

2016-02-18

**CIVIL AVIATION (AIR NAVIGATION SERVICES) REGULATIONS,
2016**

Arrangement of Regulations

PART I

Preliminary

1. Citation
2. Interpretation

PART II

Applicability

3. Applicability of Regulations

PART III

Airspace Requirements

4. Airspace Structure
5. Airspace classification
6. Transponder airspace
7. IFR flights in Class A, B, C, D or E airspace
8. VFR flights not permitted in Class A airspace
9. VFR flight in Class B airspace

10. VFR flight in Class C airspace
11. VFR flight in Class D airspace
12. VFR flights in Class E airspace
13. Requirements for the fitment and operation of transponders in aircraft
14. Provision of air traffic services in airspace classifications A, B, C, D and E

PART IV

Air Traffic Services

15. Applicability
16. Determining the need for the provision of Air Traffic Services
17. Provision of air traffic services
18. Restriction on the provisions of ATS
19. Facilities and equipment
20. Prohibition on a person performing ATC duties under the influence of alcohol and other substances
21. Training and checking programme
22. Safety management system
23. Requirements for safety management programme system
24. Reporting of aviation occurrences

- 25. Contingency Plan
- 26. Security programme
- 27. Performance Based Navigation specifications
- 28. Provision of flight information service
- 29. Flight information service to aircraft
- 30. Alerting service
- 31. Communication requirements for Air Traffic Services
- 32. Air Traffic Services requirement for information

PART V

Aeronautical Telecommunications

- 33. Interpretation
- 34. Aeronautical telecommunication systems

PART VI

Aeronautical Information Services

- 35. Interpretation
- 36. Development and publication of instrument procedures
- 37. Provision of Aeronautical Information Services
- 38. Director responsible for information published on behalf of Barbados

- 39. Requirements for aeronautical information
- 40. Establishment of a Quality Management System
- 41. Copyright protection
- 42. Form, contents, specifications and distribution of aeronautical information publications
- 43. Origin, general specification and distribution of NOTAM
- 44. General specifications, form of publications, distribution and control of Aeronautical Information Regulation and Control
- 45. General specifications, origin and distribution of Aeronautical Information Circulars
- 46. Preflight and post flight information
- 47. Telecommunication requirements
- 48. Electronic terrain and obstacle data

PART VII

Aviation Weather Services

- 49. Provision of aviation weather services
- 50. Functions of the Meteorological Office

PART VIII

Aeronautical Charts

- 51. Availability and general specifications of aeronautical charts

52. Director's responsibility to provide information to other Contracting States
53. Quality system for aeronautical data
54. Aerodrome Obstacle Chart ICAO Type A
55. Aerodrome Obstacle Chart ICAO Type B
56. Aerodrome Terrain and Obstacle Charts - ICAO (Electronic)
57. Precision Approach Terrain Charts
58. En route Charts
59. Area Charts
60. Standard Departure Chart Instruments
61. Standard Arrival Charts (Instrument STAR) - ICAO
62. Instrument Approach Charts - ICAO
63. Visual Approach Charts - ICAO
64. Aerodrome or Heliport Charts - ICAO
65. Aerodrome Ground Movement Charts - ICAO
66. Aircraft Parking or Docking Charts - ICAO
67. World Aeronautical Charts - ICAO 1:1000000
68. Aeronautical Charts - ICAO 1: 500 000
69. Aeronautical Navigation Charts

- 70. Plotting Charts - ICAO
- 71. Electronic Aeronautical Chart Display - ICAO
- 72. ATC Surveillance Minimum Altitude Chart - ICAO

PART IX

Air and Ground Operations

- 73. Units of Measurement

PART X

Miscellaneous

- 74. Director may make or amend Standards
- 75. Repeal

S.I. 2016 No.

Civil Aviation Act

CAP. 288B

**CIVIL AVIATION (AIR NAVIGATION SERVICES) REGULATIONS,
2016**

The Minister, in exercise of the powers conferred on him by section 88(b) of the *Civil Aviation Act*, makes the following Regulations:

PART I

Preliminary

Citation

1. These Regulations may be cited as the *Civil Aviation (Air Navigation Services) Regulations, 2016*.

Interpretation

2. In these Regulations,

“advisory airspace” means an airspace of defined dimensions, or designated route within which air traffic advisory service is available;

“aerodrome” means a defined area on land or water including any buildings, installations and equipment intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft;

“aerodrome control service” means the provision of air traffic control service for aerodrome traffic;

“aerodrome control tower” means a unit established to provide air traffic control service to aerodrome traffic;

- “aerodrome traffic” means all traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome;
- “aerodrome traffic zone” means airspace of defined dimensions established around an airport for the protection of aerodrome traffic;
- “aeronautical charts” means a representation of a portion of the Earth, its culture and relief specifically designated to meet the requirements of air navigation;
- “aeronautical data” means a representation of aeronautical facts, concepts or instructions in a formalized manner suitable for communication, interpretation or processing;
- “aeronautical fixed service” means a telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services;
- “aeronautical information” means information resulting from the assembly analysis and formatting of aeronautical data;
- “Aeronautical Information Circular (AIC)” means a notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP but which relates to flight safety, air navigation, technical administrative or legislative matters;
- “aeronautical information publication (AIP)” means a publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation;
- “Aeronautical Information Regulation and Control (AIRAC)” means a system aimed at advance notification based on common effective dates, of circumstances that necessitate significant changes in operating practices;
- “aeronautical information service (AIS)” means a service established in a defined area of coverage that is responsible for the provision of aeronautical information or data necessary for the safety, regularity and efficiency of air navigation and includes personnel and facilities employed to provide information pertaining to the availability of air navigation services and their

associated procedures necessary for the safety, regularity and efficiency of air navigation;

“aeronautical mobile service” means a mobile communication service between aeronautical stations and aircraft stations or between aircraft stations, in which survival craft stations may participate emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies;

“AIP Barbados” means aeronautical information publication of Barbados;

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

“aircraft stand” means a designated area on an apron intended to be used for parking an aircraft;

“air traffic” means all aircraft in flight or operating on the manoeuvring area;

“air traffic advisory service” means a service provided within advisory airspace to ensure separation, insofar as is practical, between aircraft which are operating on instrument rules;

“air traffic control clearance” means an authorisation for an aircraft to proceed under conditions specified by an air traffic control unit;

“air traffic control instruction” means a directive issued by the air traffic control service for the purpose of requiring a pilot to take specific action;

“air traffic control service” means a service provided for the purpose of

- (a) preventing collisions
 - (i) between aircraft; and
 - (ii) on the manoeuvring area between aircraft and obstructions; and
- (b) expediting and maintaining an orderly flow of air traffic;

- “air traffic control unit” means an area control unit, approach control unit or aerodrome control tower;
- “air traffic services” or “ATS” means air traffic control services including area control services, approach control services or aerodrome control services, air traffic advisory services, alerting services or flight information services;
- “air traffic service route” means a specified route designed for channelling the flow of traffic as necessary for the provision of ATS;
- “air traffic services unit” means a generic term meaning an air traffic control unit, a flight information centre or an air traffic services reporting office;
- “air transit route” means a defined path on the surface established for the air transiting of helicopters;
- “alerting service” means a service provided to notify appropriate organisations regarding aircraft in need of search of rescue aid, and to assist such organisations as required;
- “altitude” means the vertical distance of a level, a point or an object considered as a point, measured from mean sea level;
- “approach control service” air traffic control service for arriving or departing controlled flights;
- “approach control unit” means a unit established to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes;
- “apron” means a defined area on a land aerodrome intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance;
- “area control service” means air traffic control service for controlled flights in control areas;
- “ATS route” means a specified route designated for channelling the flow of air traffic as necessary for the provision of air traffic services;

- “Barbadian airspace” means the airspace specified and delineated as such in the AIP Barbados;
- “control area” means the controlled airspace extending upwards from a specified limit above the earth;
- “controlled aerodrome” means an aerodrome at which air traffic control service is provided to aerodrome traffic;
- “control zone” means the controlled airspace that is so specified in the AIP Barbados and that extends upwards vertically from the surface of the earth up to a specified upper limit;
- “controlled airspace” means an airspace of defined dimensions that is so specified in the AIP Barbados and within which an air traffic control service is provided in accordance with the airspace classification;
- “danger area” means an airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times;
- “en route phase” means that part of a flight from the end of the take off and climb phase to the commencement of the approach and landing phase;
- “final approach” means that part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified
- (a) at the end of the last procedure turn, base turn or inbound turn of a race track procedure, if specified; or
 - (b) at the point of interception of the last track specified in the approach procedure; and ends at a point in the vicinity of an aerodrome from which
 - (i) a landing can be made; or
 - (ii) a missed approach procedure is initiated;
- “final approach and take-off area” means a defined area over which the final phase of the approach manoeuvre to hover or land is completed and from

which the take-off manoeuvre is commenced and with respect to Class 1 helicopters includes the rejected take-off area available;

“final approach segment” means that segment of an instrument approach procedure in which alignment and descent for landing are accomplished;

“flight crew member” means a licensed crew member charged with duties that are essential to the operation of an aircraft during a flight duty period;

“flight information region” means an airspace of defined dimensions within which flight information service and alerting service are provided;

“flight information service” means a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights;

“Flight Level (FL)” means a surface of constant atmospheric pressure which is related to a specific pressure datum, 1013.2 hectopascals and is separated from other such services by specific pressure intervals;

“flight plan” means specified information provided to air traffic services units, relative to an intended flight or a portion of a flight of an aircraft;

“helicopter stand” means an aircraft stand which provides for parking a helicopter and where air taxiing operations are contemplated where the helicopter may touch down and lift-off;

“heliport” means an aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters;

“high level airspace” means airspace above FL 245;

“ICAO” means the International Civil Aviation Organisation;

“IFR” means instrument flight rules;

“IFR flight” means a flight conducted in accordance with the instrument flight rules;

- “instrument approach procedure” means a series of pre-determined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed to a position at which holding or en-route obstacle clearance criteria apply;
- “level” means the vertical position of an aircraft in flight including altitude and flight level;
- “low level airspace” means airspace at or below FL 245;
- “manoeuvring area” means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons;
- “missed approach procedure” means the procedure to be followed where the approach cannot be continued;
- “NOTAM” means a notice to airmen concerning the establishment or condition of or change in, any aeronautical facility, service or procedure, or any hazard affecting aviation safety, the knowledge of which is essential to personnel engaged in flight operations;
- “obstacle” means all temporary or permanent fixed and mobile objects, or parts thereof that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight;
- “operator” means a person, organisation or enterprise engaged in or offering to engage in an aircraft operation;
- “operational location” means the physical location of an operational air traffic control unit or flight service station;
- “pilot in command” means the pilot designated by the operator or in the case of general aviation, the owner as being in command and charged with the safe conduct of a flight;

- “prohibited area” means airspace of defined dimensions that is above the land area or territorial waters of a State and within which the flight of aircraft is prohibited;
- “quality management” means the co-ordinated activities that direct and control an organisation with regard to quality;
- “Required Navigation Performance (RNP)” means a statement of the navigation performance necessary for operation within a defined airspace;
- “requirement” means the need or expectation that is stated, generally implied or obligatory;
- “restricted area” means an airspace of defined dimensions, above the land area or territorial waters of a State within which the flight of aircraft is restricted in accordance with certain specified conditions;
- “route stage” means a route or portion of a route flown without an intermediate landing;
- “runway” means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft;
- “safety management system” means a systematic approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures;
- “special VFR flight” means a VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC;
- “terminal control area” means a control area of fixed dimensions that is so specified in the AIP Barbados normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes;
- “transponder airspace” means an airspace of fixed dimensions which aircraft shall not enter while in flight unless the aircraft is equipped with a serviceable and functioning transponder;
- “VFR” means Visual Flight Rules;

“VMC” means Visual Meteorological Conditions;

“warning area” means airspace of defined dimensions designed to contain activity that may be hazardous to non-participating aircraft.

PART II

Applicability

Applicability of Regulations

3. These Regulations do not apply in respect of any air navigation services that are provided by or under the authority of the Minister responsible for Defence and Security.

PART III

Airspace Requirements

Airspace Structure

4.(1) Barbadian airspace consists of controlled airspace.

(2) Controlled airspace consists of the following types of airspace:

- (a) upper control areas;
- (b) control areas;
- (c) terminal control areas;
- (d) control zones;
- (e) aerodrome traffic zones;
- (f) high level ATS routes;
- (g) low level ATS routes;

- (h) prohibited areas;
- (i) danger areas;
- (j) restricted areas; and
- (k) warning areas.

(3) The horizontal and vertical limits of any airspace of a type referred to in paragraph (1) or (2) shall be as specified in the AIP Barbados, or by NOTAM.

(4) The geographical locations of and the horizontal and vertical limits of the following areas, zones, regions and points are those specified in the AIP Barbados or by NOTAM:

- (a) altimeter setting regions;
- (b) standard pressure regions;
- (c) holding points;
- (d) reporting points;
- (e) intersections; and
- (f) control towers.

Airspace classification

5. The class of any airspace shall be one of the following, as specified in the AIP Barbados:

- (a) Class A:
 - (i) only IFR flights are permitted;
 - (ii) all flights are subject to the air traffic control services; and
 - (iii) flights are separated from each other;
- (b) Class B:
 - (i) IFR and VFR flights are permitted;

- (ii) all flights are subject to the air traffic control services; and
 - (iii) flights are separated from each other;
- (c) Class C:
- (i) IFR and VFR flights are permitted;
 - (ii) all flights are subject to the air traffic control services;
 - (iii) IFR flights are separated from other IFR flights and from VFR flights; and
 - (iv) VFR flights receive traffic information in respect of the other VFR flights;
- (d) Class D:
- (i) IFR and VFR flights are permitted;
 - (ii) all flights are subject to the air traffic control services;
 - (iii) IFR flights are separated from other IFR flights and receive traffic information in respect of VFR flights; and
 - (iv) VFR flights receive traffic information in respect of all other flights;
- (e) Class E:
- (i) IFR and VFR flights are permitted;
 - (ii) IFR flights are subject to the air traffic control services and are separated from other IFR flights; and
 - (iii) all flights receive traffic information as far as is practical;
- (f) Class F:
- (i) IFR and VFR flights are permitted;
 - (ii) all participating IFR flights receive an air traffic advisory service; and

- (iii) all flights receive flight information service, if requested;
- (g) Class G: IFR and VFR flights are permitted and all flights receive flight information service, if requested.

Transponder airspace

- 6.** Transponder airspace consists of
- (a) all Class A, B, C, D and E airspace; and
 - (b) any Class F or G airspace specified as transponder airspace in the AIP Barbados.

IFR flights in Class A, B, C, D or E airspace

- 7.(1)** No person shall operate an IFR aircraft in Class A, B, C, D, or E airspace unless the aircraft is operated in accordance with an air traffic control clearance or an authorisation by the Director or instructions as may be contained in the AIP.
- (2) The Director may issue an authorisation referred to in paragraph (1) where the operation of the aircraft is in the public interest and is not likely to be detrimental to aviation safety.

VFR flights not permitted in Class A airspace

- 8.(1)** No person shall operate an aircraft under VFR in Class A airspace unless the aircraft is operated in accordance with an authorisation issued by the Director.
- (2) The Director may issue an authorisation referred to in paragraph (1) where the operation of the aircraft is in the public interest and is not likely to affect aviation safety.

VFR flight in Class B airspace

9.(1) No person shall operate a VFR aircraft in Class B airspace unless the aircraft is operated in accordance with an air traffic control clearance or an authorisation issued by the Director.

(2) The Director may issue an authorisation referred to in paragraph (1) where the operation of the aircraft is in the public interest and is not likely to affect aviation safety.

(3) The pilot in command of a VFR aircraft operating in Class B airspace in accordance with an air traffic control clearance shall, when it becomes evident that it will not be possible to operate the aircraft in VMC at the altitude or along the route specified in the air traffic control clearance, where the airspace is a control zone, request

- (a) authorisation to operate the aircraft in special VFR flight; and
- (b) an amended air traffic control clearance that will enable the aircraft to be operated in VMC to the destination specified in the flight plan or to an alternate airport; or
- (c) an air traffic control clearance to operate the aircraft in IFR flight.

VFR flight in Class C airspace

10.(1) Subject to paragraph (2), no person operating a VFR aircraft shall enter Class C airspace unless the person receives a clearance to enter from the appropriate air traffic control unit before entering the airspace.

(2) The pilot in command of a VFR aircraft that is not equipped with radio communication equipment capable of two-way communication with the appropriate air traffic control unit may, during daylight in VMC, enter Class C airspace if the pilot in command receives authorisation to enter from the appropriate air traffic control unit before entering the airspace.

(3) Class C airspace becomes Class E airspace when the appropriate air traffic control unit is not in operation.

VFR flight in Class D airspace

11.(1) Subject to paragraph (2), no person operating a VFR aircraft shall enter Class D airspace unless the person establishes two-way radio contact with the appropriate air traffic control unit before entering the airspace.

(2) The pilot in command of a VFR aircraft that is not equipped with radio communication equipment capable of two-way communication with the appropriate air traffic control unit may, during daylight in VMC, enter Class D airspace if the pilot in command receives authorisation to enter from the appropriate air traffic control unit before entering the airspace.

(3) VFR aircraft operating in Class D airspace may be required to operate in accordance with an air traffic control clearance.

(4) Class D airspace becomes Class E airspace when the appropriate air traffic control unit is not in operation.

VFR flights in Class E airspace

12. The pilot in command of an aircraft operating under the VFR in Class E airspace must comply with the procedures for operation in Class E airspace as published in the AIP.

Requirements for the fitment and operation of transponders in aircraft

13.(1) Aircraft operated under the IFR must have a serviceable altitude encoding Mode C transponder fitted and operating.

(2) Aircraft operated under the VFR in airspace Classes A, B, C and D must have a serviceable altitude encoding Mode C transponder fitted and operating.

(3) Aircraft operated under the VFR in aircraft Class E must have a serviceable altitude encoding Mode C transponder fitted and operating.

(4) Paragraph (3) does not apply to aircraft that do not have an electrical power generating system capable of powering a transponder when such aircraft are operating at a radius of greater than 40 nautical miles from any controlled aerodrome.

Provision of air traffic services in airspace classifications A, B, C, D and E

14.(1) Where Class A or Class B airspace has been established, the air traffic control service must, as a minimum, provide for the separation of all aircraft in the airspace.

(2) Where Class C airspace has been established, the air traffic control service must, as a minimum, provide for the

- (a) separation of IFR aircraft, the separation IFR from VFR aircraft and the separation of all aircraft during runway operations;
- (b) provision of traffic avoidance advice between VFR aircraft; and
- (c) provision of traffic information to VFR aircraft.

(3) Where Class D airspace has been established, the air traffic control service must as a minimum, provide for the

- (a) separation of IFR flights, and the separation of all aircraft during runway operations;
- (b) delivery of traffic avoidance advice when requested; and
- (c) delivery of traffic information.

(4) Where Class E airspace has been established, the air traffic control service must, as a minimum, provide for the separation service of the IFR flights.

PART IV

Air Traffic Services

Applicability

15. This Part is applicable to the requirements for air traffic services including organisation, flight information services and alerting services within airspace under the jurisdiction of Barbados.

Determining the need for the provision of Air Traffic Services

16.(1) The Director shall determine, in accordance with Air Navigation Services Standards, those portions of the airspace and those aerodromes where air traffic service will be provided for the territories over which Barbados has jurisdiction.

(2) In determining the need for the provision of air traffic services the following matters shall be considered by the Director:

- (a) the types of traffic concerned;
- (b) the density of air traffic;
- (c) the meteorological conditions;
- (d) any other factors.

(3) The Director shall make the necessary arrangements for ATS to be established and provided in accordance with Air Navigation Services Standards.

(4) The Director may, except by mutual agreement, delegate to another State the responsibility for establishing and providing ATS in flight information regions, control areas or control zones extending over the territories for which the Director has control.

(5) Those portions of airspace over the high seas or in airspace of undetermined sovereignty where ATS will be provided shall be determined by the Director, on the basis of regional navigation agreements.

(6) Where ATS are established, the information shall be published by the Director as necessary to permit the utilization of ATS.

Provision of air traffic services

17.(1) No operator of an ATS operation shall provide air traffic services at an operational location unless the services are provided in accordance with the standards set out in the Air Navigation Services Standards.

(2) An operator may deviate from the standards if an emergency or other circumstances arise that makes the deviation necessary and in the interest of aviation safety.

Restriction on the provisions of ATS

18.(1) An ATS provider shall ensure that air traffic clearances are provided in accordance with the procedures and rules set out in the Air Traffic Control Instructions and General 1.7 of Part I of the AIP Barbados.

(2) No operator of an ATS operation shall issue

- (a) an air traffic control clearance; or
- (b) an air traffic control instruction

in the case of international airspace in respect of which Barbados has accepted by means of a regional air navigation agreement the responsibility of providing air navigation services, except in accordance with the standards prescribed in Air Navigation Services Standards.

(3) An ATS provider may deviate from a procedure or rule mentioned in paragraph (1) or a regional supplementary procedure from a regional air navigation agreement mentioned in paragraph (2), where an emergency or other circumstance arises that makes the deviation necessary in the interest of aviation safety.

(4) As soon as practicable, the provider shall tell the Director of the deviation and how long it will last.

Facilities and equipment

19.(1) An ATS provider shall at all times make available for use by its personnel the appropriate equipment and facilities necessary for providing air traffic services in accordance with the standards set out in the Air Navigation Services Standards.

(2) The equipment referred to in paragraph (1) shall include equipment of the kinds specified in Air Navigation Services Standards.

(3) Any equipment and facilities required for communication that an ATS provider uses for providing an air traffic service shall comply with the standards set out in the Air Navigation Services Standards.

(4) Where an ATS provider uses a control tower to provide an air traffic service, the provider shall ensure that the control tower is designed, sited, constructed, equipped and maintained in accordance with the standards set out in the Air Navigation Services Standards.

Prohibition on a person performing ATC duties under the influence of alcohol and other substances

20. A person shall not perform any duty as an air traffic controller

(a) within 8 hours after the consumption of alcohol;

(b) while under the influence of alcohol; or

(c) while under the influence of any drug or other substance that would impair his ability to perform his duties and thereby jeopardize aviation safety.

Training and checking programme

21. An ATS provider shall at all times provide a training and checking programme in accordance with the Air Navigation Services Standards to ensure that each member of its personnel who performs functions in connection with any air traffic service that it provides is competent to perform those functions.

Safety management system

22.(1) An ATS provider shall have and put into effect a safety management system that includes the policies, procedures and practices necessary to provide air traffic services safely.

(2) The safety management system shall be in accordance with the *Civil Aviation (Safety Management Systems) Regulations, 2016* (S.I 2016 No.).

(3) The ATS provider shall keep under review its safety management system and take such corrective action as is necessary to ensure that the safety management system operates properly.

Requirements for safety management programme system

23.(1) The operator of an ATS operation shall establish a safety management system that provides for an internal system of management oversight to ensure the safe provision of air navigation services.

(2) The manager of the safety management system referred to in paragraph (1) shall

- (a) have direct access to the chief executive officer of the entity providing the ATS operation, on operational system safety matters;
- (b) conduct risk assessments of current and proposed operational policies, plans and procedures; and
- (c) co-ordinate the collection and analysis of operational risk related data.

Reporting of aviation occurrences

24. The operator of an ATS operation shall report to the Director any aviation occurrence information specified in the Aviation Policy Enforcement Manual in accordance with the criteria and reporting procedures specified in that manual.

Contingency Plan

25.(1) An ATS provider must have a contingency plan that accords with the standards set out in the Air Navigation Services Standards of the procedures to be followed if for any reason an air traffic service being provided is interrupted.

(2) The contingency plan referred to in paragraph (1) shall include

- (a) the actions to be taken by the members of the providers personnel responsible for providing the service;
- (b) possible alternative arrangements for providing the service; and
- (c) the arrangements for resuming normal operations for the service.

Security programme

26.(1) An ATS provider shall have and put into effect, a security programme that sets out the procedures designed to protect its personnel, and any facility and equipment that it uses, when providing any of its air traffic services.

(2) The security programme shall be in accordance with the standards set out in the Air Navigation Services Standards.

Performance Based Navigation specifications

27.(1) The Director in applying Performance Based Navigation shall prescribe navigation specifications.

(2) The navigation specifications referred to in paragraph (1) for designated areas, tracks or ATS routes shall be prescribed by the Director based on regional air navigation agreements.

(3) The Director may apply limitations in the navigation specifications where there are navigation infrastructure constraints or specific navigation functionality requirements.

(4) The Director shall prescribe Required Navigation Performance (RNP) type and this shall be appropriate to the level of communication navigation and ATS provided in the particular airspace.

Provision of flight information service

28.(1) A flight information service shall be provided by the Director to all aircraft that are

- (a) provided with air traffic control service; or
- (b) otherwise known to the relevant ATS units.

(2) Where ATS units provide both flight information and air traffic control service, the provision of air traffic control service shall have precedence over the provision of flight information service where the provision of air traffic control service so requires.

(3) Flight information service referred to in paragraphs (1) and (2) shall be provided in accordance with the Air Navigation Services Standards.

Flight information service to aircraft

29. An ATS provider shall, provide

- (a) a voice-automatic terminal information service (voice-ATIS broadcast);
- (b) a data link automatic terminal information service (DATIS);
- (c) an automatic terminal information service (voice or data link) and

shall meet the applicable standards prescribed in Air Navigation Services Standards.

Alerting service

- 30.** An ATS provider shall ensure that
- (a) an alerting service is provided
 - (i) for all aircraft provided with an air traffic service;
 - (ii) to all other aircraft that have filed a flight plan or are known to the air traffic services; and
 - (iii) to any aircraft known or believed to be the subject to an act of unlawful interference;
 - (b) the following alerting services are provided in accordance with the standards prescribed in the Air Navigation Services Standards:
 - (i) the notification of rescue co-ordinating centres;
 - (ii) the plotting of an aircraft in a state of emergency;
 - (iii) the use of communication facilities;
 - (iv) information to an operator; and
 - (v) information to an aircraft that is operating in the vicinity of an aircraft in a state of emergency.

Communication requirements for Air Traffic Services

- 31.(1)** An ATS provider shall ensure communications for the following services are provided in accordance with the standards prescribed in Air Navigation Services Standards:
- (a) aeronautical mobile service, such as air to ground communications;
 - (b) aeronautical fixed service, such as ground to ground communications;
 - (c) surface movement control service; and
 - (d) aeronautical radio navigation service.

(2) Where air to ground voice communication channels are used for area control service and are worked by air to ground communicators, suitable arrangements shall be made by the ATS provider to permit direct pilot controller voice communications, when required.

(3) Where conditions warrant the provision of an aerodrome control service, an ATS provider shall ensure that separate communication channels are provided for the control of traffic operating on the manoeuvring area.

Air Traffic Services requirement for information

32. An ATS provider shall ensure that air traffic service requirements for information are in accordance with the standards prescribed in the Air Navigation Services Standards.

PART V

Aeronautical Telecommunications

Interpretation

33. In this Part, "aeronautical telecommunications systems" include radio navigation aids and aeronautical communication systems.

Aeronautical telecommunication systems

34.(1) A person who operates any equipment that is part of an aeronautical telecommunications system referred to in Annex 10 to the Convention shall ensure that

- (a) the equipment is installed, maintained and operated in accordance with the standards specified in the Barbados Manual of Aeronautical Telecommunications approved by the Director; and
- (b) documentation is maintained that shows how compliance with the standards referred to in paragraph (a) is being achieved.

- (2) No person shall perform a function related to the installation, maintenance or operation of any aeronautical telecommunication equipment unless the person has successfully completed training in the performance of that function, and has been certified by the operator of the aeronautical telecommunications system as being competent to perform that function.
- (3) A person who operates any ground equipment in support of satellite navigation systems shall ensure that
- (a) the equipment is installed, maintained and operated in accordance with the standards specified in the manual entitled GNSS IFR Operations; and
 - (b) documentation is maintained that shows how compliance with the standards referred to in paragraph (a) is being achieved.
- (4) A person who operates any equipment that is part of an aeronautical telecommunications system referred to in regulation 13(1) or (3) shall, at the request of the Director, provide the Director with a copy of the documentation referred to in paragraph (1)(b) or (3)(b).
- (5) For the purpose of this regulation “Convention” means the “Chicago Convention on International Civil Aviation concluded at Chicago on 7th December, 1944 as amended.

PART VI

Aeronautical Information Services

Interpretation

35. In this Part "aeronautical information services" means the services necessary to meet the aeronautical information or data requirements for the safety regularity and efficiency of air navigation as set out in the Air Navigation Services Standards.

Development and publication of instrument procedures

36. No person shall publish or submit for publishing an instrument procedure unless the procedure has been developed

- (a) in accordance with the standards and criteria specified in the ICAO manual entitled Criteria for the Development of Instrument Procedures; and
- (b) by a person who has successfully completed training in the interpretation and application of the standards and criteria specified in the ICAO manual entitled Criteria for the Development of Instrument Procedures, and such training has been accepted by the Director.

Provision of Aeronautical Information Services

37.(1) The Director shall be responsible for providing an aeronautical information service.

- (2) The Director may agree with one or more other Contracting States for the provision of a joint Aeronautical Information Service.
- (3) The Director may delegate the authority for the provision of the Aeronautical Information Service to a non-governmental agency.

Director responsible for information published on behalf of Barbados

38.(1) The Director is responsible for the aeronautical information published for and on behalf of Barbados.

- (2) The Director shall ensure that the information published in accordance with paragraph (1) is published under the authority of the Director.

Requirements for aeronautical information

- 39.(1)** The Director shall take all necessary steps to ensure that
- (a) the aeronautical information or data provided relating to Barbados as well as to areas for which the Director is responsible for providing services outside of Barbados is
 - (i) adequate;
 - (ii) of required quality;
 - (iii) is timely; and
 - (iv) meets the requirements prescribed in the Air Navigation Services Standards;
 - (b) the necessary arrangements are made for the timely provision of the required information and aeronautical data to the aeronautical information service by each of the other services associated with aircraft operations;
 - (c) arrangements are made to obtain aeronautical information and aeronautical data from the aeronautical information services of other States and from other sources that may be available in order to provide pre-flight information services and meet the needs for in-flight information;
 - (d) aeronautical information and aeronautical data obtained from other States shall when distributed, be clearly identified as having the authority of the State of Origin;
 - (e) aeronautical information and aeronautical data obtained from other sources that may be available are verified before distribution and if not verified shall when distributed, be clearly identified as not being verified; and

- (f) the aeronautical information service shall promptly make available to the aeronautical information service of the other States any information or data necessary for the safety, regularity or efficiency of air navigation required by them.
- (2) No person shall provide aeronautical information services except in accordance with the standards prescribed in the Air Navigation Services Standards.

Establishment of a Quality Management System

40.(1) The Director shall take all the necessary measures to introduce a properly organised quality management system which shall contain

- (a) procedures;
- (b) processes; and
- (c) resources

necessary to implement quality management at each function stage as is specified in the Air Navigation Services Standards.

- (2) The execution of quality management by the Director pursuant to paragraph (1) shall be demonstrable for each function stage where required.
- (3) The Director shall identify the skills and knowledge required for each function in the quality management system, and ensure that the personnel assigned to perform those functions are appropriately trained.
- (4) The Director shall ensure that
 - (a) personnel possess the skills and competencies required to perform specific assigned functions;
 - (b) appropriate records are maintained so that the qualifications of personnel can be confirmed;
 - (c) initial and periodic assessments are established that require personnel to demonstrate the required skills and competencies;

- (d) periodic assessments of personnel are used as a means to detect and correct short falls; and
- (e) procedures are established in order that aeronautical data is traceable to its origin so as to allow any data anomalies or errors detected during the production and maintenance phases or in operational use, to be corrected.

Copyright protection

41. The Director shall ensure that any product of a State's AIS which has been granted copyright protection by that State and is provided to Barbados in the process of the exchange of aeronautical information or aeronautical data shall only be made available to a third party on the condition that

- (a) the third party is made aware that the product is copyright protected; and
- (b) provided that it is appropriately annotated that the product is subject to the copyright of the Originating State.

Form, contents, specifications and distribution of aeronautical information publications

42. The Director shall ensure that the form, contents, specifications and distribution of aeronautical information publications for exchange of aeronautical information essential to air navigation are in accordance with the standards prescribed in Air Navigation Services Standards.

Origin, general specification and distribution of NOTAM

43. The Director shall ensure that the origin, general specifications and distribution of NOTAM are in accordance with the standards specified in Air Navigation Services Standards.

General specifications, form of publications, distribution and control of Aeronautical Information Regulation and Control

44. The Director shall ensure that the

- (a) general specifications;
- (b) form of publication; and
- (c) distribution and control

of Aeronautical Information Regulation and Control are in accordance with the standards prescribed in Air Navigation Services Standards.

General specifications, origin and distribution of Aeronautical Information Circulars

45. The Director shall

- (a) ensure that the general specifications, origin and distribution of Aeronautical Information Circulars are in accordance with the standards prescribed in Air Navigation Services Standards; and
- (b) select the Aeronautical Information Circulars that are to be given international distribution and give them the same distribution as for AIP.

Preflight and post flight information

46. The Director shall ensure that

- (a) pre-flight and post flight information and the application of automated aeronautical information systems are in accordance with the standards prescribed in the Air Navigation Services Standards;
- (b) aeronautical information that is essential for the safety, regularity and efficiency of air navigation and is relative to the route stages originating at an aerodrome or heliport normally used for international air

operations is made available to flight operations personnel, including flight crews and services responsible for pre-flight information;

- (c) arrangements are made to receive information concerning
 - (i) the state and operation of air navigation facilities noted by flight crews; and
 - (ii) the presence of birds observed by flight crews at aerodromes and heliports;
- (d) information mentioned in paragraph (c) is made available to the aeronautical service for distribution as circumstances necessitate.

Telecommunication requirements

47. The Director shall ensure that the telecommunication requirements applicable to the aeronautical information services are in accordance with the standards prescribed in the Air Navigation Services Standards.

Electronic terrain and obstacle data

48.(1) The Director shall ensure that the electronic terrain and obstacle data related to the entire area of responsibility of Barbados are made available in accordance with the Air Navigation Services Standards for use by international civil aviation.

(2) For the purpose of paragraph (1) “electronic terrain” means the digital depiction of the surface of the earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow excluding obstacles.

PART VII

*Aviation Weather Services***Provision of aviation weather services**

49. A person who provides aviation weather services shall provide the services in accordance with the standards specified in the Barbados Manual of Aviation Weather Services Standards and Procedures approved by the Director.

Functions of the Meteorological Office

50.(1) The aerodrome meteorological office shall carry out all or some of the following functions as necessary to meet the flight operations at an aerodrome:

- (a) prepare and obtain forecasts and other relevant information for the flights with which it is concerned, the extent of this responsibility to prepare forecasts shall be related to the local availability and use of en-route and aerodrome forecast material received from other offices;
- (b) prepare forecasts of local meteorological conditions;
- (c) maintain a continuous survey of meteorological conditions over the aerodromes for which it is designated to prepare forecasts;
- (d) provide briefing consultation and flight documentation to flight crew members and other flight operations personnel;
- (e) supply other meteorological information to aeronautical users;
- (f) display the available meteorological information;
- (g) exchange meteorological information with other meteorological offices;
- (h) supply information received on pre-eruption volcanic activity, a volcanic eruption or volcanic ash cloud, to its associated air traffic services unit, aeronautical information service and ATS authorities concerned.

- (2) The meteorological authority shall designate a meteorological office to be associated with each air traffic services unit.
- (3) The associated meteorological office shall supply the air traffic services unit with such up-to-date meteorological information as is necessary to conduct its function.
- (4) The associated meteorological office for the aerodrome tower or approach control office shall be an aerodrome meteorological office.
- (5) Any meteorological information requested by air traffic services in connection with an aircraft emergency shall be supplied as rapidly as possible.

PART VIII

Aeronautical Charts

Availability and general specifications of aeronautical charts

- 51.(1)** The Director shall ensure that the aeronautical charts for use in air navigation in the area for which Barbados has responsibility accords with the general specifications, applicability and availability standards prescribed in Air Navigation Services Standards.
- (2) The Director shall, for any chart or single sheet of a chart series that is entirely contained within the territory of Barbados, either
 - (a) produce the chart or sheet;
 - (b) arrange for the production of the chart or sheet by another Contracting State or by an agency;
 - (c) provide another Contracting State that is prepared to accept an obligation to produce the chart or sheet with the data necessary for its production.
 - (3) Where the Director produces a chart or single sheet pursuant to paragraph (2) and the chart or single sheet contains the territory of another Contracting State,

the States having jurisdiction over the territory so included shall determine the manner in which the chart or sheet will be made available.

(4) The determination made under paragraph (3) shall be made with due regard being given to regional air navigation agreements and to any programme of allocation established by the Council of ICAO.

(5) The Director shall take all reasonable measures to ensure that the information is provided and the aeronautical charts or sheets made available are adequate and accurate and that the information and aeronautical charts or sheets are kept up-to-date by a reputable revision service.

(6) The aeronautical charts or sheets referred to in this Part shall be the types recommended by ICAO.

Director's responsibility to provide information to other Contracting States

52. The Director shall on a request being made by another Contracting State, provide all the information relating to Barbados that is necessary to enable the standards of Annex 4 and the Barbados Air Navigation Services Regulations and Standards to be met.

Quality system for aeronautical data

53. The Director shall

- (a) take all necessary measures to introduce a properly organised quality system that contains procedures, processes and resources necessary to implement quality management at each function stage as outlined in the Air Navigation Services Standards for the
 - (i) receipt;
 - (ii) origination;
 - (iii) collation;
 - (iv) assembly;

- (v) editing;
- (vi) formatting;
- (vii) publication;
- (viii) storage; and
- (ix) distribution

of aeronautical data for the territory of Barbados and other areas of responsibility for air traffic services outside the territory of Barbados;

- (b) ensure that established procedures exist to facilitate the traceability of aeronautical data to its origin so as to allow data anomalies or errors detailed through the production and maintenance phases or in the operational use, to be corrected;
- (c) ensure that the order of chart resolution of aeronautical data shall be as specified for a particular chart as presented in a tabular form in the Air Navigation Services Standards; and
- (d) ensure that the integrity of aeronautical data is maintained through the data process from survey or origin to the next intended user and meets the standards set out in the Air Navigation Services Standards.

Aerodrome Obstacle Chart ICAO Type A

54.(1) The Director shall ensure that Aerodrome Obstacle Charts ICAO Type A (Operating Limitations) are available in the manner prescribed in the Air Navigation Services Standards at aerodromes used for international aviation, except for those aerodromes where there are no obstacles in the take-off flight path.

(2) Where a chart referred to in paragraph (1) is not required because no obstacles exist in the take-off flight path area, a notification to that effect shall be published in the AIP.

(3) An aeronautical obstacle chart shall meet the standards prescribed in the Air Navigation Services Standards.

Aerodrome Obstacle Chart ICAO Type B

55. The Director shall ensure that Aerodrome Obstacle Charts ICAO Type B meet the requirements set out in the Air Navigation Services Standards.

Aerodrome Terrain and Obstacle Charts - ICAO (Electronic)

56. The Director shall ensure that from 18th November 2010 Aerodrome Terrain and Obstacle Charts - ICAO (Electronic) are available in the manner prescribed in the Air Navigation Services Standards for all aerodromes used for international aviation.

Precision Approach Terrain Charts

57. The Director shall ensure that Precision Approach Terrain Charts - ICAO meet the requirements in the Air Navigation Services Standards.

En route Charts

58. The Director shall ensure that En route Charts - ICAO meet the requirements in the Air Navigation Services Standards.

Area Charts

59. The Director shall ensure that

- (a) **an approved training organisation that is exposed to safety risks that are related to aircraft operations during the provision of its services shall implement a safety management system that complies with the *Civil Aviation (Safety Management) Systems Regulations, 2016 (S.I. 2016 No.)*.**
- (b) where ATS routes or position reporting requirements are different for arrivals and departures and cannot be shown with sufficient clarity on one chart, separate Area Charts - ICAO are provided;

- (c) the Area Charts - ICAO are made available to provide flight crew with the required information to facilitate the following phases of instrument flight:
- (i) the transition between the en route phase and approach to an aerodrome;
 - (ii) the transition between take-off and missed approach and en route phase of flight; and
 - (iii) flight through areas of complex ATS routes or airspace structures.

Standard Departure Chart Instruments

60.(1) The Director shall ensure that the Standard Departure Charts Instrument (SID) - ICAO are made available where a standard departure route instrument is established and cannot be shown with sufficient clarity on the Area Chart - ICAO.

(2) The Director shall ensure that the Standard Departure Charts Instrument (SID) - ICAO provides flight crews with information to enable compliance with the designated standard departure route instrument from the take-off phase to the en route phase.

(3) The Standard Departure Charts Instrument (SID) - ICAO referred to in paragraphs (1) and (2) shall meet the standards set out in the Air Navigation Services Standards.

Standard Arrival Charts (Instrument STAR) - ICAO

61.(1) The Director shall ensure that Standard Arrival Charts (Instrument STAR) - ICAO are made available where a standard arrival route instrument has been established and cannot be shown with sufficient clarity on the area chart.

(2) The Director shall ensure that Standard Arrival Charts (Instrument STAR) - ICAO provide flight crews with information to enable compliance with the designated standard arrival route instrument from the en route phase to the approach phase.

(3) The Standard Arrival Charts - Instrument (STAR) - ICAO referred to in paragraphs (1) and (2) shall meet the standards set out in the Air Navigation Services Standards.

Instrument Approach Charts - ICAO

62.(1) The Director shall ensure that Instrument Approach Charts - ICAO are available at aerodromes used for international civil aviation where instrument approach procedures have been established.

(2) The Director shall ensure that Instrument Approach Charts - ICAO provide flight crews with information to enable them to perform approved instrument approach procedures to the runway of intended landing, including the missed approach procedure and where applicable, associated holding procedures.

(3) The Director shall

(a) provide a separate Instrument Approach Chart - ICAO for each precision and non-precision approach procedure established by the Air Traffic Services;

(b) provide more than one Instrument Approach Chart - ICAO where the values for track, time or altitude differ between categories of aircraft on other than final approach segment of the instrument approach procedures and the listing of those differences on a single chart could cause clutter or confusion; and

(c) ensure that Instrument Approach Charts - ICAO are revised where information essential to safe operation becomes out of date.

(4) A Standard Departure Charts Instrument (SID) - ICAO shall meet the standards set out in the Air Navigation Services Standards.

Visual Approach Charts - ICAO

63.(1) The Director shall ensure that Visual Approach Charts - ICAO are made available for aerodromes used for international civil aviation where

- (a) only limited navigation facilities are available;
- (b) no adequate aeronautical charts are available at the aerodrome and its surroundings at 1:500 000 or a greater scale;
- (c) visual approach in procedures have been established; or
- (d) radio communications facilities are not available.

(2) The Director shall ensure that Visual Approach Charts - ICAO provide flight crews with information to enable them to transit from en route and descend to approach phases of flight to the runway of intended landing by means of visual reference.

(3) The Visual Approach Charts - ICAO referred to in paragraphs (1) and (2) shall meet the standards set out in the Air Navigation Services Standards.

Aerodrome or Heliport Charts - ICAO

64.(1) The Director shall ensure that Aerodrome or Heliport Charts - ICAO are made available for aerodromes or heliports regularly used for international civil aviation.

(2) The Director shall ensure that Aerodrome or Heliport Charts - ICAO provide flight crews with essential operational information

- (a) to facilitate ground movement of aircraft
 - (i) from the aircraft stand to the runway; and
 - (ii) from the runway to the aircraft stand;

- (b) to facilitate helicopter movement
 - (i) from the helicopter stand to the touchdown and lift-off area and to the final approach and take-off area;
 - (ii) from the final approach and take-off area to the touchdown and lift-off area and to the helicopter stand; and
 - (iii) along air transit routes.
- (3) The Aerodrome or Heliport Charts - ICAO referred to in paragraphs (1) and (2) shall meet the standards set out in the Air Navigation Services Standards.

Aerodrome Ground Movement Charts - ICAO

65. The Director shall ensure that when the Aerodrome Ground Movement Charts - ICAO are provided they meet the requirements in the Air Navigation Services Standards.

Aircraft Parking or Docking Charts - ICAO

66. The Director shall ensure that when the Aircraft Parking or Docking Charts - ICAO are provided they meet the requirements in the Air Navigation Services Standards.

World Aeronautical Charts - ICAO 1:1000000

67. The Director shall ensure that when the World Aeronautical Charts - ICAO 1:1000000 are provided they meet the requirements in the Air Navigation Services Standards.

Aeronautical Charts - ICAO 1: 500 000

68. The Director shall ensure that when the Aeronautical Charts - ICAO 1:500 000 are provided they meet the requirements in the Air Navigation Services Standards.

Aeronautical Navigation Charts

69. The Director shall ensure that when the Aeronautical Navigation Charts - ICAO Small Scale is provided it meets the requirements in the Air Navigation Services Standards.

Plotting Charts - ICAO

70. The Director shall ensure that when Plotting Charts - ICAO is provided it meets the requirements in the Air Navigation Services Standards.

Electronic Aeronautical Chart Display - ICAO

71. The Director shall ensure that when the Electronic Aeronautical Charts Display - ICAO is provided it meets the standards set out in the Air Navigation Services Standards.

ATC Surveillance Minimum Altitude Chart - ICAO

72. The Director shall ensure that when the ATC Surveillance Minimum Altitude Charts - ICAO are provided they meet the requirements in the Air Navigation Services Standards.

PART IX*Air and Ground Operations***Units of Measurement**

73. The standards required to be met for Units of Measurements to be used in air and ground operations for international air navigation are those set out in the Air Navigation Services Standards.

PART X

Miscellaneous

Director may make or amend Standards

74.(1) The Director may make standards or amend standards and incorporate them by reference into these Regulations.

(2) No standard or amendment may come into effect less than 30 days after it is made.

Repeal

75. The *Civil Aviation (Air Navigation Services) Regulations, 2007* (S.I. 2007 No. 183) are hereby repealed.

Made by the Minister this day of , 2016.

Minister Responsible for Civil Aviation