

Speech / Xavier Jolivet (Airbus on behalf of the ICCAIA)

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Mister President of the ICAO Air Navigation Commission,
Madam Director General of the Airport Council International,
Mister Director of the ICAO Air Navigation Bureau,
Ladies, Gentlemen,

It is a great honor and pleasure for the ICCAIA to be given the opportunity to express their views during this session. I would like to sincerely thank the ICAO and ACI for jointly inviting ICCAIA and for the organization of this Symposium about Wildlife Strike Hazard Reduction.

The ICCAIA (International Coordinating Council of Aerospace Industries Associations) was established in 1972, and provides the Civil Aircraft industry a means to be represented with observer status in the deliberation of ICAO.

ICCAIA currently includes six regional and national member associations from Europe, America, Brazil, Canada, Japan and Russia.

In the charter of the ICCAIA, one of the key purposes is to promote those technological advances necessary to support the achievement of safe and economical air transport.

Wildlife strike hazard is as old as aviation. History records the first fatal bird strike accident in 1912. We do have evidence going back a long way. And as in many domains, evidence is key in how we go forward to progress.

Concerning bird strikes in civil aviation, a special report to the FAA (“Trends in strike reporting, 1990-2013”, by R.A. Dolbeer, published in May 2015) indicates that the reported strikes causing damage has actually declined or stabilized since 2000, most notably those occurring around airports. Indeed, the number of events with significant safety outcomes remains low.

When looking into the future, we know that forecasts for continued development of airports and the growth of urban areas will lead to increased cohabitation between birds and planes within the same limited space, especially since many big hubs are located in wetland areas favored by birds.

Recent studies also show a positive trend in the occurrence reporting rates and about bird species identification. However, this body of evidence always needs to be consolidated, to incorporate relevant trends and permit comparison between previsions and actual figures.

Why do we need these data?

Effectively, these data are key to provide input to technology development projects but also to refine predictive models.

We need to identify realistic scenarios with associated reliable probabilities of occurrence. As engineers we need basic information such as the birds estimated weight, phase of flight, level of damage, if we are to be able to look into design and/or operational solutions.

Developing and maintaining a reliable and widely validated dataset is therefore one of the key need in this area.

Some significant progress has already been made in streamlining the reporting and building up a validated dataset, including some very useful recent publications.

A study about wildlife strikes to civil aircraft in the US between 1990 and 2015 was published by end 2016 by FAA and US Dept of Agriculture.

The AIA bird ingestion working group, which included FAA, EASA and AIA, also published a comprehensive report in November 2012 updating bird ingestion database with recent figures. All these results would not have been possible without efforts from the various stakeholders, including airports responsible for wildlife management in their perimeter, airlines about reporting, aircraft manufacturers, ornithologists and other scientists and local authorities. These efforts have therefore proven relatively efficient and absolutely need to be continued and even reinforced with more standardized reporting formats.

However, at the present time, based on the available data, we already see a number of useful outcomes for the industry including leading to study the institution of a periodic revision of relevant databases used for bird strikes rulemaking.

FAA assigned ARAC in 2013 the task to review and assess adequacy of certain portions of the engine bird ingestion requirement. FAA also submitted in 2015 to public comments possible changes to the current airframe regulations for which manufacturers provided their feedback.

The ICCAIA is of course in favor of evolution of certification regulations, considering that it shall be performance based and capitalizing on the available positive evolutions. This is the way aviation has always progressed to bring safety at its highest level ever. Threats have always been addressed by continuous improvement of the products and of its operations, as permitted by technological advances. The industry culture has always been driven by a better understanding of its environment, allowing to push forward the state of the art to permit higher levels of Safety and performance.

However, we believe it is worth emphasizing that regulation evolutions work best when they go in the direction of characterizing the threat, and not in the direction of specifying which solution should be used to address the threat.

The ever reducing rate of accidents highlights that ICCAIA's members have a long and well demonstrated history of finding and implementing good solutions, as long as an agreed characterization of the threat is available.

Hence, again, the importance of reporting and data collection and of equivalent knowledge base expert continuing fruitful cooperation.

In terms of industry's development of useful solutions, some promising and innovative initiatives are already under development concerning bird and flock detection and avoidance.

Beyond industry, there is also a lot of effort being put into new wildlife management techniques. Clearly, reducing the threat to aviation from bird strikes will require contributions from several different types of knowledgeable people and organizations.

And of course, the manufacturers are committed to this effort.

Wildlife control and risk mitigation requires a thorough understanding of the environment and of the Air Transport System at all levels, to put appropriate measures at the right place.

In conclusion, the challenge is clear and relies on three main essential directions:

- 1- Developing reporting and keeping a widely accepted dataset which allows to precisely characterize threats and their associated probabilities in a proactive manner
- 2- Continuing to support technology advances, for developing on-board and on-ground innovative solutions.
- 3- Defining relevant priorities thanks to collaborative and coordinated approaches, to allow maximizing the outcomes of all efforts and measuring the effectiveness of actions taken.

This symposium will provide a key and unique opportunity to progress in all these directions.