



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: July 16, 2014

In reply refer to: A-14-56 and -57

Mr. W. James McNerney, Jr.
Chairman and Chief Executive Officer
The Boeing Company
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Chicago, IL 60606

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. The NTSB determines the probable cause of the accidents and issues safety recommendations aimed at preventing future accidents. In addition, the NTSB carries out special studies concerning transportation safety and coordinates the resources of the federal government and other organizations to provide assistance to victims and their family members affected by major transportation disasters. We are providing the following information to urge Boeing to take action on the safety recommendations being issued in this letter.

On June 24, 2014, the NTSB adopted its report concerning the July 6, 2013, accident, in which a Boeing 777-200ER, Korean registration HL7742, operating as Asiana Airlines flight 214, was on approach to runway 28L when it struck a seawall at San Francisco International Airport, San Francisco, California.¹ Additional information about this accident and the resulting recommendations may be found in the report of the investigation, which can be accessed at our website, <http://www.nts.gov>, under report number AAR-14/01.

As a result of this investigation, the NTSB issued 27 new recommendations, including 15 to the Federal Aviation Administration, 4 to Asiana Airlines, 4 to the Aircraft Rescue and Firefighting Working Group, 2 to the City and County of San Francisco, and the following 2 recommendations to Boeing:

¹ National Transportation Safety Board. *Descent Below Visual Glidepath and Impact With Seawall, Asiana Airlines Flight 214, Boeing 777-200ER, HL7742, San Francisco, California, July 6, 2013*. AAR-14/01 (Washington, DC: National Transportation Safety Board, 2014).

A-14-56

Revise the Boeing 777 Flight Crew Operating Manual to include a specific statement that when the autopilot is off and both flight director switches are turned off, the autothrottle mode goes to speed (SPD) mode and maintains the mode control panel-selected speed.

A-14-57

Using the guidance developed by the low energy alerting system panel created in accordance with Safety Recommendation A-14-43, develop and evaluate a modification to Boeing wide-body automatic flight control systems to help ensure that the aircraft energy state remains at or above the minimum desired energy condition during any portion of the flight.

These safety recommendations are derived from the NTSB's investigation and are consistent with the evidence we found and the analysis we performed. Acting Chairman HART and Members SUMWALT, ROSEKIND, and WEENER concurred in these recommendations.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate receiving a response from you within 90 days detailing the actions you have taken or intend to take to implement them. When replying, please refer to the safety recommendations by number. We encourage you to submit your response electronically to correspondence@ntsb.gov. If it exceeds 10 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.

[Original Signed]

By: Christopher A. Hart,
Acting Chairman