

International Civil Aviation Organization

Eighth Meeting of the Aerodromes Operations and Planning Sub-Group (AOP/SG/8)

Bangkok, Thailand, 15 to 19 July 2024

Agenda Item 4: Provision of AOP in the Asia/Pacific Region

COMPREHENSIVE WILDLIFE HAZARD MANAGEMENT

(Presented by Republic of Korea)

SUMMARY

This paper provides an in-depth examination of the wildlife hazard management program at Incheon International Airport. It covers the organizational framework, daily and monthly inspection routines, advanced control equipment, and specific preventive activities aimed at mitigating wildlife hazards. Emphasis is placed on bird strike prevention, ecological surveys, and measures to prevent animal intrusions, ensuring the highest standards of aviation safety.

1. INTRODUCTION

1.1 Wildlife hazards, particularly bird strikes, are a significant threat to aviation safety globally. Incheon International Airport has developed a robust and multifaceted wildlife hazard management program to mitigate these risks. This program includes a dedicated team, advanced technology, and a variety of proactive measures designed to maintain a safe environment for aircraft operations and minimize the impact on the surrounding ecosystem.

2. DISCUSSION

Organizational Structure and Resources

2.1 The Wildlife Control Team at Incheon Airport consists of 36 members, of which 26 (approximately 68%) have over five years of experience. The team is organized into specialized control and support units, ensuring a focused and efficient approach to wildlife management. They are equipped with state-of-the-art tools, including GPS-equipped vehicles, shotguns, paintball guns, sonic controllers, thermal cameras, and various animal capture equipment.

Inspection and Monitoring

Daily operations involve four inspections on the airside and two on the landside, facilitated by GPS-enabled vehicles that enhance response times and coordination with the control tower. Monthly ecological surveys and attractant inspections are conducted to monitor and address potential wildlife hazards. These surveys have identified over 123,000 birds of 89 species around the airport, guiding targeted management efforts.

Bird Strike Prevention Activities

- 2.3 The airport has implemented numerous measures to prevent bird strikes. From 2019 to 2023, detailed records of bird strike incidents have been maintained, with significant efforts to reduce occurrences. Key activities include;
 - Nest Removal: Conducted during the breeding season to prevent nesting within and around the airport.
 - Bird Deterrents: Installed on lighting towers and other structures to prevent nesting and reduce bird presence.
 - Green Area Spraying: Deterrents are sprayed in habitual bird entry areas from March to October.
 - Rodenticide Application: Applied around runways from June to September to control rodent populations, reducing prey for raptors.

Animal Intrusion Prevention

- 2.4 Collaborative efforts with the Wildlife Management Association help capture harmful animals like water deer using hunting dogs. Additional measures include;
 - Deer Grating: Installed at security posts to prevent deer from entering protected areas.
 - Cat Capture Cages: Deployed within the airport to safely capture and relocate stray cats.
 - Intrusion Prevention Facilities: Various installations, such as fences and drainage channel covers, prevent animal entry into critical areas.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper, work towards the potential improvements and additional strategies that could further enhance wildlife hazard management and share experiences, challenges, and best practices from other Member States to foster a collaborative approach to wildlife hazard mitigation.

-END-