SECOND NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN WORKING GROUP (NACC/WG)

AERODROMES AND GROUND AIDS (AGA)

IMPLEMENTATION TASK FORCE MEETING

(NACC/WG/AGA/TF/2)

CHALLENGES OF WILDLIFE HAZARD MANAGEMENT AT AERODROMES

BIO. MTR. YEINER E. MOLINA REYES.
CHAIRMAN, CARSAMPAF COMMITTEE.



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Conference carsampaf-22 wba-8.



CARSAMPAF

The CAR/SAM Regional Bird/Wildlife Hazard Prevention Committee is a non-profit organization, founded on October 24, 2003 in Santiago, Chile, whose purpose is to coordinate and integrate actions to reduce the number of aviation incidents/accidents resulting from aircraft collisions with wildlife. It is an auxiliary body of the CAR/SAM Regional Planning and Execution Group - GREPECAS.

Our main task is the identification, analysis, development, research and dissemination of everything related to the subject and that implies a violation to Safety, in order to try to prevent and diminish the effects of possible



CARSAMPAF



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OVERVIEW

Management of wildlife at aerodromes (avian/fauna control) can be defined as the set of measures and actions, both internal and external, that are taken to avoid negative interactions between wildlife and aircraft operations within and in the vicinity of aerodromes, aiming to reduce the probability of occurrence and potential severity of these interactions.

This issue should be addressed from an Safety point of view, rather than from an environmental point of view. Although they are related and the two components cannot be ignored.



OVERVIEW

Managing wildlife hazards at aerodromes is a major challenge due to the risks they can pose to the safety of air operations.

Some of the key challenges include the establishment of baselines (species, attractants, socioeconomic conditions, etc.), implementation of preventive and immediate intervention measures, establishing detection and monitoring systems, coordination with non-aeronautical authorities (environmental, police, civil, etc.), education and awareness at all levels, and research and development.



RISK FACTORS

Habitat: Aerodromes close to natural habitats may be more likely to be affected in their operations by the presence of wildlife; either by permanence or transit.

Species: Some species are more likely to interfere with air operations.

Seasonality: Seasonal changes affect the presence and behavior of fauna. Breeding seasons, migrations, etc.

Activities: Human activities that are not compatible with operations; either by themselves can generate attraction to fauna or by bad practices associated with these can generate attractants.

Absence and inoperability: The lack of specific regulations or their non-application can undermine efforts to carry out adequate risk management.



MANAGEMENT IN AND AROUND AERODROMES

Management should focus on two dimensions, one internal and one external.

The internal one is more along the lines of:

- · Implementation of a wildlife risk management program.
- The application of preventive and active measures to deter or remove wildlife from critical areas of the aerodrome.
- Regular inspections and monitoring to identify species and attractants.
- The sensitization of airport personnel on the importance of the issue and their vital participation in the internal prevention of attractants and the reporting of the presence of fauna or witnessed events.









MANAGEMENT AT AERODROMES AND THEIR SURROUNDINGS.

The external one is more oriented to:

- Manage the attractants that may arise in the vicinity of airfields, with the participation of the authorities.
- Regular inspections and monitoring to identify habitats, species and human activities that may generate external attractants.
- Raising awareness of the surrounding community to minimize the negative impacts that it may generate in its environment and that affect air operations.
- Airport wildlife management committees.









NATIONAL AND AIRPORT WILDLIFE MANAGEMENT COMMITTEES OR FORUMS

In Doc 9137, Airport Service Manual, Part 3 - Wildlife Hazard Management. Fifth edition, 2020. Section 2.7 establishes the guidelines for the formation of national committees or forums.

The creation of a national committee or forum on wildlife management has proven to be effective in acquiring and exchanging information about research and development of wildlife monitoring systems at aerodromes. It is an ideal way to connect the different wildlife stakeholders within the aviation community, non-aeronautical entities and national aerodromes.

On the other hand, airport committees can be an excellent opportunity to show the management of the aerodrome and make visible the adverse conditions it faces in order to achieve the support and participation of both the airport manager and the airlines, the aeronautical authority and, even more importantly, the non-aeronautical authorities.

CHALLENGES

- Establish, implement and/or maintain a robust aeronautical and non-aeronautical regulatory framework that allows the establishment of clear foundations for national and airport wildlife management programs, and supports actions to be taken to prevent, mitigate or eliminate any negative interactions between wildlife and air operations.
- Establish baselines that allow us to have updated and quality information on the animal and plant species present, on the attractants that exist within and in the vicinity of the aerodromes and on the surrounding socioeconomic conditions.
- Implement national and airport wildlife management programs based on endogenous information, which can be based on the experiences of other States. These programs must implement preventive, passive and immediate intervention measures, with a detection and monitoring system to identify the presence of fauna in the airport infrastructure and in areas near the aerodrome.

Create an efficient wildlife strike reporting system that allows aerodromes and stakeholders to track indicators (SPI) and improve their management practices.

CHALLENGES

- Articulate with non-aeronautical authorities, i.e., environmental, police, municipalities, city councils, ministries, etc., the actions that can assist in the management of wildlife in external areas.
- Implement and maintain an education and awareness program for pilots, air traffic controllers and aerodrome personnel on the risks associated with wildlife and the importance of reporting sightings and incidents. In addition, awareness of the community surrounding the aerodromes should be included.
- Generate and encourage research in the field of wildlife management, from CAAs, aerodrome and academia. And to promote the development of techniques, procedures and devices that allow us to prevent, mitigate or control the presence of wildlife on aerodromes and its surroundings.
- To train specialized personnel in the subject to direct the different programs and to make decisions based on reliable data.

CONCLUSIONS

- In summary, wildlife hazard management at aerodromes requires a multi-faceted approach that combines preventive, detection, mitigation and collaborative measures with various stakeholders to ensure safe air operations.
- Robust regulations will help aerodromes take steps to efficiently manage wildlife.
- It must be clear that each aerodrome has its own particularities and it is necessary to establish what they are, in order to implement the most efficient measures and management (best results with the optimization of resources).



CARSAMPAF-22 WBA-8 CONFERENCE

Twenty-second Meeting and Conference of the RAC/SAM Regional Committee on Avian/Fauna Hazard Prevention, and Eighth Conference of the World Bird Strike Association.

Where: Riu Plaza Hotel, Guadalajara, Mexico.

When: October 14 to 18, 2024.

More information: www.comitecarsampaf.com https://www.worldbirdstrike.com/











THANK YOU

