



**National Transportation Safety Board**  
Marine Safety

# Safety Management Systems





# Ship Management

- Management Issues at NYC DOT
- Management Issues on vessels

# Safety Management

- ISM-International Safety Management Code (Chapter 9 of the Safety of Life at Sea Treaty, or SOLAS)
- SMS-Safety Management System(s)



# Why SMS?

- Human element
- Significant benefits
- USCG supports such programs

# Safety Management Systems



- A structured, documented system
- Identify and resolve safety issues

# SMS History

- March 1987 capsizing of the *Herald of Free Enterprise*
- 193 Fatalities



# SMS History continued



“ To provide an international standard for the safe management and operations of ships and for pollution prevention.”



# ISM Code

- Mandatory for Passenger vessels on international voyages on July 1, 1998
- Most other vessels on international voyages July 1, 2002



# U.S. Regulations

- U.S. is signatory nation to SOLAS
- USCG final rule in 33 CFR 96, “Rules for the Safe Operation of Vessels and Safety Management Systems”

# Objectives of SMS

- Safe practices
- Establish safeguards against all identified risks

# Objectives of SMS continued

- Continuously improve safety management
- Ensure compliance with mandatory rules and regulations

# Ferry Operators



# B.C. Ferries

- British Columbia Ferries of Canada
- 35 ships, 47 terminals
- 21 million passengers annually
- Has a Safety Management System



# Largest U.S. Ferry operators

<b>Agency</b>	<b>Annual Ridership</b>	<b>Maximum Capacity</b>
<b>WA State Seattle</b>	<b>26 million</b>	<b>2,500</b>
<b>NYC DOT</b>	<b>19 million</b>	<b>6,000</b>
<b>SF Bay Area</b>	<b>4 million</b>	<b>788</b>
<b>LA DOT New Orleans</b>	<b>3.1 million</b>	<b>1,000</b>
<b>MBTA Boston</b>	<b>1.4 million</b>	<b>600</b>

# Staten Island Ferries



- Seven vessels
- 19 million passengers annually
- Barberi Class carried 6000 passengers
- Day and Night runs
- 3 new ferries

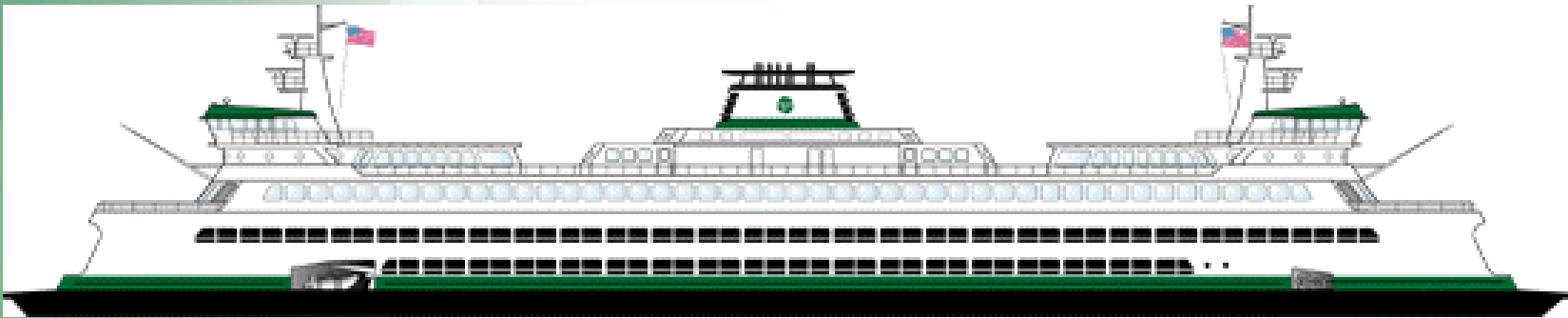
# Washington State Ferries



- 26 million passengers annually
  - 29 Vessels
- 1800 employees, 20 terminals



# Jumbo Mark II



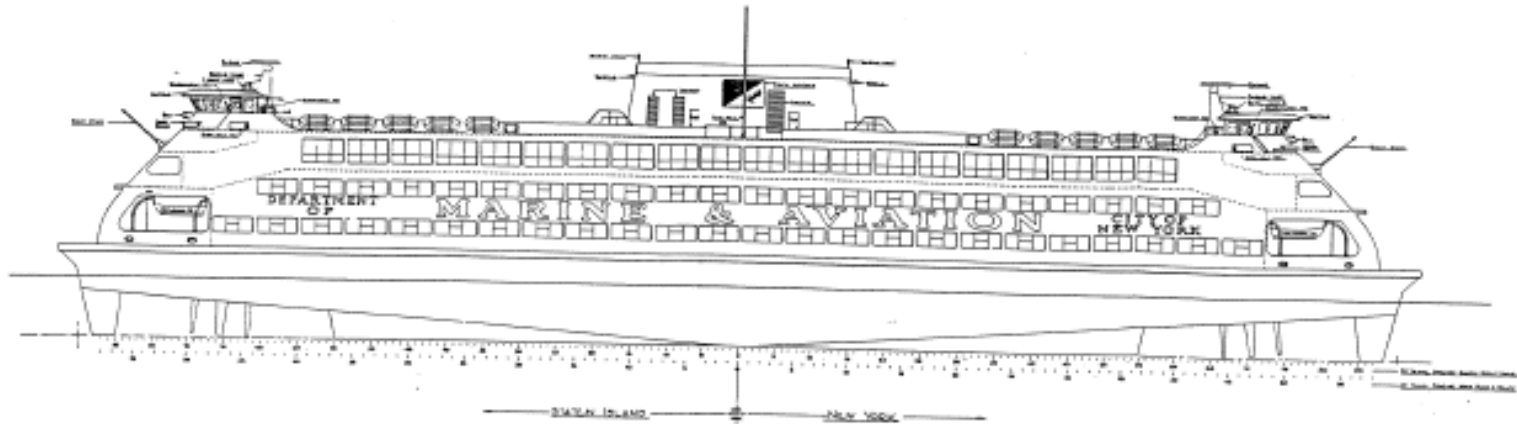
*MV Wenatchee, M/V Tacoma, M/V Puyallup*

460 Feet long

2500 Passengers

202 Vehicles

# Barberi Class



*M/V Andrew J. Barberi, M/V Samuel I Newhouse*

- 310 Feet Long
- 6000 passengers
- No vehicles

# **SMS addresses issues**

**Management Oversight**  
**Captain's Responsibilities**  
**Crew Fitness**  
**Bridge Procedures**  
**Emergency Preparedness**  
**Corrective Action**  
**Preventive Maintenance**  
**Extensive Audits**

# **Global Maritime and Transportation School (GMATS) recommendations:**

- The establishment of an SMS
- Making improvements to the navigation bridge team
- Instituting organizational changes
- The training and professional development of employees



# **Global Maritime and Transportation School (GMATS) recommendations:**

- Security modifications
- Installing advanced marine technologies



# Summary

- SMS not currently required for U.S. flag passenger operators on domestic routes
- Recommendations

