

## NTS Services Spotlight: Bird Strike Testing

### Specialists in Bird Strike Simulation for Public and Aviation Safety



**A Boeing 707 disturbs a colony of birds during takeoff**



**US Airways Flight 1549**

#### Can Your Structures Survive?

A bird strike or avian ingestion by a jet engine is a serious hazard to public and aviation safety. Investigations by the NTSB and FAA found that the January 2009 crash of US Airways Flight 1549 into the Hudson River in New York was caused by a double bird strike during take-off. The majority of bird strike incidents impact the windscreen or engine of the aircraft, the annual cost of the damage caused is estimated to be \$400 million.

#### Strike Simulator

The NTS bird strike simulator, also affectionately referred to as a chicken gun, is capable of firing real or simulated (gelatin) birds at velocities up to 350 knots (400 mph). Proximity sensors provide real time velocity measurement of each shot. High speed video is utilized to monitor all impacts, providing important post event analysis. In addition, transient shock and load data acquisition systems are readily available. Virtual witnessing can be accomplished via our NTS LabInsight portal.

#### Specifications

- ▶ 14 CFR 25.571 (4 pound bird)
- ▶ 14 CFR 25.631 (8 pound bird)
- ▶ CS 29.631 (1.0 kilogram/2.2 pound gelatin density block)

#### Contact Us

If your certification requirements call for bird strikes to aircraft structures such as radomes, antennas, windshields, wing sections or landing gear, contact us to discuss how we can help you meet these requirements.

#### About NTS New Jersey

The technical personnel at NTS Tinton Falls have extensive experience in electromagnetic radiation and susceptibility testing, product safety, dynamics, and environmental testing. NTS has the expertise to accurately monitor equipment response and performance during the most severe test environments. Our extensive knowledge of current test and conformity requirements, both domestic and international, can assist you in your product assessment and defining the proper requirements for your test program to achieve maximum customer acceptance. Aerospace, defense, telecommunications, medical and other markets are served by our Tinton Falls location.

#### About NTS

National Technical Systems is a trusted partner that helps organizations to access domestic and international markets. We are your single source for a full range of integrated engineering solutions, product testing, standards compliance, project management, and managed services. Globally accredited by leading regulatory agencies, NTS can provide cost-effective programs to meet your requirements — at your site, or at one of our many US or international facilities. NTS is the nation's largest independent standards compliance and product testing company, serving companies within the aerospace, defense, automotive, wireless and telecommunications, electronics, energy, medical device, software, and hardware markets.

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