

The following Safety Recommendations were issued as a result of NTSB Aviation Accident Report “Uncontained Engine Failure and Subsequent Fire American Airlines Flight 383 Boeing 767-323, N345AN Chicago, Illinois October 28, 2016.” Report number AAR-18-01. Adopted on January 30, 2018 and published on February 6, 2018.

Safety Recommendation Number	Safety Recommendation Recipient	Safety Recommendation Text
A-18-003	Federal Aviation Administration	Establish and lead an industry group that evaluates current and enhanced inspection technologies regarding their appropriateness and effectiveness for applications using nickel alloys, and use the results of this evaluation to issue guidance pertaining to the inspection process for nickel alloy rotating engine components.
A-18-004	Federal Aviation Administration	Require subsurface in-service inspection techniques, such as ultrasonic inspections, for critical high-energy, life-limited rotating parts for all engines.
A-18-005	Federal Aviation Administration	Revise Advisory Circular (AC) 20-128A, “Design Considerations for Minimizing Hazards Caused by Uncontained Turbine Engine and Auxiliary Power Unit Rotor Failure,” based on an analysis of uncontained engine failure data since the time that the AC was issued, to minimize hazards to an airplane and its occupants if an uncontained engine failure were to occur. The revised AC should include modifications to the accepted design precautions for fuel tanks given the fires that have occurred after uncontained engine failures.

Safety Recommendation Number	Safety Recommendation Recipient	Safety Recommendation Text
A-18-006	Federal Aviation Administration	When approving the operating procedures of a 14 <i>Code of Federal Regulations</i> Part 121 air carrier, require operators to develop and/or revise emergency checklist procedures for an engine fire on the ground to expeditiously address the fire hazard without unnecessarily delaying an evacuation.
A-18-007	Federal Aviation Administration	Develop and issue guidance to all air carriers that conduct passenger-carrying operations under 14 <i>Code of Federal Regulations</i> Part 121 regarding (1) discussing this accident during recurrent flight attendant training to emphasize the importance of effectively assessing door and overwing exits during an unusual or emergency situation and (2) providing techniques for identifying conditions that would preclude opening exits, including an operating engine.
A-18-008	Federal Aviation Administration	Review the training programs of all 14 <i>Code of Federal Regulations</i> Part 121 operators and make changes as necessary to ensure that the programs provide flight attendants and flight crews with training aids and hands-on emergency scenarios that account for the different interphone systems that air carriers operate.
A-18-009	Federal Aviation Administration	Conduct research to (1) measure and evaluate the effects of carry-on baggage

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		on passenger deplaning times and safety during an emergency evacuation and (2) identify effective countermeasures to reduce any determined risks, and implement the countermeasures.
A-18-010	Boeing	Work with operators as required to develop and/or revise emergency checklist procedures for an engine fire on the ground to expeditiously address the fire hazard without unnecessarily delaying an evacuation.
A-18-011	American Airlines	For all airplanes that you operate, review existing engine fire checklists and make changes as necessary to ensure that the procedures would expeditiously address engine fires occurring on the ground without unnecessarily delaying an evacuation.

The following Safety Recommendation was reiterated as a result of NTSB Aviation Accident Report “Uncontained Engine Failure and Subsequent Fire American Airlines Flight 383 Boeing 767-323, N345AN Chicago, Illinois October 28, 2016.” Report number AAR-18-01. Adopted on January 30, 2018 and published on February 6, 2018.

Safety Recommendation Number	Safety Recommendation Recipient	Safety Recommendation Text
A-09-027	Federal Aviation Administration	Revise Advisory Circular 120-48, “Communication and Coordination Between Flight Crewmembers and Flight Attendants,” to update guidance and training provided to flight and cabin crews regarding communications during emergency and unusual situations to reflect current

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		industry knowledge based on research and lessons learned from relevant accidents and incidents over the last 20 years.

The following Safety Recommendation was reiterated and reclassified as a result of NTSB Aviation Accident Report “Uncontained Engine Failure and Subsequent Fire American Airlines Flight 383 Boeing 767-323, N345AN Chicago, Illinois October 28, 2016.” Report number AAR-18-01. Adopted on January 30, 2018 and published on February 6, 2018.

Safety Recommendation Number	Safety Recommendation Recipient	Safety Recommendation Text	New Classification
A-16-026	Federal Aviation Administration	Develop best practices related to evacuation communication, coordination, and decision-making during emergencies through the establishment of an industry working group and then issue guidance for 14 Code of Federal Regulations Part 121 air carriers to use to improve flight and cabin crew performance during evacuations.	Open—Unacceptable Response

February 6, 2018

Daniel K. Elwell
Administrator
Federal Aviation Administration

On January 30, 2018, the NTSB adopted its report Uncontained Engine Failure and Subsequent Fire, American Airlines Flight 383, Boeing 767-323, N345AN, Chicago, Illinois, October 28, 2016, AAR1801. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at <http://www.nts.gov>.

Among the Safety Recommendations seven are issued to Federal Aviation Administration, which can be found on page 77 of the report.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number. We encourage you to submit your response to correspondence@nts.gov. If it exceeds 20 megabytes, including attachments, please e-mail us at the same address for instructions. Please do not submit both an electronic copy and a hard copy of the same response.



February 6, 2018

Mr. Richard Mayfield
Air Safety Investigator
The Boeing Company

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. We determine the probable cause of the accidents and issue safety recommendations aimed at preventing future accidents. In addition, we carry out special studies concerning transportation safety and coordinate the resources of the federal government and other organizations to provide assistance to victims and their family members affected by major transportation disasters.

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Among the Safety Recommendations one is issued to the Boeing Company, which can be found on page 78 of the report.

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February 6, 2018

Captain Chris Moran
Sr Manager - Flight Safety and Investigations
American Airlines

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Among the Safety Recommendations one is issued to American Airlines, Capt. Chris Moran which can be found on page 78 of the report.

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