

**The Hashemite Kingdom of Jordan**  
**Civil Aviation Regulatory Commission**



**Guidance Material**

**CRITICAL DATA RELATED TO SAFETY  
OCCURRENCES REPORTED AT AERODROMES FOR  
THE MONITORING OF SAFETY**

Issued On the Authority of the Chief Executive Officer of the Civil Aviation  
Regulatory Commission

Original  
March, 2017





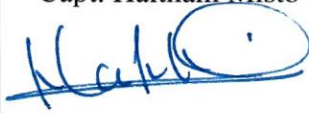


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**DOCUMENT APPROVAL**

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*This Guidance Material does not override the requirements in JCAR 2201 Aircraft Accident Investigation and its AC 2201-1, concerning the mandatory reporting of certain types of accidents/serious incidents and the responsibilities of the various parties involved.*

When safety occurrences of the following types are reported, the following critical data should be collected when relevant and feasible. This may require a collaborative effort from the aerodrome operator, Air Navigation Service Provider or other involved parties commensurate with the severity of the potential risk attached to each occurrence.

## **1. Runway excursions**

- a) type of event (lateral veer-off, overrun);
- b) landing/take-off;
- c) type of approach if it is a landing event (local time or UTC);
- d) date and time (local time or UTC);
- e) aeroplane type;
- f) runway:
  - 1. dimensions (width/length);
  - 2. slopes;
  - 3. displaced threshold (yes/no, and if so, distance between the runway threshold and the runway edge);
  - 4. runway end safety area (RESA) (yes/no, and if so, orientation, dimensions and structure);
  - 5. contaminated runway (yes/no, and if so, contaminant type (slush, snow, ice, water, other (to be specified), contaminant depth);
- g) wind (direction and speed);
- h) visibility;
- i) details of the exit:



1. exit speed or estimation;
  2. aeroplane angle with the runway edge;
  3. distance between the touchdown and the exit;
  4. description of the trajectory of the aeroplane once on the runway strip and/or RESA;
- j) details of the location of the aeroplane once stopped.

*Note 1.— for overruns, information to be reported includes longitudinal position in relation to the threshold location and/or end of runway surface and lateral position in relation to runway lateral edge or runway centre line.*

*Note 2.— in accordance to JCAR 2201 runway excursions are serious incidents, if not accidents.*

## **2. Undershoot (land short of runway)**

- a) type of event (land short, undershoot);
- b) type of approach;
- c) ground-based vertical guidance available and operational (instrument landing system (ILS), precision approach path indicator (PAPI), abbreviated precision approach path indicator (APAPI));
- d) date and time (local time or UTC);
- e) wind speed (including gusts), description (calm/variable) and direction;
- f) visibility;
- g) aeroplane type;
- h) runway:
  1. dimensions (width/length);
  2. slopes;



3. displaced threshold (yes/no, and if so, distance between the runway threshold and the runway edge);
  4. RESA (yes/no, and if so, magnetic orientation of runway (QFU), dimensions and structure);
  5. contaminated runway (yes/no, and if so, contaminant type (slush, snow, ice, water, other (to be specified), contaminant depth);
- i) details of the undershoot (aeroplane speed at touchdown, distance between the touchdown and the runway edge, causes of the event):
1. description of the trajectory of the aeroplane after touchdown.

*Note.— in accordance to JCAR 2201 undershoots are serious incidents, if not accidents.*

### 3. Runway incursion

- a. entities involved (aeroplane/vehicle; aeroplane/aeroplane; aeroplane/person);
- b. date and time (local time or UTC);
- c. aeroplane type, landing/take-off, type of approach;
- d. vehicle type, location;
- e. runway:
  1. dimensions (width/length);
  2. slopes/line of sight;
  3. displaced threshold (yes/no, and if so, distance between the runway threshold and the runway edge);
  4. rapid exits;
  5. wind;



6. visibility;
- f) details of the incursion:
  1. description of the trajectories and speeds of both vehicles/aeroplanes;
  2. estimated distances (horizontal and vertical) between the entities involved;
  3. contaminated operational surfaces in the incursion area (yes/no, and if so, contaminant type (slush, snow, ice, water, other (to be specified), contaminant depth).

*Note 1.— in accordance to JCAR 2201, Runway incursions classified with severity A are serious incidents.*

#### **4. Landing or take-off on a taxiway**

- a) landing/take-off;
- b) type of approach when relevant;
- c) date and time (local time or UTC);
- d) wind;
- e) visibility;
- f) aeroplane type;
- g) taxiway:
  1. dimensions (width/length);
  2. slopes;
- h) details of the event:
  1. possible contributing factors (e.g. inadequate lighting, procedure not applied, works, inadequate or misleading marking).





*Note.— in accordance to JCAR 2201, landing and take-off on taxiways are serious incident..*

## 5. FOD-related events

- a) type of event;
- b) location (runway, orientation, or taxiway, stand), location of FOD, including where possible lateral and longitudinal positions;
- c) date and time (local time or UTC);
- d) FOD description:
  - 1) name (if possible);
  - 2) shape and dimensions;
  - 3) material;
  - 4) colour;
  - 5) origin (if known: lighting, infrastructure, works, animals, aeroplane, environment (wind, etc.)).

## 6. Other excursions (i.e. from the taxiway or apron)

- a) type of event;
- b) location;
- c) date and time (local time or UTC);
- d) aeroplane type;
- e) taxiway:
  - 1) dimensions (width/length);



- 2) slopes;
  - 3) if in a curved section: fillets (yes/no, and characteristics);
  - 4) contaminated taxiway (yes/no, and if so, contaminant type (slush, snow, ice, water, other (to be specified) and contaminant depth);
- f) wind (direction and speed);
- g) details of the exit (exit speed or estimation, aeroplane angle with the taxiway edge, in a straight or a curved section, causes of the event);
- h) details of the location of the aeroplane once stopped.

## **7. Other incursions (i.e. on taxiway or apron)**

Same data as for item 2 (undershoot).

## **8. Birds/wildlife strike-related events**

To be conducted in accordance with ICAO bird strike information system (IBIS) data (ingestion, collision). If there has been no collision, and the animal was avoided, it is important to know the location of the animal at the time the avoided collision occurred.

## **9. Ground collisions**

- a) type of event (ground collision);
- b) location:
  - 1) apron;
  - 2) manoeuvring area;
  - 3) runway, taxiway;
  - 4) contaminant (if relevant: type and depth);



- 5) wind (if relevant);
- c) date and time (local time or UTC);
- d) phase of flight (e.g. taxi out, departure roll, engine start/pushback);
- e) aeroplane(s) involved;
  - 1) type of aeroplane and trajectory;
- f) vehicle(s) involved;
  - 1) type of vehicle and trajectory;
- g) material damages (to both aeroplane(s) and/or vehicle(s))/human damages and location of the damages;
- h) phase of operation, if ground handling is involved;
- i) description of the collision:
  - 1) estimated speed of both vehicle(s) and/or aeroplane(s);
  - 2) description of the trajectories of the aeroplane(s) and/or the vehicle(s).

*Note 1.— Ground collisions involving aeroplanes can be incidents, serious incidents or accidents. If classified as an incident, they are normally investigated as part of the aerodrome's SMS. If classified as a serious incident or accident, this would normally imply that Investigation Department of CARC needs to become involved.*

*Note 2.— Ground collisions not involving aeroplanes can be an incident and investigated as part of the aerodrome's SMS.*

