



CIVIL AVIATION ADVISORY PUBLICATION

CAAP 22

INCIDENT REPORTING

**GUIDANCE ON THE REQUIREMENTS OF SAFETY AND SECURITY INCIDENT REPORTING
BY UAE OPERATORS AND ORGANISATIONS**



RECORD OF AMENDMENTS / DATE OF APPLICABILITY

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	August 2010
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HIGHLIGHTS OF CHANGE

Issue	Description of changes
ISSUE 05	Following NPA 2017-01 the following changes has been made: • Section 5.3: point a) change to include ATO Certificate Holders. • Section 5.7: - Change to inform that Appendix B contains example of reportable incidents and may be used as guidance for establishing its own list of reportable incidents. - Change to inform that Appendix C contains example of serious incidents and may be used as guidance for establishing its own list of serious incidents. - Change to inform that Appendix D contains example of Category 1 incidents and may be used as guidance for establishing its own list of Category 1 incidents. - Change to guide and recommend each organisation to build their capacity in distinguishing if an incident other than accident or serious accidents falls under the definition of Category 1 or Category 2. • Section 5.8 - Title modified - Reference to CAR PART VI Chapter 3 is added to guide reader through the definition of “accident” and “serious incident”. - Change to ensure that organisation provide appropriate qualification to person responsible for classification of an incident. - Changes made to the table containing the reportable times. • Appendix B: - 1st paragraph added - Item 31) changed under I.A related to Taxiway and Runway incursion and similarly items 40) and 41) under IV and items 17) and 18) under V. • Appendix C created after deletion from CAR PART VI Chapter 3.



- Appendix D created.

Additional changes made but not having an impact on the implementation:

- Section 2: Addition of notes in footer.
- Section 3: inclusion of the NPA reference 2017-01 with a new note informing the industry that other change to rule will be made at next opportunity.
- Section VII under Appendix B added



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2 PURPOSE

The purpose of this Civil Aviation Advisory Publication (CAAP) is to provide interpretative material and guidance for the reporting of an incident using the GCAA's mandatory reporting system by persons/organisations licenced/regulated under UAE Civil Aviation Regulations (CARs).

In addition to reporting of safety incident to General Civil Aviation Authority (GCAA), this CAAP also describes the responsibility of the originator to send incident reports to other stakeholders who are partners in safety, e.g. manufacturer, maintenance organizations.

The mandatory reporting requirement is supported by three systems:

- a) The GCAA's "Reporting of Safety Incident" (ROSI) system¹ including user manual available in ROSI folder on GCAA website's (www.gcaa.gov.ae) downloads centre.
- b) The mandatory requirement for reporting dangerous goods incident/ accident is supported by the GCAA's Reporting of Dangerous Goods Occurrence (RODGO) system² on GCAA website, where access request could be communicated to "RODGO.Investigation@gcaa.gov.ae" (the online reporting requirement using RODGO shall be incorporated into the June 2014 revision of GCAA CAR PART VI CHAPTER 2).
- c) The mandatory requirement for reporting aviation security incident/ accident is supported by the GCAA's Reporting of Security Breach (ROSB) system³ on GCAA website, where access request could be communicated to "ROSB.Investigation@gcaa.gov.ae".

Guidance on the GCAA's voluntary reporting may be found in CAAP 57 – Voluntary Reporting System.

Note: This CAAP is based DIRECTIVE 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation and EASA AMC 20-8.

3 STATUS OF THIS CAAP

This is Issue 05 of CAAP 22 and is based on NPA 2017-01. Further changes to the proposed text in the NPA have been incorporated based on the Comments Response Document that could be consulted on GCAA website. These changes are marked with revision bars.

Note: Other Civil Aviation Regulations affected by NPA 2017-01 will be changed at next opportunity – as described in the NPA itself.

¹ Links to these systems are included in Appendix A.

² Links to these systems are included in Appendix A.

³ Links to these systems are included in Appendix A.



4 APPLICABILITY

This CAAP applies to:

- a) All UAE air operators operating in or outside UAE territory;
- b) All non-UAE operators operating UAE registered aircraft; and
- c) Other UAE approved or certified organisations including:
 - i. Overseas organisations (CAR M, 21 & CAR145) as applicable; and
 - ii. Recreation aviation aircraft.
 - iii. Approved training organisations
 - iv. ANSP's
 - v. Certified Aerodromes
 - vi. Certified Heliports

5 MANDATORY OCCURRENCE REPORTING TO THE GCAA

5.1 Objective of mandatory occurrence reporting

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.

Other objectives of such reporting system are:

- a) encourage aviation industry to follow a centralised reporting
- b) prevent recurrence of the incident by analysing their safety implications.
- c) disseminate knowledge of incident capitalised during analysis of reported incidents.
- d) 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.
- e) enhance international aviation safety by reporting wake vortex incidents and specific bird strikes and details of associated aircraft damage to ICAO when required.

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.

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



5.2 Legislation

The Civil Aviation Regulation promulgated by the GCAA impose on person/organisation to report to the GCAA any occurrence such as an incident, malfunction, defect, technical defect or exceedance of technical limitations that endangers or could endanger the safe operation of the aircraft or create an unsafe condition (e.g. CAR OPS 1.420(b)(2) & CAR OPS 3.420(b)(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 ROSI report.

5.3 Categories of persons required to report

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

- a) operator or commander of an aircraft, whether registered or not in the UAE, but operated by the holder of an Air Operator Certificate or ATO certificate issued by the GCAA; or
- b) organisation that carries out in the UAE or outside UAE the business of designing, manufacturing, modifying or maintaining a UAE registered aircraft, or any 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) organisation or person declared as Air Navigation Service Provider that performs a function connected with the installation, modification, maintenance, repair, overhaul, flight checking or inspection of air navigation facilities or other services which are approved by the GCAA; or
- e) organisation or person that performs a function connected with the ground handling of aircraft, including fuelling, servicing, load sheet preparation, loading, dangerous goods and towing at a UAE airport.

It should be understood that, while the legislation defines those who have to report, anyone may report, should they consider it necessary. Persons should report any reportable occurrence of which they have positive knowledge, even if they have good reason to believe that appropriate details of the occurrence have already been, or will be, reported by someone else. A report should also be submitted on any occurrence that involves an unsatisfactory condition, behaviour or procedure, which did not immediately endanger the aircraft but if allowed to continue uncorrected, or if repeated in other foreseeable circumstances, would create a hazard to aircraft or individuals or property.

It is of great importance that the reporters keep firmly in mind the concept of 'endangering' or 'potentially endangering', as used above, when deciding whether or not to submit a report.



5.4 Reporting procedure

The CAR places the primary responsibility for reporting with individuals. However, in the interests of flight safety, the full participation in the investigation by the organisation involved is encouraged. Therefore, wherever possible, the GCAA 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 GCAA. 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 "Air Safety Report" is an important part of an organisation's Safety Management System. The organisation should make employees aware of:

- a) the organisation's internal reporting procedure to include statements of just culture and;
- b) the existence of VOSRY where individuals may submit a report directly to GCAA should they wish to do so.

5.5 Aircraft applicability

The list below details the aircraft against which the occurrence reporting applies:

- a) Any A6 registered aircraft
- b) Any military aircraft involved in an incident while operating in UAE Civil airspace and any foreign aircraft operating in the UAE. Refer to 5.10.7
- c) Any aircraft operating under CAR OPS 1.165 or 3.165 (lease-in, and lease-out) and irrespective of the lease arrangement.

5.6 Possible action by employers

Where a reported occurrence indicated an unpremeditated or inadvertent lapse by an employee, the GCAA 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 GCAA expects employers to refrain from disciplinary or punitive action which might inhibit their staff from duly reporting incidents of which they may have knowledge.

5.7 What to report?

The primary objective of occurrence reporting is to monitor, disseminate and record for analysis, critical or potentially critical safety occurrences. It is not intended to collect and monitor the normal flow of day-to-day defects/incidents etc. The latter is an important part of the overall flight safety task but other procedures and systems exist to carry out this function. Organisational reporting policies need to ensure clear criteria for mandatory reporting to GCAA to ensure that all relevant safety events are completely and correctly reported and that those events which are not required to be sent to the GCAA are well defined and are appropriately reported



in accordance with the organisation's internal reporting system(s). Reporters should ensure that the content of their reports meets the criteria and guidance referenced in this CAAP. Particular emphasis should be paid towards ensuring that day-to-day anomalies, insignificant technical defects and routine reliability issues are dealt with by means of the normal organisational systems and procedures.

Appendix B of this CAAP provides example of what should be reported by an organisation to the GCAA. This list may be used as guidance for establishing which incident should be reported.

Appendix C of this CAAP provides examples of what occurrences falls under the classification of "serious incident". This list may be used as guidance for establishing which incident shall be classified as "serious incident".

Within the classification of occurrences other than accidents and serious incidents, the GCAA introduces two incident sub-classifications named "Category 1 incident" and "Category 2 incident".

- a) Category 1 Incident is defined as a significant occurrence other than accident and serious incident (refer to below to determine "significant".)
- b) Category 2 incident is defined as an occurrence other than accident, serious incident and Category 1 incident.

Appendix D of this CAAP provides examples of what occurrences, other than accidents and serious incidents, falls under the classification of "Category 1 incident". This list may be used as guidance for establishing which incident should be classified as "Category 1 incident". Prior to qualify an occurrence as "Category 1 Incident", reporters should:

- a) ensure that the level of hazard judged to have resulted from the occurrence is not qualifying the occurrence as serious incident;
- b) use their SMS to ensure that the level of hazard carried by the occurrence justifies the reporting as "Category 1 Incident". Where the occurrence is judged to have resulted in a less immediate and less significant hazard, report submission may be delayed as stated under Section 5.8.

Reporters should build their capacity to ensure that with time, their system has learned to distinguish what types of occurrence fall under "Category 1 incident" and "Category 2 incidents".

5.8 Notification and Reporting time

Reports must be submitted within the timeframe indicated below, unless exceptional circumstances prevent this. Nevertheless, in the cases of accidents and serious incidents the GCAA expects to be advised of the essential details as soon as possible (refer to note below). The GCAA relies on the judgement of those responsible for submitting reports to classify which occurrences fall within the accidents and serious incident types (Definitions of accident and serious incident are available in CAR PART VI Chapter 3 - AIR ACCIDENTS AND INCIDENTS INVESTIGATION). It is crucial to ensure that those persons are adequately familiar and trained to ensure adequate classification of occurrences. For other incidents, reports may be sent within the specified timeframe in the table below.



Prompt advice to the GCAA on the results of investigations and the actions taken to control the situation may minimise direct GCAA 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 GCAA. However, the efficiency of GCAA's follow-up work and the quality of safety data it can provide will be enhanced if reporting organisations keep the GCAA informed of major developments in their investigations.

Operator Type	Classification of the occurrence	Reporting Time to the GCAA ⁽⁴⁾	Reporting platform
Aerodromes	Accidents, and Serious Incidents	- Immediate Notification to DUTY INVESTIGATOR⁽¹⁾; and - A ROSI report within 8 hours containing all pertinent information about the condition and evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future.	- via ROSI BWI module for Bird Strike - via ROSI using AOP module for others
	Other than Accidents, and Serious Incidents	Category 1 incidents: - No Immediate Notification to DUTY INVESTIGATOR⁽¹⁾ is REQUIRED however a notification to the principal inspector⁽²⁾⁽³⁾ must be provided within 24 hours; - A ROSI report within 72 hours containing all pertinent information about the condition and evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future. If additional detailed information become available after 72 hours then the concerned organizations shall update the submitted ROSI report. Category 2 Incidents: - No Immediate Notification to DUTY INVESTIGATOR⁽¹⁾ nor notification within 24 hours to principal inspector⁽²⁾⁽³⁾ are REQUIRED; and - An ROSI report within 15 calendar days containing all pertinent information about the condition and evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future. If additional detailed	



		information become available after 15 calendar days then the concerned organizations shall update the submitted ROSI report.	
Air Traffic Services Organisations	Accidents, and Serious Incidents	- Immediate Notification to DUTY INVESTIGATOR⁽¹⁾; and - A ROSI report within 3 hours containing all pertinent information about the condition and evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future.	
	Other than Accidents, and Serious Incidents	Category 1 incidents: - No Immediate Notification to DUTY INVESTIGATOR⁽¹⁾ is REQUIRED however a notification to the principal inspector⁽²⁾⁽³⁾ must be provided within 24 hours; - A ROSI report within 72 hours containing all pertinent information about the condition and evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future. If additional detailed information become available after 72 hours then the concerned organizations shall update the submitted ROSI report Category 2 Incidents: - No Immediate Notification to DUTY INVESTIGATOR⁽¹⁾ nor notification within 24 hours to principal inspector⁽²⁾⁽³⁾ are REQUIRED; and - An ROSI report within 15 calendar days containing all pertinent information about the condition and evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future. If additional detailed information become available after 15 calendar days then the concerned organizations shall update the submitted ROSI report.	- via ROSI BWI module for Bird Strike - via ROSI using ATC module for others
Organisations others than Aerodromes and Air Traffic	Accidents, and Serious Incidents	- Immediate Notification to DUTY INVESTIGATOR⁽¹⁾; and - A ROSI report within the period prescribed by the applicable CAR or within 72 hours containing all pertinent information about the condition and	- via ROSI BWI module for Bird Strike - via ROSI RODGO



Services Organisations		evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future.	module for Dangerous Good - via ROSI using AOA module for others
	Other than Accidents, and Serious Incidents	Category 1 incidents: - No Immediate Notification to DUTY INVESTIGATOR⁽¹⁾ is REQUIRED however a notification to the principal inspector⁽²⁾⁽³⁾ must be provided within 24 hours; - A ROSI report within 72 hours containing all pertinent information about the condition and evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future. If additional detailed information become available after 72 hours then the concerned organizations shall update the submitted ROSI report. Category 2 Incidents: - No Immediate Notification to DUTY INVESTIGATOR⁽¹⁾ nor notification within 24 hours to principal inspector⁽²⁾⁽³⁾ are REQUIRED; and - An ROSI report within 15 calendar days containing all pertinent information about the condition and evaluation results known to the person or organisation and details of the investigation and actions it intends to take to prevent similar occurrences in the future. If additional detailed information become available after 15 calendar days then the concerned organizations shall update the submitted ROSI report.	
All organisations	Security related accident, serious incident or any critical emergency	Initial Report to DUTY INVESTIGATOR ⁽¹⁾ and followed by a written report as soon as possible	- via ROSB



- (1) Duty Investigator is located within the GCAA, however, it is referring to the section (GCAA AAIS) responsible for investigating Air Accident and serious incident. Phone numbers are available in section 6.1.
- (2) The following information must be provided by email to Principal Inspector with copy to SafetyManagement@gcaa.gov.ae:
 - Date and time of incident
 - Operator
 - Aircraft type
 - Aircraft registration
 - Location of occurrence (airport, FIR etc...)
 - Flight No.
 - Departure and Arrival airport
 - Description of the incident
- (3) There is no need for the notification required in item (2) above to be sent to SafetyManagement@gcaa.gov.ae if a ROSI report is submitted within 24 hours.
- (4) 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.

5.9 Confidentiality of reports

Without prejudice to the proper discharge of its responsibilities, the GCAA will not disclose the name of the person submitting the report or of a person to whom it relates.

Should any safety follow-up action arising from a report be necessary, the GCAA will take all reasonable steps to avoid disclosing the identity of the reporter or of those individuals involved in any reportable occurrence.

5.10 Specific reporting provisions

5.10.1 Aircraft, aircraft equipment and ground equipment defects

In the case of occurrences arising from, or relating to, defects in the aircraft, its equipment or any item of ground equipment, it is important that the appropriate manufacturer(s) and competent authority be advised of the occurrence as soon as possible. The GCAA therefore expects that any organisation which raises an occurrence report (or which has been made aware of a report raised by an individual employee) will, without any delay, report to the appropriate aircraft or equipment manufacturer(s) or relevant regulatory agencies. In the case of incidents affecting ground installations or services (for example, aerodrome and/or air traffic control) those responsible for those services should also be informed. The original report (submitted on ROSI) should list all addressees to whom it has been sent. To facilitate effective lines of communication when any part or equipment involved in an occurrence is being dispatched to another area or organisation for investigation or repair, the item(s) should be clearly identified as the subject of an occurrence report to the GCAA, by appropriate annotation of the "tag" and all accompanying paperwork.



Additionally, the GCAA expects that Suspected Unapproved Parts are also reported through ROSI as indicated in Safety Alert [2014-05](#).

5.10.2 AIRPROX and Birdstrike

Because of the specialist detailed nature of the information required on AIRPROX and birdstrike, all such reports should be submitted to the GCAA through their respective ROSI module. In particular for Birdstrike, Operators shall provide damage details as required by ICAO Doc. 9332.

5.10.3 Air Traffic Controllers

Reports (including AIRPROX) should be submitted (see appendix B).

5.10.4 Passenger medical emergencies and PAN calls

Certain types of events are considered as being a minor event, provided there is no other flight safety hazard associated with the event. These include:

- a) PAN calls for passenger medical emergencies; and
- b) other PAN calls made for the sole purpose of an expeditious approach.

Note: Unless a report specifically states that a PAN (or MAYDAY) call was made, the occurrence is not reportable under the ROSI System, unless there is an associated flight safety hazard.

5.10.5 Volcanic Ash reporting

Volcanic Ash reporting shall be reported too.

5.10.6 Dangerous Goods reporting

Any type of dangerous goods occurrence must be reported, irrespective of whether the dangerous goods are contained in cargo, mail or baggage. A dangerous goods accident is an occurrence associated with and related to the transport of dangerous goods which results in fatal or serious injury to a person or major property damage. A dangerous goods incident is an occurrence, associated with and related to the transport of dangerous goods, not necessarily occurring on board an aircraft, which results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardises the aircraft or its occupants is also deemed to constitute a dangerous goods incident. Any occasion when undeclared or



erroneously declared dangerous goods are discovered in cargo, mail or unaccompanied baggage or when accompanied baggage contains dangerous goods which passengers or crew are not permitted to take on aircraft (refer to under 8.1.1.1 of ICAO Technical Instructions for the Safe Transport of Dangerous Goods and Table 2.3.A of the IATA Dangerous Goods Regulations), shall be reported using RODGO.

5.10.7 Incident involving Military in UAE civil airspace or foreign aircraft operating in UAE

These incidents should be reported by the respective aerodrome or ATS unit affected by the incident. Affected UAE air operators will follow appendix B in such cases and report accordingly if required.

5.11 Retention of data from a Flight Data Recorder

The GCAA expects to use data obtained from a Flight Data Recorder (FDR) only when this is necessary for the proper investigation of any significant occurrence. It is not intended to use such data to check on information contained in a written report but to supplement and extend the written information. Flight Data recorders fitted to some aircraft are capable of providing valuable data on a wider range of occurrences and the GCAA would expect to make judicious use of such information in relation to appropriate occurrences. For this purpose, the GCAA requires operators to comply with CAR-OPS 1.160(a) or CAR-OPS 3.160(a), as applicable.

As part of the occurrence reporting system of an operator, the operator shall have the necessary internal procedures to download and read flight data to accomplish the necessary internal investigations and follow-up. These procedures should be included in the organisations approved procedures for internal occurrence reporting and flight data monitoring.

The GCAA depends upon the judgment of those responsible for submitting reports to establish which occurrences require the retention of FDR data. It is equally incumbent upon the GCAA to advise the reporting organisation, as quickly as possible, when it requires such data.

5.12 Processing of occurrence reports

In relation to all reported occurrences, the GCAA will:

- a) evaluate each occurrence report received;
- b) decide which occurrences require follow-up by the GCAA to discharge the GCAA's functions and responsibilities;
- c) make such checks as it considers necessary to ensure that operators, manufacturers, maintenance organisations, training organizations, air traffic control services and aerodrome operators are taking any necessary remedial and preventative action in relation to reported occurrences;
- d) take such steps as to communicate/follow-up the occurrence to type certificate holders, competent authorities and liaise and exchange information with them for any necessary remedial and preventative action



as applicable in relation to reported occurrences;

- e) assess and analyse the information reported to it in order to detect safety problems which may not be apparent to individual reporters;
- f) make available the information derived from occurrence reports in accordance with the relevant regulations;
- g) make available the results of studies of the data provided to those who will use them for the benefit of air safety;
- h) where appropriate, issue specific advice or instructions to particular sections of the industry;
- i) where appropriate, take action in relation to legislation, requirements or guidance, such as revisions of the civil aviation regulations;
- j) ensure that effective communication is maintained between GCAA Air Accident Investigation Sector and GCAA (regulator) in respect of accident and serious incident investigation and follow up, and that all appropriate areas of GCAA are fully briefed on all matters of significance.

5.13 Occurrences closed on receipt

Certain occurrences reported to the GCAA, while meeting the criteria for a reportable occurrence, are adequately dealt with by the reporting organisation. Thus, there is no justification for further investigation by the GCAA, although details of the occurrence and action taken do provide valuable information for dissemination and storage purposes. Reports judged to be in this category are closed on receipt by the GCAA, the principal justification for closure being that it is evident from the report that existing requirements, procedures, documentation and so on, coupled with the reporter's action, have adequately controlled the identified hazard. When necessary, the GCAA will liaise with the reporter in making this decision. The ability of the GCAA to close an occurrence on receipt and thus avoid the need for further GCAA investigation is very much dependent upon the quality of the information provided in the report and, specifically, information on the action taken by the reporting organisation to control the situation.

5.14 Notifying other agencies

The following agencies should also be notified in specific cases:

- a) Security incidents including laser beam occurrences should also be notified to the appropriate local security agency and air traffic control.
- b) Reports relating to air traffic, aerodrome incidents or bird strikes should also be notified to the appropriate air navigation, aerodrome or ground agency.
- c) Reporting and assessment of air traffic safety incident in ATM should be notified to air traffic control.
- d) State of Design and/or State of Manufacturer when related to design/production of aircraft, equipment fitted thereof.
- e) Accidents/ Incidents and or serious incidents involving Radioactive Materials "Class 7" should be also notified to the UAE Federal Authority for Nuclear Regulations (FANR) on (www.fanr.gov.ae), Telephone +971 2 6516644.



5.15 Reporting to other organisations

Requirements exist within the CARs that require the reporting of unsafe or un-airworthy conditions to organisations other than GCAA. These reporting lines are:

- a) Production organisation to the organisation responsible for the design;
- b) Maintenance organisation to the organisation responsible for the design & production;
- c) Maintenance organisation to operator, organisation responsible of the type design or responsible of a design of a repair/modification (e.g. TC/STC Holder);

Note: If it can be determined that the incident has an impact on or is related to an aircraft component which is covered by a separate design approval (TC, STC, TSO or PMA), then the holders of such approval/authorisation should be informed. If an incident happens on a component which is covered by a TC, STC, TSO or PMA (e.g. during maintenance), then only that TC, STC, TSO Authorisation or PMA Authorisation holder needs to be informed.

- d) Operator to organisation responsible for the design & production;
- e) Production organisation to sub contract production organisation for supplies.

6 NOTIFICATION OF ACCIDENT OR SERIOUS INCIDENT OR OTHER CRITICAL EMERGENCY AFFECTING CIVIL AVIATION SYSTEM

6.1 Duty investigator

Organisations involved or have knowledge of accident, serious incident, or security critical emergency shall immediately notify to the DI:

- a) Safety related accident, serious incident or any critical emergency to the Duty Investigator (DI) using on +971 50 641 4667.
- b) Security related accident, serious incident or any critical emergency to the AVSEC Duty Investigator on +97150 6424911 and the Mailbox AVSEC-DI@gcaa.gov.ae

Both (the hotline and the mailbox) are assigned to manage serious Aviation Security Occurrence and Breach's immediate notification(s), and for this authority to timely respond, action and or provide the necessary consultation about such immediate notification(s).

The aviation security immediate notification hotline shall be called ONLY when reporting serious aviation security occurrences and breaches.

It is very important also to emphasise that such notifications must as soon as possible be reported in the GCAA Online Reporting Security Breaches (ROSB) system, for investigation purposes since reporting aviation security occurrences and breaches is a mandatory requirement as defined in 15.6.7.4 and 19.10.1 of the National Civil Aviation Security Program (NCASP).

6.2 Examples

Aircraft Accident / Serious Incident (Fatal & Non-Fatal) could be related to:

- a) UAE Air Operator



- b) Foreign Air Operator
- c) State Aircraft – VVIP, VIPs
- d) Corporate Aircraft

Airborne Serious Emergency affecting the safety of the aircraft could be:

- a) Large Air Carrier Aircraft – such as unlawful interference
- b) Dangerous Goods Involvement

Major incident at airport affecting airside operational safety could be:

- a) Crash on Airport
- b) Aircraft evacuation due to potential hazard
- c) Major system, structural failure or labour dispute causing serious disruption to operations
- d) illegal Acts
- e) Aircraft Hijacking - in UAE
- f) Hostage taking
- g) Terrorist activities
- h) Bomb threats/ Bomb found in civil aircraft/ airport terminal building

7 CONTENT OF THE REPORTS

7.1 ROSI

The amount of information in the report should be commensurate with the severity of the incident. Each report should at least contain the following elements, as applicable:

- a) Organisation name, originator's name and ID.
- b) Aircraft Registration Mark, Flight Details/Aircraft configuration/Maintenance Incidents/Approval Reference (if relevant)
- c) Information necessary to identify the aircraft, crew or part affected
- d) Date, time and route or location
- e) Check/ mark the appropriate fields in the ROSI form (GCAA website).
- f) ROSI categorization (ECCAIRS event categorization compliant)
- g) A written short description of the incident including root cause identification, any immediate corrective measures/actions taken or planned.

Note: For any incident involving a system or component:

- a) *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.*
- b) *Identification if its reliability is of concern as per the established reliability programme (if applicable)*



7.2 RODGO

All mandatory fields must be duly completed (online application – refer to Section 7.4)

7.3 ROSB

All mandatory fields must be duly completed (online application – refer to Section 7.4)

7.4 Access Control to the mandatory reporting systems

To ensure authorised access to ROSI form in the website, users shall establish his/her profile in the website and receive user ID & password to access the form. The official users of the operator or organisation shall notify GCAA to register through email: rosi@gcaa.gov.ae

To grant access to RODGO, please notify GCAA through the email: RODGO.Investigation@gcaa.gov.ae

To grant access to ROSB, please notify GCAA through the email: ROSB.Investigation@gcaa.gov.ae

To support the concept of single point of reporting, GCAA encourages to have one user per company but not exceeding two.

7.5 Guidance for filling out a report & Submission

Operator Type	Guidance Available
Air Operations/ Airworthiness/	CAAP 22 & on line user manual Bird Strikes www.gcaa.gov.ae – Downloads – Reporting of Safety Incidents (ROSI) folder - ROSI - ATC and AOP - User Manual Dangerous Goods: https://www.gcaa.gov.ae/en/pages/login.aspx?ReturnUrl=/en/rodgo/pages/e_form.asp



Operator Type	Guidance Available
Aerodrome Operator	www.gcaa.gov.ae – Downloads – Reporting of Safety Incidents (ROSI) folder - ROSI - ATC and AOP - User Manual Bird Strikes www.gcaa.gov.ae – Downloads – Reporting of Safety Incidents (ROSI) folder - ROSI - ATC and AOP - User Manual Dangerous Goods: https://www.gcaa.gov.ae/en/pages/login.aspx?ReturnUrl=/en/rodgo/pages/e_form.asp
Air Traffic Control	www.gcaa.gov.ae – Downloads – Reporting of Safety Incidents (ROSI) folder - ROSI - ATC and AOP - User Manual Bird Strikes www.gcaa.gov.ae – Downloads – Reporting of Safety Incidents (ROSI) folder - ROSI - ATC and AOP - User Manual Dangerous Goods: https://www.gcaa.gov.ae/en/pages/login.aspx?ReturnUrl=/en/rodgo/pages/e_form.asp

Operator Type	Guidance Available
Air Operations/ Airworthiness/ Dangerous Goods	CAAP 22 & on line user manual http://www.gcaa.gov.ae/en/rosl/pages/details.aspx?_Lst=GCAA_Welcome:Body
Aerodrome Operator	www.gcaa.gov.ae – Downloads – Reporting of Safety Incidents (ROSI) folder - ROSI - ATC and AOP - User Manual – current version
Air Traffic Control	www.gcaa.gov.ae – Downloads – Reporting of Safety Incidents (ROSI) folder - ROSI - ATC and AOP - User Manual – current version
Bird Strike	www.gcaa.gov.ae – Downloads – Reporting of Safety Incidents (ROSI) folder - ROSI - ATC and AOP - User Manual – current version



8 REPORTABLE INCIDENTS

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

- a) 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 is usually published within the organisation's manuals. Such specific reporting can also be found in other specific application publication (e.g. CAAP 5 for large height deviation in RVSM airspace).
- b) Internal Reporting. The perception of safety is central to incident reporting. It is for each organisation to determine what is safe and what is unsafe and to develop its reporting system on that basis. The organisation should establish an internal reporting system 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.
- c) External Sources. External departments like law enforcement agencies, foreign CAAs may also submit safety incident reports with respect to UAE registered aircraft.

9 Voluntary Reporting

9.1 Voluntary reporting

The GCAA 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 through the mandatory reporting systems. GCAA VORSY System is used for online voluntary reporting which are then processed in a similar way to mandatory reports. Confidentiality, data protection and just culture shall be ensured by GCAA in all voluntary reports.

Guidance for Voluntary reports is available in CAAP 57.

9.2 Protection of reporters and reports

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

Reporters submitting a Confidential Report must accept that effective investigation may be inhibited by confidentiality, however, the GCAA would rather have a Confidential Report than no report at all. The above method may also be used when a reporter wishes to disclose sensitive information to the GCAA where an MOR seems inappropriate.



APPENDIX A: REPORTING SYSTEMS ACCESS

See GCAA Website for ROSI

<http://www.gcaa.gov.ae/en/rosl/>

Aircraft Operations
& Airworthiness >



Air Traffic
Control >



Aerodrome
Operations >



Bird Strike &
Wildlife Hazards >



Reporting of
Dangerous
Goods
(RODGO)

https://www.gcaa.gov.ae/en/pages/login.aspx?ReturnUrl=/en/rodgo/pages/e_form.asp



APPENDIX B: LIST OF EXAMPLES OF OCCURRENCES

Remark: This Appendix is structured in such a way that the pertinent occurrences are linked with categories of activities during which they are normally observed, according to experience, in order to facilitate the reporting of those occurrences. However, this presentation must not be understood as meaning that occurrences must not be reported in case they take place outside the category of activities to which they are linked in the list.

I. AIRCRAFT FLIGHT OPERATIONS

A. Operation of the Aircraft

- 1) Aircraft manoeuvre:
 - a) Risk of collision with an aircraft, terrain or other object or an unsafe situation when 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 V_1 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) Exceedence 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 ROSI, the operator must indicate if any assistance is required from GCAA 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
- a) Taxiway incursion is any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the taxiway or within the taxiway strip. For the purposes of this definition, incorrect presence is defined as "entering the taxiway or taxiway strip regardless of the safety effect on other aircraft or vehicle operations and irrespective of whether the taxiway is closed or not, as a consequence of a failure of a pilot, driver or person to comply with a valid ATC clearance, or their compliance with an inappropriate ATC clearance.
 - b) Runway incursion is any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft. For the purposes of this definition, the protected area is defined as "the area on the runway side of the appropriate runway holding position" and incorrect presence is "entering the protected area regardless of the safety effect on other aircraft or vehicle operations and irrespective of whether the protected surface (runway) is closed or not, as a consequence of a failure of a pilot, driver or person to comply with a valid ATC clearance, or their compliance with an inappropriate ATC clearance.
- 32) Laser incident (Guidance available in CAAP49)
- 33) Unstable approach reported by pilots or analysed through FDM programme. If the occurrence reported by a pilot requires confirmation through a Flight Data Monitoring analysis (CAR-OPS 1.037 and CAR-OPS 3.037), timelines mentioned under Section 5.8 may be extended.

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.
- 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

- 1) 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 ANNEX 13.

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: see CAR-OPS 1.1225 and AMC.

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) Noncompliance 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.
- 3) Note: All bird strike incidents shall be reported in the Bird Strike & Wildlife Hazard module of the ROSI system.
- 4) Wake turbulence encounters.
- 5) 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.



II. 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 to CS25.571(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. See paragraph II.B. below
- 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 shutdown 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 (LOTIC):
- 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 overspeed 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 in-flight 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) Damage to tail rotor, transmission and equivalent systems.
- 12) APU
- 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

- 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.

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 pilots seat control during flight.

III. 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 (Safety Alert 05-2014).
- 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.

IV. 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.

- 1) ACAS Event: An incident where a resolution advisory event (RA) did or may have occurred.
- 2) 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.

- a) Risk of collision. The risk classification of an aircraft proximity in which serious risk of collision has existed
 - b) Safety not assured. The risk classification of an aircraft proximity in which the safety of the aircraft may have been compromised.
 - c) No risk of collision. The risk classification of an aircraft proximity in which no risk of collision has existed.
 - d) 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.
- 3) 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.
 - 4) 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.
 - 5) ASMI Category C: An incident in which a reduction in required separation occurs where:
 - a) The separation remaining is 26% up to and including 50% of the required minimum and ATC resolved the situation; or
 - b) 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.
 - 6) ASMI Category D: An incident in which a reduction in required separation occurs where:
 - a) The separation remaining is 51% up to but not including 90% of the required minimum and ATC resolved the situation; or
 - b) The separation remaining is 76% or more and no ATC action is taken, or the pilot or ACAS resolved the situation.
 - 7) 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.
 - 8) 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 authorisation.
 - 9) Apron Incident: An incident reported to ATC where the flight safety of an aircraft was or may have been affected on the apron area.
 - 10) 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.
 - 11) 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.

- 12) **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.
- 13) **Communications Failure:** An incident where an aircraft experiences a total or partial communications failure.
- 14) **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.
- 15) **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.
- 16) **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.
- 17) **Flight Planning Error:** An incident where a flight planning error has been reported which may affect the safety of a flight.
- 18) **FOD:** An incident involving FOD detected on a runway including reported tyre bursts from aircraft which have recently operated on a runway.
 - a) **Category A:** FOD which is likely to cause damage to an aircraft on a runway or runway shoulder;
 - b) **Category B:** FOD which is likely to cause damage to an aircraft found within runway strip or RESA;
 - c) **Category C:** FOD which is likely to cause damage to an aircraft on taxiways or taxiway shoulders;
 - d) **Category D:** FOD which is likely to cause damage to an aircraft found on the taxiway strips, apron areas or elsewhere on the airfield.
- 19) **Fuel Emergence:** An incident where a pilot reports he is experiencing a minimum fuel situation which requires an emergency declaration.
- 20) **Go-Around Event:** Any go- around event, except where an aircraft intentionally goes around for training purposes.
- 21) **Level Bust:**
 - a) **Category A:** An incident where an aircraft deviates from an assigned level by 800 feet or more, and there was no loss of separation.
 - b) **Category B:** An incident where an aircraft deviates from an assigned level by 600 or 700 feet and there was no loss of separation.
 - c) **Category C:** An incident where an aircraft deviates from an assigned level by 400 or 500 feet, and there was no loss of separation.



- d) Category D: An incident where an aircraft deviates from an assigned level by 300 feet or less and there was no loss of separation.
- 22) Loss of Runway Separation Category A: An incident in which a reduction in required runway separation occurs where:
- a) A collision is narrowly avoided; or
 - b) 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.
- 23) Loss of Runway Separation Category B: An incident in which a reduction in required runway separation occurs where:
- a) A significant potential for collision which may result in a time-critical corrective evasive response to avoid a collision; or
 - b) 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.
- 24) Loss of Runway Separation Category C: An incident in which a reduction in required runway separation occurs where:
- a) There is ample time or distance to avoid a potential collision; or
 - b) The separation remaining is 26% up to and including 50% of the required minimum, and ATC resolved the situation; or
 - c) 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.
- 25) Loss of Runway Separation Category D: An incident in which a reduction in required runway separation occurs where:
- a) The separation remaining is 51% or more of the required minimum and ATC resolved the situation; or
 - b) 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.
- 26) 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)
- 27) 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.
- 28) Manoeuvring Area Excursion:
- a) 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
 - b) 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
 - c) 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
 - d) 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.

- 29) 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.
- 30) 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.
- 31) Non-compliance with climb gradient: An incident where an aircraft fails to comply with the published minimum departure climb gradient requirement.
- 32) Operator complaint or operational issue (not resulting in any other category) : An incident involving:
 - a) A direct operational related complaint or query received from an operator or State; or
 - b) An ATC issue with an operator
- 33) Runway Incursion Category A: A serious incident in which a collision is narrowly avoided.
- 34) 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.
- 35) Runway Incursion Category C: A runway incursion 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.
- 36) 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.
- 37) Runway Incursion Category E: Insufficient information or inconclusive or conflicting evidence precludes a severity assessment.
- 38) Runway Operation Incident An incident occurring on a runway, where operational safety was or may have been affected, excluding a runway incursion, such as
 - a) 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
 - b) attempting a take-off or landing from a taxiway not approved for such an operation.
- 39) 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.
- 40) Taxiway Incursion Category A: A Taxiway Incursion incident in which there is a potential for collision with



an aircraft, which results in a corrective/evasive response to avoid a collision.

- 41) Taxiway Incursion Category B: A Taxiway Incursion incident that meets the definition of a taxiway incursion such as the incorrect presence of a vehicle, person or aircraft on the taxiway or within the taxiway strip with no safety consequence.
- 42) 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.
- 43) Technical Problem: An incident excluding a declared emergency where a pilot reports an aircraft technical problem.
- 44) 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
- 45) Wake Turbulence Event: An incident relating to a pilot's report of turbulence, or its effects, from another aircraft's wake, excluding a reduction of required wake turbulence separation.



V. 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, in-flight 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.
- 17) Taxiway Incursion Category A: A Taxiway Incursion incident in which there is a potential for collision with an aircraft, which results in a corrective/evasive response to avoid a collision.
- 18) Taxiway Incursion Category B: A Taxiway Incursion incident that meets the definition of a taxiway incursion such as the incorrect presence of a vehicle, person or aircraft on the taxiway or within the taxiway strip with no safety consequence.

VI. 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 back up (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 signalling 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 de icing
 - 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 GCAA (e.g. AWO, RVSM, etc.)

Note: Items/events not included in the ROSI form, shall be marked as "Other" followed by short description in the narrative column.

VII. EMERGING HAZARDS, THREATS, OR RISKS

Any hazard, threat or risk that could have, if not appropriately handled or contained, an unacceptable impact on safety such as cyber-attacks (refer to SAFETY ALERT 2017-09), drug and alcohol, unlawful interface with GNSS or radio communications means.



APPENDIX C: LIST OF EXAMPLES OF SERIOUS INCIDENTS

- 1) Near collisions requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate.
- 2) Collisions not classified as accidents.
- 3) Controlled flight into terrain only marginally avoided.
- 4) Aborted take-offs on a closed or engaged runway, on a taxiway¹ or unassigned runway.
- 5) Take-offs from a closed or engaged runway, from a taxiway¹ or unassigned runway.
- 6) Landings or attempted landings on a closed or engaged runway, on a taxiway¹ or unassigned runway.
- 7) Gross failures to achieve predicted performance during take-off or initial climb.
- 8) Fires and/or smoke in the cockpit, in the passenger compartment, in cargo compartments or engine fires, even though such fires were extinguished by the use of extinguishing agents.
- 9) Events requiring the emergency use of oxygen by the flight crew.
- 10) Aircraft structural failures or engine disintegrations, including uncontained turbine engine failures, not classified as an accident.
- 11) Multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft.
- 12) Flight crew incapacitation in flight.
- 13) Fuel quantity level or distribution situations requiring the declaration of an emergency by the pilot, such as insufficient fuel, fuel exhaustion, fuel starvation, or inability to use all usable fuel on board.
- 14) Runway incursions classified with severity A. The Manual on the Prevention of Runway Incursions (Doc 9870) contains information on the severity classifications.
- 15) Take-off or landing incidents. Incidents such as under-shooting, overrunning or running off the side of runways.
- 16) System failures, weather phenomena, operations outside the approved flight envelope or other occurrences which caused or could have caused difficulties controlling the aircraft.
- 17) Failures of more than one system in a redundancy system mandatory for flight guidance and navigation.
- 18) The unintentional or, as an emergency measure, the intentional release of a slung load or any other load carried external to the aircraft.



APPENDIX D: LIST OF EXAMPLES OF CATEGORY 1 INCIDENTS

I. OPERATION OF AIRCRAFT

- 1) Aircraft Flight Path Deviation which caused a hazardous situation
- 2) Loss of Separation between Aircraft which caused a hazardous situation
- 3) Near collision with terrain
- 4) Aircraft diversion that prevent the intended flight to be completed due to operational/technical issue
- 5) Fire/smoke/fumes in aircraft
- 6) Wrong runway/taxiway selected
- 7) Runway incursion/excursion
- 8) Substantial damage to aircraft. Example: damage by tow truck, ground equipment etc..
- 9) Turbulence encounters resulting in injury to occupants or caused damage to aircraft
- 10) Any event involving injuries to crew/passengers
- 11) Unlawful act damage
- 12) Flight crew incapacitation
- 13) Deviation from ATC instruction which caused a hazardous situation
- 14) Incorrect loading
- 15) MEL violation
- 16) Take-off overweight/incorrect center of gravity (COG)
- 17) Interference with aircraft from ground
- 18) Materials/objects detaching from aircraft. Ex: structure, panels etc..
- 19) Engine Inflight Shutdown
- 20) Declared emergency (Mayday/PAN PAN)



- 21) Crew fatigue
- 22) Non compliance with operation procedure

II. AIRCRAFT TECHNICAL

- 1) Non-compliance with Aircraft Maintenance Program requirements
- 2) Non-compliance with Airworthiness Directives/mandatory instructions
- 3) Structural damage/defect which may have caused a hazardous situation
- 4) Structural or systems damage/defect which is beyond prescribed limits in aircraft maintenance manuals and required engineering input for rectification
- 5) Failure or non-functionality of an emergency system/equipment such as and not limited to: (slide rafts, doors, lightings) found during maintenance activities or during operation.
- 6) Loss of redundancy of a system
- 7) Malfunction or defect of any indication system which resulted or may have resulted in misleading indications to the crew
- 8) Any failure or malfunction of a system which occurred during a critical phase of flight relevant to the operation of the system
- 9) Inability of a system/powerplant to achieve its required performance
- 10) Asymmetry of flight control (flaps, slats, spoilers, ailerons etc..)
- 11) Engine flameout and/or shutdown
- 12) An uncommanded thrust/power loss of the engine(s)
- 13) Any detachment of any part of the aircraft found after flight/during maintenance
- 14) Any incidents where the design of the aircraft could have led to application of inadequate maintenance practices
- 15) Fire/explosion/smoke incidents
- 16) Any event which could have affect the safety of aircraft/occupants of the aircraft, or people or property in the vicinity of aircraft or ground



- 17) Incorrect assembly of parts or components of the aircraft found during inspections or tests
- 18) The failure, malfunction or defect of any system or equipment, or damage or deterioration found as result of compliance with an Airworthiness Directive or any other mandatory instruction issued by a regulatory authority when:
 - 19) It is detected for the first time by the reporting organization implementing compliance;
 - 20) On any subsequent compliance where it exceeds the permissible limits quoted in the instruction and/or published repair/rectification procedures are not available
- 21) Misleading, incorrect or insufficient maintenance data or procedures that could lead to maintenance error
- 22) Suspected unapproved Products, parts, appliances and materials (Safety Alert 05-2014).
- 23) Depressurization event
- 24) Total loss of communication inflight
- 25) Loss of electrical system
- 26) Failure of a backup electrical system
- 27) Loss of retention of cargo loading system
- 28) Fire/Smoke warnings, except for those which were confirmed as false
- 29) Undetected failure or defect of fire/smoke detection/protection system, which could lead to loss or reduced fire detection/protection;
- 30) Fuel quantity indicating system malfunction resulting in total loss or erroneous indicated fuel quantity on board
- 31) Leakage of fuel which resulted in major loss, fire hazard , significant contamination
- 32) Malfunctioning defects of fuel system which may have caused hazardous situations to flight safety
- 33) Loss of a hydraulic system
- 34) Failure of backup hydraulic system
- 35) Failure of the auto-flight system to achieve the intended operation while engaged



III. AIR NAVIGATION SERVICE PROVIDERS:

- 1) ASMI Category A
- 2) ASMI Category B
- 3) ASMI Category C
- 4) ASMI Category D
- 5) Level Bust Category A
- 6) Level Bust Category B
- 7) Level Bust Category C
- 8) Level Bust Category D
- 9) Loss of Runway Separation Category A
- 10) Loss of Runway Separation Category B
- 11) Loss of Runway Separation Category C
- 12) Loss of Runway Separation Category D
- 13) Runway Incursion Category A
- 14) Runway Incursion Category B
- 15) Runway Incursion Category C
- 16) Runway Incursion Category D
- 17) Runway Incursion Category E

IV. AERODROMES

- 1) Maneuvering Area Excursion - Category A
- 2) Maneuvering Area Excursion - Category B



- 3) Maneuvering Area Excursion - Category C
- 4) Maneuvering Area Excursion - Category D
- 5) FOD Category A
- 6) FOD Category B
- 7) Aircraft Damage - Category A
- 8) Aircraft Damage - Category B
- 9) Aircraft Damage - Category C
- 10) Runway Incursion - Category A
- 11) Runway Incursion - Category B
- 12) Runway Incursion - Category C
- 13) Runway Incursion - Category D