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THURSDAY 16TH MAY, 2024

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LEGAL SUPPLEMENT — B

GUYANA No. 26 of 2024

GUYANA CIVIL AVIATION AUTHORITY

REQUIREMENTS FOR AIR TRAFFIC SERVICES 2024

Made under

THE CIVIL AVIATION ACT 2018

(Act No. 21 of 2018)

In exercise of the powers conferred upon the Guyana Civil Aviation Authority by section 142 of the Civil Aviation Act 2018, the Guyana Civil Aviation Authority prescribes the following Requirements which may be cited as the Civil Aviation Requirements for Air Traffic Services 2024.

These Requirements are prescribed in respect of the Civil Aviation (Air Navigation Services) Regulations 2024 and contain:

(a) applicable standards;

(b) rules and recommended practices of international aviation organisations; and

(c) other requirements of the Authority.

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ABBREVIATIONS AND ACRONYMS

ACAS	– airborne collision avoidance system
ADS-B	– automatic dependent surveillance — broadcast
ADS-C	– automatic dependent surveillance — contract
AFS	– aeronautical fixed service
AIP	– Aeronautical Information Publication
ATC	– air traffic control
ATFM	– air traffic flow management
ATIS	– automatic terminal information service
ATS	– air traffic services
CPDLC	– controller-pilot data link communications
CRC	– cyclic redundancy check
CTA	– control area
FIR	– flight information region
FRMS	– fatigue risk management system
ICAO	– International Civil Aviation Organization
IFR	– instrument flight rules
IMC	– instrument meteorological conditions
PBC	– performance-based communication
PBN	– performance-based navigation
PBS	– performance-based surveillance
RCP	– required communication performance specification
RNAV	– area navigation
RNP	– required navigation performance specification
RSP	– required surveillance performance specification
SMS	– safety management system
UTA	– upper control area
UTC	– Coordinated Universal Time
VFR	– visual flight rules
VMC	– visual meteorological conditions

DEFINITIONS

Note.— The designation (RR) in these definitions indicates a definition which has been extracted from the Radio Regulations of the International Telecommunication Union (ITU)

When the following terms are used in these Requirements, they have the following meanings:

Accepting unit. Air traffic control unit next to take control of an aircraft.

Accident. An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

a) a person is fatally or seriously injured as a result of:

— being in the aircraft, or

— direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or

— direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

b) the aircraft sustains damage or structural failure which:

— adversely affects the structural strength, performance or flight characteristics of the aircraft, and

— would normally require major repair or replacement of the affected component,

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

c) the aircraft is missing or is completely inaccessible.

Note 1.— For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

Note 2.— An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

ADS-C agreement. A reporting plan which establishes the conditions of ADS-C data reporting (i.e. data required by the air traffic services unit and frequency of ADS-C reports which have to be agreed to prior to using ADS-C in the provision of air traffic services).

Note.— The terms of the agreement will be exchanged between the ground system and the aircraft by means of a contract, or a series of contracts.

Advisory airspace. An airspace of defined dimensions, or designated route, within which air traffic advisory service is available.

Advisory route. A designated route along which air traffic advisory service is available.

Aerodrome. 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. Air traffic control service for aerodrome traffic.

Aerodrome control tower. A unit established to provide air traffic control service to aerodrome traffic.

Aerodrome traffic. All traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome.

Note.— An aircraft is in the vicinity of an aerodrome when it is in, entering or leaving an aerodrome traffic circuit.

Aeronautical fixed service (AFS). 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 Publication (AIP). A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.

Aeronautical mobile service (RR S1.32). A mobile 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.

Aeronautical telecommunication station. A station in the aeronautical telecommunication service.

Airborne collision avoidance system (ACAS). An aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders.

Aircraft. 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.

Air-ground communication. Two-way communication between aircraft and stations or locations on the surface of the earth.

AIRMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information region concerned or sub-area thereof.

Air-taxiing. Movement of a helicopter/VTOL above the surface of an aerodrome, normally in ground effect and at a ground speed normally less than 37 km/h (20 kt).

Note.— The actual height may vary, and some helicopters may require air-taxiing above 8 m (25 ft) AGL to reduce ground effect turbulence or provide clearance for cargo slingloads.

Air traffic. All aircraft in flight or operating on the manoeuvring area of an aerodrome.

Air traffic advisory service. A service provided within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans.

Air traffic control clearance. Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.

Note 1.— For convenience, the term "air traffic control clearance" is frequently abbreviated to "clearance" when used in appropriate contexts.

Note 2.— The abbreviated term "clearance" may be prefixed by the words "taxi," "take-off," "departure," "en route," "approach" or "landing" to indicate the particular portion of flight to which the air traffic control clearance relates.

Air traffic control service. A service provided for the purpose of:

a) preventing collisions:

1) between aircraft, and

2) on the manoeuvring area between aircraft and obstructions; and

b) expediting and maintaining an orderly flow of air traffic.

Air traffic control unit. A generic term meaning variously, area control centre, approach control unit or aerodrome control tower.

Air traffic controller schedule. A plan for allocating air traffic controller duty periods and non-duty periods over a period of time, otherwise referred to as a roster.

Air traffic flow management (ATFM). A service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

Air traffic service. A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

Air traffic services airspaces. Airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified.

Note.— ATS airspaces are classified as Class A to G as described in 2.6.

Air traffic services reporting office. A unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure.

Note.— An air traffic services reporting office may be established as a separate unit or combined with an existing unit, such as another air traffic services unit, or a unit of the aeronautical information service.

Air traffic services unit. A generic term meaning variously, air traffic control unit, flight information centre or air traffic services reporting office.

Airway. A control area or portion thereof established in the form of a corridor.

ALERFA. The code word used to designate an alert phase.

Alerting service. A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.

Alert phase. A situation wherein apprehension exists as to the safety of an aircraft and its occupants.

Alternate aerodrome. An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing where the necessary services and facilities are available, where aircraft performance requirements can be met and which is operational at the expected time of use. Alternate aerodromes include the following:

Take-off alternate. An alternate aerodrome at which an aircraft would be able to land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure.

En-route alternate. An alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en route.

Destination alternate. An alternate aerodrome at which an aircraft would be able to land should it become either impossible or inadvisable to land at the aerodrome of intended landing.

Note.— The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.

Altitude. 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. A unit established to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes.

Appropriate ATS authority. The relevant authority designated by the State responsible for providing air traffic services in the airspace concerned.

Apron. 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.

Apron management service. A service provided to regulate the activities and the movement of aircraft and vehicles on an apron.

Area control centre. A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.

Area control service. Air traffic control service for controlled flights in control areas.

Area navigation (RNAV). A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these.

Area navigation route. An ATS route established for the use of aircraft capable of employing area navigation.

ATS Provider. An air navigation service provider designated or approved under Regulation 5 of the Civil Aviation (Air Navigation Services) Regulations 2024 to provide air traffic services.

ATS route. A specified route designed for channelling the flow of traffic as necessary for the provision of air traffic services.

Note 1.— The term "ATS route" is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.

Note 2.— An ATS route is defined by route specifications which include an ATS route designator, the track to or from significant points (waypoints), distance between significant points, reporting requirements and, as determined by the appropriate ATS authority, the lowest safe altitude.

Automatic dependent surveillance — broadcast (ADS-B). A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

Automatic dependent surveillance — contract (ADS-C). A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports.

Note.— The abbreviated term "ADS contract" is commonly used to refer to ADS event contract, ADS demand contract, ADS periodic contract or an emergency mode.

Automatic terminal information service (ATIS). The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof:

Data link-automatic terminal information service (D-ATIS). The provision of ATIS via data link.

Voice-automatic terminal information service (Voice-ATIS). The provision of ATIS by means of continuous and repetitive voice broadcasts.

Base turn. A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. The tracks are not reciprocal.

Note.— Base turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.

Calendar. Discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day (ISO 19108*).

Change-over point. The point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omnidirectional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft.

Note.— Change-over points are established to provide the optimum balance in respect of signal strength and quality between facilities at all levels to be used and to ensure a common source of azimuth guidance for all aircraft operating along the same portion of a route segment.

Clearance limit. The point to which an aircraft is granted an air traffic control clearance.

Conference communications. Communication facilities whereby direct speech conversation may be conducted between three or more locations simultaneously.

Control area. A controlled airspace extending upwards from a specified limit above the earth.

Controlled aerodrome. An aerodrome at which air traffic control service is provided to aerodrome traffic.

Note.— The term "controlled aerodrome" indicates that air traffic control service is provided to aerodrome traffic but does not necessarily imply that a control zone exists.

Controlled airspace. An airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.

Note.— Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E as described in 2.6.

Controlled flight. Any flight which is subject to an air traffic control clearance.

Controller-pilot data link communications (CPDLC). A means of communication between controller and pilot, using data link for ATC communications.

Control zone. A controlled airspace extending upwards from the surface of the earth to a specified upper limit.

Cruising level. A level maintained during a significant portion of a flight.

Cyclic redundancy check (CRC). A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.

Danger area. An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.

Data accuracy. A degree of conformance between the estimated or measured value and the true value.

Data integrity (assurance level). A degree of assurance that an aeronautical data and its value has not been lost or altered since the origination or authorized amendment.

Data link communications. A form of communication intended for the exchange of messages via a data link.

Data quality. A degree or level of confidence that the data provided meets the requirements of the data user in terms of accuracy, resolution and integrity (or equivalent assurance level), traceability, timeliness, completeness and format.

Datum. Any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities (ISO 19104*).

Declared capacity. A measure of the ability of the ATC system or any of its subsystems or operating positions to provide service to aircraft during normal activities. It is expressed as the number of aircraft entering a specified portion of airspace in a given period of time, taking due account of weather, ATC unit configuration, staff and equipment available, and any other factors that may affect the workload of the controller responsible for the airspace.

DETRESFA. The code word used to designate a distress phase.

Distress phase. A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.

Downstream clearance. A clearance issued to an aircraft by an air traffic control unit that is not the current controlling authority of that aircraft.

Duty. Any task that an air traffic controller is required by an air traffic services provider to perform. These tasks include those performed during time-in-position, administrative work and training.

Duty period. A period which starts when an air traffic controller is required by an air traffic services provider to report for or to commence a duty and ends when that person is free from all duties.

Emergency phase. A generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.

Fatigue. A physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety-related operational duties.

Fatigue risk management system (FRMS). A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles, knowledge and operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.

Final approach. 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 racetrack 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:

1) a landing can be made; or

2) a missed approach procedure is initiated.

Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Flight information centre. A unit established to provide flight information service and alerting service.

Flight information region. An airspace of defined dimensions within which flight information service and alerting service are provided.

Flight information service. A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

Flight level. A surface of constant atmospheric pressure which is related to a specific pressure datum, 1 013.2 hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals.

Note 1.— A pressure type altimeter calibrated in accordance with the Standard Atmosphere:
a) when set to a QNH altimeter setting, will indicate altitude;
b) when set to a QFE altimeter setting, will indicate height above the QFE reference datum;
c) when set to a pressure of 1 013.2 hPa, may be used to indicate flight levels.

Note 2.— The terms "height" and "altitude", used in Note 1 above, indicate altimetric rather than geometric heights and altitudes.

Flight plan. Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

Forecast. A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.

Geodetic datum. A minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system/frame.

Gregorian calendar. Calendar in general use; first introduced in 1582 to define a year that more closely approximates the tropical year than the Julian calendar (ISO 19108*).

Note.— In the Gregorian calendar, common years have 365 days and leap years 366 days divided into twelve sequential months.

Height. The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.

Human Factors principles. Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

Human performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

IFR. The symbol used to designate the instrument flight rules.

IFR flight. A flight conducted in accordance with the instrument flight rules.

IMC. The symbol used to designate instrument meteorological conditions.

INCERFA. The code word used to designate an uncertainty phase.

Incident. An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Instrument flight procedure design service. A service established for the design, documentation, validation, maintenance and periodic review of instrument flight procedures necessary for the safety, regularity and efficiency of air navigation.

Instrument meteorological conditions (IMC). Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

Note.— The specified minima for visual meteorological conditions are contained in Annex 2.

Integrity classification (aeronautical data). Classification based upon the potential risk resulting from the use of corrupted data. Aeronautical data is classified as:

a) routine data: there is a very low probability when using corrupted routine data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe;

b) essential data: there is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe; and

c) critical data: there is a high probability when using corrupted critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

International NOTAM office. An office designated by a State for the exchange of NOTAM internationally.

Level. A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.

Manoeuvring area. That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

Meteorological office. An office designated to provide meteorological service for international air navigation.

Movement area. That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

Navigation specification. A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications:

Required navigation performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH.

Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.

Non-duty period. A continuous and defined period of time, subsequent to and/or prior to duty periods, during which the air traffic controller is free of all duties.

NOTAM. A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

Obstacle. All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that:
a) are located on an area intended for the surface movement of aircraft; or
b) extend above a defined surface intended to protect aircraft in flight; or
c) stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.

Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Performance-based communication (PBC). Communication based on performance specifications applied to the provision of air traffic services.

Note.— An RCP specification includes communication performance requirements that are allocated to system components in terms of the communication to be provided and associated transaction time, continuity, availability, integrity, safety and functionality needed for the proposed operation in the context of a particular airspace concept.

Performance-based navigation (PBN). Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.

Note.— Performance requirements are expressed in navigation specifications (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, and functionality needed for the proposed operation in the context of a particular airspace concept. Availability of a global navigation satellite system signal in space (GNSS SIS) or some other NAVAID infrastructure is considered within the airspace concept in order to enable the navigation application.

Performance-based surveillance (PBS). Surveillance based on performance specifications applied to the provision of air traffic services.

Note.— An RSP specification includes surveillance performance requirements that are allocated to system components in terms of the surveillance to be provided and associated data delivery time, continuity, availability, integrity, accuracy of the surveillance data, safety and functionality needed for the proposed operation in the context of a particular airspace concept.

Pilot-in-command. 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.

Printed communications. Communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such circuit.

Prohibited area. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.

Radio navigation service. A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids.

Radiotelephony. A form of radiocommunication primarily intended for the exchange of information in the form of speech.

Reporting point. A specified geographical location in relation to which the position of an aircraft can be reported.

Required communication performance (RCP) specification. A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication.

Required surveillance performance (RSP) specification. A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance.

Rescue coordination centre. A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.

Restricted area. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions.

Runway. A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

Runway visual range (RVR). The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

Safety management system (SMS). A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

SIGMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations.

Significant point. A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.

Note.— There are three categories of significant points: ground-based navigation aid, intersection and waypoint. In the context of this definition, intersection is a significant point expressed as radials, bearings and/or distances from ground-based navigation aids.

Special VFR flight. A VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.

Station declination. An alignment variation between the zero degree radial of a VOR and true north, determined at the time the VOR station is calibrated.

Strayed aircraft. An aircraft which has deviated significantly from its intended track or which reports that it is lost.

Taxiing. Movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing.

Terminal control area. A control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes.

Time-in-position. The period of time when an air traffic controller is exercising the privileges of the air traffic controller's licence at an operational position.

Track. The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).

Traffic avoidance advice. Advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision.

Traffic information. Information issued by an air traffic services unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision.

Transfer of control point. A defined point located along the flight path of an aircraft, at which the responsibility for providing air traffic control service to the aircraft is transferred from one control unit or control position to the next.

Transferring unit. Air traffic control unit in the process of transferring the responsibility for providing air traffic control service to an aircraft to the next air traffic control unit along the route of flight.

Uncertainty phase. A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.

Unidentified aircraft. An aircraft which has been observed or reported to be operating in a given area but whose identity has not been established.

VFR. The symbol used to designate the visual flight rules.

VFR flight. A flight conducted in accordance with the visual flight rules.

Visual meteorological conditions (VMC). Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.

VMC. The symbol used to designate visual meteorological conditions.

Waypoint. A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation. Waypoints are identified as either:

Fly-by waypoint. A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure, or

Flyover waypoint. A waypoint at which a turn is initiated in order to join the next segment of a route or procedure.

CHAPTER 1 – GENERAL SPECIFICATIONS

1.1 Establishment of Authority

1.1 The Authority shall be responsible for the airspace over:

a. the territory of Guyana; and

b. that portion of the high seas where, pursuant to a regional air navigation agreement, Guyana has accepted responsibility.

1.2 The airspace defined in 1.1 above shall hereinafter be referred to as the Georgetown Flight Information Region (FIR).

1.3 The Authority shall ensure the provision of ATS:

a. in the Georgetown FIR; and

b. at those aerodromes where it has been determined by the Minister that ATS shall be provided.

CHAPTER 2 – GENERAL REQUIREMENTS

2.1 OBJECTIVES OF THE AIR TRAFFIC SERVICES

The objectives of ATS shall be to:

a) prevent collisions between aircraft;

b) prevent collisions between aircraft on the manoeuvring area and obstructions on that area;

c) expedite and maintain an orderly flow of air traffic;

d) provide advice and information useful for the safe and efficient conduct of flights;

e) notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.

2.2 DIVISIONS OF THE AIR TRAFFIC SERVICES

ATS shall comprise three services identified as follows.

2.2.1 The *air traffic control service*, to accomplish objectives a), b) and c) of 2.1, this service being divided in three parts as follows:

a) *Area control service*: the provision of air traffic control service for controlled flights, except for those parts of such flights described in 2.2.1 b) and c), in order to accomplish objectives a) and c) of 2.1;

b) *Approach control service*: the provision of air traffic control service for those parts of controlled flights associated with arrival or departure, in order to accomplish objectives a) and c) of 2.1;

c) *Aerodrome control service*: the provision of air traffic control service for aerodrome traffic, except for those parts of flights described in 2.2.1 b), in order to accomplish objectives a), b) and c) of 2.1.

2.2.2 The *flight information service*, to accomplish objective d) of 2.1.

2.2.3 The *alerting service*, to accomplish objective e) of 2.1.

2.3 DETERMINATION OF THE NEED FOR AIR TRAFFIC SERVICES

2.3.1 The need for the provision of ATS shall be determined by consideration of the following:

a) the types of air traffic involved;

b) the density of air traffic;

c) the meteorological conditions;

d) such other factors as may be relevant.

Note.— Due to the number of elements involved, it has not been possible to develop specific data to determine the need for air traffic services in a given area or at a given location. For example:

a) a mixture of different types of air traffic with aircraft of varying speeds (conventional jet, etc.) might necessitate the provision of air traffic services, whereas a relatively greater density of traffic where only one type of operation is involved would not;

b) meteorological conditions might have considerable effect in areas where there is a constant flow of air traffic (e.g. scheduled traffic), whereas similar or worse meteorological conditions might be relatively unimportant in an area where air traffic would be discontinued in such conditions (e.g. local VFR flights);

c) open stretches of water, mountainous, uninhabited or desert areas might necessitate the provision of air traffic services even though the frequency of operations is extremely low.

2.3.2 The carriage of airborne collision avoidance systems (ACAS) by aircraft in a given area shall not be a factor in determining the need for ATS in that area.

2.4 DESIGNATION OF THE PORTIONS OF THE AIRSPACE AND CONTROLLED AERODROMES WHERE ATS WILL BE PROVIDED

2.4.1 The Authority shall ensure that those portions of the Georgetown FIR and those aerodromes within the Georgetown FIR where ATS will be provided are designated in relation to the ATS that are to be provided.

2.4.2 The designation of such portions of the Georgetown FIR and such aerodromes within the Georgetown FIR shall be as follows:

2.4.2.1 *Flight information regions:* Those portions of the airspace where it is determined that flight information service and alerting service will be provided shall be designated as flight information regions.

2.4.2.2 *Control areas and control zones*

2.4.2.2.1 Those portions of the airspace where it is determined that air traffic control service will be provided to IFR flights shall be designated as control areas or control zones.

Note.— The distinction between control areas and control zones is made in 2.11.

2.4.2.2.1.1 Those portions of controlled airspace wherein it is determined that air traffic control service will also be provided to VFR flights shall be designated as Classes B, C, or D airspace.

2.4.2.2.2 Where designated within a flight information region, control areas and control zones shall form part of that flight information region.

2.4.2.3 *Controlled aerodromes:* Those aerodromes where it is determined that air traffic control service will be provided to aerodrome traffic shall be designated as controlled aerodromes.

2.5 CLASSIFICATION OF AIRSPACES

2.5.1 ATS airspaces shall be classified and designated in accordance with the following:

i. *Class A:* IFR flights only are permitted, all flights are provided with air traffic control service and are separated from each other.

ii. *Class B:* IFR and VFR flights are permitted, all flights are provided with air traffic control service and are separated from each other.

iii. *Class C:* IFR and VFR flights are permitted, all flights are provided with air traffic control service and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights.

iv. *Class D:* IFR and VFR flights are permitted and all flights are provided with air traffic control service, IFR flights are separated from other IFR flights and receive traffic information in respect of VFR flights, VFR flights receive traffic information in respect of all other flights.

v. *Class E:* IFR and VFR flights are permitted, IFR flights are provided with air traffic control service and are separated from other IFR flights. All flights receive traffic information as far as is practical. Class E shall not be used for control zones.

vi. *Class F:* IFR and VFR flights are permitted, all participating IFR flights receive an air traffic advisory service and all flights receive flight information service if requested.

Note.— Where air traffic advisory service is implemented, this is considered normally as a temporary measure only until such time as it can be replaced by air traffic control.

vii. *Class G:* IFR and VFR flights are permitted and receive flight information service if requested.

2.5.2 The ATS Provider may make recommendations to the Minister regarding airspace classification and designation as appropriate to the needs of Guyana and the airspace for which Guyana is responsible.

2.5.3 The requirements for flights within each class of airspace shall be as shown in the table in Appendix 4.

Note.— Where the ATS airspaces adjoin vertically, i.e. one above the other, flights at a common level would comply with requirements of, and be given services applicable to, the less restrictive class of airspace. In applying these criteria, Class B airspace is therefore considered less restrictive than Class A airspace; Class C airspace less restrictive than Class B airspace, etc.

2.6 FLIGHT PLAN

2.6.1 Flight plan form

2.6.1.1 The ATS Provider shall ensure that a flight plan form based on the model in Appendix 2 of the ICAO Doc 4444 is provided and used by operators and ATS units for the purpose of completing flight plans.

Note.— A different form may be provided for use in completing repetitive flight plan listings.

2.6.1.2 The ATS Provider shall ensure that the flight plan form is printed and includes an English text in addition to the language(s) of the State concerned.

2.6.1.3 The ATS Provider shall ensure that operators and ATS units comply with:

a) the instructions for completion of the flight plan form and the repetitive flight plan listing form given in Appendix 2 of the ICAO Doc 4444; and

b) any constraints identified in the Guyana AIP.

Note 1.— Failure to adhere to the provisions of Appendix 2 of the ICAO Doc 4444 or any constraint identified in relevant AIPs may result in data being rejected, processed incorrectly or lost.

Note 2.— The instructions for completing the flight plan form given in Appendix 2 may be conveniently printed on the inside cover of flight plan form pads or posted in briefing rooms.

2.6.1.4 The ATS Provider shall ensure that an operator, prior to departure:

a) ensures that, where the flight is intended to operate on a route or in an area where a navigation specification is prescribed, it has an appropriate RNP approval, and that all conditions applying to that approval will be satisfied;

b) ensures that, where the flight is intended to operate in reduced vertical separation minimum (RVSM) airspace, it has the required RVSM approval;

c) ensures that, where the flight is intended to operate where an RCP specification is prescribed, it has an appropriate approval, and that all conditions applying to that approval will be satisfied; and

d) ensures that, where the flight is intended to operate where an RSP specification is prescribed, it has an appropriate RSP approval, and that all conditions applying to that approval will be satisfied.

2.6.2 Submission of a flight plan

2.6.2.1 PRIOR TO DEPARTURE

2.6.2.1.1 The ATS Provider shall ensure that flight plans are not submitted more than 120 hours before the estimated off-block time of a flight.

2.6.2.1.2 (1) Except when other arrangements have been made for submission of repetitive flight plans, the ATS Provider shall ensure that a flight plan submitted prior to departure is submitted to the ATS reporting office at the departure aerodrome.

(2) If no such unit exists at the departure aerodrome, the ATS Provider shall ensure that the flight plan is submitted to the unit serving or designated to serve the departure aerodrome.

2.6.2.1.3 In the event of a delay of 30 minutes in excess of the estimated off-block time for a controlled flight or a delay of one hour for an uncontrolled flight for which a flight plan has been submitted, the ATS Provider shall ensure that the flight plan is amended, or a new flight plan is submitted and the old flight plan is cancelled, whichever is applicable.

2.6.2.2 DURING FLIGHT

2.6.2.2.1 The ATS Provider shall ensure that a flight plan to be submitted during flight is, under normal circumstances, transmitted to the ATS unit in charge of the FIR, control area, advisory area or advisory route in or on which the aircraft is flying, or in or through which the aircraft wishes to fly or to the aeronautical

telecommunication station serving the ATS unit concerned. When this is not practicable, the ATS Provider shall ensure that the flight plan is transmitted to another ATS unit or aeronautical telecommunication station for retransmission as required to the appropriate ATS unit.

2.6.2.2.2 Where relevant, such as in respect of ATC units serving high- or medium-density airspace, the ATS Provider shall prescribe conditions and/or limitations with respect to the submission of flight plans during flight to ATC units.

Note.— If the flight plan is submitted for the purpose of obtaining air traffic control service, the aircraft is required to wait for an air traffic control clearance prior to proceeding under the conditions requiring compliance with air traffic control procedures. If the flight plan is submitted for the purpose of obtaining air traffic advisory service, the aircraft is required to wait for acknowledgment of receipt by the unit providing the service.

2.6.3 Acceptance of a flight plan

The ATS Provider shall ensure that the first ATS unit receiving a flight plan, or change thereto, shall:

a) check it for compliance with the format and data conventions;

b) check it for completeness and, to the extent possible, for accuracy;

c) take action, if necessary, to make it acceptable to ATS; and

d) indicate acceptance of the flight plan or change thereto, to the originator.

2.7 PERFORMANCE-BASED NAVIGATION (PBN) OPERATIONS

2.7.1 In applying performance-based navigation, navigation specifications shall be prescribed by the Authority based on consultation with the relevant stakeholders. When applicable, the navigation specification(s) for designated areas, tracks or ATS routes shall be prescribed on the basis of regional air navigation agreements.

In designating a navigation specification, limitations may apply as a result of navigation infrastructure constraints or specific navigation functionality requirements.

2.7.2 Performance-based navigation operations shall be implemented in accordance with the National Plan.

2.7.3 The prescribed navigation specification shall be appropriate to the level of communications, navigation and ATS provided in the airspace concerned.

2.8 PERFORMANCE-BASED COMMUNICATION (PBC) OPERATIONS

2.8.1 In applying performance-based communication (PBC), RCP specifications shall be prescribed by the Authority based on consultation with the relevant stakeholders. When applicable, the RCP specification(s) shall be prescribed on the basis of regional air navigation agreements.

Note. — In prescribing an RCP specification, limitations may apply as a result of communication infrastructure constraints or specific communication functionality requirements.

2.8.2 The prescribed RCP specification shall be appropriate to the ATS provided.

2.9 PERFORMANCE-BASED SURVEILLANCE (PBS) OPERATIONS

2.9.1 In applying performance-based surveillance (PBS), RSP specifications shall be prescribed by the Authority based on consultation with the relevant stakeholders. When applicable, the RSP specification(s) shall be prescribed on the basis of regional air navigation agreements.

Note.— In prescribing an RSP specification, limitations may apply as a result of surveillance infrastructure constraints or specific surveillance functionality requirements.

2.9.2 The prescribed RSP specification shall be appropriate to the ATS provided.

2.9.3 Where an RSP specification has been prescribed by the Authority for performance-based surveillance, ATS units shall be provided with equipment capable of performance consistent with the prescribed RSP specification(s).

2.10 ESTABLISHMENT AND DESIGNATION OF THE UNITS PROVIDING AIR TRAFFIC SERVICES

ATS shall be provided by units established and designated as follows:

2.10.1 Flight information centres shall be established to provide flight information service and alerting service within flight information regions, unless the responsibility of providing such services within a flight information region is assigned to an air traffic control unit having adequate facilities for the discharge of such responsibility.

Note.— This does not preclude delegating to other units the function of providing certain elements of the flight
information service.

2.10.2 Air traffic control units shall be established to provide air traffic control service, flight information service and alerting service within control areas, control zones and at controlled aerodromes.

2.11 SPECIFICATIONS FOR FLIGHT INFORMATION REGIONS, CONTROL AREAS AND CONTROL ZONES

2.11.1 Where practicable and in the national interest based on regional agreement, the delineation of airspace, wherein air traffic services are to be provided, shall be related to the nature of the route structure and the need for efficient service rather than to national boundaries.

2.11.2 Flight information regions

2.11.2.1 Flight information regions shall be delineated to cover the whole of the air route structure to be served by such regions.

2.11.2.2 A flight information region shall include all airspace within its lateral limits, except as limited by an upper flight information region.

2.11.2.3 Where a flight information region is limited by an upper flight information region, the lower limit specified for the upper flight information region shall constitute the upper vertical limit of the flight information region and shall coincide with a VFR cruising level of the tables in Schedule 3 of the Civil Aviation (Rules of the Air) Regulations 2024.

Note.— In cases where an upper flight information region is established the procedures applicable therein need not be identical with those applicable in the underlying flight information region.

2.11.3 Control areas

2.11.3.1 Control areas including, *inter alia,* airways and terminal control areas shall be delineated so as to encompass sufficient airspace to contain the flight paths of those IFR flights or portions thereof to which it is desired to provide the applicable parts

of the air traffic control service, taking into account the capabilities of the navigation aids normally used in that area.

Note.— In a control area other than one formed by a system of airways, a system of routes may be established to facilitate the provision of air traffic control.

2.11.3.2 A lower limit of a control area shall be established at a height above the ground or water of not less than 200 m (700 ft).

Note.— This does not imply that the lower limit has to be established uniformly in a given control area (see Figure A-5 of the Air Traffic Services Planning Manual *(Doc 9426), Part I, Section 2, Chapter 3).*

2.11.3.2.1 The lower limit of a control area shall, when practicable and desirable in order to allow freedom of action for VFR flights below the control area, be established at a greater height than the minimum specified in 2.10.3.2.

2.11.3.2.2 When the lower limit of a control area is above 900 m (3 000 ft) MSL, it shall coincide with a VFR cruising level of the tables in Schedule 3 of the Civil Aviation (Rules of the Air) Regulations 2024.

Note.— This implies that the selected VFR cruising level be such that expected local atmospheric pressure variations do not result in a lowering of this limit to a height of less than 200 m (700 ft) above ground or water.

2.11.3.3 An upper limit of a control area shall be established when either:

a) air traffic control service will not be provided above such upper limit; or

b) the control area is situated below an upper control area, in which case the upper limit shall coincide with the lower limit of the upper control area.

When established, such upper limit shall coincide with a VFR cruising level of the tables in Schedule 3 of the Civil Aviation (Rules of the Air) Regulations 2024.

2.11.4 Flight information regions or control areas in the upper airspace

Where it is desirable to limit the number of flight information regions or control areas through which high flying aircraft would otherwise have to operate, a flight information region or control area, as appropriate, shall be delineated to include the upper airspace within the lateral limits of a number of lower flight information regions or control areas.

2.11.5 Control zones

2.11.5.1 The lateral limits of control zones shall encompass at least those portions of the airspace, which are not within control areas, containing the paths of IFR flights arriving at and departing from aerodromes to be used under instrument meteorological conditions.

Note.— Aircraft holding in the vicinity of aerodromes are considered as arriving aircraft.

2.11.5.2 The lateral limits of a control zone shall extend to at least 9.3 km (5 NM) from the centre of the aerodrome or aerodromes concerned in the directions from which approaches may be made.

Note.— A control zone may include two or more aerodromes situated close together.

2.11.5.3 If a control zone is located within the lateral limits of a control area, it shall extend upwards from the surface of the earth to at least the lower limit of the control area.

Note.— An upper limit higher than the lower limit of the overlying control area may be established when desired.

2.11.5.4 If a control zone is located outside of the lateral limits of a control area, an upper limit shall be established.

2.11.5.5 If it is desired to establish the upper limit of a control zone at a level higher than the lower limit of the control area established above it, or if the control zone is located outside of the lateral limits of a control area, its upper limit shall be established at a level which can easily be identified by pilots. When this limit is above 900 m (3 000 ft) MSL it shall coincide with a VFR cruising level of the tables in Schedule 3 of the Civil Aviation (Rules of the Air) Regulations 2024.

Note.— This implies that, if used, the selected VFR cruising level be such that expected local atmospheric pressure variations do not result in a lowering of this limit to a height of less than 200 m (700 ft) above ground or water.

2.12 IDENTIFICATION OF AIR TRAFFIC SERVICES UNITS AND AIRSPACES

2.12.1 An area control centre or flight information centre shall be identified by the name of a nearby town or city or geographic feature.

2.12.2 An aerodrome control tower or approach control unit shall be identified by the name of the aerodrome at which it is located.

2.12.3 A control zone, control area or flight information region shall be identified by the name of the unit having jurisdiction over such airspace.

2.13 ESTABLISHMENT AND IDENTIFICATION OF ATS ROUTES

2.13.1 When ATS routes are established, a protected airspace along each ATS route and a safe spacing between adjacent ATS routes shall be provided.

2.13.2 When warranted by density, complexity or nature of the traffic, special routes shall be established for use by low-level traffic, including helicopters operating to and from helidecks on territorial waters or on the high seas. When determining the lateral spacing between such routes, account shall be taken of the navigational means available and the navigation equipment carried on board helicopters.

2.13.3 ATS routes shall be identified by designators.

2.13.4 Designators for ATS routes other than standard departure and arrival routes shall be selected in accordance with the principles set forth in Appendix 1.

2.13.5 Standard departure and arrival routes and associated procedures shall be identified in accordance with the principles set forth in Appendix 3.

Note.— The spacing between parallel tracks or between parallel ATS route centre lines based on performance-based navigation will be dependent upon the relevant navigation specification required.

2.14 ESTABLISHMENT OF CHANGE-OVER POINTS

2.14.1 Change-over points shall be established on ATS route segments defined by reference to very high frequency omnidirectional radio ranges where this will assist accurate navigation along the route segments. The establishment of change-over points shall be limited to route segments of 110 km (60 NM) or more, except where the complexity of ATS routes, the density of navigation aids or other technical and

operational reasons warrant the establishment of change-over points on shorter route segments.

2.14.2 Unless otherwise established in relation to the performance of the navigation aids or frequency protection criteria, the change-over point on a route segment shall be the mid-point between the facilities in the case of a straight route segment or the intersection of radials in the case of a route segment which changes direction between the facilities.

2.15 ESTABLISHMENT AND IDENTIFICATION OF SIGNIFICANT POINTS

2.15.1 Significant points shall be established for the purpose of defining an ATS route or instrument approach procedure and/or in relation to the requirements of air traffic services for information regarding the progress of aircraft in flight.

2.15.2 Significant points shall be identified by designators.

2.15.3 Significant points shall be established and identified in accordance with the principles set forth in Appendix 2.

2.16 ESTABLISHMENT AND IDENTIFICATION OF STANDARD ROUTES FOR TAXIING AIRCRAFT

2.16.1 Where necessary, standard routes for taxiing aircraft shall be established on an aerodrome between runways, aprons and maintenance areas. Such routes shall be direct, simple and where practicable, designed to avoid traffic conflicts.

2.16.2 Where established, standard routes for taxiing aircraft shall be identified by designators distinctively different from those of the runways and ATS routes.

2.17 COORDINATION BETWEEN THE OPERATOR AND ATS

2.17.1 ATS units, in carrying out their objectives, shall have due regard for the requirements of the operators consequent on their obligations as specified in the Civil Aviation (Operations) Regulations 2024, and, if so required by the operators, shall make available to them or their designated representatives such information as may be available to enable them or their designated representatives to carry out their responsibilities.

2.17.2 When so requested by an operator, messages (including position reports) received by ATS units and relating to the operation of the aircraft for which operational control service is provided by that operator shall, so far as practicable, be made available immediately to the operator or a designated representative in accordance with locally agreed procedures.

2.18 COORDINATION BETWEEN MILITARY AUTHORITIES AND ATS

2.18.1 The ATS Provider shall establish and maintain close cooperation with military authorities responsible for activities that may affect flights of civil aircraft.

2.18.2 Coordination of activities potentially hazardous to civil aircraft shall be effected in accordance with the processes and procedures detailed in agreement/s between the ATS Provider and the military authority.

2.18.3 Arrangements shall be made to permit information relevant to the safe and expeditious conduct of flights of civil aircraft to be promptly exchanged between air traffic services units and appropriate military units.

2.18.3.1 ATS units shall, either routinely or on request, in accordance with locally agreed procedures, provide appropriate military units with pertinent flight plan and other data concerning flights of civil aircraft. In order to eliminate or reduce the need for

interceptions, the ATS Provider shall designate any areas or routes where the requirements of Civil Aviation (Rules of the Air) Regulations 2024 concerning flight plans, two-way communications and position reporting apply to all flights to ensure that all pertinent data is available in appropriate ATS units specifically for the purpose of facilitating identification of civil aircraft.

2.18.3.2 Special procedures shall be established in order to ensure that:

a) ATS units are notified if a military unit observes that an aircraft which is, or might be, a civil aircraft is approaching, or has entered, any area in which interception might become necessary;

b) all possible efforts are made to confirm the identity of the aircraft and to provide it with the navigational guidance necessary to avoid the need for interception.

2.19 COORDINATION OF ACTIVITIES POTENTIALLY HAZARDOUS TO CIVIL AIRCRAFT

2.19.1 The arrangements for activities potentially hazardous to civil aircraft, whether over the territory of Guyana or over the high seas, shall be coordinated with the appropriate air traffic services authorities. The coordination shall be effected early enough to permit timely promulgation of information regarding the activities in accordance with the Civil Aviation Requirements for AIS 2024.

2.19.1.1 If the appropriate ATS authority is not that of the State where the organization planning the activities is located, initial coordination shall be effected through the ATS authority responsible for the airspace over the State where the organization is located.

2.19.2 The objective of the coordination shall be to achieve the best arrangements which will avoid hazards to civil aircraft and minimize interference with the normal operations of such aircraft.

2.19.2.1 In determining these arrangements the following shall be applied:

a) the locations or areas, times and durations for the activities shall be selected to avoid closure or realignment of established ATS routes, blocking of the most economic flight levels, or delays of scheduled aircraft operations, unless no other options exist;

b) the size of the airspace designated for the conduct of the activities shall be kept as small as possible;

c) direct communication between the ATS Provider or ATS unit and the organization or unit conducting the activities shall be provided for use in the event that civil aircraft emergencies or other unforeseen circumstances require discontinuation of the activities.

2.19.3 The ATS Provider shall ensure that a safety risk assessment is conducted, as soon as practicable, for activities potentially hazardous to civil aircraft and that appropriate risk mitigation measures are implemented.

Note.— Such risk mitigation measures may include, but would not be limited to, airspace restriction or temporary withdrawal of established ATS routes or portions thereof.

2.19.3.1 The ATS Provider shall enter into arrangements with the relevant stakeholders to enable the organization or unit conducting or identifying activities potentially hazardous to civil aircraft to contribute to the safety risk assessment in order to facilitate consideration of all relevant safety-significant factors.

2.19.4 The ATS Provider shall be responsible for initiating the promulgation of information regarding the activities.

2.19.5 If activities potentially hazardous to civil aircraft take place on a regular or continuing basis, special committees shall be established as required to ensure that the requirements of all parties concerned are adequately coordinated.

2.19.6 Adequate steps shall be taken to prevent emission of laser beams from adversely affecting flight operations.

2.19.7 In order to provide added airspace capacity and to improve efficiency and flexibility of aircraft operations, the ATS Provider shall coordinate with the relevant stakeholders and establish procedures providing for a flexible use of airspace reserved for military or other special activities. The procedures shall permit all airspace users to have safe access to such reserved airspace.

2.20 AERONAUTICAL DATA

2.20.1 The ATS Provider shall ensure that the determination and reporting of ATS-related aeronautical data are in accordance with the accuracy and integrity classification required to meet the needs of the end-user of aeronautical data.

2.20.2 Digital data error detection techniques shall be used during the transmission and/or storage of aeronautical data and digital data sets.

2.21 COORDINATION BETWEEN THE MET PROVIDER AND THE ATS PROVIDER

2.21.1 To ensure that aircraft receive the most up-to-date meteorological information for aircraft operations, arrangements shall be made, where necessary, between the MET Provider and ATS Provider for ATS personnel:

a) in addition to using indicating instruments, to report, if observed by ATS personnel or communicated by aircraft, such other meteorological elements as may be agreed upon;

b) to report as soon as possible to the associated meteorological office meteorological phenomena of operational significance, if observed by ATS personnel or communicated by aircraft, which have not been included in the aerodrome meteorological report;

c) to report as soon as possible to the associated meteorological office pertinent information concerning pre-eruption volcanic activity, volcanic eruptions and information concerning volcanic ash cloud. In addition, area control centres and flight information centres shall report the information to the associated meteorological watch office and volcanic ash advisory centres (VAACs).

2.21.2 Close coordination shall be maintained between area control centres, flight information centres and associated meteorological watch offices to ensure that information on volcanic ash included in NOTAM and SIGMET messages is consistent.

2.22 COORDINATION BETWEEN THE AIS PROVIDER AND ATS PROVIDER

2.22.1 To ensure that AIS units obtain information to enable them to provide up-to-date pre-flight information and to meet the need for in-flight information, arrangements shall be made between the AIS Provider and the ATS Provider responsible for ATS to report to the responsible AIS unit, with a minimum of delay:

a) information on aerodrome conditions;

b) the operational status of associated facilities, services and navigation aids within their area of responsibility;

c) the occurrence of volcanic activity observed by air traffic services personnel or reported by aircraft; and

d) any other information considered to be of operational significance.

2.22.2 Before introducing changes to the air navigation system, due account shall be taken by the services responsible for such changes of the time needed by the AIS Provider for the preparation, production and issuance of relevant material for promulgation. To ensure timely provision of the information to the AIS Provider, close coordination between the AIS Provider, the ATS Provider and other ANS Providers concerned is therefore required.

2.22.3 Of particular importance are changes to aeronautical information that affect charts and/or computer-based navigation systems which qualify to be notified by the AIRAC system, as specified in the Civil Aviation Requirements for AIS 2024. The predetermined, internationally agreed AIRAC effective dates shall be observed by the ATS Provider when submitting the raw information/data to the AIS Provider.

2.22.4 The ATS Provider responsible for the provision of raw aeronautical information/data to the AIS Provider shall do so while taking into account accuracy and integrity requirements necessary to meet the needs of the end-user of aeronautical data.

Note.— AIRAC information is distributed by the AIS Provider at least 42 days in advance of the AIRAC effective dates with the objective of reaching recipients at least 28 days in advance of the effective date.

2.23 MINIMUM FLIGHT ALTITUDES

Minimum flight altitudes shall be determined in consultation with the relevant stakeholders, including the ATS Provider, and promulgated by the Authority for each ATS route and control area within the Georgetown FIR. The minimum flight altitudes determined shall provide a minimum clearance above the controlling obstacle located within the areas concerned.

2.24 TIME IN AIR TRAFFIC SERVICES

2.24.1 ATS units shall use UTC and shall express the time in hours and minutes and, when required, seconds of the 24-hour day beginning at midnight.

2.24.2 ATS units shall be equipped with clocks indicating the time in hours, minutes and seconds, clearly visible from each operating position in the unit concerned.

2.24.3 ATS unit clocks and other time-recording devices shall be checked as necessary to ensure correct time to within plus or minus 30 seconds of UTC. Wherever data link communications are utilized by an ATS unit, clocks and other time-recording devices shall be checked as necessary to ensure correct time to within 1 second of UTC.

2.24.4 The correct time shall be obtained from a standard time station or, if not possible, from another unit which has obtained the correct time from such station.

2.24.5 Aerodrome control towers shall, prior to an aircraft taxiing for take-off, provide the pilot with the correct time, unless arrangements have been made for the pilot to obtain it from other sources. ATS units shall, in addition, provide aircraft with the correct time on request. Time checks shall be given to the nearest half minute.

2.25 ESTABLISHMENT OF REQUIREMENTS FOR CARRIAGE AND OPERATION OF PRESSURE-ALTITUDE REPORTING TRANSPONDERS

The Authority, based on consultation with the ATS Provider and other relevant stakeholders, shall establish requirements for carriage and operation of pressure-altitude reporting transponders within defined portions of airspace.

2.26 SAFETY MANAGEMENT

2.26.1 General

2.26.1.1 Any significant safety-related change to the ATS system, including the implementation of a reduced separation minimum or a new procedure, shall only be effected after a safety risk assessment has demonstrated that an acceptable level of safety will be met and users have been consulted. When appropriate, the ATS Provider shall ensure that adequate provision is made for post-implementation monitoring to verify that the defined level of safety continues to be met.

Note.— When, due to the nature of the change, the acceptable level of safety cannot be expressed in quantitative terms, the safety risk assessment may rely on operational judgement.

2.26.1.2 The level of ATS and communications, navigation and surveillance, as well as the ATS procedures applicable to the airspace or aerodrome concerned, shall be appropriate and adequate for maintaining an acceptable level of safety in the provision of ATS.

2.26.1.3 The requirements in respect of services, systems and procedures applicable to airspaces and aerodromes shall be established on the basis of a regional air navigation agreement in order to facilitate the harmonization of ATS in adjacent airspaces.

2.26.1.4 The ATS Provider, in order to ensure that safety in the provision of ATS is maintained, shall implement safety management systems for the air traffic services under its jurisdiction. Where appropriate, ATS SMS shall be established on the basis of a regional air navigation agreement.

2.26.1.5 The ATS Provider shall ensure that its SMS, at a minimum:

a) clearly defines lines of safety accountability throughout the ATS Provider's organization, including a direct accountability for safety on the part of senior management;

b) identifies safety hazards;

c) identifies required resources to support the establishment and implementation of the ATS SMS;

d) ensures the implementation of remedial action necessary to maintain agreed safety performance;

e) provides for continuous monitoring and regular assessment of the safety performance; and

f) aims at a continuous improvement of the overall performance of the safety management system.

2.26.2 Objectives

The objectives of ATS safety management are to ensure that:

a) the established level of safety applicable to the provision of ATS within an airspace or at an aerodrome is met; and

b) safety-related enhancements are implemented whenever necessary.

2.26.3 ATS Safety Management Activities

2.26.3.1 An ATS SMS shall include, *inter alia*, the following with respect to the provision of ATS:

a) monitoring of overall safety levels and detection of any adverse trend;

b) safety reviews of ATS units;

c) safety risk assessments in respect of the planned implementation of airspace reorganizations, the introduction of new equipment systems or facilities, and new or changed ATS procedures; and

d) a mechanism for identifying the need for safety enhancing measures.

2.26.3.2 All activities undertaken in an ATS SMS shall be fully documented. All documentation shall be retained for such period of time as is specified by the appropriate authority.

2.26.4 Monitoring of Safety Levels

2.26.4.1 Collection and evaluation of safety-related data

2.26.4.1.1 Data for use in safety monitoring programmes shall be collected from as wide a range of sources as possible, as the safety-related consequences of particular procedures or systems may not be realized until after an incident has occurred.

2.26.4.1.2 The ATS Provider shall establish a formal incident reporting system for ATS personnel to facilitate the collection of information on actual or potential safety hazards or deficiencies related to the provision of ATS, including route structures, procedures, communications, navigation and surveillance systems and other safety significant systems and equipment as well as controller workloads.

2.26.4.2 Review of incident and other safety-related reports

2.26.4.2.1 Safety-related reports concerning the operation of ATS, including air traffic incident reports, shall be systematically reviewed by the ATS Provider in order to detect any adverse trend in the number and types of incidents which occur.

2.26.4.2.2 Reports concerning the serviceability of ATS facilities and systems, such as failures and degradations of communications, surveillance and other safety significant systems and equipment, shall be systematically reviewed by the ATS Provider in order to detect any trend in the operation of such systems which may have an adverse effect on safety.

2.26.5 Safety Reviews

2.26.5.1 General requirements

Safety reviews of ATS units shall be conducted on a regular and systematic basis by personnel qualified through training, experience and expertise and having a full understanding of relevant Civil Aviation Regulations, Civil Aviation Requirements, ICAO SARPs and PANS, safe operating practices and Human Factors principles.

2.26.5.2 Scope

The scope of ATS unit safety reviews shall include at least the following issues:

1. Regulatory issues to ensure that:

a) ATS operational documents including, but not limited, to ATS unit instructions and ATC coordination procedures are complete, concise and up-to-date;

b) the ATS route structure, where applicable, provides for:

1) adequate route spacing; and

2) crossing points for ATS routes located so as to reduce the need for controller intervention and for inter- and intra-unit coordination;

c) the separation minima used in the airspace or at aerodromes are appropriate and all the provisions applicable to those minima are being complied with;

d) where applicable, provision is made for adequate observation of the manoeuvring area, and procedures and measures aimed at minimizing the potential for inadvertent runway incursions are in place. This observation may be performed visually or by means of an ATS surveillance system;

e) appropriate procedures for low visibility aerodrome operations are in place;

f) traffic volumes and associated controller workloads do not exceed defined, safe levels and that procedures are in place for regulating traffic volumes whenever necessary;

g) procedures to be applied in the event of failures or degradations of ATS systems, including communications, navigation and surveillance systems, are practicable and will provide for an acceptable level of safety;

h) procedures for the reporting of incidents and other safety-related occurrences are implemented, that the reporting of incidents is encouraged and that such reports are reviewed to identify the need for any remedial action; and

i) all applicable regulatory requirements are being met by the management and staff of the ATS Provider.

2. Operational and technical issues to ensure that:

a) the environmental working conditions meet established levels for temperature, humidity, ventilation, noise and ambient lighting, and do not adversely affect controller performance;

b) automation systems generate and display flight plan, control and coordination data in a timely, accurate and easily recognizable manner and in accordance with Human Factors principles;

c) equipment, including input/output devices for automation systems, are designed and positioned in the working position in accordance with ergonomic principles;

d) communications, navigation, surveillance and other safety significant systems and equipment:

1) are tested for normal operations on a routine basis;

2) meet the required level of reliability and availability as defined by the Authority;

3) provide for the timely and appropriate detection and warning of system failures and degradations;

4) include documentation on the consequences of system, subsystem and equipment failures and degradations;

5) include measures to control the probability of failures and degradations; and

6) include adequate backup facilities and/or procedures in the event of a system failure or degradation; and

e) detailed records of systems and equipment serviceability are kept and periodically reviewed.

Note.— In the context above, the terms "reliability" and "availability" have the following meanings:

1) Reliability. The probability that a device or system will function without failure over a specified time period or amount of usage; and

2) Availability. The ratio of percentage of the time that a system is operating correctly to the total time in that period.

3. Licensing and training issues to ensure that:

a) controllers are medically fit, adequately trained and properly licensed with valid ratings;

b) controller competency is maintained by adequate and appropriate refresher training, including the handling of aircraft emergencies and operations under conditions with failed and degraded facilities and systems;

c) controller competency is ensured by periodic assessments of competency or proficiency checks;

d) controllers, where the ATC unit/control sector is staffed by teams, are provided relevant and adequate training in order to ensure efficient teamwork;

e) the implementation of new or amended procedures, and new or updated communications, surveillance and other safety significant systems and equipment is preceded by appropriate training and instruction;

f) controller competency in the English language is satisfactory in relation to providing ATS to international air traffic; and

g) standard phraseology is used.

2.26.6 Safety Risk Assessments

2.26.6.1 Need for safety risk assessments

2.26.6.1.1 A safety risk assessment shall be carried out in respect of proposals for significant airspace reorganizations, for significant changes in the provision of ATS procedures applicable to an airspace or an aerodrome, and for the introduction of new equipment, systems or facilities, such as:

a) a reduced separation minimum to be applied within an airspace or at an aerodrome;

b) a new operating procedure, including departure and arrival procedures, to be applied within an airspace or at an aerodrome;

c) a reorganization of the ATS route structure;

d) a resectorization of an airspace;

e) physical changes to the layout of runways and/or taxiways at an aerodrome; and

f) implementation of new communications, surveillance or other safety-significant systems and equipment, including those providing new functionality and/or capabilities.

Note 1.— A reduced separation minimum may refer to the reduction of a horizontal separation minimum, including a minimum based on required navigation performance (RNP), a reduced vertical separation minimum of 300 m (1 000 ft) between FL 290 and FL 410 inclusive (RVSM), the reduction of a separation minimum based on the use of an ATS surveillance system or a wake turbulence separation minimum or reduction of minima between landing and/or departing aircraft.

Note 2.— When, due to the nature of the change, the acceptable level of safety cannot be expressed in quantitative terms, the safety risk assessments may rely on operational judgement.

2.26.6.1.2 Proposals shall be implemented only when the assessment has shown that an acceptable level of safety will be met.

2.26.6.2 Safety-significant factors

The safety risk assessment shall consider relevant all factors determined to be safety-significant, including:

a) types of aircraft and their performance characteristics, including aircraft navigation capabilities and navigation performance;

b) traffic density and distribution;

c) airspace complexity, ATS route structure and classification of the airspace;

d) aerodrome layout, including runway configurations, runway lengths and taxiway configurations;

e) type of air-ground communications and time parameters for communication dialogues, including controller intervention capability;

f) type and capabilities of surveillance system, and the availability of systems providing controller support and alert functions. Where ADS-B implementation envisages reliance upon a common source for surveillance and/or navigation, the safety risk assessment shall take account

of adequate contingency measures to mitigate the risk of either degradation or loss of this common source (i.e. common mode failure); and

g) any significant local or regional weather phenomena.

2.26.7 Safety-Enhancing Measures

2.26.7.1 Any actual or potential hazard related to the provision of ATS within an airspace or at an aerodrome, whether identified through an ATS safety management activity or by any other means, shall be assessed and classified by the ATS Provider for its risk acceptability.

2.26.7.2 Except when the risk can be classified as acceptable, the ATS Provider concerned shall, as a matter of priority and as far as practicable, implement appropriate measures to eliminate the risk or reduce the risk to a level that is acceptable.

2.26.7.3 If it becomes apparent that the level of safety applicable to an airspace or an aerodrome is not, or may not be achieved, the ATS Provider shall, as a matter of priority and as far as practicable, implement appropriate remedial measures.

2.26.7.4 Implementation of any remedial measure shall be followed by an evaluation of the effectiveness of the measure in eliminating or mitigating a risk.

2.26.8 Hazard Database

2.26.8.1 The ATS Provider shall establish and maintain a hazard database for the analysis of the hazards. The database may be prepared, updated and maintained electronically, and shall be made accessible to the Authority.

2.26.9 SMS Manual

2.26.9.1 The ATS Provider shall prepare and submit an ATS SMS Manual and relevant materials to illustrate its implementation to the Authority for acceptance.

Note.— See 1.2 of the Civil Aviation Requirements for MANSOPs 2024.

2.26.9.2 The ATS Provider shall submit any amendments to the SMS Manual to the Authority for acceptance in a timely manner prior to implementation.

2.27 COMMON REFERENCE SYSTEMS

2.27.1 Horizontal reference system

World Geodetic System — 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system for air navigation. Reported aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.

2.27.2 Vertical reference system

Mean sea level (MSL) datum, which gives the relationship of gravity-related height (elevation) to a surface known as the geoid, shall be used as the vertical reference system for air navigation.

Note.— The geoid globally most closely approximates MSL. It is defined as the equipotential surface in the gravity field of the Earth which coincides with the undisturbed MSL extended continuously through the continents.

2.27.3 Temporal reference system

2.27.3.1 The Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference system for air navigation.

2.27.3.2 When a different temporal reference system is used, this shall be indicated in GEN 2.1.2 of the Aeronautical Information Publication (AIP).

2.28 LANGUAGE PROFICIENCY

2.28.1 With respect to radiotelephony communications, the ATS Provider shall ensure that air traffic controllers speak and understand the English language, as prescribed in the Civil Aviation (Personnel Licensing) Regulations 2024.

2.28.2 The English language shall be used for communications between ATC units.

2.29 CONTINGENCY ARRANGEMENTS

2.29.1 The ATS Provider shall develop and promulgate contingency plans for implementation in the event of disruption, or potential disruption, of ATS and related supporting services in the airspace for which they are responsible for the provision of such services. Such contingency plans shall be developed with the assistance of ICAO as necessary, in close coordination with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.

2.29.2 The contingency plan shall include –

1. the actions to be taken by the ANSP's personnel responsible for providing the service;

2. possible alternative arrangements for providing the service; and the arrangements for resuming normal operations for the service.

2.30 IDENTIFICATION AND DELINEATION OF PROHIBITED, RESTRICTED AND DANGER AREAS

2.30.1 Each prohibited area, restricted area, or danger area established by the Authority shall, upon initial establishment, be given an identification and full details shall be promulgated.

2.30.2 The identification so assigned shall be used to identify the area in all subsequent notifications pertaining to that area.

2.30.3 The identification shall be composed of a group of letters and figures as follows:

a) the nationality letters SY;

b) a letter P for prohibited area, R for restricted area and D for danger area as appropriate; and

c) a number, unduplicated within the Georgetown FIR.

2.30.4 To avoid confusion, identification numbers shall not be reused for a period of at least one year after cancellation of the area to which they refer.

2.30.5 When a prohibited, restricted or danger area is established, the area shall be as small as practicable and be contained within simple geometrical limits, so as to permit ease of reference by all concerned.

2.31 ADS-C SERVICES

Note.— The provision of ATS to aircraft, based on information received from aircraft via ADS-C, is generally referred to as the provision of ADS-C services.

2.31.1 Regarding ADS-C services, the ATS Provider shall:

i. notify the Authority of their intention to implement operations that involve ADS-C; and

ii. comply with the provisions prescribed in Chapter 13 of the ICAO Doc 4444.

2.32 HUMAN FACTORS

2.32.1 General

2.32.1.1 The ATS Provider shall take into account relevant human factors principles when:

a. designing or certifying equipment;

b. designing operating procedures;

c. training and licensing personnel.

2.32.2 Implementation

2.32.2.1 The ATS Provider shall ensure that human factors principles are taken into account in all aspects of service provision. Areas to be considered shall include organizational issues, safety management concepts e.g. management of change, and learning from incident data.

2.33 RUNWAY SAFETY PROGRAMME

2.33.1 The ATS Provider shall develop a runway safety programme.

2.33.2 The runway safety programme shall include provisions regarding the use of radiotelephony, phraseology, language proficiency, ATS procedures, aerodrome lighting and marking, situational awareness and human factors.

Note. – Guidance material on human factors principles can be found in the Human Factors Training Manual (Doc 9683), and various ICAO human factors circulars/digests.

2.34 FATIGUE MANAGEMENT

2.34.1 General

2.34.1.1 The Authority has established scheduling limits and requirements for establishing a fatigue risk management system and shall monitor to ensure compliance with the requirements for fatigue management to ensure that air traffic controllers perform at an adequate level of alertness.

Note. – The implementation of fatigue management requirements is based on scientific principles contained in ICAO guidance material, knowledge, and operational experience.

2.34.1.2 Subject to the provisions of 2.34.1.4, the ATS Provider shall implement and adhere to the:

a. scheduling limits as prescribed in Appendix 6-A; and

b. fatigue risk management system (FRMS) requirements in accordance with Appendix 6-B.

2.34.1.3 The ATS Provider, for the purpose of managing its fatigue-related safety risks, shall establish one of the following:

a) air traffic controller work schedules commensurate with the services provided and in compliance with the scheduling limits of Appendix 6-A of these Requirements; or

b) an FRMS that complies with the requirements contained in Appendix 6-B established by the Authority for the provision of all ATC services; or

c) FRMS that complies with requirements contained in Appendix 6-B of these Requirements for a specified part of the ATC services, in conjunction with schedules that comply with the scheduling limits contained in Appendix 6-A of these Requirements for the remainder of its ATC services.

2.34.1.4 Where the ATS Provider complies with scheduling limits in the provision of part or all of its air traffic control services according to 2.34.1.3 a), the ATS Provider shall:

a) when requested, provide evidence to the Authority that the limitations are not exceeded and that non-duty period requirements are met; and

b) familiarize its personnel with the principles of fatigue management and its policies with regard to fatigue management.

2.34.1.5 Where the ATS Provider complies with scheduling limits in the provision of part or all of its air traffic control services according to 2.34.1.3 a), the Authority has established, in 4 of Appendix 6-A, a process to allow variations from the scheduling limits to address any additional risks associated with sudden, unforeseen operational circumstances. The Director General may approve variations to these Requirements using the established process in order to address strategic operational needs in exceptional circumstances, based on the ATS Provider demonstrating that any associated risk is being managed to a level of safety equivalent to, or better than that achieved through the scheduling limits.

Note. – Compliance with the scheduling limits does not relieve the air traffic services provider of the responsibility to manage its risks, including fatigue-related risks, using its SMS in accordance with the provisions of the applicable Civil Aviation SMS Regulations and Requirements.

2.34.1.6 Where the ATS Provider implements an FRMS to manage fatigue-related safety risks in the provision of part or all of its air traffic control services, the Authority shall require evidence, when requested, that the ATS Provider has processes to integrate FRMS functions with its other safety management functions.

2.34.1.7 Where the ATS Provider implements an FRMS to manage fatigue-related safety risks in the provision of part or all of its air traffic control services, the Authority

shall formally indicate acceptance of the FRMS, according to a documented process.

Note. – Provisions on the protection of safety information, which support the continued availability of information required by an FRMS, are contained in the applicable Civil Aviation SMS Regulations and Requirements.

2.35 LICENSES, RATINGS AND AUTHORIZATIONS

2.35.1 The ATS Provider shall deploy a sufficient number of personnel with valid licences, ratings or authorizations to provide ATS in ATS units.

2.35.2 The ATS Provider shall ensure that no person provides a function related to the provision of ATS, except where that person:
(a) has successfully completed training in the performance of that function; and
(b) has been licenced in accordance with the applicable Civil Aviation Personnel Licencing Regulations.

2.35.3 The ATS Provider shall ensure that no person acts as an air traffic controller at any place, for any sector, or with any type of equipment, except where that person holds and complies with conditions on:
(a) an air traffic controller's licence;
(b) a valid medical certificate; and
(c) a rating authorising the person to provide the relevant air traffic control service at the place, for the sector, or with the type of equipment concerned (as the case may require).

2.35.4 The ATS Provider shall ensure that, when requested by the Authority during safety oversight activities, incident investigations or otherwise, any person acting as an air traffic controller promptly produces their licence, valid medical certificate, and rating (as the case may be) required to be held by that person under 2.35.3 above.

2.35.5 The ATS Provider shall ensure that no person acts as a flight information service officer at any place, except where that person holds and complies with conditions on:

(a) an air traffic controller's licence (whether or not rated for that place); or

(b) a flight information service officer's authorization endorsed with a validation for that place.

2.35.6 The ATS Provider shall ensure that, when requested by the Authority during safety oversight activities, incident investigations or otherwise, a person acting as a flight information service officer shall promptly produce the relevant licence or authorization and (if applicable) a validation for the place concerned.

2.35.7 (1) The Authority shall issue a flight information service officer's authorization to any applicant, subject to any condition it thinks fit, if the Authority is satisfied that the applicant:

i. is a fit person to hold the authorization;

ii. is qualified by reason of his or her knowledge, language proficiency, experience, competence, skill, and physical and mental fitness to act as a flight information service officer;

iii. is 18 years or older.

(2) No authorization is valid unless the holder has signed their name in ink on that authorization.

(3) An authorization remains in force until the expiry date specified on it unless sooner suspended, revoked, or surrendered.

(4) No authorization shall be endorsed with a validation unless:

(a) the Authority is satisfied that the holder is qualified to perform flight information service at the place to which the validation relates; and

(b) the holder of the authorization has passed an approved test of ability to perform those services at that place.

(5) A validation remains in force until the expiry date specified on it, unless it sooner lapses or is sooner suspended, revoked, or surrendered under the Civil Aviation (Air Navigation Services) Regulations 2024.

(6) If the holder of any validation does not perform any flight information services at the place specified in the validation for any period of 180 consecutive days, that validation lapses and ceases to have effect at the end of this period, and that holder shall immediately –

(a) inform the ATS provider approved to provide air traffic services at the place concerned; and

(b) forward that holder's authorization to a person designated by the Authority.

(7) The person approved by the Authority shall endorse the authorization to signify lapse of that validation and promptly return the authorization to the holder.

(8) Any holder of an authorization whose validation has lapsed may apply to the Authority for endorsement of his or her authorization with the same or a different validation.

2.36 PROBLEMATIC USE OF SUBSTANCES

2.36.1 The ATS Provider shall ensure that no person performs any duty as an air traffic controller or flight information service officer:

(a) within eight hours after consumption of alcohol;

(b) while under the influence of alcohol; or

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

2.37 FACILITY REQUIREMENTS

2.37.1 The ATS Provider shall comply with the provisions contained in Appendix 7 regarding facility requirements.

2.38 ATS MANSOPs

2.38.1 In addition to the provisions contained in the Civil Aviation Requirements for MANSOPs 2024, the ATS Provider, where aerodrome control service is provided, shall include in its MANSOPs:

i. a chart of the manoeuvring area of the aerodrome showing all runways, taxiways, parking areas, etc.;

ii. extracts from the applicable Airport Emergency Plan relevant to ATS functions;

iii. extracts from the Aerodrome Manual developed by the aerodrome operator regarding the prevention of unauthorized entry of persons or things on the movement area of the aerodrome, and

iv. extracts from the Aerodrome Manual developed by the aerodrome operator regarding the control of surface vehicles operating on or in the vicinity of the manoeuvring area.

2.38.2 In addition to the provisions contained in the Civil Aviation Requirements for MANSOPs 2024, the ATS Provider shall include in its MANSOPs:

i. a description of the arrangements made by the ATS Provider to ensure that it has, and will continue to receive, the information necessary for providing ATS, includes information that is both internally and externally sourced;

Note. – Examples of data sources normally required include, but are not limited to:

1) *AIS;*
2) *NOTAMs;*
3) *Meteorological information;*

4) *Voice coordination;*
5) *Aerodrome works and administration coordination;*
6) *Local and remote ADS-B surveillance data;*
7) *Information concerning volcanic activity;*
8) *AFTN/AMHS;*
9) *Flight notification;*
10) *Meteorological warning service;*
11) *Information on military activities potentially hazardous to civil aircraft operations;*
12) *Information on aerodrome conditions and the operational status of facilities and navigation aids; and*
13) *Information concerning radioactive material and toxic chemical clouds.*

ii. A description of the arrangements made by the ATS Provider to ensure that it can, and will continue to be able to, provide the information in relation to its ATS to other organisations whose functions reasonably require that information (e.g. adjacent ATS units and ACCs).

CHAPTER 3 – AIR TRAFFIC CONTROL SERVICE

3.1 APPLICATION

Air traffic control service shall be provided:

a) to all IFR flights in airspace Classes A, B, C, D and E;

b) to all VFR flights in airspace Classes B, C and D;

c) to all special VFR flights;

d) to all aerodrome traffic at controlled aerodromes.

3.2 PROVISION OF AIR TRAFFIC CONTROL SERVICE

The parts of air traffic control service described in 2.2.1 shall be provided by the various units as follows:

a) *Area control service:*

1) by an area control centre; or

2) by the unit providing approach control service in a control zone or in a control area of limited extent which is designated primarily for the provision of approach control service and where no area control centre is established.

b) *Approach control service:*

1) by an aerodrome control tower or area control centre when it is necessary or desirable to combine under the responsibility of one unit the functions of the approach control service with those of the aerodrome control service or the area control service;

2) by an approach control unit when it is necessary or desirable to establish a separate unit.

c) *Aerodrome control service:* by an aerodrome control tower.

Note.— The task of providing specified services on the apron, e.g. apron management service, may be assigned to an aerodrome control tower or to a separate unit.

3.3 OPERATION OF AIR TRAFFIC CONTROL SERVICE

3.3.1 In order to provide air traffic control service, an ATC unit shall:

a) be provided with information on the intended movement of each aircraft, or variations therefrom, and with current information on the actual progress of each aircraft;

b) determine from the information received, the relative positions of known aircraft to each other;

c) issue clearances and information for the purpose of preventing collision between aircraft under its control and of expediting and maintaining an orderly flow of traffic;

d) coordinate clearances as necessary with other units:

1) whenever an aircraft might otherwise conflict with traffic operated under the control of such other units;

2) before transferring control of an aircraft to such other units.

3.3.2 Information on aircraft movements, together with a record of ATC clearances issued to such aircraft, shall be so displayed as to permit ready analysis in order to maintain an efficient flow of air traffic with adequate separation between aircraft.

3.3.3 Air traffic control units should be equipped with devices that record background communication and the aural environment at air traffic controller work stations, capable of retaining the information recorded during at least the last twenty-four hours of operation.

3.3.4 Clearances issued by air traffic control units shall provide separation:

a) between all flights in airspace Classes A and B;

b) between IFR flights in airspace Classes C, D and E;

c) between IFR flights and VFR flights in airspace Class C;

d) between IFR flights and special VFR flights;

e) between special VFR flights when so prescribed by the ATS Provider,

except as provided for in 3.3.4.1 with respect to Classes D and E.

3.3.4.1 When so requested by an aircraft and provided it is agreed by the pilot of the other aircraft and so authorized by the ATS Provider, an ATC unit may clear a controlled flight, including departing and arriving flights, operating in airspace Classes D and E in visual meteorological conditions during the hours of daylight to fly subject to maintaining own separation to one other aircraft and remaining in visual meteorological conditions. When a controlled flight is so cleared, the following shall apply:

a) the clearance shall be for a specified portion of the flight at or below 3 050 m (10 000 ft), during climb or descent and subject to further restrictions as and when prescribed on the basis of regional air navigation agreements;

b) if there is a possibility that flight under visual meteorological conditions may become impracticable, an IFR flight shall be provided with alternative instructions to be complied with in the event that flight in visual meteorological conditions (VMC) cannot be maintained for the term of the clearance;

c) the pilot of an IFR flight, on observing that conditions are deteriorating and considering that operation in VMC will become impossible, shall inform ATC before entering instrument meteorological conditions (IMC) and shall proceed in accordance with the alternative instructions given;

d) essential traffic information shall be issued to the aircraft concerned.

Note 1.— As indicated in this requirement, the provision of vertical or horizontal separation by an ATC unit is not applicable in respect of any specified portion of a flight cleared subject to maintaining own separation and remaining in VMC. It

is for the flight so cleared to ensure, for the duration of the clearance, that it is not operated in such proximity to other flights as to create a collision hazard.

Note 2.— It is axiomatic that a VFR flight must remain in VMC at all times. Accordingly, the issuance of a clearance to a VFR flight to fly subject to maintaining own separation and remaining in VMC has no other object than to signify that, for the duration of the clearance, separation from other aircraft by ATC is not provided.

Note 3.— The objectives of the air traffic control service as prescribed in these Requirements do not include prevention of collision with terrain. The procedures prescribed in this document do not relieve pilots of their responsibility to ensure that any clearances issued by air traffic control units are safe in this respect. When an IFR flight is vectored or is given a direct routing which takes the aircraft off an ATS route, the procedures in the ICAO Doc 4444, Chapter 8, 8.6.5.2 apply.

3.3.5 Separation by an ATC unit shall be obtained by at least one of the following:

a) vertical separation, obtained by assigning different levels selected from:

1) the appropriate table of cruising levels in Schedule 3 of the Civil Aviation (Rules of the Air) Regulations 2024, or

2) a modified table of cruising levels, when so prescribed in accordance with Schedule 3 of the Civil Aviation (Rules of the Air) Regulations 2024 for flight above FL 410,

except that the correlation of levels to track as prescribed therein shall not apply whenever otherwise indicated in the Guyana AIP or ATC clearances;

b) horizontal separation, obtained by providing:

1) longitudinal separation, by maintaining an interval between aircraft operating along the same, converging or reciprocal tracks, expressed in time or distance; or

2) lateral separation, by maintaining aircraft on different routes or in different geographical areas;

c) composite separation, consisting of a combination of vertical separation and one of the other forms of separation contained in b) above, using minima for each which may be lower than, but not less than half of, those used for each of the combined elements when applied individually. Composite separation shall only be applied on the basis of regional air navigation agreements.

3.3.5.1 For all airspace where a reduced vertical separation minimum of 300 m (1 000 ft) is applied between FL 290 and FL 410 inclusive, a programme shall be instituted, on a regional basis, for monitoring the height-keeping performance of aircraft operating at these levels, in order to ensure that the continued application of this vertical separation minimum meets the safety objectives. The scope of regional monitoring programmes shall be adequate to conduct analyses of aircraft group performance and evaluate the stability of altimetry system error.

3.3.5.2 Where RCP/RSP specifications are applied, programmes shall be instituted for monitoring the performance of the infrastructure and the participating aircraft against the appropriate RCP and/or RSP specifications, to ensure that operations in the applicable airspace continue to meet safety objectives. The scope of monitoring programmes shall be adequate to evaluate communication and/or surveillance performance, as applicable.

3.3.5.3 Arrangements shall be put in place, through interregional agreement, for the sharing between regions of data and/or information from monitoring programmes.

3.3.6 No clearance shall be given to execute any manoeuvre that would reduce the spacing between two aircraft to less than the separation minimum applicable in the circumstances.

3.3.7 Larger separations than the specified minima shall be applied whenever exceptional circumstances such as unlawful interference or navigational difficulties call for extra precautions. This shall be done with due regard to all relevant factors so as to avoid impeding the flow of air traffic by the application of excessive separations.

Note.— Unlawful interference with an aircraft constitutes a case of exceptional circumstances which might require the application of separations larger than the specified minima, between the aircraft being subjected to unlawful interference and other aircraft.

3.3.8 Where the type of separation or minimum used to separate two aircraft cannot be maintained, another type of separation or another minimum shall be established prior to the time when the current separation minimum would be infringed.

3.3.9 Degraded aircraft performance

Whenever, as a result of failure or degradation of navigation, communications, altimetry, flight control or other systems, aircraft performance is degraded below the level required for the airspace in which it is operating, the flight crew shall advise the ATC unit concerned without delay. Where the failure or degradation affects the separation minimum currently being employed, the controller shall take action to establish another appropriate type of separation or separation minimum.

3.4 HORIZONTAL SPEED CONTROL INSTRUCTIONS

3.4.1 General

3.4.1.1 In order to facilitate a safe and orderly flow of traffic, aircraft may, subject to conditions specified by the appropriate authority, be instructed to adjust speed in

a specified manner. Flight crews should be given adequate notice of planned speed control.

Note.— Application of speed control over a long period of time may affect aircraft fuel reserves.

3.4.1.2 Speed control instructions shall remain in effect unless explicitly cancelled or amended by the controller.

3.4.1.3 Speed control shall not be applied to aircraft entering or established in a holding pattern.

3.4.1.4 Speed adjustments shall be limited to those necessary to establish and/or maintain a desired separation minimum or spacing. Instructions involving frequent changes of speed, including alternate speed increases and decreases, shall be avoided.

3.4.1.5 The flight crew shall inform the ATC unit concerned if at any time they are unable to comply with a speed instruction. In such cases, the controller shall apply an alternative method to achieve the desired spacing between the aircraft concerned.

3.4.1.6 At levels at or above 7 600 m (FL 250), speed adjustments should be expressed in multiples of 0.01 Mach; at levels below 7 600 m (FL 250), speed adjustments should be expressed in multiples of 20 km/h (10 kt) based on indicated airspeed (IAS).

Note 1.— Mach 0.01 equals approximately 11 km/h (6 kt) IAS at higher flight levels.

Note 2.— When an aircraft is heavily loaded and at a high level, its ability to change speed may, in cases, be very limited.

3.4.1.7 Aircraft shall be advised when a speed control restriction is no longer required.

3.4.2 Methods of application

3.4.2.1 In order to establish a desired spacing between two or more successive aircraft, the controller shall first either reduce the speed of the last aircraft, or increase the speed of the lead aircraft, then adjust the speed(s) of the other aircraft in order.

3.4.2.2 In order to maintain a desired spacing using speed control techniques, specific speeds need to be assigned to all the aircraft concerned.

Note 1.— The true airspeed (TAS) of an aircraft will decrease during descent when maintaining a constant IAS. When two descending aircraft maintain the same IAS, and the leading aircraft is at the lower level, the TAS of the leading aircraft will be lower than that of the following aircraft. The distance between the two aircraft will thus be reduced, unless a sufficient speed differential is applied. For the purpose of calculating a desired speed differential between two succeeding aircraft, 11 km/h (6 kt) IAS per 300 m (1 000 ft) height difference may be used as a general rule. At levels below 2 450 m (FL 80) the difference between IAS and TAS is negligible for speed control purposes.

Note 2.— Time and distance required to achieve a desired spacing will increase with higher levels, higher speeds, and when the aircraft is in a clean configuration.

3.4.3 Descending and arriving aircraft

3.4.3.1 An aircraft shall, when practicable, be authorized to absorb a period of notified terminal delay by cruising at a reduced speed for the latter portion of its flight.

3.4.3.2 An arriving aircraft may be instructed to maintain its "maximum speed", "minimum clean speed", "minimum speed", or a specified speed.

Note.— "Minimum clean speed" signifies the minimum speed at which an aircraft can be flown in a clean configuration, i.e. without deployment of lift-augmentation devices, speed brakes or landing gear.

3.4.3.3 Speed reductions to less than 460 km/h (250 kt) IAS for turbojet aircraft during initial descent from cruising level shall be applied only with the concurrence of the flight crew.

3.4.3.4 Instructions for an aircraft to simultaneously maintain a high rate of descent and reduce its speed shall be avoided as such manoeuvres are normally not compatible. Any significant speed reduction during descent may require the aircraft to temporarily level off to reduce speed before continuing descent.

3.4.3.5 Arriving aircraft shall be permitted to operate in a clean configuration for as long as possible. Below 4 550 m (FL 150), speed reductions for turbojet aircraft to not less than 410 km/h (220 kt) IAS, which will normally be very close to the minimum speed of turbojet aircraft in a clean configuration, may be used.

3.4.3.6 Only minor speed adjustments not exceeding plus/minus 40 km/h (20 kt) IAS shall be used for aircraft on intermediate and final approach.

3.4.3.7 Speed control shall not be applied to aircraft after passing a point 7 km (4 NM) from the threshold on final approach.

3.4.4 SID and STAR

The flight crew shall comply with published SID and STAR speed restrictions unless the restrictions are explicitly cancelled or amended by the controller.

Note.— Some SID and STAR speed restrictions ensure containment within RNAV departure or arrival procedure (e.g. maximum speed associated with a constant radius arc to a fix (RF) leg).

3.5 VERTICAL SPEED CONTROL INSTRUCTIONS

3.5.1 General

3.5.1.1 In order to facilitate a safe and orderly flow of traffic, aircraft may be instructed to adjust rate of climb or rate of descent. Vertical speed control may be applied between two climbing aircraft or two descending aircraft in order to establish or maintain a specific vertical separation minimum.

3.5.1.2 Vertical speed adjustments shall be limited to those necessary to establish and/or maintain a desired separation minimum. Instructions involving frequent changes of climb/descent rates shall be avoided.

3.5.1.3 The flight crew shall inform the ATC unit concerned if unable, at any time, to comply with a specified rate of climb or descent. In such cases, the controller shall apply an alternative method to achieve an appropriate separation minimum between aircraft, without delay.

3.5.1.4 Aircraft shall be advised when a rate of climb/descent restriction is no longer required.

3.5.2 Methods of application

3.5.2.1 An aircraft may be instructed to expedite climb or descent as appropriate to or through a specified level, or may be instructed to reduce its rate of climb or rate of descent.

3.5.2.2 Climbing aircraft may be instructed to maintain a specified rate of climb, a rate of climb equal to or greater than a specified value or a rate of climb equal to or less than a specified value.

3.5.2.3 Descending aircraft may be instructed to maintain a specified rate of descent, a rate of descent equal to or greater than a specified value or a rate of descent equal to or less than a specified value.

3.5.2.4 In applying vertical speed control, the controller shall ascertain to which level(s) climbing aircraft can sustain a specified rate of climb or, in the case of descending aircraft, the specified rate of descent which can be sustained, and shall ensure that alternative methods of maintaining separation can be applied in a timely manner, if required.

Note.— Controllers need to be aware of aircraft performance characteristics and limitations in relation to a simultaneous application of horizontal and vertical speed limitations.

3.6 CHANGE FROM IFR TO VFR FLIGHT

3.6.1 Change from IFR flight to VFR flight is only acceptable when a message initiated by the pilot-in-command containing the specific expression "CANCELLING MY IFR FLIGHT", together with the changes, if any, to be made to the current flight plan, is received by an ATS unit. No invitation to change from IFR flight to VFR flight is to be made either directly or by inference.

3.6.2 No reply, other than the acknowledgment "IFR FLIGHT CANCELLED AT ... (time)", shall normally be made by an ATS unit.

3.6.3 When an ATS unit is in possession of information that instrument meteorological conditions are likely to be encountered along the route of flight, a pilot changing from IFR flight to VFR flight shall, if practicable, be so advised.

3.6.4 An ATC unit receiving notification of an aircraft's intention to change from IFR to VFR flight shall, as soon as practicable thereafter, so inform all other ATS units to whom the IFR flight plan was addressed, except those units through whose regions or areas the flight has already passed.

3.7 WAKE TURBULENCE

Note.— The term "wake turbulence" is used in this context to describe the effect of the rotating air masses generated behind the wing tips of aircraft, in preference to the term "wake vortex" which describes the nature of the air masses.

3.7.1 Wake turbulence categories and groups of aircraft

3.7.1.1 Except as provided for in 3.7.1.2, wake turbulence separation minima shall be based on a grouping of aircraft types into four categories according to the maximum certificated take-off mass as follows:

a) SUPER (J) — aircraft types specified as such in the *ICAO Doc 8643 – Aircraft Type Designators*;

b) HEAVY (H) — aircraft types of 136 000 kg or more, with the exception of aircraft types listed in the ICAO Doc 8643 in the SUPER (J) category;

c) MEDIUM (M) — aircraft types less than 136 000 kg but more than 7 000 kg; and

d) LIGHT (L) — aircraft types of 7 000 kg or less.

Note.— The wake turbulence category for each aircraft type is contained in the ICAO Doc 8643 – Aircraft Type Designators.

3.7.1.2 When approved by the ATS Provider, wake turbulence separation minima may be applied utilizing wake turbulence groups and shall be based on wake generation and resistance characteristics of the aircraft. These depend primarily on maximum certificated take-off mass, wing characteristics and speeds. The group designators are described as follows:

a) GROUP A — aircraft types of 136 000 kg or more, and a wing span less than or equal to 80 m but greater than 74.68 m;

b) GROUP B — aircraft types of 136 000 kg or more, and a wing span less than or equal to 74.68 m but greater than 53.34 m;

c) GROUP C — aircraft types of 136 000 kg or more, and a wing span less than or equal to 53.34 m but greater than 38.1 m;

d) GROUP D — aircraft types less than 136 000 kg but more than 18 600 kg, and a wing span greater than 32 m;

e) GROUP E — aircraft types less than 136 000 kg but more than 18 600 kg, and a wing span less than or equal to 32 m but greater than 27.43 m;

f) GROUP F — aircraft types less than 136 000 kg but more than 18 600 kg, and a wing span less than or equal to 27.43 m;

g) GROUP G — aircraft types of 18 600 kg or less (without wing span criterion).

3.7.1.2.1 Essential information, including the wake turbulence group designator as necessary, shall be provided to the controller when separation based on wake turbulence groups is to be applied.

3.7.1.3 Helicopters shall be kept well clear of light aircraft when hovering or while air taxiing.

Note 1.— Helicopters produce vortices when in flight and there is some evidence that, per kilogram of gross mass, their vortices are more intense than those of fixed-wing aircraft. When hovering in ground effect or air taxiing, helicopters generate downwash producing high velocity outwash vortices to a distance approximately three times the diameter of the rotor.

3.7.2 Indication of super or heavy wake turbulence category

For aircraft in the SUPER or HEAVY wake turbulence categories, the word "super" or "heavy" shall be included, as appropriate, immediately after the aircraft call sign in the initial radiotelephony contact between such aircraft and ATS units.

Note.— Wake turbulence Group A is equivalent to the SUPER wake turbulence category, and Groups B and C are equivalent to the HEAVY category.

3.8 ALTIMETER SETTING PROCEDURES

3.8.1 Expression of vertical position of aircraft

3.8.1.1 For flights in the vicinity of aerodromes and within terminal control areas the vertical position of aircraft shall, except as provided for in 3.8.1.2, be expressed in terms of altitudes at or below the transition altitude and in terms of flight levels at or above the transition level. While passing through the transition layer, vertical position shall be expressed in terms of flight levels when climbing and in terms of altitudes when descending.

3.8.1.2 When an aircraft which has been given clearance to land is completing its approach using atmospheric pressure at aerodrome elevation (QFE), the vertical position of the aircraft shall be expressed in terms of height above aerodrome elevation during that portion of its flight for which QFE may be used, except that it shall be expressed in terms of height above runway threshold elevation:

a) for instrument runways, if the threshold is 2 m (7 ft) or more below the aerodrome elevation; and

b) for precision approach runways.

3.8.1.3 For flights en route, the vertical position of aircraft shall be expressed in terms of:

a) flight levels at or above the lowest usable flight level; and
b) altitudes below the lowest usable flight level;

except where, on the basis of regional air navigation agreements, a transition altitude has been established for a specified area, in which case the provisions of 3.8.1.1 shall apply.

3.8.2 Determination of the transition level

3.8.2.1 The appropriate ATS unit shall establish the transition level to be used in the vicinity of the aerodrome(s) concerned and, when relevant, the TMA, for the appropriate period of time on the basis of QNH (altimeter subscale setting to obtain elevation when on the ground) reports and forecast mean sea level pressure, if required.

3.8.2.2 The transition level shall be the lowest flight level available for use above the transition altitude established for the aerodrome(s) concerned. Where a common transition altitude has been established for two or more aerodromes which are so closely located as to require coordinated procedures, the appropriate ATS units shall establish a common transition level to be used at any given time in the vicinity of the aerodrome and, when relevant, in the TMA concerned.

3.8.3 Minimum cruising level for IFR flights

3.8.3.1 Except when specifically authorized by the Authority, cruising levels below the minimum flight altitudes established by the Authority shall not be assigned.

3.8.3.2 ATC units shall, when circumstances warrant it, determine the lowest usable flight level or levels for the whole or parts of the control area for which they are responsible, use it when assigning flight levels and pass it to pilots on request.

Note 1.— Unless otherwise prescribed by the Authority, the lowest usable flight level is that flight level which corresponds to, or is immediately above, the established minimum flight altitude.

Note 2.— The portion of a control area for which a particular lowest usable flight level applies is determined in accordance with air traffic services requirements.

Note 3.— The objectives of the air traffic control service as prescribed in these Requirements do not include prevention of collision with terrain. The procedures prescribed in this document do not relieve pilots of their responsibility to ensure that any clearances issued by ATC units are safe in this respect. When an IFR flight is vectored or is given a direct routing which takes the aircraft off an ATS route, the procedures in ICAO Doc 4444, Chapter 8, 8.6.5.2 apply.

3.8.4 Provision of altimeter setting information

3.8.4.1 Appropriate ATS units shall at all times have available for transmission to aircraft in flight, on request, the information required to determine the lowest flight level which will ensure adequate terrain clearance on routes or segments of routes for which this information is required.

Note.— If so prescribed on the basis of regional air navigation agreements, this information may consist of climatological data.

3.8.4.2 FICs and ACCs shall have available for transmission to aircraft, on request, an appropriate number of QNH reports or forecast pressures for the FIRs and control areas for which they are responsible, and for those adjacent.

3.8.4.3 The flight crew shall be provided with the transition level in due time prior to reaching it during descent. This may be accomplished by voice communications, ATIS broadcast or data link.

3.8.4.4 The transition level shall be included in approach clearances when so prescribed by the Authority or requested by the pilot.

3.8.4.5 A QNH altimeter setting shall be included in the descent clearance when first cleared to an altitude below the transition level, in approach clearances or clearances to enter the traffic circuit, and in taxi clearances for departing aircraft, except when it is known that the aircraft has already received the information

3.8.4.6 A QFE altimeter setting shall be provided to aircraft on request or on a regular basis in accordance with local arrangements; it shall be the QFE for the aerodrome elevation except for:

a) non-precision approach runways, if the threshold is 2 m (7 ft) or more below the aerodrome elevation; and

b) precision approach runways;

in which cases the QFE for the relevant runway threshold shall be provided.

3.8.4.7 Altimeter settings provided to aircraft shall be rounded down to the nearest lower whole hectopascal.

Note 1.— Unless otherwise prescribed by the Authority, the lowest usable flight level is that flight level which corresponds to, or is immediately above, the established minimum flight altitude.

Note 2.— The portion of a control area for which a particular lowest usable flight level applies is determined in accordance with air traffic services requirements.

3.9 POSITION REPORTING

3.9.1 Transmission of position reports

3.9.1.1 On routes defined by designated significant points, position reports shall be made by the aircraft when over, or as soon as possible after passing, each designated compulsory reporting point, except as provided in 3.9.1.3 and 3.9.3. Additional reports over other points may be requested by the appropriate ATS unit.

3.9.1.2 On routes not defined by designated significant points, position reports shall be made by the aircraft as soon as possible after the first half hour of flight and at hourly intervals thereafter, except as provided in 3.9.1.3. Additional reports at shorter intervals of time may be requested by the appropriate ATS unit.

3.9.1.3 Under conditions specified by the ATS Provider, flights may be exempted from the requirement to make position reports at each designated compulsory reporting point or interval. In applying this, account shall be taken of the meteorological requirement for the making and reporting of routine aircraft observations.

Note.— This is intended to apply in cases where adequate flight progress data are available from other sources, e.g. radar or ADS-B (see ICAO Doc 4444, Chapter 8, 8.6.4.4) and in other circumstances where the omission of routine reports from selected flights is found to be acceptable.

3.9.1.4 The position reports required by 3.9.1.1 and 3.9.1.2 shall be made to the ATS unit serving the airspace in which the aircraft is operated. In addition, when so prescribed by the appropriate ATS authority in aeronautical information publications or requested by the appropriate ATS unit, the last position report before passing from one FIR or control area to an adjacent FIR or control area shall be made to the ATS unit serving the airspace about to be entered.

3.9.1.5 If a position report is not received at the expected time, subsequent control shall not be based on the assumption that the estimated time is accurate. Immediate action shall be taken to obtain the report if it is likely to have any bearing on the control of other aircraft.

3.9.2 Contents of voice position reports

3.9.2.1 The position reports required by 3.9.1.1 and 3.9.1.2 shall contain the following elements of information, except that elements d), e) and f) may be omitted from position reports transmitted by radiotelephony, when so prescribed on the basis of regional air navigation agreements:

a) aircraft identification;

b) position;

c) time;

d) flight level or altitude, including passing level and cleared level if not maintaining the cleared level;

e) next position and time over; and

f) ensuing significant point.

3.9.2.1.1 Element d), flight level or altitude, shall, however, be included in the initial call after a change of air-ground voice communication channel.

3.9.2.2 When assigned a speed to maintain, the flight crew shall include this speed in their position reports. The assigned speed shall also be included in the initial call after a change of air-ground voice communication channel, whether or not a full position report is required.

Note.— Omission of element d) may be possible when flight level or altitude, as appropriate, derived from pressure-altitude information can be made continuously available to controllers in labels associated with the position

indication of aircraft and when adequate procedures have been developed to guarantee the safe and efficient use of this altitude information.

3.9.3 Radiotelephony procedures for air-ground voice communication channel changeover

When so prescribed by the ATS Provider, the initial call to an ATC unit after a change of air-ground voice communication channel shall contain the following elements:

a) designation of the station being called;

b) call sign and, for aircraft in the SUPER and HEAVY wake turbulence categories, the word "super" or "heavy" respectively;

c) level, including passing and cleared levels if not maintaining the cleared level;

d) speed, if assigned by ATC; and

e) additional elements, as required by the ATS Provider.

3.9.4 Transmission of ADS-C reports

The position reports shall be made automatically to the ATS unit serving the airspace in which the aircraft is operating. The requirements for the transmission and contents of ADS-C reports shall be established by the controlling ATC unit on the basis of current operational conditions and communicated to the aircraft and acknowledged through an ADS-C agreement.

3.9.5 Contents of ADS-C reports

3.9.5.1 ADS-C reports shall be composed of data blocks selected from the following:

a) **Aircraft identification**

b) **Basic ADS-C**

latitude

longitude

altitude

time

figure of merit

Note.— The basic ADS-C block is mandatory and is included in all ADS-C reports.

c) **Ground vector**

track

ground speed

rate of climb or descent

d) **Air vector**

heading

Mach or IAS

rate of climb or descent

e) **Projected profile**

next waypoint

estimated altitude at next waypoint

estimated time at next waypoint

(next + 1) waypoint

estimated altitude at (next + 1) waypoint

estimated time at (next + 1) waypoint

f) **Meteorological information**

wind speed

wind direction

wind quality flag (if available)

temperature

turbulence (if available)

humidity (if available)

g) **Short-term intent**

latitude at projected intent point
longitude at projected intent point
altitude at projected intent point
time of projection

If an altitude, track or speed change is predicted to occur between the aircraft's current position and the projected intent point, additional information would be provided in an intermediate intent block as follows:

distance from current point to change point
track from current point to change point
altitude at change point
predicted time to change point

3.9.5.2 The basic ADS-C data block shall be required from all ADS-C-equipped aircraft. Remaining ADS-C data blocks shall be included as necessary. In addition to any requirements concerning its transmission for ATS purposes, data block f) (Meteorological information) shall be transmitted in accordance with 2.5 of the Civil Aviation Requirements for Meteorological Service for Air Navigation 2024, where applicable. ADS-C emergency and/or urgency reports shall include the emergency and/or urgency status in addition to the relevant ADS-C report information.

3.9.6 Data format of ADS-B messages

Note.— Data formats of ADS-B messages can be found in ICAO Annex 10 — Aeronautical Telecommunications, *Volume III* — Communication Systems, *Part I* — Digital Data Communication Systems, *and Volume IV* — Surveillance and Collision Avoidance Systems.

3.10 REPORTING OF OPERATIONAL AND METEOROLOGICAL INFORMATION

3.10.1 General

3.10.1.1 When operational and/or routine meteorological information is to be reported, using data link, by an aircraft en route at times where position reports are required in accordance with 3.9.1.1 and 3.9.1.2, the position report shall be given in accordance with 3.9.5.2 (requirements concerning transmission of meteorological information from ADS-C equipped aircraft), or in the form of a routine air-report. Special aircraft observations shall be reported as special air-reports. All air-reports shall be reported as soon as is practicable.

3.10.2 Contents of routine air-reports

3.10.2.1 Routine air-reports transmitted by data link, when ADS-C is not being applied, shall give information relating to such of the following elements as are necessary for compliance with 3.10.2.2:

Section 1.— Position information:

1) aircraft identification
2) position
3) time
4) flight level or altitude
5) next position and time over
6) ensuing significant point

Section 2.— Operational information:

7) estimated time of arrival
8) endurance

Section 3.— Meteorological information:

9) wind direction

10) wind speed

11) wind quality flag

12) air temperature

13) turbulence (if available)

14) humidity (if available).

3.10.2.2 Section 1 of the air-report is obligatory, except that elements 5) and 6) thereof may be omitted when so prescribed on the basis of regional air navigation agreements. Section 2 of the air-report, or a portion thereof, shall only be transmitted when so requested by the operator or a designated representative, or when deemed necessary by the pilot-in-command. Section 3 of the air-report shall be transmitted in accordance with the Civil Aviation (Operations) Regulations 2024.

Note.— While element 4), flight level or altitude, may, in accordance with 3.9.2.1, be omitted from the contents of a position report transmitted by radiotelephony when so prescribed on the basis of regional air navigation agreements, that element may not be omitted from Section 1 of an air-report.

3.10.3 Contents of special air-reports

3.10.3.1 Special air-reports shall be made by all aircraft whenever the following conditions are encountered or observed:

a) moderate or severe turbulence; or

b) moderate or severe icing; or

c) severe mountain wave; or

d) thunderstorms, without hail that are obscured, embedded, widespread or in squall lines; or

e) thunderstorms, with hail that are obscured, embedded, widespread or in squall lines; or

f) heavy duststorm or heavy sandstorm; or

g) volcanic ash cloud; or

h) pre-eruption volcanic activity or a volcanic eruption; or

i) runway braking action encountered is not as good as reported.

Note.— Pre-eruption volcanic activity in this context means unusual and/or increasing volcanic activity which could presage a volcanic eruption.

In addition, in the case of transonic and supersonic flight:

j) moderate turbulence; or

k) hail; or

l) cumulonimbus clouds.

3.10.3.2 When air-ground data link is used, special air-reports shall contain the following elements:

message type designator

aircraft identification

Data block 1:

- latitude
- longitude
- pressure-altitude
- time

Data block 2:

- wind direction
- wind speed
- wind quality flag

air temperature

turbulence (if available)

humidity (if available)

Data block 3:

condition prompting the issuance of the special air-report; to be selected from the list a) to k) presented under 3.10.3.1.

3.10.3.3 When voice communications are used, special air-reports shall contain the following elements:

Message type designator

Section 1.— Position information

1) aircraft identification

2) position

3) time

4) flight level or altitude

Section 3.— Meteorological information

5) condition prompting the issuance of the special air-report; to be selected from the list a) to k) presented under 3.10.3.1.

3.10.4 Compilation and transmission of air-reports by voice communications

3.10.4.1 Forms based on the model AIREP SPECIAL form in Appendix 1 of the ICAO Doc 4444 shall be provided for the use of flight crews in compiling the reports. The detailed instructions for reporting, as given in Appendix 1, of the ICAO Doc 4444 shall be complied with.

3.10.4.2 The detailed instructions, including the formats of messages and the phraseologies given in Appendix 1 of the ICAO Doc 4444, shall be used by flight crews when transmitting air-reports and by ATS units when retransmitting such reports.

Note.— Increasing use of air-reports in automated systems makes it essential that the elements of such reports be transmitted in the order and form prescribed.

3.10.5 Recording of special air-reports of volcanic activity

Special air-reports containing observations of volcanic activity shall be recorded on the special air-report of volcanic activity form. Forms based on the model form for special air-reports of volcanic activity in Appendix 1 of the ICAO Doc 4444 shall be provided for flight crews operating on routes which could be affected by volcanic ash clouds.

Note.— The recording and reporting instructions may conveniently be printed on the back of the special air-report of volcanic activity form.

3.10.6 Forwarding of meteorological information

3.10.6.1 When receiving ADS-C reports which contain a meteorological information block, ATS units shall relay the basic ADS-C and meteorological information blocks and aircraft registration without delay to the world area forecast centres (WAFCs).

3.10.6.2 When receiving special air-reports by data link communications, ATS units shall forward them without delay to their associated meteorological watch office, the WAFCs, and the centres designated by regional air navigation agreement for the operation of aeronautical fixed service Internet-based services.

3.10.6.3 When receiving special air-reports by voice communications, ATS units shall forward them without delay to their associated meteorological watch offices, with the exception of conditions applying to runway braking action encountered.

3.10.7 Forwarding of braking action information

When receiving special air-reports by voice communications concerning braking action encountered that is not as good as reported, ATS units shall forward them without delay to the appropriate aerodrome operator.

3.11 PRESENTATION AND UPDATING OF FLIGHT PLAN AND CONTROL DATA

3.11.1 General

The ATS Provider shall establish provisions and procedures for the presentation to controllers, and subsequent updating, of flight plan and control data for all flights being provided with a service by an ATS unit. Provision shall also be made for the presentation of any other information required or desirable for the provision of ATS.

3.11.2 Information and data to be presented

3.11.2.1 Sufficient information and data shall be presented in such a manner as to enable the controller to have a complete representation of the current air traffic situation within the controller's area of responsibility and, when relevant, movements on the manoeuvring area of aerodromes. The presentation shall be updated in accordance with the progress of aircraft, in order to facilitate the timely detection and resolution of conflicts as well as to facilitate and provide a record of coordination with adjacent ATS units and control sectors.

3.11.2.2 An appropriate representation of the airspace configuration, including significant points and information related to such points, shall be provided. Data to be

presented shall include relevant information from flight plans and position reports as well as clearance and coordination data. The information display may be generated and updated automatically, or the data may be entered and updated by authorized personnel.

3.11.2.3 Requirements regarding other information to be displayed, or to be available for display, shall be specified by the ATS Provider.

3.11.3 Presentation of information and data

3.11.3.1 The required flight plan and control data may be presented through the use of paper flight progress strips or electronic flight progress strips, by other electronic presentation forms or by a combination of presentation methods.

3.11.3.2 The method(s) of presenting information and data shall be in accordance with Human Factors principles. All data, including data related to individual aircraft, shall be presented in a manner minimizing the potential for misinterpretation or misunderstanding.

3.11.3.3 Means and methods for manually entering data in ATC automation systems shall be in accordance with Human Factors principles.

3.11.3.4 When flight progress strips (FPS) are used, there shall be at least one individual FPS for each flight. The number of FPS for individual flights shall be sufficient to meet the requirements of the ATS unit concerned. Procedures for annotating data and provisions specifying the types of data to be entered on FPS, including the use of symbols, shall be specified by the ATS Provider.

3.11.3.5 Data generated automatically shall be presented to the controller in a timely manner. The presentation of information and data for individual flights shall continue until such time as the data is no longer required for the purpose of

providing control, including conflict detection and the coordination of flights, or until terminated by the controller.

3.11.4 Recording and retention of data for investigative purposes

Paper FPS shall be retained for a period of at least thirty days. Electronic flight progress and coordination data shall be recorded and retained for at least the same period of time.

3.12 FAILURE OR IRREGULARITY OF SYSTEMS AND EQUIPMENT

ATC units shall immediately report in accordance with local instructions any failure or irregularity of communication, navigation and surveillance systems or any other safety-significant systems or equipment which could adversely affect the safety or efficiency of flight operations and/or the provision of air traffic control service.

3.13 DATA LINK COMMUNICATIONS INITIATION PROCEDURES

3.13.1 General

3.13.1.1 Before entering an airspace where data link applications are used by the ATS unit, data link communications shall be initiated between the aircraft and the ATS unit in order to register the aircraft and, when necessary, allow the start of a data link application. This shall be initiated by the aircraft, either automatically or by the pilot, or by the ATS unit on address forwarding.

3.13.1.2 The logon address associated with an ATS unit shall be published in Aeronautical Information Publications in accordance with the Civil Aviation Requirements for AIS 2024.

Note.— A given FIR may have multiple logon addresses; and more than one FIR may share the same logon address.

3.13.2 Aircraft initiation

On receipt of a valid data link initiation request from an aircraft approaching or within a data link service area, the ATS unit shall accept the request and, if able to correlate it with a flight plan, shall establish a connection with the aircraft.

3.13.3 ATS unit forwarding

Where the ground system initially contacted by the aircraft is able to pass the necessary aircraft address information to another ATS unit, it shall pass the aircraft updated ground addressing information for data link applications previously coordinated in sufficient time to permit the establishment of data link communications.

3.13.4 Failure

3.13.4.1 In the case of a data link initiation failure, the data link system shall provide an indication of the failure to the appropriate ATS unit(s). The data link system shall also provide an indication of the failure to the flight crew when a data link initiation failure results from a logon initiated by the flight crew.

Note.— When the aircraft's logon request results from responding to a contact request by a transferring ATS unit, then both ATS units will receive the indication.

3.13.4.2 The ATS unit shall establish procedures to resolve, as soon as practicable, data link initiation failures. Procedures shall include, as a minimum, verifying that the aircraft is initiating a data link request with the appropriate ATS unit (i.e. the aircraft is approaching or within the ATS unit's control area), and if so:

a) when a flight plan is available, verify that the aircraft identification, aircraft registration, or aircraft address and other details contained in the data link initiation request correspond with details in the flight plan, and where differences

are detected, verify which is the correct information and make the necessary changes; or

b) when a flight plan is not available, create a flight plan with sufficient information in the flight data processing system to achieve a successful data link initiation; then

c) arrange for the re-initiation of the data link.

3.13.4.3 The aircraft operator shall establish procedures to resolve, as soon as practicable, data link initiation failures. Procedures should include, as a minimum, that the pilot:

a) verify the correctness and consistency of the flight plan information available in the FMS or equipment from which the data link is initiated, and where differences are detected, make the necessary changes;

b) verify the correct address of the ATS unit; then

c) re-initiate the data link.

3.14 SEPARATION METHODS AND MINIMA

3.14.1 General

3.14.1.1 The selection of separation minima for application within a given portion of airspace shall be as follows:

a) the separation minima shall be selected from those prescribed by the provisions of Chapter 5 of the ICAO Doc 4444 and the ICAO Doc 7030 – *Regional Supplementary Procedures* as applicable under the prevailing circumstances except that, where types of aids are used or circumstances prevail which are not covered by current ICAO provisions, other separation minima shall be established as necessary by:

1) the ATS Provider, following consultation with the Authority and operators, for routes or portions of routes contained within the sovereign airspace of Guyana;

2) regional air navigation agreements for routes or portions of routes contained within airspace over the high seas or over areas of undetermined sovereignty.

b) the selection of separation minima shall be made in consultation between the appropriate ATS authorities responsible for the provision of ATS in neighbouring airspace when:

1) traffic will pass from one into the other of the neighbouring airspaces;

2) routes are closer to the common boundary of the neighbouring airspaces than the separation minima applicable in the circumstances.

Note.— The purpose of this provision is to ensure, in the first case, compatibility on both sides of the line of transfer of traffic, and, in the other case, adequate separation between aircraft operating on both sides of the common boundary.

3.14.1.2 Details of the selected separation minima and of their areas of application shall be notified:

a) to the ATS units concerned; and

b) to pilots and operators through the Guyana AIP, where separation is based on the use by aircraft of specified navigation aids or specified navigation techniques.

3.15 ESSENTIAL TRAFFIC INFORMATION

3.15.1 General

3.15.1.1 Essential traffic is that controlled traffic to which the provision of separation by ATC is applicable, but which, in relation to a particular controlled flight is not, or will not be, separated from other controlled traffic by the appropriate separation minimum.

Note.— Pursuant to Section 5.2 of the ICAO Doc 4444, but subject to certain exceptions stated therein, ATC is required to provide separation between IFR flights in airspace Classes A to E, and between IFR and VFR flights in Classes B and C. ATC is not required to provide separation between VFR flights, except within airspace Class B. Therefore, IFR or VFR flights may constitute essential traffic to IFR traffic, and IFR flights may constitute essential traffic to VFR traffic. However, a VFR flight would not constitute essential traffic to other VFR flights except within Class B airspace.

3.15.1.2 Essential traffic information shall be given to controlled flights concerned whenever they constitute essential traffic to each other.

Note.— This information will inevitably relate to controlled flights cleared subject to maintaining own separation and remaining in VMC and also whenever the intended separation minimum has been infringed.

3.15.2 Information to be provided

Essential traffic information shall include:

a) direction of flight of aircraft concerned;

b) type and wake turbulence category (if relevant) of aircraft concerned;

c) cruising level of aircraft concerned; and

1) estimated time over the reporting point nearest to where the level will be crossed; or

2) relative bearing of the aircraft concerned in terms of the 12-hour clock as well as distance from the conflicting traffic; or

3) actual or estimated position of the aircraft concerned.

Note 1.— Nothing in Section 3.15 is intended to prevent ATC from imparting to aircraft under its control any other information at its disposal with a view to enhancing air safety in accordance with the objectives of ATS.

Note 2.— Wake turbulence category will only be essential traffic information if the aircraft concerned is of a heavier wake turbulence category than the aircraft to which the traffic information is directed.

3.16 REDUCTION IN SEPARATION MINIMA

3.16.1 Provided an appropriate safety risk assessment has shown that an acceptable level of safety will be maintained, and after prior consultation with users, the separation minima detailed in 5.4.1 and 5.4.2 of the ICAO Doc 4444 may be reduced in the following circumstances:

3.16.2 As determined by the ATS Provider as appropriate:

a) when special electronic or other aids enable the pilot-in-command of an aircraft to determine accurately the aircraft's position and when adequate communication facilities exist for that position to be transmitted without delay to the appropriate ATC unit; or

b) when, in association with rapid and reliable communication facilities, information of an aircraft's position, derived from an ATS surveillance system, is available to the appropriate ATC unit; or

c) when special electronic or other aids enable the air traffic controller to predict rapidly and accurately the flight paths of aircraft, and adequate facilities exist to verify frequently the actual aircraft positions with the predicted positions; or

d) when RNAV-equipped aircraft operate within the coverage of electronic aids that provide the necessary updates to maintain navigation accuracy.

3.16.3 In accordance with regional air navigation agreements when:

a) special electronic, area navigation or other aids enable the aircraft to closely adhere to their current flight plans; and

b) the air traffic situation is such that the conditions in 4.2.3.1.1 a) regarding communications between pilots and the appropriate ATC unit or units need not necessarily be met to the degree specified therein.

3.17 SEPARATION IN THE VICINITY OF AERODROMES

3.17.1 The ATS Provider shall comply with the provisions governing separation in the vicinity of aerodromes as prescribed in ICAO Doc 4444, Chapter 6.

3.18 RESPONSIBILITY FOR CONTROL

3.18.1 Responsibility for control of individual flights

A controlled flight shall be under the control of only one air traffic control unit at any given time.

3.18.2 Responsibility for control within a given block of airspace

Responsibility for the control of all aircraft operating within a given block of airspace shall be vested in a single ATC unit. However, control of an aircraft or groups of aircraft may be delegated to other ATC units provided that coordination between all ATC units concerned is assured.

3.18.3 Division of responsibility for control between ATC units

The ATS Provider shall designate the area of responsibility for each ATC unit and, when applicable, for individual control sectors within an ATC unit. Where there is more than one ATC working position within a unit or sector, the duties and responsibilities of the individual working positions shall be defined.

3.18.3.1 Between two units providing area control service.

The responsibility for the control of an aircraft shall be transferred from a unit providing area control service in a control area to the unit providing area control service in an adjacent control

area at the time of crossing the common control area boundary as estimated by the area control centre having control of the aircraft or at such other point or time as has been agreed between the two units.

3.18.3.2 Between a unit providing approach control service and a unit providing area control service

3.18.3.2.1 When area control service and approach control service are not provided by the same ATC unit, responsibility for controlled flights shall rest with the unit providing area control service except that a unit providing approach control service shall be responsible for the control of:

a) arriving aircraft that have been released to it by the ACC;

b) departing aircraft until such aircraft are released to the ACC.

3.18.3.2.2 The responsibility for the control of an aircraft shall be transferred from a unit providing area control service to a unit providing approach control service, and vice versa, at a point, level or time agreed between the two units.

3.18.3.3 Between a unit providing aerodrome control service and a unit providing approach control service

3.18.3.3.1 Except for flights which are provided aerodrome control service only, the control of arriving and departing controlled flights shall be divided between units providing aerodrome control service and units providing approach control service as follows:

3.18.3.3.1.1 *Arriving aircraft.* Control of an arriving aircraft shall be transferred from the unit providing approach control service to the unit providing aerodrome control service when the aircraft:

a) is in the vicinity of the aerodrome, and

1) it is considered that approach and landing will be completed in visual reference to the ground, or

2) has reached uninterrupted VMC, or

b) is at a prescribed point or level, or

c) has landed,

as specified in letters of agreement or ATS unit instructions.

3.18.3.3.1.2 Transfer of communications to the aerodrome controller shall be effected at such a point, level or time that clearance to land or alternative instructions, as well as information on essential local traffic, can be issued in a timely manner.

Note.— Even though there is an approach control unit, control of certain flights may be transferred directly from an ACC to an aerodrome control tower and vice versa, by prior arrangement between the units concerned for the relevant part of approach control service to be provided by the ACC or the aerodrome control tower, as applicable.

3.18.3.3.1.3 *Departing aircraft.* Control of a departing aircraft shall be transferred from the unit providing aerodrome control service to the unit providing approach control service:

a) when visual meteorological conditions prevail in the vicinity of the aerodrome:

1) prior to the time the aircraft leaves the vicinity of the aerodrome,

2) prior to the aircraft entering instrument meteorological conditions, or

3) when the aircraft is at a prescribed point or level,

as specified in letters of agreement or ATS unit instructions;

b) when instrument meteorological conditions prevail at the aerodrome:

1) immediately after the aircraft is airborne, or

2) when the aircraft is at a prescribed point or level,

as specified in letters of agreement or local instructions.

3.18.3.4 Between control sectors/positions within the same air traffic control unit

The responsibility for the control of an aircraft shall be transferred from one control sector/position to another control sector/position within the same ATC unit at a point, level or time, as specified in local instructions.

3.18.3.5 Coordination of transfer

3.18.3.5.1 Responsibility for control of an aircraft shall not be transferred from one air traffic control unit to another without the consent of the accepting control unit, which shall be obtained in accordance with 3.18.3.5.2, 3.18.3.5.2.1, 3.18.3.5.3 and 3.18.3.5.4.

3.18.3.5.2 The transferring control unit shall communicate to the accepting control unit the appropriate parts of the current flight plan and any control information pertinent to the transfer requested.

3.18.3.5.2.1 Where transfer of control is to be effected using radar or ADS-B data, the control information pertinent to the transfer shall include information regarding the position and, if required, the track and speed of the aircraft, as observed by radar or ADS-B immediately prior to the transfer.

3.18.3.5.3 Where transfer of control is to be effected using ADS-C data, the control information pertinent to the transfer shall include the four-dimensional position and other information as necessary.

3.18.3.5.4 The accepting control unit shall:

a) indicate its ability to accept control of the aircraft on the terms specified by the transferring control unit, unless by prior agreement between the two units concerned, the absence of any such indication is understood to signify acceptance of the terms specified, or indicate any necessary changes thereto; and
b) specify any other information or clearance for a subsequent portion of the flight, which it requires the aircraft to have at the time of transfer.

3.18.3.5.5 The accepting control unit shall notify the transferring control unit when it has established two-way voice and/or data link communications with and assumed control of the aircraft concerned, unless otherwise specified by agreement between the two control units concerned.

3.18.3.5.6 Applicable coordination procedures, including transfer of control points, shall be specified in letters of agreement and ATS unit instructions as appropriate.

3.19 AIR TRAFFIC CONTROL CLEARANCES

3.19.1 General

3.19.1.1 ATC clearances shall be based solely on the requirements for providing air traffic control service and shall be issued solely for expediting and separating air traffic and are based on known traffic conditions which affect safety in aircraft operation. Such traffic conditions include not only aircraft in the air and on the manoeuvring area over which control is being exercised, but also any vehicular traffic or other obstructions not permanently installed on the manoeuvring area in use.

3.19.1.2 If an ATC clearance is not suitable to the pilot-in-command of an aircraft, the flight crew may request and, if practicable, obtain an amended clearance.

3.19.1.3 The issuance of ATC clearances by ATC units constitutes authority for an aircraft to proceed only in so far as known air traffic is concerned. ATC clearances do not

constitute authority to violate any applicable regulations for promoting the safety of flight operations or for any other purpose; neither do clearances relieve a pilot-in-command of any responsibility whatsoever in connection with a possible violation of applicable rules and regulations.

3.19.1.4 ATC units shall issue such ATC clearances as are necessary to prevent collisions and to expedite and maintain an orderly flow of air traffic.

3.19.1.5 ATC clearances shall be issued early enough to ensure that they are transmitted to the aircraft in sufficient time for it to comply with them.

3.19.1.6 Standard departure and arrival routes and associated procedures shall be established by the ATS Provider in coordination with a designated or approved FPD Provider when necessary to facilitate:

a) the safe, orderly and expeditious flow of air traffic;

b) the description of the route and procedure in ATC clearances.

3.19.2 Contents and description of ATC clearances

3.19.2.1 Clearances shall contain positive and concise data and shall, as far as practicable, be phrased in a standard manner.

3.19.2.2 An air traffic control clearance shall indicate:

a) aircraft identification as shown in the flight plan;

b) clearance limit;

c) route of flight;

d) level(s) of flight for the entire route or part thereof and changes of levels if required;

Note.— If the clearance for the levels covers only part of the route, it is important for the air traffic control unit to specify a point to which the part of the clearance

regarding levels applies whenever necessary to ensure compliance with Regulation 46 a) of the Civil Aviation (Rules of the Air) Regulations 2024.

e) any necessary instructions or information on other matters such as approach or departure manoeuvres, communications and the time of expiry of the clearance.

Note.— The time of expiry of the clearance indicates the time after which the clearance will be automatically cancelled if the flight has not been commenced.

3.19.2.2.1 Clearance limit

3.19.2.2.1.1 A clearance limit shall be described by specifying the name of the appropriate significant point, or aerodrome, or controlled airspace boundary.

3.19.2.2.1.2 When prior coordination has been effected with units under whose control the aircraft will subsequently come, or if there is reasonable assurance that it can be effected a reasonable time prior to their assumption of control, the clearance limit shall be the destination aerodrome or, if not practicable, an appropriate intermediate point, and coordination shall be expedited so that a clearance to the destination aerodrome may be issued as soon as possible.

3.19.2.2.1.3 If an aircraft has been cleared to an intermediate point in adjacent controlled airspace, the appropriate ATC unit will then be responsible for issuing, as soon as practicable, an amended clearance to the destination aerodrome.

3.19.2.2.1.4 When the destination aerodrome is outside controlled airspace, the ATC unit responsible for the last controlled airspace through which an aircraft will pass shall issue the appropriate clearance for flight to the limit of that controlled airspace.

3.19.2.2.2 Route of flight

3.19.2.2.2.1 The route of flight shall be detailed in each clearance when deemed necessary. The phrase "cleared flight planned route" may be used to describe any route or portion thereof, provided the route or portion thereof is identical to that filed in the flight plan and sufficient routing details are given to definitely establish the aircraft on its route. The phrases "cleared (designation) departure" or "cleared (designation) arrival" may be used when standard departure or arrival routes have been:

(a) established by the ATS Provider;

(b) approved by the Authority; and

(c) published in the Guyana AIP.

3.19.2.2.2.2 The phrase "cleared flight planned route" shall not be used when granting a re-clearance.

3.19.2.2.2.3 Subject to airspace constraints, ATC workload and traffic density, and provided coordination can be effected in a timely manner, an aircraft should whenever possible be offered the most direct routing.

3.19.2.2.3 Levels

Except as provided for in 6.3.2 and 6.5.1.5 of the ICAO Doc 4444, use of standard departure and arrival clearances, instructions included in clearances relating to levels shall consist of:

a) cruising level(s) or, for cruise climb, a range of levels, and, if necessary, the point to which the clearance is valid with regard to the level(s);

b) levels at which specified significant points are to be crossed, when necessary;

c) the place or time for starting climb or descent, when necessary;

d) the rate of climb or descent, when necessary;

e) detailed instructions concerning departure or approach levels, when necessary.

Note.— With respect to item a) above, If the clearance for the levels covers only part of the route, it is important for the air traffic control unit to specify a point to which the part of the clearance regarding levels applies whenever necessary to ensure compliance with Regulation 46 a) of the Civil Aviation (Rules of the Air) Regulations 2024.

3.19.2.2.4 Clearance of a requested change in flight plan

3.19.2.2.4.1 When issuing a clearance covering a requested change in route or level, the exact nature of the change shall be included in the clearance.

3.19.2.2.4.2 When traffic conditions will not permit clearance of a requested change, the word "UNABLE" shall be used. When warranted by circumstances, an alternative route or level should be offered.

3.19.2.2.4.3 When an alternative route is offered and accepted by the flight crew under the procedures described in 3.19.2.2.4.2, the amended clearance issued shall describe the route to the point where it joins the previously cleared route, or, if the aircraft will not re-join the previous route, to the destination.

3.19.3 Aircraft subject to ATC for part of flight

3.19.3.1 When a flight plan specifies that the initial portion of a flight will be uncontrolled, and that the subsequent portion of the flight will be subject to ATC, the aircraft shall be advised to obtain its clearance from the ATC unit in whose area controlled flight will be commenced.

3.19.3.2 When a flight plan specifies that the first portion of a flight will be subject to ATC, and that the subsequent portion will be uncontrolled, the aircraft shall normally be cleared to the point at which the controlled flight terminates.

3.19.4 Flights through intermediate stops

3.19.4.1 When an aircraft files, at the departure aerodrome, flight plans for the various stages of flight through intermediate stops, the initial clearance limit will be the first destination aerodrome and new clearances shall be issued for each subsequent portion of flight.

3.19.4.2 The flight plan for the second stage, and each subsequent stage, of a flight through intermediate stops will become active for ATS and SAR purposes only when the appropriate ATS unit has received notification that the aircraft has departed from the relevant departure aerodrome, except as provided for in 3.19.4.3.

3.19.4.3 By prior arrangement between ATC units and the operators, aircraft operating on an established schedule may, if the proposed route of flight is through more than one control area, be cleared through intermediate stops within other control areas but only after coordination between the ACCs concerned.

3.19.5 Departing aircraft

ACCs shall, except where procedures providing for the use of standard departure clearances have been implemented, forward a clearance to approach control units or aerodrome control towers with the least possible delay after receipt of request made by these units, or prior to such request if practicable.

3.19.6 En-route aircraft

3.19.6.1 General

3.19.6.1.1 An ATC unit may request an adjacent ATC unit to clear aircraft to a specified point during a specified period.

3.19.6.1.2 After the initial clearance has been issued to an aircraft at the point of departure, it will be the responsibility of the appropriate ATC unit to issue an amended clearance whenever necessary and to issue traffic information, if required.

3.19.6.1.3 When so requested by the flight crew, an aircraft shall be cleared for cruise climb whenever traffic conditions and coordination procedures permit. Such clearance shall be for cruise climb either above a specified level or between specified levels.

3.19.6.2 Clearances relating to supersonic flight

3.19.6.2.1 Aircraft intending supersonic flight shall, whenever practicable, be cleared for the transonic acceleration phase prior to departure.

3.19.6.2.2 During the transonic and supersonic phases of a flight, amendments to the clearance shall be kept to a minimum and must take due account of the operational limitations of the aircraft in these flight phases.

3.19.6.3 Clearances for transonic flight

3.19.6.3.1 The ATC clearance relating to the transonic acceleration phase of a supersonic flight shall extend at least to the end of that phase.

3.19.6.3.2 The ATC clearance relating to the deceleration and descent of an aircraft from supersonic cruise to subsonic flight shall provide for uninterrupted descent, at least during the transonic phase.

3.19.7 Read-back of clearances and safety-related information

3.19.7.1 The ATS Provider shall ensure that flight crew read back to the air traffic controller safety-related parts of ATC clearances and instructions which are transmitted by voice. The following items shall always be read back:

a) ATC route clearances;

b) clearances and instructions to enter, land on, take off from, hold short of, cross and backtrack on any runway; and

c) runway-in-use, altimeter settings, SSR codes, level instructions, heading and speed instructions and, whether issued by the controller or contained in ATIS broadcasts, transition levels.

Note.— If the level of an aircraft is reported in relation to standard pressure 1 013.2 hPa, the words "FLIGHT LEVEL" precede the level figures. If the level of the aircraft is reported in relation to QNH/QFE, the figures are followed by the word "METRES" or "FEET", as appropriate.

3.19.7.2 Other clearances or instructions, including conditional clearances, shall be read back or acknowledged in a manner to clearly indicate that they have been understood and will be complied with.

3.19.7.3 The controller shall listen to the read-back to ascertain that the clearance or instruction has been correctly acknowledged by the flight crew and shall take immediate action to correct any discrepancies revealed by the read-back.

3.19.7.4 Unless specified by the ATS Provider, voice read-back of CPDLC messages shall not be required.

3.19.7.5 The ATS Provider shall ensure vehicle drivers and persons operating or intending to operate on the manoeuvring area read back to the air traffic controller safety-related parts of instructions which are transmitted by voice, e.g. instructions to enter, hold short of, cross and operate on any operational runway or taxiway.

3.19.7.6 The ATS Provider shall ensure the controller listens to the read-back to ascertain that the instruction has been correctly acknowledged by the vehicle driver and

shall take immediate action to correct any discrepancies revealed by the read-back.

3.19.8 Coordination of clearances

3.19.8.1 An ATC clearance shall be coordinated between ATC units to cover the entire route of an aircraft or a specified portion thereof as follows.

3.19.8.2 An aircraft shall be cleared for the entire route to the aerodrome of first intended landing:

a) when it has been possible, prior to departure, to coordinate the clearance between all the units under whose control the aircraft will come; or

b) when there is reasonable assurance that prior coordination will be effected between those units under whose control the aircraft will subsequently come.

Note.— Where a clearance is issued covering the initial part of the flight solely as a means of expediting departing traffic, the succeeding en-route clearance will be as specified above even though the aerodrome of first intended landing is under the jurisdiction of an area control centre other than the one issuing the en-route clearance.

3.19.8.3 When coordination as in 3.19.8.2 has not been achieved or is not anticipated, the aircraft shall be cleared only to that point where coordination is reasonably assured; prior to reaching such point, or at such point, the aircraft shall receive further clearance, holding instructions being issued as appropriate.

3.19.8.4 When prescribed by the ATS Provider, aircraft shall contact a downstream ATC unit, for the purpose of receiving a downstream clearance prior to the transfer of control point.

3.19.8.5 Aircraft shall maintain the necessary two-way communication with the current ATC unit whilst obtaining a downstream clearance.

3.19.8.6 A clearance issued as a downstream clearance shall be clearly identifiable as such to the pilot.

3.19.8.7 Unless coordinated, downstream clearances shall not affect the aircraft's original flight profile in any airspace, other than that of the ATC unit responsible for the delivery of the downstream clearance.

3.19.8.8 Where practicable, and where data link communications are used to facilitate downstream clearance delivery, two-way voice communications between the pilot and the ATC unit providing the downstream clearance shall be available.

3.19.8.9 When an aircraft intends to depart from an aerodrome within a control area to enter another control area within a period of thirty minutes, or such other specific period of time as has been agreed between the ACCs concerned, coordination with the subsequent ACC shall be effected prior to issuance of the departure clearance.

3.19.8.10 When an aircraft intends to leave a control area for flight outside controlled airspace, and will subsequently reenter the same or another control area, a clearance from point of departure to the aerodrome of first intended landing may be issued. Such clearance or revisions thereto shall apply only to those portions of the flight conducted within controlled airspace.

3.20 AERODROME CONTROL SERVICE

3.20.1 Provision of service

3.20.1.1 The provision of aerodrome control service shall be in accordance with the ICAO Doc 4444, Chapter 7.

3.20.2 Control of persons and vehicles at aerodromes

3.20.2.1 The movement of persons or vehicles including towed aircraft on the manoeuvring area of an aerodrome shall be controlled by the aerodrome control tower as necessary to avoid hazard to them or to aircraft landing, taxiing or taking off.

3.20.2.2 In conditions where low visibility procedures are in operation:

a) persons and vehicles operating on the manoeuvring area of an aerodrome shall be restricted to the essential minimum, and particular regard shall be given to the requirements to protect the ILS/MLS sensitive area(s) when Category II or Category III precision instrument operations are in progress;

b) subject to the provisions in 3.20.2.3, the minimum separation between vehicles and taxiing aircraft shall be as prescribed by the ATS Provider taking into account the aids available;

c) when mixed ILS and MLS Category II or Category III precision instrument operations are taking place to the same runway continuously, the more restrictive ILS or MLS critical and sensitive areas shall be protected.

3.20.2.3 Emergency vehicles proceeding to the assistance of an aircraft in distress shall be afforded priority over all other surface movement traffic.

3.20.2.4 Subject to the provisions in 3.20.2.3, vehicles on the manoeuvring area shall be required to comply with the following rules:

a) vehicles and vehicles towing aircraft shall give way to aircraft which are landing, taking off or taxiing;

b) vehicles shall give way to other vehicles towing aircraft;

c) vehicles shall give way to other vehicles in accordance with ATS unit instructions;

d) notwithstanding the provisions of a), b) and c), vehicles and vehicles towing aircraft shall comply with instructions issued by the aerodrome control tower.

3.20.3 Provision of radar and ADS-B

Radar and ADS-B ground systems should provide for the display of safety-related alerts and warnings, including conflict alert, conflict prediction, minimum safe altitude warning and unintentionally duplicated SSR codes.

3.20.4 Use of surface movement radar

3.20.4.1 In the absence of visual observation of all or part of the manoeuvring area or to supplement visual observation, surface movement radar (SMR) provided in accordance with the provisions of the Requirements for Certified Aerodromes, or other suitable surveillance equipment, should be utilized to:

a) monitor the movement of aircraft and vehicles on the manoeuvring area;

b) provide directional information to pilots and vehicle drivers as necessary; and

c) provide advice and assistance for the safe and efficient movement of aircraft and vehicles on the manoeuvring area.

3.21 SURVEILLANCE-BASED ATS

3.21.1 General

3.21.1.1 The Authority shall determine those portions of the Georgetown FIR and those aerodromes where surveillance-based ATS will be provided.

3.21.1.2 The provision of surveillance-based ATS shall be in accordance with the applicable provisions of Chapter 8 of ICAO Doc 4444, except that the horizontal separation minimum when providing surveillance-based ATS shall be 10 NM.

3.21.1.3 The range used on displays when surveillance-based ATS is provided shall not exceed 500 NM.

3.21.2 Use of ATS surveillance systems in the flight information service

Note 1.— The use of an ATS surveillance system in the provision of flight information service does not relieve the pilot-in-command of an aircraft of any responsibilities, including the final decision regarding any suggested alteration of the flight plan.

3.21.2.1 Functions

The information presented on a situation display may be used to provide identified aircraft with:
a) information regarding any aircraft observed to be on a conflicting path with the identified aircraft and suggestions or advice regarding avoiding action;
b) information on the position of significant weather and, as practicable, advice to the aircraft on how best to circumnavigate any such areas of adverse weather;
c) information to assist the aircraft in its navigation.

Note.— Attention must be given to the fact that under certain circumstances the most active area of adverse weather may not be displayed.

3.22 COORDINATION

3.22.1 Coordination in respect of the provision of air traffic control service

3.22.1.1 General

3.22.1.1.1 The coordination and transfer of control of a flight between successive ATC units and control sectors shall be effected by a dialogue comprising the following stages:
a) notification of the flight in order to prepare for coordination, as necessary;
b) coordination of conditions of transfer of control by the transferring ATC unit;

c) coordination, if necessary, and acceptance of conditions of transfer of control by the accepting ATC unit; and

d) the transfer of control to the accepting ATC unit or control sector.

3.22.1.1.2 ATC units should, to the extent possible, establish and apply standardized procedures for the coordination and transfer of control of flights, in order, *inter alia*, to reduce the need for verbal coordination. Such coordination procedures shall conform to the procedures contained in the following provisions and be specified in letters of agreement and local instructions, as applicable.

3.22.1.1.3 Such agreements and instructions shall cover the following as applicable:

a) definition of areas of responsibility and common interest, airspace structure and airspace classification(s);

b) any delegation of responsibility for the provision of ATS;

c) procedures for the exchange of flight plan and control data, including use of automated and/or verbal

coordination messages;

d) means of communication;

e) requirements and procedures for approval requests;

f) significant points, levels or times for transfer of control;

g) significant points, levels or times for transfer of communication;

h) conditions applicable to the transfer and acceptance of control, such as specified altitudes/flight levels, specific separation minima or spacing to be established at the time of transfer, and the use of automation;

i) ATS surveillance system coordination procedures;

j) SSR code assignment procedures;

k) procedures for departing traffic;

l) designated holding fixes and procedures for arriving traffic;

m) applicable contingency procedures; and

n) any other provisions or information relevant to the coordination and transfer of control of flights.

3.22.1.2 Coordination between ATC units providing air traffic service within contiguous control areas

3.22.1.2.1 General

3.22.1.2.1.1 ATC units shall forward from unit to unit, as the flight progresses, necessary flight plan and control information. When so required by agreement between the appropriate ATS authorities to assist in the separation of aircraft, flight plan and flight progress information for flights along specified routes or portions of routes in close proximity to flight information region boundaries shall also be provided to the ATC units in charge of the FIRs adjacent to such routes or portions of routes.

Note 1.— Such a route or portion of route is often referred to as an area of common interest, the extent of which is usually determined by the required separation minima.

3.22.1.2.1.2 The flight plan and control information shall be transmitted in sufficient time to permit reception and analysis of the data by the receiving unit(s) and necessary coordination between the units concerned.

3.22.1.2.2 Transfer of control

3.22.1.2.2.1 The responsibility for the control of an aircraft shall be transferred from the ATC unit to the next unit at the time of crossing the common control area boundary as determined by the unit having control of the aircraft or at such other point or time as has been agreed between the two units.

3.22.1.2.2.2 Where specified in letters of agreement between the ATC units concerned, and when transferring an aircraft, the transferring unit shall notify the accepting unit that the aircraft is in position to be transferred, and specify that the responsibility

for control should be assumed by the accepting unit forthwith at the time of crossing the control boundary or other transfer control point specified in letters of agreement between the ATC units or at such other point or time coordinated between the two units.

3.22.1.2.2.3 If the transfer of control time or point is other than forthwith, the accepting ATC unit shall not alter the clearance of the aircraft prior to the agreed transfer of control time or point without the approval of the transferring unit.

3.22.1.2.2.4 If transfer of communication is used to transfer an aircraft to a receiving ATC unit, responsibility for control shall not be assumed until the time of crossing the control area boundary or other transfer of control point specified in letters of agreement between the ATC units.

3.22.1.2.2.5 When transfer of control of identified aircraft is to be effected, the appropriate procedures specified in 8.7.5 of the ICAO Doc 4444, shall be applied.

3.22.1.2.3 Approval requests

3.22.1.2.3.1 If the flying time from the departure aerodrome of an aircraft to the boundary of an adjacent control area is less than the specified minimum required to permit transmission of the necessary flight plan and control information to the accepting ATC unit after take-off and allow adequate time for reception, analysis and coordination, the transferring ATC unit shall, prior to departure, forward that information to the accepting ATC unit together with a request for approval. The required time period shall be specified in letters of agreement or local instructions, as appropriate. In the case of revisions to a previously transmitted current flight plan, and control data being transmitted earlier than this specified time period, no approval from the accepting ATC unit shall be required.

3.22.1.2.3.2 In the case of an aircraft in flight requiring an initial clearance when the flying time to the boundary of an adjacent control area is less than a specified minimum, the aircraft shall be held within the transferring ATC unit's control area until the flight plan and control information have been forwarded together with a request for approval, and coordination effected, with the adjacent ATC unit.

3.22.1.2.3.3 In the case of an aircraft requesting a change in its current flight plan, or of a transferring ATC unit proposing to change the current flight plan of an aircraft, and the flying time of the aircraft to the control area boundary is less than a specified minimum, the revised clearance shall be withheld pending approval of the proposal by the adjacent ATC unit.

3.22.1.2.3.4 When boundary estimate data are to be transmitted for approval by the accepting unit, the time in respect of an aircraft not yet departed shall be based upon the estimated time of departure as determined by the ATC unit in whose area of responsibility the departure aerodrome is located. In respect of an aircraft in flight requiring an initial clearance, the time shall be based on the estimated elapsed time from the holding fix to the boundary plus the time expected to be needed for coordination.

3.22.1.2.3.5 The conditions, including specified flying times, under which approval requests shall be forwarded, shall be specified in letters of agreement or local instructions as appropriate.

3.22.1.2.4 Transfer of communication

3.22.1.2.4.1 Except when separation minima specified in 8.7.3 of the ICAO Doc 4444 are being applied, the transfer of air-ground communications of an aircraft from the transferring to the accepting ATC unit shall be made five minutes before the time at which the aircraft is estimated to reach the common control area boundary, unless otherwise agreed between the two ATC units concerned.

3.22.1.2.4.2 When separation minima specified in 8.7.3 of the ICAO Doc 4444 are being applied at the time of transfer of control, the transfer of air-ground communications of an aircraft from the transferring to the accepting ATC unit shall be made immediately after the accepting ATC unit has agreed to assume control.

3.22.1.2.4.3 The accepting ATC unit shall normally not be required to notify the transferring unit that radio and/or data communication has been established with the aircraft being transferred and that control of the aircraft has been assumed, unless otherwise specified by agreement between the ATC units concerned. The accepting ATC unit shall notify the transferring unit in the event that communication with the aircraft is not established as expected.

3.22.1.2.4.4 In cases where a portion of a control area is so situated that the time taken by aircraft to traverse it is of a limited duration, agreement should be reached to provide for direct transfer of communication between the units responsible for the adjacent control areas, provided that the intermediate unit is fully informed of such traffic. The intermediate unit shall retain responsibility for coordination and for ensuring that separation is maintained between all traffic within its area of responsibility.

3.22.1.2.4.5 An aircraft may be permitted to communicate temporarily with a control unit other than the unit controlling the aircraft.

3.22.1.2.5 Termination of controlled flight

3.22.1.2.5.1 In the case where a flight ceases to be operated as a controlled flight, i.e. by leaving controlled airspace or by cancelling its IFR flight and proceeding on VFR in airspace where VFR flights are not controlled, the ATC unit concerned shall ensure that appropriate information on the flight is forwarded to ATS unit(s)

responsible for the provision of flight information and alerting services for the remaining portion of the flight, in order to ensure that such services will be provided to the aircraft.

3.22.1.3 Coordination between a unit providing area control service and a unit providing approach control service

3.22.1.3.1 Division of control

3.22.1.3.1.1 Except when otherwise specified in letters of agreement or local instructions, or by the ACC concerned in individual cases, a unit providing approach control service may issue clearances to any aircraft released to it by an ACC without reference to the ACC. However, when an approach has been missed the ACC shall, if affected by the missed approach, be advised immediately and subsequent action coordinated between the ACC and the unit providing approach control service as necessary.

3.22.1.3.1.2 An ACC may, after coordination with the unit providing approach control service, release aircraft directly to aerodrome control towers if the entire approach will be made under visual meteorological conditions.

3.22.1.3.2 Take-off and clearance expiry times

3.22.1.3.2.1 Time of take-off shall be specified by the ACC when it is necessary to:

a) coordinate the departure with traffic not released to the unit providing approach control service; and

b) provide en-route separation between departing aircraft following the same track.

3.22.1.3.2.2 If time of take-off is not specified, the unit providing approach control service shall determine the take-off time when necessary to coordinate the departure with traffic released to it.

3.22.1.3.2.3 A clearance expiry time shall be specified by the ACC if a delayed departure would conflict with traffic not released to the unit providing approach control service. If, for traffic reasons of its own, a unit providing approach control service has to specify in addition its own clearance expiry time, this shall not be later than that specified by the ACC.

3.22.1.3.3 Exchange of movement and control data

3.22.1.3.3.1 The unit providing approach control service shall keep the ACC promptly advised of pertinent data on controlled traffic such as:

a) runway(s)-in-use and expected type of instrument approach procedure;

b) lowest vacant level at the holding fix available for use by the ACC;

c) average time interval or distance between successive arrivals as determined by the unit providing approach control service;

d) revision of the expected approach time issued by the ACC when the calculation of the expected approach time by the unit providing approach control service indicates a variation of five minutes or such other time as has been agreed between the two ATC units concerned;

e) arrival times over the holding fix when these vary by three minutes, or such other time as has been agreed between the two ATC units concerned, from those previously estimated;

f) cancellations by aircraft of IFR flight, if these will affect levels at the holding fix or expected approach times of other aircraft;

g) aircraft departure times or, if agreed between the two ATC units concerned, the estimated time at the control area boundary or other specified point;

h) all available information relating to overdue or unreported aircraft;

i) missed approaches which may affect the ACC.

3.22.1.3.3.2 The ACC shall keep the unit providing approach control service promptly advised of pertinent data on controlled traffic such as:

a) identification, type and point of departure of arriving aircraft;

b) estimated time and proposed level of arriving aircraft over holding fix or other specified point;

c) actual time and proposed level of arriving aircraft over holding fix if aircraft is released to the unit providing approach control service after arrival over the holding fix;

d) requested type of IFR approach procedure if different to that specified by the approach control unit;

e) expected approach time issued;

f) when required, statement that aircraft has been instructed to contact the unit providing approach control service;

g) when required, statement that an aircraft has been released to the unit providing approach control service including, if necessary, the time and conditions of release;

h) anticipated delay to departing traffic due to congestion.

3.22.1.3.3.3 Information on arriving aircraft shall be forwarded not less than fifteen minutes before estimated time of arrival and such information shall be revised as necessary.

3.22.1.4 Coordination between a unit providing approach control service and a unit providing aerodrome control service

3.22.1.4.1 Division of control

3.22.1.4.1.1 A unit providing approach control service shall retain control of arriving aircraft until such aircraft have been transferred to the aerodrome control tower and are in communication with the aerodrome control tower. Letters of agreement or local

instructions, appropriate to the airspace structure, terrain, meteorological conditions and ATS facilities available, shall establish rules for the transfer of arriving aircraft.

3.22.1.4.1.2 A unit providing approach control service may authorize an aerodrome control tower to release an aircraft for take-off subject to the discretion of the aerodrome control tower with respect to arriving aircraft.

3.22.1.4.1.3 Aerodrome control towers shall, when so prescribed in letters of agreement or local instructions, obtain approval from the unit providing approach control service prior to authorizing operation of special VFR flights.

3.22.1.4.2 Exchange of movement and control data

3.22.1.4.2.1 An aerodrome control tower shall keep the unit providing approach control service promptly advised of pertinent data on relevant controlled traffic such as:

a) arrival and departure times;

b) when required, statement that the first aircraft in an approach sequence is in communication with and is sighted by the aerodrome control tower, and that reasonable assurance exists that a landing can be accomplished;

c) all available information relating to overdue or unreported aircraft;

d) information concerning missed approaches;

e) information concerning aircraft that constitute essential local traffic to aircraft under the control of the unit providing approach control service.

3.22.1.4.2.2 The unit providing approach control service shall keep the aerodrome control tower promptly advised of pertinent data on controlled traffic such as:

a) estimated time and proposed level of arriving aircraft over the aerodrome, at least fifteen minutes prior to estimated arrival;

b) when required, a statement that an aircraft has been instructed to contact the aerodrome control tower and that control shall be assumed by that unit;

c) anticipated delay to departing traffic due to congestion.

3.22.1.5 Coordination between control positions within the same unit

3.22.1.5.1 Appropriate flight plan and control information shall be exchanged between control positions within the same air traffic control unit, in respect of:

a) all aircraft for which responsibility for control will be transferred from one control position to another;

b) aircraft operating in such close proximity to the boundary between control sectors that control of traffic within an adjacent sector may be affected;

c) all aircraft for which responsibility for control has been delegated by a controller using procedural methods to a controller using an ATS surveillance system, as well as other aircraft affected.

3.22.1.5.2 Procedures for coordination and transfer of control between control sectors within the same ATC unit shall conform to the procedures applicable to ATC units.

3.22.1.6 Failure of automated coordination

The failure of automated coordination shall be presented clearly to the controller responsible for coordinating the flight at the transferring unit. This controller shall then facilitate the required coordination using prescribed alternative methods.

3.22.2 Coordination in respect of the provision of flight information service and alerting service

3.22.2.1 Where this is deemed necessary by the ATS Provider or appropriate ATS authorities, coordination between ATS units providing flight information service in adjacent FIRs shall be effected in respect of IFR and VFR flights, in order to ensure continued flight information service to such aircraft in specified areas or

along specified routes. Such coordination shall be effected in accordance with an agreement between the ATS units concerned.

3.22.2.2 Where coordination of flights is effected in accordance with 3.22.2.1 this shall include transmission of the following information on the flight concerned:
a) appropriate items of the current flight plan; and
b) the time at which last contact was made with the aircraft concerned.

3.22.2.3 This information shall be forwarded to the ATS unit in charge of the next FIR in which the aircraft will operate prior to the aircraft entering such FIR.

3.22.2.4 When so required by agreement between the appropriate ATS authorities to assist in the identification of strayed or unidentified aircraft and thereby eliminate or reduce the need for interception, flight plan and flight progress information for flights along specified routes or portions of routes in close proximity to FIR boundaries shall also be provided to the ATS units in charge of the FIRs adjacent to such routes or portions of routes.

3.22.2.5 In circumstances where an aircraft has declared minimum fuel or is experiencing an emergency or in any other situation wherein the safety of the aircraft is not assured, the type of emergency and/or the circumstances experienced by the aircraft shall be reported by the transferring unit to the accepting unit and any other ATS unit that may be concerned with the flight and to the associated rescue coordination centres, if necessary.

3.22.3 COORDINATION IN RESPECT OF THE PROVISION OF AIR TRAFFIC ADVISORY SERVICE

ATS units providing air traffic advisory service shall apply the coordination procedures specified in Section 10.1 with respect to such aircraft having elected to use this type of service.

3.22.4 COORDINATION BETWEEN ATS UNITS AND AERONAUTICAL TELECOMMUNICATION STATIONS

When so prescribed by the ATS Provider, ATS units shall ensure that the aeronautical telecommunications stations serving the centres concerned are informed regarding transfers of communications contact by aircraft. Unless otherwise provided, information to be made available shall comprise the identification of the aircraft (including SELCAL code, when necessary), the route or destination (where necessary), and the expected or actual time of communications transfer.

CHAPTER 4 – ATS SYSTEM CAPACITY AND AIR TRAFFIC FLOW MANAGEMENT

4.1 CAPACITY MANAGEMENT

4.1.1 General

4.1.1.1 The capacity of an ATS system depends on many factors, including the ATS route structure, the navigation accuracy of the aircraft using the airspace, weather-related factors, and controller workload. Every effort shall be made to provide sufficient capacity to cater to both normal and peak traffic levels; however, in implementing any measures to increase capacity, the ATS Provider shall ensure, in accordance with the procedures specified in 2.26 that safety levels are not jeopardized.

4.1.1.1.1 The ATS Provider shall conduct:

a. a capacity assessment for those portions of the Georgetown FIR where the ATS Provider provides air traffic control service; and

b. a capacity assessment for those international aerodromes where the ATS Provider provides air traffic control service.

4.1.1.2 The number of aircraft provided with an ATC service shall not exceed that which can be safely handled by the ATC unit concerned under the prevailing circumstances. In order to define the maximum number of flights which can be safely accommodated, the ATS Provider shall assess and declare the ATC capacity for control areas, for control sectors within a control area and for aerodromes.

4.1.1.3 ATC capacity shall be expressed as the maximum number of aircraft which can be accepted over a given period of time within the airspace or at the aerodrome concerned.

Note.— The most appropriate measure of capacity is likely to be the sustainable hourly traffic flow. Such hourly capacities can, for example, be converted into daily, monthly or annual values.

4.1.2 Capacity assessment

In assessing capacity values, factors to be taken into account should include, inter alia:

a) the level and type of ATS provided;

b) the structural complexity of the control area, the control sector or the aerodrome concerned;

c) controller workload, including control and coordination tasks to be performed;

d) the types of communications, navigation and surveillance systems in use, their degree of technical reliability and availability as well as the availability of backup systems and/or procedures;

e) availability of ATC systems providing controller support and alert functions; and

f) any other factor or element deemed relevant to controller workload.

4.1.3 Regulation of ATC capacity and traffic volumes

4.1.3.1 Where traffic demand varies significantly on a daily or periodic basis, facilities and procedures shall be implemented to vary the number of operational sectors or working positions to meet the prevailing and anticipated demand. Applicable procedures should be contained in local instructions.

4.1.3.2 In case of particular events which have a negative impact on the declared capacity of an airspace or aerodrome, the capacity of the airspace or aerodrome concerned shall be reduced accordingly for the required time period. Whenever possible, the capacity pertaining to such events should be predetermined.

4.1.3.3 To ensure that safety is not compromised whenever the traffic demand in an airspace or at an aerodrome is forecast to exceed the available ATC capacity, measures shall be implemented to regulate traffic volumes accordingly.

4.1.3.4 In implementing any measures to increase its declared capacity, the ATS Provider shall apply its SMS procedures to ensure that safety levels are not jeopardised.

4.1.4 Enhancement of ATC capacity

4.1.4.1 The ATS Provider shall:

a) review ATS capacities in relation to traffic demand:

i. once every two years; or

ii prior to any significant national event that is likely to result in an increase in traffic demand; and

b) provide for flexible use of airspace in order to improve the efficiency of operations and increase capacity.

4.1.4.2 In the event that traffic demand regularly exceeds ATC capacity, resulting in continuing and frequent traffic delays, or it becomes apparent that forecast traffic demand will exceed capacity values, the ATS Provider shall, as far as practicable:

a) implement steps aimed at maximizing the use of the existing system capacity; and

b) develop plans to increase capacity to meet the actual or forecast demand.

4.1.5 Flexible use of airspace

4.1.5.1 The Authority, ATS Provider and other appropriate authorities shall, through the establishment of agreements and procedures, make provision for the flexible use of all airspace in order to increase airspace capacity and to improve the efficiency and flexibility of aircraft operations. When applicable, such agreements and procedures shall be established on the basis of a regional air navigation agreement.

4.1.5.2 Agreements and procedures providing for a flexible use of airspace should specify, inter alia:

a) the horizontal and vertical limits of the airspace concerned;

b) the classification of any airspace made available for use by civil air traffic;

c) units or authorities responsible for transfer of the airspace;

d) conditions for transfer of the airspace to the ATC unit concerned;

e) conditions for transfer of the airspace from the ATC unit concerned;

f) periods of availability of the airspace;

g) any limitations on the use of the airspace concerned; and

h) any other relevant procedures or information.

4.2 AIR TRAFFIC FLOW MANAGEMENT

4.2.1 General

4.2.1.1 Air traffic flow management (ATFM) shall be:

(i) implemented for airspace where air traffic demand at times exceeds, or is expected to exceed, the declared capacity of the air traffic control services concerned; and

(ii) implemented on the basis of a regional air navigation agreement or, when appropriate, as a multilateral agreement.

Note.— The capacity of the air traffic control services concerned will normally be declared by the ATS Provider.

4.2.1.1.1 When it becomes apparent to an ATC unit that traffic additional to that already accepted cannot be accommodated within a given period of time at a particular location or in a particular area, or can only be accommodated at a given rate, that unit shall so advise the ATFM unit, when such is established, as well as, when appropriate, ATS units concerned. Flight crews of aircraft destined to the location or area in question and operators concerned shall also be advised of the delays expected or the restrictions that will be applied.

Note.— Operators concerned will normally be advised, in advance where possible, of restrictions imposed by the air traffic flow management unit when such is established.

4.2.1.2 The ATFM service within a region or other defined area, shall be developed and implemented as a centralized ATFM organization, supported by flow management positions established at each ACC within the region or area of applicability.

4.2.1.3 Certain flights may be exempt from ATFM measures, or be given priority over other flights.

4.2.1.4 Detailed procedures governing the provision of the ATFM measures, and service within a region or area shall be prescribed in a regional ATFM manual or handbook.

4.2.2 Flow management procedures

ATFM should be carried out in three phases:

a) strategic planning, if the action is carried out more than one day before the day on which it will take effect. Strategic planning is normally carried out well in advance, typically two to six months ahead;

b) pre-tactical planning, if the action is to be taken on the day before the day on which it will take effect;

c) tactical operations, if the action is taken on the day on which it will take effect.

4.2.3 Strategic planning

4.2.3.1 Strategic planning shall be carried out in conjunction with ATC and the aircraft operators. It shall consist of examining the demand for the forthcoming season, assessing where and when demand is likely to exceed the available ATC capacity and taking steps to resolve the imbalance by:

a) arranging with the ATC authority to provide adequate capacity at the required place and time;

b) re-routing certain traffic flows (traffic orientation);

c) scheduling or rescheduling flights as appropriate; and

d) identifying the need for tactical ATFM measures.

4.2.3.2 Where a traffic orientation scheme (TOS) is to be introduced, the routes should, as far as practicable, minimize the time and distance penalties for the flights concerned, and allow some degree of flexibility in the choice of routes, particularly for long-range flights.

4.2.3:3 When a TOS has been agreed, details should be published by all States concerned in a common format.

4.2.4 Pre-tactical planning

Pre-tactical planning should entail fine-tuning of the strategic plan in the light of updated demand data. During this phase:

a) certain traffic flows may be re-routed;

b) off-load routes may be coordinated;

c) tactical measures will be decided upon; and

d) details for the ATFM plan for the following day should be published and made available to all concerned.

4.2.5 Tactical operations

4.2.5.1 Tactical ATFM operations shall consist of:

a) executing the agreed tactical measures in order to provide a reduced and even flow of traffic where demand would otherwise have exceeded capacity;

b) monitoring the evolution of the air traffic situation to ensure that the ATFM measures applied are having the desired effect and to take or initiate remedial action

when long delays are reported, including re-routing of traffic and flight level allocation, in order to utilize the available ATC capacity to the maximum extent.

4.2.5.2 When the traffic demand exceeds, or is foreseen to exceed, the capacity of a particular sector or aerodrome, the responsible ATC unit shall advise the responsible ATFM unit, where such a unit is established, and other ATC units concerned. Flight crews of aircraft planned to fly in the affected area and operators should be advised, as soon as practicable, of the delays expected or the restrictions which will be applied.

Note.— Operators known or believed to be concerned will normally be advised by the regional air traffic flow management service, when established.

4.2.6 Liaison

During all phases of ATFM the responsible units should liaise closely with ATC and the aircraft operators in order to ensure an effective and equitable service.

CHAPTER 5 – FLIGHT INFORMATION SERVICE AND AIR TRAFFIC ADVISORY SERVICE

5.1 APPLICATION

5.1.1 Flight information service shall be provided to all aircraft which are likely to be affected by the information and which are:

a) provided with air traffic control service; or

b) otherwise known to the relevant ATS units.

Note.— Flight information service does not relieve the pilot-in-command of an aircraft of any responsibilities and the pilot-in-command has to make the final decision regarding any suggested alteration of flight plan.

5.1.2 Where ATS units provide both flight information service and air traffic control service, the provision of air traffic control service shall have precedence over the provision of flight information service whenever the provision of air traffic control service so requires.

Note.— It is recognized that in certain circumstances aircraft on final approach, landing, take-off and climb may require to receive without delay essential information other than that pertaining to the provision of air traffic control service.

5.2 SCOPE OF FLIGHT INFORMATION SERVICE

5.2.1 Flight information service shall include the provision of pertinent:

a) SIGMET and AIRMET information;

b) information concerning pre-eruption volcanic activity, volcanic eruptions and volcanic ash clouds;

c) information concerning the release into the atmosphere of radioactive materials or toxic chemicals;

d) information on changes in the availability of radio navigation services;

e) information on changes in condition of aerodromes and associated facilities, including information on the state of the aerodrome movement areas when they are affected by snow, ice or significant depth of water;
f) information on unmanned free balloons;

and of any other information likely to affect safety.

5.2.2 Flight information service provided to flights shall include, in addition to that outlined in 5.2.1, the provision of information concerning:
a) weather conditions reported or forecast at departure, destination and alternate aerodromes;
b) collision hazards, to aircraft operating in airspace Classes C, D, E, F and G;
c) for flight over water areas, in so far as practicable and when requested by a pilot, any available information such as radio call sign, position, true track, speed, etc., of surface vessels in the area.

Note 1.— The information in b), including only known aircraft, the presence of which might constitute a collision hazard to the aircraft informed, will sometimes be incomplete and air traffic services cannot assume responsibility for its issuance at all times or for its accuracy.

Note 2.— When there is a need to supplement collision hazard information provided in compliance with b), or in case of temporary disruption of flight information service, traffic information broadcasts by aircraft may be applied in designated airspaces.

5.2.3 ATS units shall transmit, as soon as practicable, special air-reports to other aircraft concerned, to the associated meteorological office, and to other ATS units concerned. Transmissions to aircraft shall be continued for a period to be determined by agreement between the MET Provider and ATS Provider.

5.2.4 Flight information service provided to VFR flights shall include, in addition to that outlined in 5.2.1, the provision of available information concerning traffic and weather conditions along the route of flight that are likely to make operation under the visual flight rules impracticable.

5.3 RECORDING AND TRANSMISSION OF INFORMATION ON THE PROGRESS OF FLIGHTS

Information on the actual progress of flights, including those of heavy or medium unmanned free balloons, under neither air traffic control service nor air traffic advisory service shall be:
a) recorded by the ATS unit serving the FIR within which the aircraft is flying in such a manner that it is available for reference and in case it is requested for SAR action;
b) transmitted by the ATS unit receiving the information to other ATS units concerned, when so required in accordance with 3.22.2.2.

5.4 TRANSFER OF RESPONSIBILITY FOR THE PROVISION OF FLIGHT INFORMATION SERVICE

The responsibility for the provision of flight information service to a flight normally passes from the appropriate ATS unit in an FIR to the appropriate ATS unit in the adjacent FIR at the time of crossing the common FIR boundary. However, when coordination is required in accordance with 3.22.2, but communication facilities are inadequate, the former ATS unit shall, as far as practicable, continue to provide flight information service to the flight until it has established two-way communication with the appropriate ATS unit in the FIR it is entering.

5.5 TRANSMISSION OF INFORMATION

5.5.1 Means of transmission

5.5.1.1 Except as provided in 5.5.2.1, information shall be disseminated to aircraft by one or more of the following means as determined by the ATS Provider:
a) the preferred method of directed transmission on the initiative of the appropriate ATS unit to an aircraft,

ensuring that receipt is acknowledged; or

b) a general call, unacknowledged transmission to all aircraft concerned; or

c) broadcast; or

d) data link.

Note.— It should be recognized that in certain circumstances, e.g. during the last stages of a final approach, it may be impracticable for aircraft to acknowledge directed transmissions.

5.5.1.2 The use of general calls shall be limited to cases where it is necessary to disseminate essential information to several aircraft without delay, e.g. the sudden occurrence of hazards, a change of the runway-in-use, or the failure of a key approach and landing aid.

5.5.2 Transmission of special air-reports, SIGMET and AIRMET information

5.5.2.1 Appropriate SIGMET and AIRMET information, as well as special air-reports which have not been used for the preparation of a SIGMET, shall be disseminated to aircraft by one or more of the means specified in 5.5.1.1 as determined on the basis of regional air navigation agreements. Special air-reports shall be disseminated to aircraft for a period of 60 minutes after their issuance.

5.5.2.2 The special air-report, SIGMET and AIRMET information to be passed to aircraft on ground initiative shall cover a portion of the route up to one hour's flying time ahead of the aircraft except when another period has been determined on the basis of regional air navigation agreements.

5.5.3 Transmission of information concerning volcanic activity

Information concerning pre-eruption volcanic activity, volcanic eruptions and volcanic ash clouds (position of clouds and flight levels affected) shall be disseminated to aircraft by one or

more of the means specified in 5.5.1.1 as determined on the basis of regional air navigation agreements.

5.5.4 Transmission of information concerning radioactive materials and toxic chemical clouds

Information on the release into the atmosphere of radioactive materials or toxic chemicals which could affect airspace within the area of responsibility of the ATS unit shall be transmitted to aircraft by one or more of the means specified in 5.5.1.1.

5.5.5 Transmission of SPECI and amended TAF

5.5.5.1 Special reports in the SPECI code form and amended TAF shall be transmitted on request and supplemented by:

a) directed transmission from the appropriate air traffic services unit of selected special reports and amended TAF for the departure, destination and its alternate aerodromes, as listed in the flight plan; or

b) a general call on appropriate frequencies for the unacknowledged transmission to affected aircraft of selected special reports and amended TAF; or

c) continuous or frequent broadcast or the use of data link to make available current METAR and TAF in areas determined on the basis of regional air navigation agreements where traffic congestion dictates. VOLMET broadcasts and/or D-VOLMET should be used to serve this purpose (5.7).

5.5.5.2 The passing of amended aerodrome forecasts to aircraft on the initiative of the appropriate ATS unit shall be limited to that portion of the flight where the aircraft is within a specified time from the aerodrome of destination, such time being established on the basis of regional air navigation agreements.

5.5.6 Transmission of information on heavy or medium unmanned free balloons

Appropriate information on heavy or medium unmanned free balloons shall be disseminated to aircraft by one or more of the means specified in 5.5.1.1.

5.5.7 Transmission of information to supersonic aircraft

The following information shall be available at appropriate ACCs or flight information centres for aerodromes determined on the basis of regional air navigation agreements and shall be transmitted on request to supersonic aircraft prior to commencement of deceleration/descent from supersonic cruise:

a) current meteorological reports and forecasts, except that where communications difficulties are encountered under conditions of poor propagation, the elements transmitted may be limited to:

i) mean surface wind, direction and speed (including gusts);

ii) visibility or runway visual range;

iii) amount and height of base of low clouds;

iv) other significant information;

v) if appropriate, information regarding expected changes;

b) operationally significant information on the status of facilities relating to the runway-in-use, including the precision approach category in the event that the lowest approach category promulgated for the runway is not available;

c) sufficient information on the runway surface conditions to permit assessment of the runway braking action.

5.5.8 Transmission of information concerning space weather activity

Information on space weather phenomena that have an impact on high frequency radio communications, communications via satellite, GNSS-based navigation and surveillance systems, and/or pose a radiation risk to aircraft occupants at flight levels within the area of responsibility of the ATS unit, shall be transmitted to the affected aircraft by one or more of the means specified in 5.5.1.1.

5.6 OPERATIONAL FLIGHT INFORMATION SERVICE BROADCASTS

5.6.1 Application

5.6.1.1 The meteorological information and operational information concerning radio navigation services and aerodromes included in the flight information service shall, whenever available, be provided in an operationally integrated form.

5.6.1.2 Where integrated operational flight information messages are to be transmitted to aircraft, they should be transmitted with the content and, where specified, in the sequence indicated, for the various phases of flight.

5.6.1.3 Operational flight information service broadcasts, when provided, should consist of messages containing integrated information regarding selected operational and meteorological elements appropriate to the various phases of flight. These broadcasts shall be of three major types, i.e. HF, VHF and ATIS.

5.6.1.4 Use of the OFIS messages in directed request/reply transmissions

When requested by the pilot, the applicable OFIS message(s) shall be transmitted by the appropriate ATS unit.

5.6.2 HF operational flight information service (OFIS) broadcasts

5.6.2.1 HF OFIS broadcasts should be provided when it has been determined by regional air navigation agreements that a requirement exists.

5.6.2.2 Whenever such broadcasts are provided:

a) the information should be in accordance with 5.6.2.5, as applicable, subject to regional air navigation agreements;

b) the aerodromes for which reports and forecasts are to be included should be as determined by regional air navigation agreements;

c) the time-sequencing of stations participating in the broadcast should be as determined by regional air navigation agreements;

d) the HF OFIS broadcast message should take into consideration human performance. The broadcast message should not exceed the length of time allocated for it by regional air navigation agreements, care being taken that the readability is not impaired by the speed of the transmission;

e) each aerodrome message should be identified by the name of the aerodrome to which the information applies;

f) when information has not been received in time for a broadcast, the latest available information should be included together with the time of that observation;

g) the full broadcast message should be repeated if this is feasible within the remainder of the time allotted to the broadcasting station;

h) the broadcast information should be updated immediately a significant change occurs; and

i) the HF OFIS message should be prepared and disseminated by the most appropriate unit(s) as designated by each State.

5.6.2.3 Pending the development and adoption of a more suitable form of speech for universal use in aeronautical radiotelephony communications, HF OFIS broadcasts concerning aerodromes designated for use by international air services should be available in the English language.

5.6.2.4 Where HF OFIS broadcasts are available in more than one language, a discrete channel should be used for each language.

5.6.2.5 HF operational flight information service broadcast messages should contain the following information in the sequence indicated or as determined by regional air navigation agreements:

a) En-route weather information: Information on significant en-route weather phenomena should be in the form of available SIGMET as prescribed in the Civil Aviation Requirements for Meteorological Service for Air Navigation 2024.

b) Aerodrome information including:

1) name of aerodrome;

2) time of observation;

3) essential operational information;

4) surface wind direction and speed; if appropriate, maximum wind speed;

*5) visibility and, when applicable, runway visual range (RVR);

*6) present weather;

*7) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater;

cumulonimbus; if the sky is obscured, vertical visibility when available; and

8) aerodrome forecast.

* These elements are replaced by the term "CAVOK" whenever the conditions as specified in the ICAO Doc 4444, Chapter 11 prevail.

5.6.3 VHF operational flight information service (OFIS) broadcasts

5.6.3.1 VHF operational flight information service broadcasts should be provided as determined by regional air navigation agreements.

5.6.3.2 Whenever such broadcasts are provided:

a) the aerodromes for which reports and forecasts are to be included should be as determined by regional air navigation agreements;

b) each aerodrome message should be identified by the name of the aerodrome to which the information applies;

c) when information has not been received in time for a broadcast, the latest available information should be included together with the time of that observation;

d) the broadcasts should be continuous and repetitive;

e) The VHF OFIS broadcast message should take into consideration human performance. The broadcast message should, whenever practicable, not exceed five minutes, care being taken that the readability is not impaired by the speed of the transmission;

f) the broadcast message should be updated on a scheduled basis as determined by regional air navigation agreements. In addition, it should be expeditiously updated immediately a significant change occurs; and

g) the VHF OFIS message should be prepared and disseminated by the most appropriate unit(s) as designated by each State.

5.6.3.3 Pending the development and adoption of a more suitable form of speech for universal use in aeronautical radiotelephony communications, VHF OFIS broadcasts concerning aerodromes designated for use by international air services should be available in the English language.

5.6.3.4 Where VHF OFIS broadcasts are available in more than one language, a discrete channel should be used for each language.

5.6.3.5 VHF operational flight information service broadcast messages should contain the following information in the sequence indicated:

a) name of aerodrome;

b) time of observation;

c) landing runway;

d) significant runway surface conditions and, if appropriate, braking action;

e) changes in the operational state of the radio navigation services, if appropriate;

f) holding delay, if appropriate;

g) surface wind direction and speed; if appropriate, maximum wind speed;

*h) visibility and, when applicable, runway visual range (RVR);

*i) present weather;

*j) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus;

if the sky is obscured, vertical visibility, when available;

†k) air temperature;

†l) dew point temperature;

†m) QNH altimeter setting;

n) supplementary information on recent weather of operational significance and, where necessary, wind shear;

o) trend forecast, when available; and

p) notice of current SIGMET messages.

* These elements are replaced by the term "CAVOK" whenever the conditions as specified in the PANS-ATM (Doc 4444), Chapter 11 prevail.

† As determined on the basis of regional air navigation agreements.

5.6.4 Voice-automatic terminal information service (Voice-ATIS) broadcasts

5.6.4.1 Voice-automatic terminal information service (Voice-ATIS) broadcasts shall be provided at aerodromes where there is a requirement to reduce the communication load on the ATS VHF air-ground communication channels. When provided, they shall comprise:

a) one broadcast serving arriving aircraft; or

b) one broadcast serving departing aircraft; or

c) one broadcast serving both arriving and departing aircraft; or

d) two broadcasts serving arriving and departing aircraft respectively at those aerodromes where the length of a broadcast serving both arriving and departing aircraft would be excessively long.

5.6.4.2 A discrete VHF frequency shall, whenever practicable, be used for Voice-ATIS broadcasts. If a discrete frequency is not available, the transmission may be made on the voice channel(s) of the most appropriate terminal navigation aid(s), preferably a VOR, provided the range and readability are adequate and the identification of the navigation aid is sequenced with the broadcast so that the latter is not obliterated.

5.6.4.3 Voice-ATIS broadcasts shall not be transmitted on the voice channel of an ILS.

5.6.4.4 Whenever Voice-ATIS is provided, the broadcast shall be continuous and repetitive.

5.6.4.5 The information contained in the current broadcast shall immediately be made known to the ATS unit(s) concerned with the provision to aircraft of information relating to approach, landing and takeoff, whenever the message has not been prepared by that (those) unit(s).

Note.— The requirements for the provision of ATIS that applies to both Voice-ATIS and D-ATIS are contained in 5.6.6 below.

5.6.4.6 Voice-ATIS broadcasts provided at designated aerodromes for use by international air services shall be available in the English language as a minimum.

5.6.4.7 Where Voice-ATIS broadcasts are available in more than one language, a discrete channel shall be used for each language.

5.6.4.8 The Voice-ATIS broadcast message shall, whenever practicable, not exceed 30 seconds, care being taken that the readability of the ATIS message is not impaired by the speed of the transmission or by the identification signal of a navigation aid used for transmission of ATIS. The ATIS broadcast message shall take into consideration human performance.

5.6.5 Data link-automatic terminal information service (D-ATIS)

5.6.5.1 Where a D-ATIS supplements the existing availability of Voice-ATIS, the information shall be identical in both content and format to the applicable Voice-ATIS broadcast.

5.6.5.1.1 Where real-time meteorological information is included but the data remains within the parameters of the significant change criteria, the content, for the purpose of maintaining the same designator, shall be considered identical.

5.6.5.2 Where a D-ATIS supplements the existing availability of Voice-ATIS and the ATIS requires updating, Voice-ATIS and D-ATIS shall be updated simultaneously.

5.6.6 Automatic terminal information service (voice and/or data link)

5.6.6.1 Whenever Voice-ATIS and/or D-ATIS is provided:

a) the information communicated shall relate to a single aerodrome;

b) the information communicated shall be updated immediately a significant change occurs;

c) the preparation and dissemination of the ATIS message shall be the responsibility of the air traffic services;

d) individual ATIS messages shall be identified by a designator in the form of a letter of the ICAO spelling alphabet. Designators assigned to consecutive ATIS messages shall be in alphabetical order;

e) aircraft shall acknowledge receipt of the information upon establishing communication with the ATS unit providing approach control service or the aerodrome control tower, as appropriate;

f) the appropriate ATS unit shall, when replying to the message in e) above or, in the case of arriving aircraft, at such other time as may be prescribed by the ATS Provider, provide the aircraft with the current altimeter setting; and

g) the meteorological information shall be extracted from the local meteorological routine or special report.

Note.— In accordance with the Civil Aviation Requirements for Meteorological Service for Air Navigation 2024, the surface wind direction and speed and runway visual range (RVR) are to be averaged over 2 minutes and 1 minute, respectively;

and the wind information is to refer to conditions along the runway for departing aircraft and to conditions at the touchdown zone for arriving aircraft.

5.6.6.2 When rapidly changing meteorological conditions make it inadvisable to include a weather report in the ATIS, the ATIS messages shall indicate that the relevant weather information will be given on initial contact with the appropriate ATS unit.

5.6.6.3 Information contained in a current ATIS, the receipt of which has been acknowledged by the aircraft concerned, need not be included in a directed transmission to the aircraft, with the exception of the altimeter setting, which shall be provided in accordance with 5.6.6.1 f).

5.6.6.4 If an aircraft acknowledges receipt of an ATIS that is no longer current, any element of information that needs updating shall be transmitted to the aircraft without delay.

5.6.6.5 Contents of ATIS shall be kept as brief as possible. Information additional to that specified in 5.6.7 to 5.6.9, for example information already available in the Guyana AIP and NOTAMs, shall only be included when justified in exceptional circumstances.

5.6.7 ATIS for arriving and departing aircraft

ATIS messages containing both arrival and departure information shall contain the following elements of information in the order listed:

a) name of aerodrome;

b) arrival and/or departure indicator;

c) contract type, if communication is via D-ATIS;

d) designator;

e) time of observation, if appropriate;

f) type of approach(es) to be expected;

g) the runway(s) in use; status of arresting system constituting a potential hazard, if any;

h) significant runway surface conditions and, if appropriate, braking action;

i) holding delay, if appropriate;

j) transition level, if applicable;

k) other essential operational information;

l) surface wind direction (in degrees magnetic) and speed, including significant variations and, if surface wind sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers;

*m) visibility and, when applicable, RVR and, if visibility/RVR sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers;

*n) present weather;

*o) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility when available;

p) air temperature;

†q) dew point temperature;

r) altimeter setting(s);

s) any available information on significant meteorological phenomena in the approach and climbout areas including wind shear, and information on recent weather of operational significance;

t) trend forecast, when available; and

u) specific ATIS instructions.

* These elements are replaced by the term "CAVOK" whenever the conditions as specified in the PANS-ATM (Doc 4444), Chapter 11 prevail.

† As determined on the basis of regional air navigation agreements.

5.6.8 ATIS for arriving aircraft

ATIS messages containing arrival information only shall contain the following elements of information in the order listed:

a) name of aerodrome;

b) arrival indicator;

c) contract type, if communication is via D-ATIS;

d) designator;

e) time of observation, if appropriate;

f) type of approach(es) to be expected;

g) main landing runway(s); status of arresting system constituting a potential hazard, if any;

h) significant runway surface conditions and, if appropriate, braking action;

i) holding delay, if appropriate;

j) transition level, if applicable;

k) other essential operational information;

l) surface wind direction (in degrees magnetic) and speed, including significant variations and, if surface wind sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers;

*m) visibility and, when applicable, RVR and, if visibility/RVR sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers;

*n) present weather;

*o) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility when available;

p) air temperature;

†q) dew point temperature;

r) altimeter setting(s);

s) any available information on significant meteorological phenomena in the approach area including wind shear, and information on recent weather of operational significance;

t) trend forecast, when available; and

u) specific ATIS instructions.

* These elements are replaced by the term "CAVOK" whenever the conditions as specified in the PANS-ATM (Doc 4444), Chapter 11 prevail.

† As determined on the basis of regional air navigation agreements.

5.6.9 ATIS for departing aircraft

ATIS messages containing departure information only shall contain the following elements of information in the order listed:

a) name of aerodrome;

b) departure indicator;

c) contract type, if communication is via D-ATIS;

d) designator;

e) time of observation, if appropriate;

f) runway(s) to be used for takeoff; status of arresting system constituting a potential hazard, if any;

g) significant surface conditions of runway(s) to be used for takeoff and, if appropriate, braking action;

h) departure delay, if appropriate;

i) transition level, if applicable;

j) other essential operational information;

k) surface wind direction (in degrees magnetic) and speed, including significant variations and, if surface wind sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers;

*l) visibility and, when applicable, RVR and, if visibility/RVR sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers;

*m) present weather;

*n) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility when available;

o) air temperature;

†p) dew point temperature;

q) altimeter setting(s);

r) any available information on significant meteorological phenomena in the climbout area including wind shear;

s) trend forecast, when available; and

t) specific ATIS instructions.

* These elements are replaced by the term "CAVOK" whenever the conditions as specified in the PANS-ATM (Doc 4444), Chapter 11 prevail.

† As determined on the basis of regional air navigation agreements.

5.7 VOLMET BROADCASTS AND D-VOLMET SERVICE

5.7.1 HF and/or VHF VOLMET broadcasts and/or D-VOLMET service shall be provided when it has been determined by regional air navigation agreements that a requirement exists.

5.7.2 VOLMET broadcasts shall use standard radiotelephony phraseologies.

5.8 AIR TRAFFIC ADVISORY SERVICE

5.8.1 Objective and basic principles

5.8.1.1 The objective of the air traffic advisory service is to make information on collision hazards more effective than it would be in the mere provision of flight information service. It may be provided to aircraft conducting IFR flights in advisory airspace or on advisory routes (Class F airspace). Such areas or routes will be specified by the State concerned.

5.8.1.2 Taking into account the considerations detailed in 2.3, air traffic advisory service shall only be implemented where the ATS are inadequate for the provision of air traffic control, and the limited advice on collision hazards otherwise provided by flight information service will not meet the requirement. Where air traffic advisory

service is implemented, this shall be considered normally as a temporary measure only until such time as it can be replaced by air traffic control service.

5.8.1.3 Air traffic advisory service does not afford the degree of safety and cannot assume the same responsibilities as air traffic control service in respect of the avoidance of collisions, since information regarding the disposition of traffic in the area concerned available to the unit providing air traffic advisory service may be incomplete. To make this quite clear, air traffic advisory service does not deliver "clearances" but only "advisory information" and it uses the word "advise" or "suggest" when a course of action is proposed to an aircraft.

5.8.2 Aircraft

5.8.2.1 Aircraft using the air traffic advisory service

IFR flights electing to use or required by the ATS Provider on the basis of regional air navigation agreements to use the air traffic advisory service when operating within Class F airspace are expected to comply with the same procedures as those applying to controlled flights except that:
a) the flight plan and changes thereto are not subjected to a clearance, since the unit furnishing air traffic advisory service will only provide advice on the presence of essential traffic or suggestions as to a possible course of action;

Note 1.— It is assumed that a pilot will not effect a change in the current flight plan until notifying the intended change to the appropriate ATS unit and, if practicable, upon receiving acknowledgement or relevant advice.

Note 2.— When a flight is operating or about to operate in a control area to continue eventually into an advisory area or along an advisory route, a clearance may be issued for the whole route, but the clearance as such, or revisions thereto, applies only to those portions of the flight conducted within control areas and control zones (see 3.19.8.10). Advice or suggestions would be provided as necessary for the remaining portion of the route.

b) it is for the aircraft to decide whether or not it will comply with the advice or suggestion received and to inform the unit providing air traffic advisory service, without delay, of its decision;

c) air-ground contacts shall be made with the air traffic services unit designated to provide air traffic advisory service within the advisory airspace or portion thereof.

5.8.2.2 Aircraft not using the air traffic advisory service

5.8.2.2.1 Aircraft wishing to conduct IFR flights within advisory airspace, but not electing to use the air traffic advisory service, shall nevertheless submit a flight plan, and notify changes made thereto to the unit providing that service.

5.8.2.2.2 IFR flights intending to cross an advisory route shall do so as nearly as possible at an angle of 90 degrees to the direction of the route and at a level, appropriate to its track, selected from the tables of cruising levels prescribed for use by IFR flights operating outside controlled airspace.

5.8.3 Air traffic services unit

Note.— The efficiency of air traffic advisory service will depend largely on the procedures and practices in use. Its establishment in line with the organization, procedures and equipment of area control service, taking into account the basic differences of the two services, as indicated in 5.8.2.1, will help to ensure a high degree of efficiency and promote uniformity in the various provisions of air traffic advisory service. For example, exchange of information by the units concerned on the progress of an aircraft from one advisory area into an adjacent control area or terminal control area, and vice versa, will help to relieve pilots from repeating details of their flight plans already filed; also, use of standard air traffic control phraseology, preceded by the word "suggest" or "advise", will facilitate the pilot's understanding of air traffic advisory service intelligence.

5.8.3.1 An air traffic services unit providing air traffic advisory service shall:

a) *advise* the aircraft to depart at the time specified and to cruise at the levels indicated in the flight plan if it does not foresee any conflict with other known traffic;

b) *suggest* to aircraft a course of action by which a potential hazard may be avoided, giving priority to an aircraft already in advisory airspace over other aircraft desiring to enter such advisory airspace; and

c) *pass* to aircraft traffic information comprising the same information as that prescribed for area control service.

5.8.3.2 The criteria used as a basis for action under b) and c) above should be at least those laid down for aircraft operating in controlled airspace and should take into account the limitations inherent in the provision of air traffic advisory service, navigation facilities and air-ground communications prevailing in the region.

CHAPTER 6 – ALERTING SERVICE

6.1 APPLICATION

6.1.1 Alerting service shall be provided:

a) for all aircraft provided with air traffic control service;

b) in so far as practicable, to all other aircraft having filed a flight plan or otherwise known to the ATS; and

c) to any aircraft known or believed to be the subject of unlawful interference.

6.1.2 FICs or ACCs shall serve as the central point for collecting all information relevant to a state of emergency of an aircraft operating within the FIR or control area concerned and for forwarding such information to the appropriate RCC.

6.1.3 In the event of a state of emergency arising to an aircraft while it is under the control of an aerodrome control tower or approach control unit, such unit shall notify immediately the FIC or ACC responsible which shall in turn notify the RCC, except that notification of the ACC, FIC, or RCC shall not be required when the nature of the emergency is such that the notification would be superfluous.

6.1.3.1 Nevertheless, whenever the urgency of the situation so requires, the aerodrome control tower or approach control unit responsible shall first alert and take other necessary steps to set in motion all appropriate local rescue and emergency organizations which can give the immediate assistance required.

6.2 AIRCRAFT

6.2.1 When so required by the ATS Provider to facilitate the provision of alerting and SAR services, an aircraft, prior to and when operating within or into designated areas or along designated routes, shall comply with the provisions detailed in the Civil

Aviation (Rules of the Air) Regulations 2024 concerning the submission, completion, changing and closing of a flight plan.

6.2.2 In addition to the above, aircraft equipped with suitable two-way radiocommunications shall report during the period twenty to forty minutes following the time of last contact, whatever the purpose of such contact, merely to indicate that the flight is progressing according to plan, such report to comprise identification of the aircraft and the words "Operations normal" or the signal QRU.

6.2.3 The "Operations normal" message shall be transmitted air-ground to an appropriate ATS unit (e.g. normally to the aeronautical telecommunication station serving the ATS unit in charge of the FIR in which the aircraft is flying, otherwise to another aeronautical telecommunication station to be retransmitted as required to the ATS unit in charge of the FIR).

6.2.4 It may be advisable, in case of a SAR operation of a substantial duration, to promulgate by NOTAM the lateral and vertical limits of the area of SAR action, and to warn aircraft not engaged in actual SAR operations and not controlled by ATC to avoid such areas unless otherwise authorized by the appropriate ATS unit.

6.3 ATS UNITS

6.3.1 When no report from an aircraft has been received within a reasonable period of time (which may be a specified interval prescribed on the basis of regional air navigation agreements) after a scheduled or expected reporting time, the ATS unit shall, within the stipulated period of thirty minutes, endeavour to obtain such report in order to be in a position to apply the provisions relevant to the "Uncertainty Phase" should circumstances warrant such application.

6.3.2 When alerting service is required in respect of a flight operated through more than one FIR or control area, and when the position of the aircraft is in doubt,

responsibility for coordinating such service shall rest with the ATS unit of the FIR or control area:

a) within which the aircraft was flying at the time of last air-ground radio contact;

b) that the aircraft was about to enter when last air-ground contact was established at or close to the boundary of two FIRs or control areas;

c) within which the aircraft's intermediate stop or final destination point is located:

1) if the aircraft was not equipped with suitable two-way radiocommunication equipment; or

2) was not under obligation to transmit position reports.

6.3.3 The unit responsible for alerting service, in accordance with 6.3.2, shall:

a) notify units providing alerting service in other affected FIRs or control areas of the emergency phase or phases, in addition to notifying the rescue coordination centre associated with it;

b) request those units to assist in the search for any useful information pertaining to the aircraft presumed to be in an emergency, by all appropriate means and especially those indicated in 6.5;

c) collect the information gathered during each phase of the emergency and, after verifying it as necessary, transmit it to the rescue coordination centre;

d) announce the termination of the state of emergency as circumstances dictate.

6.3.4 In obtaining the necessary information as required under 6.4.2.1 and 6.4.3, attention shall particularly be given to informing the relevant rescue coordination centre of the distress frequencies available to survivors, as listed in Item 19 of the flight plan but not normally transmitted.

6.4 NOTIFICATION OF RESCUE COORDINATION CENTRES

6.4.1 Without prejudice to any other circumstances that may render such notification advisable, ATS units shall, except as prescribed in 6.5.1, notify rescue coordination

centres immediately when an aircraft is considered to be in a state of emergency in accordance with the following:

a) *Uncertainty phase* when:

1) no communication has been received from an aircraft within a period of thirty minutes after the time a communication should have been received, or from the time an unsuccessful attempt to establish communication with such aircraft was first made, whichever is the earlier, or when

2) an aircraft fails to arrive within thirty minutes of the estimated time of arrival last notified to or estimated by ATS units, whichever is the later,

except when no doubt exists as to the safety of the aircraft and its occupants.

b) *Alert phase* when:

1) following the uncertainty phase, subsequent attempts to establish communication with the aircraft or inquiries to other relevant sources have failed to reveal any news of the aircraft, or when

2) an aircraft has been cleared to land and fails to land within five minutes of the estimated time of landing and communication has not been re-established with the aircraft, or when

3) information has been received which indicates that the operating efficiency of the aircraft has been impaired, but not to the extent that a forced landing is likely,

except when evidence exists that would allay apprehension as to the safety of the aircraft and its occupants, or when

4) an aircraft is known or believed to be the subject of unlawful interference.

c) *Distress phase* when:

1) following the alert phase, further unsuccessful attempts to establish communication with the aircraft and more widespread unsuccessful inquiries point to the probability that the aircraft is in distress, or when

2) the fuel on board is considered to be exhausted, or to be insufficient to enable the aircraft to reach safety, or when

3) information is received which indicates that the operating efficiency of the aircraft has been impaired to the extent that a forced landing is likely, or when

4) information is received or it is reasonably certain that the aircraft is about to make or has made a forced landing, except when there is reasonable certainty that the aircraft and its occupants are not threatened by grave and imminent danger and do not require immediate assistance.

6.4.2 The notification shall contain such of the following information as is available in the order listed:

a) INCERFA, ALERFA or DETRESFA, as appropriate to the phase of the emergency;

b) agency and person calling;

c) nature of the emergency;

d) significant information from the flight plan;

e) unit which made last contact, time and means used;

f) last position report and how determined;

g) colour and distinctive marks of aircraft;

h) dangerous goods carried as cargo;

i) any action taken by reporting office; and

j) other pertinent remarks.

6.4.2.1 Such part of the information specified in 6.4.2, which is not available at the time notification is made to a rescue coordination centre, should be sought by an ATS unit prior to the declaration of a distress phase, if there is reasonable certainty that this phase will eventuate.

6.4.3 Further to the notification in 6.4.2, the rescue coordination centre shall, without delay, be furnished with:

a) any useful additional information, especially on the development of the state of emergency through subsequent phases; or

b) information that the emergency situation no longer exists.

Note.— The cancellation of action initiated by the rescue coordination centre is the responsibility of that centre.

6.5 USE OF COMMUNICATION FACILITIES

ATS units shall, as necessary, use all available communication facilities to endeavour to establish and maintain communication with an aircraft in a state of emergency, and to request news of the aircraft.

6.6 PLOTTING AIRCRAFT IN A STATE OF EMERGENCY

6.6.1 When a state of emergency is considered to exist, the flight of the aircraft involved shall be plotted on a chart in order to determine the probable future position of the aircraft and its maximum range of action from its last known position. The flights of other aircraft known to be operating in the vicinity of the aircraft involved shall also be plotted in order to determine their probable future positions and maximum endurance.

6.7 INFORMATION TO THE OPERATOR

6.7.1 When an ACC or FIC decides that an aircraft is in the uncertainty or the alert phase, it shall, when practicable, advise the operator prior to notifying the RCC.

Note.— If an aircraft is in the distress phase, the RCC has to be notified immediately in accordance with 6.4.2.

6.7.2 All information notified to the RCC by an ACC or FIC shall, whenever practicable, also be communicated, without delay, to the operator.

6.8 INFORMATION TO AIRCRAFT OPERATING IN THE VICINITY OF AN AIRCRAFT IN A STATE OF EMERGENCY

6.8.1 When it has been established by an ATS unit that an aircraft is in a state of emergency, other aircraft known to be in the vicinity of the aircraft involved shall, except as provided in 6.8.2, be informed of the nature of the emergency as soon as practicable.

6.8.2 When an ATS unit knows or believes that an aircraft is being subjected to unlawful interference, no reference shall be made in ATS air-ground communications to the nature of the emergency unless it has first been referred to in communications from the aircraft involved and it is certain that such reference will not aggravate the situation.

CHAPTER 7 – ATS REQUIREMENTS FOR INFORMATION

7.1 METEOROLOGICAL INFORMATION

7.1.1 General

The ATS Provider shall enter into agreements with the MET Provider to ensure the following:

7.1.1.1 ATS units shall be supplied with up-to-date information on existing and forecast meteorological conditions as necessary for the performance of their respective functions. The information shall be supplied in such a form as to require a minimum of interpretation on the part of ATS personnel and with a frequency which satisfies the requirements of the ATS units concerned.

7.1.1.2 ATS units shall be supplied with available detailed information on the location, vertical extent, direction and rate of movement of meteorological phenomena in the vicinity of the aerodrome, and particularly in the climb-out and approach areas, which could be hazardous to aircraft operations.

7.1.1.3 When computer-processed upper air data are made available to ATS units in digital form for use by ATS computers, the contents, format and transmission arrangements shall be as agreed between the MET Provider and the ATS Provider.

7.1.2 FICs and ACCs

The ATS Provider shall enter into agreements with the MET Provider to ensure the following:

7.1.2.1 FICs and ACCs shall be supplied with meteorological information as described in 1.3 of Appendix 9 to the Civil Aviation Requirements for Meteorological Service for Air Navigation 2024, particular emphasis being given to the occurrence or expected occurrence of weather deterioration as soon as this can be determined. These reports

and forecasts shall cover the FIR or control area and such other areas as may be determined on the basis of regional air navigation agreements.

Note.— For the purpose of this provision, certain changes in meteorological conditions are construed as deterioration in a weather element, although they are not ordinarily considered as such. An increase in temperature may, for example, adversely affect the operation of certain types of aircraft.

7.1.2.2 FICs and ACCs shall be provided, at suitable intervals, with current pressure data for setting altimeters, for locations specified by the FIC or ACC concerned.

7.1.3 Units providing approach control service

The ATS Provider shall enter into agreements with the MET Provider to ensure the following:

7.1.3.1 Units providing approach control service shall be supplied with meteorological information as described in 1.2 of Appendix 9 to the Civil Aviation Requirements for Meteorological Service for Air Navigation 2024, for the airspace and the aerodromes with which they are concerned. Special reports and amendments to forecasts shall be communicated to the units providing approach control service as soon as they are necessary in accordance with established criteria, without waiting for the next routine report or forecast. Where multiple anemometers are used, the indicators to which they are related shall be clearly marked to identify the runway and section of the runway monitored by each anemometer.

7.1.3.2 Units providing approach control service shall be provided with current pressure data for setting altimeters, for locations specified by the unit providing approach control service.

7.1.3.3 Units providing approach control service for final approach, landing and take-off shall be equipped with surface wind display(s). The display(s) shall be related to the

same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the aerodrome control tower and in the meteorological station, where such a station exists.

7.1.3.4 Units providing approach control service for final approach, landing and takeoff at aerodromes where runway visual range values are assessed by instrumental means shall be equipped with display(s) permitting read-out of the current runway visual range value(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding displays in the aerodrome control tower and in the meteorological station, where such a station exists.

7.1.3.5 Units providing approach control service for final approach, landing and take-off at aerodromes where the height of cloud base is assessed by instrumental means shall be equipped with display(s) permitting read-out of the current value(s) of the height of cloud base. The displays shall be related to the same location(s) of observations and be fed from the same sensor(s) as the corresponding display(s) in the aerodrome control tower and in the meteorological station, where such a station exists.

7.1.3.6 Units providing approach control service for final approach, landing and take-off shall be supplied with information on wind shear which could adversely affect aircraft on the approach or take-off paths or during circling approach.

7.1.4 Aerodrome control towers

The ATS Provider shall enter into agreements with the MET Provider to ensure the following:

7.1.4.1 Aerodrome control towers shall be supplied with meteorological information as described in 1.1 of Appendix 9 to the Civil Aviation Requirements for Meteorological Service for Air Navigation 2024 for the aerodrome with which they are concerned. Special reports and amendments to forecasts shall be communicated

to the aerodrome control towers as soon as they are necessary in accordance with established criteria, without waiting for the next routine report or forecast.

7.1.4.2 Aerodrome control towers shall be provided with current pressure data for setting altimeters for the aerodrome concerned.

7.1.4.3 Aerodrome control towers shall be equipped with surface wind display(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such a station exists. Where multiple sensor(s) are used, the displays to which they are related shall be clearly marked to identify the runway and section of the runway monitored by each sensor.

7.1.4.4 Aerodrome control towers at aerodromes where runway visual range values are measured by instrumental means shall be equipped with display(s) permitting read-out of the current runway visual range value(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such a station exists.

7.1.4.5 Aerodrome control towers at aerodromes where the height of cloud base is assessed by instrumental means shall be equipped with display(s) permitting read-out of the current value(s) of the height of cloud base. The displays should be related to the same location(s) of observations and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such a station exists.

7.1.4.6 Aerodrome control towers shall be supplied with information on wind shear which could adversely affect aircraft on the approach or take-off paths or during circling approach and aircraft on the runway during the landing roll or take-off run.

7.1.4.7 Aerodrome control towers and/or other appropriate units shall be supplied with aerodrome warnings.

7.1.5 Communication stations

Where necessary for flight information purposes, current meteorological reports and forecasts shall be supplied to communication stations. A copy of such information shall be forwarded to the FIC or the ACC.

7.2 INFORMATION ON AERODROME CONDITIONS AND THE OPERATIONAL STATUS OF ASSOCIATED FACILITIES

The ATS Provider shall ensure that aerodrome control towers and units providing approach control service are kept currently informed of the operationally significant conditions of the movement area, including the existence of temporary hazards, and the operational status of any associated facilities at the aerodrome(s) with which they are concerned.

7.3 INFORMATION ON THE OPERATIONAL STATUS OF NAVIGATION SERVICES

7.3.1 The ATS Provider shall ensure that ATS units are kept currently informed of the operational status of radio navigation services and visual aids essential for take-off, departure, approach and landing procedures within their area of responsibility and those radio navigation services and visual aids essential for surface movement.

7.3.2 The ATS Provider shall ensure that information on the operational status, and any changes thereto, of radio navigation services and visual aids as referred to in 7.3.1 are received by the appropriate ATS unit(s) on a timely basis consistent with the use of the service(s) and aid(s) involved.

7.4 INFORMATION ON UNMANNED FREE BALLOONS

The ATS Provider shall enter into agreements with operators of unmanned free balloons to ensure appropriate ATS units are informed of details of flights of unmanned free balloons in

accordance with the provisions contained in the Civil Aviation (Rules of the Air) Regulations 2024.

7.5 INFORMATION CONCERNING VOLCANIC ACTIVITY

The ATS Provider shall enter into agreements with the MET Provider to ensure the following:

7.5.1 ATS units shall be informed, in accordance with local agreement, of pre-eruption volcanic activity, volcanic eruptions and volcanic ash cloud which could affect airspace used by flights within their area of responsibility.

7.5.2 ACCs and FICs shall be provided with volcanic ash advisory information issued by the associated VAAC.

7.6 INFORMATION CONCERNING RADIOACTIVE MATERIALS AND TOXIC CHEMICAL "CLOUDS"

The ATS Provider shall enter into agreements with the MET Provider or other appropriate entity to ensure that ATS units are informed of the release into the atmosphere of radioactive materials or toxic chemicals which could affect airspace used by flights within their area of responsibility.

CHAPTER 8 – ATS REQUIREMENTS FOR COMMUNICATIONS

8.1 AERONAUTICAL MOBILE SERVICE (AIR-GROUND COMMUNICATIONS)

8.1.1 General

8.1.1.1 Radiotelephony and/or data link shall be used in air-ground communications for ATS purposes.

8.1.1.2 Where an RCP specification has been prescribed by the Authority for performance-based communication, ATS units shall, in addition to the requirements specified in 8.1.1.1, be provided with communication equipment which will enable them to provide ATS in accordance with the prescribed RCP specification(s).

8.1.1.3 When direct pilot-controller two-way radiotelephony or data link communications are used for the provision of air traffic control service, recording facilities shall be provided on all such air-ground communication channels.

8.1.1.4 Recordings of communications channels as required in paragraph 8.1.1.3 shall be retained for a period of at least thirty days.

8.1.2 For flight information service

8.1.2.1 Air-ground communication facilities shall enable two-way communications to take place between a unit providing flight information service and appropriately equipped aircraft flying anywhere within the FIR.

8.1.2.2 Whenever practicable, air-ground communication facilities for flight information service shall permit direct, rapid, continuous and static-free two-way communications.

8.1.3 For area control service

8.1.3.1 Air-ground communication facilities shall enable two-way communications to take place between a unit providing area control service and appropriately equipped aircraft flying anywhere within the control area(s).

8.1.3.2 Whenever practicable, air-ground communication facilities for area control service shall permit direct, rapid, continuous and static-free two-way communications.

8.1.3.3 Where air-ground voice communication channels are used for area control service and are worked by air-ground communicators, suitable arrangements shall be made to permit direct pilot-controller voice communications, as and when required.

8.1.4 For approach control service

8.1.4.1 Air-ground communication facilities shall enable direct, rapid, continuous and static-free two-way communications to take place between the unit providing approach control service and appropriately equipped aircraft under its control.

8.1.4.2 Where the unit providing approach control service functions as a separate unit, air-ground communications shall be conducted over communication channels provided for its exclusive use.

8.1.5 For aerodrome control service

8.1.5.1 Air-ground communication facilities shall enable direct, rapid, continuous and static-free two-way communications to take place between an aerodrome control tower and appropriately equipped aircraft operating at any distance within 45 km (25 NM) of the aerodrome concerned.

8.1.5.2 Where conditions warrant, separate communication channels shall be provided for the control of traffic operating on the manoeuvring area.

8.2 AERONAUTICAL FIXED SERVICE (GROUND-GROUND COMMUNICATIONS)

8.2.1 General

8.2.1.1 Direct-speech and/or data link communications shall be used in ground-ground communications for ATS purposes.

Note 1.— Indication by time of the speed with which the communication should be established is provided as a guide to communication services, particularly to determine the types of communication channels required, e.g. that "instantaneous" is intended to refer to communications which effectively provide for immediate access between controllers; "fifteen seconds" to accept switchboard operation and "five minutes" to mean methods involving retransmission.

8.2.2 Communications within a flight information region

8.2.2.1 *Communications between ATS units*

8.2.2.1.1 An FIC shall have facilities for communications with the following units providing a service within its area of responsibility:

a) the ACC, unless collocated;

b) approach control units;

c) aerodrome control towers.

8.2.2.1.2 An ACC, in addition to being connected to the FIC as prescribed in 8.2.2.1.1, shall have facilities for communications with the following units providing a service within its area of responsibility:

a) approach control units;

b) aerodrome control towers;

c) air traffic services reporting offices, when separately established.

8.2.2.1.3 An approach control unit, in addition to being connected to the FIC and the ACC as prescribed in 8.2.2.1.1 and 8.2.2.1.2, shall have facilities for communications with the associated aerodrome control tower(s) and, when separately established, the associated air traffic services reporting office(s).

8.2.2.1.4 An aerodrome control tower, in addition to being connected to the FIC, the ACC and the approach control unit as prescribed in 8.2.2.1.1, 8.2.2.1.2 and 8.2.2.1.3, shall have facilities for communications with the associated air traffic services reporting office, when separately established.

8.2.2.2 *Communications between ATS units and other units*

8.2.2.2.1 A FIC and an ACC shall have facilities for communications with the following units providing a service within their respective area of responsibility:

a) appropriate military units;

b) the meteorological office serving the centre;

c) the aeronautical telecommunications station serving the centre;

d) appropriate operator's offices;

e) the RCC or, in the absence of such centre, any other appropriate emergency service;

f) the international NOTAM office serving the centre.

8.2.2.2.2 An approach control unit and an aerodrome control tower shall have facilities for communications with the following units providing a service within their respective area of responsibility:

a) appropriate military units;

b) rescue and emergency services (including ambulance, fire, etc.);

c) the meteorological office serving the unit concerned;

d) the aeronautical telecommunications station serving the unit concerned;

e) the unit providing apron management service, when separately established.

8.2.2.2.3 The communication facilities required under 8.2.2.2.1 a) and 8.2.2.2.2 a) shall include provisions for rapid and reliable communications between the air traffic services unit concerned and the military unit(s) responsible for control of interception operations within the area of responsibility of the air traffic services unit.

8.2.2.3 *Description of communication facilities*

8.2.2.3.1 The communication facilities required under 8.2.2.1, 8.2.2.2.1 a) and 8.2.2.2.2 a), b) and c) shall include provisions for:

a) communications by direct speech alone, or in combination with data link communications, whereby for the purpose of transfer of control using radar or ADS-B, the communications can be established instantaneously and for other purposes the communications can normally be established within fifteen seconds; and

b) printed communications, when a written record is required; the message transit time for such communications being no longer than five minutes.

8.2.2.3.2 In all cases not covered by 8.2.2.3.1, the communication facilities shall include provisions for:

a) communications by direct speech alone, or in combination with data link communications, whereby the communications can normally be established within fifteen seconds; and

b) printed communications, when a written record is required; the message transit time for such communications being no longer than five minutes.

8.2.2.3.3 In all cases where automatic transfer of data to and/or from air traffic services computers is required, suitable facilities for automatic recording shall be provided.

8.2.2.3.4 The communication facilities required in accordance with 8.2.2.1 and 8.2.2.2 shall be supplemented, as and where necessary, by facilities for other forms of visual or audio communications, for example, closed circuit television or separate information processing systems.

8.2.2.3.5 The communication facilities required under 8.2.2.2.2 a), b) and c) shall include provisions for communications by direct speech arranged for conference communications.

8.2.2.3.6 The communication facilities required under 8.2.2.2.2 d) shall include provisions for communications by direct speech arranged for conference communications, whereby the communications can normally be established within fifteen seconds.

8.2.2.3.7 All facilities for direct-speech or data link communications between ATS units and between ATS units and other units described under 8.2.2.2.1 and 8.2.2.2.2 shall be provided with automatic recording.

8.2.2.3.8 Recordings of data and communications as required in 8.2.2.3.3 and 8.2.2.3.7 shall be retained for a period of at least thirty days.

8.2.3 Communications between flight information regions

8.2.3.1 FICs and ACCs shall have facilities for communications with all adjacent FICs and ACCs.

8.2.3.1.1 These communication facilities shall in all cases include provisions for messages in a form suitable for retention as a permanent record, and delivery in accordance with transit times specified by regional air navigation agreements.

8.2.3.1.2 Unless otherwise prescribed on the basis of regional air navigation agreements, facilities for communications between ACCs serving contiguous control areas shall,

in addition, include provisions for direct speech and, where applicable, data link communications, with automatic recording, whereby for the purpose of transfer of control using radar, ADS-B or ADS-C data, the communications can be established instantaneously and for other purposes the communications can normally be established within fifteen seconds.

8.2.3.1.3 When so required by agreement between the States concerned in order to eliminate or reduce the need for interceptions in the event of deviations from assigned track, facilities for communications between adjacent FICs or ACCs other than those mentioned in 8.2.3.1.2 shall include provisions for direct speech alone, or in combination with data link communications. The communication facilities shall be provided with automatic recording.

8.2.3.1.4 The communication facilities in 8.2.3.1.3 shall permit communications to be established normally within fifteen seconds.

8.2.3.2 Adjacent ATS units shall be connected in all cases where special circumstances exist.

Note.— Special circumstances may be due to traffic density, types of aircraft operations and/or the manner in which the airspace is organized and may exist even if the control areas and/or control zones are not contiguous or have not (yet) been established.

8.2.3.3 Wherever local conditions are such that it is necessary to clear aircraft into an adjacent control area prior to departure, an approach control unit and/or aerodrome control tower shall be connected with the ACC serving the adjacent area.

8.2.3.4 The communication facilities in 8.2.3.2 and 8.2.3.3 shall include provisions for communications by direct speech alone, or in combination with data link communications, with automatic recording, whereby for the purpose of transfer of control using radar, ADS-B or ADS-C data, the communications can be established

instantaneously and for other purposes the communications can normally be established within fifteen seconds.

8.2.3.5 In all cases where automatic exchange of data between ATS computers is required, suitable facilities for automatic recording shall be provided.

8.2.3.6 Recordings of data and communications as required in 8.2.3.5 shall be retained for a period of at least thirty days.

8.2.4 Procedures for direct-speech communications

Appropriate procedures for direct-speech communications shall be developed to permit immediate connections to be made for very urgent calls concerning the safety of aircraft, and the interruption, if necessary, of less urgent calls in progress at the time.

8.3 SURFACE MOVEMENT CONTROL SERVICE

8.3.1 Communications for the control of vehicles other than aircraft on manoeuvring areas at controlled aerodromes

8.3.1.1 Two-way radiotelephony communication facilities shall be provided for aerodrome control service for the control of vehicles on the manoeuvring area, except where communication by a system of visual signals is deemed to be adequate.

8.3.1.2 Where conditions warrant, separate communication channels shall be provided for the control of vehicles on the manoeuvring area. Automatic recording facilities shall be provided on all such channels.

8.3.1.3 Recordings of communications as required in 8.3.1.2 shall be retained for a period of at least thirty days.

8.4 AERONAUTICAL RADIO NAVIGATION SERVICE

8.4.1 Automatic recording of surveillance data

8.4.1.1 Surveillance data from primary and secondary radar equipment or other systems (e.g. ADS-B, ADS-C), used as an aid to ATS, shall be automatically recorded for use in accident and incident investigations, search and rescue, air traffic control and surveillance systems evaluation and training.

8.4.1.2 Automatic recordings shall be retained for a period of at least thirty days. When the recordings are pertinent to accident and incident investigations, they shall be retained for longer periods until it is evident that they will no longer be required.

8.5 ATS MESSAGES

8.5.1 The ATS Provider shall comply with the provisions governing ATS messages as prescribed in Chapter 11 of the ICAO Doc 4444.

8.6 PHRASEOLOGIES AND VOICE COMMUNICATIONS

8.6.1 The ATS Provider shall comply with the provisions governing phraseologies as prescribed in Chapter 12 of the ICAO Doc 4444.

8.6.2 The ATS Provider shall comply with the applicable provisions governing:

-aeronautical mobile service - voice communications

as prescribed in ICAO Annex 10, Vol. 2.

8.7 CPDLC

8.7.1 Regarding CPDLC, the ATS Provider shall:

i. notify the Authority of their intention to implement operations that involve CPDLC; and

ii. comply with the provisions prescribed in Chapter 14 of the ICAO Doc 4444; and

iii. comply with the provisions prescribed in the Civil Aviation Requirements for Communication, Navigation, and Surveillance 2024.

CHAPTER 9 – MISCELLANEOUS PROCEDURES

9.1 RESPONSIBILITY IN REGARD TO MILITARY TRAFFIC

9.1.1 It is recognized that some military aeronautical operations necessitate non-compliance with certain air traffic procedures. In order to ensure the safety of flight operations the appropriate military authorities shall be asked, whenever practicable, to notify the proper ATC unit prior to undertaking such manoeuvres.

9.1.2 A reduction of separation minima required by military necessity or other extraordinary circumstances shall only be accepted by an ATC unit when a specific request in some recorded form has been obtained from the authority having jurisdiction over the aircraft concerned and the lower minima then to be observed shall apply only between those aircraft. Some recorded form of instruction fully covering this reduction of separation minima must be issued by the ATC unit concerned.

9.1.3 Temporary airspace reservation, either stationary or mobile, may be established for the use of large formation flights or other military air operations. Arrangements for the reservation of such airspace shall be accomplished by coordination between the user and the ATS Provider. The coordination shall be effected in accordance with the provisions of these Requirements and completed early enough to permit timely promulgation of information in accordance with the provisions of the Civil Aviation Requirements for AIS 2024.

9.2 RESPONSIBILITY IN REGARD TO UNMANNED FREE BALLOONS

9.2.1 On receipt of notification of the intended flight of a medium or heavy unmanned free balloon, the ATS unit shall arrange for the information to be disseminated to all concerned. The information shall include:

a) the balloon flight identification or project code name;

b) balloon classification and description;

c) SSR code or NDB frequency or ADS-B capability, as applicable;

d) the launch site;

e) the estimated time of the commencement of the launch or the planned period of the launches;

f) the expected direction of ascent;

g) the cruising level(s) (pressure-altitude); and

h) the estimated elapsed time to pass 18 000 m (60 000 ft) pressure-altitude, or to reach cruising level if at or below 18 000 m (60 000 ft), together with the estimated location.

9.2.2 On receipt of notification that a medium or heavy unmanned free balloon has been launched, the ATS unit shall arrange for the information to be disseminated to all concerned. The information shall include:

a) the balloon flight identification or project code name;

b) balloon classification and description;

c) SSR code or NDB frequency or ADS-B capability, as applicable;

d) the launch site;

e) the time of launch(es);

f) the estimated time at which 18 000 m (60 000 ft) pressure-altitude will be passed, or the estimated time at which the cruising level will be reached if at or below 18 000 m (60 000 ft), and the estimated location;

g) the estimated date and time of termination of the flight; and

h) the planned location of ground contact, when applicable.

9.2.3 When there is reasonable expectation that a heavy or medium unmanned free balloon will cross international borders, the appropriate ATS unit shall arrange for the pre-launch and the launch notifications to be sent by NOTAM to the ATS unit(s) in the State(s) concerned. If agreed between the States concerned, the launch notification may be transmitted orally by direct ATS speech circuit between the ACCs/FICs involved.

9.2.4 ATS units shall maintain radar and/or ADS-B surveillance of medium and heavy unmanned free balloons to the extent possible and, if necessary and on the request of the pilot of an aircraft, provide separation using an ATS surveillance system between the aircraft and such balloons which are identified or their exact position is known.

9.3 AIR TRAFFIC INCIDENT REPORT

9.3.1 An air traffic incident report shall be submitted, normally to the ATS unit concerned, for incidents specifically related to the provision of ATS involving such occurrences as aircraft proximity (AIRPROX), or other serious difficulty resulting in a hazard to aircraft, caused by, among others, faulty procedures, non-compliance with procedures, or failure of ground facilities.

9.3.2 The ATS Provider shall establish procedures for the reporting of aircraft proximity incidents and their investigation to ensure high standards of safety in the conduct and control of air traffic. The degree of risk involved in an aircraft proximity shall be determined in the incident investigation and classified as "risk of collision", "safety not assured", "no risk of collision" or "risk not determined".

9.3.3 Aircraft accidents and incidents are often reported through ATS channels. Such reports and any associated information shall be recorded by the unit concerned and forwarded to the Authority. Notwithstanding this, reports may be forwarded to the ASRD of the GCAA by any source via the most expeditious means. This could include use of the GCAA Emergency Hotline (592-608-4222) or to the Director General or any Inspector of the ASRD.

Note. — A model air traffic incident report form together with instructions for its completion is contained in Appendix 5.

9.3.4 When an accident/incident investigative authority conducts an investigation of an aircraft proximity incident, the ATS aspects shall be included.

9.3.5 The following categories of occurrences, which are not exhaustive and only serve as guidance, shall be reported to Authority:

a) Accidents, for example:

i. mid-air collision;

ii. controlled flight into terrain;

iii. collision on the ground between aircraft;

iv. collision between an airborne aircraft and vehicle/another aircraft on the ground;

v. collision on the ground between aircraft and vehicle, person, or obstruction(s);

vi. other accidents of special interest would include "losses of control in flight", due to VORTEX or meteorological conditions;

b) Incidents, for example:

i. instances of near collision (encompassing specific situations where one aircraft and another aircraft/ground terrain/ vehicle/person or object are to be too close to each other) such as:

a. separation minima infringement;

b. runway incursion where avoiding action was necessary;

ii. controlled flight into terrain only marginally avoided;

iii. take-offs or aborted take-offs on a closed or engaged runway, on a taxiway or unassigned runway;

iv. landings or attempted landings on a closed or engaged runway, on a taxiway or unassigned runway;

v. take-off or landing incidents such as undershooting, overrunning or running off the side of runways;

vi. potential for collision or near collision (encompassing specific situations having the potential to be an accident or a near collision, if another aircraft is in the vicinity);

a. runway incursion where no avoiding action is necessary;
b. aircraft deviation from ATC clearance;
c. aircraft deviation from applicable procedure, regulation or requirement;
d. unauthorised penetration of airspace;
e. deviation from aircraft ATM-related equipment carriage and operations, as mandated in applicable regulation(s)

Note. — The example of incidents listed above may be classified as serious incidents depending on the severity and the risk posed by the occurrences.

9.4 USE OF REPETITIVE FLIGHT PLANS

9.4.1 General

9.4.1.1 RPLs shall not be used for flights other than IFR flights operated regularly on the same day(s) of consecutive weeks and on at least ten occasions or every day over a period of at least ten consecutive days. The elements of each flight plan shall have a high degree of stability.

9.4.1.2 RPLs shall cover the entire flight from the departure aerodrome to the destination aerodrome. RPL procedures shall be applied only when all ATS authorities concerned with the flights have agreed to accept RPLs.

9.4.1.3 The use by States of RPLs for international flight shall be subject to the provision that the affected adjacent States either already use RPLs or will use them at the same time. The procedures for use between States shall be the subject of bilateral, multilateral or regional air navigation agreement as appropriate.

9.4.2 Procedures for submission of RPLs by operators

9.4.2.1 Conditions governing submission, notification of changes, or cancellation of RPLs shall be the subject of appropriate arrangements between operators and the ATS Provider concerned or of regional air navigation agreements.

9.4.2.2 An RPL shall comprise information regarding such of the following items as are considered relevant by the ATS Provider:

- validity period of the flight plan
- days of operation
- aircraft identification
- aircraft type and wake turbulence category
- MLS capability
- departure aerodrome
- off-block time
- cruising speed(s)
- cruising level(s)
- route to be followed
- destination aerodrome
- total estimated elapsed time
- indication of the location where the following information may be obtained immediately upon request:
  - — alternate aerodromes
  - — fuel endurance
  - — total number of persons on board
  - — emergency equipment
- other information.

9.4.3 Submission of total listings

9.4.3.1 RPLs shall be submitted in the form of listings containing the required flight plan data using an RPL listing form specially designed for the purpose or by means of other media suitable for electronic data processing. The method of submission shall be determined by local or regional agreement.

Note.— A model RPL listing form is contained in Appendix 2 of the ICAO Doc 4444.

9.4.3.2 Initial submission of complete RPL listings and any subsequent seasonal resubmission of complete listings shall be made in sufficient time to permit the data to be properly assimilated by the ATS organization. The minimum lead time required for the submission of such listings shall be established by the administrations concerned and published in their AIPs. This minimum lead time shall be at least two weeks.

9.4.3.3 Operators shall submit listings to the designated agency for distribution to the appropriate ATS units.

9.4.3.4 The information normally to be provided shall be that listed in 9.4.2.2 except that the ATS Provider may also require the provision of estimate information of FIR boundaries and the primary alternate aerodrome. If so required, such information shall be provided as indicated on an RPL listing form specially designed for the purpose.

9.4.3.5 Information regarding alternate aerodrome(s) and supplementary flight plan data (information normally provided under Item 19 of the ICAO flight plan form) shall be kept readily available by the operator at the departure aerodrome or another agreed location, so that, on request by ATS units, it can be supplied without delay. The name of the office from which the information can be obtained shall be recorded on the RPL listing form.

9.4.3.6 Acknowledgement of receipt of listings of flight plan data and/or amendment thereto shall not be required except by agreement between operators and the appropriate agency.

9.4.4 Changes to RPL listings

9.4.4.1 Changes of a permanent nature

9.4.4.1.1 Changes of a permanent nature involving the inclusion of new flights and the deletion or modification of currently listed flights shall be submitted in the form of amendment listings. These listings shall reach the ATS agency concerned at least seven days prior to the change becoming effective.

9.4.4.1.2 Where RPL listings have been initially submitted by the use of media suitable for electronic data processing, it shall be permissible by mutual agreement between the operator and the appropriate authority for some changes to be submitted by means of RPL listing forms.

9.4.4.1.3 All RPL changes shall be submitted in accordance with the instructions for preparation of RPL listings.

9.4.4.2 Changes of a temporary nature

9.4.4.2.1 Changes of a temporary, non-recurring nature relating to RPLs concerning aircraft type and wake turbulence category, speed and/or cruising level shall be notified for each individual flight as early as possible and not later than 30 minutes before departure to the ATS reporting office responsible for the departure aerodrome. A change of cruising level only may be notified by radiotelephony on initial contact with the ATS unit.

9.4.4.2.2 In case of an incidental change in the aircraft identification, the departure aerodrome, the route and/or the destination aerodrome, the RPL shall be cancelled for the day concerned and an individual flight plan shall be submitted.

9.4.4.2.3 Whenever it is expected by the operator that a specific flight, for which an RPL has been submitted, is likely to encounter a delay of 30 minutes or more in excess of the off-block time stated in that flight plan, the ATS unit responsible for the departure aerodrome shall be notified immediately.

Note.— Because of the stringent requirements of flow control, failure by operators to comply with this procedure may result in the automatic cancellation of the RPL for that specific flight at one or more of the ATS units concerned.

9.4.4.2.4 Whenever it is known to the operator that any flight for which an RPL has been submitted is cancelled, the ATS unit responsible for the departure aerodrome shall be notified.

9.4.4.3 Operator/Pilot liaison

The operator shall ensure that the latest flight plan information, including permanent and incidental changes, pertaining to a particular flight and duly notified to the appropriate agency, is made available to the pilot-in-command.

9.4.4.4 RPL procedures for ATS units

The procedures for handling RPLs described herein are applicable regardless of whether automatic data-processing equipment is utilized or flight plan data is handled manually.

9.4.4.5 Implementation of RPL procedures

9.4.4.5.1 Procedures for use of RPLs may be established for flights operating within a single FIR or a single State.

9.4.4.5.2 Procedures may also be established for flights across international boundaries subject to the provision that affected States currently utilize or will concurrently use RPLs.

9.4.4.5.3 Application of RPL procedures for international flights requires the establishment of bilateral or multilateral agreements between the States concerned. Multilateral agreements involving a number of States may take the form of regional air navigation agreements.

9.4.4.5.4 Application of RPLs requires agreements with participating operators to establish submission and amendment procedures.

9.4.4.5.5 Agreements shall include provisions for the following procedures:

a) initial submission;

b) permanent changes;

c) temporary and incidental changes;

d) cancellations;

e) additions; and

f) completely revised listings when indicated by extensive changes.

9.4.4.6 Collection, storage and processing of RPL data

9.4.4.6.1 Any State using RPLs shall designate one or more agencies responsible for administering such data. The area of responsibility for any such designated agency shall be at least one FIR. However, part or the entire area of responsibility of one or more States may be administered jointly by a designated agency. Each designated agency shall distribute relevant RPL data to the ATS units concerned within its area of responsibility so that such data reach these units in sufficient time to become effective.

9.4.4.6.2 RPLs shall be stored by each ATS unit concerned in a manner that will ensure that they are systematically activated on the appropriate day of operation in the order of estimated times indicative of entry into the unit's area of responsibility. Activation shall be accomplished in sufficient time to present the data to the controller in appropriate form for analysis and control action.

9.4.4.7 Suspension of RPL procedures

Where the ATS Provider is obliged, due to exceptional circumstances, to temporarily suspend the use of RPLs in its area of responsibility, or a specified part thereof, they shall publish notice of such suspension with as much advance notice as possible and in the most suitable form considering the circumstances.

9.4.4.8 ATS messages related to individual flights operating on an RPL

ATS messages relating to individual flights operating on an RPL shall be originated and addressed to ATS units concerned in a manner identical to that used for flights operating on individual flight plans.

9.5 STRATEGIC LATERAL OFFSET PROCEDURES

The ATS Provider shall comply with the provisions governing strategic lateral offset procedures as prescribed in Chapter 16 of the ICAO Doc 4444.

9.6 NOTIFICATION OF SUSPECTED COMMUNICABLE DISEASES OR OTHER PUBLIC HEALTH RISK, OR BOARD AN AIRCRAFT

9.6.1 The flight crew of an en-route aircraft shall, upon identifying a suspected case(s) of communicable disease, or other public health risk, on board the aircraft, promptly

notify the ATS unit with which the pilot is communicating, and provide the information listed below:

a) aircraft identification;

b) departure aerodrome;

c) destination aerodrome;

d) estimated time of arrival;

e) number of persons on board;

f) number of suspected case(s) on board; and

g) nature of the public health risk, if known.

9.6.2 The ATS unit, upon receipt of information from a pilot regarding suspected case(s) of communicable disease, or other public health risk, on board the aircraft, shall forward a message as soon as possible to the ATS unit serving the destination/departure aerodrome.

9.6.3 The ATS Provider shall develop procedures regarding a suspected case(s) of communicable disease, or other public health risk, on board an aircraft. Such procedures shall include at a minimum:

1. actions to be taken by the ATS unit receiving a notification to this effect from another ATS unit or from an aircraft or aircraft operator;

2. coordination with relevant persons and agencies including:

    a. the Ministry of Health, Port Health, or other appropriate agency;

    b. aircraft operator or designated representative;

    c. aerodrome authority;

    d. Guyana Civil Aviation Authority

Note 1.- The agencies listed under 2a, are expected to contact the airline representative or operating agency and aerodrome authority, if applicable, for subsequent coordination with the aircraft concerning clinical details and aerodrome preparation. Depending on the communications facilities available to the airline representative or operating agency, it may not be possible to communicate with the

aircraft until it is closer to its destination. Apart from the initial notification to the ATS unit whilst en-route, ATC communications channels are to be avoided.

Note 2.— The information to be provided to the departure aerodrome will prevent the potential spread of communicable disease, or other public health risk, through other aircraft departing from the same aerodrome.

Note 3.— AFTN (urgency message), telephone, facsimile or other means of transmission may be used.

CHAPTER 10 – EMERGENCIES, COMMUNICATION FAILURE AND CONTINGENCIES

10.1 SERVICE TO AIRCRAFT IN THE EVENT OF AN EMERGENCY

10.1.1 The various circumstances surrounding each emergency situation preclude the establishment of exact detailed procedures to be followed. The procedures outlined herein are intended as a general guide to ATS personnel. Air traffic control units shall maintain full and complete coordination, and personnel shall use their best judgement in handling emergency situations.

Note 1.— Additional procedures to be applied in relation to emergencies and contingencies while using an ATS surveillance system are contained in Chapter 8, 8.8.1 of the ICAO Doc 4444.

Note 2.— If the pilot of an aircraft encountering a state of emergency has previously been directed by ATC to select a specific transponder code and/or a specific ADS-B emergency mode, that code and/or mode will normally be maintained unless, in special circumstances, the pilot has decided or has been advised otherwise. Where ATC has not requested a code or emergency mode to be set, the pilot will set the transponder to Mode A Code 7700 and/or the appropriate ADS-B emergency mode.

Note 3.— Some aircraft equipped with first generation ADS-B avionics have the capability to transmit a general emergency alert only, regardless of the code selected by the pilot.

Note 4.— Some aircraft equipped with first generation ADS-B avionics do not have the capability of squawking IDENT while the emergency and/or urgency mode is selected.

10.1.2 An aircraft known or believed to be in a state of emergency, including being subjected to unlawful interference, shall be given maximum consideration,

assistance and priority over other aircraft as may be necessitated by the circumstances.

Note.— To indicate that it is in a state of emergency, an aircraft equipped with an appropriate data link capability and/or an SSR transponder might operate the equipment as follows:

a) on Mode A, Code 7700; or

b) on Mode A, Code 7500, to indicate specifically that it is being subjected to unlawful interference; and/or

c) activate the appropriate emergency and/or urgency capability of ADS-B or ADS-C; and/or

d) transmit the appropriate emergency message via CPDLC.

10.1.3 In communications between ATS units and aircraft in the event of an emergency, Human Factors principles shall be observed.

10.1.4 When an emergency is declared by an aircraft, the ATS unit shall take appropriate and relevant action as follows:

a) unless clearly stated by the flight crew or otherwise known, take all necessary steps to ascertain aircraft identification and type, the type of emergency, the intentions of the flight crew as well as the position and level of the aircraft;

b) decide upon the most appropriate type of assistance which can be rendered;

c) enlist the aid of any other ATS unit or other services which may be able to provide assistance to the aircraft;

d) provide the flight crew with any information requested as well as any additional relevant information, such as details on suitable aerodromes, minimum safe altitudes, weather information;

e) obtain from the operator or the flight crew such of the following information as may be relevant: number of persons on board, amount of fuel remaining, possible presence of hazardous materials and the nature thereof; and

f) notify the appropriate ATS units and authorities as specified in local instructions.

10.1.5 Changes of radio frequency and SSR code should be avoided if possible and should normally be made only when or if an improved service can be provided to the aircraft concerned. Manoeuvring instructions to an aircraft experiencing engine failure should be limited to a minimum. When appropriate, other aircraft operating in the vicinity of the aircraft in emergency should be advised of the circumstances.

Note.— Requests to the flight crew for the information contained in 10.1.4 e) will be made only if the information is not available from the operator or from other sources and will be limited to essential information.

10.1.6 When an occurrence of unlawful interference with an aircraft takes place or is suspected, ATS units shall attend promptly to requests by the aircraft. Information pertinent to the safe conduct of the flight shall continue to be transmitted and necessary action shall be taken to expedite the conduct of all phases of the flight, especially the safe landing of the aircraft.

10.1.7 When an occurrence of unlawful interference with an aircraft takes place or is suspected, ATS units shall, in accordance with locally agreed procedures, immediately inform the appropriate designated authority/authorities and exchange necessary information with the operator or its designated representative.

Note 1.— A strayed or unidentified aircraft may be suspected as being the subject of unlawful interference.

10.2 PRIORITY

An aircraft known or believed to be in a state of emergency, including being subjected to unlawful interference, shall be given priority over other aircraft.

10.3 UNLAWFUL INTERFERENCE AND AIRCRAFT BOMB THREAT

10.3.1 ATS personnel shall be prepared to recognize any indication of the occurrence of unlawful interference with an aircraft.

10.3.2 Whenever unlawful interference with an aircraft is suspected, and where automatic distinct display of SSR Mode A Code 7500 and Code 7700 is not provided, the controller shall attempt to verify any suspicion by setting the SSR decoder to Mode A Code 7500 and thereafter to Code 7700.

Note.— An aircraft equipped with an SSR transponder is expected to operate the transponder on Mode A Code 7500 to indicate specifically that it is the subject of unlawful interference. The aircraft may operate the transponder on Mode A Code 7700, to indicate that it is threatened by grave and imminent danger and requires immediate assistance. An aircraft equipped with other surveillance system transmitters, including ADS-B and ADS-C, might send the emergency and/or urgency signal by all of the available means.

10.3.3 Whenever unlawful interference with an aircraft is known or suspected or a bomb threat warning has been received, ATS units shall promptly attend to requests by, or to anticipated needs of, the aircraft, including requests for relevant information relating to air navigation facilities, procedures and services along the route of flight and at any aerodrome of intended landing, and shall take such action as is necessary to expedite the conduct of all phases of the flight.

10.3.4 ATS units shall also:

a) transmit, and continue to transmit, information pertinent to the safe conduct of the flight, without expecting a reply from the aircraft;

b) monitor and plot the progress of the flight with the means available, and coordinate transfer of control with adjacent ATS units without requiring

transmissions or other responses from the aircraft, unless communication with the aircraft remains normal;

c) inform, and continue to keep informed, appropriate ATS units, including those in adjacent FIRs, which may be concerned with the progress of the flight;

Note.— In applying this provision, account must be taken of all the factors which may affect the progress of the flight, including fuel endurance and the possibility of sudden changes in route and destination. The objective is to provide, as far in advance as is practicable in the circumstances, each ATS unit with appropriate information as to the expected or possible penetration of the aircraft into its area of responsibility.

d) notify:

1) the operator or its designated representative;

2) the appropriate rescue coordination centre in accordance with appropriate alerting procedures;

3) the appropriate authority designated by the State;

Note.— It is assumed that the designated security authority and/or the operator will in turn notify other parties concerned in accordance with pre-established procedures.

e) relay appropriate messages, relating to the circumstances associated with the unlawful interference, between the aircraft and designated authorities.

Note.— These messages include, but are not limited to: initial messages declaring an incident; update messages on an existing incident; messages containing decisions made by appropriate decision makers; messages on transfer of responsibility; messages on acceptance of responsibility; messages indicating that an entity is no longer involved in an incident; and messages closing an incident.

10.3.5 The following additional procedures shall apply if a threat is received indicating that a bomb or other explosive device has been placed on board a known aircraft. The ATS unit receiving the threat information shall:

a) if in direct communication with the aircraft, advise the flight crew without delay of the threat and the circumstances surrounding the threat; or

b) if not in direct communication with the aircraft, advise the flight crew by the most expeditious means through other ATS units or other channels.

10.3.6 The ATS unit in communication with the aircraft shall ascertain the intentions of the flight crew and report those intentions to other ATS units which may be concerned with the flight.

10.3.7 The aircraft shall be handled in the most expeditious manner while ensuring, to the extent possible, the safety of other aircraft and that personnel and ground installations are not put at risk.

10.3.8 Aircraft in flight shall be given re-clearance to a requested new destination without delay. Any request by the flight crew to climb or descend for the purpose of equalizing or reducing the differential between the outside air pressure and the cabin air pressure shall be approved as soon as possible.

10.3.9 An aircraft on the ground should be advised to remain as far away from other aircraft and installations as possible and, if appropriate, to vacate the runway. The aircraft should be instructed to taxi to a designated or isolated parking area in accordance with local instructions. Should the flight crew disembark passengers and crew immediately, other aircraft, vehicles and personnel should be kept at a safe distance from the threatened aircraft.

10.3.10 ATS units shall not provide any advice or suggestions concerning action to be taken by the flight crew in relation to an explosive device.

10.3.11 An aircraft known or believed to be the subject of unlawful interference or which for other reasons needs isolation from normal aerodrome activities shall be cleared to the designated isolated parking position. Where such an isolated parking position has not been designated, or if the designated position is not available, the aircraft shall be cleared to a position within the area or areas selected by prior agreement with the aerodrome authority. The taxi clearance shall specify the taxi route to be followed to the parking position. This route shall be selected with a view to minimizing any security risks to the public, other aircraft and installations at the aerodrome.

10.4 EMERGENCY DESCENT

10.4.1 Action by the ATS unit

Upon recognition that an aircraft is making an emergency descent, all appropriate action shall be taken immediately to safeguard all aircraft concerned. Appropriate actions may include the following, in the order appropriate for the circumstance:

a) broadcasting an emergency message;

b) issuing traffic information and/or instructions to aircraft affected by the descent;

c) advising the minimum flight altitude and altimeter setting for the area of operation; and

d) informing any other ATS units which may be affected by the emergency descent.

10.4.2 Action by the pilot of the aircraft in an emergency descent

The pilot shall take the following steps as soon as practicable in the order appropriate for the circumstance:

a) navigate as deemed appropriate by the pilot;

b) advise the appropriate ATS unit of the emergency descent and, if able, intentions;

c) set transponder to Code 7700 and, if applicable, select the appropriate emergency mode on ADS-B and/or ADS-C;

d) turn on aircraft exterior lights (commensurate with appropriate operating limitations);

e) watch for conflicting traffic both visually and by reference to ACAS (if equipped); and
f) when emergency descent is complete, coordinate further intentions with the appropriate ATS unit.

10.4.3 Action by the pilot of the aircraft receiving emergency descent broadcast

Unless specifically instructed by the ATS unit to clear the area or threatened by immediate danger, the pilot shall take the following actions:
a) continue according to current clearance and maintain listening watch on the frequency in use for any further instructions from the ATS unit; and
b) watch for conflicting traffic both visually and by reference to ACAS (if equipped).

10.5 SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES IN OCEANIC AIRSPACE

[Reserved]

10.6 AIR-GROUND COMMUNICATIONS FAILURE

Note 1.— Procedures to be applied in relation to an aircraft experiencing air-ground communication failure when providing ATS surveillance services are contained in 8.8.3 of the ICAO Doc 4444.

Note 2.— An aircraft equipped with an SSR transponder is expected to operate the transponder on Mode A Code 7600 to indicate that it has experienced air-ground communication failure. An aircraft equipped with other surveillance system transmitters, including ADS-B and ADS-C, might indicate the loss of air-ground communication by all of the available means.

Note 3.— Some aircraft equipped with first generation ADS-B avionics have the capability to transmit a general emergency alert only, regardless of the code selected by the pilot.

Note 4.— See also 6.3.2.5 of the ICAO Doc 4444, concerning departure clearances containing no geographical or time limit for a cleared level below the flight planned level and procedures to be applied in relation to an aircraft experiencing air-ground communication failure under such circumstances.

10.6.1 Action by ATC units when unable to maintain two-way communication with an aircraft operating in a control area or control zone shall be as outlined as follows:

10.6.2 As soon as it is known that two-way communication has failed, action shall be taken to ascertain whether the aircraft is able to receive transmissions from the ATC unit by requesting it to execute a specified manoeuvre which can be observed by an ATS surveillance system or to transmit, if possible, a specified signal in order to indicate acknowledgement.

Note.— Some aircraft equipped with first generation ADS-B avionics do not have the capability of squawking IDENT while the emergency and/or urgency mode is selected.

10.6.3 If the aircraft fails to indicate that it is able to receive and acknowledge transmissions, separation shall be maintained between the aircraft having the communication failure and other aircraft, based on the assumption that the aircraft will:

a) if in VMC:

1) continue to fly in VMC;

2) land at the nearest suitable aerodrome; and

3) report its arrival by the most expeditious means to the appropriate ATC unit; or

b) if in IMC or when conditions are such that it does not appear likely that the pilot will complete the flight in accordance with a):

1) unless otherwise prescribed on the basis of a regional air navigation agreement, in airspace where

procedural separation is being applied, 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; or

2) in airspace where an ATS surveillance system is used in the provision of ATC, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 7 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 the ADS-B transmitter is set to indicate the loss of air-ground communications; or

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;

3) when being vectored or having been directed by ATC to proceed offset using RNAV without a specified limit, proceed in the most direct manner possible to rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude;

4) 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 5), hold over this aid or fix until commencement of descent;

5) commence descent from the navigation aid or fix specified in 4) 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;

6) complete a normal instrument approach procedure as specified for the designated navigation aid or fix; and

7) land, if possible, within 30 minutes after the estimated time of arrival specified in 5) or the last acknowledged expected approach time, whichever is later.

Note 1.— As evidenced by the meteorological conditions prescribed therein, 15.3.3 a) relates to all controlled flights, whereas 15.3.3 b) relates only to IFR flights.

Note 2.— See also 8.6.5.1 b) concerning the requirement for the flight crew to be informed of what a vector is to accomplish and the limit of the vector.

10.6.4 Action taken to ensure suitable separation shall cease to be based on the assumption stated in 10.6.3 when:

a) it is determined that the aircraft is following a procedure differing from that in 10.6.3; or

b) through the use of electronic or other aids, ATC units determine that action differing from that required by 10.6.3 may be taken without impairing safety; or

c) positive information is received that the aircraft has landed.

10.6.5 As soon as it is known that two-way communication has failed, appropriate information describing the action taken by the ATC unit, or instructions justified by any emergency situation, shall be transmitted blind for the attention of the aircraft concerned, on the frequencies available on which the aircraft is believed to be listening, including the voice frequencies of available radio navigation or approach aids. Information shall also be given concerning:

a) meteorological conditions favourable to a cloud-breaking procedure in areas where congested traffic may be avoided; and

b) meteorological conditions at suitable aerodromes.

10.6.6 Pertinent information shall be given to other aircraft in the vicinity of the presumed position of the aircraft experiencing the failure.

10.6.7 As soon as it is known that an aircraft which is operating in its area of responsibility is experiencing an apparent radiocommunication failure, an ATS unit shall forward information concerning the radiocommunication failure to all ATS units concerned along the route of flight. The ACC in whose area the destination aerodrome is located shall take steps to obtain information on the alternate aerodrome(s) and other relevant information specified in the filed flight plan, if such information is not available.

10.6.8 If circumstances indicate that a controlled flight experiencing a communication failure might proceed to (one of) the alternate aerodrome(s) specified in the filed flight plan, the ATC unit(s) serving the alternate aerodrome(s) and any other ATC units that might be affected by a possible diversion shall be informed of the circumstances of the failure and requested to attempt to establish communication with the aircraft at a time when the aircraft could possibly be within communication range. This shall apply particularly when, by agreement with the operator or a designated representative, a clearance has been transmitted blind to the aircraft concerned to proceed to an alternate aerodrome, or when meteorological conditions at the aerodrome of intended landing are such that a diversion to an alternate is considered likely.

10.6.9 When an ATC unit receives information that an aircraft, after experiencing a communication failure has re-established communication or has landed, that unit shall inform the ATS unit in whose area the aircraft was operating at the time the failure occurred, and other ATS units concerned along the route of flight, giving necessary information for the continuation of control if the aircraft is continuing in flight.

10.6.10 If the aircraft has not reported within thirty minutes after:

a) the estimated time of arrival furnished by the pilot;

b) the estimated time of arrival calculated by the ACC; or

c) the last acknowledged expected approach time,

whichever is latest, pertinent information concerning the aircraft shall be forwarded to aircraft operators, or their designated representatives, and pilots-in-command of any aircraft concerned and normal control resumed if they so desire. It is the responsibility of the aircraft operators, or their designated representatives, and pilots-in-command of aircraft to determine whether they will resume normal operations or take other action.

10.7 ASSISTANCE TO VFR FLIGHTS

10.7.1 Strayed VFR flights and VFR flights encountering adverse meteorological conditions

10.7.1.1 A VFR flight reporting that it is uncertain of its position or lost, or encountering adverse meteorological conditions, shall be considered to be in a state of emergency and handled as such. The controller shall, under such circumstances, communicate in a clear, concise and calm manner and care shall be taken, at this stage, not to question any fault or negligence that the pilot may have committed in the preparation or conduct of the flight. Depending on the circumstances, the pilot should be requested to provide any of the following information considered pertinent so as to better provide assistance:

a) aircraft flight conditions;

b) position (if known) and level;

c) airspeed and heading since last known position, if pertinent;

d) pilot experience;

e) navigation equipment carried and if any navigation aid signals are being received;

f) SSR mode and code selected if relevant;

g) ADS-B capability;

h) departure and destination aerodromes;

i) number of persons on board;

j) endurance.

10.7.1.2 If communications with the aircraft are weak or distorted, it should be suggested that the aircraft climb to a higher level, provided meteorological conditions and other circumstances permit.

10.7.1.3 Navigation assistance to help the pilot determine the aircraft position may be provided by use of an ATS surveillance system, direction-finder, navigation aids or sighting by another aircraft. Care must be taken when providing navigation assistance to ensure that the aircraft does not enter cloud.

Note.— The possibility of a VFR flight becoming strayed as a result of encountering adverse meteorological conditions must be recognized.

10.7.1.4 The pilot shall be provided with reports and information on suitable aerodromes in the vicinity where VMC exist.

10.7.1.5 If reporting difficulty in maintaining or unable to maintain VMC, the pilot should be informed of the minimum flight altitude of the area where the aircraft is, or is believed to be. If the aircraft is below that level, and the position of the aircraft has been established with a sufficient degree of probability, a track or heading, or a climb, may be suggested to bring the aircraft to a safe level.

10.7.1.6 Assistance to a VFR flight should only be provided using an ATS surveillance system upon the request or concurrence of the pilot. The type of service to be provided should be agreed with the pilot.

10.7.1.7 When providing such assistance in adverse meteorological conditions, the primary objective should be to bring the aircraft into VMC as soon as possible. Caution must be exercised to prevent the aircraft from entering cloud.

10.7.1.8 Should circumstances be such that IMC cannot be avoided by the pilot, the following guidelines may be followed:

a) other traffic on the ATC frequency not able to provide any assistance may be instructed to change to another frequency to ensure uninterrupted communications with the aircraft; alternatively the aircraft being assisted may be instructed to change to another frequency;

b) ensure, if possible, that any turns by the aircraft are carried out clear of cloud;

c) instructions involving abrupt manoeuvres should be avoided; and

d) instructions or suggestions to reduce speed of the aircraft or to lower the landing gear, should, if possible, be carried out clear of cloud.

10.8 OTHER IN-FLIGHT CONTINGENCIES

10.8.1 Strayed or unidentified aircraft

10.8.1.1 As soon as an air traffic services unit becomes aware of a strayed aircraft, it shall take all necessary steps as outlined in 10.8.1.2 and 10.8.1.3 to assist the aircraft and to safeguard its flight.

Note 1.— Navigational assistance by an air traffic services unit is particularly important if the unit becomes aware of an aircraft straying, or about to stray, into an area where there is a risk of interception or other hazard to its safety.

Note 2.— An aircraft may be considered, at the same time, as a "strayed aircraft" by one unit and as an "unidentified aircraft" by another unit.

10.8.1.2 If the aircraft's position is not known, the air traffic services unit shall:

a) attempt to establish two-way communication with the aircraft, unless such communication already exists;

b) use all available means to determine its position;

c) inform other ATS units into whose area the aircraft may have strayed or may stray, taking into account all the factors which may have affected the navigation of the aircraft in the circumstances;

d) inform, in accordance with locally agreed procedures, appropriate military units and provide them with pertinent flight plan and other data concerning the strayed aircraft;

e) request from the units referred to in c) and d) and from other aircraft in flight every assistance in establishing communication with the aircraft and determining its position.

Note.— The requirements in d) and e) apply also to ATS units informed in accordance with c).

10.8.1.3 When the aircraft's position is established, the ATS unit shall:

a) advise the aircraft of its position and corrective action to be taken; and

b) provide, as necessary, other ATS units and appropriate military units with relevant information concerning the strayed aircraft and any advice given to that aircraft.

10.8.1.4 As soon as an ATS unit becomes aware of an unidentified aircraft in its area, it shall endeavour to establish the identity of the aircraft whenever this is necessary for the provision of ATS or required by the appropriate military authorities in accordance with locally agreed procedures. To this end, the ATS unit shall take such of the following steps as are appropriate in the circumstances:

a) attempt to establish two-way communication with the aircraft;

b) inquire of other ATS units within the FIR about the flight and request their assistance in establishing two-way communication with the aircraft;

c) inquire of ATS units serving the adjacent FIRs about the flight and request their assistance in establishing two-way communication with the aircraft;
d) attempt to obtain information from other aircraft in the area.

10.8.1.5 The ATS unit shall, as necessary, inform the appropriate military unit as soon as the identity of the aircraft has been established.

10.8.1.6 Should the ATS unit consider that a strayed or unidentified aircraft may be the subject of unlawful interference, the appropriate authority designated by the State shall immediately be informed, in accordance with locally agreed procedures.

10.8.2 Interception of civil aircraft

10.8.2.1 As soon as an ATS unit learns that an aircraft is being intercepted in its area of responsibility, it shall take such of the following steps as are appropriate in the circumstances:
a) attempt to establish two-way communication with the intercepted aircraft via any means available, including the emergency frequency 121.5 MHz, unless such communication already exists;
b) inform the pilot of the intercepted aircraft of the interception;
c) establish contact with the intercept control unit maintaining two-way communication with the intercepting aircraft and provide it with available information concerning the aircraft;
d) relay messages between the intercepting aircraft or the intercept control unit and the intercepted aircraft, as necessary;
e) in close coordination with the intercept control unit take all necessary steps to ensure the safety of the intercepted aircraft; and
f) inform ATS units serving adjacent FIRs if it appears that the aircraft has strayed from such adjacent FIRs.

10.8.2.2 As soon as an ATS unit learns that an aircraft is being intercepted outside its area of responsibility, it shall take such of the following steps as are appropriate in the circumstances:

a) inform the ATS unit serving the airspace in which the interception is taking place, providing this unit with available information that will assist in identifying the aircraft and requesting it to take action in accordance with 10.8.2.1;

b) relay messages between the intercepted aircraft and the appropriate ATS unit, the intercept control unit or the intercepting aircraft.

10.8.3 Fuel dumping

10.8.3.1 General

10.8.3.1.1 An aircraft in an emergency or other urgent situations may need to dump fuel so as to reduce to maximum landing mass in order to effect a safe landing.

10.8.3.1.2 When an aircraft operating within controlled airspace needs to dump fuel, the flight crew shall advise ATC. The ATC unit shall then coordinate with the flight crew the following:

a) the route to be flown, which, if possible, should be clear of cities and towns, preferably over water and away from areas where thunderstorms have been reported or are expected;

b) the level to be used, which should be not less than 1 800 m (6 000 ft); and

c) the duration of the fuel dumping.

10.8.3.2 Separation

Other known traffic shall be separated from the aircraft dumping fuel by:

a) at least 19 km (10 NM) horizontally, but not behind the aircraft dumping fuel;

b) vertical separation if behind the aircraft dumping fuel within 15 minutes flying time or a distance of 93 km

(50 NM) by:

1) at least 300 m (1 000 ft) if above the aircraft dumping fuel; and

2) at least 900 m (3 000 ft) if below the aircraft dumping fuel.

Note.— The horizontal boundaries of the area within which other traffic requires appropriate vertical separation extend for 19 km (10 NM) either side of the track flown by the aircraft which is dumping fuel, from 19 km (10 NM) ahead, to 93 km (50 NM) or 15 minutes along track behind it (including turns).

10.8.3.3 Communications

If the aircraft will maintain radio silence during the fuel dumping operation, the frequency to be monitored by the flight crew and the time when radio silence will terminate should be agreed.

10.8.3.4 Information to other ATS units and non-controlled traffic

10.8.3.4.1 A warning message shall be broadcast on appropriate frequencies for non-controlled traffic to remain clear of the area concerned. Adjacent ATC units and control sectors should be informed of the fuel dumping taking place and requested to broadcast on applicable frequencies an appropriate warning message for other traffic to remain clear of the area concerned.

10.8.3.4.2 Upon completion of the fuel dumping, adjacent ATC units and control sectors should be advised that normal operations can be resumed.

10.8.4 Fuel emergency and minimum fuel

10.8.4.1 When a pilot reports a state of minimum fuel, the controller shall inform the pilot as soon as practicable of any anticipated delays or that no delays are expected.

Note.— The declaration of MINIMUM FUEL informs ATC that all planned aerodrome options have been reduced to a specific aerodrome of intended landing, and any change to the existing clearance may result in landing with less than planned final reserve fuel. This is not an emergency situation but an indication that an emergency situation is possible
should any additional delay occur.

10.8.5 Descents by aircraft due to solar radiation from space weather events

ATC units shall be prepared for the possibility that aircraft may, on rare occasions, experience a rise in solar radiation which requires them to descend to lower levels. When such a situation is known or suspected, ATC units shall take all possible action to safeguard all aircraft concerned, including any aircraft affected by the descent.

Note.— All aircraft in a particular portion of airspace and above a certain altitude may be affected at the same time, and the event may be accompanied by a deterioration or loss of air ground communications. It is expected that the aircraft will alert ATC units before the radiation reaches a critical level and will request a descent clearance when the critical level is reached. However, situations may occur in which the aircraft will need to descend without waiting for a clearance. In such cases, the aircraft are expected to advise air traffic control units, as soon as possible, of the emergency action taken.

10.9 ATC CONTINGENCIES

The various circumstances surrounding each contingency situation preclude the establishment of exact detailed procedures to be followed. The procedures outlined below are intended as a general guide to ATS personnel.

10.9.1 Radiocommunications contingencies

10.9.1.1 General

ATC contingencies related to communications, i.e. circumstances preventing a controller from communicating with aircraft under control, may be caused by either a failure of ground radio equipment, a failure of airborne equipment, or by the control frequency being inadvertently blocked by an aircraft transmitter. The duration of such events may be for prolonged periods and appropriate action to ensure that the safety of aircraft is not affected shall therefore be taken immediately.

10.9.1.2 Ground radio failure

10.9.1.2.1 In the event of complete failure of the ground radio equipment used for ATC, the controller shall:

a) where aircraft are required to keep a listening watch on the emergency frequency 121.5 MHz, attempt to establish radiocommunications on that frequency;

b) without delay inform all adjacent control positions or ATC units, as applicable, of the failure;

c) appraise such positions or units of the current traffic situation;

d) if practicable, request their assistance, in respect of aircraft which may establish communications with those positions or units, in establishing separation between and maintaining control of such aircraft; and

e) instruct adjacent control positions or ATC units to hold or re-route all controlled flights outside the area of responsibility of the position or ATC unit that has experienced the failure until such time that the provision of normal services can be resumed.

10.9.1.2.2 In order to reduce the impact of complete ground radio equipment failure on the safety of air traffic, the ATS Provider shall establish contingency procedures to be followed by control positions and ATC units in the event of such failures. Where

feasible and practicable, such contingency procedures shall provide for the delegation of control to an adjacent control position or ATC unit in order to permit a minimum level of services to be provided as soon as possible, following the ground radio failure and until normal operations can be resumed.

10.9.1.3 Blocked frequency

10.9.1.3.1 In the event that the control frequency is inadvertently blocked by an aircraft transmitter, the following additional steps should be taken:

a) attempt to identify the aircraft concerned;

b) if the aircraft blocking the frequency is identified, attempts should be made to establish communication with that aircraft, e.g. on the emergency frequency 121.5 MHz, by SELCAL, through the aircraft operator's company frequency if applicable, on any VHF frequency designated for air-to-air use by flight crews or any other communication means or, if the aircraft is on the ground, by direct contact;

c) if communication is established with the aircraft concerned, the flight crew shall be instructed to take immediate action to stop inadvertent transmissions on the affected control frequency.

10.9.1.4 Unauthorized use of ATC frequency

10.9.1.4.1 Instances of false and deceptive transmissions on ATC frequencies which may impair the safety of aircraft can occasionally occur. In the event of such occurrences, the ATC unit concerned shall:

a) correct any false or deceptive instructions or clearances which have been transmitted;

b) advise all aircraft on the affected frequency(ies) that false and deceptive instructions or clearances are being transmitted;

c) instruct all aircraft on the affected frequency(ies) to verify instructions and clearances before taking action to comply;

d) if practical, instruct aircraft to change to another frequency; and

e) if possible, advise all aircraft affected when the false and deceptive instructions or clearances are no longer
being transmitted.

10.9.1.4.2 Flight crews shall challenge or verify with the ATC unit concerned any instruction or clearance issued to them which they suspect may be false or deceptive.

10.9.1.4.3 When the transmission of false or deceptive instructions and clearances is detected, the ATS Provider shall take all necessary action to have the transmitter located and the transmission terminated.

10.9.2 Emergency separation

10.9.2.1 If, during an emergency situation, it is not possible to ensure that the applicable horizontal separation can be maintained, emergency separation of half the applicable vertical separation minimum may be used, i.e. 150 m (500 ft) between aircraft in airspace where a vertical separation minimum of 300 m (1 000 ft) is applied, and 300 m (1 000 ft) between aircraft in airspace where a 600 m (2 000 ft) vertical separation minimum is applied.

10.9.2.2 When emergency separation is applied the flight crews concerned shall be advised that emergency separation is being applied and informed of the actual minimum used. Additionally, all flight crews concerned shall be provided with essential traffic information.

10.9.3 Short-term conflict alert (STCA) procedures

Note 1.— The generation of short-term conflict alerts is a function based on surveillance data, integrated into an ATC system. The objective of the STCA function is to assist the controller in preventing collision between aircraft by generating, in a timely manner, an alert of a potential or actual infringement of separation minima.

Note 2. — In the STCA function the current and predicted three-dimensional positions of aircraft with pressure-altitude reporting capability are monitored for proximity. If the distance between the three-dimensional positions of two aircraft is predicted to be reduced to less than the defined applicable separation minima within a specified time period, an acoustic and/or visual alert will be generated to the controller within whose jurisdiction area the aircraft is operating.

10.9.3.1 Local instructions concerning use of the STCA function shall specify, inter alia:

a) the types of flight which are eligible for generation of alerts;

b) the sectors or areas of airspace within which the STCA function is implemented;

c) the method of displaying the STCA to the controller;

d) in general terms, the parameters for generation of alerts as well as alert warning time;

e) the volumes of airspace within which STCA can be selectively inhibited and the conditions under which this will be permitted;

f) conditions under which specific alerts may be inhibited for individual flights; and

g) procedures applicable in respect of volume of airspace or flights for which STCA or specific alerts have been inhibited.

10.9.3.2 In the event an STCA is generated in respect of controlled flights, the controller shall without delay assess the situation and, if necessary, take action to ensure that the applicable separation minimum will not be infringed or will be restored.

10.9.3.3 Following the generation of an STCA, controllers shall be required to complete an air traffic incident report only in the event that a separation minimum was infringed.

10.9.3.4 The ATS Provider should retain electronic records of all alerts generated. The data and circumstances pertaining to each alert should be analysed to determine whether an alert was justified or not. Non-justified alerts, e.g. when visual separation was applied, should be ignored. A statistical analysis should be made of justified alerts

in order to identify possible shortcomings in airspace design and ATC procedures as well as to monitor overall safety levels.

10.9.4 Procedures in regard to aircraft equipped with airborne collision avoidance systems (ACAS)

10.9.4.1 The procedures to be applied for the provision of ATS to aircraft equipped with ACAS shall be identical to those applicable to non-ACAS equipped aircraft. In particular, the prevention of collisions, the establishment of appropriate separation and the information which might be provided in relation to conflicting traffic and to possible avoiding action shall conform with the normal ATS procedures and shall exclude consideration of aircraft capabilities dependent on ACAS equipment.

10.9.4.2 When a pilot reports an ACAS resolution advisory (RA), the controller shall not attempt to modify the aircraft flight path until the pilot reports "Clear of Conflict".

10.9.4.3 Once an aircraft departs from its ATC clearance or instruction in compliance with an RA, or a pilot reports an RA, the controller ceases to be responsible for providing separation between that aircraft and any other aircraft affected as a direct consequence of the manoeuvre induced by the RA. The controller shall resume responsibility for providing separation for all the affected aircraft when:

a) the controller acknowledges a report from the flight crew that the aircraft has resumed the current clearance; or

b) the controller acknowledges a report from the flight crew that the aircraft is resuming the current clearance and issues an alternative clearance which is acknowledged by the flight crew.

10.9.4.4 ACAS can have a significant effect on ATC. Therefore, the performance of ACAS in the ATC environment shall be monitored.

10.9.4.5 Following a significant ACAS event, pilots and controllers shall complete an air traffic incident report.

Note.— The ACAS capability of an aircraft may not be known to air traffic controllers.

10.9.5 Minimum safe altitude warning (MSAW) procedures

Note 1.— The generation of minimum safe altitude warnings is a function of an ATC radar data-processing system. The objective of the MSAW function is to assist in the prevention of controlled flight into terrain accidents by generating, in a timely manner, a warning of the possible infringement of a minimum safe altitude.

Note 2.— In the MSAW function, the reported levels from aircraft with pressure-altitude reporting capability are monitored against defined minimum safe altitudes. When the level of an aircraft is detected or predicted to be less than the applicable minimum safe altitude, an acoustic and visual warning will be generated to the controller within whose jurisdiction area the aircraft is operating.

10.9.5.1 Local instructions concerning use of the MSAW function shall specify, *inter alia*:

a) the types of flight which are eligible for generation of MSAW;

b) the sectors or areas of airspace for which MSAW minimum safe altitudes have been defined and within which the MSAW function is implemented;

c) the values of the defined MSAW minimum safe altitudes;

d) the method of displaying the MSAW to the controller;

e) the parameters for generation of MSAW as well as warning time; and

f) conditions under which the MSAW function may be inhibited for individual aircraft tracks as well as procedures applicable in respect of flights for which MSAW has been inhibited.

10.9.5.2 In the event an MSAW is generated in respect of a controlled flight, the following action shall be taken without delay:

a) if the aircraft is being vectored, the aircraft shall be instructed to climb immediately to the applicable safe level and, if necessary to avoid terrain, be assigned a new heading;

b) in other cases, the flight crew shall immediately be advised that a minimum safe altitude warning has been generated and be instructed to check the level of the aircraft.

10.9.5.3 Following an MSAW event, controllers shall complete an air traffic incident report only in the event that a minimum safe altitude was unintentionally infringed with a potential for controlled flight into terrain by the aircraft concerned.

10.9.6 Autonomous runway incursion warning system (ARIWS)

[Reserved]

10.9.7 Change of radiotelephony call sign for aircraft

10.9.7.1 An ATC unit may instruct an aircraft to change its type of RTF call sign, in the interests of safety, when similarity between two or more aircraft RTF call signs are such that confusion is likely to occur.

10.9.7.2 Any such change to the type of call sign shall be temporary and shall be applicable only within the airspace(s) where the confusion is likely to occur.

10.9.7.3 To avoid confusion, the ATC unit shall, if appropriate, identify the aircraft which will be instructed to change its call sign by referring to its position and/or level.

10.9.7.4 When an ATC unit changes the type of call sign of an aircraft, that unit shall ensure that the aircraft reverts to the call sign indicated by the flight plan when the aircraft

is transferred to another ATC unit, except when the call sign change has been coordinated between the two ATC units concerned.

10.9.7.5 The appropriate ATC unit shall advise the aircraft concerned when it is to revert to the call sign indicated by the flight plan.

10.9.8 Procedures for ATS units when a volcanic ash cloud is reported or forecast

10.9.8.1 If a volcanic ash cloud is reported or forecast in the airspace for which the ATS unit is responsible, the following actions should be taken:

a) relay pertinent information immediately to flight crews whose aircraft could be affected to ensure that they are aware of the ash cloud's current and forecast position and the flight levels affected;

b) accommodate requests for re-routing or level changes to the extent practicable;

c) suggest re-routing to avoid or exit areas of reported or forecast ash clouds when requested by the pilot or deemed necessary by the controller; and

d) when practicable, request a special air-report when the route of flight takes the aircraft into or near the forecast ash cloud and provide such special air-reports to the appropriate agencies.

10.9.8.2 When the flight crew advises the ATS unit that the aircraft has inadvertently entered a volcanic ash cloud, the ATS unit should:

a) take such action applicable to an aircraft in an emergency situation; and

b) initiate modifications of route or level assigned only when requested by the pilot or necessitated by airspace requirements or traffic conditions.

10.9.9 Emergencies, hazards and equipment failures where surveillance-based ATS is provided

10.9.9.1 The provisions governing:

a. emergencies;

b. collision hazard information;

c. failure of equipment including:

i. aircraft radio transmitter failure;

ii. complete aircraft communication failure;

iii. aircraft transponder failure in areas where the carriage of a functioning transponder is mandatory;

d. ATS surveillance system failure;

e. degradation of aircraft position source data; and

f. ground radio failure

shall be as prescribed in Chapter 8 of the ICAO Doc 4444.

APPENDIX 1 – PRINCIPLES GOVERNING THE IDENTIFICATION OF NAVIGATION SPECIFICATIONS AND THE IDENTIFICATION OF ATS ROUTES OTHER THAN STANDARD DEPARTURE AND ARRIVAL ROUTES

1. DESIGNATORS FOR ATS ROUTES AND NAVIGATION SPECIFICATIONS

1.1 The purpose of a system of route designators and navigation specification(s) applicable to specified ATS route segment(s), route(s) or area is to allow both pilots and ATS, taking into account automation requirements:

a) to make unambiguous reference to any ATS route without the need to resort to the use of geographical coordinates or other means in order to describe it;

b) to relate an ATS route to a specific vertical structure of the airspace, as applicable;

c) to indicate a required level of navigation performance accuracy, when operating along an ATS route or within a specified area; and

d) to indicate that a route is used primarily or exclusively by certain types of aircraft.

Note.— In relation to this appendix and for flight planning purposes, a prescribed navigation specification is not considered an integral part of the ATS route designator.

1.2 In order to meet this purpose, the designation system shall:

a) permit the identification of any ATS route in a simple and unique manner;

b) avoid redundancy;

c) be usable by both ground and airborne automation systems;

d) permit utmost brevity in operational use; and

e) provide sufficient possibility of extension to cater for any future requirements without the need for fundamental changes.

1.3 Controlled, advisory and uncontrolled ATS routes, with the exception of standard arrival and departure routes, shall therefore be identified as specified hereafter.

2. COMPOSITION OF DESIGNATOR

2.1 The ATS route designator shall consist of a basic designator supplemented, if necessary, by:

a) one prefix as prescribed in 2.3; and

b) one additional letter as prescribed in 2.4.

2.1.1 The number of characters required to compose the designator shall not exceed six characters.

2.1.2 The number of characters required to compose the designator should, whenever possible, be kept to a maximum of five characters.

2.2 The basic designator shall consist of one letter of the alphabet followed by a number from 1 to 999.

2.2.1 Selection of the letter shall be made from those listed hereunder:

a) A, B, G, R for routes which form part of the regional networks of ATS routes and are not area navigation routes;

b) L, M, N, P for area navigation routes which form part of the regional networks of ATS routes;

c) H, J, V, W for routes which do not form part of the regional networks of ATS routes and are not area navigation routes;

d) Q, T, Y, Z for area navigation routes which do not form part of the regional networks of ATS routes.

2.3 Where applicable, one supplementary letter shall be added as a prefix to the basic designator in accordance with the following:

a) K to indicate a low-level route established for use primarily by helicopters;

b) U to indicate that the route or portion thereof is established in the upper airspace;

c) S to indicate a route established exclusively for use by supersonic aircraft during acceleration, deceleration and while in supersonic flight.

2.4 When prescribed by the ATS Provider or on the basis of regional air navigation agreements, a supplementary letter may be added after the basic designator of the ATS route in question in order to indicate the type of service provided in accordance with the following:

a) the letter F to indicate that on the route or portion thereof advisory service only is provided;

b) the letter G to indicate that on the route or portion thereof flight information service only is provided.

Note 1.— Due to limitations in the display equipment on board aircraft, the supplementary letters "F" or "G" may not be displayed to the pilot.

Note 2.— Implementation of a route or a portion thereof as controlled route, advisory route or flight information route is indicated in aeronautical charts and aeronautical information publications in accordance with the provisions in the Civil Aviation Requirements for the Aeronautical Charts 2024 and the Civil Aviation Requirements for AIS 2024.

3. ASSIGNMENT OF BASIC DESIGNATORS

3.1 Basic ATS route designators shall be assigned in accordance with the following principles.

3.1.1 The same basic designator shall be assigned to a main trunk route throughout its entire length, irrespective of terminal control areas, States or regions traversed.

Note.— This is of particular importance where automated ATS data processing and computerized airborne navigation equipment is used.

3.1.2 Where two or more trunk routes have a common segment, the segment in question shall be assigned each of the designators of the routes concerned, except where this would present difficulties in the provision of air traffic service, in which case, by common agreement, one designator only shall be assigned.

3.1.3 A basic designator assigned to one route shall not be assigned to any other route.

3.1.4 Guyana's requirements for designators shall be notified to the Regional Offices of ICAO for coordination.

4. USE OF DESIGNATORS IN COMMUNICATIONS

4.1 In printed communications, the designator shall be expressed at all times by not less than two and not more than six characters.

4.2 In voice communications, the basic letter of a designator shall be spoken in accordance with the ICAO spelling alphabet.

4.3 Where the prefixes K, U or S specified in 2.3 are used, they shall, in voice communications, be spoken as follows:

K — KOPTER

U — UPPER

S — SUPERSONIC

The word "kopter" shall be pronounced as in the word "helicopter" and the words "upper" and "supersonic" as in the English language.

4.4 Where the letters "F" or "G" specified in 2.4 are used, the flight crew should not be required to use them in voice communications.

APPENDIX 2 – PRINCIPLES GOVERNING THE ESTABLISHMENT AND IDENTIFICATION OF SIGNIFICANT POINTS

1. ESTABLISHMENT OF SIGNIFICANT POINTS

1.1 Significant points should, whenever possible, be established with reference to ground-based or space-based radio navigation aids, preferably VHF or higher frequency aids.

1.2 Where such ground-based or space-based radio navigation aids do not exist, significant points shall be established at locations which can be determined by self-contained airborne navigation aids, or, where navigation by visual reference to the ground is to be effected, by visual observation. Specific points may be designated as ''transfer of control'' points by agreement between adjacent ATC units or control positions concerned.

2. DESIGNATORS FOR SIGNIFICANT POINTS MARKED BY THE SITE OF A RADIO NAVIGATION AID

2.1 Plain language name for significant points marked by the site of a radio navigation aid

2.1.1 Whenever practicable, significant points shall be named with reference to an identifiable and preferably prominent geographical location.

2.1.2 In selecting a name for the significant point, care shall be taken to ensure that the following conditions are met:

a) the name shall not create difficulties in pronunciation for pilots or ATS personnel when speaking in the language used in ATS communications. Where the name of a geographical location in the national language selected for designating a significant point gives rise to difficulties in pronunciation, an abbreviated or contracted version of this name, which retains as much of its geographical significance as possible, shall be selected;

Example: FUERSTENFELDBRUCK = FURSTY

b) the name shall be easily recognizable in voice communications and shall be free of ambiguity with those of other significant points in the same general area. In addition, the name shall not create confusion with respect to other communications exchanged between air traffic services and pilots;

c) the name should, if possible, consist of at least six letters and form two syllables and preferably not more than three;

d) the selected name shall be the same for both the significant point and the radio navigation aid marking it.

2.2 Composition of coded designators for significant points marked by the site of a radio navigation aid

2.2.1 The coded designator shall be the same as the radio identification of the radio navigation aid. It shall be so composed, if possible, as to facilitate association with the name of the point in plain language.

2.2.2 Coded designators shall not be duplicated within 1 100 km (600 NM) of the location of the radio navigation aid concerned, except as noted hereunder.

Note.— When two radio navigation aids operating in different bands of the frequency spectrum are situated at the same
location, their radio identifications are normally the same.

2.3 Guyana's requirements for coded designators shall be notified to the Regional Offices of ICAO for coordination.

3. DESIGNATORS FOR SIGNIFICANT POINTS NOT MARKED BY THE SITE OF A RADIO NAVIGATION AID

3.1 Where a significant point is required at a position not marked by the site of a radio navigation aid, and is used for ATC purposes, it shall be designated by a unique five-letter pronounceable "name-code". This name-code designator then serves as the name as well as the coded designator of the significant point.

3.2 The name-code designator shall be selected so as to avoid any difficulties in pronunciation by pilots or ATS
personnel when speaking in the language used in ATS communications.

Examples: ADOLA, KODAP

3.3 The name-code designator shall be easily recognizable in voice communications and shall be free of ambiguity with those used for other significant points in the same general area.

3.4 The unique five-letter pronounceable name-code designator assigned to a significant point shall not be assigned to any other significant point. When there is a need to relocate a significant point, a new name-code designator shall be chosen. In cases when a State wishes to keep the allocation of specific name-codes for reuse at a different location, such name-codes shall not be used until after a period of at least six months.

3.5 In areas where no system of fixed routes is established or where the routes followed by aircraft vary depending on operational considerations, significant points shall be determined and reported in terms of WGS-84 geographical coordinates, except that permanently established significant points serving as exit and/or entry points into such areas shall be designated in accordance with the applicable provisions in 2 or 3.

4. USE OF DESIGNATORS IN COMMUNICATIONS

4.1 Normally the name selected in accordance with 2 or 3 shall be used to refer to the significant point in voice communications. If the plain language name for a significant point marked by the site of a radio navigation aid selected in accordance with 2.1 is not used, it shall be replaced by the coded designator which, in voice communications, shall be spoken in accordance with the ICAO spelling alphabet.

4.2 In printed and coded communications, only the coded designator or the selected name-code shall be used to refer to a significant point.

5. SIGNIFICANT POINTS USED FOR REPORTING PURPOSES

5.1 In order to permit ATS to obtain information regarding the progress of aircraft in flight, selected significant points may need to be designated as reporting points.

5.2 In establishing such points, consideration shall be given to the following factors:

a) the type of air traffic services provided;

b) the amount of traffic normally encountered;

c) the accuracy with which aircraft are capable of adhering to the current flight plan;

d) the speed of the aircraft;

e) the separation minima applied;

f) the complexity of the airspace structure;

g) the control method(s) employed;

h) the start or end of significant phases of a flight (climb, descent, change of direction, etc.);

i) transfer of control procedures;

j) safety and search and rescue aspects;

k) the cockpit and air-ground communication workload.

5.3 Reporting points shall be established either as "compulsory" or as "on-request".

5.4 In establishing "compulsory" reporting points, the following principles shall apply:

a) compulsory reporting points shall be limited to the minimum necessary for the routine provision of information to ATS units on the progress of aircraft in flight, bearing in mind the need to keep cockpit and controller workload and air-ground communications load to a minimum;

b) the availability of a radio navigation aid at a location should not necessarily determine its designation as a compulsory reporting point;

c) compulsory reporting points should not necessarily be established at flight information region or control area boundaries.

5.5 "On-request" reporting points may be established in relation to the requirements of ATS for additional position reports when traffic conditions so demand.

5.6 The designation of compulsory and on-request reporting points shall be reviewed regularly with a view to keeping the requirements for routine position reporting to the minimum necessary to ensure efficient ATS.

5.7 Routine reporting over compulsory reporting points should not systematically be made mandatory for all flights in all circumstances. In applying this principle, particular attention shall be given to the following:

a) high-speed, high-flying aircraft should not be required to make routine position reports over all reporting points established as compulsory for low-speed, low-flying aircraft;

b) aircraft transiting through a terminal control area should not be required to make routine position reports as frequently as arriving and departing aircraft.

5.8 In areas where the above principles regarding the establishment of reporting points would not be practicable, a reporting system with reference to meridians of longitude or parallels of latitude expressed in whole degrees may be established.

APPENDIX 3 – PRINCIPLES GOVERNING THE IDENTIFICATION OF STANDARD DEPARTURE AND ARRIVAL ROUTES AND ASSOCIATED PROCEDURES

1. DESIGNATORS FOR STANDARD DEPARTURE AND ARRIVAL ROUTES AND ASSOCIATED PROCEDURES

Note.— In the following text, the term "route" is used in the meaning of "route and associated procedures".

1.1 The system of designators shall:

a) permit the identification of each route in a simple and unambiguous manner;

b) make a clear distinction between:

— departure routes and arrival routes;

— departure or arrival routes and other ATS routes;

— routes requiring navigation by reference to ground-based radio aids or self-contained airborne aids, and routes requiring navigation by visual reference to the ground;

c) be compatible with ATS and aircraft data processing and display requirements;

d) be of utmost brevity in its operational application;

e) avoid redundancy;

f) provide sufficient possibility for extension to cater for any future requirements without the need for fundamental changes.

1.2 Each route shall be identified by a plain language designator and a corresponding coded designator.

1.3 The designators shall, in voice communications, be easily recognizable as relating to a standard departure or arrival route and shall not create any difficulties in pronunciation for pilots and ATS personnel.

2. COMPOSITION OF DESIGNATORS

2.1 Plain language designator

2.1.1 The plain language designator of a standard departure or arrival route shall consist of:

a) a basic indicator; followed by

b) a validity indicator; followed by

c) a route indicator, where required; followed by

d) the word "departure" or "arrival"; followed by

e) the word "visual", if the route has been established for use by aircraft operating under VFR.

2.1.2 The basic indicator shall be the name or name-code of the significant point where a standard departure route terminates or a standard arrival route begins.

2.1.3 The validity indicator shall be a number from 1 to 9.

2.1.4 The route indicator shall be one letter of the alphabet. The letters "I" and "O" shall not be used.

2.2 Coded designator

The coded designator of a standard departure or arrival route, instrument or visual, shall consist of:

a) the coded designator or name-code of the significant point described in 2.1.1 a); followed by

b) the validity indicator in 2.1.1 b); followed by

c) the route indicator in 2.1.1 c), where required.

Note.— Limitations in the display equipment on board aircraft may require shortening of the basic indicator, if that indicator is a five-letter name-code, e.g. KODAP. The manner in which such an indicator is shortened is left to the discretion of operators.

3. ASSIGNMENT OF DESIGNATORS

3.1 Each route shall be assigned a separate designator.

3.2 To distinguish between two or more routes which relate to the same significant point (and therefore are assigned the same basic indicator), a separate route indicator as described in 2.1.4 shall be assigned to each route.

4. ASSIGNMENT OF VALIDITY INDICATORS

4.1 A validity indicator shall be assigned to each route to identify the route which is currently in effect.

4.2 The first validity indicator to be assigned shall be the number "1".

4.3 Whenever a route is amended, a new validity indicator, consisting of the next higher number, shall be assigned. The number "9" shall be followed by the number "1".

5. EXAMPLES OF PLAIN LANGUAGE AND CODED DESIGNATORS

5.1 *Example 1*: Standard departure route — instrument:
a) Plain language designator: BRECON ONE DEPARTURE
b) Coded designator: BCN 1

5.1.1 *Meaning*: The designator identifies a standard instrument departure route which terminates at the significant point BRECON (basic indicator). BRECON is a radio navigation facility with the identification BCN (basic indicator of the coded

designator). The validity indicator ONE (1 in the coded designator) signifies either that the original version of the route is still in effect or that a change has been made from the previous version NINE (9) to the now effective version ONE (1) (see 4.3). The absence of a route indicator (see 2.1.4 and 3.2) signifies that only one route, in this case a departure route, has been established with reference to BRECON.

5.2 *Example 2*: Standard arrival route — instrument:

a) Plain language designator: KODAP TWO ALPHA ARRIVAL

b) Coded designator: KODAP 2 A

5.2.1 *Meaning*: This designator identifies a standard instrument arrival route which begins at the significant point KODAP (basic indicator). KODAP is a significant point not marked by the site of a radio navigation facility and therefore assigned a five-letter name-code in accordance with Appendix 2. The validity indicator TWO (2) signifies that a change has been made from the previous version ONE (1) to the now effective version TWO (2). The route indicator ALPHA (A) identifies one of several routes established with reference to KODAP and is a specific character assigned to this route.

5.3 *Example 3*: Standard departure route — visual:

a) Plain language designator: ADOLA FIVE BRAVO DEPARTURE VISUAL

b) Coded designator: ADOLA 5 B

5.3.1 *Meaning*: This designator identifies a standard departure route for controlled VFR flights which terminates at ADOLA, a significant point not marked by the site of a radio navigation facility. The validity indicator FIVE (5) signifies that a change has been made from the previous version FOUR (4) to the now effective version FIVE (5). The route indicator BRAVO (B) identifies one of several routes established with reference to ADOLA.

6. COMPOSITION OF DESIGNATORS FOR MLS/RNAV APPROACH PROCEDURES

6.1 Plain language designator

6.1.1 The plain language designator of an MLS/RNAV approach procedure shall consist of:

a) "MLS"; followed by

b) a basic indicator; followed by

c) a validity indicator; followed by

d) a route indicator; followed by

e) the word "approach"; followed by

f) the designator of the runway for which the procedure is designed.

6.1.2 The basic indicator shall be the name or name-code of the significant point where the approach procedure begins.

6.1.3 The validity indicator shall be a number from 1 to 9.

6.1.4 The route indicator shall be one letter of the alphabet. The letters "I" and "O" shall not be used.

6.1.5 The designator of the runway shall be in accordance with the applicable Civil Aviation Regulations and Requirements governing aerodromes.

6.2 Coded designator

6.2.1 The coded designator of an MLS/RNAV approach procedure shall consist of:

a) "MLS"; followed by

b) the coded designator or name-code of the significant point described in 6.1.1 b); followed by

c) the validity indicator in 6.1.1 c); followed by

d) the route indicator in 6.1.1 d); followed by

e) the runway designator in 6.1.1 f).

6.3 Assignment of designators

6.3.1 The assignment of designators for MLS/RNAV approach procedures shall be in accordance with paragraph 3. Procedures having identical tracks but different flight profiles shall be assigned separate route indicators.

6.3.2 The route indicator letter for MLS/RNAV approach procedures shall be assigned uniquely to all approaches at an airport until all the letters have been used. Only then shall the route indicator letter be repeated. The use of the same route indicator for two routes using the same MLS ground facility shall not be permitted.

6.3.3 The assignment of validity indicator for approach procedures shall be in accordance with section 4 of this Appendix.

6.4 Example of plain language and coded designators

6.4.1 *Example:*

a) Plain language designator: MLS HAPPY ONE ALPHA APPROACH RUNWAY ONE EIGHT LEFT

b) Coded designator: MLS HAPPY 1 A 18L

6.4.2 *Meaning:* The designator identifies an MLS/RNAV approach procedure which begins at the significant point HAPPY (basic indicator). HAPPY is a significant point not marked by the site of a radio navigation facility and therefore assigned a five-letter name-code in accordance with Appendix 2. The validity indicator ONE (1) signifies that either the original version of the route is still in effect or a change has been made from the previous version NINE (9) to the now effective version ONE (1).

The route indicator ALPHA (A) identifies one of several routes established with reference to HAPPY and is a specific character assigned to this route.

7. USE OF DESIGNATORS IN COMMUNICATIONS

7.1 In voice communications, only the plain language designator shall be used.

Note.— For the purpose of identification of routes, the words "departure", "arrival" and "visual" described in 2.1.1 d) and 2.1.1 e) are considered to be an integral element of the plain language designator.

7.2 In printed or coded communications, only the coded designator shall be used.

8. DISPLAY OF ROUTES AND PROCEDURES TO AIR TRAFFIC CONTROL

8.1 A detailed description of each currently effective standard departure and/or arrival route/approach procedure, including the plain language designator and the coded designator, shall be displayed at the working positions at which the routes/procedures are assigned to aircraft as part of an ATC clearance, or are otherwise of relevance in the provision of air traffic control services.

8.2 Whenever possible, a graphic portrayal of the routes/procedures shall also be displayed.

APPENDIX 4 – ATS AIRSPACE CLASSES — SERVICES PROVIDED AND FLIGHT REQUIREMENTS

Class	*Type of flight*	*Separation provided*	*Service provided*	*Speed limitation**	*Radio communication requirement*	*Subject to an ATC clearance*
A	IFR only	All aircraft	Air traffic control service	Not applicable	Continuous two-way	Yes
B	IFR	All aircraft	Air traffic control service	Not applicable	Continuous two-way	Yes
	VFR	All aircraft	Air traffic control service	Not applicable	Continuous two-way	Yes
C	IFR	IFR from IFR IFR from VFR	Air traffic control service	Not applicable	Continuous two-way	Yes
	VFR	VFR from IFR	1) Air traffic control service for separation from IFR; 2) VFR/VFR traffic information (and traffic avoidance advice on request)	250 kt IAS below 3 050 m (10 000 ft) AMSL	Continuous two-way	Yes
D	IFR	IFR from IFR	Air traffic control service, traffic information about VFR flights (and traffic avoidance advice on request)	250 kt IAS below 3 050 m (10 000 ft) AMSL	Continuous two-way	Yes
	VFR	Nil	IFR/VFR and VFR/VFR traffic information (and traffic avoidance advice on request)	250 kt IAS below 3 050 m (10 000 ft) AMSL	Continuous two-way	Yes
E	IFR	IFR from IFR	Air traffic control service and, as far as practical, traffic information about VFR flights	250 kt IAS below 3 050 m (10 000 ft) AMSL	Continuous two-way	Yes
	VFR	Nil	Traffic information as far as practical	250 kt IAS below 3 050 m (10 000 ft) AMSL	No	No
F	IFR	IFR from IFR as far as practical	Air traffic advisory service; flight information service	250 kt IAS below 3 050 m (10 000 ft) AMSL	Continuous two-way	No
	VFR	Nil	Flight information service	250 kt IAS below 3 050 m (10 000 ft) AMSL	No	No
G	IFR	Nil	Flight information service	250 kt IAS below 3 050 m (10 000 ft) AMSL	Continuous two-way	No
	VFR	Nil	Flight information service	250 kt IAS below 3 050 m (10 000 ft) AMSL	No	No

* 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.

APPENDIX 5 – MODEL AIR TRAFFIC INCIDENT REPORTING FORM

1. This Appendix contains the model air traffic incident reporting form.

GUYANA CIVIL AVIATION AUTHORITY
AVIATION SAFETY REGULATION DIRECTORATE
AIR TRAFFIC INCIDENT REPORTING FORM

FORM #: GCAA/ANSI/2811
ORIGIN: ANS INSPECTORATE

Note: *For use when submitting and receiving reports on air traffic incidents. ATS is to ensure completeness of this form, as far as practicable, prior to submission to the GCAA-ASRD. In an initial report by radio, shaded items should be included.*

Instructions: Complete sections and tick (✓) boxes only as applicable.
Further instructions and notes for completion are formatted in Small Caps, e.g. "1. EXAMPLE (INSTRUCTIONS)"

A – AIRCRAFT IDENTIFICATION (OF AIRCRAFT FILING THE REPORT, AS STATED IN FLIGHT PLAN)	**B – TYPE OF INCIDENT: AIRPROX/PROCEDURE/FACILITY** (IF COMPLETING BY HAND, CIRCLE AS APPROPRIATE. AN AIRPROX REPORT SHOULD BE FILED IMMEDIATELY BY RADIO)

C. THE INCIDENT

1. GENERAL

a) Time (IN UTC) of incident: Date of incident (DD/MM/YYYY):
b) Day ☐ Night ☐ Twilight ☐ ETOPS ☐
c) Approximate position (LAT. & LONG. COORDINATES, OR BEARING/DISTANCE FROM NAVIGATION AID OR WAYPOINT, OR DIRECTION/DISTANCE IN NM FROM SIGNIFICANT FEATURE, LANDMARK, AIRSPACE BOUNDARY, OR OTHER DESCRIPTION)

2. OWN AIRCRAFT (AIRCRAFT FILING THE REPORT)

a) Phase of flight
b) Heading and route
c) Lateral deviation/offset: Direction Distance (IN NM)
d) True airspeed, or groundspeed (FOR ATS FROM SSR/ADS-B) Unit of measurement ☐ knots ☐ km/h
e) Level Altimeter setting Unit of measurement ☐ hPa/millibars ☐ Inches of Hg
f) Aircraft climbing or descending ☐ Level ☐ Climbing ☐ Descending
g) Vertical speed (IN FEET PER MINUTE)
h) SSR code when incident occurred (REGARDLESS OF ATS PROVIDED)

h) Aircraft bank angle
☐ Wings level ☐ Slight bank ☐ Moderate bank
☐ Steep bank ☐ Inverted ☐ Unknown

i) Aircraft direction of bank ☐ Left ☐ Right ☐ Unknown

j) Restrictions to visibility (SELECT AS MANY AS REQUIRED)
☐ Sunglare ☐ Windscreen pillar ☐ Dirty windscreen ☐ Other cockpit structure

k) Use of aircraft lighting (SELECT AS MANY AS REQUIRED)
☐ Navigation lights ☐ Strobe lights ☐ Cabin lights ☐ Other
☐ Red anti-collision lights ☐ Landing/taxi lights ☐ Logo (tail fin) lights

l) Traffic avoidance advice issued by ATS
☐ Yes, based on radar ☐ Yes, based on visual sighting ☐ Yes, based on other information ☐ No

m) Traffic information issued
☐ Yes, based on radar ☐ Yes, based on visual sighting ☐ Yes, based on other information ☐ No

n) Airborne Collision Avoidance System – ACAS (SELECT AS MANY AS REQUIRED)
☐ Not carried ☐ Type ☐ Traffic advisory issued
☐ Resolution advisory issued ☐ Traffic advisory or resolution advisory not issued

GUYANA CIVIL AVIATION AUTHORITY
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o) ATS surveillance identification
Type of surveillance: ☐ No surveillance available during incident ☐ Identified ☐ Not identified

p) Other aircraft sighted ☐ Yes ☐ No ☐ Wrong aircraft sighted

q) Avoiding action taken ☐ Yes ☐ No

r) Type of flight plan ☐ IFR ☐ VFR ☐ Special VFR ☐ None

3. OTHER AIRCRAFT

a) Type and aircraft identification (IF KNOWN)
b) If Type from a) above is not known, describe below
☐ High wing ☐ Mid wing ☐ Low wing
☐ Rotorcraft ☐ 1 engine ☐ 2 engines
☐ 3 engines ☐ 4 engines ☐ More than 4 engines
Markings, colours, or other available details
c) Aircraft climbing or descending ☐ Level ☐ Climbing ☐ Descending ☐ Unknown

d) Aircraft bank angle
☐ Wings level ☐ Slight bank ☐ Moderate bank
☐ Steep bank ☐ Inverted ☐ Unknown

e) Aircraft direction of bank ☐ Left ☐ Right ☐ Unknown

f) Lights displayed (SELECT AS MANY AS REQUIRED)
☐ Navigation lights ☐ Strobe lights ☐ Cabin lights ☐ Red anti-collision lights ☐ Unknown
☐ Logo (tail fin) lights ☐ Landing/taxi lights ☐ Other ☐ None

g) Traffic avoidance advice issued by ATS
☐ Yes, based on radar ☐ Yes, based on visual sighting ☐ Yes, based on other information ☐ No ☐ Unknown

h) Traffic information issued
☐ Yes, based on radar ☐ Yes, based on visual sighting ☐ Yes, based on other information ☐ No

i) Avoiding action taken ☐ Yes ☐ No ☐ Unknown

4. DISTANCE (STATE UNITS USED)

a) Closest horizontal distance
b) Closest vertical distance

5. FLIGHT WEATHER CONDITIONS

a) ☐ IMC ☐ VMC Outside air temperature (IN DEGREES CELSIUS)
b) ☐ Above clouds ☐ Below clouds ☐ Fog ☐ Haze ☐ Between layers
c) Distance vertically from clouds: Feet below Feet above
d) Cloud types
e) ☐ In cloud ☐ Rain ☐ Snow ☐ Sleet ☐ Hail
(STATE INTENSITY OF PRECIPITATION)
f) Flying into sun ☐ Flying out of sun ☐

GUYANA CIVIL AVIATION AUTHORITY
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g) Flight visibility	Unit of measurement	☐ NM	☐ km	☐ m
h) Any other significant weather conditions (ICING, TURBULENCE, WIND SHEAR, ETC.)				
i) Runway conditions				
j) Latest weather report when incident occurred				

6. ANY OTHER INFORMATION CONSIDERED IMPORTANT BY THE PILOT-IN-COMMAND (IF NEEDED, ATTACH DOCUMENTS)

D - MISCELLANEOUS

1. INFORMATION REGARDING REPORTING AIRCRAFT

a) Aircraft registration			
b) Aircraft type			
c) Nature of flight (PASSENGER, CARGO, ETC.)			
d) Operator			
e) Operator's address		Operator's email	
f) Aerodrome of departure			
g) Aerodrome of first landing	Destination		
h) Reported by radio or other means to (STATE NAME OF ATS UNIT)		at time (IN UTC)	
i) Date (DD/MM/YYYY)/time (IN UTC)/place of completion of form			

2. DETAILS OF PERSON SUBMITTING REPORT

a) Name (PLEASE PRINT)	
b) Function	
c) Address	
d) Signature	
e) Telephone/Mobile number	

3. DETAILS OF PERSON RECEIVING REPORT

a) Name (PLEASE PRINT)	
b) Function	
c) Signature	

E – SUPPLEMENTARY INFORMATION BY ATS UNIT CONCERNED

1. RECEIPT OF REPORT

a) Report received via AFTN/radio/telephone/other (specify)	
b) Report received by (STATE NAME OF ATS UNIT)	

2. DETAILS OF ATS ACTION

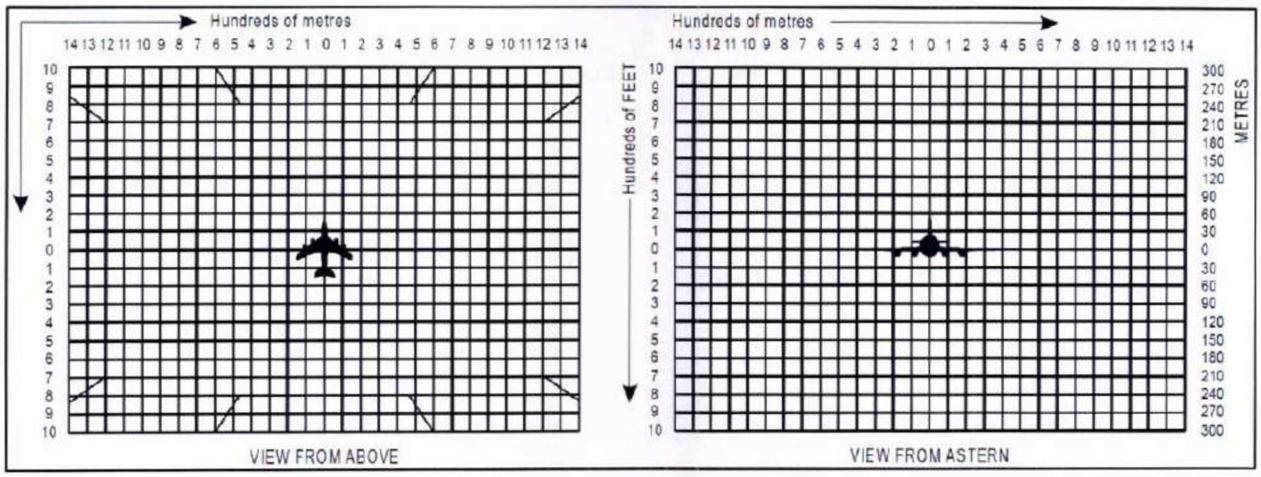
INCLUDE DETAILS OF ATS UNIT, SERVICE PROVIDED, RADIOTELEPHONY FREQUENCY, SSR CODES ASSIGNED, CLEARANCE, INCIDENT SEEN (RADAR/VISUALLY, WARNING GIVEN, RESULT OF LOCAL ENQUIRY, ETC.)

GUYANA CIVIL AVIATION AUTHORITY
AVIATION SAFETY REGULATION DIRECTORATE
AIR TRAFFIC INCIDENT REPORTING FORM

FORM #: GCAA/ANSI/2811
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F. DIAGRAMS OF AIRPROX

Instructions: Mark passage of other aircraft relative to you, in plan on the left and in elevation on the right, assuming YOU are at the centre of each diagram. Include first sighting and passing distance.



G. NARRATIVE OF INCIDENT

FOR GCAA USE ONLY

INSPECTOR ASSIGNED	ASSIGNED BY	DATE (DD/MM/YYYY)	GCAA REFERENCE	OCCURRENCE CODE	DATE OPENED (DD/MM/YYYY)

COMMENTS

FINAL AUTHORITY MAKING CLOSURE

NAME OF GCAA REPRESENTATIVE	SIGNATURE	POSITION	DATE OF CLOSURE (DD/MM/YYYY)

APPENDIX 6-A – SCHEDULING LIMITS FOR AIR TRAFFIC CONTROLLERS

1. GENERAL

1.1 The purpose of these scheduling limits is to ensure, so far as is reasonably practicable, that air traffic controller fatigue does not endanger aircraft operations and thereby to assist air traffic controllers to provide a safe and efficient service. In all cases, the management of air traffic controller rostering shall be sympathetic to this purpose.

1.2 In the event of an air traffic accident or incident, the GCAA investigative team shall consider whether an air traffic controller would have previously registered, with Management of both the ATS Provider and ASRD, a formal complaint in writing regarding:

a. working hours whose aggregate indicate non-compliance with these provisions, or

b. a lack of fatigue management on the part of the ATS Provider.

1.3 Breaks shall include all measures necessary to ensure that air traffic controllers will not be suffering, to any extent as a consequence of their duties, from any mental or physical fatigue whilst exercising the privileges of their licence. Such measures shall include a certain detachment from operations, e.g. dedicated rest areas, some of which shall afford the individual 'quiet space' and facilities for adequate refreshment.

1.4 The ATS Provider shall take adequate steps to actively analyze traffic density, trends, and ATC workload to determine their impact on the controller's performance, with the aim of ensuring that controllers enjoy adequate breaks commensurate with workload encountered.

1.5 The ATS Provider shall develop a process for assigning unscheduled duties that allows air traffic controllers to avoid extended periods of being awake. As far as

practicable, the ATS Provider shall ensure that such process conforms to the Prescribed Limits specified in 3.

1.6 Where the process for assigning unscheduled duties may result in circumstances that conflict with the Prescribed Limits specified in 3, the ATS Provider shall comply with the requirements for Variations specified in 4.

2. MINIMUM REST FACILITIES

2.1 The minimum rest facilities shall consist of a room which is separate from the facility and reasonably quiet.

2.2 There shall be sufficient and adequate furniture for the number of staff likely to be on a break at one time.

2.3 Facilities for obtaining refreshments shall be available within, or within a short distance of, the unit or appropriate facilities shall be provided for the storage and preparation of food and drinks.

3. PRESCRIBED LIMITS

3.1 The ATS Provider shall ensure that air traffic controllers are scheduled in accordance with the following scheduling limits.

3.2 The maximum number of hours in any duty period shall be 10 hours.

3.3 The maximum number of duty periods of each air traffic controller shall not exceed 5 within 5 consecutive days.

3.4 The aggregate of duty periods and standby duties shall not exceed 200 hours within 30 days.

3.5 The minimum duration of non-duty periods shall be 12 hours between the conclusion of one duty period and the commencement of the next duty period, except as prescribed in 3.6 below.

3.6 The minimum duration described in 3.5 above shall only be reduced:

1. by a maximum of 4 hours; and
2. with the consent of the controller affected.

3.7 The reduction described in 3.6 shall be permitted not more than once within a period of 30 days for any individual controller.

3.8 The minimum number of non-duty days within each period of 30 days shall be 7.

3.9 The time-in-position during a duty period shall not exceed 2 hours, except during periods of low traffic when, at the discretion of the facility supervisor or in their absence, the Unit Chief, the time-in-position shall be up to 4 hours.

3.10 The minimum duration of each break between each time-in-position in any duty period shall be no less than 30 minutes.

3.11 The minimum duration of each break between each time-in-position at a control position from which surveillance-based (ADS-B) air traffic control in any duty period shall be no less than 60 minutes.

3.12 The maximum number of scheduled consecutive night duties shall not exceed 2.

3.13 The minimum duration of a non-duty period that follows 2 consecutive night duties shall be not less than 24 hours.

3.14 Any variations from these scheduling limits shall be conducted in accordance with 4 below.

4. VARIATIONS

4.1 The management of the ATS Provider, due to unexpected circumstances, e.g. sick reports, staff emergencies, shall be permitted to vary the scheduling limits prescribed in 3 above as follows:

i. a controller currently on duty, may be asked to work a duty period that is extended by 6 hours; or

ii. a controller may be asked to work consecutive days that would result in a maximum of 6 duty periods within 6 consecutive days.

4.2 In all cases listed under 4.1 above, the affected controller shall indicate their consent prior to working under the conditions of the variation. The management of the ATS Provider shall ensure that adequate off-duty periods are provided to mitigate fatigue arising from the variation.

4.3 Where the ATS Provider encounters extreme unforeseen circumstances that result in:

i. a controller working a duty period that exceeds 17 hours; or

ii. the aggregate of duty periods and standby duties exceeding 200 hours within 30 days;

the ATS Provider shall obtain permission from the Director General, citing:

i. the reason for the variation;

ii. the extent of the variation;

iii. the safety case, outlining mitigations, to support the variation; and

iv. such other information as may be relevant.

Note. - For the purpose of 4.3 above, extreme unforeseen circumstances include the inability of the ATS Provider to procure replacement staff, natural disasters,

communicable diseases, industrial action, or other circumstances that severely impact the provision of ATS.

4.4 The Director General shall, based on the information submitted in 4.3 above:

i. approve the variation; or

ii. state the conditions that must be satisfied prior to granting approval.

5. DUTY OF CARE

5.1 Controllers shall use their best judgement and maintain a level of self-discipline that will allow them to safely decrease and manage their level of fatigue.

5.2 While non-duty periods, breaks and other mechanisms have been prescribed to manage fatigue, controllers shall make every effort to ensure they are adequately rested in a manner that reduces their cumulative sleep debt, and in a frame of mind that is conducive to safe, regular and efficient air traffic services.

5.3 Nothing in these provisions shall prohibit the ATS Provider:

i. from permitting a controller to embark on a break, a non-duty period, or medical leave, the conditions of which would be beyond those stipulated in these provisions, if the controller feels that he or she is not in the correct frame of mind to provide ATS, or;

ii. from permitting a controller to embark on a break, a non-duty period, or medical leave, if another member of staff observes or has reason to believe that the former is about to experience or experiencing an increase level of fatigue due to workload, scheduling, or any other factor known to the person making the report.

5.4 The ATS Provider shall monitor situations envisioned by 5.3 above, to determine if any patterns are developing that may indicate an increasing level of fatigue, or if this requirement is being abused.

APPENDIX 6-B – FATIGUE RISK MANAGEMENT SYSTEM (FRMS) REQUIREMENTS

Where the ATS Provider establishes an FRMS to manage fatigue-related safety risks for all of its air traffic control services or parts thereof, such FRMS shall contain, at a minimum:

1. FRMS POLICY AND DOCUMENTATION

1.1 FRMS Policy

1.1.1 The ATSP shall define its FRMS policy, with all elements of the FRMS clearly identified.

1.1.2 The policy shall:

a) define the scope of FRMS operations;

b) reflect the shared responsibility of management, air traffic controllers, and other involved personnel;

c) clearly state the safety objectives of the FRMS;

d) be signed by the accountable executive of the organization;

e) be communicated, with visible endorsement, to all the relevant areas and levels of the organization;

f) declare management commitment to effective safety reporting;

g) declare management commitment to the provision of adequate resources for the FRMS;

h) declare management commitment to continuous improvement of the FRMS;

i) require that clear lines of accountability for management, air traffic controllers, and all other involved personnel are identified; and

j) require periodic reviews to ensure it remains relevant and appropriate.

Note.— Effective safety reporting is described in the Safety Management Manual (SMM) *(Doc 9859).*

1.2 FRMS Documentation

An air traffic services provider shall develop and keep current FRMS documentation that describes and records:

a) FRMS policy and objectives;

b) FRMS processes and procedures;

c) accountabilities, responsibilities and authorities for these processes and procedures;

d) mechanisms for ongoing involvement of management, air traffic controllers, and all other involved personnel;

e) FRMS training programmes, training requirements and attendance records;

f) scheduled and actual duty and non-duty periods and break periods between periods of time-in-position in a duty period with significant deviations and reasons for deviations noted; and

Note.— Significant deviations are described in the Manual for the Oversight of Fatigue Management Approaches *(Doc 9966).*

g) FRMS outputs including findings from collected data, recommendations, and actions taken.

2. FATIGUE RISK MANAGEMENT PROCESSES

2.1 Identification of fatigue-related hazards

An air traffic services provider shall develop and maintain three fundamental and documented processes for fatigue hazard identification:

2.1.1 *Predictive*. The predictive process shall identify fatigue hazards by examining air traffic controller scheduling and taking into account factors known to affect sleep and fatigue and their effects on performance. Methods of examination may include, but are not limited to:

a) air traffic services or industry operational experience and data collected on similar types of operations or from other

industries with shift work or 24-hour operations;

b) evidence-based scheduling practices; and

c) bio-mathematical models.

2.1.2 *Proactive*. The proactive process shall identify fatigue hazards within current air traffic services operations. Methods of examination may include, but are not limited to:

a) self-reporting of fatigue risks;

b) fatigue surveys;

c) relevant air traffic controller performance data;

d) available safety databases and scientific studies;

e) tracking and analysis of differences in planned and actual worked times; and

f) observations during normal operations or special evaluations.

2.1.3 *Reactive*. The reactive process shall identify the contribution of fatigue hazards to reports and events associated with potential negative safety consequences in order to determine how the impact of fatigue could have been minimized. At a minimum, the process may be triggered by any of the following:

a) fatigue reports;

b) confidential reports;

c) audit reports; and

d) incidents.

2.2 Fatigue-Related Risk Assessment

2.2.1 An Air Traffic Services Provider shall develop and implement risk assessment procedures that determine when the associated risks require mitigation.

2.2.2 The risk assessment procedures shall review identified fatigue hazards and link them to:

a) operational processes;

b) their probability;

c) possible consequences; and

d) the effectiveness of existing preventive controls and recovery measures.

2.3 Risk Mitigation

2.3.1 An air traffic services provider shall develop and implement fatigue risk mitigation procedures that:

a) select the appropriate mitigation strategies;

b) implement the mitigation strategies; and

c) monitor the strategies' implementation and effectiveness.

3. FRMS SAFETY ASSURANCE PROCESSES

3.1 The air traffic services provider shall develop and maintain FRMS safety assurance processes to:

a) provide for continuous FRMS performance monitoring, analysis of trends, and measurement to validate the effectiveness of the fatigue safety risk controls. The sources of data may include, but are not limited to:

1) hazard reporting and investigations;

2) audits and surveys; and

3) reviews and fatigue studies (both internal and external);

b) provide a formal process for the management of change. This shall include, but is not limited to:

1) identification of changes in the operational environment that may affect the FRMS;

2) identification of changes within the organization that may affect the FRMS; and

3) consideration of available tools which could be used to maintain or improve FRMS performance prior to implementing changes; and

c) provide for the continuous improvement of the FRMS. This shall include, but is not limited to:

1) the elimination and/or modification of preventive controls and recovery measures that have had unintended consequences or that are no longer needed due to changes in the operational or organizational environment;

2) routine evaluations of facilities, equipment, documentation and procedures; and

3) the determination of the need to introduce new processes and procedures to mitigate emerging fatigue-related risks.

4. FRMS PROMOTION PROCESSES

4.1 FRMS promotion processes support the ongoing development of the FRMS, the continuous improvement of its overall performance, and attainment of optimum safety levels. The following shall be established and implemented by the air traffic service provider as part of its FRMS:

a) training programs to ensure competency commensurate with the roles and responsibilities of management, air traffic controllers, and all other involved personnel under the planned FRMS; and

b) an effective FRMS communication plan that:

1) explains FRMS policies, procedures and responsibilities to all relevant stakeholders; and

2) describes communication channels used to gather and disseminate FRMS-related information.

APPENDIX 7 – FACILITY REQUIREMENTS

1. INTRODUCTION

1.1 The ATS Provider shall establish the following facilities, as appropriate to the air traffic services being provided:

a) aerodrome control towers
b) approach control offices
c) area control centres
d) flight information centres
e) dedicated training and assessment facilities.

2. AERODROME CONTROL SERVICE

2.1 Where aerodrome control service is provided, the ATS Provider shall ensure that each aerodrome control tower is provided with equipment for two-way voice communication with:

a) any aircraft, in or adjacent to airspace for which the applicant has responsibility; and
b) any aircraft, vehicle, and person, on, or adjacent to, the manoeuvring area.

2.2 Aerodrome control towers shall be provided with the following minimum equipment:

a) A display system or systems designed to show the disposition of current and pending flights together with ancillary information for individual aircraft
b) Power supply
c) Appropriate and current maps and charts
d) Binoculars
e) Clocks
f) Log keeping system
g) Outside temperature indicator
h) QNH display
i) RVR display

j) Signal lamp/gun with green, red and white functions
k) Telephone communications
l) Status monitors for approach and landing aids and any signaling equipment affecting the use of a runway
m) Visibility checkpoints
n) Voice and, if applicable, data recording equipment
o) Wind direction and wind speed display
p) Audible emergency alerting system
q) Means of reception and transmission of information normally conveyed by AFTN/AMHS
r) Airfield lighting controls panel
s) Two (2) independent sources of the current altimeter setting, at least 1 of which must be an aneroid barometer or barometric altimeter situated in the visual control room
t) Headset
u) Microphone
v) Transceiver
w) Speakers
x) Radio selector panel
y) Intercom
z) Lighting, including emergency lights
aa) Flight data panel
bb) Fire extinguisher
cc) Clipboards/displays (NOTAMs, etc.)
dd) Desks, consoles, shelves
ee) Chairs
ff) Shades
gg) Air conditioning
hh) Bookcases
ii) Sound-absorbing coverings (floor/wall)

3. AREA CONTROL CENTRE OR APPROACH CONTROL UNIT

3.1 Where area control service or approach control service is provided, the ATS Provider shall ensure that each area control centre, flight information centre, or approach control unit is provided with equipment enabling to the fullest extent practical, two-way voice communication; and if applicable, data communication with any aircraft in, or adjacent to, airspace for which the ATS Provider has responsibility.

3.2 Area control centres or approach control units shall be provided with the following minimum equipment:

a) A display system or systems designed to show the disposition of current and pending flights together with ancillary information for individual aircraft
b) Power supply
c) Appropriate and current maps and charts
d) Binoculars
e) Clocks
f) Log keeping system
g) Outside temperature indicator
h) QNH display
i) RVR display fed from same source as corresponding equipment in the tower
j) Telephone communications
k) Status monitors for approach and landing aids and any signalling equipment affecting the use of a runway
l) Visibility checkpoints
m) Voice and, if applicable, data recording equipment
n) Wind direction and wind speed display fed from same source as corresponding equipment in the tower
o) Audible emergency alerting system
p) Means of reception and transmission of information normally conveyed by AFTN/AMHS
q) Two (2) independent sources of the current altimeter setting, at least 1 of which must be an aneroid barometer or barometric altimeter situated in the visual control room

r) Headset
s) Microphone
t) Transceiver
u) Speakers
v) Radio selector panel
w) Intercom
x) Lighting, including emergency lights
y) Flight data panel
z) Fire extinguisher
aa) Clipboards/displays (NOTAMs, etc.)
bb) Desks, consoles, shelves
cc) Chairs
dd) Shades
ee) Air conditioning
ff) Bookcases
gg) Sound-absorbing coverings (floor/wall)

3.3 The equipment required shall have a level of reliability, availability, and redundancy that minimizes the possibility of failure, non-availability, or significant degradation of performance.

3.4 The ATS Provider shall ensure that the required status monitors are equipped with:

a) an aural signal to indicate a change of status; and
b) a visual indication of the current status.

3.5 A temporary aerodrome control tower shall not be required to be provided with the equipment required under paragraphs 2.2 (k) and (q) if it is impracticable to do so and other appropriate measures are taken, as the case may be, to:

a) provide the personnel providing air traffic services from the temporary tower with the information that would be available from the equipment required under paragraphs 2.2 (k) and (q); and

b) control the airfield lighting if applicable.

Made this 16th day of May 2024.

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Director-General

For the Guyana Civil Aviation Authority