ADVISORY CIRCULAR

CAA-AC-OPS023
November 2022

MANDATORY OCCURRENCE REPORTING SYSTEM

1.0 PURPOSE

1.0.1 The purpose of this Advisory Circular (AC) is to provide interpretative material and guidance for the reporting of a safety occurrence by relevant persons or service providers, licensed or regulated under Uganda Civil Aviation Regulations (UCARs).

1.0.2 In addition to reporting of safety occurrences to the Authority, this AC also describes the responsibility of the originator to send occurrence reports to other stakeholders who are partners in safety, e.g. aircraft accident investigation department (AAID), manufacturers, and maintenance organizations.

1.0.3 This Advisory Circular is an initial issue dated November 2022

2.0 REFERENCES

2.1 The Civil Aviation Act;
2.2 The Civil Aviation (Accident and Incident Investigation) Regulations, 2022.
2.3 The Civil Aviation (Safety Management) Regulations, 2022.

3.0 INFORMATION AND GUIDANCE

3.1 Mandatory Reporting to the UCAA

3.1.1 The objective of occurrence reporting is to contribute to the improvement of flight safety by ensuring that relevant information on safety is reported, collected, investigated, analysed, stored, protected and disseminated.

3.1.2 Specific objectives of the mandatory reporting system are to:

(a) encourage aviation industry to follow a centralised reporting;
(b) facilitate investigation and isolation of the root causes of the occurrence;
(c) prevent recurrence of the incident by analysing their safety implications;
(d) disseminate information or knowledge gained during analysis of reported incidents.
(e) enhance international aviation safety by reporting to applicable Civil Aviation Authorities responsible for the Type Certificate Data Sheet (TCDS) or Air Traffic Control when required.

(f) enhance international aviation safety by reporting safety occurrences including wake vortex incidents and specific bird strikes and details of associated aircraft damage to ICAO when required.

3.1.3 Such incident reporting system is complementary to the normal day to day oversight and 'control' systems and is not intended to duplicate or supersede any of them. The incident reporting system is a tool to identify those occasions where day-to-day oversight has failed.

3.1.4 Information on each incident shall remain in the database for research and safety promotional activities as well as usage by any other UCAA applications.

3.2 Regulatory Requirements for Mandatory Reporting

3.2.1 Civil Aviation (Accident and Incident Investigation) and Civil Aviation (Safety management System) regulations, require relevant persons and service providers to report aviation accidents, serious incidents, incidents and other safety related occurrences (including malfunctions, service difficulties and defects or exceedance of technical limitations that endanger or could endanger the safe operation of the aircraft or create an unsafe condition) to the investigator-in-chief and the Authority respectively.

3.2.2 Reporting does not remove the reporter's or organisation's responsibility to commence corrective actions to prevent similar incidents in the future. Known, planned or preventive actions already implemented may be included within the report.

3.2.3 The list of reportable occurrences (apart from accidents) and the reporting timelines are provided in Appendix I to this circular.

3.3 The Mandatory Occurrence Reporting

3.3.1 The MOR System

In the case of accidents and serious incidents, notification must be made to the Investigator-In-Chief and the Authority. Notification is then followed by a detailed MOR report of the occurrence giving all the pertinent information within twenty-four (24) hours. The actual notification and reporting to the UCAA and the Investigator-In-Chief is mandatory in respect of all accidents and serious incidences. Any notifications received through verbal or telephone communication shall be followed by a comprehensive MOR report within the timelines specified in this AC.

3.3.2 Persons Required to Report Incidents and Accidents

The categories of persons (or organisations) that are required to report occurrences are:

(a) Operators (and their contracted agencies) or commander of an aircraft:

i. any Ugandan registered aircraft;
ii. an aircraft operated by a holder of an Air Operator Certificate issued by the Authority; or
iii. any aircraft operated in Uganda regardless of its nationality.

(b) organisations that carry out maintenance of Ugandan registered or operated aircraft, equipment or part thereof; or
(c) person who signs a certificate of release to service in respect of the aircraft indicated in paragraph (a); or any equipment or part thereof; or
(d) organisations and/or persons certified as Air Navigation Service Providers and their employees; or
(e) operators of licenced or certified aerodromes (and their contracted agencies).

3.3.3 The Reporting Procedure

3.3.3.1 The Uganda Civil Aviation Regulations place the primary responsibility for reporting with individuals. However, in the interests of flight safety, the full participation in the investigation by the reporting organisation or individual is encouraged. Therefore, wherever possible, the Authority encourages the use of company reporting systems, with a responsible person(s) within the organisation being nominated to receive all reports and to establish which reports meet the desired criteria for an occurrence report to the Authority. Correlation of operational and technical aspects and the provision of any relevant supplementary information (for example, the reporter's assessment and immediate action to control the problem) is an important part of such activity.

Management of such "Safety Reports" is an important part of an organisation's Safety Management System. Finally, the organisation should make employees aware of:

(a) the organisation's internal reporting procedure and;
(b) the existence of the Authority's Voluntary Reporting System, where individuals may submit a report directly to Authority should they wish to do so.

3.3.3.2 Occurrence reports shall be made to the Authority using the MOR system and in the appropriate form.

3.3.3.3 Possible Action by Employers

Where a reported occurrence indicates an unpremeditated or inadvertent lapse by an employee, the Authority expects the employer in question to act responsibly by not taking actions that would inhibit reporting.

Employers are advised that, except to the extent that action is needed to ensure safety, the Authority expects employers to refrain from disciplinary or punitive

action which might inhibit their staff from duly reporting incidents of which they may have knowledge.

3.3.3.4 What to Report

Appendix A of this AC provides guidance as to what should be reported by an organisation

3.3.3.5 Reporting Timeliness

Reports must be dispatched within the timeframe indicated the table below, unless exceptional circumstances prevent this. Nevertheless, in the cases of accidents and serious incidents, the Authority expects to be advised of the essential details as soon as possible (refer to note below). This should be followed up, within the mandated timeframe, by a full MOR report.

Incident Type	**Timelines**
Incident	72 Hours
Serious Incident	48 Hours
Accident	24 Hours

Prompt advice to the Authority on the results of investigations and the actions taken to control the situation may minimize direct UCAA involvement in the investigation. In the case of technical failures or difficulties, the availability of photographs and/or preservation of damaged parts will greatly facilitate the subsequent investigation. Provision of supplementary information on reportable occurrences may be necessary when specifically requested by the Authority, however, the efficiency of UCAA's follow-up work and the quality of safety data it can provide will be enhanced if reporting organisations keep the Authority informed of major developments in their investigations.

Notes:

1. *The reporting period is normally understood to start from when the incident took place or from the time when the reporter determined that there was, or could have been, a potentially hazardous or unsafe condition.*
2. *Where an incident is judged to have resulted in an immediate and particularly significant or critical risk, the Authority must be notified immediately, and by the most expeditious possible means providing whatever details are available*

4.0 Investigation

4.1 In order to ensure that the reporting system yields improvement in safety, it is important that all reported incidents are investigated to reveal the root courses and appropriate mitigation measures proposed and implemented.

4.2 As part of Service Providers obligation to implement SMS it is important that all incidents are reported to facilitate resolution of safety issues.

4.3 In order to ensure that investigations are objective and coordinated the following responsibilities shall apply:

4.3.1 Reporter

The reporter shall:

(a) Compile all information relating to the incident;

(b) Update the Authority on any new or emerging information relating to the incident;

(c) Respond to all queries by the Authority in the course of investigation of the incident.

Note.

1. *Service providers are reminded that the single point reporter identified in xxx above is responsible for coordinating all internal matters and providing responses to the queries raised by the Authority.*
2. *The amount of information provided by the reporter should be commensurate with and clearly indicate the operational context within which the incident occurred. Reporters are required to fill all the fields of the appropriate reporting form and additionally provide further information in the "Description of the Incident" section, if necessary*

4.3.2 Inspector

The inspector is responsible for conducting investigations on reported incidents. It is important for Service Providers to note that this investigation complements the mandatory investigations that they conduct in their implementation of SMS.

The inspector shall seek information and evidence from the service provider to facilitate closure of the incident and thus conclusion of the investigation.

In concluding the investigations, the inspector shall make appropriate comments and observations that summarise the root courses and possible mitigation actions required.

Note:

For any incident involving a system or component: - if monitored or protected by a warning and/or protection system (for example: fire detection/extinguishing) the incident report should always state whether such system(s) functioned properly. - Identification if its reliability is of concern as per the established reliability programme (if applicable).

5.0 Access Control to the mandatory reporting systems

To ensure authorised access to MOR forms in the reporting system, users shall be assigned specific log-in credentials comprising user IDs and passwords. The official users of the operator or organisation shall apply to the Authority for registration onto the safety reporting system through email safety@ucaa.co.ug

6.0 Guidance for filling out a report & Submission

Operator Type	Guidance Available
Air Operations/ Airworthiness	Air Operators and Maintenance Organisations shall report all safety occurrences involving aircraft operations and airworthiness. All birdstrike incidents occurring during aircraft operations/airworthiness shall be reported. All dangerous goods incidents occurring during Aircraft operations/airworthiness shall be reported.
Aerodrome Operator	Aerodrome Operators shall report all safety occurrences involving aircraft operations. All birdstrike incidents occurring during aerodrome operations shall be Reported. All dangerous goods incidents occurring during aerodrome operations shall be reported.
Air Traffic Control	Air Traffic Services to report all safety occurrences involving aircraft and ANS systems operations. All birdstrike incidents occurring during ATS operations shall be Reported.

7.0 REPORTABLE INCIDENTS

7.1 Reportable incidents are those where the safety of operation was or could have been endangered or which could have led to an unsafe condition.

7.1.1 Customised List.

Each approval, certificate, and authorisation holder should develop a customised list adapted to its aircraft, operation, product, or service. The list of reportable

incidents applicable to an organisation shall be published within the organisation's manuals.

7.1.2 Internal Reporting.

The organisations shall establish internal reporting systems whereby reports are centrally collected and reviewed to establish which reports meet the criteria for incident reporting to the Authority and other organisations as required.

7.1.3 External Sources.

External departments like law enforcement agencies, foreign CAAs may also submit safety incident reports with respect to Ugandan registered aircraft.

7.2 Voluntary Reporting

The Authority encourages voluntary reporting across the whole spectrum of civil aviation operations. A voluntary report is made by a person not required to report under the legislation described above. Voluntary reports help in capturing hazards which may not have been reported though the mandatory reporting systems.
Confidentiality, and protection of the identity of the reporter is paramount and is guaranteed by the Authority in handling of voluntary reports.

7.3 Protection of reporters and reports

The Authority shall, as far as practicable, maintain protection of reporters and reports, however, the Authority cannot, of course, guarantee confidentiality when an occurrence is reported separately by another party, incompetence or cases involving criminal activities.

Reporters submitting a Voluntary Report must recognise the fact that, while the Authority guarantees strict confidentiality of the reporter, effective investigation may require consultations with the reporter and hence reporters are encouraged to disclose their contact details to the Authority.

Voluntary reporting may also be used when a reporter wishes to disclose sensitive information to the Authority where an MOR seems inappropriate.

Appendix I

EXAMPLES OF REPORTABLE OCCURRENCES

The list below is not exhaustive and does not include accidents.

1. Aircraft Fight operations

A: Operation of the Aircraft

1) Aircraft manoeuvre
   (a) Risk of collision with an aircraft, terrain or object or an unsafe situation or when an avoidance action would have been appropriate;
   (b) An avoidance manoeuvre required to avoid a collision with an aircraft, terrain or other object;
   (c) An avoidance manoeuvre to avoid other unsafe situations.

2) Take-off or landing incidents, including precautionary or forced landings.
3) Incidents such as under-shooting, over running or running off the side of runways.
4) Take-offs, rejected take-offs, landings or attempted landings on a closed, occupied or incorrect runway.
5) Inability to achieve predicted performance during take-off or initial climb.
6) Critically low fuel quantity or inability to transfer fuel or use total quantity of usable fuel.
7) Loss of control (including partial or temporary loss of control) from any cause.
8) Incident close to or above V1 resulting from or producing a hazardous or potentially hazardous situation (e.g. tail strike, engine power loss, rejected take-off etc.).
9) Go-around/Missed Approach producing a hazardous or potentially hazardous situation including rejected landing.
10) Unintentional significant deviation from airspeed, intended track or altitude (more than 300ft) from any cause.
11) Descent below decision height/altitude or minimum descent height/altitude without the required visual reference.
12) Loss of position awareness relative to actual position or to other aircraft.
13) Breakdown in communication between flight crew (CRM) or between Flight crew and other parties (cabin crew, ATC, engineering).
14) Heavy/hard landing - a landing deemed to require a 'heavy landing check'.
15) Exceedance of fuel imbalance limits.
16) Incorrect setting of an SSR code or of an altimeter subscale.
17) Incorrect programming of, or erroneous entries into, equipment used for navigation or performance calculations, or use of incorrect data.
18) Incorrect receipt or interpretation of radiotelephony messages.
19) Fuel system malfunctions or defects, which had an effect on fuel supply and/or distribution.
20) Aircraft unintentionally departing a paved surface.

21) Collision between an aircraft and any other aircraft, vehicle or other ground object.
22) Inadvertent and/or incorrect operation of any controls.
23) Inability to achieve the intended aircraft configuration for any flight phase (e.g. landing gear and doors, flaps, stabilisers, slats etc.).
24) A hazard or potential hazard which arises as a consequence of any deliberate simulation of failure conditions for training, system checks or training purposes.
25) Abnormal vibration.
26) Operation of any primary warning system associated with manoeuvring of the aircraft e.g. configuration warning, stall warning (stick shake), over speed warning etc. unless:
    (a) the crew conclusively established that the indication was false.
    (b) provided that the false warning did not result in difficulty or hazard arising from the crew response to the warning; or
    (c) operated for training or test purposes.

27) GPWS/TAWS 'warning' when:
    (a) the aircraft comes into closer proximity to the ground than had been planned or anticipated; or
    (b) the warning is experienced in IMC or at night and is established as having been triggered by a high rate of descent (Mode 1); or
    (c) the warning results from failure to select landing gear or landing flap by the appropriate point on the approach (Mode 4); or
    (d) any difficulty or hazard arises or might have arisen as a result of crew response to the 'warning' e.g. possible reduced separation from other traffic. This could include warning of any Mode or Type i.e. genuine, nuisance or false.

28) GPWS/TAWS 'alert' when any difficulty or hazard arises or might have arisen as a result of crew response to the 'alert'.
29) TCAS/ ACAS RAs.
    Note: While submitting a MOR, the operator must indicate if any assistance is required from UCAA in coordinating the incident with foreign ATS Authority or CAA.
30) Jet or prop blast incidents resulting in significant damage or serious injury.
31) Taxiway incursion/Runway incursion Any occurrence unauthorized presence on a taxiway of an aircraft, vehicle, person or object that creates a collision hazard or results in a potential loss of separation
32) Laser incident
33) Unstable approach reported by pilots or analysed through FDM programme.

B. Emergencies

1) Fire, explosion, smoke or toxic or noxious fumes, even though fires were extinguished.
2) The use of any non-standard procedure by the flight or cabin crew to deal with an emergency when:
   (a) the procedure exists but is not used; or
   (b) a procedure does not exist; or
   (c) the procedure exists but is incomplete or inappropriate; or
   (d) the procedure is incorrect; or
   (e) the incorrect procedure is used.
3) Inadequacy of any procedures designed to be used in an emergency, including when being used for maintenance, training or test purposes.
4) An event leading to an emergency evacuation
5) Depressurisation.
6) The use of any emergency equipment or prescribed emergency procedures in order to deal with a situation.
7) An event leading to the declaration of an emergency ('Mayday' or 'Pan Pan').
8) Failure of any emergency system or equipment, including all exit doors and lighting, to perform satisfactorily, including when being used for maintenance, training or test purposes.
9) Events requiring any emergency use of oxygen by any crew member.

C. Crew Incapacitation

1) Incapacitation of any member of the flight crew, including that which occurs prior to departure if it is considered that it could have resulted in incapacitation after take-off.
2) Incapacitation of any member of the cabin crew which renders them unable to perform essential emergency duties.

D. Aircrew Fatigue

1) A physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase, or workload (mental and/or physical activity) that can impair a crew member's alertness and ability to safely operate an aircraft or perform safety related duties and complying with criteria of Section 5.7.

2) Fatigue is a major human factors hazard because it affects most aspects of a crewmember's ability to do their job. It therefore has implications for safety.
3) For example, crew member reports on fatigue due to an incident happened on the aircraft and it is believed that fatigue is considered to be the main reason for the occurrence of such incident.

E. Injury

An incident, which have or could have led to significant injury to passengers or crew but which are not considered reportable as an accident under Civil Aviation (Accident and Incident Investigation) Regulations.

F. Meteorology

1) A lightning strike which resulted in damage to the aircraft or loss or malfunction of any essential service.

2) A hail strike which resulted in damage to the aircraft or loss or malfunction of any essential service.

3) Severe turbulence encounters resulting in injury to occupants or deemed to require a 'turbulence check' of the aircraft.

4) A wind shear encounter.

5) Icing encounter resulting in handling difficulties, damage to the aircraft or loss or malfunction of any essential service.

G. Security

1) Unlawful interference with the aircraft including a bomb threat or hijack.

2) Difficulty in controlling intoxicated, violent or unruly passengers.

3) Discovery of a stowaway.

H. Aerodrome and Aerodrome Facilities

1) Significant spillage during fuelling operations.

2) Loading of incorrect fuel quantities likely to have a significant effect on aircraft endurance, performance, balance or structural strength.

3) Unsatisfactory ground de-icing / anti-icing

I. Passenger Handling, Baggage and Cargo

1) Significant contamination of aircraft structure, or systems and equipment arising from the carriage of baggage or cargo.

2) Incorrect loading of passengers, baggage or cargo, likely to have a significant effect on aircraft mass and/or balance.

3) Incorrect stowage of baggage or cargo (including hand baggage) likely in any way to hazard the aircraft, its equipment or occupants or to impede emergency evacuation.

4) Inadequate stowage of cargo containers or other substantial items of cargo.

5) Dangerous goods incidents reporting.

J. Aircraft Ground Handling and Servicing

1) Failure, malfunction or defect of ground equipment used for test or checking of aircraft systems and equipment when the required routine inspection and test procedures did not clearly identify the problem when this results in a hazardous situation.

2) Non-compliance or significant errors in compliance with required servicing procedures.

3) Loading of contaminated or incorrect type of fuel or other essential fluids (including oxygen and potable water).

K. Other incidents

1) Repetitive instances of a specific type of incident which in isolation would not be considered 'reportable' but which due to the frequency at which they arise, form a potential hazard.

2) Bird strike that may have or may have not resulted in damage to the aircraft or loss or malfunction of any essential service.

Note: All bird strike incidents shall be reported in the Bird Strike & Wildlife Hazard module of the MOR system.

3) Wake turbulence encounters.

4) Any other incident of any type considered to have endangered or which might have endangered the aircraft or its occupants on board the aircraft or on the ground.

2. AIRCRAFT TECHNICAL

A. Structural

Not all structural failures need to be reported. Engineering judgement is required to decide whether a failure is serious enough to be reported. The following examples can be taken into consideration:

(1) Damage to a Principal Structural Element that has not been qualified as damage tolerant (life limited element). Principal Structural Elements are those which contribute significantly to carrying flight, ground, and pressurisation loads, and whose failure could result in a catastrophic failure of the aircraft. Typical examples of such elements are listed for large aeroplanes in EASA AMC t o C S 25.571(a) “damage tolerance and fatigue evaluation of structure” and in equivalent AMC material for rotorcraft.

(2) Defect or damage exceeding admissible damages to a Principal Structural Element that has been qualified as damage tolerant.

(3) Damage to or defect exceeding allowed tolerances of a structural element which failure could reduce the structural stiffness to such an extent that the required flutter, divergence or control reversal margins are no longer achieved.

(4) Damage to or defect of a structural element, which could result in the liberation of items of mass that may injure occupants of the aircraft.

(5) Damage to or defect of a structural element, which could jeopardise proper operation of systems.

(6) Loss of any part of the aircraft structure in flight.

B. Systems

The following generic criteria applicable to all systems are proposed:

1) Loss, significant malfunctions or defects of any system, subsystem or set of equipment when standard operating procedures, drills etc. could not be satisfactorily accomplished.

2) Inability of the crew to control the system, e.g.:

a) uncommented actions;

b) incorrect and or incomplete response, including limitation of movement or stiffness; c) runaway;

d) Mechanical disconnection or failure.

3) Failure or malfunction of the exclusive function(s) of the system (one system could integrate several functions).

4) Interference within or between systems.

5) Failure or malfunction of the protection device or emergency system associated with the system.

6) Loss of redundancy of the system.

7) Any incident resulting from unforeseen behaviour of a system.

8) For aircraft types with single main systems, subsystems or sets of equipment: Loss, significant malfunctions or defects in any main system, subsystem or set of equipment.

9) For aircraft types with multiple independent main systems, subsystems or sets of equipment:

The loss, significant malfunctions, or defects of more than one main system, subsystem or set of equipment

10) Operation of any primary warning system associated with aircraft systems or equipment unless the crew conclusively established that the indication was false provided that the false warning did not result in difficulty or hazard arising from the crew response to the warning.

11) Leakage of hydraulic fluids, fuel, oil or other fluids which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or risk to occupants.

12) Malfunction or defect of any indication system when this results in the possibility of misleading indications to the crew.

13) Any failure, malfunction or defect if it occurs at a critical phase of flight and relevant to the operation of that system.

14) Incidents of significant shortfall of the actual performances compared to the approved performance which resulted in a hazardous situation (taking into account the accuracy of the performance calculation method) including braking action, fuel consumption etc.

15) Asymmetry of flight controls; e.g. flaps, slats, spoilers etc.

C. Propulsion (including Engines, Propellers and Rotor Systems) and APUs

1) Flameout, shutdown or malfunction of any engine.
2) Over speed or inability to control the speed of any high speed rotating component (for Example: Auxiliary power unit, air starter, air cycle machine, air turbine motor, propeller or rotor).
3) Failure or malfunction of any part of an engine or power plant resulting in any one or more of the following;
   a) Non-containment of components/debris;
   b) Un-controlled internal or external fire, or hot gas breakout;
   c) Thrust in a different direction from that demanded by the pilot;
   d) Thrust reversing system failing to operate or operating inadvertently;
   (e) Inability to control power, thrust or
   rpm; f) Failure of the engine mount
   structure;
   g) Partial or complete loss of a major part of the power plant;
   h) Dense visible fumes or concentrations of toxic products sufficient to incapacitate crew or passengers;
   i) Inability, by use of normal procedures, to shut down an engine;
   (j) Inability to restart a serviceable engine.
4) An un-commanded thrust/power loss, change or oscillation which is classified as a loss of thrust or power control (LOTC):
   a) For a single engine aircraft; or
   b) Where it is considered excessive for the application, or
   c) Where this could affect more than one engine in a multi-engine aircraft, particularly in the case of a twin engine aircraft; or
   d) For a multi engine aircraft where the same, or similar, engine type is used in an application where the event would be considered hazardous or critical.
5) Any defect in a life controlled part causing retirement of before completion of its full life.
6) Defects of common origin which could cause an in-flight shut down rate so high that there is the possibility of more than one engine being shut down on the same flight.
7) An engine limiter or control device failing to operate when required or operating inadvertently.
8) Exceedance of engine parameters.
9) FOD resulting in damage.
10) Propellers and -transmission Failure or malfunction of any part of a propeller or power plant resulting in any one or more of the following:
   a) An over speed of the propeller;
   b) The development of excessive drag;
   c) A thrust in the opposite direction to that commanded by the pilot;

d) A release of the propeller or any major portion of the propeller; e) A failure that results in excessive unbalance;

f) The unintended movement of the propeller blades below the established minimum inflight low-pitch position;

g) An inability to feather the propeller;

h) An inability to command a change in propeller pitch; i) An un-commanded change in pitch;

j) An uncontrollable torque or speed fluctuation; k) The release of low energy parts.

11) Rotors and-transmission

a) Damage or defect of main rotor gearbox/ attachment which could lead to in-flight separation of the rotor assembly, and / or modifications of the rotor control.

b) b) Damage to tail rotor, transmission and equivalent systems.

12) APUs

a) Shut down or failure when the APU is required to be available by operational requirements, e.g. ETOPS, MEL.

b) Inability to shut down the APU.

c) Over speed.

d) Inability to start the APU when needed for operational reasons.

D. Human Factors

Any incident where any feature or inadequacy of the aircraft design could have led to an error of use that could contribute to a hazardous or catastrophic effect.

E. Other Incidents

1) Any incident where any feature or inadequacy of the aircraft design could have led to an error of use that could contribute to a hazardous or catastrophic effect.
2) An incident not normally considered as reportable (for example, furnishing and cabin equipment, water systems), where the circumstances resulted in endangering of the aircraft or its occupants.
3) A fire, explosion, smoke or toxic or noxious fumes.
4) Any other event which could affect the safety of the aircraft/occupants of the aircraft, or people or property in the vicinity of the aircraft or on the ground.
5) Failure or defect of passenger address system resulting in loss or inaudible passenger address system.
6) Loss of pilot's seat control during flight.

3. Aircraft Maintenance and repair

1) Incorrect assembly of parts or components of the aircraft found during an inspection or test procedure not intended for that specific purpose.
2) Hot bleed air leak resulting in structural damage.

3) Any defect in a lift controlled part causing retirement before completion of its full life.
4) Any damage or deterioration (i.e. fractures, cracks, corrosion, delaminating, dis- bonding etc.) resulting from any cause (such as flutter, loss of stiffness or structural failure) to;

   a) Primary structure or a principal structural element (as defined in the manufacturers' Repair manual) where such damage or deterioration exceeds allowable limits specified in the Repair Manual and requires a repair or complete or partial replacement of the element;

   b) Secondary structure which consequently has or may have endangered the aircraft;

   c) The engine, propeller or rotorcraft rotor system.
5) Any failure, malfunction or defect of any system or equipment, or damage or deterioration found as a result of compliance with an Airworthiness Directive or other mandatory instruction issued by a Regulatory Authority, when;

   a) It is detected for the first time by the reporting organisation implementing compliance;

   b) On any subsequent compliance where it exceeds the permissible limits quoted in the instruction and/or published repair/rectification procedures are not available.
6) Failure of any emergency system or equipment, including all exit doors and lighting, to perform satisfactorily, including when being used for maintenance or test purposes.
7) Non compliance or significant errors in compliance with required maintenance procedures.
8) Suspected unapproved Products, parts, appliances and materials
9) Misleading, incorrect or insufficient maintenance data or procedures that could lead to maintenance errors.
10) Failure, malfunction or defect of ground equipment used for test or checking of aircraft systems and equipment when the required routine inspection and test procedures did not clearly identify the problem when this results in a hazardous situation.

4. AIR NAVIGATION SERVICES PROVIDERS

This list is in no way exhaustive and any occurrence which is believed to be a flight safety issue shall be reported.

Note: Birdstrike and wildlife (BWI) reports related to events on or in the immediate vicinity of an aerodrome shall be reported according to the procedures in force at the relevant aerodrome.

Category Description:

ACAS Event An incident where a resolution advisory event (RA) did or may have occurred.

Accident An occurrence meeting the definition of an accident.

AIRPROX A situation in which, in the opinion of a pilot or air traffic services personnel, the distance between aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved may have been compromised.

1. ***Risk of collision***. The risk classification of an aircraft proximity in which serious risk of collision has existed

2. ***Safety not assured***. The risk classification of an aircraft proximity in which the safety of the aircraft may have been compromised.

3. ***No risk of collision***. The risk classification of an aircraft proximity in which no risk of collision has existed.

4. Risk not determined. The risk classification of an aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.

ASMI Category A: An incident in which a reduction in required ATC separation occurs where the separation remaining is 25% or less of the required minimum, regardless of whether or not corrective action or an evasive response to avoid a collision was taken.

ASMI Category B: An incident in which a reduction in required ATC separation occurs where the separation remaining is 26% up to and including 50% of the required minimum and no ATC action is taken, or the initial action to resolve the situation was determined by the pilot or ACAS.

ASMI Category C: An incident in which a reduction in required separation occurs where: 1. The separation remaining is 26% up to and including 50% of the required minimum and ATC resolved the situation; or 2. The separation remaining is 51% up to and including 75% of the required minimum and no ATC action is taken, or the initial action to resolve the situation was determined by the pilot or ACAS.

ASMI Category D An incident in which a reduction in required separation occurs where: 1. The separation remaining is 51% up to but not including 90% of the required minimum and ATC resolved the situation; or 2. The separation remaining is 76% or more and no ATC action is taken, or the pilot or ACAS resolved the situation.

ASMI Category E An incident in which a reduction in required separation occurs where the separation remaining is 90% or more of the required minimum and ATC resolved the situation.

Airspace Penetration (CTA/CTR/SUA) without Clearance or Approval An incident where an aircraft enters civil or military controlled airspace or SUA without clearance or proper authorization.

Apron Incident An incident reported to ATC where the flight safety of an aircraft was or may have been affected on the apron area.

ATC Coordination Error An incident where the coordination between ATC Sectors or units is not completed correctly, where the ATC coordination failure affected flight safety.

ATC Operational Issue An incident, not resulting in any other category, where incorrect ATCO actions or ATC procedures affected, or may have affected flight safety.

ATS/AD Equipment Failure An incident where there is a failure or irregularity of ATS or Aerodrome communication, navigation or surveillance systems or any other safety significant systems or equipment which could adversely affect the safety or efficiency of flight operations and/or the provision of an air traffic control service.

Communications Failure An incident where an aircraft experiences a total or partial communications failure

Deviations from ATC Clearance (not including a Level Bust) An incident where an aircraft fails to comply with any component of an ATC clearance, excluding a cleared altitude or flight level

Emergency (other than Engine Failure or Fuel Shortage) An incident, excluding an accident, security event, engine failure, fuel emergency or medical emergency, where a pilot declares an emergency, Mayday or Pan.

Engine Failure An incident where a pilot reports he has experienced an engine failure during takeoff, in flight or landing, or reports that he has shut down an engine due to a technical problem.

Flight Planning Error An incident where a flight planning error has been reported which may affect the safety of a flight

FOD An incident involving FOD detected on a runway including reported tyre bursts from aircraft which have recently operated on a runway.

1. Category A: FOD which is likely to cause damage to an aircraft on a runway or runway shoulder;
2. Category B FOD which is likely to cause damage to an aircraft found within runway strip or RESA;
3. Category C: FOD which is likely to cause damage to an aircraft on taxiways or taxiway shoulders;
4. Category D: FOD which is likely to cause damage to an aircraft found on the taxiway strips, apron areas or elsewhere on the airfield.

Fuel Emergency An incident where a pilot reports he is experiencing a minimum fuel situation which requires an emergency declaration.

Go-Around Event Any go- around event, except where an aircraft intentionally goes around for training purposes.

Level Bust Category A An incident where an aircraft deviates from an assigned level by 800 feet or more, and there was no loss of separation.

Level Bust Category B An incident where an aircraft deviates from an assigned level by 600 or 700 feet and there was no loss of separation.

Level Bust Category C An incident where an aircraft deviates from an assigned level by 400 or 500 feet, and there was no loss of separation.

Level Bust Category D An incident where an aircraft deviates from an assigned level by 300 feet or less and there was no loss of separation.

Loss of Runway Separation Category A An incident in which a reduction in required runway separation occurs where:

1. A collision is narrowly avoided; or
2. The separation remaining is 25% or less of the required minimum, regardless of whether or not corrective action or an evasive response to avoid a collision was taken.

Loss of Runway Separation Category B An incident in which a reduction in required runway separation occurs where:

1. A significant potential for collision which may result in a time-critical corrective evasive response to avoid a collision; or
2. The separation remaining is 26% up to and including 50% of the required minimum, and no ATC action is taken, or the initial action to resolve the situation was determined by the pilot.

Loss of Runway Separation Category C An incident in which a reduction in required runway separation occurs where:

1. There is ample time or distance to avoid a potential collision; or
2. The separation remaining is 26% up to and including 50% of the required minimum, and ATC resolved the situation; or
3. The separation remaining is 51% or more of the required minimum and no ATC action is taken, or the initial action to resolve the situation was determined by the pilot.

Loss of Runway Separation Category D An incident in which a reduction in required runway separation occurs where:

1. The separation remaining is 51% or more of the required minimum and ATC resolved the situation; or
2. An aircraft is in receipt of a landing or take-off clearance, while another aircraft is on the runway, and the initial action to resolve the situation was determined by the pilot.

LSALT/Terrain Event An incident where an IFR aircraft is flown below a Lowest Safe Altitude (LSALT) or an ATC Minimum Radar Vectoring Altitude (MRVA)

LVP Violations An incident where an aircraft conducts an operation when RVR, Met visibility and/or cloud base conditions are below the required approach minima or the aerodrome operator minima.

Manoeuvring Area Excursion Category A An incident in which an aircraft has an excursion from a runway – i.e. overruns, excursion off the side of the runway – resulting in damage to aircraft

Category B: An incident in which an aircraft has an excursion from a taxiway – excursion off the side of the taxiway – resulting in damage to aircraft

Category C: An incident in which an aircraft has an excursion from a runway – i.e. overruns, excursion off the side of the runway – resulting in no damage to aircraft

Category D: An incident in which an aircraft has an excursion from a taxiway- excursion off the side of the taxiway – resulting in no damage to aircraft.

Medical Emergency An incident where a pilot reports a medical emergency requiring a diversion or priority track or landing due to a sick or injured passenger or crew member.

Military Due Regard Event An incident where actions of a military aircraft under limited civil ATC control results in a situation where flight safety in controlled airspace is or may have been compromised.

Non-compliance with climb gradient An incident where an aircraft fails to comply with the published minimum departure climb gradient requirement.

Operator complaint or operational issue (not resulting in any other category) An incident involving:

1. A direct operational related complaint or query received from an operator or State; or
2. An ATC issue with an operator

Runway Incursion Category A A serious incident in which a collision is narrowly avoided.

Runway Incursion Category B A runway incursion in which the separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision. This includes a runway incursion occurring while a departing aircraft has commenced its take-off roll or an arriving aircraft has crossed the threshold.

Runway Incursion Category C A runway incursion characterized by ample time and/or distance to avoid a collision, including a runway incursion occurring while a departing aircraft has been cleared to line up, or cleared for take-off or an arriving aircraft has been cleared to land but has not crossed the threshold.

Runway Incursion Category D A runway incursion that meets the definition of a runway incursion such as the incorrect presence of a vehicle, person or aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.

Runway Incursion Category E Insufficient information or inconclusive or conflicting evidence precludes a severity assessment

Runway Operation Incident An incident occurring on a runway, where operational safety was or may have been affected, excluding a runway incursion, such as

1. an aircraft conducts an operation on a runway without proper authority, e.g. conducting a take-off or landing on an operational or closed runway without a clearance; or
2. attempting a take-off or landing from a taxiway not approved for such an operation.

Security Event An incident involving a security event relating to an aircraft, which may adversely affect flight safety, such as a Hijack, Bomb Warning or an unruly passenger, which results in a request for a priority diversion or landing, or the attendance to an aircraft by security personnel.

Taxiway Operation Incident An incident, excluding an actual or attempted take-off or landing on a taxiway, where an aircraft, vehicle or person operates on a taxiway in a manner where operational safety was or may have been affected, including taxiway incursion.

Technical Problem An incident excluding a declared emergency where a pilot reports an aircraft technical problem.

Visual Hazard Report An incident where a pilot or ATC unit becomes aware of a situation involving a light source, including laser, spotlights or pyrotechnics, where flight safety was or may have been compromised

Wake Turbulence Event An incident relating to a pilot's report of turbulence, or its effects, from another aircraft's wake. If the incident was already reported as an ASMI then no need to report it as Wake Turbulence.

4.1 AERODROMES

1) Manoeuvring Area Excursion - Category A - An incident in which an aircraft has an excursion from a runway – i.e. overruns, excursion off the side of the runway – resulting in damage to aircraft

2) Manoeuvring Area Excursion - Category B - An incident in which an aircraft has an excursion from a taxiway – excursion off the side of the taxiway – resulting in damage to aircraft

3) Manoeuvring Area Excursion - Category C - An incident in which an aircraft has an excursion from a runway – i.e. overruns, excursion off the side of the runway – resulting in no damage to aircraft

4) Manoeuvring Area Excursion - Category D - An incident in which an aircraft has an excursion from a taxiway – excursion off the side of the taxiway – resulting in no damage to aircraft

5) FOD Category A - FOD which is likely to cause damage to an aircraft on runway or runway shoulder

6) FOD Category B - FOD which is likely to cause damage to an aircraft found within runway strip or RESA

7) Aircraft Damage - Category A - Destroyed – Aircraft is unlikely to ever fly again – total write off

8) Aircraft Damage - Category B - Substantially Damaged – Major damage that prevents the aircraft from flight until significant maintenance is undertaken

9) Aircraft Damage - Category C - Minor Damage – Minor damage that prevents the aircraft from immediate flight and requires some maintenance to rectify

10) Runway Incursion - Category A - A serious incident in which a collision is narrowly avoided

11) Runway Incursion - Category B - A Runway Incursion incident in which the separation decreases and there is a significant potential for collision, which may result in a time critical corrective / evasive response to avoid a collision, including a runway incursion occurring while a departing aircraft has commenced its take-off roll or an arriving aircraft has crossed the threshold

12) Runway Incursion - Category C - A Runway Incursion incident characterised by ample time and/or distance to avoid a collision, including a runway incursion occurring while a departing aircraft has been cleared to line

up, or cleared for take-off, or an arriving aircraft has been cleared to land but has not crossed the threshold

13) Runway Incursion - Category D - A Runway Incursion incident that meets the definition of a runway incursion such as the incorrect presence of a single vehicle, person or aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences

14) Bird & Wildlife Hazard - Category A - An incident where a pilot experiences wildlife striking an aircraft resulting in significant damage to the aircraft and or requiring an aborted take-off, inflight diversion, prioritised landing or resulting in an accident

15) Bird & Wildlife Hazard - Category B - An incident where a pilot reports an actual or potential wildlife strike, which does not result in significant damage or adversely affect the flight

16) Bird & Wildlife Hazard - Category C - An incident where dead wildlife is found on the runway when a strike has not been reported by a pilot.

4.2 Reportable Incident to Specific Systems

The following subparagraphs give examples of reportable incidents resulting from the application of the generic criteria to specific systems:

1) Air conditioning/ventilation (a) Complete loss of avionics cooling; (b) Depressurisation

2) Auto-flight system (a) Failure of the auto-flight system to achieve the intended operation while engaged (b) Significant reported crew difficulty to control the aircraft linked to auto-flight system functioning (c) Failure of any auto-flight system disconnect device (d) Un-commanded auto-flight mode change

3) Communications (a) Failure or defect of Passenger Address System resulting in loss or inaudible passenger address; (b) Total loss of communication in flight.

4) Electrical system

(a) loss of one electrical system distribution system (AC or DC)

(b) total loss or loss or more than one electrical generation system (c) failure of the backup (emergency) electrical generating system

5) Cockpit/Cabin/Cargo (a) Pilot seat control loss during flight; (b) Failure of any emergency system or equipment, including emergency evacuation signaling system, all exit doors, emergency lighting, etc.; (c) Loss of retention capability of the cargo loading system.

6) Fire protection system (a) Fire warnings, except those immediately confirmed as false;

(b) Undetected failure or defect of fire/smoke detection/protection system, which could lead to loss or reduced fire detection/protection; (c) Absence of warning in case of actual fire or smoke.

7) Flight controls (a) Asymmetry of flaps, slats, spoilers etc.; (b) Limitation of movement, stiffness or poor or delayed response in the operation of primary flight control systems or their associated tab and lock systems; (c) Flight control surface run away; (d) Flight control surface vibration felt by the crew; (e) Mechanical flight control disconnection or failure; (f) Significant interference with normal control of the aircraft or degradation of flying qualities;

8) Fuel system (a) fuel quantity indicating system malfunction resulting in total loss or erroneous indicated fuel quantity on board; (b) leakage of fuel which resulted in major loss, fire hazard , significant contamination; (c) malfunction or defects of the fuel jettisoning system which resulted in inadvertent loss of significant quantity, fire hazard, hazardous contamination of aircraft equipment or inability to jettison fuel; (d) fuel system malfunctions or defects which had a significant effect on fuel supply and/or distribution; (e) inability to transfer or use total quantity of usable fuel;

9) Hydraulics (a) loss of one hydraulic system (ETOPS only) (b) failure of the isolation system to operate (c) loss of more than one hydraulic circuits (d) failure of the backup hydraulic system (e) inadvertent Ram Air Turbine extension

10) Ice detection/protection system (a) undetected loss or reduced performance of the anti-ice/de-ice system (b) loss of more than one of the probe heating systems (c) inability to obtain symmetrical wing deicing (d) abnormal ice accumulation leading to significant effects on performance or handling qualities

(e) crew vision significantly affected

11) Indicating/warning/recording systems (a) malfunction or defect of any indicating system when the possibility of significant misleading indications to the crew could result in an inappropriate crew action on an essential system (b) loss of a red warning function on a system (c) For glass cockpits: loss or malfunction of more than one display unit or computer involved in the display/warning function.

12) Landing gear system /brakes/tyres

(a) Brake fire

(b) Significant loss of braking action

(c) Unsymmetrical braking leading to significant path deviation

(d) Failure of the L/G free fall extension system (including during scheduled tests)

(e) Unwanted gear or gear doors extension/retraction

(f) Multiple tyres burst

13) Navigation systems (including precision approaches system) and air data systems

(a) Total loss or multiple navigation equipment failures;

(b) Total failure or multiple air data system equipment failures;

(c) Significant misleading indication;

(d) Significant navigation errors attributed to incorrect data or a database coding error;

(e) Unexpected deviations in lateral or vertical path not caused by pilot input;

(f) Problems with ground navigational facilities leading to significant navigation errors not associated with transitions from inertial navigation mode to radio navigation mode.

14) Oxygen

(a) for pressurised aircraft: loss of oxygen supply in the cockpit;

(b) loss of oxygen supply to a significant number of passengers (more than 10%), including when found during maintenance or training or test purposes.

15) Bleed air system

(a) Hot bleed air leak resulting in fire warning or structural damage;

(b) Loss of all bleed air systems;

(c) Failure of bleed air leak detection system.

16) Any other that could be related to system/component for Special Operations Approval granted by the CAA (e.g. AWO, RVSM, etc.)