



Republika e Kosovës
Republika Kosovo - Republic of Kosovo

Autoriteti i Aviacionit Civil
Autoritet Civilnog Vazduhoplovstva
Civil Aviation Authority

Director General of Civil Aviation Authority of Kosovo,

Pursuant to Article 21.3 of the Law No. 03/L-051 on Civil Aviation,

Having regard to UNMIK's signature of the Multilateral Agreement on the Establishment of a European Common Aviation Area ("the ECAA Agreement") on behalf of Kosovo, and the provisional entry into force of the ECAA Agreement in Kosovo on 10 October 2006,

Whereas the Republic of Kosovo has undertaken the international obligations of Kosovo, including those concluded on behalf of Kosovo by UNMIK,

For the purpose of setting out rules on Occurrence Reporting in Civil Aviation in accordance with the ECAA Agreement and its requirements that Directive 2003/42/EC on occurrence reporting in civil aviation shall be made part of the internal legal order of the Republic of Kosovo,

Hereby issues the following:

REGULATION No. 1/2009 ON
OCCURRENCE REPORTING IN CIVIL AVIATION

Article 1
Objective

The objective of this Regulation is to contribute to the improvement of air safety by ensuring that relevant information on safety is reported, collected, stored, protected and disseminated.

The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability.

Article 2
Definitions

For the purpose of this Regulation:

“Occurrence” means an operational interruption, defect, fault or other irregular circumstance that has or may have influenced flight safety and that has not resulted in an accident or serious incident, hereinafter referred to as ‘accident or serious incident’.

“Accident” means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

1. a person is fatally or seriously injured as a result of:
 - being in the aircraft, or
 - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
 - direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

2. the aircraft sustains damage or structural failure which:
 - adversely affects the structural strength, performance or flight characteristics of the aircraft, and
 - would normally require major repair or replacement of the affected component,

except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tyres, brakes, fairings, small dents or puncture holes in the aircraft skin;

3. the aircraft is missing or is completely inaccessible;

“Serious incident” means an incident involving circumstances indicating that an accident nearly occurred

“Disidentification” means removing from reports submitted all personal details pertaining to the reporter and technical details which might lead to the identity of the reporter, or of third parties, being inferred from the information.

“ECAA Agreement” means the Multilateral Agreement between the European Community and its Member States, the Republic of Albania, Bosnia and Herzegovina, the Republic of Bulgaria, the Republic of Croatia, the Former Yugoslav Republic of Macedonia, the Republic of Iceland, the Republic of Montenegro, the Kingdom of Norway, Romania, the Republic of Serbia and the United Nations Interim Administration Mission in Kosovo on the Establishment of a European Common Aviation Area.

“Commission” means the Commission of European Communities.

Article 3

Scope

3.1 This Regulation shall apply to occurrences which endanger or which, if not corrected, would endanger an aircraft, its occupants or any other person. A list of examples of these occurrences appears in *Annexes I and II*.

Article 4

Mandatory reporting

4.1 Every person listed below, in the exercise of his/her functions, shall report all occurrences covered by Article 3 to the Civil Aviation Authority of Kosovo:

- a) the operator or commander of an aircraft used by an operator for which the Civil Aviation Authority of Kosovo ensures safety oversight of operations;
- b) a person who carries on the business of designing, manufacturing, maintaining or modifying an aircraft, or any equipment or part thereof, under the oversight of the Civil Aviation Authority of Kosovo;
- c) a person who signs a certificate of maintenance review, or of release to service in respect of an aircraft, or any equipment or part thereof, under the oversight of the Civil Aviation Authority of Kosovo;
- d) a person who performs a function which requires him/her to be authorised by the Civil Aviation Authority of Kosovo as an air traffic controller or as a flight information officer;
- e) a manager of an airport;
- f) a person who performs a function connected with the installation, modification, maintenance, repair, overhaul, flight-checking or inspection of air navigation facilities for which the Civil Aviation Authority of Kosovo ensures responsibility;
- g) a person who performs a function connected with the ground-handling of aircraft, including fuelling, servicing, loadsheet preparation, loading, de-icing and towing at an airport.

Article 5

Voluntary Reporting

Any person not listed in Article 4 but performing civil aviation operations similar to those of such persons, may report Occurrences that arise in the performance of that person's duties to the Civil Aviation Authority of Kosovo and shall be encouraged to do so by the Civil Aviation Authority of Kosovo and his employer.

Article 6

Collection and storage of information

6.1 The Civil Aviation Authority of Kosovo shall implement European Co-ordination Centre for Aviation Incident Reporting Systems (ECCAIRS) to collect, evaluate, process and store occurrences reported in accordance with Article 4.

6.2 Accidents and serious incidents shall also be stored in the database, subject to the agreed terms and conditions with the Aircraft Accident Incident Investigation Commission (AAIIC) of the Republic of Kosovo.

Article 7

Exchange of information

7.1 The Civil Aviation Authority of Kosovo shall participate in an exchange of information by making all relevant safety-related information available to the competent authorities of other ECAA Member States and the Commission.

7.2 The Civil Aviation Authority of Kosovo upon receiving an occurrence report shall enter it into the databases and notify, whenever necessary, the competent authority where the occurrence took place, where the aircraft is registered, where the aircraft is manufactured and/or where the operator is certificated.

Article 8

Dissemination of information

8.1 The Civil Aviation Authority of Kosovo shall, upon written request, disseminate information on occurrences collected and exchanged in accordance with Articles 6 and 7, to any entity entrusted with regulating civil aviation safety or with investigating civil aviation accidents and incidents to enable them to draw the safety lessons from the reported occurrences.

8.2 The decision to disseminate information under this paragraph shall be limited to what is strictly required for the purpose of its user, without prejudice to the provisions of Article 9.

These measures, which can be general or individual, shall be based on the need:

- to provide persons and organisations with the information they need to improve civil aviation safety,
- to limit the dissemination of information to what is strictly required for the purpose of its users, in order to ensure appropriate confidentiality of that information.

8.3 The Civil Aviation Authority of Kosovo may publish at least annually a safety review containing information on the types of occurrences collected by the mandatory occurrence-reporting system to inform the public of the level of safety in civil aviation.

The Civil Aviation Authority of Kosovo may also publish disidentified reports.

Article 9

Protection of information

9.1 The Civil Aviation Authority of Kosovo shall take necessary measures to ensure appropriate confidentiality of the information received by it pursuant to Articles 7.1 and 8.1. This information shall be used solely for the objective of this Regulation.

9.2 Regardless of the type or classification of occurrence and accident or serious incident, names or addresses of individual persons that reported the occurrence shall never be recorded in the database referred to in Article 6.1.

9.3 Without prejudice to the applicable rules of Kosovo Penal Code, the Civil Aviation Authority of Kosovo shall refrain from instituting proceedings in respect of unpremeditated or inadvertent infringements of the law which come to their attention only because they have been reported under the national mandatory occurrence-reporting scheme, except in cases of gross negligence.

9.4 The employer of any person that reports an Occurrence pursuant to this Regulation shall not, by any act or inaction, discriminate, at any time, against such an employee because that employee reported the Occurrence.

Article 10

Entry into force

This Regulation shall enter into force on 1 September 2009.

Dritan Gjonbalaj
Director General

ANNEX I

List of aircraft operations, maintenance, repair, and manufacture-related occurrences to be reported

Note 1: Although this Annex lists the majority of reportable occurrences, it cannot be completely comprehensive. Any other occurrences, which are judged by those involved to meet the criteria, should also be reported.

Note 2: This Annex does not include accidents. In addition to other requirements covering the notification of accidents, they should also be recorded in the database.

Note 3: This Annex contains examples of reporting requirements covering aircraft operations, maintenance, repair and manufacture.

Note 4: Occurrences to be reported are those where the safety of operation was or could have been endangered or which could have led to an unsafe condition. If in the view of the reporter an occurrence did not endanger the safety of the operation but if repeated in different but likely circumstances would create a hazard, then a report should be made. What is judged to be reportable on one class of product, part or appliance may not be so on another and the absence or presence of a single factor, human or technical, can transform an occurrence into an accident or serious incident.

Note 5: Specific operational approvals, e.g. RVSM, ETOPS, RNAV, or a design or maintenance programme, may have specific reporting requirements for failures or malfunctions associated with that approval or programme.

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A. AIRCRAFT FLIGHT OPERATIONS

(i) Operation of the aircraft

- a) Avoidance manoeuvres:
 - risk of collision with another aircraft, terrain or other object or an unsafe situation when avoidance action would have been appropriate;
 - an avoidance manoeuvre required to avoid a collision with another aircraft, terrain or other object;
 - an avoidance manoeuvre to avoid other unsafe situations.
- b) Take-off or landing incidents, including precautionary or forced landings. Incidents such as under-shooting, overrunning or running off the side of runways. Take-offs, rejected take-offs, landings or attempted landings on a closed, occupied or incorrect runway. Runway incursions.
- c) Inability to achieve predicted performance during take-off or initial climb.
- d) Critically low fuel quantity or inability to transfer fuel or use total quantity of usable fuel.
- e) Loss of control (including partial or temporary) regardless of cause.
- f) Occurrences close to or above V1 resulting from or producing a hazardous or potentially hazardous situation (e.g. rejected take-off, tail strike, engine-power loss etc.).
- g) Go around producing a hazardous or potentially hazardous situation.
- h) Unintentional significant deviation from airspeed, intended track or altitude (more than 300 ft) regardless of cause.
- i) Descent below decision height/altitude or minimum descent height/altitude without the required visual reference.

- j) Loss of position awareness relative to actual position or to other aircraft.
- k) Breakdown in communication between flight crew (CRM) or between flight crew and other parties (cabin crew, ATC, engineering).
- l) Heavy landing – a landing deemed to require a ‘heavy landing check’.
- m) Exceedance of fuel imbalance limits.
- n) Incorrect setting of an SSR code or of an altimeter subscale.
- o) Incorrect programming of, or erroneous entries into, equipment used for navigation or performance calculations, or use of incorrect data.
- p) Incorrect receipt or interpretation of radio-telephony messages.
- q) Fuel system malfunctions or defects, which had an effect on fuel supply and/or distribution.
- r) Aircraft unintentionally departing from a paved surface.
- s) Collision between an aircraft and any other aircraft, vehicle or other ground object.
- t) Inadvertent and/or incorrect operation of any controls.
- u) Inability to achieve the intended aircraft configuration for any flight phase (e.g. landing gear and gear doors, flaps, stabilizers, slats etc.).
- v) A hazard or potential hazard which arises as a consequence of any deliberate simulation of failure conditions for training, system checks or training purposes.
- w) Abnormal vibration.
- x) Operation of any primary warning system associated with manoeuvring the aircraft e.g. configuration warning, stall warning (stick shaker), over-speed warning etc. unless:
 1. the crew conclusively established that the indication was false and provided that the false warning did not result in difficulty or hazard arising from the crew response to the warning; or
 2. operated for training or test purposes.

- y) GPWS/TAWS 'warning' when:
1. the aircraft comes into closer proximity to the ground than had been planned or anticipated; or
 2. the warning is experienced in instrument meteorological conditions or at night and is established as having been triggered by a high rate of descent (mode 1); or
 3. the warning results from failure to select landing gear or landing flaps by the appropriate point on the approach (mode 4); or
 4. 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.
- z) GPWS/TAWS 'alert' when any difficulty or hazard arises or might have arisen as a result of crew response to the 'alert'.
1. ACAS RAs.
 2. Jet or prop blast incidents resulting in significant damage or serious injury.

(ii) Emergencies

- a) Fire, explosion, smoke or toxic or noxious fumes, even though fires were extinguished.
- b) The use of any non-standard procedure by the flight or cabin crew to deal with an emergency when:
1. the procedure exists but is not used;
 2. the procedure does not exist;
 3. the procedure exists but is incomplete or inappropriate;
 4. the procedure is incorrect;
 5. the incorrect procedure is used.
- c) Inadequacy of any procedures designed to be used in an emergency, including when being used for maintenance, training or test purposes.
- d) An event leading to an emergency evacuation.
- e) Depressurisation.

- f) The use of any emergency equipment or prescribed emergency procedures in order to deal with a situation.
- g) An event leading to the declaration of an emergency ('Mayday' or 'panne').
- h) 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.
- i) Events requiring any use of emergency oxygen by any crew member

(iii) Crew incapacitation

- a) 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.
- b) Incapacitation of any member of the cabin crew which renders them unable to perform essential emergency duties.

(iv) Injury

Occurrences, which have or could have led to significant injury to passengers or crew but which are not considered reportable as an accident.

(v) Meteorology

- a) A lightning strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- b) A hail strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- c) Severe turbulence encounter, an encounter resulting in injury to occupants or deemed to require a 'turbulence check' of the aircraft.
- d) A windshear encounter.
- e) Icing encounter resulting in handling difficulties, damage to the aircraft or loss or malfunction of any essential service.

(vi) Security

- a) Unlawful interference with the aircraft including a bomb threat or hijack.
- b) Difficulty in controlling intoxicated, violent or unruly passengers.
- c) Discovery of a stowaway.

(vii) Other occurrences

- a) Repetitive instances of a specific type of occurrence which in isolation would not be considered 'reportable' but which due to the frequency with which they arise, form a potential hazard.
- b) A bird strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- c) Wake-turbulence encounters.
- d) Any other occurrence 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.

B. AIRCRAFT TECHNICAL

(i) Structural

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

- a) damage to a principal structural element (PSE) that has not been designated as damage-tolerant (life-limited element). PSEs are those which contribute significantly to carrying flight, ground, and pressurisation loads, and the failure of which could result in a catastrophic failure of the aircraft;
- b) defect or damage exceeding admissible damages to a PSE that has been designated as damage-tolerant;
- c) damage to or defect exceeding allowed tolerances of a structural element, the failure of which could reduce the structural stiffness to such an extent that the required flutter, divergence or control reversal margins are no longer achieved;
- d) 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;
- e) damage to or defect of a structural element, which could jeopardise proper operation of systems. See (ii) below;
- f) loss of any part of the aircraft structure in flight.

(ii) Systems

The following general criteria applicable to all systems are proposed:

- a) loss, significant malfunction or defect of any system, subsystem or set of equipment when standard operating procedures, drills etc. could not be satisfactorily accomplished;
- b) inability of the crew to control the system, for example:
 - 1. uncommanded actions,
 - 2. incorrect and/or incomplete response, including limitation of movement or stiffness,
 - 3. runaway,

4. mechanical disconnection or failure;
- c) failure or malfunction of the exclusive function(s) of the system (one system could integrate several functions);
 - d) interference within or between systems;
 - e) failure or malfunction of the protection device or emergency system associated with the system;
 - f) Loss of redundancy of the system.
 - g) Any occurrence resulting from unforeseen behaviour of a system.
 - h) For aircraft types with single main systems, subsystems or sets of equipment:
 - loss, significant malfunction or defect in any main system, subsystem or set of equipment.
 - i) For aircraft types with multiple independent main systems, subsystems or sets of equipment:
 - the loss, significant malfunction or defect of more than one main system, subsystem or set of equipment.
 - j) 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.
 - k) 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.
 - l) Malfunction or defect of any indication system when this results in the possibility of misleading indications to the crew.
 - m) Any failure, malfunction or defect if it occurs at a critical phase of the flight and is relevant to the system operation.
 - n) 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.
 - o) Asymmetry of flight controls; e.g. flaps, slats, spoilers etc.

The Appendix to this Annex gives a list of examples of reportable occurrences resulting from the application of these general criteria to specific systems.

(iii) Propulsion (including engines, propellers and rotor systems) and auxiliary power units (APUs)

- a) Flameout, shutdown or malfunction of any engine.
- b) Overspeed or inability to control the speed of any high-speed rotating component (for example: APU, air starter, air cycle machine, air turbine motor, propeller or rotor).
- c) Failure or malfunction of any part of an engine or powerplant resulting in any one or more of the following:
 1. non-containment of components/debris;
 2. uncontrolled internal or external fire, or hot gas breakout;
 3. thrust in a direction different from that demanded by the pilot;
 4. thrust-reversing system failing to operate or operating inadvertently;
 5. inability to control power, thrust or rpm;
 6. failure of the engine mount structure;
 7. partial or complete loss of a major part of the powerplant;
 8. dense visible fumes or concentrations of toxic products sufficient to incapacitate crew or passengers;
 9. inability, by use of normal procedures, to shutdown an engine;
 10. inability to restart a serviceable engine.
- d) An uncommanded thrust/power loss, change or oscillation which is classified as a loss of thrust or power control (LOTC):
 1. for a single-engine aircraft; or
 2. where it is considered excessive for the application; or
 3. where this could affect more than one engine in a multi-engine aircraft, particularly in the case of a twin-engine aircraft; or
 4. 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.

- e) Any defect in a life-controlled part causing its withdrawal before completion of its full life.
- f) 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.
- g) An engine limiter or control device failing to operate when required or operating inadvertently.
- h) Exceedance of engine parameters.
- i) FOD resulting in damage.

Propellers and transmission

- j) Failure or malfunction of any part of a propeller or powerplant resulting in any one or more of the following:
 - 1. an Overspeed of the propeller;
 - 2. the development of excessive drag;
 - 3. a thrust in the opposite direction to that commanded by the pilot;
 - 4. a release of the propeller or any major portion of the propeller;
 - 5. a failure that results in excessive imbalance;
 - 6. the unintended movement of the propeller blades below the established minimum in-flight low-pitch position;
 - 7. an inability to feather the propeller;
 - 8. an inability to change propeller pitch;
 - 9. an uncommanded change in pitch;
 - 10. an uncontrollable torque or speed fluctuation;
 - 11. the release of low-energy parts.

Rotors and transmission

- k) Damage or defect of main rotor gearbox/attachment which could lead to in-flight separation of the rotor assembly and/or malfunctions of the rotor control.
- l) Damage to tail rotor, transmission and equivalent systems.

APUs

- m) Shut down or failure when the APU is required to be available by operational requirements, e.g. ETOPS, MEL.
- n) Inability to shut down the APU.
- o) Overspeed.
- p) Inability to start the APU when needed for operational reasons.

(iv) Human factors

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

(v) Other occurrences

- a) 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.
- b) An occurrence not normally considered as reportable (e.g., furnishing and cabin equipment, water systems), where the circumstances resulted in endangering the aircraft or its occupants.
- c) A fire, explosion, smoke or toxic or noxious fumes.
- d) Any other event which could endanger the aircraft, or affect the safety of the occupants of the aircraft, or people or property in the vicinity of the aircraft or on the ground.
- e) Failure or defect of passenger address system resulting in loss of, or inaudible, passenger address system.
- f) Loss of pilot seat control during flight

C. AIRCRAFT MAINTENANCE AND REPAIR

- (i) Incorrect assembly of parts or components of the aircraft found during an inspection or test procedure not intended for that specific purpose.
- (ii) Hot bleed air leak resulting in structural damage.
- (iii) Any defect in a life-controlled part causing retirement before completion of its full life.
- (iv) Any damage or deterioration (e.g. fractures, cracks, corrosion, delamination, disbonding etc.) resulting from any cause (e.g. as flutter, loss of stiffness or structural failure) to:
 - a) a primary structure or a PSE (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;
 - b) a secondary structure which consequently has or may have endangered the aircraft;
 - c) the engine, propeller or rotorcraft rotor system.
- (v) **Any failure, malfunction or defect of any system or equipment, or damage or deterioration thereof 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, it exceeds the permissible limits quoted in the instruction and/or published repair/rectification procedures are not available.
- (vi) 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.
- (vii) Non-compliance or significant errors in compliance with required maintenance procedures.
- (viii) Products, parts, appliances and materials of unknown or suspect origin.
- (ix) Misleading, incorrect or insufficient maintenance data or procedures that could lead to maintenance errors.

- (x) Any failure, malfunction or defect of ground equipment used for testing or checking of aircraft systems and equipment when the required routine inspection and test procedures did not clearly identify the problem, where this results in a hazardous situation.

D. AIR NAVIGATION SERVICES, FACILITIES AND GROUND SERVICES

(i) Air navigation services (ANS)

See Annex II, list of reportable ANS-related occurrences.

(ii) Aerodrome and aerodrome facilities

- a) Significant spillage during fuelling operations.
- b) Loading of incorrect fuel quantities likely to have a significant effect on aircraft endurance, performance, balance or structural strength.

(iii) Handling of passengers, baggage and cargo

- a) Significant contamination of aircraft structure, systems and equipment arising from the carriage of baggage or cargo.
- b) Incorrect loading of passengers, baggage or cargo, likely to have a significant effect on aircraft mass and/or balance.
- c) Incorrect stowage of baggage or cargo (including hand baggage) likely in any way to endanger the aircraft, its equipment or occupants or to impede emergency evacuation.
- d) Inadequate stowage of cargo containers or other substantial items of cargo.
- e) Carriage or attempted carriage of dangerous goods in contravention of applicable regulations, including incorrect labelling and packaging of dangerous goods.

(iv) Aircraft ground handling and servicing

- a) Failure, malfunction or defect of ground equipment used for the testing or checking of aircraft systems and equipment when the required routine inspection and test procedures did not clearly identify the problem, where this results in a hazardous situation.
- b) Non-compliance or significant errors in compliance with required servicing procedures.
- c) Loading of contaminated or incorrect type of fuel or other essential fluids (including oxygen and potable water)

Appendix to ANNEX I

The following subparagraphs give examples of reportable occurrences resulting from the application of the general criteria to specific systems listed in paragraph B(ii) of Annex I.

1. Air conditioning/ventilation

- a) complete loss of avionics cooling
- b) depressurisation.

2. Autoflight system

- a) failure of the autoflight system to achieve the intended operation while engaged
- b) significant reported crew difficulty to control the aircraft linked to autoflight system functioning
- c) failure of any autoflight system disconnect device
- d) uncommanded autoflight mode change.

3. Communications

- a) failure or defect of passenger address system resulting in loss of or inaudible passenger address
- b) total loss of communication in flight.

4. Electrical system

- a) loss of one electrical distribution system (AC/DC)
- b) total loss or loss of more than one electrical generation system
- c) failure of the backup (emergency) electrical generation 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 runaway
- 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 wrong indication of 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
- c) loss of more than one hydraulic circuit
- d) failure of the back-up 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) asymmetrical braking action leading to significant path deviation

- d) failure of the landing gear free fall extension system (including during scheduled tests)
- e) unwanted landing gear or gear doors extension/retraction
- f) multiple tyre burst.

13. Navigation systems (including precision approach systems) and air data systems

- a) total loss or multiple navigation equipment failures
- b) total or multiple air data system equipment failures
- c) significant misleading indications
- 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 for pressurised aircraft

- a) 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

ANNEX II

List of air navigation services related occurrences to be reported

Note 1: Although this Annex lists the majority of reportable occurrences, it cannot be completely comprehensive. Any other occurrences, which are judged by those involved to meet the criteria, should also be reported.

Note 2: This Annex does not include accidents and serious incidents. In addition to other requirements covering the notification of accidents, they should also be recorded.

Note 3: This Annex includes ANS occurrences which pose an actual or potential threat to flight safety, or can compromise the provision of safe ANS services.

Note 4: The contents of this Annex shall not preclude the reporting of any occurrence, situation or condition which, if repeated in different but likely circumstances or allowed to continue uncorrected, could create a hazard to aircraft safety.

Near collision incidents (encompassing specific situations where one aircraft and another aircraft/the ground/a vehicle/person or object are perceived to be too close to each other):

- a) separation minima infringement;
- b) inadequate separation;
- c) near-controlled flight into terrain (near CFIT);
- d) runway incursion where avoiding action was necessary.

Potential for collision or near collision (encompassing specific situations having the potential to be an accident or a near collision, if another aircraft is in the vicinity):

- a) runway incursion where no avoiding action is necessary;
- b) runway excursion;
- c) aircraft deviation from ATC clearance;
- d) aircraft deviation from applicable air traffic management (ATM) regulation:
 - 1. aircraft deviation from applicable published ATM procedures;
 - 2. unauthorised penetration of airspace;

3. deviation from aircraft ATM-related equipment carriage and operations, as mandated by applicable regulation(s).

ATM-specific occurrences (encompassing those situations where the ability to provide safe ATM services is affected, including situations where, by chance, the safe operation of aircraft has not been jeopardised).

This shall include the following occurrences:

- a) inability to provide ATM services:
 - 1. inability to provide air traffic services;
 - 2. inability to provide airspace management services;
 - 3. inability to provide air traffic flow management services;
- b) failure of Communication function;
- c) failure of Surveillance function;
- d) failure of Data Processing and Distribution function;
- e) failure of Navigation function;
- f) ATM system security.

Appendix to ANNEX II

The following subparagraphs give examples of reportable ATM occurrences resulting from the application of the general criteria listed in paragraph (iii) of Annex II to aircraft operations.

1. Provision of significantly incorrect, inadequate or misleading information from any ground sources, e.g. air traffic control (ATC), automatic terminal information service (ATIS), meteorological services, navigation databases, maps, charts, manuals, etc.
2. Provision of less than prescribed terrain clearance.
3. Provision of incorrect pressure reference data (i.e. altimeter setting).
4. Incorrect transmission, receipt or interpretation of significant messages when this results in a hazardous situation.
5. Separation minima infringement.
6. Unauthorised penetration of airspace.
7. Unlawful radio communication transmission.
8. Failure of ANS ground or satellite facilities.
9. Major ATC/ATM failure or significant deterioration of aerodrome infrastructure.
10. Aerodrome movement areas obstructed by aircraft, vehicles, animals or foreign objects, resulting in a hazardous or potentially hazardous situation.
11. Errors or inadequacies in marking of obstructions or hazards on aerodrome movement areas resulting in a hazardous situation.
12. Failure, significant malfunction or unavailability of airfield lighting.
