

LEGAL NOTICE No. 289

REPUBLIC OF TRINIDAD AND TOBAGO

THE CIVIL AVIATION ACT, CHAP. 49:03

REGULATIONS

MADE BY THE TRINIDAD AND TOBAGO CIVIL AVIATION AUTHORITY
WITH THE APPROVAL OF THE MINISTER UNDER SECTION 33 OF THE
CIVIL AVIATION ACT AND SUBJECT TO NEGATIVE RESOLUTION OF
PARLIAMENT

THE CIVIL AVIATION [(NO. 7) INSTRUMENTS AND EQUIPMENT]
(AMENDMENT) REGULATIONS, 2019

1. These Regulations may be cited as the Civil Aviation [(No. 7) Citation
Instruments and Equipment] (Amendment) Regulations, 2019.
2. In these Regulations, “the Regulations” mean the Civil Aviation Interpretation
[(No. 7) Instruments and Equipment] Regulations, 2004. Chap. 49:03
3. Regulation 2 of the Regulations is amended by— Regulation 2
amended
 - (a) inserting in the appropriate alphabetical sequence, the following definitions:
 - “automatic deployable flight recorder (ADFR)” means a combination flight recorder installed on the aircraft which is capable of automatically deploying from the aircraft;
 - “flight data analysis” means a process of analysing recorded flight data in order to improve the safety of flight operations;
 - “flight recorder” means any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigations;
 - “integrated survival suit” means a survival suit which meets the combined requirement of the survival suit and life jacket;
 - “Underwater Locator Beacon (ULB)” means a generic term used to describe a device fitted to aviation flight recorders, such as the CVR and FDR, or sometimes directly attached to an aircraft fuselage, which when triggered by water immersion, emits an ultrasonic pulse for a duration of at least 30 days;” and

(b) deleting the definition for “Emergency Locator Transmitter” and substituting the following definition:

“emergency locator transmitter (ELT)” means a generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated. An ELT may be any of the following:

- (a) *Automatic fixed ELT [ELT(AF)]*. An automatically activated ELT which is permanently attached to an aircraft;
- (b) *Automatic portable ELT [ELT(AP)]*. An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft;
- (c) *Automatic deployable ELT [ELT(AD)]*. An ELT which is rigidly attached to an aircraft and which is automatically deployable and activated on impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided; or
- (d) *Survival ELT [ELT(S)]*. An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors.”

Regulation 7
amended

4. Regulation 7 of the Regulations is amended, by revoking subregulation (4) and substituting the following subregulation:

“ (4) An operator shall ensure that all equipment is installed on an aircraft in such a manner that failure of any single unit required for communications, navigation or surveillance purposes or any combination thereof shall not result in the failure of another unit required for communication, navigation or surveillance purposes.”.

Regulation 10
amended

5. Regulation 10 of the Regulations is amended—

- (a) in subregulation (1)(i) by—
 - (i) deleting the word “in” and substituting the word “on”; and
 - (ii) deleting the words “crew compartment” and substituting the word “deck”;

(b) by revoking subregulation (8) and substituting the following subregulation:

“ (8) An air operator shall not conduct single-pilot Instrument Flight Rules (IFR) unless the aeroplane is equipped with—

- (a) an automatic pilot with at least altitude hold and heading select modes;
- (b) a headset with a boom microphone or equivalent; and
- (c) means of displaying charts that enables them to be readable in all ambient light conditions.”.

6. Regulation 13 of the Regulations is amended—

Regulation 13
amended

(a) by revoking subregulation (3) and substituting the following subregulation:

“ (3) Where an operator is conducting operations in an aircraft in which a navigation specification for performance based navigation (PBN) has been prescribed, he shall ensure that the—

- (a) aircraft is equipped with navigation equipment that will enable it to operate in accordance with the prescribed navigation specification;
- (b) aircraft has information relevant to the aircraft navigation specification capabilities listed in the flight manual or other aircraft documentation approved by the State of Design or the State of Registry;
- (c) aircraft has information relevant to the aircraft navigation specification capabilities included in the MEL; and
- (d) operations of the aircraft are approved by the Authority.”; and

(b) by inserting after subregulation (3), the following subregulations:

“ (3A) An operator shall not conduct operations in an aircraft where a navigation specification for PBN has been prescribed unless the operator has established and documented—

- (a) normal and abnormal procedures, including contingency procedures;

- (b) flight crew qualification and proficiency requirements, in accordance with appropriate navigation specifications;
- (c) a training programme for relevant personnel consistent with the intended operations; and
- (d) appropriate maintenance procedures to ensure continued airworthiness, in accordance with appropriate navigation specifications.

(3B) The Director General shall make recommendation to the Authority for the issue of a specific approval to an operator who carries out operations based on PBN authorisation required (AR) navigation specification.”.

Regulation 15
amended

7. Regulation 15 of the Regulations is amended—

(a) by revoking subregulation (2D) and substituting the following subregulation:

“ (2D) In addition to the requirements of subregulations (2), (2A), (2B) and (2C), an operator of an aeroplane or helicopter shall ensure, for operations where communication equipment is required to meet an Required Communication Performance (RCP) specification for performance-based communication (PBC), the aeroplane or helicopter—

- (a) is provided with communication equipment which will enable it to operate in accordance with the prescribed RCP specification(s);
- (b) have information relevant to the aeroplane or helicopter RCP specification capabilities listed in the flight manual or other aeroplane or helicopter documentation approved by the State of Design or the State of Registry; and
- (c) have information relevant to the aeroplane or helicopter RCP specification capabilities included in the MEL; and operations are authorised by the Authority in such airspace.”; and

(b) by inserting after subregulation (2D), the following sub-regulations:

“ (2E) An operator shall not conduct operations in an aircraft where an RCP specification for PBC has been prescribed unless the operator has established and documented—

(a) normal and abnormal procedures, including contingency procedures;

(b) flight crew qualification and proficiency requirements, in accordance with appropriate RCP specifications;

(c) a training programme for relevant personnel consistent with the intended operations; and

(d) appropriate maintenance procedures to ensure continued airworthiness, in accordance with appropriate RCP specifications.

(2F) (1) An aeroplane and helicopter mentioned in subregulations (2D) and (2E) shall have adequate provisions by the operator for the Authority to receive the reports of observed communication performance issued by monitoring programmes established through inter-regional agreements for the sharing between regions for such data in accordance with paragraph 2(7) in Part B of Schedule 1 of the Trinidad and Tobago Civil Aviation [(No.15) Air Navigation Services] Regulations.

(2) The Director General shall make recommendations to the Authority to take immediate corrective action for individual aircrafts, aircraft types or operators, identified in reports in subregulation (1) as not complying with the RCP specification.”.

8. Regulation 30 of the Regulations is amended by inserting after subregulation (29), the following subregulations: Regulation 30
amended

“ (30) An aeroplane of a maximum certified take-off mass of over twenty-seven thousand kilogrammes, for which the individual certificate of airworthiness is first issued after 31st December, 2020 shall be equipped with a CVR capable of retaining the information recorded during at least the last twenty-five hours of its operation.

(31) An aeroplane of a maximum certified take-off mass of over twenty-seven thousand kilogrammes for which the application for type certification is submitted to a Contracting State after 31st December, 2017 shall be provided with an alternate power source that—

- (a) powers the forward CVR, in the case of combination recorders;
- (b) automatically engages and provides ten minutes, plus or minus one minute, of operation whenever aeroplane power to the recorder ceases, either by normal shutdown or by any other power loss;
- (c) powers the CVR and its associated cockpit area microphones; and
- (d) is located as close as practicable to the CVR.

(32) (1) An aeroplane of a maximum certified take-off mass of over twenty-seven thousand kilogrammes and authorized to carry more than nineteen passengers for which the application for type certification is submitted to a Contracting State after 31st December, 2020 shall be equipped with a means approved by the Authority to recover flight recorder data and make it available in a timely manner.

(2) In approving the means to make the flight recorder data available in a timely manner, the Authority shall take into account the following:

- (a) the capabilities of the air operator;
- (b) overall capability of the aeroplane and its systems as certified by the State of Design;
- (c) the reliability of the means to recover the appropriate CVR channels and the appropriate FDR data; and
- (d) specific mitigation measures.”.

Regulation 32
amended

9. Regulation 32 of the Regulations is amended—

- (a) in subregulation (4), by deleting the word “eighty” and substituting with the words “seventy-five”;
- (b) in subregulation (6)—
 - (i) by deleting the words “, after 31st December, 2011;”;
 - and

(ii) by deleting paragraph (d) and substituting with the following paragraph:

“(d) the use of magnetic tape FDRs shall be discontinued after 31st December, 2015.”; and

(c) by inserting after subregulation (22), the following subregulation:

“(23) All turbine-engined helicopters of a maximum certificated take-off mass of over two thousand two hundred and fifty kilogrammes, up to and including three thousand one hundred and seventy-five kilogrammes for which the application for type certification was submitted to a contracting state after 31st December, 2018 shall be equipped with—

(a) a Type IV A FDR;

(b) a Class C AIR capable of recording flight path and speed parameters displayed to the pilot(s); or

(c) an ADRS capable of recording the essential parameters as set out in Part B of Schedule 2.”.

10. Regulation 39 of the Regulations is amended—

Regulation 39
amended

(a) in subregulation (1), by inserting, after the words “aircraft is equipped with”, the words “or carry on board”; and

(b) in subregulation (2)(a), by inserting after the words “equipped with”, the words “or carry on board”.

11. Regulation 40 of the Regulations is amended—

Regulation 40
amended

(a) in subregulation (1), by deleting the words “is equipped with” and substituting the words “shall be equipped with or carry on board”; and

(b) in subregulation (5), by deleting the words “31st December, 2016” and substituting the words “31st December, 2018”.

12. Regulation 45 (1) of the Regulations is amended by deleting the words “is equipped with” and substituting the words “shall be equipped with or carry on board”.
Regulation 45
amended

13. Regulation 48 of the Regulations is amended in subregulation (1) by inserting after the words “is equipped with”, the words “or carried on board-”.
Regulation 48
amended

Regulation 51
amended

14. Regulation 51(1A) of the Regulations is amended by deleting the words “unless it is equipped with sufficient number of life rafts with rated capacity and buoyancy to accommodate the total number of persons aboard that helicopter” and substituting the words “shall not conduct commercial air transport extended over water operations unless—

- (i) the helicopter is equipped with or carries on board a sufficient number of life rafts with rated capacity and buoyancy to accommodate the total number of persons aboard that helicopter; and
- (ii) where two life rafts are fitted, each shall be able to carry all occupants in the overload state and the life raft overload state must have a design safety margin of 1.5 times the maximum capacity.

Regulation
52A amended

15. Regulation 52A of the Regulations is amended by inserting—

- (a) above subregulation (1), the heading “Emergency Locator Transmitter”;
- (b) after subregulation (5), the following subregulation:

“ (6) With effect from 31st December, 2017, an operator of an aeroplane of a maximum certificated take-off mass of over twenty-seven thousand kilogrammes engaged in commercial air transport operations on long-range over-water flights shall ensure that the aeroplane is equipped with an underwater locating beacon (ULB) that—

- (a) is securely attached to the aeroplane;
- (b) is not installed in wings or empennage;
- (c) operates at a frequency of 8.8 khz;
- (d) is automatically activated under water; and
- (e) operates for a minimum of thirty days when activated.”.

Regulation 55
amended

16. Regulation 55(1) of the Regulations is amended by deleting the words “is equipped with” and substituting the words “shall be equipped with or carry on board”.

Regulation 57
amended

17. Regulation 57(1) of the Regulations is amended by deleting the words “is equipped with” and substituting the words “shall be equipped with or carry on board”.

18. The Regulations are amended by revoking regulation 59 and substituting the following regulation: Regulation 59 amended

“ 59. (1) An air operator shall ensure that where materials in each compartment of an aircraft in which he conducts or intends to conduct operations, used by the crew or passengers do not meet the current airworthiness requirements of materials to be used in the interior of cabin, for the applicable airworthiness requirements for the aircraft type in the transport category, such materials are replaced with materials that meet the airworthiness requirements of such aircraft type, upon the first major overhaul of such aircraft or refurbishment of such cabin interior.

(2) An air operator shall ensure that all seat cushions, except those of flight crew seats, in any compartment of an aircraft on which he conducts or intends to conduct operations, which is occupied by crew or passengers meets the requirements pertaining to fire protection as specified by the airworthiness requirements for the aircraft type.”.

19. Regulation 62 of the Regulations is amended by deleting the word “has” after the words “unless such aircraft” and substituting the words “shall be equipped with or carry on board”. Regulation 62 amended

20. Regulation 71 of the Regulations is amended by inserting after subregulation (3), the following subregulation: Regulation 71 amended

“ (4) Notwithstanding the requirements of subregulations (1), (2) and (3), an operator shall not operate an aircraft in commercial air transport operations in Trinidad and Tobago unless the aircraft is equipped with an Airborne Collision Avoidance System (ACAS II).”.

21. Regulation 72A of the Regulations is amended, by revoking subregulation (2) and substituting the following subregulation: Regulation 72A amended

“ (2) In establishing operational criteria for the use of automatic landing system, HUD or equivalent displays, EVS, SVS or CVS, an operator shall provide evidence that—

- (a) the equipment meets the appropriate airworthiness certification requirements;
- (b) he has carried out a safety risk assessment associated with the operations supported by the automatic landing systems, a HUD or equivalent display, EVS, SVS or CVS; and

- (c) he has established and documented the procedures for the use of, and training requirement for, automatic landing systems, a HUD or equivalent display, EVS, SVS or CVS.”.

Regulation 72B inserted 22. The Regulations are amended by inserting after Regulation 72A the following Regulation:

“SURVEILLANCE EQUIPMENT

Surveillance
equipment

72B. (1) An operator shall not operate an aircraft unless it is equipped with surveillance equipment that will enable the aircraft to operate in accordance with the requirements of air traffic services.

(2) Where an operator is conducting operations where surveillance equipment is required to meet an Required Surveillance Performance (RSP) specification for performance-based surveillance (PBS), he shall ensure that the—

- (a) aircraft is equipped with surveillance equipment that will enable it to operate in accordance with the prescribed RSP specification;
- (b) aircraft have information relevant to the aircraft RSP specification capabilities listed in the flight manual or other aircraft documentation approved by the State of Design or the State of Registry;
- (c) aircraft have information relevant to the aircraft RSP specification capabilities included in the MEL; and
- (d) operations of the aircraft are approved by the Authority.

(3) An operator shall not conduct operations in an aircraft where an RSP specification for PBS has been prescribed unless the operator has established and documented—

- (a) normal and abnormal procedures, including contingency procedures;

- (b) flight crew qualification and proficiency requirements, in accordance with appropriate RSP specifications;
- (c) a training programme for relevant personnel consistent with the intended operations; and
- (d) appropriate maintenance procedures to ensure continued airworthiness, in accordance with appropriate RSP specifications.

(4) An Operator shall ensure that an aircraft mentioned in subregulations (1), (2) and (3) has adequate provision for the Authority to receive the reports of observed surveillance performance issued by monitoring programmes established through inter-regional agreements for the sharing between regions for such data, in accordance with paragraph 2 (7) in Part B of Schedule 1 of the Trinidad and Tobago Civil Aviation [(No.15) Air Navigation Services] Regulations.

(5) The Director General shall make recommendations to the Authority to take immediate corrective action for individual aircraft, aircraft types or operators, identified in report under subregulation (1) as not complying with the RSP specification”.

23. Schedule 2 of the Regulations is amended—

Schedule 2
amended

(a) in Part A—

- (i) by inserting after clause 3, the following following clause:

“3A. Automatic deployable flight recorder (ADFR)
Operation

The following requirements shall apply to an ADFR:

- deployment shall take place when the aeroplane structure has been significantly deformed;
- deployment shall take place when an aeroplane sinks in water;

- ADFR shall not be capable of manual deployment;
- the ADFR shall be able to float on water;
- the ADFR deployment shall not compromise the safe continuation of the flight;
- the ADFR deployment shall not significantly reduce the chance of survival of the recorder and of successful transmission by its ELT;
- the ADFR deployment shall not release more than one piece;
- an alert shall be made to the flight crew when the ADFR is no longer captive to the aircraft;
- the flight crew shall have no means to disable ADFR deployment when the aircraft is airborne;
- the ADFR shall contain an integrated ELT which shall activate automatically during the deployment sequence. Such ELT may be of a type that is activated in-flight and provides information from which a position can be determined; and
- the integrated ELT of an ADFR shall satisfy the same requirements as an ELT required to be installed on an aeroplane. The integrated ELT shall, at least have the same performance as the fixed ELT to maximize detection of the transmitted signal.”.

(ii) in Clause 4—

- (A) by inserting after the words in the heading “Airborne image recorder”, the words (AIR) and airborne image recording system (AIRS)”;
- (B) in paragraph (a), by inserting the words “or airborne image recording system” after the words “airborne image recorder”;
- (C) in paragraph (b), by inserting the words “or airborne image recording system” after the words “airborne image recorder”;

- (D) in paragraph (c), by inserting the words “or airborne image recording system” after the words “airborne image recorder”;
 - (E) in paragraph (d), by deleting the word “must” wherever it occurs and substituting the words “or airborne image recording system shall”; and
 - (iii) in clause 6, by inserting after the words in the heading “Aircraft Data Recording Systems” the words “(ADRS)”;
- (b) in Part B, clause 4—
- (i) by inserting after the words in the heading “Airborne image recorder”, the words (AIR) and airborne image recording system (AIRS)”;
 - (ii) in paragraph (a)—
 - (A) by inserting the words “or airborne image recording system” after the words “airborne image recorder”;
 - (B) Note 2, by inserting the words “or airborne image recording systems” after the words “Class A AIRs”;
 - (iii) in paragraph (b), by inserting the words “or airborne image recording system” after the words “airborne image recorder”;
 - (iv) in paragraph (c), by inserting the words “or airborne image recording system” after the words “airborne image recorder”;
 - (v) in paragraph (d), by deleting the word “will” wherever it occurs and substituting the words “or airborne image recording system shall”.

Made by the Trinidad and Tobago Civil Aviation Authority this 14th day of August, 2019.

F. REGIS
*Trinidad and Tobago
Civil Aviation Authority*

Approved by the Minister of Works and Transport this 16th day of August, 2019.

R. SINANAN
Minister of Works and Transport