

March 8, 2019

Mr. Daniel Elwell  
Acting Administrator  
Federal Aviation Administration  
800 Independence Avenue  
Washington, DC 20591

Dear Mr. Elwell:

On February 14, 2019, the NTSB adopted its report, Runway Overrun during Rejected Takeoff, Ameristar Air Cargo, Inc., dba Ameristar Charters, flight 9363, Boeing MD-83, N786TW, Ypsilanti, Michigan, March 8, 2017, NTSB AAR-19/01. 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>.

As a result of this investigation, the NTSB identified the following safety issues:

- Lack of a means to enable flight crews of Boeing DC-9/MD-80 series and 717 model airplanes to verify before takeoff that the elevators are not jammed.
- Need for lower ground gust criteria for elevator physical inspections and operational checks by maintenance personnel for Boeing DC 9/MD-80 series and 717 model airplanes.
- Potential inadequacy of ground gust limit loads for the certification of transport category airplanes.
- Lack of procedures for operators of Boeing DC-9/MD-80 series and 717 model airplanes to monitor the wind that affects parked airplanes.
- Lack of procedures for weather observers related to sign off and backup augmentation responsibilities during a facility evacuation.
- Evacuation slide malfunction.

Accordingly, the NTSB makes the following safety recommendations to the FAA. Additional information regarding these recommendations can be found in the noted sections of the report.

- Determine if the ground gust limit loads contained in Title 14 Code of Federal Regulations 25.415 adequately ensure that critical flight control systems are protected from hazards introduced by ground gusts that contain dynamic, vertical wind components. (A 19-4) (See section 2.4.1)
- Ensure the operators of Boeing DC-9/MD-80 series and 717 model airplanes have procedures that define who is responsible for monitoring the wind that affects parked airplanes and for notifying

maintenance personnel when conditions could meet or exceed the ground gust criteria specified in the Aircraft Maintenance Manual. (A-19-5) (See section 2.4.3.)

- Revise Order JO 7900.5D, Surface Weather Observing, Change 1, to specify sign off procedures and backup augmentation responsibilities for all types of weather-observing personnel when they are unable to perform their prescribed duties from their normal duty station during normal duty hours. (A-19-6) (See section 2.6.3.)

In our report on the March 8, 2017, accident in Ypsilanti, Michigan, we also classified two previously issued safety recommendations:

- Require all 14 Code of Federal Regulations Part 139 certificated airports to upgrade all runway safety areas that could, with feasible improvements, be made to meet the minimum standards established by Advisory Circular 150/5300-13, "Airport Design." The upgrades should be made proactively, not only as part of other runway improvement projects.

(A 03-11, classified "Closed—Acceptable Action" in Section 2.5)

- Require all 14 Code of Federal Regulations Part 139 certificated airports to install engineered materials arresting systems in each runway safety area available for air carrier use that could not, with feasible improvements, be made to meet the minimum standards established by Advisory Circular 150/5300-13, "Airport Design." The systems should be installed proactively, not only as part of other runway improvement projects.

(A-03-12, classified "Closed—Acceptable Action" in Section 2.5)

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@ntsb.gov](mailto:correspondence@ntsb.gov). If your reply 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.

Sincerely,

Robert L. Sumwalt, III

Chairman

March 8, 2019

Mr. Robert J. McIntosh  
Director, Product Safety – Commercial Airplanes  
The Boeing Company  
PO Box 3707, MC 081-53  
Seattle, WA 98124-2207

Dear Mr. McIntosh:

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 assist victims and their family members affected by major transportation disasters.

We are providing the following information to urge your organization to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents. For more information about the NTSB and our recommendation process, please see the attached one-page summary.

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- Lack of procedures for weather observers related to sign off and backup augmentation responsibilities during a facility evacuation.
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Accordingly, the NTSB makes the following safety recommendations to The Boeing Company. Additional information regarding these recommendations can be found in section 2.4.2 of the report.

- Complete the development of a modification for Boeing DC-9/MD-80 series and 717 model airplanes that will prevent the possibility of elevator jamming due to ground wind exposure. (A-19-1)
- Develop new preflight procedures or other mitigations for Boeing DC-9/MD-80 series and 717 model airplanes that will enable a flight crew to verify before takeoff that the elevators are not jammed. (A-19-2)
- Until the actions in Safety Recommendations A-19-1 and -2 are completed, revise the Aircraft Operating Manual and Aircraft Maintenance Manual for Boeing DC-9/MD-80 series and 717 model airplanes to lower the ground gust criteria that will require physical inspections and operational checks of the elevators by maintenance personnel. (A-19-3)

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 (for example, A-19-1). We encourage you to submit your response to [correspondence@ntsb.gov](mailto:correspondence@ntsb.gov). If your reply 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.

Sincerely,

Robert L. Sumwalt, III

Chairman