KINGDOM OF BAHRAIN Ministry of Transportation and Telecommunications





ANTR PART VI AIRCRAFT ACCIDENT & INCIDENT INVESTIGATION

FOREWORD

CONTENTS

This Page Intentionally Left Blank

Bahrain CAA Publication Revisions Highlight Sheet

⊠ ANTR: Part VI

□ CAP:____ □ TPM:____

The following pages of ANTR PART VI (Aircraft Accident & Incident Investigation) has been revised to comply with Annex 13 Amendment 17.

ltem	Pages/Paragraph Number	Reason
1	Pg. 1-2	Amendment to the definition for "accredited representative" to comply with Annex 13.
2	Pgs. 4-2 to 4-4	Alignment of provisions on notification and dissemination of final reports, to comply with Annex 13. Amendment of the phrase 'serious incidents' to 'incidents', to align with Annex 13.
3	Pgs. 5-1 to 5-3	Timely Investigation of accidents and serious incident, to comply with Annex 13. Amendment of responsibilities for instituting and conducting the investigation including delegation of investigations, to comply with Annex 13. Paragraph 5.2.1 (d): amended to further specify all available evidential material.
4	Pgs. 5-11 to 5-13	Amendment of rights and entitlement of an expert. Amendment of paragraph header to align with Annex 13.
5	Pg. 6-2 to 6-3	Timely release and dissemination of the final report, to comply with Annex 13. Paragraph 6.4: Consultation of draft Safety Recommendations.
6	App. C-1	Amendment of list of list of examples of serious incident, to align with Annex 13.
7	App. D-1	Introduction to a new Appendix for delegation of investigations.

02 February 2020

FOREWORD

- 1 The Kingdom of Bahrain Civil Aviation Affairs, known in these regulations as the "BCAA" has implemented ANTR Part VI – Aircraft Accident and Incident Investigation Regulations based on Annex 13 to the Convention on International Civil Aviation and Ministerial Decree No. 13/2017 on Aircraft Accident Investigation.
- 2 Future development of the requirements of ANTR Part VI will be in accordance with Notice of Proposed Amendment (NPA) procedures. These procedures allow for the amendment of ANTR Part VI to be harmonized with amendments to ICAO Annexes in a timely manner
- 3 Definitions and abbreviations of terms used in ANTR Part VI that are considered generally applicable are contained in ANTR Part 1- Definitions. However, specific definitions and abbreviations of terms are also contained in Chapter 1 of this Part.
- 4 The editing practices used in this document are as follows:
 - (a) 'Shall' is used to indicate a mandatory requirement and may appear in ANTRs.
 - (b) 'Should' is used to indicate a recommendation.
 - (c) 'May' is used to indicate discretion by the Authority, the industry or the applicant, as appropriate.
 - (d) 'Will' indicates a mandatory requirement and is used to advise of action incumbent on the Authority.

NOTE: The use of the male gender implies the female gender and vice versa.

- 5 New, amended and corrected text will be indicated with a side bar beside paragraphs, until a subsequent "amendment" is issued.
- 6 This 3rd Edition Revision 4 to ANTR Part VI is dated 02 February, 2020.
 - 7 Please refer to the Volume 1 List of Effective Pages and Revision Page for current status.

This Page Intentionally Left Blank

CONTENTS

CHAPTER 1 - DEFINITIONS

CHAPTER 2 - AUTHORITY FOR INVESTIGATION

2.1	Applicability	2-1
2.1.1	General	
2.1.2	Leased and Chartered Aircraft	
2.1.3	BCAA Authority	
2.1.4	The Accident Investigation Unit	

CHAPTER 3 - GENERAL

3.1	Objective of the Investigation	3-1
3.2	Conduct of the Investigation	
3.3	Protection of Evidence, Custody and Removal of Aircraft	
3.3.1	Responsibility of the Kingdom of Bahrain as the State of Occurrence	3-1
3.3.2	Protection of Evidence	3-2
3.3.3	Requests from State of Registry/Operator/Design or Manufacturer	3-2
3.3.4	Release from Custody	3-2
3.3.5	Retained Evidence	3-3
3.3.6	Disposal of Aircraft Wreckage or Parts	3-3

CHAPTER 4 - NOTIFICATION

4.1	Applicability	4-1
4.2	Initial Notification	
4.2.1	Accident and Serious Incidents	4-1
4.2.2	Reportable Incidents	4-1
4.2.3	Where to File Incident Reports	4-1
4.3	Accidents or Serious Incidents in the Kingdom of Bahrain to Aircraft	
	of Another Contracting State	4-1
4.3.1	Responsibility of Bahrain as the Sate of Occurrence	4-1
4.3.2	Responsibility of Bahrain as either the State of Registry or the	
	State of Operator	4-3
4.4	Accidents or Serious Incidents in the Territory of the State of Registry,	
	in a Non-Contracting State or Outside the Territory of any State	4-4
4.4.1	Responsibility of the Kingdom of Bahrain as the State of Registry	
4.4.2	Responsibility of the Kingdom of Bahrain as the State of Operator	4-4

CHAPTER 5 - INVESTIGATION

5.1	Responsibility for Instituting and Conducting the Investigation	5-1
5.1.1	General	5-1
5.1.2	Within the Territory of the Kingdom of Bahrain	5-1
5.1.3	In the Territory of a Non Contracting State	5-2
5.1.4	Outside the Territory of any State	5-2
5.2	Organization and Conduct of the Investigation	5-2
5.2.1	General	5-2
5.3	Investigation Unit	5-3
5.3.1	General	5-3

5.3.2	Composition	5-3
5.3.3	Responsibilities	
5.3.4	Rights	5-4
5.4	Investigator-in-charge	5-4
5.4.1	Designation	5-4
5.4.2	Powers of Investigator-in-charge	5-4
5.4.3	Access and control	5-5
5.5	Investigators	5-5
5.5.1	Designation	5-5
5.5.2	Responsibilities of the Investigator	5-5
5.5.3	Powers of Investigators	5-5
5.5.4	Seconded Investigators	5-6
5.6	Furnishing of Information	5-6
5.6.1	General	5-6
5.6.2	Serving of Notices or Documents	5-6
5.6.3	Obstruction of Investigations	
5.7	Form and Conduct of Investigations	5-7
5.7.1	Form of Investigation	5-7
5.7.2	Discontinuation of Investigation	5-7
5.7.3	Re-Opening of Investigation	5-7
5.7.4	Flight Recorders	5-8
5.7.5	Autopsy Examinations	5-8
5.7.6	Medical Examinations	5-8
5.7.7	Co-ordination – Judicial Authorities	5-8
5.7.8	Informing Aviation Security or Judicial Authorities	5-8
5.8	Protection of Accident and Incident Investigation Records	5-9
5.8.1	General	5-9
5.9	Responsibility of the Kingdom of Bahrain when not the State of Occurrence	5-10
5.9.1	Provision of Information by the BCAA – Accidents and Incidents	5-10
5.10	Responsibility of the Kingdom fo Bahrain as either the Sate of Registry	
	or State of Operator	5-10
5.10.1	Flight Recorders – Accidents and Serious Incidents	5-10
5.10.2	Organizational Information	5-10
5.11	Participation in the Investigation	5-11
5.11.1	Rights of Other States	5-11
5.11.2	Obligations of the Kingdom of Bahrain as either the State of Registry	
	or the Stae of Operator	5-11
5.12	Entitlement of Accredited Representatives	5-11
5.12.1	Advisors	5-11
5.12.2	Participation	5-12
5.12.3	Obligations	5-12
5.13	Participation of States having suffered Fatalities or Serious Injuries to their	
	Citizens	5-13
5.13.1	Rights and Entitlements	5-13

CHAPTER 6 - FINAL REPORT

6.1	Responsibility of the Kingdom of Bahrain	6-1
6.2	Responsibility of the State conducting the Investigation	
6.2.1	Consultation	
6.3	Final Report	6-2
6.3.1	Recipients	
6.3.2	Release of Final Report	6-2
6.3.3	Format of the Final Report	

6.4	Safety Recommendations	.6-	3
6.5	Action on Safety Recommendations	6-	3

CHAPTER 7 - ADREP REPORTING

7.1	Preliminary Report	7-1
7.1.1	Accidents to Aircraft Over 2250 Kg	
7.1.2	Accidents to Aircraft of 2250 Kg or Less	
7.1.3	Language	7-1
7.1.4	Dispatch	7-1
7.2	Accident/Incident Data Report	
7.2.1	Accidents to Aircraft Over 2250 Kg	7-2
7.2.2	Incidents Involving Aircraft Over 5700 Kg	
7.2.3	Additional Information	

CHAPTER 8 - ACCIDENT PREVENTION MEASURES

8.1	Incident Reporting Systems	
8.1.1	Mandatory System	
8.1.2	Voluntary System	
8.1.3	Database System	
8.2	Analysis – Preventative Actions	
8.3	Exchange of Safety Information	
APPEN	DIX A - PROTECTION OF ACCIDENT AND INCIDENT INVESTIGATION RECORDS	APP A - 1
APPEN	DIX B - GUIDANCE FOR THE DETERMINATION OF AIRCRAFT DAMAGE	APP B - 1
APPENI	DIX C - LIST OF EXAMPLES OF SERIOUS INCIDENTS	APP C - 1
APPEN	DIX D - INVESTIGATION DELEGATION AGREEMENTS	APP D - 1

This Page Intentionally Left Blank

CHAPTER 1

DEFINITIONS

1.1 DEFINITIONS

As used in these regulations, the following words or phrases are defined as follows:

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 and the time 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 as 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:
 - (1) being in the aircraft, or
 - (2) direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
 - (3) direct exposure to jet blast,

except when the injuries are from natural causes, selfinflicted 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:
 - (1) adversely affects the structural strength, performance or flight characteristics of the aircraft, and
 - (2) 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); or

- (c) the aircraft is missing or is completely inaccessible.
- Note 1: For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

	Note 2: An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.
	Note 3: Guidance for the determination of aircraft damage can be found in Appendix B to these regulations.
	Note 3: In the case of investigation of an unmanned aircraft system, only aircraft with a design and/or operational approval are to be considered.
Accident investigation authority	The Accident Investigation Unit is the authority designated by the Minister as responsible for aircraft accident and serious investigations within the context of these regulations.
Accredited Representative	A person designated by a State, on the basis of his or her qualifications, for the purpose of participating in an investigation conducted by another State. The accredited representative would normally be from the state's accident investigation authority.
Advisor	A person appointed by a State, on the basis of his or her qualifications, for the purpose of assisting its accredited representative in an investigation.
Aircraft	Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.
Authorized Person	A person authorized by the CAA or Accident Investigation Unit, either generally or specifically, to have access to any aircraft involved in an accident or incident.
Causes	Actions, omissions, events, conditions, or a combination thereof, which led to the accident or incident. The identification of causes does not imply the assignment of fault or the determination of administrative, civil or criminal liability.
	administrative, ervir of erminiar hability.
Civil Aircraft	means any aircraft registered in an ICAO Contracting State.
Civil Aircraft Contributing factors	
	means any aircraft registered in an ICAO Contracting State. Actions, omissions, events, conditions, or a combination thereof, which, if eliminated, avoided or absent, would have reduced the probability of the accident or incident occurring, or mitigated the severity of the consequences of the accident or incident. The identification of contributing factors does not imply the assignment of fault or the determination of administrative, civil or criminal
Contributing factors	means any aircraft registered in an ICAO Contracting State. Actions, omissions, events, conditions, or a combination thereof, which, if eliminated, avoided or absent, would have reduced the probability of the accident or incident occurring, or mitigated the severity of the consequences of the accident or incident. The identification of contributing factors does not imply the assignment of fault or the determination of administrative, civil or criminal liability. means any injury, which results in death within 30 days of the

- Incident means an occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.
- Interested Party Any person, government authority/department, institution, organization, aviation society, air operator, aircraft owner, property owner, ministry or any other body the Accident Investigation Unit finds appropriate to have their limited participation in the investigation or receive comments on the Accident Investigation Unit's draft reports.
- **Investigation** A process conducted for the purpose of accident and incident prevention, which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes, and/or contributing factors and, when appropriate, the making of safety recommendations.
- **Investigator-in-charge** A person charged, on the basis of his or her qualifications, with the responsibility for the organization, conduct and control of an investigation. This person shall be designated by the Minister to direct the investigative activity of the Investigation Unit and over whose signature any required report is issued.

Maximum mass means maximum certified take-off mass

- **Operator** means a person, organization or enterprise engaged in or offering to engage in aircraft operation.
- **Preliminary Report** The communication used for the prompt dissemination of data obtained during the early stages of the investigation.
- **Safety Recommendation** A proposal of an accident investigation authority based on information derived from an investigation, made with the intention of preventing accidents or incidents and which, in no case, has the purpose of creating a presumption of blame or liability for an accident or incident. In addition to safety recommendations arising from accident and incident investigations, safety recommendations may result from diverse sources, including safety studies.
- **Serious incident** An Incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which, in case of 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 a place between the time the aircraft is ready to move with the purpose of flight until the such time as it comes to rest at the end of the flight and the primary propulsion system is shutdown.

Note: Refer to Appendix B for examples of incidents that are likely to be serious incidents. The list is not exhaustive and only serves as guidance to the definition of serious incident.

Serious Injury	means which:	any injury, which is sustained by a person in an accident and
	(a)	requires hospitalisation for more than 48 hours, commencing within 7 days from the date the injury was received; or
	(b)	results in a fracture of any bone (except simple fractures of fingers, toes, or nose; or
	(c)	involve lacerations, which cause severe haemorrhage, nerve muscle, or tendon damage; or
	(d)	involves injury to any internal organ; or
	(e)	involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
	(f)	involves verified exposure to infectious substances or injurious radiation.
State of Design	The State having jurisdiction over the organization responsible for the type design.	
State of Manufacture		ate having jurisdiction over the organization responsible for al assembly of the aircraft.
State of Occurrence	The St	ate in the territory of which an accident or incident occurs.
State of the Operator	The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.	
State of Registry	The State on whose register the aircraft is entered.	
State Safety Programme (SSP)	An integrated set of regulations and activities aimed at improving safety.	
Substantial Damage	means damage or failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. For the purposes of this Chapter, the following conditions are not considered "substantial damage":	
	(a)	for multi-engine aircraft: engine failure or damage limited to an engine if only one engine fails or is damaged,
	(b)	bent fairings or cowling, dented skin, small punctured holes in the skin or fabric,
	(c)	ground damage to rotor or propeller blades,
	(d)	and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips.

This Page Intentionally Left Blank

CHAPTER 2

AUTHORITY FOR INVESTIGATION

2.1 APPLICABILITY

2.1.1 General

- 2.1.1.1 Unless otherwise stated, these Regulations apply to activities following accidents and incidents involving civil aircraft wherever they occurred and apply:
 - (a) to occurrences arising out of or in the course of air navigation, which occur to civil aircraft in or over the Kingdom of Bahrain; or
 - (b) to such occurrences, which occur elsewhere to civil aircraft registered in Bahrain.

2.1.2 Leased and Chartered Aircraft

In these regulations, the specifications concerning the State of the Operator apply only when an aircraft is leased, chartered or interchanged and when that State is not the State of Registry and if it discharges, in respect of these regulations, in part or in whole, the functions and obligations of the State of Registry.

2.1.3 BCAA Authority

The BCAA is vested by the Minister of Transportation and Telecommunications of the Kingdom of Bahrain (hereinafter referred to as the "Minister") as the Competent Authority for the development and promulgation of regulations pertaining to aircraft accident investigation.

2.1.4 The Accident Investigation Unit

- (a) The Accident Investigation Unit, under Ministerial Decree No. 13/2017, is the authority responsible for the conduct of aircraft accident investigation.
- (b) The Accident Investigation Unit shall be independent from State aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation.
- Note 1: Where an Accident Investigation Unit has been established to conduct an aircraft accident investigation, the Unit assumes specific "State" responsibilities in respect to the investigation and the completion of the Final Report.
- *Note 2:* The division of responsibility between the Accident Investigation Unit and BCAA is indicated throughout these regulations.

This Page Intentionally Left Blank

CHAPTER 3

GENERAL

3.1 OBJECTIVE OF THE INVESTIGATION

The sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability.

3.2 CONDUCT OF THE INVESTIGATION

The purpose and form of an investigation is determined by the nature of the accident or incident concerned.

- (a) The Accident Investigation Unit shall investigate those accidents and serious incidents normally involving air transport operations. An investigation with this objective is referred to as an 'accident investigation'.
- (b) In addition to compliance with these regulations, the Accident Investigation Unit, when conducting an investigation as the investigating authority, shall comply with the provisions of ICAO Annex 13.
- (c) The BCAA shall investigate incidents for the purpose of identifying safety learnings that may benefit the Bahrain Civil Aviation system. An investigation with this objective is referred to as a 'safety occurrence investigation'.
- (d) A safety occurrence investigation is not an 'accident investigation'. An accident investigation is solely focused on establishing the predominant (root) cause of the accident.
- (e) While a safety investigation may also try and identify the cause of the incident, its fundamental purpose is to understand the circumstances of the incident and to identify any factors that may have contributed to an occurrence, or other safety or system issues.
- (f) The BCAA, when conducting an incident occurrence investigation as the investigating authority, shall comply with the provisions of ANTR Volume III, Part 19 and ICAO Annex 19 Safety Management Systems (SMS).
- (g) However, the incident occurrence investigation report should use the standard format and language of ICAO Annex 13.

3.3 PROTECTION OF EVIDENCE, CUSTODY AND REMOVAL OF AIRCRAFT

3.3.1 Responsibility of the Kingdom of Bahrain as the State of Occurrence

Bahrain, as the State of Occurrence, shall take all reasonable measures to protect the evidence and to maintain safe custody of the aircraft and its contents for such a period as may be necessary for the purposes of an investigation. Protection of evidence shall include the preservation, by photographic or other means of any evidence, which might be removed, effaced, lost or destroyed. Safe custody shall include protection against further damage, access by unauthorized persons, pilfering and deterioration.

Note: The protection of flight recorder's evidence requires that the recovery and handling of the recorder and its recordings be assigned only to qualified personnel.

3.3.2 Protection of Evidence

- (a) When a reportable accident occurs in or over Bahrain, no person other than an authorized person, shall have access to the aircraft involved in the accident and neither the aircraft nor its contents shall, except under the authority of the Accident Investigation Unit, be removed or otherwise interfered with.
- (b) The aircraft may be removed or interfered with so far as may be necessary for the purpose of extricating persons or animals, removing any mails, valuables and dangerous goods carried by the aircraft, preventing destruction by fire or other cause, or preventing any danger or obstruction to the public or to air navigation or to other transport or, under the supervision of an Investigator or of the Police, for the purpose of removing any other property from the aircraft;
- (c) Should the aircraft be wrecked on water, the aircraft or any of its contents may be removed to such extent as may be necessary for bringing it or them to a place of safety.
- (d) The operator of an aircraft involved in an accident or incident for which notification must be given is responsible for preserving to the extent possible any aircraft wreckage and cargo aboard the aircraft and all records, including all recording mediums of flight, maintenance, and voice recorders pertaining to the operation and maintenance of the aircraft and to the airmen, until the Accident Investigation Unit takes custody thereof and a release is granted.
- (e) Where it is necessary to move aircraft wreckage or cargo, sketches, descriptive notes, and photographs shall be made by the accident investigator, or if none available by the on-site authority, if possible, of the original position and condition of the wreckage and any significant impact marks.
- (f) The operator of an aircraft involved in an accident or incident shall retain all records, reports, internal documents, and memoranda dealing with the accident or incident, until authorized by the Accident Investigation Unit to the contrary.

3.3.3 Requests from State of Registry/Operator/Design or Manufacturer

If a request is received from the State of Registry, the State of the Operator, the State of Design or the State of Manufacturer that the aircraft, its contents, any other evidence remain undisturbed pending inspection by an accredited representative of the requesting State, Bahrain as the State of Occurrence, shall take all necessary steps to comply with such request, so far as this is reasonably practicable and compatible with the proper conduct of the investigation; provided that the aircraft may be moved to the extent necessary to extricate persons, animals, mails and valuables, to prevent destruction by fire or other causes, or to eliminate any danger or obstruction to air navigation, to other transport or to the public, and provided that it does not result in undue delay in returning the aircraft to service where this is practicable.

3.3.4 Release from Custody

(a) Subject to the provisions of paragraphs 3.3.2 and 3.3.3 above, Bahrain, as the State of Occurrence, shall release custody of the aircraft, its contents or any parts thereof as soon as they are no longer required by the Accident Investigation Unit in the investigation, to any person or persons duly designated by the State of Registry or the State of the Operator, as applicable. For this purpose Bahrain shall facilitate access to the aircraft, its contents, or any parts thereof, provided that, if the aircraft, its contents or any parts thereof, lie in an area within which Bahrain finds it impracticable to grant such access, it shall itself effect removal to a point where access can be given.

(c) The Accident Investigation Unit and/or BCAA shall liaise with appropriate authorities prior to release from custody of an aircraft or wreckage.

3.3.5 Retained Evidence

After the investigation is complete, the Accident Investigation Unit and/or the BCAA shall have the right to retain any evidence it considers of importance.

3.3.6 Disposal of Aircraft Wreckage or Parts

The Pilot or Operator shall be responsible for the prompt disposal of aircraft, disabled or wrecked or parts of such aircraft, as directed by the BCAA/Unit. In the event of his failure to comply with such directives, the disabled or wrecked aircraft and/or parts may be removed by BCAA personnel. Removal by BCAA personnel will be without liability for damage which may result in the course of such removal and the cost of removal will be for the account of the operator.

CHAPTER 4

NOTIFICATION

4.1 APPLICABILITY

This Chapter contains rules pertaining to notification and reporting aircraft accidents and serious incidents in the operation of aircraft when they involve Bahraini registered aircraft wherever they occur, or foreign civil aircraft when such events occur in the Kingdom of Bahrain, its territories or possessions.

4.2 INITIAL NOTIFICATION

4.2.1 Accidents and Serious Incidents

- (a) When a reportable accident or serious incident occurs, the pilot-in-command of the aircraft involved at the time of the accident, or if he/she be killed or incapacitated, then the operator of the aircraft and, in the case of an accident occurring on or adjacent to a Bahraini airport, the Bahrain Airport Company (BAC), shall give immediate notice to the BCAA by the quickest means of communication available. In case of a reportable accident occurring in or over Bahrain, the local police authorities shall also be notified with details, if practicable, of the place where the accident occurred.
- (b) Any person who has knowledge of the occurrence of accident or serious incident shall immediately notify the BCAA.

4.2.2 Reportable Incidents

When a reportable incident occurs, the pilot in command, operator or the Bahrain Airport Company (BAC), as applicable, shall give notice to the BCAA within 72 hours.

4.2.3 Where to File Incident Reports

The operator of an aircraft shall file any report required by this regulation via:

- (a) the BCAA Q-Pulse reporting System (access is required from the BCAA): or
- (b) the website, http://qpulse.mtt.gov.bh/reporting; or
- (c) Email, Aerolicensing@mtt.gov.bh.

4.3 ACCIDENTS OR SERIOUS INCIDENTS IN THE KINGDOM OF BAHRAIN TO AIRCRAFT OF ANOTHER CONTRACTING STATE

4.3.1 Responsibility of Bahrain as the State of Occurrence

(a) Applicability

This paragraph applies to the responsibility of the Kingdom of Bahrain as the State of Occurrence for the notification of an accident or serious incident to aircraft of another Contracting State.

(b) Forwarding

- (1) Bahrain, if the State of Occurrence, shall forward a notification of an accident, a serious incident, or an incident to be investigated within the context of this Part, with a minimum of delay and by the most suitable and quickest means available to;
 - (i) the State of Registry;
 - (ii) the State of the Operator;
 - (iii) the State of Design;
 - (iv) the State of Manufacturer; and
 - (v) the International Civil Aviation Organization, when the aircraft involved is of a maximum mass of over 2250 kg or is a turbojet powered airplane.
- (2) However, when Bahrain, as the State of Occurrence, is not aware of a serious incident, or an incident to be investigated, the State of Registry or the State of the Operator, as appropriate, shall forward a notification of such an incident to the State of Design, the State of Manufacture and the State of Occurrence.
- *Note:* Telephone, facsimile, e-mail or the Aeronautical Fixed Telecommunication Network (*AFTN*) will in most cases constitute "the most suitable and quickest means available". More than one means of communication may be appropriate.

(c) Format and Content

The above notification shall be given in plain language and contain as much of the following information as is readily available, but its dispatch shall not be delayed due to the lack of complete information:

- 1) for accidents the identifying abbreviation ACCID, for serious incidents SINCID, for incidents INCID;
- 2) manufacturer, model, nationality and registration marks, and serial number of the aircraft;
- 3) name of owner, operator and hirer, if any, of the aircraft;
- 4) qualification of the pilot-in-command; nationality of crew and passengers;
- 5) date and time (local time or UTC) of the accident or incident;
- 6) last point of departure and point of intended landing of the aircraft;
- 7) position of the aircraft with reference to some easily defined geographical point and latitude and longitude;
- 8) number of crew and passengers; aboard, killed and seriously injured; others, killed and seriously injured;
- 9) description of the accident or incident and the extent of damage to the aircraft so far as is known;

- 10) an indication to what extent the investigation will be conducted or is proposed to be delegated by the Kingdom of Bahrain to another State.
- 11) Physical characteristics of the accident or incident area; as well as an indication of access difficulties or special requirements to reach the site;
- 12) Identification of the BCAA and means to contact the investigator-in-charge and the Accident Investigation Unit of the State of Occurrence at any time; and
- 13) Presence and description of dangerous goods on board the aircraft.

(d) Language

The notification shall be prepared in the English language.

(e) Additional information

As soon as possible to do so, Bahrain, as the State of Occurrence, shall dispatch the details omitted from the notification as well as other known relevant information.

(f) Notification to Security Authorities

As soon as possible to do so, Bahrain, as the State of Occurrence, shall notify the appropriate security authorities if an act of unlawful interference was involved or suspected.

4.3.2 Responsibility of Bahrain as either the State of Registry or the State of Operator

(a) Applicability

This paragraph applies to the responsibility of the State of Registry, the State of the Operator, the State of Design and the State of Manufacture for an accident or serious incident in another Contracting State.

(b) Forwarding

- (1) Upon receipt of the notification, Bahrain, as either the State of Registry or the State of Operator, shall, as soon as possible, provide the State of Occurrence with any relevant information available to it regarding the aircraft and flight crew involved in the accident or serious incident. Bahrain, as either the State of Registry or the State of Operator shall also inform the State of Occurrence whether it intends to appoint an accredited representative and, if such an accredited representative is appointed, the name and contact details as well as the expected date of arrival if the accredited representative will travel to the State of Occurrence.
- (2) Upon receipt of notification, Bahrain shall, with a minimum of delay and by the most suitable and quickest means available, provide the State of Occurrence with details of dangerous goods on board the aircraft.
- *Note 1:* Bahrain, as either the State of Registry or the State of Operator, has the right to appoint an accredited representative to participate in the investigation.
- *Note 2:* Bahrain, as either the State of Registry or the State of Operator, is obliged to appoint an accredited representative when specifically requested to do so by the State conducting the investigation of an accident to an aircraft over 2 250 kg.

4.4 ACCIDENTS OR INCIDENTS IN THE TERRITORY OF THE STATE OF REGISTRY, IN A NON-CONTRACTING STATE OR OUTSIDE THE TERRITORY OF ANY STATE

4.4.1 Responsibility of the Kingdom of Bahrain as the State of Registry

(a) Forwarding

Bahrain, when as the State of Registry, institutes the investigation of an accident or incident in the territory of the Kingdom of Bahrain, or in a Non-Contracting State or outside the territory of any State, Bahrain, as the State of Registry, shall forward a notification, in accordance with 4.3.1 (c) and (d) above, with a minimum of delay and by the most suitable and quickest means available, to:

- (1) the State of the Operator;
- (2) the State of Design;
- (3) the State of Manufacture; and
- (4) the International Civil Aviation Organization, when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet powered airplane.

4.4.2 Responsibility of the Kingdom of Bahrain as the State of Operator

(a) Applicability

This paragraph applies to the responsibility of Bahrain, as the State of Operator, upon receipt of notification from a State of Registry of an accident or incident in a Non-Contracting State or outside the territory of any State.

(b) Forwarding

- (1) Bahrain, as the State of Operator, shall acknowledge receipt of the notification of an accident or incident.
- (2) Upon receipt of the notification, Bahrain, as the State of Operator, shall, upon request, provide the State of Registry with any relevant information available to them regarding the aircraft and flight crew involved in the accident or incident. Bahrain shall also inform the State of Registry whether it intends to appoint an accredited representative and if such an accredited representative is appointed the name and contact details; as well as the expected date of arrival if the accredited representative will be present at the investigation.
- *Note 1:* Bahrain, as either the State of Registry or the State of Operator, has the right to appoint an accredited representative to participate in the investigation.
- *Note 2:* Bahrain, as either the State of Registry or the State of Operator, is obliged to appoint an accredited representative when specifically requested to do so by the State conducting the investigation of an accident to an aircraft over 2 250 kg.
- (3) Upon receipt of the notification, Bahrain, as the State of Operator shall, with a minimum of delay and by the most suitable and quickest means available, provide the State of Registry with details of dangerous goods on board the aircraft.

This Page Intentionally Left Blank

CHAPTER 5

INVESTIGATION

5.1 **RESPONSIBILITY FOR INSTITUTING AND CONDUCTING THE INVESTIGATION**

5.1.1 General

Bahrain is responsible under ICAO Annex 13 to institute an investigation into the circumstances of the accident or serious incident.

5.1.2 Within the Territory of the Kingdom of Bahrain

- (a) The Minister, shall institute an investigation into the circumstances of the accident. The Accident Investigation Unit shall be responsible for the conduct of the investigation, but may delegate the whole or any part of the conducting of such investigation to another State by mutual arrangement and consent. In any event, the Accident Investigation Unit shall use every means to facilitate the investigation.
- (b) The Minister, shall institute an investigation into the circumstances of a serious incident when the aircraft is of a maximum mass of over 2250 kg. The Accident Investigation Unit shall be responsible for the conduct of the investigation, but may delegate the whole or any part of the conducting of such investigation to another State by mutual arrangement and consent. In any event the Unit shall use every means to facilitate the investigation.
- (c) If the Minister does not institute and conduct an investigation, and does not delegate the investigation to another State or a regional accident and incident investigation organization, as set out in (a) and (b), the State of Registry or, in the following order, the State of the Operator, the State of Design or the State of Manufacture is entitled to request in writing the State of Occurrence to delegate the conducting of such investigation. If the State of Occurrence gives express consent or does not reply to such a request within 30 days, the State making the request should institute and conduct the investigation with such information as is available.
- *Note 1:* The investigation of a serious incident does not exclude other already existing types of investigation of incidents (serious or not) by other organisations.
- Note 2: When the whole investigation is delegated to another State or a regional accident investigation organisation, such a State is expected to be responsible for the conduct of the investigation, including the issuance of the Final Report and the ADREP reporting. When a part of the investigation is delegated, the Accident Investigation Unit should retain the responsibility for the conduct of the investigation.
- Note 3: In the case of serious incidents, the Accident Investigation Unit may consider delegating the investigation to the State of Registry or the State of the Operator, in particular those involving occurrences in which it might be beneficial or more practical for one of these States to conduct the investigation.
- *Note 4: The delegation of an investigation does not absolve the Kingdom of Bahrain as State of Occurrence from its obligation under this part.*
- Note 5: Paragraph 5.1.2 (c) does not necessarily give the State making the request the right to access the accident site, wreckage or any other evidence or information situated within the territory of the Kingdom of Bahrain as the State of Occurrence.

5.1.3 In the Territory of a Non-Contracting State

When the accident or serious incident has occurred in the territory of a non-Contracting State, which does not intend to conduct an investigation in accordance with ICAO Annex 13, Bahrain, as the State of Registry or State of the Operator, should endeavor to institute and conduct an investigation in co-operation with the State of Occurrence but, failing such co-operation, should itself conduct an investigation with such information as is available.

5.1.4 Outside the Territory of any State

- (a) When the location of the accident or the serious incident cannot definitely be established as being in the territory of any State, Bahrain, as the State of Registry, shall institute and conduct an investigation of the accident or serious incident. However, it may delegate the whole or any part of the investigation to another State or a regional accident and incident investigation organisation by mutual arrangement and consent.
- (b) Should Bahrain be the State nearest the scene of an accident in international waters, it shall provide such assistance as it is able and shall, likewise, respond to requests by the State of Registry.
- (c) If the State of Registry is a non-Contracting State which does not intend to conduct an investigation in accordance with Annex 13, Bahrain, as the State of Operator or, failing that, the State of Design or the State of Manufacture shall endeavor to institute and conduct an investigation. However, it may delegate the whole or any part of the investigation to another State by mutual arrangement and consent.
- (d) If the State of Registry does not institute and conduct an investigation, and does not delegate the investigation to another State or a regional accident and incident investigation organization, as set out in 5.3, the kingdom of Bahrain as the State of the Operator or, in the following order, the State of Design, or the State of Manufacture is entitled to request in writing the State of Registry to delegate the conducting of such investigation. If the State of Registry gives express consent or does not reply to such a request within 30 days, the State making the request should institute and conduct the investigation with such information as is available.

Note: Paragraph 5.1.4 (d) does not absolve the State of Registry from its obligation under this part.

5.2 ORGANIZATION AND CONDUCT OF THE INVESTIGATION

5.2.1 General

- (a) The Accident Investigation Unit shall have independence in the conduct of the investigation and have unrestricted authority over its conduct. The investigation shall normally include:
 - (1) the gathering, recording and analysis of all relevant information on that accident or serious incident;
 - (2) the protection of certain accident and serious incident investigation records in accordance with paragraph 5.8.1;
 - (3) if appropriate, the issuance of safety recommendations;
 - (4) if possible, the determination of the causes and/or contributing factors; and

- (5) the completion of the Final Report.
- (b) Where feasible, the scene of the accident shall be visited, the wreckage examined and statements taken from witnesses. The extent of the investigation and the procedure to be followed in carrying out such an investigation shall be determined by the accident investigation authority, depending on the lessons it expects to draw from the investigation for the improvement of safety.
- (c) Any investigation conducted in accordance with the provisions of these regulations shall be separate from any judicial or administrative proceedings to apportion blame or liability.
 - *Note:* Separation can be achieved by the investigation being conducted by State accident investigation authority experts, and any judicial or administrative proceedings being conducted by other appropriate experts. Coordination between the two processes would likely be required at the accident site and in the gathering of factual information, with due consideration to the non-disclosure provisions.
- (d) Documented policies and procedures detailing the Accident Investigation Unit's duties shall be developed. These should include: organisation and planning; investigation; and reporting.
- (d) Any investigation conducted under the provisions of these regulations shall have unrestricted access to all available evidential material without delay and shall not be impeded by administrative or judicial investigations or proceedings.
- (e) Cooperation between the Accident Investigation Unit and judicial authorities should be ensured so that an investigation is not impeded by administrative or judicial investigations or proceedings.
 - Note.1: Cooperation may be achieved by legislation, protocols, agreements or other arrangements, and may cover the following subjects: access to the site of the accident; preservation of and access to evidence; initial and on-going debriefings of the status of each process; exchange of information; appropriate use of safety information; and resolution of conflicts.
 - *Note 2: Nothing in the following provisions is intended to preclude the State conducting the investigation from calling upon the best technical expertise from any source.*

5.3 INVESTIGATION UNIT

5.3.1 General

Pursuant to the provisions of Part VIII of the Civil Aviation Law (Ministerial Decree No. 13 of 2017), aircraft accidents and serious incidents that occur within the territories of the Kingdom of Bahrain and/or to an aircraft registered in the Kingdom of Bahrain, wherever it may be, shall be investigated by the Accident Investigation Unit.

5.3.2 Composition

The Investigation Unit shall be composed of a Chairman, and an adequate number of members, suitably qualified for the purpose.

5.3.3 Responsibilities

The Accident Investigation Unit shall be responsible for;

- (a) Conducting accident/serious incident investigations in a timely, effective and impartial manner;
- (b) Preparation, resolution and official announcement of aviation occurrence investigation reports;
- (c) Making safety recommendations;
- (d) Conducting surveys and research required in aircraft accident/serious incident investigations;
- (e) Designation of research and education agencies related to accident/serious incident investigations;
- (f) Issuing media announcements; and
- (g) Other matters prescribed by the provisions of the Convention on Civil Aviation and Annexes to the said Convention in relation to aviation accident/serious incident investigations.

5.3.4 Rights

- (a) The Accident Investigation Unit shall have immediate and unrestricted access to all relevant evidence without requiring prior consent from judicial bodies or other authorities.
- (b) The Accident Investigation Unit shall have the right to ensure the investigation is kept separate from judicial processes or administrative proceedings brought about by other authorities.
- (c) The Accident Investigation Unit, shall have the right to notify, correspond, make announcements and sign associated documents on behalf of the Kingdom of Bahrain.
- (d) All evidence and correspondence delivered to the BCAA, and associated with the occurrence, shall be handed to the Accident Investigation Unit without delay.

5.4 INVESTIGATOR-IN-CHARGE

5.4.1 Designation

The Minister shall designate the Investigator-in-charge of the investigation in writing and he/she shall initiate the investigation immediately.

5.4.2 Powers of Investigator-In-Charge

(a) The Investigator-in-charge shall determine whether or not an investigation shall be carried out into any accident or serious incident to which these Regulations apply and the form of the investigation he/she may him/herself carry out, or may cause an Investigator(s) to carry out, an investigation of any such accident or serious incident.

- (b) Without any prejudice to the power of an Investigator to seek such advice or assistance as he/she may deem necessary in making an investigation, the Accident Investigation Unit may, at the request of the Investigator-in-charge, appoint additional experts from whatever source, to assist the Investigator in a particular investigation and such person(s) shall for the purpose of so doing have such of the powers of an Investigator under these Regulations, as may be specified in their appointment.
- (c) The Investigator-in-charge shall be the single point of contact for media enquiries and disclosure of information.
- (d) The Investigator-in-charge shall exercise control over the conduct of the investigation in all respects.
- (e) The Investigator-in-charge shall issue delegations of authority to those personnel participating in the investigation.

5.4.3 Access and control

- (a) The Investigator-in-charge shall have unhampered access to the wreckage and all relevant material, including flight recorders and ATS records, and shall have unrestricted control over it to ensure that a detailed examination can be made without delay by authorized personnel participating in the investigation.
- (b) The Investigator-in-charge may at any time publish, or cause to be published, information relating to an accident whether or not such an accident is subject of an investigation or undergoing a reopening of the original investigation.

5.5 INVESTIGATORS

5.5.1 Designation

The Minister, through the Investigator-in-Charge, shall designate the Investigators for the investigation.

5.5.2 **Responsibilities of the Investigator**

The responsibilities of the nominated investigator shall be as follows;

- (a) To conduct an accident/serious incident investigation in an objective, professional and fair manner without any interference of others, and precisely record and maintain the facts gathered and observed in the occurrence site;
- (b) To carry an official credential when conducting the investigation;
- (c) To not divulge or disclose to the public the data or information investigated on, gathered or analyzed;

5.5.3 **Powers of Investigators**

For the purpose of the investigation of any accident or serious incident to which these Regulations apply, or any inquiries undertaken with a view to determining whether any such investigation should be held, an accredited Investigator shall have power:

- (a) by summons, under his authority, to call before him and examine all persons as he/she thinks fit, to require such persons to answer any questions or furnish any information or procure any documents, and articles which the Investigator may consider relevant and to retain any such books, papers, documents and articles until the completion of the investigation, or, as the case may be, it is determined that an investigation shall not be carried out;
- (b) to take statements from all such persons as he/she thinks fit and to require any such person to make and sign a declaration of the truth of the statements made by him;
- (c) to have access to and examine any aircraft involved in any such accident and the place where the accident occurred and to require any such aircraft or any part of equipment thereof to be preserved unaltered pending investigation;
- (d) to examine, remove, test and take measures for the preservation of, or otherwise deal with, the aircraft involved in the accident, or, where it appears to the Investigator to be necessary for the purposes of such investigation, any other aircraft, or any part of such aircraft or anything contained therein;
- (e) on production, if required, of his credentials, to enter and inspect any place, building or aircraft, the entry or inspection whereof appears to the Investigator to be necessary for the purpose of any such investigation except that an Investigator shall not have power to enter any premises which at the time are being used as a dwelling;
- (f) to take such measures for the preservation of evidence as he/she considers appropriate.

5.5.4 Seconded Investigators

Seconded Investigators from Bahraini authorities, other ICAO Contracting States, or organizations are responsible to the Investigator-in-charge for the duration of the investigation. Unless otherwise determined by the Investigator-in-charge, they shall have the same designation, responsibilities and powers of an investigator.

5.6 FURNISHING OF INFORMATION

5.6.1 General

Where an accident to which these Regulations apply occurs, whether in or over Bahrain or elsewhere, the owner, operator, pilot in command, hirer or any other person involved in the loading or operation of the aircraft shall, if so required by notice in writing given to him by the Investigator-in-charge, send to the Investigator-in-charge, within such time as may be specified in the notice, such information as is in his possession or control with respect to the accident and in such form as the Investigator-in-charge may require.

5.6.2 Serving of Notices or Documents

Any notice or other document required or authorized by any provision of these Regulations to be served on or given to any person, may be served or given:

- (a) by delivering it to that person;
- (b) by leaving it at his/her usual or last-known residence or place of business, whether in Bahrain or elsewhere;

- (c) by sending it to him/her by post at that address; or
- (d) by sending it to him/her at that address by telex or facsimile, in which case the document is regarded as served when received.

5.6.3 Obstruction of Investigations

- 5.6.3.1 A person shall not obstruct or impede an Investigator, or any person acting under the authority of the Accident Investigation Unit, in the exercise of any powers or duties under these Regulations.
- 5.6.3.2 A person shall not, without reasonable excuse, fail to comply with any summons or requisition of an Investigator conducting an investigation or undertaking any inquiries with a view to determining whether any investigation should be held under these Regulations.

5.7 FORM AND CONDUCT OF INVESTIGATIONS

5.7.1 Form of Investigation

- (a) An investigation into any accident to which these Regulations apply may be a formal investigation or a field investigation.
- (b) Public notice that a formal investigation is taking place shall be given in such a manner as the Investigator-in-charge may decide and shall invite any persons who desire to make representations concerning the circumstances or causes of the accident, to do so in writing within the time to be specified in the notice.
- (c) All investigations shall be held in private.
- (d) Where it appears to the Investigator in the course of any investigation that in order to resolve any conflict of evidence or that for any other reason it is expedient to do so, he/she may permit any person to appear before him and to call evidence and examine witnesses.

5.7.2 Discontinuation of Investigation

The Accident Investigation Unit, in co-ordination with Investigator-in-charge, may determine that any investigation being carried out into an accident shall be discontinued. However, public notice should be given, in such a manner as the Investigator-in-charge may determine that the investigation has been discontinued. Following the discontinuance of any investigation, the Investigator-in-charge shall submit to the Minister, such information as he/she considers desirable in the interest of the avoidance of accidents in the future.

5.7.3 Re-opening of Investigation

- (a) If, after the investigation has been closed, new and significant evidence becomes available, the Accident Investigation Unit, if it conducted the investigation, shall re-open it. However, if the Unit conducted the investigation at the request of another State, consent from that State shall be firstly obtained.
- (b) Any investigation reopened shall be subject to and conducted in accordance with the provisions of these Regulations relating to a formal investigation thereof.
- Note: Where an aircraft which was considered missing following an official search is subsequently located, consideration may be given to reopening the investigation.

5.7.4 Flight recorders

- (a) Effective use shall be made of flight recorders in the investigation of an accident or a serious incident. The Accident Investigation Unit, when conducting the investigation, shall arrange for the readout of the flight recorders without delay.
- (b) In the event that Bahrain does not have adequate facilities to read out the flight recorders, the Accident Investigation Unit shall arrange to use the facilities made available to it by other States, giving consideration to the following:
 - (1) the capabilities of the readout facility;
 - (2) the readout of the recorders shall be conducted without delay; and
 - (3) the location of the read out facility.

5.7.5 Autopsy Examinations

The Accident Investigation Unit, when conducting the investigation into a fatal accident, shall arrange for complete autopsy examination of fatally injured flight crew and, subject to the particular circumstances, of fatally injured passengers and cabin crew, by a pathologist, preferably experienced in accident investigation. These examinations shall be expeditious and complete.

5.7.6 Medical Examinations

- (a) When appropriate, the Accident Investigation Unit, when conducting the investigation into a fatal accident, shall arrange for medical examination of the surviving flight crew, as well as applicable cabin crew, passengers and involved aviation personnel, by a physician, preferably experienced in accident investigation. These examinations shall be expeditious and complete.
- (b) The Accident Investigation Unit, when conducting the investigation into a non-fatal occurrence, shall arrange for medical examination of crew, passengers and involved aviation personnel, as considered appropriate, by a physician.
- *Note:* Such examinations may also determine whether the level of physical and psychological fitness of flight crew and other personnel directly involved in the occurrence is sufficient for them to contribute to the investigation.

5.7.7 Co-ordination – Judicial Authorities

The Accident Investigation Unit, when responsible for conducting the investigation, shall recognise the need for co-ordination between the Investigator-in-charge and the judicial authorities. Particular attention shall be given to evidence, which requires prompt recording and analysis for the investigation to be successful, such as the examination and identification of victims and readouts of flight recorder recordings.

5.7.8 Informing Aviation Security or Judicial Authorities

(a) If, in the course of an investigation it becomes known, or it is suspected, that an act of unlawful interference was involved, the Investigator-in-charge shall immediately initiate action to ensure that the aviation security authorities of the State(s) concerned are so informed.

- (b) If the Investigator-in-charge finds evidence or suspects that the accident or serious incident was a result of a criminal act, he/she shall refer the matter to the competent and relevant judicial authorities of the State(s) concerned with a view to the institution of necessary legal proceedings.
- *Note:* Separate investigation by judicial authorities does not, in any way, diminish the responsibilities and powers of the Accident Investigation Unit and investigators.

5.8 PROTECTION OF ACCIDENT AND INCIDENT INVESTIGATION RECORDS (See also Appendix A)

5.8.1 General

- (a) The Accident Investigation Unit, when conducting the investigation into an accident or serious incident, shall not make the following records available for purposes other than accident or serious incident investigation, unless the appropriate authority for the administration of justice in Bahrain determines in accordance with national laws and subject to Appendix A that their disclosure outweighs the adverse domestic and international impact such action may have on that or any future investigations:
 - (1) cockpit voice recordings and airborne image recordings any transcripts from such recordings;
 - (2) records in the custody or control of the Accident Investigation Unit being;
 - (i) all statements taken from persons by the investigation Unit in the course of their investigation;
 - (ii) all communications between persons having been involved in the operation of the aircraft;
 - (iii) medical or private information regarding persons involved in the accident or serious incident;
 - (iv) recordings and transcripts of recordings from air traffic control units;
 - (v) analysis of and opinions about information, including flight recorder information, made by the Accident Investigation Unit and accredited representatives in relation to the accident or incident; and
 - (vi) the draft Final Report of an accident or serious incident investigation.
- (b) These records shall be included in the Final Report or its appendices only when pertinent to the analysis of the accident or serious incident. Parts of the records not relevant to the analysis shall not be disclosed.
- Note: The records listed above in paragraph 5.8.1(a), include information related to an accident or serious incident. The disclosure or use of such information for purposes where the disclosure or use is not necessary in the interest of safety means that, in the future, the information will no longer be openly disclosed to investigators. Lack of access to such information would impede the investigation process and seriously affect aviation safety.

- (c) The names of the persons involved in the accident or serious incident shall not be disclosed to the public by the accident investigation Unit.
- (d) The Accident Investigation Unit shall ensure that requests for records in its custody or control are directed to the original source of the information, where available.
- (e) The Accident Investigation Unit should retain, where possible, only copies of records obtained in the course of an investigation.
- (f) The Accident Investigation Unit shall take measures to ensure that audio content of cockpit voice recordings as well as image and audio content of airborne image recordings are not disclosed to the public.
- (g) The Accident Investigation Unit, if issuing or receiving a draft Final Report, shall take measures to ensure that it is not disclosed to the public.
- *Note:* Appendix A contains additional provisions on the protection of accident and incident investigation records and form part of these regulations.

5.9 RESPONSIBILITY OF THE KINGDOM OF BAHRAIN WHEN NOT THE STATE OF OCCURRENCE

5.9.1 Provision of Information by the BCAA – Accidents and Incidents

- (a) The BCAA shall, on request from the State conducting the investigation of an accident or a serious incident, provide that State with all the relevant information available to it.
- (b) The BCAA, in regard to any facilities or services of which have been, or would normally have been, used by an aircraft prior to an accident or a serious incident, and which has information pertinent to the investigation, shall provide such information to the State conducting the investigation.
- (c) The BCAA should cooperate with other States to determine the limitations on disclosure or use that will apply to information before it is exchanged between them for the purposes of an accident or serious incident investigation.

5.10 RESPONSIBILITY OF THE KINGDOM OF BAHRAIN AS EITHER THE STATE OF REGISTRY OR THE STATE OF OPERATOR

5.10.1 Flight Recorders – Accidents and Serious Incidents

When an aircraft involved in an accident or a serious incident lands in a State other than the State of Occurrence, Bahrain, as either the State of Registry or the State of Operator shall, on request from the State conducting the investigation of an accident or a serious incident, furnish that State with the flight recorder records and, if necessary, the associated flight recorders.

Note: Bahrain, as either the State of Registry or the State of the Operator, may request the cooperation of any other State in the retrieval of the flight recorder records.

5.10.2 Organizational Information

Bahrain, as either the State of Registry or the State of Operator, on request from the State conducting the investigation, shall provide pertinent information on any organisation whose activities may have directly or indirectly influenced the operation of the aircraft.

5.11 PARTICIPATION IN THE INVESTIGATION

5.11.1 Rights of Other States

- (a) The State of Registry, the State of the Operator, the State of Design and the State of Manufacturer, shall each be entitled to appoint an accredited representative to participate in the investigation.
- *Note 1: States that designed or manufactured the powerplant or major components of the aircraft may request participation in the investigation of an accident.*
- *Note 2:* Accredited representative and advisers of a State do not have to be always present in the State in which the investigation is conducted.
- (b) The State of Registry or the State of the Operator shall be entitled to appoint one or more advisers proposed by the operator, to assist its accredited representative.
- (c) When neither the State of Registry, nor the State of the Operator appoint an accredited representative, the Accident Investigation Unit conducting the investigation should invite the operator to participate, subject to any procedures considered by the Accident Investigation Unit.
- (d) The State of Design and the State of Manufacture shall be entitled to appoint one or more advisers, proposed by the organizations responsible for the type design and the final assembly of the aircraft, to assist their accredited representatives.
- (e) When neither the State of Design nor the State of Manufacture appoints an accredited representative, the Accident Investigation Unit conducting the investigation shall invite the organizations responsible for the type design and the final assembly of the aircraft to participate.
- (f) Any State, which on request provides information, facilities or experts to the Accident Investigation Unit conducting the investigation, shall be entitled to appoint an accredited representative to participate in the investigation.
- Note: Any State that provides an operational base for field investigations, or is involved in search and rescue or wreckage recovery operations, or is involved as a State of a code-share or alliance partner of the operator, may also be invited to appoint an accredited representative to participate in the investigation.

5.11.2 Obligations of the Kingdom of Bahrain as either the State of Registry or the State of Operator

When the State conducting an investigation of an accident to an aircraft of a maximum mass of over 2250 kg specifically requests participation by Bahrain, as either the State of Registry or the State of Operator, Bahrain shall appoint an accredited representative.

5.12 ENTITLEMENT OF ACCREDITED REPRESENTATIVES AND ADVISORS

5.12.1 Advisors

- (a) A State entitled to appoint an accredited representative shall also be entitled to appoint one or more advisers to assist the accredited representative in the investigation.
- Note 1: Nothing precludes a State that is participating in an investigation from calling upon the best technical experts from any source and appointing such experts as advisers to its accredited representative.

- Note 2: Facilitation of the entry of the accredited representatives, their advisers and equipment is covered in Annex 9 — Facilitation. The carriage of an official or service passport may expedite the entry. Entry of investigation personnel and equipment may be expedited by the establishment of prior agreements between the accident investigation authority and immigration and customs authorities within the State.
- (b) Advisors assisting an accredited representative shall be permitted by the Investigator-incharge, under the accredited representative's supervision, to participate in the investigation to the extent necessary to enable the accredited representative to make his or her participation effective.

5.12.2 Participation

Participation in the investigation shall confer entitlement to participate in all aspects of the investigation, under the control of the Investigator-in-charge, in particular to;

- (a) visit the scene of the accident;
- (b) examine the wreckage;
- (c) obtain witness information and suggest areas of questioning;
- (d) have full access to all relevant evidence as soon as possible;
- (e) receive copies of all pertinent documents;
- (f) participate in readouts of recorded media;
- (g) participate in off-scene investigative activities such as component examinations, technical briefings, tests and simulations;
- (h) participate in investigation progress meetings including deliberations related to analysis, findings, causes, contributing factors and safety recommendations; and
- (i) make submissions in respect of the various elements of the investigation.

However, participation of States other than the State of Registry, the State of Operator, the State of Design and the State of Manufacture may be limited to those matters which entitled such States to participation under paragraph 5.11.1(f) above.

5.12.3 Obligations

The accredited representative and their advisers;

- (a) shall provide the Aircraft Investigation Unit with all relevant information available to them; and
- (b) shall not divulge information on the progress and the findings of the investigation without the express consent of the Aircraft Investigation Unit.

5.13 STATES HAVING SUFFERED FATALITIES OR SERIOUS INJURIES TO THEIR CITIZENS

5.13.1 Rights and Entitlements

A State, which has a special interest in an accident, by virtue of fatalities or serious injuries to its citizens shall be entitled to appoint an expert who shall be entitled to:

- (a) visit the scene of the accident;
- (b) have access to the relevant factual information, which is approved for public release by the State conducting the investigation and information on the progress of the investigation; and
- (c) receive a copy of the Final Report.

This will not preclude the State from also assisting in the identification of victims and in meetings with survivors from the State.

Note: The Accident Investigation Unit should release, at least during the first year of the investigation, established factual information and indicate the progress of the investigation in a timely manner.

This Page Intentionally Left Blank

CHAPTER 6

FINAL REPORT

6.1 **RESPONSIBILITY OF THE KINGDOM OF BAHRAIN**

- (a) The BCAA shall not circulate, publish or give access to a draft report or any part thereof, or any documents obtained during an investigation of an accident or serious incident, without the express consent of the State which conducted the investigation, unless such reports or documents have already been published or released by that latter State.
- (b) A person who receives a draft report under 6.2.1(a) (6) below shall not:
 - (1) make a copy of the whole or any part of the report;
 - (2) disclose any of the contents of the report to any other person; or
 - (3) use it to any disciplinary or legal proceedings.

6.2 **RESPONSIBILITY OF THE STATE CONDUCTING THE INVESTIGATION**

6.2.1 Consultation

- (a) The Accident Investigation Unit, as the authority of the State conducting the investigation, shall send a copy of the draft Final Report to the following States, inviting their significant and substantiated comments on the Report as soon as possible.:
 - (1) the State that instituted the investigation;
 - (2) the State of Registry;
 - (3) the State of the Operator;
 - (4) the State of Design;
 - (5) the State of Manufacturer; and
 - (6) any State that participated in the investigation as per Chapter 5.
- (b) The Accident Investigation Unit shall send the draft Final Report to the operator through the State of the Operator, to enable the operator to submit comments on the draft Final Report.
- (c) The Accident Investigation Unit shall send the draft Final Report to the organizations responsible for the type design and the final assembly of the aircraft, through the State of Design and the State of Manufacture, to enable them to submit comments on the draft Final Report.
- (d) If the Accident Investigation Unit receives comments within sixty days of the date of the transmittal letter, it shall either amend the draft Final Report to include the substance of the comments received, or if desired by the State that provided comments, append the comments to the Final Report. If the Accident Investigation Unit receives no comments within sixty days of the date of the first transmittal letter, it shall issue the Final Report to the recipient States unless an extension of that period has been agreed by the States concerned.

- Note 1: Nothing is intended to preclude the Authority from consulting other States, such as those States which provided relevant information, significant facilities, or experts who participated in the investigation.
- Note 2: Comments to be appended to the Final Report are restricted to non-editorial-specific technical aspects of the Final Report upon which no agreement could be reached.
- Note 3: When sending the draft Final Report to recipient States, the Authority may consider using the most suitable and quickest means available, such as facsimile, e-mail, courier service or express mail.
- Note 4: Intended safety recommendations are to be included in the draft Final Report.
- *Note 5:* The format of the Final Report in indicated in ICAO Annex 13. However, it may be adapted to the circumstances of the accident or incident.

6.3 FINAL REPORT

6.3.1 Recipients

The Accident Investigation Unit shall send, with a minimum of delay, the final report to:

- (a) the State which instituted the investigation;
- (b) State of Registry;
- (c) the State of the Operator;
- (d) the State of Design;
- (e) the State of Manufacturer;
- (f) any State that participated in the investigation;
- (g) any States having suffered fatalities or serious injuries to its citizens;
- (h) any State which provided relevant information, significant facilities or experts; and
- (i) the International Civil Aviation Organization, only for accidents involving an aircraft of maximum mass of over 5700 kg.

6.3.2 Release of the Final Report

- (a) In the interest of accident prevention, the Accident Investigation Unit, as the authority of the State conducting the investigation, shall make the Final Report publicly available as soon as possible, and, if possible, within twelve months.
- (b) If the report cannot be made publicly available within twelve months, the Accident Investigation Unit shall make an interim statement publicly available on each anniversary of the occurrence, detailing the progress of the investigation and any safety issues raised. If the State conducting the investigation does not make the Final Report or an interim statement publicly available within a reasonable timeframe, other States participating in the investigation are entitled to request in writing from the State conducting the investigation express consent to release a statement containing safety issues raised with such information as is available. If the State conducting the investigation gives express consent or does not

reply to such a request within 30 days, the State making the request should release such a statement after coordinating with participating States.

- (c) When the Accident Investigation Unit, as the authority of the State that has conducted an investigation into an accident or a serious incident involving an aircraft of a maximum mass of over 5 700 kg, has released a Final Report, it shall send to the International Civil Aviation Organization a copy of the Final Report.
- Note: Guidance on what may constitute a "reasonable timeframe" for a State to make a Final Report and/or an interim statement publicly available is contained in the Manual of Aircraft Accident and Incident Investigation (Doc 9756), Part IV - Reporting.

6.3.3 Format of the Final Report

The format of the final report shall be in conformity with Annex 13 to the Convention on International Civil Aviation.

6.4 SAFETY RECOMMENDATIONS

- (a) At any stage of the investigation of an accident or serious incident, the Accident Investigation Unit, shall recommend in a dated transmittal correspondence to the appropriate authorities, including those in other States, any preventative action, which it considers necessary to be taken promptly to enhance aviation safety.
- Note: Nothing in this part is intended to preclude the State conducting the investigation from consulting States participating in the investigation on its draft safety recommendations, inviting their comments on the appropriateness and effectiveness of these recommendations.
 - (1) Precedence for the issuance of safety recommendations from an accident or serious incident investigation is given to the State conducting the investigation; however, in the interest of safety, other States participating in the investigation shall be entitled to issue safety recommendations after coordinating with the State conducting the investigation.
 - *Note:* Effective coordination of draft safety recommendations would avoid issuance of conflicting safety recommendations by the States participating in the investigation.
- (b) The Accident Investigation Unit, as the authority of the State that has conducted an investigation, shall address, when appropriate, any safety recommendations arising out of its investigations in a dated transmittal correspondence to the accident investigation authorities of other State(s) concerned and, when ICAO documents are involved, to ICAO.
- *Note:* When Final Reports contain safety recommendations addressed to ICAO, because ICAO documents are involved, these reports must be accompanied by a letter outlining the specific action proposed.

6.5 ACTION ON SAFETY RECOMMENDATIONS

(a) On receipt of any safety recommendations or other proposals for preventative action received, the BCAA shall inform the proposing State, within ninety days of the date of the transmittal correspondence, of the preventative action taken or under consideration, or the reasons why no action will be taken.

(b) The BCAA shall implement procedures to record and track the responses to the safety recommendations it issued or it receives from foreign States and the progress of the action taken in response to each safety recommendation.

CHAPTER 7

ADREP REPORTING

7.1 PRELIMINARY REPORT

7.1.1 Accidents to Aircraft over 2250 kg

When the aircraft involved in an accident, is of a maximum mass of over 2250 kg, the Accident Investigation Unit, as the authority of the State conducting the investigation, shall send the Preliminary Report to:

- (a) the State of Registry or the State of Occurrence, as appropriate;
- (b) the State of the Operator;
- (c) the State of Design;
- (d) the State of Manufacturer;
- (e) any State which provided relevant information, significant facilities or experts; and
- (f) the International Civil Aviation Organization.

7.1.2 Accidents to Aircraft of 2250 kg or Less

When an aircraft of a maximum mass of 2250 kg or less is involved in an accident, and when airworthiness or matters considered to be of interest to other States are involved, the Accident Investigation Unit, as the authority of the State conducting the investigation, shall forward the Preliminary Report to:

- (a) the State of Registry or the State of Occurrence, as appropriate;
- (b) the State of the Operator;
- (c) the State of Design;
- (d) the State of Manufacturer; and
- (e) any State, which provided relevant information, significant facilities or experts.

7.1.3 Language

The Preliminary Report shall be submitted to appropriate States and to the International Civil Aviation Organization in the English language.

7.1.4 Dispatch

The Preliminary Report shall be sent by facsimile, e-mail, or airmail within thirty days of the date of the accident unless the Accident/Incident Data Report has been sent by that time. When matters directly affecting safety are involved it shall be sent as soon as the information is available and by the most suitable and quickest means available.

7.2 ACCIDENT/INCIDENT DATA REPORT

7.2.1 Accidents to Aircraft over 2250 kg

When the aircraft involved in an accident is of a maximum mass of over 2250 kg, the Accident Investigation Unit, as the authority of the State conducting the investigation, shall send, as soon as practicable after the investigation, the Accident Data Report to the International Civil Aviation Organization.

7.2.2 Incidents Involving Aircraft over 5700 kg

The Accident Investigation Unit, as the authority of the State conducting an investigation into an incident to an aircraft of a maximum mass of over 5700 kg, the Unit shall send, as soon as is practicable after the investigation, the Incident Data Report to the International Civil Aviation Organization.

7.2.3 Additional Information

The Accident Investigation Unit, ass the authority of the State conducting the investigation, shall, upon request, provide other States with pertinent information additional to that made available in the Accident/Incident Data Report.

CHAPTER 8

ACCIDENT PREVENTION MEASURES

8.1 INCIDENT REPORTING SYSTEMS

8.1.1 Mandatory System

The BCAA shall establish and maintain a mandatory incident reporting system to facilitate collection of information on actual or potential safety deficiencies.

- Note 1: The mandatory reporting requirements are listed in CAP 05 "Occurrence Reporting".
- *Note 2:* State authorities responsible for the implementation of the SSP should have access to the accident and incident database referenced in 8.1.1 to support their safety responsibilities.

8.1.2 Voluntary System

The BCAA shall establish and maintain a voluntary incident reporting system to facilitate collection of information that may not be captured by a mandatory incident reporting system. The voluntary incident reporting system shall be non-punitive and afford protection to the sources of the information.

Note: Refer to CAP 17- CHIRP for voluntary incident reporting system procedures and form.

8.1.3 Database System

The BCAA shall establish and maintain a database system to facilitate the effective analysis of information obtained, including that from its incident reporting system. The database systems should use standardised formats to facilitate data exchange.

8.2 ANALYSIS – PREVENTATIVE ACTIONS

Using the accident and incident database system, the BCAA shall analyse the information contained in its accident/incident reports to determine the preventative actions required.

8.3 EXCHANGE OF SAFETY INFORMATION

- (a) If the BCAA, in the analysis of the information contained in its database, identifies safety matters considered to be of interest to other States, the BCAA should forward any safety information to those States as soon as possible.
- Note: In addition to safety recommendations arising from accident and incident investigations, safety recommendations may result from diverse sources, including safety studies. If safety recommendations are addressed to an organization in another State, they should also be transmitted to that State's investigation authority.
- (b) The BCAA shall promote the establishment of safety information sharing networks among all users of the aviation system and should facilitate the free exchange of information on actual and potential safety deficiencies.

This Page Intentionally Left Blank

APPENDIX A - PROTECTION OF ACCIDENT AND INCIDENT INVESTIGATION RECORDS

1. INTRODUCTION

- Note 1: The disclosure or use of records listed in paragraph 5.8.1, in criminal, civil, administrative or disciplinary proceedings, or their public disclosure, can have adverse consequences for persons or organizations involved in accidents and incidents, likely causing them or others to be reluctant to cooperate with accident investigation authorities in the future. The determination on disclosure or use required by 5.8.1 is designed to take account of these matters.
- *Note 2: Throughout this Appendix, the term;*

"balancing test" refers to the determination by the competent authority, in accordance with paragraph 5.8.1, of the impact the disclosure or use of accident and incident investigation records may have on current or future investigations; and "record(s)" refers to those listed in paragraph 5.8.1.

2. GENERAL

- 2.1 The Accident Investigation Unit shall accord the protections in paragraph 5.8.1 and this Appendix to the entire recording of the cockpit voice recorder and airborne image recorder, and any transcripts from such recordings. These protections shall apply from the time an accident or incident occurs and continue after the publication of the Final Report.
- 2.2 The Accident Investigation Unit shall accord the protections in paragraph 5.8.1 and this Appendix to the other records listed in paragraph 5.8.1(a). These protections shall apply from the time they come into the custody or control of the accident investigation authority and continue after the publication of the Final Report.

Non-disclosure of audio or image recordings to the public

- 2.3 The Accident Investigation Unit shall take action to achieve the non-disclosure of audio content of cockpit voice recordings as well as image and audio content of airborne image recordings to the public, as per paragraph 5.8.1(f), such as:
 - (a) prevention of disclosure through the adoption of national laws, regulations and policies; or
 - (b) adoption of authoritative safeguards such as protective orders, closed proceedings or incamera review; or
 - (c) prevention of disclosure of recordings, through technical means such as encrypting or overwriting, before returning the cockpit voice recorders or airborne image recorders to the owners.
 - Note: Ambient workplace recordings required by these regulations, such as cockpit voice recordings and airborne image recordings, may be perceived as constituting an invasion of privacy for operational personnel if they are disclosed or used for purposes other than those for which the recordings were made.

3. COMPETENT AUTHORITY

In accordance with paragraph 5.8.1, each State shall designate a competent authority or competent authorities appropriate to the task of administering the balancing test.

Note: Different competent authorities may be designated for different circumstances. For example, the competent authority designated for applying the balancing test in criminal or civil proceedings may be a judicial authority. Another competent authority may be designated for applying the balancing test in cases where the purpose of the request for disclosure is for public accessibility.

4. ADMINISTRATION OF THE BALANCING TEST

- 4.1 Where the request is for a record to be disclosed or used in a criminal, civil, administrative or disciplinary proceeding, the competent authority shall be satisfied that a material fact in question in the proceedings cannot be determined without that record, before administering the balancing test.
 - Note: A material fact in question is a legal term used to refer to a fact that is significant or essential to the matter at hand; that one party alleges and that the other controverts; and is to be determined by the competent authority administering the balancing test.
- 4.2 When administering the balancing test, the competent authority shall take into consideration factors such as:
 - (a) the purpose for which the record was created or generated;
 - (b) the requester's intended use of that record;
 - (c) whether the rights or interests of a person or organization will be adversely affected by the disclosure or use of that record;
 - (d) whether the person or organization to whom that record relates has consented to make that record available;
 - (e) whether suitable safeguards are in place to limit the further disclosure or use of that record;
 - (f) whether that record has been or can be de-identified, summarized or aggregated;
 - (g) whether there is an urgent need to access that record to prevent a serious risk to health or life;
 - (h) whether that record is of a sensitive or restrictive nature; and
 - (i) whether that record reasonably indicates that the accident or incident may have been caused by an act or omission considered, in accordance with national laws and regulations, to be gross negligence, willful misconduct, or done with criminal intent.
 - *Note 1: The administration of the balancing test can be done once for a certain category of records and the result incorporated into national laws and regulations.*
 - *Note 2: The competent authority may need to administer a balancing test for determining whether to permit the disclosure of a record, and a separate balancing test for determining whether to permit the use of a record.*
 - Note 3: Guidance material on the balancing test can be found in the Manual on Protection of Safety Information, Part I - Protection of Accident and Incident Investigation Records (Doc 10053).

5. RECORDS OF THE DECISIONS

The Accident Investigation Unit should record the reasons for its determination when administering the balancing test. The reasons should be made available and referred to as necessary for subsequent decisions.

Note: The BCAA may submit the decisions recorded to the International Civil Aviation Organization in one of the working languages of the Organization to be archived in a public database.

6. FINAL REPORT

In order to limit the use of the Final Report for purposes other than the prevention of accidents and incidents, the Accident Investigation Unit should consider:

- (a) instituting a separate investigation for those other purposes; or
- (b) differentiating between the parts of the Final Report in order to allow the use of factual information contained therein while preventing use of analysis, conclusions and safety recommendations for apportioning blame or liability; or
- (c) preventing the use of the Final Report as evidence in proceedings to apportion blame or liability.
- Note: Final Reports are publicly available in the interest of accident prevention and are not subject to protection under paragraph 5.8.1. However, the use of portions of the Final Report, in particular the analysis, conclusions and safety recommendations, as evidence before national courts in view of assigning blame or determining liability is against the purposes for which the investigation was undertaken.

7. ACCIDENT AND INCIDENT INVESTIGATION PERSONNEL

In the interest of safety, the Accident Investigation Unit should consider that accident investigation personnel not be compellable to give an opinion on matters of blame or liability in civil, criminal, administrative or disciplinary proceedings.

APPENDIX B - GUIDANCE FOR THE DETERMINATION OF AIRCRAFT DAMAGE

- 1) If an engine separates from an aircraft, the event is categorized as an accident even if damage is confined to the engine.
- 2) A loss of engine cowls (fan or core) or reverser components which does not result in further damage to the aircraft is not considered an accident.
- 3) Occurrences where compressor or turbine blades or other engine internal components are ejected through the engine tail pipe are not considered an accident.
- 4) A collapsed or missing radome is not considered an accident unless there is related substantial damage in other structures or systems.
- 5) Missing flap, slat and other lift augmenting devices, winglets, etc., that are permitted for dispatch under the configuration deviation list (CDL) are not considered to be an accident.
- 6) Retraction of a landing gear leg, or wheels-up landing, resulting in skin abrasion only. If the aircraft can be safely dispatched after minor repairs, or patching, and subsequently undergoes more extensive work to effect a permanent repair, then the occurrence would not be classified as an accident.
- 7) If the structural damage is such that the aircraft depressurizes, or cannot be pressurized, the occurrence is categorized as an accident.
- 8) The removal of components for inspection following an occurrence, such as the precautionary removal of an undercarriage leg following a low-speed runway excursion, while involving considerable work, is not considered an accident unless significant damage is found.
- 9) Occurrences that involve an emergency evacuation are not counted as an accident unless someone receives serious injuries or the aircraft has otherwise sustained significant damage.
 - Note 1: Regarding aircraft damage which adversely affects the structural strength, performance or flight characteristics, the aircraft may have landed safely, but cannot be safely dispatched on a further sector without repair.
 - *Note 2:* If the aircraft can be safely dispatched after minor repairs and subsequently undergoes more extensive work to effect a permanent repair, then the occurrence would not be classified as an accident.

Likewise, if the aircraft can be dispatched under the CDL with the affected component removed, missing or inoperative, the repair would not be considered as a major repair and consequently the occurrence would not be considered an accident.

Note 3: The cost of repairs, or estimated loss, such as provided by insurance companies may provide an indication of the damage sustained but should not be used as the sole guide as to whether the damage is sufficient to count the occurrence as an accident. Likewise, an aircraft may be considered a "hull loss" because it is uneconomic to repair, without it having incurred sufficient damage to be classified as an accident.

APPENDIX C – LIST OF EXAMPLES OF SERIOUS INCIDENTS

1. The term "serious incident" is defined in Chapter 1 as follows:

Serious incident. 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 as it comes to rest at the end of the flight and the primary propulsion system is shut down.

- 2. There may be a high probability of an accident if there are few or no safety defences remaining to prevent the incident from progressing to an accident. To determine this, an event risk-based analysis, that takes into account the most credible scenario had the incident escalated and the effectiveness of the remaining defences between the incident and the potential accident, can be performed as follows:
 - a) consider whether there is a credible scenario by which this incident could have escalated into an accident; and
 - b) assess the remaining defences between the incident and the potential accident as:

- effective, if several defences remained and needed to coincidently fail; or

- limited, if few or no defences remained, or when the accident was only avoided due to providence.

Consider both the number and robustness of the remaining defences between the incident and the potential accident. Ignore defences that already failed, and consider only those which worked and any subsequent defences still in place.

- *Note 1: The most credible scenario refers to the realistic assessment of injury and/or damage resulting from the potential accident.*
- Note 2: Defences include crew, their training and procedures, ATC, alerts (within and outside the aircraft), aircraft systems and redundancies, structural design of the aircraft and aerodrome infrastructure.

The combination of these two assessments helps in determining which incidents are serious incidents:

		b) Remaining de	b) Remaining defences between the incident and	
		the potential a	the potential accident	
		Effective	Limited	
a) Most credible	Accident	incident	Serious incident	
scenario	No accident	incident		

The incidents listed are examples of incidents may be serious incidents. However, the list is not exhaustive and, depending on the context, items on the list may not be classified as serious incidents if effective defences remained between the incident and credible scenario.

(a) Near collisions requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate.

- (b) Collisions not classified as accidents.
- (c) Controlled flight into terrain only marginally avoided.
- (d) Aborted take-offs on a closed or engaged runway, on a taxiway* or unassigned runway.
- (e) Take-offs from a closed or engaged runway, from a taxiway* or unassigned runway.
- (f) Landings or attempted landings on a closed or engaged runway on a taxiway* unassigned runway or unintended landing locations such as roadways.
- (g) Retraction of a landing gear leg or wheels-up landing not classified as an accident.
- (h) Dragging during landing of a wing tip, an engine pod or any other part of the aircraft, when not classified as an accident.
- (i) Gross failures to achieve predicted performance during take-off or initial climb.
- (j) Fires and/or smoke in the cockpit, in the passenger compartment, in cargo compartments or engine fires, even though such fires were extinguished by the use of extinguishing agents.
- (k) Events requiring the emergency use of oxygen by the flight crew.
- (1) Aircraft structural failures or engine disintegrations, including uncontained turbine engine failures, not classified as an accident.
- (m) Multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft.
- (n) Flight crew incapacitation in flight.
 - for single pilot operations (including remote pilot);
 - for multi-pilot operations for which flight safety was compromised because of a significant increase in workload for the remaining crew.
- (o) Fuel quantity level or distribution situations requiring the declaration of an emergency by the pilot, such as insufficient fuel, fuel exhaustion, fuel starvation, or inability to use all usable fuel on board.
- (p) Runway incursions classified with severity A.

Note: The Manual on the Prevention of Runway Incursions (ICAO Doc 9870) contains information on the severity classifications.

- (o) Take-off or landing incidents. Incidents, such as undershooting, overrunning or running off the side of runways.
- (p) System failures (including loss of power or thrust), weather phenomena, operations outside the approved flight envelope or other occurrences which caused or could have caused difficulties controlling the aircraft.
- (q) Failures of more than one system in a redundancy system mandatory for flight guidance and navigation.

- (r) The unintentional or, as an emergency measure, the intentional release of a slung load or any other load carried external to the aircraft.
 - *Note*: Excluding authorized operations by helicopters.*

APPENDIX D – INVESTIGATION DELEGATION AGREEMENTS

In accordance with paragraph 5.1.2, the State of Occurrence is responsible for instituting and conducting an investigation, but it may delegate the whole or any part of the conducting of such investigation to another State or a regional accident and incident investigation organization (RAIO) by mutual arrangement and consent. Similarly, delegation of the conducting of an investigation can take place when a State is required to institute an investigation of accidents or serious incidents occurring in the territory of a non-Contracting State that does not intend to conduct an investigation in accordance with Annex 13, or when the location of the accident or serious incident cannot definitely be established as being in the territory of any State.

Entering into an investigation delegation agreement normally begins with a decision made by the State responsible for instituting and conducting the investigation. In general, such a State may consider delegating the conducting of the investigation to another State or RAIO, in particular for those situations when it might be beneficial or more practical for the selected State or RAIO to conduct the investigation, or when the State responsible for instituting the investigation lacks the resources or capability to investigate the occurrence in accordance with Annex 13.

Depending on the parties involved in the investigation, the scope of the investigation to be conducted by another State or RAIO would determine whether a formal investigation delegation agreement is required, or if a mutual understanding would suffice. In general, delegation of the whole investigation requires a formal investigation delegation agreement. In the case of delegation of part of the investigation, a formal delegation agreement would be at the discretion of the two parties.

When the whole investigation is delegated to another State or an RAIO, such State or RAIO is expected to be responsible for the conduct of the investigation, including the issuance of the Final Report and the ADREP reporting. When a part of the investigation is delegated, the delegating State usually retains the responsibility for the conduct of the investigation, including the issuance of the Final Report and the ADREP reporting. In any event, the delegating State shall use every means to facilitate the investigation.

It is important to differentiate between the institution and the conduct of an investigation in terms of the triggering and terminating events of each function. *Instituting* the investigation begins from the time the accident investigation authority is informed about the accident or incident, and forwards the official notification of the occurrence to concerned States and to ICAO as required in paragraph 4.1. *Conducting* the investigation is the function of performing an investigation in accordance with Annex 13, and issuing reports including the Final Report.

It is important that the investigation delegation agreement achieves the purpose of the investigation and maintains conformity with the requirements of Annex 13. Therefore, the parties to the agreement should ensure that the responsibility of each party is clearly defined. The contents and details of the agreement depend on the scope of the delegation.

Note: The Manual of Aircraft Accident and Incident Investigation, Part I — Organization and Planning (Doc 9756), Chapter 2, contains guidance material on the delegation of investigations and a model delegation agreement.