

THE CIVIL AVIATION ACT

(CAP. ...354...)

REGULATIONS

(Made under Section)

THE CIVIL AVIATION (AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION) REGULATIONS, 2019

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THE CIVIL AVIATION ACT

(No.... of

THE CIVIL AVIATION (AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION) REGULATIONS, 2019

IN EXERCISE of the powers conferred by section of the Civil Aviation Act,, the Minister of Works and Transport makes the following Regulations: —

PART I – PRELIMINARY

Citation. 1. These Regulations may be cited as the Civil Aviation (Aircraft Accident and Incident Investigation) Regulations, 2019.

Interpretation. 2. In these Regulations, unless the context otherwise requires—

“**accident**” means an occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which—

(a) a person is fatally or seriously injured as a result of—

- (i) being in the aircraft;
- (ii) direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or
- (iii) 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;

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

- (i) adversely affects the structural strength, performance or flight characteristics of the aircraft; and
- (ii) would normally require major repair or replacement of the affected component,

except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to

propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or

(c) the aircraft is missing or is completely inaccessible:

Provided that, an aircraft is deemed to be missing when the official search has been terminated and the wreckage has not been located;

“**Act**” means the Civil Aviation Act of [State]

“**act of unlawful interference**” means an act or attempted act to jeopardise the safety of civil aviation and air transport, including but not limited to –

- (a) unlawful seizure of an aircraft in flight or on the ground;
- (b) destroying an aircraft in service or causing damage to the aircraft which renders it incapable of flight or which is likely to endanger its safety in flight;
- (c) hostage taking on board an aircraft or at an airport;
- (d) forcible intrusion on board an aircraft at an airport or on the premises of an aeronautical facility;
- (e) introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes;
- (f) use of an aircraft in service for the purpose of causing death, serious bodily injury, or serious damage to property or the environment;
- (g) unauthorised possession, at an airport, or unauthorised introduction on board an aircraft, of a weapon or hazardous device or material;
- (h) destroying or damaging air navigation facilities or interfering with their operation, if any such act is likely to endanger the safety of aircraft in flight;
- (i) violence against a person on board an aircraft in flight; if that act is likely to endanger the safety of that aircraft;

- (j) communicating information which is known to be false, thereby endangering the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public at an airport or on the premises of a civil aviation facility;
- (k) unlawfully and intentionally using any device, substance or weapon—
 - (i) to perform an act of violence against a person at an airport serving civil aviation which causes or is likely to cause serious injury or death;
 - (ii) to destroy or seriously damage the facilities of an airport serving civil aviation or an aircraft not in service located at the airport or disrupting the services of the airport, if that act endangers or is likely to endanger safety at that airport;

“**accredited representative**” means a person designated by a State, on the basis of his or her qualifications, for the purpose of participating in an investigation conducted by another State, the designated accredited representative will normally be from the State’s accident investigation authority.

“**adviser**” means a person appointed by I[State], on the basis of his or her qualifications, for the purpose of assisting the accredited representative in an investigation,

“**airport operator**” means a person, organization or enterprise engaged in the operation of an airport,

“**air traffic control unit**” means various area control centre, approach control unit, or aerodrome control tower

“**aircraft**” means any machine that can derive support in the atmosphere from the reactions of the air, other than reactions of the air against the earth’s surface, and includes all flying machines, aeroplanes, gliders, seaplanes, rotorcrafts, airships, balloons, gyroplanes, helicopters, ornithopters and other similar machines but excludes state aircraft.

“**Annex 13**” means the Annex to the Convention on International Civil Aviation that contains the International Standards and Recommended Practices related to aircraft accident and incident investigation;

“**Air Traffic Service**” means air traffic services and includes flight information service, alerting service, air traffic advisory service, air traffic control service, area control service, approach

control service and aerodrome control service;

“**authority**” means the unit or person responsible for accident and incident investigation

“**Appointed Head**” means a competent government official who is appointed by [State] to be responsible for the accident and incident investigations within the meaning of the Act.

“**causes**” means actions, omissions, events, conditions, or a combination thereof, which led to the accident or incident, whose identification does not imply the assignment of fault or the determination of administrative, civil or criminal liability;

“**collision**” means an impact between aircraft, or between an aircraft and another object;

“**contributing factors**” means actions, omissions, events, conditions, or a combination thereof, which, if eliminated, avoided or absent, would have reduced the probability of the accident or incident occurring, or mitigated the severity of the consequences of the accident or incident, whose identification does not imply the assignment of fault or the determination of administrative, civil or criminal liability;

“**crew member**” means a person assigned by an air operator to duty on an aircraft during a flight duty period;

“**Contracting State**” means any State which is a party to the Convention on International Civil Aviation (Chicago Convention, 1944);

“**dangerous goods**” means articles or substances which are capable of posing a risk to health, safety, property or the environment as per ICAO Annex 18;

“**department**” means any ministry, authority, organization or other concerned institution of a [State] that has a direct interest in aircraft accidents or incidents;

“**document**” includes any correspondence, memorandum, book, plan, map, drawing, diagram, pictorial or graphic, film, sound recording, video tape, electronic files, data, aircraft documents, and any copy of the document;

“**Draft Final Report**” means draft investigation report that is sent in confidence to departments in [State], other States and organizations involved in the investigation, inviting their significant and substantiated comments on the report;

“**Final Report**” means a State’s conclusive report on its investigation into an aircraft accident or incident which is issued by the Authority and includes the pertinent factual information, analysis, conclusions and, when appropriate, associated safety recommendations;

“**flight recorder**” means any type of recorder installed in the aircraft for the purpose of complementing accident and incident investigation;

“**incident**” means an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation;

“**investigation**” means a process conducted for the purpose of accident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and contributing factors and when appropriate, the making of safety recommendations;

“**investigation interim statement**” means the public communication used by the appropriate authority on each anniversary of the accident or incident for informing those having a direct interest in the investigation regarding the progress of an ongoing investigation and any safety issues raised during the investigation;

“**investigator**” means a person delegated by the appropriate authority to conduct its investigations;

“**investigator-in-charge**” means a person charged, on the basis of his or her qualifications, with the responsibility for the organization, conduct and control of an investigation;

“**observer**” means a representative of a concerned department of [state] who is authorized by the appropriate authority to attend an investigation as an observer, or an investigator authorized to attend an investigation being conducted by another concerned department;

“**occurrence**” means any accident or incident associated with the operation of an aircraft;

“**maximum mass**” means maximum certificated take-off mass;

“**Non-Contracting State**” means any State which is not a party to the Chicago Convention;

“**operator**” means the person, organization or enterprise engaged in or offering to engage in an aircraft operation;

“**participant**” means a person authorized by the appropriate authority to participate in an investigation being conducted by that authority because in the opinion of the authority that person has the expertise to contribute to achieving the authority’s

mandate;

“**pilot-in-command**” means the pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight;

“**Preliminary Report**” means the communication used for the prompt dissemination of data obtained during the early stages of the investigation;

“**safety recommendation**” means a proposal of an accident investigation authority based on information derived from an investigation, made with the intention of preventing accidents or incidents, which in no case has the purpose of creating a presumption of blame or liability for an accident or incident and may result from diverse sources, including safety studies;

“**serious incident**” means an incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down;

“**serious injury**” means an injury which is sustained by a person in an accident and which:

- (a) requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was sustained;
- (b) results in a fracture of any bone (except simple fractures of fingers, toes or nose);
- (c) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage;
- (d) involves injury to any internal organ;
- (e) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
- (f) involves verified exposure to infectious substances or injurious radiation;

“**State aircraft**” means aircraft used in military, customs and police services of [State] or of any other State or any other civil registered aircraft at the time performing a State function and fully converted to offer services to heads of States, military service, customs or police services or any other State;

“**State of Design**” means the State having jurisdiction over the

organization responsible for the type design;

“**State of Manufacture**” means the State having jurisdiction over the organization responsible for the final assembly of the aircraft, engine or propeller;

“**State of Occurrence**” means the State in the territory of which an accident or incident occurs;

“**State of the Operator**” means the State in which the operator’s principal place of business is located or, if there is no such place of business, the operator’s permanent residence;

“**State of Registry**” means the State on whose register the aircraft is entered;

“**State Safety Programme (SSP)**” means an integrated set of regulations and activities aimed at improving safety; and

“**statement**” means the whole or any part of an oral, written or recorded statement relating to an aircraft accident or incident given by the author of the statement to the appropriate authority.

- Application
3. (1) These Regulations shall apply to any accident or incident arising out of or in the course of air navigation which occurs to any civil aircraft in or over [State], or elsewhere to aircraft registered in [State].
 - (2) In these Regulations, the specifications concerning the State of the Operator apply only when an aircraft is leased, chartered or interchanged and when that State is not the State of Registry and if it discharges, in respect of these Regulations in part or in whole, the functions and obligations of the State of Registry.

PART II—GENERAL

- Objective of investigation.
4. (1) The objective of the investigation of an accident or incident under these Regulations shall be the prevention of accidents and incidents.
 - (2) Subject to sub regulation (1), the purpose of such an investigation shall not be to apportion blame or liability.
- Manual of aircraft accident and incident investigation
5. (1) The Aircraft Accident Investigation authority shall have in place a manual of aircraft accident and incident investigation.

- (2) The manual of aircraft accident and incident investigation shall contain information and instructions necessary to enable the investigators to perform their duties.
- Investigators of accidents and incidents
6. (1) For the purpose of carrying out aircraft accident and incident investigations, the [State] may by notice in the Gazette appoint investigators of accidents and incidents.
- (2) The [State] shall appoint the investigator-in charge and his or her deputy from among the persons appointed under sub-regulation (1).
- (3) The investigator-in charge may delegate any of his or her powers and obligations under these Regulations to the deputy investigator-in charge.
- Independence of investigations
7. The State shall establish an accident investigation authority that is independent from State aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation.
- Obligation to investigate
8. (1) Subject to sub-regulation (7), the investigator-in-charge shall cause an investigation to be carried out into an accident or serious incident in the following circumstances:
- (a) where the accident or serious incident occurs in the State;
- (b) where the accident or serious incident occurs in any non-contracting State which does not intend to carry out an investigation of the accident or serious incident and involves an aircraft registered in [State] or an aircraft operated by an operator whose principle base of operation is in the [State];
- (c) where the accident or serious incident involves an aircraft registered in [State] or an aircraft operated by an operator in [State] and the investigation has been delegated to [State] by another Contracting State by mutual arrangement and consent; or
- (d) where the accident or serious incident occurs in a location which cannot be definitely established as being in the territory of any State and involves an aircraft registered in [State].
- (2) In the event of an accident or incident involving a civilian aircraft and a military or State aircraft, investigation shall be conducted in accordance with the provision of these

Regulations, with the military or the State being a party to investigation.

- (3) The Investigator-in-charge may, when he expects to draw air safety lessons from it, cause an investigation to be carried out into an incident which occurs:
 - (a) in the [State]; or
 - (b) outside the [State] involving an aircraft registered in [State] or an aircraft operated by an operator in [State].
- (4) Without prejudice to the power of an investigator-in-charge under regulation 34 (3) (k), the Investigator-in-charge may appoint any person as an adviser to assist in carrying out an investigation under these Regulations.
- (5) The Investigator-in-charge may, with the approval of the appropriate authority, delegate the task of carrying out an investigation into an accident or a serious incident to another Contracting State or accident investigation authority by mutual arrangement and consent.
- (6) Where the Investigator-in-charge delegates the task of carrying out an investigation, he or she shall, facilitate investigation carried out by the investigator-in-charge appointed by the Contracting State conducting the investigation.
- (7) Where the Investigator-in-charge is of the opinion that it would be desirable for public notice to be given that an investigation is taking place, he or she may do so in such manner as he or she may deem fit.
- (8) The notice referred to in sub regulation (7) may, if the Investigator-in-charge thinks appropriate, state that any person who desires to make representations concerning the circumstances or causes of the accident or incident may do so orally or in writing within a time to be specified in the notice.
- (9) Any person in possession of any item which may constitute evidence for purpose of an investigation under these Regulations shall hold and preserve the same and shall promptly hand them over to the investigator-in-charge.

- (10) Subject to sub regulation (9) safe custody shall include protection against further damage, access by unauthorized persons, pilfering and deterioration.

Notification of accidents and serious incidents

9. (1) Where an aircraft accident or incident takes place, the aircraft owner, aircraft operator, aircraft pilot, surviving crew member of the aircraft, handling agent, maintenance organizations, police, local authorities, the airport operator or owner, air traffic controller, eye witness and in the event of an occurrence of an accident or incident in the foreign territory to an aircraft registered in a [State] the relevant State of occurrence, having knowledge of an accident or incident shall notify the authority and shall provide information as soon as possible and by the quickest means available.

- (2) The notification to the authority shall be in plain language and shall contain as much of the information specified in sub regulation (4) as is readily available; but, the dispatch of the notification shall not be delayed due to the lack of complete information.

- (3) A person specified in sub regulation (1) shall as soon as he or she becomes aware of an accident or serious incident send a notification to the appropriate authority stating any of the following-

- (a) in the case of an accident, the identifying abbreviation "ACCID" or, in the case of a serious incident, SINCID, and for incidents INCID;
- (b) manufacturer, model, nationality and registration marks and serial number of the aircraft;
- (c) the name of the owner, operator and hirer, if any, of the aircraft;
- (d) the name of the pilot-in-command of the aircraft and the number and nationality of the crew and passengers on board the aircraft at the time of the accident or serious incident;
- (e) the date and local time or Coordinated Universal Time (UTC) of the accident or serious incident;
- (f) the last point of departure and the next point of intended landing of the aircraft;
- (g) the position of the aircraft with reference to some easily defined geographical point and the latitude and longitude;

- (h) in the case of an accident, the number of crew members, passengers or other persons respectively killed or seriously injured as a result of the accident;
- (i) a description of the accident or serious incident and the extent of damage to the aircraft so far as is known;
- (j) the physical characteristics of the area in which the accident or serious incident occurred and an indication of access difficulties or special requirements to reach the site;
- (k) the identification of the person sending the notice and where the accident or serious incident occurred outside the [State], the means by which the investigator-in-charge and the accident investigation authority of the State of Occurrence may be contacted; and
- (l) the presence and description of dangerous goods on board the aircraft, if any.

Parties to Investigation

10. (1) The investigator-in-charge shall designate parties to participate in the investigation.
- (2) The 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 to actively assist in the investigation.
- (3) The participants shall be under the direction of the investigator-in-charge through their respective party representatives and party coordinators and a party may lose party status if they do not comply with their assigned duties and activity proscription or instructions or if they conduct themselves in a manner prejudicial to the investigation.

Acts of unlawful interference

11. Where in the course of an investigation the authority becomes aware or it suspects that an act of unlawful interference was involved, the investigator-in-charge shall immediately initiate action to ensure that the security authorities of [State] and of the Stat concerned are so informed.

Crew involved in accidents

12. (1) As soon as possible after the accident or serious incident, each crew member shall forward to the authority, a statement setting forth the facts, conditions, and

circumstances relating to the accident or serious incident as they appear to the member.

- (2) If the crew member is incapacitated, he or she shall submit the statement as soon as he or she is physically able to do so.

Foreign
investigations

13. Where the authority has been notified of an aircraft accident or serious incident that occurred outside the territory of [State] involving a [State] aircraft, an aircraft operated by a [State] operator, or an aircraft designed or manufactured in the [State], the Authority shall-

(a) acknowledge receipt of the notification;

(b) provide the notifying State with the following information with the least possible delay-

(i) any relevant information regarding the aircraft and flight crew involved in the accident or serious incident; and

(ii) if [State] is the State of the Operator, details of any dangerous goods on board the aircraft.

(c) inform the notifying State as to-

(i) whether the [State] intends to appoint or has appointed an accredited representative; and

(ii) if such accredited representative will be or has been appointed and will be travelling to the State in which the investigation is being carried out, the contact details and the expected date of arrival of the accredited representative in such State; and

(d) appoint an accredited representative, if requested to do so by the State conducting an investigation into an accident, or a serious incident involving an aircraft of a maximum mass of over 2 250 kg.

Removal of
damaged aircraft

14. (1) Where an accident or a serious incident occurs in [State], a person shall not-

(a) have access to the aircraft involved in the accident or serious incident, the contents thereof or the site of the accident or serious incident, other than the investigator-in-charge or an authorized person; or

(b) move or interfere with the aircraft, its contents or the site of the accident or serious incident except under the authority of the investigator-in-charge.

(2) Notwithstanding sub-regulation (1)-

(a) the aircraft involved in an accident or a serious incident may be moved or interfered with to such extent as may be necessary for all or any of the following purposes

(i) extricating persons or animals;

(ii) removing any mail, valuables or dangerous goods carried by the aircraft;

(iii) preventing destruction by fire or other cause; and

(iv) preventing any danger or obstruction to the public, air navigation or other transport.

(b) where the aircraft is wrecked in water, the aircraft or any contents thereof may be moved to such extent as may be necessary for bringing the aircraft or its contents to a place of safety.

- (3) Subject to sub regulation (2), a determination shall be made by the investigator-in-charge to the extent of the damage to the aircraft in accordance to the guidance set out in the Sixth Schedule to these Regulations.
- (4) Where the investigator-in-charge has authorized any person to remove any goods or passenger baggage from the aircraft or to release any goods or passenger baggage from the custody of the investigator-in-charge, that person may-
- (a) remove the goods or passenger baggage from the aircraft subject to the supervision of a police officer; and
 - (b) release the goods or passenger baggage from the custody of the investigator-in-charge subject to clearance by or with the consent of an officer of customs, if the aircraft has come from a place outside the [State].
- (5) Where the investigator-in-charge is of the opinion that the aircraft involved in the accident or serious incident is likely to endanger or obstruct the public, air navigation or other transport, he or she may order the owner, operator or hirer of such aircraft to remove it to such place as the investigator-in-charge may indicate.
- (6) In the absence of the owner, operator or hirer or in the event of non-compliance with the order given pursuant to sub-regulation(4), the investigator-in-charge may remove or cause the removal of the aircraft and shall not be liable for any further damage that may occur during removal.
- (7) In this regulation, “authorised person” means any person authorized by the investigator-in-charge either generally or specifically to have access to any aircraft involved in an accident or a serious incident and includes any police officer or any officer of customs.
- (8) The police officer referred to in sub- regulation (6) shall be responsible for the maintenance of law and order and preservation of the site of accident pending the arrival of the

investigator-in-charge.

Obstruction of investigation

15. (1) A person shall not obstruct an investigator or any person acting under the authority of the investigator-in-charge in the exercise of any rights, powers or duties under these Regulations.
- (2) A person shall not, without reasonable cause, fail to comply with any summons of-
- (a) an investigator-in-charge carrying out an investigation under these Regulations; or
 - (b) any person empowered to exercise the powers of the investigator-in-charge under these Regulations.
- (3) The onus of proving reasonable cause for failing to comply with duly served summons shall lie on the person relying on such excuse.

Assistance to survivors and families

16. (1) The investigator-in-charge shall ensure assistance to the survivors and to the families of victims and survivors of an accident which is the subject of an ongoing investigation by-
- (a) communicating all relevant information in time;
 - (b) facilitating their entry into and exit from the country and the repatriation of victims; and
 - (c) coordinating assistance efforts by the Government, airlines, humanitarian and other organizations.
- (2) The authority shall develop instructions for better implementation of sub regulation (1).

Release and

17. (1) Where the retention of the aircraft involved in an accident

disposal of
aircraft and
wreckage

or incident, parts of the aircraft or aircraft wreckage, or any contents of the aircraft is no longer necessary for the purposes of an investigation, the investigator-in-charge shall release custody of the aircraft, parts, wreckage or contents to the following person or persons-

(a) if it is an aircraft registered [State]-

(i) the owner of the aircraft, parts, wreckage or contents;

(ii) where the owner is dead, his or her personal representative; or

(iii) a person authorised in writing by the owner or his or her personal representative to take custody on behalf of the owner or the owner's personal representative; and

(b) in any other case, to the person or persons designated by the State of Registry or the State of the Operator, as the case may be.

(2) The investigator-in-charge shall-

(a) where he or she intends to release aircraft wreckage, issue a notice to persons referred to in sub regulation (1); or

(b) where such persons cannot be traced, by publishing such notice in at least two daily newspapers of wide circulation in the State of occurrence giving details of the aircraft wreckage and specifying the period during which it should be removed.

(3) The person to whom the notice has been issued may, before the expiry of the notice and for good cause, apply in writing

to the investigator-in-charge for an extension of the period within which the wreckage may be removed.

- (4) Where a person to whom custody of the aircraft, parts, wreckage or contents is to be released fails to take custody within the period specified in the notice, the aircraft, parts, wreckage or contents may be disposed of in such manner as the investigator-in-charge considers fit.
- (5) The expenses incurred by the investigator-in-charge in disposing of the aircraft, parts, wreckage or contents shall be recoverable from the owner or operator of the aircraft or both.

Responsibility of the State of Occurrence

Protection of evidence and safe custody of aircraft

18. (1) The State of Occurrence shall take all reasonable measures to protect the evidence and to maintain safe custody of the aircraft and its contents for such a period as may be necessary for the purposes of an investigation.
- (2) The protection of evidence shall include the preservation, by photographic or other means, of any evidence which might be removed, effaced, lost or destroyed.
- (3) Subject to sub regulation (1) safe custody shall include protection against further damage, access by unauthorized persons, pilfering and deterioration.

Request from State of Registry, State of the Operator, State of Design or State of Manufacture

19. (1) Where 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 State of Occurrence shall take all necessary steps to comply with such request, so far as this is reasonably practicable and compatible with the proper conduct of the investigation.

(2) Notwithstanding sub regulation (1) the aircraft may be moved to the extent necessary to extricate persons, animals, mail and valuables, to prevent destruction by fire or other causes, or to eliminate any danger or obstruction to air navigation, to other transport or to the public, and provided that it does not result in undue delay in returning the aircraft to service where this is practicable.

Release from
custody by State
of Occurrence

20. (1) The State of Occurrence shall release custody of the aircraft, its contents or any parts of the aircraft 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, where applicable.

(2) The State of Occurrence shall facilitate access to the aircraft, its contents or any parts of the aircraft, provided that, if the aircraft, its contents, or any of its parts lie in an area within which the State finds it impracticable to grant such access, the State shall effect removal to a point where access can be given.

PART III

NOTIFICATION OF ACCIDENTS OR INCIDENTS IN THE TERRITORY OF A CONTRACTING STATE TO AIRCRAFT OF ANOTHER CONTRACTING STATE

Responsibility of
notification of
accidents and
incidents

21. (1) The State of Occurrence shall forward a notification of an accident or serious incident, or an 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 the:

(a) State of Registry;

(b) State of the Operator;

(c) State of Design;

(d) State of Manufacture; and

(e) International Civil Aviation Organization, when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane.

(2) Notwithstanding sub-regulation (1), when the State of Occurrence is not aware of a serious incident, or an incident to be investigated, the State of Registry or the State of the Operator, as appropriate, shall forward a notification of such an incident to the State of Design, the State of Manufacture and the State of Occurrence.

Format
content of
Notification

and 22. The notification shall be in plain language and contain as much of the following information as is readily available, but its dispatch shall not be delayed due to the lack of complete information:

(a) for accidents the identifying abbreviation “ACCID”, for serious incidents “SINCID”, and for incidents INCID;

(b) manufacturer, model, nationality and registration marks, and serial number of the aircraft;

(c) name of owner, operator and hirer, if any, of the aircraft;

(d) qualification of the pilot-in-command, and nationality of crew and passengers;

(e) date and time (local time or UTC) of the accident or ~~serious~~ incident;

(f) last point of departure and point of intended

landing of the aircraft;

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

Language 23. The notification shall be prepared in English language, whenever it is possible to do so without causing undue delay.

Additional information 24. The State of Occurrence shall dispatch the details omitted from the notification as well as other known relevant information, as soon as possible.

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

Action taken on receipt of notification 25. (1) The State of Registry, the State of the Operator, the State of Design and the State of Manufacture may acknowledge receipt of the notification of an accident or

serious incident.

- (2) Upon receipt of the notification, the State of Registry, the State of the Operator, the State of Design and the State of Manufacture shall, as soon as possible, provide the State of Occurrence with any relevant information available to them regarding the aircraft and flight crew involved in the accident or serious incident.
- (3) Subject to sub regulation (2), each State shall inform the State of Occurrence whether it intends to appoint an accredited representative and where an accredited representative is appointed, the name, contact details and the expected date of arrival of the accredited representative.
- (4) Upon receipt of the notification, the State of the Operator shall, with a minimum of delay and by the most suitable and quickest means available, provide the State of Occurrence with details of any dangerous goods on board the aircraft.

Responsibility of the State of Registry

- Responsibility of notification of accidents and incidents
26. When the State of Registry institutes the investigation of an accident or serious incident, that State shall forward a notification, with a minimum of delay and by the most suitable and quickest means available, to the:
 - (a) State of the Operator;
 - (b) State of Design;
 - (c) State of Manufacture; and
 - (d) International Civil Aviation Organization, when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane.

Responsibility of the State of The Operator, State of Design and State of Manufacture

- Action taken on receipt of notification by the State of the Operator, the State of Design and the State of Manufacture
27. (1) The State of the Operator, the State of Design and the State of Manufacture on receipt of a notification may acknowledge receipt of the notification of an accident or serious incident.
- (2) Upon receipt of the notification, the State of the Operator, the State of Design and the State of Manufacture shall, upon request, provide the State of Registry with any relevant information available to them regarding the flight crew and the aircraft involved in the accident or serious incident.
- (3) Subject to sub-regulation (2), the State shall inform the State of Registry whether it intends to appoint an accredited representative, and where an accredited representative is appointed, the name, contact details and the expected date of arrival of the accredited representative.
- (4) Upon receipt of the notification, the State of the Operator shall, with a minimum of delay and by the most suitable and quickest means available, provide the State of Registry with details of any dangerous goods on board the aircraft.

PART IV

INVESTIGATION

Responsibility For Instituting And Conducting The Investigation

- Conduct of investigation by the State of Occurrence
- 28 (1) The State of Occurrence shall institute an investigation into the circumstances of the accident and be responsible for the conduct of the investigation, but it may delegate the whole or any part of the conducting of such investigation to another State or a regional accident and incident investigation organization (RAIO) by mutual arrangement and consent.
- (2) The State of Occurrence may delegate the whole or any part of the conducting of such investigation to another

State or a regional accident and incident investigation organization by mutual arrangement and consent.

(3) The State of Occurrence shall institute an investigation into the circumstances of a serious incident when the aircraft is of a maximum mass of over 2 250 kg. Such a State may delegate the whole or any part of the conducting of such investigation to another State or a regional accident and incident investigation organization by mutual arrangement and consent.

(4) The State of Occurrence shall investigate accidents and incidents involving unmanned aircraft systems with a design or operational approval.

(5) Subject to this regulation, the State of Occurrence shall use every means to facilitate the investigation.

(6) If the State of Occurrence does not institute and conduct an investigation, and does not delegate the investigation to another State or a regional accident and incident investigation organization, the State of Registry or, in the following order, the State of the Operator, the State of Design or the State of Manufacture is entitled to request in writing the State of Occurrence to delegate the conducting of such investigation. If the State of Occurrence gives express consent or does not reply to such a request within 30 days, the State making the request may institute and conduct the investigation with such information as is available.

7) The delegation of an investigation does not absolve the State of Occurrence from its obligation under Annex 13.

(8) Sub-regulation 6 of this regulation does not necessarily give the State making the request the right to access the accident site, wreckage or any other evidence or information situated within the territory of the State of Occurrence.

Accidents or incidents in a Non-Contracting State

29. When an accident or serious incident has occurred in the territory of a Non-Contracting State which does not intend to conduct an investigation in accordance with these Regulations, the State of Registry or, failing that, the State

of the Operator, the State of Design or the State of Manufacture should endeavor to institute and conduct an investigation in cooperation with the State of Occurrence but, failing such cooperation, should itself conduct an investigation with such information as is available.

Accidents or incidents outside the territory of any State

30. (1) When the location of an accident or serious incident cannot definitely be established as being in the territory of any State, the State of Registry shall institute and conduct any necessary investigation of the accident or serious incident, it may however 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.

(2) Subject to sub regulation (1), the State of Registry may delegate the whole or any part of the investigation to another State by mutual arrangement and consent.

(3) States nearest to the scene of an accident in international waters shall provide such assistance as they are able and shall, likewise, respond to requests by the State of Registry.

(4) Where the State of Registry is a Non-Contracting State which does not intend to conduct an investigation in accordance with these Regulations, the State of the Operator or, failing that, the State of Design or the State of Manufacture should endeavor to institute and conduct an investigation.

(5) Subject to sub regulation (4), the State of the Operator or, failing that, the State of Design or the State of Manufacture may delegate the whole or any part of the investigation to another State by mutual arrangement and consent.

(6) If the State of Registry does not institute and conduct an investigation, and does not delegate the investigation to another State or a regional accident and incident investigation organization, the State of the Operator or, in the following order, the State of Design, or the State of Manufacture is entitled to request in writing the State of Registry to delegate the conducting of such investigation. If the State of Registry gives express

consent or does not reply to such a request within 30 days, the State making the request may institute and conduct the investigation with such information as is available.

(7) The delegation of an investigation does not absolve the State of Registry from its obligation under Annex 13.

Responsibility of
the State
conducting the
investigation

31. (1) The accident investigation authority shall have independence in the conduct of the investigation and unrestricted authority over its conduct, consistent with the provisions of these Regulations.

(2) Subject to sub regulation (1), the investigation shall include-

- (a) the gathering, recording and analysis of all relevant information on that accident or incident;
- (b) the protection of certain accident and incident investigation records in accordance with these Regulations;
- (c) where appropriate, the issuance of safety recommendations;
- (d) where possible, the determination of the causes or contributing factors; and
- (e) the completion of the Final Report.

(3) Where feasible, the scene of the accident shall be visited, the wreckage examined and statements taken from witnesses. The extent of the investigation and the procedure to be followed in carrying out such an investigation shall be determined by the accident investigation authority, depending on the lessons it expects to draw from the investigation for the improvement of safety.

(4) Any investigation conducted in accordance with these Regulations shall be separate from any judicial or administrative proceedings to apportion blame or liability.

(5) The accident investigation authority shall develop documented policies and procedures detailing its accident investigation duties. These should include: organization and planning; investigation; and reporting.

(6) The State should ensure that any investigations conducted under these Regulations have unrestricted access to all available evidential material without delay.

(7) The State should ensure cooperation between its accident investigation authority and judicial authorities so that an investigation is not impeded by administrative or judicial investigations or proceedings.

Designation of investigator-in-charge

32. The State conducting the investigation shall designate the investigator-in-charge of the investigation and shall initiate the investigation immediately.

Access and control by the investigator-in-charge

33. 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.

Powers of the investigator-in-charge

34. (1) Where the whole or any part of the investigation is carried out in [State] an investigator-in-charge shall have the access rights and powers specified in sub-regulations (2) and (3) to carry out an investigation into an accident or incident in the most efficient way and within the shortest period possible.

(2) The investigator-in-charge shall have-

(a) powers to secure and preserve the scene of the accident;

(b) access to the results of examination of the bodies of victims or tests made on samples taken from the bodies of the victims;

(c) immediate access to the results of examinations of the

persons involved in the operation of the aircraft or tests made on samples taken from such persons; and

- (d) free access to any relevant information or records held by the owner, the operator, the operator's maintenance contractors and sub-contractors, the hirer, the designer or the manufacturer of the aircraft and by the authorities for civil aviation or airport operation or Air Traffic Service.

(3) The investigator-in-charge shall-

(a) by summons under his or her authority-

(i) call before him or her and interview any person as he or she deems appropriate;

(ii) require such person to answer any question or furnish any information or produce any books, papers, documents, licenses, certificates and articles which he or she may consider relevant; and

(iii) retain any such licenses, certificates, books, papers, documents and articles until the completion of the investigation or such time as he or she deems appropriate;

(b) take statements from all such persons as he or she deems fit and require each of such persons to make and sign a declaration of the truth of the statement made by him or her;

(c) on production, if required, of his credentials, enter and inspect any place, building or aircraft the entry or inspection whereof appears to him to be necessary for the purposes of the investigation;

(d) on production, if required, of his credentials, remove, test, take measures for the preservation of or otherwise deal with any aircraft other than an aircraft involved in

the accident or incident where it appears to him to be necessary for the purposes of the investigation;

(e) take possession of, examine, remove, test or take measures for the preservation of any object or evidence he considers necessary for the purposes of the investigation;

(f) order for immediate listing of evidence and removal of debris or components for examination or analysis purposes;

(g) order for the readout of the flight recorders;

(h) in the case of a fatal accident, require a complete autopsy examination of fatally injured flight crew, and, when necessary, passengers and cabin crew by a pathologist, and if a pathologist experienced in the investigation of aircraft accidents is available, by such pathologist;

(i) where appropriate, require the medical and toxicological examination of the crew, passengers and aviation personnel involved in the accident or incident by a medical practitioner, and if a medical practitioner experienced in the investigation of aircraft accidents is available, by such medical practitioner;

(j) require the crew, passengers and aviation personnel involved in the accident or incident to undergo such other tests including a breathalyzer test within reasonable time for the purposes of the investigation; and

(k) seek such advice or assistance as he or she considers necessary for the purposes of the investigation.

(4) The investigator-in-charge may delegate to his or her deputy or any other investigator the rights and powers vested in him or her in sub-regulations (2) and (3), where the whole or any

part of the investigation is carried out in [State].

- (5) Without prejudice to the generality of sub-regulation (3)(k), the investigator-in-charge may request another Contracting State to provide such information, facilities or experts as he or she may consider necessary for the purposes of an investigation.
- (6) The investigator-in-charge shall take all reasonable measures to protect the evidence and to maintain safe custody of the aircraft and its contents for such period as may be necessary for the purposes of an investigation.

Form and conduct
of investigations

35. (1) An investigation shall not be open to the public.
- (2) The extent of investigations and the procedure to be followed in carrying out investigations required or authorised under these Regulations shall be determined by the Investigator-in-charge taking into account-
 - (a) the objective of the investigation set out in these Regulations;
 - (b) the lessons expected to be drawn from the aircraft accident or incident for the improvement of safety; and
 - (c) the complexity of the investigation.

Flight recorders
— Accidents and
incidents

36. (1) Effective use in the readout and analysis of flight recorders for the investigation of an accident or an incident shall be made in accordance with the guidelines set out in the Sixth Schedule to these Regulations.
- (2) The State conducting the investigation shall arrange for the read-out of the flight recorders without delay.
- (3) In the event that the State conducting the investigation of an accident or an incident does not have adequate facilities to read out the flight recorders, it should use the facilities made available to it by other States, giving consideration to the

following-

- (a) capabilities of the read-out facility;
- (b) timeliness of the read-out; and
- (c) location of the read-out facility.

- (4) The recovery, handling and protection of the flight recorder and its recordings shall be assigned to qualified personnel.

Autopsy
examinations

- 37. The State conducting the investigation into a fatal accident shall arrange for expeditious and complete autopsy examination of fatally injured flight crew and, subject to the particular circumstances, of fatally injured passengers and cabin attendants, by a pathologist, preferably experienced in accident investigation.

Medical
examinations

- 38. When appropriate, the State conducting the investigation shall arrange for expeditious medical examination of the crew, passengers and involved aviation personnel, by a physician, preferably experienced in accident investigation.

Coordination with
Judicial
Authorities

- 39. When appropriate, the State conducting the investigation shall ensure the coordination between the investigator-in-charge and the judicial authorities while paying particular attention to 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.

Protection of
accident and
incident
investigation
records

- 40. (1) The State conducting the investigation of an accident or incident shall not make the following records, subject to the guidelines set out in the Second Schedule, available for purposes other than accident or incident investigation, unless the competent court of law determines, in accordance with these Regulations that their disclosure or use outweighs the likely adverse domestic and international impact such action may have on that or any

future investigations-

- (a) cockpit voice recordings and airborne image recordings and any transcripts from such recordings; and
- (b) records in the custody or control of the accident investigation authority being:
 - (i) all statements taken from persons by the accident investigation authority in the course of their investigation;
 - (ii) all communications between persons having been involved in the operation of the aircraft;
 - (iii) medical or private information regarding persons involved in the accident or incident;
 - (iv) recordings and transcripts of recordings from air traffic control units;
 - (v) analysis of and opinions about information, including flight recorder information, made by the accident investigation authority and accredited representatives in relation to the accident or incident; and
 - (vi) the Draft Final Report of an accident or incident investigation.
- (2) The State shall determine whether any other records obtained or generated by the accident investigation authority, as a part of an accident or incident investigation, need to be protected in the same way as the records listed in this regulation.

- (3) The records shall be included in the Final Report or its appendices when pertinent to the analysis of the accident or incident.
- (4) The parts of the records considered not relevant to the analysis shall not be disclosed.
- (5) The names of the persons involved in the accident or incident shall not be disclosed to the public by the accident investigation authority.
- (6) The State shall ensure that requests for records in the custody or control of the accident investigation authority are directed to the original source of the information, where available.
- (7) The accident investigation authority shall retain, where possible, only copies of records obtained in the course of an investigation.
- (8) The State shall take measures to ensure that audio content of cockpit voice recordings as well as image and audio content of airborne image recordings are not disclosed to the public.
- (9) The State issuing or receiving a Draft Final Report shall take measures to ensure that it is not disclosed to the public.
- (10) The protections of the accident and incident investigation records shall apply from the time an accident or incident occurs and continue after the publication of the Final Report.

Reopening of investigation

41. (1) The investigator-in-charge may recommend to the appropriate authority to re-open an investigation, where new and significant evidence becomes available after

the accident or serious incident investigation has been closed.

- (2) The investigator-in-charge may cause the investigation of an incident other than a serious incident to be re-opened if evidence has been disclosed after the completion of the investigation which, in his or her opinion, is new and significant.
- (3) Where the investigation of an accident or a serious incident has been instituted by another Contracting State, the appropriate authority shall obtain the consent of that State before causing the investigation to be re-opened under sub-regulation (1).
- (4) Any investigation which is re-opened shall be carried out in accordance with these Regulations.
- (5) Where in the case of a missing aircraft following an official search is subsequently located, consideration shall be given to reopening the investigation.

Return and disposal of records

42. (1) The investigator-in-charge shall, after the completion of the investigation or at any time determined by the investigator-in-charge, return the aircraft records or any documents containing factual information concerning an accident or incident to the persons from whom they were obtained, unless they are still required for judicial proceedings or other proceedings.
- (2) The records and information referred to in sub-regulation (1) not claimed by or returned to the persons from whom they were obtained, may be disposed of in any manner that the investigator-in-charge considers fit after a period of three years.

Accidents and incidents information from any other State

43. (1) The State shall, on request from the State conducting the investigation of an accident or an incident, provide that State with all the relevant information available to it.

- (2) The State shall cooperate with other States to determine the limitations on disclosure or use that will apply to information before it is exchanged between them for the purposes of an accident or incident investigation.
- (3) The facilities or services of any State which have been, or would normally have been, used by an aircraft prior to an accident or an incident, and which has information pertinent to the investigation, shall provide such information to the State conducting the investigation.

Responsibility of the state of registry and the state of the operator

Flight recorders
— Accidents and
serious incidents

- 44. (1) When an aircraft involved in an accident or a serious incident lands in the State other than the State of Occurrence, the State of Registry or the State of the Operator shall, on request from the State conducting the investigation, furnish the State conducting the investigation with the flight recorder records and, if necessary, the associated flight recorders.
- (2) The State of Registry and the State of the Operator, on request from the State conducting the investigation, shall provide pertinent information on any organization whose activities may have directly or indirectly influenced the operation of the aircraft.

Rights
participation
investigations

- of 45. (1) The State of Registry, the State of the Operator, the State of Design and the State of Manufacture shall each be entitled to appoint an accredited representative to participate in the investigation.
- (2) The State of Registry or the State of the Operator shall appoint one or more advisers, proposed by the operator, to assist its accredited representative to participate in the investigations.

(3) When neither the State of Registry, nor the State of the Operator appoints an accredited representative, the State conducting the investigation may invite the operator to participate, subject to the procedures of the State conducting the investigation.

(4) The State of Design and the State of Manufacture shall be entitled to appoint one or more advisers, proposed by the organizations responsible for the type design and the final assembly of the aircraft, to assist their accredited representatives to participate in the investigation.

(5) When neither the State of Design nor the State of Manufacture appoints an accredited representative, the State conducting the investigation may invite the organizations responsible for the type design and the final assembly of the aircraft to participate, subject to the procedures of the State conducting the investigation.

Obligation to appoint accredited representatives 46. When the State conducting an investigation of an accident to an aircraft of a maximum mass of over 2 250 kg specifically requests participation by the State of Registry, the State of the Operator, the State of Design or the State of Manufacture, the State(s) concerned shall each appoint an accredited representative to participate in the investigation.

Rights to participation by any other States 47. Any State which on request provides information, facilities or experts to the State conducting the investigation shall be entitled to appoint an accredited representative to participate in the investigation.

Entitlement of accredited representatives 48. (1) The State entitled to appoint an accredited representative shall be entitled to appoint one or more advisers to assist the accredited representative in the investigation.

(2) Advisers assisting the 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.

- (3) *The accredited representatives, their advisers and equipment is covered in Annex 9 — Facilitation. The carriage of an official or service passport may expedite the entry. Entry of investigation personnel and equipment may be expedited by the establishment of prior agreements between the accident investigation authority and immigration and customs authorities within.*

Participation
accredited
representatives
and advisers

- by 49. (1) Participation in the investigation shall confer accredited representatives and advisers entitlement to participate in all aspects of the investigation, under the control of the investigator-in-change, in particular to:
- (a) visit the scene of the accident;
 - (b) examine the wreckage;
 - (c) obtain witness information and suggest areas of questioning;
 - (d) have full access to all relevant evidence as soon as possible;
 - (e) receive copies of all pertinent documents;
 - (f) participate in read-outs of recorded media;
 - (g) participate in off-scene investigative activities such as component examinations, technical briefings, tests and simulations;
 - (h) participate in investigation progress meetings including deliberations related to analysis, findings, causes, contributing factors and safety recommendations; and
 - (i) make submissions in respect of the various elements of the investigation.
- (2) The 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 in accordance with these Regulations.

Obligations of 50. Accredited representatives and their advisers-
 accredited
 representatives
 and advisers

(a) shall provide the State conducting the investigation with all relevant information available to them; and

(b) shall not divulge information on the progress and the findings of the investigation without the express consent of the State conducting the investigation.

States having suffered fatalities or serious injuries to their citizens
~~Rights And Entitlement Of States~~

51. (1) A State which has a special interest in an accident by virtue of fatalities or serious injuries to its citizens shall be entitled to appoint an expert who shall be entitled to-

a) visit the scene of the accident;

b) have access to the relevant factual information which is approved for public release by the State conducting the investigation, and information on the progress of the investigation; and

c) receive a copy of the Final Report.

(2) The provisions of sub-regulation (1) will not preclude the State from assisting in the identification of victims and in meetings with survivors from that State.

(3) The State conducting the investigation shall release, at least during the first year of the investigation, established factual information and indicate the progress of the investigation in a timely manner.

Format of Final Report 52. The format of the Final Report shall be as specified in Schedule 1 to these Regulations and may be adapted to the circumstances of the accident or incident.

Consent for release of information — 53. The State shall not circulate, publish or give access to a Draft Final Report or any part of the report, or any document obtained during an investigation of an accident or incident, without the express consent of the State which conducted the investigation, unless such a report or document has already been published or released by the State which conducted the investigation.

Responsibility of the State conducting the investigation 54. (1) The State conducting the investigation shall send a copy of the Draft Final Report to the following States inviting their significant and substantiated comments on the report as soon as possible-

- (a) the State that instituted the investigation;
- (b) the State of Registry;
- (c) the State of the Operator;
- (d) the State of Design;
- (e) the State of Manufacture; and
- (f) any State that participated in the investigation under these Regulations.

(2) Where the State conducting the investigation receives comments within sixty days of the date of the transmittal letter of the Draft Final Report, 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.

(3) Where the State conducting the investigation does not receive comments within sixty days of the date of the first transmittal letter of the Draft Final Report, it shall issue the Final Report in accordance with these Regulations, unless an extension of that period has been agreed by the States concerned.

(4) The State conducting the investigation shall 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.

(5) The State conducting the investigation 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.

- (6) A person shall not circulate, publish, disclose or give access to any draft report or any part of its contents or any documents obtained during an investigation of an aircraft accident or incident unless the report has already been published by the Investigator-In-Charge.

Recipient States 55. The Final Report of the investigation ~~of an accident~~ shall be sent with a minimum of delay by the State conducting the investigation to-

- (a) the State that instituted the investigation;
- (b) the State of Registry;
- (c) the State of the Operator;
- (d) the State of Design;
- (e) the State of Manufacture;
- (f) any State that participated in the investigation;
- (g) any State having suffered fatalities or serious injuries to its citizens; and
- (h) any State that provided relevant information, significant facilities or experts.

Release of the Final Report 56. (1) In the interest of accident prevention, the State conducting the investigation of an accident or incident shall make the Final Report publicly available as soon as possible and, if possible, within twelve months from the date of occurrence of the accident or incident.

- (2) Where the Report cannot be made publicly available within twelve months, the State conducting the investigation shall make an investigation interim statement publicly available on each anniversary of the occurrence, detailing the progress of the investigation and any safety issues raised.

- (3) When the State that has conducted an investigation into an accident or an incident involving an aircraft of a maximum mass of over 5 700 kg has released a Final Report, that State shall send to the International Civil Aviation Organization a copy of the Final Report.

- (4) **Recommendation.**— *If the State conducting the*

investigation does not make the Final Report or an interim statement publicly available within a reasonable timeframe, other States participating in the investigation are entitled to request in writing from the State conducting the investigation express consent to release a statement containing safety issues raised with such information as is available. If the State conducting the investigation gives express consent or does not reply to such a request within 30 days, the State making the request should release such a statement after coordinating with participating States

Safety
recommendations

57. (1) At any stage of the investigation of an accident or incident, the accident investigation authority of the State conducting the investigation shall recommend in a dated transmittal correspondence to the appropriate authorities, including those in other States, any preventive action that it considers necessary to be taken promptly to enhance aviation safety.
- (2) The State conducting investigations of accidents or incidents shall address, when appropriate, any safety recommendations arising out of its investigations in a dated transmittal correspondence to the accident investigation authorities of other State(s) concerned and, when International Civil Aviation Organization documents are involved, to International Civil Aviation Organization.
- (3) Precedence for the issuance of safety recommendations from an accident or incident investigation is given to the State conducting the investigation however, in the interest of safety, other States participating in the investigation shall be entitled to issue safety recommendations after coordinating with the State conducting the investigation.

Recipients
of safety
recommendations

58. Safety recommendations issued by the appropriate authority shall be sent to those persons or organizations of the aviation community that have a direct interest in the safety issue that was the basis for the safety recommendation, as well as to other members of the aviation community who would benefit from the information.

Responsibility of a state receiving or issuing safety recommendations

Action on safety recommendations 59. (1) Any person or authority in [State] to whom a recommendation has been communicated shall, without delay —

(a) take that recommendation into consideration and, where appropriate, act upon it;

(b) send to the investigator-in-charge—

(i) full details of the measures, if any, it has taken or proposes to take to implement the recommendation and, if such measures are to be implemented, the schedule for the implementation; or

(ii) a full explanation as to why no measures shall be taken to implement the recommendation; and

(c) give notice to the investigator-in-charge if at any time any information provided to the investigator-in-charge under paragraph (b) concerning the measures it proposes to take or the schedule for securing the implementation of the recommendation is rendered inaccurate by any change of circumstances.

(2) A recommendation for preventive action or safety recommendation shall, in no case, create a presumption of liability for an aircraft accident or incident.

(3) Where any recommendation for preventive action or a safety recommendation has been forwarded to the appropriate authority or to the investigator-in-charge by another Contracting State, the appropriate authority or investigator-in-charge shall notify that State of the preventive action taken or under consideration or the reasons as to why no action

shall be taken.

PART V

ACCIDENT AND INCIDENT DATA REPORT (ADREP)

- Accidents to aircraft over 2 250 kg
60. When the aircraft involved in an accident is of a maximum mass of over 2 250 kg, the State conducting the investigation shall send the Preliminary Report to-
- (a) the State of Registry or the State of Occurrence, as appropriate;
 - (b) the State of the Operator;
 - (c) the State of Design;
 - (d) the State of Manufacture;
 - (e) any State that provided relevant information, significant facilities or experts; and
 - (f) the International Civil Aviation Organization.
- Accidents to aircraft of 2 250 kg or less
61. When an aircraft, not covered under regulation 60, is involved in an accident and when airworthiness or matters considered to be of interest to other States are involved, the State conducting the investigation shall forward the Preliminary Report to:
- (a) the State of Registry or the State of Occurrence, as appropriate;
 - (b) the State of the Operator;
 - (c) the State of Design;
 - (d) the State of Manufacture; and
 - (e) any State that provided relevant information, significant facilities or experts.
- Language
62. The Preliminary Report shall be submitted to appropriate States and to the International Civil Aviation Organization in English language.
- Dispatch.
63. (1) The Preliminary Report shall be sent by facsimile, e-mail, or airmail within thirty days of the date of the accident

unless the Accident and Incident Data Report has been sent by that time.

- (2) Pursuant to sub regulation (1), when matters directly affecting safety are involved, the Preliminary Report shall be sent as soon as the information is available and by the most suitable and quickest means available.

PART VI

ACCIDENT/ INCIDENT DATA REPORTING

Responsibility of the state conducting the investigation

- | | |
|-------------------------------------|--|
| Accidents to aircraft over 2 250 kg | 64. When the aircraft involved in an accident is of a maximum mass of over 2 250 kg, the State conducting the investigation shall send, as soon as practicable after the investigation, the Accident Data Report to the International Civil Aviation Organization. |
| Additional information | 65. The State conducting the investigation shall, upon request, provide other States with pertinent information additional to that made available in the Accident and Incident Data Report. |
| Incidents to aircraft over 5 700 kg | 66. Where a State conducts an investigation into an incident to an aircraft of a maximum mass of over 5 700 kg, that State shall send, as soon as is practicable after the investigation, the Incident Data Report to the International Civil Aviation Organization. |

PART VII

ACCIDENT PREVENTION MEASURES

- | | |
|---------------------------------|---|
| Database and preventive actions | 67. (1) The State shall establish and maintain an accident and incident database to facilitate the effective analysis of information on actual or potential safety deficiencies and |
|---------------------------------|---|

to determine any preventive actions required.

- (2) State authorities responsible for the implementation of the SSP shall have access to the accident and incident database referenced in sub-regulation (1) to support their safety responsibilities.
- (3) In addition to safety recommendations arising from accident and incident investigations, safety recommendations may result from diverse sources, including safety studies.
- (4) When safety recommendations are addressed to an organization in another State, they shall also be transmitted to that State's accident investigation authority.

PART VIII

PENALTIES AND TRANSITIONAL PROVISIONS

Penalties

68. A person who contravenes any provision of these Regulations, commits an offence and upon conviction, shall be liable to a fine of not more than [one thousands United States dollars] or to imprisonment for a term not more than six months or to both, and in a case of a continuing offence shall be liable to a fine of not more than United States dollars for

each day the offence continues.

Revocation and
saving

69. (1) The [State] Civil Aviation (Investigation of Accidents) Regulations,, are hereby revoked.

(2) Notwithstanding sub regulation (1) any investigation, review or inquiry commenced under those regulations shall be continued as if they were instituted under these regulations.

FIRST SCHEDULE
(Made under regulation 52)
FORMAT OF THE FINAL REPORT

1. PURPOSE

1.1 The purpose of this format is to present the Final Report in a convenient and uniform manner.

1.2 Detailed guidance on completing each section of the Final Report is found in the Manual of Aircraft Accident and Incident Investigation.

2. FORMAT

2.1 **Title.** The Final Report begins with a title comprising:

- a. name of the operator;
- b. manufacturer,
- c. model,
- d. nationality and registration marks of the aircraft; and
- e. place and date of the accident or incident.

2.2 **Synopsis.** Following the title is a synopsis describing briefly all relevant information regarding:

- a. notification of accident to national and foreign authorities;
- b. identification of the accident investigation authority and accredited representation;
- c. organization of the investigation;
- d. authority releasing the report;
- e. date of publication;
- f. concluding with a brief résumé of the circumstances leading to the accident.

2.3 **Body.** The body of the Final Report comprises the following main headings:

- a. Factual information
 1. Analysis
 2. Conclusions
 3. Safety recommendations

2.3.1 Each heading consisting of a number of subheadings as outlined in the following.

2.4 **Appendices.** Include as appropriate.

2.5 *In preparing a Final Report, using this format, ensure that:*

- a. all information relevant to an understanding of the factual information, analysis and conclusions is included under each appropriate heading;
- b. where information in respect of any of the items in 1. — Factual information is not available, or is irrelevant to the circumstances leading to the accident, a note to this effect is included under the appropriate subheadings.

1. FACTUAL INFORMATION

1.1 **History of the flight.** A brief narrative giving the following information:

- a. Flight number, type of operation, last point of departure, time of departure (local time or UTC), and point of intended landing.

- b. Flight preparation, description of the flight and events leading to the accident, including reconstruction of the significant portion of the flight path, if appropriate.
- c. Location (latitude, longitude, elevation), time of the accident (local time or UTC), whether day or night.

1.2 **Injuries to persons.** Completion of the following (in numbers):

<i>Injuries</i>	<i>Crew</i>	<i>Passengers</i>	<i>Others</i>
Fatal			
Serious			
Minor/None			

Fatal injuries include all deaths determined to be a direct result of injuries sustained in the accident. Serious injury is defined in Part 1.

- 1.3 **Damage to aircraft.** Brief statement of the damage sustained by aircraft in the accident (destroyed, substantially damaged, slightly damaged, no damage).
- 1.4 **Other damage.** Brief description of damage sustained by objects other than the aircraft.
- 1.5 **Personnel information:**
 - a. Pertinent information concerning each of the flight crew members including: age, validity of licences, ratings, mandatory checks, flying experience (total and on type) and relevant information on duty time.
 - b. Brief statement of qualifications and experience of other crew members.
 - c. Pertinent information regarding other personnel, such as air traffic services, maintenance, etc., when relevant.

1.6 **Aircraft information:**

- a. Brief statement on airworthiness and maintenance of the aircraft (indication of deficiencies known prior to and during the flight to be included, if having any bearing on the accident).
- b. Brief statement on performance, if relevant, and whether the mass and centre of gravity were within the prescribed limits during the phase of operation related to the accident. (If not and if of any bearing on the accident give details.)
- c. Type of fuel used.

1.7 **Meteorological information:**

- a. Brief statement on the meteorological conditions appropriate to the circumstances including both forecast and actual conditions, and the availability of meteorological information to the crew.
 - b. Natural light conditions at the time of the accident (sunlight, moonlight, twilight, etc.).
- 1.8 **Aids to navigation.** Pertinent information on navigation aids available, including landing aids such as ILS, MLS, NDB, PAR, VOR, visual ground aids, etc., and their effectiveness at the time.
- 1.9 **Communications.** Pertinent information on aeronautical mobile and fixed service communications and their effectiveness.
- 1.8 **Aerodrome information.** Pertinent information associated with the aerodrome, its facilities and condition, or with the take-off or landing area if other than an aerodrome.
- 1.10 **Flight recorders.** Location of the flight recorder installations in the aircraft, their condition on recovery and pertinent data available therefrom.
- 1.11 **Wreckage and impact information.** General information on the site of the accident and the distribution pattern of the wreckage, detected material failures or component malfunctions. Details concerning the location and state of the different pieces of the wreckage are not normally required unless it is necessary to indicate a break-up of the aircraft prior to impact. Diagrams, charts and photographs may be included in this section or attached in the appendices.
- 1.12 **Medical and pathological information.** Brief description of the results of the investigation undertaken and pertinent data available therefrom.
- 1.13 Medical information related to flight crew licences should be included in 1.5 — Personnel information.
- 1.14 **Fire.** If fire occurred, information on the nature of the occurrence, and of the firefighting equipment used and its effectiveness.
- 1.15 **Survival aspects.** Brief description of search, evacuation and rescue, location of crew and passengers in relation to injuries sustained, and failure of structures such as seats and seat-belt attachments.
- 1.14 **Tests and research.** Brief statements regarding the results of tests and research.
- 1.16 **Organizational and management information.** Pertinent information concerning the organizations and their management involved in influencing the operation of the aircraft. The organizations include, for example: the operator; the air traffic services; airway, aerodrome and weather service agencies; and the regulatory authority. The information could include, but not

be limited to, organizational structure and functions, resources, economic status, management policies and practices, and regulatory framework.

- 1.17 ***Additional information.*** Relevant information not already included in 1.1 to 1.17.
- 1.18 ***Useful or effective investigation techniques.*** When useful or effective investigation techniques have been used during the investigation, briefly indicate the reason for using these techniques and refer here to the main features as well as describing the results under the appropriate subheadings 1.1 to 1.18.

2. ANALYSIS

- 2.1 Analyse, as appropriate, only the information documented in 1. — Factual information and which is relevant to the determination of conclusions and causes and/or contributing factors.

3. CONCLUSIONS

- 3.1 List the findings, causes and/or contributing factors established in the investigation. The list of causes and/or contributing factors should include both the immediate and the deeper systemic causes and/or contributing factors.
- 3.2 The Final Report format presented in this Schedule may be adapted to the circumstances of the accident or incident. Thus, the State may use either “causes” or “contributing factors”, or both, in the Conclusions.

4. SAFETY RECOMMENDATIONS

- 4.1 As appropriate, briefly state any recommendations made for the purpose of accident prevention and identify safety actions already implemented.

APPENDICES

- 5.1 Include, as appropriate, any other pertinent information considered necessary for the understanding of the Final Report.

SECOND SCHEDULE (Made under regulation 40)

PROTECTION OF ACCIDENT AND INCIDENT INVESTIGATION RECORDS

1. INTRODUCTION

- 1.1. The disclosure or use of records listed in regulation 40, in criminal, civil, administrative or disciplinary proceedings, or their public disclosure, can have adverse consequences for persons or organizations involved in accidents and incidents, likely causing them or others to be reluctant to cooperate with

accident investigation authorities in the future. The determination on disclosure or use required by regulation 40 is designed to take account of these matters.

1.2. In accordance with regulation 40, the provisions specified in this Schedule are intended to:

- a) assist the State in developing national laws, regulations and policies to protect accident and incident investigation records appropriately; and
- b) assist the competent authority in making the determination as required by regulation 40.

1.3 Throughout this Schedule:

- a) *balancing test* refers to the determination by the competent authority, in accordance with regulation 40, of the impact the disclosure or use of accident and incident investigation records may have on current or future investigations; and
- b) *record(s)* refers to those listed in regulation 40.

1.4. Provisions on the use and protection of safety information and related sources other than accident and incident investigation records are included in the Civil Aviation (Safety Management) Regulations.

2. GENERAL

2.1 The State shall accord the protections in regulation 40 and this Schedule to the entire recording of the cockpit voice recorder and airborne image recorder, and any transcripts from such recordings. These protections shall apply from the time an accident or incident occurs and continue after the publication of the Final Report.

2.2 The State shall accord the protections in regulation 40 and this schedule to the other records listed. These protections shall apply from the time they come into the custody or control of the accident investigation authority and continue after the publication of the Final Report.

3. NON-DISCLOSURE OF AUDIO OR IMAGE RECORDINGS TO THE PUBLIC

3.1 States shall take action to achieve the non-disclosure of audio content of cockpit voice recordings as well as image and audio content of airborne image recordings to the public, as per regulation 40, such as:

- a) prevention of disclosure through the adoption of national laws, regulations and policies; or

- b) adoption of authoritative safeguards such as protective orders, closed proceedings or in-camera review; or
- c) prevention of disclosure of recordings through technical means, such as encrypting or overwriting, before returning the cockpit voice recorders or airborne image recorders to the owners.

3.2 Ambient workplace recordings, such as cockpit voice recordings and airborne image recordings, required by the Civil Aviation Regulations may be perceived as constituting an invasion of the privacy of operational personnel if disclosed or used for purposes other than those for which the recordings were made.

4. COMPETENT AUTHORITY

- 4.1. In accordance with regulation 40, each State shall designate a competent authority or competent authorities appropriate to the task of administering the balancing test.
- 4.2. Different competent authorities may be designated for different circumstances. For example, the competent authority designated for applying the balancing test in criminal or civil proceedings may be a judicial authority. Another competent authority may be designated for applying the balancing test in cases where the purpose of the request for disclosure is for public accessibility.

5. ADMINISTRATION OF THE BALANCING TEST

- 5.1 Where the request is for a record to be disclosed or used in a criminal, civil, administrative or disciplinary proceeding, the competent authority shall be satisfied that a material fact in question in the proceedings cannot be determined without that record, before administering the balancing test.
- 5.2 A material fact in question is a legal term used to refer to a fact that is significant or essential to the matter at hand, that one party alleges and that the other controverts, and is to be determined by the competent authority administering the balancing test.
- 5.3 When administering the balancing test, the competent authority shall take into consideration factors such as:
 - a) the purpose for which the record was created or generated;
 - b) the requester's intended use of that record;
 - c) whether the rights or interests of a person or organization will be adversely affected by the disclosure or use of that record;

- d) whether the person or organization to whom that record relates has consented to make that record available;
- e) whether suitable safeguards are in place to limit the further disclosure or use of that record;
- f) whether that record has been or can be de-identified, summarized or aggregated;
- g) whether there is an urgent need to access that record to prevent a serious risk to health or life;
- h) whether that record is of a sensitive or restrictive nature; and
- i) Whether that record reasonably indicates that the accident or incident may have been caused by an act or omission considered, in accordance with national laws and regulations, to be gross negligence, willful misconduct, or done with criminal intent.

5.4 The administration of the balancing test can be done once for a certain category of records and the result incorporated into national laws and regulations.

5.5 The competent authority may need to administer a balancing test for determining whether to permit the disclosure of a record, and a separate balancing test for determining whether to permit the use of a record.

5.6 Guidance material on the balancing test can be found in the Manual on Protection of Safety Information— Protection of Accident and Incident Investigation Records.

6. RECORDS OF THE DECISIONS

6.1 The competent authority should record the reasons for its determination when administering the balancing test. The reasons should be made available and referred to as necessary for subsequent decisions.

6.2 The State may submit the decisions recorded to the International Civil Aviation Organization in English languages of the Organization to be archived in a public database.

7. FINAL REPORT

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

- a) instituting a separate investigation for those other purposes; or

- b) differentiating between the parts of the Final Report in order to allow the use of factual information contained therein while preventing use of analysis, conclusions and safety recommendations for apportioning blame or liability; or
- c) preventing the use of the Final Report as evidence in proceedings to apportion blame or liability.

7.2 Final Reports are publicly available in the interest of accident prevention and are not subject to protection regulation 40. However, the use of portions of the Final Report, in particular the analysis, conclusions and safety recommendations, as evidence before national courts in view of assigning blame or determining liability is prohibited.

8. ACCIDENT AND INCIDENT INVESTIGATION PERSONNEL

8.1 In the interest of safety and in accordance with regulation 4 States should consider that accident investigation personnel not be compellable to give an opinion on matters of blame or liability in civil, criminal, administrative or disciplinary proceedings.

THIRD SCHEDULE *(Made under regulations 9, 21, 55, 56, 57, 60, 61, 64, 66 and 67)*

NOTIFICATION AND REPORTING CHECKLIST

1. Introduction

1.1 In this checklist, the following terms have the meaning indicated below:

- a. International occurrences: accidents and serious incidents occurring in the territory of a Contracting State to aircraft registered in another Contracting State.
- b. Domestic occurrences: accidents and serious incidents occurring in the territory of the State of Registry.
- c. Other occurrences: accidents and serious incidents occurring in the territory of a non-Contracting State, or outside the territory of any State.

2.1 Notification — Accidents, Serious Incidents And Incidents To Be Investigated

<i>From</i>	<i>For</i>	<i>Send to</i>	<i>Regulation reference</i>
State of Occurrence	International occurrences: All aircraft	State of Registry State of the Operator State of Design State of Manufacture ICAO (when aircraft over 250 kg or is a turbojet-powered aeroplane)	21.
State of Registry	Domestic and other occurrences: All aircraft	State of the Operator State of Design State of Manufacture ICAO (when aircraft over 250 kg or is a turbojet-powered aeroplane)	9

3. FINAL REPORT

6.1.1 Accidents and incidents wherever they occurred

<i>From</i>	<i>Type of report</i>	<i>Concerning</i>	<i>Send to</i>	<i>Regulation reference</i>
State conducting the investigation	FINAL REPORT	All aircraft	State instituting the investigation State of Registry State of the Operator State of Design State of Manufacture Other States participating in the investigation State having suffered fatalities or serious injuries to its citizens State providing information, significant facilities or experts	55
		Aircraft over 5 700 kg	ICAO	56

4. ADREP REPORT

Accidents and incidents wherever they occurred

<i>From</i>	<i>Type of report</i>	<i>Concerning</i>	<i>Send to</i>	<i>Regulation reference</i>
State conducting the investigation	PRELIMINARY REPORT	Accidents to aircraft over 2 250 kg	State of Registry or State of Occurrence State of the Operator State of Design State of Manufacture State providing information, significant facilities or experts	60
		Accidents to	ICAO Same as above,	61

	aircraft of 2 250 kg or less if airworthiness or matters of interest are involved	<i>except ICAO</i>	
ACCIDENT DATA REPORT INCIDENT DATA REPORT	Accidents to aircraft over 2 250 kg Incidents to aircraft over 5 700 kg	ICAO ICAO	64 66

5. ACCIDENT PREVENTION MEASURES

Safety matters of interest to other States

<i>From</i>	<i>Type</i>	<i>Concerning</i>	<i>Send to</i>	<i>Regulation reference</i>
States making safety recommendations	Safety recommendations	Recommendations made to another State ICAO documents	Accident investigation authority in that State ICAO	67 57

FOURTH SCHEDULE (Made under regulation 9 (3)) LIST OF EXAMPLES OF SERIOUS INCIDENTS

1. The term “serious incident” is defined in Part I of these Regulations:
2. There may be a high probability of an accident if there are few or no safety defences remaining to prevent the incident from progressing to an accident. To determine this, an event risk-based analysis, that takes into account the most credible scenario had the incident escalated and the effectiveness of the remaining defences between the incident and the potential accident, can be performed as follows:

(a) consider whether there is a credible scenario by which this incident could have escalated into an accident; and

(b) assess the remaining defences between the incident and the potential accident as:

– effective, if several defences remained and needed to coincidentally fail; or

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

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

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

		<i>b) Remaining defences between the incident and the potential accident</i>	
		<i>Effective</i>	<i>Limited</i>
<i>(a) Most credible scenario</i>	<i>Accident</i>	<i>Incident</i>	<i>Serious Incidents</i>
	<i>No Accident</i>	<i>Incident</i>	

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

- (a) Near collisions requiring an avoidance maneuver to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate;
- (b) Collisions not classified as accidents;
- (c) Controlled flight into terrain only marginally avoided;
- (d) Aborted take-offs on a closed or engaged runway, on a taxiway (excluding authorized operations by helicopters) or unassigned runway;
- (e) Take-offs from a closed or engaged runway, from a taxiway (excluding authorized operations by helicopters) or unassigned runway;
- (f) Landings or attempted landings on a closed or engaged runway, on a taxiway (excluding authorized operations by helicopters) unassigned runway or unintended landing locations such as roadways.
- (g) Retraction of a landing gear leg or wheels-up landing not classified as an accident

- (h) Dragging during landing of a wing tip, an engine pod or any other part of the aircraft, when not classified as an accident.
- (i) Gross failures to achieve predicted performance during take-off or initial climb.
- (j) Fires or smoke in the cockpit, in the passenger compartment, in cargo compartments or engine fires, even though such fires were extinguished by the use of extinguishing agents;
- (k) Events requiring the emergency use of oxygen by the flight crew;
- (l) Aircraft structural failures or engine disintegrations, including uncontained turbine engine failures, not classified as an accident;
- (m) Multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft;
- (n) Flight crew incapacitation in flight.
 - a) for single pilot operations (including remote pilot);
 - b) for multi-pilot operations for which flight safety was compromised because of a significant increase in workload for the remaining crew.
- (o) Fuel quantity level or distribution situations requiring the declaration of an emergency by the pilot, such as insufficient fuel, fuel exhaustion, fuel starvation, or inability to use all usable fuel on board;
- (P) Runway incursions classified with severity A (A serious incident in which a collision is narrowly avoided) ;
- (q) Take-off or landing incidents. Incidents such as under-shooting, overrunning or running off the side of runways;
- (r) System failures (including loss of power or thrust), (weather phenomena, operations outside the approved flight envelope or other occurrences which caused or could have caused difficulties controlling the aircraft;
- (s) Failures of more than one system in a redundancy system mandatory for flight guidance and navigation; and
- (t) The unintentional or, as an emergency measure, the intentional release of a slung load or any other load carried external to the aircraft.

FIFTH SCHEDULE
(Made under Regulation 37 (1))
**GUIDELINES FOR FLIGHT RECORDER READ-OUT AND
ANALYSIS**

1. Initial response

- 1.1 The aftermath of a major accident is a demanding time for any State's accident investigation authority. One of the immediate items requiring a decision is where to have the flight recorders read out and analyzed. It is essential that the flight recorders be read out as early as possible after an accident. Early identification of problem areas can affect the investigation at the accident site where evidence is sometimes transient. Early identification of problem areas may also result in urgent safety recommendations which may be necessary to prevent a similar occurrence.
- 1.2 Many States do not have their own facilities for the playback and analysis of flight recorder information (both voice and data) and consequently request assistance from other States. It is essential, therefore, that the accident investigation authority of the State conducting the investigation make timely arrangements to read out the flight recorders at a suitable read-out facility.

2. Choice of facility

- 2.1 The State conducting the investigation may request assistance from any State that, in its opinion, can best serve the investigation. The manufacturer's standard replay equipment and playback software, which are typically used by airlines and maintenance facilities, are not considered adequate for investigation purposes. Special recovery and analysis techniques are usually required if the recorders have been damaged.
- 2.2 Facilities for the read-out of flight recorders should have the ability to-
- (a) disassemble and read out recorders that have sustained substantial damage;
 - (b) play back the original recording or memory module without the need for the use of a manufacturer's copy device or the recorder housing that was involved in the accident or incident;
 - (c) manually analyse the raw binary waveform from digital tape flight data recorders;
 - (d) enhance and filter voice recordings digitally by means of suitable software; and
 - (e) Graphically analyses data, derive additional parameters not explicitly recorded, validate the data by cross-checking and use other analytical methods to determine data accuracy and limitations.

3. Participation by the State of Manufacture (or Design) and the State of the Operator

- 3.1 The State of Manufacture (or Design) has airworthiness responsibilities and the expertise normally required to read out and analyse flight recorder information. Since flight recorder information can often reveal airworthiness problems, the State of Manufacture (or Design) should have a representative present when the flight recorder read-out and analysis are being conducted in a State other than the State of Manufacture (or Design).
- 3.2 The State of the Operator has regulatory responsibilities regarding the flight operation and can provide insights into operational issues which may be specific to the operator. Since flight recorder information can reveal operational problems, the State of the Operator should also have a representative present when the flight recorder read-out and analysis are being conducted.

4. Recommended procedures

- 4.1 The flight data recorder and the cockpit voice recorder should be read out by the same facility, because they contain complementary data which can help validate each recording and aid in determining timing and synchronization.

- 4.2 Flight recorders should not be opened or powered up and original recordings should not be copied (particularly not by high-speed copy devices) prior to the read-out because of the risk of damage to the recordings.
- 4.3 The facility at which the flight recorders are read out for another State should be given an opportunity to comment on the Final Report in order to ensure that the characteristics of the flight recorder analysis have been taken into account.
- 4.4 The facility at which the flight recorders are read out may require the expertise of the aircraft manufacturer and the operator in order to verify the calibration data and validate the recorded information.
- 4.5 The State conducting the investigation may leave the original recordings, or a copy of them, with the read-out facility until the investigation is completed, in order to facilitate the timely resolution of additional requests or clarifications, providing that the facility has adequate security procedures to safeguard the recordings.

SIXTH SCHEDULE
(Made under regulation 14(3))

**GUIDANCE FOR THE DETERMINATION OF AIRCRAFT
DAMAGE**

1. If an engine separates from an aircraft, the event is categorized as an accident even if damage is confined to the engine.
2. A loss of engine cowls (fan or core) or reverser components which does not result in further damage to the aircraft is not considered an accident.
3. Occurrences where compressor or turbine blades or other engine internal components are ejected through the engine tail pipe are not considered accidents.
4. A collapsed or missing radome is not considered an accident unless there is related substantial damage in other structures or systems.
5. Occurrences of missing flaps, slats and other lift augmenting devices, winglets, etc., that are permitted for dispatch under the Configuration Deviation List (CDL) are not considered accidents.
6. Retraction of a landing gear leg or wheels-up landing, resulting in skin abrasion only, when the aircraft can be safely dispatched after minor repairs or patching, and subsequently undergoes more extensive work to effect a permanent repair, would not be classified as an accident.

7. If the structural damage is such that the aircraft depressurizes, or cannot be pressurized, the occurrence is categorized as an accident.
8. The removal of components for inspection following an occurrence, such as the precautionary removal of an undercarriage leg following a low-speed runway excursion, while involving considerable work, is not considered an accident unless significant damage is found.
9. Occurrences that involve an emergency evacuation are not counted as accidents unless someone receives serious injuries or the aircraft has sustained significant damage.
10. Regarding aircraft damage which adversely affects the structural strength, performance or flight characteristics, the aircraft may have landed safely, but cannot be safely dispatched on a further sector without repair.
11. If the aircraft can be safely dispatched after minor repairs and subsequently undergoes more extensive work to effect a permanent repair, then the occurrence would not be classified as an accident. Likewise, if the aircraft can be dispatched under the CDL with the affected component removed, missing or inoperative, the repair would not be considered as a major repair and consequently the occurrence would not be considered an accident.
12. The cost of repairs, or estimated loss, such as provided by insurance companies may provide an indication of the damage sustained but should not be used as the sole guide as to whether the damage is sufficient to count the occurrence as an accident. Likewise, an aircraft may be considered a "hull loss" because it is uneconomic to repair, without it having incurred sufficient damage to be classified as an accident.