assist the Master in navigation and communications; closes the fire screen doors; secures ventilation; insures proper information is presented to passengers via the public address system.
Mate #1	Acts under the direction of the Master; Officer in charge on scene; arrives on scene with an axe; remains in continual contact with the pilothouse via VHF radio.
Mate #2	Acts under the direction of the Master; on scene in charge of passenger control; if two hoses are required, in charge of 2nd hose team; remains in continual contact with Mate #1 via VHF radio.
Bridge Deck Deckhand #1	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; operates the nozzle.
Saloon Deck, Jersey Side Deckhand #2	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; tends the hose behind the nozzle operator.
Saloon Deck, Bklyn Side Deckhand #3	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; operates the hydrant.
Men's Cabin Deckhand #4	Acts under the direction of the Mate; arrives on scene with the fog applicator; if two hoses are required, this person will operate the nozzle of the 2nd hose.
New York End	Acts under the direction of the Mate; arrives on scene with a

Deckhand #5	fire extinguisher; if two hoses are required, tends the 2nd hose behind the nozzle operator; otherwise directs passengers to a safe area.
Staten Island End Deckhand #6	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; if two hoses are required, operates the hydrant for the second hose; otherwise directs passengers to a safe area.
Utility Bridge Deck Deckhand #7	Acts under the direction of the Mate; assists Mate #2 with crowd control; operates the fog applicator.
Chief Engineer	In charge in the control room; remains in communication with pilothouse; ensures electrical power is shut off to the affected area; activates the CO2 system if needed.
Marine Engineer	Acts under the direction of the Chief; on scene in charge; ensures that the oilers have lined up bilge and fire systems; starts fire pump and bilge pump.
Oiler #1	Acts under the direction of the Marine Engineer; lines up the valves for the fire systems; if the fire is in the engine room and water is used, tend the nozzle and hose; when the semi-portable CO2 system is used, tend the discharge nozzle.
Oiler #2	Acts under the direction of the Marine Engineer; lines up the valves for the bilge system; if the fire is in the engine room and water is used, tend the hose hydrant; when the semi portable CO2 system is used, tend the valve on the bottle.

BOAT STATIONS

Master	In the pilothouse in charge of all operations; informs the Chief Engineer of the situation; insures notifications are made to the Ferry Terminal Supervisor, USCG, NYPD.
Assistant Captain	In the pilothouse to assist the Master in navigation and communications.
Mate #1	Acts under the direction of the Master; on scene in charge of rescue boat launch and recovery operation; remains in continual communications with the Pilothouse.
Mate #2	Acts under the direction of the Master; in charge of passenger control; assists rescue team as needed.

Bridge Deck Deckhand #1	In the Pilothouse to assist the Master and Assistant Captain; acts as lookout.
Saloon Deck, Jersey Side Deckhand #2	Acts under the direction of the Mate; with assistance from DH#3, moves the ladder from its stowed to operational position; assists in swinging the rescue boat to its lowering position; checks rescue boat equipment; when the boat is ready, enters it and rows.
Saloon Deck, Bklyn Side Deckhand #3	Acts under the direction of the Mate; with assistance from DH #2, moves the ladder from its stowed to operational position; assists in swinging the rescue boat to its launching position; insures the drain plug is in place; when the boat is ready, enters it and rows.
Men's Cabin Deckhand #4	Acts under the direction of the Mate; tends gripes; assists with falls; assists with passenger control.
New York End Deckhand #5	Acts under the direction of the Mate; prepares and tends forward falls.
Staten Island End Deckhand #6	Acts under the direction of the Mate; prepares and tends aft falls.
Bridge Deck Utility Deckhand #7	Acts under the direction of the Mate; assists with the aft falls; assists with passenger control.
Chief Engineer	In charge in the Control Room; prepares for erratic maneuvers and high speed return to a terminal.
Marine Engineer	Acts under the direction of the Chief; assists the Chief.
Oilers #1 and #2	Acts under the direction of the Chief Engineer; if released by the Chief Engineer, assist the Deck Crew with crowd control.

DAMAGE ASSESSMENT AND CONTROL

The damage assessment and control team is comprised of the engine room crew. In case of collision, explosion, grounding, flooding, or any other situation that may compromise the vessel's structural integrity, this team (led by the Chief) will immediately dispatch to the scene. They will keep the Master informed of the situation and make recommendations as to the course of action. The team will make what ever emergency repairs are possible

OPERATIONAL READINESS, MAINTENANCE, INSPECTION AND DRILL LOG OF LIFESAVING AND FIREFIGHTING EQUIPMENT

Operational readiness, Maintenance, Inspection of Lifesaving Equipment
Fire Fighting Equipment and Drill Log

Operational Readiness:
Whenever a Staten Island Ferry Vessel is out of service, and without a crew for more than four (4) hours, and prior to being put back into service, the Master will inspect all Pilothouse controlled emergency, rescue, operation and navigation equipment; the Mate will inspect the deck emergency, rescue and operation equipment; the Chief Engineer will inspect control room controlled emergency, rescue and operational equipment; the Marine Engineer and the oilers will inspect all other below deck emergency, rescue and operation equipment.

While on duty and making rounds, or participating in drills, every crewmember will be on a close lookout for, and immediately report all deficiencies in emergency and rescue equipment. The Master's and Chief Engineer's daily logs has space provided to report the results of these daily inspections.

Maintenance and inspection of Fire Fighting and Rescue Equipment:
Whenever a Staten Island Ferry Vessel undergoes either a quarterly or annual inspection a copy of the inspection sheets signed by a qualified and competent person will be kept in this log book verifying the criteria set forth in 46 CFR 199.190 is met regarding weekly, monthly and annual inspections and maintenance.

A log book listing each piece of fire, rescue and emergency equipment along with space to report the condition and repair will be onboard each vessel.

Each Master will log and date each piece of fire, rescue and emergency equipment utilized and inspected during drills. Any required maintenance will also be logged and dated.

Each Master will continue the rotation started by the previous Master of fire, rescue and emergency equipment to insure that every piece of equipment listed in the log book is utilized to accomplish the following schedule.

To insure each fire hydrant station and fire extinguisher is inspected once each month a minimum of two hydrants utilized and 10 fire extinguishers examined every drill. All fire screen doors will and ventilation shut downs will be used during each drill.

To insure all the Life rings, buoyant apparatus and inflatable rafts are inspected each month the equipment on one side of one end will be inspected during each drill as well as life rings on one deck.

To insure that the general alarm system is inspected every week the general alarm will be utilizes during every drill.

To insure that each rescue boat is inspected and one is launched every week one rescue boat will be launched and another inspected during every drill.

AUSTEN CLASS
SSMCP

AUSTEN CLASS
SHIPBOARD SAFETY MANAGEMENT AND CONTIGENCY PLAN

Indoctrination and voyage tasks

Rescue boat launching and recovering

Fire and explosion response

Collision

Flooding

CO2 release

Grounding

Bomb threat

Medical emergency

Police emergency

Launching buoyant apparatus and inflatable rafts

Emergency steering

Emergency Propulsion

Anchor deployment

Oil spill

Abandon ship

Station Bill/ Muster List

Operational readiness, maintenance, inspection and drill log of emergency equipment

INDOCTRINATION: VOYAGE TASKS

The following steps are taken in a typical ferry trip.

Passengers assemble in terminal

Embark passengers

Brief passengers on safety measures using public address system

Survey local harbor traffic

Contact local traffic as required

Check harbor conditions

Confirm engine and navigational equipment is operational

Contact VTS and local traffic as required

Scan area around vessel while getting underway, make whistle signals

Maneuver away from berth

Observe and evaluate vessel response

Monitor Route

Communicate with other harbor traffic as required

Evaluate hazards from other traffic

Take evasive action as required

Make crew report to docking stations announcement

Follow docking procedures

Make docking announcements

Use ships whistle, PA system or any other means to warn passengers of danger

Disembark passengers

RESCUE BOAT LAUNCHING AND RECOVERING PROCEDURES

Release the gripes by pulling the slipknots securing them

Remove the rescue boat access ladder from the bulkhead along side the rescue boat. Hang the ladder overboard by attaching its brackets to the top of the bulwark. The ladder should be in a position where it will be in the middle of the rescue boat when it is lowered. Secure the line attached to the top rung of the ladder to the nearest cleat.

Prepare the falls by laying them out on the deck so they will not tangle (DO NOT TAKE THE TURNS OFF THE CLEAT ON THE DAVITS)

Lift the davit locks at the base of the davit and secure them up

Utilizing the gripes and the hand rails on the rescue boat swing the rescue boat back, without losing momentum swing the front and then the back of the rescue boat overboard. When the boat is swung out reposition the davit locks

Slowly and carefully start to release the falls from the cleats on the davits. (LEAVE A TURN ON THE CLEAT)

As directed by the Mate, evenly lower the rescue boat to the rail, stop and take a couple of turns on the cleat

Install the drain plug and check the other equipment in the boat

As directed by the Mate, take all but one turn off the cleat and evenly lower the boat to the water (Leave a slight strain on the falls)

The rowers don their life jackets and, one at a time, climb down the ladder into the boat

When ready the aft fall is slacked and let go first then the forward fall

Place the oars in the oarlocks and row together. The Mate will point out the direction of the person in the water

As you reach the person to be rescued try to position the rescue boat stern to the person. Pull the person over the stern and into the rescue boat not over the side. A frantic person may tip the boat over by trying to climb over the side of the boat

Situate the person in the middle of the rescue boat and as low as possible

RESCUE BOAT LAUNCCHING AND RECOVERING
PROCEEDURES

As you row back to the ferry approach so the front of the rescue boat is facing the same direction as that end of the ferry. Use the boat hook to pull the rescue boat to the latter or pass the painter the ferry to assist in making up to the falls

Attach the front fall first then the aft fall. As soon as the falls are attached take a strain on the falls

It is important that a strain is kept on the falls as people exit the rescue boat. This is to insure the falls do not release

As soon as the rescue boat is secured to the falls one Deckhand will exit and one will stay in the rescue boat to insure the safety of the rescue victim

When lifting the rescue boat with people on board two crewmembers will tend each fall

As directed by the Mate, the rescue boat will be raised evenly to the rail. A turn will always be kept on the cleat and the slack taken up between each pull of the falls. Once at the rail additional turns will be added to the cleat

At the rail the Deckhand and rescue victim may exit the rescue boat. If necessary the boat can be raised further, swung in and lowered to the deck of the ferry

As soon as possible bring the ladder on board as to allow the ferry to get underway. The rescue boat has to be swung in before the ferry reaches the terminal

To stow the rescue boat remove the drain plug, raise it above the rail, release the davit locks and swing the front forward and reverse the procedure for swinging it out

Raise it as high as it can go, reposition the davit locks and secure with the gripes, return the ladder to the bulkhead

Fire and Explosion Response

There are three fire scenarios that are of concern for the ferry: Car deck fires; engine room fires; and, passenger space fires.

In all three fire scenarios, the basic response is to head to a terminal and evacuate the passengers via their normal exit points. Simultaneously, the ferry crew will attempt to control the fire and call for help to the Coast Guard VTS, the Ferry Terminal Supervisor, FDNY, and the NYPD, all by VHS radio. All four of these entities maintain 24 hour radio watch.

While the nearest terminal will typically be selected for the passenger evacuation, local circumstances such as prevailing winds may make proceeding to the farther terminal a better option. In the event of a fire and simultaneous loss of power, a towing vessel would be called in, and the FDNY fireboat would be used for fire fighting resources. Standpipes at each end of the ferry are available to energize the fire main from the FDNY Fireboat.

The passengers will be directed by the ferry crew to assemble in a safe refuge during the initial fire response. Safe refuge for both car deck and engine room fires is the Saloon Deck, which is insulated from the car deck by the car deck sprinkler system. For passenger compartment fires, passengers will be assembled on the furthest deck away from the fire. This protection will be sufficient for the 10 to 15 minute run back to the terminal.

Once at the terminal, the plan is to dock and disembark passengers as normal. NYPD and FDNY personnel will assist the ferry crew in handling the crowd. The car deck sprinkler system will be enhanced directly beneath the passenger egress area to provide extra protection in this area. This plan may be modified as circumstances dictate.

Engine Room Fire

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal

Close fire doors

Secure ventilation

Head to safest terminal

Start fire pumps

Engine room crew fights and controls fire assisted by Deck crew

Sound the general alarm

Insure the passengers receive informative and reassuring information and directions

Assemble firefighting party

Evacuate passengers to an area of safe refuge

Check for injured passengers

If fire cannot be controlled, abandon engine room and activate C02 flooding

If vessel power is lost, notify VTS and Terminal Supervisor. Drop anchor if necessary. Make up to towing vessel, proceed to port

Instruct passengers on egress route

Arrive in terminal, disembark passengers with the assistance of FDNY, NYPD

Assist FDNY in fighting fire

Passenger Space Fire

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance from marine patrols as well as land based assets to meet ferry at terminal.

Close the fire doors

Secure the ventilation

Head to nearest terminal

Inform the engine room and start fire pumps

Sound the general alarm

Announce over the PA system the nature of the emergency

Assemble firefighting party

Evacuate passengers to an area of safe refuge

Check for injured passengers

Fight and control fire

Instruct passengers on egress route

Arrive in terminal, disembark passengers

Assist FDNY in fighting fire

COLLISION

Notify Ferry Terminal Supervisor by VHF Radio, have supervisor call emergency services by "911" landline. Request FDNY and NYPD assistance as required, from marine patrols as well as land based assets to meet ferry at terminal.

Insure the passengers receive informative and reassuring information and directions

Assemble passengers at the assembly station

Head to the nearest terminal

Assemble the damage control party

Locate the damage and assess its extent

Start all available pumps for dewatering

Isolate the damaged area, control the flooding, and reduce the free surface

Disembark passengers.

Locate and assess the damage

In case of fire, take actions as described under "Fire and explosion"

If there is any danger to passengers from the collision damage, take immediate action to stabilize the situation. Such action could be intentional grounding of the vessel, dropping anchor, or maneuvering the vessel alongside a barge or other rescue platform. Take actions described under "Abandon Ship."

CO2 RELEASE PROCEEDURES

THE ORDER TO FLOOD A COMPARTMENT WITH CO2 CAN ONLY BE GIVIEN BY THE MASTER AND THE CHIEF ENGINEER

In order for the CO2 to be effective all ventilation must be shut, hatches closed, machinery and boilers shut down

Remote machinery shut downs as well as remote CO2 releases, are located inside the engine room entrances from the vehicle deck at either end of the vessel. Identification and instructions for there use are clearly posted above each device

In the event of the remote releases failing the CO2 bottles with local releases are located in the crew's locker room. Identification and instruction for there use are clearly posted by each device

All crewmembers known to have been in the affected space should be accounted for

Prepare for the total loss of propulsion power and control except for systems powered by the emergency generator

Notify the Ferry Terminal Supervisor by VHF radio in order to call emergency services by "911" land line if required. Request FDNY and NYPD assistance as necessary

Insure the passengers receive informative and reassuring information and instructions via the public address system

Ready anchor, prepare for tugs, put the vessel on the safest possible heading and broadcast proper VHF radio calls on channels 13 and 14

Engage emergency systems not already on line

To release the gas:

Vacate the space

Notify the pilothouse of the release

The Chief Engineer will break the glass covering the shutdown and release devices, pull the handles for the affected space and then shut the hatch

An alarm will sound signaling release of the gas in 20 seconds

Grounding

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline if required. Request FDNY and NYPD assistance as necessary.

Conduct damage survey of internal spaces

Take on ballast so the ferry does not move into even shallower water. Especially with raising tide

Prepare to make up to tugs

Dump ballast when tugs arrive and attempt to pull the ferry off its groundings

Refer to section on Abandon Ship if passenger evacuation is necessary

Insure the passengers receive informative and reassuring information and directions

Bomb Threat

Inform the Captain

Notify VTS and Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline. Request NYPD assistance from marine patrols if necessary, as well as land based assets to meet ferry at terminal

Head to safest terminal

If at a terminal, call NYPD or contact NYPD onboard

If underway, conduct a walk-through search of the vessel without causing undue panic

Upon arrival at terminal, disembark passengers immediately

If necessary insure the passengers receive informative and reassuring information and directions

Flooding

Notify Ferry Terminal Supervisor by VHF Radio, have Supervisor call emergency services by "911" landline if required. Request FDNY and NYPD assistance as necessary

Insure passengers receive informative and reassuring information and directions

Head to the nearest terminal

Assemble the damage control party

Locate the damage and assess its extent

Start all available pumps for dewatering

Isolate the damaged area, control the flooding, and reduce the free surface

Disembark passengers

MEDICAL EMERGENCY

As soon as a medical emergency is discovered the Pilothouse must be notified of the location via VHF radio or sound powered phone. The Master will immediately dispatch the crew and police officers via the public address system and VHF radio

The Master will notify the Chief Engineer

Make all necessary radio calls to the Coast Guard and other harbor traffic

The crew and police officers will administer aid and control the crowd

Announcements asking for medically trained persons to report to the emergency's location will be made over the public address system

The Mate will inform the master of the nature and extent of the emergency

The Master will asses the situation and determine which terminal the vessel will dock

Notify the Ferry terminal supervisor by VHF radio of the location, nature and extent of the emergency. THE FERRY TERMINAL SUPERVISOR MUST BE INFORMED IF A DEFIBRILLATOR WAS USED

The Ferry Terminal Supervisor will call "911" with the details of the emergency and arrange to have an ambulance meet the vessel upon it's arrival at the terminal

Upon it's arrival, and if necessary, all passengers will be evacuated from the vessel

The vessel will be placed back in service after the person has been stabilized and removed from the vessel

POLICE EMERGENCY

Whenever police assistance is required the pilothouse must be informed immediately of the location, nature and extent of the disturbance

Police and crew members will be dispatched via the public address system

The Master will asses the situation and decide which terminal the vessel will dock and if further assistance is required

Make all necessary radio calls to Coast Guard and other harbor traffic

Call "Harbor Charley" on VHF channel 17 and prepare to be boarded if needed

Notify the Ferry Terminal Supervisor of the situation. If it is requested The Ferry Terminal Supervisor will Call "911" and have additional emergency services meet the vessel upon it's arrival at the terminal

If no police are onboard the crew's primary responsibility is to protect innocent passengers and segregate them from danger until assistance arrives

LAUNCING BUOYANT APPARATUS AND INFATABLE LIFE RAFTS

The fire and emergency signal for the Hurricane Deck will be used to muster the crew to the buoyant apparatus and inflatable life rafts station

The buoyant apparatus and inflatable life rafts will be deployed in the aid of other vessels in distress and with people in the water.

The ferry has no capabilities of marshaling the rafts. The master will maneuver the ferry as close to the situation as possible and deploy the rafts. Once the painter is freed from the ferry smaller vessels will have to tow the rafts into position.

This operation will have to be a closely coordinated effort between the ferry and the USCG, NYPD, NYFD and other vessels in the vicinity.

As in any emergency situation evolving a ferry the Master must insure the following:
The Chief Engineer is informed
The Ferry Terminal Supervisor is informed
Insure the passengers receive informative and reassuring information and directions

To deploy the buoyant apparatus:
Detach the painter and any other lines secured to the ferry.

Insure passengers do not have their heads out of the windows and there are no people or vessels in the water in the rafts path

Push the raft overboard

To deploy the inflatable apparatus:
MAKE SURE THE PAINTER IS SECURELY ATTACHED TO THE FERRY,

Release the small pelican hook on the metal strap holding the raft to the cradle

Insure passengers do not have their heads out of the windows and there are no people or vessels in the water in the rafts path

Push the entire container out of the cradle and overboard. When the container is in the water pull the painter until it is tight and then give a sharp, hard pull. This will inflate the raft and release it from the container

RELEASE THE PAINTER FROM THE FERRY so it can be towed into position

EMERGENCY STEERING PROCEDURES (AUSTEN CLASS)

IN THE EVENT OF A STEERING CASUALTY THE FOLLOWING PROCEDURES WILL BE FOLLOWED:

STEERING FAILURE: OTHER THAN PROPULSION UNIT

THE CAPTAIN WILL ASSIGN CREW MEMBER TO THE PROPULSION ROOM IN ORDER TO COMMUNICATE COMMANDS BY SOUND POWERED PHONE.

THE ENGINEER WILL ASSIGN EITHER HIMSELF OR THE MARINE OILER TO THE PROPULSION ROOM TO EXECUTE STEERING COMMANDS, FOLLOWING POSTED INSTRUCTIONS.

STEERING FAILURE: PROPULSION UNIT

CAPTAIN WILL TRANSFER POWER TO NON-OPERATING PILOTHOUSE AS CONDITIONS PERMIT. ON CAPTAINS ORDERS C.M.E. WILL SHUT DOWN ENGINES TO THAT PROPULSION UNIT.

IN THE EVENT OF A STEERING CASUALTY, THE CAPTAIN WILL NOTIFY VESSEL TRAFFIC SERVICE OF STEERING CASUALTY. VESSEL MUST BE PLACED OUT OF SERVICE. CAPTAIN MUST ENSURE THAT THE PORT SUPERVISOR'S OFFICE IS NOTIFIED.

ALL DRILLS MUST BE PROPERLY LOGGED IN THE CAPTAINS DAILY AND OPERATING LOG AND EMERGENCY DRILL LOG.

THESE ARE RECOMMENDED GUIDE-LINES AND NOTHING IN THESE GUIDE LINES WILL PREVENT THE CAPTAIN FROM USING GOOD MARINE JUDGEMENT TO ENSURE SAFE AND PROPER PROCEDURES ARE FOLLOWED.

ANCHOR DEPLOYMENT PROCEDURES

Notify the Ferry Terminal Supervisor by VHF radio, have supervisor call emergency services by "911" land line. Request FDNY and NYPD assistance as required from marine patrols as well as land based assets to meet the ferry at the terminal

Insure the passengers receive informative and reassuring information and directions

Upon receiving a command from the Master to ready and deploy the anchor the following procedures will be followed under the supervision of the Mate:

If possible the vessel should be stopped or under slight sternway, hold the head or stern into the dominate condition (current or wind). Deploy the anchor from the end that will lead away from the vessel. Allow the vessel to come back easy attempting to hold the vessel straight into the current or wind until the anchor catches and holds

Deckhands #1 and 2 direct passengers out of the way, close the cabin doors in the vicinity of the anchor

Deckhands #5 and 6 remove the lashings or collar on the top end of the anchor shank that hold the anchor in its stowed position

Deckhands # 3 and 4, assisted by Deckhands # 5 and 6 as soon as the anchor is clear, retrieve the anchor line and shackle.

Lay the anchor line out on the deck so it will not tangle when the anchor is dropped

Lead the anchor end of the line out through the forward chock, around the front of the bull work and attach it to the anchor with the shackle, secure the boat end of the line to the forward cleat

All hands push the anchor to a position just inside the gates

When the order is given to deploy insure the line is clear then push the anchor and dolly overboard

Stand clear of the line as it fetches up

To release from the anchor tie a buoy outside of chock, release the anchor line from the cleat. A retrieval vessel will be dispatched to recover the anchor

Oil Spill

Identify and secure the source of the spill

If fuelling or transferring oil, stop immediately

Remove or disable potential ignition sources

Inform the Captain

Contain the spill using onboard equipment

Inform the Ferry Terminal Supervisor to activate the terminal Spill Response Team

Refer to the vessel spill plan

Inform the Coast Guard

Continue cleanup operations

Abandon Ship

Notify the Ferry Terminal Supervisor by VHF radio. The supervisor will notify the Director of Ferry Operations in order to initiate the shore based procedures

Every possible effort to return to either St. George or Whitehall Terminal should be exhausted prior to abandoning ship in the harbor

If conditions onboard permit, dropping the anchor and waiting for tugs to return the ferry to a terminal is the preferred procedure

If at the terminal, evacuate through normal passenger egresses

Abandon ship underway only after all other options have been exhausted

Gangways that will be used during the abandon ship procedure will be stored at both terminals. These gangways will always be ready and easily accessible

The vessel chosen (either a Barberi or Austen class vessel) to perform the rescue will proceed to the closest terminal to off load it's passengers and pick up the gangway and additional terminal deckhands

If this occurs during off hours a vessel will be prepared by the sounding security crew while personnel are called in to get the boat underway

The rescue vessel will approach the stranded vessel by stemming the current and making up end to end

Mooring lines will be run between the vessels from the aft cleats, out of the chocks along the bullwork port and starboard

If the stranded vessel is anchored care must be taken by the rescue vessel not to have the anchor jump or break free

When the boats are secure the gangway will be positioned between the two vessels and the passengers will transfer

Prior to abandoning ship assemble passengers in area of safe refuge until the emergency situation is stabilized

The area of safe refuge will be any area large enough to contain the passengers onboard that provides the safest existing conditions

Announce over the PA system the nature of the emergency and the intended action

Insure the passengers receive frequent, informative and reassuring information and directions regarding donning of life jackets, wearing the proper clothing for prevailing weather conditions, how and when the abandon ship procedure will occur. This will be best accomplished by crew members walking through the spaces giving instructions

Board local emergency response personnel from NYPD, FDNY, and USCG

Give final instructions to the passengers preparing to leave the stranded vessel regarding donning lifejackets and being properly dressed for the prevailing weather conditions and exiting to the rescue vessel

AUSTEN CLASS VESSEL
STATION BILL
(Sister Ships: Alice Austen, John Noble)

UPON REPORTING ABOARD THIS VESSEL, IT IS THE RESPONSIBILITY OF EACH CREWMEMBER TO FAMILIARIZE THEMSELVES WITH THE STATION BILL AND MUSTER LIST.

Whenever a Staten Island Ferry vessel is out of service, and without a crew for more then four (4) hours, and prior to being put back in service, the Master will inspect the Pilot House controlled emergency and rescue equipment; the Mate will inspect the deck emergency and rescue equipment; the Chief Marine Engineer will inspect the control room controlled emergency and rescue equipment; and the Marine Oiler will inspect all other below deck emergency and rescue equipment. While on duty and making rounds, or participating in drills, every crewmember will be on close lookout for, and immediately report all deficiencies in emergency and rescue equipment. The Master's and the Chief Marine Engineer's daily logs have designated space to report the results of these daily inspections.

Every crew will participate in weekly fire and rescue drills to ensure that all crews are well trained, and that emergency/rescue equipment is inspected and maintained regularly.

Equipment used during the drills shall vary and be logged..

The entire crew shall familiarize themselves with the location and duties of their assigned station during emergency situations.

The entire crew will drill and familiarize themselves with above and below deck areas of the vessel, as well as the location and use of all emergency and rescue equipment.

Every crewmember must participate in all drills as instructed.

Drills will be performed as if a real emergency exists.

Any crewmember discovering a fire must inform the pilothouse, isolate the passengers from danger, and then attempt to restrict and/or extinguish the fire until the fire team arrives.

Any crewmember discovering a person overboard will immediately throw a life ring or life jacket in the vicinity of the person and then inform the pilothouse.

During emergency situations crewmembers are reminded to stay calm, listen for instructions and signals, rely on the experience you have acquired from the drills, and remember that instruction(s) to the passengers will minimize panic and confusion.

SIGNALS

Upon hearing the following below listed signals, all crewmembers will immediately report to their assigned stations fully prepared to perform their assigned tasks according to the muster list.

General Alarm controls are located in the pilothouse and the control room. It is operated by lifting the knob on the end of the handle and swinging the handle to the right for sound and back to the left for silence.

The ship's whistle controls are located in the pilothouse and are operated manually by a pull cord directly above the steering station.

The Public Address (PA) controls are located in the pilothouse. It is operated by turning the power switch ON and by positioning the operation mode to switch to either ALL public spaces or ALL spaces; pick-up the hand set and place approximately six (6) inches from mouth; depress button and speak slowly and clearly (the manual for the system is located in each pilothouse).

FIRE AND EMERGENCY

One (1) continuous blast of the ship whistle and continuous ringing of the general alarm for a period of at least 10 seconds.

The following additional signals will designate the location of the emergency.

Engine Room	One (1) short blast of the whistle and general alarm.
Main Deck	Two (2) short blasts of the whistle and general alarm.
Bridge Deck	Three (3) short blasts of the whistle and general alarm.
Hurricane Deck	Four (4) short blasts of the whistle and general alarm.

MAN OVERBOARD

The following announcement over the public address system and whistle signals will be utilized for a rescue operation. The words "man overboard" will not be used. These unusual signals are to minimize panic, confusion, and passenger interference during the rescue operation.

"All crewmembers report to Station Number One (1)" signifies that the rescue operation will be conducted from the New York End of the vessel.

"All crewmembers report to Station Number Three (3)" signifies that the rescue operation will be conducted from the Staten Island End of the vessel.

Launch Rescue Boat	One (1) short blast of the whistle and general alarm.
Retrieve Rescue Boat	Two (2) short blasts of the whistle and general alarm.
Secure Rescue Boat	Three (3) short blasts of the whistle and general alarm.

ABANDON SHIP

Seven (7) short blasts of the ship whistle and general alarm followed by one (1) long blast of the whistle and general alarm.

When the Master announces over the PA system to prepare for abandoning ship and for passenger's to put the life jackets on over their warmest clothing, each deckhand will go to their assigned deck station to aid and assist in the distribution and donning of life jackets. A final check of the passenger's life jackets and clothing will be performed at the evacuation platform.

AUSTEN CLASS VESSEL
MUSTER LIST
(Sister Ships: Alice Austen, John Noble)

In the case of a fire in the engine room or any below deck area, the deck crew will muster outside the effected compartment equipped with hoses, fire extinguishers, and axes and await instructions from the Chief Engineer. Each deck crewmember will arrive at the scene with a fire extinguisher.

FIRE STATIONS

Master	In the pilothouse in charge of all operations; informs the Chief Engineer of the situation; insures notifications are made to the Ferry Terminal Supervisor, FDNY, NYPD, and USCG.
Assistant Captain	In the pilothouse to assist the Master in navigation and communications; closes the fire screen doors; secures ventilation; insures proper information is presented to passengers via the public address system.
Mate	Acts under the direction of the Master; Officer in charge on scene; arrives on scene with an axe; remains in continual contact with the pilothouse via VHF radio.
Bridge Deck, Jersey Side Deckhand #1	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; operates the nozzle.
Bridge Deck, Bklyn Side Deckhand #2	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; tends the hose behind the nozzle operator.
Ends Deckhand #3	Acts under the direction of the Mate; arrives on scene with a fire extinguisher; operates the hydrant; assists with passenger control.
Men's Cabin, Utility Deckhand #4	Acts under the direction of the Mate; arrives on scene with the fog applicator; if two hoses are required, tends the 2nd hose and nozzle; assists wit passenger control.
Chief Engineer	In charge in the control room; remains in communication with pilothouse; ensures electrical power is shut off to the affected area; activates the CO2 system if needed.

Oiler	Acts under the direction of the Chief; lines up the valves for the fire and bilge systems; starts pumps; if the fire is in the engine room and water is used, tend the nozzle and hose; when the semi-portable CO2 system is used, tend the discharge nozzle.

BOAT STATIONS

Master	In the pilothouse in charge of all operations; informs the Chief Engineer of the situation; insures notifications are made to the Ferry Terminal Supervisor, USCG, NYPD.
Assistant Captain	In the pilothouse to assist the Master in navigation and communications; acts as lookout.
Mate	Acts under the direction of the Master; on scene in charge of rescue boat launch and recovery operation; remains in continual communications with the Pilothouse.
Bridge Deck, Jersey Side Deckhand #1	Acts under the direction of the Mate; with assistance from DH #2, moves the ladder from its stowed position to operational position; assists in swinging the rescue boat to its lowering position; insures the drain plug is in place; when the boat is ready, enters it and rows.
Bridge Deck, Bklyn Side Deckhand #2	Acts under the direction of the Mate; with assistance from DH #1, moves the ladder from its stowed to operational position; assists in swinging the rescue boat to its lowering position; checks rescue boat equipment; when the boat is ready, enters it and rows.
Ends Deckhand #3	Acts under the direction of the Mate; tends the gripes; prepares and tends the falls; assists with passenger control.
Men's Cabin Utility Deckhand #4	Acts under the direction of the Mate; tends gripes; assists with falls; assists with passenger control.
Chief Engineer	In charge in the Control Room; prepares for erratic maneuvers and high speed return to a terminal.
Oiler	Acts under the direction of the Chief Engineer; if released by the Chief Engineer, assist the Deck Crew with passenger control.

DAMAGE ASSESSMENT AND CONTROL

The damage assessment and control team is comprised of the engine room crew. In case of collision, explosion, grounding, flooding, or any other situation that may compromise the vessel's structural integrity, this team (led by the Chief) will immediately dispatch to the scene. They will keep the Master informed of the situation and make recommendations as to the course of action. The team will make what ever emergency repairs are possible

OPERATIONAL READINESS, MAINTENANCE, INSPECTION AND DRILL LOG OF LIFESAVING AND FIREFIGHTING EQUIPMENT

Operational readiness, Maintenance, Inspection of Lifesaving Equipment
Fire Fighting Equipment and Drill Log

Operational Readiness:
Whenever a Staten Island Ferry Vessel is out of service, and without a crew for more than four (4) hours, and prior to being put back into service, the Master will inspect all Pilothouse controlled emergency, rescue, operation and navigation equipment; the Mate will inspect the deck emergency, rescue and operation equipment; the Chief Engineer will inspect control room controlled emergency, rescue and operational equipment; the Marine Engineer and the oilers will inspect all other below deck emergency, rescue and operation equipment.

While on duty and making rounds, or participating in drills, every crewmember will be on a close lookout for, and immediately report all deficiencies in emergency and rescue equipment. The Master's and Chief Engineer's daily logs has space provided to report the results of these daily inspections.

Maintenance and inspection of Fire Fighting and Rescue Equipment:
Whenever a Staten Island Ferry Vessel undergoes either a quarterly or annual inspection a copy of the inspection sheets signed by a qualified and competent person will be kept in this log book verifying the criteria set forth in 46 CFR 199.190 is met regarding weekly, monthly and annual inspections and maintenance.

A log book listing each piece of fire, rescue and emergency equipment along with space to report the condition and repair will be onboard each vessel.

Each Master will log and date each piece of fire, rescue and emergency equipment utilized and inspected during drills. Any required maintenance will also be logged and dated.

Each Master will continue the rotation started by the previous Master of fire, rescue and emergency equipment to insure that every piece of equipment listed in the log book is utilized to accomplish the following schedule.

To insure each fire hydrant station and fire extinguisher is inspected once each month a minimum of two hydrants utilized and 10 fire extinguishers examined every drill. All fire screen doors will and ventilation shut downs will be used during each drill.

To insure all the Life rings, buoyant apparatus and inflatable rafts are inspected each month the equipment on one side of one end will be inspected during each drill as well as life rings on one deck.

To insure that the general alarm system is inspected every week the general alarm will be utilizes during every drill.

To insure that each rescue boat is inspected and one is launched every week one rescue boat will be launched and another inspected during every drill.

B. Safety Management

In this appendix, training, drills, and safety equipment inspection and maintenance programs are detailed.

B.1 Training and Drills

This section provides guidance on practical, and actual simulation training that includes the personnel or organizations identified in the plan so they can practice their roles in the event of an incident.

B.1.1 Training materials.

Training material will be maintained on board the ferry, and at the Director, Ferry Operations Office. This material will consist of a manual and audiovisual training aids. Only the manual is kept aboard each vessel.

(1) The training manual is maintained on one of the navigating bridges, and is available to any crew member upon request. Audiovisual training aids and the training manual are kept at the Director, Ferry Operations Office.

(2) The training material explains in detail--

(i) The procedure for donning lifejackets;
(ii) The procedure for mustering at the assigned stations;
(iii) The use of all lifesaving and rescue equipment;
(iv) The use of anchors;
(v) Man Overboard, including the launching of rescue boats;
(vi) The recovery of rescue boats, including stowage and securing;
(vii) The hazards of exposure and the need for warm clothing;
(viii) The best use of the rescue boats;
(ix) The use of firefighting equipment;
(x) All other functions contained in the muster list and emergency instructions; and.
(xi) Post-accident reporting procedures and drug testing.

B.1.2 Familiarity with emergency procedures.

(1) Every crewmember with emergency duties assigned on the muster list must be familiar with their assigned duties.

(2) As new passengers embark, a safety announcement must be given immediately before sailing or immediately after sailing. The announcement must be made on the vessel's public address system or by other equivalent means likely to be heard by the passengers. Information cards or posters may be used to supplement the briefing, but may not be used to replace the announcement.

B.1.3 Drills

(1) Drills must, as far as practicable, be conducted as if there were an actual emergency.

(2) Every crewmember must participate in at least one fire drill every week. Fire drills must, as far as practicable, be planned with due consideration given to the various emergencies that may occur, including car deck, engine room, and passenger space fires. Each fire drill must include—

(i) Reporting to stations and preparing for the duties described in the muster list for the particular fire emergency being simulated;
(ii) Starting of fire pumps and the use of two jets of water and the car deck sprinkler to determine that the system is in proper working order;
(iii)
(iv) Checking the relevant communications equipment;
(v) Checking the operation of watertight doors, fire doors, and fire dampers and main inlets and outlets of ventilation systems in the drill area; and
(vi) Checking the necessary arrangements for subsequent abandonment of the vessel.

(3) Every crewmember must participate in at least one abandon ship drill every month Abandon-ship drills must include—

(i) Summoning persons on board to muster stations with the general alarm followed by drill announcements on the public address or other communication system and ensuring that the persons on board are made aware of the order to abandon ship;
(ii) Reporting to stations and preparing for the duties described in the muster list;
(iii) Checking that persons on board are suitably dressed;
(iv) Checking that lifejackets are correctly donned; and,
(v) Deployment of the evacuation gangway.

(4) Man Overboard drills must be conducted, and as far as is reasonable and practicable rescue boats must be launched with their assigned crew aboard and maneuvered in the water, each week.

(5) Emergency lighting for mustering and abandonment must be tested at each abandon-ship drill.

(6) The equipment used during drills must immediately be brought back to its fully operational condition. Any faults and defects discovered during the drills must be remedied as soon as possible.

B.1.4 Training

(1) Onboard training in the use of the vessel's lifesaving appliances, including rescue boats and equipment, and in the use of the vessel's fire-extinguishing appliances must be given as soon as possible but not later than 2 weeks after a crewmember first enters employment with the ferries.

(2) The crew must be instructed in the use of the vessel's fire-extinguishing and lifesaving appliances at the same interval as the drills. Individual units of instruction may cover different parts of the vessel's lifesaving and fire-extinguishing appliances, but all the vessel's lifesaving and fire-extinguishing appliances must be covered within any period of 3 months.

(3) Every crewmember must be given instructions that include, but are not limited to--

(i) The problems of hypothermia, first aid treatment for hypothermia, and other appropriate first aid procedures such as CPR;
(ii) Any special instructions necessary for use of the vessel's lifesaving and rescue appliances in severe weather and severe harbor conditions; and
(iii) The operation and use of fire extinguishing appliances.

B.1.5 Records

(1) When musters are held, details of abandon-ship drills, fire drills, drills of other lifesaving appliances, and onboard training must be recorded in the vessel's official logbook, or the ferry operation's training record if the training is held ashore. Logbook entries must include--

(i) The date and time of the drill, muster, or training session;
(ii) The survival craft and fire-extinguishing equipment used in the drills;
(iii) Identification of inoperative or malfunctioning equipment and the corrective action taken;
(iv) Identification of crewmembers participating in drills or training sessions; and
(v) The subject of the training session.

(2) If a full muster, drill, or training session is not held at the appointed time, an entry must be made in the logbook stating the circumstances and the extent of the muster, drill, or training session held.

B.2 Indoctrination: Voyage Tasks

The following steps are taken in the typical ferry trip. New employees must be familiar with all of these steps during their break-in.

1. Assemble passengers in terminal
2. Embark passengers
3. Brief Passengers on safety measures using public address system
4. Survey local traffic
5. Contact local traffic as required
6. Check harbor conditions
7. Confirm engine and navigation equipment operation
8. Contact VTS and in bad weather make security call to all vessels in vicinity
9. Scan area around vessel while getting underway, make whistle signals
10. Maneuver vessel away from berth
11. Observe and evaluate vessel response
12. Monitor indicators
13. Communicate with other river traffic and VTS
14. Evaluate hazards from other traffic
15. Take evasive action as necessary
16. Maintain course and speed
17. Approach Destination
18. Make security announcement, advising which berth will be used (for visually impaired) and warn of hard landing when necessary
19. Adjust speed for safe docking and dock
20. Disembark Passengers.

B.3 Operational Readiness, Maintenance, and Inspection of Lifesaving and Firefighting Equipment

B.3.1 Operational Readiness

Before the vessel is placed in service and at all times during the voyage, each lifesaving appliance and all firefighting gear must be in working order and ready for immediate use. Firefighting equipment must be visually inspected prior to the vessel being placed in service daily. Anything other than full readiness must be cleared with the OCMI.

B.3.2 Maintenance

(1) The manufacturer's instructions for onboard maintenance of lifesaving appliances and firefighting equipment must be on board the vessel. The following must be provided for each appliance:

(i) Checklists for use when carrying out the inspections required under this section.
(ii) Maintenance and repair instructions.
(iii) A schedule of periodic maintenance.
(iv) A diagram of lubrication points with the recommended lubricants.
(v) A list of replaceable parts.
(vi) A list of sources of spare parts.
(vii) A log for records of inspections and maintenance.

B.3.3 Spare parts and repair equipment.

Spare parts and repair equipment must be provided for each lifesaving appliance and component that is subject to excessive wear or consumption and that needs to be replaced regularly.

B.3.4 Weekly inspections and tests.

(1) Each rescue boat and launching appliance must be visually inspected, and one launched, to ensure readiness for use.

(2) The general alarm system must be tested.

B.3.4 Monthly inspections

Each lifesaving appliance and all firefighting gear must be inspected monthly using the checklists to make sure the appliance and the equipment are complete and in good working order. A report of the inspection, including a statement as to the condition of the equipment, must be recorded in the vessel's official logbook.

B.3.5 Annual Inspections

Annual inspections must include the following:

(1) Each rescue boat must be stripped, cleaned, and thoroughly inspected and repaired, as needed.

(2) Each davit, winch, fall, and other launching appliance must be thoroughly inspected and repaired, as needed, once each year.

(3) Each item of survival equipment with an expiration date must be replaced during the annual inspection if the expiration date has passed.

(4) Each battery clearly marked with an expiration date and used in an item of survival equipment must be replaced during the annual inspection if the expiration date has passed.

B.3.6 Periodic servicing of launching appliances and release gear

(1) Launching appliances must be serviced at the intervals recommended in the manufacturer's instructions or as set out in the shipboard planned maintenance program.

(2) Launching appliances must be thoroughly examined at intervals not exceeding 5 years and, upon completion of the examination, the launching appliance must be subjected to a dynamic test of the winch brake.

(3) Rescue boat release gear must be serviced at the intervals recommended in the manufacturer's instructions, or as set out in the shipboard-planned-maintenance program.

(4) Rescue boat release gear must be subjected to a thorough examination by properly trained personnel familiar with the system at each inspection for certification.

(5) Rescue boat release gear must be operationally tested under a load of 1.1 times the total mass of the rescue boat when loaded with its full complement of persons and equipment whenever overhauled or at least once every 5 years.

B.3.7 Maintenance of falls

(1) Each fall used in a launching appliance must--
   (i) Be turned end-for-end at intervals of not more than 30 months; and,
   (ii) Be renewed when necessary due to deterioration or at intervals of not more than 5 years, whichever is earlier.

(2) As an alternative to paragraph (1) of this section, each fall may--

(i) Be inspected annually; and,
(ii) Be renewed whenever necessary due to deterioration or at intervals of not more than 4 years, whichever is earlier.

SUPERVISORY PROCEDURES FOR REASONABLE CAUSE AND SERIOUS MARINE INCIDENT (POST-ACCIDENT) TESTING PASSENGER TRANSPORT/TERMINAL OPERATIONS

REASONABLE CAUSE

Definition: Drug and Alcohol testing that is required when an employee is reasonably suspected to be under the influence of drugs or alcohol.

PROCEDURE

When a supervisor has a reasonable belief that an employee may be under the influence of alcohol or drugs, based on specific, articulable observations concerning the appearance, behavior, speech, body odors or performance indicators of the employee (where practicable, this belief should be based on the observation of the individual by two persons in supervisory positions), the supervisor must:

- **You must immediately contact the Director of Terminal Operations at (646) 772-9516. The Director of Terminal Operations will verify that the supervisor can articulate signs or symptoms that are the cause of the suspicion. (A back-up contact will be the Assistant Commissioner at 917/846-1181).**

- **The Director of Terminal Operations will write down what the supervisor is saying on the "Written Record of Observations Leading To A Reasonable Suspicion Test" form.**

- **The Director of Terminal Operations will sign the form and the supervisor who has made the observation must proceed to the office of the Director of Terminal Operations as soon as possible to sign the form.**

- **The Director of Terminal Operations will immediately call the vendor and state that we need a reasonable suspicion test to be conducted and a collector to come to the site designated by the Director of Terminal Operations.**

- **The supervisor who has made the "reasonable cause" determination must speak to the employee and the employee must be ordered to submit to the test. The employee must be informed that a refusal to test, or leaving the scene, will be considered a "positive" and carry the same consequences as a positive test result. The employee will be tested for both alcohol and drugs in all cases of reasonable suspicion.**

- **OPTION: Escorting the employee to a collection site. Where possible, and between the hours of 9am and 2pm, a supervisor can escort the employee to a vendor-affiliated collection clinic that performs both drug and alcohol tests. First, the Director of Terminal Operations will contact Angela Bongiorno, Director of Administration at 718/447-6513/5845 to obtain a "chain of custody and control" form. Ms. Bongiorno will complete portions "c", "d" and "e" of the "step 1" portion of the chain of custody and control form. The supervisor will take the employee and the form to the collection site; remain with the employee until the drug and alcohol testing is completed; and then escort the employee back to the DOT work site.**

By the next business day following the reasonable cause test, the DOT Designated Employer Representative (DER) must be notified at (212) 442-7826 by the Director of Terminal Operations.

"SERIOUS MARINE INCIDENT" TESTING (POST- ACCIDENT):

Definition: Drug and Alcohol testing conducted after a "marine casualty or accident" as defined by the Coast Guard regulations.

The same procedures outlined above for "reasonable cause" will be used for "serious marine incident" testing (post-accident).

In addition, please note:

- Supervisor must order the employee(s) involved in incident to remain for testing, unless they require immediate medical attention.

- The Director of Terminal Operations will immediately call the vendor.* An employee must be assigned to stay at a land-line phone to receive a call back from the vendor to confirm our need for post accident testing and to give particular instructions to the vendor (e.g. location, number of tests to be conducted).

* In all situations requiring post accident testing, in addition to the vendor, Terminal Operations must also contact DOT's Emergency Response Center at (718) 433-3340 and ask them to contact the Human Resources regarding the accident and the need for drug testing.

- The vendor will always be brought to our site following an accident/serious marine incident.

NOTE: If an accident does not meet the criteria for "Serious Marine Incident" (Post-Accident), supervisors must still be ready at each incident/accident to make a determination of whether or not "reasonable cause" may exist. This will be the responsibility of the supervisor who reports to the accident site, or is in charge at the accident site. If the supervisor believes that "reasonable cause" may exist, the supervisor must immediately contact the Director of Terminal Operations who will verify and record the observations of the supervisor that are the cause of the suspicion.

You may call the DER AT (212) 442-7826 if you have any questions regarding the testing process. In off hours, you may contact the Emergency Response Center at (718) 433-3340 and ask them to contact Human Resources personnel regarding drug and alcohol testing and leave a return phone number.

ENERGETIX CORPORATION

REASONABLE SUSPICION TRAINING FOR DOT SUPERVISORS

DOCUMENTATION FORM OF SUPERVISOR REASONABLE SUSPICION TRAINING

"By signing below, I acknowledge that I have received, read and understand the Supervisor Reasonable Suspicion Training Manual as required by DOT regulations.

NAME (Please Print)_____

SIGNATURE _____

DATE_____

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SECTION

1.0 INTRODUCTION

The Supervisor who manages safety sensitive employees has an important part in the anti-drug and alcohol program. The Supervisor is often the first line of defense in the war of drugs in the workplace, in that he or she often is first aware that a problem may exist with an employee. When you read the Employee Training Manual, you no doubt visualized yourself as the employee subject to drug testing. Now, while reading this Supervisor Training manual, visualize yourself as being part of the management of the substance abuse program. Picture yourself as the Supervisor who has responsibilities in the implementation of the program and who has employees subject to testing working for you.

The employees are your company's most important assets, and their health, safety and emotional well-being are of paramount importance. Unfortunately, substance abuse is a major problem in America today, threatening our workplaces, our schools and our homes. Workers who abuse substances represent a real health and safety risk to coworkers and to the public, and they are less productive than their fellow drug-free workers.

In order to deter substance abuse in the workplace, your company has to put in place an anti-drug and alcohol program that includes employee and supervisor training about substance abuse. This program is required by Federal regulations issued by the U. S. Department of Transportation (DOT). It also provides a deterrent to abuse through testing. We all need to learn and be aware of the symptoms associated with substance abuse. They can include financial, marital, legal, or career-related problems. Most importantly, we need to know how a struggling individual can get help.

2.0 INSTRUCTIONS FOR SUPERVISORS

1. If you are a Supervisor who has the authority to submit safety sensitive employees for reasonable-suspicion or post-accident drug and alcohol tests, you must receive, read and understand this Supervisor Training Manual.

2. After reading the Manual, complete the Supervisor Training Quiz located at the end of the Manual and sign this form below. Attach the two together.

3. Return the completed quiz and this form to your company's Designated Employee Representative (DER) - Substance Abuse Program Manager .

Your company's DER will then convene a Supervisor training meeting to discuss the training and go over the quiz. If you are located too far away to travel to your company's DER, this will be done by telephone. If you have any questions on the training or any aspect of the anti-drug and alcohol program, please ask your DER. All questions will be kept in strict confidence.

3.0 SUPERVISOR TRAINING LEARNING OBJECTIVES

By the end of this training, you should be able to:

Objective 1: Identify the regulations that require your company to implement this program.

Objective 2: State and explain your company's substance abuse policy.

Objective 3: Define "substance abuse" and name at least four substances that are abused in America.

Objective 4: Describe the health and safety hazards associated with substance abuse.

Objective 5: List the referral and personal assistance resources available to employees.

Objective 6: Identify the role and responsibilities of the Supervisor within the anti-drug program.

Objective 7 Describe the signs and symptoms of substance abuse - by category

Objective 8: Describe the changes in an employee's behavior that indicate that he or she may need help.

Objective 9: Describe the procedure you must follow to initiate and complete reasonable suspicion drug and alcohol test

4.0 YOUR COMPANY'S SUBSTANCE ABUSE POLICY

Your company has implemented a DOT anti-drug and alcohol program for employees engaged in safety sensitive activities as defined by the DOT. Your company has declared itself a drug-free workplace, which means that the use, manufacture, possession, sale or purchase of illegal drugs on company property is prohibited and will not be tolerated. Furthermore, no employee shall report to work while under the influence of alcohol or any illegal drug. Your company further recognizes that illegal drug use is a hazard to fellow employees and the public. Your company acknowledges that substance abuse is a compulsive disease that can be cured. It strongly urges individuals who may have a substance abuse problem to seek and get help for themselves. This training identifies such resources.

5.0 WHAT IS SUBSTANCE ABUSE?

A drug is defined as any substance that produces physical, mental, emotional or behavioral changes in the user. Drug abuse is the use of a drug for other than medical purposes. Many legal, as

well as illegal, drugs are mood-altering, or psychoactive, and it is this effect that users seek. The substances that are abused the most are nicotine (tobacco-smoking or chewing), alcohol, marijuana, cocaine, and legal over-the-counter or prescription drugs. This training will primarily be concerned with illegal drugs, specifically the five drugs addressed by DOT regulations and with alcohol.

What is use versus abuse? Taking an allergesic under the guidance of a doctor is substance use, not abuse. Mainlining heroin clearly is abuse. But, is drinking a beer with dinner considered substance abuse? No. Is drinking a six-pack every night considered substance abuse? Quite possibly. The difference, therefore, between use and abuse is not always clear. Common sense is the best guide. Some substances, like PCP (angel dust) have no legal uses. Any use of PCP is illegal. On the other hand, there are legal uses of cocaine, marijuana (or THC), and amphetamines. Drug dependence is a psychological desire to feel the effects of the drug, to feel good. Drug addiction is the chemical need of the body to continue receiving the drug. Most drugs have elements of both. For example, cigarette smokers will psychologically crave a cigarette. They will also experience an actual chemical withdrawal when they quit. Substance abusers may know logically that what they are doing is destructive, yet they want and need that next "hit" or "fix", and it is a difficult cycle to break. Substance abuse is a compulsive disease, and abusers have great difficulty changing their habits.

Like drug addiction, alcoholism is a progressive disease. The body becomes increasingly dependent on the use of alcohol. This dependency can lead to uncontrollable drinking habits that interfere with normal life patterns. The progressive stages of alcoholism vary, but the following is a typical pattern:

- Social drinking and occasional use to escape tensions and frustrations
- Increased tolerance and a progressive preoccupation with alcohol - inability to stop at one drink, drinking alone and experiencing feelings of embarrassment and guilt
- Complete change of behavior toward family
- Concealment of drinking habits
- Complete dependency - drinking from morning to night

Symptoms of delirium tremens (DTs), characterized by delirium, muscle tremors, confusion and hallucinations, can occur after several years of addiction.

6.0 WHY SUBSTANCE ABUSE IS A HEALTH AND SAFETY HAZARD

Substance abusers, compared to non-users:

- are 1/3 less productive
- use 3 times more medical benefits
- are 4 times more likely to have an accident at work

- are 2 times likely to take a week's sick time per year
- are 5 times more likely to file a Workman's Compensation claim

Cocaine has killed over 100,000 persons since 1986! Substance abusers inflict a terrible burden on their families and on the companies they work for. Each abuser affects about five other people around them, lowering their well-being and productivity as well as the abuser. Substance abusers are the cause of neglect, anger, physical abuse, suspicion, mistrust, guilt, fear and sometimes financial ruin. Drug use is most prevalent among the young adults. Studies have shown that no less than 1 in 4 working males from 18 to 34 years old use marijuana at least once per month. As much as 1 in 11 use cocaine. The government estimates that $100 billion dollars is wasted in the US because of drugs each year! One more depressing statistic; on average, 15 in every 100 8th graders across the country smoke marijuana, and 5 use crack cocaine - 13 years old!

7.0 WHERE TO GET HELP

There are many resources available to those who may need help in coping with a personal problem, drug-related or not. Below are some national helpline numbers that are staffed by trained and sympathetic individuals. They are often people who experienced the same problem themselves, and got through it. Most of them operate 24 hours a day, and you do not need to give your name.

Alcohol and Drug Referral Hotline	1-800-252-6465
National Institute of Drug Abuse (NIDA)	1-800-662-4357
Drug Information Line	1-800-241-7946
Alcoholics Anonymous	1-800-344-2666
National Child Abuse Hotline	1-800-422-4453
National AIDS Hotline	1-800-342-2437
National Cocaine Hotline	1-800-262-2463
National Hepatitis Hotline	1-800-223-0179
National Runaway and Suicide Hotline	1-800-621-4000
Sexually Transmitted Diseases Hotline	1-800-227-8922
Drug and Alcohol Helpline	1-516-481-4000
Narcotics Anonymous	1-818-780-3951

Additional resources include:

a. Employee Assistance Programs (EAP) are offered by many employers today as an employee benefit. The EAP is free to the employee, and is completely confidential. Look for posted information in your workplace.

b. Professional counselors at mental health centers treat drug abusers, and the cost is usually covered by your medical benefits program.

c. Religious clerics are often trained as counselors. They are willing to listen to and help individuals, whether or not the individual is a member of their congregation.

d. Community and professional clubs (Kiwanis, Lions, Rotary, Chambers of Commerce, etc.) sometimes have referral services for community members.

e. Local clinics and hospitals have crisis lines that can be called anonymously. They may also have out-patient care.

f. Family and close friends are sometimes the best support around (provided they are not a part of the problem). However, it is important to recognize when professional help is needed. Substance abuse treatment needs a combination of medical care and emotional support.

g. Support group meetings with other people recovering from the same problem are effective in avoiding relapse.

h. Yellow Pages Look in the Yellow Pages under "Drug Abuse" for local help centers.

If your know someone who may be suffering from substance abuse, offer them your warm support and guide them to a resource to get help. With adequate professional care and loving support, recovery can be total and complete. Don't give up on someone who seems "too far gone".

8.0 WHAT WE TEST FOR

Well-publicized accidents such as the Prince William Sound oil spill or the New York subway Crash where drugs or alcohol were cited as the cause resulted in Congress passing stringent drug and alcohol testing laws. These laws resulted in Federal regulations that were issued by the U.S. Department of Transportation. As part of the substance abuse program, your company is testing for several drug types and alcohol. The list currently includes marijuana, cocaine, opiates, amphetamine and phencyclidine (PCP). The list of drug types tested may be expanded in the future if a particular drug is increasingly abused.

Drug testing is conducted through urinalysis. Alcohol testing is conducted by breath testing.

Drug testing also includes "validity" testing. The laboratory is authorized to analyze for adulterated or substituted urine. If the laboratory has determined that an employee has tampered with his/her urine specimen, the test will be reported as a "refusal to test". The consequences will be the same as if the employee tested positive.

Additional drug and alcohol information is located at the end of this Training Manual.

9.0 ROLE AND RESPONSIBILITIES OF THE SUPERVISOR

The regulations have given special responsibilities to the Supervisor of employees who are subject to DOT substance abuse programs. As you know, the program involves drug and alcohol testing

for employees and job applicants for safety sensitive positions.

The primary focus of your company's anti-drug and alcohol program is to deter the use of controlled substances and alcohol in the workplace. This program is not meant to "catch" substance abusers; the random selection rate is too low to catch all users. Instead, it is a rate that puts a minimum burden on the employee and the employer while still providing a strong deterrence to use. Most importantly, the anti-drug and alcohol program will keep substance abusers from applying for employment with your company, preserving the excellent reputation your company and the industry as a whole have.

Each employee is a unique part of your company's most valuable and important asset, the dedicated and skilled workforce. The health, safety and emotional well being of each employee are of paramount importance, for the employee as well as for fellow workers. A vital part of your role as a Supervisor is to promote and maintain the safest work environment possible. Your company recognizes this unique role of the Supervisor.

10.0 REASONABLE-SUSPICION TEST

A Supervisor must require a reasonable-suspicion drug and alcohol test of an employee, sometimes called a for-cause test, if the Supervisor suspects that the employee is using drugs or alcohol. However, there are conditions that must be satisfied before a reasonable-suspicion test can be conducted. The reasonable-suspicion test should be used carefully because if it is misused, issues of employee harassment or discrimination could be raised. However, if the circumstances dictate that a reasonable suspicion test is needed, it must be done.

For most DOT modalities, only one trained Supervisor is required to make the decision to reasonable-suspicion test an employee. That Supervisor must have received two hours of DOT Supervisor training. The reason for the test must be factually documented, giving the specific reason for the suspicion of drug use. This can include deteriorating work performance or behavior, coupled with "contemporaneous" evidence of drug or alcohol use. In other words, the employee also shows clear indication of drug or alcohol use by you finding drug paraphernalia or observing other distinct signs of use. Hopefully, you will never be put in a situation of sending a fellow worker for a reasonable-suspicion drug test. On the other hand, if you observe the signs and symptoms of substance abuse and the employee's degraded job performance, you must act.

How will you as the Supervisor know when someone is on drugs or alcohol? For drugs, you probable won't. Substance abusers are very good at hiding their drug habits. For alcohol, it may be easier, especially if the smell of alcohol is present. Most of us have witnessed at some time a person's temporary decrease in work habits, personal appearance, and attitude. These are normal occurrences in everyone's life at some point, and it does not mean that the person has started using drugs or alcohol. As a Supervisor, you need to be aware of deteriorating work performance. Something in that person's life has changed that is affecting their morale, and it warrants your attention. Do not become a "pop psychologist" or counselor. If you think the person could use some help, encourage them to call the appropriate 800 number listed in Section 7, Where to Get Help in this Training Manual.

The reason for any reasonable-suspicion test must be documented by the Supervisor on a Reasonable Suspicion Checklist (sample provided). A refusal of the safety sensitive employee to comply with a reasonable-suspicion test must be treated as if the employee tested positive.

11.0 WHEN DOES SOMEONE NEED HELP

We have all heard the claim that drug user's pupils dilate. In reality, that is not always true, and it is not necessarily evidence of drug use. Eyes dilate for many reasons. Therefore, please do not try to be a medical diagnostician. Instead, focus on an employee's changes in personal habits and work performance. Drug or alcohol use is usually the symptom of another emotional problem – typically depression. For example, if an employee's marriage is "on the rocks", he or she may turn to alcohol or drugs to temporarily escape the emotional pain. The employee's behavior will probably change enough to become noticeable to fellow workers and to supervisors. It is these changes that you can and should look for. Base your decision to get involved by asking yourself the following questions:

- ☐ Has the person recently and suddenly changed their personal hygiene and dress habits - they do not care how they look anymore?
- ☐ Has the person gained or lost a lot of weight recently?
- ☐ Does the person appear tired or complain about being tired or having no energy?
- ☐ Has the person's performance dropped, and have they lost their pride in their work?
- ☐ Does the person not concentrate on work?
- ☐ Is the person more agitated, nervous or anxious?
- ☐ Does the person seem to have lost their self-esteem?
- ☐ Has the person been taking unnecessary risks?
- ☐ Has the person suddenly changed his or her choice of friends?
- ☐ Do you suspect that the person is stealing?
- ☐ Do you or fellow workers catch the person in silly lies?
- ☐ Does the person borrow money excessively from others and not pay them back?
- ☐ Does the person no longer seem to get along with others, is more irritable, or avoids lunch or breaks?
- ☐ Does the person spend a lot of time on the telephone?

- ☐ Has the person's absenteeism and tardiness increased recently?
- ☐ Does the person seem to disappear for unexplained lengths of time?
- ☐ Has the person's work related accident rate increased recently?
- ☐ Does the person startle easily, or have excessive mood swings?
- ☐ Does the person seem more forgetful?
- ☐ Are you aware of any changes in the person's life that could be distracting them (poor job review, marital problems, financial difficulty, children problems, etc.)?

If the answer is yes to many of these questions, that person is vulnerable to the temptations of substance abuse. However, there are other reasons for the above to occur, such as diabetes, high blood pressure, thyroid disease, psychiatric disorders, emotional problems, and certain heart conditions. Therefore, a person who displays the above changes is not necessarily a drug user but something has changed that warrants your attention as their Supervisor. Reasonable-suspicion drug and alcohol tests have the potential of being construed as employee harassment or discrimination if not handled correctly.

To substantiate the need for a reasonable suspicion test, you will need to base your decision on specific contemporaneous, articulable observations concerning behavior, appearance, speech and/or body odors.

12.0 HOW TO EXECUTE THE TEST

The Reasonable Suspicion (RS) test can be executed in a way that precludes the interpretation by the employee as harassment by the supervisor. The key to successfully implementing the Reasonable Suspicion test is to follow the steps listed below:

- Observe signs and symptoms; document on the RS checklist (the symptoms make present themselves over a few weeks (drugs) or a few minutes (alcohol intoxication)

- You need a contemporaneous symptom (something that happens the day you determine the need to test) that occurs before you can complete the checklist

- If in doubt, call your DER or Energetix to confirm your analysis.

- Call the employee in for a face to meeting in a private setting. Explain what you have observed and that you are obligated under Federal law and your company policy to initiate RS testing under these conditions. THE MEETING SHOULD TAKE NO MORE THAN 10 MINUTES.

- Arrange for the employee to be taken to the collection site (or on-site location) DO NOT LET

THE EMPLOYEE DRIVE HIM/HERSELF TO THE SITE. ALWAYS CONDUCT AN ALCOHOL AND DRUG TEST. It is not your responsibility to determine what substance the employee is actually using.

- Inform the DER that the tests were performed. The alcohol test result will be immediately available. The drug test result will take at least 48 hours, longer if the result is positive.

13.0 HOW TO GET MORE INFORMATION

Your first resource for more information is within your company. You can either ask your Supervisor or your company's DER. The second resource is to call one of the national helplines, especially the NIDA Drug Abuse Information and Treatment Referral Line (1-800-662-HELP or 4357). NIDA has a large library of pamphlets, brochures, and videos that you can receive at no charge.

14.0 SUMMARY OF FIVE DRUG TYPES

Below is information of the five drug types that are being tested for in your company's program.

MARIJUANA

Marijuana is the most abused controlled substance after nicotine and alcohol. Marijuana and cocaine are by far the most used drugs.

Associated Terms: Grass, bone, pot, reefer, or dope. A joint is a rolled marijuana cigarette. hash is the concentrated form of marijuana made from the tops of the plant. Being high on marijuana is commonly referred to as being stoned.

Appearance: Green, like ground oregano or thyme. Personal "stashes" are usually kept in plastic ziplock sandwich bags.

How Drug is Made: Marijuana is a hemp plant that has been dried, crushed and the seeds removed before being smoked, much like tobacco. The plant was historically used to make hemp rope. It can grow in a wide variety of climates, from tropical to temperate zones. Much of the marijuana used is "homegrown" in the US.

How Drug is Taken: Usually smoked in a pot pipe, bong (water pipe) or a joint (marijuana cigarette). Has a distinctive odor when burning, like burning grass or rope.

Effects: Marijuana produces a temporary mellow euphoria or high for up to 5 hours, followed by drowsiness. Marijuana impairs concentration, learning and perceptual/motor skills. One study conducted on experienced pilots in a flight
simulator demonstrated impairment for 24 hours after the immediate high had passed (American Journal of Psychiatry, 1985).

General: Marijuana's active ingredient, THC, is prescribed in rare instances to manage the symptoms of glaucoma (painful eyeball pressure) and to suppress the nausea associated with cancer treatment (chemo-and radiation therapy). Chronic users develop tolerance to THC requiring more frequent use and higher doses to achieve the same high. It is estimated that 66 million Americans, fully one quarter of the country's entire population have tried marijuana at least once in their lives. It is the most common drug abuse after alcohol and nicotine.

COCAINE AND CRACK

Crack cocaine is the fastest-growing substance of abuse. Cocaine and marijuana are by far the most used drugs.

Associated Terms: Coke, crack, rock, snow, toot, nose candy or Lady. Lines are finely crushed cocaine powder laid out in parallel line on a flat surface. Snorting is the inhalation of the crushed cocaine powder through a tube into a nostril. Freebasing is the separation of the active ingredient from the salt base, and inhaling the resultant highly volatile fumes. Crack (or rock) is a purified form of cocaine for smoking much like freebasing.

Appearance: Cocaine - Finely-ground white powder typically stored in a small glass vials or folded glossy paper (such as used in expensive magazines). Crack - Small white chips having the appearance of slivers of soap or broken porcelain. Sold in small glass vials.

How Drug is Made: Cocaine is make from the coca bushes' leaves, most often grown in the Andean countries of South America. The leaves are processed with a variety of chemicals, including acid, and then dried to yield a white powder. Before being sold on the street, cocaine is often diluted, or cut, with other white crystalline powders, such as sugar or crushed aspirin tablets. Crack is made by further processing cocaine.

How Drug is Taken: Cocaine - Cocaine is usually finely ground with a razor blade on a flat surface such as glass, and snorted deep into a nostril through a tube. The cocaine powder is deposited on the membrane tissues of the nose and sinus, and absorbed into the blood stream. It only takes a few minutes to travel to the brain and create the high. Crack-Cocaine rocks are placed in a pipe (usually glass) and heated with a butane flame. The resultant fumes are inhaled. The onset of the high only takes seconds and is very intense. The crash, or post-high depression, is also more pronounced than for snorting.

Effects: Cocaine and crack temporarily produce an elevated mood for 10 to 20 minutes. The user then emotionally crashes and becomes severely depressed. The user then craves another dose to bring him or her up again. Chronic use will cause damage to the nasal passages, malnutrition, heart disease, and ultimately death. The user's personality will change drastically as casual use becomes chemical addiction. Crack users report that addiction occurs after only one or two episodes.

General: Cocaine is used as a topical pain killer for nasal surgery. Cocaine and crack are highly addictive psychologically and chemically. Research has discovered that an addicted animal will prefer cocaine to food, even if starved. It inhibits the release of a natural

chemical in the brain (dopamine) that produces the normal sensation of joy or pleasure. The coke user relies on the cocaine to "feel good", since his or her brain is incapable of producing dopamine, and will stay depressed until cocaine is taken again.

The vicious cycle is very difficult to break, explaining the low success rate of rehabilitation (more than 70% of treated users relapse). For addicts, only inpatient care under continuous psychological and medical supervision for at least 60 days, coupled with strong, loving support has shown to be effective. The recovered user must then never re-enter the social setting that led to the experimentation with the drug. 10% of the entire population has tried cocaine, with close to 6 million users in any given month. Crack use is growing faster than any other drug.

OPIATES

While marijuana, cocaine and PCP are specific drugs, opiates are a class of drugs. The most common opiates are raw opium, heroin, morphine and codeine.

Associated Terms: Heroin - Smack, horse, H, hard stuff, scag or scat. Mainlining is the injection of heroin (or other drugs) directly into a vein. Needle tracks are the puncture marks left by the needle usually found on the forearms or legs. Opium - Black Tar. Morphine and Codeine - Morpho, M coties and dope.

Appearance: Heroin - white to dark brown powder to tar. Opium - dark drown chunks of powder. Morphine and Codeine "legal looking" (prescription) pills, tablets and injection liquids.

How Drug is Taken: Opium is the raw product from which the other opiates are made. Opium and its derivatives are made from a specific poppy plant. The poppy grower makes vertical razor cuts in the seed pod beneath the flower while it is still in the ground. A dark fluid oozes out, and this is collected and chemically processed into raw opium. Heroin is then made by reacting the natural morphine from the raw opium with acetic acid. The poppy plant is indigenous to the Middle Eastern countries of the Mediterranean, through it has been transplanted to other sub-tropical areas of the world. The active ingredients of opium have been manufactured synthetically and this is the opiate form found in many legally-prescribed narcotic opiates.

How Drug is Taken: Heroin - heroin is taken by turning it into a liquid through heating it in a spoon over a candle, drawing it up into a syringe, and injecting it into a vein ("mainlining"). Opium - Raw opium is mostly smoked, as was done in the "opium dens" of the East. It can also be eaten.

Morphine and Codeine - Morphine and codeine are usually taken as abused prescribed drugs. They can be taken orally or injected. Abuse of morphine and codeine are limited by drug accessibility, making use more prevalent in the health care professions, versus other sectors of society.

Effects: All of the opiates bring on a short-lived state of euphoria, which passes and leaves

the user craving another dose. Within minutes of injection, heroin changes to morphine, and later codeine in the body. Therefore, a heroin user will test positive for both codeine and morphine.

General: Public awareness of heroin as a hard drug is widespread, though it is not generally recognized that most heroin users are ordinary people who have become addicted. Heroin is primarily an urban drug, though its use has spread to smaller mid-continent communities. Since heroin is primarily injected intravenously, there is an additional risk of infection, especially by the HIV virus (AIDS), when hypodermic needles are shared. Abuse of legally prescribed opiate drugs is growing fastest in the health care professions. A typical dose of heroin costs $10, with an addicted user requiring close to $100 per day.

AMPHETAMINE AND METHAMPHETAMINE

Amphetamine and methamphetamine are manufactured legally and are prescribed for medical conditions. They are also heavily controlled substances.

Associated Terms: Speed, co-pilot, uppers, dexies, black beauties, pep pills, bennies, meth, and wake-up are among the terms used to describe amphetamine and methamphetamine. The trade names include benzedrine, biphetamines, dexedrine, synatan, appetrol, methedrine and desoxyn.

Appearance: These drugs are in the form of pills, tablets or caplets of varying colors, shapes and sizes.

How Drug is Made: These drugs are most often legally made by pharmaceutical companies and controlled by the FDA. They are completely synthetic drugs developed for legally prescribed uses, such as appetite suppression, narcolepsy (involuntary sleep), and as antidepressants.

How Drug is Taken: They are nearly always taken orally.

Effects: Abused primarily to increase alertness, these drugs cause symptoms often related to excessive caffeine intake, such as restlessness and insomnia. Amphetamines cause increase heart rate, which can result in heart attacks. Amphetamines and methamphetamine are addicting.

General: These drugs are typically used to ward off fatigue over long periods of time. They are not normally used as "recreational drugs"; they are not as psychoactive or mood altering as marijuana, cocaine or opiates. However, strong diet pills are abused by millions of people, who develop mild addictions to them, diminishing job productivity.

PHENCYCLIDINE (PCP)

There is no legal use of PCP. All PCP is manufactured in illegal home labs. PCP abuse is a fraction of that of cocaine or marijuana, but its violent effects are devastating. Washington DC, Los Angeles, and New Orleans have the highest incidences of PCP use.

Associated Terms: Angel dust, crystal, rocket fuel, dummy dust, krystal joints, KJs, DOA, zombies, super cools.

Appearance: Pure PCP is a white crystalline powder that dissolves easily in water. It is also sold as tablets of many colors.

How Drug is Made: These drugs are completely illegal. There is no legal use of PCP. Originally designed for veterinary purposes (the "horse pill"), PCP is no longer manufactured legally.

How Drug is Taken: PCP is added to mint leaves, parsley or marijuana and smoked as krystal joints or KJs. Liquid PCP can be injected, and is also applied with an eye dropper directly to the eyes. It can even be absorbed directly through the skin.

Effects: The user experiences a false sense of unlimited power and strength, while losing basic motor skills and becoming confused and disoriented. An expert varsity swimmer under the effects of PCP jumped into a pool, could not recall how to swim and drowned. Hallucinations are common, as is schizophrenic and unexplainable violent behavior.

General: PCP has been shown to be addictive, though it is not a common drug of abuse. It appeared on the West Coast in the Seventies and is used primarily with marijuana. Users sprinkle angel dust or spray PCP solutions on a joint and smoke it, with violent results.

ALCOHOL

Alcohol abuse is the most common and the most costly form of drug abuse. Mixing alcohol with other drugs is dangerous. It intensifies the effects of other depressants, making an overdose much more likely. The results of mixing other drugs with alcohol are unpredictable and can be deadly!

Slang Terms: Booze, juice, sauce, brew, vino.

Appearance and Source: Liquid consumed as a beverage - wine, beer and hard liquors.

How Alcohol is Taken: Swallowed.

Effects: In general, a 12 oz. beer (5% alcohol), a 5 oz. glass of wine (12% alcohol), and a 1 1/2 oz. shot of 80 proof liquor (40% alcohol) all contain the same amount of alcohol. The effects of alcohol consumption are: greatly impaired driving ability; slurred speech,

bloodshot/watery eyes, reduced coordination and reflex action; impaired vision and judgment;

inability to divide attention; lowers inhibitions; "hangovers" from over-indulgence include: headaches, unsettled digestion, nausea, unclear thinking, aching muscles, dehydration

Attachment 1

SUPERVISOR TRAINING QUIZ

_____
Name Social Security Number or Employee Number

_____
Company / Date

1. Of the five drugs listed below, name the one drug that is not tested under this program:

   a. PCP b. Marijuana c. Valium d. Crack e. Opium

2. Our company policy for a positive test result or refusal to test is:

   _____

3. The health and safety hazards associated with substance abuse include:

   a. Increased risk of an accident
   b. Higher likelihood of family problems
   c. Lower productivity
   d. a., and c. only
   e. a., b. and c

4. The referral and personal assistance resources available to employees include:

   a. Employee Assistance Programs (EAP)
   b. Local hospitals
   c. Yellow Pages under "Drug Abuse"
   d. Support group meetings
   e. All of the above

5. True or False: After an employee is randomly selected for testing, he or she will not be selected again until all of the other employees in that company have been tested.

   True False

6. The Medical Review Officer's (MRO) primary role is to:

   a. Review all test results
   b. Conduct Employee and Supervisor Training
   c. Verify positive results
   d. a. and c. only
   e. a., b. and c.

Attachment 1 (Continued)

SUPERVISOR TRAINING QUIZ

Name _____ Social Security Number or Employee Number

_____ Company/Date

7. True or False: The six types of drug tests are pre-employment, random, reasonable-suspicion, post-accident, return-to-duty and follow-up.

True False

8. Identify **your** company's internal Anti-drug and alcohol Manager.

_____

9. All of the items below, except one, are used to help prevent the occurrence of incorrect drug test results. Which one is not used?

a. Blind samples
b. GC/MS confirmation of all positives
c. Verification of all results by a qualified Medical Review Officer (MRO)
d. Chain-Of-Custody Form
e. Fingerprinting

10. Before a Supervisor can require an employee to submit to a reasonable-suspicion drug test, the following criteria must be satisfied:

a. The Supervisor must have received Supervisor Training.
b. The Supervisor must document that the decision to test the employee is reasonable and articulate, and based of specific contemporaneous physical, behavioral or performance indicators of probable drug use.
c. a. and b.

Attachment 1 (Continued)

SUPERVISOR TRAINING QUIZ

Name _____ Social Security Number or Employee Number

_____ Company/Date

11. An employee fails to provide a urine specimen within the three hour period. He must:

a. report back to work
b. be tested again
c. be sent to a physician for an exam
d. do nothing

12. True or False: If a Supervisor hears that a safety sensitive employee was a heavy smoker of marijuana while in high school ten years ago, this is sufficient suspicion to require that employee to submit to a reasonable-suspicion drug test.

True False

13. True or False: A Supervisor must have a contemporaneous event in addition to historic events prior to asking an employee to undergo a reasonable suspicion test.

True False

Energetix

ENERGETIX CORPORATION

DOT REASONABLE SUSPICION/CAUSE OBSERVATION CHECKLIST

COMPANY: _____
NAME: _____ DEPT: _____

This checklist is intended to assist a supervisor in referring a person for reasonable suspicion/cause drug and alcohol testing. Has the employee manifested any of the following signs/symptoms?

QUALITY & QUANTITY OF WORK

____Clear refusal to do assigned tasks
____Significant increase in errors
____Repeated errors in spite of increased guidance
____Reduced quantity of work
____Inconsistent "up and down" quantity or quality of work
____ Behavior that disrupts work-flow
____Procrastination on significant decisions or tasks
____More than usual supervision necessary
____Frequent, unsupported explanations for poor work performance
____Noticeable change in written or verbal communication

GENERAL JOB PERFORMANCE

____Excessive unauthorized absences
____Excessive authorized absences
____Excessive use of sick leave
____Frequent Monday/Friday absence or other pattern
____Excessive extension of breaks or lunch
____Frequently leaves work early
____Increased concern about, or actual incidents of safety offenses involving the employee
____Experiences or causes job accidents
____Major change in duties or responsibilities
____ Interferes with or ignores established procedures
____ Inability to follow through on job performance recommendation

INTERPERSONAL WORK RELATIONSHIPS

____Significant change in relations with co-workers, supervisors, others
____Frequent or intense arguments
____ Verbal abusiveness
____Physical abusiveness
____Persistently withdrawn or less involved with people
____Intentional avoidance of supervisor
____Expressions of frustration or discontent
____Change in frequency or nature of complaints
____Complaints by Co-workers or subordinates

____Unusual sensitivity to advice or critique of work

____Unpredictable responses to supervision
____Passive-aggressive attitude or behavior, doing things behind your back
____Cynical, distrustful comments

PERSONAL MATTERS

____Changes in or unusual personal appearance (dress, hygiene, etc.)
____Changes in or unusual speech (incoherent, stuttering, loud, slurred)
____Changes in or unusual physical mannerisms (gestures, posture)
____Changes in or unusual facial expressions
____Engages in detailed discussions about death, suicide or harming someone
____Increasingly irritable or emotional
____Persistently boisterous or rambunctious
____Unpredictable or out of context displays of emotions, unusual fears
____Lacks appropriate caution
____Engages in detailed discussion about obtaining or using drugs and/or alcohol
____Has personal relationship problems (spouse, children, in-laws, girl/boyfriend)
____Makes unfounded accusations toward others, i.e., has feelings of persecution
____Secretive or furtive
____Memory problems (difficulty recalling instructions, data, past behaviors)
____Frequent colds, flu or other illnesses
____Comes to work with alcohol on breath
____Excessive fatigue
____Temper tantrums or angry outbursts
____Demanding or inflexible
____Major change in physical health, disorientation
____Impaired coordination or motor skills
____Stealing from others - borrowing money constantly
____Lying

CONTEMPORANEOUS EVENT:

_____

_____

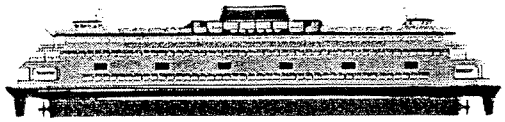
You will need multiple signs and a **contemporaneous event (a sign that occurs that causes you to test today)** to initiate a test. Make note of date and time of each incident. Obtain concurrence of DER or second supervisor (optional) and record their signature as noted.

Signature of #1 Supervisor _____

DATE: _____

Signature of DER or #2 Supervisor (OPTIONAL)_____

DATE: _____



Staten Island Ferry Crew Safety Manual

Rev: 23 Mar 04

Table of Contents

I. INTRODUCTION

As Staten Island Ferry employees, we provide a vital transportation service for the City of New York. The following training information is provided as a guide for maintaining each Staten Island Ferry employee's level of readiness during normal operations and emergency situations.

STANDARD OPERATING PROCEDURES

All vessel crews and dock personnel should be readily familiar with the NYC DOT Staten Island Ferry SOP for their respective job position.

TRAINING AND DRILLS

General:

- Drills must, as far as practicable, be conducted as if they were an actual emergency.
- Every crew member must participate in the abandon ship drill and fire drill held.
- Regulations and information listed below can be found in 46 CFR Part 199.

RESCUE BOAT DRILLS

Must Include:

- Summing persons onboard to muster stations with the PA announcement "All hands report to station # 1" (for NYE rescue) or "All hands report to station # 3" (for SIE rescue), ensuring that the persons onboard are made aware of the rescue operation.
- Reporting to stations and preparing for duties described in the muster list for that class of vessel.
- Checking that persons involved are properly dressed out.
- Lowering of at least one lifeboat after any necessary preparation for launching.
- As far as is reasonable and practicable, rescue boats must be launched and maneuvered in the water every month. All rescue boats must be launched at least once every 3 months.
- Emergency lighting for all mustering and rescues must be tested at each drill.

FIRE DRILLS

Fire Drills must, as far as practicable, be planned with due consideration given to the various emergencies that may occur for this class of ferry.

Must Include:

- Reporting to stations and preparing for the duties described in the muster list for the particular fire emergency being simulated.
- Starting of fire pumps and the use of two jets of water to determine that the system is in proper working order.
- Checking the relevant communications equipment.
- Checking the operation of water tight doors, fire screen doors and fire dampers and main inlets and outlets of ventilation system in the drill area.
- Checking the necessary arrangements for subsequent abandonment of the vessel.

ONBOARD TRAINING AND INSTRUCTION

Onboard training in the use of the vessels' lifesaving appliances and fire extinguishing appliances must be given as soon as possible.

- Crew must be instructed in the use of the vessel's lifesaving and fire extinguishing appliances in the same interval as the drills.
- Individual units of instruction may cover different parts of the vessel's life saving and fire extinguishing appliances, but all the vessel's appliances must be covered within any period of two months.

Every crew member must be given instructions that include, but are not limited to –

- Operation and use of vessel's inflatable liferafts;
- The problems of hypothermia, first aid treatment for hypothermia, and other appropriate first aid procedures;
- Any special instructions necessary for use of the vessel's lifesaving appliances in severe weather and sea conditions;
- The operation and use of fire extinguishing appliances.

RECORDS

When drills and musters are held, details of abandon ship drills, fire drills, drills of other lifesaving appliances, and onboard training must be recorded in the vessel's official logbook.
Entries must include –

- The date and time of the drill
- The survival / rescue craft and fire extinguishing equipment used in the drill. Identification of inoperative equipment and the corrective action taken.
- Identification of crew members participating in the drills or training session.
- The subject of the onboard training.
- If a full muster or training session is not held at the appointed time, an entry must be made in the logbook stating that circumstances and the extent of the muster, drill or training session held.

II. COMMUNICATIONS

EMERGENCY SIGNALS

Emergency signals listed in the vessel's Station Bill will be utilized to muster and alert all crew members to report to their assigned stations fully prepared to perform their assigned duties according to the muster list. Each crew member should be familiar of their responsibilities listed in on the vessel's Station Bill.

General alarm controls are located in the pilot houses and control room. It is operated by lifting the knob on the end of the handle and swinging the handle to the right to ring the general alarm.

The ship's whistle controls are located in the pilothouse and are operated electronically by controls in front of the steering station or manually by pulling the pull cord/lever directly above the steering station.

The Public Address (PA) controls are located in the pilot house. It is operated by depressing the power switch ON and by placing the operation mode switch to either ALL public spaces or a specific station on the panel; pick up the hand set; depress the button on the hand set; and with your mouth @ 6", speak clearly and slowly into the mouthpiece. Manuals for each vessel's specific PA system are located in the pilot house.

The fire and emergency signal will be one (1) continuous blast of the ship's whistle for a period of at least 10 seconds followed by a secondary whistle signal to designate the deck of the emergency as follows:

Engine room	1 short blast
Main deck	2 short blasts
Saloon deck	3 short blasts
Bridge deck	4 short blasts
Hurricane deck	5 short blasts

These whistle signals will be followed by the same signal on the general alarm.

The man overboard signal will be passed over the PA system using the following phrase:

"All crewmembers report to station # 1" – Rescue from the NYE of the vessel using boat # 1 or 2.
"All crewmembers report to station # 3" – Rescue from the SIE of the vessel using boat # 3 or 4.

Additional signals during rescue boat operations:

Launch the rescue boat:	One short blast of the ship's whistle / alarm
Retrieve the rescue boat:	Two short blasts of the ship's whistle / alarm
Secure the rescue boat:	Three short blasts of the ship's whistle / alarm.

Abandon Ship signal will consist of seven (7) short blasts of the ship's whistle followed by one long blast of the ship's whistle. This will be followed by the same signal on the ship's general alarm.

Secure From Drill signal will consist of three (3) short blasts of the ship's whistle followed by the same signal on the ship's general alarm.

CREW COMMUNICATIONS

There are numerous means of primary and secondary communication onboard each vessel.

- Crew Radios: Distributed to crew when reporting onboard.
- Public Address system: controlled from each pilot house. PA will override automated message system.
- Automated Announcement System (currently only on Kennedy Class): automated messages for standard procedures. Located and operated from PA system module. Scroll to desired message and press play. Over-ridden by PA system.

- Intercom System (currently only on Kennedy class vessels): Intercom system with stations at Pilot houses, control room and each main deck ends.
- Sound-powered phones: Located at various key stations throughout the vessel. To operate turn the station indicator witch to the desired station you are trying to reach. Turn the handle on the side of the phone to ring the bell at the designated station. Press the button on the hand-set to speak and listen.
- Deck Buzzers: Main deck buzzers are located at each main deck end. Press button to ring opposite end's pilot house and then use S/P phones. Three sets of three buzzes signals a "man-overboard"
- Matron alarm: Located in the ladies room and signals both pilot houses of an emergency situation in the ladies room.
- Talk-back system (Barberi Class only): Located throughout the vessel at various key locations (rescue boat stations, pilot houses, locker rooms, EDGR, control room, upper embarkation level, and hurricane deck). Operation is as follows: (1) depress the button (or toggle switch) in the box below the PA speaker, (2) speak into the direction of the speaker, (3) A light will illuminate on the pilot houses PA system control panel to signal which talk-back station is being utilized, (4) Pilot house will position to illuminated station and communication will be open.

III. INTRODUCTION TO FIREFIGHTING

HOW FIRES START:

Fire is a **chemical reaction** involving rapid oxidation or burning of a fuel. It needs three elements to occur.

FUEL - Fuel can be any combustible material - solid, liquid or gas. Most solids and liquids become a vapor or gas before they will burn.

OXYGEN - The air we breathe is about 21 percent oxygen. Fire only needs an atmosphere of at least 16 percent oxygen.

HEAT - Heat is the energy necessary to increase the temperature of the fuel to a point where sufficient vapors are given off for ignition to occur.

Chemical reaction - A chain reaction can occur when the three elements of fire are present in the proper conditions and proportions. Fire occurs when this rapid oxidation or burning takes place.
Take any one of these factors away, and the fire cannot occur or will be extinguished if it was already burning.

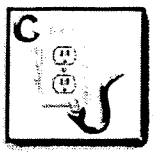
HOW FIRES ARE CLASSIFIED

CLASS A

Ordinary combustibles or fibrous material, such as wood, paper, cloth, rubber and some plastics.

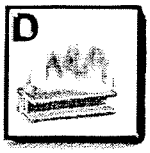
CLASS B

Flammable or combustible liquids such as gasoline, kerosene, paint, paint thinners and propane.



CLASS C

Energized electrical equipment, such as appliances, switches, panel boxes and power tools.



CLASS D

Certain combustible metals, such as magnesium, titanium, potassium and sodium. These metals burn at high temperatures and give off sufficient oxygen to support combustion. They may react violently with water or other chemicals, and must be handled with care.

HOW TO PREVENT FIRES

Class A: Ordinary combustibles:

- Keep storage and working areas free of trash. Place oily rags in covered containers.

Class B: Flammable liquids or gases:

- Don't refuel gasoline-powered equipment in a confined space, especially in the presence of an open flame such as a furnace or water heater.
- Don't refuel gasoline-powered equipment while it's hot.
- Keep flammable liquids stored in tightly closed, self-closing, spill-proof containers. Pour from storage drums only what you'll need.
- Store flammable liquids away from spark-producing sources.
- Use flammable liquids only in well-ventilated areas.

Class C: Electrical equipment:

- Look for old wiring, worn insulation and broken electrical fittings. Report any hazardous condition to your supervisor.
- Prevent motors from overheating by keeping them clean and in good working order. A spark from a rough-running motor can ignite the oil and dust in it.
- Utility lights should always have some type of wire guard over them. Heat from an uncovered light bulb can easily ignite ordinary combustibles.
- Don't misuse fuses. Never install a fuse rated higher than specified for the circuit.
- Investigate any appliance or electrical equipment that smells strange. Unusual odors can be the first sign of fire.
- Don't overload wall outlets. Two outlets should have no more than two plugs.

Class D: Flammable metals:

- Flammable metals such as magnesium and titanium generally take a very hot heat source to ignite; however, once ignited are difficult to extinguish as the burning reaction produces sufficient oxygen to support combustion, even under water.
- In some cases, covering the burning metal with sand can help contain the heat and sparks from the reaction. Class D extinguishing agents are available *(generally as a dry powder in a bucket or box)* which can be quite effective, these agents are carried by the FDNY.
- Pure metals such as potassium and sodium react violently *(even explosively)* with water and some other chemicals, and must be handled with care. Generally these metals are stored in sealed containers in a non-reactive liquid to prevent decay *(surface oxidation)* from contact with moisture in the air.
- White phosphorus is air-reactive and will burn/explode on contact with room air. It must be kept in a sealed container with a non-reactive solution to prevent contact with air.
- All of these materials are uncommon at the Staten Island Ferry.

HOW TO EXTINGUISH SMALL FIRES

Class A: Ordinary combustibles can be extinguished by cooling the material below its ignition temperature and then soaking the fibers to prevent re-ignition.

Use pressurized water, foam or multi-purpose *(ABC-rated)* dry chemical extinguishers. DO NOT USE carbon dioxide or ordinary *(BC-rated)* dry chemical extinguishers on Class A fires.

Class B: Extinguish flammable liquids, greases or gases by removing the oxygen, preventing the vapors from reaching the ignition source or inhibiting the chemical chain reaction.

Foam, carbon dioxide, ordinary *(BC-rated)* dry chemical, multi-purpose dry chemical, and halon extinguishers may be used to fight Class B fires.

Class C: Extinguish energized electrical equipment by using an extinguishing agent that is not capable of

conducting electrical currents.

Carbon dioxide, ordinary *(BC-rated)* dry chemical, multi-purpose dry chemical and halon* fire extinguishers may be used to fight Class C fires. DO NOT USE water extinguishers on energized electrical equipment.

** Even though halon is widely used, EPA legislation is phasing it out of use in favor of agents less harmful to the environment.*

Class D: Extinguish combustible metals such as magnesium, titanium, potassium and sodium with dry powder extinguishing agents specially designated for the material involved. In most cases, they absorb the heat from the material, cooling it below its ignition temperature.

Note: Multipurpose *(ABC-rated) chemical* extinguishers leave a residue that can harm sensitive equipment, such as computers and other electronic equipment. Because of this, carbon dioxide or halon extinguishers are preferred in these instances because they leave very little residue.

ABC dry powder residue is mildly corrosive to many metals.

HOW TO IDENTIFY THE PROPER FIRE EXTINGUISHER

All ratings are shows on the extinguisher faceplate. Some extinguishers are marked with multiple ratings such as AB, BC and ABC. These extinguishers are capable of putting out more than one class of fire.

Class A and B extinguishers carry a numerical rating that indicates how large a fire an experienced person can safely put out with that extinguisher.

Class C extinguishers have only a letter rating to indicate that the extinguishing agent will not conduct electrical current. Class C extinguishers must also carry a Class A or B rating.

Class D extinguishers carry only a letter rating indicating their effectiveness on certain amounts of specific metals.

HOW TO USE A PORTABLE FIRE EXTINGUISHER
Remember the acronym, "P.A.S.S."—

P	**Pull** the Pin.
A	**Aim** the extinguisher nozzle at the base of the flames.
S	**Squeeze** trigger while holding the extinguisher upright.
S	**Sweep** the extinguisher from side to side, covering the area of the fire with the extinguishing agent.

HOW TO INSPECT FIRE EXTINGUISHERS

Know the locations of the fire extinguishers in your work area.

Make sure the class of the extinguisher is safe to use on fires likely to occur in the immediate area.

Check the plastic seal holding the pin in the extinguisher handle. Has the extinguisher been tampered with or used before? Report any broken/missing seals/pins to your supervisor. Work orders will be

submitted for corrective action.
Look at the gauge and if possible, feel the weight. Is the extinguisher full? Does it need to be recharged?

- Water, some foam, and dry chemical extinguishers have gauges indicating the pressure inside the extinguisher. The pressure needle should be in the "green" area *(generally 100-175 lbs., depending on the type of agent)*.
- CO_2 *(carbon dioxide)* extinguishers are *high-pressure* cylinders with pressures ranging from 1500 lb to 2150 lb. These extinguishers DO NOT have gauges and must be weighed by FMF staff to determine the amount of contents remaining.

Make sure the pin, nozzle and nameplate are intact.

THE APPEARANCE OF DIFFERENT TYPES OF EXTINGUISHERS:

Generally, you can tell with a glance which type an extinguisher is hanging on the wall or bulkhead, or in the cabinet, just by looking at its shape. Check the labels of the extinguishers in your area and note the color and shape/size of the extinguisher. This may help if someone runs in to help you fight a fire with the WRONG extinguisher *(i.e. water on an electrical fire)* - you can STOP him or her before they are injured or make matters worse!

ABC-rated multipurpose dry powder extinguishers are the most common at the Staten Island Ferry. They are almost always RED in color and have either a long narrow hose or no hose *(just a short nozzle)*. These extinguishers are very light *(5-25 lbs total weight)*

CO_2 *(carbon dioxide)* extinguishers are generally red have a LARGE "tapered" nozzle *(horn)*, are VERY HEAVY *(15-85 lbs.)* - These are all high-pressure cylinders. Care should be used **not to drop** a CO_2 cylinder; CO_2 cylinders do not have a pressure gauge - they must be weighed to determine the amount of contents. Be sure to hold a CO2 by the insulated handle when discharging. CO2 extinguishers should always be "grounded" to the deck when be discharged.

FIRE FIGHTING PROCEDURES

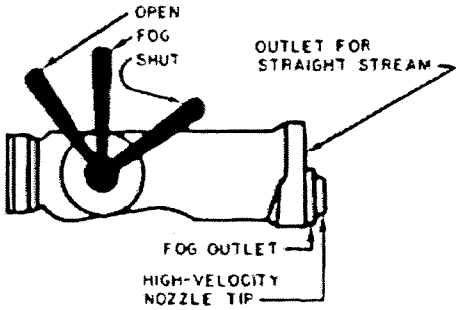
- Notify the pilot house immediately
- De-energize any electrical circuits at the scene and/or call engine room to secure the power.
- Secure / Activate ventilation as necessary.
- DO NOT ENTER any non-ventilated space.
- Check all doors for heat and smoke before entering.
- Break out F/F equipment and fight fire as per Mate or Person in Charge.
- Check and cool as necessary all surrounding areas within the fire boundaries.
- When extinguished, set a re-flash watch and check all adjoining compartments on all six sides.

IV. VESSEL FIREFIGHTING EQUIPMENT

KENNEDY CLASS

HOSE STATIONS:
There are a total of 24 – 50ft. hose stations onboard the Kennedy class vessels.

- Stations #23 - #24 are 1½" stations are located in the engine room. Each 1½" hose station has its own 4ft. applicator.
- Stations #1 - #22 are 2½" stations.
- 12' Low-Velocity Fog Applicators are located (1) main deck SIE, Bklyn side (#18), (2) Saloon deck amidships, NJ side (#9). Each station is fitted with a three-position All-Purpose" fire nozzle.



There are NYFD shore hook-ups fittings located on each end of the main deck at stations #12 and #19. The NYFD can utilize these hook-up points to pressurize the vessel's firemain system to provide firefighting water to the vessel's fire-stations utilizing the NYFD firepumps.

VEHICLE DECK SPRINKLER SYSTEM:
The overhead sprinkler system services the vehicle lanes. It is activated from the SIE entrance to engine room. The system is fitted with 6 sprinkler zones. Each zone is activated by opening valves labeled #1 - #6. Valve #1 activates NYE, with valves #2 - #6 activating zones working aft towards SIE.

PORTABLE EXTINGUISHERS:
Numerous dry-chemical and CO2 portable fire-extinguishers are stationed throughout the vessel; on deck and in all machinery spaces and pilot houses.

FIXED FIREFIGHTING EQUIPMENT:
There are two fixed CO2 hose reel systems:

- NYE of machinery space in engine room
- Forward (NYE) motor room

FIXED CO2 FLOODING SYSTEMS:

Engine room: Can be activated locally at engine room entrance or from the CO2 bottle storage room located in the deckhand's locker room. There is a @20 second delay before release of CO2 after activation. Alarms and flashing lights will signal in the engine room to indicate that the CO2 flooding system has been activated.

THE CO2 FLOODING SYSTEM WILL ONLY BE ACTIVATED ON ORDERS FROM THE CME OR CAPTAIN.

Operation: Engine Room controls are at the entrance to the engine room on the NYE. (1) Break glass (2) pull cylinder release handle (3) and valve release handle.

FWD AND AFT MOTOR ROOMS:
Operation: Separate controls for each forward and aft motor room bilge. The controls are located at each entrance to the individual motor rooms. (1) Break glass (2) pull cylinder release handle (3) and valve release handle.

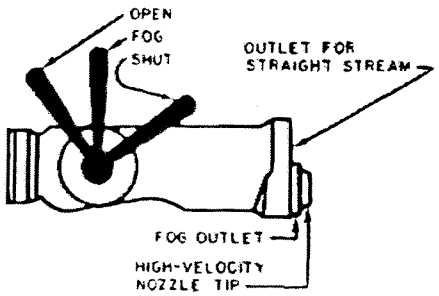
INDIVIDUAL CO2 FLOODING OF MOTORS:
Each main space generator motor (4) and each motor in the fwd (4) and aft (4) motor rooms has an individual CO2 flooding system located in the space. To activate (1) Pull the pin from the handle (2) Pull down on the CO2 release handle.

FIRE SCREEN DOORS:
FSDs should be released to minimize the spread of any vessel fire. They can be activated from 1) Pilothouse, 2) Engine Room and 3) locally in vicinity of the door.

BARBERI CLASS

HOSE STATIONS:
There are a total of 23 – 50ft. hose stations onboard the Barberi class vessels.

- Stations #1 - #4 are 1½" stations are located in the engine room. Each 1½" hose station has its own 4ft. applicator.
- Stations #5 -#19 are 2½" stations.
- 12' Low-Velocity Fog Applicators are located (1) main deck SIE, Bklyn side, (2) Saloon deck amidships, NJ side.
- Each station is fitted with a three-position "All-Purpose" fire nozzle.



There are NYFD shore hook-ups fittings located on each end of the main deck. The NYFD can utilize these hook-up points to pressurize the vessel's firemain system to provide firefighting water to the vessel's fire-stations utilizing the NYFD firepumps.

PORTABLE EXTINGUISHERS:
Numerous dry-chemical and CO2 portable fire-extinguishers are stationed throughout the vessel; on deck and in all machinery spaces, dugouts and pilot houses.

FIXED FIREFIGHTING EQUIPMENT:
There are two fixed CO2 hose reel systems:

- Center of machinery space in engine room
- Directly outside of the generator space in the engine room

FIXED CO2 FLOODING SYSTEM:

Engine room: Can be activated locally at engine room entrance or from the CO2 bottle storage room which is located behind the MSD room forward of the engine room. There is a @20 second delay before release of CO2 after activation. Alarms and flashing lights will signal in the engine room to indicate that the system has been activated.

The CO2 flooding system will only be activated on orders from the CME or Captain.

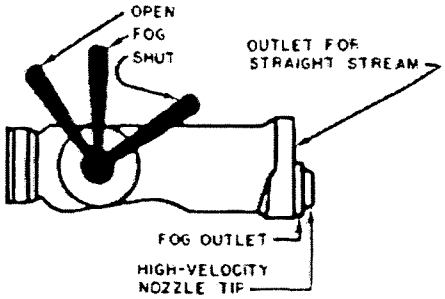
Operation: (1) Open the box at the top of the engine room main entrance (2) Pull the pin from the CO2 cylinder (3) Depress the lever down (4) Pull locking pin under hand wheel and turn wheel counter clockwise to open.

Emergency Diesel Generator Room (EDGR): Located on the NJ side of the NYE Saloon deck
Operation: (1) Open the box outside of the EDGR, (2) Pull the pin from the CO2 cylinder and (3) Depress the lever down.

FIRE SCREEN DOORS (FSD):
FSDs should be released to minimize the spread of any vessel fire. They can be activated from 1) Pilothouse, 2) Engine Room and 3) locally in vicinity of the door.

AUSTEN CLASS

There are 11 - 50ft 1-1/2" hose stations onboard the Austen class vessels. They are numbered from below decks (Sta. # 1) to the hurricane deck (Sta. #11).



NYFD shore hookup fittings are located on each end of the main deck.

- There are two 4' fog applicators located at stations #1 and #4.
- Each station is fitted with a three-position "All-Purpose" fire nozzle.

FIXED CO2 FLOODING SYSTEM:

Engine Room: Open box at top of engine room, activate ventilation and shut down stops. Break glass and pull cylinder release cable, break glass and pull stop valve cable. There is a @20 second delay before release of CO2 after activation. The system can be activated from the following locations: Engine room main deck entrance, pilothouse and locally in the CO2 bottle room.

The CO2 flooding system will only be activated on orders from the CME or Captain.

Emergency Diesel Generator Room: Located on starboard side of stack (Jersey side). To activate break glass and pull cylinder release cable and pull stop valve cable. The system can be activated from CO2 bottle storage (next compartment).

FIRE SCREEN DOORS (FSD):
FSDs should be released to minimize the spread of any vessel fire. They can be activated from 1) Pilothouse, 2) Engine Room and 3) locally in vicinity of the door.

V. LIFESAVING EQUIPMENT

Each vessel is equipped with various lifesaving and rescue equipment. Crews are required to be familiar with the proper operation of all equipment related to rescue and lifesaving operations.

AUTOMATIC EXTERNAL DEFIBRILLATORS (AED)

Locations: Lockers in each pilot house (Kennedy and Austen class), and also on Main Deck and Saloon Deck (Barberi Class only). AED training is scheduled through Mr. George Aswad on the 3rd Floor of the FMF.

FIRST AID KITS / CPR MASKS

First aid kits are located in the pilot houses. Additionally, every mate should have his own 'issued' first aid kit readily available. CPR masks are located along with the AEDs and additionally at numerous stations onboard.

LIFERINGS

Liferings are stationed on each end of the main deck, saloon deck and hurricane deck. They should be deployed in the event of a man overboard. Some liferings have a distress marker light attached by a snap hook to the lifering in order to facilitate locating the lifering's position in the hours where there is no daylight. These lights should be detached prior to being deployed during daylight hours.

ANCHOR GEAR

There are two anchors located on each end of the main deck and 300ft. of anchor line in the anchor gear locker on each end. (Austen Class has one anchor on the SI end only).
To ready the anchor for letting go: All crew members should be dressed out in a PFD, fake out the anchor line outside of the gate on the main deck, with the bitter end that will be attached to the anchor being outboard. Reeve the other bitter end through the chock and secure it to the vessel's cleat. Release and roll out the anchor and cradle to the deck edge, attach the anchor line using the anchor shackle and await the order to let go the anchor. When letting go, all non-essential crew members should be inside the cabin area.

BUOYANT APPARATUS

To launch the buoyant apparatus, under the direction of the Mate, detach the painter and any other securing lines. Ensure that there are no passengers with their heads out of the windows below and that there are no persons or vessels in the water in the rafts' path. On the Mate's order, push the buoyant apparatus overboard.

KENNEDY CLASS
There are 8 – 15 man buoyant apparatus (rafts) located on the bridge deck wings.

BARBERI CLASS
There are 20 - 22 man buoyant apparatus (rafts) located on the hurricane deck.

AUSTEN CLASS
There are 4 – 20 man buoyant apparatus (rafts) located on the hurricane deck.

INFLATABLE LIFERAFTS

Items found in the inflatable liferafts include: batteries, seasick pills hand flares, rocket flares, water bags, first aid kit, bailer, sea anchor, pump, fishing kit, paddles, drinking cups, sponges, floating knife, signal mirror, repair kit.

KENNEDY CLASS

There are two inflatable liferafts located on the bridge deck wings; one 20-man (SIE) and one 16-man (NYE) liferaft. Each has a *Hammar* hydrostatic release. For operation see Enclosure 1-3.

BARBERI CLASS

There are four 8-man and one 6-man inflatable liferafts located on the hurricane deck. Each has a *Hammar* hydrostatic release. For operation see Enclosure 1-3.

AUSTEN CLASS

There are four 6-man inflatable rafts located on hurricane deck. Each has a "hammer" hydrostatic release. For operation see Enclosures 1-3.

PERSONAL FLOATATION DEVICES – PFD (LIFEJACKETS)

KENNEDY CLASS

PFDs are located under the seats and in the bridge deck wing and horseshoe overheads. Children's PFDs are generally located fore and aft and amidships on each deck. Children's PFD are available for 10% of the total number of passengers allowed onboard. Crew PFDs for rescue operations are located in the main deck rescue gear boxes.

BARBERI CLASS

PFDs are located under the seats and in the bridge deck amidships children's PFD locker. Additional children's PFDs are generally located fore and aft and amidships on each deck. Children's PFD are available for 10% of the total number of passengers allowed onboard. Crew PFDs for rescue operations are located in the main deck rescue gear boxes.

AUSTEN CLASS

PFDs are located in bulkhead cabinets throughout the vessel. Children's lifejackets are available for 10% of the total number allowed onboard. They are located amidships on the Brooklyn side main deck and amidships on the Jersey side saloon deck.

For proper donning instructions see Enclosure 4.

RESCUE BOATS

All Barberi, Kennedy and Austen class vessels are now fitted out with twin davit rescue boats.
To launch rescue boats: On the Mate's command, remove the belly gripes, lay out the boat falls. Remove the davit stays and put the ladder over the side. Swing boat and davits over the side and lower to the rail. Screw in bilge plug and tend the painter line. Lower the boat to the water. Oarsman enter the boat and release the bow and stern hooks. Release the painter line.

Each rescue boat is outfitted with the following equipment: 4 rowing oars, 1 sweep oar, boat hook, bailer, hand ax, flashlight, and lifejackets. This gear is stowed in the rescue boat or the main deck rescue gear locker.

Lighting for all boat station is controlled from the pilot house bulkhead switches.
Search lights are controlled from the pilot house (Kennedy and Austen class) and spot lights are controlled locally at each hurricane deck wing.

Kennedy and Barberi Class: There are four rescue boats onboard the Kennedy and Barberi class vessels. Boats # 1 and 2 are on the NYE and # 3 and 4 are on the SIE.

Austen Class: There are two boats located on the Austen Class vessels. Boat #1 is on the NYE and boat #2 on the SIE.

VI. VESSEL to VESSEL TRANSFER

All Staten Island Ferry crews should be familiar with the current directive concerning vessel to vessel transfer. Below is a brief synopsis of the evolution.

DISABLED VESSEL PROCEDURES

Rescue vessel (RV) will approach disabled vessel (DV) and pass double headlines. DV will secure lines on their cleats. RV will pass safety net lines to DV and DV crew will secure them to the vessel's padeyes. RV will then pass the gangway to the DV and DV crew will secure the gangway lines to the vessel's padeyes. Crew will conduct crowd control and ensure that all passengers have properly donned PFDs.

RESCUE VESSEL PROCEDURES

RV will proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to the DV. Crew will secure double headlines on the vessel's cleats and will ready heaving lines for passing. They will secure safety nets to the vessels padeyes. Ready heaving lines for passing safety net. Ready the gangway for launching to DV. Upon rendezvous with the DV, pass and secure the headlines, pass the safety net, pass the emergency evacuation gangway. As passengers come aboard supply any first aid or assistance as necessary.

VII. SIGNAL "52" BOMB THREAT

All Staten Island Ferry employees should be readily familiar with the procedures and directives concerning anti-terrorism. In summary:

FERRY BOAT CREW RESPONSE

Normal Threat Conditions

- Captain briefs crew to be especially alert for suspicious persons or packages.
- All doors and hatches that can be locked, WILL be locked, and checked by the Mate.
- Mates will ensure deckhands patrol their stations.
- Mate will notify the Captain of anything out of the ordinary.

Bomb Threat (Ferry at Terminal)

- Captain will be informed by FTS via "signal 52" code on Ch. 19 and by messenger.
- No shipboard radio transmissions will be made, only SP phones and PA talkback.
- Mate will alert onboard NYPD and crew will commence search of vessel and report the results to the Mate (Mate to Captain).

Suspicious Package Found (Ferry at Terminal)

- Do not touch the package
- Notify the Captain
- Secure the area
- Off load all passengers
- Package will be removed by the NYPD Bomb Squad

No Suspicious Package (Ferry at Terminal)

- Boat will be cleared by NYPD, then...
- Captain informs USCG via Ch.14, NYPD (Ch17) and FTS (Ch 19) using "Signal 52 Clear" code words.
- Captain coordinates with FTS as to boarding passengers.

Bomb Threat - Underway

- No shipboard radio transmissions will be made, only SP phones and PA talkback.
- Mate will alert onboard NYPD and crew will commence search of vessel and report the results to the Mate/CME and then to the Captain.

Suspicious Package Found (Underway)

- Do not touch the package.
- *Secure the area and evacuate all passengers as far away as possible.*
- *Captain proceeds to the nearest terminal and expeditiously offload all passengers or as directed by USCG.*
- NYPD Bomb squad will remove package.

Bomb Explosion

- Captain informs harbor Ch. 13, USCG (Ch14), NYPD (Ch17) and FTS (Ch19).
- Inform passengers via PA to minimize panic.
- Mate and DH's commence inspection of vessel for additional device, vessel damage and personnel injuries.
- If tugboat assistance is needed, request such on Ch's 13, 14 and19.
- Make anchor preparations as necessary.
- Above decks crew on deck administering First Aid and performing vessel damage control and fire fighting.
- Captain coordinates course of action with USCG and NYPD.
- Update FTS on plans for proceeding to nearest terminal.
- Continually update USCG and NYPD as to extent of damage.

Vessel Countermeasures

- Relative Wind Direction
- Ventilation
- Fire hoses
- Vehicle Lane Sprinkler System
- Fire Screen Doors
- Communication

What to look for...

- Filming / Photography from ships
- Divers near ships / facilities
- Signaling from / to ships
- Unusual night operations
- Unattended small boats
- Recovering or tossing items near water
- Any aggressive or suspicious behavior

NYC Terror Hotline:
1-888-692-7233

VII. ADDITIONAL VESSEL INFORMATION

KENNEDY CLASS

Length: 277 feet
Gross Tonnage: 2,109
Passenger Capacity: 3,533
Other Vessels in class: F/B American Legion, F/B Herbert H. Lehman

DECK	SEATS	STANDING	TOTAL
Bridge Deck	724	294	1,018
Saloon Deck	1,078	701	1,779
Main Deck	398	308	736
Totals	**2,200**	**1,303**	**3,533**

BARBERI CLASS

Length: 310 feet
Gross Tonnage: 3,335
Passenger Capacity: 5,997
Other Vessels in class: F/B Samuel I. Newhouse

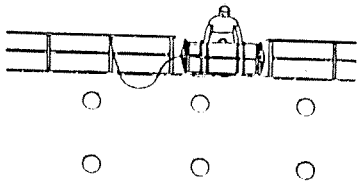
DECK	SEATS	STANDING	TOTAL
Bridge Deck	809	948	1,757
Saloon Deck	1258	622	1,880
Main Deck	1654	706	2,360
Totals	**3,721**	**2,276**	**5,997**

Comments and recommendations concerning this training manual can be directed to Mate Brian Walsh.

OPERATING INSTRUCTIONS

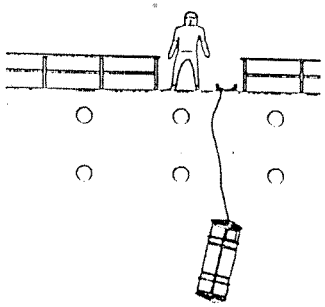
FOR ISSI INFLATABLE RAFTS

THROWOVER RELEASE & INFLATION



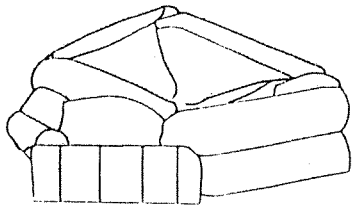
1

THE ISSI RAFT CAN BE INFLATED EITHER ON DECK OR THROWN OVERBOARD IN THE CONTAINER AS SHOWN IN THIS PHOTO. BE SURE THE PAINTER LINE IS SECURE TO THE CLEAT PROVIDED FOR THIS PURPOSE, OR TO SOME OTHER FIXED OBJECT BEFORE THROWING THE RAFT OVERBOARD.



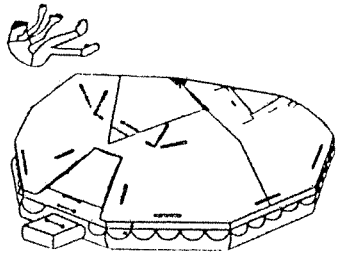
2

TESTED FOR IMPACT STRENGTH FROM A HEIGHT OF UP TO 125 FT. THE CONTAINER FLOATS WHEN IT HITS THE SURFACE OF THE WATER. AFTER PULLING OUT PAINTER LINE, A SHARP TUG WILL START THE INFLATION PROCESS.



3

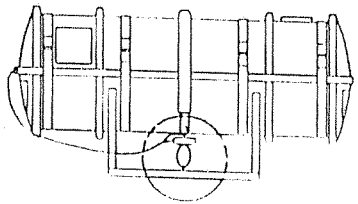
WHEN THE RAFT IS FULLY INFLATED AND READY FOR BOARDING AT EITHER END. THE SEA ANCHOR IS AUTOMATICALLY STREAMED AND THE LIGHT ACTIVATED.



4

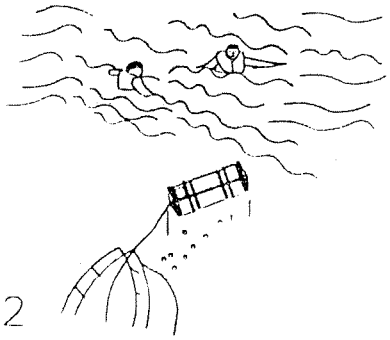
THE STRENGTH FACTORY OF THE RAFT IS SUCH THAT SURVIVORS MAY JUMP INTO THE CANOPY FROM AS HIGH AS 15 FEET IN PERFECT SAFETY. ONCE ABOARD, HELP OTHERS, AND CUT PAINTER LINE FROM SINKING VESSEL WITH SAFETY KNIFE ON CANOPY. THEN READ THE MANUAL TO LEARN DETAILS OF RAFT OPERATION AND OTHER DATA TO INSURE SURVI

AUTOMATIC RELEASE & INFLATION



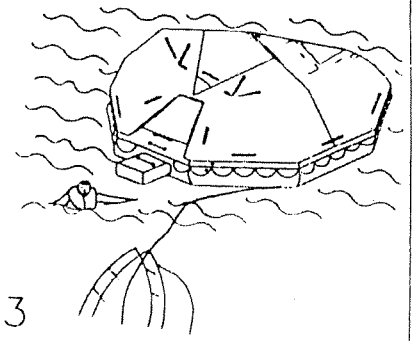
1

THE ISSI RAFT IS SECURED TO ITS CRADLE WITH A HYDROSTATIC RELEASE WHICH, IF TIME DOES NOT PERMIT MANUAL RELEASE AND INFLATION, THIS IS ACCOMPLISHED AUTOMATICALLY.



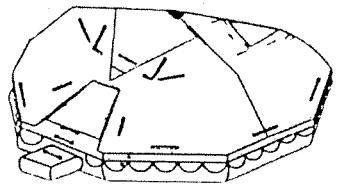
2

AS THE VESSEL SINKS, PRESSURE OF THE WATER AT A DEPTH OF 10 FEET ACTIVATES THE RELEASE MECHANISM, FREEING THE RAFT FROM ITS STOWAGE. THE RAFT IS INHERENTLY BUOYANT AND WILL FLOAT TO THE SURFACE.



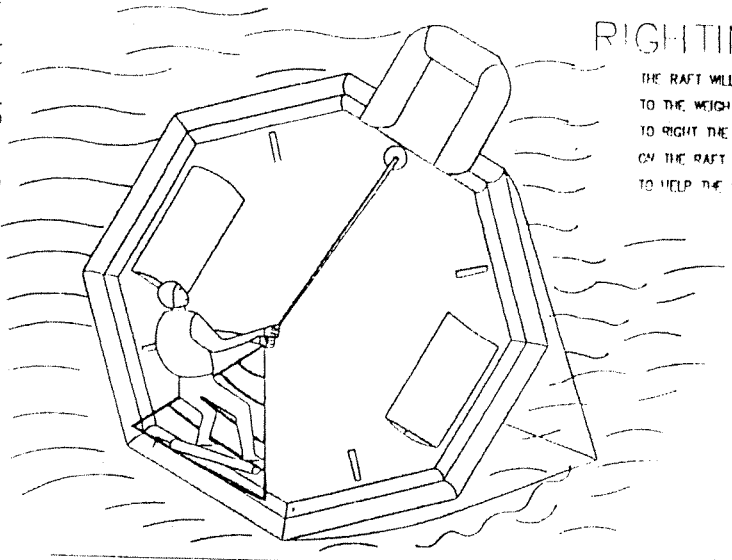
3

THE SINKING VESSEL PULLS THE PAINTER LINE AND THE RAFT INFLATES. THE SEA ANCHOR IS STREAMED AUTOMATICALLY WHEN THE RAFT INFLATES, TO REDUCE DRIFT.



4

THE WEAK LINK ATTACHES THE PAINTER LINE TO THE SHIP; THIS BREAKS APART AND PERMITS THE RAFT TO FLOAT FREE OF THE SINKING VESSEL. THE LIGHT COMES ON TO GUIDE SURVIVORS TO THE RAFT. ONCE ABOARD, HELP OTHERS TO BOARD, AND THEN READ THE MANUAL TO LEARN DETAILS OF RAFT OPERATION AND OTHER DATA TO INSURE SURVIVAL.



RIGHTING THE RAFT

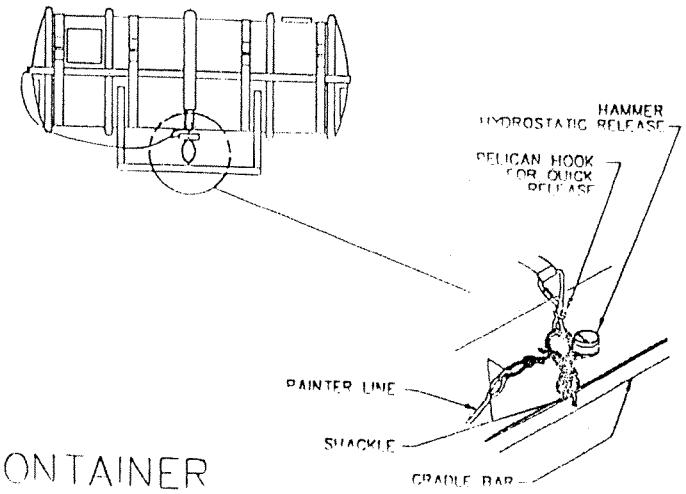
THE RAFT WILL INFLATE AND FLOAT ALMOST VERTICALLY (A RARE OCCASION), DUE TO THE WEIGHT OF THE INFLATING CYLINDER AND EQUIPMENT PACK AT ONE SIDE. TO RIGHT THE RAFT, STAND ON THE CYLINDER, GRASP THE RIGHTING STRAPS ON THE RAFT BOTTOM, AND THROW YOUR WEIGHT BACKWARD. USE ANY WIND TO HELP THE RIGHTING ACTION.

EXPOSURE PROTECTION

ISSI DOUBLE-WALL PROTECTS SURVIVORS AGAINST EXPOSURE, HEAT AND COLD.

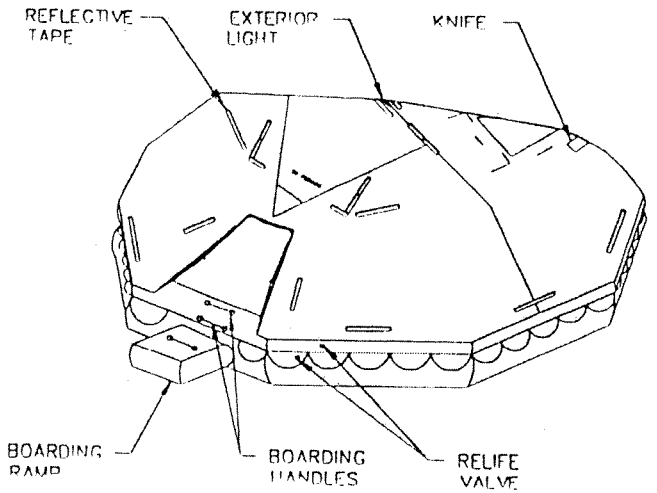
WITH THE INSULATION PROVIDED, LOSS OF BODY WATER IS REDUCED BY 80% UNDER TROPICAL CONDITIONS.

CONVERSELY, WITH AIR TEMPERATURE BELOW FREEZING, BODY HEAT ALONE WILL RAISE THE RAFTS INTERNAL TEMPERATURE TO 70° F.



CONTAINER

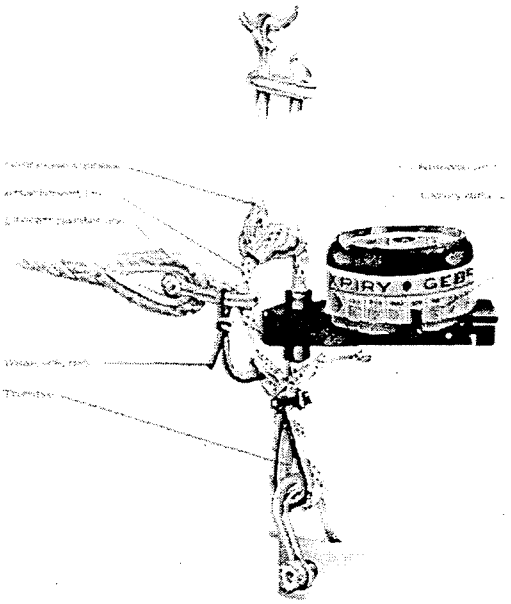
IN CASE OF MANUAL RELEASE, USE THE PELICAN HOOK ONLY. NEVER TRY TO REMOVE RAFT FROM CONTAINER. THE RAFT EMERGES AUTOMATICALLY AT TIME OF INFLATION.



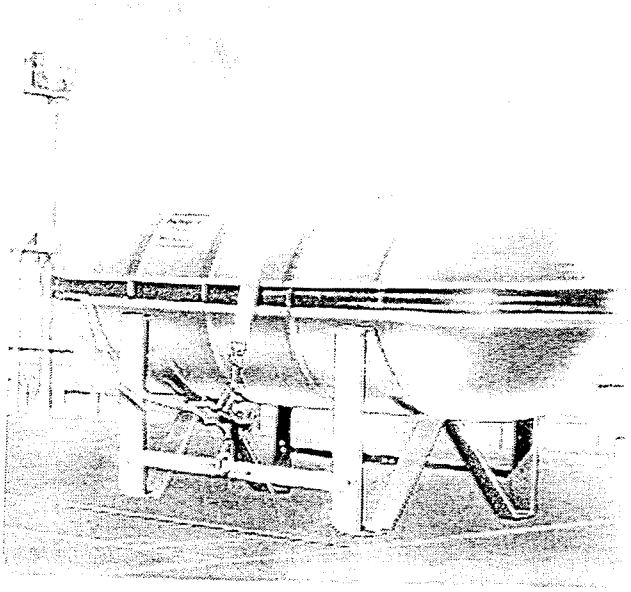
INFLATABLE SURVIVAL SYSTEMS INC.
1420 Wolf Creek Trail,
PO Box 359
Sharon Center, OH 44274-0359

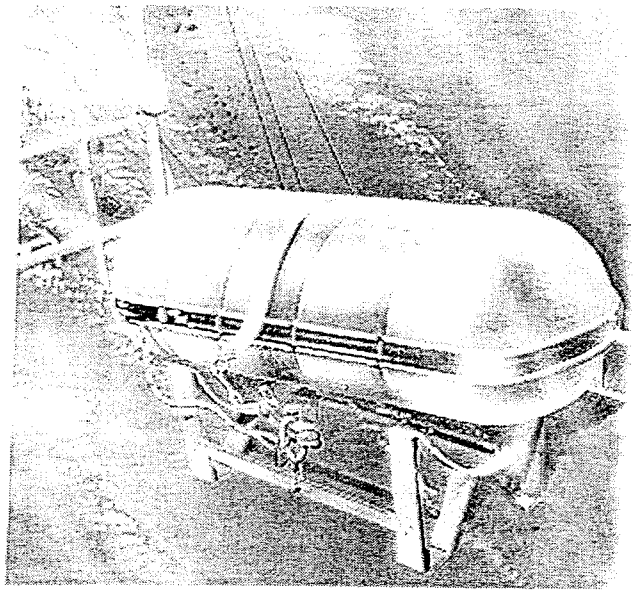
3RA1571

Enclosure 3: Hammar Hydrostatic Release

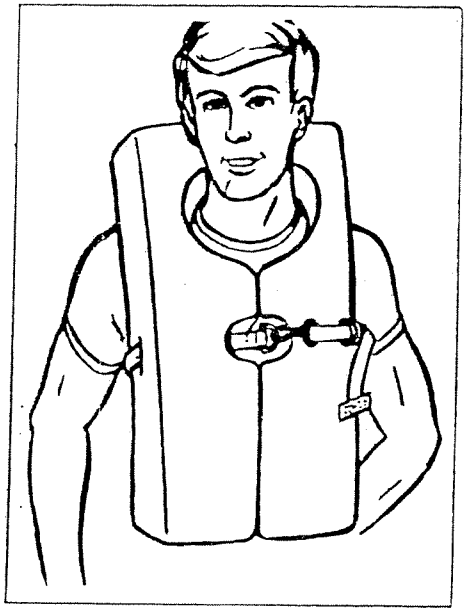


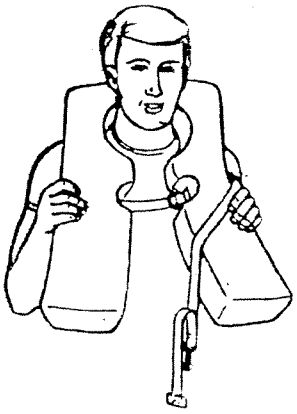
Operating depth:	up to 4 meters
Operating temperature:	-30° C to +65° C
Rope cutting capacity:	8.5mm braid on braid polyester
Service life:	2 years
Length:	80mm (3.15")
Width:	40mm (1.6")
Height:	42.5mm (1.7")
Weight:	80g





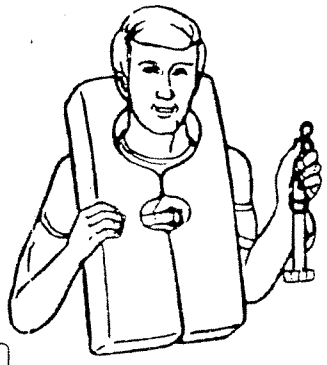
Enclosure 4: Donning Personal Floatation Devices





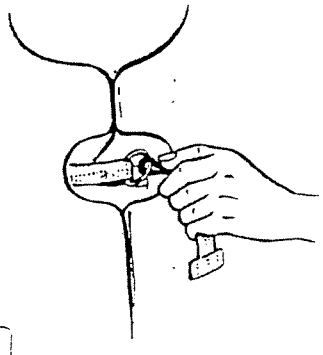
1

SPREAD JACKET APART AND SLIP OVER HEAD WITH JACKET OPENING IN FRONT...



2

TAKE STRAP WITH BLACK SNAP HOOK ON IT AND PASS BEHIND BACK...



3

ATTACH HOOK TO D-RING AT CENTER OF JACKET IN FRONT AND PULL TIGHTLY BY END OF STRAP UNTIL SECURE.

Enclosure 5: BASIC FIRST AID MANUAL

In spite of the variety of injuries possible, several principles of first aid apply to all emergencies. The very first step is to call for professional medical help, if that is possible. Establish what dangers may still be present at the scene of the accident before beginning to provide first aid. The victim, if conscious, should be reassured that medical aid has been summoned, and ask for permission to provide any first aid. Ask any bystanders or the injured person's family or friends about details of the injury or illness. Ask about any care that may have already been given, and about any pre-existing conditions such as diabetes or heart trouble. The victim should be checked for a medical bracelet or card that describes special medical conditions. Don't move the victim unless the accident scene becomes unsafe or the victim may suffer further injury.

One method for evaluating a victim's condition is known by the acronym "ABCs", which stands for:

A Airway: is it open and unobstructed?
B Breathing: is the person breathing? Look, listen, and feel for breathing.
C Circulation: is there a pulse? Is the person bleeding externally? Check skin color and temperature for additional indications of circulation problems.

The injured person's head should be kept in a neutral position in line with the body. If you determine there is no skull or spinal cord injury, move the injured person into a comfortable position. Position the person on one side so the victim can vomit without choking or obstructing the airway.

Shock

Before treating specific injuries, protect the victim from shock. Shock occurs when blood pressure drops and the organs do not receive enough blood, depriving them of oxygen. Heart failure, injury, burns, and hemorrhage can cause shock. The symptoms of shock to watch for include, anxiety or restlessness, pale cool clammy skin; a weak but rapid pulse; shallow breathing; bluish lips; and nausea, apathy, and weakness. During the early stages, consciousness is retained, but alertness is diminished. Sudden circulatory failure of the outer extremities, however, affects the brain and causes fainting. These symptoms may not be apparent immediately, as shock can develop several hours after an accident.

First aid for shock includes having the victim lie down, keeping him or her warm but not overheated, stopping any bleeding, and, if the person is not breathing, administering artificial respiration. The victim's feet should be elevated. Because of the danger of abdominal injuries, nothing should be administered by mouth.

Cardiopulmonary Arrest

Cardiopulmonary resuscitation (CPR) is used to restore the heartbeat in a victim whose heart has stopped, a condition known as cardiac arrest or cardiopulmonary Arrest. Symptoms of this extremely life threatening condition may include crushing pain or pressure behind the breastbone; pain in the arms, neck, or shoulder; anxiety and a feeling of impending doom; difficulty breathing; heavy perspiration; weakness; nausea; and loss of consciousness. CPR combines the techniques of artificial respiration with the application of external heart massage to keep blood flowing through the victim's body.

First aid for Cardiopulmonary Arrest: The first-aid provider positions the victim face up on a firm surface and clears the airway of any obstructions. To maintain an open airway, the head is tilted back and the chin lifted forward. The provider then gives the victim two breaths by mouth or mask. If no pulse is detected at the carotid artery (located in groove beside windpipe in the neck), the first-aid provider kneels next to victim, placing the heel of one hand on top of the other over the lower half of the sternum. The provider depresses the chest about 2 inches, forcing blood from the heart through the victim's arteries. When the pressure is released, blood flows into the heart and the cycle is repeated. The first-aid provider applies the pressure in short, rhythmic thrusts about 15 times every ten seconds. This cycle of two breaths followed by 15 chest compressions is repeated until the victim revives or professional medical help arrives. This is hard work and you will need help as soon as possible.

Artificial Respiration / Asphyxiation

Asphyxiation occurs when air cannot reach the lungs, cutting off the supply of oxygen to circulating blood. If left untreated this can cause irreparable damage to the brain. Some of the causes of asphyxiation are drowning, gas poisoning, overdose of narcotics, electrocution, choking, and strangulation. Victims may collapse, be unable to speak or breathe, and have bluish skin. Most people will suffer brain death within 4 to 6 minutes after breathing ceases unless first aid is administered. For victims of asphyxiation, the most practical method of first aid is artificial respiration. In cases of drowning, artificial respiration should be attempted even if the victim appears dead. People submerged in cold water for more than 30 minutes who appeared blue have responded to first-aid efforts and recovered with no brain damage. Artificial respiration is the mouth-to-mouth technique in which the first-aid provider forcefully exhales air into the victim's lungs after the victim stops breathing on their own.

First aid Asphyxiation: The provider tilts the victim's head backward by placing one hand under the victim's chin and lifting while the other hand presses down on the victim's forehead. At this point, the mouth and airway can be checked for foreign objects, which can be removed with the fingers. To begin mouth-to-mouth resuscitation, gently pinch the victim's nostrils together to prevent air from escaping out the nose. Take normal breaths, seal the victim's mouth with a pocket mask or mouth, and exhale into the mouth. When performed properly the victim's chest should rise visibly. The provider then listens for the victim to exhale; if using a pocket mask, it need not be removed. This process is repeated at a rate of about 12 times per minute (one breath every five seconds) for adults and about 20 times per minute for children, using less pressure and volume for children. Once beginning artificial respiration, the first-aid provider should continue until the victim begins to breathe or medical help arrives

Bleeding

The best way to stop bleeding from a medium-sized blood vessel is by applying direct pressure at the site of the wound. This pressure will flatten the injured blood vessel slowing the flow of blood to make clotting possible.

First aid for bleeding: Cover the wound with a clean dressing, elevate the wound, and pressure should be applied over it with the fingers for 5 to 15 minutes or until the bleeding stops. If there is a foreign body in the wound, pressure should be applied to one side, do not remove the object. If bleeding continues, new bandages should be added, but do not remove the saturated one; removing the first bandage may disrupt clots in the process of forming. Once the bleeding has stopped, secure the dressing in place with tape or some other means to minimize chances of renewed bleeding.

Severe Bleeding

The presence of blood over a large area of a person's body does not always indicate severe bleeding. The blood may ooze from multiple small wounds or be smeared, giving the appearance of more blood than is actually present. The rate at which blood is lost from a wound depends on the size and kind of blood vessel ruptured. Bright red, spurting blood indicates injury to an artery while welling or steadily flowing, dark red blood indicates injury to a vein.

Welling or spurting blood is an unmistakable sign of severe bleeding. If a major artery ruptures, a person may bleed to death within a minute. Injuries to veins and minor arteries bleed more slowly but may also be fatal if left unattended. Shock usually results from loss of fluids, such as blood, and must be prevented as soon as the loss of blood has been stopped.

First aid for sever bleeding: To stop the bleeding, apply pressure directly over the wound and, when possible, elevate the bleeding body part. The first-aid provider should use bandages to hold a sterile dressing or clean cloth firmly over the wound. Dressings that become saturated with blood should not be removed but should be reinforced with additional layers.

Bleeding normally stops through the process of coagulation, or clotting of the blood, and methods used to stop hemorrhage depend on slowing the flow of blood sufficiently for a clot to form. The hemorrhage is most effectively stopped by the application of pressure directly over the wound. A tourniquet should

never be applied if there is another way to stop the bleeding, as application of a tourniquet increases the likelihood that amputation will be required.

Pressure Points

If an arm or leg wound bleeds rapidly and cannot be controlled by direct pressure, dressings, and bandages, the first-aid provider can apply pressure to the artery at a point adjacent to the wound called the pressure point. Arteries pass close to the skin at these points and can be compressed against underlying bone to stop arterial bleeding. The pressure point for the femoral artery, which supplies blood to the leg, is located on the front center of the leg's hinge, the crease of the groin area where the artery crosses the pelvic bone. The pressure point for the brachial artery, which supplies blood to the arm, is located halfway between the elbow and armpit on the inner side of the arm.

Tourniquet

A tourniquet is a first-aid device used for stopping external bleeding by squeezing the "pressure point" nearest the wound, but lying between the wound and the heart. The use of a tourniquet is dangerous; it should be used only when the bleeding is life threatening and cannot be controlled by any other method.

The device is usually made from a piece of strong bandaging material that is wrapped around the pressure point and twisted by means of a stick. A tourniquet can also be fashioned by the use of a leather belt, or a piece of ½ inch rope. Instead of the stick mentioned above, you can use a large screwdriver. In the absence of familiarity with the pressure points of the body, the tourniquet should be applied to any portion of the injured limb but always between the site of the wound and the heart. Never apply a tourniquet around a victim's neck. Remember application of a tourniquet increases the likelihood that amputation will be required.

Burns

A burn is an injury to the skin caused by exposure to fire, hot liquids or metals, radiation, chemicals, electricity, or the sun's ultraviolet rays. Burns are classified according to the depth of tissue damage and extent of the burn. A first-degree, or superficial, burn, which involves only the surface of the skin, is characterized by reddening. A second-degree burn extends beneath skin surface and causes blistering and severe pain while a third-degree burn causes charring and destruction of the cell-producing layer of skin. The severity of a burn depends also on the area involved, expressed as a percentage of the total body surface area. Severe burns cause shock and loss of body fluids. A person suffering third-degree burns over more than 10 percent of body surface area should be hospitalized as soon as possible.

First aid for burns: Remove the source of the burn as soon as possible. The burn should be cooled immediately with cold clean water. A clean, cold wet towel or dressing can be placed on less serious burns to ease pain and protect the burn from contamination. Continuously bathe chemical burns with running water for at least 20 minutes to dilute the substance. If a chemical powder causes the burn, it should be carefully brushed off with gloved or protected hands before washing. Wet dressings or ointments should never be used for sever burns. Instead, the first-aid provider should gently apply dry, sterile dressings held in place by bandages and seek immediate medical attention.

Heimlich maneuver

In the case of choking, a procedure known as the Heimlich maneuver can be used to clear the windpipe of food or other objects. In this procedure quick upward thrusts are applied to the victim's abdomen to eject the object blocking the windpipe.

The first-aid provider stands behind the victim with both arms around the victim's waist. One fist is placed slightly above the navel and below the rib cage with the thumb against the victim's body. The other hand is used to hold the fist and apply pressure. The abdomen is then pressed quickly inward and upward, forcing air from the lungs to eject the object from the windpipe. If the victim is too large to hold while standing, or becomes unconscious, the maneuver can be accomplished by laying the person down face up and using the heel of one hand in the same manner as above. The person performing the maneuver must be careful not to apply pressure on the rib cage to avoid breaking ribs, especially in children and the

elderly. For obese or pregnant choking victims, the provider's hands should be placed over the lower half of the sternum (breastbone) and pressure applied as described above.

Fainting
Fainting, a sudden, temporary loss of consciousness occurs when the brain does not receive enough blood. Just before fainting, a person's skin may appear pale and clammy or sweaty.

First aid for fainting: Restore blood flow to the brain, a first-aid provider should elevate the unconscious person's feet or position the individual's head below the level of the heart. The victim's airway and breathing should be closely monitored. A fainting victim must also be kept warm to prevent shock. If the victim does not fully recover after five minutes, medical help should be requested.

Seizures
Seizures, sudden brief episodes of intense neurological activity, may result from a variety of causes, including epilepsy, a neurological disorder, and head injuries.

First aid for seizures: consists of protecting the victim from accidental injury during the seizure. The first-aid provider should not put any objects in a seizing person's mouth or try to hold the tongue. If the victim has medical identification indicating epilepsy, an ambulance need not be called unless the person experiences multiple seizures or one seizure lasts more than five minutes. Otherwise, once the seizure stops, question the person about the need for a hospital evaluation. If no medical identification exists the first-aid provider should request medical assistance.

Coma
A deep state of unconsciousness due to illness or injury is known as a coma. Comatose individuals cannot be awakened. Heart failure, stroke, epilepsy, diabetes, or traumatic brain injury can cause comas and a medical alert tag on the victim may identify a possible cause of the coma.

First aid for coma: If the person is breathing, first aid is limited to providing comfort until medical assistance arrives. If the victim is not breathing, the first-aid provider should administer mouth-to-mouth or mask-to-mouth resuscitation.

Poisoning
One of the mainstays of the treatment of accidental poisoning is the local or regional poison control center. Approximately 85 percent of cases of poisoning are handled in the home after telephone consultation with a center. Poisons include toxic medications, herbicides, insecticides, noxious gases, household disinfectants, and various rat poisons.

First aid for poisoning: In a case of poisoning, the first-aid provider should remove the victim from a toxic environment, and then contact the poison control center listed in most United States phone books. If the number is unavailable, the provider should call a physician or hospital emergency department. If possible, the provider should try to identify the poison, either by questioning the victim or searching for suspicious containers. Containers of many poisonous substances list the antidote, or remedy, on the label. Burns or stains on the skin or a characteristic odor on the breath may also help the first-aid provider recognize the poison.

Various treatments counteract the effect of a poison. In most cases the use of dilution is advisable, that is, the ingestion of large quantities of water or milk. In other cases it is advisable to use an emetic, a substance that induces vomiting and rids the stomach of certain poisons. An emetic may act locally, as on the gastric nerves, or systematically on the part of the brain that causes the vomiting. Household emetics, which act locally, include a tablespoon of salt dissolved in warm water or two tablespoons of mustard dissolved in a pint of water.

Emetics must not be given to a person who has swallowed a corrosive poison. An antidote, unlike an emetic, is a remedy that counteracts the effects of a poison chemically, although it may result indirectly in vomiting. An antidote may work against a poison by neutralizing it, rendering it insoluble, absorbing it,

isolating it, or producing an opposite physiological effect generally. In any instance of poisoning, it is imperative that remedial treatment be started immediately.

Unless instructed to do so by the poison control center, the first-aid provider should never give a poisoning victim anything to eat or drink. Vomiting should not be induced unless the poison control center recommends it. If the victim vomits, the first-aid provider should turn the individual on the side and clear the airway. Before clearing the victim's mouth of any obstructions, however for self-protection, the provider should first put on clean first-aid gloves or wrap a cloth around his or her fingers. If the person who ingested the poison is unconscious, the airway, breathing, and circulation should be checked and CPR started if necessary.

Drug Overdose
A drug overdose occurs when an individual takes too large a dose of a drug or takes a dose that is stronger than the person can tolerate. A drug overdose can be difficult to diagnose because the signs and symptoms vary widely and often mimic other illnesses or injuries. Symptoms of a drug overdose include unusually dilated or contracted pupils, vomiting, difficulty in breathing, hallucinations, and in severe cases unconsciousness and slow, deep breathing. If an overdose is not treated, the individual may die. Victims of overdose should be taken immediately to a hospital emergency room.

Electric Shock
Contact with electrical current is potentially fatal. Electricity passing through the body can cause injury to the skin and internal organs. If electricity passes through the heart, the heart muscle may be damaged and the heart's rhythm interrupted, leading to cardiac arrest. The signs and symptoms of electric shock include tingling, burns on the skin where the current entered or exited, muscle pain, headache, loss of consciousness, irregular breathing or lack of breathing, and cardiac arrest. The severity of the injury depends on the strength of the electric current and the path the current takes through the body.

First aid for electric shock: The person providing first aid to a victim of electric shock should not touch the individual's body until the source of the shock is turned off. Because of the potential for internal injuries, victims of electrical injury should not be moved unless they are in immediate danger. The first-aid provider should monitor the victim for symptoms of shock. If the victim has stopped breathing and has no pulse, CPR should be performed after the airway, breathing, and circulation have been checked. When the victim's vital signs are stable, the site of the burn should be treated using the same methods used for other burns

Head Injuries
Injuries to the head may involve the scalp, skull, or brain. If the victim has a head wound that seriously damages or penetrates the scull, the first-aid provider should not apply pressure to it, as this may damage the brain. The victim's airway should be kept clear from obstructions, such as vomit, which is common in cases of head injury. If the victim has a seizure, a sudden spasm of the body, the head must be protected with cushions to prevent further injury. A physician should evaluate all individuals with head injuries. Bleeding from a head wound often appears to be much worse than it is.

Eye Injuries
Medical attention should be sought for all eye injuries as well. In the case of foreign material in the eye, especially caustic substances, or those that can burn, corrode, or dissolve tissues, the eye should be flushed immediately with a cool, sterile saline solution, if available, or plain tap water for 15 to 30 minutes. Hold the affected eye open during the flushing process. The first-aid provider should never attempt to remove embedded objects from the eye. If there is an embedded object in the eye and flushing with water did not remove it, lightly bandage both eyes this will help immobilize the injured eye by preventing the victim from looking around, reducing the possibility of further damage. Eye injuries are very painful; a tiny grain of sand feels like a bolder!

Nose Injuries
The most common injuries to the nose involve nosebleeds, objects lodged in the nasal passages, and broken nasal bones. The victim of a simple nosebleed should sit down, lean forward, and gently pinch

together the soft part of the nose for 15 minutes. A cold compress can also be placed on the bridge of the nose. If material lodged in the nose cannot be forced out by gently blowing the nose, the victim should request medical help. In the case of a broken nose, the first-aid provider should apply a cold compress to the bridge of the nose and seek medical attention.

Sprains and Fractures

A sprain, the painful stretching or tearing of ligaments, occurs when a bone is suddenly wrenched at the joint. A fracture, a break or crack in a bone, is caused by sudden, violent pressure against the bone. Great pain and swelling characterize both a sprain and a fracture, but the inability to move the affected part, a deformed appearance, and pain or tenderness at a specific point usually indicates a fracture. A first-aid provider should treat sprains and fractures in the same way since it can be difficult to diagnose a fracture without an X ray of the affected bone.

Because the slightest movement of the affected part may cause the injured person great pain and increase the damage, no attempt should be made to straighten or move sprained or broken limbs until medical help arrives. If the injured person must be transported to a hospital, rigid splints should be used to immobilize the broken part and adjacent joints or bones. Splints can be improvised from light, smooth boards or folded cardboard and tied to the broken part with wide strips of cloth or improvised material.

If a person is found with the head or body in an unnatural position, a fracture of the spinal column may have occurred. Other signs of a broken spinal column are severe pain in the back or neck and lack of movement of the lower extremities. The first-aid provider should not attempt to straighten or move the injured person's body as this may cause permanent paralysis or death. If the victim must be transported, his or her body should be immobilized by placing it on a flat board. However, moving such a victim should not be attempted without prior training.

Bruising

Bruising is an injury in which tiny blood vessels beneath the skin are ruptured, but the skin itself is not broken. The affected area swells and turns shades of blue, red, and purple as blood from the broken blood vessels seeps into the tissues. During the healing process, the color of a bruise will gradually change to yellow as hemoglobin, the pigment in red blood cells, is broken down and reabsorbed into the bloodstream. When absorption is complete, the bruise disappears without a trace.

First aid for bruising: Applying either ice or a cold wet clothe to the affected area immediately after the injury may reduce discoloration, swelling, and pain. Because they may indicate more serious underlying conditions, three kinds of bruises warrant examination by a physician:

1. Those that are very large and very painful.
2. Those that do not result from contact with hard objects and have no obvious cause.
3. Those that fail to disappear completely within one or two weeks.

A severe black eye may be accompanied by damage to the eyeball and optic nerves, and should receive professional attention if the patient experiences abnormal vision.

Heat Exhaustion

Heat Exhaustion or heat prostration is a condition usually produced by overexertion in hot temperatures. During heavy exertion the body perspires and sweat evaporates to cool the skin and helps prevent the body temperature from rising. Perspiration causes the loss of fluids and salts normally replaced by regularly consuming liquids and food. However, if prolonged, excessive sweating occurs, fluids and salts are not replaced rapidly enough. This causes blood circulation to diminish, affecting the brain, heart, and lungs, and heat exhaustion results.

Symptoms of heat exhaustion include heavy sweating; pale, clammy skin; dilated pupils; a slightly elevated body temperature; and cramps, weakness, dizziness, nausea, vomiting, headache, mental confusion, and sometimes unconsciousness.

First aid for heat exhaustion: Remove the affected person from the source of heat to a cool place, preferably near a fan or air conditioner. Elevate the person's legs to improve blood circulation to the brain; loosen clothing; and cool the body with wet compresses or ice packs, but not an alcoholic rub. Massage the arms and legs if cramping occurs. If the person is responsive to conversation and not nauseated, give electrolyte beverages or water that is slightly salty. If neither of these are immediately available, give cool water alone. However, do not give the person alcohol or caffeine, which interfere with the body's ability to regulate temperature, and do not administer any medication to reduce body temperature. Also, stop the person from cooling too quickly to prevent shock from setting in. A person who experiences heat exhaustion should be checked by a doctor after several hours of rest, and should not engage in strenuous activities for one or two days.

Heatstroke

Heatstroke is the response to extreme heat characterized by high body temperature and disturbance of the sweating mechanism; it is called sunstroke if caused by long exposure to sun. In heatstroke the skin is hot, red, and dry; the pulse is strong and rapid; the victim may be unconscious; and the body temperature is about 106° F or higher. Prior to unconsciousness the person may experience dizziness, fainting, tingling, and mental confusion. If untreated, heatstroke is often fatal, because prolonged fever can cause brain damage, shock, or heart or kidney failure, especially in persons with underlying disease.

Heatstroke is a result of excessive sweating during which the body's salts are depleted. The control of heat regulation by the central nervous system is disturbed and sweating ceases. This leads to the hot, dry skin characteristic of the condition. Children and the elderly are more susceptible than others because their temperature regulating system is less responsive to change. People suffering from obesity are also at greater risk because their bodies dissipate heat with decreased efficiency.

First aid for heatstroke: First aid must be immediate and consist of measures to bring the temperature below at least 102° F. This is accomplished by rubbing the victim's skin with cold water or alcohol. If a cold bath is available, it should be used, but an ice bath is not advisable. When the body temperature reaches 102° F, cooling should proceed more slowly. If the temperature rises again, cooling procedures should be repeated.

Cold Exposure

When the body is exposed to extremely cold temperatures, the blood vessels constrict and body heat is gradually lost. As the body temperature falls, tissues are easily damaged. The extent of damage depends on such factors as wind speed, temperature, type and duration of exposure, and humidity. Fatigue, smoking, drugs, alcohol, stress, dehydration, and the presence of other injuries increase the harmful effects of the cold.

Hypothermia

Hypothermia, an abnormally low body temperature, is a medical emergency. It is caused by continued exposure to low or rapidly falling temperatures, cold moisture, snow, or ice. Individuals exposed to low temperatures for long periods may suffer harmful effects, even if they are protected by clothing, because cold affects the body slowly, almost without notice.

Signs and symptoms of hypothermia include:

1. Several stages of progressive shivering (an attempt by the body to generate heat).
2. Dizziness, numbness, and confusion.
3. Unconsciousness may follow quickly.
4. Signs of shock.
5. Extremities (arms and legs) freeze.

First Aid for hypothermia:

Move the casualty immediately to a warm place. Monitor the airway, breathing, and circulation (ABCs). Re-warm by applying external heat to both sides of the casualty. Natural body heat (skin to skin) from two rescuers (buddy warming) is the best method. Do not place heat source next to bare skin. Since the casualty is unable to generate body heat, placing him/her under a blanket is not sufficient. If the casualty is conscious and can drink, give warm liquids. Do not give hot liquids, coffee, or alcohol or allow casualty to smoke. Request medical assistance for hypothermia as soon as possible.

Immersion Hypothermia

Immersion hypothermia is the lowering of the body temperature due to prolonged immersion in cold water. It is often associated with limited motion of the extremities and water-soaked clothing. Temperatures range from just above freezing to 50 degrees F (1O degrees C).

Signs and symptoms of immersion hypothermia include:

1. Tingling and numbness of affected areas.
2. Swelling of the legs, feet or hands.
3. Bluish discoloration of the skin and painful blisters.

First Aid for immersion hypothermia:

Move the casualty immediately but gently to a warm, dry area. Monitor the airway, breathing, and circulation (ABC's). Remove wet clothing carefully, keep casualty warm and dry. Do not rub or massage affected area. Do not rupture blisters or apply ointment to affected area.

If the casualty is conscious and can drink, give warm liquids. Do not give hot liquids, coffee, or alcohol or allow casualty to smoke. Request medical assistance for immersion hypothermia as soon as possible.

Frostbite

Frostbite is damage to the skin due to continued exposure to severe cold. It occurs when ice crystals form in the skin or deeper tissue after exposure to a temperature of 32 degrees F (0 degrees C) or lower. The areas most commonly affected are the hands, feet, ears, nose, and cheeks. Frostbite is classified as incipient, superficial, or deep.

EMERGENCY RESOURCES

New York City Police Department

New York City Fire Department

United States Coast Guard

Army Corps of Engineers

Other ferries

ALL tug boats

Other harbor traffic

This section describes the external emergency response resources available to the ferry.

New York City Police Department (NYPD).

The NYPD has marine units that operate 24 hours per day, 7 days per week. There are three bases, Charlie Base, Adam Base, and George Base. Charlie Base is located in Brooklyn, by the 69th Street Pier, and would be the first responder in an emergency involving the ferry. Adam Base, located in Howard Beach near JFK Airport, is about 40 minutes away from the ferry. George Base, located in College Point near LaGuardia Airport, is also about 40 minutes away from the ferry.

Charlie Base could have a boat on scene at the ferry within 15 minutes of a distress call, at any point in the ferry's run. During peak commuter hours this time may be reduced because the Harbor Charlie patrol boat remains underway during that time. Charlie Base has three 55' boats, a 36' boat, and a 30' boat. One of the 5 5'boats is designated to carry the SCUBA team, which is available 24 hours per day. Each boat carries three officers, except the 30' boat, which carrie 2 officers.

The Adam and George Bases are similarly equipped, although they each have only one 55' boat.

To supplement the Police Harbor Patrols there is an emergency police helicopter stationed in Brooklyn that can deploy swimmers anywhere on the ferry run within 5 minutes of a distress call. In addition, the 122nd Precinct Headquarters Building is across the street from the St. George terminal, and police can board vessels there to be carried out to the ferry in an emergency.

New York City Fire Department (FDNY).

The FDNY has marine units that operate 24 hours per day, 7 days per week. There are three bases in the vicinity of the ferry operating area. These bases. Marine Companies 9, 1, and 6 are located in Staten Island, Greenwich Village, and Brooklyn Navy Yard, respectively.

Marine Company 9, which would be the first responder in a ferry emergency, has a 134' firel with 8 monitors, 20,000 gpm total capacity, and a single monitor maximum capacity of 7,50(gpm. This vessel is operated by a 7 person crew. Marine Company 1 in Greenwich Village h a fireboat with similar capacity, and Marine Company 6 has a fireboat with about one half of capacity.

In the case of a major emergency, a "special call" would be made. Within 10 minutes, a full alarm assignment would be at the ferry terminal, consisting of three 5-person engine companies, two 6-person ladder companies, a 6-person rescue company, a 6-person "fas truck," and a Battalion Chief. These fire fighters would either wait for the ferry to arrive in th terminal, or be transported out to the ferry by either a fireboat or another ferry.

United States Coast Guard.

The USCG Station New York has at least one 41' patrol boat at the ready status (B-0) 24 per day, 7 days per week. A second 41' patrol boat is B-0 in the summer, B-2 in the wint Station New York has a total of four 41' patrol boats and two RHI's for emergency respo purposes.

At the Military Oceans Terminal the USCG has two 65' and two 140' cutters, one of which is typically on B-6 status.

Further away, the USCG has resources at Kings Point and Sandy Hook, which are on B-0 status and are less than one hour away from the ferry operating area.

Other Ferries.

The rescue vessel of choice in an emergency would be another ferry. During most operating hours there are a minimum of two ferries operating at the same time. In the case of an emergency, the operating ferry would head to the nearest terminal, discharge passengers, and then go to the aid of the other ferry. By then rescue calls would have been called in, and emergency personnel can board the operating ferry. In the middle of the night, only one ferry operates. Due to crew rotations and watch procedures, there is a 2 hour period each night whe a second full engineering crew is not on duty, and a 4 hour period each night when a second fu deck crew is not on duty. During these times, a rescue ferry could be mobilized in about an hour. The operator of a ferry encountering an emergency would contact the ferry terminal supervisor (on watch 24 hours per day, at each terminal). The operator would specify what hel is required. If another ferry were required, the terminal supervisor would commence vessel preparations. In the terminal there is a qualified engineer and an oiler on duty 24 hours per da These engineers would immediately start up the rescue ferry plant. As with the engineers, the are five deckhands on duty 24 hours per day. These personnel would be immediately dispatched to ready the ferry and embark emergency personnel as required. During these preparations the terminal supervisor would recall a Captain, which would be either a Port Captain or one of the Captains from the oncoming watch. There are two Port Captains for the ferry system, and one is available on call at all times.

When the Captain arrives, the ferry would be ready to go. This entire evolution can be carrie out in about one hour.

Towing Vessels. Henry Marine

towing vessels are available on call 24 hours per day, 7 days per week. While not emergency responders, they would be called upon to tow a disabled ferry back into port.

Army Corps of Engineer (ACOE) Vessels.

The ACOE operates debris collecting vessels during daylight hours, 7 days per week. The vessels are either catamaran design or tow catamaran type barges that have nets stretched between the hulls to pick up floating debris. They are operated by U.S. Federal Employees with appropriate licenses. These vessels have large deck areas and could serve as platforms for ferrying passengers or equipment in an emergency.

General Harbor Traffic.

The high volume of traffic in New York's Upper Bay almost guarantees that there will be a vessel in the immediate vicinity of a ferry if it has an emergency. A study of vessel traffic by V New York showed that for February 2000, there was an average of 10 vessels per hour at St. George every night during the hours of 2-3 am, excluding ferry vessels. The least number of non-ferry vessels recorded for that hour was 5, and the most was 19. There was a towing ve underway in the vicinity during that hour on every day of the study.

Procedures to mobilize emergency response teams.

On the vessel, crewmembers will make up emergency response teams as per the Station B and Muster List. External resources are summoned by VHS Radio. The two primary cal always go to USCG VTS New York and the Ferry Terminal Supervisor. VTS and the Termin Supervisor mobilize the external response teams, contacting NYPD and FDNY by landline (911) or VHS Radio, Channel 17. The ferry can also make direct contact via VHS Channel 16 although initial contact through the VTS and Terminal Supervisor are preferred.

OPERATING EMERGENCY PHONE NEMBERS
AS OF DECEMBER 2003

ASSISTANT COMMISSIONER STATEN ISLAND FERRY, JOSEPH ALBANO
718 876-5368 PAGER 877 581 4342

DIRECTOR OF FERRY OPERATIONS, PATRICK RYAN 718 876 3855 PAGER 877 837 8640

CHIEF ASSIGNMENT OFFICER, GEORGE ASWAD 718 447 5176 PAGER 877 832 6640

PORT CAPTAIN, JOHN MAULDIN
718 876 8652 PAGER 877 832 7992

PORT CAPTAIN, JOSEPH ECOCK
718 876 5889 PAGER 877 699 5325

PORT MATE, RAY OCELLO
718 876 5638 PAGER 877 832 9098

PORT ENGINEER, MARK TETTONIS
718 876 8379 PAGER 877 832 0989

PORT ENGINEER, ED MADIGAN
718 876 8394 PAGER 877 829 6625

PORT ENGINEER FUEL FACILITY AND BOILER ROOM,
WILLIAM KAIN 718 876 6103 PAGER 877 829 7245

D.O.T. COMMUNICATION CENTER 718 433 3340

D.O.T. COMMAND AT OEM 646 756 3041

MAINTENANCE AND REPAIR EMERGENCY NUMBERS

ASSISTANT COMMISSIONER STATEN ISLAND FERRY, JOSEPH ALBAN O
718 876 5368 PAGER 877 581 4342

DIRECTOR OF FERRY OPERATIONS, PATRICK RYAN
718 876 3855 PAGER 877 836 8649

DIRECTOR OF PORTS AND TERMINALS MAINTENANCE AND REPAIRS.
ANTHONY MANCINO 718 876 1028 PAGER 877 832 8968

DEPUTY DIRECTOR OF VESSEL MAINTENANCE AND REPAIR,
RALPH MCKENZIE 718 876 7216 PAGER 877 832 9095

CHIEF ENGINEER BULL GANG, STEVE WHYTE
PAGER 877 829 6246

EXTERNAL RESOURCES EMERGENCY NUMBERS

POLICE, FIRE, RESCUE AND AMBULANCE EMERGENCY
CALL 911

U.S.C.G. 718 354 4088

ST. GEORGE POLICE ROOM
718 876 4725

POLICE COMMAND CENTER ALL BOROUGHS OEM
646 756 3019

120 PCT. STATEN ISLAND
718 390 8500

1 ST PCT. MANHATTAN
212 334 0616

HARBOR POLICE
718 765 4118 VHF RADIO CH 17

FIRE DEPTMENT COMMAND ALL BOROUGH OEM
646 756 3161

FIRE BOAT DISPATCH
718 494 4261

PRESENT TUG BOAT SERVICE
HENRY MARINE
718 966 6193 24 HOURS 7 DAYS A WEEK

All classes

Vessel To Vessel Transfer

Anytime a Staten Island ferry vessel is in distress it should first attempt to return to the nearest terminal either by its own power or with tug assistance.

A Staten Island ferry vessel which has lost propulsion and or steering control and is in danger of colliding with another vessel, land or dock before tug assistance is available or onboard repairs are accomplished it should drop the anchor and wait for tug assistance to return to the nearest terminal.

If for any reason return to a terminal is impossible the anchored vessel will transfer the passengers to a Staten Island ferry rescue vessel.

In the event a Staten Island ferry vessel has sustained damage which my cause the vessel to sink prior to its return to the nearest terminal the vessel should be grounded. While grounding the vessel rescue vessel approaches should be kept in mind. The rescue and disabled vessel must meet end to end, stem into the current. In the case of a grounded vessel the rescue vessel will have to be the Austen class due to its shallow draft. After the vessel is grounded passengers will be transferred to a Staten Island ferry rescue vessel.

The port office or dock office will contact and instruct the vessel or vessels to be used for the rescue. All other vessels should standby for instructions from the port office or dock office.

The designated rescue vessel shall proceed to the nearest terminal discharge passengers, pick up gangway and shall proceed to the disabled vessel.

All vessel to vessel transfers will be end to end.

The rescue vessel will slowly approach the anchored or grounded vessel by stemming the current.

As the rescue vessel approaches it should come close enough to the disabled vessel to have lines passed from vessel to vessel.

After the lines, rescue ramp and net are secured the rescue vessel will back slow to put a strain on the lines and hold the rescue vessel in position.

Vessel to Vessel Transfer

Kennedy Class Vessel

To

Kennedy Class Vessel

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate: Will direct crew with the following procedure.

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue. Put heaving lines on other shackles so net can be passed to disabled vessel.
3. D/H #1, 2 Prepare gangway for launching to disabled vessel.
4. D/H #5, 6 Extra crowd control.

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.
Marine Engineer- will assist Chief Engineer.
Oiler#1- Will be on standby for use of emergency equipment such as fire pumps, etc.
Oiler# 2- Extra crowd control
Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

   After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

   How to operate launching apparatus:

   1. Roll launching apparatus unit so gangway is between both vessels.
   2. Lock wheels on launching apparatus by putting handle in upright position.
   3. Secure gangway with lines to cleats.

   4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
   5. Unhook cable and remove launching apparatus.

6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:
Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Kennedy Class Vessel
Vessel to Vessel Transfer
DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate - Will direct crew with the following procedures.

D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then help with crowd control by positioning themselves by the departing gangway and insure each passenger has a lifejacket on properly before departing vessel.

D/H #3, 4 will take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.

D/H #5, 6 and # 1 Oiler will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.

Chief Engineer - Stays in engine room Control room and keeps in constant communication with Captain.
Marine Engineer - S/B emergency equipment such as fire pumps etc.
#1 Oiler – Crowd control helping passengers put on life jackets and reassuring passengers they will be safe.
#2 Oiler – keeps in contact with C/E and M/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Barberi Class Vessel

To

Austen Class Vessel

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate#1 will direct crew with the following procedure.
Mate #2 Extra crowd control

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue.

Put heaving lines on other shackles so net can be passed to disabled vessel.

3. D/H #1, 2 Prepare gangway for launching to disabled vessel.
4. D/H #5, 6 Extra crowd control.
5. D/H # 7 Extra crowd control

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.
Marine Engineer – will assist Chief Engineer
Oiler#1- Will be on standby for use of emergency equipment such as fire pumps, etc.
Oiler# 2- Extra crowd control

Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

   After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

   How to operate launching apparatus:

   1. Roll launching apparatus unit so gangway is between both vessels.
   2. Lock wheels on launching apparatus by putting handle in upright position.
   3. Secure gangway with lines to cleats.

   4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
   5. Unhook cable and remove launching apparatus.

6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:

Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Austen Class Vessel

Vessel to Vessel Transfer

DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate - Will direct crew with the following procedures.

D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.
D/H #3, 4 will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.

Chief Engineer - Stays in engine room control room and keeps in constant communication with Captain.

Oiler – keeps in contact with C/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Kennedy Class Vessel

To

Austen Class Vessel

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate: Will direct crew with the following procedure.

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue. Put heaving lines on other shackles so net can be passed to disabled vessel.
3. D/H #1, 2 Prepare gangway for launching to disabled vessel.
4. D/H #5, 6 Extra crowd control.

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.
Marine Engineer- will assist Chief Engineer
Oiler#1- Will be on standby for use of emergency equipment such as fire pumps, etc.
Oiler# 2- Extra crowd control
Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

   After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

   How to operate launching apparatus:

   1. Roll launching apparatus unit so gangway is between both vessels.
   2. Lock wheels on launching apparatus by putting handle in upright position.
   3. Secure gangway with lines to cleats.

   4. Proceed to lower by turning stainless steel knob counter-clock to release pressure until there is slack in the chain.
   5. Unhook cable and remove launching apparatus.

6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump handle to raise gangway.

Announcements will be made to keep crowd in control:

Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Austen Class Vessel

Vessel to Vessel Transfer

DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate - Will direct crew with the following procedures.

D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.
D/H #3, 4 will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.

Chief Engineer - Stays in engine room control room and keeps in constant communication with Captain.

Oiler – keeps in contact with C/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Austen Class Vessel

To

Barberi class Vessels

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate: Will direct crew with the following procedure.

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue. Put heaving lines on other shackles so net can be passed to disabled vessel.
3. D/H #1, 2 Prepare gangway for launching to disabled vessel.

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.

Oiler- will be on standby for use of emergency equipment such as fire pumps, etc.

Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

   After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

   How to operate launching apparatus:

   1. Roll launching apparatus unit so gangway is between both vessels.
   2. Lock wheels on launching apparatus by putting handle in upright position.
   3. Secure gangway with lines to cleats.
   4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
   5. Unhook cable and remove launching apparatus.
   6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:

Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Barberi Class Vessels
Vessel to Vessel Transfer

DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate#1 - Will direct crew with the following procedures.
Mate #2- Crowd control
D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then help with crowd control by positioning themselves by the departing gangway and insure each passenger has a lifejacket on properly before departing vessel.

D/H #3, 4 will take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.

D/H #5, 6 and # 1 Oiler will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.
D/H #7 Crowd control
Chief Engineer - Stays in engine room Control room and keeps in constant communication with Captain.
Marine Engineer - S/B emergency equipment such as fire pumps etc.
#1 Oiler – Crowd control helping passengers put on life jackets and reassuring passengers they will be safe.
#2 Oiler – keeps in contact with C/E and M/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Barberi Class Vessel

To

Barberi Class Vessel

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate#1 will direct crew with the following procedure.

Mate #2 Extra crowd control

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue.

Put heaving lines on other shackles so net can be passed to disabled vessel.

3. D/H #1, 2 Prepare gangway for launching to disabled vessel.
4. D/H #5, 6 Extra crowd control.
5. D/H # 7 Extra crowd control

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.

Marine Engineer- will assist Chief Engineer

Oiler#1- Will be on standby for use of emergency equipment such as fire pumps, etc.

Oiler# 2- Extra crowd control

Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

How to operate launching apparatus:

1. Roll launching apparatus unit so gangway is between both vessels.
2. Lock wheels on launching apparatus by putting handle in upright position.
3. Secure gangway with lines to cleats.

4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
5. Unhook cable and remove launching apparatus.

6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:

Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Barberi Class Vessel
Vessel to Vessel Transfer
DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate#1 - Will direct crew with the following procedures.
Mate #2- Extra crowd control
D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then help with crowd control by positioning themselves by the departing gangway and insure each passenger has a lifejacket on properly before departing vessel.

D/H #3, 4 will take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.

D/H #5, 6 and # 1 Oiler will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.
D/H # 7 Extra crowd control
Chief Engineer - Stays in engine room Control room and keeps in constant communication with Captain.
Marine Engineer - S/B emergency equipment such as fire pumps etc.
#1 Oiler – Crowd control helping passengers put on life jackets and reassuring passengers they will be safe.

#2 Oiler – keeps in contact with C/E and M/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Kennedy Class Vessel

To

Barberi Class Vessel

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate: Will direct crew with the following procedure.

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue. Put heaving lines on other shackles so net can be passed to disabled vessel.
3. D/H #1, 2 Prepare gangway for launching to disabled vessel.
4. D/H #5, 6 Extra crowd control.

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.
Marine Engineer- will assist Chief Engineer.
Oiler#1- Will be on standby for use of emergency equipment such as fire pumps, etc.
Oiler# 2- Extra crowd control

Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

   After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

   How to operate launching apparatus:

   1. Roll launching apparatus unit so gangway is between both vessels.
   2. Lock wheels on launching apparatus by putting handle in upright position.
   3. Secure gangway with lines to cleats.

   4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
   5. Unhook cable and remove launching apparatus.

6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:

Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Barberi Class Vessel
Vessel to Vessel Transfer

DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate#1 - Will direct crew with the following procedures.
Mate #2- Extra crowd control
D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then help with crowd control by positioning themselves by the departing gangway and insure each passenger has a lifejacket on properly before departing vessel.

D/H #3, 4 will take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.

D/H #5, 6 and # 1 Oiler will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.
D/H # 7 Extra crowd control
Chief Engineer - Stays in engine room Control room and keeps in constant communication with Captain.
Marine Engineer - S/B emergency equipment such as fire pumps etc.
#1 Oiler – Crowd control helping passengers put on life jackets and reassuring passengers they will be safe.
#2 Oiler – keeps in contact with C/E and M/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Kennedy Class Vessel

To

Barberi Class Vessel

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate: Will direct crew with the following procedure.

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue. Put heaving lines on other shackles so net can be passed to disabled vessel.
3. D/H #1, 2 Prepare gangway for launching to disabled vessel.
4. D/H #5, 6 Extra crowd control.

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.
Marine Engineer- will assist Chief Engineer.
Oiler#1- Will be on standby for use of emergency equipment such as fire pumps, etc.
Oiler# 2- Extra crowd control

Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

   After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

   How to operate launching apparatus:

   1. Roll launching apparatus unit so gangway is between both vessels.
   2. Lock wheels on launching apparatus by putting handle in upright position.
   3. Secure gangway with lines to cleats.

   4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
   5. Unhook cable and remove launching apparatus.

6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:
Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Barberi Class Vessel
Vessel to Vessel Transfer

DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate#1 - Will direct crew with the following procedures.
Mate #2- Extra crowd control
D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then help with crowd control by positioning themselves by the departing gangway and insure each passenger has a lifejacket on properly before departing vessel.

D/H #3, 4 will take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.

D/H #5, 6 and # 1 Oiler will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.
D/H # 7 Extra crowd control
Chief Engineer - Stays in engine room Control room and keeps in constant communication with Captain.
Marine Engineer - S/B emergency equipment such as fire pumps etc.
#1 Oiler – Crowd control helping passengers put on life jackets and reassuring passengers they will be safe.
#2 Oiler – keeps in contact with C/E and M/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Austen Class Vessel

To

Kennedy Class Vessels

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate: Will direct crew with the following procedure.

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue.
Put heaving lines on other shackles so net can be passed to disabled vessel.
3. D/H #1, 2 Prepare gangway for launching to disabled vessel.

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.

Oiler- will be on standby for use of emergency equipment such as fire pumps, etc.

Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

   After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

   How to operate launching apparatus:

   1. Roll launching apparatus unit so gangway is between both vessels.
   2. Lock wheels on launching apparatus by putting handle in upright position.
   3. Secure gangway with lines to cleats.

   4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
   5. Unhook cable and remove launching apparatus.
   6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:

Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Kennedy Class Vessel

Vessel to Vessel Transfer

DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate - Will direct crew with the following procedures.

D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then help with crowd control by positioning themselves by the departing gangway and insure each passenger has a lifejacket on properly before departing vessel.

D/H #3, 4 will take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.
D/H #5, 6 and #1 Oiler will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.

Chief Engineer - Stays in engine room Control room and keeps in constant communication with Captain.

Marine Engineer - S/B emergency equipment such as fire pumps etc.
#1 Oiler – Crowd control helping passengers put on life jackets and reassuring passengers they will be safe.

#2 Oiler – keeps in contact with C/E and M/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Barberi Class Vessel

To

Kennedy Class Vessel

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate#1 will direct crew with the following procedure.
Mate #2 Extra crowd control

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue.
Put heaving lines on other shackles so net can be passed to disabled vessel.
3. D/H #1, 2 Prepare gangway for launching to disabled vessel.
4. D/H #5, 6 Extra crowd control.
5. D/H # 7 Extra crowd control

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.
Marine Engineer- will assist Chief Engineer
Oiler#1- Will be on standby for use of emergency equipment such as fire pumps, etc.
Oiler# 2- Extra crowd control

Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

How to operate launching apparatus:

1. Roll launching apparatus unit so gangway is between both vessels.
2. Lock wheels on launching apparatus by putting handle in the upright position.
3. Secure gangway with lines to cleats.
4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
5. Unhook cable and remove launching apparatus.
6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:

Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Kennedy Class Vessel
Vessel to Vessel Transfer
DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate#1 - Will direct crew with the following procedures.

D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then help with crowd control by positioning themselves by the departing gangway and insure each passenger has a lifejacket on properly before departing vessel.

D/H #3, 4 will take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.

D/H #5, 6 and # 1 Oiler will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.

Chief Engineer - Stays in engine room Control room and keeps in constant communication with Captain.
Marine Engineer - S/B emergency equipment such as fire pumps etc.
#1 Oiler – Crowd control helping passengers put on life jackets and reassuring passengers they will be safe.

#2 Oiler – keeps in contact with C/E and M/E in case emergency equipment is needed.

Vessel to Vessel Transfer

Austen Class Vessel

To

Austen Class Vessels

The following procedures shall be as followed:

1. The designated rescue vessel shall proceed to the nearest terminal and discharge passengers, pick up rescue gangway and proceed to disabled vessel.
2. While enroute to disabled vessel crew will set up rescue gangway.

Captain: Will navigate vessel toward disabled vessel. Captain will stay in contact with disabled vessel and communicate with Chief Engineer in the engine room.

Asst. Captain: Notify Ferry Terminal Supervisor Ch #19, U.S.C.G. Ch # 13, 14, 16, N.Y.P.D harbor Ch #17. Keep engine room updated.

Mate: Will direct crew with the following procedure.

1. D/H #1, 2 put double headlines through chocks and over cleat and put heaving lines on headlines. Lay out fire hose on saloon deck if needed.
2. D/H # 3, 4 secure safety net to pad eye with shackle on Port and Starboard side of end that will be used for rescue. Put heaving lines on other shackles so net can be passed to disabled vessel.
3. D/H #1, 2 Prepare gangway for launching to disabled vessel.

Chief Engineer-will be in control room monitoring equipment and standby in case emergency equipment is needed.

Oiler- will be on standby for use of emergency equipment such as fire pumps, etc.

Additional crew can be used from Whitehall or St. George dock if needed.

When rescue vessel arrives
Step by Step

1. D/H # 1, 2 Double Headlines will be passed to disabled vessel and vessels will stay approx. 3-5 ft. apart. After headlines are secured to disabled vessel.

2. Rescue vessel will keep a strain on the headlines by backing vessel slightly.

3. D/H # 3, 4 Rescue net will be put out between vessels and secured to pad eye on disabled vessel.

   After cargo net is secured to disabled vessel by D/H #3, 4

4. D/H #1, 2 will launch gangway from launching apparatus and secure it to the disabled vessel pad eye and lock wheels on gangway.

   How to operate launching apparatus:

   1. Roll launching apparatus unit so gangway is between both vessels.
   2. Lock wheels on launching apparatus by putting handle in the upright position.
   3. Secure gangway with lines to cleats.
   4. Proceed to lower by turning stainless steel knob counter-clockwise to release pressure until there is slack in the chain.
   5. Unhook cable and remove launching apparatus.
   6. Picking up gangway hook up chain to gangway then turn stainless steel knob clockwise and pump with handle to raise gangway.

Announcements will be made to keep crowd in control:

Such as:

1. Please move as far forward as possible.
2. Please remain calm.
3. Please remain seated.
4. Please listen for instructions from crew members.
5. Please put on life jackets.

5. Begin vessel to vessel transfer with constant announcements to keep crowd in control.

6. All crew members will start crowd control and transfer passengers between vessels and will move passengers as far forward as possible.

Austen Class Vessel

Vessel to Vessel Transfer

DISABLED VESSEL PROCEDURES

Captain - Will keep in touch with rescue vessel. Make sure announcements are made to reassure the safety of the passengers.

Asst. Captain - Keeps in touch with engine room for updates and report them to the Captain. Make updated announcements. Also will make announcement for everyone to put on their life jackets before they depart the vessel.

Mate - Will direct crew with the following procedures.

D/H #1, 2 will take double headlines from rescue vessel and put them through the chock then on the cleat. Then take lines of cargo net and fasten to the pad eyes. After the net is secured prepare to receive the gangway from the rescue vessel. After gangway is secured stay by gangway and help passengers disembark telling passengers to watch their step.
D/H #3, 4 will be on crowd control. Keeping passengers inside doors until vessels are secured and safe to board.

Chief Engineer - Stays in engine room control room and keeps in constant communication with Captain.

Oiler – keeps in contact with C/E in case emergency equipment is needed.