



ICAO

International Civil Aviation Organization

Sixth Meeting of the Asia/Pacific Wildlife Hazard Management Working Group (AP-WHM/WG/6)

Bangkok, Thailand, 14 to 17 May 2024

Agenda Item 4: Progress Update on Tasks assigned to States and International/Regional Organizations

AN OVERVIEW OF WILDLIFE HAZARD MANAGEMENT PROGRAMME IMPLEMENTED AT GREENFIELD MANOHAR INTERNATIONAL AIRPORT, GOA, INDIA

(Presented by India)

SUMMARY

This paper presents the aerodrome operator's experience in establishment & commencement of the Wildlife Hazard Management programme at the new greenfield airport – Manohar International Airport, Goa, India.

1. INTRODUCTION

1.1 GMR Goa International Airport Limited (GGIAL), a subsidiary of GMR Airports Limited (GAL), is a Greenfield Airport at Mopa in North Goa based on the Public Private Partnership model. The airport lies on a plateau surrounded by thick reserve forests, wetlands, rivers and home gardens making it a unique one in terms of features & topography. Spread across an area of 2132 acres, the airport lies on a plateau at an elevation of 172 m above MSL. The length of the runway is 3500 m. It is also noteworthy to mention here that the airport is located just 20 kilometers away from the Arabian Sea.

1.2 The ICAO code of the airport is VOGA & IATA- GOX

2. DISCUSSION





2.1 Pre-Operations Phase



An initial Wildlife Hazard Management survey carried out during the project phase. The survey identified 87 species present in and around the airport.







Later, appointed an agency specialized in wildlife study, to assess the wildlife present in and around the airport and to give recommendations thereon. The agency carried out all season wildlife hazard assessment survey. A total of 133 resident & migratory species were recorded during the survey, in and around the airport.

-  Various avian species so observed during the survey were classified into five types i.e. Surface feeders, dive feeders, Aerial hunters, ground hunters and Shore feeders based on the feeding mechanisms they employ.
-  The agency gave 19 recommendations. Most of the recommendations relevant to our airport has been actioned.
-  Combing operation carried out to flush the mammals having a territorial occupancy of the area. The perceived ownership of the mammals like dogs, jackals and monkeys mitigated through, continuous day & night patrols with non-lethal methods.
-  The construction debris lying unorganized around the airside, cleared to ensure a non-conductive habitat for the reptiles & rodents.







2.2












Pre-Licensing Phase

-  Prior to obtaining the aerodrome license, a comprehensive Wildlife Hazard Management Plan (WHMP) has been drafted covering various aspects of Wildlife Hazard Management within & outside of the aerodrome.
-  The Wildlife Hazard Management Plan (WHMP) for the Greenfield airport envisages our commitment towards effective wildlife hazard control and enhancing safe aircraft operations at the airport.
-  Standard Operating Procedures/checklists have been prepared for setting down different processes and standards needed for safe and effective day-to-day operations.
-  Formed insourced and outsourced team. Trained the team in various aspects of airside WHM comprising of safety aspects, bird identification, pyrotechnics, snake handling techniques including venomous reptiles rescue & rehabilitation, etc.

2.3

Operations Phase

-  Regular scheduled operations at the Manohar International Airport, Goa commenced from 5th January 2023.
-  Started implementing the short term & long-term recommendations as suggested in the wildlife hazard assessment survey.
-  Peafowls were more in numbers during the initial days, owing to their habituation to the mounds of construction debris. Habitat fragmentary mechanisms used.
-  In terms of active control, adopted the process of monitoring & deterrence mechanism by the positioning of bird scarers by the side of RW, TWY and approach paths.
-  Periodical night surveys, planned during the Moon phase & dark phase on need basis.
-  The operational area divided into zones for easy monitoring, reporting & hazard mitigation.

-  Deployment is dynamic based on the bird movement pattern analysis of previous week.
-  Passive wildlife hazard management is carried out, as on & off airport management strategy.
-  A comprehensive habitat management plan is also in place to ensure procedural implementation of different habitat management practices.
-  Awareness sessions being conducted during the monsoon season to the drivers of airside on avoiding road kills.
-  Aerodrome Environment Management Committee (AEMC) has been constituted under the Chairmanship of Chief Secretary, Govt of Goa and meets at regular intervals to discuss matters pertaining to wildlife and environment.
-  A sub-Committee to AEMC has also been formed which is chaired by the District Collector and meets at regular intervals.
-  A role based training calendar has been prepared and followed.
-  Wildlife hazard risk assessment done. Appropriate assessments also done periodically to check the effectiveness of various mitigation measures.
-  Aerodrome Wildlife Hazard Management Committee has also been formed with the involvement of various stakeholders as members as recommended by ICAO Airport Services Manual (Doc 9137), Part 3 – Wildlife Hazard Management.
-  Other initiatives in order to maintain the biodiversity of the surrounding includes, maintaining a “Wildlife Protected Species Register”. The team is also participating in the “People’s Biodiversity Register”.
-  With all these integrated & collaborative efforts, we strive to make the skies safer for birds as well as aeroplanes.

3. ACTION BY THE MEETING

- 3.1 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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