

## Part 19

# AIRCRAFT ACCIDENT & INCIDENT REPORTING & INVESTIGATION <sup>1</sup>

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<sup>1</sup> This Part is revised according to Appendix XVII to Circular 03/2016/TT-BGTVT dated 31 March 2016

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## **SUBPART A: GENERAL**

### **19.001. APPLICABILITY**

- (a) This Part contains requirements of Vietnam pertaining to:
  - (1) Aircraft incident, accident investigations that CAAV is authorized to carry out.
  - (2) Notification, investigation, analysis and reporting of aircraft incidents and accidents and certain other occurrences in the operation of aircraft:
    - (i) When they involve Vietnam-registered aircraft, wherever they occur; and
    - (ii) When they involve foreign-registered civil aircraft, where the events occur in Vietnam;
  - (3) Preservation of aircraft wreckage, mail, cargo, and records involving all civil and state aircraft accidents in Vietnam;
  - (4) Conformance to the international Standards for accident and incident reporting.
- (b) This Part is applicable to the:
  - (1) Organizations and operators that operate aircraft or provide services associated with the safe operation of aircraft; and
  - (2) All Government agencies necessary to ensure the timely and correct investigation and reporting of accidents.
- (c) This Part is also applicable to:
  - (1) All persons associated with the safe operations of aircraft;
  - (2) The general public where they have information pertinent to an accident or incident investigation; and
  - (3) The technical persons that participate in the investigations.

### **19.002 OBJECTIVE OF INVESTIGATIONS**

- (a) The sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents.
- (b) It is not the purpose of the activities subject to this Part to apportion blame or liability.

## **SUBPART B: PERSONAL RESPONSIBILITY: ACCIDENT & INCIDENT REPORTING**

### **19.009 APPLICABILITY**

- (a) <sup>2</sup> This Subpart is applicable to air operators, aircraft maintenance organization, air traffic service provider, airport ground service provider and individuals who are involved in or have knowledge of an aircraft accident or serious incident occurring within Vietnam airspace, with a Vietnam-registered aircraft or with a Vietnam operator.

<sup>2</sup> This content is revised according to Item 2, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

## **19.010 CLASSIFICATION OF AVIATION ACCIDENTS, INCIDENTS AND OCCURRENCES**

- (a) <sup>3</sup> Aviation accidents, incidents and occurrences are classified according to A (accidents), B, C, D (incident) and E (occurrences) depending on their nature and extent of the equipment described in the Appendix I of this article and complies with the provisions of the International Civil Aviation Organization (ICAO) in Document Doc. 9156 of the Convention 13.
- (b) Serious incidents list is provided in Appendix 2 to 19.010.

## **19.011 IMMEDIATE NOTIFICATION**

- (a) <sup>4</sup> Aviation accidents, serious incidents (Level B) and high risk incidents (Level C) must be reported to the Aviation Administration of Vietnam as soon as possible by the most expeditious means available, as required following:
  - (1) The air operators of any civil aircraft, or any state aircraft not operated by the Armed Forces, or any foreign aircraft shall immediately notify the CAAV (Level C) when an aircraft accident, serious incident (Level B) and high risk incident occur.
  - (2) The air traffic service providers shall immediately notify the CAAV when accidents, serious incidents (Level B) and high risk incidents (Level C) occur with the air traffic control activities in the Vietnamese airspace and flight information regions managed by Vietnam
  - (3) The airport ground service providers shall immediately, and by the most expeditious means available, notify the CAAV when accidents, serious incidents (Level B) and high risk incidents (Level C) occur at the airport, and at the same time notify the airport authority;
  - (4) The airport authorities shall immediately notify the CAAV when accidents, serious incidents (Level B) and high risk incidents (Level C) occur in areas within the scope of management of airport authorities.
- (b) This initial notification requirement also applies when an aircraft is overdue and is believed to have been involved in an accident.
- (c) The initial report may be made to the nearest air traffic service unit or flight information unit of Vietnam CAAV or directly to the Flight Safety Standards Department in Hanoi.

## **19.013 INFORMATION TO BE GIVEN IN NOTIFICATION**

- (a) <sup>5</sup> The required notification shall contain the following information, if available:
  - (1) Type, nationality, and registration marks of the aircraft;
  - (2) Name of owner, and operator of the aircraft;
  - (3) Full Name of the pilot in command;
  - (4) Date and time of the accident/ incident;
  - (5) Last point of departure and point of intended landing of the aircraft;

<sup>3</sup> This content is revised according to Item 3, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>4</sup> This content is revised according to Item 4, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>5</sup> This content is revised according to Item 5, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (6) Position of the aircraft with reference to some easily defined geographical point;
- (7) Number of persons aboard, number killed, and number seriously injured;
- (8) Nature of the accident, the weather and the extent of damage to the aircraft, so far as is known; and
- (9) A description of any explosives, radioactive materials, or other dangerous articles carried.

#### **19.014 PRESERVATION & PROTECTION OF WRECKAGE & ACCIDENT SITE**

- (a) The operator and pilot-in-command shall ensure as much as is practical that the wreckage and accident site is protected and preserved in accordance with the requirements of Subpart D of this Part.
- (b) An operator shall ensure, to the extent possible, in the event the aircraft becomes involved in an accident or incident, the preservation of all related flight recorder records and, if necessary, the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with this Part.

#### **19.015 FILE INITIAL REPORT OF AN ACCIDENT OR INCIDENT**

- (a) <sup>6</sup> The operator shall file an initial report in the form and manner prescribed by the CAAV:
  - (1) Within 24 hours after an accident; or
  - (2) Within 48 hours after a serious incident (Level B);
  - (3) Within 72 hours after a other incident (Level C and D).

#### **19.016 CREW MEMBER STATEMENT**

- (a) Each crew member, if physically able at the time the formal 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.
- (b) If the crew member is incapacitated, he shall submit the statement as soon as he is physically able.

#### **19.017 FORWARDING OF AN OPERATOR ACCIDENT OR INCIDENT REPORT**

- (a) <sup>7</sup> The air operators, aircraft maintenance organization, air traffic service provider, airport ground service provider shall file a report in the form and manner prescribed by the CAAV within 30 days after an incident level C, D and occurrence which contains the following information:

<sup>6</sup> This content is revised according to Item 6, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>7</sup> This content is revised according to Item 7, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (1) Additional information on necessary regarding to accidents and incidents have been reported;
- (2) History of accidents and incidents in chronological order;
- (3) Analysis, evaluation, findings and conclusions on causes of aviation accidents and incidents;
- (4) Safety recommendations and corrective actions;

## **SUBPART C: MANDATORY & VOLUNTARY OCCURRENCE REPORTING**

### **19.020 GENERAL APPLICABILITY**

- (a) This Subpart prescribes the general requirements and administrative rules for implementation and on-going administration of processes for mandatory and voluntary reporting of occurrences where such reports are required by the Civil Aviation Regulations.
- (b) The general requirements of this Subpart apply to all occurrence reports required by any Section of Civil Aviation Regulations.
- (c) The reporting requirements of this Subpart are mandatory for the persons and organizations involved when the occurrence is related to:
  - (1) Any aircraft operated under an AOC granted by the CAAV;
  - (2) Any turbine-powered aircraft which has a certificate of airworthiness issued by the CAAV.
- (d) In the case of organizations providing a service or facility for aircraft operating over or in Vietnam, any occurrence meeting the required criteria should be reported regardless of the nationality of the aircraft involved.

### **19.023 APPLICABILITY TO PERSONS & ORGANIZATIONS INVOLVED**

- (a) The mandatory reporting requirements of this Subpart are applicable to persons and organizations involved in the:
  - (1) Operations, maintenance and support of Vietnam-registered aircraft worldwide;
  - (2) Operations, maintenance and support of aircraft operating in Vietnam; and
  - (3) The provision of services to aircraft and crews in the operational airspace controlled by Vietnam and the aerodromes located in Vietnam.
- (b) Persons and organizations included in this applicability are:
  - (1) The operator and the flight crew of a turbine-powered aircraft which has a certificate of airworthiness issued by the CAAV;
  - (2) The operator and the flight crew of an aircraft operated under an AOC granted by the CAAV;
  - (3) A person who carries on the business of manufacturing a turbine-powered or aircraft that is to be operated in commercial air transport, or any equipment or part thereof, in Vietnam;
  - (4) A person who carries on the business of maintaining or modifying a turbine-powered aircraft, which has a certificate of airworthiness issued by

- the CAAV, and a person who carries on the business of maintaining or modifying any equipment or part of such an aircraft;
- (5) A person who carries on the business of maintaining or modifying an aircraft, operated under an AOC granted by the CAAV, and a person who carries on the business of maintaining or modifying any equipment or part of such an aircraft;
  - (6) A person who signs an airworthiness review certificate, or a certificate of release to service in respect of a turbine-powered aircraft, which has a certificate of airworthiness issued by the CAAV, and a person who signs an airworthiness review certificate or a certificate of release to service in respect of any equipment or part of such an aircraft;
  - (7) A person who signs an airworthiness review certificate, or a certificate of release to service in respect of an aircraft, operated under an AOC granted by the CAAV, and a person who signs an airworthiness review certificate or a certificate of release to service in respect of any equipment or part of such an aircraft;
  - (8) A person who performs a function which requires him to be authorised by the CAAV as an air traffic controller or as a flight information service officer;
  - (9) A licensee and a manager of a licensed aerodrome or a manager of an airport;
  - (10) A person who performs a function in respect of the installation, modification, maintenance, repair, overhaul, flight-checking or inspection of air navigation facilities which are utilised by a person who provides an air traffic control service under an approval issued by the CAAV;
  - (11) A person who performs a function in respect of the ground-handling of aircraft, including fuelling, servicing, load sheet preparation, loading, de-icing and towing at an airport
- (c) This list of persons and organizations defines those who have to report, but any person or organization may file a report should they consider it necessary or pertinent to aviation safety.

#### **19.025 OBJECTIVE OF THE REPORTING REQUIREMENTS**

- (a) The sole objective of occurrence reporting is the prevention of accidents and incidents through the collection and dissemination of relevant safety information and not to attribute blame or liability.
- (b) The mandatory reporting requirements contribute to the improvement of air safety by ensuring free and full reporting of relevant information on safety is collected, stored, protected and disseminated.
- (c) The voluntary reporting of persons contribute to the improvement of air safety in the interest of flight safety through the same processes and policies applicable to the mandatory reporting requirements.



### **19.027 MANDATORY OCCURENCE REPORT <sup>8</sup>**

- (a) The CAAV shall prescribe the mandatory occurrences that shall be reported under the provisions of this Subpart.
- (b) <sup>9</sup> These reportable occurrences shall be categorised for purposes of assessing trends as:
  - (1) Aircraft flight operations (Appendix 1 to 19.027);
  - (2) Aircraft technical (Appendix 2 to 19.027);
  - (3) Aircraft maintenance (Appendix 3 to 19.027);
  - (4) Air navigation and ground operation (Appendix 4 to 19.027).
- (c) A reportable occurrence in relation to an aircraft means any incident which endangers or which, if not corrected, would endanger an aircraft, its occupants or any other person.
- (d) A person required to make a mandatory report of an occurrence shall report any occurrence of which he has positive knowledge, even though this may not be first hand, unless he has good reason to believe that appropriate details of the occurrence have already been, or will be, reported by someone else.
- (e) A report should also be submitted on any occurrence which involves a defective condition or unsatisfactory behaviour or procedure which did not immediately endanger the aircraft but which, if allowed to continue uncorrected, or if repeated in different, but likely, circumstances, would create a hazard to aircraft safety.

### **19.029 MANDATORY OCCURENCE REPORT <sup>10</sup>**

### **19.030 VOLUNTARY REPORTING**

- (a) The CAAV shall encourage and facilitate voluntary reporting to the same criteria across the w h o le spectrum of civil aviation operations.
- (b) The organization and procedures of the CAAV for processing and recording reports shall not substantially differentiate between voluntary and mandatory reports.
- (c) A voluntary occurrence report is that report made by a person or organization who are not required to report in accordance with the requirements of this Subpart.
- (d) The occurrences reported and trends developed shall be retained in a limited format which removes information and data which is likely to identify the person reporting.
- (e) The confidentiality of these voluntary reports shall be protected by the CAAV and information disclosed in these reports shall inadmissible for any future proceedings relating to the person reporting.

<sup>8</sup> The name of this Article is revised according to Paragraph (a) of Item 8, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>9</sup> This content is revised according to Paragraph (b) of Item 8, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>10</sup> This Article is revoked according to Item 9, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

### **19.033 SELF-DISCLOSURE OF NON-COMPLIANCE**

- (a) The CAAV shall encourage self-disclosure of non-compliance with regulations whether associated with associated with mandatory or voluntary reporting processes of this Subpart and shall not take legal enforcement action if the reporter is found to be in compliance with the conditions of paragraph (b).
- (b) In evaluating whether an apparent non-compliance is covered by this Section, the CAAV shall ensure that the following conditions are met:
  - (1) The regulated entity has notified the CAAV of the apparent non-compliance immediately after detecting it and before the CAAV has learned of it by other means.
  - (2) The notification did not occur during, or in anticipation of, an investigation or inspection by the CAAV or in association with an accident or incident.
  - (3) The apparent non-compliance with the regulations was inadvertent.
  - (4) The apparent non-compliance with regulations does not indicate a lack, or reasonable question, of qualification of the regulated entities.
  - (5) Immediate action, satisfactory to the CAAV was taken upon discovery to terminate the conduct that resulted in the apparent non-compliance.
  - (6) The regulated entity has developed or is developing a comprehensive fix and schedule of implementation satisfactory to the CAAV.
  - (7) The comprehensive fix includes a follow-up self-audit to ensure that the action taken corrects the noncompliance.
  - (8) This self-audit is in addition to any audits conducted by the CAAV.

### **19.035 CONFIDENTIALITY OF REPORTS**

- (a) Without prejudice to the proper discharge of its responsibilities in this regard, the CAAV shall not disclose the name of the person submitting the report or of a person to whom it relates unless required to do so by law or unless, in either case, the person concerned authorises disclosure.
- (b) Should any flight safety follow-up action arising from a report be necessary, the CAAV shall take all reasonable steps to avoid disclosing the identity of the reporter or of those individuals involved in the reportable occurrence.

### **19.037 ASSURANCE REGARDING PROSECUTION**

- (a) The CAAV shall not institute proceedings in respect of unpremeditated or inadvertent breaches of the law which come to its attention only because they have been reported under the mandatory or voluntary provisions of this Subpart, except in cases involving dereliction of duty amounting to gross negligence.

### **19.040 ACTION IN RESPECT OF LICENCES & CERTIFICATES**

- (a) The CAAV has a duty under international treaties and conventions to vary, revoke or suspend a licence or certificate as appropriate if it ceases to be satisfied that the holder of the licence or certificate is competent, medically fit and a fit person to exercise the privileges of the licence.
- (b) If an occurrence report suggests that the licence or certification holder does not continue to meet the standards for issuance of the license or certificate, the

CAAV must take appropriate action to re-examine the holder. The purpose of this review is solely to ensure safety and shall not be conducted to penalize the holder.

#### **19.043 POSSIBLE ACTION BY EMPLOYERS**

- (a) Where a reported occurrence indicated an unpremeditated or inadvertent lapse by an employee, the employer shall act responsibly and to share its view that free and full reporting is the primary aim, and that every effort should be made to avoid action that may inhibit reporting.
- (b) Employers shall refrain from disciplinary or punitive action which might inhibit their staff from duly reporting incidents of which they may have knowledge, that, except to the extent that action is needed in order to ensure safety, and except in such flagrant circumstances.

### **SUBPART D: PRESERVATION OF WRECKAGE & RECORDS**

#### **19.050 APPLICABILITY**

- (a) This Subpart is applicable to all persons and organizations that have access to the wreckage and records that are critical to the investigation of the accident or serious incident.

#### **19.053 PRESERVATION & PROTECTION OF WRECKAGE**

- (a) All persons involved in the rescue, search and investigation of an accident 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.
  - (1) Protection of evidence shall include the preservation, by photographic or other means of any evidence which might be removed, effaced, lost or destroyed.
  - (2) Safe custody shall include protection against further damage, access by unauthorized persons, pilfering and deterioration.
- (b) 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, cargo, and mail 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 CAAV takes custody thereof or a release is granted.
- (c) 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 CAAV to the contrary.

#### **19.055 MOVING THE WRECKAGE**

- (a) Prior to the time the CAAV or its authorized representative takes custody of aircraft wreckage, mail, or cargo, such wreckage, mail, or cargo may not be disturbed or moved except to the extent necessary:
  - (1) To remove persons injured or trapped;
  - (2) To protect the wreckage from further damage; or

- (3) To protect the public from injury.
- (b) Where it is necessary to move aircraft wreckage, mail, or cargo, sketches, descriptive notes, and photographs shall be made, if possible, of the original positions and condition of the wreckage and any significant impact marks.
- (c) If a request is received from the State of Registry, the State of the Operator, the State of Design or the State of Manufacture that the aircraft, its contents, and any other evidence remain undisturbed pending inspection by an accredited representative of the requesting State, the investigator-in-charge 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:
  - (1) To the extent necessary to extricate persons, animals, mail and valuables;
  - (2) To prevent destruction by fire or other causes; or
  - (3) To eliminate any danger or obstruction to air navigation, to other transport or to the public, and
  - (4) Provided that it does not result in undue delay in returning the aircraft to service where this is practicable.

#### **19.057 RELEASE FROM CUSTODY**

- (a) <sup>11</sup> Subject to the provisions of Section 19.053 and 19.055, the investigator-in-charge shall release custody of the aircraft, its contents or any parts thereof as soon as they are no longer required in the investigation, to any person or persons duly designated by the State of Registry or the State of the Operator, as applicable.
- (b) For this purpose the investigator-in-charge 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 the investigator-in-charge finds it impracticable to grant such access, it shall itself effect removal to a point where access can be given.

### **SUBPART E: ACCIDENT & INCIDENT INVESTIGATION**

#### **19.060 APPLICABILITY**

- (a) This Subpart is applicable to the conduct of accident and incident investigations. the persons who conduct the investigations and those persons that have information or records pertinent to the investigations.

#### **19.063 RESPONSIBILITY FOR INVESTIGATION <sup>12</sup>**

- (a) <sup>13</sup> Vietnam shall have to conduct investigation on aviation accidents and serious incidents occurring in the Vietnamese territory or flight information regions managed by Vietnam. However, Vietnam may delegate the whole or any part of the conducting of such investigation to another State or a regional

<sup>11</sup> This content is revised according to Item 10, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2018.

<sup>12</sup> This Article is revised according to Item 11, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2018.

<sup>13</sup> This content is revised according to Item 1, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018.

accident and incident investigation organization (RAIO) by mutual arrangement and consent.

- (b) <sup>14</sup> If the State of Occurrence does not conduct an investigation, and does not delegate the investigation to another State or a regional accident and incident investigation organization, Vietnam as a State of Registry or, the State of the Operator, the State of Design or the State of Manufacture is entitled to request in writing the State of Occurrence to delegate the conducting of such investigation. If the State of Occurrence gives express consent or does not reply to such a request within 30 days, Vietnam should institute and conduct the investigation with such information as is available
- (c) If the accident or incident occurs in a foreign state not bound by the provisions of Annex 13 to the Chicago Convention involving civil aircraft of Vietnam registry, the conduct of the investigation shall be in consonance with any agreement entered into between the Government of Vietnam and the foreign state.
- (d) <sup>15</sup> In the case of an accident or incident occurring at an unidentified location in the territory of any country with respect to an aircraft registered for Vietnamese nationality, Vietnam shall be responsible for carrying out the investigation. However, it may delegate the whole or any part of the investigation to another State or a regional accident and incident investigation organization by mutual arrangement and consent.
- (e) In the case of an aircraft accident occurring in the international waters nearest to the territory of Vietnam, Vietnam shall be responsible for the maximum support as requested by the State registering the aircraft.

#### **19.065 NATURE OF INVESTIGATION**

- (a) Accident and incident investigations are conducted by the CAAV to determine the facts, conditions, and circumstances relating to an accident or incident and the probable cause(s) thereof.
- (b) These results are then used to ascertain measures that would best tend to prevent similar accidents or incidents in the future.
- (c) The investigation includes the field investigation (on-scene at the accident, testing, teardown, etc.), report preparation, and, where ordered, a public hearing.
- (d) The investigation results in CAAV conclusions issued in the form of a report or "brief" of the incident or accident.
- (e) Accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties.
- (f) <sup>16</sup> These investigations are not conducted for the purpose of determining the rights or liabilities of any person and not impeded by administrative or judicial investigation or proceedings.

<sup>14</sup> This content is revised according to Item 1, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018.

<sup>15</sup> This content is revised according to Item 1, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018.

<sup>16</sup> This content is revised according to Item 12, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

## **19.067 RIGHT TO REPRESENTATION <sup>17</sup>**

- (a) Any person interviewed by an authorized representative of the CAAV during the investigation, regardless of the form of the interview (sworn, unsworn, transcribed, not transcribed, etc.), has the right to be accompanied, represented, or advised by an attorney or non-attorney representative.

## **19.070 ACCIDENT INQUIRY BOARD**

- (a) <sup>18</sup> The competence to organize investigations into aircraft incidents and accidents is provided for in the Civil Aviation Law of Vietnam and the Government's Decree No. 75/2007/ND-CP of May 9th 2007 on investigation of civil aircraft incidents and accidents.
  - (1) The Aircraft Accident Investigation Commission set up by the Prime Minister shall organize the investigation of aircraft accidents specified at Points (a) and (c) of Clause 2, Article 104 of the Civil Aviation Law of Vietnam.
  - (2) The Ministry of Transport shall investigate aircraft accidents and incidents specified in Clauses 1 and Point (b) of Clause 2, Article 104 of the Vietnam Civil Aviation Law;
  - (3) The CAAV under the authorization of The Ministry of Transport in according with Decision № 1370/QD-BGTVT dated May 21<sup>st</sup> 2009 on conduct or organize the investigation of incident or accident;
- (b) <sup>19</sup> The accident inquiry board shall have the responsibility for:
  - (1) Ensuring the proper conduct and transparency of the investigation;
  - (2) Determining the findings and the possible causal factors;
  - (3) Developing safety recommendations based on the findings;
  - (4) Retain the copies of records obtained in the course of an investigation;
  - (5) Completion and distribution of a Final Report.
- (c) To meet these responsibilities, the accident inquiry board shall be able to appoint any person who has adequate qualification of any following organization to support the investigation:
  - (1) Aircraft operator;
  - (2) Air traffic service unit;
  - (3) Aircraft designer, aircraft manufacturer, aircraft maintenance organization or aviation laboratory;
  - (4) Aviation association;
  - (5) Have access to all details, information, interviews, records and reports of technical experts;
  - (6) Hold public inquiries to interview witnesses and technical experts;

<sup>17</sup> The name of this Article is revised according to Item 13, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>18</sup> This content is revised according to Item 14, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>19</sup> This content is revised according to Item 14, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (d) The accident inquiry board shall have suitable working area near the incident/accident site with required transportation; the accident inquiry board shall be equipped with necessary equipment to support the investigation. Depends on the actual situation, the accident inquiry board might decide suitable working area.
- (e) The accident inquiry board is responsible for recording all related files and documentations after finishing the investigation.

#### **19.073 INVESTIGATOR-IN-CHARGE: DESIGNATION**

- (a) The CAAV shall designate the investigator-in-charge of the investigation and shall initiate the investigation immediately.
- (b) When an accident inquiry board is appointed, the investigator-in-charge shall be relieved of all other duties and detailed to the board until the Final Report is distributed.
- (c) The accident inquiry board may, after their appointment, replace the investigator-in-charge with a qualified person of their choice.

#### **19.075 INVESTIGATOR-IN-CHARGE: ACCESS & CONTROL <sup>20</sup>**

- (a) The investigator-in-charge shall have unhampered access to the wreckage and all relevant material, including flight recorders and ATS records, and shall have unrestricted control over it to ensure that a detailed examination can be made without delay by authorized personnel participating in the investigation.

#### **19.077 INVESTIGATOR-IN-CHARGE**

- (a) The designated investigator-in-charge (IIC) organizes, conducts, controls, and manages the field phase of the investigation, regardless of what other representatives of the Government of Vietnam are also on-scene at the accident or incident site.
- (b) The IIC shall have the responsibility and authority to supervise and coordinate all resources and activities of all personnel, both government and civilians, involved in the on-site investigation.
- (c) The IIC shall continue to have considerable organizational and management responsibilities throughout later phases of the investigation, up to and including the CAAV's consideration and adoption of a report or brief of probable cause(s).

#### **19.080 AUTHORITY OF ACCIDENT INVESTIGATORS**

- (a) Upon presentation of appropriate credentials, an authorized representative of the CAAV is authorized to:
  - (1) Enter any property where an accident/incident subject to the CAAV's jurisdiction has occurred; or
  - (2) Wreckage from any such accident/incident is located; and
  - (3) Do all things considered necessary for proper investigation.
- (b) Further, upon demand of an authorized representative of the CAAV and presentation of credentials, any Government agency, or person having

<sup>20</sup> This content is revised according to Item 15, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

possession or control of any transportation vehicle or component thereof, any facility, equipment, process or controls relevant to the investigation, or any pertinent records or memoranda, including all files, hospital records, and correspondence then or thereafter existing, and kept or required to be kept, shall forthwith permit inspection, photographing, or copying thereof by such authorized person for the purpose of investigating an accident or incident, or preparing a study, or related to any special investigation pertaining to safety or the prevention of accidents.

- (c) The representative of the CAAV may issue a subpoena, enforceable in court, to obtain testimony or other evidence.
- (d) A representative of the CAAV may question any person having knowledge relevant to an accident/incident, study, or special investigation.
- (e) The representatives of the CAAV also have exclusive authority, on behalf of the CAAV, to decide the way in which any testing will be conducted, including: Decisions on the person that will conduct the test; the type of test that will be conducted; and any individual who will witness the test.
- (f) The representative of the CAAV, upon presenting appropriate credentials, is authorized to examine and test to the extent necessary any civil or public aircraft, aircraft engine, propeller, appliance, or property aboard such aircraft involved in an accident in commercial air transport.

#### **19.083 AUTOPSY & MEDICAL EXAMINATIONS**

- (a) The investigator-in-charge, on behalf of the CAAV, 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 members, by a pathologist, preferably experienced in accident investigation.
- (b) The representative of the CAAV is authorized to obtain, with or without reimbursement, a copy of the report of autopsy performed on any person who dies as a result of having been involved in a aircraft accident within the jurisdiction of the CAAV.
- (c) The investigator-in-charge, on behalf of the CAAV, may order an autopsy or seek other tests of such persons as may be necessary to the investigation, provided that to the extent consistent with the needs of the accident investigation, provisions of local law protecting religious beliefs with respect to autopsies shall be observed.
- (d) When appropriate, investigator-in-charge shall arrange for medical examination of the crew, passengers and involved aviation personnel, by a physician, preferably experienced in accident investigation.
- (e) The investigator-in-charge shall ensure these examinations shall be expeditious and complete.

#### **19.085 PARTIES TO THE INVESTIGATION**

- (a) The investigator-in-charge designates parties to participate in the investigation. Parties shall be limited to those persons, government agencies, companies, and associations whose employees, functions, activities, or products were involved



in the accident or incident and who can provide suitable qualified technical personnel actively to assist in the investigation. No other entity is afforded the right to participate in accident investigations by the CAAV.

- (b) Participants in the investigation (i.e., party representatives, party coordinators, and/or the larger party organization) shall be responsive to the direction of representatives the CAAV and may lose party status if they do not comply with their assigned duties, actively proscriptions or instructions, or if they conduct themselves in a manner prejudicial to the investigation.
- (c) No party to the investigation shall be represented in any aspect of the CAAV's investigation by any person who also represents claimants or insurers. No party representative may occupy a legal position.
- (d) In addition to compliance with the provisions of paragraph (a) of this section, and to assist in ensuring complete understanding of the requirements and limitations of party status, all party representatives in aviation investigations shall sign a statement containing these requirements and limitations immediately upon attaining party representative status.

#### **19.087 ACCESS TO & RELEASE OF WRECKAGE, RECORDS, MAIL & CARGO**

- (a) Only the accident investigation personnel of the CAAV, and other persons authorized by the investigator-in-charge to participate in any particular investigation, examination or testing shall be permitted access to wreckage, records, mail, or cargo in the custody of the CAAV.
- (b) Wreckage, records, mail, and cargo in the custody of the CAAV shall be released when it is determined that the CAAV has no further need of such wreckage, mail, cargo, or records.

#### **19.090 NOTIFICATION OF AFFECTED STATES**

- (a) <sup>21</sup> Upon receipt of the incident/ accident report, CAAV confirm the information and notify other States and the ICAO of the accident or incident.
- (b) The collection and recording of information shall not be delayed to await the arrival of an accredited representative.

#### **19.093 FLIGHT RECORDERS: ACCIDENTS & INCIDENTS**

- (a) Effective use shall be made of flight recorders in the investigation of an accident or an incident. The investigator-in-charge shall arrange for the read-out of the flight recorders without delay.
- (b) During the conduct of an accident or incident investigation, the investigator-in-charge determines that adequate facilities to read out the flight recorders are not available in Vietnam, he may use the facilities made available to by other States, giving consideration to the following:
  - (1) The capabilities of the read-out facility;
  - (2) The timeliness of the read-out; and
  - (3) The location of the read-out facility.

<sup>21</sup> This content is revised according to Item 16, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

### **19.095 COORDINATION: JUDICIAL AUTHORITIES**

- (a) <sup>22</sup> The judicial authorities of Vietnam shall ensure support, coordination and access of the investigator-in-charge or his assigned representative during the conduct of an accident investigation.
- (b) This coordination and support shall include any evidence which requires prompt recording and analysis for the investigation to be successful, such as the examination and identification of victims and read-outs of flight recorder recordings.

### **19.097 INFORMING AVIATION SECURITY AUTHORITIES**

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

### **19.100 FLOW & DISSEMINATION OF ACCIDENT OR INCIDENT INFORMATION**

- (a) <sup>23</sup> Release of information during the field investigation, particularly at the accident scene, shall be limited to factual developments, and shall be made only through the designated representative of Vietnam.
- (b) All information concerning the accident or incident obtained by any person or organization participating in the investigation shall be passed to the IIC through appropriate channels before being provided to any individual outside the investigation.
- (c) Parties to the investigation may relay to their respective organizations information necessary for purposes of prevention or remedial action.
- (d) However, no information concerning the accident or incident may be released to any person not a party representative to the investigation (including non-party representative employees of the party organization) before initial release by the CAAV without prior consultation and approval of the IIC.

### **19.103 PROPOSED FINDINGS**

- (a) Any person, government agency, company, or association whose employees, functions, activities, or products were involved in an accident or incident under investigation may submit to the CAAV written proposed findings to be drawn from the evidence produced during the course of the investigation, a proposed probable cause, and/or proposed safety recommendations designed to prevent future accidents.
- (b) Timing of submissions. To be considered, these submissions must be received before the matter is calendared for consideration at a meeting chaired by the CAAV. All written submissions are expected to have been presented to staff in advance of the formal scheduling of the meeting. This procedure ensures orderly and thorough consideration of all views.

<sup>22</sup> This content is revised according to Item 17, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>23</sup> This content is revised according to Item 18, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

### **19.105 NON-DISCLOSURE OF RECORDS** <sup>24</sup>

- (a) During the conduct of an investigation of an accident or incident, no person may make the following records available for purposes other than accident or incident investigation, unless competent person determines that their disclosure outweighs the adverse domestic and international impact such action may have on that or any future investigations:
  - (1) All statements taken from persons by the investigation authorities in the course of their investigation;
  - (2) All communications between persons having been involved in the operation of the aircraft;
  - (3) Medical or private information regarding persons involved in the accident or incident;
  - (4) Cockpit voice recordings and airborne image recording and any transcripts from such recordings;
  - (5) Recordings and transcriptions of recordings from air traffic control units;
  - (6) Opinions expressed in the analysis of information, including flight recorder information.
  - (7) The draft Final Report of an accident or incident investigation.
- (b) These records shall be included in the final report or its appendices only when pertinent to the analysis of the accident or incident.
- (c) Those records or parts of the records collected during the investigation but not deemed relevant to the analysis shall not be disclosed.
- (d) The names of the persons involved in the accident or incident shall not be disclosed to the public by the accident investigation authority.

### **19.107 RE-OPENING OF THE INVESTIGATION**

- (a) If new and significant evidence becomes available after the investigation of an accident that occurred within the jurisdiction of Vietnam has been closed, the CAAV shall re-open the investigation.
- (b) If new and significant evidence becomes available to the CAAV regarding an accident that occurred in another State, that evidence shall be transmitted to the appropriate authorities of the State which instituted the original investigation.
- (c) If the CAAV would like to re-open an investigation that was not instituted by the Government of Vietnam, the consent of appropriate authorities of the State which instituted the investigation shall be obtained.

## **SUBPART F: INTERNATIONAL RESPONSIBILITY OF INVESTIGATING STATE WHERE VIETNAM IS THE STATE OF OCCURRENCE** <sup>25</sup>

### **19.110 APPLICABILITY**

<sup>24</sup> This content is revised according to Item 19, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>25</sup> This content is revised according to Item 20, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (a) This Subpart is applicable to international obligations in the event of an accident or incident investigation where Vietnam is the State of Occurrence or the Investigating State.

### **19.113 NOTIFICATION OF OTHER STATES**

- (a) <sup>26</sup> In situations where Vietnam is the State of Occurrence, depends on the nature of the occurrence, CAAV shall report as required by any international organization that Vietnam is a member.
- (b) <sup>27</sup> In situations where Vietnam is the State of Occurrence, the Ministry of Transportation shall ensure the forwarding of the notification of an accident or serious incident to be investigated within the context of Annex 13, with a minimum of delay and by the most suitable and quickest means available to:
  - (1) The State of Registry;
  - (2) The State of the Operator;
  - (3) The State of Design;
  - (4) The State of Manufacture; and
  - (5) The International Civil Aviation Organization, when the aircraft involved is of a maximum mass of over 2250kg.
- (c) <sup>28</sup> In situations where Vietnam is the State of Registry and the CAAV institutes the investigation of an accident or serious incident, the investigator-in-charge shall forward a notification contain the format and content specified in Section 19.115, with a minimum of delay and by the most suitable and quickest means available, to the other States listed in paragraph (b).
- (d) In situations where Vietnam is either the State of Registry or the State of the Operator, if it is determined that the civil aviation authorities of the State of Occurrence is not aware of a serious incident, the CAAV shall forward a notification of such an incident to the:
  - (1) State of Design;
  - (2) State of Manufacture; and
  - (3) State of Occurrence

### **19.115 FORMAT & CONTENT OF NOTIFICATION**

- (a) The notification shall be in plain language and contains as much of the following information as is readily available, but the notification process shall not be delayed due to the lack of complete information:
  - (1) For accidents the identifying abbreviation ACCID, for serious incidents INCID;
  - (2) Manufacturer, model, nationality and registration marks, and serial number of the aircraft;
  - (3) Name of owner, operator and hirer, if any, of the aircraft;

<sup>26</sup> This content is revised according to (a) of Item 21, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>27</sup> This content is revised according to (a) of Item 2, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018.

<sup>28</sup> This content is revised according to (b) of Item 21, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (4) Name of the pilot-in-command, and nationality of crew and passengers
- (5) Date and time (local time or UTC) of the accident or serious incident;
- (6) Last point of departure and point of intended landing of the aircraft;
- (7) Position of the aircraft with reference to some easily defined geographical point and latitude and longitude;
- (8) Number of crew and passengers; aboard, killed and seriously injured; others, killed and seriously injured;
- (9) Description of the accident or serious incident and the extent of damage to the aircraft so far as is known
- (10) An indication to what extent the investigation will be conducted or is proposed to be delegated by the State of Occurrence;
- (11) Physical characteristics of the accident or serious incident area, as well as an indication of access difficulties or special requirements to reach the site;
- (12) Identification of the originating authority and means to contact the investigator-in-charge and the accident investigation authority of the State of Occurrence at anytime; and
- (13) Presence and description of dangerous goods on board the aircraft.

#### **19.117 LANGUAGE TO BE USED IN THE NOTIFICATION**

- (a) The notification shall be prepared in English, taking into account the language of the recipient(s), whenever it is possible to do so without causing undue delay.

#### **19.120 ADDITIONAL RELEVANT INFORMATION**

- (a) As soon as it is possible to do so, the CAAV shall dispatch the details omitted from the notification as well as other known relevant information to all applicable States.

#### **19.123 EXPECTATIONS OF PARTICIPATION OF STATES**

- (a) If the acknowledgements do not occur in a timely fashion, the CAAV will contact the civil aviation authorities of the States on an informal and individual basis.
- (b) <sup>29</sup> The State of Registry, the State of the Operator, the State of Design and the State of Manufacture are expected 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. The participation of their representatives are encouraged for the usefulness of their presence and participation in the investigation.

#### **19.127 CONDUCT OF THE INVESTIGATION**

- (a) The CAAV shall ensure that the conduct of the investigation is accomplished within the authority and limitations of Subpart E of this Part.

#### **19.130 COORDINATION OF PARTICIPATION OF OTHER STATES**

<sup>29</sup> This content is revised according to (a) of Item 22, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (a) The CAAV shall ensure the proper coordination and participation of the representative, advisors and technical experts in accordance with the provisions of Subparts H and I.

#### **19.133 TIMELY COMPLETION OF PERTINENT REPORTS**

- (a) The CAAV shall ensure the timely and completeness of all required reports specified in Subpart J.

### **SUBPART G: INTERNATIONAL RESPONSIBILITY OF INVESTIGATING STATE WHERE VIETNAM IS NOT THE STATE OF OCCURRENCE** <sup>30</sup>

#### **19.140 APPLICABILITY**

- (a) This Subpart is applicable to international obligations in the event of an accident or incident investigation where Vietnam is not the State of Occurrence, but is the:
  - (1) State of Registry;
  - (2) State of the Operator;
  - (3) State of Manufacturer; and/or
  - (4) State of Design

#### **19.143 ACTIONS FOLLOWING RECEIPT OF NOTIFICATION**

- (a) <sup>31</sup> The CAAV shall acknowledge receipt of the notification of an accident or serious incident from the State of Occurrence.
- (b) The CAAV shall also inform the State of Occurrence:
  - (1) <sup>32</sup> Whether it intends to appoint an accredited representative; and
  - (2) 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.

#### **9.145 TIMELY PROVISION OF RELEVANT INFORMATION**

- (a) Upon receipt of the notification, the CAAV shall, upon request, provide the State of Occurrence with any relevant information available to them regarding the flight crew and the aircraft involved in the accident or serious incident.
- (b) Upon receipt of the notification, the CAAV shall, with a minimum of delay and by the most suitable and quickest means available, provide the State of Occurrence with details of dangerous goods on board the aircraft.

#### **19.147 PROVISION OF ADDITIONAL INFORMATION**

- (a) The CAAV 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 the CAAV.

<sup>30</sup> This content is revised according to Item 23, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>31</sup> This content is revised according to Paragraph (a) of Item 24, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>32</sup> This content is revised according to Paragraph (b) of Item 24, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (b) The CAAV shall, when the facilities or services of Vietnam have been, or would normally have been, used by an aircraft prior to an accident or an incident, and if it has information pertinent to the investigation, shall provide such information to the State conducting the investigation.

#### **19.150 PROTECTION & PROVISION OF FLIGHT RECORDER RECORDS <sup>33</sup>**

- (a) When an aircraft involved in an accident or a serious incident lands in Vietnam, the CAAV shall, on request from the State conducting the investigation, furnish the latter State with the:
- (1) Flight recorder records; and
  - (2) If necessary, the associated flight recorders.

#### **19.153 PROVISION OF RELATED ORGANIZATION INFORMATION**

- (a) The CAAV shall, 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.

#### **19.155 REQUIRED APPOINTMENT OF AN ACCREDITED REPRESENTATIVE**

- (a) When the State conducting an investigation of an accident to an aircraft of a maximum mass of over 2250 kg specifically requests participation of Vietnam, the CAAV shall appoint an accredited representative.

#### **19.157 ACTION ON SAFETY RECOMMENDATIONS**

- (a) When the CAAV receives proposed safety recommendations from another State based on an accident or incident investigation, an evaluation of the proposals shall be conducted.
- (b) <sup>34</sup> Following that evaluation, within 90 days of the date of the transmittal correspondence, the CAAV shall inform the proposing State of the preventive action taken or under consideration or reasons why no action will be taken or alternative proposals for preventive action other than the original safety recommendations.
- (c) <sup>35</sup> CAAV that receives a safety recommendation should implement procedures to monitor the progress of the action taken in response to that safety recommendation.
- (d) <sup>36</sup> In the interest of safety, CAAV shall be entitled to issue safety recommendations after coordinating with the State conducting the investigation.

#### **19.158 FINAL REPORT <sup>37</sup>**

- (a) If the State conducting the investigation does not make the Final Report or an interim statement publicly available within a reasonable timeframe, Vietnam participating in the investigation is entitled to request in writing from

<sup>33</sup> This content is revised according to Item 25, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>34</sup> This content is revised according to Item 26, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>35</sup> This content is revised according to Item 26, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

<sup>36</sup> This content is revised according to Item 3, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018.

<sup>37</sup> This Article is added according to Item 4, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018.

the State conducting the investigation express consent to release a statement containing safety issues raised with such information as is available. If the State conducting the investigation gives express consent or does not reply to such a request within 30 days, Vietnam should release such a statement after coordinating with participating States.

## **SUBPART H: RIGHT OF PARTICIPATION IN INVESTIGATION** <sup>38</sup>

### **19.160 APPLICABILITY**

- (a) This Subpart provides the requirements for allowing the participation of accredited representatives, their advisors and other experts to assist in the accident investigation, reports and safety recommendations.
- (b) The investigator in charge will ensure that these persons are included in the accident and incident investigation to the extent of their entitlement.

### **19.163 STATES ENTITLED TO APPOINT A REPRESENTATIVE**

- (a) The following States are entitled to appoint an accredited representative to participate in an accident or incident investigation conducted by the CAAV:
  - (1) The State of Registry;
  - (2) The State of the Operator;
  - (3) The State of Design;
  - (4) The State of Manufacture;
  - (5) The State that designed or manufactured the powerplant or major components of the aircraft shall also be invited to participate in the investigation of an accident.
- (b) Any State which on request provides information, facilities or experts to the CAAV shall be entitled to appoint an accredited representative to participate in the investigation.
- (c) Any State that provides an operational base for field investigations, or is involved in search and rescue or wreckage recovery operations, or is involved as a State of a code-share or alliance partner of the operator, shall also be invited to appoint an accredited representative to participate in the investigation.

### **19.165 ADDITIONAL INVITED PARTICIPANTS**

- (a) If neither the State of Registry, nor the State of the Operator appoint an accredited representative, the CAAV shall invite the operator to participate, subject to the procedures of the State conducting the investigation.
- (b) When neither the State of Design nor the State of Manufacture appoint an accredited representative, the CAAV shall invite the organizations responsible for the type design and the final assembly of the aircraft to participate, subject to the procedures of the CAAV.

### **19.167 APPOINTMENT OF ADVISORS TO THE ACCREDITED REPRESENTATIVES**

<sup>38</sup> The name of this Chapter is revised according to Item 27, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.



- (a) The State of Registry or the State of the Operator may appoint one or more advisors, proposed by the operator, to assist its accredited representative.
- (b) The State of Design and the State of Manufacture shall be entitled to appoint one or more advisors, proposed by the organizations responsible for the type design and the final assembly of the aircraft, to assist their accredited representatives.

#### **19.170 STATES WITH FATALITIES OR SERIOUS INJURIES TO ITS CITIZENS**

- (a) A State which has a special interest in an accident by virtue of fatalities or serious injuries to its citizens shall, upon making a request to do so, be permitted by the CAAV to appoint an expert who shall be entitled to:
  - (1) Visit the scene of the accident;
  - (2) Have access to the relevant factual information;
  - (3) Participate in the identification of the victims;
  - (4) Assist in questioning surviving passengers who are citizens of the expert's State; and
  - (5) <sup>39</sup> Receive a copy of the Final Report.

### **SUBPART I: ENTITLEMENT OF ACCREDITED REPRESENTATIVES**

#### **19.180 APPLICABILITY**

- (a) This Subpart provides the requirements that will be applied to the accredited representatives that participate in the investigation of aircraft accidents and incidents in Vietnam.
- (b) The investigator-in-charge shall ensure that these accredited representatives are accorded the appropriate entitlements.

#### **19.183 ACCREDITED REPRESENTATIVES & THEIR ADVISORS**

- (a) A State entitled to appoint an accredited representative shall also be entitled to appoint one or more advisors to assist the accredited representative in the investigation
- (b) A State participating in an investigation may call upon the best technical experts from any source and appointing such experts as advisors to its accredited representative.
- (c) Advisors assisting accredited representatives shall be permitted, under the accredited representatives' supervision, to participate in the investigation to the extent necessary to enable the accredited representatives to make their participation effective.

#### **19.185 PARTICIPATION**

- (a) The accredited representatives, their advisors and other invited participants may participate in all aspects of the investigation, under the control of the investigator-in-charge, in particular to:
  - (1) Visit the scene of the accident;

<sup>39</sup> This content is revised according to Item 29, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (2) Examine the wreckage;
- (3) Obtain witness information and suggest areas of questioning;
- (4) Receive copies of all pertinent documents;
- (5) Participate in read-outs of recorded media;
- (6) Participate in off-scene investigative activities such as component examinations, technical briefings, tests and simulations;
- (7) Make submissions in respect of the various elements of the investigation.
- (8) However, participation of States other than the State of Registry, the State of the Operator, the State of Design and the State of Manufacture may be limited to those matters which entitled such States to participation under Section 19.115.

### **19.187 PROCEDURES**

- (a) All participants in the accident or incident investigation, or part thereof, shall be subject to the restrictions and procedures of Vietnam, as administered by the investigator-in-charge, or part thereof, is being conducted.

### **19.190 LIMITS TO ENTITLEMENT**

- (a) Nothing in this Part precludes the CAAV from extending participation beyond the entitlement enumerated herein.
- (b) The pertinent documents referred to in Section K also include documents such as the reports on examinations of components or studies performed within the framework of the investigation.

### **19.193 OBLIGATIONS**

- (a) Accredited representatives and their advisors:
  - (1) Shall provide the State conducting the investigation with all relevant information available to them; and
  - (2) Shall not divulge information on the progress and the findings of the investigation without the express consent of the CAAV conducting the investigation.
- (b) Nothing in paragraph (a) precludes prompt release of facts when authorized by the investigator-in-charge of the investigation, nor does this Section preclude accredited representatives from reporting to their respective States in order to facilitate appropriate safety actions.

## **SUBPART K: ACCIDENT/INCIDENT REPORTS** <sup>40</sup>

### **19.200 APPLICABILITY**

- (a) This Subpart is applicable to the reports that are completion, editing and distribution of the reports that are required in the accident and serious incident investigation process.

<sup>40</sup> The name of this Chapter is revised according to Item 30, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

- (b) This Subpart is applicable to the personnel of the Accident Inquiry Board and their assigned investigators and the personnel of the CAAV supporting the investigation.

#### **19.203 SAFETY OF FLIGHT <sup>41</sup>**

- (a) When matters directly affecting safety are determined to involved in an accident or serious incident, the CAAV shall forward that information is forwarded to the appropriate States and ICAO:
  - (1) As soon as the information is available; and
  - (2) By the most suitable and quickest means available.

#### **19.205 LANGUAGE**

- (a) All notifications and reports by the CAAV during the course of accident and incident investigation shall be submitted to appropriate States and to the ICAO in English.

#### **19.207 RELEASE OF INFORMATION: CONSENT**

- (a) No person may circulate, publish or give access to a draft report or any part thereof, or any documents obtained during an investigation of an accident or incident, without the express consent of the CAAV, unless such reports or documents have already been published or released by the government of Vietnam.

#### **19.210 PRELIMINARY REPORT <sup>42</sup>**

- (a) During the investigation of an aircraft accident or serious incident, the CAAV shall complete a Preliminary Report outlining the facts, observations and findings of the investigators at the time of the report.

#### **19.213 ACCIDENTS TO AIRCRAFT OVER 2,250 KG**

- (a) When an aircraft involved in an accident is of a maximum mass of over 2.250 kg, the CAAV shall send the Preliminary Report to:
  - (1) The State of Registry or the State of Occurrence, as appropriate;
  - (2) The State of the Operator;
  - (3) The State of Design;
  - (4) The State of Manufacture;
  - (5) Any State that provided relevant information, significant facilities or experts; and
  - (6) The International Civil Aviation Organization.

#### **19.215 ACCIDENTS TO AIRCRAFT OF 2,250 KG OR LESS**

- (a) When an aircraft, a maximum mass of 2,250 kg or less, is involved in an accident and when airworthiness or matters considered to be of interest to other States are involved, the CAAV shall forward the Preliminary Report to:
  - (1) The State of Registry or the State of Occurrence, as appropriate;

<sup>41</sup> This content is revised according to Item 31, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>42</sup> This content is revised according to Item 32, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

- (2) The State of the Operator;
- (3) The State of Design;
- (4) The State of Manufacture; and
- (5) Any State that provided relevant information, significant facilities or experts.

#### **19.217 TIMELY SUBMISSION OF THE PRELIMINARY REPORT**

- (a) The CAAV shall send the Preliminary Report by facsimile, e-mail, or airmail within thirty days of the date of the accident, unless the Accident/Incident Data Report has already been sent by that time.

#### **19.220 ACCIDENT OR INCIDENT DATA REPORT <sup>43</sup>**

- (a) During the investigation of an aircraft accident or serious incident, the CAAV shall complete an Accident or Incident Data Report in the form and manner prescribed by ICAO.

#### **19.223 ACCIDENTS TO AIRCRAFT OVER 2,250 KG**

- (a) When the aircraft involved in an accident is of a maximum mass of over 2,250 kg, the CAAV shall send, as soon as practicable after the investigation, the Accident Data Report to ICAO.

#### **19.225 ADDITIONAL INFORMATION**

- (a) The CAAV shall, upon request, provide other States with pertinent information additional to that made available in the Accident/Incident Data Report.

#### **19.227 INCIDENTS TO AIRCRAFT OVER 5,700 KG <sup>44</sup>**

- (a) When the CAAV conducts an investigation into an incident to an aircraft of a maximum mass of over 5,700 kg, the Incident Data Report shall be sent to the ICAO as soon as practicable after the investigation..

#### **19.230 FINAL REPORT <sup>45</sup>**

- (a) During the investigation of an aircraft accident or serious incident, the investigator-in-charge shall ensure the drafting, coordination and completion of a Final Report of that investigation in sufficient detail for analysis by the CAAV, other States and ICAO.

#### **19.233 CONSULTATION WITH OTHER STATES**

- (a) The CAAV shall send a copy of the draft Final Report to the State that instituted the investigation and to all States that participated in the investigation, inviting their significant and substantiated comments on the report as soon as possible.
- (b) The draft Final Report of the investigation shall be sent for comments to:
  - (1) The State of Registry;
  - (2) The State of the Operator;
  - (3) The State of Design; and

<sup>43</sup> This content is revised according to Item 33, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>44</sup> This content is revised according to Item 34, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>45</sup> This content is revised according to Item 35, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

- (4) The State of Manufacture.
- (c) When sending the draft Final Report to recipient States, the CAAV shall use the most suitable and quickest means available, such as facsimile, email, courier service or express mail.

#### **19.235 INVITING COMMENTS FROM OTHER INTERESTED PARTIES**

- (a) The CAAV shall also send, through the State of the Operator, a copy of the draft Final Report to the operator to enable the operator to submit comments on the draft Final Report.
- (b) The CAAV shall send, through the State of Design and the State of Manufacture, a copy of the draft Final Report to the organizations responsible for the type design and the final assembly of the aircraft to enable them to submit comments on the draft Final Report.

#### **19.237 PROCESSING OF TIMELY COMMENTS** <sup>46</sup>

- (a) If the CAAV 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.
- (b) If the CAAV receives no comments within sixty days of the date of the first transmittal letter, it shall issue the Final Report, unless an extension of that period has been agreed by the States concerned.
- (c) During the course of the investigation, the CAAV may consult with other States, such as those States which provided relevant information, significant facilities, or experts who participated in the investigation..
- (d) Comments to be appended to the Final Report are restricted to non-editorial-specific technical aspects of the Final Report upon which no agreement could be reached.

#### **19.240 RECIPIENT STATES** <sup>47</sup>

- (a) The CAAV shall send the Final Report of the investigation of an accident with a minimum of delay by the State conducting the investigation to:
  - (1) The State that instituted the investigation;
  - (2) The State of Registry;
  - (3) The State of the Operator;
  - (4) The State of Design;
  - (5) The State of Manufacture;
  - (6) Any State having suffered fatalities or serious injuries to its citizens; and
  - (7) Any State that provided relevant information, significant facilities or experts.

#### **19.243 RELEASE OF THE FINAL REPORT**

<sup>46</sup> This content is revised according to Item 36, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>47</sup> This content is revised according to Item 37, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

- (a) In the interest of accident prevention, the CAAV shall release the Final Report of an accident or serious incident as soon as possible.
- (b) The CAAV shall release the Final Report in the shortest possible time and, if possible, within twelve months of the date of the occurrence.
- (c) <sup>48</sup> If the report cannot be released within twelve months after the accident, the CAAV shall release an interim report on each anniversary of the occurrence, detailing the progress of the investigation and any safety issues raised.
- (d) <sup>49</sup> When the CAAV has released a Final Report of an investigation into an accident or an incident involving an aircraft of a maximum mass of over 5,700 kg, it shall send a copy of that report to the ICAO.

#### **19.245 SAFETY RECOMMENDATIONS**

- (a) At any stage of the investigation of an accident or incident, investigator-in-charge conducting the investigation shall recommend to the appropriate authorities, including those in other States, any preventive action that it considers necessary to be taken promptly to enhance aviation safety.
- (b) The CAAV shall address, when appropriate, any safety recommendations arising out of its investigations to the accident investigation authorities of other State(s) concerned.
- (c) <sup>50</sup> 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 shall be also transmitted to that State's accident investigation authority.
- (d) <sup>51</sup> The CAAV shall implement procedures to monitor the progress of the action taken in response to that safety recommendation.

#### **19.247 WHEN ICAO DOCUMENTS ARE INVOLVED**

- (a) The CAAV shall address, when appropriate, any safety recommendations arising out of its investigations to ICAO, when ICAO documents are involved.
- (b) When Final Reports contain safety recommendations addressed to ICAO, because ICAO documents are involved, the CAAV shall ensure that these reports must be accompanied by a letter outlining the specific action proposed.

### **APPENDICES**

#### **APPENDIX 1 TO 19.010 CLASSIFICATION OF AVIATION ACCIDENTS, INCIDENTS AND OCCURRENCES <sup>52</sup>**

- (a) ***Accident.*** An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

<sup>48</sup> This content is revised according to Item 38, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>49</sup> This content is revised according to Item 38, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>50</sup> This content is revised according to Item 39, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>51</sup> This content is revised according to Item 39, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>52</sup> This content is revised according to Item 40, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

- (1) a person is fatally or seriously injured as a result of:
    - being in the aircraft, or
    - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
    - direct exposure to jet blast,

*except* when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
  - (2) the aircraft sustains damage or structural failure which:
    - adversely affects the structural strength, performance or flight characteristics of the aircraft, and
    - would normally require major repair or replacement of the affected component,

*except* for engine failure or damage, when the damage is limited to a single engine (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or
  - (3) the aircraft is missing or is completely inaccessible. An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.
- (b) **Incident.** An occurrence, other than the accident, associated with the operation of an aircraft which affects or could affect the safety of operation, including:
- (1) **Serious incident (Level B):** <sup>53</sup>
    - i. An incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked;
    - ii. The examples of serious incidents are listed but not limited in the Appendix 2 Article 19.010 of this Part. However, depending on the context, items on the list may not be classified as serious incidents if effective defences remained between the incident and the credible scenario.
  - (2) High risk incident (Level C) listed in the Appendix 1, Appendix 2, Appendix 3, Appendix 4 to Article 19.027 of this Part with the following conditions:
    - i. *In aircraft maintenance, operations:*
      - A. Reduce the flight crews' and system ability to handle difficult situation to a level, reduce seriously level of flight safety and performance of some aircraft main functions/system;
      - B. Cause difficulties and may increase severely work load of flight crews or cause them not be able to perform the task correctly;

C. Cause serious damage to the aircraft or pollution to the environment;

D. Incidents cause, consequences or damages to aircrafts, aircraft systems or equipment may not be able to be identified or overcome by applying operation, maintenance, and repair processes within the operational, maintenance, repair document system approved by CAAV and lead to the aircraft out of operation for more than 96 hours (excluding the time waiting for materials and parts) or similar defects on the same aircraft system, equipment, hence the application of the 2<sup>nd</sup> equivalent emergency.

*ii. In air traffic service:*

A. Serious affect air traffic operations and flight safety leading to aircraft nearly collision;

B. Real distance between the aircraft and the ground or obstacle has been violated but bigger or equivalent to 50% of the safe margin distance;

C. Violated altitude between the aircrafts (without collision trend) but bigger or equivalent to 50% of the minimum altitude value;

D. The cause of the incident should be verified, investigated and the need to apply measures to enhance safety.

*iii. In airport ground handling service:* cause damage to the airport, vehicles, equipment operated in the airfield and threatens the safety of persons, vehicles operating within the airfield and direct threat to aircraft operations safety.

(3) Low risk incident (Level D) listed in the Appendix 1, Appendix 2, Appendix 3, Appendix 4 to Article 19.027 of this Part with the following conditions:

*i. In aircraft maintenance, operations:*

A. Affect the flight safety but not at a serious level, problem solving is under control of flight crews.

B. This may reduce the level of flight safety or operational capacity of certain functions and increase the (small) workload of the crew such as changes to plans or performance of flight;

C. These incidents can cause annoying to the flight crew, passengers or damage slightly the aircraft. However, after the incidents, damages to aircrafts, aircraft systems and facilities caused by incidents can be overcome by applying operation, maintenance, and repair processes within the operation, maintenance, repair document system approved by CAAV, and the aircraft can continue operations.

*ii. In air traffic service:*

A. Real distance between the aircraft and the ground or obstacle has been violated but bigger or equivalent to 80% of the safe margin distance;

B. Violated altitude between the aircrafts (without collision trend) but bigger or equivalent to 80% of the minimum altitude value;

C. Affect the flight safety and air traffic but not yet at level C, problem solving are within the capability of flight crew and air traffic control. Air



traffic and air traffic control operate as normal, but there's a need to conduct a risk assess.

*iii. In airport ground handling service:* Incidents of vehicles collide with vehicles or human; incidents that damaged the airport infrastructure and threaten aviation safety.

- (c) **Occurrence** (Level E) does not directly affect the safety of operation and listed in the Appendix 1, Appendix 2, Appendix 3, Appendix 4 to Article 19.027 of this Part with the following conditions:
- (1) Not directly affect safety nor cause any difficulties to flight crew during next phase after the incident; After the incidents, damages to aircrafts, aircraft systems and facilities caused by incidents can be overcome by applying operation, maintenance, and repair processes within the operation, maintenance, repair document system approved by CAAV, and the aircraft can continue operations normally.
  - (2) Affected the operations but has not affected the flight safety or as the result of assessment, reduced level from classification D.
  - (3) Affected the aviation service provision at airport, but yet affected the aviation safety.
  - (4) These reports are for statistic only.

#### **APPENDIX 2 TO 19.010 LIST OF SERIOUS INCIDENTS** <sup>54</sup>

- (a) Near collisions requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate; actual distance between the aircrafts is less than 50% of the required minimum separation.
- (b) Airplanes collide with or collide with vehicles, equipment, or obstacles but are not accidental.
- (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) <sup>55</sup> Landings or attempted landings on a closed or engaged runway, on a taxiway, unassigned runway or unintended landing locations such as roadways.
- (g) Landings exceed the landing distance or overrun from the runway surface;
- (h) Gross failures to achieve predicted performance during take-off or initial climb.
- (i) 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.
- (j) Events requiring the emergency use of oxygen by the flight crew.
- (k) Aircraft structural failures or engine disintegrations, including uncontained turbine engine failures, not classified as an accident.

<sup>54</sup> This Appendix is added according to Item 41, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

<sup>55</sup> This content is revised according to Paragraph (a) of Item 6, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018

- (l) Multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft.
- (m) <sup>56</sup> Flight crew member incapacitation in flight.
  - (1) for single pilot operations;
  - (2) for multi-pilot operations for which flight safety was compromised because of a significant increase in workload for the remaining crew.
- (n) 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.
- (o) Near collisions with another aircraft or equipment or people on the runway.
- (p) System failures, weather phenomena, operations outside the approved flight envelope or other occurrences which could have caused difficulties controlling the aircraft.
- (q) <sup>57</sup> Retraction of a landing gear leg or wheels-up landing not classified as an accident.
- (r) <sup>58</sup> Dragging during landing of a wing tip, an engine pod or any other part of the aircraft, when not classified as an accident.

<sup>56</sup> This content is revised according to Paragraph (b) of Item 6, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018

<sup>57</sup> This content is revised according to Paragraph (c) of Item 6, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018

<sup>58</sup> This content is revised according to Paragraph (c) of Item 6, Appendix X to Circular 56/2018/TT-BGTVT dated 11 Dec 2018

# APPENDIX 1 TO 19.023 OCCURRENCE REPORT

**Ministry of Transport**  
**CIVIL AVIATION ADMINISTRATION OF VIETNAM**

**CAAV Form 14B**  
 Occurrence Ref. Number:  
 ...../.....



## OCCURRENCE REPORT FORM

When completed, please send to: Flight Safety Standard Department - CAAV  
 119 Nguyen Son-Long Bien Dist. -Hanoi - Vietnam  
 Email: [fssd@caa.gov.vn](mailto:fssd@caa.gov.vn)  
 Fax: 04-8.271.993 / 8.732.291  
 Tel: 04-8.271.992

If report is CONFIDENTIAL  
 - mark clearly at the top  
 and provide contact  
 address /Tel no. your wish  
 be respected.

AIRCRAFT TYPE & SERIES		REGISTRATION		OPERATOR		DATE		LOCATION/POSITION/RW		TIME		DAY NIGHT TWILIGHT									
FLIGHT NR		ROUTE FROM		ROUTE TO		FL/ALT/HT (FT)		IAS (KTS)		ETOPS											
										YES		NO									
NATURE OF FLIGHT		PAX	FREIGHT	POSITIONING	FERRY	TEST	TRAINING	BUSSINESS	AGRICULTURE	SURVEY	PLEASURE	CLUB/GROUP	PRIVATE	PARACHUTING	TOWING						
FLIGHT PHASE	PARKED	TAXYING	TAKE OFF	INITIAL CLIMB	CLIMB	CRUISE	DESCENT	HOLDING	APPROACH	LANDING	CIRCUIT	AEROBATICS	HOVER								
ENVIRONMENTAL DETAILS																					
WIND		CLOUD			PRECIPITATION				OTHER METEOROLOGICAL CONDITIONS					RUNWAY STATE							
DIRN	SPEED (kts)	TYPE	HT(ft)	8th	RAIN	SNOW	SLEET	HAIL	VISIBILITY	ICING			TURBULENCE		QAT(°C)	DRY	WET	ICE	SNOW	SLUSH	
					LIGHT	MOD	HEAVY		RMM	ICE	MOD	SEVERE	ICE	MOD	SEVERE		CATEGORY	I	II	III	
BRIEF TITLE																					
DESCRPTION OF OCCURRENCE																					
<i>Continue on next page as necessary</i>																					
Any procedures, manuals, pubs (eg AIC, AD, SB etc) directly relevant to occurrence and (when appropriate) compliance state of aircraft, equipment or documentation.																					
GROUND STAFF REPORT																					
A/C CONSTRUCTORS NR		ENGINE TYPE / SERIES				ETOPS APPROVED				GROUND PHASE		AIRCRAFT BELOW 5700 KG ONLY - MAINTENANCE ORGANISATION									
						YES		NO		MAINTENANCE		TEL No:									
										GROUND HANDLING											
										UNATTENDED											
COMPONENT / PART		MANUFACTURE		PART NR		SERIES NR		MANUAL REF		COMPONENT OH/REPAIR ORGANISATION											

DESCRPTION OF OCCURRENCE CONTINUED	

<b>ORGANISATION AND APPROVAL REF.</b>	<b>NAME</b>	<b>POSITION</b>	<b>SIGNATURE</b>	<b>DATE</b>
If report is voluntary (ie, not subject to mandatory requirements) can the information be published in the interest of safety?	YES	Address and tel No. (if reporter wishes contacted privately)		NOTE 1: If additional information, as below, is available please provide
	NO			NOTE 2: If the occurrence is related to a design or manufacturing deficiency, the manufacture should also be advised promptly.
			NOTE 3: Where applicable, a report of this incident should be forwarded directly to other agencies involved, e.g. Aerodrome Authority, ATC agency.	

**REPORTING ORGANISATION - REPORT**

ORGANISATION COMMENTS - ASSESSMENT / ACTION TAKEN / SUGGESTIONS TO PREVENT

UTILISATION - AIRCRAFT				UTILISATION - ENGINE / COMPONENT				MANUFACTURE ADVISE		
	TOTAL	SINCE OH/REPAIR	SINCE INSPECTION		TOTAL	SINCE OH/REPAIR	SINCE INSPECTION	YES	NO	
HOUR CYCLES				HOUR CYCLES				FDR DATA RETAINED		
LANDINGS				LANDINGS						
ORGANISATION	TEL / FAX:			REPORTER REF	REPORT		REPORTER INVESTIGATION		YES	NO
NAME	POSITION			SIGNATURE		DATE				
					NEW	SUPPL	NIL	CLOSED	OPEN	

## **APPENDIX 1 TO 19.027 MANDATORY REPORTS: AIRCRAFT FLIGHT OPERATIONS**

- (a) Occurrences during operations of an aircraft that involve:
  - (1) Avoidance manoeuvres:
    - (i) Risk of collision with another aircraft, terrain or other object or an unsafe situation when avoidance action would have been appropriate;
    - (ii) An avoidance manoeuvre required to avoid a collision with another aircraft, terrain or other object;
    - (iii) An avoidance manoeuvre to avoid other unsafe situations.
  - (2) Take-off or landing incidents, including precautionary or forced landings. Incidents such as:
    - (i) Under-shooting, overrunning or running off the side of runways
    - (ii) Take-offs, rejected take-offs, landings or attempted landings on a closed, occupied or incorrect runway; and
    - (iii) 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) regardless of cause.
  - (6) Occurrences close to or above V1 resulting from or producing a hazardous or potentially hazardous situation (e.g. rejected take-off, tail strike, engine-power loss etc.).
  - (7) Go around producing a hazardous or potentially hazardous situation.
  - (8) Unintentional significant deviation from airspeed, intended track or altitude (more than 300 ft) regardless of 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" (crew resource management) or between flight crew and other parties (cabin crew, ATC [air traffic control] 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" (secondary surveillance radar) code or of an altimeter sub-scale.

- (15) Incorrect programming of, or erroneous entries into, equipment used for navigation or performance calculations, or use of incorrect data.
- (16) Incorrect receipt or interpretation of radio-telephony messages.
- (17) Fuel system malfunctions or defects, which had an effect on fuel supply and/or distribution.
- (18) Aircraft unintentionally departing from 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 gear 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 the aircraft, such as a configuration warning, stall warning (stick shaker), over-speed warning etc. unless:
  - (i) The crew conclusively established that the indication was false and provided that the false warning did not result in difficulty or hazard arising from the crew response to the warning; or
  - (ii) Operated for training or test purposes.
- (25) "GPWS" (ground proximity warning system)/"TAWS" (terrain awareness and warning system) "warning" when:
  - (i) The aircraft comes into closer proximity to the ground than had been planned or anticipated; or
  - (ii) The warning is experienced in instrument meteorological conditions or at night and is established as having been triggered by a high rate of descent (mode 1); or
  - (iii) The warning results from failure to select landing gear or landing flaps by the appropriate point on the approach (mode 4); or
  - (iv) 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" (air collision advisory system) "RA"s (resolution advisories).
- (28) Jet or prop blast incidents resulting in significant damage or serious injury.
  - (28) Landing at the wrong aerodrome.
- (b) Occurrences resulting in emergencies, including:
  - (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:
    - (i) The procedure exists but is not used;
    - (ii) The procedure does not exist;
    - (iii) The procedure exists but is incomplete or inappropriate;
    - (iv) The procedure is incorrect;
    - (v) 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) Depressurization.
  - (5) The use of any emergency equipment or prescribed emergency procedures in order to deal with a situation.
  - (6) An event leading to the declaration of an emergency ("Mayday" or "PAN").
  - (7) 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.
  - (8) Events requiring any use of emergency oxygen by any crew member.
- (c) Occurrences involving crew incapacitation, including:
  - (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.
  - (2) Incapacitation of any member of the cabin crew which renders them unable to perform essential emergency duties.
- (d) Occurrences involving Injury, including any occurrences which have or could have led to significant injury to passengers or crew but which are not considered reportable as an accident.
- (e) Occurrences related to meteorology, including—
  - (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.
- (f) Security occurrences, including:
  - (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.
- (g) Other occurrences, including:
  - (1) Repetitive instances of a specific type of occurrence which in isolation would not be considered "reportable" but which due to the frequency with which they arise, form a potential hazard.
  - (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 persons on the ground.

#### **APPENDIX 2 TO 19.027 MANDATORY REPORTS: AIRCRAFT TECHNICAL**

- (a) Structural occurrences, including:
  - (1) Damage to a "PSE" (principal structural element) that has not been designated as damage-tolerant (life - limited element). PSEs are those which contribute significantly to carrying flight, ground, and pressurization loads, and the failure of which could result in a catastrophic failure of the aircraft;
  - (2) Defect or damage exceeding admissible damages to a PSE that has been designated as damage-tolerant;
  - (3) Damage to or defect exceeding allowed tolerances of a structural element, the failure of which could reduce the structural stiffness to such an extent that the required flutter, divergence or control reversal margins are no longer achieved;
  - (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.
  - (6) Loss of any part of the aircraft structure in flight.
- (b) Aircraft systems occurrences, including:
  - (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, including:
    - (i) Uncommanded actions,
    - (ii) Incorrect and/or incomplete response, including limitation of movement or stiffness,



- (iii) Runaway,
- (iv) Mechanical disconnection or failure;
- (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 the flight and is relevant to the system operation;
- (14) 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.
- (c) <sup>59</sup> Propulsion (including engines, propellers and rotor systems) and APUs (auxiliary power units):
  - (1) Flameout, shutdown or malfunction of any engine.
  - (2) Overspeed or inability to control the speed of any high-speed rotating component (for example: APU, air starter, air cycle machine, air turbine motor, propeller or rotor).
  - (3) Failure or malfunction of any part of an engine or powerplant resulting in any one or more of the following:
    - (i) Non-containment of components/debris;
    - (ii) Uncontrolled internal or external fire, or hot gas breakout;

- (iii) Thrust in a direction different from that demanded by the pilot;
  - (iv) Thrust-reversing system failing to operate or operating inadvertently;
  - (v) Inability to control power, thrust or revolutions per minute;
  - (vi) Failure of the engine mount structure;
  - (vii) Partial or complete loss of a major part of the powerplant;
  - (viii) Dense visible fumes or concentrations of toxic products sufficient to incapacitate crew or passengers;
  - (ix) Inability, by use of normal procedures, to shutdown an engine;
  - (x) Inability to restart a serviceable engine.
- (4) An uncommanded thrust/power loss, change or oscillation which is classified as a "LOTC" (loss of thrust or power control):
- (i) For a single-engine aircraft; or
  - (ii) Where it is considered excessive for the application; or
  - (iii) Where this could affect more than one engine in a multi-engine aircraft, particularly in the case of a twin-engine aircraft; or
  - (iv) 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 its withdrawal 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" (foreign objects damage) affect to propellers and transmission
- (d) Occurrences involving rotors and transmissions, including:
- (1) Failure or malfunction of any part of a propeller or powerplant resulting in any one or more of the following:
- (i) An overspeed of the propeller;
  - (ii) The development of excessive drag;
  - (iii) A thrust in the opposite direction to that commanded by the pilot;
  - (iv) A release of the propeller or any major portion of the propeller;
  - (v) A failure that results in excessive imbalance;
  - (vi) The unintended movement of the propeller blades below the established minimum in-flight low-pitch position;
  - (vii) An inability to feather the propeller;
  - (viii) An inability to change propeller pitch;
  - (ix) An uncommanded change in pitch;

- (x) An uncontrollable torque or speed fluctuation;
- (xi) The release of low-energy parts.
- (2) 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.
- (3) Damage to tail rotor, transmission and equivalent systems.
- (e) Occurrences involving APUs, including:
  - (1) Shut down or failure when the APU is required to be available by operational requirements, e.g. ETOPS, "MEL" (minimum equipment list).
  - (2) Inability to shut down the APU.
  - (3) Overspeed.
  - (4) Inability to start the APU when needed for operational reasons.
- (f) Human factors occurrences, including 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.
- (g) Other aircraft technical occurrences, including:
  - (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 (e.g., furnishing and cabin equipment, water systems), where the circumstances resulted in endangering the aircraft or its occupants.
  - (3) A fire, explosion, smoke or toxic or noxious fumes.
  - (4) Any other event which could endanger the aircraft, or affect the safety of the occupants of the aircraft, or people or property in the vicinity of the aircraft or on the ground.
  - (5) Failure or defect of passenger address system resulting in loss of, or inaudible, passenger address system.
  - (6) Loss of pilot seat control during flight.

**APPENDIX 3 TO 19.027 MANDATORY REPORTS: AIRCRAFT MAINTENANCE** <sup>60</sup>

- (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-air leakage causes aircraft structure damage
- (c) Any defect in a life-controlled part causing retirement before completion of its full life
- (d) Damage and deterioration (e.g. fractures, cracks, corrosion, delamination, disbonding etc.) resulting from any cause (e.g. as flutter, loss of stiffness or structural failure) to::
  - (1) a primary structure or a "PSE" (principal structure element) (as defined

<sup>60</sup> This content is added according to Item 43, Appendix XIV to Circular 21/2017/TT-BGTVT dated 30 June 2017

- in the manufacturers' Repair Manual) where such damage or deterioration exceeds allowable limits specified in the Repair Manual and requires a repair or complete or partial replacement.
- (2) a secondary structure which consequently has or may have endangered the aircraft
  - (3) the engine, propeller or rotorcraft rotor system
- (e) Any failure, malfunction or defect of any system or equipment, or damage or deterioration thereof found as a result of compliance with an airworthiness directive or other mandatory instruction issued by a regulatory authority, when:
- (1) It is detected for the first time by the reporting organization implementing compliance
  - (2) On any subsequent compliance, it exceeds the permissible limits quoted in the instruction and/or published repair/rectification procedures are not available.
- (f) Failure of any emergency system or equipment, including all exit doors and lighting, to perform satisfactorily, including when being used for maintenance or test purposes
- (g) Non-compliance or significant errors in compliance with required maintenance procedures.
- (h) Aircraft product (aircraft, engine, and propeller), parts, equipment or materials are not clear or suspected of origin.
- (i) Misleading, incorrect or insufficient maintenance data or procedures that could lead to maintenance errors
- (j) Any failure, malfunction or defect of ground equipment used for testing or checking of aircraft systems and equipment when the required routine inspection and test procedures did not clearly identify the problem, where this results in a hazardous situation.

#### **APPENDIX 4 TO 19.027 MANDATORY REPORTS: AIR NAVIGATION AND GROUND OPERATION OCCURRENCES**

- (a) Near collision incidents (encompassing specific situations where one aircraft and another aircraft/the ground/a vehicle/person or object are perceived to be too close to each other):
- (1) Separation minima infringement;
  - (2) Inadequate separation;
  - (3) "Near-CFIT" (near-controlled flight into terrain);
  - (4) Runway incursion where avoiding action was necessary.
- (b) Potential for collision or near collision (encompassing specific situations having the potential to be an accident or a near collision, if another aircraft is in the vicinity):
- (1) Runway incursion where no avoiding action is necessary;
  - (2) Runway excursion;
  - (3) Aircraft deviation from ATC clearance;

- (4) Aircraft deviation from applicable "ATM" (air traffic management) regulation:
  - (i) Aircraft deviation from applicable published ATM procedures;
  - (ii) Unauthorized penetration of airspace;
  - (iii) Deviation from aircraft ATM-related equipment carriage and operations, as mandated by applicable regulation(s).
- (c) ATM-specific occurrences (encompassing those situations where the ability to provide safe ATM services is affected, including situations where, by chance, the safe operation of aircraft has not been jeopardised. This shall include the following occurrences:
  - (1) Inability to provide ATM services:
    - (i) inability to provide air traffic services;
    - (ii) inability to provide airspace management services;
    - (iii) inability to provide air traffic flow management services;
  - (2) Failure of Communication function;
  - (3) Failure of Surveillance function;
  - (4) Failure of Data Processing and Distribution function;
  - (5) Failure of Navigation function
  - (6) ATM system security.
  - (7) Examples of include:
    - (i) Provision of significantly incorrect, inadequate or misleading information from any ground sources, e.g. ATC, "ATIS" (automatic terminal information service), meteorological services, navigation databases, maps, charts, manuals, etc.
    - (ii) Provision of less than prescribed terrain clearance.
    - (iii) Provision of incorrect pressure reference data (i.e. altimeter setting).
    - (iv) Incorrect transmission, receipt or interpretation of significant messages when this results in a hazardous situation.
    - (v) Separation minima infringement.
    - (vi) Unauthorized penetration of airspace.
    - (vii) Unlawful radio communication transmission.
    - (viii) Failure of ANS ground or satellite facilities.
    - (ix) Major ATC/ATM failure or significant deterioration of aerodrome infrastructure.
    - (x) Aerodrome movement areas obstructed by aircraft, vehicles, animals or foreign objects, resulting in a hazardous or potentially hazardous situation.
    - (xi) Errors or inadequacies in marking of obstructions or hazards on aerodrome movement areas resulting in a hazardous situation.
    - (xii) Failure, significant malfunction or unavailability of aerodrome lighting

- (d) "ATC" (air traffic control) Navigation and Communications - significant malfunction or deterioration of service.
- (e) An aircraft was or could have been endangered by impairment of any member of ground staff (e.g. ATC, "FD" (flight dispatchers), Maintenance, etc.).
- (f) ATC overload.
- (g) Failure or unplanned shutdown of a major operational ATC computer system, requiring reversion to manual back-up and resulting in disruption to the normal flow of air traffic.
- (h) Significant spillage during fuelling operations.
- (i) Loading of incorrect fuel quantities likely to have a significant effect on aircraft endurance, performance, balance or structural strength.
- (j) Unsatisfactory ground de-icing/anti-icing.
- (k) Significant contamination of aircraft structure, systems and equipment arising from the carriage of baggage or cargo.
- (l) Incorrect loading of passengers, baggage or cargo, likely to have a significant effect on aircraft mass and/or balance.
- (m) Incorrect stowage of baggage or cargo (including hand baggage) likely in any way to endanger the aircraft, its equipment or occupants or to impede emergency evacuation.
- (n) Inadequate stowage of cargo containers or other substantial items of cargo.
- (o) Loading goods in unsafe way against the regulations x
- (p) Failure, malfunction or defect of ground equipment used for the testing or checking of aircraft systems and equipment when the required routine inspection and test procedures did not clearly identify the problem, where this results in a hazardous situation.
- (q) Non-compliance or significant errors in compliance with required servicing procedures.
- (r) Loading of contaminated or incorrect type of fuel or other essential fluids (including oxygen and potable water).