Can Brazil make the difference in reducing the wildlife strike risk?

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“How safe and efficient is my flight?”

Passengers like a cheap, safe and on-time flight. Finding out the cheapest flights is easy via the world-wide-web or local travel agent. A Google search of “Cheap flights Brazil” gives, for example, 11,800,000 hits. On-time performance is a bit more challenging, but nowadays internet travel sites such as www.flightstats.com can provide passengers with these statistics as well.

“Figure 1: Cancelations & Delays in air transport

However, passengers normally do not study safety statistics before booking a specific flight. Even when they would like to, getting representative statistics poses a big challenge. Apparently, aviation authorities provide passengers’ safety oversight. Whilst in a specific flight passengers rely on the Captain’s performance. This system has proven very successful since aviation is by far the safest means of transport.

“What is the wildlife strike risk for my flight?”

Notwithstanding the excellent aviation record, passengers are very interested in a safe flight. Since I have become involved with bird/wildlife strikes, people ask me if birds and other animals are really a danger for aircraft. Trying to answer this question, I went on the Internet with full confidence in modern aviation transparency to find the answer. When searching for “global wildlife strikes to civil aircraft 2012” I get links related to the FAA, AAWHG and WBA. The search via “annual bird strike report 2012” produces the same type of pop-ups, together with annual safety reports of some airports. Narrowing the search to “ICAO IBIS annual report 2012”, the hits are many, but none of them gives me what I want. Not even one! The most recent global statistics available are the ones presented in the 2001-2007 IBIS Electronic Bulletin issued by ICAO in 2009.

The conclusion is staggering and frightening! Apparently, worldwide transparency is lacking and even after almost 25 year of data collection, short global data is available. Some nations might and others will have reliable data, covering their own territories. However, as we all know, human-made borders do not restrict wildlife and, especially, birds. Every year, migrating birds might cross over 25 national borders during their journeys. Also, aircraft cross international borders. Therefore national annual bird strike reports (when they exist) have a limited value, if not used together. Another interesting question is if there is no, or in the best case, limited statistical data, how can the appropriate authority perform adequate oversight? Is it possible, therefore, that the trust of the traveling public in adequate oversight by the authorities is not being realistic?

An alternative solution for the lacking of statistical methods could be the risk assessment via “best expert judgement”. There are many wildlife strike experts in the world. Each with a different background, skills and interests. Some of them sell products they consider as being the “silver bullet” in solving the wildlife strike problem. Others gather data for scientific research, whilst another group is interested in dealing with liability. During bird/wildlife conferences, these specialists meet and exchange ideas. Great! However, will it help me to answer the question above? What is the factual wildlife strike risk for passengers? Not really, 100 people have 100 opinions, especially when they are not structured and organized.

Another method is through accident and incident investigation. A good accident/serious incident report will identify risk factors. Luckily, wildlife strikes have resulted in relatively low quantity of serious accidents when compared to other causes (e.g. safe runway operations). Some of these reports are made available for the public. However, the question is whether these reports are representative for the worldwide wildlife strike risk or not. Sure, after a serious incident or accident, media might choose to address the wildlife problem. However, time will heal the wounds and, after a period, the topic is old news and is forgotten again. The traveling public relies thereafter on the appropriate authorities to overview the system for them so that the corrective actions are undertaken. Leaving the basic question on the real bird strike risk still unsolved.

The only way to understand the risk posed by wildlife strike to aviation is to combine objectively and in a fully transparent manner worldwide data with opinions of selected and amongst-peers accepted experts, and with data derived from accident and incident reports. Thus, this three-step-approach is necessary to establish the wildlife strike risk for Aviation. Only reliable data will allow the adoption of realistic and effective measures to reduce the risk.
ICAQ Bird Strike Information System

Migrating birds do not stop at national borders. Therefore, a worldwide organization should be responsible for collecting and disseminating all data. Logically, such organization should be ICAQ.

Figure 2: Bird migratory routes around the globe

The ICAO Bird Strike Information System (IBIS) was established almost 35 years ago in 1979 (last revision 1989). Looking back, however, it appears that over the past 35 years, ICAQ has not been successful in achieving a worldwide, up-to-date, transparent and objective database yet. So the question is: do we have to wait another 35 years? Or would it be time for the global aviation sector and the leading aviation authorities to take adequate initiative? Only these stakeholders have the power to either motivate ICAO to act effectively or to take themselves the initiative. How can Brazil help about that?

“How could Brazil make the difference?”

During the last five years, Brazil has been achieving an impressive economic development, leading to a quick increasing of its national aviation system. This condition has led Brazil to become one of the potential leading nations in Civil Aviation worldwide. On the other side of the wildlife strike problem, fauna and flora are incredibly huge and important in Brazil. The South American Giant has shown as well an impressive population growth concentrated in a few extremely populated areas, facing the challenge to reach a balance between economy, ecology and flight safety. Therefore, I believe Brazil should play a major and even a leading role. Could Brazil thus make the difference? I think the answer is “yes”!

A roadmap to achieve this may begin with the identification of the wildlife strike risk in Brazilian aviation, followed by setting a smart example while dealing with environment conservation, passenger’s safety and economy. Could Brazil do that alone? Probably, as much as other big countries, Brazil can. Nonetheless, working beyond national borders would be better. Even better would be to work in an interdisciplinary fashion together with other entities. That means involving stakeholders from the aviation sector (airports, aircraft operators, air service providers), bird strike industry, environment organizations, and authorities. In a country environment, this group is the national wildlife strike committee.

At a global scale, the World Birdstrike Association (WBA) has exactly this intention, while bringing all these stakeholders together. The WBA believes that only a global and interdisciplinary approach will elevate the prevention of wildlife strikes to the next level. The WBA is willing to serve as a catalyst in three areas. First: stimulate authorities to start truthfully working together towards a transparent and up-to-date worldwide database. Second: stimulate the setting up of a worldwide group of specialists recognised and accepted by peers. Third: help to bridge the gap between aviation and environment organizations. This latter requires the will of the aviation industry, science, operators, ecologists and authorities to work together on a global scale.

Brazil could make the difference in realizing this vision by setting an example. Wildlife deserves it, economy deserves it and, most importantly, all passengers deserve it.