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Letter to FAA Administrator re: USAir 1549 crash

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The Honorable J. Randolph Babbitt  
Administrator  
Federal Aviation Agency  
800 Independence Ave.  
Washington, D.C. 20591

Re: NTSB Safety Recommendations A-10-62 through 86

Dear Mr. Babbitt,

Regarding the captioned recommendations recently forwarded to you by the NTSB following the January 2009 US Airways 1549 accident, we would like to offer some comments and suggestions. As the signatories of this letter we feel that we are some of the most uniquely knowledgeable experts in the area of aviation wildlife mitigation due to our extensive training, education and experience. We have no comment on human factors or survival factors of this accident. But we express both surprise and dismay at many of the NTSB recommendations regarding the ultimate cause of this accident, wildlife, and the lack of effective mitigation, still deficient after all this time. We feel the FAA is and has been receiving advice that is at best incomplete and at worst dangerous to the taxpayer, voter and traveling public.

Recommendation A10-64: This recommendation proposes amending FAR 33 by using the lowest expected fan speed to certify the engines for small and medium bird testing. This idea is not deemed appropriate by all engine manufacturers worldwide. It obviates the peril of broken fan blades and severe imbalances due to the cascading effect caused by high speed engine rotation at the time of ingestion. Lufthansa Technik, which repairs large numbers of CFM56 engines worldwide, is on record as stating that low rotation speed allows birds to pass through the engine with minimal damage to the engine. They have the industry experience to support this statement: 50% of the engines sent to them for unscheduled off wing repair show signs of bird ingestion. There appears to be no scientific reason to amend FAR 33 as proposed.

Recommendation A10-75: in this accident a Wildlife Hazard Assessment had been conducted and a Wildlife Hazard Management Plan had been implemented at the LaGuardia Airport. None of these actions altered the situation leading to the accident. While we agree that WHAs and WHMPs are important component of airport wildlife hazard management, a comprehensive overview of the entirety of the wildlife hazard problem is severely lacking. The current risk management approach primarily focuses on the airport and surrounding environment with little or no consideration of operational, communication, pilot training, hazard segregation/avoidance, and regulatory oversight requirements.
Recommendation A10-76: the USDA proposals for equipment on aircraft to help avoid birdstrikes are not only incorrect but also not based on any sound science and have been proven wrong repeatedly. We have known since the first X-band radar systems were installed on aircraft that weather radar has no effect on birds. Birds don’t hear in the X-band. Even if they could perceive the sound that radar RF makes, birds recognize no evolutionary benefit in responding to this as a hazard. It’s not the same as shouting: ‘Get out of the way!’ But it is being portrayed in the same light. The same applies to the use of lasers on airplanes. Again, there is no evidence that such systems convey a message that would enable birds to avoid being struck at speeds beyond their evolutionary experience. We also trade mitigation for one hazard, birdstrikes, for another hazard: crew blindness from lasers.

These poorly researched and ill conceived proposals are a clear demonstration of the narrow view and insular world of some people engaged in this attempted mitigation. These persons lack either safety management training or an operational background in aviation or both. If we want to actually mitigate the problem we must stop the profligate dissipation of tax dollars on improvident research projects and start training our operational personnel on what they can actually do to reduce the probability and severity of birdstrikes. While basic research is necessary to advance new ideas, we should not jump to the applied implementation phase or even make recommendations unless and until conclusive data to support findings is presented.

Regarding mitigation by aircraft owners and operators it is critical to understand that there is virtually nothing out there now, published by the U.S government, that can help in this area. We simply seem to refuse to pick the low hanging fruit, the mitigation solutions, that are currently available. There are wonderful assets from other sources that are not being used. The most disturbing element missing from our current strategy is that there is no training in this area for the aviation industry: pilots, ATC, maintenance. These key stakeholders lack the basic mitigation tools to address the hazard. Curiously we have successfully mitigated windshear, icing and volcanic ash but we have failed to handle the birds. We not only lack an integrated, comprehensive mitigation plan but such an idea is without an advocate in government. We cannot simply continue to operate just by doing more of the same as we are guaranteeing another similar accident will occur.

We are aware that the FAA has asked the Commercial Aviation Safety Team (CAST) to add wildlife hazards as a task. We are also aware that CAST has no person or organization on board with comprehensive experience or training in this hazard. Further we are aware that CAST does have member organizations which have been approached repeatedly over the last 10 years to help in mitigating the wildlife risk but those member organizations consistently refused, citing birdstrikes as no threat. It is inconsistent with human nature that those organizations and people will suddenly reverse course and lead us to a solution.

The solution to this wildlife problem is the simple, time tested effective use of industry standard risk mitigation processes. We define the problem, develop mitigation, train the mitigation and implement the mitigation. It worked for wind shear: no US air carrier
a aircraft has been lost to wind shear in 15 years. It worked for icing: no US air carrier aircraft has been lost to icing in 15 years. Neither wind shear nor icing have gone away, we simply learned to effectively mitigate them. But to do so here we need strong knowledgeable leadership and that is the ingredient most sorely missing in the wildlife mitigation effort now.

Randy, we are confident that you remember striking a deer in an EAL DC-9. Sadly, not enough has changed since then. It is time to direct the resources and leadership to address this problem effectively.

We are prepared to assist in any efforts to develop an integrated solution to the aviation wildlife hazard problem and would be pleased to discuss the issue with you at your earliest convenience.

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Capt. Richard Sowden