

Factual Report – Attachment 17

NTSB Safety Letter

OPERATIONAL FACTORS/HUMAN PERFORMANCE

DCA18IA081



National Transportation Safety Board

Washington, D.C. 20594

February 7, 2018

Captain Nick Stone
Director, Regulatory Compliance & Fleet Technology
Horizon Air / Flight Ops Division
Horizon Air Industries, Inc.
8070 NE Airtrans Way
Portland, OR

Dear Captain Stone,

The National Transportation Safety Board (NTSB) is currently conducting an investigation of the incident that involved a Horizon Air Q-400 airplane that landed on the taxiway at Pullman/Moscow Regional Airport on December 29, 2017 (NTSB case DCA18IA081).

The Independent Safety Board Act of 1974 assigns the Safety Board the responsibility to investigate transportation accidents and propose corrective steps to make transportation as safe and risk-free as possible, and to reduce the likelihood of recurrence of similar accidents. This letter contains one safety suggestion that I developed during the investigation which was discussed by telephone with you and Captain Jason Atterbury, Manager of Flight Safety and Senior Q-400 Check Pilot for Horizon Air, on February 7, 2018.¹ I would like to emphasize that the investigation is still on-going, and no probable cause to this incident has been developed.

Following the January 12, 2014 incident involving Southwest Airlines flight 4013, a Boeing 737-7H4 landing at the wrong airport, and the November 21, 2013 incident involving a Boeing 747-400 LCG (Dreamlifter) which also landed at the wrong airport, the NTSB published Safety Alert "Landing at the Wrong Airport"² (see attached) which provided suggestions for pilots to mitigate the risks of landing at the wrong airport. Included in the suggestions was the following:

- *Be familiar with and include in your approach briefing the destination airport's layout and relationship to other ground features; available lighting such as visual glideslope indicators, approach light systems, and runway lighting; and instrument approaches.*

While the Safety Alert was published following two serious incidents involving large airplanes landing at the wrong airport, the purpose of the suggestions was to increase pilot awareness with not only the airport of intended landing, but also with the runway aids available to the pilot, and is applicable to verifying the correct airport and runway for landing. Approach briefings are critical to preparing the pilot for approaches and landings, as well as providing a shared mental model of

¹ Captain Atterbury is a member of the Operations/Human Performance group for this investigation.

² The NTSB safety alert and others can be accessed from the NTSB's Safety Alert web page at <http://www.nts.gov/safety/safety-alerts/Pages/default.aspx>.

the approach and landing between both pilots.³ Understanding what approach lights, runway lights and visual glideslope indicators the pilots should see for the landing runway, whether flying under visual conditions or breaking out of the clouds at minimums during reduced visibilities, would help increase the pilot's situational awareness and mitigate the risk of landing somewhere other than where the pilot intended.

The investigation reviewed Horizon Air Q-400 pilot guidance, specifically that related to the approach briefings. The Horizon Air Flight Operations Manual (FOM), page 10.1.7 included those items required to be included in the approach briefing. Available lighting such as visual glideslope indicators, approach light systems, and runway lighting were not required items for an approach briefing, nor were they required on the following page for visual approach briefing items.⁴

Following our recent conversation regarding this topic, and to improve safety by mitigating the potential risk of landing somewhere other than where the pilot planned, I would suggest Horizon Air conduct a risk analysis review through its Safety Management System (SMS) program to include visual glideslope indicators, approach light systems, and runway lighting in the pilot's approach briefing in visual or instrument approaches.

I would appreciate if you would advise me of your response to this suggestion, in writing or by email, within 30 days. If you have any questions, or want to discuss this suggestion further, please feel free to contact me.

Finally, I would like to emphasize that it is your responsibility to implement whatever safety improvements are necessary. The above is my suggestion on one possible way to improve the safety of your operations and should not be construed as a formal Safety Recommendation from the Members of the Safety Board. Thank you for your cooperation in this matter and your interest in transportation safety.

Sincerely,



Captain David Lawrence
Senior Aviation Safety Investigator

cc: Dr. Dan Bower
Dr. Katherine Wilson
Captain David Helson

³ See also the Federal Aviation Administration (FAA) Advisory Circular 120-71A, Standard Operating Procedures for Flight Deck Members." Source: https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_120-71B.pdf.

⁴ In addition, the FlightSafety Foundation ALAR (Approach and Landing Accident Reduction) Tool Kit, Briefing Note 1.6 "Approach Briefing" suggests approach briefings include "approach lighting and runway lighting, and other expected visual references." Source: <https://www.skybrary.aero/bookshelf/books/849.pdf>.