INTERNATIONAL CIVIL AVIATION ORGANIZATION

Sixth Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO/SG6)
4-8 September 2023

Agenda Item 3: Achievements in Airspace and Aerodrome Operations

AFI REGIONAL WILDLIFE HAZARD MANAGEMENT

(Presented by Uganda)

SUMMARY

This paper presents wildlife management challenges faced by states in the AFI region.

Action by the meeting is as per paragraph 3

REFRENCE(S):
Reference(s):

- Annex 14
- ICAO 2008 - 2015 Wildlife Strike Analyses (Ibis) – 12 May 2017
- ICAO Report On The Regional Workshop On Wildlife Hazard Management (WHM) 26-27 July 2022

Related ICAO Strategic Objective(s):

A – Safety, **B-** Air navigation Capacity and Efficiency, **E-** Economic Development of Air Transport

1. INTRODUCTION

1.1 The risk of a wildlife hazard depends on the size, behavior, number of wildlife and proximity to aircraft during different phases of flight. Wildlife risks fluctuate with the daily and seasonal cycles of wildlife activity. The species and amount of wildlife at and around aerodromes may vary over the years due to land use and environmental changes (e.g. agricultural practices, urbanization, conservation and climate change). Aerodromes have site-specific characteristics regarding their habitat.

2. DISCUSSION

2.1 The ICAO 2008-2015 ICAO Wildlife strike Analysis (IBIS) report indicated that 39% of aircraft wildlife strikes were 'Unknown'. During the ICAO ESAF Wildlife Hazard Management webinar held virtually in 2021 and the Runway Safety workshops held in May 2023, Uganda and other AFI States reported an increase in the 'Unknown' species strikes on aircraft.

2.2 A further analysis of 2008-2015 of the Global ICAO Wildlife strike Analysis (IBIS) report indicates that only 13% of incidents were reported by members of the AFI region. The other 87% were by non AFI states. Some States which are known to experience wildlife strikes in the AFI region

did not report their incidents to ICAO. Additionally, some states have noted changes in behavior of species such as migratory patterns due to possible effects of climate change and some strikes are classified as 'unknown' which is a great concern to Aviation safety.

2.3 Understanding the type of species being struck provides information on species' behavior, activity, habitats and migratory patterns. This is vital in providing appropriate mitigation measures to manage the hazard. The lack of wildlife species' knowledge and understanding makes aerodromes vulnerable to potentially serious incidents that could result into aircraft accidents. In the recent past, States in the tropical areas have reported a higher number of '*Unknown*' species.

2.4 On the global scene, having states report 'Unknowns', may indicate that they may not have capacity to identify the species when carcasses have been recovered after an incident or that the incidents are happening away beyond the aerodrome operator's reach. This calls for further examination that employs use of genetic analysis to determine what the unknown species are and how to ensure they do not pose a risk to flight operations.

2.5 While some states in the AFI region are fortunate not to experience wildlife strikes, a number of states known to have wildlife strikes are not reporting. As such, contributing 13% incidents to the analysis of the global wildlife statistics may make for inaccuracies in the analysis that is intended to provide assistance in the management of wildlife hazards for the AFI states.

2.6 Furthermore, since states in the AFI region generally have different climate conditions and different wildlife species, there is need for further review of the AFI region statistics to make it relevant for those states. It is also important that effects of climate change on biodiversity which subsequently impact wildlife hazards are analyzed. The combination of genetic analysis and consideration of climate change aspects may require investment in research, human and financial resources.

2.7 In the recent past the Wildlife Hazard Management discussions have been highlighted in the Regional Runway Safety Forums given the pivotal role Wildlife Management plays on Runway Safety. Some States may have impactful challenges on Wildlife activities while others may not.

2.8 The Wildlife Hazard Management was initially included in the Aerodrome Certification Project. The need to deliver scientifically proven data for effective decision making from a dedicated platform on Wildlife Hazard Management cannot be understated.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) Note the information in this paper
b) Consider a Project team approach in the collection, analysis and reporting of Wildlife strikes especially on the Unknown species
c) Consider the effects of climate change on wildlife Hazard Management at Airports.
d) Urge States to invest in the Wildlife Hazard Management Programme including embracing a regional approach.

Appendices:

1. I*CAO 2008 - 2015 Wildlife Strike Analyses (Ibis) – 12 May 2017*
2. *ICAO Report On The Regional Workshop On Wildlife Hazard Management (WHM) 26-27 July 2022*