

## ***Boeing Commercial Airplanes***

### **RESPONSE TO QUERY FINAL**

**DATE:** September 8, 2016

**SUBJECT:** Bird strikes

#### **ISSUE DESCRIPTION:**

The Sept. 9 opening of the motion picture “Sully,” about the Miracle on the Hudson starring Tom Hanks, may renew interest from the public and news media about the consequences of birds striking airplanes in flight.

#### **BOEING RESPONSE TO QUERY:**

Boeing airplanes are rigorously analyzed and tested to validate airplane strength and survivability in the event of a bird strike.

The analyses and test results ensure all Boeing commercial airplanes meet or exceed regulatory and more restrictive Boeing requirements for bird strikes.

Bird strike tests and/or analysis are conducted during the development of a new airplane model or when a structurally significant change has been made to an airplane that would require FAA re-certification for bird strike.

Tests and analyses are performed on critical structure components, such as forward fuselage structure, windshields, control surfaces and leading edges of wing and tail structure.

Systems and transport elements (wiring, tubing, etc.) are separated for protection following damaging bird strikes.

Boeing provides our customers’ pilots with bird strike training material and operational recommendations.

Boeing continues to work with government and industry to address this issue for current and future airplanes.

**Note:** Bird strike tests for jet engines are conducted by engine manufacturers as part of their certification process.

For more information about bird strikes in commercial aviation, go to:

<http://www.birdstrike.org/>

<http://wildlife.faa.gov/>

<http://flightsafety.org/aerosafety-world-magazine/march-2016/keeping-the-beasts-at-bay>

[http://www.boeing.com/commercial/aeromagazine/articles/2011\\_q3/pdfs/AERO\\_2011\\_Q3\\_article4.pdf](http://www.boeing.com/commercial/aeromagazine/articles/2011_q3/pdfs/AERO_2011_Q3_article4.pdf)