



## ՔԱՂԱՔԱՑԻԱԿԱՆ ԱՎԻԱՑԻԱՅԻ ԿՈՄԻՏԵԻ ՆԱԽԱԳԱՀ

«22» 09 2022թ.

ՀՐԱՄԱՆ N 451-L

### «ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅԱՆ ՔԱՂԱՔԱՑԻԱԿԱՆ ԱՎԻԱՑԻԱՅՈՒՄ ՏԵՂԻ ՈՒՆԵՑՈՂ ԻՐԱԴԱՐՁՈՒԹՅՈՒՆՆԵՐԻ ԶԵԿՈՒՑՄԱՆ, ՎԵՐԼՈՒԾՈՒԹՅԱՆ ԵՎ ՄՈՆԻԹՈՐԻՆԳԻ» ԿԱՐԳԸ ՀԱՍՏԱՏԵԼՈՒ ՄԱՍԻՆ

Ղեկավարվելով Հայաստանի Հանրապետության տարածքային կառավարման և ենթակառուցվածքների նախարարի 2021 թվականի փետրվարի 26-ի թիվ 14-Լ հրամանով հաստատված Հայաստանի Հանրապետության թռիչքային անվտանգության պետական ծրագրի 8-րդ կետով, 27-րդ կետի 7-րդ ենթակետով, 31-րդ, 32-րդ, 35-րդ և 36-րդ կետերով՝

#### Հ Ր Ա Մ Ա Յ ՈՒ Մ Ե Մ .

1. Հաստատել «Հայաստանի Հանրապետության քաղաքացիական ավիացիայում տեղի ունեցող իրադարձությունների զեկուցման, վերլուծության և մոնիթորինգի» կարգը:
2. Կոմիտեի անձնակազմի կառավարման բաժնի պետին՝ սույն հրամանը տեղեկացնել Կոմիտեի մասնագիտական ստորաբաժանումների բոլոր աշխատողներին:
3. Սույն հրամանի կատարման հսկողությունը վերապահում եմ ինձ:



Восстановимая подпись



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Подписано: KHACHATRYAN MIHRAN 3308540266

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## **REGULATION LAYING DOWN THE REPORTING, ANALYSIS AND FOLLOW-UP OF OCCURRENCES IN THE CIVIL AVIATION OF THE REPUBLIC OF ARMENIA**

### **1. General Provisions**

1. “Regulation laying down the reporting, analysis and follow-up of occurrences in the civil aviation of the Republic of Armenia” (here and after Regulation) is developed based on the provisions of ICAO Annex 19 “Safety Management”, ICAO Doc 9859 “Safety Management Manual”, Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation. A high general level of safety should be ensured in civil aviation of the Republic of Armenia (here and after RA) and every effort should be made to reduce the number of accidents and incidents with a view to ensuring public confidence in aviation transport.
2. Safety information is therefore an important resource for the detection of potential safety hazards. In addition, whilst the ability to learn from an accident is crucial, purely reactive systems have been found to be of limited use in continuing to bring forward improvements. Reactive systems should therefore be complemented by proactive systems which use other types of safety information to make effective improvements in aviation safety. The Civil Aviation Committee of the RA (here and after CAC) should contribute to the improvement of aviation safety through the introduction of more proactive and evidence based safety systems which focus on accident prevention based on the analysis of all relevant safety information, including information on civil aviation occurrences.
3. In order to improve aviation safety, relevant civil aviation safety information should be reported, collected, stored, protected, exchanged, disseminated and analysed, and appropriate safety action should be taken on the basis of the information collected. This proactive and evidence-based approach should be implemented by the CAC.
4. The imposition on organisations of occurrence reporting obligations should be proportionate to the size of the organisation concerned and the scope of its activity. It should therefore be possible, in particular for smaller organisations, to decide to join or merge functions related to occurrence handling within

the organisation, to share occurrence reporting tasks with other organisations of the same nature or to outsource the collection, evaluation, processing, analysis and storage of details of occurrences to specialised entities approved by the CAC.

5. It is necessary to ensure that front-line aviation professionals report occurrences that pose a significant risk to aviation safety. Voluntary reporting systems should complement the mandatory reporting systems, and both should allow individuals to report details of aviation safety-related occurrences. Mandatory and voluntary reporting systems should be set up within organisations and the CAC. The information collected should be transferred to the CAC ([safety@gdca.am](mailto:safety@gdca.am)) for appropriate monitoring in order to enhance aviation safety. Organisations should analyse those occurrences that could have an impact on safety, in order to identify safety hazards and take any appropriate corrective or preventive action. Organisations should send the preliminary results of their analyses to CAC ([safety@gdca.am](mailto:safety@gdca.am)) and should also send them the final results if those results identify an actual or potential aviation safety risk. The CAC should put in place a similar procedure for those occurrences that have been directly submitted to them and should adequately monitor the organisation's assessment and any corrective or preventive action taken.
6. Various categories of staff working or otherwise engaged in civil aviation witness events which are of relevance to accident prevention. They should therefore have access to tools enabling them to report such events, and their protection should be guaranteed. In order to encourage staff to report occurrences and enable them to appreciate more fully the positive impact which occurrence reporting has on air safety, they should be regularly informed about action taken under occurrence reporting systems.
7. The hazards and risk associated with complex motor-powered aircraft are very different from those associated with other types of aircraft. Therefore, while the entire aviation sector should be covered by this Regulation, the obligations imposed by it should be proportionate to the sphere of activity and the complexity of different types of aircraft. Accordingly, information collected on occurrences involving aircraft other than complex motor-powered ones should be subject to simplified reporting obligations which are better suited to that branch of aviation.
8. The development of other means of collecting safety information in addition to the systems required by this Regulation should be encouraged, with a view to collecting further information which could contribute to the improvement of aviation safety. Where organisations have existing and well-functioning safety information collection systems, they should be allowed to continue to use those systems alongside the systems to be established for the purpose of this Regulation.
9. Safety investigation authorities and any entity entrusted with regulating civil aviation safety within the RA should have full access to details of occurrences collected and occurrence reports stored by in order to decide which incidents require a safety investigation, as well as to identify where lessons can be learned in the interest of aviation safety and to fulfil their oversight obligations.

10. It is essential to have high-quality and complete data, as analysis and trends derived from inaccurate data may show misleading results and may lead to effort being focused on inappropriate action. In addition, such inaccurate data may lead to a loss of confidence in the information produced by occurrence reporting schemes. In order to ensure the quality of occurrence reports, and to facilitate their completeness, they should contain certain minimum information, which may vary depending on the occurrence category.
11. To facilitate information exchange, occurrence reports should be stored in databases/repositories, which should be compatible with the ECCAIRS software and the ADREP taxonomy.
12. Organisations should store occurrence reports derived from details of occurrences collected under the mandatory and, where applicable, the voluntary reporting systems in one or more databases/repositories. It should be possible for the complexity of the database/repository to be proportionate to the size of the organisation concerned and/or its significance with respect to the objectives of this Regulation, and it should at least consist of a data file containing **common mandatory data fields and**, where applicable, **specific mandatory data fields** as mentioned in Appendix II of this Regulation. The set of common mandatory data fields included in Appendix II point 1 of this Regulation is required to be provided for each reportable occurrence. The set of specific mandatory data fields included in Appendix II point 2 of this Regulation is required to be provided only for certain specific occurrences i.e. occurrences for which that data is relevant. Mandatory data fields cannot be left blank when they are relevant to the occurrence. They should always be filled with a value.
13. An occurrence involving an aircraft registered in the RA or operated by an organisation established in the RA should be reported CAC ([safety@gdca.am](mailto:safety@gdca.am)) even if it happened outside the territory of the RA.
14. The objective of the exchange of information on occurrences should be the prevention of aviation accidents and incidents. It should not be used to attribute blame or liability or to establish benchmarks for safety performance.
15. Information contained in occurrence reports should be analysed, and safety risks identified. Any appropriate consequent action for improving aviation safety should be identified and implemented in a timely manner. Information on the analysis and follow-up of occurrences should be disseminated within organisations and CAC since providing feedback on occurrences that have been reported incentivises individuals to report occurrences. Where applicable and when possible, information on the analysis and follow-up of occurrences should also be provided to individuals who have directly reported occurrences to CAC. Such feedback should comply with the rules on confidentiality and protection of the reporter and the persons mentioned in occurrence reports pursuant to this Regulation.
16. This Regulation should assist organisations in managing aviation safety risks. Organisations should collect and analyse information on occurrences in order to identify and mitigate hazards associated with their activities. They should also assess associated safety risks and allocate resources to take

prompt and appropriate safety risk mitigation measures. The overall process should be monitored by the CAC, which should, when necessary, require that additional action be taken to ensure that the safety deficiencies are correctly addressed.

- 17.** When determining the action to be included within the State Safety Programme and National Aviation Safety Plan, and in order to ensure that the action is evidence-based, the RA should use the information derived from the occurrence reports that have been collected and from their analysis.
- 18.** The civil aviation safety system is established on the basis of feedback and lessons learned from accidents and incidents. Occurrence reporting and the use of occurrence information for the improvement of safety depend on a relationship of trust between the reporter and the entity in charge of the collection and assessment of the information. This requires strict application of rules on confidentiality. In this context, sensitive safety information should be protected in an appropriate way and its collection should be ensured by guaranteeing its confidentiality, protecting its source and ensuring the confidence of staff working in civil aviation in occurrence reporting systems. Appropriate measures should be put in place to ensure that information collected through occurrence reporting schemes is kept confidential. National rules on freedom of information should take into account the necessary confidentiality of such information. The information collected should be adequately protected from unauthorised use or disclosure. It should be used strictly for the purpose of maintaining or improving aviation safety and should not be used to attribute blame or liability.
- 19.** In order to ensure the confidence of employees or contracted personnel in the occurrence reporting system of the organisation, the information contained in occurrence reports should be protected appropriately and should not be used for purposes other than maintaining or improving aviation safety. The internal “just culture” rules adopted by organisations pursuant to this Regulation should contribute in particular to the achievement of this objective. In addition, the limitation of the transmission of personal details, or of information allowing the identification of the reporter or of the other persons mentioned in occurrence reports, by a clear separation between the departments handling occurrence reports and the rest of the organisation, may be an efficient way to achieve this objective.
- 20.** A reporter or a person mentioned in occurrence reports should be adequately protected. In this context, occurrence reports should be disidentified and details relating to the identity of the reporter and of the persons mentioned in occurrence reports should not be entered into databases/repositories.
- 21.** In addition, the civil aviation system should promote a ‘safety culture’ facilitating the spontaneous reporting of occurrences and thereby advancing the principle of a “just culture”. “Just culture” is an essential element of a broader “safety culture”, which forms the basis of a robust safety management system. An environment embracing ‘safety culture’ principles should not prevent action being taken where necessary to maintain or improve the level of aviation safety.

- 22.** A “just culture” should encourage individuals to report safety-related information. It should not, however, absolve individuals of their normal responsibilities. In this context, employees and contracted personnel should not be subject to any prejudice on the basis of information provided pursuant to this Regulation, except in cases of wilful misconduct or where there has been manifest, severe and serious disregard with respect to an obvious risk and profound failure of professional responsibility to take such care as is evidently required in the circumstances, causing foreseeable damage to a person or to property, or seriously compromising the level of aviation safety.
- 23.** In order to encourage reporting of occurrences, it should be appropriate to protect not only reporters, but also persons mentioned in the occurrence reports concerned. However, such protection should not exonerate those persons from their reporting obligations under this Regulation. In particular, in a situation where a person is mentioned in an occurrence report and has himself or herself the obligation to report that same occurrence, and intentionally fails to report it, then that person should lose his or her protection and face penalties in application of this Regulation.
- 24.** Without prejudice to national criminal law and the proper administration of justice, it is important to clearly demarcate the extent of the protection of the reporter and other persons mentioned in occurrence reports from prejudice or prosecution.
- 25.** In order to enhance the confidence of individuals in the system, the handling of occurrence reports should be organised in such a way as to appropriately safeguard the confidentiality of the identity of the reporter and other persons mentioned in occurrence reports with regard to fostering a “just culture”.
- 26.** Staff of organisations, of CAC who are involved in the evaluation, processing or analysis of occurrences have a significant role to play in the identification of safety hazards and safety deficiencies. Experience shows that when occurrences are analysed with the benefit of hindsight following an accident, the analysis leads to the identification of risks and deficiencies that might otherwise not have been identified. It is possible, therefore, that the persons involved in the evaluation, processing or analysis of occurrences may fear potential consequences in terms of prosecution before judicial authorities. Without prejudice to national criminal law and the proper administration of justice, RA should not institute proceedings against persons, who are involved in the evaluation, processing or analysis of occurrences in respect of decisions taken as part of their duties which subsequently, and with the benefit of hindsight, prove to have been erroneous or ineffective but which, when they were taken and on the basis of the information available at that time, were proportional and appropriate.
- 27.** Employees and contracted personnel should have the opportunity to report breaches of the principles delimiting their protection as established by this Regulation, and should not be penalised for so doing. Ministry of Justice of RA should define the consequences for those who infringe the principles of protection of the reporter and of other persons mentioned in occurrence reports and should adopt remedies or impose penalties as appropriate.

- 28.** Individuals may be discouraged from reporting occurrences by the fear of self-incrimination and the potential consequences in terms of prosecution before judicial authorities. The objectives of this Regulation can be achieved without interfering unduly with the justice systems of the RA. It is therefore appropriate to provide that unpremeditated or inadvertent infringements of the law that come to the attention of the CAC solely through reporting pursuant to this Regulation should not be the subject of disciplinary, administrative or legal proceedings, unless where otherwise provided by applicable national criminal law. However, the rights of third parties to institute civil proceedings should not be covered by this prohibition and should be subject only to national law.
- 29.** Nevertheless, in the context of developing a “just culture” environment, RA should retain the option of extending the prohibition on using occurrence reports as evidence against reporters in administrative and disciplinary proceedings to civil or criminal proceedings.
- 30.** In addition, the cooperation between safety authorities and judicial authorities should be enhanced and formalised by means of advance arrangements between themselves which should respect the balance between the various public interests at stake and which should in particular cover, for example, access to and the use of occurrence reports contained in the national databases/repositories.
- 31.** Penalties should, in particular, be applicable against any person who or entity which, contrary to this Regulation, misuses information protected by this Regulation; acts in a prejudicial manner against the reporter or other persons mentioned in occurrence reports, except in cases where the exemptions laid down in this Regulation apply; does not establish an environment appropriate for allowing the collection of details of occurrences; does not analyse the information collected; does not act to address any safety or potential safety deficiencies detected; or does not share the information collected in application of this Regulation.

## **2. Objectives**

- 32.** This Regulation aims to improve aviation safety by ensuring that relevant safety information relating to civil aviation is reported, collected, stored, protected, exchanged, disseminated and analysed.
- This Regulation ensures:
- 1) that, where appropriate, safety action is taken in a timely manner based on analysis of the information collected;
  - 2) the continued availability of safety information by introducing rules on confidentiality and on the appropriate use of information and through the harmonised and enhanced protection of reporters and persons mentioned in occurrence reports; and
- 33.** The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability.

### 3. Definitions

34. For the purposes of this Regulation the following definitions apply:

- 1) “**occurrence report**” means a collection of values and a description that describe an occurrence;
- 2) “**reporter**” means a natural person who reports an occurrence or other safety-related information pursuant to this Regulation;
- 3) “**aircraft**” means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface;
- 4) “**incident**” means an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation;
- 5) “**serious incident**” means an incident involving circumstances indicating that there was a high probability of an accident and is associated with the operation of an aircraft, which in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down.
- 6) “**accident**” means an occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:
  - a. 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
  - b. 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 a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windcreens, the aircraft skin (such as small dents or puncture holes)



or minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike, (including holes in the radome); or

c. the aircraft is missing or is completely inaccessible;

- 7) “**misidentified information**” means information arising from occurrence reports from which all personal data such as names or addresses of natural persons have been removed;
- 8) “**occurrence**” means any safety-related event which endangers or which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person and includes in particular an accident or serious incident;
- 9) “**organisation**” means any organisation providing aviation products and/or which employs, contracts or uses the services of persons required to report occurrences in accordance with Paragraph 42 of this Regulation;
- 10) “**anonymization**” means the removal from occurrence reports of all personal details relating to the reporter and to the persons mentioned in occurrence reports and any details, including the name of the organisation(s) involved in the occurrence, which may reveal the identity of the reporter or of a third party or lead to that information being inferred from the occurrence report;
- 11) “**hazard**” means a situation or an object with the potential to cause death or injury to a person, damage to equipment or a structure, loss of material, or a reduction of ability to perform a prescribed function.
- 12) “**just culture**” means a culture in which front-line operators or other persons are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but in which gross negligence, wilful violations and destructive acts are not tolerated;
- 13) “**State Safety Programme**” means an integrated set of legal acts and activities aimed at managing civil aviation safety in the RA;
- 14) “**safety investigation authority**” means the permanent national civil aviation safety investigation authority conducting or supervising safety investigations as referred to in Government Decree N 1777-N on "Investigation, classification and reporting of aviation accidents and incidents in the Republic of Armenia" dated 03.11.2003;
- 15) “**safety management system**” means a systematic approach to managing aviation safety including the necessary organisational structures, accountabilities, policies and procedures, and includes any management system that, independently or integrated with other management systems of the organisation, addresses the management of safety.

#### **4. Subject matter and scope**

**35.** This Regulation lays down rules on:

- 1) the reporting of occurrences which endanger or which, if not corrected or addressed, would endanger an aircraft, its occupants, any other person, equipment or installation affecting aircraft operations; and the reporting of other relevant safety-related information in that context;
- 2) analysis and follow-up action in respect of reported occurrences and other safety-related information;
- 3) the protection of aviation professionals;
- 4) appropriate use collected safety information;
- 5) the dissemination of anonymised information to interested parties as mentioned in Appendix III of this Regulation for the purpose of providing such parties with the information they need in order to improve aviation safety.

**36.** This Regulation applies to occurrences and other safety-related information involving civil aircraft.

#### **5. Mandatory reporting**

**37.** Occurrences which may represent a significant risk to aviation safety given in Appendix I of this Regulation shall be reported by the persons listed in Paragraph 40 through the mandatory occurrence reporting systems pursuant to this Chapter of this Regulation.

**38.** Each organisation established in RA shall establish a mandatory reporting system to facilitate the collection of details of occurrences referred to in Appendix I of this Regulation.

**39.** CAC shall establish a mandatory reporting system to facilitate the collection of details of occurrences referred to in Appendix I of this Regulation.

**40.** The following natural persons shall report the occurrences referred to in Appendix I of this Regulation;

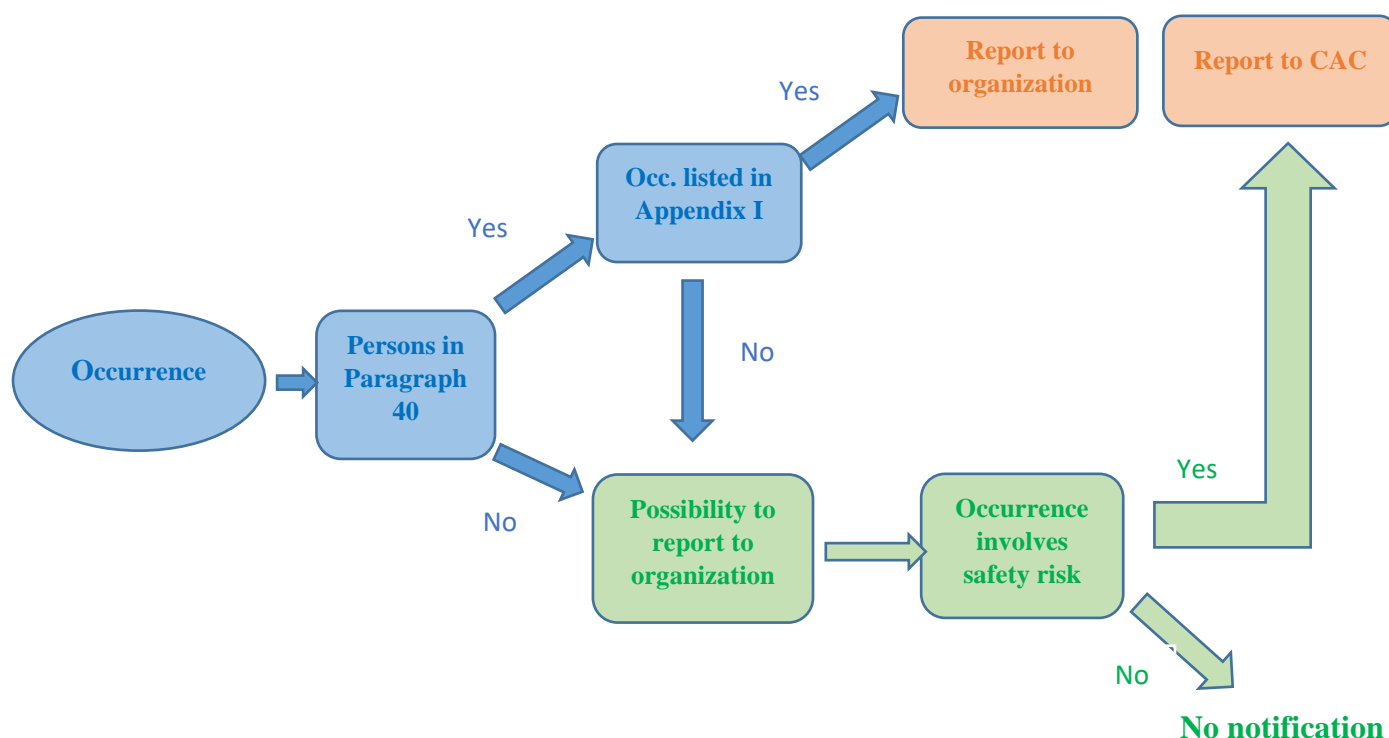
- 1) the pilot in command, or, in cases where the pilot in command is unable to report the occurrence, any other crew member next in the chain of command of an aircraft registered in the RA or an aircraft registered outside the RA but used by an operator for which CAC ensures oversight of operations;
- 2) a person engaged in designing, manufacturing, continuous airworthiness monitoring, maintaining or modifying an aircraft, or any equipment or part thereof, under the oversight of CAC;
- 3) a person who signs an airworthiness review certificate, or a release to service in respect of an aircraft or any equipment or part thereof, under the oversight of CAC;
- 4) a person who performs a function which requires him or her to be authorised by the CAC as a staff member of an air traffic service provider entrusted with responsibilities related to air navigation services or as a flight information service officer;

- 5) a person who performs a function connected with the safety management of an airport referred to in General Department of Civil Aviation Order N 246-N on “ Safety requirements for ground vehicles and ground services in the field of civil aviation” dated 18.12.2003;
- 6) a person who performs a function connected with the installation, modification, maintenance, repair, overhaul, flight-checking or inspection of air navigation facilities for which CAC ensures the oversight;
- 7) a person who performs a function connected with the ground handling of aircraft, including fuelling,

**41.** The persons listed in Paragraph 40 of this Regulation shall report occurrences within 72 hours of becoming aware of the occurrence, unless exceptional circumstances prevent this.

**42.** Following notification of an occurrence, any organisation established in the RA, shall report to the CAC ([safety@gdca.am](mailto:safety@gdca.am)) the details of occurrences collected in accordance with Paragraph 38 as soon as possible, and in any event no later than 72 hours after becoming aware of the occurrence.

Diagram 1 indicates that the reporting by individuals is made to the organisation while it is recognised by this Regulation that individuals may report directly to the CAC.



**Diagram 1.** Information flow related to the occurrence initial notification

## **6. Voluntary reporting**

**43.** Each organisation established in RA shall establish a voluntary reporting system to facilitate the collection of:

- 1) details of occurrences that may not be captured by the mandatory reporting system;
- 2) other safety-related information which is perceived by the reporter as an actual or potential hazard to aviation safety.

**44.** CAC shall establish a voluntary reporting system to facilitate the collection of:

- 1) details of occurrences that may not be captured by the mandatory reporting system;
- 2) other safety-related information which is perceived by the reporter as an actual or potential hazard to aviation safety.

That system shall also include, but shall not be limited to, the collection of information transferred by organisations pursuant to Paragraph 46 of this Regulation.

**45.** The voluntary reporting systems shall be used to facilitate the collection of details of occurrences and safety-related information:

- 1) not subject to mandatory reporting pursuant to Paragraph 37 of this Regulation;
- 2) reported by persons who are not listed in Paragraph 40 of this Regulation.

**46.** Each organisation established in RA shall, in a timely manner, report to CAC, the details of occurrences and other safety-related information which have been collected pursuant to Paragraph 43 of this Regulation and which may involve an actual or potential aviation safety risk.

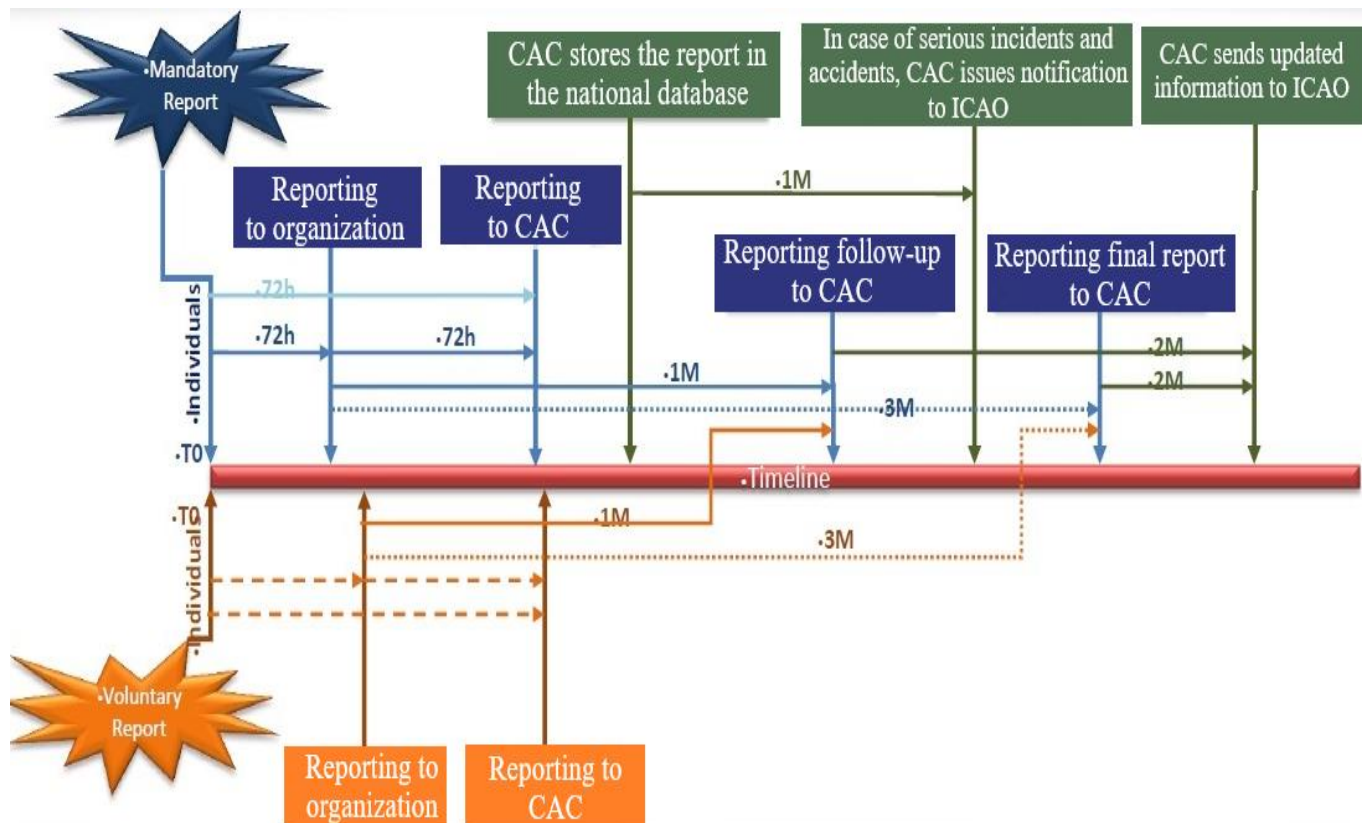
CAC may require any organisation established in their territory to report the details of all occurrences collected pursuant to Paragraph 43 of this Regulation.

**47.** CAC and organisations may establish other safety information collection and processing systems to collect details of occurrences that might not be captured by the reporting systems referred to in Chapter 5 and Paragraph 43, 44 and 45 of this Regulation.

**48.** Information received from voluntary and mandatory reporting may be integrated into a single system.

**49.** The reporting flow starts from the moment the occurrence is detected. From this moment, the individual shall report it to the organisation or to the CAC as soon as possible, but before 72 hours if it falls within the mandatory scheme. In this case, the organisation has 72 hours to report to the CAC (**[safety@gdca.am](mailto:safety@gdca.am)**) from the moment they become aware of the occurrence.

The diagram 2 illustrates the general flow of information, main deadlines and stages of the reporting.



**Diagram 2.** Flow of information

From the day of the reception of the initial report of the serious incidents or accidents, CAC has 30 days to issue notification to ICAO. In the case of follow-up CAC has two months to send updated information to the ICAO.

## 7. Collection and storage of information

**50.** Each organisation established in a RA shall designate one or more persons to handle independently the collection, evaluation, processing, analysis and storage of details of occurrences reported pursuant to Chapter 5 and 6 of this Regulation.

The handling of the reports shall be done with a view to preventing the use of information for purposes other than safety, and shall appropriately safeguard the confidentiality of the identity of the reporter and of the persons mentioned in occurrence reports, with a view to promoting a “just culture”.

**51.** By agreement with the CAC, small organisations may put in place a simplified mechanism for the collection, evaluation, processing, analysis and storage of details of occurrences. They may share those tasks with organisations of the same nature, while complying with the rules on confidentiality and protection pursuant to this Regulation.

**52.** RA shall designate one competent authority to establish a mechanism to independently collect, evaluate, process, analyse and store details of occurrences reported pursuant to Chapter 5 and 6 of this Regulation.

The handling of the reports shall be done with a view to preventing the use of information for purposes other than safety, and shall appropriately safeguard the confidentiality of the identity of the reporter and of the persons mentioned in occurrence reports, with a view to promoting a “just culture”.

- 53. Organisations shall store occurrence reports drawn up on the basis of details of occurrences collected in accordance with Chapter 5 and 6 of this Regulation in one or more databases/repositories.
- 54. CAC shall store occurrence reports drawn up on the basis of details of occurrences collected in accordance with Chapter 5 and 6 of this Regulation in the national database/repository.
- 55. Relevant information on accidents and serious incidents, involving organisations under the oversight of CAC, collected or issued by foreign safety investigation authorities shall also be stored in the national database/repository.
- 56. The safety investigation authority shall have full access to the respective national database/repository referred to in Paragraph 55 of this Regulation for the purpose of discharging their responsibilities pursuant to Government Decree N 1777-N on "Investigation, classification and reporting of aviation accidents and incidents in the Republic of Armenia" dated 03.11.2003.

## **8. Quality and content of occurrence reports**

- 57. Occurrence reports referred to in Chapter 7 of this Regulation shall contain at least the information listed in Appendix II of this Regulation.
- 58. Occurrence reports referred to in Paragraph 54 of this Regulation shall include a safety risk classification for the occurrence concerned. For this purpose, organisations may use risk classification methodologies currently used in their aviation domain.
- 59. Occurrence reports referred to in Paragraph 55 of this Regulation shall include a safety risk classification for the occurrence concerned.
- 60. The CAC and organisations, shall establish data quality checking processes to improve data consistency, notably between the information collected initially and the report stored in the database/repository.
- 61. The safety data reported by organisations to CAC referred to in Paragraph 54 of this Regulation shall be standardised and compatible with ECCAIRS (European Centre Accident & Incidents Reporting System) software and the ADREP taxonomy
- 62. The national database/repository referred to in Paragraph 55 of this Regulation shall use formats, which are standardised and compatible with ECCAIRS software and the ADREP taxonomy.

## **9. Exchange of information**

**63.** In case of accidents and serious incidents, CAC shall issue notification to ICAO (International Civil Aviation Organisation) no later than 30 days after having entered the report details in the national database/ repository.

Occurrence reports shall be updated whenever necessary with additional information relating to safety.

**64.** Certified organisations and interested parties as mentioned in Appendix III of this Regulation shall participate, under the aegis of the CAC, in the dissemination of lessons learned from occurrence reporting at national level.

## **10. Occurrence analysis and follow-up**

**65.** Each organisation established in the RA shall develop a process to analyse occurrences collected in accordance with Paragraph 38 and 43 of this Regulation in order to identify the safety hazards associated with identified occurrences or groups of occurrences.

Based on that analysis, each organisation shall determine any appropriate corrective or preventive action, required to improve aviation safety.

**66.** When, following the analysis referred to Paragraph 65 of this Regulation, an organisation established in the RA identifies any appropriate corrective or preventive action required to address actual or potential aviation safety deficiencies, it shall:

- 1) implement that action in a timely manner; and
- 2) establish a process to monitor the implementation and effectiveness of the action.

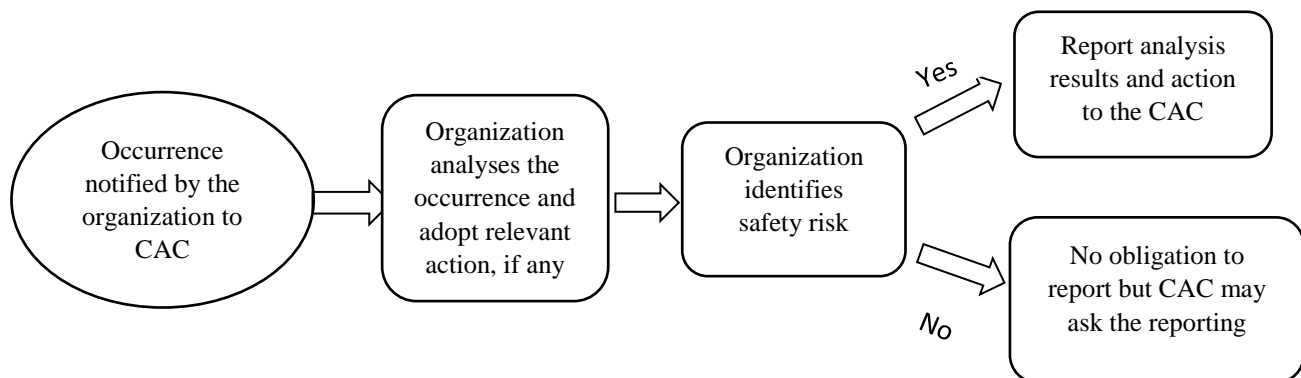
**67.** Each organisation established in the RA shall regularly provide its employees and contracted personnel with information concerning the analysis of, and follow-up on, occurrences for which preventive or corrective action is taken.

**68.** Where an organisation established in the RA and certified by CAC identifies an actual or potential aviation safety risk as a result of its analysis of occurrences or group of occurrences reported pursuant to Paragraph 42 and 46 of this Regulation, it shall transmit to the CAC ([safety@gdca.am](mailto:safety@gdca.am)) within 30 days from the date of notification of the occurrence:

- 1) the preliminary results of the analysis performed pursuant to Paragraph 65 of this Regulation if any; and
- 2) any action to be taken pursuant to Paragraph 66 of this Regulation.

The organisation shall report the final results of the analysis, where required, as soon as they are available and, in principle, no later than three months from the date of notification of the occurrence. The CAC may request organisations to transmit the preliminary or final results of the analysis of any occurrence of which it has been notified but in relation to which it has received no follow-up or only the preliminary results (see Diagram 3).

**69.** CAC shall develop a process to analyse the information relating to occurrences, which are directly reported to them, in accordance with Paragraph 40, 43 and 44 of this Regulation in order to identify the safety hazards associated with those occurrences. Based on that analysis, they shall determine any appropriate corrective or preventive action required to improve aviation safety (see Diagram 3).



**Diagram 3.** *Information flow related to analysis and follow-up related information*

**70.** When, following the analysis referred to in Paragraph 69 of this Regulation, the CAC identifies any appropriate corrective or preventive action required to address actual or potential aviation safety deficiencies, it shall:

- 1) implement that action in a timely manner; and
- 2) establish a process to monitor the implementation and effectiveness of the action.

**71.** For each occurrence or group of occurrences monitored in accordance with Paragraph 68 of this Regulation, the CAC shall have access to the analysis made and shall appropriately monitor action taken by the organisations for which it is respectively responsible.

If CAC concludes that the implementation and the effectiveness of the reported action is inappropriate to address actual or potential safety deficiencies, it shall ensure that additional appropriate action is taken and implemented by the relevant organisation.

**72.** Where available, information relating to the analysis and the follow-up of individual occurrences obtained pursuant to this Chapter of this Regulation shall be stored in the national database/repository, in a timely manner and no later than two months after their storage in the organisation database/repository.

**73.** CAC shall use information obtained from the analysis of occurrence reports to identify remedial action to be taken, if any, within the State Safety Programme.

**74.** In order to inform the public of the level of safety in civil aviation, RA shall publish a safety review at least once a year. The safety review shall:

- 1) contain aggregated and anonymised information on the type of occurrences and safety-related information reported through its national mandatory and voluntary reporting systems;



- 2) identify trends;
- 3) identify the action it has taken.

75. RA may also publish anonymised occurrence reports and risk analysis outcomes.

## **11. Confidentiality and appropriate use of information**

76. CAC and organisations, in accordance with their national law shall take the necessary measures to ensure the appropriate confidentiality of the details of occurrences received by them pursuant to Chapter 5 and 6 of this Regulation.

CAC and each organisation established in the RA shall process personal data only to the extent necessary for the purposes of this Regulation and without prejudice to national legal acts.

77. Without prejudice to the provisions relating to the protection of safety information, information derived from occurrence reports shall be used only for the purpose for which it has been collected.

CAC and organisations shall not make available or use the information on occurrences:

- 1) in order to attribute blame or liability; or
- 2) for any purpose other than the maintenance or improvement of aviation safety.

78. CAC when discharging their obligations under International agreement in relation to transferring to it all information contained, shall:

- 1) ensure the confidentiality of the information; and
- 2) limit the use of the information to what is strictly necessary in order to discharge their safety-related obligations without attributing blame or liability; in this respect, the information shall be used in particular for risk management and for analysis of safety trends which may lead to safety recommendations or actions, addressing actual or potential safety deficiencies.

79. RA shall ensure that organisations and CAC for the administration of justice cooperate with each other through advance administrative arrangements. These advance administrative arrangements shall seek to ensure the correct balance between the need for proper administration of justice, on the one hand, and the necessary continued availability of safety information, on the other.

## **12. Protection of the information source**

80. For the purposes of this Chapter of this Regulation, “personal details” includes in particular names or addresses of natural persons.

81. Each organisation established in the RA shall ensure that all personal details are made available to staff of that organisation other than persons designated in accordance with Paragraph 50 of this Regulation only where absolutely necessary in order to investigate occurrences with a view to enhancing aviation safety.

Disidentified information shall be disseminated within the organisation as appropriate.

**82.** CAC shall ensure that no personal details are ever recorded in the national database/repository referred to in Chapter 7 of this Regulation. Such disidentified information shall be made available to all relevant parties, for example to allow them to discharge their obligations in relation to aviation safety improvement.

**83.** CAC shall not be prevented from taking any action necessary for maintaining or improving aviation safety.

**84.** Without prejudice to applicable national criminal law, CAC 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 pursuant to Chapter 5 and 6 of this Regulation.

The first subparagraph shall not apply in the cases referred to in Paragraph 88 of this Regulation. CAC may retain or adopt measures to strengthen the protection of reporters or persons mentioned in occurrence reports. CAC may in particular apply this rule without the exceptions referred to in Paragraph 87 of this Regulation.

**85.** If disciplinary or administrative proceedings are instituted under national law, information contained in occurrence reports shall not be used against:

- 1) the reporters; or
- 2) the persons mentioned in occurrence reports.

The first subparagraph shall not apply in the cases referred to in Paragraph 87 of this Regulation.

CAC may retain or adopt measures to strengthen the protection of reporters or persons mentioned in occurrence reports. CAC may in particular extend that protection to civil or criminal proceedings.

**86.** Except where Paragraph 87 of this Regulation applies, employees and contracted personnel, who report or are mentioned in occurrence reports collected in accordance with Chapter 5 and 6 of this Regulation shall not be subject to any prejudice by their employer or by the organisation for which the services are provided on the basis of the information supplied by the reporter.

**87.** The protection under Paragraph 83, 85 and 86 of this Regulation shall not apply to any of the following situations:

- 1) in cases of wilful misconduct;
- 2) where there has been a manifest, severe and serious disregard of an obvious risk and profound failure of professional responsibility to take such care as is evidently required in the circumstances, causing foreseeable damage to a person or property, or which seriously compromises the level of aviation safety.

**88.** Each organisation established in the RA shall, after consulting its staff representatives, adopt internal rules describing how “just culture” principles, in particular the principle referred to in Paragraph 85 of this Regulation are guaranteed and implemented within that organisation.

**89.** Employees and contracted personnel may report to CAC alleged infringements of the rules established by this Chapter of this Regulation. Employees and contracted personnel shall not be penalised for reporting alleged infringements. Employees and contracted personnel may inform the CAC about such alleged infringements.

### **13. Updating of the appendices**

**90.** CAC shall be empowered to adopt delegated acts

- 1) update the list of mandatory data fields in occurrence reports laid down in Appendix II of this Regulation where, in the light of experience gained in the application of this Regulation, changes prove necessary in order to improve aviation safety;
- 2) update the request for national database/repository, to take account of experience gained and of new developments;
- 3) align any of the appendices with the ECCAIRS software or the ADREP taxonomy, as well as with legal acts adopted by the RA and with international agreements.

### **14. Penalties**

**91.** RA shall lay down the rules on penalties applicable to infringements of this Regulation. The penalties provided for shall be effective, proportionate and dissuasive.

## **APPENDIX I**

### **I. OCCURRENCES RELATED TO THE OPERATION OF THE AIRCRAFT**

*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.*

#### **1. AIR OPERATIONS**

##### **1) Flight preparation**

- a. Use of incorrect data or erroneous entries into equipment used for navigation or performance calculations, which has or could have endangered the aircraft, its occupants or any other person.
- b. Carriage or attempted carriage of dangerous goods in contravention of applicable legislations including incorrect labelling, packaging and handling of dangerous goods.

##### **2) Aircraft preparation**

- a. Incorrect fuel type or contaminated fuel.
- b. Missing, incorrect or inadequate De-icing/Anti-icing treatment.

##### **3) Take-off and landing**

- a. Taxiway or runway excursion.
- b. Actual or potential taxiway or runway incursion.
- a. Final Approach and Take-off Area (FATO) incursion.
- b. Any rejected take-off.
- c. Inability to achieve required or expected performance during take-off, go-around or landing.
- d. Actual or attempted take-off, approach or landing with incorrect configuration setting.
- e. Tail, blade/wingtip or nacelle strike during take-off or landing.
- f. Approach continued against air operator stabilised approach criteria.
- g. Continuation of an instrument approach below published minimums with inadequate visual references.
- h. Precautionary or forced landing.
- i. Short and long landing.
- j. Hard landing.

##### **4) Any phase of flight**

- a. Loss of control.
- b. Aircraft upset, exceeding normal pitch attitude, bank angle or airspeed inappropriate for the conditions.
- c. Level bust.

- d. Activation of any flight envelope protection, including stall warning, stick shaker, stick pusher and automatic protections.
- e. Unintentional deviation from intended or assigned track of the lowest of twice the required navigation performance or 10 nautical miles.
- f. Ground Percussion Warning System (GPWS/TAWS) of the aircraft.
- g. Exceedance of aircraft flight manual limitation.
- h. Operation with incorrect altimeter setting.
- i. Jet blast or rotor and prop wash occurrences, which have or could have endangered the aircraft, its occupants or any other person.
- j. Misinterpretation of automation mode or of any flight deck information provided to the flight crew, which has or could have endangered the aircraft, its occupants or any other person.

## **5) Other types of occurrences**

- a. Unintentional release of cargo or other externally carried equipment.
- b. Loss of situational awareness (including environmental, mode and system awareness, spatial disorientation, and time horizon).
- c. Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.

## **2. TECHNICAL OCCURRENCES**

### **1) Structure and systems**

- a. Loss of any part of the aircraft structure in flight.
- b. Loss of a system.
- c. Loss of redundancy of a system.
- d. Leakage of any fluid which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or which has or could have endangered the aircraft, its occupants or any other person.
- e. Fuel system malfunctions or defects, which had an effect on fuel supply and/or distribution.
- f. Malfunction or defect of any indication system when this results in misleading indications to the crew.
- g. Abnormal functioning of flight controls such as asymmetric or stuck/jammed flight controls (for example: lift (flaps/slats), drag (spoilers), attitude control (ailerons, elevators, rudder) devices).

### **2) Propulsion (including engines, propellers and rotor systems) and auxiliary power units (APUs)**

- a. Failure or significant malfunction of any part or controlling of a propeller, rotor or powerplant.
- b. Damage to or failure of main/tail rotor or transmission and/or equivalent systems.

- c. Flameout, in-flight shutdown of any engine or APU when required (for example: ETOPS (Extended range Twin engine aircraft Operations), MEL (Minimum Equipment List)).
- d. Engine operating limitation exceedance, including over speed 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).
- e. Failure or malfunction of any part of an engine, power plant, APU or transmission resulting in any one or more of the following:
  - thrust-reversing system failing to operate as commanded;
  - inability to control power, thrust or rpm (revolutions per minute);
  - non-containment of components/debris.

### **3. INTERACTION WITH AIR NAVIGATION SERVICES (ANS) AND AIR TRAFFIC MANAGEMENT (ATM)**

- 1) Unsafe ATC (Air Traffic Control) clearance.
- 2) Prolonged loss of communication with ATS (Air Traffic Service) or ATM Unit.
- 3) Conflicting instructions from different ATS Units potentially leading to a loss of separation.
- 4) Misinterpretation of radio-communication, which has or could have endangered the aircraft, its occupants or any other person.
- 5) Intentional deviation from ATC instruction, which has or could have endangered the aircraft, its occupants or any other person.
- 6) ACAS RA (Airborne Collision Avoidance System, Resolution Advisory).
- 7) Activation of genuine ground collision system such as GPWS (Ground Proximity Warning System)/TAWS (Terrain Awareness and Warning System) 'warning'.

### **4. EMERGENCIES AND OTHER CRITICAL SITUATIONS**

- 1) Any event leading to the declaration of an emergency ('Mayday' or 'PAN call').
- 2) Any burning, melting, smoke, fumes, arcing, overheating, fire or explosion.
- 3) Contaminated air in the cockpit or in the passenger compartment, which has or could have endangered the aircraft, its occupants or any other person.
- 4) Failure to apply the correct non-normal or emergency procedure by the flight or cabin crew to deal with an emergency.
- 5) Use of any emergency equipment or non-normal procedure affecting in-flight or landing performance.
- 6) Failure of any emergency or rescue system or equipment, which has or could have endangered the aircraft, its occupants or any other person.

- 7) Uncontrollable cabin pressure.
- 8) Critically low fuel quantity or fuel quantity at destination below required final reserve fuel.
- 9) Emission or leakage of aircraft fuel.
- 10) The presence of a bomb on the aircraft.
- 11) Any use of crew oxygen system by the crew.
- 12) Incapacitation of any member of the flight or cabin crew that results in the reduction below the minimum certified crew complement.
- 13) Crew fatigue impacting or potentially impacting their ability to perform safely their flight duties.

## **5. EXTERNAL ENVIRONMENT AND METEOROLOGY**

- 1) A collision or a near collision on the ground or in the air, with another aircraft, terrain or obstacle<sup>1</sup>.
- 2) ACAS RA (Airborne Collision Avoidance System, Resolution Advisory).
- 3) Activation of genuine ground collision system such as GPWS (Ground Proximity Warning System)/TAWS (Terrain Awareness and Warning System) ‘warning’.
- 4) Wildlife strike including bird strike.
- 5) Foreign object damage/debris (FOD), which has or could have endangered the aircraft.
- 6) Unexpected encounter of poor runway surface conditions.
- 7) Wake-turbulence encounters.
- 8) Interference with the aircraft by firearms, fireworks, flying kites, laser illumination, high powered lights, lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.
- 9) A lightning strike, which resulted in damage to the aircraft or loss or malfunction of any aircraft system.
- 10) A hail encounter, which resulted in damage to the aircraft or loss or malfunction of any aircraft system.
- 11) Severe turbulence encounter or any encounter resulting in injury to occupants or deemed to require a “turbulence check” of the aircraft.
- 12) A significant wind shear or thunderstorm encounter, which has or could have endangered the aircraft, its occupants or any other person.
- 13) Icing encounter resulting in handling difficulties, damage to the aircraft or loss or malfunction of any aircraft system.
- 14) Volcanic ash encounter.

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<sup>1</sup> Obstacle includes vehicle.

## **6. SECURITY**

- 1) Bomb threat or hijack.
- 2) Difficulty in controlling intoxicated, violent or unruly passengers.
- 3) Discovery of a stowaway.

## **II. OCCURRENCES RELATED TO TECHNICAL CONDITIONS, MAINTENANCE AND REPAIR OF THE AIRCRAFT**

### **1. MANUFACTURING**

- 1) Products, parts or appliances released from the production organisation with deviations from applicable design data that could lead to a potential unsafe condition as identified with the holder of the type-certificate or design approval.

### **2. DESIGN**

- 1) Any failure, malfunction, defect or other occurrence related to a product, part, or appliance, which has resulted in or may result in an unsafe condition.

### **3. MAINTENANCE AND CONTINUING AIRWORTHINESS MANAGEMENT**

- 1) Serious structural damage (for example: cracks, permanent deformation, delamination, debonding, burning, excessive wear, or corrosion) found during maintenance of the aircraft or component.
- 2) Serious leakage or contamination of fluids (for example: hydraulic, fuel, oil, gas or other fluids).
- 3) Failure or malfunction of any part of an engine or powerplant and/or transmission resulting in any one or more of the following:
  - a. non-containment of components/debris;
  - b. failure of the engine mount structure.
- 4) Damage, failure or defect of propeller, which could lead to in-flight separation of the propeller or any major portion of the propeller and/or malfunctions of the propeller control.
- 5) Damage, failure 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.
- 6) Significant malfunction of a safety-critical system or equipment including emergency system or equipment during maintenance testing or failure to activate these systems after maintenance.
- 7) Incorrect assembly or installation of components of the aircraft found during an inspection or test procedure not intended for that specific purpose.
- 8) Wrong assessment of a serious defect, or serious non-compliance with MEL and Technical logbook procedures.
- 9) Serious damage to Electrical Wiring Interconnection System (EWIS).
- 10) Any defect in a life-controlled critical part causing retirement before completion of its full life.



- 11) The use of products, components or materials, from unknown, suspect origin, or unserviceable critical components.
- 12) Misleading, incorrect or insufficient applicable maintenance data or procedures that could lead to significant maintenance errors, including language issue.
- 13) Incorrect control or application of aircraft maintenance limitations or scheduled maintenance.
- 14) Releasing an aircraft to service from maintenance in case of any non-compliance, which endangers the flight safety.
- 15) Serious damage caused to an aircraft during maintenance activities due to incorrect maintenance or use of inappropriate or unserviceable ground support equipment that requires additional maintenance actions.
- 16) Identified burning, melting, smoke, arcing, overheating or fire occurrences.
- 17) Any occurrence where the human performance, including fatigue of personnel, has directly contributed to or could have contributed to an accident or a serious incident.
- 18) Significant malfunction, reliability issue, or recurrent recording quality issue affecting a flight recorder system (such as a flight data recorder system, a data link recording system or a cockpit voice recorder system) or lack of information needed to ensure the serviceability of a flight recorder system.

### **III. OCCURRENCES RELATED TO AIR NAVIGATION SERVICES AND FACILITIES**

#### **1. AIRCRAFT-RELATED OCCURRENCES**

- 1) A collision or a near collision on the ground or in the air, between an aircraft and another aircraft, terrain or obstacle, including near-controlled flight into terrain (near CFIT).
- 2) Separation minima infringement<sup>2</sup>.
- 3) Inadequate separation<sup>3</sup>.
- 4) ACAS RAs.
- 5) Wildlife strike including bird strike.
- 6) Taxiway or runway excursion.
- 7) Actual or potential taxiway or runway incursion.
- 8) Final Approach and Take-off Area (FATO) incursion.
- 9) Aircraft deviation from ATC clearance.

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<sup>2</sup> This refers to a situation in which prescribed separation minima were not maintained between aircraft or between aircraft and airspace to which separation minima is prescribed.

<sup>3</sup> In the absence of prescribed separation minima, a situation in which aircraft were perceived to pass too close to each other for pilots to ensure safe separation.

10) Aircraft deviation from applicable air traffic management (ATM) regulation:

- a. aircraft deviation from applicable published ATM procedures;
- b. airspace infringement including unauthorised penetration of airspace;
- c. deviation from aircraft ATM-related equipment carriage and operations, as mandated by applicable regulations.

11) Call sign confusion related occurrences.

## **2. DEGRADATION OR TOTAL LOSS OF SERVICES OR FUNCTIONS**

1) Inability to provide ATM services or to execute ATM functions:

- a. inability to provide air traffic services or to execute air traffic services functions;
- b. inability to provide airspace management services or to execute airspace management functions;
- c. inability to provide air traffic flow management and capacity services or to execute air traffic flow management and capacity functions.

2) Missing or significantly incorrect, corrupted, inadequate or misleading information from any support service<sup>4</sup>, including relating to poor runway surface conditions.

3) Failure of communication service.

4) Failure of surveillance service.

5) Failure of data processing and distribution function or service.

6) Failure of navigation service.

7) Failure of meteorological facilities and/or service.

8) Failure of ATM system security, which had or could have a direct negative impact on the safe provision of service.

9) Significant ATS sector/position overload leading to a potential deterioration in service provision.

10) Incorrect receipt or interpretation of significant communications, including lack of understanding of the language used, when this had or could have a direct negative impact on the safe provision of service.

11) Prolonged loss of communication with an aircraft or with other ATS unit.

## **3. OTHER OCCURRENCES**

1) Declaration of an emergency ('Mayday' or 'PAN' call).

2) Significant external interference with Air Navigation Services (for example radio broadcast stations transmitting in the FM band, interfering with ILS (instrument landing system), VOR (VHF Omni Directional Radio Range) and communication).

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<sup>4</sup> For example: air traffic service (ATS), automatic terminal information service (ATIS), meteorological services, navigation databases, maps, charts, aeronautical information service (AIS), manuals.

- 3) Interference with an aircraft, an ATS unit or a radio communication transmission including by firearms, fireworks, flying kites, laser illumination, high-powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.
- 4) Fuel dumping.
- 5) Bomb threat or hijack.
- 6) Fatigue impacting or potentially impacting the ability to perform safely the air navigation or air traffic duties.
- 7) Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.

## **IV. OCCURRENCES RELATED TO AERODROMES AND GROUND SERVICES**

### **1. SAFETY MANAGEMENT OF AN AERODROME**

#### **1) Aircraft- and obstacle-related occurrences**

- a. A collision or near collision, on the ground or in the air, between an aircraft and another aircraft, terrain or obstacle<sup>5</sup>.
- b. Wildlife strike including bird strike.
- c. Taxiway or runway excursion.
- d. Actual or potential taxiway or runway incursion.
- e. Final Approach and Take-off Area (FATO) incursion or excursion.
- f. Aircraft or vehicle failure to follow clearance, instruction or restriction while operating on the movement area of an aerodrome (for example: wrong runway, taxiway or restricted part of an aerodrome).
- g. Foreign object on the aerodrome movement area which has or could have endangered the aircraft, its occupants or any other person.
- h. Presence of obstacles on the aerodrome or in the vicinity of the aerodrome which are not published in the AIP (Aeronautical Information Publication) or by NOTAM (Notice to Airmen) and/or that are not marked or lighted properly.
- i. Push-back, power-back or taxi interference by vehicle, equipment or person.
- j. Passengers or unauthorised person left unsupervised on apron.
- k. Jet blast, rotor down wash or propeller blast effect.
- l. Declaration of an emergency ('Mayday' or 'PAN' call).

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<sup>5</sup> Obstacle includes vehicle.

## **2) Degradation or total loss of services or functions**

- a. Loss or failure of communication between:
  - aerodrome, vehicle or other ground personnel and air traffic services unit or apron management service unit;
  - apron management service unit and aircraft, vehicle or air traffic services unit.
- b. Significant failure, malfunction or defect of aerodrome equipment or system, which has or could have endangered the aircraft or its occupants.
- c. Significant deficiencies in aerodrome lighting, marking or signs.
- d. Insufficient visibility of aerodrome lightning signs during the daylight.
- e. Failure of the aerodrome emergency alerting system.
- f. Rescue and firefighting services not available according to applicable requirements.

## **3) Other occurrences**

- a. Fire, smoke, explosions in aerodrome facilities, vicinities and equipment, which has or could have endangered the aircraft, its occupants or any other person.
- b. Aerodrome security related occurrences (for example: unlawful entry, sabotage, bomb threat).
- c. Absence of reporting of a significant change in aerodrome operating conditions which has or could have endangered the aircraft, its occupants or any other person.
- d. Missing, incorrect or inadequate de-icing/anti-icing treatment.
- e. Significant spillage during fuelling operations.
- f. Loading of contaminated or incorrect type of fuel or other essential fluids (including oxygen, nitrogen, oil and potable water).
- g. Failure to handle poor runway surface conditions.
- h. Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.

## **2. GROUND HANDLING OF AN AIRCRAFT**

*Remark: This Section 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.*

### **1) Aircraft- and aerodrome-related occurrences**

- a. A collision or near collision, on the ground or in the air, between an aircraft and another aircraft, terrain or obstacle<sup>6</sup>.

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<sup>6</sup> Obstacle includes vehicle.

- b. A collision or near collision, on the ground, between an aircraft and another obstacle, especially, maintenance transportation vehicles or aircraft boarding bridge.
- c. Failure or malfunction of the aircraft ground power supply (voltage fluctuations, inconsistency of output indicators).
- d. Runway or taxiway incursion.
- e. Runway or taxiway excursion.
- f. Significant contamination of aircraft structure, systems and equipment arising from the carriage of baggage, mail or cargo.
- g. Push-back, power-back or taxi interference by vehicle, equipment or person.
- h. Foreign object on the aerodrome movement area, which has or could have endangered the aircraft, its occupants or any other person.
- i. Passengers or unauthorised person left unsupervised on apron.
- j. Fire, smoke, explosions in aerodrome facilities, vicinities and equipment, which has or could have endangered the aircraft, its occupants or any other person.
- k. Aerodrome security-related occurrences (for example: unlawful entry, sabotage, bomb threat).

## **2) Degradation or total loss of services or functions**

- a. Loss or failure of communication with aircraft, vehicle, air traffic services unit or apron management service unit.
- b. Loss or failure of aircraft boarding bridge.
- c. Significant failure, malfunction or defect of aerodrome equipment or system, which has or could have endangered the aircraft or its occupants.
- d. Significant deficiencies in aerodrome lighting, marking or signs.

## **3) Ground handling specific occurrences**

- a. Incorrect handling or loading of passengers, baggage, mail or cargo, likely to have a significant effect on aircraft mass and/or balance (including significant errors in loadsheet calculations).
- b. Boarding equipment removed leading to endangerment of aircraft occupants.
- c. Incorrect stowage or securing of baggage, mail or cargo likely in any way to endanger the aircraft, its equipment or occupants or to impede emergency evacuation.
- d. Transport, attempted transport or handling of dangerous goods, which resulted or could have resulted in the safety of the operation being endangered or led to an unsafe condition (for example: dangerous goods incident or accident as defined in the ICAO Technical Instructions<sup>7</sup>).
- e. Non-compliance on baggage or passenger reconciliation.

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<sup>7</sup> Technical Instructions For The Safe Transport of Dangerous Goods by Air (ICAO — Doc 9284).

- f. Non-compliance with required aircraft ground handling and servicing procedures, especially in de-icing, refuelling or loading procedures, including incorrect positioning or removal of equipment.
- g. Significant spillage during fuelling operations.
- h. Loading of incorrect fuel quantities likely to have a significant effect on aircraft endurance, performance, balance or structural strength.
- i. Loading of contaminated or incorrect type of fuel or other essential fluids (including oxygen, nitrogen, oil and potable water).
- j. Incorrect positioning or removal of equipment used for technical and commercial aircraft maintenance at the parking lot.
- k. Failure, malfunction or defect of ground equipment used for ground handling, resulting into damage or potential damage to the aircraft (for example: tow bar or GPU (Ground Power Unit)).
- l. Missing, incorrect or inadequate de-icing/anti-icing treatment.
- m. Damage to aircraft by ground handling equipment or vehicles including previously unreported damage.
- n. Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.

## **V. OCCURRENCES RELATED TO BALLOONS**

Remark: This Section 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.

### **1. Air operations**

- 1) Any flight, which has been performed with a balloon which was not airworthy, or for which an incomplete flight preparation has or could have endangered the balloon, its occupants or any other person.
- 2) Unintended permanent extinction of the pilot light.

### **2. Technical occurrences**

- 1) Failure of any of the following parts or controls: dip tube on fuel cylinder, envelope pulley, control line, tether rope, valve seal leak on burner, valve seal leak on fuel cylinder, carabiner, damage to fuel line, lifting gas valve, envelope or ballonnet, blower, pressure relief valve (gas balloon), winch (tethered gas balloons).
- 2) Significant leakage or loss of lifting gas (for example: porosity, unseated lifting gas valves).  
Interaction with air navigation services and air traffic management

### **3. Interaction with air navigation services and air traffic management**

- 1) Interaction with air navigation services (for example: incorrect services provided, conflicting communications or deviation from clearance) which has or could have endangered the balloon, its occupants or any other person.
- 2) Airspace infringement.

### **4. Emergencies and other critical situations**

- 1) Any occurrence leading to an emergency call.
- 2) Fire, explosion, smoke or toxic fumes in the balloon (beyond the normal operation of the burner).
- 3) Balloon's occupants ejected from basket or gondola.
- 4) Incapacitation of the pilot leading to inability to perform any duty.
- 5) Unintended lift or drag of ground crew, leading to fatality or injury of a person.

### **5. External environment and meteorology**

- 1) A collision or near collision on the ground or in the air, with an aircraft, terrain or obstacle<sup>8</sup> which has or could have endangered the lighter-than-air vehicle, its occupants or any other person.
- 2) Interference with the lighter-than-air vehicle by firearms, fireworks, flying kites, laser illumination, high powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.
- 3) Unexpected encounter of adverse weather conditions which has or could have endangered the balloon, its occupants or any other person

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<sup>8</sup> Obstacle includes vehicle.

## APPENDIX II

### LIST OF REQUIREMENTS APPLICABLE TO THE MANDATORY AND VOLUNTARY OCCURRENCE REPORTING SCHEMES

*Note: The data fields must be completed with the information requested. Mandatory data fields cannot be left blank when they are relevant to the occurrence. They should always be filled with a value. If it is not possible for the CAC of the RA to include that information because it has not been provided by the organisation or the reporter, the data field may be completed with the value 'unknown'. However, with a view to ensuring that the appropriate information is transmitted, use of that 'unknown' value should, to the best extent possible, be avoided, and the report should, where possible, be completed with the information later.*

#### 1. COMMON MANDATORY DATA FIELDS

When entering, in their respective databases/repositories, information on every occurrence mandatorily reported and, to the best extent possible, every occurrence voluntarily reported, organisations, CAC must ensure that occurrence reports recorded in their databases/repositories contain at least the following information:

- 1) Headline
  - a. Headline
- 2) Filing Information
  - a. Responsible Entity
  - b. File Number
  - c. Occurrence Status
- 3) When
  - a. UTC Date
- 4) Where
  - a. State/Area of Occurrence
  - b. Location of Occurrence
- 5) Classification
  - a. Occurrence Class
  - b. Occurrence Category
- 6) Narrative
  - a. Narrative Language
  - b. Narrative
- 7) Events
  - a. Event Type
- 8) Risk classification



## **2. SPECIFIC MANDATORY DATA FIELDS**

### **1) Aircraft-related data fields**

When entering, in their respective databases/repositories, information on every occurrence mandatorily reported and, to the best extent possible, every occurrence voluntarily reported, organisations, CAC must ensure that occurrence reports recorded in their databases/repositories contain at least the following information only for certain specific occurrences i.e. occurrences for which that data is relevant:

- a. Aircraft Identification
  - State of Registry
  - Make/Model/Series
  - Aircraft serial number
  - Aircraft Registration
  - Call sign
- b. Airspace
  - Airspace type
  - Airspace class
  - FIR/UIR name
- c. Aircraft Operation
  - Operator
  - Type of operation
- d. Aircraft Description
  - Aircraft Category
  - Propulsion Type
  - Mass Group
- e. History of Flight
  - Last Departure Point
  - Planned Destination
  - Flight Phase
- f. Weather
  - Weather relevant

### **2) Data fields relating to air navigation services**

When entering, in their respective databases/repositories, information on every occurrence mandatorily reported and, to the best extent possible, every occurrence voluntarily reported, organisations, CAC must ensure that occurrence reports recorded in their databases/repositories contain at least the following information:

- a. ATM relation
  - ATM contribution
  - Service affected (effect on ATM service)
- b. Aircraft Identification
  - State of Registry (if known)
  - Make/Model/Series
  - Aircraft Registration
  - Call sign
- c. Aircraft Operation
  - Operator
  - Type of operation
  - Base (airport) of operation
- d. Aircraft Description
  - Aircraft Category
- e. History of Flight
  - Last Departure Point
  - Planned Destination
  - Flight Phase
- f. Weather
  - Weather relevant
- g. ATS Unit Name

### **3) Separation Minima Infringement/Loss of Separation and Airspace Infringement-related data fields**

When entering, in their respective databases/repositories, information on every occurrence mandatorily reported and, to the best extent possible, every occurrence voluntarily reported, organisations, Member States and the Agency must ensure that occurrence reports recorded in their databases/repositories contain at least the following information:

- a. Airspace
  - Airspace type
  - Airspace class
  - FIR/UIR name

### **4) Aerodrome-related data fields**

When entering, in their respective databases/repositories, information on every occurrence mandatorily reported and, to the best extent possible, every occurrence voluntarily reported, organisations, CAC must

ensure that occurrence reports recorded in their databases/repositories contain at least the following information:

- a. Location Indicator (ICAO indicator of the airport)
- b. Location on the aerodrome

#### **5) Aircraft damage or personal injury-related data fields**

When entering, in their respective databases/repositories, information on every occurrence mandatorily reported and, to the best extent possible, every occurrence voluntarily reported, organisations, CAC must ensure that occurrence reports recorded in their databases/repositories contain at least the following information:

- a. Severity
  - Highest Damage
  - Injury Level
- b. Injuries to persons
  - Number of injuries on ground (fatal, serious, minor)
  - Number of injuries on aircraft (fatal, serious, minor)

### **APPENDIX III**

#### **INTERESTED PARTIES**

1. List of interested parties which may receive information on the basis of a case-by-case decision under Paragraph 83 of this Regulation or on the basis of a general decision under Paragraph 85 of this Regulation:
  - 1) Manufacturers: designers and manufacturers of aircraft, engines, propellers and aircraft parts and appliances, and their respective associations; designers and manufacturers of air traffic management (ATM) systems and constituents; designers and manufacturers of systems and constituents for air navigation services (ANS); designers and manufacturers of systems and equipment used on the air side of aerodromes
  - 2) Maintenance: organisations involved in the maintenance or overhaul of aircraft, engines, propellers and aircraft parts and appliances; in the installation, modification, maintenance, repair, overhaul, flight checking or inspection of air navigation facilities; or in the maintenance or overhaul of aerodrome air side systems, constituents and equipment
  - 3) Operators: airlines and operators of aircraft and associations of airlines and operators; aerodrome operators and associations of aerodrome operators
  - 4) Air navigation services providers and providers of ATM-specific functions
  - 5) Aerodrome service providers: organisations in charge of ground handling of aircraft, including fuelling, loadsheet preparation, loading, de-icing and towing at an aerodrome, as well as rescue and firefighting, or other emergency services
  - 6) Aviation training organisations
  - 7) Third-country organisations: governmental aviation authorities and accident investigation authorities from third countries
  - 8) International aviation organisations
  - 9) Research: public or private research laboratories, centres or entities; or universities engaged in aviation safety research or studies
2. List of interested parties which may receive information on the basis of a case-by-case decision under Paragraph 83 and 84 of this Regulation:
  - a. Pilots (on a personal basis)
  - b. Air traffic controllers (on a personal basis) and other ATM/ANS staff carrying out safety-related tasks
  - c. Engineers/technicians/air traffic safety electronics staff/aviation (or aerodrome) managers (on a personal basis)
  - d. Professional representative bodies of staff carrying out safety-related tasks.