

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 5: State's Action Plan for Establishment and Implementation of Wildlife Hazard Management Programme – State's Update

# MONITORING AND REPORTING OF WILDLIFE STRIKE USING THE CAAM AVIATION REPORTING SYSTEM (CAReS)

(Presented by Malaysia)

#### **SUMMARY**

The paper aims to highlight the monitoring and reporting system for wildlife strikes that Malaysia has developed, while also addressing the challenges that were encountered during its implementation. Additionally, the paper seeks to explore best practices implemented by other States in the Asia-Pacific Region on this matter.

### 1. INTRODUCTION

- 1.1 Annex 14 Standard 9.4.1 mandates the wildlife strike hazard on, or in the vicinity of, an aerodrome shall be assessed through:
  - a) the establishment of a national procedure for recording and reporting wildlife strikes to aircraft;
  - b) the collection of information from aircraft operators, aerodrome personnel and other sources on the presence of wildlife on or around the aerodrome constituting a potential hazard to aircraft operations; and
  - c) an ongoing evaluation of the wildlife hazard by competent personnel.
- 1.2 Assessing of wildlife strike hazards involves a systematic approach that integrates data collection, mitigation strategies and collaboration among stakeholders to ensure the safety of aircraft operations and minimize the potential for wildlife strikes.
- 1.3 CAAM has established a centralised reporting system known as CAReS, which is specifically designed to receive and process Mandatory Occurrence Reports (MOR) and Voluntary Occurrence Reports (VOR). Wildlife strikes are among the occurrences that shall be reported through the system.
- 1.4 This systematic data collection could help aerodrome operators implement preventive measures to effectively manage the threat of wildlife strikes and enhance aviation safety.

#### 2. DISCUSSION

- 2.1 CAAM has published directive, Civil Aviation Directive 1900 Safety Reporting System (CAD 1900 SRS) which divides safety occurrence reporting into the following categories:
  - a) mandatory occurrence reporting;
  - b) voluntary occurrence reporting;
  - c) wildlife (birds and animals) strike reporting;
  - d) air traffic incident report;
  - e) mor airworthiness aspect;
  - f) flight time limitation;
  - g) mandatory reporting of dangerous goods incidents and accidents; and
  - h) flight duty extension.
- 2.2 In addition, the document (CAD 1900) also specifies when wildlife strikes occurred, as follows:
  - a) a pilot reports a wildlife strike; or
  - b) maintenance personnel report that aircraft damage is due to a wildlife strike; or
  - c) aerodrome personnel report seeing a wildlife strike; or
  - d) aerodrome personnel find wildlife remains on airside areas on or in the vicinity of a runway and no other cause of death is identified; or
  - e) an animal's presence on the aerodrome had a significant negative effect on a flight (i.e., aborted take-off, aborted landing, high-speed emergency stop, aircraft left pavement area to avoid collision with animal).
- 2.3 CAAM mandates that all occurrences of wildlife strike in the vicinity of the aerodrome shall be reported using the CAReS. Through the following hyperlink: https://safetyreporting.caam.gov.my/.
- By leveraging this system, wildlife strike monitoring can become more efficient, proactive, and data-driven, ultimately enhancing aviation safety and reducing the potential for wildlife-related accidents. Figure 1 shows real-time monitoring wildlife strike reports through CAReS for the year 2024. Real-time monitoring furnishes CAAM with immediate notifications in the event of a wildlife strike being reported.
- 2.5 During the implementation of a CAReS, various challenges has arise, impacting the process potentially delaying or hindering the successful adoption CAReS. Here are some challenges that CAAM encounter during the implementation of a CAReS:
  - a) user training and adoption: CAAM has conducted a series of engagements with all pertinent stakeholders. Nevertheless, user training and support at the stakeholder level remain inadequate. In order to address this issue, CAAM has developed a user manual that is accessible to all relevant parties whenever necessary. User manual may be access through the following hyperlink: Reporting Manual
  - b) awareness of the CAReS: During the earliest stages of CAReS adoption, some stakeholders were unaware of the necessity of reporting occurrences through CAReS. In light of this, CAAM has issued a Safety Information (SI) regarding the implementation of CAReS. The new system will replace the previous reporting channel with the aim of improving the reporting process and promoting a reporting culture in the Malaysian aviation industry. Safety Information (SI) may be access through the following hyperlink: <a href="Safety Information (SI)">Safety Information (SI)</a>

c) data migration and integration: transitioning from manual to CAReS involves migrating large volumes of data. During the initial implementation, there was redundant of birdstrike data encountered during the migration and data integration process. Ensuring the accuracy and integrity of this data during migration becomes challenging. CAAM established verification procedures to confirm that data has been migrated accurately. This involves comparing migrated data with source data to identify discrepancies.



Figure 1: Real-time monitoring wildlife strike reports through CAReS

## 3. ACTION BY THE MEETING

## 3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) share relevant best practices by other States in the Asia-Pacific Region; and
- c) discuss any relevant matters as appropriate.