



ICAO

Fifth Meeting of the Asia/Pacific Wildlife Hazard
Management Working Group (AP-WHM/WG/5)

Bangkok, Thailand, 3 to 5 May 2023

Agenda Item 3: Global, Regional and National Guidance/Best Practices on Wildlife Hazard Management

UPDATE ON ACTIVITIES AND PROGRESS OF INTERNATIONAL WHM SME GROUP

(Presented by Chair AAWHG/Australia on behalf of the Global WHM SME Group)

SUMMARY

This paper presents an update on the progress and activities of the International Wildlife Hazard Management (WHM) Subject Matter Expert (SME) Group.

1. INTRODUCTION

1.1 Wildlife Hazards to aviation are as old as aviation itself. Whilst many things have continued to be developed over time as thinking and technology have developed, the approach to WHM in aviation has remained steady if not stagnant – causing aerodromes to be disproportionately burdened with risk assessment rather than concentrating on hazard management and communication. Wildlife Hazard Management is a shared responsibility with each stakeholder owning its risk.

1.2 Since 2020, a group of subject matter experts from around the world has regularly met to discuss consider what was perceived as potential conflicts in application of available guidance, recommended practices, standards, and other materials as applied in aviation wildlife hazard management. The group has members from all established *domains* of aviation (air operations, pilots, aerodromes, air traffic control (ATC), aircraft design, airworthiness), both civil and military, as well as science, ecology and business. Within the wider group, a sub-group was established, specifically to appraise the application of risk management in the field of aviation wildlife hazard management.

1.3 The sub-group meets notionally every week and is currently formulating a white-paper to outline the potential strengthening of the system that supports aviation operations and how this can be applied to improve wildlife strike mitigation across all spheres of influence, re-balancing the risk equation.

2. DISCUSSION

2.1 Traditional approaches to the development and application of the ICAO Standards and Recommended Practices (SARPS) have been through the publication of SARPs in their respective Annexes and their associated cascading documents including PANS and manuals specific to each discipline or domain and their subsequent use. The notable difference to this being in the development and subsequent amendments to Doc 9859 Safety Management Manual Ed 1 in 2006 and Annex 19 Safety Management Ed 1 in 2013. Although these two documents apply across all other established *spheres* of aviation, they do not address inconsistencies and potential conflicts which exist between Annexes— an example being the application of appropriate risk management in the field of wildlife hazard management; and at times introduce additional inconsistencies.

2.2 Specifically, as an example, Doc 9981 PANS-Aerodromes, Ed3, 2020 states in Ch 6 Wildlife Hazard Management, “A wildlife safety risk assessment shall be conducted, covering the aerodrome and its vicinity”. On initial reading, this may seem reasonable, yet it exclusively burdens aerodromes with calculating something that they are unable to reasonably assess (risk) thereby lacking a system-based perspective and shared responsibility; thus, artificially biases’ the system to burden the aerodrome with the accountability for the risk equation. This does not occur with other significant hazards in aviation such as weather or volcanic ash, where the burden is on assessing the extent of the threat or hazard, taking appropriate management actions where able, proactively and effectively communicating this information to the most appropriate place (the air operators) for consideration of the hazard in context, assessment of the risk and risk-based decision making.

This situation is further exacerbated by near-interchangeable use of the terminology of hazard and risk in documents such as Doc 9137 Airport Services Manual Part 3 – Wildlife Control and Reduction.

2.3 Within their White Paper, the sub-group seeks to address these challenges and to propose solutions for overcoming them. The elements/parameters emerging as of highest relevance are:

- a) The need for a system-based approach to WHM, including appropriate acceptance of risk,
- b) The opportunity to move away from prescriptive, hard limits (3km, 8km and 13km) surrounding airports that do not necessarily consider local factors or operational parameters,
- c) A move toward the development of and application of *critical* airspace to allow for local adapted flexibility whilst retaining a robust system-based approach to risk,
- d) A structured process assigning clear responsibilities for all stakeholders involved.
- e) Need for holistic education and promotion, a shared understanding and acceptance of responsibilities for all involved stakeholders.

2.4 The WHM SME Group intention is evolutionary and seeks to enhance and assist practices currently published within the ICAO framework, hence allowing all aviation *spheres* to move toward a better and more effective solution whilst still meeting the minimum required prescriptive standards.

3. CONCLUSION

3.1 Thorough analysis of current ICAO regulations indicates that the responsibility for WHM is seen to lie solely with the aerodrome operator whereas the risks posed to aviation through realization of wildlife hazards is one that reaches all aspects and *spheres* of the aviation system. The hazard is a system-wide problem concerning all aviation stakeholders. Through the understanding of this and the integration of the management of this hazard and the associated risk the aviation system can realise a shared responsibility and therefore a shared safety outcome.

3.2 The White Paper currently being formulated by the WHM SME Group seeks to enhance this understanding to contribute to truly effective outcomes being realised in even the most challenging of environments and across all aviation domains.

4. ACTION BY THE MEETING

4.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

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