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TRANSPORT SAFETY INVESTIGATIONS ACT 2018

TRANSPORT SAFETY INVESTIGATIONS (AVIATION OCCURRENCES) REGULATIONS 2023

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In exercise of the powers conferred by section 49 of the Transport Safety Investigations Act 2018, the Minister for Transport makes the following Regulations:

PART 1**PRELIMINARY****Citation and commencement**

1. These Regulations are the Transport Safety Investigations (Aviation Occurrences) Regulations 2023 and come into operation on 1 January 2024.

General definitions

2.—(1) In these Regulations —

“accredited representative” means an individual appointed by a Contracting State, on the basis of the individual’s qualifications, for the purpose of participating in an investigation conducted by another State, and includes any

other person so recognised under Annex 13 to the Chicago Convention;

“adviser” means an individual appointed by a State, on the basis of the individual’s qualifications, for the purpose of assisting the State’s accredited representative in an investigation conducted by another State;

“air traffic services” includes —

- (a) any aerodrome control service;
- (b) any air traffic advisory service;
- (c) any air traffic control service;
- (d) any approach control service provided for arriving or departing controlled flights;
- (e) any area control service provided for controlled flights in such airspace of defined dimensions within which an air traffic control service is provided;
- (f) any flight information service provided for the purpose of giving advice and information intended for the safe and efficient conduct of flights; and
- (g) any alerting service provided to notify appropriate organisations regarding aircraft in need of search and rescue from air, and to assist such organisations as required;

“aircraft accident” means an accident associated with the operation of an aircraft within the meaning given by regulation 3;

“appropriate foreign authority” includes an investigation authority designated by a region of Contracting States (not including Singapore) as responsible for transport safety investigations which correspond to investigations that must be carried out by the TSIB into aircraft accidents, and to the functions of the TSIB, under the Act;

“cause”, as a noun in relation to any aviation occurrence, means any action, omission, event, condition, or a combination

thereof, which led to the aviation occurrence, the identification of which does not imply the assignment of fault or the determination of administrative, civil or criminal liability;

“Chicago Convention” means —

- (a) the Convention on International Civil Aviation done at Chicago on 7 December 1944;
- (b) the Protocols amending that Convention which Singapore ratifies; and
- (c) the Annexes to that Convention relating to international standards and recommended practices, being Annexes adopted in accordance with that Convention;

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

“crew”, in relation to an aircraft, includes every individual having duties or functions on board the aircraft during the flight of the aircraft in connection with the flying of the aircraft or the safety of the aircraft when it is in operation;

“dangerous goods” has the meaning given by the First Schedule to the Air Navigation (92 — Carriage of Dangerous Goods) Regulations 2022 (G.N. No. S 998/2022);

“fatal aircraft-related injury” has the meaning given by regulation 3(3);

“fuel”, as a noun, includes alternative fuel or power which serves, partly at least, as a substitute for fossil oil fuel, such as and not limited to electricity, hydrogen and liquid or gaseous biofuels;

“ICAO” means the International Civil Aviation Organization established under the Chicago Convention, and includes any successor to that Organization;

“maximum certificated take-off mass” or “MCTOM”, in relation to an aircraft, means the maximum total mass of the aircraft and its contents at which the aircraft may take off

anywhere in the world, under the most favourable circumstances in accordance with the Certificate of Airworthiness in force in respect of the aircraft;

“operation of an aircraft” has the meaning given by paragraph (2);

“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;

“passenger” means an individual boarding or intending to board an aircraft for the purpose of travelling on board as a passenger, and includes —

(a) a participant of an aerial sports activity or flying exhibition involving that aircraft; and

(b) an inspector or other like official making any investigation or inspection or witnessing any training, practice or test for the purposes of any written law about aviation safety;

“pilot-in-command”, in relation to an aircraft, means —

(a) the pilot designated by the operator of the aircraft as being in command and charged with the safe conduct of a flight using that aircraft; and

(b) if no such person under paragraph (a) is designated, an individual who is, for the time being, 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;

“safety recommendation” means a proposal that is —

(a) made by —

(i) the Director under regulation 20; or

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- (ii) an appropriate foreign authority of a State conducting or participating in an investigation;
 - (b) made for the purpose of preventing aviation occurrences; and
 - (c) not made for the purpose of creating a presumption of blame or liability for any aviation occurrence, being a proposal based on information derived from the investigation or from other information (such as safety studies);
- “safety recommendation of global concern” means a safety recommendation regarding a systemic deficiency having a probability of recurrence, with significant consequences at a global level, and requiring timely action to improve safety;
- “section 12(1) report” means a report about an aviation occurrence that is an immediately reportable matter required by section 12(1) of the Act to be reported, and includes a notification given by any appropriate foreign authority to the Director in relation to such an aviation occurrence;
- “section 12(2) report” means a report about an aviation occurrence that is an ordinary reportable matter required by section 12(2) of the Act to be reported, and includes a notification given by any appropriate foreign authority to the Director in relation to such an aviation occurrence;
- “serious aircraft-related injury” has the meaning given by regulation 3(4);
- “Singapore Flight Information Region” means the area within which air navigation services are provided by the CAAS in accordance with the International Civil Aviation Organisation Asia/Pacific Regional Air Navigation Plan;
- “Singapore operator” means an operator whose principal place of business is located, or whose permanent residence is, in Singapore;

“State of Design”, in relation to an aircraft, means the State having jurisdiction over the organisation responsible for the type design of the aircraft;

“State of Manufacture”, in relation to an aircraft, means the State having jurisdiction over the organisation responsible for the final assembly of the aircraft or its engine or propeller;

“State of Occurrence” means the State in whose territory an aviation occurrence occurs;

“State of Registry”, in relation to an aircraft, 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 is located.

- (2) In these Regulations, “operation of an aircraft” takes place —
- (a) in the case of a manned aircraft — between the time any individual boards the aircraft with the intention of flight until such time as all individuals have disembarked; or
 - (b) in the case of an unmanned aircraft — between the time the aircraft is ready to move for 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.

(3) For the purposes of regulations 15(5) and 19(3)(b), a Contracting State (other than Singapore) has a special interest in an aviation occurrence being investigated by an investigator under the Act if any of its citizens sustained fatal aircraft-related injuries or serious aircraft-related injuries in relation to the operation of an aircraft involved in that aviation occurrence.

Meaning of “accident” associated with operation of aircraft, and related definitions

3.—(1) Subject to paragraphs (2) and (3), an accident associated with the operation of an aircraft is an accident for the purposes of the definition of “accident” in section 2 of the Act, if it involves any of the following in relation to the operation of an aircraft:

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- (a) an individual suffers a fatal aircraft-related injury;
 - (b) an individual suffers a serious aircraft-related injury;
 - (c) the aircraft is missing;
 - (d) the aircraft is completely inaccessible;
 - (e) an aircraft sustains damage or structural failure that —
 - (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 part.

(2) However, the following damage sustained by, or following a failure of, an aircraft must be disregarded for the purposes of paragraph (1)(e):

- (a) engine failure limited to a single engine;
- (b) engine damage limited to a single engine (including its cowlings or accessories);
- (c) damage to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors or windcreens;
- (d) damage such as small dents or puncture holes to the aircraft skin;
- (e) minor damage to main rotor blades, tail rotor blades or landing gear;
- (f) minor damage resulting from hail or bird strike (including holes in the radome).

(3) In these Regulations, an individual suffers a fatal aircraft-related injury in relation to the operation of an aircraft if —

- (a) he or she suffers an injury as a result of —
 - (i) being in the aircraft during its operation;
 - (ii) direct contact during the operation of the aircraft with any part of the aircraft, including parts which have become detached from the aircraft; or

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- (iii) direct exposure to jet blast during the operation of the aircraft;
 - (b) he or she dies as a result of the injury after sustaining the injury; and
 - (c) none of the following applies:
 - (i) the injury results from natural causes;
 - (ii) the injury is self-inflicted;
 - (iii) the injury is caused by another person;
 - (iv) the injury is to an individual who is a stowaway in a part of the aircraft that is not usually accessible to crew members or passengers after take-off.
- (4) In these Regulations, an individual suffers a serious aircraft-related injury in relation to the operation of an aircraft if —
- (a) he or she suffers an injury as a result of —
 - (i) being in the aircraft during its operation;
 - (ii) direct contact during the operation of the aircraft with any part of the aircraft, including parts which have become detached from the aircraft; or
 - (iii) direct exposure to jet blast during the operation of the aircraft;
 - (b) any of the following applies:
 - (i) the injury requires or is likely to require hospitalisation for a period that —
 - (A) starts no later than the 7th day after the date the individual sustained the injury; and
 - (B) exceeds 48 hours after starting;
 - (ii) the injury involves a fracture of any bone, except a simple fracture of any finger, toe or the nose of the individual;

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- (iii) the injury involves any laceration that causes the individual severe haemorrhage or nerve, muscle or tendon damage;
 - (iv) the injury involves an injury to any internal organ of the individual;
 - (v) the injury involves second or third degree burns, or any burns affecting more than 5% of the surface of the body of the individual;
 - (vi) the injury involves a verified exposure of the individual to infectious substances or injurious radiation; and
- (c) none of the following applies:
- (i) the injury results from natural causes;
 - (ii) the injury is self-inflicted;
 - (iii) the injury is caused by another person;
 - (iv) the injury is to an individual who is a stowaway in a part of the aircraft that is not usually accessible to crew members or passengers after take-off.

International agreements

4.—(1) The following international agreements are identified for the purposes of section 10(1) of the Act:

- (a) Articles 26, 37 and 38 of the Chicago Convention, in so far as those Articles relate to aviation safety investigation;
- (b) Annex 13 to the Chicago Convention.

(2) For the purposes of section 10(2) of the Act, the rules, recommendations, guidelines, codes or other instruments that are promulgated by the ICAO referred to in the Chicago Convention are identified in so far as the rules, recommendations, guidelines, codes or other instruments relate to aviation safety investigation and Annex 13 to the Chicago Convention.

PART 2

REPORTING OF AVIATION OCCURENCES

Meaning of “responsible person”

5.—(1) For the purposes of paragraph (a)(iv) of the definition of “responsible person” in section 2 of the Act, each of the following persons is a responsible person in relation to any reportable matter that is an aviation occurrence:

- (a) for an aviation occurrence occurring outside Singapore — the respective appropriate foreign authorities of —
 - (i) the State of Occurrence of the aviation occurrence;
 - (ii) the State of Registry of the aircraft involved;
 - (iii) the State of the Operator of the aircraft involved;
 - (iv) the State of Manufacture of the aircraft involved; and
 - (v) the State of Design of the aircraft involved;
- (b) for an aviation occurrence occurring during a flying display in Singapore — the organiser of the flying display;
- (c) for an aviation occurrence involving the operation of an unmanned aircraft in circumstances for which a UA operator permit or UA cross-border permit is required — the holder of the UA operator permit or UA cross-border permit.

(2) For the purposes of paragraph (a)(iv) of the definition of “responsible person” in section 2 of the Act, a provider of air traffic services in Singapore is a responsible person in relation to every ordinary reportable matter happening within the Singapore Flight Information Region.

(3) In this regulation —

“flying display” has the meaning given by section 16(5) of the Act;

“UA cross-border permit” means an aviation safety instrument issued by the CAAS under regulation 18B of the Air Navigation (101 — Unmanned Aircraft Operations)

Regulations 2019 (G.N. No. S 833/2019), which authorises the holder of the aviation safety instrument to operate an unmanned aircraft for the purpose of flying or causing the flight of the unmanned aircraft into or out of Singapore;

“UA operator permit” means an aviation safety instrument issued by the CAAS under regulation 12 of the Air Navigation (101 — Unmanned Aircraft Operations) Regulations 2019, which authorises the holder of the aviation safety instrument to operate an unmanned aircraft of the type and for the purpose stated in the instrument.

Meaning of “immediately reportable matter”

6. For the purposes of section 12(1) of the Act, an aviation occurrence is an immediately reportable matter if —

- (a) it is an accident, or is an incident described in the First Schedule; and
- (b) it occurs —
 - (i) in or over Singapore; or
 - (ii) outside Singapore involving a Singapore aircraft or an aircraft operated by a Singapore operator.

Immediately reportable matter — when, how and what to report

7.—(1) Subject to paragraph (5), for the purposes of section 12(1) of the Act, a section 12(1) report about an aviation occurrence that is an immediately reportable matter consists of —

- (a) an initial notice, which is given orally in English, about the immediately reportable matter, by telephone call to the Duty Officer using the telephone number +65 98262359; and
- (b) subsequent to the initial notice, a written notice in English about the immediately reportable matter sent by email to the email address `notification_of_air_occurrences@mot.gov.sg`.

(2) Subject to paragraph (5), for the purposes of section 12(1) of the Act, a responsible person has to report an aviation occurrence that is an immediately reportable matter within the following times:

- (a) for an initial notice in paragraph (1)(a) about the immediately reportable matter — as soon as reasonably practicable after the responsible person becomes aware of the happening of that immediately reportable matter;
- (b) for the written notice in paragraph (1)(b) about the immediately reportable matter — not more than 24 hours after the responsible person becomes aware of the happening of that immediately reportable matter.

(3) Subject to paragraph (5), for the purposes of section 12(1) of the Act, an initial notice and a written notice about an immediately reportable matter in paragraph (1)(a) and (b), respectively, must each contain the particulars specified in the Second Schedule.

(4) Where any particulars required by paragraph (3) about an immediately reportable matter was not available or known to the responsible person required to report the immediately reportable matter concerned at the time mentioned in paragraph (2), then for the purposes of section 12(1) of the Act, the responsible person must, as soon as it is practicable to do so, send by email in the manner in paragraph (1)(b), the remainder of those particulars required which becomes subsequently available or known to the responsible person.

(5) Paragraphs (1), (2) and (3) do not apply to or in relation to any notification given or to be given by an appropriate foreign authority of a Contracting State to the Director according to the laws of that State in relation to an aviation occurrence that is an immediately reportable matter.

Meaning of “ordinary reportable matter”

8. For the purposes of section 12(2) of the Act, an aviation occurrence is an ordinary reportable matter if —

- (a) it is an incident specified in the Third Schedule; and

(b) it —

- (i) involves a Singapore aircraft or an aircraft operated by a Singapore operator anywhere;
- (ii) happens within the Singapore Flight Information Region; or
- (iii) happens on or adjacent to an aerodrome in Singapore.

Ordinary reportable matter — what to report

9.—(1) For the purposes of section 12(2) of the Act, the particulars that must be reported about an aviation occurrence that is an ordinary reportable matter are the particulars in the Second Schedule which are in the possession or control of the responsible person.

(2) However, paragraph (1) does not apply to or in relation to any notification given or to be given by an appropriate foreign authority of a Contracting State to the Director according to the laws of that State in relation to an aviation occurrence that is an ordinary reportable matter.

Follow-up after receiving section 12(1) report

10.—(1) Where, upon receiving a section 12(1) report about an aviation occurrence, a duty or power arises under section 15 of the Act to investigate the aviation occurrence being either an accident or called a serious incident, the Director must take —

- (a) the steps mentioned in paragraph (2) in relation to each Contracting State that is any of the following with respect to any aircraft involved in the aviation occurrence:
 - (i) the State of Registry;
 - (ii) the State of the Operator;
 - (iii) the State of Design;
 - (iv) the State of Manufacture; and
- (b) the steps mentioned in paragraph (3), where applicable.

(2) The steps that the Director must take concerning an aviation occurrence are as follows:

- (a) with minimum delay and by the quickest means of communication available, send to each Contracting State mentioned in paragraph (1)(a), a notification of the aviation occurrence containing —
 - (i) all the particulars in the Fourth Schedule about the aviation occurrence as are available to the Director upon receiving the section 12(1) report or the initial notice under regulation 7(1)(a); and
 - (ii) if the aircraft is missing or inaccessible, the actions taken or planned to locate or gain access to the aircraft;
- (b) inform, either in the notification mentioned in sub-paragraph (a) or as soon as practicable after giving that notification —
 - (i) whether an investigation under the Act is to be conducted into the aviation occurrence; and
 - (ii) if an investigation under the Act is to be so conducted —
 - (A) the extent to which the investigation will be conducted by the TSIB or is proposed to be delegated to another Contracting State; and
 - (B) the means by which the Director and the investigator-in-charge may be contacted;
- (c) as soon as it is practicable to do so, provide —
 - (i) the remainder of the particulars in the Fourth Schedule about the aviation occurrence that was unavailable at the time of the notice mentioned in sub-paragraph (a) and which becomes subsequently available to the Director, except the name of the pilot-in-command of each aircraft involved; and
 - (ii) any other relevant information about the aviation occurrence and known to the Director.

(3) If an aircraft involved in the aviation occurrence which is the subject of the section 12(1) report received by the Director —

- (a) then had an MCTOM exceeding 2,250 kg; or
- (b) was then a turbine-engine powered aircraft,

the Director must, with minimum delay and by the quickest means of communication available, send to the ICAO a notification of the aviation occurrence containing as much of the particulars in the Fourth Schedule about the aviation occurrence as are available to the Director.

Follow-up after receiving notification from appropriate foreign authority

11.—(1) This regulation applies where the Director receives a notification from an appropriate foreign authority of an aviation occurrence —

- (a) that occurred outside Singapore; and
- (b) that involved a Singapore aircraft, or an aircraft operated by a Singapore operator.

(2) The Director must take the steps mentioned in paragraph (3) in relation to each Contracting State that is any of the following with respect to the aircraft involved and is conducting a transport safety investigation into the aviation occurrence corresponding to investigations by the TSIB:

- (a) the State of Registry;
- (b) the State of Occurrence;
- (c) the State of the Operator;
- (d) the State of Design;
- (e) the State of Manufacture.

(3) The steps that the Director must take concerning an aviation occurrence in paragraph (1) are as follows:

- (a) with minimum delay and by the quickest means of communication available, acknowledge receipt of every

notification of the aviation occurrence received from an appropriate foreign authority of a State;

- (b) provide, with the least possible delay, a Contracting state whose appropriate foreign authority is conducting a transport safety investigation into the aviation occurrence with —
- (i) any relevant information regarding each aircraft involved and the flight crew as is available to the Director;
 - (ii) if Singapore is the State of the Operator, details of any dangerous goods on board the aircraft;
 - (iii) a statement whether an accredited representative from Singapore will be or has been appointed, and will be or is travelling to the State in which that transport safety investigation is being conducted; and
 - (iv) the contact details and expected date of arrival of the accredited representative of Singapore, if any.

Follow-up after receiving section 12(2) report — other cases

12. Where, upon receiving a section 12(2) report about an aviation occurrence, the Director determines that —

- (a) a duty to investigate under section 15 of the Act arises in respect of an aviation occurrence; or
- (b) an investigation in respect of that aviation occurrence should be conducted,

regulation 10 applies with respect to that aviation occurrence with such modifications and adaptations as the differences between immediately reportable matters and ordinary reportable matters require.

PART 3
INVESTIGATIONS

Delegation of investigation

13.—(1) The Director may, with the approval of the Minister, delegate the task of carrying out the whole or part of an investigation into any aviation occurrence which the Director is required or allowed under the Act to conduct —

- (a) to another Contracting State; or
- (b) to an appropriate foreign authority designated by a region of Contracting States (not including Singapore) as responsible for aircraft accident and incident investigations in relation to transport safety,

by mutual arrangement and consent.

(2) Where the Director delegates the task of carrying out the whole or part of an investigation under paragraph (1), the Director must take all reasonably practicable steps to facilitate the investigation carried out by the investigator-in-charge appointed by a Contracting State mentioned in paragraph (1)(a) or (b) so delegated.

Appointment of advisers

14.—(1) The Director may appoint any individual as an adviser to assist an investigator-in-charge in a particular investigation into an aviation occurrence.

(2) The Director must, in writing, issue to each adviser appointed under paragraph (1) an appointment letter specifying when, where and the circumstances in which any power mentioned in sections 26 to 31 of the Act may be exercised by the adviser.

(3) An adviser appointed under paragraph (1) may exercise those powers only —

- (a) within the limits specified in his or her appointment letter;
- (b) to assist the investigator-in-charge in a particular investigation into an aviation occurrence or any other investigation in that same investigation; and

(c) under the direction (general or specific) of the Director or the investigator-in-charge or other investigator.

(4) An adviser appointed under paragraph (1) does not cease to be acting on the direction of the Director or an investigator-in-charge or other investigator by reason only that the Director, investigator-in-charge or other investigator (as the case may be) is not always present when the adviser exercises any power specified in the adviser's appointment letter.

(5) This regulation does not prevent an investigator-in-charge or other investigator seeking such advice or assistance as he or she may consider necessary in carrying out an investigation.

Participation by accredited representatives, advisers, etc., of Contracting State in Singapore investigation

15.—(1) For an investigation into an aviation occurrence carried out by an investigator-in-charge, each of the following Contracting States (not including Singapore) with respect to the aircraft involved in the aviation occurrence is 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 Design;
- (d) the State of Manufacture;
- (e) a State which has, on the Director's request, provided information, facilities or experts to the investigator-in-charge in connection with the investigation.

(2) An accredited representative of a Contracting State in paragraph (1) is entitled to participate in all aspects of an investigation into an aviation occurrence under the control of an investigator-in-charge, except that the participation of an accredited representative of a Contracting State mentioned in paragraph (1)(e) may be limited to those matters in respect of which that State has, on

request, provided information, facilities or experts to the investigator-in-charge in connection with the investigation.

(3) In particular, an accredited representative of a Contracting State in paragraph (1) may do all or any of the following:

- (a) visit the scene of the aircraft accident investigated;
- (b) examine any wreckage from the aircraft accident investigated;
- (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 collected in the course of the investigation;
- (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;
- (i) make submissions in respect of various aspects of the investigation.

(4) An adviser assisting an accredited representative of a Contracting State in paragraph (1) is entitled to participate in the investigation only —

- (a) under the accredited representative's supervision; and
- (b) to the extent necessary to make that accredited representative's participation effective.

(5) A Contracting State which has a special interest in an aviation occurrence being investigated by an investigator under the Act is entitled to appoint an expert to participate in the investigation.

(6) An expert appointed under paragraph (5) is entitled to —

- (a) visit the scene of the aircraft accident investigated;
- (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.

(7) An accredited representative of a Contracting State in paragraph (1), his or her adviser and an expert appointed under paragraph (5) —

- (a) must provide the investigator-in-charge with all information about the aviation occurrence as is available to the accredited representative, adviser or expert (as the case may be) that is relevant to the investigation of the aviation occurrence; and
- (b) must not knowingly communicate or use, or knowingly permit to be communicated or used, any information that the accredited representative, adviser or expert (as the case may be) has obtained during the investigation of the aviation occurrence (including the progress of investigations) without the express consent in writing of the investigator-in-charge.

(8) In this regulation, “contributing factor”, in relation to any aviation occurrence, means any action, omission, event, condition, or a combination thereof —

- (a) which, if eliminated, avoided or absent, would have reduced the probability of the aviation occurrence occurring, or mitigated the severity of the consequences of the aviation occurrence; and
- (b) the identification of which does not imply the assignment of fault or the determination of administrative, civil or criminal liability.

Appointment of accredited representative, adviser and expert of Singapore to participate in investigation by other State

16.—(1) This regulation applies only with respect to an aviation occurrence —

- (a) that happened outside Singapore in another Contracting State; and
- (b) where —
 - (i) Singapore is the State of Registry, State of the Operator, State of Manufacture or State of Design of the aircraft involved in the aviation occurrence; or
 - (ii) Singapore has at the request of the Contracting State conducting the investigation, provided information, facilities or experts to the Contracting State in connection with the investigation.

(2) The Director may appoint —

- (a) a suitably qualified and experienced individual to be an accredited representative of Singapore to participate in the investigation into an aviation occurrence mentioned in paragraph (1); and
- (b) one or more advisers to assist the accredited representative in sub-paragraph (a).

(3) In addition, the Director may appoint an expert to participate in the investigation into an aviation occurrence which happened in another Contracting State where Singapore has a special interest in the accident by virtue of any citizens of Singapore sustaining fatal aircraft-related injuries or serious aircraft-related injuries in relation to the operation of an aircraft involved in that aviation occurrence.

(4) An accredited representative of Singapore appointed under this regulation may, for the purposes of the investigation in which the accredited representative is participating, exercise all or any of the rights and powers of an investigator mentioned in sections 26 to 31 of the Act in respect of any aircraft, records, information, documents, objects, witnesses or other evidence —

- (a) in Singapore; or

(b) held by any person in Singapore,

which or whom the accredited representative considers to be relevant or necessary to the investigation.

(5) Regulation 14 applies, with the necessary modifications, to every adviser appointed under this regulation to assist an accredited representative of Singapore.

Investigators access to flight recorders, etc.

17.—(1) Without affecting section 27 of the Act, an investigator is entitled to immediate and unrestricted access to and use of the contents of the flight recorders, air traffic service records and any other recordings that may complement the investigation.

(2) In this regulation, “flight recorder” means any type of recorder that is installed in an aircraft for the purpose of complementing investigations into an aircraft accident or an incident.

PART 4

REPORTS AND SAFETY RECOMMENDATIONS

Preliminary reports

18.—(1) This regulation applies where an investigation is carried out into an aviation occurrence that is an aircraft accident involving —

- (a) an aircraft with an MCTOM exceeding 2,250 kg; or
- (b) an aircraft with an MCTOM of 2,250 kg or lower and when airworthiness or matters considered to be of interest to other Contracting States are involved.

(2) In an investigation into an aviation occurrence mentioned in paragraph (1), the investigator-in-charge must, unless an Accident Data Report has been sent within 30 days after the aviation occurrence happened, send a preliminary report within that period to —

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

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- (ii) the State of Registry or the State of Occurrence, as appropriate, of the aircraft involved in the aviation occurrence;
 - (iii) the State of the Operator of the aircraft involved in the aviation occurrence;
 - (iv) the State of Design of the aircraft involved in the aviation occurrence;
 - (v) the State of Manufacture of the aircraft involved in the aviation occurrence;
 - (vi) any State that provided relevant information, significant facilities or experts; and
- (b) the ICAO, where the aircraft involved in the aviation occurrence has an MCTOM exceeding 2,250 kg.

(3) In paragraph (2), “Accident Data Report” means the Accident Data Report referred to in Annex 13 to the Chicago Convention.

Draft Final Report and Final Report

19.—(1) The Director must, as soon as possible after the completion of an investigation under the Act into an aviation occurrence, send a copy of the draft Final Report to each of the following Contracting States, inviting their significant and substantiated comments:

- (a) the State that instituted the investigation;
- (b) the Contracting States that participated in the investigation;
- (c) the following Contracting States, whether or not they participated in the investigation:
 - (i) the State of Registry of the aircraft involved in the aviation occurrence;
 - (ii) the State of the Operator of the aircraft involved in the aviation occurrence;
 - (iii) the State of Design of the aircraft involved in the aviation occurrence;

(iv) the State of Manufacture of the aircraft.

(2) If any comments on the draft Final Report are received by the Director within 60 days after the date on which the draft Final Report was sent out under paragraph (1), the Director must —

- (a) amend the draft Final Report to include the substance of the comments received; or
- (b) if desired by the Contracting State that provided the comments, append the comments to the Final Report.

(3) If no comments on the draft Final Report are received by the Director within 60 days after the date on which the draft Final Report was sent out under paragraph (1), and no extension of time has been agreed upon with the Contracting State to whom it was sent, the Director must issue and send out the Final Report to the following parties:

- (a) the Contracting States referred to in paragraph (1)(a), (b) and (c);
- (b) any Contracting State which has a special interest in the aviation occurrence investigated;
- (c) any Contracting State that provided relevant information, significant facilities or experts for the purposes of the investigation;
- (d) the ICAO, where the aircraft involved in the aviation occurrence has an MCTOM exceeding 2,250 kg.

(4) In addition to paragraphs (1), (2) and (3), the Director must, as soon as possible after the completion of an investigation into an aviation occurrence, send to the ICAO —

- (a) the Accident Data Report, where the aviation occurrence involves an aircraft with an MCTOM exceeding 2,250 kg; and
- (b) if applicable, the Incident Data Report, where the aviation occurrence involves an aircraft with an MCTOM exceeding 5,700 kg.

(5) In paragraph (4), “Accident Data Report” and “Incident Data Report” mean the Accident Data Report and Incident Data Report referred to in Annex 13 to the Chicago Convention.

Safety recommendations

20.—(1) The Director may, at any stage of an investigation, give to the persons mentioned in paragraph (2), in a duly dated written communication accompanied by a safety recommendation containing any preventive action that the Director or investigator-in-charge considers necessary to be taken promptly to enhance aviation safety.

(2) The persons to whom a safety recommendation under paragraph (1) may be given are as follows:

(a) any persons in Singapore or in another Contracting State who, in the opinion of the Director, are most fitted to implement the safety recommendation, which may be a person, an unincorporated association, or a public authority or public officer;

(b) the ICAO, when ICAO documents are involved.

(3) In addition, the Director or an investigator-in-charge having charge of an investigation into an aviation occurrence must give to the ICAO a safety recommendation under paragraph (1) if it is a safety recommendation of global concern.

(4) The Director must inform, in a duly dated written communication, the appropriate foreign authority of a Contracting State of any safety recommendation in paragraph (1) given to those persons in paragraph (2)(a) outside Singapore.

(5) For the purposes of section 22(2) of the Act, any person in Singapore to whom a safety recommendation is communicated under paragraph (1) must within 90 days after receiving the safety recommendation —

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

(b) send to the Director —

- (i) full details of the measures (if any) that the person has taken or proposes to take to implement the safety recommendation and, if such measures are to be implemented, the timetable for securing that implementation; or
- (ii) a full explanation as to why no measures will be taken to implement the safety recommendation.

(6) Where a safety recommendation has been forwarded to the Director by another Contracting State, the Director must, within 90 days after receiving the safety recommendation from that Contracting State, notify that Contracting State of the preventive action taken or under consideration or the reasons as to why no action will be taken.

PART 5

MISCELLANEOUS

Coordination between TSIB and Singapore Armed Forces

21. To avoid doubt, and without limiting section 16(4) of the Act, the discipline or internal administration of the Singapore Armed Forces are not directly relevant in an investigation into any aviation occurrence involving military aircraft for identifying of factors —

- (a) that contribute, or have contributed, to those aviation occurrences; or
- (b) that improve or affect, or might improve or affect, transport safety.

FIRST SCHEDULE

Regulation 6(a)

IMMEDIATELY REPORTABLE MATTERS

1. A near collision requiring an avoidance manoeuvre to avoid a collision or an unsafe situation, or when an avoidance action would have been appropriate.
2. A collision between aircraft, or involving an aircraft, that is not an accident.
3. A controlled flight into terrain is only marginally avoided.
4. 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.

5. 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.

6. 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.

7. The retraction of a landing gear leg during landing, or a wheels-up landing.
8. The dragging, during landing, of a wing tip, engine pod or any other part of the aircraft.
9. A significant failure to achieve predicted performance during take-off or initial climb.
10. Smoke is detected, or a fire occurs in the aircraft cockpit, the passenger compartment or the cargo compartment, or an engine fire, regardless that the fire is subsequently extinguished.

FIRST SCHEDULE — *continued*

11. An event requiring the emergency use of oxygen by the flight crew.
12. An aircraft that has significant damage to its structure or engine disintegration, including uncontained turbine engine failure, that is not an accident.
13. Multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft.
14. Physical incapacitation of a flight crew member during a flight period of the aircraft —
 - (a) during a single pilot operation; or
 - (b) during a multi-pilot operation, if the safety of the operation of the aircraft is compromised because of a significant increase in workload for the remaining flight crew members.
15. A fuel quantity level or distribution situation (such as insufficient fuel, fuel exhaustion, fuel starvation or inability to use all usable fuel on board the aircraft) requiring the declaration of an emergency by a pilot.
16. A runway incursion in which a collision is narrowly avoided.
17. A take-off or landing incident such as undershooting, overrunning or running off the side of a runway.
18. A system failure (including loss of power or thrust) or weather phenomenon, or an operation outside the approved flight envelope or other occurrence, which caused or could have caused difficulties controlling the aircraft.
19. A failure of more than one system in a redundancy system mandatory for flight guidance or navigation.
20. The unintentional release, or the intentional release as an emergency measure, of a slung load or any other load carried external to the aircraft.
21. An incident involving circumstances indicating that there was a high probability of an aircraft accident.

SECOND SCHEDULE

Regulations 7(3) and 9(1)

PARTICULARS ABOUT REPORTABLE MATTERS

1. The flight number, nationality and registration mark of each aircraft involved in that aviation occurrence.
2. The date and local time or Coordinated Universal Time (UTC) of the aviation occurrence.

SECOND SCHEDULE — *continued*

3. The last point of departure and the point of intended landing of the aircraft involved in the aviation occurrence.
4. The position or last known position (as the case may be) of the aircraft involved in the aviation occurrence by reference to the State of Occurrence or an easily defined geographical point, or by latitude and longitude including the date and time that the aircraft was at that position.
5. A description of the aviation occurrence.
6. The phase of the operation that each of those aircraft involved was in when the aviation occurrence took place.
7. The name and title of the person making the report and the telephone number and address at which the person can be reached at any time.

THIRD SCHEDULE

Regulation 8

ORDINARY REPORTABLE MATTERS

1. Any shutdown of an aircraft engine in flight.
2. An activation of stall warning or stick shaker.
3. An aircraft was refuelled with the incorrect type of fuel or with contaminated fuel.
4. A loss of communication with air traffic control.
5. Any other aviation occurrence that endangered or may endanger the operation of an aircraft, or which caused or may cause a danger to persons or property.

FOURTH SCHEDULE

Regulation 10(2) and (3)

NOTIFICATIONS TO OTHER STATES AND ICAO

1. The appropriate identifying abbreviation:
 - (a) where the reportable matter is an aircraft accident, the abbreviation “ACCID”;
 - (b) where the reportable matter is an incident described in the First Schedule and in respect of which a duty to investigate arises under section 15 of the Act (called a serious incident), the abbreviation “SINCID”;

FOURTH SCHEDULE — *continued*

- (c) where the reportable matter is neither an aircraft accident nor a serious incident, the abbreviation “INCID”.
2. The flight number, nationality, registration mark and serial number of each aircraft involved in that aviation occurrence.
 3. The manufacturer and model of each aircraft involved in the aviation occurrence.
 4. The name of the owner and operator of the aircraft, and (if applicable) the hirer of the aircraft involved in the aviation occurrence.
 5. The class of the pilot licence held by the pilot-in-command of each aircraft involved in the aviation occurrence, when the aircraft aviation occurrence occurred.
 6. The respective nationalities of the crew and passengers of each aircraft involved in the aviation occurrence.
 7. The date and local time or Coordinated Universal Time (UTC) of the aviation occurrence.
 8. The last point of departure and the point of intended landing of the aircraft involved in the aviation occurrence.
 9. The position of the aircraft involved in the aviation occurrence with reference to some easily defined geographical point and the latitude and longitude.
 10. If the aircraft involved in the aviation occurrence is missing or inaccessible, the last known position of the aircraft by reference to an easily defined geographical point, or by latitude and longitude, including the date and time that the aircraft was at that position.
 11. Where the immediately reportable matter is an accident, the number of crew members, passengers or other individuals respectively killed or seriously injured as a result of the accident.
 12. A narrative description of the aviation occurrence and the extent of any resulting damage to the aircraft involved so far as is known.
 13. The physical characteristics of the area in which the aviation occurrence occurred and an indication of access difficulties or special requirements to reach the accident site related to that immediately reportable matter.
 14. The presence and description of dangerous goods on board the aircraft during the aviation occurrence.
 15. The State that instituted the transport safety investigation into the aviation occurrence.

FOURTH SCHEDULE — *continued*

16. To what extent the transport safety investigation into the aviation occurrence will be conducted by the State of Occurrence or is proposed to be delegated by the State of Occurrence.

17. The name and title of the investigator-in-charge and the appropriate foreign authority of the State of Occurrence, and the telephone number and address at which the investigator-in-charge and appropriate foreign authority can be reached at any time.

Made on 14 December 2023.

LOH NGAI SENG
*Permanent Secretary,
Ministry of Transport,
Singapore.*

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