

## **Air Navigation (Investigation of Accidents and Incidents) Order**

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## **AIR NAVIGATION ACT (CHAPTER 6, SECTION 3(1))**

## **AIR NAVIGATION (INVESTIGATION OF ACCIDENTS AND INCIDENTS) ORDER**

07

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[24th February 2003]

## PART I

## PRELIMINARY

**Citation**

1. [This Order](#) may be cited as the [Air Navigation \(Investigation of Accidents and Incidents\) Order](#).

**Definitions and application**

2.—(1) In this Order, 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 persons have disembarked, or which 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 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 where the injuries arise from natural causes, are self-inflicted or inflicted by any other person, or where the person injured is a stowaway hiding outside the areas normally available to 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,

and guidance for the determination of which is set out in [the First Schedule](#); but excludes —

- (A) engine failure or damage, when the damage is limited to a single engine (including its cowlings or accessories) or to propellers, wings tips, antennas, probes, vanes, tyres, brakes, wheels, fairings, panels, landing gear doors, windscreens or the aircraft skin (such as small dents or puncture holes);
- (B) minor damage to main rotor blades, tail rotor blades or landing gear; and
- (C) minor damage resulting from hail or bird strike (including holes in the radome); or

(c) the aircraft is missing or completely inaccessible;

[\[S 424/2010 wef 02/08/2010\]](#)

“accredited representative” means a person appointed by a Contracting State, on the basis of his qualifications, for the purpose of participating in an investigation conducted by another State;

“adviser” means a person appointed by a Contracting State, on the basis of his qualifications, for the purpose of assisting its accredited representative in an investigation conducted by another State;

“aircraft” means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth’s surface;

“Annex 13” means Annex 13 to the Chicago Convention as amended from time to time by the Council of the International Civil Aviation Organisation;

“ATS” 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;

“cause”, in relation to any accident or incident, means any action, omission, event, condition, or a combination thereof, which led to the accident or incident, the identification of which does not imply the assignment of fault or the determination of administrative, civil or criminal liability;

[\[S 424/2010 wef 02/08/2010\]](#)

“Chief Inspector” means the Chief Inspector of Accidents appointed under [paragraph 7\(2\)](#);

“Contracting State” means any State which is a party to the Chicago Convention;

“contributing factor”, in relation to an accident or incident, means any action, omission, event, condition, 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;

[\[S 640/2013 wef 11/10/2013\]](#)

“Final Report” means a report of an accident or incident in the format set out in Annex 13 and which may be adapted to the circumstances of the accident or incident under investigation;

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

“flying display” means a civilian organised event (including any rehearsal for such event) which —

- (a) consists, wholly or partly, of an exhibition of flying of any civil or military aircraft; and
- (b) takes place at an aerodrome or premises other than a naval, military or air force aerodrome or premises;

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

“Inspector” means an Inspector of Accidents appointed under [paragraph 7\(1\)](#);

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

[\[S 522/2009 wef 30/10/2009\]](#)

[\[S 424/2010 wef 02/08/2010\]](#)

“investigator-in-charge” means a person designated by the Chief Inspector as such under [paragraph 8\(3\)](#) and charged with the responsibility for the organisation, conduct and control of an investigation;

“military aircraft” means an aircraft belonging to —

- (a) the Singapore Armed Forces; or
- (b) any of the naval, military or air forces of any State;

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

“operator” means a person engaged in or offering to engage in aircraft operation;

“owner”, in relation to an aircraft which is registered, means the registered owner of the aircraft;

“pilot-in-command”, in relation to an aircraft, means a person who for the time being is in charge of the piloting of the aircraft without being under the direction of any other pilot in the aircraft;

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

“runway incursion” means any occurrence at an aerodrome involving the incorrect presence of an aircraft, a vehicle or a person on the protected area of a surface designated for the landing and take-off of aircraft;

[\[S 522/2009 wef 30/10/2009\]](#)

“safety recommendation” means a proposal of the Chief Inspector, investigator-in-charge or the accident investigation authority of a State conducting an investigation, based on information derived from an investigation and made with the intention of preventing accidents or incidents, and which in no case has the purpose of creating a presumption of blame or liability for an accident or incident;

[\[S 424/2010 wef 02/08/2010\]](#)

“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 —

- (a) 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
- (b) 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 it comes to rest at the end of the flight and the primary propulsion system is shut down,

examples of which are set out in the Second Schedule;

[\[S 424/2010 wef 02/08/2010\]](#)

“serious injury”, in relation to a person, means an injury which —

- (a) requires hospitalisation for a period of more than 48 hours, such period commencing within 7 days from the date of the injury;
- (b) results in a fracture of any bone other than a simple fracture of any finger or toe or the nose;
- (c) involves lacerations which cause severe haemorrhage or 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% of the surface of the body; or
- (f) involves verified exposure to infectious substances or injurious radiation;

“Singapore aircraft” means an aircraft that is registered in Singapore;

“Singapore operator” means an operator whose principal place of business is located, or whose permanent residence is, in Singapore;

“State of Design” means the State having jurisdiction over the organisation responsible for the type design of the aircraft;

“State of Manufacture” means the State having jurisdiction over the organisation responsible for the final assembly of the aircraft;

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

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

“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.

(2) For the purposes of this Order, an aircraft shall be deemed to be missing when the official search has been terminated and the wreckage has not been located.

(3) [This Order](#) shall apply only in relation to —

- (a) an accident or incident involving a civil aircraft; and
- (b) an accident or incident involving a military aircraft during a flying display in Singapore.

## PART II

### INVESTIGATIONS

#### Purpose of investigation

**3.—**(1) The sole objective of the investigation of an accident or incident under this Order shall be the prevention of accidents and incidents.

(2) It shall not be the purpose of such an investigation to apportion blame or liability.

(3) An investigation shall normally include —

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

*[S 424/2010 wef 02/08/2010]*

(4) Any investigation carried out under this Order shall be separate from any judicial or administrative proceedings to apportion blame or liability.

*[S 424/2010 wef 02/08/2010]*

### **Notification of accidents and incidents**

**4.—(1)** Where an accident or a serious incident occurs —

- (a) in Singapore; or
- (b) outside Singapore involving a Singapore aircraft or an aircraft operated by a Singapore operator,

the relevant person shall, as soon as is reasonably practicable after he becomes aware of the accident or serious incident —

- (i) send notice thereof to the Chief Inspector by the quickest means of communication available; and
- (ii) in the case of an accident occurring in Singapore, notify a police officer of the accident and of the place where it occurred.

(2) The notice to the Chief Inspector referred to in [sub-paragraph \(1\)](#) shall state, as far as possible —

- (a) in the case of an accident, the identifying abbreviation “ACCID” or, in the case of a serious incident, the identifying abbreviation “INCID”;
- (b) the 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 nationality of the crew and passengers;
- (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) the number of crew members and passengers on board the aircraft at the time of the accident or serious incident;
- (i) 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;
- (j) a description of the accident or serious incident and the extent of damage to the aircraft so far as is known;

- (k) 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;
  - (l) the identification of the person sending the notice and where the accident or serious incident occurred outside Singapore, the means by which the investigator-in-charge and the accident investigation authority of the State of Occurrence may be contacted; and
  - (m) the presence and description of dangerous goods on board the aircraft.
- (3) Where an incident, other than a serious incident, occurs —
- (a) in Singapore; or
  - (b) outside Singapore involving a Singapore aircraft or an aircraft operated by a Singapore operator,

the owner, operator, pilot-in-command or hirer of the aircraft shall, if so required by notice in writing by the Chief Inspector, send to the Chief Inspector, such information as is in his possession or control with respect to the incident in such form and at such times as may be specified in the notice.

- (4) In this paragraph, “relevant person” means —
- (a) the owner, operator or pilot-in-command of the aircraft at the time of the accident or serious incident;
  - (b) where the accident or serious incident occurs on or adjacent to an aerodrome in Singapore, the owner or operator of the aerodrome;
  - (c) where the accident or serious incident occurs in Singapore airspace, the ATS provider; or
  - (d) where the accident or serious incident occurs during a flying display in Singapore, the organiser of the flying display.

[\[S 218/2009 wef 25/05/2009\]](#)

[\[S 218/2009 wef 25/05/2009\]](#)

### **Action to be taken on receipt of notification**

**5.—**(1) Where an accident or a serious incident occurs in Singapore involving a civil aircraft, the Chief Inspector shall do the following:

- (a) with the least possible delay and by the quickest means of communication available, forward a notification of the accident or serious incident containing as much of the information referred to in [paragraph 4\(2\)](#) as may be available to —
  - (i) a Contracting State that is the State of Registry, the State of the Operator, the State of Design or the State of Manufacture; and
  - (ii) if the aircraft is of a maximum certified take-off mass of more than 2,250 kg or is a turbojet-powered aircraft, the International Civil Aviation Organisation,

except that only the qualification, and not the name, of the pilot-in-command shall be included in the notification;

[\[S 424/2010 wef 02/08/2010\]](#)

- (b)

inform the States referred to in [sub-paragraph \(a\)\(i\)](#) either in the communication forwarding the notification or as soon as practicable —

- (i) as to whether, and, if so, the extent to which an investigation will be conducted or is proposed to be delegated to another Contracting State; and
  - (ii) as to the means by which he and the investigator-in-charge may be contacted; and
- (c) as soon as it is practicable to do so, provide the States referred to in [sub-paragraph \(a\)\(i\)](#) with any other information referred to in [paragraph 4\(2\)](#) which becomes subsequently available to the Chief Inspector and any other known relevant information pertaining to the accident or serious incident.

(2) Upon receipt of a notification of an accident or a serious incident which occurs outside Singapore involving a Singapore aircraft or an aircraft operated by a Singapore operator, the Chief Inspector shall do the following:

- (a) acknowledge receipt of the notification;
- (b) where the State of Occurrence, the State of Registry or the State of the Operator which is investigating the accident or serious incident is a Contracting State, provide the State with the following information with the least possible delay:
  - (i) any relevant information he has regarding the aircraft and flight crew involved in the accident or serious incident; and
  - (ii) if Singapore is the State of the Operator, details of any dangerous goods on board the aircraft; and
- (c) inform the State referred to in [sub-paragraph \(b\)](#) —
  - (i) whether the Minister 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.

### **Removal of damaged aircraft**

**6.—**(1) Subject to [paragraphs 7\(3\)](#) and [8\(5\)](#), where an accident or a serious incident occurs in Singapore —

- (a) no person other than the Chief Inspector, the investigator-in-charge or an authorised person shall have access to the aircraft involved in the accident or serious incident, the contents thereof or the site of the accident or serious incident; and
- (b) no person shall move or interfere with the aircraft, its contents or the site of the accident or serious incident except under the authority of the Chief Inspector or the investigator-in-charge.

(2) Notwithstanding [sub-paragraph \(1\)](#) —



- (a) the aircraft involved in an accident or a serious incident may be removed 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;
  - (iv) preventing any danger or obstruction to the public, air navigation or other transport; and
- (b) if the aircraft is wrecked in water, the aircraft or any contents thereof may be removed to such extent as may be necessary for bringing the aircraft or its contents to a place of safety.

(3) Where the Chief Inspector or the investigator-in-charge has authorised 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 Chief Inspector or the investigator-in-charge, the person may —

- (a) remove the goods or passenger baggage from the aircraft subject to the supervision of a police officer not below the rank of inspector of police; and
- (b) release the goods or passenger baggage from the custody of the Chief Inspector or 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 Singapore.

(4) Where the Chief Inspector or the investigator-in-charge is of the opinion that the aircraft involved in the accident or serious incident is likely to be a danger or obstruction to the public, air navigation or other transport, he may order the owner, operator or hirer of such aircraft to remove the aircraft to such place as the Chief Inspector or the investigator-in-charge shall indicate.

(5) In the absence of the owner, operator or hirer or in the event of non-compliance with the order referred to in [sub-paragraph \(4\)](#), the Chief Inspector or the investigator-in-charge shall be empowered to remove or cause the removal of the aircraft.

(6) The expenses incurred in removing such aircraft shall be —

- (a) borne by the owner, operator or hirer of the aircraft; and
- (b) where the aircraft is removed by the Chief Inspector or the investigator-in-charge under [sub-paragraph \(5\)](#), recoverable from the owner, operator or hirer or all of them.

(7) In this paragraph, “authorised person” means —

- (a) any person authorised by the Chief Inspector or 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; and
- (b) in relation to an accident involving a military aircraft belonging to the Singapore Armed Forces, includes any person authorised by the Chief of Air Force.

## Inspectors of Accidents

7.—(1) For the purpose of carrying out investigations into accidents and incidents referred to in [paragraph 8\(1\)](#) and [\(2\)](#), the Minister may appoint such number of persons as he thinks fit as Inspectors of Accidents.

(1A) The Inspectors of Accidents appointed by the Minister under [sub-paragraph \(1\)](#) shall together form the department in the Ministry of Transport known as the Air Accident Investigation Bureau of Singapore (AAIB).

*[S 298/2005 wef 24/02/2003]*

(2) The Minister shall appoint one of the Inspectors as the Chief Inspector of Accidents.

(3) The Chief Inspector may arrange for any of his powers and obligations under this Order to be performed on his behalf by an Inspector designated by him to be his deputy.

### **Obligation to investigate**

8.—(1) Subject to [sub-paragraph \(6\)](#), the Chief Inspector shall cause an investigation to be carried out into an accident or a serious incident in the following circumstances:

- (a) where the accident or serious incident occurs in Singapore;
- (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 in accordance with Annex 13 and involves a Singapore aircraft or an aircraft operated by a Singapore operator;
- (c) where the accident or serious incident involves a Singapore aircraft or an aircraft operated by a Singapore operator and the investigation has been delegated to Singapore 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 a Singapore aircraft.

(2) The Chief Inspector may, when he expects to draw air safety lessons from it, cause an investigation to be carried out into an incident, other than a serious incident, which occurs —

- (a) in Singapore; or
- (b) outside Singapore involving a Singapore aircraft or an aircraft operated by a Singapore operator.

(3) The Chief Inspector may designate himself or any Inspector as investigator-in-charge for the purpose of carrying out an investigation referred to in [sub-paragraph \(1\)](#) or [\(2\)](#).

(4) Without prejudice to the power of an investigator-in-charge to seek such advice or assistance as he may consider necessary in carrying out an investigation, the Chief Inspector may appoint any person as an adviser to assist an investigator-in-charge in a particular investigation carried out under this Order.

(5) In any case where the Chief Inspector is of the view that more than one Inspector is needed to carry out an investigation, he may designate one or more Inspectors, one of whom shall be designated deputy investigator-in-charge, to assist the investigator-in-charge.

(6) The Chief Inspector may, with the approval of the Minister, delegate the task of carrying out an investigation into an accident or a serious incident to another Contracting

State, or to a regional accident investigation organisation, by mutual arrangement and consent.

(7) Where the Chief Inspector delegates the task of carrying out an investigation under [sub-paragraph \(6\)](#), he shall to the best of his ability, facilitate investigation carried out by the investigator-in-charge appointed by the Contracting State or the regional accident investigation organisation conducting the investigation.

(8) Where the Minister is of the opinion that it would be desirable for public notice to be given that an investigation is taking place, he may do so in such manner as he thinks fit.

(9) The notice may, if the Minister thinks appropriate, state that any person who desires to make representations concerning the circumstances causes or contributing factors of the accident or incident may do so in writing within a time to be specified in the notice.

*[S 640/2013 wef 11/10/2013]*

### **Powers of Inspectors and advisers**

**9.**—(1) For the purpose of enabling him to carry out an investigation into an accident or incident in the most efficient way and within the shortest time possible, an investigator-in-charge shall have the access rights and powers specified in [sub-paragraphs \(2\)](#) and [\(3\)](#) where the whole or any part of the investigation is carried out in Singapore.

(2) The investigator-in-charge shall —

- (a) have free and unhampered access to the site of the accident or incident as well as to the aircraft, its contents or its wreckage;
- (b) have immediate and unrestricted access to and use of the contents of the flight recorders, ATS records and any other recordings;
- (c) have access to and be provided with the results of examinations of the bodies of victims or of tests made on samples taken from the bodies of the victims;
- (d) have immediate access to and be provided with the results of examinations of the persons involved in the operation of the aircraft or of tests made on samples taken from such persons; and
- (e) have 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 ATS.

(3) The investigator-in-charge may —

- (a) by summons under his hand —
  - (i) call before him and examine any person as he thinks fit;
  - (ii) require such person to answer any question or furnish any information or produce any books, papers, documents and articles which he may consider relevant; and
  - (iii) make copies of and retain any such books, papers, documents and articles until the completion of the investigation;
- (b) take statements from all such persons as he thinks fit and require any such person to make and sign a declaration of the truth of the statement made by him;

- (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 as he considers necessary for the purposes of the investigation;
- (f) require an immediate listing of evidence and removal of debris or components for examination or analysis purposes;
- (g) require 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 breathalyser test) as he considers necessary for the purposes of the investigation; and
- (k) seek such advice or assistance as he considers necessary for the purposes of the investigation.

(4) The following persons may, where the whole or any part of the investigation is carried out in Singapore, exercise the rights and powers of an investigator-in-charge specified in [sub-paragraphs \(2\)](#) and [\(3\)](#):

- (a) the deputy investigator-in-charge and any Inspectors designated by the Chief Inspector to assist the investigator-in-charge under [paragraph 8\(5\)](#);
- (b) any adviser appointed by the Chief Inspector under [paragraph 8\(4\)](#) to assist the investigator-in-charge, but only to the extent specified by the Chief Inspector.

(5) Every person summoned as a witness in accordance with this paragraph shall be allowed such expenses as the Minister may, from time to time, determine.

(6) Any expenses incurred by reason of anything done by the investigator-in-charge or the persons specified in [sub-paragraph \(4\)](#) in exercise of any rights or powers referred to in [sub-paragraph \(2\)](#) or [\(3\)](#) for the purposes of the investigation shall be borne by the owner or operator of the aircraft and be recoverable from either or both of them.

(7) Without prejudice to the generality of [sub-paragraph \(3\)\(k\)](#), the investigator-in-charge may request another Contracting State to provide such information, facilities or experts as he may consider necessary for the purposes of an investigation.

## Form and conduct of investigations

**10.**—(1) An investigation shall be held in private.

(2) The extent of investigations and the procedure to be followed in carrying out investigations required or authorised under this Order shall be determined by the Chief Inspector taking into account —

- (a) the purpose of the investigation set out in [paragraph 3](#);
- (b) the principles and objectives of Annex 13; and
- (c) the lessons he expects to draw from the accident or incident for the improvement of safety.

(3) If, in the course of an investigation into an accident or a serious incident, it becomes known or is suspected that an act of unlawful interference was involved in the accident or serious incident, the investigator-in-charge shall, after consultation with the Chief Inspector and the Minister —

- (a) immediately inform the Singapore Police Force; or
- (b) take steps to ensure that the aviation security authorities of other Contracting States concerned are informed of the fact.

## Accredited representatives, advisers, etc., of Contracting States

**11.**—(1) Where an investigation into an accident or a serious incident is being carried out by an investigator-in-charge under this Order, each of the following States that is a Contracting State shall be entitled to appoint an accredited representative to participate in the investigation and one or more advisers, to assist the accredited representative:

- (a) the State of Registry;
- (b) the State of the Operator;
- (c) the State of Manufacture;
- (d) the State of Design;
- (e) a State which has, on request, provided information, facilities or experts to the investigator-in-charge in connection with the investigation.

(2) An accredited representative shall be entitled to participate in all aspects of an investigation under the control of the investigator-in-charge and shall be entitled, in particular, to —

- (a) visit the scene of the accident;
- (b) examine the wreckage;
- (c) obtain witness information and suggest areas for questioning witnesses;
- (d) have full access to all relevant evidence as soon as possible;
- (e) receive copies of all pertinent documents;
- (f) participate in readouts of recorded media;
- (g) participate in off-scene investigative activities such as component examinations, technical briefings, tests and simulations;

- (h) participate in investigation progress meetings, including deliberations related to analysis, findings, causes, contributing factors and safety recommendations; and [\[S 640/2013 wef 11/10/2013\]](#)
- (i) make submissions in respect of various aspects of the investigation.

(3) Notwithstanding [sub-paragraph \(2\)](#), the participation of the accredited representative of a Contracting State 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 in respect of which the State has, on request, provided information, facilities or experts to the investigator-in-charge in connection with the investigation.

(4) A Contracting 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 to participate in the investigation.

[\[S 424/2010 wef 02/08/2010\]](#)

(5) An expert appointed under [sub-paragraph \(4\)](#) 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 investigator-in-charge, and to information on the progress of the investigation; and
- (c) receive a copy of the Final Report.

[\[S 424/2010 wef 02/08/2010\]](#)

(6) An adviser assisting an accredited representative shall be entitled to participate in the investigation under the accredited representative's supervision and to the extent necessary to make the accredited representative's participation effective.

(7) The accredited representative, his adviser and the expert appointed under [sub-paragraph \(4\)](#) —

- (a) shall provide the investigator-in-charge with all relevant information available to them; and
- (b) shall not disclose any information on the progress and findings of the investigation without the express consent in writing of the investigator-in-charge.

### **Appointment of accredited representative, adviser and expert by Minister**

**12.—**(1) The Minister may appoint an accredited representative to participate in the investigation into an accident or incident which occurs in another Contracting State and one or more advisers to assist the accredited representative in any of the following cases:

- (a) where Singapore is the State of Registry, State of the Operator, State of Manufacture or State of Design of the aircraft involved in the accident or incident; or
- (b) where Singapore has, at the request of the Contracting State conducting the investigation, provided information, facilities or experts to the State in connection with the investigation.

[\[S 298/2005 wef 15/05/2005\]](#)

(2) The Minister may appoint an expert to participate in the investigation into an accident which occurs in another Contracting State where Singapore has a special interest in the accident by virtue of fatalities or injuries to citizens of Singapore.

(3) The accredited representative and, to the extent specified by the Chief Inspector, an adviser appointed by the Minister under [sub-paragraph \(1\)](#) may, for the purposes of the investigation in which they are participating, exercise all or any of the rights and powers of the investigator-in-charge specified in [paragraph 9\(2\)](#) and [\(3\)](#) in respect of any aircraft, records, information, documents, objects, witnesses or other evidence in Singapore or held by any person in Singapore which or whom the accredited representative or adviser considers to be relevant or necessary to the investigation.

(4) Any expenses incurred by the accredited representative and the adviser by reason of their participation in an investigation under [sub-paragraph \(1\)](#) or by reason of anything done during, in or incidental to the investigation by the accredited representative and the adviser in exercise of the rights and powers specified in [paragraph 9\(2\)](#) and [\(3\)](#) shall be borne by and be recoverable from the owner or operator of the aircraft or both.

(5) The Minister may, if he thinks appropriate, authorise the Chief Inspector to exercise the Minister's power under [sub-paragraph \(1\)](#) either generally or in any particular case.

### **Investigations involving military aircraft or civil aircraft in military aerodrome**

**13.—**(1) This paragraph shall apply to any accident or incident —

- (a) involving a military aircraft during a flying display; or
- (b) occurring while a civil aircraft was on, in the course of taking off from or landing on, an aerodrome controlled by the Singapore Armed Forces.

(2) If it appears to the investigator-in-charge that the investigation into an accident or incident referred to in [sub-paragraph \(1\)](#) has been completed but for the investigation of matters relating to discipline or internal administration of the Singapore Armed Forces which are more appropriate for investigation by some other person or body, the investigation may be treated as if it has been completed without such matters being investigated under this Order.

(3) Where an investigation of matters relating to the discipline or internal administration has not been carried out by virtue of [sub-paragraph \(2\)](#), the report of the investigation into the accident or incident shall state the matters to which the investigation has not been extended.

### **Investigation reports**

**14.—**(1) Where an investigation is carried out into an accident involving —

- (a) an aircraft of a maximum certificated take-off mass of more than 2,250 kg; or
- (b) an aircraft of a maximum certificated take-off mass of 2,250 kg or less and when airworthiness or matters considered to be of interest to other Contracting States are involved,

the investigator-in-charge shall, unless an Accident Data Report has been sent within 30 days of the accident, send a Preliminary Report within that period to —

- (i) each of the following States that is a Contracting State:

- (A) the State that instituted the investigation;
- (B) the State of Registry or the State of Occurrence, as appropriate;
- (C) the State of the Operator;
- (D) the State of Design;
- (E) the State of Manufacture; and
- (F) any State that provided relevant information, significant facilities or experts; and

(ii) where the aircraft is of a maximum certificated take-off mass of more than 2,250 kg, the International Civil Aviation Organisation.

(2) The investigator-in-charge shall, as soon as possible after the completion of an investigation, do the following:

- (a) send a copy of the draft Final Report to each of the following Contracting States, inviting their significant and substantiated comments on the draft Final Report:
  - (i) the Contracting State that instituted the investigation;
  - (ii) the Contracting States that participated in the investigation; and
  - (iii) the following Contracting States, whether or not they participated in the investigation:
    - (A) the State of Registry;
    - (B) the State of the Operator;
    - (C) the State of Design; and
    - (D) the State of Manufacture;

*[S 218/2009 wef 25/05/2009]*

(b) if any such comments are received within 60 days of the date on which the draft Final Report is sent out, amend the draft Final Report to include the substance of the comments received or, if desired by the Contracting State that provided the comments, append the comments to the Final Report;

(c) if no comments are received within 60 days of the date on which the draft Final Report is sent out and no extension of time has been agreed upon with the Contracting State to whom it was sent, issue and send out the Final Report to the following parties:

- (i) the Contracting States referred to in [sub-paragraph \(a\)](#);
- (ii) any Contracting State that has suffered fatalities or serious injuries to its citizens;
- (iii) any Contracting State that provided relevant information, significant facilities or experts for the purposes of the investigation; and

*[S 218/2009 wef 25/05/2009]*

(iv) where the accident or incident involves an aircraft of a maximum certificated take-off mass of more than 5,700 kg, the International Civil Aviation Organisation;

*[S 218/2009 wef 25/05/2009]*

(d)



where the accident involves an aircraft of a maximum certificated take-off mass of more than 2,250 kg, send the Accident Data Report to the International Civil Aviation Organisation; and

- (e) where the incident involves an aircraft of a maximum certificated take-off mass of more than 5,700 kg, send the Incident Data Report to the International Civil Aviation Organisation.

*[S 218/2009 wef 25/05/2009]*

(3) *[Deleted by S 218/2009 wef 25/05/2009]*

(4) The Final Report of an investigation shall state the sole objective of the investigation as set out in [paragraph 3](#).

(5) *[Deleted by S 218/2009 wef 25/05/2009]*

(6) In this paragraph, “Accident Data Report” and “Incident Data Report” mean the Accident Data Report and Incident Data Report referred to in Annex 13.

### **Publication of reports**

**15.—**(1) The Chief Inspector shall cause the report of an investigation into an accident or incident to be made public.

(2) The report shall be made public —

- (a) after the Final Report has been sent out to the relevant Contracting States under [paragraph 14\(2\)\(c\)](#);
- (b) in the shortest time possible; and
- (c) in such manner as the Chief Inspector thinks fit.

(3) No person shall 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 accident or incident which is carried out under this Order or carried out by another Contracting State without the express consent of the investigator-in-charge or the State which conducted the investigation unless the report or documents have already been published by the investigator-in-charge or the State concerned, as the case may be.

### **Safety recommendations**

**16.—**(1) The Chief Inspector or the investigator-in-charge may, at any stage of an investigation carried out under this Order, do the following:

- (a) recommend , in a dated transmittal correspondence, to the appropriate authorities, including those in other Contracting States, any preventive action that the investigator-in-charge considers necessary to be taken promptly to enhance aviation safety; and
- (b) address, when appropriate and in a dated transmittal correspondence, any safety recommendation arising out of the investigation to the accident investigation authorities of the other Contracting States concerned and where International Civil Aviation Organisation documents are involved, to the International Civil Aviation Organisation.

(2) The Chief Inspector shall cause to be communicated to such relevant person or authority in Singapore as he may determine —

- (a) the recommendation of preventive action or safety recommendation referred to in [sub-paragraph \(1\)](#); or
- (b) any recommendation of preventive action or safety recommendation forwarded to the Minister or Chief Inspector by another Contracting State.

(3) Any person or authority in Singapore to whom or to which a recommendation for preventive action or safety recommendation is communicated under [sub-paragraph \(2\)](#) shall, without delay —

- (a) take that recommendation into consideration and, where appropriate, act upon it;
- (b) send to the Chief Inspector —
  - (i) full details of the measures, if any, he or 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 will be taken to implement the recommendation; and
- (c) give notice to the Chief Inspector if at any time any information provided to the Chief Inspector under [sub-paragraph \(b\)\(i\)](#) 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.

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

(5) Where any recommendation for preventive action or safety recommendation has been forwarded to the Minister or the Chief Inspector by another Contracting State, the Chief Inspector shall, within 90 days of the date of the transmittal correspondence from that Contracting State, notify the State of the preventive action taken or under consideration or the reasons as to why no action will be taken.

### **Re-opening of investigation**

**17.—**(1) The Minister shall cause the investigation of an accident or a serious incident carried out under this Order to be re-opened if evidence has been disclosed after the completion of the investigation which, in his opinion, is new and significant.

(2) The Chief Inspector 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 opinion, is new and significant.

(3) Where the investigation of an accident or a serious incident was instituted by another Contracting State, the Minister shall obtain the consent of that State before causing the investigation to be re-opened under [sub-paragraph \(1\)](#).

(4) Any re-opened investigation shall be carried out in accordance with this Order.

## PART III

### MISCELLANEOUS

#### **Non-disclosure of records**

**18.**—(1) Subject to [sub-paragraph \(2\)](#), no person shall disclose or make available to any other person any of the following records for any purpose other than an investigation carried out under this Order unless the High Court determines that the benefits resulting from disclosure outweighs the adverse domestic and international impact the disclosure may have on that or any future investigation:

- (a) any statement taken from any person in the course of an investigation;
  - (b) any communication between any person having been involved in the operation of the aircraft;
  - (c) any medical or private information regarding any person involved in the accident or incident;
  - (d) any cockpit voice recording and transcript from such recording;
  - (e) any ATS recording and transcript from such recording;
  - (ea) any cockpit airborne image recording and any part or transcript from such recording;
- [S 424/2010 wef 02/08/2010]*
- (f) any opinion expressed in the analysis of information, including flight recorder information.

(2) A record referred to in [sub-paragraph \(1\)](#) shall be included in a Final Report or its appendices, or in any other report only when it is relevant to the analysis of the accident or incident.

(3) Such parts of the record which are not relevant to the analysis of the accident or incident shall not be included in the Final Report.

(4) The names of the persons involved in the accident or incident shall not be disclosed by the Chief Inspector, the Inspectors or the Air Accident Investigation Bureau of Singapore.

*[S 424/2010 wef 02/08/2010]*

### **Release and disposal of aircraft and wreckage**

**19.**—(1) If the retention of the aircraft involved in an accident 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 Chief Inspector shall release custody of the aircraft, parts, wreckage or contents to the following person or persons:

- (a) if the aircraft is a Singapore aircraft —
  - (i) the owner of the aircraft, parts, wreckage or contents;
  - (ii) where the owner is dead, his personal representative; or
  - (iii) a person authorised in writing by the owner or his 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) If a person to whom custody of the aircraft, parts, wreckage or contents is to be released refuses to take custody thereof or fails to take custody within a reasonable period,

the aircraft, parts, wreckage or contents may be disposed of in such manner as the Chief Inspector considers fit.

(3) The expenses incurred by the Chief Inspector in disposing of the aircraft, parts, wreckage or contents shall be borne by the owner or operator of the aircraft and be recoverable from either or both of them.

### **Disposal of records**

**20.**—(1) The Minister, the Chief Inspector and an investigator-in-charge shall not be required to hold aircraft records or factual information concerning an accident or incident beyond such time as is necessary for the completion of the investigation and reports.

(2) The records and information referred to in [sub-paragraph \(1\)](#) include —

- (a) photographs;
- (b) written statements; and
- (c) documents pertaining to the accident or incident, the circumstances of the accident or incident, or the aircraft or personnel involved.

(3) Such records shall be returned to the persons from whom they were obtained and if not claimed by such persons after a reasonable period, may be disposed of in any manner that the Chief Inspector considers fit.

### **Obstruction of investigation**

**21.**—(1) No person shall obstruct or impede an Inspector or any person acting under the authority of the Minister or the Chief Inspector in the exercise of any rights, powers or duties under this Order.

(2) No person shall without reasonable excuse and after having had the expenses (if any) to which he is entitled tendered to him, fail to comply with any summons of —

- (a) an investigator-in-charge carrying out an investigation under this Order; or
- (b) any person empowered to exercise the powers of the investigator-in-charge under [paragraph 9\(4\)](#).

(3) The onus of proving reasonable excuse for failing to comply with a summons shall lie on the person relying on such excuse.

### **Offences**

**22.** Any person who contravenes [paragraph 4\(1\)](#) or [\(3\)](#), [6\(1\)](#), [15\(3\)](#), [18\(1\)](#) or [21\(1\)](#) or [\(2\)](#) shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$5,000 or to imprisonment for a term not exceeding 12 months or to both.

### **Saving of powers**

**23.** Nothing in this Order shall limit the powers of cancelling, suspending or endorsing any licence, certificate or other document under the [Act](#) or any other subsidiary legislation made thereunder.

[Paragraph 2\(1\)](#)

## GUIDANCE FOR DETERMINATION OF AIRCRAFT DAMAGE

1. If an engine separates from an aircraft, the event is considered 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. An occurrence where any compressor, turbine blade or other engine internal component is ejected through the engine tail pipe is not considered an accident.
4. A collapsed or missing radome is not considered an accident, unless there is related substantial damage in other structures or systems.
5. Any missing flap, slat and other lift augmenting device, winglet, etc., that is permitted for dispatch under the Configuration Deviation List is not considered an accident.
6. Where any retraction of a landing gear leg, or wheels up landing, has resulted in skin abrasion only and if the aircraft can be safely dispatched after minor repairs or patching, and subsequently undergoes more extensive work to effect a permanent repair, then the occurrence is not considered an accident.
7. If the structural damage is such that the aircraft depressurises, or cannot be pressurised, the occurrence is considered an accident.
8. Any occurrence that entails the removal of any component for inspection following the occurrence, such as the precautionary removal of an undercarriage leg following a low speed runway excursion, while such removal may involve considerable work, is not considered an accident unless significant damage is found.
9. Any occurrence that involves an emergency evacuation is not considered an accident unless someone has sustained serious injuries, or the aircraft has sustained significant damage, as a result of the occurrence.

[\[S 424/2010 wef 02/08/2010\]](#)

## SECOND SCHEDULE

[Paragraph 2\(1\)](#)

### EXAMPLES OF SERIOUS INCIDENTS

1. A near collision requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or where an avoidance action would have been appropriate.
  - 1A. A collision between aircraft, or involving an aircraft, that is not classified as an accident.
 [\[S 640/2013 wef 11/10/2013\]](#)
2. A controlled flight into terrain only marginally avoided.
3. An aborted take-off on —
  - (a) a closed or engaged runway;
  - (b) an unassigned runway; or
  - (c) a taxiway (excluding any aborted take-off by a helicopter, which take-off had been authorised by the aerodrome operator and the aerodrome control tower).[\[S 522/2009 wef 30/10/2009\]](#)
4. A take-off from —
  - (a) a closed or engaged runway;
  - (b) an unassigned runway; or
  - (c)

a taxiway (excluding any take-off by a helicopter that is authorised by the aerodrome operator and the aerodrome control tower).

[\[S 522/2009 wef 30/10/2009\]](#)

5. A landing or an attempted landing on —

- (a) a closed or engaged runway;
- (b) an unassigned runway; or
- (c) a taxiway (excluding any landing or attempted landing by a helicopter, which landing had been authorised by the aerodrome operator and the aerodrome control tower).

[\[S 522/2009 wef 30/10/2009\]](#)

6. A gross failure to achieve predicted performance during take-off or initial climb.

7. Fire or smoke in the cockpit, in the passenger compartment, in the cargo compartment or engine fire, even though such a fire was extinguished by the use of extinguishing agents.

[\[S 640/2013 wef 11/10/2013\]](#)

8. An event requiring the emergency use of oxygen by the flight crew.

9. An aircraft structural failure or engine disintegration, including uncontained turbine engine failure, not classified as an accident.

10. Multiple malfunction of one or more aircraft systems seriously affecting the operation of the aircraft.

11. Flight crew incapacitation during flight.

12. A fuel quantity level or distribution situation 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 the aircraft.

[\[S 640/2013 wef 11/10/2013\]](#)

13. A take-off or landing incident such as undershooting, overrunning or running off the side of runways.

14. A system failure or weather phenomenon, or an operation outside the approved flight envelope or other occurrence, which caused or could have caused difficulties controlling the aircraft.

[\[S 640/2013 wef 11/10/2013\]](#)

15. A failure of more than one system in a redundancy system mandatory for flight guidance or navigation.

16. A runway incursion in which a collision is narrowly avoided.

[\[S 522/2009 wef 30/10/2009\]](#)

17. The unintentional release, or the intentional release as an emergency measure, of a slung load or any other load carried external to the aircraft.

[\[S 640/2013 wef 11/10/2013\]](#)

[\[G.N. No. S 78/2003\]](#)

## LEGISLATIVE HISTORY

### AIR NAVIGATION (INVESTIGATION OF ACCIDENTS AND INCIDENTS) ORDER (CHAPTER 6, O 7)

This Legislative History is provided for the convenience of users of the [Air Navigation \(Investigation of Accidents and Incidents\) Order](#). It is not part of this Order.

**1. G. N. No. S 78/2003—Air Navigation (Investigation of Accidents and Incidents) Order 2003**

Date of commencement

: 24 February 2003

**2. [2004 Revised Edition—Air Navigation \(Investigation of Accidents and Incidents\) Order](#)**

Date of operation : 31 December 2004

**3. G. N. No. S 298/2005—Air Navigation (Investigation of Accidents and Incidents) (Amendment) Order 2005**

Date of commencement : 15 May 2005

**4. G. N. No. S 606/2006—Air Navigation (Investigation of Accidents and Incidents) (Amendment) Order 2006**

Date of commencement : 3 November 2006

**5. G. N. No. S 218/2009—Air Navigation (Investigation of Accidents and Incidents) (Amendment) Order 2009**

Date of commencement : 25 May 2009

**6. G. N. No. S 522/2009—Air Navigation (Investigation of Accidents and Incidents) (Amendment No. 2) Order 2009**

Date of commencement : 30 October 2009

**7. G. N. No. S 424/2010—Air Navigation (Investigation of Accidents and Incidents) (Amendment) Order 2010**

Date of commencement : 2 August 2010

**8. G.N. No. S 640/2013—Air Navigation (Investigation of Accidents and Incidents) (Amendment) Order 2013**

Date of commencement : 11 October 2013