



وزارة المواصلات والاتصالات  
Ministry of Transportation  
and Telecommunications

# **ANTR PART VI AIRCRAFT ACCIDENT & INCIDENT INVESTIGATION**

**FOREWORD**

**CONTENTS**

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### **Bahrain CAA Publication Revisions Highlight Sheet**

ANTR: PART VI     CAP: \_\_\_\_     TPM: \_\_\_\_

The following pages have been revised to Revision ICAO Annex 13 Amendment 13 &14, dated 07/07/2015.

<b>Item</b>	<b>Page/Paragraph number</b>	<b>Remove</b>	<b>Insert</b>	<b>Reason</b>
1	Pg. iii, iv and 1-1 to 8-1	Pg. iii, iv and 1-1 to 8-1	Pg. iii, iv and 1-1 to 8-1	The wording 'Kingdom of Bahrain', 'Bahrain' replaces 'CAA' and 'Committee' replaces 'Board' throughout the text to comply with Annex 13.
2	Pg. 1-1 to 1-5	Pg. 1-1 to 1-5	Pg. 1-1 to 1-5	Revised definitions of 'accident' to accommodate unmanned aircraft systems.  Revised definitions of 'causes', 'investigation' and 'serious incident'. Added definitions for 'contributing factors', 'interested party', 'safety recommendation' and 'State Safety Programme (SSP)'.  Inclusion and amendment to the list of examples of serious incidents.
3	2.1.1.2, 2.1.2.1 to 2.1.2.2	Pg. 2-1	Pg. 2-1	Para. 21.1.2 re-worded. Para. 2.1.2.1 to 2.1.2.2 amended Minister of Transportation to be Minister of Transportation and Telecommunication.
4	4.4	Pg. 4-2	Pg. 4-2	Chapter 4 Para. 4.4 deleted. Superseded by Para. 4.5.4. Succeeding paragraphs re-numbered.
5	4.4.3	Pg. 4-3	Pg. 4-3	ALD Fax Number updated.
6	4.5	Pg. 4-3	Pg. 4-3	Inclusion of new Para. 4.5 heading to comply with ICAO Annex 13.
7	4.5.2	Pg. 4-3	Pg. 4-3	New specification on the notification to ICAO of accidents and serious incidents to turbojet aeroplanes.
8	4.5.4	Pg. 4-4	Pg. 4-4	Para. 4.5.4 Format and Content - Deletion of reference to the name of the pilot in the notification of accidents and serious incidents.
9	4.5.8	Pg. 4-4	Pg. 4-4	Inclusion of new Para. 4.5.8 heading to comply with ICAO Annex 13.
10	4.5.8.1 and 4.5.8.2	Pg. 4-4/5	Pg. 4-4/5	Inclusion of Para. 4.5.8.1 and 4.5.8.3 to comply with ICAO Annex 13.
11	4.6	Pg. 4-5	Pg. 4-5	Inclusion of Para. 4.6 heading to comply with ICAO Annex 13.
12	4.6.1, 4.6.1.1 to 4.6.1.3	Pg. 4-5	Pg. 4-5	Inclusion of Para. 4.6.1, 4.6.1.1, 4.6.1.2 and 4.6.1.3 to comply with ICAO Annex 13.

Item	Page/Paragraph number	Remove	Insert	Reason
13	4.6.2	Pg. 4-5	Pg. 4-5	Inclusion of Para. 4.6.2 heading to comply with ICAO Annex 13.
14	4.6.2.1 to 4.6.2.4	Pg. 4-6	Pg. 4-6	Inclusion of Para. 4.6.2.1 to Para. 4.6.2.4 to comply with ICAO Annex 13.
15	4.7.4	Pg. 4-7	Pg. 4-7	Deletion of Para. 4.7.4 to comply with ICAO Annex 13.
16	5.1.2.2	Pg. 5-1	Pg. 5-1	New provision concerning the investigation of serious incidents to aircraft of a maximum mass of over 2250 kg.  Deletion of 'Note' to comply with ICAO Annex 13.
17	5.1.2	Pg. 5-1	Pg. 5-1	Inclusion of Para. 5.1.2 to comply with ICAO Annex 13.
18	5.2.1.2	Pg. 5-2	Pg. 5-2	The phrase 'When possible' amended to 'Where feasible' to comply with ICAO Annex 13.
19	5.2.1.3	Pg. 5-2	Pg. 5-2	Expansion of provision concerning the extension of investigations based on lessons expected.
20	5.8.1.1	Pg. 5-7/8	Pg. 5-7/8	Para. 5.8.1.1 (f) – Widening the specification concerning the disclosure of records to address cockpit airborne image recordings and their transcripts.
21	5.8.1.2	Pg. 5-8	Pg. 5-8	Para. 5.8.1.2 – new provision to avoid disclosure of the names of the persons involved in accidents and incidents.
22	5.12.1 and 5.12.1 (b)	Pg. 5-10	Pg. 5-10	Para. 5.12.1 and 5.12.1 (b) – Revised provision addressing participation of States which suffered fatalities or serious injuries to its citizens.  Items (c) and (d) deleted.
23	5.13.1.1 and 5.13.2.2	Pg. 5-11	Pg. 5-11	Para. 5.13.1.1 and 5.13.2.2 – Inclusion of 'contributing' to comply with ICAO Annex 13.
24	6.1.1.1	Pg. 6-1	Pg. 6-1	Para 6.1.1.1 (a) and (f) – New provision concerning request for comment on the draft final report.
25	6.2.1	Pg. 6-2	Pg. 6-2	Para. 6.2.1 (f) – new provision concerning percipients of the Final Report.
26	6.2.2.2	Pg. 6-2	Pg. 6-2	Para 6.2.2.2 – Revised provision concerning the need to make the Final Report publicly available.

27	6.2.2.3	Pg. 6-2	Pg. 6-2	Para 6.2.2.3 – Deletion of text. Strengthening the provision on the release of an interim statement on each anniversary of the occurrence.
28	6.3.1 and 6.3.2	Pg. 6-2	Pg. 6-2	Para. 6.3.1 and 6.3.2 – revised provision requiring State to recommend ‘in a dated transmitted correspondence’.
29	6.4	Pg. 6-3	Pg. 6-3	Para. 6.4 – Revised provision to addressing safety recommendations to include a time frame for actions to be taken.
30	Appendix A	Pg. APP A-1	Pg. APP A-1	Inclusion of new Appendix A on guidance for the determination of aircraft damage.
31	Appendix B	Pg. APP B-1 to APP B-2	Pg. APP B-1 to APP B-2	Inclusion of new Appendix B listing examples of incidents likely to be serious incidents. List was deleted from Chapter 1.

## FOREWORD

- 1 The Kingdom of Bahrain Civil Aviation Affairs, known in these regulations as the “Authority” has implemented ANTR Part VI – Aircraft Accident and Incident Investigation Regulations based on ICAO Annex 13.
- 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 3<sup>rd</sup> Edition Revision 2 to ANTR Part VI is dated 31 December, 2015.
- 7 Please refer to the Volume 1 List of Effective Pages and Revision Page for current status.

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## CHAPTER 1

## DEFINITIONS

## 1.1 DEFINITIONS

As used in this Chapter, the following words or phrases are defined as follows:

**Aircraft 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) within thirty days of the occurrence, 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, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

(b) the aircraft sustains damage or structural failure which:

(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: An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.*

*Note 2: Guidance for the determination of aircraft damage can be found in Appendix A to this Chapter.*

*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.*

<b>Accredited Representative</b>	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.
<b>Advisor</b>	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.
<b>Aircraft</b>	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.
<b>Authorized Person</b>	A person authorized by the CAA or Accident Investigation Committee, either generally or specifically, to have access to any aircraft involved in an accident or incident.
<b>Causes</b>	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.
<b>Civil Aircraft</b>	means any aircraft registered in an ICAO Contracting State.
<b>Contributing factors</b>	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.
<b>Fatal Injury</b>	means any injury, which results in death within 30 days of the accident.
<b>Flight Recorder</b>	Any type of recorder installed in the aircraft for the purpose of complimenting accident/incident investigation.  Note: Flight recorder includes (D)FDR, CVR, QAR, and memory devices (such as FADEC, FMS)
<b>Incident</b>	means an occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.

<b>Interested Party</b>	Any person, government authority/department, institution, organization, aviation society, air operator, aircraft owner, property owner, ministry or any other body the CAA finds appropriate to have their limited participation in the investigation or receive comments on the CAA's draft reports.
<b>Investigation</b>	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.
<b>Investigation Committee</b>	The investigation unit appointed by the Minister and empowered to conduct an aircraft accident/incident investigation under the control of the investigator-in-charge.
<b>Investigator-in-charge</b>	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 Committee and over whose signature any required report is issued.
<b>Maximum mass</b>	means maximum certified take-off mass
<b>Operator</b>	means a person, organization or enterprise engaged in or offering to engage in aircraft operation.
<b>Preliminary Report</b>	The communication used for the prompt dissemination of data obtained during the early stages of the investigation.
<b>Safety Recommendation</b>	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.
<b>Serious incident</b>	<p>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.</p> <p><i>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.</i></p>

<b>Serious Injury</b>	<p>means any injury, which is sustained by a person in an accident and which:</p> <ul style="list-style-type: none"> <li>(a) requires hospitalisation for more than 48 hours, commencing within 7 days from the date the injury was received; or</li> <li>(b) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); or</li> <li>(c) involve lacerations, which cause severe haemorrhage, nerve muscle, or tendon damage; or</li> <li>(d) involves injury to any internal organ; or</li> <li>(e) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or</li> <li>(f) involves verified exposure to infectious substances or injurious radiation.</li> </ul>
<b>State of Design</b>	The State having jurisdiction over the organization responsible for the type design.
<b>State of Manufacture</b>	The State having jurisdiction over the organization responsible for the final assembly of the aircraft.
<b>State of Occurrence</b>	The State in the territory of which an accident or incident occurs.
<b>State of the Operator</b>	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.
<b>State of Registry</b>	The State on whose register the aircraft is entered.
<b>State Safety Programme (SSP)</b>	An integrated set of regulations and activities aimed at improving safety.
<b>Substantial Damage</b>	<p>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":</p> <ul style="list-style-type: none"> <li>(a) for multi-engine aircraft: engine failure or damage limited to an engine if only one engine fails or is damaged,</li> <li>(b) bent fairings or cowling, dented skin, small punctured holes in the skin or fabric,</li> <li>(c) ground damage to rotor or propeller blades,</li> <li>(d) and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips.</li> </ul>

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## 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.

2.1.1.2 In this part 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 part or in whole, the functions and obligations of the State of Registry.

## 2.1.2 CAA Authority

2.1.2.1 The CAA 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.

2.1.2.2 The Accident Investigation Committee, under the chairmanship of the Minister, is the organization responsible for the conduct of aircraft accident investigation.

*Note 1: Where an Accident Investigation Committee has been established to conduct an aircraft accident investigation, the Committee assumes specific “State” responsibilities in respect to the investigation and Final Report.*

*Note 2: The division of responsibility between the Accident Investigation Committee and CAA is indicated throughout this Part.*

*Note 3: In this Part 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 this Part, in part or in whole, the functions and obligations of the State of Registry.*

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## 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 PROTECTION OF EVIDENCE, CUSTODY AND REMOVAL OF AIRCRAFT

##### 3.2.1 Responsibility of the Kingdom of Bahrain

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.*

##### 3.2.2 Protection of Evidence

3.2.2.1 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 Committee, be removed or otherwise interfered with.

3.2.2.2 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;

3.2.2.3 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.

3.2.2.4 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 Committee takes custody thereof and a release is granted.

3.2.2.5 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.

3.2.2.6 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 Committee to the contrary.

### **3.2.3 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.

### **3.2.4 Release from Custody**

3.2.4.1 Subject to the provisions of paragraphs 3.2.1 and 3.2.3 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 Committee 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.

3.2.4.2 The Accident Investigation Committee and/or CAA shall liaise with appropriate authorities prior to release from custody of an aircraft or wreckage.

### **3.2.5 Retained Evidence**

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

### **3.2.6 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 CAA. In the event of his failure to comply with such directives, the disabled or wrecked aircraft and/or parts may be removed by CAA personnel. Removal by CAA 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.

### **3.2.7 Conduct of Investigation**

In addition to compliance with this Part, the Accident Investigation Committee, when conducting an investigation as the investigating authority, shall comply with the provisions of ICAO Annex 13.

## CHAPTER 4

### NOTIFICATION

#### 4.1 APPLICABILITY

This Chapter contains rules pertaining to:

- (a) Notification and reporting aircraft accidents, serious incidents, incidents and certain other occurrences 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.
- (b) Reporting aircraft accidents and listed incidents.

#### 4.2 INITIAL NOTIFICATION

##### 4.2.1 Accident

When a reportable accident 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 airport authority, shall give notice to the CAA 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.

##### 4.2.2 Reportable Incident

When a reportable serious incident occurs, the pilot in command, operator or airport authority, as applicable, shall give notice to the CAA by the quickest means of communication available within 24 hours. When a reportable incident occurs, the pilot in command, operator or airport authority, as applicable, shall give notice to the CAA within 72 hours.

#### 4.3 REPORTABLE OCCURRENCES

The CAA shall be notified when:

- (a) an aircraft accident, serious incident, or any of the incidents, as listed below, occur.
  - (1) Flight control system malfunction or failure.
  - (2) Inability of any required flight crew member to perform his normal flight duties as a result of injury or illness.
  - (3) Failure of structural components of a turbine engine excluding compressor and turbine blades and vanes.
  - (4) In-flight fire.
  - (5) Aircraft collide in flight.
  - (6) For large multiengine aircraft (more than 5700 kg maximum certificated take-off mass):

- (i) in-flight failure of electrical systems which requires the sustained use of an emergency bus powered by a back-up source such as a battery, auxiliary power unit, or air-driven generator to retain flight control or essential instruments;
  - (ii) in-flight failure of hydraulic systems that result in sustained reliance on the sole remaining hydraulic or mechanical system for movement of flight control surfaces;
  - (iii) sustained loss of the power or thrust produced by two or more engines;
  - (iv) Evacuation of an aircraft in which an emergency egress system is utilised.
- (7) Significant incidents involving:
- (i) the transport of dangerous goods;
  - (ii) breaches of security;
  - (iii) the carriage of important persons;
  - (iv) a serious maintenance event and/or failure;
  - (v) aircraft departure of taxiways/runways;
  - (vi) taxi accidents/collisions;
  - (vii) flight crew incapacitation;
  - (viii) decompression resulting in emergency descent;
  - (ix) ATC incidents involving near collisions; serious windshear phenomenon;
  - (x) passenger offences affecting safety; and
  - (xi) passenger offences affecting safety; and
  - (xii) any other factor affecting or derogating safety.
- (b) an aircraft is overdue and is believed to have been involved in an incident.

#### ← 4.4 REPORTING OF ACCIDENTS/INCIDENTS AND OVERDUE AIRCRAFT

##### 4.4.1 Reports

4.4.1.1 The operator of an aircraft shall file a report to the CAA immediately upon being advised of an accident or an overdue aircraft.

4.4.1.2 A report on an incident for which notification is required by paragraph 4.3 above, shall be filed within 24 hours of the occurrence of the incident.

#### **4.4.2 Crew Member Statement**

Each crew member, if physically able at the time the report is submitted, shall attach a statement setting forth the facts, conditions, and circumstances relating to the accident or incident as they appear to him. If the crew member is incapacitated, he/she shall submit the statement as soon as he/she is physically able.

#### **4.4.3 Where to File the Reports**

The operator of an aircraft shall file any report required by this Chapter with the CAA Aeronautical Licensing Directorate, P. O. Box 586, Kingdom of Bahrain (Fax Number +973 17321061).

### **4.5 ACCIDENTS AND SERIOUS INCIDENTS IN THE KINGDOM OF BAHRAIN TO AIRCRAFT OF ANOTHER STATE**

#### **4.5.1 Responsibility of Bahrain as the State of Occurrence**

#### **4.5.2 Applicability**

This sub-chapter 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.

#### **4.5.3 Forwarding**

Bahrain, if the State of Occurrence, shall forward a notification of an accident or serious incident with a minimum of delay and by the most suitable and quickest means available to;

- (a) the State of Registry;
- (b) the State of the Operator;
- (c) the State of Design;
- (d) the State of Manufacturer; and
- (e) the International Civil Aviation Organization, when the aircraft involved is of a maximum mass of over 2250 kg or is a turbojet powered airplane.

#### **4.5.4 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:

- (a) for accidents the identifying abbreviation ACCID, for serious incidents INCID;
- (b) manufacturer, model, nationality and registration marks, and serial number of the aircraft;
- (c) name of owner, operator and hirer, if any, of the aircraft;
- (d) qualification of the pilot-in-command; nationality of crew and passengers;
- (e) date and time (local time or UTC) of the accident or serious incident;

- (f) last point of departure and point of intended landing of the aircraft;
- (g) position of the aircraft with reference to some easily defined geographical point and latitude and longitude;
- (h) number of crew and passengers; aboard, killed and seriously injured; others, killed and seriously injured;
- (i) description of the accident or serious incident and the extent of damage to the aircraft so far as is known;
- (j) an indication to what extent the investigation will be conducted or is proposed to be delegated by the Kingdom of Bahrain.
- (k) Physical characteristics of the accident or serious incident area; as well as an indication of access difficulties or special requirements to reach the site;
- (l) Identification of the CAA and means to contact the investigator-in-charge and the Accident Investigation Committee of the State of Occurrence at any time; and
- (m) Presence and description of dangerous goods on board the aircraft.

#### **4.5.5 Language**

The notification shall be prepared in the English language.

#### **4.5.6 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.

#### **4.5.7 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.

#### **4.5.8 Responsibility of the State of Registry, the State of Operator, the State of Design and the State of Manufacture**

##### **4.5.8.1 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.

##### **4.5.8.2 Information - Participation**

Upon receipt of the notification, the State of Registry, the State of the Operator, the State of Design and the State of Manufacture shall, as soon as possible, provide Bahrain with any relevant information available to it regarding the aircraft and flight crew involved in the accident or serious incident. Each State shall also inform Bahrain 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 Kingdom



of Bahrain.

*Note 1: The State of Registry, the State of Operator, the State of Design and the State of Manufacture should acknowledge receipt of the notification of an accident or serious incident (4.6.2.3 refers).*

*Note 2: In accordance with 5.10.1.1, the State of Registry, the State of the Operator, the State of Design and the State of Manufacture have the right to appoint an accredited representative to participate in the investigation.*

*Note 3: In accordance with 5.10.3, the attention of the State of Registry, the State of the Operator, the State of Design and the State of Manufacture is drawn to their obligation 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. Their attention is also drawn to the usefulness of their presence and participation in the investigation.*

4.5.8.3 Upon receipt of notification, the State of Operator shall, with a minimum of delay and by the most suitable and quickest means available, provide Bahrain with details of dangerous goods on board the aircraft.

## **4.6 ACCIDENTS OR SERIOUS INCIDENTS IN THE TERRITORY OF THE KINGDOM OF BAHRAIN, IN A NON-CONTRACTING STATE OR OUTSIDE THE TERRITORY OF ANY STATE**

### **4.6.1 Responsibility of the Kingdom of Bahrain as the State of Registry**

Bahrain, when as the State of Registry, institutes the investigation of an accident or serious incident in a Non-Contracting State or Outside the Territory of any State, Bahrain shall forward a notification, in accordance with 4.5.4 and 4.5.5 above, with a minimum of delay and by the most suitable and quickest means available, to:

- (a) the State of the Operator;
- (b) the State of Design;
- (c) the State of Manufacture; and
- (d) 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.

4.6.1.1 Upon receipt of notification, Bahrain, as the State of Registry, shall request the State of Operator, the State of Design and the State of Manufacture, to provide any relevant information available to them regarding the aircraft and flight crew involved in the accident or serious incident.

4.6.1.2 Bahrain, as the State of Registry, should acknowledge receipt of notification of an accident or serious incident.

4.6.1.3 Bahrain, as the State of Registry, shall entitle the other States to appoint an accredited representative.

### **4.6.2 Responsibility of the State of the Operator, the State of Design and the State of Manufacture**

**4.6.2.1 Information – Participation**

4.6.2.2 Upon receipt of the notification, the State of the Operator, the State of Design and the State of Manufacturer shall, upon request, provide Bahrain with any relevant information available to them regarding the aircraft and flight crew involved in the accident or serious incident. Each State shall also inform Bahrain 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.

4.6.2.3 The State of the Operator, the State of Design and the State of Manufacture should acknowledge receipt of notification of an accident or serious incident.

4.6.2.4 Upon receipt of the notification, the State of the Operator shall, with a minimum of delay and by the most suitable and quickest means available, provide Bahrain with details of dangerous goods on board the aircraft

**4.7 RESPONSIBILITY OF THE KINGDOM OF BAHRAIN WHERE NOT THE STATE OF OCCURRENCE****4.7.1 Applicability**

This sub-chapter applies to the responsibility of Bahrain, as the State of Registry or the State of the Operator, for an accident or serious incident occurring in another Contracting State.

**4.7.2 Information – Participation**

4.7.2.1 Upon receipt of the notification, Bahrain, as the State of Registry or the State of the Operator shall, as soon as possible, provide the State of Occurrence with any relevant information available to them regarding the aircraft and flight crew involved in the accident or serious incident. Bahrain 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 be present at the investigation.

4.7.2.2 Bahrain as the State of Operator, shall acknowledge receipt of the notification of an accident or serious incident.

**4.7.3 Forwarding**

4.7.3.1 Upon receipt of the notification, Bahrain, as the State of the Operator shall, with a minimum of delay and by the most suitable and quickest means available, provide the State of Occurrence and State of Registry (if applicable) with details of dangerous goods on board the aircraft.

4.7.3.2 When the State of Occurrence is not aware of a serious incident, Bahrain as the State of Registry or the State of the Operator; as appropriate, shall forward a notification of such incident to the State of Design, the State of Manufacturer, and the State of Occurrence.



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## CHAPTER 5

### INVESTIGATION

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

##### 5.1.1 General

The Kingdom of 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

5.1.2.1 The Minister, on behalf of the Kingdom of Bahrain, shall institute an investigation into the circumstances of the accident. Bahrain 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 Bahrain shall use every means to facilitate the investigation.

5.1.2.2 The Minister, on behalf of the Kingdom of Bahrain, shall institute an investigation into the circumstances of a serious incident when the aircraft is of a maximum mass of over 2250 kg. Bahrain 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 Bahrain shall use every means to facilitate the investigation.

##### 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

5.1.4.1 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 by mutual arrangement and consent.

5.1.4.2 Should Bahrain be the State nearest the scene of an accident in international waters, Bahrain shall provide such assistance as it is able and shall, likewise, respond to requests by the State of Registry.

5.1.4.3 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 the Operator or, failing that, the State of Design or the State of Manufacture shall endeavor to institute and conduct an investigation. However, Bahrain may delegate the whole or any part of the investigation to another State by mutual arrangement and consent.

## 5.2 ORGANIZATION AND CONDUCT OF THE INVESTIGATION

### 5.2.1 General

5.2.1.1 The Accident Investigation Committee shall have independence in the conduct of the investigation and have unrestricted authority over its conduct. The investigation shall normally include:

- (a) the gathering, recording and analysis of all relevant information on that accident or incident;
- (b) if appropriate, the issuance of safety recommendations;
- (c) if possible, the determination of the causes and/or contributing factors; and
- (d) the completion of the Final Report.

5.2.1.2 Where feasible, the scene of the accident shall be visited, the wreckage examined and statements taken from witnesses.

5.2.1.3 The extent of the investigation and the procedure to be followed in carrying out such an investigation shall be determined by the Accident Investigation Committee depending on the lessons it expects to draw from the investigation for the improvement of safety.

5.2.1.4 Any judicial or administration proceedings to apportion blame or liability shall be separate from any investigation conducted by the Accident Investigation Committee.

## 5.3 INVESTIGATION COMMITTEE

### 5.3.1 General

Pursuant to the provisions of Part VIII of the Civil Aviation Law (No. 14 of 2013), aircraft accidents and 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 Committee chaired by the Minister.

### 5.3.2 Composition

5.3.2.1 The Investigation Committee shall be composed of a Chairman, under the Chairmanship of the Minister, and an adequate number of members, suitably qualified for the purpose.

5.3.2.2 When an accident or incident involves a civil and a military aircraft, the Committee shall be composed of equal numbers of Investigators appointed by the Minister and those of the relevant Military Aviation Authority. The Committee shall be under the direction of the Minister.

### 5.3.3 Responsibilities

The Accident Investigation Committee shall be responsible for;

- (a) Conducting accident/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/incident investigations;
- (e) Designation of research and education agencies related to accident/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/incident investigations.

#### **5.3.4 Rights**

- 5.3.4.1 The Accident Investigation Committee shall have immediate and unrestricted access to all relevant evidence without requiring prior consent from judicial bodies or other authorities.
- 5.3.4.2 The Accident Investigation Committee shall have the right to ensure the investigation is kept separate from judicial processes or administrative proceedings brought about by other authorities.
- 5.3.4.3 The Accident Investigation Committee, shall have the right to notify, correspond, make announcements and sign associated documents on behalf of Bahrain, as the State of Occurrence.
- 5.3.4.4 All evidence and correspondence delivered to the CAA, and associated with the occurrence, shall be handed to the Accident Investigation Committee 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**

- 5.4.2.1 The Investigator-in-charge shall determine whether or not an investigation shall be carried out into any accident or 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 incident.
- 5.4.2.2 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 Committee 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.
- 5.4.2.3 The Investigator-in-charge shall be the single point of contact for media enquiries and disclosure of information.
- 5.4.2.4 The Investigator-in-charge shall exercise control over the conduct of the investigation in all respects.
- 5.4.2.5 The Investigator-in-charge shall issue delegations of authority to those personnel participating in the investigation.

### **5.4.3 Access and control**

5.4.3.1 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.

5.4.3.2 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/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 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 Committee, 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

5.7.1.1 An investigation into any accident to which these Regulations apply may be a formal investigation or a field investigation.

5.7.1.2 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.

5.7.1.3 All investigations shall be held in private.

5.7.1.4 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 Committee, 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

5.7.3.1 If, after the investigation has been closed, new and significant evidence becomes available, the Accident Investigation Committee, if it conducted the investigation, shall re-open it. However, if the Committee conducted the investigation at the request of another State, consent from that State shall be firstly obtained.

5.7.3.2 Any investigation reopened shall be subject to and conducted in accordance with the provisions of these Regulations relating to a formal investigation thereof.

### 5.7.4 Flight recorders

5.7.4.1 Effective use shall be made of flight recorders in the investigation of an accident or an incident.

5.7.4.2 The Accident Investigation Committee, when conducting the investigation, shall arrange for the readout of the flight recorders without delay. Effective use shall be made of flight recorders in the investigation of all accidents and incidents.

5.7.4.3 In the event that Bahrain does not have adequate facilities to read out the flight recorders, the Accident Investigation Committee shall arrange to use the facilities made available to it by other States, giving consideration to the following:

- (a) the capabilities of the readout facility;
- (b) the readout of the recorders shall be conducted without delay; and
- (c) the location of the read out facility.

### 5.7.5 Autopsy Examinations

The Accident Investigation Committee, 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

5.7.6.1 The Accident Investigation Committee, 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.

5.7.6.2 The Accident Investigation Committee, 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.

### 5.7.7 Co-ordination – Judicial Authorities

The Accident Investigation Committee, 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

5.7.8.1 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.

5.7.8.2 If the Investigator-in-charge finds evidence or suspects that the accident or 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 Committee and investigators.*

## 5.8 NON-DISCLOSURE OF RECORDS

### 5.8.1 General

5.8.1.1 The Accident Investigation Committee, when conducting the investigation into an accident or incident, shall not make the following records available for purposes other than accident or incident investigation, unless the appropriate authority for the administration of justice in Bahrain determines that their disclosure outweighs the adverse domestic and international impact such action may have on that or any future investigations:

- (a) all statements taken from persons by the investigation committee in the course of their investigation;
- (b) all communications between persons having been involved in the operation of the aircraft;

- (c) medical or private information regarding persons involved in the accident or incident;
- (d) cockpit voice recordings and transcripts from such recordings; and
- (e) recordings and transcripts of recordings from air traffic control units;
- (f) cockpit airborne image recording and any part or transcripts from such recording; and
- (g) opinions expressed in the analysis of information, including flight recorder information.

5.8.1.2 The names of the persons involved in the accident or incident shall not be disclosed to the public by the accident investigation committee.

5.8.1.3 The Accident Investigation Committee, when not conducting the investigation into an accident or incident, shall not make the above records available unless Bahrain approves its disclosure.

## **5.8.2 Inclusion provisions in Final Report**

These records shall be included in the Final Report or its appendices only when pertinent to the analysis of the accident or incident. Parts of the records not relevant to the analysis shall not be disclosed.

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

### **5.9.1 Provision of Information**

5.9.1.1 Bahrain, as the State of Registry and/or the State of the Operator shall, on request from the State conducting the investigation of an accident or an incident, provide that State with all the relevant information available to it.

5.9.1.2 Bahrain, 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 an incident, and which has information pertinent to the investigation, shall provide such information to the State conducting the investigation.

### **5.9.2 Flight Recorders**

Bahrain, as the State of Registry and/or the State of the 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.

### **5.9.3 Organizational Information**

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

## **5.10 PARTICIPATION IN THE INVESTIGATION**

### **5.10.1 Rights of Other States**

5.10.1.1 The State of Registry, the State of the Operator, the State of Design and the State of Manufacturer, including the State of Manufacturer of engines or major components, shall each be entitled to appoint an accredited representative to participate in the investigation.

5.10.1.2 Any State, which on request provides information, facilities or experts to the State conducting the investigation, shall be entitled to appoint an accredited representative to participate in the investigation.

*Note 1: Participation by States, other than the State of Registry, the State of the Operator, the State of Design and the State of Manufacturer may be limited to those matters which entitled those States to participate.*

*Note 2: Under ICAO Annex 13, the Kingdom of Bahrain has identical rights for an occurrence in another State.*

5.10.1.3 When neither the State of Registry, nor the State of the Operator appoint an accredited representative, the State conducting the investigation should invite the operator to participate, subject to the procedures of the State conducting the investigation.

5.10.1.4 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.

5.10.1.5 When neither the State of Design nor the State of Manufacture appoint an accredited representative, Bahrain, as the State conducting the investigation, should invite the organizations responsible for the type design and the final assembly of the aircraft to participate.

## **5.10.2 Operator – Advisor**

5.10.2.1 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.

5.10.2.2 When neither the State of Registry nor the State of the Operator appoints an accredited representative, Bahrain, as the State conducting the investigation, may invite the operator to participate.

*Note: Under ICAO Annex 13, the Kingdom of Bahrain has identical rights for an occurrence in another State.*

## **5.10.3 Obligations of the Kingdom of Bahrain**

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 the State of Registry, the State of the Operator, the State of Design or the State of Manufacturer, Bahrain shall appoint an accredited representative.

## **5.11 ENTITLEMENT OF ACCREDITED REPRESENTATIVES AND ADVISORS**

### **5.11.1 Advisors**

5.11.1.1 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.

5.11.1.2 Advisors assisting an accredited representative shall be permitted by the Investigator-in-charge, 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.

*Note: Under ICAO Annex 13, the Kingdom Bahrain has identical rights, entitlements and obligations for an occurrence in another State.*

### 5.11.2 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.

### 5.11.3 Obligations

The accredited representative and their advisers;

- (a) shall provide the Aircraft Investigation Committee 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 Committee .

## 5.12 OTHER PARTICIPATION

### 5.12.1 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.

*Note: Under ICAO Annex 13, the Kingdom of Bahrain has identical rights and entitlements for such an occurrence in another State.*

## **5.13 INVESTIGATOR-IN-CHARGE'S REPORT**

### **5.13.1 Investigator's Report**

5.13.1.1 Upon completion of a formal investigation the Investigator-in-charge shall submit, to the Accident Investigation Committee, a draft report from the Investigator(s) who carried out the investigation. The report shall state the facts relating to the accident/incident followed by an analysis of the facts and conclusions as to the causes and contributing factors of the occurrence, together with any recommendations, which the Investigator-in-charge may make with a view to the compilation of the Final Report, as well as the preservation of life and the avoidance of accidents in the future.

5.13.1.2 The Investigator-in-charge report shall be in the same format as a draft Final Report.

### **5.13.2 Representation**

5.13.2.1 No report(s) shall be submitted until the Investigator-in-charge has:

- (a) where it appears to him to be practicable to do so, served notice under this Regulation upon the operator and commander of the aircraft involved in the accident and on any person whose reputation is, in the Investigator-in-charge's opinion, likely to be adversely affected by the report or, if any of the foregoing be a deceased individual, upon such person or persons as appear to the Investigator-in-charge, at the time he/she proposes to serve Notice, to represent best the interest of the deceased in the matter; and
- (b) considered any representations, which may be made to him in accordance with sub-paragraph 5.13.2.3 below, by or on behalf of the persons served with such a Notice.

5.13.2.2 The notice referred to in sub-paragraph 5.13.2.1 above, shall include particulars of any proposed analysis of facts and conclusions as to the cause, causes and/or contributing factors of the accident, which may affect the person on whom or in respect of whom the Notice is served.

5.13.2.3 Written representations made to the Investigator-in-charge pursuant to sub-paragraph 5.13.2.1 above, shall be within 28 days from the service of the Notice referred to in that sub-paragraph. The Investigator-in-charge shall have the power to extend such period, and this power may be exercised notwithstanding that the period so prescribed has expired.

5.13.2.4 After considering the written representation, the Investigator-in-charge may determine that the person(s) concerned shall be heard by the Committee and shall have the right to give evidence, produce witnesses and examine any other witnesses giving evidence. The Investigator(s) who made the report shall be entitled to be heard.

5.13.2.5 The Accident Investigation Committee shall have full investigative powers under these regulations and, in addition, the Investigator-in-charge may administer an oath to or require a solemn affirmation from any witness.

5.13.2.6 Where at any time the Committee is satisfied that any of the findings and conclusions in the Investigator-in-charge's report do not adversely affect the reputation of the person in respect of whom the Notice was served, the Committee may recommend to the Investigator-in-charge that the proceedings in respect of those findings and conclusions be discontinued and the report be submitted to the Minister.

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## CHAPTER 6

### FINAL REPORT

#### 6.1 DRAFT FINAL REPORT

##### 6.1.1 Request for Comment

6.1.1.1 The Accident Investigation Committee 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:

- (a) the State that instituted the investigation;
- (b) the State of Registry;
- (c) the State of the Operator
- (d) the State of Design;
- (e) the State of Manufacturer; and
- (f) any state that participated in the investigation as per chapter 5.

6.1.1.2 The Accident Investigation Committee 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.

6.1.1.3 The Accident Investigation Committee 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.

##### 6.1.2 Response

If the Minister 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 Minister 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.

##### 6.1.3 Release of Information - Consent

States shall not circulate, publish or give access to a draft report or any part thereof, or any document obtained during an investigation of an accident or incident, without the express consent of the Kingdom of Bahrain, which conducted the investigation, unless such reports or documents have already been published or released by the Kingdom of Bahrain.

*Note: The Kingdom of Bahrain, if sending a copy of the draft Final Report, should ensure in writing that other States comply with this ICAO Annex 13 requirement.*



## 6.2 FINAL REPORT

### 6.2.1 Recipients

The Final Report of the investigation of an accident shall be sent with a minimum of delay by the Accident Investigation Committee 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 .

### 6.2.2 Release of the Final Report

6.2.2.1 The Minister shall, unless in his opinion there are good reasons to the contrary, cause the Investigator-in-charge's report to be made public, wholly or in part, in such manner as he/she thinks appropriate.

6.2.2.2 In the interest of accident prevention, the Minister shall make the Final Report publicly available as soon as possible, and, if possible, within twelve months.

6.2.2.3 If the report cannot be made publicly available within twelve months, an interim report shall be made publicly available on each anniversary of the occurrence, detailing the progress of the investigation and any safety issues raised.

6.2.2.3 The Final Report should be released in the shortest possible time and, if possible within twelve months of the date of the occurrence. If the report cannot be released within twelve months, an interim report should be released on each anniversary of the occurrence, detailing the progress of the investigation and any safety issues raised.

### 6.2.3 Format of the Final Report

ICAO Annex 13, Appendix shall be used for the format of the Final Report.

## 6.3 SAFETY RECOMMENDATIONS

6.3.1 At any stage of the investigation of an accident or incident, the Accident Investigation Committee, 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.

6.3.2 The Accident Investigation Committee conducting investigations of accidents or incidents, 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.

#### **6.4 ACTION ON SAFETY RECOMMENDATIONS**

On receipt of any safety recommendations or other proposals for preventative action received, the CAA 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.

**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 Committee, if 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 Committee, if 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 Committee, if 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**

If the Accident Investigation Committee conducts an investigation into an incident to an aircraft of a maximum mass of over 5700 kg, the Committee 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 Committee, if conducting the investigation, should, 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 CAA shall establish and maintain a mandatory incident reporting system to facilitate collection of information on actual or potential safety deficiencies.

*Note: The mandatory reporting requirements are listed in AMC 20-8 “Occurrence Reporting”*

##### 8.1.2 Voluntary System

The CAA 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 CAA 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 CAA shall analyse the information contained in its accident/incident reports to determine the preventative actions required.

*Note: Refer also to the ICAO Accident Prevention Programme at [www.icao.int](http://www.icao.int)*

#### 8.3 EXCHANGE OF SAFETY INFORMATION

- 8.3.1 If the Accident Investigation Committee, in the analysis of the information contained in its database, identifies safety matters considered to be of interest to other States, the Accident Investigation Committee 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.*

- 8.3.2 The CAA 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.

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**APPENDIX A - 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 B – EXAMPLES OF INCIDENTS LIKELY TO BE SERIOUS INCIDENTS**

The following incidents are typical 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.

- (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\* or unassigned runway.
- (g) Gross failures to achieve predicted performance during take-off or initial climb.
- (h) 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.
- (i) Events requiring the emergency use of oxygen by the flight crew.
- (j) Aircraft structural failures or engine disintegrations, including uncontained turbine engine failures, not classified as an accident.
- (k) Multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft.
- (l) Flight crew incapacitation in flight.
- (m) 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.
- (n) 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, 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.