

PART 10
OPERATIONS OF AIRCRAFT

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SUBPART A: GENERAL

10.001 APPLICABILITY

- (a) This Part prescribes the requirements of Vietnam for:
 - (1) Operations conducted by airman certified in Vietnam while operating aircraft registered in Vietnam;
 - (2) Operations of foreign registered aircraft by Vietnam Air Operator Certificate (AOC) holders;
 - (3) ¹(removed)
- (b) This Part is applicable to operators of aircraft in:
 - (1) Aerial work;
 - (2) Commercial air transport; or
 - (3) General Aviation.
- (c) For operations outside of Vietnam, all Vietnam pilots and operators shall comply with these requirements unless compliance would result in a violation of the laws of the foreign State in which the operation is conducted.
- (d) Where a particular requirement is applicable only to a particular segment of aviation operations, it will be identified by a reference to those particular operations, such as “commercial air transport” or “turbo-jet aeroplanes”.

10.003 DEFINITIONS²

- (a) The definitions in this Part are defined in Appendix to 1.007 of Part 1.

10.005 ACRONYMS

- (a) The following acronyms are used in this Part:
 - (1) AFM – Aircraft Flight Manual
 - (2) AGL – Above Ground Level
 - (3) AOC – Air Operator Certificate
 - (4) AOM – Aircraft Operating Manual
 - (5) ATC – Air Traffic Control
 - (6) CAT – Category;
 - (7) C.G. – Center of Gravity
 - (8) DH – Decision Height
 - (9) ETA – Estimated Time of Arrival
 - (10) ETOPS – Extended Twin-engine Operations
 - (11) FL – Flight Level
 - (12) IFR – Instrument Flight Rules

¹This content is removed according to Item 1, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

²This content is revised according to Item 1, Appendix 10 to Circular No. 42/2020/TT-BGTVT dated December 31, 2020.

- (13) IMC – Instrument Meteorological Conditions
- (14) LOC – Localizer
- (15) LVTO – Low Visibility Take Off
- (16) kph – Kilometers Per Hour
- (17) MDA – Minimum Decent Altitude
- (18) MEA – Minimum En Route Altitude
- (19) MEL – Minimum Equipment List
- (20) MMEL – Master Minimum Equipment List
- (21) MNPSA – Minimum Navigation Specifications Airspace
- (22) MOCA – Minimum Obstruction Clearance Altitude
- (23) MSL – Mean Sea Level
- (24) nm – Nautical Mile
- (25) NOTAM – Notice to Airmen
- (26) RFM – Rotorcraft Flight Manual
- (27) RVR – Runway Visibility Range
- (28) RVSM – Reduced Vertical Separation Minimum
- (29) PBE – Protective Breathing Equipment
- (30) PIC – Pilot In Command
- (31) F/O – Flight Officer
- (32) SCA – Senior Cabin Attendant/ Purser
- (33) SM – Statute Miles
- (34) VFR – Visual Flight Rules
- (35) VMC – Visual Meteorological Conditions

10.007 SPECIFIC APPROVALS³

- (a) The pilot-in-command shall not conduct operations for which a specific approval is required by this Schedule unless such approval has been issued by the CAAV.
- (b) Specific approvals issued by the CAAV shall follow a specific layout and contain at least the information required to clearly indicate the approval that is granted, any applicable limitation(s) and, if applicable, the expiration date.

SUBPART B: AIRCRAFT REQUIREMENTS

10.010 REGISTRATION MARKINGS

- (a) No person may operate a Vietnam-registered aircraft unless it displays the proper markings prescribed in Part 2.

³This content is added according to Item 1, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (b) No person may operate an aircraft in Vietnam unless it displays registration markings in accordance with ICAO Annex 7.

10.013 AIRCRAFT NOTIFICATION REQUIRED

- (a) No person may operate a foreign registered aircraft in the airspace of Vietnam unless:
 - (1) They have made written notification to CAAV for the following information:
 - (i) Aircraft nationality registration number;
 - (ii) Aircraft manufacturer, model and series;
 - (iii) Aircraft serial number;
 - (iv) Aerodrome where the aircraft is based;
 - (v) Operator name, address and telephone contact numbers;
 - (vi) A current copy of the aircraft insurance papers.
 - (2) He has been issued a flight permit from CAAV allowing such operation.

10.015 CIVIL AIRCRAFT AIRWORTHINESS

- (a) ⁴ No person may operate a civil aircraft unless it has:
 - (1) A valid Certification of Airworthiness issued by the State of Registry which has not expired; and
 - (2) Been maintained in an airworthy condition and released to service under a system of maintenance acceptable to the State of Registry.
- (b) Each PIC shall determine whether an aircraft is in a condition for safe flight before takeoff.
- (c) The PIC shall discontinue a flight as soon as practicable when a mechanical, electrical or structural condition occurs that would make the aircraft unairworthy.

10.017 AIRWORTHINESS CERTIFICATE OPERATIONAL RESTRICTIONS

- (a) ⁵ No person may operate an aircraft except:
 - (1) As provided in the terms of the airworthiness certificate or equivalent document issued by the State of Registry;
 - (2) Within the approved operating limitations contained in its flight manual; and
 - (3) Within the mass limitations imposed by compliance with the applicable noise certificate, unless otherwise authorised in exceptional circumstances for a certain aerodrome or a runway where there is no noise disturbance problem, by the competent authority of the State in which the aerodrome is situated.

⁴This content is revised according to Item 2, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁵This content is revised according to Item 9, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (b) No person may operate an aircraft with a Special Certificate of Airworthiness except as provided in the limitations issued with that certificate.

10.020 AIRCRAFT INSTRUMENTS AND EQUIPMENT

- (a) No person may operate an aircraft unless it is equipped with the instruments and equipment requirements of Part 6 appropriate to the type of flight operation conducted and the route being flown.

10.023 INOPERATIVE INSTRUMENTS AND EQUIPMENT

- (a) No person may takeoff an aircraft with inoperative instruments or equipment installed, except as authorised by CAAV.
- (b) No person may takeoff in a multi-engine aircraft with inoperative instruments and equipment installed unless the following conditions are met:
 - (1) An approved Minimum Equipment List [MEL] exists for that aircraft;
 - (2) ⁶The CAAV has approved the MEL for use for the specific aircraft and operator;
 - (3) The approved Minimum Equipment List must:
 - (i) Be prepared in accordance with the limitations specified in paragraph (c) of this section.
 - (ii) Provide for the operation of the aircraft with certain instruments and equipment in an inoperative condition.
 - (iii) ⁷Be developed in accordance with the current Master MEL issued by the proper Authority.
 - (4) Records identifying the inoperative instruments and equipment shall be hand to the pilot.
 - (5) The aircraft is operated under all applicable conditions and limitations contained in the MEL.
- (c) The following instruments and equipment may not be included in the Minimum Equipment List:
 - (1) Instruments and equipment that are either specifically or otherwise required by the airworthiness requirements under which the aircraft is type certificated and which are essential for safe operations under all operating conditions.
 - (2) Instruments and equipment required by an airworthiness directive to be in operable condition unless the airworthiness directive provides otherwise;
 - (3) ⁸Instruments and equipment required for specific operations under Parts 7, 9, 10, 11, 12 and 23.

⁶This content is revised according to Item 3(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁷This content is revised according to Item 3(b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁸This content is revised according to Item 3(c), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (d) An aircraft with inoperative required instruments or equipment may be operated only under a special flight permit issued by CAAV under Part 4.

Note: See Appendix 1 to 10.023 for specific limitation on inoperative instruments and equipment.

10.025 CIVIL AIRCRAFT FLIGHT MANUAL, MARKING AND PLACARD REQUIREMENTS

- (a) No person may operate a civil aircraft unless there is available in the aircraft:
- (1) A current AFM, RFM approved by CAAV; or
 - (2) An AOM approved by CAAV for the AOC holder;
 - (3) If no AFM or RFM exists, approved manual material, markings and placards, or any combination thereof which provide the PIC with the necessary limitations for safe operation.
- (b) ⁹Placards, listings, instrument markings or combination thereof, containing those operating limitations prescribed by the State of Registry for visual presentation shall be displayed in the aircraft.
- (c) Each person operating a civil aircraft shall cause the AFM or RFM to be updated by implementing changes made mandatory by the State of Registry.

10.027 REQUIRED AIRCRAFT AND EQUIPMENT INSPECTION

- (a) Unless otherwise authorised by CAAV, no person may operate a Vietnam civil aircraft unless it has had the following inspections and evidence of those inspections are carried on the aircraft:
- (1) An annual inspection within the past 12 calendar months;
 - (2) For commercial or hire operations, a 100-hour inspection;
 - (3) For IFR operations, an altimeter and pitot-static system inspection in the past 24 calendar months;
 - (4) For transponder equipped aircraft, a transponder check within the past 12 calendar months;
 - (5) For ELT-equipped aircraft, an ELT check within the past 12 calendar months, and
 - (6) For IFR aircraft, a VOR receiver check within the past 30 calendar days in accordance with the method prescribed by CAAV;

Note: IFR aircraft maintained under a continuous maintenance programme will have a different requirement other than 30-day requirement.

- (7) For aircraft equipped with flight and cockpit voice recorders, operational checks and evaluations of recordings shall be conducted to ensure their serviceability at intervals prescribed by CAAV.

Note: The requirements for these inspections are contained in Part 4.

⁹This content is revised according to Item 3, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (b) Aircraft maintained under an alternate maintenance and inspection programme approved by CAAV, as specified in Part 4, may not have current annual or 100-hour inspections in their maintenance records.

Note: An "alternate maintenance and inspection programme" may include a manufacturer's recommended programme, instructions for continued airworthiness, or a programme designed by the operator and approved by CAAV.

10.030 DOCUMENTS TO BE CARRIED ON AIRCRAFT: ALL OPERATIONS¹⁰

- (a) No person may operate a civil aircraft unless it has within it the current and approved documents appropriate to the operations to be conducted:
- (1) Properly displayed aircraft nationality registration certificate;
 - (2) Properly displayed airworthiness certificate;
 - (3) Noise certificate;
 - (4) License of use of radio devices in the aircraft, if installed;
 - (5) Technical/ Journey log of the aircraft in accordance with Appendix 1 to 10.030;
 - (6) AFM or RFM;
 - (7) Normal, abnormal and emergency checklists;
 - (8) Aircraft operating manual;
 - (9) Performance and weight and balance tables or graphs;
 - (10) List of passengers and cargo for passengers and cargo transportation;
 - (11) Current and suitable charts for:
 - (i) The route of the proposed flight, and
 - (ii) All routes along which it is reasonable to expect that the flight may be diverted.
 - (12) Air-ground signals for search and rescue;
 - (13) Civil liability insurance certificate;
 - (14) Operational Flight Plan;
 - (15) NOTAMS briefing documentation;
 - (16) Meteorological information;
 - (17) Filed ATC flight plan;
 - (18) Incident/ accident forms as required.

¹⁰This content is revised according to Item 4, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.033 ADDITIONAL DOCUMENTS APPLICABLE TO INTERNATIONAL FLIGHTS

- (a) No person may operate a civil aircraft for flights across international borders unless it has within it the additional documents necessary for such flights, including:
- (1) A general declaration for customs;
 - (2) A list of passenger names and points of embarkation and destination, if applicable;
 - (3) An aircraft radio licence;
 - (4) The procedures and signals relating to interception of aircraft;
 - (5) An English translation noise certificate, and
 - (6) Any other documentation that may be required by CAAV or States concerned with a proposed flight.

Note: The noise certificate shall state the standards in ICAO Annex 16, Volume 1. The statement may be contained in any document, carried on board, approved by CAAV.

10.035 ADDITIONAL DOCUMENT REQUIREMENTS: COMMERCIAL AIR TRANSPORT ¹¹

- (a) No person may operate a civil aircraft in commercial air transport unless the following current and approved documents must be carried on board the aircraft during those operations:
- (1) Part(s) of the AOC holder's operations manual relevant to operation(s) conducted;
 - (2) Aircraft Operating Manual acceptable to the State of the Operator;
 - (3) MEL approved by the State of the Operator;
 - (4) ¹²A certified true copy of the Air Operator Certificate (AOC) as specified in paragraph b of Appendix 1 to 12.017;
 - (5) ¹³Instructions on the least risk bomb location specific to the aircraft;
 - (6) Least risk location instructions in the event a bomb is found;
 - (7) Forms for complying with the reporting requirements of the Authority of the AOC holder.

¹¹This content is revised according to Item 5, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹²This content is revised according to Item 1, Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

¹³This content is revised according to Item 1, Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

10.037 AIRCRAFT OPERATING UNDER THE 83BIS AGREEMENT OF THE CHICAGO CONVENTION ¹⁴

- (a) When an aircraft operating under the Article 83 *bis* Agreement of the Chicago Convention (hereinafter referred to as: Article 83 *bis*) between the State of Registry and the State of the Operator, a certified true copy in paper or electronic format of the Agreement Summary shall be carried on board. When the Summary is issued in a language other than English, an English translation shall be included.
- (b) The Article 83 *bis* Agreement Summary shall be accessible to a civil aviation safety inspector to determine which functions and duties are transferred under the agreement by the State of Registry to the State of the Operator, when conducting surveillance activities such as ramp checks.
- (c) The State of Registry or the State of the Operator shall submit the Agreement Summary together with the Article 83 *bis* Agreement for registration with the ICAO Council.

SUBPART C: FLIGHT CREW REQUIREMENT

10.039 APPLICABILITY ¹⁵

This Subpart provides the flight crew requirements to ensure that they are qualified and current for flight operations.

10.040 COMPOSITION OF THE FLIGHT CREW

- (a) The number and composition of the flight crew may not be less than that specified in the flight manual or other documents associated with the airworthiness certificate.
- (b) A F/O is required for IFR commercial air transport operations, unless CAAV has issued a deviation.
- (c) The flight crews shall include flight crew members in addition to the minimum numbers specified in the flight manual or other documents associated with the certificate of airworthiness when necessitated by considerations related to the type of aeroplane use, the type of operations and duties involved and the duration of flight between points where flight crews are exchanged.
- (d) The flight crew shall include at least one member who holds a flight navigator licence in all operations where, as determined by CAAV, navigation necessary for the safe conduct of the flight.
- (e) ¹⁶When a separate flight engineer's station is incorporated in the design of an aeroplane, the flight crew shall include at least one flight engineer especially assigned to that station, unless the duties associated with that station can be satisfactorily performed by another flight crew member, holding a flight engineer licence, without interference with regular duties.

¹⁴This content is added according to Item 3, Appendix 10 to Circular No. 42/2020/TT-BGTVT dated December 31, 2020.

¹⁵This content is revised according to Item 6, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁶This content is revised according to Item 7, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.043 AIRMAN: LIMITATIONS ON USE OF SERVICES

- (a) No person may operate a civil aircraft in aerial work unless that person is qualified for the specific operation and in the specific type of aircraft used.
- (b) No person may serve as an airman, nor may any person use an airman in commercial air transport unless that person is qualified for the operations for which they are to be used in accordance with Part 14.

10.045 FLIGHT CREW LICENCES REQUIRED

- (a) No person may act as PIC or in any other capacity as a required flight crew member of a civil aircraft of:
 - (1) Vietnam registry, unless he or she carries in their personal possession the appropriate and current licence for that flight crew position for that type of aircraft and a valid medical certificate;
 - (2) Foreign registry, unless he or she carries in their personal possession a valid and current licence for that type of aircraft issued to them by the State in which the aircraft is registered.
- (b) No person may act as a flight crew member of a foreign registered aircraft operated by a Vietnam AOC holder unless they have been issued a Vietnam licence for the category, class and type of aircraft.
- (c) ¹⁷No person may act as a flight engineer or a flight navigator on a Vietnam registered aircraft unless they have appropriate licence and type rating.
- (d) ¹⁸The PIC of an aircraft equipped with an airborne collision avoidance system (ACAS II) shall ensure that each flight crew member has been appropriately trained to competency in the use of ACAS II equipment and the avoidance of collisions. Refer to Appendix 1 to 10.045 for ACAS training requirements.

10.047 NOTIFICATION OF CHANGE OF ADDRESS TO LICENCE

- (a) No person may exercise the privileges of an airman licence issued by CAAV for more than 30 calendar days after they have changed their official mailing address unless they have provided written notification of the following information to CAAV:
 - (1) Full name;
 - (2) Pilot certificate number;
 - (3) House Number, Street Address, and PO Box Number
 - (4) City (for a Vietnam address);
 - (5) City, State, Postal Code and Country (for a foreign address)
 - (6) Telephone number (including Country codes).

¹⁷This content is revised according to Item 8(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁸This content is revised according to Item 8(b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.050 RADIO OPERATOR LICENCE

- (a) For international operations, the flight crew shall include at least one member who has in his personal possession a valid radio operator licence or endorsement, issued or rendered valid by the State of Registry, authorising operation of the type of radio transmitting equipment to be used.

10.051 LANGUAGE PROFICIENCY¹⁹

- (a) No person may use the aircraft radio for aeronautical radiotelephony unless their licenses has been endorsed for at least Level 4 language proficiency (as specified in Part 7 for the language to be used).
- (b) The PIC shall ensure that all flight crew member licenses are endorsed for language proficiency in the language used for aeronautical radiotelephony communications.
- (c) The PIC shall ascertain that the common language used by the crew for the operation of the aircraft is adequate for those operations.
- (d) Operators shall ensure that flight crew members demonstrate the ability to speak and understand the language used for aeronautical radiotelephony communications as specified in Part 7 for the language to be used.

10.053 MEDICAL CERTIFICATE REQUIRED

- (a) The following persons must have a current and valid medicate certificate in order to exercise the privileges of their licences in aviation:
 - (1) Pilots;
 - (2) Flight engineers;
 - (3) Flight navigators
- (b) No person may serve in aviation unless that person has in their personal possession a valid airman medical certificate.
- (c) ²⁰(removed)
- (d) ²¹(removed)
- (e) ²²(removed)

10.055 FLIGHT CREW QUALIFICATIONS

- (a) The PIC and the AOC holder shall ensure that the licences of each flight crew member have been issued or rendered valid by the State of Registry, contain the appropriate category, class and type ratings, and that all that the flight crew members are in conformance with the recency of experience requirements of this Part.

Note: The category and class ratings are identified in 7.025 of Part 7.

¹⁹This content is revised according to Item 9, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

²⁰This content is revised according to Item 10, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

²¹This content is revised according to Item 10, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

²²This content is revised according to Item 10, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (b) No person may operate or perform duties in a civil aircraft that require a licence unless the licence authorising the privileges to conduct that operation were issued in accordance with the specifications of Part 7 of the Civil Aviation Regulations and/or, where applicable, the Standards of Annex 1 of the International Civil Aviation Organization.

10.057 CATEGORY, CLASS AND TYPE RATING REQUIRED

- (a) No person may act as the PIC of an aircraft unless that person holds the appropriate category, class, and type rating (if a class rating and type rating is required) for the aircraft to be flown, except where the pilot is the sole occupant of the aircraft, or:
 - (1) Is receiving training for the purpose of obtaining an additional pilot licence or rating that is appropriate to that aircraft while under the supervision of an authorised instructor; or
 - (2) Has received training required by these Parts that is appropriate to the aircraft category, class, and type rating (if a class or type rating is required) for the aircraft to be flown, and has received the required endorsements from an authorised instructor.
- (b) A pilot may not act as PIC of an aircraft that is carrying another person, or is operated for remuneration or hire, unless that pilot holds a category, class, and type rating (if a class and type rating is required) that applies to the aircraft.

10.060 WHEN AIRCRAFT TYPE RATING IS REQUIRED

- (a) Except as provided in paragraph (b), no person may operate any of the following civil aircraft as PIC unless that person's licence has been endorsed for the aircraft type:
 - (1) ²³Large aircraft, other than airships.
 - (2) ²⁴Turbine-engined aeroplanes.
 - (3) ²⁵Helicopters and powered-lift.
 - (4) ²⁶Aircraft certificated for operation with a minimum crew of at least two pilots.
 - (5) Any aircraft in Which CAAV deems necessary.
- (b) CAAV may authorise a pilot to operate an aircraft requiring a type rating without a type rating for up to 60 calendar days, provided:
 - (1) CAAV has determined that an equivalent level of safety can be achieved through the operating limitations on the authorisation;
 - (2) The applicant shows that compliance with paragraph (a) is impracticable for the flight or series of flights;
 - (3) The operations:

²³This content is revised according to Item 11, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

²⁴This content is revised according to Item 11, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

²⁵This content is revised according to Item 11, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

²⁶This content is revised according to Item 11, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (i) Involve only a ferry flight, training flight, test flight, or practical test for a pilot licence or rating;
 - (ii) Are within Vietnam, unless, by previous agreement with CAAV, the aircraft is flown to an adjacent State for maintenance;
 - (iii) Are not for compensation or hire unless the compensation or hire involves payment for the use of the aircraft for training or taking a practical test; and
 - (iv) Involve only the carriage of flight crew members considered essential for the flight.
- (4) If the purpose of the authorisation provided by this paragraph cannot be accomplished within the time limit of the authorisation, CAAV may authorise an additional period of up to 60 calendar days.

10.063 INSTRUMENT RATING REQUIRED

- (a) No person may operate a civil aircraft as the PIC in the following situations unless that person's pilot licence has been endorsed with an instrument or airline transport pilot (not limited to VFR) rating for the category, class and, if required, type of aircraft:
 - (1) In flight conditions where the proximity to clouds and minimum visibility is less than those prescribed for VFR (Visual Flight Rules),
 - (2) In IMC (instrument meteorological conditions);
 - (3) On an ATS clearance for operations in IFR (Instrument Flight Rules); or
 - (4) Conducting Special VFR Operations at night in Class G airspace.
- (b) No person may perform the duties of a F/O in any of the situations described in paragraph (a) when an F/O is required, unless that person's pilot licence has been endorsed with an instrument rating for the category of aircraft.

10.065 AUTHORISATION REQUIRED FOR CATEGORY II/III OPERATIONS

- (a) Except as shown in paragraph (b), no person may act as a pilot crew member of a civil aircraft in a CAT II/III operation unless:
 - (1) In the case of a PIC, he or she holds a current CAT II or III letter of authorisation for that type aircraft.
 - (2) In the case of an F/O, he or she is authorised by the State of Registry to act as F/O in that aircraft in CAT II/III operations.
- (b) A letter of authorisation is not required for individual pilots of an AOC holder that has operations specifications approving CAT II or III operations, however, all pilots shall meet the appropriate qualifications for operations of CAT II or III.

10.067 ADDITIONAL TRAINING REQUIREMENTS FOR PILOT IN COMMAND

- (a) No person may act as PIC of a complex aeroplane, high-performance aeroplane, or a pressurised aircraft capable of flight above 7500 m (25,000 ft) MSL, or an aircraft that CAAV has determined requires aircraft type-specific training, unless the person has:

- (1) Received and logged ground and flight training from an authorised instructor in the applicable aeroplane type, or in an approved flight simulator or approved flight training device that is representative of that, and has been found proficient in the operation and systems of that aeroplane; and
 - (2) Received a one-time endorsement in the pilot's logbook from an authorised instructor who certifies the person is proficient to operate that aircraft.
- (b) Additional training required for operating tail wheel aeroplanes. No person may act as PIC of a tail wheel aeroplane unless that person has:
- (1) Received and logged flight training from an authorised instructor in a tail wheel aeroplane on the manoeuvres and procedures prescribed in paragraph (b)(2), and
 - (2) Received an endorsement in the person's logbook from an authorised instructor who found the person proficient in the operation of a tail wheel aeroplane, to include at least normal and crosswind takeoffs and landings, wheel landings (unless the manufacturer has recommended against such landings), and go-around procedures.

10.070 PILOT LOGBOOKS

- (a) Each pilot shall show the aeronautical training and experience used to meet the requirements for a licence and rating, or recency of experience, by a reliable record.
- (b) ²⁷Each pilot shall carry his or her logbook while on duty.
- (c) A student pilot shall carry his or her logbook, including the proper flight instructor endorsements, on all solo cross-country flights.
- (d) Upon the request of an authorised representative of CAAV or a law enforcement officer, the pilot shall provide their logbook to that person.

10.073 CONTENTS OF PILOT LOGBOOK

- (a) Each person shall enter the following information for each flight or lesson logged:
 - (1) General:
 - (i) Date.
 - (ii) Total flight time.
 - (iii) Location where the aircraft departed and arrived, or for lessons in an approved flight simulator or an approved flight training device, the location where the lesson occurred.
 - (iv) Type and identification of aircraft, approved flight simulator, or approved flight training device, as appropriate.
 - (v) The name of a safety pilot, if required.

²⁷This content is revised according to Item 2, Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

- (2) Type of pilot experience or training:
 - (i) Solo.
 - (ii) PIC.
 - (iii) F/O.
 - (iv) Flight and ground training received from an authorised instructor.
 - (v) Training received in an approved flight simulator or approved flight training device from an authorised instructor.
- (3) Conditions of flight:
 - (i) Day or night.
 - (ii) Actual instrument.
 - (iii) Simulated instrument conditions in flight, an approved flight simulator, or an approved flight training device by CAAV.

10.075 LOGGING OF FLIGHT TIME AND TRAINING²⁸

- (a) ²⁹The pilot shall, at a minimum and in accordance with the requirements of Appendix 1 to 10.075, log the:
 - (1) Training and experience used to meet the eligibility requirements for a license, rating and/or authorization prescribed by Part 7 of these regulations;
 - (2) The experience required to show recent flight experience prescribed by Parts 10, 11 or 14 of these regulations.

10.077 PIC CURRENCY: TAKEOFF AND LANDING

- (a) No person may act as PIC of an aircraft carrying passengers, or of an aircraft certified for more than one required pilot flight crew member unless, within the preceding 90 calendar days that pilot has:
 - (1) Made 3 takeoffs and landings as the sole manipulator of the flight controls in an aircraft of the same category and class and if a type rating is required, of the same type.
 - (2) For a tail wheel aeroplane, made the 3 takeoffs and landings in a tail wheel aeroplane with each landing to a full stop;
 - (3) ³⁰For night operations, made at least one landing at night as sole manipulator of the flight controls.

²⁸This content is revised according to Item 12, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

²⁹This content is revised according to Item 4, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

³⁰This content is revised according to Item 3, Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

- (b) ³¹No person may act as the co-pilot of a large or turbine engine aeroplane or any other aircraft certified for more than one required pilot flight crew member unless that pilot has complied with the takeoff and landing requirements of paragraph (a) of this Subsection.
- (c) ³²A pilot who has not met the recency of experience for takeoffs and landings shall satisfactorily complete a re-qualification curriculum acceptable to the CAAV.
- (d) ³³Requirements of paragraphs (a), (b) or (c) may be satisfied in a flight simulator approved by the CAAV.

10.080 PILOT CURRENCY: IFR OPERATIONS

- (a) No person may act as PIC under IFR, nor in IMC, unless he or she has, within the preceding 6 calendar months:
 - (1) Logged at least 6 hours of instrument flight time including at least 3 hours in flight in the category of aircraft; and
 - (2) Completed at least 6 instrument approaches.
- (b) A pilot who has completed an instrument competency check with an authorised representative of CAAV retains currency for IFR operations for 6 calendar months following that check.
- (c) ³⁴No person may act as PIC for an aeroplane subject to Part 23 of these regulations unless, with the previous 7 calendar months, they have completed an instrument proficiency check acceptable to the CAAV.

10.083 PILOT CURRENCY: GENERAL AVIATION OPERATIONS³⁵

- (a) No person may act as pilot of an aircraft type certified for more than one pilot or subject to the applicability of Part 23 unless, since the beginning of the preceding 12 calendar months, he or she has passed a prescribed proficiency check in the specific type of aircraft with an authorised representative of the CAAV.
- (b) No person may act as PIC of an aircraft type certified for a single pilot unless, since the beginning of the 24 calendar months, he or she has passed a flight review with an authorised representative of the CAAV.
- (c) The proficiency check shall include the maneuvers and procedures listed in the appropriate Skill Test Standards prescribed by the CAAV.

10.085 ADDITIONAL COMMERCIAL AIR TRANSPORT QUALIFICATIONS³⁶

- (a) Besides requirements outlined in this Part, all aviation personnel involved in commercial air transport shall also conform to:

³¹This content is revised according to Item 13(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

³²This content is revised according to Item 13(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

³³This content is revised according to Item 13(b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

³⁴This content is revised according to Item 14, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

³⁵This content is revised according to Item 15, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

³⁶This content is revised according to Item 16, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (1) The initial and continuing qualification requirements of Part 14, and
- (2) The requirements of Part 15 for maximum duty and flight time and minimum rest periods.

10.087 PILOT PRIVILEGES AND LIMITATIONS

- (a) A pilot may conduct operations only within the general privileges and limitations of the type of valid licence that he has been issued by CAAV.

10.090 AIRLINE TRANSPORT PILOT PRIVILEGES

- (a) When qualified and current for the aircraft category, class and type being operated, the holder of an airline transport pilot licence may:
 - (1) ³⁷Act as PIC (or co-pilot) of the aircraft in commercial air transportation certificated for operation with more than one pilot after completing the additional requirements of Part 14;
 - (2) Exercise the privileges accorded to a commercial pilot;
 - (3) Not give flight instruction unless also the holder of a specific authorisation from CAAV;
 - (4) Unless limited to VFR operations only, exercise the privileges accorded to an instrument rating for that category of aircraft; and
 - (5) When appropriate, exercise the privileges accorded to a private pilot.
- (b) ³⁸When the holder of an airline transport pilot licence in the aeroplane category has previously held only a multi-crew pilot licence, the privileges of the licence shall be limited to multi-crew operations unless the holder has met the appropriate requirements established in Section 7.203.

10.092 MULTI-CREW PILOT PRIVILEGES³⁹

- (a) The holder of a multi-crew pilot licence may exercise:
 - (1) Commercial pilot privileges while acting as a co-pilot of an aeroplane required to be operated with a co-pilot; and
 - (2) Instrument rating privileges during a multi-crew flight operation.
- (b) The holder of a multi-crew pilot license may make application to the CAAV to act the PIC of an aeroplane certificated for single-pilot operation only after completion of the requirements of Section 7.203 for the exercise of:
 - (1) Commercial pilot privileges;
 - (2) Instrument rating privileges; or
 - (3) Private pilot privileges.
- (c) The CAAV may exercise the option to issue one or more of the authorizations for these privileges by:
 - (1) An endorsement on the holder's multi-crew pilot licence; or

³⁷This content is revised according to Item 17(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

³⁸This content is revised according to Item 17 (b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

³⁹This content is revised according to Item 18, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) The separate issuance of a commercial or private pilot license with the appropriate ratings.

10.093 COMMERCIAL PILOT PRIVILEGES

- (a) When qualified and current for the aircraft category, class and type being operated, the holder of a commercial pilot licence may:
 - (1) Act as PIC of an aeroplane up to a maximum gross weight of 12,500 lbs or a helicopter certificated for single pilot operations in commercial air transport after completing the additional requirements of Part 14.
 - (2) Act as F/O of an aircraft in commercial air transport after completing the additional requirements of Part 14.
 - (3) Act as PIC (or F/O) of an aircraft in aerial work for remuneration and hire;
 - (4) Not give flight instruction unless also the holder of an appropriate flight instructor licence and rating;
 - (5) Accept remuneration and hire as a PIC, or F/O of an aircraft by or for a person or entity that is not AOC holder; and
 - (6) When appropriate, exercise the privileges accorded to a private pilot.
- (b) The holder of a multi-crew pilot licence may act as a:
 - (1) F/O of an aeroplane required to be operated with a F/O
 - (2) PIC with a commercial endorsement on his multi-crew pilot licence.

10.095 INSTRUMENT RATING PRIVILEGES

- (a) When qualified and current for IFR operations in the aircraft category and class being operated the holder of an instrument rating may act as a required pilot for flights IFR flights in:
 - (1) General aviation;
 - (2) Aerial work operations; and
 - (3) Commercial Air Transport as the:
 - (i) PIC (or F/O) of an aircraft with a maximum gross weight of up to 5700 kg after completing the additional requirements of Part 14.
 - (ii) F/O of an aircraft with a maximum gross weight of more than 5700 kg after completing the additional requirements of Part 14.
- (b) ⁴⁰The holder of an instrument rating shall not exercise those privileges in a multi-engined aircraft unless they have demonstrated their instruments skills in a multi-engined aircraft, including engine-out operations, as required by Section 7.113.
- (c) ⁴¹The holder of an instrument rating for one category may not exercise instrument privileges in another category of aircraft, unless they have completed the requirements in each category.

⁴⁰This content is revised according to Item 19(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁴¹This content is revised according to Item 19(b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.097 ⁴² PRIVATE PILOT PRIVILEGES AND LIMITATIONS

- (a) When qualified and current for the aircraft category, class and type being operated, the holder of a private pilot licence may operate that aircraft, as prescribed in this Subsection.
- (b) A private pilot may not act as a required crew member of an aircraft carrying passengers or property for compensation or hire or for the purpose of flight instruction.
- (c) Before exercising the private pilot privileges at night, the licence holder shall have received dual instruction in aircraft within the appropriate category of aircraft in night flying, including take-off, landing and navigation.

10.100 STUDENT PILOT - GENERAL LIMITATIONS

- (a) A student pilot may not act as PIC of an aircraft:
 - (1) That is carrying a passenger;
 - (2) That is carrying property for compensation or hire
 - (3) That is operated for compensation or hire;
 - (4) In furtherance of a business;
 - (5) On an international flight, unless by special or general arrangement between the States concerned⁴³;
 - (6) With a flight or surface visibility of less than 9 km (5 sm) during daylight hours;
 - (7) When the flight cannot be made with visual reference to the surface; or
 - (8) In a manner contrary to any limitations placed in the student pilot's logbook by an authorised instructor.
- (b) A student pilot may not act as a required pilot flight crew member on any aircraft for which more than one pilot is required by the aircraft type certificate or by the Part under which the flight is conducted, except when receiving flight training from an authorised instructor on board an airship, and no person other than a required flight crew member is carried on the aircraft.

10.103 STUDENT PILOT SOLO FLIGHT LIMITATIONS

- (a) A student pilot may not operate an aircraft in solo flight unless that pilot has been trained and satisfactorily demonstrated the knowledge and proficiency requirements of:
 - (1) Part 7.177 for solo flight; and
 - (2) For solo cross-country flights, 7.179; and
 - (3) Been so endorsed in his or her logbook by a flight instructor.

⁴²This content is revised according to Item 4, Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

⁴³This content is revised according to Item 21, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (b) A student pilot may not operate an aircraft in solo flight unless that student pilot has received within the 90 calendar days preceding the date of the flight an endorsement from an authorised instructor for the specific make and model aircraft to be flown made.
 - (1) On his or her student pilot licence; and
 - (2) In the student's logbook.
- (c) A student pilot may not operate an aircraft in solo flight at night.
- (d) A student pilot may not operate an aircraft in solo cross-country flights of more than 40 km (25 sm) unless the flight planning has been reviewed by a flight instructor and student pilot's logbook has been endorsed by the instructor for the flight(s) as provided in 7.179 of Part 7.

10.105 FLIGHT INSTRUCTOR PRIVILEGES AND LIMITATIONS⁴⁴

- (a) A flight instructor is authorised within the limitations of that person's flight instructor licence and ratings, and pilot licence and ratings, to give training and endorsements that are required for, and relate to:
 - (1) A student pilot licence, including the supervision of solo flights;
 - (2) A pilot licence;
 - (3) A flight instructor licence;
 - (4) A ground instructor licence;
 - (5) An aircraft category, class or type rating;
 - (6) An instrument rating;
 - (7) A flight review, operating privilege, or recency of experience requirement;
 - (8) A skill test; and
 - (9) A knowledge test.
- (b) The requirements for records of flight instructors are prescribed in Appendix 1 to 10.105.
- (c) The limitations imposed on flight instructors are prescribed in Appendix 2 to 10.105.
- (d) Except as provided in this sub-section, no person other than the holder of a flight instructor licence with appropriate rating may:
 - (1) Give training required to qualify a person for solo flight and solo cross-country flight;
 - (2) Endorse an applicant for a pilot license, flight instructor, or ground instructor licence or rating issued under this part;
 - (3) Endorse a pilot logbook to show training given; or
 - (4) Endorse a student pilot licence and logbook for solo operating privileges.
- (e) Provided that the flight instructor:
 - (1) Holds at least the licence and rating for which instruction is being given, in the appropriate aircraft category;

⁴⁴This content is revised according to Item 22, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) Holds the licence and rating necessary to act as the pilot-in-command of the aircraft on which the instruction is given; and
- (3) Has the authorization of the CAAV as either:
 - (i) A valid flight instructor license; or
 - (ii) An endorsement of flight instructor privileges entered on the holder's pilot licence.
- (f) In order to carry out instruction for the multi-crew pilot licence, the flight instructor shall have also met all the instructor qualification requirements.
- (g) The following licence holders may be endorsed by the CAAV to conduct flight instruction:
 - (1) The holder of a commercial pilot licence with a lighter-than-air rating, provided the training is given in a lighter-than-air aircraft;
 - (2) ⁴⁵The holder of an airline transport pilot licence with appropriate ratings, provided the training is conducted in accordance with an approved training program under Part 7 and Part 14;
 - (3) ⁴⁶Provided the training is conducted at an approved training organization under Part 9;
 - (4) The holder of a ground instructor licence in accordance with the privileges of the licence.

10.107 FLIGHT ENGINEER PRIVILEGES AND LIMITATION

- (a) No person may act as a flight engineer of a civil aircraft of Vietnam registry unless he or she has a flight engineer licence with appropriate ratings.
- (b) The holder of a flight engineer licence with the appropriate rating is authorised to perform those duties on those aircraft that require a flight engineer for the operation of the aircraft under the type certificate.
- (c) A flight engineer in commercial air transport operations must also be qualified and current in accordance with Part 14 requirements.

10.108 FLIGHT NAVIGATOR PRIVILEGES AND LIMITATIONS

- (a) No person may act as a flight navigator of a civil aircraft of Vietnam registry unless he or she has a flight navigator licence with appropriate ratings.
- (b) The holder of a flight navigator licence with the appropriate rating is authorised to perform those duties on those aircraft that require a flight navigator for the operation of the aircraft.
- (c) A flight navigator in commercial air transport operations must also be qualified and current in accordance with Part 14 requirements.

⁴⁵This content is revised according to Item 5, Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

⁴⁶This content is revised according to Item 5, Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

SUBPART D: CREW MEMBER DUTIES AND RESPONSIBILITIES

10.110 AUTHORITY AND RESPONSIBILITY OF THE PIC

- (a) The PIC shall be responsible for the operations and safety of the aircraft and for the safety of all persons and property on board when the:
 - (1) Doors are closed, if installed; and
 - (2) The aircraft is ready to move for the purpose of taking off until the moment it finally comes to rest at the end of the flight with the primary propulsion units shut down and any propellers or rotor blades have stopped turning.
- (b) The PIC of an aircraft shall have final authority as to the operation of the aircraft while he or she is in command.
- (c) The PIC of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with the rules of the air, except that the PIC may depart from these rules in emergency circumstances that render such departure absolutely necessary in the interests of safety.
- (d) ⁴⁷Nothing in these regulations shall relieve the pilot-in-command of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories provided by ACAS equipment, as will best avert collision.

10.113 DESIGNATION OF PIC FOR COMMERCIAL AIR TRANSPORT ⁴⁸

- (a) For each flight, a PIC shall be designated, in writing or computer assignment, by:
 - (1) AOC holders for commercial air transport operations;
 - (2) General aviation operators; and
 - (3) Operators subject to the requirements of Part 23 of these regulations.
- (b) The PIC shall ensure that qualified flight crew members are assigned to each required flight crew position and are at their station before initiating the pre-start checklists.
- (c) The PIC shall ensure that qualified cabin crew members are assigned to each required cabin crew position and are at their station before initiating the pre-start checklists, but may delegate that responsibility to the senior cabin crew member where more than 2 cabin crew members are required.
- (d) No operator may assign a crew member that is not qualified to perform the necessary duties and functions:
 - (1) That are required for their assigned station; and
 - (2) In an emergency or in a situation requiring emergency evacuation.

⁴⁷This content is revised according to Item 23, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁴⁸This content is revised according to Item 24, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.114 OPERATIONAL CONTROL⁴⁹

- (a) The PIC shall have responsibility for operational control for all general aviation and aerial work operations.
- (b) For commercial air transport operations, the operational control requirements of Part 16 shall apply.

10.115 COMPLIANCE WITH LOCAL REGULATIONS

- (a) All crew members shall comply with the relevant laws, regulations and procedures of the States in which the aircraft is operated.
- (b) ⁵⁰All crew members shall bring their crew identity cards issued by CAAV in compliance with Annex 9 to the Chicago Convention when they are on duties and meet the requirements of the States in which the aircraft is operated.

Note: See Appendix 1 to 10.115 for more information of regulations of issuing crew identity cards.

- (c) If an emergency situation which endangers the safety of the aircraft or persons necessitates the taking of action which involves a violation of local regulations or procedures, the PIC shall:
 - (1) Notify the appropriate local authority without delay;
 - (2) Submit a report of the circumstances, if required by the State in which the incident occurs; and
 - (3) Submit a copy of this report to CAAV.
- (d) Each PIC shall submit reports specified in paragraph (c) to CAAV within 10 calendar days in the form prescribed.

10.117 FITNESS OF FLIGHT CREW MEMBERS

- (a) No person may act as PIC or in any other capacity as a required flight crew member when they are aware of any decrease in their medical fitness which might render them unable to safely exercise the privileges of his or her licence.
- (b) The PIC shall be responsible for ensuring that a flight is not:
 - (1) Commenced if any flight crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, the effects of alcohol or drugs; or
 - (2) Continued beyond the nearest suitable aerodrome if a flight crew members' capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness or lack of oxygen.

10.120 USE OF PSYCHOACTIVE SUBSTANCES

- (a) No person may act or attempt to act as a crew member of a civil aircraft:

⁴⁹This content is added according to Item 25, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁵⁰This content is revised according to Item 6, Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

- (1) ⁵¹Having a blood alcohol concentration in excess of 0.02% (0.2 grams alcohol per liter blood) or a breath alcohol concentration in excess of 90 micrograms of alcohol per liter of breath at the start of duty time;
 - (2) While under the influence of alcohol; or
 - (3) While using any psychoactive substance that might render them unable to safely and properly exercise their duties.
- (b) A crew member shall, on request of a law enforcement officer or CAAV, yield to a test to indicate the presence of alcohol or psychoactive substances in the blood at any time:
- (1) Up to 8 hours before acting as a crew member,
 - (2) Immediately after attempting to act as a crew member, or
 - (3) Immediately after acting as a crew member.

Note: The prescribed limits for these tests are found in Part 1 of these Regulations.

- (c) No crew member of a civil aircraft may engage in any problematic use of psychoactive substances.

Note: See Appendix 1 to 10.120 for specific requirements pertaining to testing for alcohol or narcotics.

- (d) ⁵²The operators shall develop and implement their drug and alcohol testing programs in the aviation workplace that aims to identify and control the problematic use of psychoactive substances by aviation personnel while performing safety-critical duties.

10.123 CREW MEMBER USE OF SEAT BELTS AND SHOULDER HARNESSSES

- (a) Each crew member shall have his or her seat belts fastened during takeoff and landing and all other times when seated at his or her station.
- (b) Each crew member occupying a station equipped with a shoulder harness shall fasten that harness during takeoff and landing.
- (c) Each occupant of a seat equipped with a combined safety belt and shoulder harness shall have the combined safety belt and shoulder harness properly secured about that occupant during takeoff and landing and be able to properly perform assigned duties.
- (d) At each unoccupied seat, the safety belt and shoulder harness, if installed, shall be secured so as not to interfere with crew members in the performance of their duties or with the rapid egress of occupants in an emergency.

10.125 FLIGHT CREW MEMBERS AT DUTY STATIONS

- (a) Each required flight crew member shall remain at the assigned duty station during take-off and landing and critical phases of flight.

⁵¹This content is revised according to Item 7(a), Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

⁵²This content is added according to Item 7(b), Appendix VII to Circular No. 09/2023/TT-BGTVT dated 09 June 2023.

- (b) ⁵³The AOC holder shall have in their operations manual a requirement to have at least two pilots or one pilot with one crew member in the cockpit during all phases of flight unless:
- (1) Absence is necessary for the performance of his or her duties in connection with the operation;
 - (2) Absence is necessary for physiological needs, provided one qualified pilot remains at the controls at all times; or
 - (3) The crew member is taking a rest period and a qualified relief crew member replaces him or her at the duty station.

Note: See Appendix 1 to 10.125 for specific requirement pertaining to qualified relief crew members.

10.127 REQUIRED CREW MEMBER EQUIPMENT

- (a) Each crew member involved in night operations shall have a flashlight at his or her station.
- (b) Each pilot crew member shall have at his or her station an aircraft checklist containing at least the pre-takeoff, after takeoff, before landing and emergency procedures.
- (c) Each pilot crew member shall have at his or her station current and suitable charts to cover the route of the proposed flight and any route along which it is reasonable to expect that the flight may be diverted.
- (d) Each pilot crew member wearing sunglasses will ensure that any sunglasses worn during the exercise of airman privileges are non-polarizing and of a neutral gray tint.

10.130 REQUIRED CORRECTIVE LENSES

- (a) Each flight crew member assessed as fit to exercise the privileges of a licence subject to the use of suitable correcting lenses, shall use those lenses or have them immediately available when performing as a required crew member.
- (b) Each flight crew member assessed as fit to exercise the privileges of a licence subject to the use of suitable correcting lenses, shall have a spare set of the correcting spectacles readily available when performing as a required crew member in commercial air transport.
- (c) If near correction for distances other than those tested for the medical certificate are necessary for visual flight deck tasks, the applicant shall obtain and use such lenses in the medical evaluation.

10.133 COMPLIANCE WITH CHECKLISTS

- (a) ⁵⁴The PIC and the operator shall ensure that the flight crew:
 - (1) Has checklists for each phase of flight and emergencies available in the cockpit;

⁵³The content is revised according to Item 26, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁵⁴This content is revised according to Item 27(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) Uses these checklists prior to, during and after each phase of flight and emergencies.
- (b) All members of the flight crew shall use the checklists prior to, during and after all phases of operations and in an emergency to ensure compliance with the:
 - (1) operating procedures contained in the aircraft operating manual; and
 - (2) the flight manual; or
 - (3) other documents associated with the certificate of airworthiness; and
 - (4) otherwise in the operations manual.
- (c) ⁵⁵The design and utilization of checklists shall observe Human Factors principles.

10.135 SEARCH AND RESCUE INFORMATION

- (a) For all international flights, the PIC shall have on board the aircraft essential information concerning the search and rescue services in the areas over which they intend to operate the aircraft.
- (b) ⁵⁶Operators subject to the requirements of Parts 12 or 23 of these regulations shall ensure that the pilot-in-command has available on board the aeroplane all the essential information concerning the search and rescue services in the area over which the aeroplane will be flown.

10.137 PRODUCTION OF AIRCRAFT AND FLIGHT DOCUMENTATION

- (a) The PIC shall, within a reasonable time of being requested to do so by a person authorised by CAAV, produce to that person the documentation required to be carried on the aircraft.

10.140 LOCKING OF FLIGHT DECK COMPARTMENT DOOR: COMMERCIAL AIR TRANSPORT

- (a) The PIC shall ensure that the flight deck compartment door (if installed) is locked during passenger-carrying commercial air transport operations from the time all external doors are closed following embarkation until any such door is opened for disembarkation except when necessary to permit access and egress by authorised persons and to provide for emergency evacuation.
- (b) ⁵⁷No person shall unlock the flight deck compartment door in flight unless they have used the means of monitoring the door area to identify persons requesting entry.

10.143 ADMISSION TO THE FLIGHT DECK: COMMERCIAL AIR TRANSPORT

- (a) No person may admit any person to the flight deck of an aircraft engaged in commercial air transport operations unless the person being admitted is:
 - (1) An operating crew member;

⁵⁵This content is revised according to Item 27 (b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁵⁶This content is revised according to Item 28, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁵⁷This content is revised according to Item 29, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) A representative of CAAV responsible for certification, licencing or inspection, if this is required for the performance of his or her official duties; or
 - (3) Permitted by and carried out in accordance with instructions contained in the Operations Manual.
- (b) The PIC shall ensure that:
- (1) In the interest of safety, admission on the flight deck does not cause distraction and/or interference with the flight's operations; and
 - (2) All persons carried on the flight deck are made familiar with the relevant safety procedures.

10.145 ADMISSION OF INSPECTOR TO THE FLIGHT DECK

- (a) Whenever, in performing the duties of conducting an inspection, an inspector from CAAV presents an Aviation Safety Inspector's Credential issued by CAAV to the PIC, the PIC shall give the inspector free and uninterrupted access to the flight deck of the aircraft.

10.147 DUTIES DURING CRITICAL PHASES OF FLIGHT: COMMERCIAL AIR TRANSPORT

- (a) No flight crew member may perform any duties during a critical phase of flight except those required for the safe operation of the aircraft.
- (b) No PIC may permit a flight crew member to engage in any activity during a critical phase of flight which could distract or interfere with the performance of their assigned duties.

10.150 FLIGHT DECK COMMUNICATIONS

- (a) Each required flight crew member shall use an anti-noise or throat microphone to communicate with each other and air traffic service below the transition area or 3,000 m (10,000 ft), whichever is lower.

10.153 MANIPULATION OF THE CONTROLS: COMMERCIAL AIR TRANSPORT

- (a) No PIC may allow an unqualified person to manipulate the controls of an aircraft during commercial air transport operations.
- (b) No person may manipulate the controls of an aircraft during commercial air transport operations unless he or she is qualified to perform the applicable crew member functions and is authorised by the AOC holder.

10.155 RESPONSIBILITY FOR REQUIRED DOCUMENTS ON BOARD

- (a) The PIC shall ensure that all documents required for each specific flight operations by subsection 10.030, 10.033 and/or 10.035 are carried on board the aircraft.
- (b) ⁵⁸For international flights, the PIC shall ensure the completion of:
 - (1) Journey log book, including the particulars of each journey; and

⁵⁸This content is revised according to Item 30, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) General declaration and its safekeeping and delivery.

10.157 COMPLETION OF THE AIRCRAFT TECHNICAL LOGBOOK: COMMERCIAL AIR TRANSPORT

- (a) The PIC shall ensure that all portions of the technical logbook are completed at the appropriate points before, during and after flight operations.

10.160 REPORTING MECHANICAL IRREGULARITIES

- (a) At the termination of the flight, the PIC shall ensure that all known or suspected defects discovered in flight are:
- (1) For general aviation operations, reported in writing to the operator of the aircraft.
 - (2) For commercial air transport operations, entered in the technical log of the aircraft;
- (b) No person may allow or participate in the operation of an aircraft unless these defects are properly corrected or deferred in accordance with an approved MEL or Manufacturer's technical data prior to the flight.

10.163 REPORTING OF FACILITY AND NAVIGATION AIR INADEQUACIES

- (a) Each crew member shall report, without delay, any inadequacy or irregularity of a facility or navigational aid observed in the course of operations to the person responsible for that facility or navigational aid.

10.165 REPORTING OF WEATHER AND HAZARDOUS CONDITIONS⁵⁹

- (a) The flight crews should record and report on routine meteorological observation during departure and en- route and climb-out phases of the flight and special and other non-routine observations during any phase of the flight.
- (b) When making a meteorological report in flight, a pilot should follow the procedures for recording and reporting such observations in a consistent manner.
- (c) The PIC shall report to the appropriate ATC facility, without delay and with enough detail to be pertinent to the safety of other aircraft, any hazardous flight conditions encountered en route, including those associated with:
- (1) Meteorological conditions;
 - (2) Volcanic activity; and
 - (3) Any other report prescribed by the CAAV.
- (d) The pilot-in-command shall report the runway braking action special air-report (AIREP) when the runway braking action encountered is not as good as reported.

⁵⁹This content is revised according to Item 5, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

10.167 REPORTING OF INCIDENTS

- (a) PIC of a commercial air transport operation with a maximum gross weight of up to 5700 kg, or helicopter up to 3180 kg must submit incidents and accidents report according to prescribed in Annex 01 and 04 to Decree 75/2007/ND-CP on May 09th, 2007 of the Government for investigation of civil aircraft's incidents and accidents; and
- (b) Air traffic report. The PIC shall submit, without delay, an air traffic incident report whenever an aircraft in flight has been endangered by:
 - (1) A near collision with another object or aircraft;
 - (2) Faulty air traffic procedures or lack of compliance with applicable procedures by ATC or by the flight crew; or
 - (3) A failure of ATC facilities.
- (c) Birds strike. In the event a bird constitutes an in-flight hazard or an actual bird strike the PIC shall, without delay:
 - (1) Inform the appropriate ground station whenever a potential bird hazard is observed; and
 - (2) Submit a written bird strike report after landing.
- (d) Dangerous Goods. The PIC shall inform the appropriate ATC facility, if the situation permits, when an in-flight emergency occurs involving dangerous goods on board.
- (e) Unlawful Interference. The PIC shall submit a report to the local authorities and to CAAV, without delay, following an act of unlawful interference with the crew members on board an aircraft.
- (g) ⁶⁰Voluntary report: flight crew shall report in accordance with Part 19.

10.170 ACCIDENT NOTIFICATION

- (a) The PIC shall notify the nearest appropriate authority, by the quickest available means, of any accident involving his or her aircraft that results in serious injury or death of any person, or substantial damage to the aircraft or property.
- (b) The PIC shall submit a report to CAAV of any accident which occurred while he or she was responsible for the flight.
- (c) ⁶¹In the event that the pilot is incapacitated, the operator of the aircraft shall make this accident notification and complete the accident report.

10.173 OPERATION OF FLIGHT DECK VOICE AND FLIGHT DATA RECORDERS

- (a) The PIC shall ensure that flight recorders are operated continuously from the instant:
 - (1) For a flight data recorder, the aircraft begins its takeoff roll until it has completed the landing roll, and

⁶⁰This content is revised according to Item 31, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁶¹This content is revised according to Item 32, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) For a flight deck voice recorder, the initiation of the pre-start checklist until the end of the securing aircraft checklist.
- (b) The PIC may not permit a flight data recorder or flight deck voice recorder to be disabled, switched off or erased during flight, unless necessary to preserve the data for an accident or incident investigation.
- (c) In event of an accident or incident, the PIC shall act to preserve the flight recorder records and recorded data and ensure their retention in safe custody as determined by the accidents and incidents investigating Authority as prescribed.
- (d) The flight recorders shall not be reactivated before their disposition is determined by the investigating Authority.

10.175 CREW MEMBER: MINIMUM OXYGEN SUPPLY & USE

- (a) The PIC shall ensure that breathing oxygen and masks are available to crew members in sufficient quantities for all flights at such altitudes where a lack of oxygen might result in impairment of the faculties of crew members.
- (b) In no case shall the minimum supply of oxygen on board the aircraft be less than that prescribed by CAAV.

Note: The requirements for oxygen supply and use are prescribed in Part 6.

- (c) ⁶²The PIC shall ensure that all flight crew members, when engaged in performing duties essential to the safe operation of an aircraft in flight, use breathing oxygen continuously at cabin altitudes exceeding 700 hPa (10,000 ft) for a period in excess of 30 minutes and whenever the cabin altitude exceeds 620 hPa (13,000 ft).
- (d) One pilot at the controls of a pressurised aircraft in flight shall wear and use an oxygen mask:
 - (1) For general aviation operations, at flight levels above FL 350, if there is no other pilot at their duty station.
 - (2) ⁶³(removed)

10.176 WEARING OF SURVIVAL SUITS⁶⁴

- (a) For commercial air transport helicopter operations off-shore, a survival suit shall be worn by every occupant when the:
 - (1) Sea temperature is less than 10 degrees Centigrade; or
 - (2) Estimated rescue time exceeds the calculated survival time based on the sea state and ambient flight conditions.
- (b) The crew may not comply with the provisions of paragraph a of this Article when the high level and intensity of the sun in a high temperature environment are hazardous on the landing deck.

⁶²This content is revised according to Item 33, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁶³This content is revised according to Item 6, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

⁶⁴This content is revised according to Item 34, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.177 PORTABLE ELECTRONIC DEVICES

- (a) No PIC or SCA may permit any person to use, nor may any person use a portable electronic device on board an aircraft that may adversely affect the performance of aircraft systems and equipment unless:
 - (1) For IFR operations other than commercial air transport, the PIC allows such a device prior to its use; or
 - (2) For commercial air transport operations, the AOC holder makes a determination of acceptable devices and publishes that information in the Operations Manual for the crew members use;
 - (3) The PIC informs passengers of the permitted use; and
 - (4) ⁶⁵Procedures to use the portable electronic device onboard shall be in accordance with ICAO circular 340.

10.178 ELECTRONIC FLIGHT BAG [EFB]⁶⁶

- (a) Where portable EFBs are used on board, the pilot-in-command and/or the operator/owner shall ensure that they do not affect the performance of the aeroplane systems, equipment or the ability to operate the aeroplane.
- (b) Where EFBs are used on board an aeroplane the pilot-in-command and/or the owner/operator shall:
 - (1) Assess the safety risk(s) associated with each EFB function;
 - (2) Establish the procedures for the use of, and training requirements for, the device and each EFB function; and
 - (3) Ensure that, in the event of an EFB failure, sufficient information is readily available to the flight crew for the flight to be conducted safely.

10.180 CARRIAGE OF DANGEROUS GOODS

- (a) No person shall load or cause to load any goods on an aircraft which that person knows or ought to know or suspect to be dangerous goods, unless this act is in conformance with the requirements of Part 18 regarding carriage of dangerous goods by air.
- (b) ⁶⁷No person shall carry dangerous goods unless the details of that information are included in the flight plan and proper notification has been made to both the appropriate authorities at the intermediate and destination aerodromes.
- (c) ⁶⁸No person shall carry dangerous goods in an aircraft registered in Vietnam or operated in Vietnam except:
 - (1) With the written permission of the CAAV and in accordance with the regulations and/or conditions set by the CAAV in granting such permission; and

⁶⁵This content is revised according to Item 35, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁶⁶This content is revised according to Item 36, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁶⁷This content is revised according to Item 37, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁶⁸This content is revised according to Item 37, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) In accordance with the Technical Instructions for the Safe Transport of Dangerous Goods by Air issued by the Council of International Civil Aviation Organization and with any variations to those instructions that the CAAV may from time-to-time mandate and provide notification of to ICAO.

10.183 COMPLIANCE WITH SECURITY PROGRAMME⁶⁹

- (a) The PIC shall be responsible for the security of the aircraft during its operation.
- (b) No person shall commence a flight unless all requirements of the operator security programme have been completed.
- (c) Each operator shall establish, implement and maintain a written operator security programme that meets the requirements of the national civil aviation security program and includes the accepted industry codes of practice for such programmes.

10.185 RECORDS OF EMERGENCY EQUIPMENT, LIFE-SAVING EQUIPMENT⁷⁰

- (a) The owner of the aircraft, or in the case where it is leased, the lessee, shall at all times have available for immediate communication to rescue co-ordination centres, lists containing information on the emergency and survival equipment carried on board any of their aircraft.
- (b) This information shall include, as applicable, the:
 - (1) Number, colour and type of life rafts and pyrotechnics,
 - (2) Details of emergency medical supplies,
 - (3) Water supplies and
 - (4) Type and frequencies of the emergency portable radio equipment.
- (c) The PIC shall determine that this information is immediately available from the owner (or operator) before commencing flight overwater or remote areas.

SUBPART E: ALL PASSENGER CARRYING OPERATIONS BY AIR

19.190 APPLICABILITY

- (a) This Subpart applies to all passenger-carrying operations in civil aircraft.
- (b) Operators of aircraft with passenger seating capacity of more than 19 passengers are also comply with the additional requirements contained in Part 13.

10.193 UNACCEPTABLE CONDUCT

- (a) No person on board may interfere with a crew member in the performance of his or her duties.
- (b) Each passenger shall fasten his or her seat belt and keep it fastened while the seat belt sign is lighted.

⁶⁹This content is revised according to Item 38, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁷⁰This content is revised according to Item 39, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (c) No person on board an aircraft shall recklessly or negligently act or omit to act in such a manner as to endanger the aircraft or persons and property therein.
- (d) No person may secrete himself or herself nor secrete cargo on board an aircraft.
- (e) No person may smoke while the no-smoking sign is lighted.
- (f) No person may smoke in any aircraft lavatory.
- (g) No person may tamper with, disable or destroy any smoke detector installed in any aircraft lavatory.

10.195 FUELING WITH PASSENGERS ON BOARD⁷¹

- (a) No PIC may allow an aircraft to be refuelled when passengers are embarking, on board or disembarking unless:
 - (1) The aircraft is manned by qualified personnel ready to initiate and direct an evacuation; and;
 - (2) Two-way communication is maintained between the qualified personnel in the aircraft and the ground crew supervising the refuelling.
- (b) Helicopters: no person will allow a helicopter to be refuelled, rotors stopped or turning, when:
 - (1) passengers are embarking or disembarking; or
 - (2) when oxygen is being replenished.
- (c) The PIC shall exercise extra precautions when the fuel is other than aviation kerosene or when an open line is used.
- (d) The operator shall establish procedures and specify conditions under which such refuelling may be carried out.
- (đ) No person will allow a helicopter to be refuelled with AVGAS (aviation gasoline) or wide-cut type fuel or a mixture of these types of fuel, when passengers are on board.
- (e) Detailed requirement for refuelling with passenger on board listed on Appendix 1 to 10.195.
- (g) No person may allow a helicopter to be defueled at any time when:
 - (1) passengers remain on board; or
 - (2) passengers are embarking or disembarking; or
 - (3) oxygen is being replenished

Note: See Appendix 1 to 10.195 for detailed requirements of refueling when passengers are embarking, onboard or disembarking.

⁷¹This content is revised according to Item 1, Appendix VII to Circular 56/2018/TT-BGTVT dated 30 Jan 2019.

10.197 PASSENGER SAFETY

- (a) The PIC shall ensure that each person on board occupies an approved seat or berth with their own individual safety belt and shoulder harness (if installed) properly secured about them during movement on the surface, takeoff and landing.
- (b) Each passenger shall have his or her seat belt securely fastened at any other time the PIC determines it is necessary for safety, especially during turbulence or emergency.
- (c) A safety belt provided for the occupant of a seat may not be used during takeoff and landing by more than one person who has reached his or her second birthday.
- (d) All carry-on baggage must be stowed for takeoff and landing.
- (e) All cargo carried in the passenger cabin shall be restrained through the use of straps or nets attached to the airframe.
- (g) ⁷²All crew members understand and are capable of performing their assigned emergency duties related to emergency evacuation and passenger safety.

10.200 PASSENGER BRIEFING

- (a) The PIC shall ensure that crew members and passengers are made familiar, by means of an oral briefing or by other means, with the location and use of the following safety and emergency equipments, if appropriate:
 - (1) Seat belts;
 - (2) Emergency exits;
 - (3) Life jackets;
 - (4) Oxygen dispensing equipment; and
 - (5) Other emergency equipment provided for individual use, including passenger emergency briefing cards.
- (b) The PIC shall ensure that all persons on board are aware of the locations and general manner of use of the principal emergency equipment carried on board.
- (c) ⁷³For commercial air transport operations, the briefing shall contain all subjects approved by CAAV for the specific operations conducted as included in the pertinent Operations Manual.
- (d) ⁷⁴When cabin attendants are required in a commercial air transport operation, the PIC may delegate this responsibility, but shall ascertain that the proper briefing has been conducted prior to takeoff.

10.203 IN-FLIGHT EMERGENCY INSTRUCTION

- (a) In an emergency during flight, the PIC shall ensure that all persons on board are instructed in such emergency action as may be appropriate to the circumstances.

⁷²This content is revised according to Item 40, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁷³This content is revised according to Item 41, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁷⁴This content is revised according to Item 41, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (b) When cabin attendants are required in a commercial air transport operation, the PIC may delegate this responsibility, but shall ascertain that the proper briefing has been conducted.

10.205 PASSENGER OXYGEN: MINIMUM SUPPLY AND USE

- (a) The PIC shall ensure that breathing oxygen and masks are available to passengers in sufficient quantities for all flights at such altitudes where a lack of oxygen might harmfully effect passengers.
- (b) ⁷⁵No person may commence a flight that is intended for operations above an altitude of 700 hpa unless the minimum supply of stored breathing oxygen carried on board the aircraft is:
 - (1) For non-pressurized aircraft:
 - (i) Sufficient for 10 per cent of the passengers for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hPa and 620 hPa
 - (ii) Sufficient for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa.
 - (2) For pressurized aircraft:
 - (i) Sufficient to supply all passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressurization, for any period that the atmospheric pressure in any compartment occupied by them would be less than 700 hPa; and
 - (ii) In addition, when an aeroplane is operated at flight altitudes at which the atmospheric pressure is less than 376 hPa; or
 - (iii) Which, if operated at flight altitudes at which the atmospheric pressure is more than 376 hPa and cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hPa, there shall be no less than a 10- minute supply for the occupants of the passenger compartment.
 - (3) The requirements for oxygen storage and dispensing apparatus are prescribed in Part 6.
- (c) The PIC shall require all passengers to use oxygen continuously at cabin pressure altitudes above 15,000 feet.

10.207 ALCOHOL AND DRUGS

- (a) No person may permit the boarding or serving of any person who appears to be intoxicated or who demonstrates, by manner or physical indications, that the person is under the influence of drugs (except a medical patient under proper care).

⁷⁵This content is revised according to Item 42, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

SUBPART F: FLIGHT PLANS

10.210 SUBMISSION A FLIGHT PLAN

- (a) Information relative to an intended flight or portion of a flight, to be provided to air traffic services units, shall be in the form of a flight plan.
- (b) Prior to operating one of the following, a pilot shall file a VFR or IFR flight plan, as applicable, for:
 - (1) Any flight (or portion thereof) to be provided with air traffic control service;
 - (2) Any IFR flight within advisory airspace;
 - (3) Any flight within or into designated areas, or along designated routes, when so required by the appropriate ATC authority to facilitate the provision of flight information, alerting and search and rescue services;
 - (4) Any flight within or into designated areas, or along designated routes, when so required by the appropriate ATC authority to facilitate co-ordination with appropriate military units or with ATC facilities in adjacent states in order to avoid the possible need for interception for the purpose of identification; and
 - (5) Any flight across international borders.
- (c) The PIC shall submit a flight plan before departure or during flight, to the appropriate ATC facility, unless arrangements have been made for submission of repetitive flight plans.
- (d) Unless otherwise prescribed by the appropriate ATC authority, a pilot should submit a flight plan to the appropriate ATC facility:
 - (1) At least sixty minutes before departure; or
 - (2) If submitted during flight, at a time which will ensure its receipt by the appropriate ATC facility at least ten minutes before the aircraft is estimated to reach:
 - (i) The intended point of entry into a control area or advisory area; or
 - (ii) The point of crossing an airway or advisory route.

10.213 AIR TRAFFIC CONTROL FLIGHT PLAN: COMMERCIAL AIR TRANSPORT

- (a) No person may takeoff an aircraft in commercial air transport if an ATC flight plan has not been filed, except as authorised by CAAV.

10.215 CONTENTS OF A FLIGHT PLAN

- (a) Each person filing an IFR or VFR flight plan shall include in it the following information:
 - (1) Aircraft identification;
 - (2) Flight rules and type of flight;
 - (3) Number and type(s) of aircraft and wake turbulence category;

- (4) Equipment;
 - (5) Departure aerodrome and alternate (if required);
 - (6) Estimated off-block time;
 - (7) Cruising speed(s);
 - (8) Cruising level(s);
 - (9) Route to be followed;
 - (10) Destination aerodrome and alternate (if required);
 - (11) Fuel endurance;
 - (12) Total number of persons on board;
 - (13) Emergency and survival equipment; and
 - (14) Other information.
- (b) Whatever the purpose for which it is submitted, a flight plan shall contain information, as applicable, on relevant items up to and including “Alternate aerodrome(s)” regarding the whole route or the portion thereof for which the flight plan is submitted.
- (c) It shall, in addition, contain applicable information on all other items when so prescribed by the appropriate ATS authority or when otherwise deemed necessary by the person submitting the flight plan.

*Note: (removed)*⁷⁶

10.217 PLANNED RECLEARANCE⁷⁷

- (a) No person shall commence a flight, if prior to departure it is anticipated that depending on fuel endurance decision may be taken request clearance to proceed to a revised destination aerodrome, unless the flight plan submitted to the appropriate ATC unit contains information concerning the revised route (where known) and the revised destination.
- (b) No person may plan to change destinations in flight unless there is adequate fuel on board to comply the required fuel requirements from the point of re-planning and ATC has been notified of the planned change and, in the case of IFR flight, an ATC clearance to the revised destination has been received.

10.220 CHANGES TO A FLIGHT PLAN

- (a) When a change occurs to a flight plan submitted for an IFR flight or a VFR flight operated as a controlled flight, the pilot shall report that change as soon as practicable to the appropriate ATC facility.
- (b) For VFR flights other than those operated as controlled flight, the PIC shall report significant changes to a flight plan as soon as practicable to the appropriate ATC facility.

⁷⁶This Note is removed according to Item 7, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

⁷⁷This content is revised according to Item 43, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (c) Where information submitted prior to departure regarding fuel endurance or total number of persons carried on board is incorrect at time of departure, this significant change shall be reported by the PIC.

10.223 CLOSING A FLIGHT PLAN

- (a) The PIC shall make a report of arrival either in person, by radio or data link to the appropriate ATC facility at the earliest possible moment after landing at the destination aerodrome, unless ATS automatically closes a flight plan.
- (b) When a flight plan has been submitted for a portion of a flight, but not the arrival at destination, the pilot shall close that flight plan en route with the appropriate ATS facility.
- (c) When no ATS facility exists at the arrival aerodrome, the pilot shall contact the nearest ATS facility to close the flight plan as soon as practicable after landing and by the quickest means available.
- (d) When communication facilities at the arrival aerodrome are known to be inadequate and alternate arrangements for the handling of arrival reports on the ground are not available, the following action shall be taken:
 - (1) Immediately prior to landing the pilot shall, if practicable, transmit to the appropriate air traffic services unit, a message comparable to an arrival report, where such a report is required.
 - (2) Normally this transmission shall be made to the aeronautical station serving the ATS unit in charge of the flight information region in which the aircraft is operated.
- (e) Pilots shall include the following elements of information in their arrival reports:
 - (1) Aircraft nationality registration number;
 - (2) Departure aerodrome;
 - (3) Destination aerodrome (only in the case of a diversionary landing);
 - (4) Arrival aerodrome; and
 - (5) Time of arrival.

Note: Whenever an arrival report is required, failure to comply with these provisions may cause serious disruption in the air traffic services and incur great expense in carrying out unnecessary search and rescue operations.

SUBPART G: FLIGHT PLANNING AND PREPARATION

10.230 AIRCRAFT AIRWORTHINESS AND SAFETY PRECAUTIONS

- (a) The PIC may not commence a flight in a civil aircraft in flight until satisfied that:
 - (1) The aircraft is airworthy, duly registered and that appropriate certificates are aboard the aircraft;
 - (2) The instruments and equipment installed in the aircraft are appropriate, taking into account the expected flight conditions; and

- (3) Any necessary maintenance has been performed and a maintenance release, if applicable, has been issued in respect to the aircraft.
- (b) For commercial air transport operations, before commencing the flight, the PIC shall certify by signing the aircraft technical log that he or she is satisfied that the requirements of paragraph (a) have been met for a particular flight.

10.233 ADEQUACY OF OPERATING FACILITIES

- (a) No person may commence a flight unless it has been determined by every reasonable means available that the ground and/or water areas and facilities available and directly required for such flight and for the safe operation of the aircraft, are adequate, including communication facilities and navigation aids.

Note: "Reasonable means" denotes use, at the point of departure, of information available to the PIC either through official information published by the aeronautical information services or readily obtainable in other sources.

10.235 SELECTION OF VFR LANDMARKS

- (a) No person may commence a flight under VFR unless it has been determined that the flight can be conducted by visual reference to landmarks spaced no greater than 110 km (60 nm) apart.

10.237 WEATHER REPORTS AND FORECASTS

- (a) Before commencing a flight, the PIC shall be familiar with all available information, including meteorological information, appropriate to the intended flight.
- (b) The PIC shall include, during preparation for a flight away from the vicinity of the place of departure, and for every flight under the instrument flight rules:
 - (1) A careful study of available current weather reports and forecasts taking into consideration fuel requirements; and
 - (2) The planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned.

10.240 WEATHER LIMITATIONS FOR VFR FLIGHTS

- (a) No person may commence a flight to be conducted in accordance with VFR unless available current meteorological reports, or a combination of current reports and forecasts, indicate that the meteorological conditions along the route, or that part of the route to be flown under VFR, will, at the appropriate time, allow VFR operations.

10.243 IFR DESTINATION AERODROMES

- (a) For IFR flight planning purposes, no person may commence an IFR flight unless the available information indicates that the weather conditions at the aerodrome of intended landing and, if required, at least one suitable alternate at the estimated time of arrival, will be at or above the:
 - (1) Minimum ceiling and visibility values for the standard instrument approach procedure to be used; or

- (2) Minimum operating altitude, if no instrument approach procedure is to be used, that would allow a decrease in a VMC descent to the aerodrome.
- (b) ⁷⁸ For general aviation operations of large or turbojet aeroplanes, no person may:
 - (1) Takeoff from the departure aerodrome unless the meteorological conditions, at the time of use, are at or above the operator's established aerodrome operating minima for that operation; and
 - (2) Takeoff or continue beyond the point of in-flight re-planning unless at the aerodrome of intended landing or at each alternate aerodrome to be selected in compliance with Sections 10.145 through 10.253, current meteorological reports or a combination of current reports and forecasts indicate that the meteorological conditions will be, at the estimated time of use, at or above the operator's established aerodrome operating minima for that operation.
- (c) ⁷⁹ For commercial air transport operations: The weather at the destination does not have to be at or above the approach minima to release and commence a flight, as long as the designated alternate aerodrome meets the IFR weather selection criteria.

10.245 IFR DESTINATION ALTERNATE REQUIREMENT⁸⁰

- (a) Except as provided in paragraph (b), no person may commence a flight to be conducted in accordance with the instrument flight rules, unless at least one suitable destination alternate aerodrome shall be selected and specified in the:
 - (1) ATS flight plan; and
 - (2) For commercial air transport, the operational flight plan.
- (b) A destination alternate aerodrome is not required to be selected when:
 - (1) The aerodrome is isolated; or
 - (2) For the duration of the flight from the departure aerodrome, or from the point of in-flight re-planning, to the destination aerodrome, a reasonable certainty exists that at the estimated time of use (taking into account all meteorological conditions and operational information relevant to the flight):
 - (i) The approach and landing may be made under visual meteorological conditions as specified in paragraphs (d) and (e); and
 - (ii) Separate runways are usable at the estimated time of use of the destination aerodrome with at least one runway having an operational instrument approach procedure.
- (c) Two destination alternate aerodromes shall be selected and specified in the operational and ATS flight plans when, for the destination aerodrome:
 - (1) Meteorological conditions at the estimated time of use will be below the operator's established aerodrome operating minima for that operation; or

⁷⁸This content is revised according to Item 44, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁷⁹This content is revised according to Item 44, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁸⁰This content is revised according to Item 45, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) Meteorological information is not available.
- (d) No person may commence an IFR flight in an aircraft without at least one destination alternate aerodrome listed in the flight plan unless available current meteorological information indicates that the following meteorological conditions will exist from 1 hour before to 1 hour after the estimated time of arrival at the destination with a standard instrument approach:
 - (1) For an aeroplane:
 - (i) A cloud base of at least 300 meters (1,000 ft) above the minimum associated with a standard instrument approach procedure for that aerodrome; and
 - (ii) Visibility of at least 4.5 km more than the minimum associated with the procedure.
 - (2) For a helicopters:
 - (i) A cloud base of at least 120 meters (400 ft) above the minimum associated with a standard instrument approach procedure for that aerodrome;
 - (ii) Visibility of at least 1.5 km more than the minimum associated with the procedure.
- (e) No person may commence an IFR flight in an aircraft without at least one destination alternate aerodrome listed in the flight plan unless available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two hours after the estimated time of arrival at the destination with a standard instrument approach:
 - (1) A cloud base of at least 300 meters (1,000 feet) above the lowest minimum en-route altitude within 10 km of the aerodrome; and
 - (2) Visibility of 8 kilometres at the aerodrome.

10.246 ADDITIONAL REQUIREMENTS FOR ISOLATED AERODROMES ⁸¹

- (a) No person may commence a flight into an isolated aerodrome, unless a determination of the point of no return has been made and that PNR has been included in the flight plan remarks.
- (b) No person may continue a flight to an isolated aerodrome past the point of no return unless a current assessment of meteorological conditions, traffic and other operational conditions indicate that a safe landing can be made at the estimated time of use.

10.247 IFR ALTERNATE AERODROME SELECTION CRITERIA

- (a) If alternate minimums are published, no PIC may designate an alternate aerodrome in an IFR flight plan unless the current available forecast indicates that the meteorological conditions at that alternate at the ETA will be at or above those published alternate minimums.

⁸¹This content is revised according to Item 46, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (b) If alternate minimums are not published, and if there is no prohibition against using the aerodrome as an IFR planning alternate, each PIC shall ensure that the meteorological conditions at that alternate at the ETA will be at or above:
 - (1) For a precision approach procedure, a ceiling of at least 180 m (600 ft) and visibility of not less than 3 km (2 sm); or
 - (2) For a non-precision approach procedure, a ceiling of at least 240 m (800 ft) and visibility of not less than 3 km (2 sm).
- (c) For commercial air transport operations in aeroplanes, the PIC shall ensure that the meteorological conditions at that alternate 1 hour before and after the ETA are forecast to be at or above:
 - (1) For a Cat II and III approach, at least the published Category I minimums;
 - (2) For a Cat I approach, at least the published non-precision minimums;
 - (3) For a non-precision approach, at least 1,000 m above the published non-precision minimums;
 - (4) For a circling approach, at least the circling approach minimums.
- (d) ⁸²Where two destination alternates are required, the meteorological forecasts for those aerodromes:
 - (1) The first destination alternate should be forecast to be at or above the operating minima for use as a destination; and
 - (2) The second at or above the operating minima for selection as an alternate.

10.250 OFF-SHORE ALTERNATES FOR HELICOPTER OPERATIONS

- (a) No person may designate an offshore alternate landing site when it is possible to carry enough fuel to have an on-shore alternate landing site. The selection of offshore alternates shall be exceptional cases, the details of which have been approved by CAAV, and should not include payload enhancement in IMC.
- (b) Each person selecting an off-shore alternate landing site shall consider the following:
 - (1) The offshore alternate may be used only after a point of no return;
 - (2) The mechanical reliability of critical control systems and critical components.
 - (3) One engine inoperative performance capability will be obtained prior to arrival at the alternate.
 - (4) The helideck availability is guaranteed.
 - (5) The weather information at the helideck shall be available from a source approved or accepted by CAAV.
 - (6) For IFR operations, an instrument approach procedure shall be prescribed and available.

⁸²This content is added according to Item 47, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

Note: The landing technique specified in the flight manual following control system failure may preclude the selection of certain helidecks as alternate aerodromes.

10.253 TAKE-OFF ALTERNATE REQUIREMENTS⁸³

- (a) No person may release or take-off an aircraft without a suitable take-off alternate specified in the operational flight plan if either meteorological conditions at the aerodrome/heliport of departure are below the operator's established aerodrome/heliport landing minima for that operation or it would not be possible to return to the aerodrome/heliport of departure for other reasons.
- (b) Each operator shall ensure that each take-off alternate specified shall be located within the following flight time from the aerodrome/heliport of departure:
 - (1) For aircraft with two engines, one hour of flight time at a one-engine-inoperative cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; or
 - (2) For aircraft with three or more engines, two hours of flight time at the one-engine inoperative cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass;
 - (3) ⁸⁴For airplanes engaged in extended diversion time operations (EDTO) where an alternate aerodrome meeting the distance criteria of a) or b) is not available, the first available alternate aerodrome located within the distance of the operator's approved maximum diversion time considering the actual take-off mass.

10.255 MAXIMUM DISTANCE FROM AN ADEQUATE AERODROME WITHOUT AN ETOPS APPROVAL

- (a) Unless specifically approved by CAAV (ETOPS Approval), an AOC holder shall not operate a two-engined aeroplane over a route which contains a point further from an adequate aerodrome than:
 - (1) For large, turbine engine powered aeroplanes, the distance flown in 60 minutes at the one-engine-inoperative cruise speed determined in accordance with Appendix 1 to 10.257 with either:
 - (i) A maximum approved passenger seating configuration of 20 or more; or
 - (ii) A maximum take-off mass of 45360 kg or more;
 - (2) For reciprocating engine powered aeroplanes:
 - (i) The distance flown in 60 minutes at the one-engine-inoperative cruise speed determined in accordance with Appendix 1 to 10.257; or
 - (ii) 480 km (300 nm), whichever is less.

⁸³This content is revised according to Item 48, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁸⁴This content is revised according to Item 8, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

10.256 TIME CAPABILITY OF CARGO COMPARTMENT FIRE SUPPRESSION⁸⁵

No person may plan a diversion time to an aerodrome where a safe landing could be made that exceeds the published cargo compartment fire suppression time capability of the aeroplane (when one is identified in the relevant aeroplane documentation) minus an operational safety margin of 15 minutes.

10.257 MAXIMUM EN-ROUTE DIVERSION TIME TO AN ALTERNATE AERODROME⁸⁶

- (a) No person may operate an aircraft beyond the point where it could divert to a suitable alternate aerodrome that is within 60 minutes in cruising flight or a threshold time approved by the CAAV.
- (b) Operators conducting operations beyond 60 minutes from a point on a route to an en-route alternate aerodrome shall ensure that:
 - (1) En-route alternate aerodromes are identified and the most up-to-date information is provided to the flight crew on identified en-route alternate aerodromes, including operational status and meteorological conditions;
 - (2) For airplanes with two turbine engines, the most up-to-date information provided to the flight crew indicates that conditions at identified en-route alternate aerodromes will be at or above the operator's established aerodrome operating minima for the operation at the estimated time of use.
 - (3) The following are taken into account and provide the overall level of safety intended by the provisions for:
 - (i) Operational control and flight dispatch procedures;
 - (ii) Operating procedures; and
 - (iii) Training programs.

10.260 EXTENDED DIVERSION TIME OPERATIONS⁸⁷

- (a) Unless specifically approved by the CAAV (EDTO Approval), no person may operate, and no person may authorize operations of an airplane with two or more turbine engines over a route which contains a diversion time from any point on the route, calculated in ISA and still air conditions at the one-engine inoperative cruise speed for airplanes with two turbine engines and at the all-engine operating cruise speed for airplanes with more than two turbine engines, to an en-route alternate aerodrome exceeds the threshold time established for such operations by the CAAV.
- (b) The maximum diversion time, for an operator of a particular airplane type engaged in extended diversion time operations shall be approved by the CAAV before such operations.

⁸⁵This content is revised according to Item 9, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

⁸⁶This content is revised according to Item 10, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

⁸⁷This content is revised according to Item 11, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (c) No pilot may continue, and no person may authorize a flight to continue, beyond the threshold time unless the identified en-route alternate aerodromes have been re-evaluated for availability and the most up to date information indicates that, during the estimated time of use:
 - (1) Conditions at those aerodromes will be at or above the operator's established aerodrome operating minima for the operation; and
 - (2) If any conditions are identified that would preclude a safe approach and landing at that aerodrome during the estimated time of use, the PIC shall determine and implement an alternative course of action.

10.263 MINIMUM FUEL SUPPLY: GENERAL CONSIDERATIONS⁸⁸

- (a) No person may commence a flight without carrying enough usable fuel on the aircraft, to complete the planned flight safely and to allow for contingencies and deviations from the planned operation.
- (b) The amount of usable fuel to be carried shall, as a minimum, be based on:
 - (1) The following data: Current aircraft-specific data derived from a fuel consumption monitoring system, if available; or if current aircraft-specific data is not available, data provided by the aircraft manufacturer; and:
 - (2) The operating conditions for the planned flight including:
 - (i) Anticipated aircraft mass;
 - (ii) Notices to Airmen;
 - (iii) Current meteorological reports or a combination of current reports and forecasts;
 - (iv) Air traffic services procedures, restrictions and anticipated delays;
 - (v) Procedures prescribed in the operations manual for loss of pressurization en route, where applicable;
 - (vi) Failure of one power-unit en route;
 - (vii) The effects of deferred maintenance items and/or configuration deviations; and
 - (viii) Any other conditions that may delay landing of the aircraft or increase fuel and/or oil consumption.

10.265 MINIMUM FUEL SUPPLY FOR VFR FLIGHTS⁸⁹

- (a) No person may commence a flight in an aeroplane under VFR unless, (considering the wind, forecast weather conditions and contingencies), the amount of fuel to be carried permits flight:
 - (1) To the first point of planned landing; and
 - (2) Assuming normal cruising altitude, to have a final reserve fuel after that:
 - (i) For day operations, at least 30 minutes.
 - (ii) For night operations, at least 45 minutes.

⁸⁸This content is revised according to Item 51, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁸⁹This content is revised according to Item 52, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (b) No person may commence a flight in a helicopter under VFR unless (considering the wind, forecast weather conditions and contingencies) there is enough fuel carried:
 - (1) To fly to the first point of planned landing;
 - (2) Have a final reserve fuel to fly after that for a period of 20 minutes at best range speed; and still have an additional amount of fuel equal to 10% of the total flight time calculated to provide for the increased consumption on the occurrence of potential contingencies.

10.266 IFR FUEL REQUIREMENTS: HELICOPTERS ⁹⁰

- (a) No person may commence a flight in a helicopter under IFR unless, (considering the wind, forecast weather conditions and contingencies), the amount of fuel and oil to be carried permits flight:
 - (1) When no alternate is required, to fly to and execute an approach at the heliport or landing location to which the flight is planned, and thereafter to have:
 - (i) A final reserve fuel to fly 30 minutes at holding speed at 450 m (1 500 ft) above the destination heliport or landing location under standard temperature conditions and approach and land; and
 - (ii) To an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of potential contingencies.
 - (2) When an alternate is required, to fly to and execute an approach, and a missed approach, at the heliport or landing location to which the flight is planned, and thereafter:
 - (i) to fly to and execute an approach at the alternate specified in the flight plan; and then
 - (ii) have a final reserve fuel to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate under standard temperature conditions, and approach and land.
 - (3) To have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of potential contingencies.
 - (4) Where the aerodrome/heliport of intended landing is an isolated heliport or landing location, sufficient fuel shall be carried to enable the helicopter to fly to the destination to which the flight is planned and thereafter for a period that will, based on geographic and environmental considerations, enable a safe landing to be made.

10.267 IFR FUEL REQUIREMENTS: GENERAL AVIATION PISTON-ENGINED AEROPLANES ⁹¹

- (a) No person may commence a flight under IFR in general aviation piston-engined aeroplane unless there is enough fuel supply (considering weather reports and forecasts and contingencies), to:

⁹⁰This content is revised according to Item 53, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁹¹This content is revised according to Item 12, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (1) Fly to the aerodrome of intended landing;
 - (2) Execute an instrument approach; and
 - (3) After that, have a final reserve fuel for at least 45 minutes at normal cruising altitude.
- (b) No person may commence a flight under IFR in general aviation piston-engined aeroplane unless there is enough fuel supply (considering weather reports and forecasts and contingencies), to:
- (1) Fly to the aerodrome of intended landing and execute an instrument approach; and
 - (2) Then to an alternate aerodrome, and
 - (3) After that, have a final reserve fuel for at least 45 minutes at normal cruising altitude.

10.268 IFR FUEL REQUIREMENTS: LARGE & TURBINE AEROPLANES ⁹²

- (a) No person may commence a flight in a large or turbine-engined aeroplane under IFR or for international operations unless, considering the wind and forecast weather conditions, the pre-flight calculation of usable fuel required and available fuel at takeoff includes:
- (1) Taxi fuel, which shall be the amount of fuel expected to be consumed before take-off, taking into account local conditions at the departure aerodrome and auxiliary power unit (APU) fuel consumption;
 - (2) Trip fuel, which shall be the amount of fuel required to enable the airplane to fly from takeoff or the point of in-flight re-planning until landing at the destination aerodrome/heliport taking into account the operating conditions of Section 10.410;
 - (3) Contingency fuel, which shall be the amount of fuel required to compensate for unforeseen factors. It shall be 5 per cent of the planned trip fuel or of the fuel required from the point of in-flight re-planning based on the consumption rate used to plan the trip fuel but, in any case, shall not be lower than the amount required to fly for five minutes at holding speed at 450 m (1 500 ft) above the destination aerodrome/heliport in standard conditions;
 - (4) Destination alternate fuel, which shall be:
 - (i) Where a destination alternate aerodrome/heliport is required, the amount of fuel required to enable the airplane to:
 - A. Perform a missed approach at the destination aerodrome;
 - B. Climb to the expected cruising altitude;
 - C. Fly the expected routing;
 - D. Descend to the point where the expected approach is initiated; and
 - E. Conduct the approach and landing at the destination alternate aerodrome.

⁹²This content is added according to Item 55, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (ii) Where two destination alternate aerodromes are required, the amount of fuel, as calculated), required to enable the airplane to proceed to the destination alternate aerodrome/heliport which requires the greater amount of alternate fuel; or
 - (iii) Where a flight is operated without a destination alternate aerodrome, the amount of fuel required to enable the airplane to fly for 15 minutes at holding speed at 450 m (1 500 ft) above destination aerodrome/heliport elevation in standard conditions; or
 - (iv) Where the aerodrome/heliport of intended landing is an isolated aerodrome, the amount of fuel required to fly for two hours at normal cruise consumption above the destination aerodrome, including final reserve fuel.
- (5) Final reserve fuel, which shall be the amount of fuel calculated using the estimated mass on arrival at the destination alternate aerodrome/heliport or the destination aerodrome, when no destination alternate aerodrome is required, the amount of fuel required to fly for 30 minutes at holding speed at 450 m (1 500 ft) above aerodrome elevation in standard conditions;
- (6) Additional fuel, which shall be the supplementary amount of fuel required if the minimum fuel as calculated is not sufficient to:
- (i) Allow the aircraft to descend as necessary and proceed to an alternate aerodrome in the event of engine failure or loss of pressurization, whichever requires the greater amount of fuel based on the assumption that such a failure occurs at the most critical point along the route:
 - A. Fly for 15 minutes at holding speed at 450 m (1 500 ft) above aerodrome/heliport elevation in standard conditions; and
 - B. Make an approach and landing;
 - C. Allow an airplane engaged in EDTO to comply with the EDTO critical fuel scenario as established by the CAAV;
 - D. Meet additional requirements not covered above;
- (7) Discretionary fuel, which shall be the extra amount of fuel to be carried at the discretion of the pilot-in- command.

10.269 IN-FLIGHT CHANGES & RE-PLANNING⁹³

- (a) No person may use fuel after flight commencement for purposes other than originally intended during pre- flight planning unless they have performed a re-analysis and, if applicable, adjustment of the planned operation.
- (b) No person may commence or continue from the point of in-flight re-planning unless the re- analysis required by paragraph (a) shows that the usable fuel on board meets the requirements of Subsection 10.263, 10.265, 10.266, 10.267 or 10.268 as applicable to the aircraft used and type of operation.

⁹³This content is added according to Item 56, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.270 IN-FLIGHT FUEL MANAGEMENT⁹⁴

- (a) The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome/heliport where a safe landing can be made with the planned final reserve fuel remaining upon landing.
- (b) The pilot-in-command shall request delay information from ATC when unanticipated circumstances may result in landing at the destination aerodrome/heliport with less than the final reserve fuel plus any fuel required to proceed to an alternate aerodrome or the fuel required to operate to an isolated aerodrome.
- (c) The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome/heliport may result in landing with less than planned final reserve fuel.
- (d) The pilot-in-command shall declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL, when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome/heliport where a safe landing can be made is less than the planned final reserve fuel.

10.273 AIRCRAFT LOADING, MASS AND BALANCE

- (a) No person may commence a flight unless all loads carried are properly distributed and safely secured, taking into consideration the effect of the mass on centre of gravity and floor loading limitations.
- (b) No person may commence a flight unless the calculations for the mass of the aircraft and centre of gravity location indicate that the flight can be conducted safely and in accordance with the aircraft limitations, taking into account the flight conditions expected.

Note: When load masters, load planners or other qualified personnel are provided by the AOC holder in a commercial air transport operation, the PIC may delegate these responsibilities, but shall ascertain that proper loading procedures are followed.

- (c) Unless otherwise authorised by CAAV, the computations for the mass and balance shall be based on the AFM or RFM method for determination of the C.G. and the mass values used for these computations shall be based on the:
 - (1) Aircraft empty weight derived through a periodic weighing of the aircraft;
 - (2) Actual weights of the required crew, their equipment and baggage;
 - (3) Actual weights of the passengers, their baggage and cargo; and
 - (4) Actual weight of the useable fuel boarded.

⁹⁴This content is revised according to Item 57, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (d) For commercial air transport operations, no person may commence a flight unless these mass and balance computations are accomplished by qualified persons and are in conformance with the additional mass and balance requirements of Part 17 for AOC holders.

10.275 AIRCRAFT PERFORMANCE LIMITATIONS

- (a) The detailed and comprehensive performance code of the State of Registry shall be the basis for any determination of aircraft performance.
- (b) ⁹⁵No person may commence a flight unless the calculations for the performance of the aircraft in all phases of flight indicate that the flight can be conducted safely taking into account the flight conditions expected and in accordance with the aircraft's designed operating limitations, contained in the flight manual, or its equivalent, will not be exceeded. This information should be based on the manufacturer's or other data, acceptable to the CAAV, and should be included in the operations manual.
- (c) ⁹⁶No person may commence a flight unless the performance data is available for use inflight and, when applying that performance data, the calculations shall account for the aircraft configuration, environmental conditions, and the operation of any system or systems that may have an adverse effect on performance.
- (d) No person may commence a flight without ensuring that the maximum allowable weight for a flight does not exceed the maximum allowable takeoff or landing weight, or any applicable en route performance or landing distance limitations considering the:
 - (1) Condition of the takeoff and landing areas to be used;
 - (2) Gradient of runway to be used (land planes only);
 - (3) Pressure altitude;
 - (4) Ambient temperature;
 - (5) Current and forecast winds; and
 - (6) Any other conditions (e.g., atmospheric and aircraft configuration), such as density altitude, which may adversely affect performance.
- (e) For commercial air transport operations, no person may commence a flight unless the performance computations are accomplished by qualified persons and are in conformance with the additional performance requirements of Part 17 for AOC holders.

⁹⁵This content is revised according to Item 58(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁹⁶This content is revised according to Item 58(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (g) ⁹⁷ For commercial air transport operations and general aviation operations subject to Part 23 of these regulations, no person may commence a flight unless the performance computations are accomplished by qualified persons and are in conformance with the requirements of this Section and additional performance requirements of Part 17.

10.277 FLIGHT RELEASE REQUIRED: COMMERCIAL AIR TRANSPORT ⁹⁸

- (a) No person may commence a flight or series of flights under a flight following system without specific authority from the person authorised by the AOC holder to exercise operational control over the flight.
- (b) No person may commence a passenger-carrying flight or series of flights in commercial air transport for which there is a published schedule, unless a qualified person authorised by the AOC holder to perform operational control functions has issued a flight release for that specific flight or series of flights.
- (c) No person may release or commence a commercial air transport flight or series of flights unless it has been determined to be in compliance with the additional requirements of Part 16 of these regulations.

10.280 OPERATING FLIGHT PLAN: COMMERCIAL AIR TRANSPORT

- (a) ⁹⁹No person may commence a flight unless the operational flight plan has been signed by the PIC.
- (b) A PIC may sign the operational flight plan only when the PIC and the person authorised by the operator to exercise operational control have determined that the flight can be safely completed.

Note: The operational flight plan shall include the routing and fuel calculations, with respect to the meteorological and other factors expected, to complete the flight to the destination and all required alternates.

- (c) The PIC signing the operational flight plan shall have access to the applicable flight planning information for fuel supply, alternate aerodromes, weather reports and forecasts and NOTAMs for the routing and aerodrome.
- (d) No person may continue a flight from an intermediate aerodrome without a new operational flight plan if the aircraft has been on the ground more than 4 hours.

10.283 FLIGHT PLANNING DOCUMENT DISTRIBUTION AND RETENTION: COMMERCIAL AIR TRANSPORT

- (a) ¹⁰⁰ For commercial air transport operations, the PIC shall complete and sign the following flight preparation documents before commencing a flight or series of flights:
- (1) An operational flight plan, including NOTAMs and weather pertinent to the flight planning decisions regarding minimum fuel supply, en route performance, and destination and alternate aerodromes.

⁹⁷This content is revised according to Item 58(b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁹⁸This content is revised according to Item 59, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

⁹⁹This content is revised according to Item 60, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁰⁰The content is revised according to Item 61(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) A load manifest, showing the distribution of the load, centre of gravity, takeoff and landing weights and compliance with maximum operating weight limitations, and performance analysis.
- (3) An applicable technical log page, if mechanical irregularities were entered after a previous flight, maintenance or inspection functions were performed or a maintenance release was issued at the departure aerodrome.
- (b) No person may takeoff an aircraft unless a copy of all flight preparation documents, signed by the PIC, are retained and available with a company representative at the point of departure, unless a different retention method has been approved by CAAV.
- (c) The PIC shall carry a copy of the documents specified in paragraph (a) on the aircraft to the destination aerodrome.
- (d) ¹⁰¹These documents will be retained by the AOC holder for at least 3 months using the location and methodology approved by the CAAV.

SUBPART H: FLIGHT RULES FOR ALL OPERATIONS

10.290 APPLICABILITY

- (a) The flight rules of this Subpart are applicable to all operations of aircraft in the airspace of Vietnam.
- (b) ¹⁰²All persons involved in the operation of an aircraft either in flight or on the movement area of an aerodrome shall ensure that it is operated in compliance with the applicable regulations and, in addition, when in flight, either with the visual flight rules or instrument flight rules.
- (c) ¹⁰³The holders of airman licenses issued by Vietnam shall comply with these rules when flying outside Vietnam, except where these rules may differ with the other State, in which case compliance with the rules of the State or region being overflown is required.

10.293 NEGLIGENT OR RECKLESS OPERATIONS OF THE AIRCRAFT

- (a) No person may operate an aircraft in a negligent or reckless manner so as to endanger life or property of others.

10.295 COMPLIANCE WITH LOCAL REGULATIONS

- (a) All pilots shall be familiar with the laws, regulations and procedures pertinent to the performance of their duties, prescribed for the:
 - (1) areas to be traversed,
 - (2) the aerodromes to be used; and
 - (3) the air navigation facilities relating to them.

¹⁰¹This content is revised according to Item 61(b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁰²This content is revised according to Item 62, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁰³This content is revised according to Item 62, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (b) ¹⁰⁴All other members of the crew shall be familiar with the laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aircraft.

10.297 OPERATION OF AIRCRAFT ON THE GROUND ¹⁰⁵

- (a) No person may taxi an aircraft on the movement area of an aerodrome unless the person at the controls:
- (1) Has been authorised by the owner, the lessee, or a designated agent;
 - (2) Is fully competent to taxi the aircraft;
 - (3) Is qualified to use the radio if radio communications are required;
 - (4) Has received instruction from a competent person in respect of aerodrome layout, and where appropriate, information on routes, signs, marking, lights, ATS signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aircraft movement at the aerodrome; and
 - (5) When required, displays the required exterior lighting.
- (b) No person may taxi an aircraft on the manoeuvring area of a controlled aerodrome without clearance from the aerodrome control tower and shall comply with any instructions given by that unit.
- (c) No person shall cause a helicopter rotor to be turned under power unless there is a qualified pilot at the controls.
- (d) The operator shall provide appropriately specific training and procedures to be followed for all personnel, other than qualified pilots, who are likely to carry out the turning of a rotor under power for purposes other than flight.
- (e) No person shall guide an aircraft unless trained, qualified and approved by the appropriate authority to carry out the functions of a signalman.
- (f) No pilot shall taxi an aircraft under the guidance of a signalman unless:
- (1) The standard marshalling signals to aircraft are provided in a clear and precise manner using the signals as prescribed by the CAAV.
 - (2) The signalman is wearing a distinctive fluorescent identification vest to allow the flight crew to identify that he or she is the person responsible for the marshalling operation.
 - (3) The signalman and all participating ground staff are using daylight-fluorescent wands, table- tennis bats or gloves for all signalling during daylight hours and illuminated wands at night or in low visibility.

10.300 RIGHT OF WAY RULES: AERODROME SURFACE MOVEMENT

- (a) In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome the following shall apply:

¹⁰⁴This content is revised according to Item 63, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁰⁵This content is revised according to Item 64, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (1) When two aircraft are approaching head on, or approximately so, each pilot shall stop or where practicable alter the course aircraft to the right so as to keep well clear;
 - (2) When two aircraft are on a converging course, the pilot which has the other aircraft on his right shall give way;
 - (3) An aircraft which is being overtaken by another aircraft shall have the right-of-way and the pilot of the overtaking aircraft shall keep well clear of the other aircraft.
- (b) The pilot of an aircraft taxiing on the manoeuvring area shall stop and hold at all runway-holding positions unless otherwise authorised by the aerodrome control tower.
 - (c) The pilot of an aircraft taxiing on the manoeuvring area shall stop and hold at all lighted stop bars and may proceed further when the lights are switched off.
 - (d) The pilot of an aircraft taxiing on the manoeuvring area of an aerodrome shall give way to aircraft:
 - (1) Taking off or about to take off.
 - (2) Landing or in the final stages of an approach to landing.

10.303 RIGHT OF WAY RULES: WATER SURFACE OPERATIONS

- (a) General. Each person operating an aircraft on the water shall, insofar as possible, keep clear of all vessels and avoid impeding their navigation, and shall give way to any vessel or other aircraft that is given the right-of-way by any rule of this subsection.
- (b) Converging. When aircraft, or an aircraft and a vessel, are on crossing courses, the aircraft or vessel to the other's right has the right-of-way.
- (c) Approaching head-on. When aircraft, or an aircraft and a vessel, are approaching head-on, or nearly so, each shall alter its course to the right to keep well clear.
- (d) Overtaking. Each aircraft or vessel that is being overtaken has the right-of-way, and the one overtaking shall alter course to keep well clear.
- (e) Landing and taking off. Aircraft landing on or taking off from the water shall, in so far as practicable, keep well clear of all vessels and avoid impeding their navigation.
- (f) Special circumstances. When aircraft, or an aircraft and a vessel, approach so as to involve risk of collision, each aircraft or vessel shall proceed with careful regard to existing circumstances, including the limitations of the respective craft.

10.305 NIGHT OPERATIONS

- (a) No person may operate the following aircraft in night operations within the airspace of Vietnam:
 - (1) Gliders, or
 - (2) Free Balloons.

- (b) No person may operate single-engine aircraft in night cross-country operations within in airspace of Vietnam.

10.307 USE OF AIRCRAFT LIGHTS

- (a) If an aircraft has red rotating beacon lights installed, the pilot shall switch those lights on prior to starting engines and display those lights at all times the engines are running.
- (b) No person may operate an aircraft in the movement area of an aerodrome, on the water or in flight between the period from sunset to sunrise, or any other period prescribed by the appropriate authority, unless it displays:
 - (1) Anti-collision lights intended to attract attention to the aircraft; and
 - (2) Navigation lights intended to indicate the relative path of the aircraft to an observer.

Note: An aircraft is understood to be operating when it is taxiing or being towed or is stopped temporarily during the course of taxiing or being towed.

- (c) The pilots of all aircraft in flight and fitted with anti-collision lights shall display such lights during all operations from takeoff to landing.
- (d) A pilot shall be permitted to switch off or reduce the intensity of any required flashing lights if they do or are likely to:
 - (1) Adversely affect the satisfactory performance of duties; or
 - (2) Subject an outside observer to harmful dazzle.
- (e) Lights fitted for other purposes, such as landing lights, taxi lights, airframe floodlights, and logo lights may also be used to enhance aircraft conspicuity and attract attention to the aircraft, but no person may not display any lights that are likely to be mistaken for the navigation or anti- collision lights.
- (f) No person may park an aircraft at night in, or in a dangerous proximity to, a movement area of an aerodrome, unless the aircraft displays:
 - (1) Navigation and anti-collision lights,
 - (2) Lights that illuminate the extremities of the aircraft's structure; or
 - (3) Is in an area that is marked by obstruction lights.
- (g) No person may anchor an aircraft at night unless that aircraft:
 - (1) Has lighted anchor lights; or
 - (2) Is in an area where anchor lights are not required on vessels.

10.310 PRE-TAKEOFF INSPECTIONS

- (a) No person may takeoff an aircraft unless:
 - (1) They have completed an inspection of the aircraft, in accordance with a published checklist, of the exterior for airworthiness; including the quantity and quality of the fuel on board;

- (2) Passenger cabin readiness and required equipment;
- (3) Interior flight deck equipment, instruments and documents on the aircraft; and
- (4) Pre takeoff setup of the flight deck instruments and controls.

10.313 TAKEOFF AND LANDING

- (a) No person shall cause an aircraft to takeoff or land at an aerodrome within Vietnam that is not licenced by CAAV or, unless the prior permission for use has been received, a non-licenced aerodrome, if the purpose of the flight operation is:
 - (1) commercial air transport with passengers,
 - (2) flight instruction, or
 - (3) solo flight by a student pilot.
- (b) No person shall cause an aircraft to takeoff or land at an aerodrome at night within Vietnam for the purpose of commercial air transport carrying passengers, unless there is adequate lighting to:
 - (1) Determine the landing direction, and
 - (2) Make a safe approach and landing.
- (c) No person shall cause an aircraft with a certificated passenger capacity of more than 20 passengers to takeoff or land at an aerodrome within Vietnam for the purpose of commercial air transport carrying passengers, unless there is:
 - (1) Current runway analysis for obstacle clearance and stopping distance;
 - (2) Established communications with a qualified person on the surface to determine the:
 - (i) Prevailing approach and landing conditions; and
 - (ii) Status of runway surface.
- (d) ¹⁰⁶No person may cause a helicopter to takeoff or land at an elevated:
 - (1) Heliport in a congested area unless it is a Performance Class 1 helicopter.
 - (2) Heliport or helideck unless it is a Performance Class 1 helicopter.

10.315 TAKEOFF CONDITIONS

- (a) No person may takeoff an aircraft, unless:
 - (1) According to the available information, the weather at the aerodrome and the condition of the runway intended to be used will allow for a safe takeoff and departure; and
 - (2) The RVR or visibility in the takeoff direction of the aircraft is equal to or better than the applicable minimum.

¹⁰⁶This content is revised according to Item 65, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (b) No person may takeoff an aircraft unless, in determining the length of the runway required and available, the loss, if any, of runway length due to alignment of the aeroplane prior to takeoff has been determined.

10.317 AERODROME OPERATING MINIMA

- (a) ¹⁰⁷No person may operate an aircraft to or from an aerodrome using an operating minima lower than those specified by the State in which the aerodrome is located, except with specific approval of that Authority.
- (b) No person may continue a flight towards the aerodrome of intended landing, unless the latest available information indicates that at the expected time of arrival, a landing can be affected at that aerodrome, or at least one alternate aerodrome, in compliances with the operating minima applicable to that flight.
- (c) Except in case of emergency, no person may continue an approach to land at any aerodrome beyond a point at which the limits of the operating minima specified for that aerodrome would be infringed.
- (d) ¹⁰⁸The operator of a helicopter shall ensure that take-off and landing procedures take into account the need to minimize the effect of helicopter noise.

10.320 NOISE ABATEMENT

- (a) No person may use a different departure procedure at an aerodrome where a noise abatement departure is applicable to the aircraft, unless this action would not be considered safe or practical considering the existing conditions or performance limitations.
- (b) Unless otherwise required by special circumstances at an aerodrome, each person shall use, for any one aircraft type, the same noise abatement procedure and profiles at all aerodromes.
- (c) No person may takeoff or lands an aircraft at a mass that exceeds the maximum demonstrated for that aircraft to comply with the noise certification standards, unless authorised by the competent authority of the State for a specific aerodrome or runway where there is no noise disturbance problem.
- (d) ¹⁰⁹The operator of a helicopter shall ensure that take-off and landing procedures take into account the need to minimize the effect of helicopter noise.

10.323 LIGHT INTO KNOWN OR EXPECTED ICING¹¹⁰

- (a) No person may takeoff an aircraft or continues to operate an aircraft en route when the icing conditions are expected or encountered, without ensuring that the aircraft is certified for icing operations and has sufficient operational de-icing or anti-icing equipment.
- (b) No person may takeoff an aircraft in suspected or known ground icing conditions unless the aeroplane has been inspected for icing and, if necessary, has been given appropriate de-icing/anti-icing treatment.

¹⁰⁷This content is revised according to Item 66(a), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁰⁸This content is revised according to Item 66(b), Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁰⁹This content is added according to Item 67, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹¹⁰This content is revised according to Item 68, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (c) No person may takeoff an aircraft when frost, ice or snow is adhering to the wings, control surfaces, propellers, engine inlets or other critical surfaces of the aircraft which might adversely affect the performance, controllability or airworthiness of the aircraft. Accumulation of ice or naturally occurring contaminants shall be removed so that the aircraft is kept in an airworthy condition prior to takeoff.
- (d) For commercial air transport operations, no person may takeoff an aircraft when conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, unless the procedures approved for the AOC holder by CAAV are followed to ensure ground de-icing and anti-icing is accomplished.

10.325 AIRCRAFT OPERATING LIMITATIONS

- (a) No person may operate a civil aircraft within or over Vietnam without complying with the operating limitations specified in the approved AFM or RFM, markings and placards, or as otherwise prescribed by the certifying authority for the State of Registry.

10.327 OPERATING NEAR OTHER AIRCRAFT¹¹¹

- (a) No person may operate an aircraft in such proximity to another aircraft as to create a collision hazard.
- (b) No person may operate an aircraft in formation flight except by pre-arrangement with the PIC of each aircraft in the formation and, in controlled airspace, in accordance with the conditions prescribed in Section 10.410.
- (c) No person may operate an aircraft carrying passengers for hire in formation flight.

10.328 CLIMB & DESCENT PRECAUTIONS ¹¹²

Unless otherwise specified in an air traffic control instruction, the flight crew shall use a rate less than 8 m/ sec or 1 500 ft/min (depending on the instrumentation available) throughout the last 300 m (1 000 ft) of climb or descent to the assigned level to avoid unnecessary airborne collision avoidance system (ACAS II) resolution advisories in aircraft at or approaching adjacent altitudes or flight levels.

10.330 RIGHT-OF-WAY RULES: AIRCRAFT IN FLIGHT

- (a) General:
 - (1) Each pilot shall maintain vigilance so as to see and avoid other aircraft;
 - (2) When a rule of this subsection gives another aircraft the right-of-way, the pilot shall give way to that aircraft and may not pass over, under, or ahead of it unless well clear and takes into account the effect of wake turbulence;
 - (3) The pilot of the aircraft with the right-of-way should maintain heading and speed except as necessary to avoid collision;

¹¹¹This content is revised according to Item 69, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹¹²This content is revised according to Item 70, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (4) Nothing in these rules shall relieve the PIC of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories proved by ACAS equipment, as will best avert collision.
- (b) In distress. An aircraft in distress has the right-of-way over all other air traffic.
- (c) Converging
- (1) When aircraft of the same category are converging at approximately the same altitude (except head-on, or nearly so), the aircraft to the other's right has the right-of-way.
- (2) If the converging aircraft are of different categories:
- (i) A balloon has the right-of-way over any other category of aircraft;
- (ii) A glider has the right-of-way over an airship, aeroplane, or rotorcraft; and
- (iii) An airship has the right-of-way over an aeroplane or rotorcraft.
- (d) Towing or refuelling. An aircraft towing or refuelling other aircraft has the right-of-way over all other engine-driven aircraft, except aircraft in distress.
- (e) Approaching head-on. When aircraft are approaching each other head-on, or approximately so, and there is a danger of collision, each pilot of each aircraft shall alter heading to the right.
- (f) Overtaking:
- (1) Each aircraft that is being overtaken has the right-of-way and each pilot of an overtaking aircraft, whether climbing descending or in horizontal flight, shall alter heading to the right to pass well clear.
- (2) No subsequent change to the relative position of the two aircraft shall absolve the pilot of the overtaking aircraft from this obligation until it is entirely past and clear.
- (3) An overtaking aircraft is an aircraft that approaches another from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter.
- For example, in such a position with reference to the other aircraft at night it should be unable to see either of the aircraft left (port) or right (starboard) navigation lights.*
- (g) Landing:
- (1) Aircraft, while on final approach to land or while landing, have the right-of-way over other aircraft in flight or operating on the surface;
- Note: The PIC may not take advantage of this rule to force an aircraft off the runway surface which has already landed and is attempting to make way for an aircraft on final approach.*

- (2) The pilot of an aircraft in flight shall give way to aircraft landing or in the final stages of an approach to land.
- (3) The pilot of an aircraft that is aware that another is compelled by emergency to land shall give way to that aircraft.
- (4) When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing:
 - (i) The pilot of an aircraft at the higher level shall give way to aircraft at the lower level,
 - (ii) But the pilot of the lower aircraft shall not take advantage of this rule to cut in front of or overtake the higher aircraft which is in the final stages of an approach to land.
 - (iii) Nevertheless, the pilot of a power-driven heavier-than-air aircraft shall give way to gliders.

10.332 CRUISING LEVELS ¹¹³

- (a) The cruising levels at which a flight or a portion of a flight is to be conducted shall be in terms of:
 - (1) Flight levels, for flights at or above the lowest usable flight level or, where applicable, above the transition altitude.
 - (2) Altitudes, for flights below the lowest usable flight level or, where applicable, at or below the transition altitude.
- (b) Unless otherwise specified by the appropriate ATS facility, the cruising levels provided in Appendix 1 to 10.332 shall be used when selecting a cruising level appropriate to the aircraft track for VFR or IFR flight.

10.333 ALTIMETER SETTINGS

- (a) Each person operating an aircraft shall maintain the cruising altitude or flight level by reference to an altimeter set:
 - (1) Below the transition altitude to:
 - (i) The current reported QNH altimeter setting of a station along the route and within 160 km (100nm) of the aircraft;
 - (ii) The current reported QNH altimeter setting of a nearby station, if there is not a station along the route; or
 - (iii) In the case of an aircraft not equipped with a radio, the elevation of the departure aerodrome or an appropriate altimeter setting available before departure; or
 - (2) At or above the prescribed transition altitude to the QFE altimeter setting of 1013.2 hPa (29.92” Hg).

¹¹³This content is added according to Item 71, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.335 MINIMUM SAFETY ALTITUDES: GENERAL

- (a) Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:
 - (1) Anywhere. An altitude allowing, if a power unit fails, continuation of flight or an emergency landing without undue hazard to persons or property on the surface.
 - (2) Over congested areas. Over any congested area of a city, town, or settlement, or over any open-air assembly of persons, an altitude of 600m (2,000 feet) above the highest obstacle within a horizontal radius of 900m (3,000 feet) of the aircraft.
 - (3) Over other than congested areas. An altitude of 150m (500 feet) above the surface.
 - (4) Helicopters. Pilots of helicopters are not subject to the proximity restrictions provided they operate in a manner that is not hazardous to persons and property on the surface. The PIC of a helicopter shall comply with any routes or altitudes for the area that are prescribed for helicopters by CAAV.

10.337 MINIMUM SAFE VFR ALTITUDES: COMMERCIAL AIR TRANSPORT OPERATIONS

- (a) No person may operate an aeroplane in commercial air transport during the day, under VFR, at an altitude less than 300 m (1,000 ft) above the surface or within 300 m (1,000 ft) of any mountain, hill, or other obstruction to flight.
- (b) No person may operate an aeroplane in commercial air transport at night, under VFR, at an altitude less than:
 - (1) 600 m (2,000 feet) above the highest obstacle within a horizontal distance of 8 km (5 sm) from the centre of the intended course, or,
 - (2) In designated mountainous areas, less than 900 m (3,000 feet) above the highest obstacle within a horizontal distance of 8 km (5 sm) from the centre of the intended course.

10.340 MAXIMUM AIRSPEEDS

- (a) Unless otherwise authorised by ATS, no person may operate an aircraft at an airspeed greater than:
 - (1) 340 kph (180 knots) in the aerodrome traffic area.
 - (2) 400 kph (210 knots) while in an assigned holding pattern, unless authorised by ATS clearance for a higher airspeed.
 - (3) 475 kph (250 knots) between the surface and 3,000 m (10,000 ft) MSL.

10.343 AERODROME OPERATING MINIMA¹¹⁴

- (a) The Operator shall establish aerodrome operating minima in accordance with criteria specified by the State of Registry, for each aerodrome to be used in operations.

¹¹⁴This content is revised according to Item 13, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (b) No person may operate an aircraft to or from an aerodrome (or heliport) using an operating minima lower than those established by the State in which the aerodrome is located, except with specific approval of that State's civil aviation authority.
- (c) The operating minima for 2D instrument approach operations using instrument approach procedures shall be determined by establishing a minimum descent altitude (MDA) or minimum descent height (MDH), minimum visibility and, if necessary, cloud conditions.
- (d) The operating minima for 3D instrument approach operations using instrument approach procedures shall be determined by establishing a decision altitude (DA) or decision height (DH) and the minimum visibility or RVR.

10.344 HELIPORTS IN CONGESTED HOSTILE ENVIRONMENT¹¹⁵

Except as specifically approved by the CAAV, no person may operate a helicopter to or from a heliport in a congested hostile environment unless the operation conforms to requirements for Performance Class 1.

10.345 DIVERSION DECISION

- (a) Except as provided in paragraph (b), the PIC shall land the aircraft at the nearest suitable aerodrome at which a safe landing can be made whenever an engine of an aircraft fails or is shut down to prevent possible damage.
- (b) If not more than one engine of an aeroplane having three or more engines fails, or its rotation is stopped, the PIC may proceed to an aerodrome if he or she decides that proceeding to that aerodrome is as safe as landing at the nearest suitable aerodrome after considering the:
 - (1) Nature of the malfunction and the possible mechanical difficulties that may occur if flight is continued;
 - (2) Altitude, weight, and usable fuel at the time of engine stoppage;
 - (3) Weather conditions en route and at possible landing points;
 - (4) Air traffic congestion;
 - (5) Kind of terrain; and
 - (6) Familiarity with the aerodrome to be used.

10.347 SIMULATED INSTRUMENT FLIGHT

- (a) No person may operate an aircraft in simulated instrument flight unless:
 - (1) That aircraft has fully functioning dual controls;
 - (2) ¹¹⁶The other control seat is occupied by a safety pilot who is qualified for the category and class appropriate to the aircraft and operation being flown;

¹¹⁵This content is added according to Item 72, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹¹⁶This content is revised according to Item 73, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (3) The safety pilot has adequate vision forward and to each side of the aircraft, or a competent observer in communication with the safety pilot shall occupy a position on the aircraft from which provides adequately supplement to the vision of the safety pilot.

10.350 INFLIGHT SIMULATION: COMMERCIAL AIR TRANSPORT

- (a) No person may engage in simulated instrument flight conditions by artificial means during commercial air transport operations.
- (b) No person may cause or engage in simulate an abnormal or emergency situations during commercial air transport operations.

10.353 DROPPING, SPRAYING, TOWING

- (a) Except under conditions prescribed by CAAV in Part 11, no pilot may take the following actions:
 - (1) Dropping, dusting or spraying from an aircraft;
 - (2) Towing of aircraft or other objects; or
 - (3) Allowing parachute descents, except emergency descents.
- (b) Even when approved by CAAV, coordination shall be established with ATS and, where necessary, a clearance will be obtained.

10.355 AEROBATIC FLIGHT

- (a) No person may operate an aircraft in aerobatic flight:
 - (1) Over any city, town or settlement;
 - (2) Over an open air assembly of persons;
 - (3) Within the lateral boundaries of the surface areas of Class B, C, D or E airspace designated for an aerodrome;
 - (4) Below an altitude of 450 m (1,500 ft) above the surface; or
 - (5) When the flight visibility is less than 5 km (3 mi).
- (b) No person may operate an aircraft in manoeuvres exceeding a bank of 60 degrees or pitch of 30 degrees from level flight attitude unless all occupants of the aircraft are wearing parachutes packed by a qualified parachute rigger in the past 12 calendar months.

10.357 FLIGHT TEST AREAS

- (a) No person may flight-test an aircraft except:
 - (1) As authorised by the Authority; and
 - (2) Conducted over open water or sparsely populated areas having light traffic.

10.360 PROHIBITED AREAS AND RESTRICTED AREAS

- (a) No person may operate an aircraft in a danger area, restricted area or prohibited area, the particulars of which have been duly published, except in accordance with the conditions of the restrictions or by permission of the State over whose territory the areas are established.

10.363 OPERATIONS IN RNP, MNPS OR RVSM AIRSPACE ¹¹⁷

- (a) ¹¹⁸No person may operate in airspace or on routes for where PBN (RNP), MNPS, RVSM or PBC (RCP) performance specifications have been prescribed without a written approval issued by the CAAV indicating:
- (1) The navigation and communications capability of the aircraft satisfies the requirements specified for such operations;
 - (2) The operator has instituted appropriate procedures in respect of continued airworthiness (maintenance and repair) practices and program; and
 - (3) The operator has instituted appropriate flight crew procedures for operations in the authorised airspace;
 - (4) The approval is valid globally only when any operating procedures specific to a given region are stated in the operations manual or appropriate crew guidance.
 - (5) Refer to Appendix 1 to 10.363 for additional requirements prescribed for Performance- Based Navigation.
 - (6) Refer to Appendix 2 to 10.363 for additional requirements prescribed for Performance- Based Communications.
 - (7) Refer to Appendix 3 to 10.363 for expanded requirements prescribed for RVSM operations.
- (b) No person may operate an aircraft in airspace or on routes requiring a special authorization by the CAAV, except in accordance with the conditions of the procedures and restrictions required for this airspace.
- (c) The operator and pilots involved shall provide an incident report in the form and manner prescribed by the CAAV within 10 days of any deviation from the performance specifications of a route or airspace.
- (d) ¹¹⁹The operator shall make application for one or more of these operational approvals in the form and manner prescribed by the CAAV and complete the prescribed certification process 30 days prior to the intended operation.

10.364 ADDITIONAL OPERATIONAL CERTIFICATION APPROVALS ¹²⁰

- (a) Operators shall make application to the CAAV and complete the certification process for the following approvals prior to operational use:
- (1) Automatic Landing Systems;
 - (2) HUD (or equivalent) EVS, SVS, CVS, or any combination of these systems into a hybrid system;
 - (3) PBN variations, including RNP-APCH;
 - (4) ADS-C, including CPDLC;

¹¹⁷This content is revised according to Item 74, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹¹⁸This content is revised according to Item 14(a), Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹¹⁹This content is revised according to Item 14(b), Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹²⁰This content is revised according to Item 15, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (5) ADS-B-IN and -OUT;
 - (6) Performance-Based Surveillance (PBS);
 - (7) Electronic Flight Bag (EFB); and
 - (8) Other critical approvals identified by the CAAV or by evolving international standards.
 - (9) Refer to Appendix 1 to 10.364 for requirements regarding PBS approvals.
 - (10) Refer to Appendix 2 to 10.364 for requirements regarding EFB approvals.
- (b) Unless the installation and procedures are approved by the CAAV, no person may operate an aircraft using an automatic landing systems, HUD or equivalent displays, EVS, SVS, CVS, or NVIS to:
- (1) Conduct descent or take-off in weather conditions below VFR minimums;
 - (2) Conduct Instrument approach operations below Category I instrument approach minimums;
 - (3) Reduce or satisfy visibility requirements;
 - (4) Compensate for required ground facilities;
 - (5) Conduct night operations to a site other than an aerodrome or heliport; or
 - (6) Gain any other operational benefit related to these Regulations.
- (c) Refer to Appendix 3 to 10.364 for expanded requirements for these approvals.
- (d) In consideration of the approval of operational credit(s) for operations with aircraft equipped with a HUD or equivalent displays, EVS, SVS or CVS, these approvals shall not affect the classification of the instrument approach procedure.
- (d) The operator shall make application for one or more of these operational approvals in the form and manner prescribed by the CAAV 30 days prior to the intended operation and complete the prescribed certification process prior to operational use.

10.365 OPERATIONS ON OR IN THE VICINITY OF AN AERODROME

- (a) Each pilot of an aircraft operated on or in the vicinity of an aerodrome shall, whether or not within an aerodrome traffic zone:
- (1) Observe other aerodrome traffic for the purpose of avoiding collision;
 - (2) Conform with or avoid the pattern of traffic formed by other aircraft in operation;
 - (3) Make all turns to the left, when approaching for a landing and after taking off, unless otherwise instructed;
 - (4) Comply with any traffic patterns established by the authorities having jurisdiction over that aerodrome.
 - (5) Land and take off into the wind unless safety, the runway configuration, or air traffic considerations determine that a different direction is preferable,

(6) Comply with traffic light signals when radio communication cannot be established.

(b) A helicopter shall avoid the flow of aeroplanes.

10.367 OPERATIONS IN CLASS A,B,C,D AND E AIRSPACE

(a) No person may operate an aircraft in Class A airspace unless they are operating under IFR in accordance with an ATS clearance.

(b) No person may operate an aircraft in Class B, C, D or E airspace unless they establish two-way radio communications with the controlling ATS facility prior to entering and, while operating in that airspace:

(1) Operate on an ATS clearance, and

(2) Maintain two-way communications.

10.370 AERODROME TRAFFIC PATTERN ALTITUDES: LARGE OR TURBO-JET AEROPLANE

(a) When arriving at an aerodrome, the PIC of a large or turbo-jet aeroplane shall enter the traffic pattern at least 450 m (1,500 ft) AGL until further descent is required for landing.

(b) When departing, the PIC of a large or turbo-jet aircraft shall climb to 450 m (1,500 ft) AGL as rapidly as practicable.

10.372 AEROPLANE OPERATING PROCEDURES FOR LANDING PERFORMANCE ¹²¹

The PIC shall not continue an approach to land below 300 m (1 000 ft) above aerodrome elevation unless satisfied that, with the runway surface condition information available, the aeroplane performance information indicates that a safe landing can be made.

10.373 COMPLIANCE WITH VISUAL AND ELECTRONIC GLIDE SLOPES

(a) The PIC of an aeroplane approaching to land on a runway served by a visual approach slope indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.

(b) The PIC of a large or turbo-jet aeroplane approaching to land on a runway served by an ILS shall fly that aeroplane at or above the glide slope from the point of interception to the middle marker.

10.375 STABILIZED FINAL APPROACH

(a) The PIC of an aeroplane on final approach for landing will establish the aircraft in landing configuration (landing gear, flaps, airspeed, attitude and power) at or before 150 m (500 ft) above the elevation of the runway touchdown zone and maintain a stabilized configuration until the landing flare.

¹²¹This content is added according to Item 16, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

10.377 RESTRICTION OR SUSPENSION OF OPERATIONS: COMMERCIAL AIR TRANSPORT

- (a) If a PIC or an AOC holder knows of conditions, including aerodrome and runway conditions, that are a hazard to safe operations, that person shall restrict or suspend all commercial air transport operations to such aerodromes and runways as necessary until those conditions are corrected.

10.379 CONTINUATION OF FLIGHT¹²²

No person may continue a flight towards the aerodrome of intended landing, unless the latest available information indicates that at the expected time of arrival, a landing can be affected at that aerodrome, or at least one alternate aerodrome, in compliance with the operating minima applicable to that flight.

10.380 CONTINUATION OF FLIGHT: COMMERCIAL AIR TRANSPORT

- (a) ¹²³No PIC may allow a flight to continue toward any aerodrome of intended landing where commercial air transport operations have been restricted or suspended, unless:
 - (1) In the opinion of the PIC, the conditions that are a hazard to safe operations may reasonably be expected to be corrected by the estimated time of arrival; or
 - (2) There is no safer procedure.
- (b) ¹²⁴*(removed)*

10.381 AIRSPACE REQUIREMENTS FOR SAFE FLIGHT OPERATIONS ¹²⁵

The operator shall ensure that a flight will not commence or continue as planned unless it has been ascertained by every reasonable means available that the airspace containing the intended route from aerodrome of departure to aerodrome of arrival, including the intended take-off, destination and en-route alternate aerodromes, can be safely used for the planned operation. When intending to operate over or near conflict zones, a risk assessment shall be conducted and appropriate risk mitigation measures taken to ensure a safe flight.

10.383 INTERCEPTION

- (a) No pilot may conduct an international flight unless the procedures and signals relating to interception of aircraft are readily available on the flight deck.
- (b) When intercepted by a military or government aircraft, each PIC shall comply with over flight State order and/or the international standards when interpreting and responding to visual signals as prescribed by CAAV.

10.385 OVERWATER OPERATIONS OF HELICOPTERS

- (a) No person may operate a helicopter over water beyond a safe forced landing distance from land unless:
 - (1) That helicopter has been certified for ditching, and

¹²²This content is added according to Item 17, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹²³This content is revised according to Item 18, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹²⁴This content is removed according to Item 18, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹²⁵ This content is added according to Item 2, Appendix 10 to Circular No. 42/2020/TT-BGTVT dated December 31, 2020.

- (2) Information about the ditching procedures and the sea state are available in the aircraft.

SUBPART I: OPERATIONS IN CONTROLLED FLIGHT

10.390 APPLICABILITY

- (a) The flight rules of this Subpart are applicable to all operations of aircraft in the airspace of Vietnam.
- (b) ¹²⁶The holders of airman certificates issued by CAAV will comply with these rules when flying outside Vietnam, except where these rules may differ with the other State, in which case compliance with the rules of the State being overflown is required.

10.393 ATC CLEARANCES

- (a) Each PIC shall obtain an ATC clearance prior to operating a controlled flight, or a portion of a flight as a controlled flight.
- (b) Each PIC shall request an ATC clearance through the submission of a flight plan to an ATS facility.
- (c) Whenever an aircraft has requested a clearance involving priority, each PIC shall submit a report explaining the necessity for such priority, if requested by the appropriate ATS facility.
- (d) No person operating an aircraft on a controlled aerodrome may taxi on the manoeuvring area or any runway without clearance from the aerodrome control tower.

10.395 ADHERENCE TO ATC CLEARANCES

- (a) When an ATC clearance has been obtained, no PIC may deviate from the clearance or, if applicable, the current flight plan, except in an emergency, unless he or she obtains an amended clearance.

Note: A flight plan may cover only part of a flight, as necessary, to describe that portion of the flight or those manoeuvres which are subject to air traffic control. A clearance may cover only part of a current flight plan, as indicated in a clearance limit or by reference to specific manoeuvres such as taxiing, landing or taking off.

Note: Paragraph (a) does not prohibit a pilot from cancelling an IFR clearance when operating in VMC conditions or cancelling a controlled flight clearance when operating in airspace that does not require controlled flight.

- (b) When operating in airspace requiring controlled flight, no PIC may operate contrary to ATC instructions, except in an emergency.
- (c) Each PIC who deviates from an ATC clearance or instructions in an emergency, shall:

¹²⁶This content is revised according to Item 76, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (1) Notify ATC of that deviation as soon as circumstances permit; and
- (2) State that this action has been taken under emergency authority.

10.397 COMMUNICATIONS & COMMUNICATIONS FAILURE ¹²⁷

- (a) Each person operating an aircraft on a controlled flight under VFR or IFR shall maintain a continuous air- ground voice communication watch on the appropriate communication channel or, and establish two-way communication as necessary with, the appropriate ATS unit, except as may be prescribed by the appropriate ATS authority in respect of aircraft forming part of aerodrome traffic at a controlled aerodrome.
- (b) SELCAL or similar automatic signalling devices may be used to satisfy the requirement to maintain a continuous listening watch.
- (c) The requirement for an aircraft to maintain air-ground voice communication watch remains in effect after CPDLC has been established.
- (d) If a communication failure precludes compliance with paragraph (a), (b), (c), the pilot shall comply with the voice communication failure procedures of Annex 10, Volume II, and such procedures specified in paragraph (đ), (e), (g), (h), (i), (k), (l), (m) as appropriate.
- (đ) In event of communications failure, the pilot shall attempt to establish communications with the appropriate air traffic control unit using all other available means.
- (e) If in visual meteorological conditions, the PIC shall:
 - (1) Continue to fly in visual meteorological conditions; land at the nearest suitable aerodrome; and report its arrival by the most expeditious means to the appropriate air traffic services unit;
 - (2) If considered advisable, complete an IFR flight in accordance with paragraph (g) of this subsection.
- (g) If in instrument meteorological conditions or when the pilot of an IFR flight considers it inadvisable to complete the flight in VMC, the PIC shall:
 - (1) Unless otherwise prescribed on the basis of regional air navigation agreement, in airspace where radar is not used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan;
 - (2) In airspace where radar is used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 07 minutes following:
 - (i) The time the last assigned level or minimum flight altitude is reached; or
 - (ii) The time the transponder is set to Code 7600; or

¹²⁷This content is revised according to Item 19, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (iii) The aircraft's failure to report its position over a compulsory reporting point;
whichever is later, and thereafter adjust level and speed in accordance with the filed flight plan.
- (h) When being radar vectored or having been directed by ATC to proceed offset using area navigation (RNAV) without a specified limit, rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude;
- (i) Proceed according to the current flight plan route to the appropriate designated navigation aid or fix serving the destination aerodrome and, when required to ensure compliance with (k) below, hold over this aid or fix until commencement of descent;
- (k) Commence descent from the navigation aid or fix specified in i) at, or as close as possible to, the expected approach time last received and acknowledged; or, if no expected approach time has been received and acknowledged, at, or as close as possible to, the estimated time of arrival resulting from the current flight plan; estimated time of arrival specified in i) or the last acknowledged expected approach time, whichever is later;
- (l) Complete a normal instrument approach procedure as specified for the designated navigation aid or fix; and
- (m) Land, if possible, within 30 minutes after the estimated time of arrival specified in k) or the last acknowledged expected approach time, whichever is later.

10.400 ROUTE TO BE FLOWN

- (a) Unless otherwise authorised or directed by the appropriate ATC facility, the PIC of a controlled flight shall, in so far as practicable:
 - (1) When on an established ATC route, operate along the defined centre line of that route; or
 - (2) When on any other route, operate directly between the navigation facilities and/or points defining that route.
- (b) The PIC of a controlled flight operating along an ATC route defined by reference to VORs shall change over for primary navigation guidance from the facility behind the aircraft to that ahead of it at, or as close as operationally feasible to, the change-over point, where established.
Note: These requirements do not prohibit manoeuvring the aircraft to pass well clear of other air traffic or the manoeuvring of the aircraft in VFR conditions to clear the intended flight path both before and during climb or descent.
- (c) ¹²⁸The PIC of a controlled flight shall notify the appropriate ATC facility of any deviations of paragraph (a) or (b).

¹²⁸This content is added according to Item 78, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.403 DEVIATIONS FROM PLANNED FLIGHT¹²⁹

- (a) A PIC shall take the following action in the event that a controlled flight deviates from its current flight plan:
 - (1) Deviation from track. If the aircraft is off track, the PIC shall adjust the heading of the aircraft forthwith to regain track as soon as practicable.
 - (2) Deviation from ATC assigned Mach number/indicated airspeed: the appropriate air traffic services unit shall be informed immediately
 - (3) Deviation from Mach number/true airspeed: if the sustained Mach number/true airspeed at cruising level varies by plus or minus Mach 0.02 or more, or plus or minus 19 km/h (10 kt) true airspeed or more from the current flight plan, the appropriate air traffic services unit shall be so informed.
 - (4) Change in time estimate: except where ADS-C is activated and serviceable in airspace where ADS-C services are provided, if the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first, changes in excess of 2 minutes from that previously notified to air traffic services, or such other period of time as is prescribed by the appropriate ATS authority or on the basis of regional air navigation agreements, the flight crew shall notify the appropriate air traffic services unit as soon as possible.
- (b) When ADS-C services are provided and ADS-C is activated, the air traffic services unit shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.

10.405 ATC CLEARANCE: INTENDED CHANGES

- (a) ¹³⁰Requests for flight plan changes shall include the following information:
 - (1) Change of cruising level. Aircraft identification, requested new cruising level and cruising speed at this level, and revised time estimates, when applicable, at subsequent flight information region boundaries.
 - (2) Change of Mach number/true airspeed: aircraft identification; requested Mach number/true airspeed.
 - (3) Change of route:
 - (i) Destination unchanged. Aircraft identification, flight rules; description of new route of flight including related flight plan data beginning with the position from which requested change of route is to commence; revised time estimates, and any other pertinent information.
 - (ii) Destination change. Aircraft identification; flight rules; description of revised route of flight to revised destination aerodrome including related flight plan data, beginning with the position from which requested change of route is to commence; revised time estimates; alternate aerodrome(s); any other pertinent information.

¹²⁹This content is revised according to Item 20, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹³⁰This content is revised according to Item 21, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

10.407 POSITION REPORTS

- (a) Each pilot of a controlled flight under VFR or IFR shall report to the appropriate ATC facility, as soon as possible, the time and level of passing each designated compulsory reporting point, together with any other required information, unless exempted from this requirement by the appropriate ATC authority.
- (b) Each pilot of a controlled flight shall make position reports in relation to additional points or intervals when requested by the appropriate ATC unit.
- (c) ¹³¹ In the absence of designated reporting points, pilot shall make position reports at intervals prescribed by the appropriate ATS authority or specified by the appropriate air traffic services unit.
- (d) ¹³² Pilots of controlled flights providing position information to the appropriate air traffic services unit via data link communications shall only provide voice position reports when requested.

10.410 FORMATION FLIGHTS

- (a) No person will operate an aircraft in formation flight in controlled airspace unless those operations are conducted in accordance with an ATS clearance and any other prescribed conditions including:
 - (1) The formation operates as a single aircraft with regards to navigation and position reporting;
 - (2) ¹³³ Separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and shall include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and breakaway;
 - (3) A distance not exceeding 1 km (0.5 NM) laterally and longitudinally and 30 meters (100 ft) vertically from the flight leader shall be maintained by both aircraft.

10.413 OPERATIONS ON OR IN THE VICINITY OF A CONTROLLED AERODROME

- (a) No person may operate an aircraft to, from, through, or on an aerodrome having an operational control tower unless air-ground communications are maintained between that aircraft and the control tower.
- (b) On arrival, each PIC shall establish communications required by paragraph (a) prior to 8 km (5 sm) from the aerodrome when operating from the surface up to and including an altitude of 750 m (2,500 ft).
- (c) On departure, each PIC shall establish communications with the control tower prior to taxi.

¹³¹This content is revised according to Item 22, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹³²This content is revised according to Item 22, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹³³This content is revised according to Item 79, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (d) Takeoff, landing, taxi clearance. No person may, at any aerodrome with an operating control tower, operate an aircraft on a runway or taxiway or takeoff or land an aircraft, unless an appropriate clearance has been received by ATC.

Note: A clearance to “taxi to” the takeoff runway is not a clearance to cross or taxi on to that runway. It does authorise the PIC to cross other runways during the taxi to the assigned runway. A clearance to “taxi to” any other point on the aerodrome is a clearance to cross all runways that intersect the taxi route to the assigned point.

- (e) ¹³⁴(removed)

10.415 TERMINATION OF CONTROL

- (a) The pilot of a controlled flight shall, except when landing at a controlled aerodrome, advise the appropriate ATC unit as soon as it ceases to be subject to air traffic control service.

10.417 UNLAWFUL INTERFERENCE

- (a) To enable ATS to give priority to an aircraft and minimize conflict with other aircraft, The pilot shall, when and if possible, notify the appropriate ATS facility when an aircraft is being subjected to unlawful interference, including:
 - (1) Any significant circumstances associated with the unlawful interference, and
 - (2) Any deviation from the current flight plan necessitated by the circumstances.
- (b) ¹³⁵If an aircraft is subjected to unlawful interference, the pilot-in-command shall attempt to land as soon as practicable at the nearest suitable aerodrome or at a dedicated aerodrome assigned by the appropriate authority unless considerations aboard the aircraft dictate otherwise.
- (c) ¹³⁶ Following an act of unlawful interference, the PIC shall submit the report required by Subsection 10.260 to the designated local authority.

10.420 TIME CHECKS

- (a) Each PIC shall use Co-ordinated Universal Time (UTC), expressed in hours and minutes of the 24-hour day beginning at midnight, in flight operations.
- (b) Each PIC shall obtain a time check prior to operating a controlled flight and at such other times during the flight as may be necessary. Such time checks will be obtained from an ATS unit unless other arrangements have been made.
- (c) Wherever time is utilized in the application of data link communications, it shall be accurate to within 1 second of UTC.

¹³⁴This content is removed according to Item 80, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹³⁵This content is added according to Item 81, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹³⁶This content is added according to Item 23, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

10.423 UNIVERSAL SIGNALS

- (a) ¹³⁷Upon observing or receiving any of the designated universal aviation signals, prescribed by the Authority, each person operating an aircraft shall take such action as may be required by the interpretation of the signal. Specific guidance regarding the universal aviation signals is provided in relevant CAAV documentations and ICAO Annex 2, Appendix 1.
- (b) Universal signals shall have only the meanings designated.
- (c) Each person using universal signals in the movement of aircraft shall only use them for the purpose indicated.
- (d) No person may use signals likely to cause confusion with universal aviation signals.

SUBPART J: VFR FLIGHT RULES

10.430 APPLICABILITY

- (a) The VFR rules of this Subpart are applicable in the airspace of Vietnam.
- (b) ¹³⁸The holders of airman licenses issued by Vietnam will comply with these rules when flying outside Vietnam, except where these rules may differ with the other State, in which case compliance with the rules of the State or region being overflown is required.

10.433 VISUAL METEOROLOGICAL CONDITIONS

- (a) No person may operate an aircraft under VFR when the flight visibility is less than, or at a distance from the clouds that is less than that prescribed, or the corresponding altitude and class of airspace prescribed in Annex 2 of Chicago Convention – Rules of the Air.

Note: See Appendix 1 to 10.433 for the table outlining the airspace and visual meteorological minimums specified in Annex 2.

10.435 VFR WEATHER MINIMUMS FOR TAKEOFF AND LANDING

- (a) No person may enter the traffic pattern, land or takeoff an aircraft under VFR from an aerodrome located in Class B, Class C, Class D or Class E airspace unless the:
 - (1) Reported ceiling is at least 450 m (1,500 ft); and
 - (2) Reported ground visibility is at least 5 km (3 mi), if reported.
- (b) If the ground visibility is not reported, the pilot shall maintain 5 km (3 mi) flight visibility.
- (c) Class G Airspace. No person may enter the traffic pattern, land or takeoff an aircraft under VFR from an aerodrome located in Class G airspace below 360 m (1,200 ft) AGL unless:

¹³⁷This content is revised according to Item 82, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹³⁸This content is revised according to Item 83, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (1) For aeroplanes. The visibility is at least 2 km (1 mi) and the aircraft can be operated clear of clouds within 1 km (one-half mile) of the runway; or
- (2) For helicopters. The helicopter can be operated clear of clouds at a speed that allows the pilot adequate opportunity to see any air traffic or obstruction in time to avoid a collision.

Note: The only exception to the required weather minimums of this subsection is during a Special VFR operation.

10.437 SPECIAL VFR OPERATORS

- (a) No person may conduct a Special VFR flight operation to enter the traffic pattern, land or takeoff an aircraft under Special VFR from an aerodrome located in Class B, Class C, Class D or Class airspace unless:
 - (1) Authorised by an ATC clearance;
 - (2) The aircraft remains clear of clouds; and
 - (3) The flight visibility is at least 5 km.
- (b) No person may conduct a Special VFR flight operation in an aircraft between sunset and sunrise unless the:
 - (1) The PIC is current and qualified for IFR operations; and
 - (2) The aircraft is qualified to be operated for IFR flight.

10.440 LIMITATION TO VFR NAVIGATION BY VISUAL REFERENCE

- (a) No person may operate a flight under VFR navigating only by visual reference to landmarks unless the distance between each succeeding landmark is less than 110 km (60 nm).

10.443 VFR CRUISING ALTITUDE¹³⁹

- (a) The ultimate selection of a VFR cruising altitude shall correspond to the appropriate table as specified in Appendix 1 to 10.433.
- (b) Except as provided in paragraph a, each person operating an aircraft in level cruising flight under VFR at altitudes above 900 m (3 000 ft), but below FL 290, above the ground or water, shall maintain:
 - (1) For magnetic track from zero degrees to 179 degrees, any odd thousand MSL altitude or flight level plus 150 m (500 ft);
 - (2) For magnetic track from 180 degrees to 359 degrees, any even thousand MSL altitude or flight level plus 150 m (500 ft).

10.445 ATC CLEARANCES FOR VFR FLIGHTS

- (a) Each pilot of a VFR flight shall obtain and comply with ATC clearances and maintain an air- ground communications watch before and during operations:
 - (1) Within Classes B, C and D airspace;
 - (2) As part of aerodrome traffic at controlled aerodromes;

¹³⁹This content is revised according to Item 84, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (3) Under Special VFR;
- (4) Crossing international borders; and
- (5) On other routes as required by ATS or CAAV.

10.447 VFR FLIGHTS REQUIRING ATC AUTHORISATION

- (a) Unless authorised by CAAV, no pilot may operate in VFR flight:
 - (1) Above FL 200; or
 - (2) At transonic and supersonic speeds.
 - (3) Away more than 180km from land in controlled airspace.

10.450 VFR FLIGHT NOT AUTHORISED IN RVSM AIRSPACE

- (a) Authorisation for VFR flights to operate above FL 290 shall not be granted in areas where a vertical separation minimum of 300 m (1 000 ft) is applied above FL 290.

10.453 WEATHER DETERIORATION BELOW VMC

- (a) Each pilot of a VFR flight operated as a controlled flight shall, when he or she finds it is not practical or possible to maintain flight in VMC in accordance with the ATC flight plan:
 - (1) Request an amended clearance enabling the aircraft to continue in VMC to its destination or to an alternative aerodrome, or to leave the airspace within which an ATC clearance is required;
 - (2) If no clearance can be obtained, continue to operate in VMC and notify the appropriate ATC facility of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome;
 - (3) Operating within a control zone, request authorisation to operate as a special VFR flight; or
 - (4) Request clearance to operate in IFR, if currently rated for IFR operations.

10.455 CHANGING FROM VFR TO IFR

- (a) Each pilot operating in VFR who wishes to change to IFR shall:
 - (1) If a flight plan was submitted, communicate the necessary changes to be affected to its current flight plan; or
 - (2) Submit a flight plan to the appropriate ATC facility and obtain a clearance prior to proceeding IFR when in controlled airspace.

10.457 ¹⁴⁰(removed).

SUBPART K: IFR FLIGHT RULES

10.460 APPLICABILITY

- (a) The IFR rules of this Subpart are applicable in the airspace of Vietnam.

¹⁴⁰This content is removed according to Item 85, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (b) The holders of airman licenses issued by CAAV will comply with these rules when flying outside Vietnam, except where these rules may differ with the other State, in which case compliance with the rules of the State or region being overflown is required.

10.463 IFR FLIGHT IN CONTROLLED AIRSPACE

- (a) No person shall operate an aircraft under IFR in controlled airspace unless he or she:
 - (1) Filed an IFR flight plan; and
 - (2) Received an appropriate ATC clearance.
 - (3) Maintain a continuous air-ground communication watch on the appropriate ATS frequency.
- (b) ¹⁴¹A pilot may elect to fly in accordance with instrument flight rules in visual meteorological conditions or may be required to do so by the appropriate ATS facility.

10.465 IFR FLIGHTS OUTSIDE CONTROLLED AIRSPACE

- (a) Each PIC of an IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the appropriate ATC authority, shall:
 - (1) File a flight plan;
 - (2) Maintain a continuous air-ground communication watch on the appropriate ATS frequency and establish two-way communications with the ATS unit providing flight information service;
 - (3) Make position reports as required for controlled flights.
- (b) Each PIC of an IFR flight operating outside controlled airspace that is required to comply with (a) shall report position using the same phraseology and sequencing as specified for controlled flights.

10.467 IFR STANDARD TAKEOFF MINIMUMS

- (a) No pilot operating an aircraft may accept a clearance to take off from a civil aerodrome under IFR unless weather conditions are at or above 400 m RVR.
- (b) For commercial air transport operations, no pilot may takeoff an aeroplane when the visibility is less than 150 m RVR (Category A, B, and C aeroplanes) or 200 m RVR (Category D aeroplanes) unless approved by CAAV.
- (c) Prior to performing a takeoff with the weather conditions lower than specified above, the pilot shall have been properly qualified for low visibility takeoffs as approved by CAAV.

10.469 IFR TAKE-OFF MINIMUMS: GENERAL AVIATION¹⁴²

- (a) A flight to be conducted in accordance with the instrument flight rules shall not:

¹⁴¹This content is revised according to Item 86, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁴²This content is added according to Item 24, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (1) Take off from the departure aerodrome unless the meteorological conditions, at the time of use, are at or above the aerodrome operating minima for that operation; and
- (2) Take off or continue beyond the point of in-flight re-planning unless at the aerodrome of intended landing or at each alternate aerodrome to be selected in compliance with Subsection 10.245 and 10.255, current meteorological reports or a combination of current reports and forecasts indicate that the meteorological conditions will be, 1 hour before and after the ETA, at or above the aerodrome operating minima for that operation.

10.470 IFR CRUISING ALTITUDE OR FLIGHT LEVEL IN CONTROLLED AIRSPACE¹⁴³

- (a) Each person operating an aircraft under IFR in level cruising flight in controlled airspace shall maintain the altitude or flight level:
 - (1) Assigned that aircraft by ATC; or
 - (2) Specified by the appropriate ATS authority in Aeronautical Information Publications.
- (b) In all other situations involving the selection of an IFR cruising level, the appropriate table in Appendix 1 to 10.433 shall be used.

10.473 IFR CRUISING ALTITUDE OR FLIGHT LEVEL IN UNCONTROLLED AIRSPACE¹⁴⁴

- (a) Except when otherwise specified by the appropriate ATS facility or as provided in paragraph (b) or (c), each person operating an aircraft in level cruising flight under IMC at altitudes above 900 m (3,000 ft), but below Flight Level 290, from the ground or water, shall maintain:
 - (1) For magnetic courses from zero degrees to 179 degrees, any odd thousand MSL altitude or flight level; and
 - (2) For magnetic courses from 180 degrees to 359 degrees, any even thousand MSL altitude or flight level.
- (b) The ultimate selection of an IFR cruising altitude shall correspond to the appropriate table in Appendix 1 to 10.443.
- (c) A person may deviate from the cruising altitudes specified in paragraph (a) only when:
 - (1) Authorised by ATC;
 - (2) Operating in a holding pattern;
 - (3) Manoeuvring in turns; or
 - (4) Operating under a cruise-climb clearance from ATS.

10.475 MINIMUM ALTITUDES FOR IFR OPERATIONS

- (a) Operation of aircraft at minimum altitudes. Except when necessary for takeoff or landing, no person may operate an aircraft under IFR below:
 - (1) The applicable minimum altitudes prescribed by the authorities having jurisdiction over the airspace being overflown; or

¹⁴³This content is revised according to Item 87, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁴⁴This content is revised according to Item 88, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (2) If no applicable minimum altitude is prescribed by the authorities:
 - (i) Over high terrain or in mountainous areas, at a level which is at least 900 m (3,000 ft) above the highest obstacle located within 8 km (5 sm) of the estimated position of the aircraft; and
 - (ii) Elsewhere than as specified in paragraph (a), at a level which is at least 600 m (2,000 ft) above the highest obstacle located within 8 km (5 sm) of the estimated position of the aircraft.
 - (iii) ¹⁴⁵The estimated position of the aircraft will take account of the navigational accuracy which can be achieved on the relevant route segment, having regard to the navigational facilities available on the ground and in the aircraft.
 - (3) If an MEA and a MOCA are prescribed for a particular route or route segment, a person may operate an aircraft below the MEA down to, but not below, the MOCA, when within 42 km (22 nm) of the VOR concerned.
- (b) Climb for obstacle clearance:
- (1) If unable to communicate with ATC, each pilot shall climb to a higher minimum IFR altitude immediately after passing the point beyond which that minimum altitude applies
 - (2) If ground obstructions intervene, each pilot shall climb to a point beyond which that higher minimum altitude applies, at or above the applicable MCA.

10.477 MINIMUM ALTITUDES FOR USE OF AN AUTOPILOT

- (a) For en route operations, no person may use an autopilot at an altitude above the terrain:
 - (1) That is less than 150 m (500 ft), or
 - (2) If the maximum altitude loss specified in the AFM for a malfunction under cruise conditions when multiplied by two is more than 150 m (500 ft), then the derived figure becomes the controlling minimum altitude for use of the autopilot.
- (b) For instrument approach operations, no person may use an autopilot at an altitude above the terrain:
 - (1) That is more than 15 m (50 ft) below the MDA or DH; or
 - (2) If the maximum altitude loss specified in the AFM for a malfunction under approach conditions when multiplied by two is more than 15 m (50 ft), the extent to which that figure exceeds 15 m (50 ft) will be added to the minimum altitude determined for (b)(1) and then becomes the controlling minimum altitude for use of the autopilot.

¹⁴⁵This section is supplemented by the provisions of Section 89 of Appendix IX amending and supplementing a number of articles of Part 10 of the Regulation on civil aviation safety in the field of aircraft and aircraft operation issued together with Circular No. 03/2016/TT-BGTVT dated March 31, 2016, effective from May 15, 2016.

- (c) No person may use an autopilot for approach to touchdown and rollout unless authorised by CAAV.

10.480 OPERATION UNDER IFR IN CONTROLLED AIRSPACE: MALFUNCTION REPORTS

- (a) The PIC of each aircraft operated in controlled airspace under IFR shall report as soon as practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.
- (b) In each report specified in paragraph (a), the PIC shall include the:
 - (1) Aircraft identification;
 - (2) Equipment affected;
 - (3) Degree to which the capability of the pilot to operate under IFR in the ATC system is impaired; and
 - (4) Nature and extent of assistance desired from ATC.

10.483 CONTINUATION OF IFR FLIGHT TOWARD A DESTINATION

- (a) No pilot may continue an IFR flight toward an aerodrome of intended landing, unless the latest available meteorological information indicates that the conditions at that aerodrome, or at least one destination alternate aerodrome will, at the expected time of arrival, be at or above the specified instrument approach minima.

10.485 INSTRUMENT APPROACHES TO AERODROMES

- (a) Each person operating a civil aircraft shall use a standard instrument approach procedure prescribed by the State having jurisdiction over the aerodrome, unless otherwise authorised by the Authority.
- (b) No person may make an instrument approach at an aerodrome except in accordance with IFR weather minimums and the published instrument approach procedures.
- (c) Authorised DH or MDA. For the purpose of this section, when the approach procedure being used provides for and requires the use of a DH or MDA, the authorised DH or MDA is the highest of the following:
 - (1) The DH or MDA prescribed by the approach procedure.
 - (2) The DH or MDA prescribed for the PIC.
 - (3) The DH or MDA for which the aircraft is equipped.

10.487 RUNWAY VISUAL RANGE (RVR) MINIMUMS

- (a) No person may operate an aircraft for the purpose of the following landing or takeoff operations at an aerodrome unless adequate landing and rollout Runway Visual Range (RVR) information is available:
 - (1) Takeoff, approach and landing operations with reported visibility less than 800 m or RVR 550 m, and
 - (2) Category II and III Approaches.

- (b) Where RVR is used, the controlling RVR is the touchdown RVR, unless otherwise specified by CAAV.

Note: The controlling RVR is the reported values of one or more RVR reporting locations (touchdown, mid-point and stop-end) that is used to determine whether operating minima are or are not met.

- (c) ¹⁴⁶For helicopter operations, the CAAV may approve the use of an alternate method that provides a precise measurement or observation of visibility.

10.490 APPROVAL REQUIRED: CATEGORY II OR III APPROACHES

- (a) No person may operate a civil aircraft of Vietnam registry or under a Vietnam AOC to the instrument approach minimums for Category II or III approaches without the written approval of CAAV.

10.493 CONTINUING AN INSTRUMENT APPROACH ¹⁴⁷

- (a) No pilot may continue below 300 m (1 000 ft) above the aerodrome elevation or into the final approach segment unless the reported visibility or controlling RVR is at or above the aerodrome operating minima for that procedure.
- (b) If after entering the final approach segment or after descending below 300 m (1,000 ft) above the aerodrome elevation, the reported visibility or controlling RVR falls below the specified minimum, the pilot may continue the approach to DA/H or MDA/H.
- (c) In any case, no pilot may continue its approach-to-land at any aerodrome beyond a point at which the limits of the operating minima specified for that aerodrome would be infringed.

10.495 OPERATION BELOW DH OR MDA

- (a) Where a DH or MDA is applicable, no pilot may operate a civil aircraft at any aerodrome below the authorised MDA, or continue an approach below the authorised DH unless:
 - (1) The aircraft is continuously in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal manoeuvres;
 - (2) For commercial air transport operations, a descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing;
 - (3) The flight visibility is not less than the visibility prescribed in the standard instrument approach being used; and
 - (4) At least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:

¹⁴⁶This content is added according to Item 90, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

¹⁴⁷The name of this Subsection is revised according to Item 92, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

The content is revised according to Item 91, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

- (i) The approach light system, except that the pilot may not descend below 30 m (100 ft) above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable.
- (ii) The threshold;
- (iii) The threshold markings;
- (iv) Threshold lights;
- (v) The runway end identifier lights;
- (vi) The visual approach slope indicator;
- (vii) The touchdown zone or touchdown zone markings;
- (viii) The touchdown zone lights;
- (ix) The runway or runway markings; or
- (x) The runway lights.

Note: These visual references do not apply to Category II and III operations. The required visual references under Category II and III operations are provided in the AOC holder's operations specifications or a special authorisation prescribed by CAAV.

10.497 LANDING DURING INSTRUMENT METEOROLOGICAL CONDITIONS

- (a) No pilot operating a civil aircraft may continue an approach-to-land when the flight visibility is less than the visibility prescribed in the standard instrument approach procedure being used.
- (b) ¹⁴⁸No pilot may continue a precision approach to landing unless in compliance with operational procedures that ensure the aircraft will cross the threshold by a safe margin with the aircraft in landing configuration and attitude.

10.500 EXECUTION OF A MISSED APPROACH PROCEDURE

- (a) Each pilot operating a civil aircraft shall immediately execute an appropriate missed approach procedure when either of the following conditions exists:
 - (1) Whenever the required visual reference criteria are not met in the following situations:
 - (i) When the aircraft is being operated below MDA; or
 - (ii) Upon arrival at the missed approach point, including a DH where a DH is specified and its use is required, and at any time after that until touchdown.
 - (2) Whenever an identifiable part of the aerodrome is not distinctly visible to the pilot during a circling manoeuvre at or above MDA, unless the inability to see an identifiable part of the aerodrome results only from a normal bank of the aircraft during the circling approach.

¹⁴⁸This content is added according to Item 87, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

10.503 CHANGE FROM IFR FLIGHT TO VFR FLIGHT

- (a) A pilot electing to change from IFR flight to VFR flight shall notify the appropriate ATC facility specifically that the IFR flight is cancelled and then communicate the changes to be made to his or her current flight plan.
- (b) When acceptable to ATC, a pilot operating under IFR encountering VMC may cancel the IFR flight plan if the VMC conditions were anticipated and it is intended that the flight will be continued for a reasonable period of time in uninterrupted VMC.

10.505 ¹⁴⁹(removed).

¹⁴⁹This content is removed according to Item 93, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

APPENDIXES

APPENDIX 1 TO 10.023: INOPERATIVE INSTRUMENTS AND EQUIPMENT

- (a) This implementing standard authorises flight operations with inoperative instruments and equipment installed in situations where no master minimum equipment list (MMEL) is available and no MEL is required for the specific aircraft operation under this Part.
- (b) The inoperative instruments and equipment may not be:
 - (1) Part of the VFR-day instruments and equipment prescribed in Part 6;
 - (2) Required on the aircraft's equipment list or the operations equipment list for the kind of flight operation being conducted;
 - (3) Required by Part 6 for the specific kind of flight operation being conducted; or
 - (4) Required to be operational by an airworthiness directive.
- (c) To be eligible for these provisions, the inoperative instruments and equipment shall be:
 - (1) Determined by the PIC not to be a hazard to safe operation;
 - (2) Deactivated and placarded Inoperative; and
 - Note: If deactivation of the inoperative instrument or equipment involves maintenance, it must be accomplished and recorded in accordance with Part 4.*
 - (3) Removed from the aircraft, the flight deck control placarded and the maintenance recorded in accordance with Part 4.
- (d) The following instruments and equipment may not be included in the MEL:
 - (1) Instruments and equipment that are either specifically or otherwise required by the certification airworthiness requirements and which are essential for safe operations under all operating conditions.
 - (2) Instruments and equipment required for operable condition by an airworthiness directive, unless the airworthiness directive provides otherwise.
 - (3) Instruments and equipment required for specific operations.
 - Note: The required instruments and equipment for specific operations are listed in Part 6.*

APPENDIX 1 TO 10.030: CONTENTS OF JOURNEY LOG¹⁵⁰

- (a) The operator shall provide a journey log for each aircraft involved in international operations which includes the following information:
 - (1) Aeroplane nationality and registration;
 - (2) Date;
 - (3) Crew member names and duty assignments;
 - (4) Departure and arrival points and times;
 - (5) Purpose of flight;
 - (6) Observations regarding the flight; and
 - (7) Signature of the pilot-in-command.

APPENDIX 1 TO 10.045: ACAS TRAINING¹⁵¹

- (a) Appropriate training to competency in the use of ACAS II equipment and the avoidance of collisions shall be evidenced by:
 - (1) Possession of a type rating for an aeroplane equipped with ACAS II, where the operation and use of ACAS II are included in the training syllabus for the type rating; or
 - (2) Possession of a document issued by a training organization or person approved by the State to conduct training for pilots in the use of ACAS II.

APPENDIX 1 TO 10.075: LOGGING OF FLIGHT TIME¹⁵²

- (a) Logging of solo flight time. Except for a student pilot acting as PIC of an airship requiring more than one flight crew member, a pilot may log as solo flight time only that flight time when the pilot is the sole occupant of the aircraft.
- (b) Logging PIC flight time:
 - (1) A private or commercial pilot may log PIC time only for that flight time during which that person is:
 - (i) The sole manipulator of the controls of an aircraft for which the pilot is rated; or
 - (ii) Acting as PIC of an aircraft on which more than one pilot is required under the type certification of the aircraft or the requirements under which the flight is conducted; or
 - (iii) Performing the duties of PIC under the supervision of a check airman designated by the CAAV, or
 - (iv) A sole occupant.

¹⁵⁰This appendix is supplemented by the provisions of Section 94 of Appendix IX amending and supplementing a number of articles of Part 10 of the Civil Aviation Safety Regulations in the field of aircraft and aircraft operation issued together with Circular No. 03/2016/TT-BGTVT dated March 31, 2016, effective from May 15, 2016.

¹⁵¹This appendix is supplemented by the provisions of Section 95 of Appendix IX amending and supplementing a number of articles of Part 10 of the Civil Aviation Safety Regulations in the field of aircraft and aircraft operation issued together with Circular No. 03/2016/TT-BGTVT dated March 31, 2016, effective from May 15, 2016.

¹⁵²This appendix is supplemented by the provisions of Section 96 of Appendix IX amending and supplementing a number of articles of Part 10 of the Civil Aviation Safety Regulations in the field of aircraft and aircraft operation issued together with Circular No. 03/2016/TT-BGTVT dated March 31, 2016, effective from May 15, 2016.

- (2) A qualified airline transport pilot may log as PIC time all of the flight time while acting as PIC of an operation requiring an airline transport pilot licence.
 - (3) An authorised instructor may log as PIC time all flight time while acting as an authorised instructor.
 - (4) A student pilot may log PIC time when the student pilot:
 - (i) Is the sole occupant of the aircraft or is performing functions of the PIC of an airship requiring more than one flight crew member
 - (ii) Has a current solo flight endorsement; or
 - (iii) Is undergoing training for a pilot licence or rating.
- (c) Logging co-pilot flight time. A person may log co-pilot flight time only for that flight time during which that person:
- (1) Is qualified in accordance with the requirements of this Part for co-pilot and occupies a pilot station of an aircraft Certificated to be operated with a co-pilot or engaged in operations of a aircraft certificated for a single pilot, but these type of operation requires a co-pilot;
 - (2) Holds the appropriate category, class, and instrument rating (if an instrument rating is required for the flight) for the aircraft being flown in operations requiring a co-pilot.
 - (3) Is involved in multi-crew operations that have been approved by the CAAV.
- (d) Logging instrument flight time:
- (1) A person may log instrument flight time only for that flight time when the person operates the aircraft solely by reference to instruments under actual or simulated instrument flight conditions.
 - (2) An authorised instructor may log instrument flight time when conducting instrument flight instruction in actual instrument flight conditions.
 - (3) For the purposes of logging instrument flight time to meet the recency of instrument experience requirements, the following information shall be recorded in a person's logbook:
 - (i) The location and type of each instrument approach accomplished; and
 - (ii) The name of the safety pilot, if required.
 - (4) An approved flight simulator or approved flight training device may be used by a person to log instrument flight time, provided an authorised instructor is present during the simulated flight.
- (e) Logging flight instruction time:
- (1) A person may log flight instruction time when that person receives training from an authorised instructor in an aircraft, approved flight simulator, or approved flight training device.

- (2) The flight instruction time shall be logged in a logbook and shall be endorsed in a legible manner by the authorised instructor and include a description of the training given, the length of the training lesson, and the instructor's signature, licence number, and licence expiration date.

APPENDIX 2 TO 10.075: CREDITING OF FLIGHT TIME ¹⁵³

- (a) A student pilot or the holder of a pilot licence shall be entitled to be credited in full with all solo, dual instruction and pilot-in-command flight time towards the total flight time required for the initial issue of a pilot licence or the issue of a higher grade of pilot licence.
- (b) The holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated for operation by a single pilot but required by the CAAV to be operated with a co-pilot, shall be entitled to be credited with not more than 50 per cent of the co-pilot flight time towards the total flight time required for a higher grade of pilot licence.
- (c) The holder of a pilot licence may have the flight time specified in (b) credited in full towards the total flight time required if the aircraft is equipped (second instrument panel) to be operated by a co-pilot and the aircraft is operated in a multi-crew operation.
- (d) The holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated to be operated with a co-pilot, shall be entitled to be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence.
- (e) The holder of a pilot licence, when acting as pilot-in-command under supervision, shall be entitled to be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence.

APPENDIX 1 TO 10.105: FLIGHT INSTRUCTOR RECORDS

- (a) Each holder of a flight instructor shall comply with the following record keeping requirements:
 - (1) Sign the logbook of each person to whom that instructor has given flight training or ground training;
 - (2) Maintain a record in a logbook or a separate document that contains the following:
 - (i) The name of each person whose logbook or student pilot licence that instructor has endorsed for solo flight privileges, and the date of the endorsement; and
 - (ii) The name of each person that instructor has endorsed for a knowledge test or practical test, and a record of the kind of test, the date, and the results;
 - (3) Retain the records required by this subsection for at least 3 years.

¹⁵³This appendix is added according to Item 97, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

APPENDIX 2 TO 10.105: FLIGHT INSTRUCTOR LIMITATIONS AND QUALIFICATIONS

- (a) Each holder of a flight instructor licence shall observe the following limitations and qualifications:
 - (1) Hours of training. In any 24-consecutive-hour period, a flight instructor may not conduct more than 8 hours of flight training.
 - (2) Required ratings. A flight instructor may not conduct flight training in any aircraft for which the flight instructor does not hold:
 - (i) A pilot licence and flight instructor licence with the applicable category and class rating; and
 - (ii) For instrument flight training or for training for a type rating not limited to VFR, an appropriate instrument rating on his or her flight instructor licence and pilot licence.
- (b) Limitations on endorsements. A flight instructor may not endorse a:
 - (1) Student pilot's licence or logbook for solo flight privileges, unless that flight instructor has:
 - (i) Given that student the flight training required for solo flight privileges required by this subpart;
 - (ii) Determined that the student is prepared to conduct the flight safely under known circumstances, subject to any limitations listed in the student's logbook that the instructor considers necessary for the safety of the flight;
 - (iii) Given that student pilot training in the make and model of aircraft or a similar make and model of aircraft in which the solo flight is to be flown; and
 - (iv) Endorsed the student pilot's logbook for the specific make and model aircraft to be flown.
 - (2) Student pilot's licence and logbook for a solo cross-country flight, unless that flight instructor has determined that:
 - (i) The student's flight preparation, planning, equipment, and proposed procedures are adequate for the proposed flight under the existing conditions and within any limitations listed in the logbook that the instructor considers necessary for the safety of the flight; and
 - (ii) The student has the appropriate solo cross-country endorsement for the make and model of aircraft to be flown.
 - (3) Student pilot's licence and logbook for solo flight in a Class B airspace area or at an aerodrome within Class B airspace unless that flight instructor has:
 - (i) Given that student ground and flight training in that Class B airspace or at that aerodrome; and
 - (ii) Determined that the student is proficient to operate the aircraft safely.

- (4) Logbook of a pilot for a flight review, unless that instructor has conducted a review of that pilot in accordance with the requirements; or
- (5) Logbook of a pilot for an instrument proficiency check, unless that instructor has tested that pilot in accordance with the requirements.
- (c) Training in a multi engine aeroplane or helicopter. A flight instructor may not give training required for the issuance of a licence or rating in a multi engine aeroplane or a helicopter, unless that flight instructor has at least 5 flight hours of PIC time in the specific make and model of multi engine aeroplane or helicopter, as appropriate.
- (d) Training first-time flight instructors. The qualifications of the flight instructor for training first-time flight instructor applicants.
 - (1) No flight instructor may provide instruction to another pilot who has never held a flight instructor licence unless that flight instructor:
 - (i) Holds a current ground or flight instructor licence with the appropriate rating, has held that licence for at least 24 months, and has given at least 40 hours of ground training; or
 - (ii) Meets the prescribed eligibility requirements;
 - (iii) For training in preparation for an aeroplane, rotorcraft, has given at least 200 hours of flight training as a flight instructor; and
 - (iv) For training in preparation for a glider rating, has given at least 80 hours of flight training as a flight instructor.
- (e) Prohibition against self endorsements. A flight instructor may not make any self-endorsement for a licence, rating, flight review, authorisation, operating privilege, practical test, or knowledge test that is required by this Part.
- (f) Category II and Category III instructions: A flight instructor may not give training in Category II or Category III operations unless the flight instructor has been trained and tested in Category II or Category III operations as applicable.

APPENDIX 1 TO 10.115: REQUIREMENTS OF ISSUANCE OF CREW MEMBER CERTIFICATE

- (a) Operators have responsibility to make a list of flight crews and cabin crews to CAAV for approval and issuance of crew member certificate
- (b) For crew members, subject to pilot license by CAAV, CAAV shall compare with the pilot profile kept at the CAAV to grant crew member certificates
- (c) For cabin crews, operators will make a list of training results, qualification check in satisfying the requirements of safety aviation for the cabin crews as a basis for CAAV to grant crew member certificate.
- (d) ¹⁵⁴The application for issuance of crew member certificate shall be submitted directly or through the postal system or through the online public service system to the CAAV. The application includes:
 - (1) A hard or soft copy of the air operator's official letter of request, enclosed with the list of applicants for the crew member certificate.
 - (2) A hard or soft copy of the application form for the crew member certificate as specified in paragraph h of Appendix 1 to 10.115;
 - (3) Printed 3x4 portrait photo or 3x4 portrait photo in digital form (for online submission).
- (e) Within 3 working days after receipt of crew list and the attached documents, CAAV shall review and announce the adequacy and validity of the documents.
- (f) ¹⁵⁵Within 4 working days after the application is determined to be valid, CAAV shall complete the procedures for issuing crew member certificate for the subjects satisfying the requirements.
- (g) The flight crew member certificate is valid for 36 months from date of issue. When expired, the operators shall carry out the procedures as for the first time.

¹⁵⁴This content is revised according to Item 1(a), Appendix III to Circular No. 11/2022/TT-BGTVT dated 29 June 2022.

¹⁵⁵This content is revised according to Item 2, Appendix IX to Circular 56/2018/TT-BGTVT dated 30 Jan 2019.

TK/CMC Form

SOCIALIST REPUBLIC OF VIETNAM
Independence - Freedom - Happiness

Photo of new
shoot, straight
face, bare head,
white background,
size 4cmx6cm

DECLARATION

(For requirement of crew member certificate)

1. Full name (*in block letter*)..... 2. Male • Female •
3. Date of birth.....Place of birth (*province, city*).....
4. Professional licence number:

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5. Issue date...../...../..... 6. Expiry date...../...../.....
7. Phone number.....
8. Occupation.....
9. Work unit.....
10. Company's name and address (*if any*).....
11. The latest-issued CMC (if any) Number.....Issue date..... /..... /.....
12. Contents.....

I would take responsibility for the above statements.

Confirmation of department head

In..... Day.....month..... year


((Signature, name, title and stamp))

The applicant
(Signature, name)

FOR CAAV

.....
.....

(h) ¹⁵⁶The application form for Crew Member Certificate:

	<p>ĐƠN ĐỀ NGHỊ CẤP GIẤY CHỨNG NHẬN THÀNH VIÊN TỔ BAY</p> <p>APPLICATION FOR CREW MEMBER CERTIFICATE</p>	<p>HƯỚNG DẪN Điền tay hoặc máy. Chỉ nộp bản gốc cho Phòng Tiêu chuẩn An toàn bay hoặc Người được Cục HKVN ủy quyền. Nếu cần thêm không gian, hãy sử dụng trang đính kèm.</p> <p>INSTRUCTIONS Write or type. Submit original only to the Flight Safety Standards Department or a CAAV Authorized Person. If additional space is required, use an attachment</p>	
<p>A. ĐỀ NGHỊ/ APPLICATION IS HEREBY MADE FOR <input type="checkbox"/> CẤP LẦN ĐẦU/ ISSUANCE <input type="checkbox"/> CẤP LẠI/ REISSUANCE <input type="checkbox"/> GIA HẠN/ RENEWAL GIẤY CHỨNG NHẬN THÀNH VIÊN TỔ BAY VIỆT NAM CHO/ OF THE FOLLOWING VIETNAM CREW MEMBER CERTIFICATE:</p> <p> <input type="checkbox"/> TỔ LÁI/ FLIGHT CREW <input type="checkbox"/> NHÂN VIÊN KỸ THUẬT BẢO DƯỠNG TÀU BAY/ AMT <input type="checkbox"/> PHỤ TRÁCH XẾP TÀI/ LOAD MASTER <input type="checkbox"/> TIẾP VIÊN HÀNG KHÔNG/ CABIN CREW <input type="checkbox"/> NHÂN VIÊN ĐIỀU ĐỘ, KT BAY/ FLIGHT DISPATCHER <input type="checkbox"/> KHÁC/ OTHER: <input type="checkbox"/> CƠ GIỚI TRÊN KHÔNG/ FLIGHT ENGINEER <input type="checkbox"/> NHÂN VIÊN XẾP TÀI/ LOAD CONTROL </p>			
<p>B. ĐỀ NGHỊ CỦA NHÀ KHAI THÁC/ AIR OPERATOR REQUEST</p> <p>1. Tôi xác nhận rằng nhân viên hàng không được nêu trong Phần C dưới đây đã hoàn thành tất cả các yêu cầu đào tạo áp dụng cho hoạt động của công ty trong lĩnh vực vận tải hàng không thương mại và yêu cầu người đó phải được kiểm tra trình độ cho các vị trí và hoạt động bay/ I certify that the airman listed in Section C below has completed all applicable training requirements for operations with this company under commercial air transport and request that he or she be checked for proficiency for positions and flight operations.</p> <p>2. VỊ TRÍ ĐỀ NGHỊ/ ASSIGNED POSITION:</p>			
3. TÊN NHÀ KHAI THÁC/ AIR OPERATOR BUSINESS NAME:	4. SỐ GIẤY CHỨNG NHẬN AOC/ AOC CERTIFICATE#:	5. SỐ ĐIỆN THOẠI/ TELEPHONE :	6. SỐ FAX/ FAX:
7. CHỮ KÝ NGƯỜI ĐẠI DIỆN/ SIGNATURE OF COMPANY OFFICIAL (DIRECTOR OF OPERATIONS OR CHIEF PILOT)		8. NGÀY KÝ/ DATE SIGNED	
		9. TÊN VÀ CHỨC DANH NGƯỜI ĐẠI DIỆN/ PRINTED NAME AND TITLE OF COMPANY OFFICIAL	
<p>C. THÔNG TIN NHÂN VIÊN HÀNG KHÔNG/ PERSONAL INFORMATION:</p>			
1. HỌ TÊN NGƯỜI ĐỀ NGHỊ/ FULL NAME:		2. ĐIỆN THOẠI LIÊN HỆ/ PHONE CONTACT NUMBERS:	
3. ĐỊA CHỈ/ PERMANENT ADDRESS (Street or PO Box Number)			
4. SỐ HỘ CHIẾU VÀ QUỐC GIA CẤP/ PASSPORT NUMBER & STATE OF ISSUE		5. THÀNH PHỐ/ TỈNH CITY/ STATE/ PROVINCE	
		MÃ BƯU CỤC/ MAIL CODE	
		COUNTRY/ QUỐC GIA	
6. QUỐC TỊCH/ NATIONALITY (CITIZENSHIP)		7. NƠI SINH/ COUNTRY OF BIRTH	
		8. NGÀY SINH/ DATE OF BIRTH	
9. CHIỀU CAO/ HEIGHT	10. CÂN NẶNG/ WEIGHT	11. MÀU TÓC/ HAIR	12. MÀU MẮT/ EYES
		13. GIỚI TÍNH/ SEX	14. ĐỊA CHỈ E-MAL/ E-MAIL ADDRESS
			15. For CAAV Use
<p>D. GIẤY CHỨNG NHẬN THÀNH VIÊN TỔ BAY ĐANG GIỮ/ CURRENT HOLDER OF A CREW MEMBER CERTIFICATE?</p>			
1. <input type="checkbox"/> CÓ/ YES <input type="checkbox"/> KHÔNG/ NO		2. SỐ GCN/ NUMBER	
		3. QUỐC GIA BAN HÀNH/ STATE OF ISSUE	
		4. NGÀY HẾT HẠN/ DATE OF EXPIRY	
<p>E. ẢNH CHÂN DUNG VÀ GHI CHÚ/ PHOTO & NOTES?</p>			
1. ẢNH CHÂN DUNG/ PHOTO (3X4)		2. GHI CHÚ/ NOTES	
<p>F. XÁC NHẬN CỦA NGƯỜI LÀM ĐƠN/ APPLICANT'S CERTIFICATION:</p>			
<p>1. Tôi xác nhận rằng thông tin cá nhân và Giấy chứng nhận ở trên là đúng và chính xác. Tôi xác nhận thêm rằng tôi đã hoàn thành tất cả các yêu cầu đào tạo ban đầu và / hoặc định kỳ đã được phê chuẩn cho chủ sở hữu AOC và đáp ứng tất cả các yêu cầu kinh nghiệm hàng không nêu trong QCATK Phần 7, 10 và 14 đối với tàu bay, vị trí công việc và hoạt động đề nghị./ I certify that the above personal and certificate information is true and correct. I further certify that I have completed all applicable initial and/or recurrent training requirements approved for the AOC holder and meet all VAR Part 7, 10 and 14 aeronautical experience requirements for the assigned aircraft, position and operations proposed.:</p>			
2. NGÀY KÝ/ DATE SIGNED.		3. CHỮ KÝ NGƯỜI ĐỀ NGHỊ / SIGNATURE OF APPLICANT	
		4. TÊN NGƯỜI ĐỀ NGHỊ/ PRINTED NAME OF APPLICANT	

¹⁵⁶This content is added according to Item 1(b), Appendix III to Circular No. 11/2022/TT-BGTVT dated 29 June 2022.

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G. ĐÍNH KÈM/ ATTACHMENTS:			
1. <input type="checkbox"/> BẢN SAO GIẤY CHỨNG NHẬN/ GIẤY PHÉP NẾU TRONG PHẦN A (NẾU CÓ)/ COPY OF CERTIFICATE/ LICENCE MENTIONED IN SECTION A.			
2. <input type="checkbox"/> BẢN SAO CHỨNG MINH NHÂN DÂN/ THẺ CĂN CƯỚC CÔNG DÂN/ HỘ CHIẾU/ COPY OF IDENTIFICATION CERTIFICATE (ID)/ PASSPORT.			
3. <input type="checkbox"/> KẾT QUẢ HUẤN LUYỆN, KIỂM TRA TRÌNH ĐỘ VỀ AN TOÀN HÀNG KHÔNG ĐỐI VỚI TIẾP VIÊN HÀNG KHÔNG/ TRAINING RESULT AND COMPETENCY CHECK OF AVIATION SAFETY FOR CABIN CREW			

H. CAAV AUTHORIZED PERSON CERTIFICATION:			
GIẤY CHỨNG NHẬN THÀNH VIÊN TỔ BAY ĐỦ ĐIỀU KIỆN CẤP THEO QUY ĐỊNH TẠI ĐIỀU 10.115 VÀ CÁC QUY ĐỊNH CỦA CỤC HKVN/ THE CMC WAS ISSUED IAW 10.115 AND CAAV REQUIREMENTS:		<input type="checkbox"/> CÓ/ YES <input type="checkbox"/> KHÔNG/ NO	
1. NGÀY/ DATE	2. CHỨC DANH HOẶC SỐ ỦY QUYỀN/ TITLE OR DESIGNATION NUMBER	3. CHỮ KÝ/ SIGNATURE	4. CASORT-PEL Entry:

- (i) ¹⁵⁷The results of the application for crew member certificate as specified in this Subsection may be returned directly at the CAAV office or through the online public service portal upon applicant's request.

APPENDIX 1 TO 10.120: USE OF PSYCHOACTIVE SUBSTANCES

- (a) Whenever there is a reasonable basis to believe that a person may not be in compliance with 10.120 and upon the request of the Authority, that person shall furnish the Authority or authorise any clinic, doctor, or other person to release to the Authority, the results of each blood test taken for presence of alcohol or narcotic substances up to 8 hours before or immediately after acting or attempting to act as a crew member.
- (b) Any test information provided to the Authority under the provisions of this section may be used as evidence in any legal proceeding.

¹⁵⁷This content is added according to Item 1(c), Appendix III to Circular No. 11/2022/TT-BGTVT dated 29 June 2022.

APPENDIX 1 TO 10.125: FLIGHT CREW MEMBERS AT DUTY STATIONS

- (a) A required flight crew member may leave the assigned duty station if the crew member is taking a rest period, and relief is provided:
 - (1) For the assigned PIC during the en route cruise portion of the flight by a pilot who holds an airline transport pilot licence and an appropriate type rating, and who is currently qualified as PIC or SIC, and is qualified as PIC of that aircraft during the en route cruise portion of the flight; and
 - (2) In the case of the assigned SIC, by a pilot qualified to act as PIC or SIC of that aircraft during en route operations.

APPENDIX 2 TO 10.125: RELIEF OF FLIGHT CREW IN FLIGHT

- (a) Flight crew members may leave the control position by replacing another flight crew member suitably qualified.
- (b) The PIC relief: the PIC may authorize to:
 - (1) Another flight crew approved as a PIC;
 - (2) A pilot qualified as specified in paragraph (c) below, if only operating above FL200.
- (c) Minimum requirements for the pilot to replace the PIC are:
 - (1) Holding current ATPL;
 - (2) Having appropriate type rating with the aircraft including conversion trainings and checks as specified in Part 14;
 - (3) Experiencing requalification curriculum and interval check as specified in Part 14.
 - (4) Having knowledge of the route as specified in Part 14;
- (d) The F/O relief: the F/O may be replaced by:
 - (1) Another pilot suitably qualified and approved;
 - (2) A stand-by F/O at cruise phase as specified in paragraph (e) below.
- (e) Minimum requirements for the F/O at cruise phase:
 - (1) Having CPL with IFR rating;
 - (2) Having appropriate type rating with the aircraft including conversion trainings and checks as specified in Part 14, except requirements of takeoff and landing training;
 - (3) Experiencing requalification curriculum and interval check as specified in Part 14, except requirements of takeoff and landing training;
 - (4) Only acting as F/O during cruise phase and not below FL200.
 - (5) No experience is required in accordance with Part 14. However, the pilot must take cockpit simulator training and refresher training for our existing skills within a period not exceeding 90 days. Refresher training can be combined with conversion training under the provisions of Part 14.

APPENDIX 1 TO 10.195: REFUELLING WITH PASSENGER ARE EMBARKING, ON BOARD OR DISEMBARKING¹⁵⁸

Operators must have a procedure of refuelling with passenger embarking, onboard or disembarking to comply with following requirements:

- (a) A person with appropriate certificates must be present at the specified location during refuelling/defueling with passenger onboard. This person must be capable of operating the emergency procedures related to fire prevention, fire fighting, communication and evacuation guidelines;
- (b) A 2-way communication must be established by the communication system inside the aircraft or other appropriate method between persons on the ground who are monitoring the refuelling/defuelling and persons in the aircraft;
- (c) The flight crew members, staff and passengers must be informed of the conduct of the refuelling;
- (d) The aircraft 'FASTEN SEAT BELTS' signs are turned OFF;
- (đ) The aircraft 'NO SMOKING' signs are turned ON;
- (e) The flight crew shall ensure that the passengers are briefed on what actions to take if an incident occurs during refuelling;
- (g) here are enough people who are certified on the plane in preparation for the emergency evacuation
- (h) If there is smell of fuel inside the plane, or any other harm occurs while refuelling it must be stopped immediately;
- (i) The area below the emergency exit and slide must be clear;
- (k) Having requirements for the evacuation of passengers safely and quickly
- (l) For helicopter, doors on the refuelling side of the helicopter remain closed where possible, unless these are the only suitable exits;
- (m) For helicopter, doors on the non-refuelling side of the helicopter remain open, weather permitting, unless otherwise specified by the RFM;
- (n) For helicopter, fire-fighting facilities of the appropriate scale be positioned so as to be immediately available in the event of a fire;
- (o) For helicopter, seat belts should be unfastened to facilitate rapid egress; and
- (p) For helicopter, with rotors turning, only ongoing passengers should remain on board.

APPENDIX 1 TO 10.257: DETERMINATION OF FLIGHT PLANNING SPEED – ETOPS

- (a) An AOC holder shall determine a speed for the calculation of the maximum distance to an adequate aerodrome for each two-engined aeroplane type or variant operated, not exceeding V_{mo} based upon the true airspeed that the aeroplane can maintain with one-engine-inoperative under the following conditions:

¹⁵⁸This appendix is revised according to Item 3, Appendix VII to Circular 56/2018/TT-BGTVT dated 30 Jan 2019.

- (1) International Standard Atmosphere;
- (2) Level flight:
 - (i) For turbine engine powered aeroplanes at:
 - (A) FL 170; or
 - (B) At the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the AFM, whichever is less.
 - (ii) For propeller driven aeroplanes:
 - (A) FL 80; or
 - (B) At the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the AFM, whichever is less.
- (3) Maximum continuous thrust or power on the remaining operating engine;
- (4) An aeroplane mass not less than that resulting from:
 - (i) Take-off at sea-level at maximum take-off mass until the time elapsed since take-off is equal to the applicable threshold prescribed in paragraph (a);
 - (ii) All engines climb to the optimum long range cruise altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in sub paragraph (a); and
 - (iii) All engines cruise at the long range cruise speed at this altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in paragraph (a).
- (b) An AOC holder shall ensure that the following data, specific to each type or variant, is included in the Operations Manual:
 - (1) The one-engine-inoperative cruise speed determined in accordance with paragraph (b); and
 - (2) The maximum distance from an adequate aerodrome determined in accordance with paragraphs (a) and (b).

Note: The speeds and altitudes (flight levels) specified above are only intended to be used for establishing the maximum distance from an adequate aerodrome.

APPENDIX 1 TO 10.260: ETOPS ALTERNATE PLANNING

Type of Approach	Planning Minima	
(RVR/visibility required & ceiling, if applicable)		
	Aerodrome with:	
	at least 2 separate approach procedures based on 2 separate aids serving 2 separate runways (See note 1)	at least 2 separate approach procedures based on 2 separate aids serving 1 runway or, at least 1 approach procedure based on 1 aid serving 1 runway
Precision Approach Cat II, III (ILS, MLS)	Precision Approach Cat I Minima	Non-Precision Approach Minima
Precision Approach Cat I (ILS, MLS)	Non-Precision Approach Minima	Circling minima or, if not available, non-precision approach minima plus 200ft/1000m
Non-Precision Approach	The lower of non-precision approach minima plus 200ft/1000 m or circling minima	The higher of non-precision approach minima plus 200ft/1000 m or circling minima

Note 1: Runways on the same aerodrome are considered to be separate runways when they are separate landing surfaces which may overlay or cross such that if one of the runways is blocked, it will not prevent the planned type of operations on the other runway and each of the landing surfaces has a separate approach based on a separate aid.

APPENDIX 1 TO 10.263: ¹⁵⁹(removed)

APPENDIX 1 TO 10.270: IN-FLIGHT FUEL MANAGEMENT

- (a) In-flight fuel checks:
 - (1) A PIC shall ensure that fuel checks are carried out in flight at regular intervals. The remaining fuel must be recorded and evaluated to:
 - (i) Compare actual consumption with planned consumption;
 - (ii) Check that the remaining fuel is sufficient to complete the flight; and
 - (iii) Determine the expected fuel remaining on arrival at the destination.
 - (2) The relevant fuel data must be recorded.
- (b) In-flight fuel management:

¹⁵⁹This Appendix is removed according to Item 26, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

- (1) If, as a result of an in-flight fuel check, the calculated fuel remaining on arrival at the destination is less than the required fuel plus final reserve fuel, the commander must take into account the traffic and the operational conditions prevailing at the destination aerodrome, along the diversion route to an alternate aerodrome and at the destination alternate aerodrome, in order to decide to proceed to the destination aerodrome or to divert, so as to land with not less than final reserve fuel.
- (2) On a flight to an isolated aerodrome: the last possible point of diversion to any available en-route alternate aerodrome shall be determined. Before reaching this point, the PIC shall assess the fuel expected to remain overhead the isolated aerodrome, the weather conditions, and the traffic and operational conditions prevailing at the isolated aerodrome and at any of the en-route aerodrome before deciding whether to proceed to the isolated aerodrome or to divert to an en-route aerodrome.

APPENDIX 1 TO 10.332: TABLE OF FLIGHT LEVELS¹⁶⁰

The cruising levels to be observed when so required by this Part are as follows:

¹⁶⁰This appendix is added according to Item 98, Appendix IX to Circular No.03/2016/TT-BGTVT dated 31 March 2016.

RVSM – Feet

- (a) In areas where feet are used for altitude and where, in accordance with regional air navigation agreements, a vertical separation minimum of 1 000 ft is applied between FL290 and FL410 inclusive (*):

Track**											
From 000 degrees to 179 degrees***						From 180 degrees to 359 degrees ***					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres
010	1000	300	---	---	---	020	2000	600	---	---	---
030	3000	900	035	3500	1050	040	4000	1200	045	4500	1350
050	5000	1500	055	5500	1700	060	6000	1850	065	6500	2000
070	7000	2150	075	7500	2300	080	8000	2450	085	8500	2600
090	9000	2750	095	9500	2900	100	10000	3050	105	10500	3200
110	11000	3350	115	11500	3500	120	12000	3650	125	12500	3800
130	13000	3950	135	13500	4100	140	14000	4250	145	14500	4400
150	15000	4550	155	15500	4700	160	16000	4900	165	16500	5050
170	17000	5200	175	17500	5350	180	18000	5500	185	18500	5650
190	19000	5800	195	19500	5950	200	20000	6100	205	20500	6250
210	21000	6400	215	21500	6550	220	22000	6700	225	22500	6850
230	23000	7000	235	23500	7150	240	24000	7300	245	24500	7450
250	25000	7600	255	25500	7750	260	26000	7900	265	26500	8100
270	27000	8250	275	27500	8400	280	28000	8550	285	28500	8700
290	29000	8850				300	30000	9150			
310	31000	9450				320	32000	9750			
330	33000	10050				340	34000	10350			
350	35000	10650				360	36000	10950			
370	37000	11300				380	38000	11600			
390	39000	11900				400	40000	12200			
410	41000	12500				430	43000	13100			
450	45000	13700				470	47000	14350			
490	49000	14950				510	51000	15550			
...			

* Except when, on the basis of regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum of 1 000 ft (300 m) is prescribed for use, under specified conditions, by aircraft operating above FL 410 within designated portions of the airspace.

** Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

*** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

RVSM – Meters

(b) In areas where metres are used for altitude and where, in accordance with regional air navigation agreements, a vertical separation minimum of 300 m is applied between 8900 m and 12500 m inclusive:

Track**											
From 000 degrees to 179 degrees***						From 180 degrees to 359 degrees ***					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Standard metric	Metres	Feet	Standard metric	Metres	Feet	Standard metric	Metres	Feet	Standard metric	Metres	Feet
0030	300	1000	---	---	---	60	600	2000			
0090	900	3000	0105	1050	3500	120	1200	4000	135	1350	4400
0150	1500	4900	0165	1650	5400	180	1800	6000	195	1950	6400
0210	2100	6900	0225	2250	7400	240	2400	8000	255	2550	8400
0270	2700	8900	0285	2850	9400	300	3000	10000	315	3150	10300
0330	3300	10800	0345	3450	11300	360	3600	12000	375	3750	12300
0390	3900	12800	0405	4050	13300	420	4200	14000	435	4350	14300
0450	4500	14800	0465	4650	15300	480	4800	16000	495	4950	16200
0510	5100	16700	0525	5250	17200	540	5400	18000	555	5550	18200
0570	5700	18700	0585	5850	19200	600	6000	20000	615	6150	20200
0630	6300	20700	0645	6450	21200	660	6600	22000	675	6750	22100
0690	6900	22600	0705	7050	23100	720	7200	24000	735	7350	24100
0750	7500	24600	0765	7650	25100	780	7800	26000	795	7950	26100
0810	8100	26600	0825	8250	27100	840	8400	28000	855	8550	28100
0890	8900	29100				920	9200	30100			
0950	9500	31100				980	9800	32100			
1010	10100	33100				1040	10400	34100			
1070	10700	35100				1100	11000	36100			
1130	11300	37100				1160	11600	38100			
1190	11900	39100				1220	12200	40100			
1250	12500	41100				1310	13100	43000			
1370	13700	44900				1430	14300	46900			
1490	14900	48900				1550	15500	50900			
...			

* Except when, on the basis of regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum of 1 000 ft (300 m) is prescribed for use, under specified conditions, by aircraft operating above FL 410 within designated portions of the airspace.

** Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

*** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

Non RVSM – Feet

(c) In other areas where “feet” are the primary unit of measurement for altitude:

Track**											
From 000 degrees to 179 degrees***						From 180 degrees to 359 degrees ***					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres
010	1000	300	---	---	---	020	2000	600			
030	3000	900	035	3500	1050	040	4000	1200	045	4500	1350
050	5000	1500	055	5500	1700	060	6000	1850	065	6500	2000
070	7000	2150	075	7500	2300	080	8000	2450	085	8500	2600
090	9000	2750	095	9500	2900	100	10000	3050	105	10500	3200
110	11000	3350	115	11500	3500	120	12000	3650	125	12500	3800
130	13000	3950	135	13500	4100	140	14000	4250	145	14500	4400
150	15000	4550	155	15500	4700	160	16000	4900	165	16500	5050
170	17000	5200	175	17500	5350	180	18000	5500	185	18500	5650
190	19000	5800	195	19500	5950	200	20000	6100	205	20500	6250
210	21000	6400	215	21500	6550	220	22000	6700	225	22500	6850
230	23000	7000	235	23500	7150	240	24000	7300	245	24500	7450
250	25000	7600	255	25500	7750	260	26000	7900	265	26500	8100
270	27000	8250	275	27500	8400	280	28000	8550	285	28500	8700
290	29000	8850	300	30000	9150	310	31000	9450	320	32000	9750
330	33000	10050	340	34000	10350	350	35000	1065	360	36000	1095
370	37000	11300	380	38000	11600	390	39000	1190	400	40000	12200
410	41000	12500	420	42000	12800	430	43000	13100	440	44000	13400
450	45000	13700	460	46000	14000	470	47000	14350	480	48000	14650
490	49000	14950	500	50000	15250	510	51000	15550	520	52000	15850
...

** Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

*** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

Non RVSM – Meters

(d) In other areas where metres are the primary unit of measurement for altitude:

Track **											
From 000 degrees to 179 degrees***						From 180 degrees to 359 degrees ***					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Standard metric	Metres	Feet	Standard metric	Metres	Feet	Standard metric	Metres	Feet	Standard metric	Metres	Feet
0030	300	1000	---	---	---	060	600	2000			
0090	900	3000	0105	1050	3500	0120	1200	3900	0135	1350	4400
0150	1500	4900	0165	1650	5400	0180	1800	5900	0195	1950	6400
0210	2100	6900	0225	2250	7400	0240	2400	7900	0255	2550	8400
0270	2700	8900	0285	2850	9400	0300	3000	9800	0315	3150	10300
0330	3300	10800	0345	3450	11300	0360	3600	11800	0375	3750	12300
0390	3900	12800	0405	4050	13300	0420	4200	13800	0435	4350	14300
0450	4500	14800	0465	4650	15300	0480	4800	15700	0495	4950	16200
0510	5100	16700	0525	5250	17200	0540	5400	17700	0555	5550	18200
0570	5700	18700	0585	5850	19200	0600	6000	19700	0615	6150	20200
0630	6300	20700	0645	6450	21200	0660	6600	21700	0675	6750	22100
0690	6900	22600	0705	7050	23100	0720	7200	23600	0735	7350	24100
0750	7500	24600	0765	7650	25100	0780	7800	25600	0795	7950	26100
0810	8100	26600	0825	8250	27100	0840	8400	27600	0855	8550	28100
0890	8900	29100	0920	9200	30100	0950	9500	31100	0980	9800	32100
1010	10100	33100	1040	10400	34100	1070	10700	35100	1100	11000	36100
1130	11300	37100	1160	11600	38100	1190	11900	39100	1220	12200	40100
1250	12500	41100	1280	12800	42100	1310	13100	43000	1370	13700	44000
1370	13700	44900	1400	14000	46100	1430	14300	46900	1460	14600	47900
1490	14900	48900	1520	15200	49900	1550	15500	50900	1580	15800	51900
...

** Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

*** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

APPENDIX 1 TO 10.363: PERFORMANCE-BASED NAVIGATION APPROVAL¹⁶¹

- (a) The CAAV shall, for operations where a navigation specification for PBN has been prescribed, ensure that the operator has established and documented:
 - (1) Normal and abnormal procedures including contingency procedures;
 - (2) Flight crew qualification and proficiency requirements in accordance with the appropriate navigation specifications;
 - (3) A training programme for relevant personnel consistent with the intended operations;
 - (4) Appropriate maintenance procedures to ensure continued airworthiness in accordance with the appropriate navigation specifications;
 - (5) Additional requirements determined to be necessary for safety.
- (b) The CAAV shall ensure that, in respect of those aircraft mentioned in Subsection 6.052, adequate provisions exist for:
 - (1) Receiving the reports of observed surveillance performance issued by monitoring programmes established in accordance with ICAO Annex 11, Chapter 3, Section 3.3.5.2; and
 - (2) Taking immediate corrective action for individual aircraft, aircraft types or operators, identified in such reports as not complying with the navigation specifications.

APPENDIX 1 TO 10.364: PERFORMANCE-BASED SURVEILLANCE APPROVAL¹⁶²

- (a) The CAAV shall, for operations where an RSP specification for PBS has been prescribed, ensure that the operator has established and documented:
 - (1) Normal and abnormal procedures, including contingency procedures;
 - (2) Flight crew qualification and proficiency requirements, in accordance with appropriate RSP specifications;
 - (3) A training programme for relevant personnel consistent with the intended operations;
 - (4) Appropriate maintenance procedures to ensure continued airworthiness, in accordance with appropriate RSP specifications; and
 - (5) Additional requirements determined to be necessary for safety.
- (b) The CAAV shall ensure that, in respect of those aircraft mentioned in Subsection 6.066, adequate provisions exist for:
 - (1) Receiving the reports of observed surveillance performance issued by monitoring programmes established in accordance with ICAO Annex 11, Chapter 3, Section 3.3.5.2; and
 - (2) Taking immediate corrective action for individual aircraft, aircraft types or operators, identified in such reports as not complying with the RSP specification.

¹⁶¹This Appendix is added according to Item 28, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹⁶²This Appendix is added according to Item 29, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

APPENDIX 2 TO 10.364: APPROVAL OF ELECTRONIC FLIGHT BAGS ¹⁶³

- (a) In establishing operational criteria for the use of EFBs, the State of Registry shall ensure that:
- (1) The EFB equipment and its associated installation hardware, including interaction with aeroplane systems if applicable, meet the appropriate airworthiness certification requirements;
 - (2) The operator/owner has assessed the risks associated with the operations supported by the EFB function(s);
 - (3) The operator/owner has established requirements for redundancy of the information (if appropriate) contained in and displayed by the EFB function(s);
 - (4) The operator/owner has established and documented procedures for the management of the EFB function(s) including any databases it may use;
 - (5) The operator/owner has established and documented the procedures for the use of, and training requirements for, the EFB function(s);
 - (6) Any additional requirements necessary for safety are completed.

APPENDIX 3 TO 10.364: APPROVAL OF AUTO LANDING, HUD, NVIS OR CVS SYSTEMS¹⁶⁴

- (a) In establishing operational criteria for the use of automatic landing systems, a HUD or equivalent displays, EVS, SVS or CVS, the State of Registry shall ensure that:
- (1) The equipment meets the appropriate airworthiness certification requirements;
 - (2) The operator/owner has carried out a safety risk assessment associated with the operations supported by the automatic landing systems, a HUD or equivalent displays, EVS, SVS or CVS;
 - (3) The operator/owner has established and documented the procedures for the use of, and training requirements for automatic landing systems, a HUD or equivalent displays, EVS, SVS or CVS, and
 - (4) Additional requirements determined to be necessary for safety are included.

¹⁶³This Appendix is added according to Item 30, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

¹⁶⁴This Appendix is added according to Item 31, Appendix VIII to Circular 21/2017/TT-BGTVT dated 30 June 2017.

APPENDIX 1 TO 10.433: AIRSPACE AND VMC MINIMUMS

Airspace Class	A (Note3) B C D E	F	G
		ABOVE 900 m (3 000 ft.) AMSL or above 300 m (1 000 ft.) above terrain, whichever is the higher	At and below 900 m (3 000 ft.) AMSL or 300 m (1 000 ft.) above terrain, whichever is the higher
Distance from cloud	1 500 m horizontally 300 m (1 000 ft.) vertically		Clear of cloud and in sight of the surface
Flight visibility	8 km at and above 3 050 m (10 000 ft.) AMSL 5 km below 3 050 m (10 000 ft.) AMSL		5 km (Note2)

Note 1: When the height of the transition altitude is lower than 3 050 m (10 000 ft.) AMSL, FL 100 should be used in lieu of 10 000 ft.

Note 2: When so prescribed by the appropriate ATS authority:

- a) lower flight visibilities to 1 500 m may be permitted for flights operating:

 - 1) at speeds that, in the prevailing visibility, will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or*
 - 2) in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels.**
- b) Helicopters may be permitted to operate in less than 1 500 m flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.*

Note 3: The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace.