

NTSB Overview July 23, 2015

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Director Office of Marine Safety



Mission

Independently Advancing Transportation Safety



"From tragedy we draw knowledge to improve safety for us all"



Organization









Aviation Safety

Highway Safety

Rail, Pipeline and Hazardous Material

Marine Safety

Research & Engineering

Administrative Support (MD, CIO, CFO, HR etc)



Marine Safety Organization

- 4 Managers
- 11 Marine Investigators
- 2 Human Factors Investigators
- 2 Writer/Editors
- 1 Administrative Officer







Authority - Marine

Major Marine Casualty

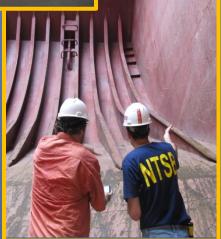
- Loss of vessel >100T
- Damage >\$500k
- 6 or more fatalities
- Serious threat to life, property or environment by hazmat

Accidents of a recurring nature

Public – Non Public vessel; one fatality or >\$75k damage

Significant safety issues relating to USCG safety functions







Dual authorities to investigate







Authority - Marine

NTSB - USCG MOU

- Signed Nov. 2008
- Determines lead for MMC's
- Ensures interagency communications, cooperation, coordination
- Ensures efficient marine investigation processes



Gather and share factual information
No joint analysis
Separate Reports







Notification and Launch





Go-team travels to scene





Arrival on scene

Organizational Meeting

- Designate parties and party coordinators
- Establish and organize groups

Progress Meetings

- Summarize findings
- Info for briefings



Family Briefings

Press Briefings



Who may be a Party?

Parties to the field investigation shall be limited to those persons, government agencies, companies, and associations whose employees, functions, activities, or products were involved in the accident and who can provide suitable qualified technical personnel to actively assist in the field investigation.





Investigative groups

- Operations
- Engineering
- Survival
- Human performance
- Vehicle performance
- Medical/forensic
- Meteorology
- Recorders
- Fire/Materials





Investigative process



On-scene Investigation

Organizational Meeting

Groups and Parties

Progress meetings
Family Briefings
Media Briefings
Press Releases



Preliminary report

Factual information



Investigative Hearing

Fact finding
Depositions
Witnesses

Docket



Board Meeting

Findings

Docket

Conclusions

Probable Cause

Safety Recommendations In-Flight Separation of Vertical Stabilité American Airlines Flight 587 Airbus Industrie A380-605R, N14853 Betle Harbor, New York November 12, 2021



Final Report

Government in the Sunshine Act



Coordination with authorities

- Coast Guard
- First responders
- Federal agencies
- Port authorities
- Pilot commissions





Air/Rail Passenger Carriers

Family Assistant Teams

Logistics

Emergency Management Agencies First Responders Medical Examiner/Coroner Airport Authority Other Support Agencies

Local/State

Department of Homeland
Security (DHS)
Communications
Federal Protective Service

Security (DF Communication

American Red Cross

Disaster Mental Health Services

Disaster Health Services

Spiritual Care

Child Care

Mass Care





Assistance to US Citizen overseas Foreign Citizen & Government interfacing



Federal Bureau of Investigation (FBI)

Evidence & Wreckage Recovery
Victim Assistance Support





Department of Defense (DOD)

AM & PM Data Collection

NTSB and FBI

- MOU signed in 2005
- NTSB is lead until a crime is determined
- Procedure for transfer of case





Available FBI assets

- Evidence response teams
- Technical Hazardous Response Unit





Issues of interest

- Distraction
- Bridges and infrastructure
- Vessel traffic services (VTS)
- Passenger
 vessels, control
 mode awareness

- DUKW accident
- Cosco Busan,
 Overseas Reymar
- Summer Wind and Miss Susan
- Seastreak Wall Street



Safety initiatives

- Special Investigative Reports
 - Parasailing
 - Vessel Traffic Service
- Marine accident briefs
- Safer Seas
- Safety Alerts and videos
- Safety Forums
 - Cruise Ship Safety
 - Shared Waterways
- Safety Studies
 - Vessel Traffic Services



Safety Recommendations

- Most Wanted
 - Mass Transit (ferry) Vessel Safety
 - Distraction in Transportation
 - Medical fitness for duty
- VDR's
- Safety Management Systems
- Fatigue pilots





Safety Studies and Special Investigative Reports

- Parasail operations
- VTS







Marine Accident Brief (MAB)



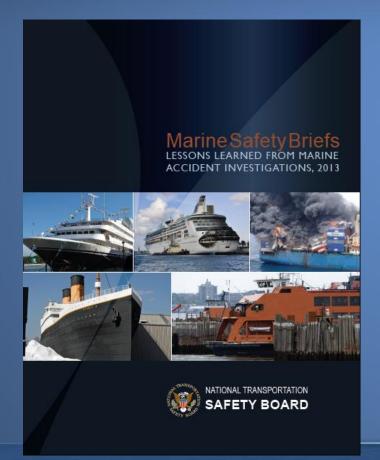


See online reports at http://www.ntsb.gov/investigations/reports.html



New ideas

• Safer Seas (eBook)





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Pride with

Rowan EXL I

EXL I

The National Transportation Safety Board determines

ordered hard starboard rudder in an attempt to make the ship's bow pass astern of the Rowan EXL I. Howeve at 0718, about 4 minutes after the engine slowdown began, the starboard-side bow of the FRB Pride collided with the portside of the Rowan EXL I at about 8 knots. Shortly after the collision, which punctured the FRS Pride's hull below the waterline, the ship's forepeak tank flooded and the vessel grounded at its bow. After the collision and within the timeframes required

by Coast Guard regulations, the FR8 Pride pilot and crew, and the pilot on board the lead tugboat for the Rowan EXL I, were tested for drugs and alcohol. All

The reason for the automatic slowdown of the FR8 Pride's engine was that the cooling jacket on the engine's cylinder No. 5 had suddenly cracked. Jacket water began leaking from the cracked cooling jacket, and the main engine control system—detecting the resulting pressure loss in the jacket water cooling system—protected the

After cylinder No.5's cooling jacket failure, which led to the collision, the crew called on the assistance of the engine manufacturer's service engineer, who identified several possible causes for the cracked cooling jackets. According to the service engineer's report, the cracks likely resulted from excessive thermal stresses imposed by rapid application of engine load when the ship's speed was increased from slow ahead to full ahead. In addition, the cooling jackets were metallurgically tested in an attempt to determine why they had cracked. The test found no abnormal conditions such as flaws or defects, preexisting cracks, unusual metal composition corrosion, or manufacturing defect. The metallurgical test report did express the opinion that the material used in manufacturing the cooling jackets (gray cast iron) might be inappropriate for this design application





New ideas

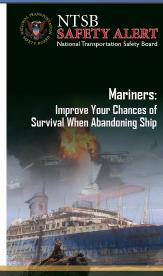
- Safety alert brochures
- Safety alert trading cards
- Short videos



supplies—and ensure the responsible person is

- Drill as if it is a real emergency. Conducting realistic drills gets the attention of crewmembers, builds their confidence and proficiency in emergency response procedures, and reinforces a strong safety culture. Review drill performance with crew to identify areas for improvement.
- Even in coastal waters, plan for the worst. Despite being dose to shore and/or in a normally high traffic waterway, don't assume that others will be able to come to your immediate aid, especially if your location changes. Be physically and mentally prepared for the possibility of a prolonged exposure situation.
- Follow your plan. In emergency situations involving high stress and exhaustion, ensure all aspects are covered by running through step by step emergency procedures in accordance with established checklists. Use shoreside support resources to assist you with this.
- Don't forget the EPIRB. The EPIRB is a vital piece of equipment that can significantly shorten the time necessary to locate and rescue you. Take it with you! In addition, carry a personal locator beacon (PLB); it is an inexpensive and effective device.
- Stay together in the water. Search and rescue personnel will more easily spot a group of people in the water than dispersed swimmers.

This NTSB safety alert and others can be accessed from the NTSB's Safety Alerts web page at www.ntsb.gov/safety/safety_alerts.html.



SAFETY ALERT -!!!!!!

GOOD PREPARATION AND PROPER USE OF SAFETY EQUIPMENT IS KEY



Getting the safety message out

- Tweets @NTSB
- Blogs
- Press releases
- Interviews (TV, magazines...)
- Outreach (industry events)
- Email distribution (list serve)











You Tube







