#### **Democratic Socialist Republic of Sri Lanka**



#### **Civil Aviation Authority of Sri Lanka**

## **Implementing Standards**

(Issued under Sec. 120, Civil Aviation Act No.14 of 2010)

#### **Title: Aviation Occurrence Reporting System**

**Reference No** : CA-IS-2011-GEN-004 **S.N.** : IS-006 **Date** : Sept 12, 2011

- 1. This Implementing Standard shall be referred to with its title together with the reference number, serial number (SN) and the date shown above.
- Attachment 01 of the Implementing Standards No. CA-IS-2011-GEN-004 refers to Aviation Safety Notice (ASN) 107 which stipulates requirements to be complied with the local implementation of Chapter 7 & 8 to the Annex 13 - Aircraft Accident and Incident Investigation.
- 3. This Implementing Standard supersedes the ASN- 107 which is deemed obsolete.
- 4. The applicable legal provisions relating to the subject matter of this Implementing Standard are as follows:
  - i. Section 116 of Civil Aviation Act No.14 of 2010
  - ii. Article 26 of the Schedule of Civil Aviation Act 14 of 2010
  - iii. Annex 13 to the Convention on International Civil Aviation
- 5. The following personnel/Organization shall comply with the requirements stipulated in this Implementing Standard;

a. Holders of Air Operator Certificates issued by DGCA for Commercial /Private Air Transport Operations; b. Holders of Foreign Air Operator Certificates issued by DGCA, for Commercial Air Transport Operations; c. Prospective applicants for Air Operator Certificate for Commercial /Private Air Transport Operations;

- d. Operators of flying schools with a licence issued by DGCA;
- e. Any other person operating aircraft in Sri Lanka under any other arrangement as approved by the DGCA;
- f. Air Navigation Services Providers in Sri Lanka;
- g. Certified Aerodrome Operators in Sri Lanka;

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- h. Ground Handling Agents in Sri Lanka
- 6. All categories of personnel /organization mentioned in the Attachment of this Implementing Standard are required to strictly adhere to the requirements specified in the Attachment to the Implementing Standard. All occurrences shall be forwarded through (European Co-ordination Centre for Aviation Incident Reporting Systems) ECCAIRS.
- In addition, all volunteers are welcome to report the occurrences under the guidance given in the Attachment to this Implementing Standard.

H.M.C. Nimalsiri Director General of Civil Aviation and Chief Executive Officer

Civil Aviation Authority of Sri Lanka 04, Hunupitiya Road Colombo 02.

Enclosure: Attachment No. CA-IS-2011-GEN-004-Att-01 (57 pages)

#### Implementing Standards: CA-IS-2011-GEN-004

#### **Title: Aviation Occurrence Reporting System**

#### Foreword

The purpose of this Implementing Standard is to describe the CAASL's Mandatory/ Voluntary Aviation Occurrence Reporting System for all operations, establishment of an accident and incident reporting system & database (European Co-ordination Centre for Aviation Incident Reporting Systems -ECCAIRS) and guide those who will be involved in those activities, with the primary objective of enhancing flight safety. It is important that all involved in Mandatory Aviation Occurrence Reporting should be fully aware of its aims and requirements.

The CAASL will welcome comments and suggestions for the improvement of this Aviation Occurrence Reporting System. Such comments should be addressed to the Director General of Civil Aviation, No.04, Hunupitiya Road, Colombo 2.

#### **Channels of Reporting**

All categories of occurrences shall be completed in using ECCAIRS E4f file and shall be reported to CAASL. Completed Occurrence Report Forms of E4f files shall be sent to the Accident Investigation Unit via email to <a href="mailto:paaai@caa.lk">paaai@caa.lk</a>

When completing occurrences in E4f files using in ECCAIRS system, the CAASL Occurrence Report Forms shall be used as the guidelines. The instructions for completing E4f file has laid down in Chapter 4 to this Implementing Standards.

#### For Accidents/ Serious incidents/ any dangerous or potentially dangerous occurrences

For accidents/ serious incidents or any occurrences which are considered as particularly dangerous or potentially dangerous, require the immediate passing of initial notification to the CAASL, with a minimum of delay and by the most suitable and quickest means available.

#### During Office Hours: Report to DGCA or AIU

Decignation	Contact Details							
Designation	E-mail	Phone	Mobile	Residence	Fax			
DGCA	sldgca@caa.lk	0112304606	0773411424	0332272470	0112304706			
SD	sd@caa.lk	0112304709	0777352083	0332273806	0112358826			
D/AS	das@caa.lk	0112304687	0773956210	-	0112358876			
D/FS	dfs@caa.lk	0112304650	0777751826		0112358879			
DD/AW	ddaw@caa.lk	0112358895	0718669337	-	0112304694			
DD/OPS	ddops@caa.lk	0112358882	0772075798	-	0112304649			
DD/AV.SEC	ddavsec@caa.lk	0112358830	0773520586	-	0112304682			
DD/A&NS	ddans@caa.lk	0112358910	0771055119	-	0112304645			
ANSI	ansi@caa.lk	0112358911	-	-	0112304645			
CSI	csi@caa.lk	0112358886	0773411791	-	0112304649			
AWE	awe@caa.lk	0112358897	0773077304	-	0112304694			
PA-AAI	paaai@caa.lk	0112358820	-	-	0112304644			
					0112304699			

During Outside Office Hours: Report to any of the following officials

In all such cases written confirmation of the available details of the occurrence should be forwarded to the CAASL as quickly as possible, preferably by email or fax.

The written confirmation referred to in the above paragraph in relation to accident or serious incident or any occurrence which considered as particularly dangerous, shall include as much of the following information as is readily available, but its dispatch shall not be delayed due to the lack of complete information.

- (a) In the case of an accident, the identifying abbreviation "ACCID" or, in the case of a serious incident, the identifying abbreviation, "INCID"
- (b) manufacturer, model, nationality and registration marks, and serial number of the aircraft;
- (c) name of owner, operator and hirer, if any, of the aircraft;
- (d) qualification of the pilot-in-command, and nationality of crew and passengers;
- (e) date and time (local time or UTC) of the accident or serious incident;
- (f) last point of departure and point of intended landing of the aircraft;
- (g) position of the aircraft with reference to some easily defined geographical point and latitude and longitude;
- (h) number of crew and passengers; aboard, killed and seriously injured; others, killed and seriously injured;
- (i) description of the accident or serious incident and the extent of damage to the aircraft so far as is known;
- (j) physical characteristics of the accident or serious incident area, as well an indication of access difficulties or special requirements to reach the site;
- (k) identification of the person sending the notice and where the accident or serious incident occurred outside Sri Lanka, the means by which the investigator-in-charge and the accident investigation authority of the State of Occurrence may be contacted at any time; and
- (I) presence and description of dangerous goods on board the aircraft.

In addition, with the availability of the further information, those occurrences shall be completed in forms of E4f files using ECCAIRS and email to CAASL within the reportable time period as shown in 2.7.10.

## STATEMENT BY THE DGCA

#### **Confidentiality of Reports**

It is fundamental to the purpose of the Scheme that the substance of reports should be disseminated where necessary in the interest of the Aviation Safety. Without prejudice to the proper discharge of its responsibilities in this regard, CAASL will not disclose the name of the person submitting the report or of a person to whom it relates unless required to do so by law or unless, the person concerned authorizes such disclosure.

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

#### Assurance Regarding Prosecution

The CAASL gives an assurance that its primary concern is to secure free and uninhibited reporting and that it will not be the CAASL's policy to institute proceedings in respect of unpremeditated or inadvertent breaches of the law which come to its attention only because they have been reported under the Scheme. Reports of events involving violation of rules or procedures which result in apparent noncompliance with CAASL directives or that involve gross negligence, criminal activity, drugs, alcohol or intentional falsification are excluded from this program.

#### **Action in Respect of Licences**

The CAASL has a duty to vary, revoke or suspend a licence as appropriate if the CAASL ceases to be satisfied that the holder of the licence is competent, fit and proper person to exercise the privileges of the licence. If an occurrence report suggests that the licence holder does not satisfy these requirements, it will take appropriate enforcement action. For example, if the report indicates that the licence holder requires further training, after an investigation it may suspend his licence until he has undergone such training. If a report indicates that the licence holder may not be a fit person to exercise the privileges of his licence, the fact that he has reported the occurrence will be taken into account in determining his fitness and will weigh heavily in his favour.

The purpose of enforcement action is solely to strengthen the necessity of conformance to safety requirements and not to penalize the licence holder.

#### **Possible Action by Employers**

Where a reported occurrence indicated an unpremeditated or inadvertent lapse by an employee, the CAASL would expect the employer to act responsibly and share its view that free and full reporting is the primary aim, and that every effort should be made to avoid disciplinary or administrative action on the person reporting, which may inhibit reporting.

The CAASL will, accordingly, make it known to employers that, except to the extent that action is needed in order to ensure safety, and except in such flagrant circumstances as are described under the heading 'Prosecution' above, the CAASL expects employers to refrain from disciplinary or punitive action against their employees who are reporting to the CAASL under this scheme, which might inhibit their staff from duly reporting incidents of which they may have knowledge.

## CHAPTER 1 - DEFINITIONS AND ABBREVIATIONS

## DEFINITIONS

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, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome);

c) or the aircraft is missing or is completely inaccessible.

**Incident** means an occurrence, other than an accident, associated with the operation of an aircraft which affects, or could affect, the safety of operation.

**Reportable Occurrence** means a reportable occurrence in relation to an aircraft means any incident which endangers or which, if not corrected, would endanger an aircraft, its occupants or any other person.

**Serious incident** means an incident involving circumstances indicating that there was a high probability of an accident and 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.

## **ABBREVIATIONS**

ACAS: Air Collision Advisory System **AD**: Aircraft Dispatcher **AFTN:** Aeronautical Telecommunication Network AI: Aerodromes Inspector AIU: Accident Investigation Unit **ANS:** Air Navigation Services ANSI: Air Navigation Services Inspector **APU:** Auxiliary Power Units ATC: Air Traffic Control ATIS: Automatic Terminal Information Service **ATM**: Air Traffic Management ATS: Air Traffic Services **BIA**: Bandaranaike International Airport CAASL: Civil Aviation Authority of Sri Lanka **CRM:** Crew Resource Management CSI: Cabin Safety inspector D/AS: Director/Aeronautical Services DD/A&NS: Deputy Director/Aerodromes & Navigation Services DD/AV. SEC: Deputy Director/Aviation Security **DD/AW**: Deputy Director/Airworthiness **DD/OPS**: Deputy Director/Operations DD/PEL: Deputy Director/Personnel Licensing D/FS: Director Flight Safety DGCA: Director General of Civil Aviation ECCAIRS: European Co-ordination Centre for Aviation Incident Reporting Systems

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**ETOPS**: Extended Range Twin Operations

FOD: Foreign Objects Damage

GPWS/EGPWS: Ground Proximity Warning System

LOTC: Loss of thrust or power control

MEL: Minimum Equipment List

MOR: Mandatory/Voluntary Occurrence Reporting Scheme

PIC: Pilot in Command

PSE: Principal Structural Element

RA: Resolution Advisories

RMA: Ratmalana Airport

**RNAV**: Area Navigation

**RVSM**: Reduced Vertical Separation Minima

SD: Senior Director

SSR: Secondary Surveillance Radar

TAWS: Terrain Awareness and Warning System

## CHAPTER 2 - THE OBJECTIVE OF THE SYSTEM

#### 2.1 The objective

The Objective of the Mandatory Aviation Occurrence Reporting System and Voluntary Aviation Occurrence Reporting System are to improve the aviation safety by ensuring that relevant information related to safety is reported, collected, stored, protected, analyzed and disseminated. The occurrence reporting under this scheme does not intend to attribute blame or liability to anyone.

#### 2.2 Division of Responsibilities

- A. The existence of the Occurrence Reporting Scheme to achieve the above objectives is not intended to replace or reduce the duties and responsibilities of all organizations and personnel within the air transport industry.
- B. The primary responsibility for safety rests with the management of the organizations involved. The CAASL's responsibility is to provide the regulatory framework within which the industry must work and thereafter to monitor performance to be satisfied that required standards are set and maintained.
- C. The Occurrence Reporting Scheme is an established part of the CAASL's monitoring function and is complementary to the normal day to day procedures and systems. It is not intended to duplicate or supersede these. It is thus no less incumbent upon any aviation organization to record occurrences; and
- D. In conjunction with the appropriate organization, when necessary the CAASL, investigate occurrences in order to establish the cause sufficiently to devise, promulgate and implement any necessary remedial and preventative action.

#### 2.3 CAASL responsibility

- A. In relation to all reported occurrences the CAASL will;
  - 1. evaluate each occurrence report received;
  - 2. decide which occurrences require investigation by the CAASL in order to discharge the CAASL's functions and responsibilities;
  - 3. make such checks as it considers necessary to ensure that air navigation service providers and aerodrome operators, operators, maintenance, repair and overhauls organizations are taking any necessary remedial and preventative action in relation to reported occurrences;
  - 4. assess and analyse the information reported to it in order to detect safety problems which may not be apparent to individual reporters;
  - 5. make available the information derived from occurrence reports;
  - 6. where appropriate, issue specific advice or instructions to particular sections of the industry; and,
  - 7. where appropriate, take action in relation to legislation, requirements or guidance.

#### 2.4 Categories of persons required to report

The categories of persons (or organizations) who are required to report occurrences compulsorily are:

- A. Operators of all aircraft engaged in domestic and international;
- B. Pilots of all aircraft engaged in domestic and international;
- C. Aerodrome operators;
- D. Air Traffic Controllers;
- E. Personnel who perform functions in respect of the ground-handling of aircraft;
- F. Personnel who perform functions connected with the installation, modification, or maintenance of equipment on the ground used for the purpose of the provision of an Air Navigation Services including Air Traffic Control Service or in connection with navigational aids to aircraft.
- G. any person or organization in maintaining or modifying an aircraft, operated under an air operator's certificate granted by the CAASL, and a person or organization in maintaining or modifying any equipment or part of such an aircraft;
- H. any person who signs an airworthiness review certificate, or a certificate of release to service in respect of an aircraft equipment or part of such an aircraft operated under an air operator's certificate granted by the CAASL; and
- I. Any person or organization providing any of facility or service to aircraft engaged in commercial air transportation.
- J. It should be understood that in addition to above categories those who have to report, anyone may, in fact, report should they consider it necessary.

#### 2.5 Voluntary Reporting

- A. Mandatory reporting of accidents and incidents will often result in investigations and safety recommendations. However, many incidents that have potential in helping to enhance safety go unreported. As a consequence, many opportunities to learn from the incidents, and to prevent incidents and accidents, are lost.
- B. The main aim of voluntary reporting is to enhance aviation safety through the collection of feedback on incidents that would otherwise not be reported through other channels or that may appear minor, but which nevertheless can allow others to learn from the reporter's experience and even lead to changes in procedure or design.
- C. The CAASL encourages voluntary reporting of all occurrences across the whole spectrum of civil aviation operations. The CAASL's procedures for processing and recording reports do not substantially differentiate between voluntary and mandatory reports.
- D. Voluntary reports are confidential & non punitive. It provides a channel for the reporting of aviation incidents and safety deficiencies while protecting the reporter's identity.
- E. A voluntary report is that report made by a person or organization that are not required to report in accordance with the requirements specified in this Implementing Standard.
- F. Persons and organizations that are required to report are detailed in 2.4 above and reports may use CAASL approved forms provided in this Implementing Standard.
- G. Criminal activities, Incidents or events with no aviation safety content, Personnel problems, personality conflicts and industrial relations issues and Legal/commercial disputes should not be reported.

- H. When publishing voluntary reports, the CAASL will remove the information and data which is likely to identify the reporter unless the person concerned authorizes disclosure.
- I. The voluntary report does not obviate the need for mandatory reporting of aircraft accidents and incidents to the CAASL. The voluntary reporting focuses on systems, human factors, procedures and equipment, rather than on individuals.
- J. Anonymous reports will not be accepted. Reporters contact details are needed.

#### 2.6 Points to remember

- A. Any person specified in this Implementing Standard (paragraph 2.4) shall report any reportable occurrence of which he has positive knowledge, even though this may not be first hand, unless he has good reason to believe that appropriate details of the occurrence have already been, or will be, reported by someone else.
- B. In deciding whether or not to report an occurrence it must be decided whether the event meets the definition of "reportable occurrence". A reportable occurrence in relation to an aircraft means any incident which endangered, endangers or which, if not corrected, would endanger an aircraft, its occupants or any other person.
- C. A report should also be submitted on any occurrence which involves, for example, a defective condition or unsatisfactory behaviour or procedure which did not immediately endanger the aircraft but which, if allowed to continue uncorrected, or if repeated in different, but likely, circumstances, would create a hazard.
- D. The Reporters should ensure that the content of their reports meets with the criteria and guidance laid out in Chapter 3, 4 and 5. Particular emphasis should be paid to ensuring that day to day operational anomalies, technical defects and routine reliability issues are dealt with via the normal organizational systems and procedures.

#### 2.7 Protection of Reporters and Reports

#### 2.7.1 Confidentiality and dissemination of Reports

- A. The CAASL will ensure that the relevant safety information deriving from the analysis of reports is made available to all parties so that they can be used for improving safety of the systems.
- B. The CAASL will not disclose the name of the person submitting the report or of a person to whom it relates unless required to do so by law or unless, in either case, the person concerned authorizes disclosure

#### 2.7.2 Assurance Regarding Prosecution

- A. The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability
- B. The CAASL gives an assurance that its primary concern is to secure free and uninhibited reporting and that it will not be its policy to institute proceedings in respect of unpremeditated or inadvertent infringements of the law which come to its attention of the relevant authorities only because they have been reported under the Scheme, except in cases involving dereliction of duty amounting to gross negligence

#### 2.7.3 Possible Action by Employers

- A. In any event, where a reported occurrence indicated an unpremeditated or inadvertent lapse by an employee, the CAASL expects an employer to act responsibly and to share its view that free and full reporting is the primary aim, and that every effort should be made to avoid action that may inhibit reporting.
- B. Therefore, except to the extent that action is needed in order to ensure safety, CAASL expects employers to refrain from disciplinary or punitive action which might inhibit their staff from duly reporting incidents of which they may have knowledge.

#### 2.7.4 Reporting Procedure

All occurrences shall be sent as an E4f file using ECCAIRS system. The guidelines for E4f file submission has described in Chapter 4 to this Implementing Standard. The CAASL Occurrence Reports forms which are shown in Chapter 5 shall be used as the guidelines for completion of the E4f file in ECCAIRS reporting system.

All E4f files shall be email to CAASL via paaai@caa.lk

#### 2.7.5 Submission of Reports

- A. The primary responsibility for reporting lies with individuals. However, the interests of flight safety are best served by full participation, in the investigation and follow-up, by the organization involved. Therefore, wherever possible, the CAASL encourages responsible person(s) within the organization being nominated to receive all reports and to establish which reports from individuals within the organization meet the desired criteria for an occurrence report to the CAASL.
- B. However, when the employee making such a report is a person having a duty to report to the CAASL in accordance with the requirements specified in this Implementing Standard, the company must tell him if his report has been passed on to the CAASL or not. If not, and the employee is convinced that it should, he must have the right to insist that the report be passed to the CAASL or to report it directly to the CAASL himself.
- C. Procedures to ensure that this right of the individual reporter is maintained must be incorporated into the organization's reporting procedures and be clearly stated in the relevant instructions to staff.
- D. Reporters are advice to submit mandatory occurrence report directly to CAASL by ECCAIRS system as the guidelines provided in Chapter 4 of this Implementing Standard. In the interest of flight safety they are advised to notify their employers, preferably by a copy of the report, unless confidentiality is considered essential.
- E. Reports must be dispatched within 72 hours of the event, unless exceptional circumstances prevent this. Nevertheless, when the circumstances of an accident/serious incident or any occurrence are judged to be particularly hazardous, the CAASL expects to be advised of the essential details as shown in the foreword of this Implementing Standard by the fastest possible means (e.g. email/telephone/fax.). This should be followed up within 72 hours by a full report to the CAASL.
- F. If the initial report is incomplete in respect of any item of information a further report containing complete information must be made available within another 48 hours. Prompt advice to the CAASL on the results of in-house investigations and the actions taken to control the situation will minimize or may render unnecessary direct CAASL involvement in the investigative activity. The CAASL seeks the co-operation of all reporting organizations in this respect.
- G. Voluntary/Confidential reports can be completed CAASL approved manual forms as shown in Chapter 5 of this Implementing Standard.

#### 2.7.6 Confidential Reports

- A. Reporters may use CAASL approved manual forms as shown in Chapter 5 of this Implementing Standard.
- B. If any reporter considers that it is essential that his/her identity not be revealed, the report itself should be clearly annotated 'CONFIDENTIAL' and submitted direct to the DGCA. The envelope should be marked 'CONFIDENTIAL' and should be enclosed in another normal envelope.
- C. The request will be respected and the reporter will be contacted personally. CAASL cannot, of course, guarantee confidentiality when an occurrence is reported separately by another party or it has happened due to gross negligence.
- D. Reporters submitting a Confidential Report must accept that effective investigation may be inhibited due to confidentiality of the report. Nevertheless, the CAASL would rather have a Confidential Report than no report at all.
- E. The confidential reporting focuses on systems, human factors, procedures and equipment, rather than on individuals.

#### 2.7.7 The CAASL Occurrence Report Forms

To facilitate consistent reporting and subsequent storage and analysis of data, standard report forms are available and they should be used as guidance when reporting occurrences as E4f file in ECCARIS reporting system. The reporting procedure for ECCAIRS has shown in Chapter 4 of this Implementing Standard.

Subject Area	Form Number	Purpose
Mandatory Repor	ting	
Air Navigation Service	CAASL/AS/001 (see Appendix 1)	Air Traffic Incident Reports
	CAASL/AS/002 (see Appendix 1)	Air Traffic Incident Reports
	CAASL/AS/003 (see Appendix 1)	Air Traffic Incident Reports reported by pilots over radio
	CAASL/AS/009 (see Appendix 1)	On - ground Occurrences
	CAASL/AS/010 (see Appendix 1)	for reporting Bird Strikes
	CAASL/AS/ 015 (see Appendix 1)	Air Traffic Services Ground Equipment and Engineering Occurrence
Flight Operations, Aircraft Technical Repair & Maintenance	CAASL/AU/ 003 (see Appendix 2)	
Other	CAASL/AU/ 004 (see Appendix 3)	Notice of Death in an aircraft registered in Sri Lanka
	CAASL/AU/005 (see Appendix 3)	Birth occurring in an aircraft registered in Sri Lanka
	CAASL/AU/ 006 (see Appendix 3)	Person missing and believed to have died in consequence of an accident to an aircraft registered in Sri Lanka
Voluntary Report	ing	1
Voluntary Reporting	CAASL/AU/007	Aviation Occurrence - Voluntary Report Form

Individual Forms are available on the CAASL Web Site (www.caasl.lk)

#### 2.7.8 Completion of the Reports

A. When completing occurrences using E4f file in ECCAIRS system, the sample mandatory occurrence report forms are contained in respective Appendix can be used as guidelines.

#### 2.7.9 Processing of Occurrence Reports and Publication of Occurrence Information

#### 2.7.9.1 The CAASL Accident Investigation Unit

- A. The CAASL Accident Unit provides the CAASL's management and co-ordination centre for the Occurrence Reporting System and thus forms the central point for receipt of E4f files; evaluate (initial) and storage of occurrence report data.
- B. Further the Unit identify the nature of those occurrences and direct these to the appropriate specialist Sections within the CAASL for action and all technical sections have the access to ECCAIRS database for review the occurrences for further actions.

#### 2.7.9.2 Closed and Open Reports

A. The appropriate Divisions/Sections in the CAASL will evaluate the occurrence and decide whether the CAASL's follow up action is required with regard to the particular occurrence. The reports which require follow up action are classified as 'Open'. All reports not requiring CAASL's follow-up are recorded as 'Closed' and entered on the ECCAIRS database as such.

#### 2.7.9.3 Occurrences Closed on Receipt

- A. If the occurrences reported to the CAASL, while meeting the criteria for a reportable occurrence, have been adequately dealt with by the reporting organization, there is no justification for further investigation by the CAASL. As such CAASL will take action to store and disseminate the details of those occurrences.
- B. Reports which come under above category are considered as "Closed on Receipt". The principal justification for closure is that evident received from the report proves that existing requirements, procedures, documentation, etc., coupled with the reporter's action, have adequately controlled the identified hazard. This decision will be taken by the DGCA.
- C. The ability of the DGCA to close an occurrence on receipt and thus avoid the need for further CAASL investigation is very much dependent upon the quality of the information provided in the report and, specifically, information on the action taken by the reporting organization to control the situation.

### 2.7.9.4 Voluntary/ Confidential Reports (refer the Chapter 6 of this Implementing Standard)

- A. Such reports will be directed to relevant Divisional/Sectional Head with a copy to Accident Investigation Unit by the DGCA for review personally by relevant Sectional head for the subject matter.
- B. The Sectional Head will take possible measures to contact the reporter, by telephone if possible, to acknowledge receipt, discuss implications or obtain further information as appropriate. A course of action will be mutually agreed.
- C. After discussions with the reporter have been completed and when the CAASL is satisfied that the information obtain is complete and coherent, de-identify the information and enter the data into the database the original report will be destroyed (shredded). No copy of the report will be created or retained.
- D. The time needed to process the report depends on the complexity of the case and whether the CAASL needs to discuss the case with the reporter or consult a third party (using de-identified data).
- E. The CAASL will pay particular attention to the need to protect the identity of the reporter in its processing of Voluntary/Confidential Occurrence Reports
- F. The report will be processed as an occurrence but annotated CONFIDENTIAL.
- G. Names of individual persons are never recorded on the database.

#### 2.7.10 Reporting time

Reports must be dispatched within 72 hours of the event unless exceptional circumstances such as an accident/serious incident or any occurrence are judged to be particularly hazardous. In such cases reporters must be dispatched immediate notification to the CAASL, with a minimum of delay and by the most suitable and quickest means available.

## Attachment No: CA-IS-2011-GEN-004-Att-01 CHAPTER 3 - REPORTING OF OCCURRENCES

#### 3.1 INTRODUCTION

- A. Objectives of occurrence reporting and the formal definition of a reportable occurrence are contained in Chapter 1 & Chapter 2 of this Implementing Standard. Reporters should ensure that the content of their reports meets the criteria and guidance laid down below.
- B. The Occurrence Reporting Scheme is an essential part of the CAASL's monitoring function; it is complementary to the normal day to day procedures and 'control' systems and is not intended to duplicate or supersede them.
- C. The Occurrence Reporting Scheme aims to identify those occurrences where the routine control procedures have failed. To achieve this objective the criteria for a reportable occurrence need to be set above (in terms of the effects on safety) the normal day to day defects and minor incidents.
- D. Those occurrences which must always be reported (e.g. fires, uncontained engine failures, critically low fuel states, close proximity between aircraft, etc.) can easily be listed but it is impossible to define precisely every significant hazard which requires reporting.
- E. What is judged to be reportable on one class of aircraft may not be so on another and the absence or presence of a single factor, human or technical, can transform a minor occurrence into a significant hazard or an accident. Judgment by the reporter of the degree of hazard or potential hazard involved is therefore essential in many cases.
- F. Within the above constraints, this Chapter lists the types of occurrence which are likely to fall within the definition of a reportable occurrence in which case they must therefore be reported.
- G. Whilst the Appendix lists the majority of occurrences which shall normally be reported it cannot be completely comprehensive and any other occurrences judged, by those involved, to meet the criteria shall be reported.
- H. Practical and effective working of the Occurrence Reporting Scheme requires a constructive approach and resolve on the part of all reporters and others involved to make the Scheme a successful and worthwhile safety reporting programme.
- In the case of organizations providing a service or facility for aircraft operating over or in Sri Lanka (e.g. Air Traffic Services, airfields etc.) any occurrence meeting the required criteria should be reported regardless of the nationality of the aircraft involved.

#### 3.2 PART 1- AIR NAVIGATION SERVICES - RELATED OCCURRENCES TO BE REPORTED

**Note 1**: Although this Part 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 Part does not include accidents and serious incidents.

**Note 3:** This Part includes "ANS" (air navigation service) 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 Part 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.

#### 3.3 ANS Occurrences

- A. 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):
- B. Separation minima infringement;
  - 1. inadequate separation;
  - 2. "near-CFIT" (near-controlled flight into terrain);
  - 3. runway incursion where avoiding action was necessary.
- C. 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):
- D. runway incursion where no avoiding action is necessary;
- E. runway excursion;
- F. aircraft deviation from ATC clearance;
- G. aircraft deviation from applicable "ATM" (air traffic management) rules:
- H. aircraft deviation from applicable published ATM procedures;
- I. unauthorized penetration of airspace;
- J. deviation from aircraft ATM-related equipment carriage and operations, as mandated by applicable rules.

#### **3.3.1** 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 jeopardized). This shall include the following occurrences:

- K. inability to provide ATM services:
- L. inability to provide air traffic services;
- M. inability to provide airspace management services;
- N. inability to provide air traffic flow management services;
- O. failure of Communication function;
- P. failure of Surveillance function;
- Q. failure of Data Processing and Distribution function;
- R. failure of Navigation function;
- S. ATM system security

- T. "ATC" (air traffic control) Navigation and Communications significant malfunction or deterioration of service.
- U. An aircraft was or could have been endangered by impairment of any member of ground staff (e.g. ATC, "AD" (aircraft dispatchers), Maintenance, etc.).
- V. ATC overload.
- W. Failure or unplanned shutdown of a major operational ATC computer system, requiring reversion to manual back-up and resulting in disruption to the normal flow of air traffic.

#### **3.3.2** Examples of Reportable ATM Occurrences

- A. Provision of significantly incorrect, inadequate or misleading information from any ground sources, e.g. ATC, "ATIS" (automatic terminal information service), meteorological services, navigation databases, maps, charts, manuals etc.)
- B. Provision of less than prescribed terrain clearance.
- C. Provision of incorrect pressure reference data (i.e. altimeter setting).
- D. Incorrect transmission, receipt or interpretation of significant messages when this results in a hazardous situation
- E. Separation minima infringement
- F. Unauthorized penetration of airspace
- G. Unlawful radio communication transmissions
- H. Failure of ANS ground or satellite facilities
- I. Major ATC/ATM failure or significant deterioration of aerodrome infrastructure
- J. Aerodrome movement areas obstructed by aircraft, vehicles, animals or foreign objects, resulting in a hazardous or potentially hazardous situation
- K. Errors or inadequacies in marking of obstructions or hazards on aerodrome movement areas resulting in a hazardous situation
- L. Failure, significant malfunction or unavailability of airfield lighting

#### 3.3.3 Aerodromes 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.
- C. Failure or significant deterioration of aerodrome aircraft operating surfaces.

#### **3.3.4** Other occurrences

- A. bird strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- B. Wake-turbulence encounters.
- C. 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 persons on the ground.

#### 3.4 PART 2 - Aircraft Operations, Maintenance, Repair and Manufacturer- related occurrences

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

**Note 2:** This Part does not include accidents.

**Note 3:** 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 4:** Specific operational approvals, e.g. "RVSM" (reduced vertical separation minima), "ETOPS" (extended range twin operations), "RNAV" (area navigation), or a design or maintenance programme, may have specific reporting requirements for failures or malfunctions associated with that approval or programme.

This sub-part contains reportable areas address below and shall not preclude the reporting of any occurrence, situations or condition which, if repeated in different but likely circumstances or allowed to continue uncorrected, could create a hazard to aircraft safety.

#### A. AIRCRAFT FLIGHT OPERATIONS

- B. AIRCRAFT TECHNICAL
- C. AIRCRAFT MAINTENANCE AND REPAIR

### 3.4.1 Aircraft Flight Operations

#### 3.4.1.1 Operation of the aircraft

- A. Avoidance manoeuvres:
- B. Risk of collision with another aircraft, terrain or other object or an unsafe situation when avoidance action would have been appropriate;
- C. An avoidance manoeuvre required to avoid a collision with another aircraft, terrain or other object;
- D. An avoidance manoeuvre to avoid other unsafe situations.
- E. 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.
- F. Inability to achieve predicted performance during take-off or initial climb.
- G. Critically low fuel quantity or inability to transfer fuel or use total quantity of usable fuel.
- H. Loss of control (including partial or temporary) regardless of cause.
- I. 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.).
- J. Go around producing a hazardous or potentially hazardous situation.
- K. Unintentional significant deviation from airspeed, intended track or altitude (more than 300 ft) regardless of cause.
- L. Descent below decision height/altitude or minimum descent height/altitude without the required visual reference.
- M. Loss of position awareness relative to actual position or to other aircraft.
- N. Breakdown in communication between flight crew "CRM" (crew resource management) or between flight crew and other parties (cabin crew, ATC [air traffic control] engineering).
- O. Heavy landing a landing deemed to require a "heavy landing check".
- P. Exceedance of fuel imbalance limits.
- Q. Incorrect setting of an "SSR" (secondary surveillance radar) code or of an altimeter subscale.
- R. Incorrect programming of, or erroneous entries into, equipment used for navigation or performance calculations, or use of incorrect data.
- S. Incorrect receipt or interpretation of radio-telephony messages.
- T. Fuel system malfunctions or defects, which had an effect on fuel supply and/or distribution.
- U. Aircraft unintentionally departing from a paved surface.
- V. Collision between an aircraft and any other aircraft, vehicle or other ground object.
- W. Inadvertent and/or incorrect operation of any controls.
- X. Inability to achieve the intended aircraft configuration for any flight phase (e.g. landing gear and gear doors, flaps, stabilizers, slats etc.).
- Y. A hazard or potential hazard which arises as a consequence of any deliberate simulation of failure conditions for training, system checks or training purposes.
- Z. Abnormal vibration.

- AA. Operation of any primary warning system associated with manoeuvring the aircraft e.g. configuration warning, stall warning (stick shaker), over-speed warning etc. unless: 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 operated for training or test purposes.
- BB. "GPWS / EGPWS" (ground proximity warning system)/"TAWS" (terrain awareness and warning system) "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.
- CC. GPWS/TAWS "alert" when any difficulty or hazard arises or might have arisen as a result of crew response to the "alert".
- DD."ACAS" (air collision advisory system)"RA"s (resolution advisories).
- EE. Jet or prop blast incidents resulting in significant damage or serious injury.
- FF. Landing at the wrong airfield.

## 3.4.1.2 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.

## 3.4.1.3 Depressurization

- A. The use of any emergency equipment or prescribed emergency procedures in order to deal with a situation.
- B. An event leading to the declaration of an emergency ("Mayday" or "PAN").
- C. 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.
- D. Events requiring any use of emergency oxygen by any crew member.

## 3.4.1.4 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.

## 3.4.1.5 Injury

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

## 3.4.1.6 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 wind shear encounter.
- E. Icing encounter resulting in handling difficulties, damage to the aircraft or loss or malfunction of any essential service.

#### 3.4.1.7 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.

#### 3.4.1.8 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. 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 persons on the ground.

#### 3.4.2 Aircraft Technical

#### 3.4.2.1 Structural

- A. 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:
- B. damage to a "PSE" (principal structural element) that has not been designated as damagetolerant (life-limited element). PSEs are those which contribute significantly to carrying flight, ground, and pressurization loads, and the failure of which could result in a catastrophic failure of the aircraft;
- C. defect or damage exceeding admissible damages to a PSE that has been designated as damagetolerant;
- D. 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;
- E. 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;
- F. damage to or defect of a structural element, which could jeopardize proper operation of systems. See paragraph 2.2 below;
- G. loss of any part of the aircraft structure in flight.

#### 3.4.2.2 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. un commanded actions,
  - 2. incorrect and/or incomplete response, including limitation of movement or stiffness,
- C. runway,
- D. mechanical disconnection or failure;
- E. failure or malfunction of the exclusive function(s) of the system (one system could integrate several functions);
- F. interference within or between systems;
- G. failure or malfunction of the protection device or emergency system associated with the system;
- H. loss of redundancy of the system;
- I. any occurrence resulting from unforeseen behaviour of a system.
- J. 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.
- K. 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.
- L. 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;
- M. 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;
- N. malfunction or defect of any indication system when this results in the possibility of misleading indications to the crew;
- O. any failure, malfunction or defect if it occurs at a critical phase of the flight and is relevant to the system operation;
- P. 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.;
- Q. asymmetry of flight controls; e.g. flaps, slats, spoilers etc.

#### 3.4.2.3 Examples of reportable occurrences

- A. Propulsion (including engines, propellers and rotor systems) and "APUs" (auxiliary power units)
- B. Flameout, shutdown or malfunction of any engine.
- C. 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).
- D. Failure or malfunction of any part of an engine or power plant resulting in any one or more of the following:
- E. non-containment of components/debris;
- F. uncontrolled internal or external fire, or hot gas breakout;
- G. thrust in a direction different from that demanded by the pilot;
- H. thrust-reversing system failing to operate or operating inadvertently;
- I. inability to control power, thrust or revolutions per minute;
- J. failure of the engine mount structure;
- K. partial or complete loss of a major part of the power plant;
- L. dense visible fumes or concentrations of toxic products sufficient to incapacitate crew or passengers;
- M. inability, by use of normal procedures, to shutdown an engine;
- N. inability to restart a serviceable engine.
- O. An uncommented thrust/power loss, change or oscillation which is classified as a"LOTC" (loss of thrust or power control):
  - 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.
- P. Any defect in a life-controlled part causing its withdrawal before completion of its full life.
- Q. 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.
- R. An engine limiter or control device failing to operate when required or operating inadvertently.
- S. Exceedance of engine parameters.
- T. "FOD" (foreign objects damage).

#### 3.4.2.4 Propellers and transmission

- A. Failure or malfunction of any part of a propeller or power plant resulting in any one or more of the following:
- B. an over speed of the propeller;
- C. the development of excessive drag;
- D. a thrust in the opposite direction to that commanded by the pilot;
- E. a release of the propeller or any major portion of the propeller;
- F. a failure that results in excessive imbalance;
- G. the unintended movement of the propeller blades below the established minimum in-flight lowpitch position;
- H. an inability to feather the propeller;
- I. an inability to change propeller pitch;
- J. an uncommanded change in pitch;
- K. an uncontrollable torque or speed fluctuation;
- L. the release of low-energy parts.

#### 3.4.2.5 Rotors and transmission

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

#### 3.4.2.6 APUS

- A. Shut down or failure when the APU is required to be available by operational requirements, e.g. ETOPS, "MEL" (minimum equipment list).
- B. Inability to shut down the APU.
- C. Over speed.
- D. Inability to start the APU when needed for operational reasons.

#### 3.4.2.7 Human factors

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.

#### 3.4.2.8 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.

#### 3.4.3 Aircraft maintenance and repair

- A. Incorrect assembly of parts or components of the aircraft found during an inspection or test procedure not intended for that specific purpose.
- B. Hot bleed air leak resulting in structural damage.
- C. Any defect in a life-controlled part causing retirement before completion of its full life.
- D. 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:
  - 1. a primary structure or a "PSE" (principal structure element) (as defined in the manufacturers' Repair Manual) where such damage or deterioration exceeds allowable limits specified in the Repair Manual and requires a repair or complete or partial replacement;
  - 2. a secondary structure which consequently has or may have endangered the aircraft;
  - 3. the engine, propeller or rotorcraft rotor system.
- E. 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:
  - 1. it is detected for the first time by the reporting organization implementing compliance;
  - 2. on any subsequent compliance, it exceeds the permissible limits quoted in the instruction and/or published repair/rectification procedures are not available.
- F. 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.
- G. Non-compliance or significant errors in compliance with required maintenance procedures.
- H. Products, parts, appliances and materials of unknown or suspect origin.
- I. Misleading, incorrect or insufficient maintenance data or procedures that could lead to maintenance errors.
- J. 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.

#### 3.5 Appendix to Part 2

The following subparagraphs give examples of reportable occurrences resulting from the application of the general criteria to specific systems listed in paragraph.

#### 3.5.1 Air conditioning/ventilation

- A. Complete loss of avionics cooling;
- B. Depressurization

#### 3.5.2 Auto flight system

- A. failure of the auto flight system to achieve the intended operation while engaged;
- B. significant reported crew difficulty to control the aircraft linked to auto flight system functioning;
- C. failure of any auto flight system disconnect device;
- D. uncommanded auto flight mode change.

#### **3.5.3** Communications

- A. failure or defect of passenger address system resulting in loss of or inaudible passenger address;
- B. total loss of communication in flight.

#### 3.5.4 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.

#### 3.5.5 Cockpit/Cabin/Cargo

- A. pilot seat control loss during flight;
- B. failure of any emergency system or equipment, including emergency evacuation signaling system, all exit doors, emergency lighting, etc.;
- C. loss of retention capability of the cargo loading system.

#### 3.5.6 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.

#### 3.5.7 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.

#### 3.5.8 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.

#### 3.5.9 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

#### 3.5.10 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.

## 3.5.11 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.

#### 3.5.12 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.

#### 3.5.13 Navigation 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.

#### **3.5.14** Oxygen for pressurized 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 testing.

#### 3.5.15 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.

## CHAPTER 4 - ESTABLISHMENT OF AN ACCIDENT AND INCIDENT REPORTING SYSTEM AND DATABASE

#### (European Co-ordination Centre for Aviation Incident Reporting Systems – ECCAIRS)

#### 4.1 General

Institutional arrangements and requirements contained in this chapter is based on the Chapter 7 - ADREP Reporting Requirement, Chapter 8 - Accident Prevention Measures, Attachment E – Safety Data Collection & Processing System and Attachment F- State Safety Programme, to the ICAO Annex 13 - "Aircraft Accident and Incident Investigation".

The legislative & regulatory bases for establishment of this reporting system are laid down in Section 116 of Civil Aviation Act No. 14 of 2010.

Chapter 20 of SLCAP 9999 – "Aircraft Accident Investigation Procedure Manual" published by the Civil Aviation Authority of Sri Lanka expalins the responsibilities and internal arrangement for ECCAIRS reporting system.

#### 4.2 Introduction

European Co-ordination Centre for Aviation Incident Reporting Systems, (ECCAIRS) is a software used by the ICAO ADREP system and was developed to facilitate the exchange of data between States and ICAO.

International Civil Aviation Organization (ICAO) adopted the ECCAIRS software developed by the Joint Research Centre of the European Union in Ispra, Italy, as its platform to operate the ADREP system. The ECCAIRS system was developed in close cooperation with ICAO with the aim of implementing taxonomies developed in ICAO to facilitate the online reporting and exchanging of information between ICAO and the States and between all stakeholders.

#### 4.3 Applicability

Requirements contained in this Implementing Standard shall be applicable to both local and foreign air operators operating into, out of or within Sri Lanka, flying school and Service providers like Airport and Aviation Services (SL) Limited.

#### 4.4 Purpose of Implementation

This is to establish and maintain an accident and incident database to facilitate the effective analysis of information on actual or potential safety deficiencies obtained, including from incident reporting systems, and to determine any preventive actions required. It is also objective to promote accident prevention by collection and analysis of safety data and by a prompt exchange of safety information, as part of the State Safety Programme and Safety Management Systems, in line with the ICAO strategy to implement a well-established and common aviation occurrence data exchange platform with all stake holders.

ICAO provides ECCAIRS software & training free-of-charge to States. CAASL helps to install ECCAIRS system on operators and service providers freely. Operators shall maintain the system is current at all times. Updates can be downloaded from <u>http://eccairs.www.jrc.it</u>

#### 4.5 Recommendation for Operators

Operators shall forward immediately a notification as soon as possible to CAASL of an accident or serious incident involving an aircraft operated by them as mentioned in this Implementing Standard and Section 3 of Aircraft Accident and Incident Investigations Rules of Sri Lanka.

In addition, Operators shall use the ECCAIRS system to report all reportable occurrences to CAASL as initial notifications, preliminary and full data reports. ECCAIRs will replace the current manual reporting system.

#### 4.6 Instructions for ECCAIRS software and its use

The ECCAIRS Suite comes with predefined Views optimized for typical flight operations and ATM users. The View Definition menu allows selecting the appropriate view over the occurrence data-structure, among those available in ECCAIRS 4, to be used for display and browsing in the Taxonomy Tree Pane.

There are four views;

- ADREP Full view organizes and display the occurrence data according to the complete ICAO ADREP 2000 taxonomy
- ADREP Preliminary view is a reduced and simple view, where all the information is condensed to be used for a quick focus on flight operations occurrences
- ATM Full view focuses on the Air Traffic Management issues of the occurrence
- **ATM Preliminary** view is a reduced and simple view focused on ATM specific type of occurrences.

#### 4.7 Features of use this tool;

- 1. add, edit and delete occurrence data
- 2. use the views the View Definition menu allows selecting the appropriate view over the occurrence datastructure, among those available in ECCAIRS 4, to be used for display and browsing in the Taxonomy Tree Pane.
- 3. find and show data
- 4. present data graphically
- 5. exchange data
- 6. code an occurrence into ECCAIRS

#### 4.8 Basic guideline to E4f submissions to CAASL

- 4.8.1 It was recommended that reporting organizations, to fill all occurrences using the ECCAIRS system, by taking reporting forms which are issued by the CAASL as guidelines (to have the idea of required fields in which the CAASL expects from reporters).
- 4.8.2 Reporters must report all occurrences using the ECCAIRS system and completed E4f files shall be forwarded to CAASL via email. (Email address paaai@caa.lk)
- 4.8.3 The completed E4f file must email to CAASL, within the mentioned time period (within 96). However in case of an accident/serious incident or any occurrence which is judged to be particularly hazardous and CAASL investigation is required, the initial notification shall be forwarded to CAASL through the quickest means available prior to ECCAIRS reporting and previously prescribed guidelines regarding the notification of accident/serious incident will not be changed. Subsequently the preliminary and data report shall be forwarded to CAASL, through ECCAIRS.
- 4.8.4 To facilitate processing on initial notification, preliminary report and full data report submissions, the heading of an E4f file and the subject line of the email shall always be included the following;
  - Aircraft Registration number
  - Occurrence category (in short form by choosing the occurrence category using the coded values)
  - Date of Occurrence
  - Operators name

*For example* –: If a ground collision occurred, into ABC Airlines aircraft Reg. no. AB-CCC on 20<sup>th</sup> Sept. 2010.

Occurrence category would be - <u>GCOL</u>

The heading of *the* report and subject of the email would be;

Eg: AB-CCC, GCOL, 2010.09.20 (ABC Airlines)

4.8.5 For multiple reports submissions, the body of the e-mail text shall include the above with the "report status" (closed, initial, preliminary, Full data)

Eg: 2010.09.20, AB-CCC, GCOL (ABC Airlines) – Full Data report

- 4.8.6 Report status (what each report/E4f file should contain)
  - Initial notification This is an E4f file which created using ECCAIRS software, which contains the basic information and is the first submission made to CAASL. The Report status field in the E4f file should be entered as initial notification and shall be emailed to CAASL. (email address paaai@caa.lk)
  - Preliminary report This is the same E4f file created after submitting the initial notification, with updated information. The report status field in the E4f file shall be changed to reflect Preliminary as the report status. This file then shall be emailed to CAASL.

- Data report This is the same E4f file created, when submitting the initial notification or preliminary report, updated with information. The report status shall be changed to reflect Data as the Report status. This file then shall be emailed to CAASL.
- Closed This is the same E4f file which was created, updated based on information from the final report, which therefore would remain unchanged after this point. The report status field shall be changed to reflect as closed as the report status.
- 4.8.7 Submission of final reports if an operator/aerodrome authority conducts in house inquiries/investigation upon the request of the CAASL, they shall forward their final reports to the CAASL in a hard copy or e-copy (Pdf form) in addition to ECCAIRS reporting.
- 4.8.8 Mandatory fields there are four mandatory fields where the reports must complete those fields. Such as;
  - > Date entered The date entered the occurrence
  - State reporting For aircraft operated by Air Operators of Sri Lanka, this would be " Sri Lanka"
  - State file number- Operators may use own file numbers, but the number should unique to each occurrence.
  - Reporting Organization name of operator/aerodrome authority, which reports to the CAASL
- 4.8.9 Additional information which is required, not categorized under the given fields shall be included in the narrative or note.
- 4.8.10 Any occurrence which cannot be categorized under any of the coded occurrence category, such occurrences shall be categorized as "other". In such cases all required details (as per the CAASL manual forms) shall be included in the narrative or note.

#### 4.9 Minimum System Requirement

#### 4.9.1 Client side

- Pentium III, IV or equivalent
- > 128 Mb RAM
- > 75 Mb disk space
- LAN connection
- Windows XP Professional with Service Pack 2 or 3
- Office 2003
- No other SQL applications running on PC, such as MSDE

#### 4.9.2 Server side

- Pentium IV or equivalent. In multi-user systems with large amount of data, multi-processor systems are recommended to increase response times from database
- > 256 Mb RAM
- > 75 Mb disk space
- ▶ 50 Kb disk space <u>per occurrence</u>  $\rightarrow$  avg. 100 Mb every 2000
- 60 Mb disk space for MSDE components

- > DCOM
- > PC user must have administrative access rights

### 4.10 Assistance provided by CAASL

- Free software installation and CD with all guidance materials
- Explanation of the use of system including queries & graphs
- > Arrangement of the training opportunities by cooperation with ICAO

# Attachment No: CA-IS-2011-GEN-004-Att-01 CHAPTER 5 - MANDATORY OCCURRENCE REPORT FORMS

- A. Appendix 1 ANS & Aerodrome Operations Occurrence Report Forms
- B. Appendix 2 Flight Operations, Aircraft technical Repair & Maintenance Report Forms
- C. Appendix 3 Other Occurrence Report Forms

Note: All forms can be used as guidelines to complete E4f files in ECCAIRS system.

#### Contact details;

Director General of Civil Aviation

Civil Aviation Authority of Sri Lanka

No.04, Hunupitiya Road

Colombo 2.

Email – <u>sldgca@slt.lk</u>, <u>sldgca@CAASL.lk</u>

Tel. +94 11 2358801; +94 11 2304606; +94 777 352081

Fax. +94 11 2304706

AFTN. VCCCYAYX

or

Accident Investigation Unit

Civil Aviation Authority of Sri Lanka

No. 04, Hunupitiya Road

Colombo 2.

Email – paaai@caa.lk

Tel. +94 11 2358820

Fax. +94 11 2304699

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## Appendix 1 – ANS & Aerodrome Operations Occurrence Report Forms

#### 1. ATC Occurrence Report Form

<b>()</b>		CAASL/AS/001				
ATC Occurrence Report Form						
Please use this form reporting system and not categorized unde If report is CONFIDED respected	as the guideline shall email the E4 r the given fields s NTIAL – clearly at	e to fill the d If file to: <u>paaa</u> hall be include the top & pr	lata for th i@caa.lk. ed in the n ovide con	ne occurrence Additional info arrative or not itact address/t	using ormatio e. el. no.	E4f file in ECCAIRS n which is required, your wish will be
ATC Centre						
ACC	APP-BIA	Tower - B	IA	Tower - RMA		Other - specify
General Details						
DATE Time	ATE Time - UTC Occurrence Type of incident Position Accident, Airprox, Incident or infringe					or infringement
Details of Aircraft 1						
Call Sign:	Ту	pe of A/C:		Registi	ration:	
Operator:	Position: Altitude			le/FL:		
Speed:	From:		То			
Pax:	Endurance: Flight Rul			Rules		
SSR Code:	M	ode C Displaye	ed or Not:			
Details of Aircraft 2						
Call Sign:	Тур	e of A/C:		Registra	tion:	
Operator:	Pos	ition:		Altitude/FL:		
Speed:	Fro	m:		To:		
Pax:	Endurance: Flight Rules					
SSR Code	Mode C Displayed or Not					
Details – ATS						
RTF Frequencies	Radar or Pro	ocedural	Equipme unservice	nt eabilities	QNH	Runway in use

						Att	achment No: CA	-IS-2011-GEN-004-Att
Class &	Type of A	irsp	ace					
В	С	D		E	G	CTR / CTA	/ TMA / FIR /	Other - specify
Was Pr Separa	escribed tion Lost		Minim Existe	ium Sepa d-	ration	Conflict Alert/ TCAS/STCA	Traffic Info. Given By ATC?	Avoiding Action Taken by ATC
			Horizo	ontal/Vert	ical			
Descrip	otion of the	e Oc	currer	nce				
Deserie								
Whethe	r RTF/Vide	eo Ta	apes h	eld:				
Watch C	Officers Na	me	and th	e watch:				
Reportir	ng officers	Nan	ne and	the Signa	ature:			
Date:								

## 2. Air Traffic Incident Report Form

Civil Aviation Authority of Sri Lanka					
	CAASL/AS/002				
Constanting Autorop					
Please use this form as the gui	deline to fill the data for the o	ccurrence using E4f fi	le in ECCAIRS reporting		
system and shall email the E	4f file to: <u>paaai@caa.lk</u> . Add	litional information v	which is required, not		
categorized under the given fie	lds shall be included in the nar	rative or note.			
If report is CONFIDENTIAL – ma	ark clearly at the top & provide	e contact address/tel.	. no. your wish will be		
AIRCRAFT IDENTIFICATION		TYPE OF INCIDENT			
		ACCIDENT/AIRPROX	/INCIDENT/INFRINGE		
		MENT			
THE INCIDENT					
General					
a) Date/time of incident	UTC				
b) Position					
Own aircraft					
a) Heading and route					
b) True airspeed	knots				
c) Level and altimeter setting					
d) Aircraft climbing or descene	ding				
( )Level flight	()Climbing	()Descending			
e) Aircraft bank angle					
()Wing level	()Slight bank	( )Moderate bank			
( )Steep bank	( )Inverted	( )Unknown			
f) Aircraft direction of bank					
( )Left	()Right	( )Unknown			
g) Restriction to visibility (selec	t as many as required)				
( )Sun glare	( )Windscreen pillar	()Dirty windscree	n		
()Other cockpit structure					
h) Use of aircraft lighting					
()Navigation lights	()Strobe lights	()Cabin lights			
()Red anti-collision lights	()Landing/taxi lights	()Logo (tail fin) lig	hts		
()Other	()None	( )=050 (tan ini) iig			

		Attachment No: CA-IS-2011-GEN-004-Att-01
i) Traffic avoidance advice is	sued by ATS	
()Yes, based on ATS	()Yes, based on visual	( )Yes, based on other ( ) No
Surveillance system	sighting	Information
j) Traffic information issued		
()Yes, based on ATS	()Yes, based on visual	( )Yes, based on other ( ) No
Surveillance system	sighting	Information
k) Airborne collision avoidar	ice system – ACAS	
()Not carried	( )Туре	()Traffic advisory issued
()Resolution advisory	()Traffic advisory or	
issued	resolution advisory not issued	
i) Identification		
( ) No ATS surveillance	() Identification	( ) No identification
System available		
m) Other aircraft sight		
( )Yes	( )No	()Wrong aircraft sighted
n) Avoiding action taken		
( )yes	( )No	
o) Type of flight plan	IFR/VFR/none*	
Other aircraft a) Type and call sign/registra b) if a) above not known ()High wing ()1 engine ()4 engine other available details	ation (if Known) ( )Mid wing ( )2 engine ( )More than 4 engine	( )Low wing ( )Rotorcraft ( )3 engine
c) Aircraft climbing or desce	nding	
()Level flight	() Climbing	()Descending
()Unknown		
d) Aircraft bank anglo		
	()Slight bank	()Madarata bank
() Willigs level		
	()Inverted	( )OTKHOWN
e) Aircraft direction of bank		
	()Right	()Linknown
()Leit	( )Mgnt	
f) Lights displayed		
()Navigation lights	()Strobe lights	()Cabin lights
()Red anti-collision lights	()Landing/taxi lights	() l ogo (tail fin)lights
()Other	()None	() Inknown
	( jivone	

<ul> <li>g) Traffic avoidance advice is</li> <li>()Yes, based on ATS</li> <li>Surveillance system</li> <li>() No</li> </ul>	sued by ATS ()Yes, based on visual sighting ()Unknown	( )Yes, based on other Information	
<ul> <li>h) Traffic information issued <ul> <li>()Yes, based on ATS</li> <li>Surveillance system</li> <li>() No</li> </ul> </li> <li>i) Avoiding action taken <ul> <li>()Yes</li> </ul> </li> </ul>	( )Yes, based on visual sighting ( )Unknown ( )No	( )Yes, based on other Information ( )Unknown	
<i>Distance</i> Closest horizontal distance:			
Closest vertical distance:			
Meteorological conditions			
IMC/VMC			
Above/below clouds/fog/haz	e or between layers		
Distance vertically from cloue	d m / ft below	m / ft above	
In cloud / rain / snow / sleet	/ fog / haze		
Flying into / out of sun			
Flight visibility m /	km		
Any other information consi	dered important by the pilo	ot-in-command	

#### Miscellaneous

Information regarding reporting aircraft (Own Aircraft)
Aircraft Registration
Aircraft Type
Operator
Aerodrome of Departure
Aerodrome of First Landing Destination
Reported by radio or other means to (ATS Unit) at Date/Time

#### Details of ATC action

Action taken by ATC (Explain Clearance, ATC surveillance system, warning given) ..... ..... ..... .... .... ... ..... .....

DIAGRA	MS OF AIRPROX
Mark passage of other aircraft relative to you, in plan on the lef diagram. Include first sighting and passing distance.	Hundreds of metres Hundreds of hundreds Hundreds of
VIEW FROMABOVE	2 4 5 7 9 10 VIEW FROM ASTERN 6 9 150 150 150 150 150 150 150 150
Signature of person submitting report:	Designation:
Address:	
Гel Number:	

## 3. Air Traffic Incident Report Form - Pilots Report Over Radio – CAASL/AS/003

	Civil Aviation Au	thority of Sri L	anka		CAASL/AS/003
Construction of the second	Air Traffic Incident Report (Pilots Report Over Radio)				
Please use this form as reporting system and sha not categorized under the	the guideline to fi Ill email the E4f file t e given fields shall be	ill the data fo to: <u>paaai@caa.</u> e included in tł	r the oc <u>lk</u> . Addit ne narrat	currence usi tional inform tive or note.	ng E4f file in ECCAIRS ation which is required,
If report is CONFIDENTIA respected.	AL – clearly at the to	op & provide	contact	address/tel.	no. your wish will be
AIRCRAFT IDENTIFICATIO	N/TYPE		TYPE OF	INCIDENT	
THE INCIDENT					
General					
Date/time of incident					UTC
position					
Own aircraft					
Heading and route					
True airspeed		measured	in ( )kt	( ) km/	h
Level and altimeter settin	ng				
Aircraft climbing or desce	ending				
( )Level flight	()Climbing	( )Desc	ending		
Avoiding Action Taken	( ) Yes ( ) No	( ) Unknowr	I		
Other aircraft					
Type and call sign/registr	ation (if Known)				
if above not known					
( )High wing	()Mid wing	( )Low	wing	()Rotorcr	aft
( )1 engine	()2 engine	( )3 en	gine		
( )4 engine	()More than 4 eng	gine			

<u></u>			Attach	ment No: CA-IS	-2011-GEN-004
Other availa	ble details				
					Aircraft
climbing or c	lescending				
() Level fligh	nt	() Climbing	() Descending	( ) Unknown	
Avoiding Act	ion Taken				
( ) Yes	( ) No	( ) Unknown			
Distance					
Distance					
Closest horiz	ontal distan	ce:			
Closest verti	cal distance:				
Watch Super	visors Name	and the watch:			
watch Super					
Reporting of	ficers Name	and the signature:			
Date:					

#### 4. On- Ground Occurrence Report Form – CAASL/AS/009

4 A N	Civil Aviation Authority of Sri Lanka	CAASL/AS/009
<b>(<u>@</u>)</b> =	On - ground Occurrence Report Form	
Contract Assess		

Please use this form as the guideline to fill the data for the occurrence using E4f file in ECCAIRS reporting system and shall email the E4f file to: <u>paaai@caa.lk</u>. Additional information which is required, not categorized under the given fields shall be included in the narrative or note.

If report is CONFIDENTIAL – clearly at the top & provide contact address/tel. no. your wish will be respected.

<i>A</i> aintenance	Ground Handling Time	Unattended		
	Time			
		Weather Condition (rain/wind/mist)		
/Equipment				
	Any Damage to vehi	cles, Equipment, or personnel		
	() yes () no			
of above questions	s give a brief descriptio	n		
ce:				
rt Manager:	Name of the R	Reporting officer:		
	Date:			
	<sup>/</sup> Equipment <sup>,</sup> of above question: <del>,</del> ce: 	/Equipment Any Damage to vehi () yes () no of above questions give a brief descriptio ce: rt Manager: Name of the F		

#### 5. Bird Strike Incident Reporting Form – CAASL/AS/010



Civil Aviation Authority of Sri Lanka Bird Strike Incident Reporting Form CAASL/AS/010

Please use this form as the guideline to fill the data for the occurrence using E4f file in ECCAIRS reporting system and shall email the E4f file to: <u>paaai@caa.lk</u>. Additional information which is required, not categorized under the given fields shall be included in the narrative or note.

If report is CONFIDENTIAL – clearly at the top & provide contact address/tel. no. your wish will be respected.

Operator:			A/c Make/Model:						
Engine Make/Model:			A/c Reg.:						
Date:			Local Time:						
Dawn/Day/Du	ust/Night:				Aerodrome Name:				
Sector:					Runway used:				
Location if En Route:			Height AGL: ft Speed (IAS): kt				kt		
Phase of Flight	Parked	Тахі	Take off	Clin	٦b	En route	Descent	Approach	Landing roll

Part(s) of Aircraft	Struck	Damage	Part(s) of Aircraft	Struck	Damaged
Radome			Propeller		
Windshield			Wing/rotor		
Nose (exclusive above)			Fuselage		
Engine no. 1			Landing gear		
Engine no. 2			Tail		
Engine no. 3			Lights		
Engine no. 4			Other (Specify)		

Effect on Flight	None	Aborteo	l take-off	Precautionary Landing			וg	Engines shut down	Other (specify)
Number of Birds		1	2-10	1	1-100	more	Bi	ird species	
Seen							-		
Struck									
Sky condition : No cloud/some cloud/overcast				Precipitation: Fog/Rain/Snow					
Size of Bird: Small/Medium/Large				Pilot w	arned of B	ird	s: yes/ no		

#### **Cost Information:**

Aircraft time out of service ...... Hours

Estimated cost of repairs or replacement U.S.\$ (in thousands).....

Estimated other costs U.S.\$ (in thousands).....

(e.g. loss of revenue, fuel, hotels)

#### **Special Information on Engine Damage Strikes**

Reason for failure/shutdown	Engine position number				
	1	2	3	4	
Uncontained failure					
Fire					
Shutdown-Vibration					
Shutdown-Temperature					
Shutdown-Fire warning					
Shutdown-Other(specify)					
Shutdown - unknown					
Estimated percentage of thrust loss:	Estimated number of birds ingested:				
Remarks(Describe damage, injuries and other per	tinent inform	ation):			

Reported by (Name & Designation).....

Date: .....

Signature: .....

#### 6. ATS Engineering Occurrence Report Form – CAASL/AS/015

	Civil Aviation Authority of Sri Lanka	CAASL/AS/015
2 Conference and C	ATS Engineering Occurrence Report Form	

Please use this form as the guideline to fill the data for the occurrence using E4f file in ECCAIRS reporting system and shall email the E4f file to: <u>paaai@caa.lk</u>. Additional information which is required, not categorized under the given fields shall be included in the narrative or note.

If report is CONFIDENTIAL – clearly at the top & provide contact address/tel. no. your wish will be respected

Occurrence Location:	Date: Time (UTC):	Duration:	ATS Facility:	Services Affe Area Con Aerodrome Control/BIA	ected: trol, Approach Control, Control/RMA, Aerodrome	
Equipment Type/Manufacturer:		Frequency:	Call sign:	Equipment Location:		
Facility Configuration:				Equipment Status:		
wini Stu by				Unserviceable,		
				Routine/Corr Modification	rective Maintenance, /Replacement	
Remarks:				1		
Name		Organization/	/Position	Start tim	e and duration of shift	
Address & Te privately)	lephone nui	mber (if the rep	oorter wishes	to be contacte	ed Signature	
					Date	
L						

## Appendix 2 - Flight Operations, Aircraft Technical Repair & Maintenance Report Forms

#### 1. Aircraft Accident /Incident Report Form – CAASL/AU/003

Civil Aviation Authority of Sri Lanka	CAASL/AU/003								
Aircraft Accident /Incident Report Form									
Please use this form as the guideline to fill the data for the occurrence using	lease use this form as the guideline to fill the data for the occurrence using E4f file in ECCAIRS reporting system								
and shall email the E4f file to: <u>paaai@caa.lk</u> . Additional information which is required, not categorized under the									
given fields shall be included in the narrative or note.									
If report is CONFIDENTIAL – clearly at the top & provide contact address/tel. n	o. your wish will be respected.								
Role of reporter in relation to the aircraft:									
Crew Operator Rescue/Fire Service Owner Aerodrome Operat	or Other (Pl. specify)								
Personal particulars of reporter									
Name: Designation:									
Contact Address: Tel:	Tel:								
Fax:	Fax:								
Email:									
Crew & Operators details									
Name Nationality	type of licence								
PIC									

## Accident/Incident details

First Officer

Additional crew

Aircraft details

Registration :

make& model:

Operator:

/ teelacine/ intelacin	t actails				
Date :			Last departure point:		
Time( UTC & Loc	al):		Intended destination:		
Location :			Actual point of Landing (if different):		
ATS Route:	Heading :	IAS (Kt):	Mach NBR:	Flight Level/Attitude:	

Operator's Tel:

if hire, name of renter:

Owner:

Flight NBR :

#### Damages to Passenger & Aircraft

	On Board	No injuries	Minor injuries	Serious injuries	Fatalities
Total crew					
Total pax					
Other company					
employees					
No of persons injured on ground					

	Attachment No: CA-IS-2011-GEN-004-Att-01			
Aircraft damage: Destroyed / Substantial / Minor/	Damage description:			
Nil				
Effect on flight : None / Rejected T/O / Precautionary landing / Engine shutdown / Other				

#### **Weather Condition**

Wind speed:	Visibility:	Precipitation:	QNH:	QFE:	TEMP. (ºC):
Rain: Drizzle/Light/M	Icing : Nil/ Light /Mod	erate/Server	Cloud (type, a	imount & base):	

#### Other information relevant to the event

Flight rules: VFR /IFR	Flight Condition : VMC/IMC	Light Condition : Day/Night/ Twilight

#### ELT information- (as applicable)

ELT manufacturer and model :	Fixed / Portable	Manual activation/ Automatic
Did not activate (why?):	ELT Location : cockp	it / cabin / rear/ tail / other

#### Phase of flight

Parked	pushback	Taxing out	Lined up	Take off roll
Holding (specify)	Lift off	Climb	Cruise	Descent
Approach	Circuit	Touch down	Taxi in	Land Roll

Airspace designation:Rwy state : Dry / Wet / Ice / Snow / SlushCAT : I/II/III	
---	--

#### Type of operation

Description of dangerous goods:

Passenger	Freight	Ferry	Test	Training	Business	Other (specify):	ETOPS: Y/N

Wildlife strike : bird /animal	NBR of Birds:	Size : small/medium/large	Species:

Description of Accident/Incident (All relevant documentation should be forwarded to CAASL. Attach additional paper if required)

Include your suggestions as to how this type of occurrence could be prevented. (Attach additional paper if required)

Signature:

Date:

#### Appendix – 3 Other Occurrence Report Forms

#### 2. Notice of death in an aircraft registered in Sri Lanka Form – CAASL/AU/004

16L
C Aler areator consetly

Civil Aviation Authority of Sri Lanka Notice of death in an aircraft registered in Sri Lanka

CAASL/AU/004

Please use this form as the guideline to fill the data for the occurrence using E4f file in ECCAIRS reporting system and shall email the E4f file to: <u>paaai@caa.lk</u>. Additional information which is required, not categorized under the given fields shall be included in the narrative or note.

If report is CONFIDENTIAL – clearly at the top & provide contact address/tel. no. your wish will be respected.

Flt. Number:	Туре:	Registration:	Sector:

Information on Deceased Passenger:

Date of Death:	
Place of Death:	
Profession or Occupation(Actual position if known, Otherwise approximate positio	n, eg. "40 miles west of "
Country name")	
Full name:(Surnar	me in BLOCK LETTERS)
Sex:	
Age & Date of Birth:	
Passport Number of Dead Person:	
Nationality:	
Usual Residence at Time of Death:	(Full
Postal Address)	
Rank or Title (if any):	
(In the case of a married woman or a widow, the words 'wife of' or 'widow of' sha the name, profession or occupation, rank and title, and nationality of the hu- unmarried woman, there shall be inserted the word 'spinster', followed by her pr any), rank or title (if any). In the case of children under the age of 16 years, the w of' shall be followed by the name, profession, etc of the father.)	all be entered, followed by sband. In the case of an rofession or occupation (if yords 'son of' or 'daughter
Cause of Death:	
Name, Description and home Address of informant:	
Relationship (if any) to deceased:	
Signature of informant:	
Date:	
Designation of Person completing return:	Date
Signature:	

## 3. Birth Occurring in an aircraft registered in Sri Lanka CAASL/AU/005

Civil Aviat	ion Authority of Sri	Lanka	CAASL/AU/005
Birth Occurrin			
Please use this form as the	guideline to fill the	data for the occurrence using	E4f file in ECCAIRS reporting
system and shall email th	ne E4f file to: <u>paaa</u>	<u>ai@caa.lk</u> . Additional informa	tion which is required, not
categorized under the given	fields shall be includ	ed in the narrative or note.	
If report is CONFIDENTIAL	- clearly at the to	p & provide contact address	/tel. no. your wish will be
respected.			
Elt Number:	Type:	Registration:	Sector:
	Type.	Registration.	
Passenger Information			
Date of Birth:			
(Day & month in words, yea	r in figures)		
Place of Birth:			
(Approximate position, eg. "	40 miles west of " Co	ountry name" )	
Time of Birth:			
Sex of child:			
Full Name of Farther:			
		(Surname in BLOCK LETTE	ERS)
Nationality & Passport Num	ber:		
Usual Residence Address:			
Full Name of Mother:		(Surnama in DLOCK   FTTFF	
Maidan Surnama:			
Nationality & Passnort Num	her <sup>.</sup>		(5)
Usual Residence Address:			
Date and Place of marriage	of parents:		
Profession or Occupation of	Father; and rank or t	title (if any):	
Name, description and hom	e address of informa	int:	
Signature of informant:			
Date:			
Designation of Person com	pleting return:		Date
Signature:			

# 4. Person missing and believed to have died in consequence of an accident to an aircraft registered in Sri Lanka CAASL/AU/006

	Civil Aviation Authority of Sri Lanka	CAASL/AU/006
	Person missing and believed to have died in consequence of an	
< THE REAL SHORT	accident to an aircraft registered in Sri Lanka	

Please use this form as the guideline to fill the data for the occurrence using E4f file in ECCAIRS reporting system and shall email the E4f file to: <a href="mailto:paaai@caa.lk">paaai@caa.lk</a>. Additional information which is required, not categorized under the given fields shall be included in the narrative or note.

If report is CONFIDENTIAL – clearly at the top & provide contact address/tel. no. your wish will be respected.

#### **Flight information**

Flt. Number:	Туре:	Registration:	Sector:			
Date of Accident:	Place of Accident:					
Passenger Information						
Name & surname of missing p	erson:					
Usual Residence Address of m	issing person:					
Sex:						
Age:						
Profession or Occupation, ran	k or title:					
Nationality:						
(Women and children: In the	case of a married wo	man or a widow, the words 'w	vife of ' or 'widow of'	' shall		
be entered, followed by the	e name, profession	or occupation, rank and titl	e, and nationality o	of the		
husband.						
In the case of an unmarried w	oman, there shall be	inserted the word 'spinster', for	ollowed by her			
Profession or occupation (if a	ny), rank or title (if an	y), and her nationality.				
In the case of children under	the age of 15 years,	the words 'son of' or 'daught	er of' shall be follow	ed by		
the name, profession, etc of t	he father.)					
Grounds for Presumption of d	leath:					
Name, description and home	Name, description and home address of informant:					
Signature of informant: Date:						
Designation of Person comp	leting return:		Date:			
Signature:						

# Attachment No: CA-IS-2011-GEN-004-Att-01 CHAPTER 6 - THE VOLUNTARY AVIATION OCCURRENCE REPORTING SYSTEM

#### 6.1 General

The Voluntary Aviation Occurrence Reporting System is a voluntary, non-punitive, reporting system established by the Civil Aviation Authority of Sri Lanka (CAASL), in line with the standards of Annex 13 to the Chicago Convention. This System provides a channel for reporting of aviation incidents and safety deficiencies while protecting the reporter's identity.

The Voluntary Aviation Occurrence Reporting System does not obviate the need for mandatory reporting of aircraft accidents and incidents to the CAASL.

Mandatory reporting of accidents and incidents will often result in investigations and safety recommendations. However, many incidents that have potential in helping to enhance aviation safety go unreported. As a consequence, many opportunities to learn from the incidents and thereby to prevent incidents and accident are lost.

The principal aim of the Voluntary Aviation Occurrence Reporting system is to enhance aviation safety through the collection of feedback on incidents that would otherwise not be reported through other channels or that may appear minor, but which nevertheless can allow others to learn from the reporter's experience and even lead to changes in procedures, practices or design. The Voluntary Aviation Occurrence Reporting System focuses on systems, human factors, procedures and equipment, rather than on individuals.

#### 6.2 Scope of the Voluntary Aviation Occurrence Reporting System

System covers, but not limited to the following areas;

- 1. Flight Operations
- Departure/en-route/approach/landing
- Aircraft cabin operations
- Air proximity events
- Weight and balance and performance
- 2. Ground Operations
- Aircraft Ground operations
- Operations in the movement area of the airport
- Fueling operations
- Airport conditions or services
- Cargo handling
- 3. Air Traffic Management
- ATC Operations
- ATC equipment and navigation aids
- Pilot and ATC communications
- 4. Maintenance
- Aircraft maintenance
- Record keeping

- 5. Miscellaneous
- Safety related passenger handling operations

Flight and cabin crew members, air traffic controllers, licensed aircraft engineers, employees of maintenance, design and manufacturing organizations, airport operators, airport employees individuals involved in general aviation and general public all can contribute to safety enhancement through the Voluntary Aviation Occurrence Reporting System by reporting on actual or potential hazards and deficiencies in aviation operations.

#### 6.3 Reporting method

Voluntary Aviation Occurrence Report can be completed using the CAASL Occurrence report forms or specific form which is prepared for Voluntary Occurrence Reporting provided in the CAASL web site or available for collection on request from CAASL. The completed forms can be sent to the Director General of Civil Aviation, at the following address by denoting "CONFIDENTIAL" at the top left hand of the inner envelop.

Director General of Civil Aviation

Civil Aviation Authority of Sri Lanka

No: 04, Hunupitiya Road

Colombo 02.

www.caa.lk

Anonymous reports will not be accepted and reporters contact details are essential. The Authority will not disclose the name of the person submitting the report or of a person to whom it relates unless required to do so by law or unless, the person concerned authorizes such disclosure.

Without complete information, the range of safety enhancement follow-up actions could be limited and as such CAASL requires amplifying or clarifying the information from reporter when necessary. Reporters contact details will also allow the CAASL to advise the reporter of the action taken or outcome arising from the report, before the report is returned to the reporter. Reporter's identity will be protected by the system.

#### 6.4 What should not be reported;

- Criminal activities
- Incidents or events with no aviation safety content
- Personnel problems, personality conflicts and industrial relations issues
- Legal/commercial disputes

#### 6.5 When to report

- When the reporter wishes others to learn and benefit from the incident but is concerned about protecting the reporter's identity.
- When there is no other appropriate reporting procedure or channel. (especially for members of the general public)
- When reporter has tried other reporting procedure or channel without the issue having been addressed.

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#### 6.6 Processing of reports

The CAASL will pay particular attention to the need to protect the identity of the reporter in its processing of Voluntary Aviation Occurrence Reports.

Reports will be read and validated by CAASL. The CAASL may contact the reporter to make sure that the nature and circumstances of the incident reported is clearly understood or to obtain the necessary additional information or clarification.

When the CAASL is satisfied that the information obtained is complete and coherent, the information will be deidentified and will be entered into the database. Excessive details that could point to the source will also be avoided.

If during the course of addressing the concerns raised in the report, it becomes necessary to seek the input of a third party, only the de-identified data will be used in the discussion. Once a report has been processed (i.e. clarification obtained from the reporter; information validated and de-identified and captured in the database), the report will be returned to the reporter and no copy of the report will be created or retained. After the return of the report, there will have no more reference to the reporter.

CAASL aims to return the Voluntary Aviation Occurrence Report to the reporter as soon as possible. The time needed to process the report depends on the complexity of the case and whether the CAASL needs to discuss the case with the reporter or consult a third party (using de-identified data).

#### 6.7 Feedback to the aviation community

Relevant de-identified reports and extracts will be shared with the aviation community. So that all can learn from the experiences and the relevant authorities and parties can review policy and plan for improvements.

However, if the content of a Voluntary Aviation Occurrence Report suggest a situation or condition that poses an immediate or urgent danger to aviation safety, the report will be handled with priority and referred, after deidentification, to the relevant organizations as soon as possible to enable them to take the necessary safety precautions.

A feedback on such safety improvements will be gathered from the relevant organizations and kept in record.

## 1. Aviation Occurrence - Voluntary Report Form

	Civil Aviation Auth	nority	of Sri Lar	nka			CAA/AU/007
Aviation Occurrence - Voluntary Reporting Form							
This form is not for reporting of accident, serious incidents or criminal activities. This could be used to report hazards, or safety deficiencies. Mark clearly at the top "Confidential" & provide contact address/tel. no. The completed form shall send to DGCA, Civil Aviation Authority of Sri Lanka, No.4, Hunupitiya Road, Colombo 02.							
Date of Occurrence:			Location of Occurrence:				
Area relevant to hazard c	or occurrence (Tick off)						
Flight Operations			Cargo Services				
Airport Services			Human Resources				
Engineering			Security & Investigations				
In-flight Services			Others (Specify)				
If hazard or occurrence inv	volves aircraft state						
Aircraft Type:	Aircraft Registration:		Aircraft Operator:			F	light No:
Phase of flight           Standing         Take-off         En-route         Manoeuvring         Approach							
Altituda			Wind			Claur	4
Aititude	VISIDIIILY	visibility		wind		Cioud	
Please fully describe the occurrence (include your suggestions to prevent similar occurrences)							
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Reporters Name:			Occupation/Designation:				
Address:							
Contact No:			Signatu	re:			
<u>L</u>			I				