



CIVIL AVIATION PUBLICATION

CAP 05 INCIDENT AND OCCURRENCE REPORTING

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Bahrain CAA Publication Revisions Highlight Sheet

CAP: 05

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The following pages have been revised to Revision 10 dated 17 September 2023.

Item	Chapter/Paragraph No.	Page(s)	Reason
1.	1	1	Adding Q-Pulse System for reporting
2.	5(b)	4	Adding Airsafety Reporting requirement
3.	5 (c)	4	Introduction of additional requirement for submission of monthly report by the operator
4.	6	5	Adding requirement for initial investigation report
5.	7(c)(1)	6	Additional reporting channel requirement
6.	8.1(j)	7	Amended to delete of irrelevant reference
7.	9	8	Adding requirements for retention of flight recorder data
8.	Appendix 6	APP 6-1	Deletion of Occurrence report form and introducing link for the same.
9.	Appendix 7	APP 7-1	Deletion of Q-Pulse template and introducing link for the same.

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LIST OF EFFECTIVE PAGES

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REVISION RECORD

CAP 05 INCIDENT AND OCCURRENCE REPORTING

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OCCURRENCE REPORTING

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1. INTRODUCTION

This CAP is interpretative material and provides guidance in order to determine which occurrences should be reported to the BCAA and to other organisations, and it provides guidance on the timescale for submission of such reports. It also describes the objective of the overall occurrence reporting system including internal and external functions. Operators and organisations are encouraged to include occurrence reporting data bases within their Safety Management System.

The mandatory requirement for reporting aviation security incident/accident is supported by the Aviation Safety and Security Directorate at the following number 17321113, or via email assd@mtt.gov.bh or BCAA's Q-Pulse system.

For the mandatory requirement for reporting dangerous goods incident/accidents, see paragraph 2(c) below.

Guidance on the BCAA's voluntary reporting may be found in CAP 17 – Voluntary Reporting.

2. APPLICABILITY

- (a) This CAP only applies to occurrence reporting by persons/organisations regulated by ANTR-21, ANTR-OPS, ANTR-M or ANTR-145. It does not address reporting by aerodrome organisations, air navigation service providers and authorities themselves.
- (b) In most cases the obligation to report is on the holders of a certificate or approval, which in most cases are organisations, but in some cases can be a single person. In addition, some reporting requirements are directed to persons. However, in order not to complicate the text, only the term “organisation” is used.
- (c) The CAP also does not apply to dangerous goods reporting. The definition of reportable dangerous goods occurrences is different from the other occurrences and the reporting system is also separate. This subject is covered in specific requirements and guidance within ANTR-OPS, CAP and ICAO Documents namely:
 - (1) ANTR-OPS 1/3.1225 and AMC OPS 1/3.1225
 - (2) ICAO Annex 18 - The Safe Transport of Dangerous Goods by Air, Chapter 12
 - (3) ICAO Doc 9284-AN/905, Technical Instructions for the Safe Transport of Dangerous Goods by Air
 - (4) CAP 02 Dangerous Goods

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3. OBJECTIVE OF OCCURRENCE REPORTING

- (a) The occurrence reporting system is an essential part of the overall monitoring function. The objective of the occurrence reporting, collection, investigation analysis, storage, protection and dissemination described in ANTR-OPS 1/3, ANTR-21, ANTR-M and ANTR-145 is to use the reported information to contribute to the improvement of aviation safety, and not to attribute blame, impose fines or take other enforcement actions.
- (b) The detailed objectives of the occurrence reporting systems are:
 - (1) To enable an assessment of the safety implications of each occurrence to be made, including previous similar occurrences, so that any necessary action can be initiated. This includes determining what and why it had occurred and what might prevent a similar occurrence in the future.
 - (2) To ensure that knowledge of occurrences is disseminated so that other persons and organisations may learn from them.
 - (3) Encourage aviation industry to follow a centralised reporting.
 - (4) Enhance international aviation safety by reporting wake vortex incidents and specific bird strikes and details of associated aircraft damage to ICAO when required.
- (c) The occurrence reporting system is complementary to the normal day to day procedures and 'control' systems and is not intended to duplicate or supersede any of them. The occurrence reporting system is a tool to identify those occasions where routine procedures have failed.
- (d) Occurrences should remain in the database when judged reportable by the person submitting the report as the significance of such reports may only become obvious at a later date.
- (e) The BCAA shall ensure that, in respect of aeroplanes over 5700 kg and helicopters over 3175 kg maximum certificated take-off mass, there exists a system whereby information on faults, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the aircraft is transmitted to the organization responsible for the type design of that aircraft. Whenever this information relates to an engine or propeller, such information shall be transmitted to both the organization responsible for engine or propeller type design and the organization responsible for aircraft type design. Where a continuing airworthiness safety issue is associated with a modification, the State of Registry shall ensure that there exists a system whereby the above information is transmitted to the organization responsible for the design of the modification.

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4. CATEGORIES OF PERSONS REQUIRED TO REPORT

The categories of persons (or organisations) that are required to report occurrences are:

- (a) operator or commander of an aircraft, whether registered or not in Bahrain, but operated by the holder of an Air Operator Certificate issued by the BCAA; or
- (b) organisation that carries out in Bahrain or outside Bahrain the business of designing, manufacturing, modifying or maintaining a Bahraini registered aircraft, or any equipment or part thereof; or
- (c) person who signs a certificate of release to service in respect of the aircraft indicated in paragraph (a); or any equipment or part thereof; or
- (d) organization or person connected with the installation, modification, maintenance, repair, overhaul, flight checking or inspection of air navigation facilities or other services which are approved by the BCAA; or
- (e) organisation or person that performs a function connected with the ground handling of aircraft, including fuelling, servicing, load sheet preparation, loading, dangerous goods and towing at a Bahraini airport.

It should be understood that, while the legislation defines those who have to report, anyone may report, should they consider it necessary. Persons should report any reportable occurrence of which they have positive knowledge, even if they have good reason to believe that appropriate details of the occurrence have already been, or will be, reported by someone else.

A report should also be submitted on any occurrence that involves an unsatisfactory condition, behaviour, or procedure, which did not immediately endanger the aircraft but if allowed to continue uncorrected, or if repeated in other foreseeable circumstances, would create a hazard to aircraft or individuals or property.

It is of great importance that the reporters keep firmly in mind the concept of 'critical' or 'potentially critical', as used above and explained under Section 5, when deciding whether or not to submit a report.

5. REPORTING TO THE AUTHORITY

- (a) Requirements
 - (1) Occurrences defined as an incident, malfunction, defect, technical defect or exceedance of technical limitations that endangers or could endanger the safe operation of the aircraft must be reported to the Authority.
 - (2) Occurrences defined as a failure, malfunction, defect or other occurrence which has resulted in or may result in an unsafe condition must be reported to the Authority.
 - (3) Occurrences defined as a deviation which could lead to an unsafe condition must be reported to the Authority.

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- (4) ANTR M stipulates the requirement of reporting any identified condition of an aircraft or component which endangers flight safety.
 - (5) ANTR 145 & ANTR M stipulates that occurrences defined as any condition of the aircraft or aircraft component that has resulted or may result in an unsafe condition that could seriously hazard the aircraft must be reported to the Authority.
 - (6) Reporting does not remove the reporter's or organisation's responsibility to commence corrective actions to prevent similar occurrences in the future. Known and planned preventive actions should be included within the report.
- (b) This CAP provides guidance as to what should be reported by an organisation to the Authority. The list of criteria provided may be used as guidance for establishing which occurrences shall be reported by which organisation. For example, the organisation responsible for the design will not need to report certain operational occurrences that it has been made aware of, if the continuing airworthiness of the product is not involved.

Report Form at <http://qpulse.mtt.gov.bh/reporting> or <https://www.mtt.gov.bh/sites/default/files/f017.pdf>

To facilitate consistent reporting and subsequent storage and analysis of data, Q-Pulse Web Reporting is available and ideally should be used or form ALD/ASR/F017 to be submitted. While filing the report through the Q-Pulse system, the Airsafety Report (ASR) and Technical Safety Report shall also be submitted as applicable.

(c) Monthly Occurrence Status Reports

Monthly occurrence status reports are required to be sent to the BCAA (Attn: ALD Chief Aviation Safety Rules & Regulations) as part of the BCAA's Safety Management System.

After the end of each month an operator's SMS Manager shall submit either a written or an electronic summary of all occurrences which occurred during the calendar month, together with any comments. The comments may include the action taken, or the investigation/rectification status. The Q-Pulse Incident Details template (refer to Appendix 7) should be completed and submitted for each reported Mandatory Occurrence Report (MOR).

In addition to the submission of the monthly report, the report shall also contain the root cause analysis, corrective action to make good the occurrence reported and preventive action to avoid such occurrences in future. To establish this the operator is required to incorporate a system for periodic analysis of occurrences, area wise to identify the effectiveness of application of root cause analysis, and the corrective & preventive actions. Such system shall also identify the weak areas and the enforced surveillance actions required to curtail such occurrences.

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(d) Channels of Reporting

The operator/organisation may report via:

- (a) the BCAA Q-Pulse reporting System (access is required from the BCAA): or
- (b) the website, as referred above
- (c) Email, Aerolicensing@mtt.gov.bh.

6. NOTIFICATION OF ACCIDENTS AND SERIOUS INCIDENTS

In addition to the requirement to notify the appropriate accident investigating authorities directly of any accident or serious incident, operators should also report to the BCAA.

The primary objective of occurrence reporting is to monitor, disseminate and record for analysis, critical or potentially critical safety occurrences. It is not intended to collect and monitor the normal flow of day-to-day defects/incidents etc. The latter is an important part of the overall flight safety task, but other procedures and systems exist to carry out this function. Organisational reporting policies need to ensure clear criteria for mandatory reporting to BCAA to ensure that all relevant safety events are completely and correctly reported and that those events which are not required to be sent to the BCAA are well defined and are appropriately reported in accordance with the organisation's internal reporting system(s). Reporters should ensure that the content of their reports meets the criteria and guidance referenced in this CAP. Particular emphasis should be paid towards ensuring that day-to-day anomalies, insignificant technical defects and routine reliability issues are dealt with by means of the normal organisational systems and procedures.

In either case, the preliminary investigation report along with the initial risk assessment associated with this event shall be submitted within 5 business days.

Appendices 1 to 5 of this CAP provide guidance as to what should be reported by an organisation to the BCAA. The list of criteria provided may be used as guidance for establishing which incident shall be reported by which organisation.

7. REPORTING TIME

Reports must be dispatched within the timeframe indicated below, unless exceptional circumstances prevent this. Nevertheless, in the cases of accidents and serious incidents, the BCAA expects to be advised of the essential details as soon as possible (refer to note below). This should be followed up, within the mandated timeframe, by a full report. The BCAA relies on the judgement of those responsible for submitting reports to establish which occurrences fall within the serious incident category. For other incidents, reports may be sent within the specified timeframe in the table below.

Prompt advice to the BCAA on the results of investigations and the actions taken to control the situation may minimise direct BCAA involvement in the investigation. In the case of technical failures or difficulties, the availability of photographs and/or preservation of damaged parts will greatly facilitate the subsequent investigation. Provision of supplementary information on reportable occurrences may be necessary when specifically requested by the BCAA. However, the efficiency of BCAA's follow-up work and the quality of safety data it can provide will be enhanced if reporting organisations keep the BCAA informed of major developments in their investigations.

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- (a) The period of 72 hours is normally understood to start from when the occurrence took place or from the time when the reporter determined that there was, or could have been, a potentially hazardous or unsafe condition.
- (b) For many occurrences there is no evaluation needed; it must be reported. However, there will be occasions when, as part of a Safety Management System or Quality Programme, a previously non-reportable occurrence is determined to be reportable
- (c) Within the overall limit of 72 hours for the submission of a report, the degree of urgency should be determined by the level of hazard judged to have resulted from the occurrence:
 - (1) Where an occurrence is judged to have resulted in an immediate and particularly significant hazard the Authority expects to be advised immediately, and by the fastest possible means (e.g. telephone, fax, telex, e-mail) of whatever details are available at that time to the Director of Aeronautical Licensing and the initial notification should then be followed up by a report within 72 hours.
 - (2) Where the occurrence is judged to have resulted in a less immediate and less significant hazard, report submission may be delayed up to the maximum of 72 hours to provide more details or more reliable information.

Note: Reportable accidents require that notice be given to the CAA by the quickest means of communication available and serious incidents, as defined in ANTR Part VI, require that notice be given to the CAA by the quickest means of communication available within 24 hours.

8. SPECIFIC REPORTING PROVISIONS

- (a) Aircraft, aircraft equipment and ground equipment defects

In the case of occurrences arising from, or relating to, defects in the aircraft, its equipment or any item of ground equipment, it is important that the appropriate manufacturer(s) and competent authority be advised of the occurrence as soon as possible. The BCAA therefore expects that any organisation which raises an occurrence report (or which has been made aware of a report raised by an individual employee) will, without any delay, report to the appropriate aircraft or equipment manufacturer(s) or relevant regulatory agencies. In the case of incidents affecting ground installations or services (for example, aerodrome and/or air traffic control) those responsible for those services should also be informed. The original report (submitted to the BCAA) should list all addressees to whom it has been sent. To facilitate effective lines of communication when any part or equipment involved in an occurrence is being dispatched to another area or organisation for investigation or repair, the item(s) should be clearly identified as the subject of an occurrence report to the BCAA, by appropriate annotation of the “tag” and all accompanying paperwork.

Additionally, the BCAA expects that Suspected Unapproved Parts are also reported.

- (b) AIRPROX and Birdstrike

Because of the specialist detailed nature of the information required on AIRPROX and birdstrike, all such reports should be submitted to the BCAA through the required website, as referred above

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All bird and wildlife strikes must be recorded in the Aviation Safety and Security Incident Log. If the strike resulted in damage the Operator shall complete a supplementary damage report details as required by ICAO Doc. 9332, upon request by the BCAA. If the birdstrike has not caused damage to aircraft or engine, the BCAA may extend the reporting time mandated by paragraph 6.

Note: For Air Traffic Controllers, see Appendix 5.

- (c) Volcanic Ash Reporting
Volcanic Ash reporting shall be reported too.
- (d) Dangerous Goods Reporting
See paragraph 2(c) above.
- (e) Incident Involving Military in Bahrain civil airspace or foreign aircraft operating in Bahrain.

These incidents should be reported by the respective aerodrome or ATS unit affected by the incident. Affected Bahraini air operators will follow appendix 5 in such cases and report accordingly if required.

8.1 Service Difficulty Reporting

Each operator should report the occurrence or detection of each failure, malfunction or defect concerning at least the following (but not limited to):

- a) fires during flight and whether or not a fire warning system was installed and functioned properly;
- b) false fire warning during flight;
- c) an engine exhaust system that causes damage during flight to the engine, adjacent structure, equipment or components;
- d) an aircraft component that causes accumulation or circulation of smoke, vapour, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;
- e) engine shutdown during flight because of flameout;
- f) engine shutdown during flight when external damage to the engine or aircraft structure occurs;
- g) engine shutdown during flight due to foreign object ingestion or icing;
- h) shutdown during flight of more than one engine;
- i) a propeller feathering system or ability of the system to control over-speed during flight;
- j) a fuel or fuel dumping system that affects fuel flow or causes hazardous leakage during flight;
- k) a landing gear extension or retraction, or opening or closing of landing gear doors during flight;
- l) brake system components that result in loss of brake actuating force when the aircraft is in motion on the ground;
- m) aircraft structure that requires significant repair;
- n) cracks, permanent deformation, or corrosion of aircraft structure, if more than the maximum acceptable to the manufacturer or the CAA;
- o) aircraft components or systems that result in taking emergency actions during flight (except action to shut down an engine);
- p) each interruption to a flight, unscheduled change of aircraft en route, or unscheduled stop or diversion from a route, caused by known or suspected mechanical difficulties or malfunctions;

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- q) the number of engines removed prematurely because of malfunction, failure or defect, listed by make and model and the aircraft type in which it was installed; and
- r) the number of propeller featherings in flight, listed by type of propeller and engine and aircraft on which it was installed.

8.2 Significant Reports

8.2.1 The following significant reports warrant immediate notification of the appropriate State organization by telephone or report:

- a) primary structure failure;
- b) control system failure;
- c) fire in the aircraft;
- d) engine structural failure; or
- e) any other condition considered an imminent hazard to safety.

8.2.2 The telephone or report should follow the format of the SDR and, being of an alert nature, should contain the following information when available and relevant:

- a) aircraft owner's name and address;
- b) whether accident or incident;
- c) related SBs, service letters, ADs; and
- d) disposition of the defective parts.

9. RETENTION OF DATA FROM A FLIGHT DATA / VOICE RECORDER

The BCAA expects to use data obtained from a Flight Data Recorder (FDR) only when this is necessary for the proper investigation of any significant occurrence. It is not intended to use such data to check on information contained in a written report but to supplement and extend the written information. Flight Data recorders fitted to some aircraft are capable of providing valuable data on a wider range of occurrences and the BCAA would expect to make judicious use of such information in relation to appropriate occurrences. For this purpose, the BCAA requires operators to comply with ANTR-OPS 1.160(a) or ANTR-OPS 3.160(a), as applicable.

Following an accident or incident that requires filing of mandatory occurrence reporting, the operator of an aeroplane on which a flight / voice recorder is carried shall, to the extent possible, preserve the original recorded data / voice pertaining to that accident or incident, as retained by the recorder for a period of 60 days unless otherwise directed by the investigating authority.

As part of the occurrence reporting system of an operator, the operator shall have the necessary internal procedures to download and read flight data to accomplish the necessary internal investigations and follow-up. These procedures should be included in the organisations approved procedures for internal occurrence reporting and flight data monitoring.

The BCAA depends upon the judgment of those responsible for submitting reports to establish which occurrences require the retention of FDR data. It is equally incumbent upon the BCAA to advise the reporting organisation, as quickly as possible, when it requires such data.

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10. PROCESSING OF OCCURRENCE REPORTS

In relation to all reported occurrences, the BCAA will:

- (a) evaluate each occurrence report received;
- (b) decide which occurrences require follow-up by the BCAA to discharge the BCAA's functions and responsibilities;
- (c) make such checks as it considers necessary to ensure that operators, manufacturers, maintenance organisations, training organizations, air traffic control services and aerodrome operators are taking any necessary remedial and preventative action in relation to reported occurrences;
- (d) take such steps as to communicate/follow-up the occurrence to type certificate holders, competent authorities and liaise and exchange information with them for any necessary remedial and preventative action as applicable in relation to reported occurrences;
- (e) assess and analyse the information reported to it in order to detect safety problems which may not be apparent to individual reporters;
- (f) make available the information derived from occurrence reports in accordance with the relevant regulations;
- (g) make available the results of studies of the data provided to those who will use them for the benefit of air safety;
- (h) where appropriate, issue specific advice or instructions to particular sections of the industry;
- (i) where appropriate, take action in relation to legislation, requirements or guidance, such as revisions of the civil aviation regulations;
- (j) ensure that effective communication is maintained in respect of accident and serious incident investigation and follow up, and that all appropriate areas of BCAA are fully briefed on all matters of significance.

11. OCCURRENCES CLOSED ON RECEIPT

Certain occurrences reported to the BCAA, while meeting the criteria for a reportable occurrence, are adequately dealt with by the reporting organisation. Thus, there is no justification for further investigation by the BCAA, although details of the occurrence and action taken do provide valuable information for dissemination and storage purposes. Reports judged to be in this category are closed on receipt by the BCAA, the principal justification for closure being that it is evident from the report that existing requirements, procedures, documentation and so on, coupled with the reporter's action, have adequately controlled the identified hazard. When necessary, the BCAA will liaise with the reporter in making this decision. The ability of the BCAA to close an occurrence on receipt and thus avoid the need for further BCAA investigation is very much dependent upon the quality of the information provided in the report and, specifically, information on the action taken by the reporting organisation to control the situation.

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12. CONTENT OF REPORTS

- (a) Notwithstanding other required reporting means as promulgated in national requirements (e.g. AIRPROX reporting), reports may be transmitted in any form considered acceptable to the Authority. The amount of information in the report should be commensurate with the severity of the occurrence. Each report should at least contain the following elements, as applicable to each organisation:
- (1) Organisation name
 - (2) Approval reference (if relevant)
 - (3) Information necessary to identify the aircraft or part affected.
 - (4) Date and time if relevant
 - (5) A written summary of the occurrence
 - (6) Any other specific information required (e.g. For helicopters, Appendix 1 to ANTR-OPS 3.517(a) requires specific data to be reported.)
- (b) For any occurrence involving a system or component, which is monitored or protected by a warning and/or protection system (for example: fire detection/extinguishing) the occurrence report should always state whether such system(s) functioned properly.

13. NOTIFICATION TO OTHER AGENCIES

For ANTR-OPS approved organisations, in addition to reporting occurrences to the Authority, the following agencies should also be notified in specific cases:

- (a) Reports relating to “security incidents” should also be notified to the appropriate local security agency
- (b) Reports relating to air traffic, aerodrome occurrences or bird strikes should also be notified to the appropriate air navigation, aerodrome or ground agency
- (c) Reports relating to air traffic management safety occurrences should be notified to the responsible Regional authority
- (d) Laser beam occurrences should also be notified to the appropriate local security agency and air traffic control.
- (e) State of Design and/or State of Manufacturer when related to design/production of aircraft, equipment fitted thereof. The list can be found in Section 8.1.
- (f) Accidents/ Incidents and or serious incidents involving Radioactive Materials “Class 7” should be also notified to the BCAA.

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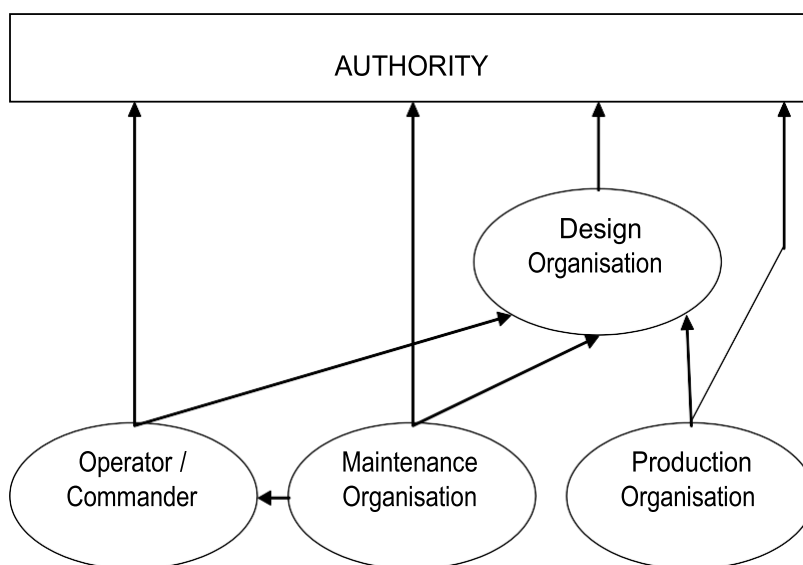
14. REPORTING BETWEEN ORGANISATIONS

- (a) Requirements exist that address the reporting of data relating to unsafe or un-airworthy conditions. For Bahraini operators/organisations these reporting lines are:
- (1) Maintenance organisation to the organisation responsible for the design;
 - (2) Maintenance organisation to operator;
 - (3) Operator to organisation responsible for the design;
- (b) The Organisation responsible for the design“ is a general term, which can be any one or a combination of the following organisations
- (1) Holder of Type Certificate (TC) of an Aircraft, Engine or Propeller;
 - (2) Holder of a Supplemental Type Certificate (STC) on an Aircraft, Engine or Propeller;
 - (3) Holder of a Technical Standard Order (TSO) Authorisation; or
 - (4) Holder of a Part Approval (PA) Authorisation
- (c) If it can be determined that the occurrence has an impact on or is related to an aircraft component which is covered by a separate design approval (TC, STC, TSO or PA), then the holders of such approval/authorisation should be informed.
- If an occurrence happens on a component which is covered by an TC, STC, TSO or PA (e.g. during maintenance), then only that TC, STC, TSO Authorisation or PA Authorisation holder needs to be informed.
- (d) The form and timescale for reports to be exchanged between organisations is left for individual organisations to determine. What is important is that a relationship exists between the organisations to ensure that there is an exchange of information relating to occurrences.
- (e) Paragraph 10(e) of this CAP provides guidance as to what should be reported by an organisation to the authority. The list of criteria provided may be used as guidance for establishing which occurrences shall be reported to which organisation. Foreexample, certain operational occurrences will not need to be reported by an operator to the design or production organisation.

15. REPORTABLE OCCURRENCES

- (a) *General.* There are different reporting requirements for operators (and/or commanders), maintenance organisations, design organisations and production organisations. Moreover, there are not only requirements for reporting to the authority, but also for reporting to other (private) entities. The criteria for all these different reporting lines are not the same. For example, the authority will not receive the same kind of reports from a design organisation as from an operator. This reflects the different perspectives of the organisations based on their activities. The following presents a simplified scheme of all reporting lines.

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- (b) *Operations and Maintenance.* The list of examples of reportable occurrences offered below under Appendix 2 and 4 is established from the perspective of primary sources of occurrence information in the operational area (operators and maintenance organisations) to provide guidance for those persons developing criteria for individual organisations on what they need to report to the authority. The list is neither definitive nor exhaustive and judgement by the reporter of the degree of hazard or potential hazard involved is essential.
- (c) *Customised list.* Each Bahraini approval or authorisation holder should develop a customised list or data base adapted to its aircraft, operation or product. The list of reportable occurrences applicable to an organisation is usually published within the organisation and could be part of the organisation's SMS.
- (d) *Internal reporting.* The perception of safety is central to occurrence reporting. It is for each organisation to determine what is safe and what is unsafe and to develop its reporting system on that basis. The organisation should establish an internal reporting system whereby reports are centrally collected and reviewed to establish which reports meet the criteria for occurrence reporting to the Authority and other organisations, as required.
- (e) *External Sources.* External departments like law enforcement agencies, foreign CAAs may also submit safety incident reports with respect to Bahraini registered aircraft.
- (f) *List of examples of reportable occurrences*

The following on Appendix 1 is a generic list. Not all examples are applicable to each reporting organisation. In addition, some organisations may prefer a less detailed list. Therefore, each organisation should define and agree with the authority a specific list of reportable occurrences or a list of more generic criteria, tailored to its activity and scope of work. In establishing that customised list, the organisation should consider the following considerations:

Reportable occurrences are those where the safety of operation was or could have been endangered or which could have led to an unsafe condition. If in the view of the reporter an occurrence did not hazard the safety of the operation but if repeated in

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different but likely circumstances would create a hazard, then a report should be made. What is judged to be reportable on one class of product, part or appliance may not be so on another and the absence or presence of a single factor, human or technical, can transform an occurrence into a serious incident or accident.

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

A lot of the qualifying adjectives like “significant” have been deleted from the list. Instead, it is expected that all examples are qualified by the reporter using the general criteria that are applicable in his field, and specified in the requirement. (e.g. for operators: “hazards or could have endangered the safety of the operation”).

Note: Refer to following Appendices 1-5 for various reportable occurrences.

16. VOLUNTARY REPORTING

The BCAA encourages voluntary reporting across the whole spectrum of civil aviation operations. A voluntary report is made by a person not required to report under the legislation described above. Voluntary reports help in capturing hazards which may not have been reported through the mandatory reporting systems. BCAA QPULSE System is used for online voluntary reporting which are then processed in a similar way to mandatory reports. Confidentiality, data protection and just culture shall be ensured by the BCAA in all voluntary reports.

Guidance for Voluntary reports is available in CAP 17.

17. CONFIDENTIALITY OF REPORTS

Without prejudice to the proper discharge of its responsibilities, the BCAA will not disclose the name of the person submitting the report or of a person to whom it relates.

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

The BCAA cannot, of course, guarantee confidentiality when an occurrence is reported separately by another party, incompetence or cases involving criminal activities.

Reporters submitting a Confidential Report must accept that effective investigation may be inhibited by confidentiality, however, the BCAA would rather have a Confidential Report than no report at all. The above method may also be used when a reporter wishes to disclose sensitive information to the BCAA where an MOR seems inappropriate.

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APPENDIX 1

REPORTABLE OCCURRENCES TO SPECIFIC SYSTEMS (Reportable to BCAA)

The following subparagraphs give examples of reportable occurrences resulting from the application of the generic criteria to specific systems listed in paragraph 10(e) of this Section.

1. Air conditioning/ventilation
 - (a) complete loss of avionics cooling
 - (b) depressurisation
2. Autoflight system
 - (a) failure of the autoflight system to achieve the intended operation while engaged
 - (b) significant reported crew difficulty to control the aircraft linked to autoflight system functioning
 - (c) failure of any autoflight system disconnect device
 - (d) Un-commanded autoflight mode change
3. Communications
 - (a) failure or defect of passenger address system resulting in loss or inaudible passenger address
 - (b) total loss of communication in flight
4. Electrical system
 - (a) loss of one electrical system distribution system (AC or DC)
 - (b) total loss or loss or more than one electrical generation system
 - (c) failure of the backup (emergency) electrical generating system
5. Cockpit/Cabin/Cargo
 - (a) pilot seat control loss during flight
 - (b) failure of any emergency system or equipment, including emergency evacuation signalling system, all exit doors, emergency lighting, etc
 - (c) loss of retention capability of the cargo loading system
6. Fire protection system
 - (a) fire warnings, except those immediately confirmed as false

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- (b) undetected failure or defect of fire/smoke detection/protection system, which could lead to loss or reduced fire detection/protection
- (c) absence of warning in case of actual fire or smoke

7. Flight controls

- (a) Asymmetry of flaps, slats, spoilers etc.
- (b) limitation of movement, stiffness or poor or delayed response in the operation of primary flight control systems or their associated tab and lock systems
- (c) flight control surface run away
- (d) flight control surface vibration felt by the crew
- (e) mechanical flight control disconnection or failure
- (f) significant interference with normal control of the aircraft or degradation of flying qualities

8. Fuel system

- (a) fuel quantity indicating system malfunction resulting in total loss or erroneous indicated fuel quantity on board
- (b) leakage of fuel which resulted in major loss, fire hazard, significant contamination
- (c) malfunction or defects of the fuel jettisoning system which resulted in inadvertent loss of significant quantity, fire hazard, hazardous contamination of aircraft equipment or inability to jettison fuel
- (d) fuel system malfunctions or defects which had a significant effect on fuel supply and/or distribution
- (e) inability to transfer or use total quantity of usable fuel

9. Hydraulics

- (a) loss of one hydraulic system (ETOPS only)
- (b) failure of the isolation system to operate
- (c) loss of more than one hydraulic circuit
- (d) failure of the backup hydraulic system
- (e) inadvertent Ram Air Turbine extension

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10. Ice detection/protection system
 - (a) undetected loss or reduced performance of the anti-ice/de-ice system
 - (b) loss of more than one of the probe heating systems
 - (c) inability to obtain symmetrical wing de icing
 - (d) abnormal ice accumulation leading to significant effects on performance or handling qualities
 - (e) crew vision significantly affected
11. Indicating/warning/recording systems
 - (a) malfunction or defect of any indicating system when the possibility of significant misleading indications to the crew could result in an inappropriate crew action on an essential system
 - (b) loss of a red warning function on a system
 - (c) for glass cockpits: loss or malfunction of more than one display unit or computer involved in the display/warning function
12. Landing gear system /brakes/tyres
 - (a) brake fire
 - (b) significant loss of braking action
 - (c) unsymmetrical braking leading to significant path deviation
 - (d) failure of the L/G free fall extension system (including during scheduled tests)
 - (e) unwanted gear or gear doors extension/retraction
 - (f) multiple tyres burst
13. Navigation systems (including precision approaches system) and air data systems
 - (a) total loss or multiple navigation equipment failures
 - (b) total failure or multiple air data system equipment failures
 - (c) significant misleading indication
 - (d) Significant navigation errors attributed to incorrect data or a database coding error
 - (e) Unexpected deviations in lateral or vertical path not caused by pilot input.
 - (f) Problems with ground navigational facilities leading to significant navigation errors not associated with transitions from inertial navigation mode to radio navigation mode.

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14. Oxygen
 - (a) for pressurised aircraft: loss of oxygen supply in the cockpit
 - (b) loss of oxygen supply to a significant number of passengers (more than 10%), including when found during maintenance or training or test purposes
15. Bleed air system
 - (a) hot bleed air leak resulting in fire warning or structural damage
 - (b) loss of all bleed air systems
 - (c) failure of bleed air leak detection system

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APPENDIX 2 AIRCRAFT

FLIGHT OPERATIONS (Reportable to BCAA)

A. Operation of the Aircraft

- (1)
 - (a) Risk of collision with an aircraft, terrain or other object or an unsafe situation when avoidance action would have been appropriate.
 - (b) An avoidance manoeuvre required to avoid a collision with an aircraft, terrain or other object.
 - (c) An avoidance manoeuvre to avoid other unsafe situations.
- (2) Take-off or landing incidents, including precautionary or forced landings. Incidents such as under-shooting, overrunning or running off the side of runways. Take-offs, rejected take-offs, landings or attempted landings on a closed, occupied or incorrect runway. Runway incursions.
- (3) Inability to achieve predicted performance during take-off or initial climb.
- (4) Critically low fuel quantity or inability to transfer fuel or use total quantity of usable fuel.
- (5) Loss of control (including partial or temporary loss of control) from any cause.
- (6) Occurrences close to or above V_1 resulting from or producing a hazardous or potentially hazardous situation (e.g. rejected take-off, tail strike, engine power loss etc.).
- (7) Go-around producing a hazardous or potentially hazardous situation.
- (8) Unintentional significant deviation from airspeed, intended track or altitude. (more than 300 ft) from any cause.
- (9) Descent below decision height/altitude or minimum descent height/altitude without the required visual reference.
- (10) Loss of position awareness relative to actual position or to other aircraft.
- (11) Breakdown in communication between flight crew (CRM) or between Flight crew and other parties (cabin crew, ATC, engineering).
- (12) Heavy landing - a landing deemed to require a 'heavy landing check'.
- (13) Exceedance of fuel imbalance limits.
- (14) Incorrect setting of an SSR code or of an altimeter subscale.
- (15) Incorrect programming of, or erroneous entries into, equipment used for navigation or performance calculations, or use of incorrect data.

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- (16) Incorrect receipt or interpretation of radiotelephony messages.
- (17) Fuel system malfunctions or defects, which influenced fuel supply and/or distribution.
- (18) Aircraft unintentionally departing a paved surface.
- (19) Collision between an aircraft and any other aircraft, vehicle or other ground object.
- (20) Inadvertent and/or incorrect operation of any controls.
- (21) Inability to achieve the intended aircraft configuration for any flight phase (e.g. landing gear and doors, flaps, stabilisers, slats etc).
- (22) A hazard or potential hazard which arises as a consequence of any deliberate simulation of failure conditions for training, system checks or training purposes.
- (23) Abnormal vibration.
- (24) Operation of any primary warning system associated with manoeuvring of the aircraft e.g. configuration warning, stall warning (stick shake), over speed warning etc. unless:
 - (a) the crew conclusively established that the indication was false. Provided that the false warning did not result in difficulty or hazard arising from the crew response to the warning; or
 - (b) operated for training or test purposes.
- (25) GPWS/TAWS “warning” when:
 - (a) the aircraft comes into closer proximity to the ground than had been planned or anticipated; or
 - (b) the warning is experienced in IMC or at night and is established as having been triggered by a high rate of descent (Mode 1); or
 - (c) the warning results from failure to select landing gear or land flap by the appropriate point on the approach (Mode 4); or
 - (d) any difficulty or hazard arises or might have arisen as a result of crew response to the “warning” e.g. possible reduced separation from other traffic. This could include warning of any Mode or Type i.e. genuine, nuisance or false.
- (26) GPWS/TAWS “alert” when any difficulty or hazard arises or might have arisen as a result of crew response to the “alert”.
- (27) ACAS RAs.
- (28) Jet or prop blast incidents resulting in significant damage or serious injury.

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- (29) Taxiway incursion/Runway incursion. Any occurrence unauthorized presence on a taxiway of an aircraft, vehicle, person or object that creates a collision hazard or results in a potential loss of separation.
- (30) Laser incidents.
- (31) Unstable approach reported by pilots or analysed through FDM programme. If the occurrence reported by a pilot requires confirmation through a Flight Data Monitoring analysis (ANTR OPS 1.037 and ANTR OPS 3.037), timelines mentioned under paragraph 6 may be extended.

B. Emergencies

- (1) Fire, explosion, smoke or toxic or noxious fumes, even though fires were extinguished.
- (2) The use of any non-standard procedure by the flight or cabin crew to deal with an emergency when:
 - (a) the procedure exists but is not used; or
 - (b) a procedure does not exist; or
 - (c) the procedure exists but is incomplete or inappropriate; or
 - (d) the procedure is incorrect; or
 - (e) the incorrect procedure is used.
- (3) Inadequacy of any procedures designed to be used in an emergency, including when being used for maintenance, training or test purposes.
- (4) An event leading to an emergency evacuation.
- (5) Depressurisation.
- (6) The use of any emergency equipment or prescribed emergency procedures in order to deal with a situation.
- (7) An event leading to the declaration of an emergency (“Mayday” or “PanPan”).
- (8) Failure of any emergency system or equipment, including all exit doors and lighting, to perform satisfactorily, including when being used for maintenance, training or test purposes.
- (9) Events requiring any emergency use of oxygen by any crew member.

C. Crew Incapacitation

- (1) Incapacitation of any member of the flight crew, including that which occurs prior to departure if it is considered that it could have resulted in incapacitation after take-off.

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

D. Crew Fatigue-related Incidents

- (1) A physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase, or workload (mental and/or physical activity) that can impair a crew member's alertness and ability to safely operate an aircraft or perform safety related duties.
- (2) Fatigue is a major human factor hazard because it affects most aspects of a crewmember's ability to do their job. It therefore has implications for safety.
- (3) For example, a crew member reports an incident on the aircraft where fatigue can be considered to be the main or contributory factor for the occurrence of such incident.

E. Injury

- (1) Occurrences, which have or could have led to significant injury to passengers or crew, but which are not considered reportable as an accident under Annex 13.

F. Meteorology

- (1) A lightning strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- (2) A hail strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- (3) Severe turbulence encounter – an encounter resulting in injury to occupants or deemed to require a “turbulence check” of the aircraft.
- (4) A windshear encounter.
- (5) Icing encounter resulting in handling difficulties, damage to the aircraft or loss or malfunction of any essential service.

G. Security

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

H. Aerodrome and Aerodrome Facilities

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

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- (3) Unsatisfactory ground de-icing / anti-icing.

I. Passenger Handling, Baggage and Cargo

- (1) Significant contamination of aircraft structure, or systems and equipment arising from the carriage of baggage or cargo.
- (2) Incorrect loading of passengers, baggage or cargo, likely to have a significant effect on aircraft mass and/or balance.
- (3) Incorrect stowage of baggage or cargo (including hand baggage) likely in any way to hazard the aircraft, its equipment or occupants or to impede emergency evacuation.
- (4) Inadequate stowage of cargo containers or other substantial items of cargo.
- (5) Dangerous goods incidents reporting: see ANTR OPS 1.1225 and AMC 1.1225.

J. Aircraft Ground Handling and Servicing

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

K. Other Occurrences

- (1) Repetitive instances of a specific type of occurrence which in isolation would not be considered 'reportable' but which due to the frequency at which they arise, form a potential hazard.
- (2) A bird strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- (3) Wake turbulence encounters.
- (4) Any other occurrence of any type considered to have endangered or which might have endangered the aircraft or its occupants on board the aircraft or on the ground.

Note: Refer also to paragraph 10(e) on reportable occurrences to specific systems.

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APPENDIX 3

AIRCRAFT TECHNICAL (Reportable to BCAA)

A. Structural

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

- (1) Damage to a Principal Structural Element that has not been qualified as damage tolerant (life limited element). Principal Structural Elements are those which contribute significantly to carrying flight, ground, and pressurisation loads, and whose failure could result in a catastrophic failure of the aircraft.

Typical examples of such elements are listed for large aeroplanes in the State of Design regulations. For example, EASA AC/AMC 25.571(a) "damage tolerance and fatigue evaluation of structure" and in the equivalent AMC material for rotorcraft as well as FAR 25.

- (2) Defect or damage exceeding admissible damages to a Principal Structural Element that has been qualified as damage tolerant.
- (3) Damage to or defect exceeding allowed tolerances of a structural element which failure could reduce the structural stiffness to such an extent that the required flutter, divergence or control reversal margins are no longer achieved.
- (4) Damage to or defect of a structural element, which could result in the liberation of items of mass that may injure occupants of the aircraft.
- (5) Damage to or defect of a structural element, which could jeopardise proper operation of systems. See paragraph II.B. below.
- (6) Loss of any part of the aircraft structure in flight.

B. Systems

The following generic criteria applicable to all systems are proposed:

- (1) Loss, significant malfunction or defect of any system, subsystem or set of equipment when standard operating procedures, drills etc. could not be satisfactorily accomplished.
- (2) Inability of the crew to control the system, e.g.:
 - (a) un-commanded actions;
 - (b) incorrect and or incomplete response, including limitation of movement or stiffness;
 - (c) runaway;
 - (d) mechanical disconnection or failure.

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- (3) Failure or malfunction of the exclusive function(s) of the system (one system could integrate several functions).
- (4) Interference within or between systems.
- (5) Failure or malfunction of the protection device or emergency system associated with the system.
- (6) Loss of redundancy of the system.
- (7) Any occurrence resulting from unforeseen behaviour of a system.
- (8) For aircraft types with single main systems, subsystems or sets of equipment: Loss, significant malfunction or defect in any main system, subsystem or set of equipment.
- (9) For aircraft types with multiple independent main systems, subsystems or sets of equipment: The loss, significant malfunction or defect of more than one main system, subsystem or set of equipment.
- (10) Operation of any primary warning system associated with aircraft systems or equipment unless the crew conclusively established that the indication was false provided that the false warning did not result in difficulty or hazard arising from the crew response to the warning.
- (11) Leakage of hydraulic fluids, fuel, oil or other fluids which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or risk to occupants.
- (12) Malfunction or defect of any indication system when this results in the possibility of misleading indications to the crew.
- (13) Any failure, malfunction or defect if it occurs at a critical phase of flight and relevant to the operation of that system.
- (14) Occurrences of significant shortfall of the actual performances compared to the approved performance which resulted in a hazardous situation (taking into account the accuracy of the performance calculation method) including braking action, fuel consumption etc.
- (15) Asymmetry of flight controls; e.g. flaps, slats, spoilers etc.

A list of examples of reportable occurrences resulting from the application of these generic criteria to specific systems is in Section 10(e)

C. Propulsion (including Engines, Propellers and Rotor Systems) and APUs

- (1) Flameout, shutdown or malfunction of any engine.
- (2) Overspeed or inability to control the speed of any high speed rotating component (for example: Auxiliary power unit, air starter, air cycle machine, air turbine motor, propeller or rotor).

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- (3) Failure or malfunction of any part of an engine or powerplant resulting in any one or more of the following:
 - (a) non containment of components/debris;
 - (b) uncontrolled internal or external fire, or hot gas breakout;
 - (c) thrust in a different direction from that demanded by the pilot;
 - (d) thrust reversing system failing to operate or operating inadvertently;
 - (e) inability to control power, thrust or rpm;
 - (f) failure of the engine mount structure;
 - (g) partial or complete loss of a major part of the powerplant;
 - (h) Dense visible fumes or concentrations of toxic products sufficient to incapacitate crew or passengers;
 - (i) inability, by use of normal procedures, to shutdown an engine;
 - (j) inability to restart a serviceable engine.
- (4) An uncommanded thrust/power loss, change or oscillation which is classified as a loss of thrust or power control (LOTC):
 - (a) for a single engine aircraft; or
 - (b) where it is considered excessive for the application, or
 - (c) where this could affect more than one engine in a multi-engine aircraft, particularly in the case of a twin engine aircraft; or
 - (d) for a multi engine aircraft where the same, or similar, engine type is used in an application where the event would be considered hazardous or critical.
- (5) Any defect in a life controlled part causing retirement of before completion of its full life.
- (6) Defects of common origin which could cause an in flight shut down rate so high that there is the possibility of more than one engine being shut down on the same flight.
- (7) An engine limiter or control device failing to operate when required or operating inadvertently.
- (8) exceedance of engine parameters.
- (9) FOD resulting in damage.

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Propellers and transmission

- (10) Failure or malfunction of any part of a propeller or powerplant resulting in any one or more of the following:
- (a) an overspeed of the propeller;
 - (b) the development of excessive drag;
 - (c) a thrust in the opposite direction to that commanded by the pilot;
 - (d) a release of the propeller or any major portion of the propeller;
 - (e) a failure that results in excessive unbalance;
 - (f) the unintended movement of the propeller blades below the established minimum in-flight low-pitch position;
 - (g) an inability to feather the propeller;
 - (h) an inability to command a change in propeller pitch;
 - (i) an uncommanded change in pitch;
 - (j) an uncontrollable torque or speed fluctuation;
 - (k) The release of low energy parts.

Rotors and -transmission

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

APUs

- (13) Shut down or failure when the APU is required to be available by operational requirements, e.g. ETOPS, MEL.
- (14) Inability to shut down the APU.
- (15) Overspeed.
- (16) Inability to start the APU when needed for operational reasons.

D. Human Factors

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

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E. Other Occurrences

- (1) Any incident where any feature or inadequacy of the aircraft design could have led to an error of use that could contribute to a hazardous or catastrophic effect.
- (2) An occurrence not normally considered as reportable (for example, furnishing and cabin equipment, water systems), where the circumstances resulted in endangering of the aircraft or its occupants.
- (3) A fire, explosion, smoke or toxic or noxious fumes.
- (4) Any other event which could hazard the aircraft or affect the safety of the occupants of the aircraft, or people or property in the vicinity of the aircraft or on the ground.
- (5) Failure or defect of passenger address system resulting in loss or inaudible passenger address system.
- (6) Loss of pilot's seat control during flight.

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APPENDIX 4

AIRCRAFT MAINTENANCE AND REPAIR (Reportable to BCAA)

- A. Incorrect assembly of parts or components of the aircraft found during an inspection or test procedure not intended for that specific purpose.
- B. Hot bleed air leak resulting in structural damage.
- C. Any defect in a life controlled part causing retirement before completion of its full life.
- D. Any damage or deterioration (i.e. fractures, cracks, corrosion, de-lamination, dis-bonding etc) resulting from any cause (such as flutter, loss of stiffness or structural failure) to:
 - (1) primary structure or a principal structural element (as defined in the manufacturers' Repair Manual) where such damage or deterioration exceeds allowable limits specified in the Repair Manual and requires a repair or complete or partial replacement of the element;
 - (2) secondary structure which consequently has or may have endangered the aircraft;
 - (3) the engine, propeller or rotorcraft rotor system.
- E. Any failure, malfunction or defect of any system or equipment, or damage or deterioration found as a result of compliance with an Airworthiness Directive or other mandatory instruction issued by a Regulatory Authority, when:
 - (1) it is detected for the first time by the reporting organisation implementing compliance;
 - (2) on any subsequent compliance where it exceeds the permissible limits quoted in the instruction and/or published repair/rectification procedures are not available.
- F. Failure of any emergency system or equipment, including all exit doors and lighting, to perform satisfactorily, including when being used for maintenance or test purposes.
- G. Non compliance or significant errors in compliance with required maintenance procedures.
- H. Unapproved products, parts, appliances and materials of unknown or suspect origin.
- I. Misleading, incorrect or insufficient maintenance data or procedures that could lead to maintenance errors.
- J. Failure, malfunction or defect of ground equipment used for test or checking of aircraft systems and equipment when the required routine inspection and test procedures did not clearly identify the problem when this results in a hazardous situation.

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APPENDIX 5

AIR NAVIGATION SERVICES, FACILITIES AND GROUND SERVICES (Reportable to BCAA)

A. Air Navigation Services

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

B. Aerodrome and Aerodrome Facilities

- (1) Significant spillage during fuelling operations.
- (2) Loading of incorrect fuel quantities likely to have a significant effect on aircraft endurance, performance, balance or structural strength.
- (3) unsatisfactory ground de-icing/anti-icing

C. Passenger Handling, Baggage and Cargo

- (1) Significant contamination of aircraft structure, or systems and equipment arising from the carriage of baggage or cargo.

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- (2) Incorrect loading of passengers, baggage or cargo, likely to have a significant effect on aircraft mass and/or balance.
- (3) Incorrect stowage of baggage or cargo (including hand baggage) likely in any way to hazard the aircraft, its equipment or occupants or to impede emergency evacuation.
- (4) Inadequate stowage of cargo containers or other substantial items of cargo.
- (5) Dangerous goods incidents reporting: see ANTR-OPS 1.1225 and CAP 02.

D. Aircraft Ground Handling and Servicing

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

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APPENDIX 6

OCCURRENCE REPORT FORM

Refer to the MTT website - <https://www.mtt.gov.bh/sites/default/files/f017.pdf>

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APPENDIX 7

SAMPLE Q-PULSE INCIDENT DETAILS TEMPLATE

Refer to the MTT website - <http://qpulse.mtt.gov.bh/reporting>