



ICAO

Second Meeting of the Asia/Pacific Wildlife Hazard
Management Working Group (AP-WHM WG/2)

Virtual Meeting, 27 to 29 May 2020

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

**PROCEDURES FOR COLLECTION OF INFORMATION ON PRESENCE OF
WILDLIFE ON OR AROUND AERODROME**

(Presented by World Birdstrike Association)

SUMMARY

This paper presents the development of various procedures for 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.

This paper was prepared in response to Task 1/12.

1. INTRODUCTION

1.1 All bird/wildlife management programmes need to be monitored to see if they are working effectively and whether they need to be modified, extended or improved. The only effective way to do this is by collecting data on the strikes at the airport concerned. Other measures, counting the birds/wildlife on the airfield for instance, provide useful additional information, but are not a direct measure of the strike risk at the airport.

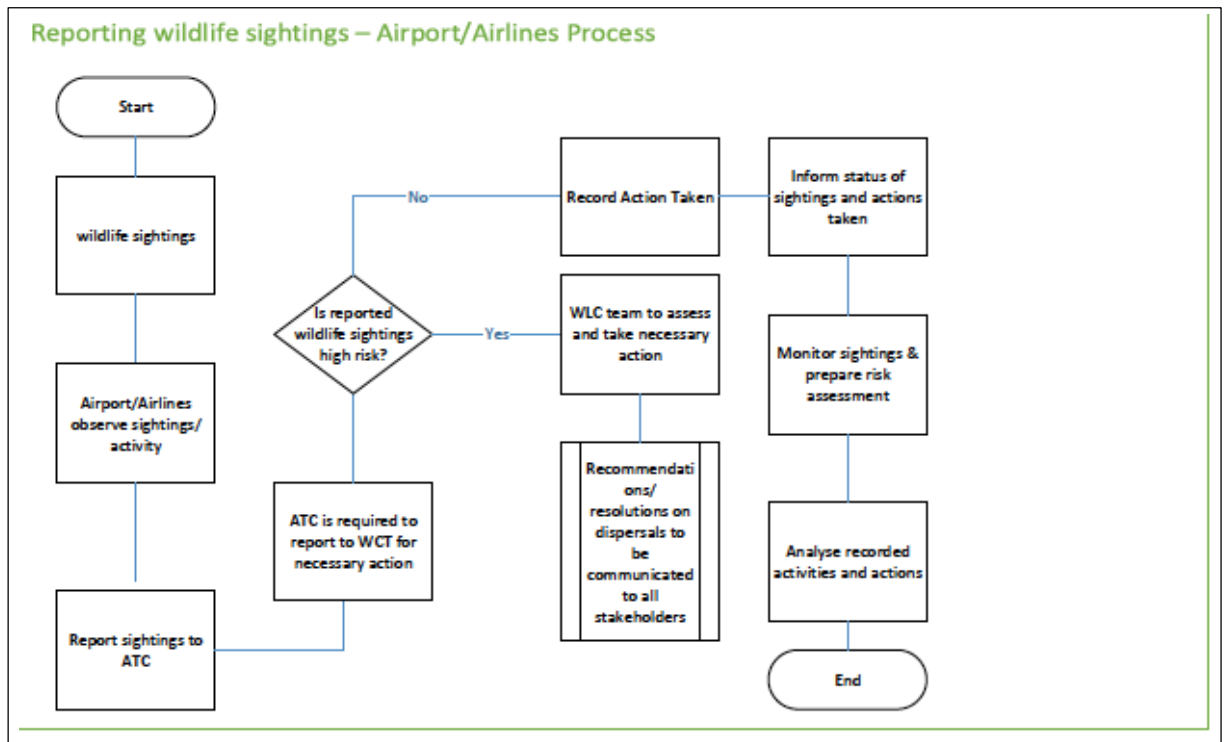
1.2 All strikes should be reported, whether or not they cause damage to the aircraft and whichever bird/wildlife species was involved. Unless the airport is confident that it knows what species are being struck on its property, it cannot hope to target its management efforts in the correct direction.

1.3 It is important that airport managers do not penalise staff for reporting bird/wildlife strikes. Even though strikes to large jet airliners from small species such as swallows or sparrow-sized birds are unlikely to cause damage to an aircraft, staff should be required to report them.

1.4 Similarly, the total number of strikes at an airport should never be used as a measure of strike risk or of the performance of the bird/wildlife controllers. The main risk arises from strikes with large species, especially birds that form flocks. A risk assessment process that combines strike frequency with likely severity needs to be employed to properly assess the risk. Such a process cannot work effectively unless all strikes are reported.

2. DISCUSSION

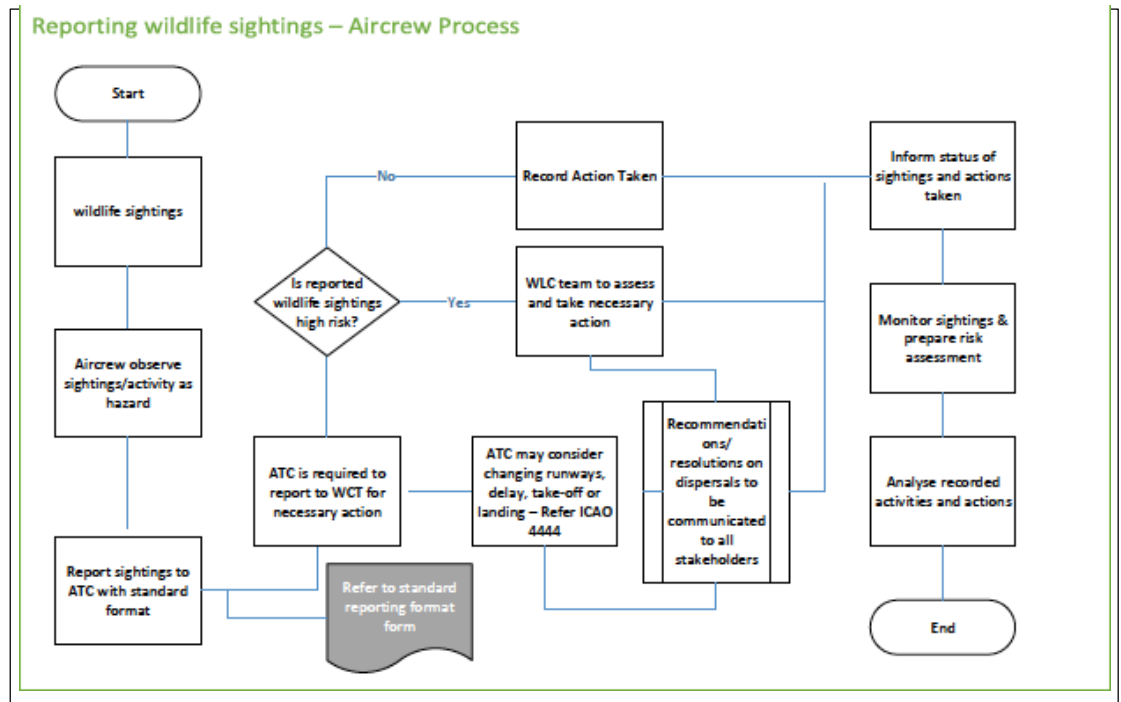
Reporting wildlife sighting – Process for Airport/Airline Personnel



2.1 Recommendations

- 2.1.1 Use of technology smart application to enable users to just click on location to record species and number for effective wildlife hazard management.
- 2.1.2 Fully automatic system that records wildlife activities with ease.
- 2.1.3 In addition, the recording system should reflect standard global names of wildlife birds, mammals, and reptiles.

Reporting wildlife sighting – Process for Aircrew in flight



2.2 Recommendations

2.2.1 Ensure a standard format for Pilots and ATC for wildlife reporting, as currently it differs from country to country. To be discussed in the upcoming meeting

2.2.2 The reporting forms (paper or electronic format) used by the aerodrome operator or other stakeholders at the aerodrome for reporting wildlife strikes, should contain at least the following information:

- a) operator involved
- b) aircraft make/model;
- c) engine make/model;
- d) aircraft registration;
- e) date (dd/mm/yyyy);
- f) local time;
- g) dawn, day, dusk, night;
- h) aerodrome name;
- i) runway used;
- j) location if en route;
- k) height above ground level (AGL) in ft; [applicable to pilots]
- l) speed (indicated airspeed (IAS)) in kt; [applicable to pilots]
- m) phase of flight:
 - i) parked;
 - ii) taxi;
 - iii) take off run;
 - iv) climb;
 - v) en route;
 - vi) descent;
 - vii) approach;
 - viii) landing roll;

- n) part(s) of aircraft struck or damaged:
 - i) radome;
 - ii) windshield;
 - iii) nose (excluding radome and windshield);
 - iv) engine number (1, 2, 3, 4);
 - v) propeller;
 - vi) wing/rotor;
 - vii) fuselage;
 - viii) landing gear;
 - ix) tail;
 - x) lights;
 - xi) other (to be specified);

- o) effect on flight:
 - i) none;
 - ii) aborted take-off;
 - iii) precautionary landing;
 - iv) engines shut down;
 - v) other (to be specified);

- p) sky condition:
 - i) no cloud;
 - ii) some cloud;
 - iii) overcast;

- q) precipitation:
 - i) fog;
 - ii) rain;
 - iii) snow;

- r) wildlife species; [if identified]
- s) Number of wildlife seen
 - i) One;
 - ii) Two to Ten;
 - iii) Eleven to Hundred;
 - iv) Over 100;

- t) Struck:
 - i) One;
 - ii) Two to Ten;
 - iii) Eleven to Hundred;
 - iv) Over 100;

- u) size of wildlife:
 - i) small;
 - ii) medium;
 - iii) large;

- v) pilot warned of wildlife: yes/no;
- w) remarks (description of damage, injuries and other pertinent information);
- x) reporting person/organization;
- y) address and/or instructions for returning the form to the competent authority; and

- z) address within the State to which any wildlife remains, including feather fragments, should be sent.

Common Understanding of Terms

2.3 It is crucial to standardize the use of various terms and ensure a common understanding among stakeholders, including pilots, air traffic controllers, airport wildlife hazard controllers and other parties. These terms include description of bird size (large/medium/small), number of birds, etc.

Risk Assessment

2.4 In the report, it would also be useful to include the bird/wildlife actions or type of activities, e.g. flying, standing on ground, etc., if observed, at the time of the report. The information will be useful for risk level analysis which is related to the type of activities, size, number, whether in flocks, etc.

Real-time Reporting Format

2.5 Aviation frontline personnel including pilots, ATC and aerodrome wildlife management staff constantly face time pressure in their jobs. They are required to make decisions based on the available information in a timely manner. Therefore, it is crucial to standardize the format of real-time wildlife reporting so as to minimize the time for transmitting the information and subsequent clarifications.

2.6 In Doc 4444 PANS-ATM Para. 7.5.2, temporary hazards including birds on the ground or in the air are regarded as essential information on aerodrome conditions. PANS-ATM Para. 7.5.3 has the following procedure:

Essential information on aerodrome conditions shall be given to every aircraft, except when it is known that the aircraft already has received all or part of the information from other sources. The information shall be given in sufficient time for the aircraft to make proper use of it, and the hazards shall be identified as distinctly as possible.

2.7 The following items could be considered when formulating the real-time reporting format:

- 2.7.1 UTC Time;
- 2.7.2 Altitude of aircraft (for pilot reports only);
- 2.7.3 Location of sight/strike;
 - a) With reference to prominent features on ground or in the air;
 - b) Aerodrome zoning to be applied for ATC and aerodrome personnel.
- 2.7.4 Movement and altitude of birds;
- 2.7.5 Number of wildlife – with a standardized categorization; and
- 2.7.6 Size of wildlife – with a standardized categorization.

2.8 It is recognized that the frontline personnel may face various workload at the time of wildlife sighting and strike. Therefore, flexibility for fewer items may be allowed during the first reporting, but the party involved should supplement missing information at the earliest opportunity.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper, and discuss and consider the following:

- a) wildlife sighting reporting procedures – process for airport/airline personnel;
- b) wildlife sighting reporting procedures – process for aircrew in flight; and
- c) real-time wildlife reporting format.

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