



NTSB National Transportation Safety Board

The Role of the NTSB - an Independent Investigative Process

**Flight Safety Foundation
Business Aviation Safety Symposium
Accident Panel
Weston, Florida,
May 14, 2015**

**Earl F. Weener, Ph.D.
NTSB Board Member**

Who We Are



The National Transportation Safety Board (NTSB) is an independent Federal agency created by the U.S. Congress to investigate **every civil aviation accident** in the United States and **significant accidents in the other modes** of transportation, namely – railroad, highway, marine and pipeline.



What We Do

Investigate the accident.



Determine the probable cause of the accident.

Propose corrective action to reduce the likelihood of a recurrence of the accident - through formal “recommendations”.



The Investigative Process – Major Investigations

- Decision to launch a “Go-Team”
- Arrival On-Scene
- Organizational Meeting
- Briefings and on-scene activities (i.e. fact gathering)
- Post on-scene fact gathering
- Analysis
- Report preparation – recommendation development
- Board Approval
- Advocacy

Go-Team Launch



- An NTSB “Go-Team” is dispatched from Washington headquarters to the site of major transportation accidents.

- Go-Team for a major accident typically includes:
 - Board Member
 - Investigator-In-Charge (IIC)
 - Technical Specialists
 - Public Affairs Officers
 - Family Affairs Specialists



Arrival On-scene

- Coordinate with local law enforcement authorities & first responders.
- Establish our investigative resources at the accident site.



- Establish an NTSB Operations Center.
- Confirm security arrangements.
- Ensure precautions for bio- and environmental hazards.

Organizational Meeting

- Review NTSB Rules of participation
- Implement the Party Process
- Identify parties and party representatives
- Establish Working groups
- Outline on-scene investigation schedule



Briefings

- Family briefings
- Media briefings



- The NTSB Board Member On-Scene or the IIC, is the sole spokesperson.
- Provide factual information only.



Post On-Scene



- Issue Preliminary Report
 - Additional fact finding
 - Examination of evidence
 - Investigative hearing (optional)
- Various Laboratories on premises to assist
 - Two campuses – HQ and Ashburn (storage and training facility)

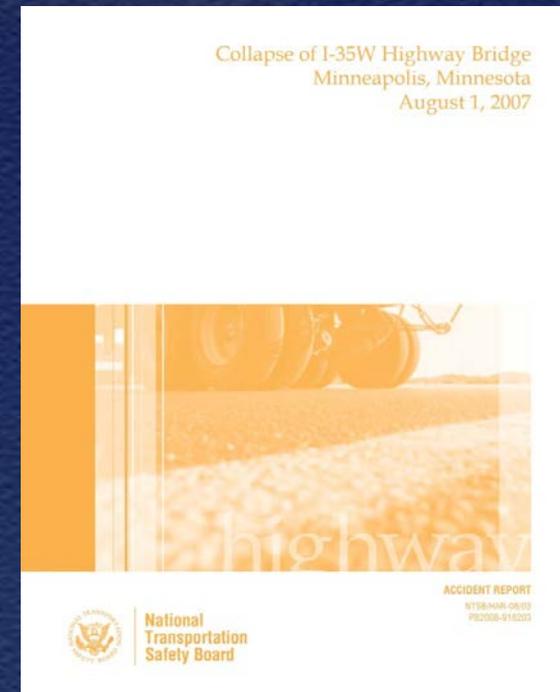


Analysis and Final Report Development

- Working group reports – “Chairman Reports”
- Docket opened



- Factual statement – party review/collaboration
- Development of statement of analysis – NTSB only



Board Meeting

The Board Members conduct a public meeting to discuss and approve the final report on the accident. The report includes conclusions, a statement of probable cause, and recommendations.



Recommendations

- Safety recommendations – most recognized product of the NTSB.
 - State the safety need to be satisfied
 - Describe the recommended action to be taken
 - Designate the party or person expected to take action



National Transportation Safety Board
Washington, DC 20594

Safety Recommendation

Date: March 8, 2013
In reply refer to: R-13-16

Mr. David Starling
President and CEO
Kansas City Southern Railway Company
Post Office Box 219335
Kansas City, Missouri 64121-9335

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline.

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National Transportation Safety Board
Washington, DC 20594

Safety Recommendation

Date: January 15, 2014
In reply refer to: A-14-001

The Honorable Michael P. Huerta
Administrator
Federal Aviation Administration
Washington, DC 20591

We are providing the following information to urge the Federal Aviation Administration (FAA) to take action on the safety recommendation issued in this letter. This recommendation addresses the need to require the retrofit of existing Robinson R44 helicopters with improved fuel tanks. The recommendation is derived from the National Transportation Safety Board's (NTSB) and the Australian Transport Safety Bureau's (ATSB) investigations of R44 accidents in which the impact forces were survivable for the occupants, but fatal or serious injuries occurred because of a postcrash fire that resulted from an impact-related breach in the fuel tanks. Information supporting this recommendation is discussed below.

On November 25, 2012, a Robinson R44 II helicopter, N4204A, collided with a structure at Corona Municipal Airport, Corona, California. The pilot/owner, who was operating the helicopter under the provisions of 14 *Code of Federal Regulations* (CFR) Part 91, died as a result of his injuries. The helicopter was substantially damaged from impact forces and a postcrash fire. Although this accident is still under investigation, preliminary evidence indicates that the accident was survivable and that the pilot succumbed to injuries related to the postcrash fire.¹

The NTSB has investigated, since 2008, three other R44 helicopter accidents in which the fuel tanks were breached, resulting in leaking fuel and a postcrash fire.² In addition, since 2011, three similarly equipped R44 helicopters were involved in accidents in Australia.³ Analysis of data from the US and Australian accidents showed that they should all have been survivable with minor or no injuries to the occupants.⁴ However, the accidents in the United States, including the Corona accident, resulted in two fatalities and two serious thermal injuries, and the accidents in

¹ Additional information about this accident, WPR13FA054, can be found at the [NTSB's website](http://www.ntsb.gov), which can be accessed at <http://www.ntsb.gov>.

² For more information, see DFW08LA122, WPR10LA458, and CEN12CA643 at the [NTSB's website](http://www.ntsb.gov).

³ For more information, see AO-2011-016, AO-2012-021, and AO-2013-055 at the [NTSB's website](http://www.ntsb.gov), which can be accessed at <http://www.ntsb.gov>.

⁴ Two of the occupants involved in these accidents survived with minor or no injuries. For DFW08LA122, the pilot received minor injuries (but the passenger received fatal injuries). For CEN12CA643, the pilot (the only occupant) was not injured.

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