

ENR 1. GENERAL RULES AND PROCEDURES

ENR 1.1 GENERAL RULES

1. General

- 1.1 The air traffic rules and procedures applicable to air traffic in the territory of República Oriental del Uruguay conform to LAR's, Annexes 2 and 11 to the Convention on International Civil Aviation and to those portions of the *Procedures for Air Navigation Services - Air Traffic Management (Doc 4444 ATM/501)* applicable to aircraft and of the Regional Supplementary Procedures applicable to the SAM Region, except for the differences listed in GEN 1.7.
- 1.2 Any person who carries out activities of any nature, when he understands that an international standard, law or regulation provides something other than the technical information published in the AIP, for strict reasons of Operational Safety, shall apply what is indicated in the AIP, until the moment that is modified, and it shall immediately report the discrepancy in writing to DINACIA.

2. Dropping of objects

The dropping or spraying of objects or other substances out of or from aircraft is prohibited, except by the authorization of the Dirección General de Aviación Civil in coordination with the Air Traffic Division and/or the respective authorizations of the ATS units.

3. Acrobatic flying

3.1 No person may operate an aircraft in acrobatic flight:

- a) over any populated area of a city, village or town;
- b) over any gathering of people in open sky;
- c) within a controlled area or airways, or area of aerodromes;
- d) within the 7400 M (4 NM) from the centreline of any airway;
- e) below 1500 FT (500 M) above the surface; or
- f) When flight visibility is less than 5 KM (3 Statute Miles).

Acrobatic flight means intentional manoeuvres involving abrupt changes in aircraft attitude, abnormal attitudes, or abnormal acceleration not necessary for normal flight

4. Towing and advertising flights

- 4.1 The aircrafts involved in aerial work service advertising shall not fly over the beach areas except as provided in 4.4
- 4.2 For the purpose, it means "beach area" those areas between 500 M each side of the Atlantic Ocean coastline, rivers, streams, lakes and lagoons
- 4.3 The operation in the permitted area shall be developed in a minimum height of 500 FT (150 M) above sea level.
- 4.4 The aircraft may fly over a beach area for the sole purpose of entering or exit to/or the authorized areas of operation, and shall make at least at 1000 FT (300 M) above the highest obstacle located within a radius of 600 M of the aircraft.
- 4.5 Regional Delegates and Inspectors of the Dirección General de Aviación Civil and the Departments of Operations and Air Traffic Control of the Dirección General de Infraestructura Aeronáutica monitor compliance with these over flights.

5. Times and units of measurement

5.1 Universal Time Coordinated (UTC) shall be applied to flight operations and units of measurement prescribed in ICAO Annex 5 *Units of Measurement to be Used in Air and Ground Operations*.

6. Airspace structure

6.1 Airspace under Uruguayan responsibility is divided into:

a) Lower airspace:

- Lower limit: ground or water;
- Upper limit: FL 245 inclusive.

b) Upper airspace:

- Lower limit: FL 245 excluded;
- Upper limit: unlimited.

This airspace includes: flight information regions, a control area, terminal control areas, control zones and aerodrome traffic zones

7. Prohibited areas and flight restrictions

7.1 No aircraft shall fly prohibited and restricted area whose details have been duly published in the AIP, unless it meets the conditions of the restrictions or have permission from the State.

An Air Defence Identification Zone (ADIZ) has been established within the national borders.

8. Cloud flights with gliders

8.1 The air traffic services can allow clouds flights with glider if conditions of visibility and distance from clouds meet the ENR Table 1.2-1, and apply the following measures.

- All aircraft and glider towing should have bilateral communication equipment with VHF frequencies 118.3 - 122.1 MHz capability (TWR Capitan Curbelo) and keep liaise permanently.
- La Alameda shall communicate to Capitan Curbelo TWR in frequencies 118.3 – 122.1 MHZ an hour before starting the activity including:
 - sector of airspace to use,
 - required height,
 - any other information required by the aerodrome control.
- The takeoffs shall be coordinated with Capitan Curbelo TWR.
- Capitan Curbelo TWR may:
 - Limit the height of flight paths,
 - Regulate schedules according to the needs arising from development or anticipated traffic in the area.
- Assign a sector of airspace;
- Cancel the operations for any reason, weather, traffic, etc. it deserves it.

Note 1: La Alameda shall maintain point to point communication with Capitan Curbelo TWR frequencies 118.3 – 122.1 MHZ.

Note 2: Controllers should note that the flight of these aircraft is developed with a common height variation due to thermal and paths by prevailing winds.

9. Take-off's and landings of airplanes, rotorcraft, airships, powered gliders, gliders and parachutists outside aerodromes admitted for them.

9.1 Shall communicate with (7) days in advance at least, the establishment or suspension (including activation), as applicable, of PROHIBITED - RESTRICTED - DANGEROUS areas and activities requiring temporary airspace restrictions other than emergency operations.

9.2 All subsequent activities cancellation, and any reduction in hours of activity or the size of the airspace must be notified 24 hours in advance, at least, to allow timely culminate the process of notification and to allow better plan the use of airspace.

NOTE: It is recalled that at the airfield "La Alameda", located 6 NM north of "El Jagüel" Dptal. Punta del Este airport, glider activity is performed. This activity shall be informed by the Air Traffic Control of Laguna del Sauce.

10. Ascents of balloons, kites, self-propelled flying models and flying bodies.

10.1 Consideration shall be taken with Ala-Delta activity on: Punta Ballena, Cerro del Toro, Cerro Pan de Azucar and Cerro de la Virgen in the Department of Maldonado and Cerro del Cura and Cerro del Verdun in the Department of Lavalleja. It should also be considered delta-wing drag flight from Punta Manantiales to Jose Ignacio. In all cases the height of the flights shall not exceed 300 M.

NOTE: Gliders are reminded that prior to start the activity, it must be coordinated with the corresponding aerodrome control for the control area where it is developed.

10.2 It should also be considered paragliding activity in a radius of 10 KM with centre at the airfield of San Jose (342102S/0564508W), throughout the week, up to a height of 300 M. The frequency used for traffic information is 123.70 MHz.

10.3 Consider also anticipated operations of helicopters, aircraft performing aerial advertising, flying ultralight aircraft, manned balloon flight, all of which constitutes an area of high traffic density with very different aircraft configurations and performances, it is recommended to the pilots to extreme caution in regard to air traffic operating in the area and strict compliance with instructions issued by the air Traffic Control.

11. Uruguayan State Flights

► 11.1 Flight of State is that made by all public aircraft (Art. 28 Aviation Code, Definitions) belonging to the State, while the flight is not fulfilling business activities.

11.2 This type of flight will be exempt from fees but is not authorized to set aside from the rules of air traffic with ATC.

11.3 The Air Operations Centre (COA) is the competent body to authorize the existence of a Flight of State. The application of this authorization may only be made by the state agency user and not by the air carrier.

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ENR 1.2 VISUAL FLIGHT RULES

VFR flights are conducted in a way that simultaneously and continuously the aircraft fly in poor visibility and distance from clouds equal to or exceeding those specified in the table below. VFR flights will operate from 30 MIN before sunrise until 30 MIN after sunset. Night VFR flights are authorized while they fulfil with LAR 91 and 135.

VFR flights shall not be made:

- a) above FL 200
- b) at transonic and supersonic speeds
- c) on the sea more than 20 NM (37 km) of coastline, for over an hour
- d) on clouds, fog and other weather formations when they obstruct more than 4 eighth of Earth's surface, seen from the aircraft in flight.

Special VFR flights shall not be authorized:

- a) when the visibility is less than 1500 M and the cloud ceiling is less than 800 FT;
- b) in the case of training and/or instruction flights;

Special VFR flights shall:

- a) are not apply in "G" Airspace;
- b) shall only be authorized during daylight hours.

International night VFR flights shall not be authorized.

Table of visibility and distance from clouds for VFR flights

Airspace class	C F	G	
		At or below 900 M AMSL, or at 300 M above ground, whichever is greater.	
Distance from cloud	1 500 M horizontally 300 M vertically	1 500 M horizontally Clear of cloud and in sight of the surface.	
Flight visibility	8 KM to 3 050 M (FL 100) AMSL or above 5 KM below 3 050 M (FL 100) AMSL	5 KM	
REMARKS: airspaces B, D and E not applicable.			

The helicopter flights assigned to fire fighting, health, search and rescue and natural catastrophes, due to their characteristics, may eventually separate partially or totally from the minimums of VFR flights. These operations must be conducted without hazard to persons and property on the surface, manoeuvring at a speed that gives adequate opportunity to observe the traffic or any obstacle, with enough time to avoid a collision.

Note: All aircraft below flight level FL 100, maintain airspeed less than 250 KT; unless otherwise authorized by ATC or DINACIA.

1. Coordination between air traffic control services and military flights

1.1 Military flight subject to standard

It is all flight of a military aircraft operating in accordance with current regulations of the Circulación Aérea Regulations.

1.2 Military Flight Operations (VMO)

It is all flight of a military aircraft, in accordance with an Operational Mission, that need to withdraw, in whole or in part from the current flight rules.

The Air Operations Centre (COA) is the agency responsible for determining which the VMO are. When military aircraft set aside from the current flight rules and instructions of the ATC, the COA and the pilot in command shall be solely responsible for the operation.

It can be controlled by the ATC or the COA, after coordination between the two centres.

2. Responsibility delimitations

2.1 ATC shall be responsible of:

Release portions of airspace to be used by flights in Military Flight Operations (VMO).

2.2 The FAU operator shall be responsible of:

Keep within the confines of assigned airspace.

3. Coordination between Air Traffic Control Services and police flights

3.1 Administrative police flight missions

It is every flight performed by a public aircraft of the National Police which by its characteristics does not require any special separation from the general rules applicable in aeronautical matters.

3.2 Operational Police Flight Missions

It is every flight performed by a public aircraft of the National Police carrying out operational police functions, which by their characteristics must necessarily separate from the general rules applicable in aeronautical matters.

3.3 The flight plan must establish an express text indicating that it is an operational Police Flight. The coordinations shall be made through the Air Operations Centre of the Uruguayan Air Force (COA)

4. Delimitation of responsibilities

Responsibility for all facts and events of any nature that occur during the performance of Operational Police Flights including those affecting the aircraft used, their crew and surface personnel, shall be the sole responsibility of the Ministry of Interior, who shall appreciate the need and scope of public action.

5. Visual procedures for VFR flights in non-controlled aerodromes.

1) VFR flights operating at aerodromes that are included permanently or transiently in uncontrolled airspace (class G airspace) will follow the procedures described in LAR 211, Appendix 10, to issue and receive air traffic information through TIBA messages (Traffic Information Broadcast by Aircraft).

a) You must keep scanning on frequency 123.45 Mhz 10 minutes before entering the aerodrome airspace and until you leave it. If the aircraft has two VHF equipment in service, one of them must be tuned, if published, on the frequency expected by ATS at that aerodrome and on the other scanning should be maintained on frequency 123.45 Mhz.

2) Aircraft arriving at the aerodrome must report entering traffic pattern, (left turn is desired, unless prevented by a prohibited or restricted area published and / or weather conditions), while turning base leg and turning final leg. Once on the ground it will report leaving the runway.

3) Departing aircraft must report after engine start-up, reporting their intentions (threshold to which they will roll, departure course, and altitude or level to climb), repeat the message before entering the runway and prior to takeoff.

4) Aircraft in local flights must report departure as established in 3) and while in traffic pattern procedures are as established in 2); at the end of the message crew must report his intentions either stop or touch and go. If flying in uncontrolled airspace close to the aerodrome, aircraft will issue a message every 10 minutes reporting position, altitude or level.

5) When receiving radio messages about traffic, if the flight crew decides that it is necessary to take immediate actions to avoid collisions, procedures are established in LAR 91.

The information received by another aircraft will be acknowledged and maneuvers necessary to avoid possible conflict will be agreed upon. To avoid collision risks, the aircraft that yields the pass will immediately descend to 500 ft (unless other maneuvers seem more appropriate) and will communicate the actions taken. When it is unavoidable to change the cruising level or the course at the time of maneuvering, all the aircraft lights that helps the visual detection must be turned on. Phraseology included in LAR 211 Appendix 10 will be used.

6) If an aircraft operating within airspace without ATS services is subject to interception, flight crews may deviate from the TIBA transmission rules to give priority to communications related to the interception procedures.

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ENR 1.3 INSTRUMENT FLIGHT RULES

1. Rules applicable to all IFR flights

1.1 *Aircraft equipment*

The aircraft will be equipped with suitable instruments and with navigation equipment to the route to be flown.

1.2 *Minimum levels*

- ☛ The pilot in command of an IFR flight must fly at a level not less than a height of 600 M (2 000 FT) above the highest obstacle located within a radius of 8 KM of the estimated position of the aircraft in flight, except when necessary for take-off or landing, or when expressly authorized by the aeronautical authority.
- ☛ LAR91 #91.340 Minimum altitudes for IFR operations apply

1.3 *Change from IFR flight to VFR flight*

1.3.1 An aircraft electing to change the conduct of its flight from compliance with the instrument flight rules to compliance with the visual flight rules shall, if a flight plan was submitted, notify the appropriate air traffic services unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

1.3.2 When an aircraft operating under the instrument flight rules is flown in or encounters visual meteorological conditions, it shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

2. Rules applicable to IFR flights within controlled airspace

2.1 IFR flights shall comply with the provisions of LAR 91 Reglamento de vuelo y operaciones (Reglas de vuelo por instrumento IFR) when operated in controlled airspace.

2.2 *Aircraft speeds*

2.2.1 All aircraft below flight level FL 100, maintain an indicated airspeed less than 250 KT, unless otherwise authorized by ATC or DINACIA.

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ENR 1.4 ATS AIRSPACE CLASSIFICATION

1. Classification of airspaces

ATS airspaces are classified and designated in accordance with the following:

Class A. IFR flights only are permitted, all flights are subject to air traffic control service and are separated from each other.

Class B. IFR and VFR flights are permitted, all flights are subject to air traffic control service and are separated from each other. (Not applicable)

Class C. IFR and VFR flights are permitted, all flights are subject to 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.

Class D. IFR and VFR flights are permitted and all flights are subject to 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. (Not applicable)

Class E. IFR and VFR flights are permitted, IFR flights are subject to air traffic control service and are separated from other IFR flights. All flights receive traffic information as far as is practical. (Not applicable)

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.

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

The requirements for the flights within each class of airspace are as shown in the following table.

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

Class	Type of flight	Separation provided	Service provided	Speed limitation	Radio communication requirement	Subject to an ATC clearance
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	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	Yes
D+	IFR	IFR from IFR	Air traffic control service including 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	Traffic information between VFR and IFR flights (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 traffic information about VFR flights as far as practical	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	Continuous two-way	No

Class	Type of flight	Separation provided	Service provided	Speed limitation	Radio communication requirement	Subject to an ATC clearance
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
<p>☞ Helicopter flights engaged in firefighting, medical flights, search and rescue and natural disasters tasks, due to their characteristics, may eventually deviate partially or totally from the VFR flight minima. These operations must be conducted without risks to people and property on the surface, manoeuvring at a speed that provides adequate opportunity to observe the traffic or any obstacle, with enough time to avoid a collision.</p> <p>G* IFR flights are permitted in Class G space outside the 80 NM centred on the VOR/DME "CRR" when there is communication in both directions. Montevideo Oceanic and Montevideo Eastern Sectors conform to the provisions of ENR 2.1-2 and ENR 2.1-3.</p>						
NOTE: † Airspace Classes B, D and E do not apply						

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ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES

1. General

1.1 The holding, approach and departure procedures and the coordination procedures of air traffic in use, are based on those contained in the fourth edition of ICAO Doc 8168 - *Procedures for Air Navigation Services - Aircraft Operations* (PANS-OPS).

2. Arriving flights

- 2.1 IFR flights entering a TMA to land, will be cleared according to the entering procedures indicated in Terminal Area Chart and the ones indicated by the respective control according to traffic conditions in the area.
- 2.2 Due to the limited airspace available, it is important that the approaches to the patterns and the holding procedures be carried out as precisely as possible. Pilots are strongly requested to inform ATC if for any reason the approach and/or holding cannot be performed as required.

3. Departing flights

- 3.1 IFR flights departing from controlled aerodromes will receive initial ATC clearance from aerodrome service (TWR or AFIS). The clearance limit will normally be the aerodrome of destination.
- 3.2 After takeoff, the turns and paths that follow the aircraft to intercept the proposed route, and the levels that must hold before climbing to cruise level assigned, they shall be as indicated in the output statements, and/or the standard instrument departures, when they are published.
- 3.3 The holding procedures are indicated in each case in the instrument approach charts to be published in Part 2 of the AIP AD.
- 3.4 If for some reason had to do a holding procedure at one point for has not been published any, shall be execute a normal holding procedure, forming a kind of hippodrome circuit in accordance with the procedure recommended in Doc 8168/Operations/611 VOL I, Part 4 of ICAO.

3.5 Aircraft shall enter holding patterns at speeds equal to or less than the following:

HOLDING SPEEDS

Flight level (FL)	Category A and B aircraft	1 Aircrafts category C, D and E	
		Normal conditions	Turbulence conditions
Up to FL 140 (4 250 M) inclusive	(170 KT) ⁴	(230 KT) ² (425 KM/H)	
Above FL 140 (4 250 M) to FL 200 (6 100 M) inclusive		(240 KT) ⁵ (445 KM/H)	(280 KT) ³ (520 KM/H) or Mach 0.8, whichever is less (170 KT) ⁴
Above FL 200 M (6 100 M) to FL 340 (10 350 M) inclusive		(265 KT) ⁵ (490 KM/H)	
Above FL 340 (10 350 M)		Mach 0.83	Mach 0.83

1 The levels indicated above represent the corresponding altitudes or flight levels, according to the altimeter setting used.

- 2 When the holding procedure follow the initial portion of the instrument approach procedure promulgated at a speed exceeding 425 km / h (230 kt), the holding should also enacted at this higher speed whenever possible.
- 3 The speed of 520 KM/h (280kt) (Mach 0.8) reserved for cases of turbulence, should be used for waiting only after obtaining prior permission from ATC, unless the relevant publications indicate that the holding area can be used by aircraft operating at these high speeds.
- 4 For holdings limited only to aircraft of the CAT A and B.
- 5 Whenever possible, use the speed of 520 KM/h (280 kt) for holding procedures related to structures of airways.

ENR 1.6 RADAR SERVICES AND PROCEDURES

1.1 Radar Service

Radar service is provided from PSR and MSSR information

1.1.1 A radar unit normally operates as an integral part of the parent ATS unit and provides radar service to aircraft, to the maximum extent practicable, to meet the operational requirement. Many factors, such as radar coverage, controller workload, equipment capabilities and congestion of communications may affect these services, and the radar controller shall determine the practicability of providing or continuing to provide radar services in any specific case.

1.1.2 A pilot will know when radar services are being provided because the radar controller will use the following call signs:

- a) inside Montevideo Control Area: "Montevideo Radar"
- b) inside Carrasco Terminal Area: "Carrasco Radar"

1.1.3 Radar coverage

Montevideo Control Centre and Carrasco Approach operate:

- a) Primary Surveillance Radar PSR of 80 NM located at Carrasco Intl. Airport position 34°49'16.1"S 056°02'22.3"W,
- b) Secondary Surveillance Radar MSSR of 200 NM located at Carrasco Intl. Airport position 34°49'16.1"S 056°02'22.3"W and secondary radar MSSR of 220 NM located in Durazno/Santa Bernardina Intl de Alternativa position 33°21'04.7"S 056°30'09.9"W,
- c) Secondary Surveillance Radar SSR (Selex) mode S of 200 NM located at Carrasco Intl. Airport position 34°49'15.90"S 056°02'23.03"W.
- d) Secondary Surveillance Radar MSSR of 180 NM located at Santa Clara, department of Treinta y Tres.

Note: It integrates information from Ezeiza's radar data.

1.2 The application of radar control service

1.2.1 Radar identification is achieved according to the provisions specified by ICAO.

1.2.2 Radar control service is provided in controlled airspaces to aircraft operated by Montevideo and Carrasco Radar under radar surveillance. This service may include:

- a) radar separation of arriving, departing and en-route traffic;
- b) radar monitoring of arriving, departing and en-route traffic to provide information on any significant deviation from the normal flight path;
- c) radar vectoring when required;
- d) assistance to aircraft in emergency;
- e) assistance to aircraft flying VFR;
- f) warnings and position information on other aircraft considered to constitute a hazard;
- g) information to assist in navigation of aircraft.

1.2.3 The minimum horizontal radar separations are:

- a) Primary Radar, 5 NM
- b) Secondary Radar, 5 NM

Note: The minimum horizontal separation shall increase when circumstances such as bearings or relative speeds of the aircraft, the workload of controllers and difficulties caused by congestion of communications, so require.

1.2.4 *Vector and Sequencing Guide (See ATC Surveillance Minimum Altitude Chart - ICAO)*

1.2.5 The levels and/or altitudes assigned by the radar controller to pilots shall provide a minimum clearance of land, according to the phase of flight.

2.1 Emergency procedures

2.1.1 Except as provided in following paragraphs, the pilot in command shall operate the transponder (SSR), selecting modes and codes in accordance with instructions issued by ATC units.

2.1.2 The aircraft with transponders in operation, shall keep it on during all the flight regardless they are in airspace with radar coverage.

Emergency: When an aircraft equipped with a transponder, was in a state of emergency, the pilot in command must operate Code 7700 in Mode A.

Communication failure: When an aircraft equipped with a transponder, was with bilateral communication failure, the pilot in command must operate Code 7600 in Mode A.

Unlawful Interference: When a transponder-equipped aircraft, was subject of unlawful interference, the pilot in command must operate Code 7500 in Mode A.

2.2 Radio communications and radar failure procedures

2.2.1 Radar failure

In case of failure or loss of radar identification, instructions shall provide to restore normal non-radar separation. As an emergency measure if non-radar normal separation could not be provided, vertically separation shall be applied by separated levels 500 feet (150 M) below FL 290 and 1 000 feet (300 M) above FL 290.

2.2.2 Communication failure in the transmission of the aircraft.

2.2.2.1 The radar controller shall determine whether the aircraft receiver work, instructing the pilot:

- a) to carry out one or more turns, or
- b) to activate the special position identification (SPI) of the SSR, or
- c) to change SSR code.

Looking at the performance of the instruction, the radar will continue to provide radar service to aircraft.

2.2.2.2 Total failure of communication of the aircraft. If the aircraft radio is completely out of service, the pilot must carry out the procedures for the communication failure in accordance with the provisions of ICAO.

If you have already established radar identification the controller provide radar vectoring to other aircraft identified outside their track up to the time the aircraft leaves radar coverage.

2.3 System of Code assignment

2.3.1 The SSR Codes - mode A/3 - assigned by ICAO for the identification of the Montevideo FIR flights correspond to the following series:

- a) domestic flights, series 11 and 12
- b) international flights, 60, 61 and 73 series

2.3.2 The codes are automatically assigned by ATC integrated system except the following:

1101 to 1117 - Durazno Control Tower (SUDU)
1160 to 1167 - Gral. Artigas Control Tower (E.M.A)

1200 - VFR flights with no code assigned

1260 to 1267 - Gral. Artigas Control Tower (E.M.A)
1270 to 1277 - Adami Control Tower (SUAA)

2000 - IFR flights with no code assigned

7711 to 7727 - SAR missions

NOTE 1: Codes for SAR missions shall be assigned exclusively by the Montevideo ACC.

NOTE 2: When there are bilateral or multilateral agreements with neighbouring authorities, the flight may be instructed to keep their original code in adjacent FIRs.

INTERNATIONAL CODE OF EMERGENCY

7500 - Unlawful Interference

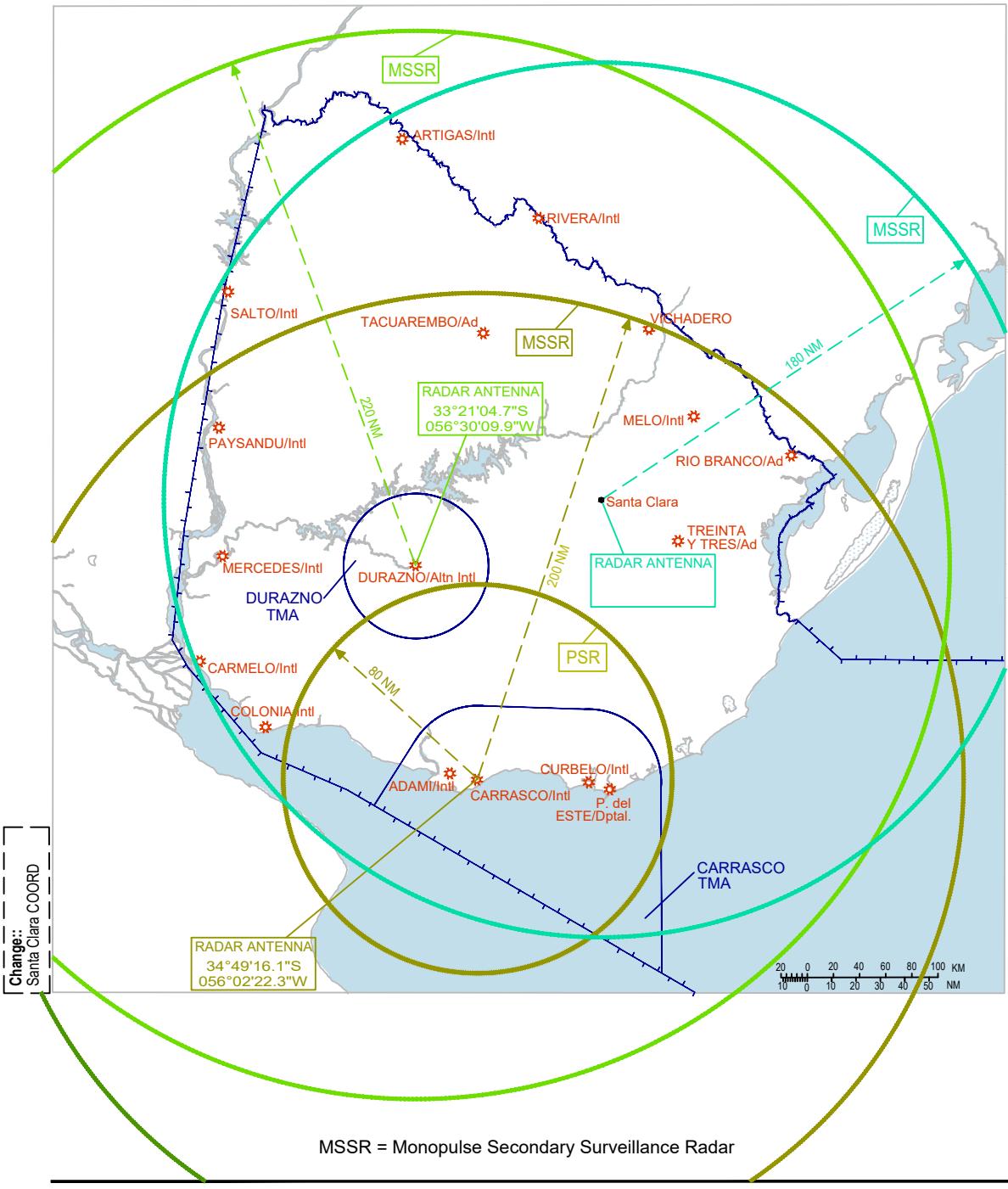
7600 - Communications Failure

7700 - Emergency

2.4 Criteria for checking the accuracy of the information on the flight level derived of Mode C

2.4.1 The tolerance value used to determine that the information on the flight level derived of Mode C presented to the controller is accurate shall be ± 60 m (± 200 ft) for all Uruguayan airspace.

GRAPHICAL REPRESENTATION OF THE RADAR COVERAGE



ENR 1.7 ALTIMETER SETTING PROCEDURES

1. Introduction

The altimeter setting procedures contained here, describes the methods to be observed to keep a proper vertical separation between aircraft and a vertical margin on the ground, in all phases of flights that are made in the MONTEVIDEO FIR/CTA.

In general the procedures for the altimeter setting in Uruguay, are applied in accordance with specified in Document 7030 (Regional Supplementary Procedures) and the Document 8168/OPS/611 (Aircraft Operations) of ICAO.

The transition altitude of the aerodromes is contained in the Instrument Approach Charts and Tables AD 2.

QNH reports and temperature information for use in determining adequate terrain clearance on the ground, are provided by units of air traffic services. QNH values are given in hectopascals, but also at the request are provided in inches.

2. Basic altimeter setting procedures

2.1 General

2.1.1 The transition altitude for aerodromes specified in the territory of Uruguay, in no case shall be less than 900 meters.

2.1.2 The vertical position of an aircraft when at the transition altitude or below it, is expressed in terms of altitudes, whereas such positioning at or above the transition level is expressed in terms of flight levels. When passing through a transition layer, vertical position is expressed in terms of altitudes when descending and in terms of flight levels when ascending.

2.1.3 Flight level zero is located at the atmospheric pressure level of:

1 013.2 hPa (29.92 in). Consecutive flight levels are separated by a pressure interval corresponding to 500 feet (152.4 m) in the standard atmosphere.

Note.— Examples of the relationship between flight levels and altimeter indications are given in the following table, the metric equivalents being approximate:

Flight level number	Altimeter indication	
	Feet	Metres
50	5 000	1 500
100	10 000	3 050
150	15 000	4 550
200	20 000	6 100

2.2 Take-off and climb

2.2.1 A QNH altimeter setting, is made available to aircraft in taxi clearance prior to take-off.

2.2.2 Vertical positioning of aircraft during climb is expressed in terms of altitudes until reaching the transition altitude above which vertical positioning is expressed in terms of flight levels.

2.3 Vertical separation – en route

2.3.1 Vertical separation between aircraft, during en-route flight above 900 meters, shall be expressed in terms of flight levels.

2.3.2 The vertical separation between aircraft during flight en route to be made at or below 900 meters, shall be expressed in altitudes

	000° - 179°		180° - 359°	
	IFR	VFR	IFR	VFR
Flight		35	40	45
level	50	55	60	65
number	70	75	80	85
	90	95	100	105
	etc.	etc.
	270		280	
	290		300	
	310		320	
	330			
	etc.		etc.	

2.4 Approach and landing

2.4.1 The QNH altimeter setting and the transition level used at the aerodrome shall be reported to the aircrafts at the aerodrome approach permits.



2.4.2 The vertical position of the aircrafts during the approach is controlled by reference to flight levels up to the transition level, below which the vertical position is controlled by reference to altitudes.

After the permit has been issued for the approach and has begun the descent for landing, the vertical position of the aircraft above the transition level may be expressed by reference to altitudes (QNH) provided that:

- a) does not have or expected a flight levelled above the transition altitude, and
- b) the flight level above the transition level from which adjustment may be used QNH, be indicated by air traffic control.

Note . - This procedure is mainly applied to aircrafts equipped with turbines, that are appropriate for a continuous descent from a high flight level and to the air traffic control units eligible to control aircrafts with reference to altitudes during descent.

To determine transition levels, the following table shall be used

Table for determining the level of transition							
Transition Altitude		Transition Levels					
Metres	Feet	From 942.2 to 959.4	From 959.5 to 977.1	From 977.2 to 995.0	From 995.1 to 1013.2	From 1013.3 to 1031.6	From 1031.7 to 1050.3
900	3 000	FL 060	FL 055	FL 050	FL 045	FL 040	FL 035
1 200	4 000	FL 070	FL 065	FL 060	FL 055	FL 050	FL 045

2.5 Missed approach

2.5.1 In the case of missed approach, the relevant parts of 2.1.2, 2.2.2 and 2.4 while follow the missed approach procedures set forth in the instrument approach charts of the AD.

4. Procedures applicable to operators (including pilots)

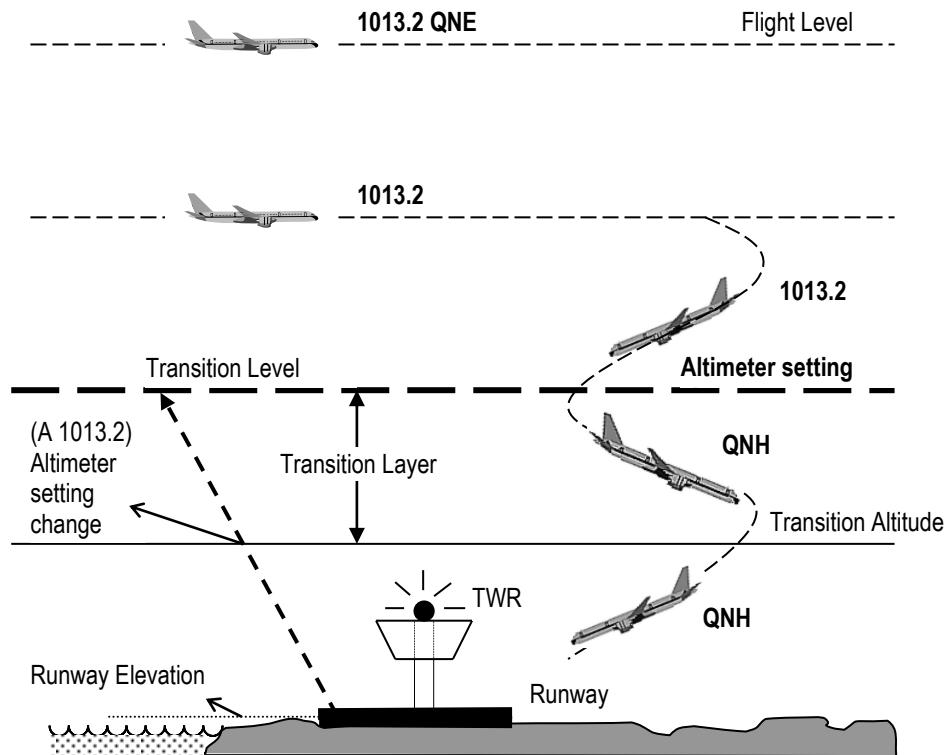
4.1 The levels at which a flight is to be conducted shall be specified in the flight plan:

- in terms of flight levels if the flight is to be conducted at or above the transition level;
- in terms of altitudes if the flight is to be conducted in the vicinity of an aerodrome and at or below the transition altitude.
- in terms of altitudes if the flight is to be conducted in route at 900 metres, or below this altitude;

4.2 When the flight is conducted at altitudes you must have current QNH information updated, relevant to the route, in order to determine the vertical margin over the ground with reasonable accuracy.

4.3 In the flight plan, flight levels shall be specified by number and altitude in feet or metres.

DEMO SCHEME OF ALTIMETER SETTINGS, FROM FLIGHT LEVELS INTO ALTITUDES AND VICEVERSA



5. Tables of cruising levels

Tables of cruising levels applicable in Uruguay

TRACK									
From 000 degrees to 179 degrees					From 180 degrees to 359 degrees				
IFR Flights		VFR Flights		IFR Flights		VFR Flights			
FL	Altitude	FL	Altitude	FL	Altitude	FL	Altitude	Metres	Feet
								Metres	Feet
50	1500	5000	55	1050	3500	40	1200	4000	45
70	2150	7000	75	2300	7500	80	2450	8000	85
90	2750	9000	95	2900	9500	100	3050	10000	105
110	3350	11000	115	3500	11500	120	3650	12000	125
130	3950	13000	135	4100	13500	140	4250	14000	145
150	4550	15000	155	4700	15500	160	4900	16000	165
170	5200	17000	175	5350	17500	180	5500	18000	185
190	5800	19000	195	5950	19500	200	6100	20000	
210	6400	21000				220	6700	22000	
230	7000	23000				240	7300	24000	
250	7600	25000				260	7900	26000	
270	8250	27000				280	8550	28000	
290	8850	29000							
310	9450	31000				300	9150	30000	
330	10050	33000				320	9750	32000	
350	10650	35000				340	10350	34000	
370	11300	37000				360	10950	36000	
390	11900	39000				380	11600	38000	
410	12500	41000				400	12200	40000	
450	13700	45000				430	13100	43000	
490	14950	49000				470	14350	47000	
Etc.	etc.	etc.				510	15550	51000	
						etc.	etc.	etc.	

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ENR 1.8 REGIONAL SUPPLEMENTARY PROCEDURES (DOC 7030)

The supplementary procedures in force are given in their entirety. Differences are shown in quotation marks.

SSR code assignment

By bilateral agreement between the Area Control Centres Ezeiza and Montevideo; a code assigned is retained by the Transferor Centre for a minimum of two (2) hours from the point of transfer before the centre can be re-allocated to another aircraft."

1. Visual flights rules (VFR) (Annex 2, 4.8)

VFR flights to be operated within a control zone established at an aerodrome serving international flights and in specified portions of the associated terminal control area shall:

- a) have two-way radio communications;
- b) obtain permission from the appropriate air traffic control unit; and
- c) report positions, as required.
- del d) must have transponder SSR in Mode A and C operating throughout Montevideo FIR airspace, except that operate in space "G" below 2500 FT.

Note.- The phrase "specified portions of the associated terminal control area" is intended to signify at least those portions of the TMA used by international IFR flights in association with approach, holding, departure and noise abatement procedures.

2. Special application of instrument flight rules

Flights shall be conducted in accordance with the instrument flight rules (even when not operating in instrument meteorological conditions) when above the sea more than 20 nautical miles of shoreline, for over an hour, except you do not require compliance with the minimum IFR flight levels during the day, when there are visual meteorological conditions.

3. Air traffic advisory service (PANS-RAC, Part VI, 1.4)

All IFR flights shall comply with the procedures for air traffic advisory service when operating in advisory airspace.

4. Adherence to ATC approved route (Annex 2, of ICAO, 3.6.2.2)

If an aircraft has inadvertently deviated from the route specified in its ATC clearance, it shall forthwith take action to regain such route within "one hundred (100)" nautical miles from the position at which the deviation was observed.

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ENR 1.9 AIR TRAFFIC FLOW MANAGEMENT (ATFM)

1. Air traffic flow management structure, service area, service provided, location of unit(s) and hours of operation

1.1 *Service area*

Air Traffic Control Services are responsible for implementing flow control within Montevideo FIR. ATS unit that applies Flow Control is who regulates entry and departure of aircraft

2. Types of flow messages and descriptions of the formats

When required to implement, modify or cancel a flow control it shall send messages via AFTN or FAX (alternative) according to the following standards:

a) Recipients as appropriate:

SAEZZRZX - SAEZTZR - SAEZPZX - SABEZTZX - SABEZPZX - SADDZTZX - SADFZTZX -
SAREZRZX - SUEOZQZX - SUMUZAZX - SUMUZTZX - SUMUYIYX - SULSZTZX - SULSZPZX -
SBCWZQZX

b) Originators as appropriate:

SUEOZQZX - SUMUZAZX - SUMUZTZX - SAEZZRZX - SAEZTZR - SABEZTZX

c) Implementation message format:

d) FROM UTC (UNTIL UTC) FLOW CONTROL IS IMPLEMENTED IN POSITION FOR
ROUTE/S AND DESTINATION/S(DISCRIMINATE BETWEEN)(reactors, conventional,
flyovers, etc.). WITH AN INTERVAL OF MINUTES DUE TO

Example:

From 18:00 UTC the flow control is implemented in position DORVO for Route A 305 destinations SUMU/
KNEW/SULS with an interval of 5 minutes due to traffic.

e) Change message format:

REGARDING MY TXT N° GHO..... IS ENLARGED/REDUCED SEPARATION TOMINUTES
DUE TO

f) Cancellation message format:

REGARDING MY TXT N° GHO..... FLOW CONTROL IS CANCELLED FROMUTC

3. Procedures applicable for departing flights

Not applicable.

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ENR 1.10 FLIGHT PLANNING

1. Procedures for the submission of a flight plan

The regulations and procedures of air traffic in Uruguay, conform to LAR 211 and the Procedures for Air Navigation Services - Air Traffic Management and regional Supplementary Procedures for SAM region that has application in Uruguay.

1.1 Submission of a Flight Plan

- 1.1.1 ➔ The Flight Plan must be submitted without exception before departure at the Operations Offices (Flight Plan) of the departure aerodrome, except for the submission of repetitive flight plans. The presentation of the Flight Plan shall be made using the corresponding ICAO form.
- 1.1.2 ➔ The DINACIA Operations Department of the Carrasco International Airport receives Flight Plans by the following means: 1) personally at the Department's office; 2) Telefax (598) 26040311; 3) e-mail: plandevuelo@dinacia.gub.uy.
- 1.1.3 ➔ When the departure aerodrome does not have an Operations Office, the FPL "I" or FPL "Y" for national or international flights shall be processed according to 1.1.2.
- 1.1.4 ➔ When the departure aerodrome does not have an Operations Office, FPL "V" and FPL "Z" for domestic flights, may be processed through the aeronautical Telecommunications Station, through 0800-PLAN (0800- 7526) or fax 26040298 or through the electronic form provided for this purpose at www.dinacia.gub.uy FLIGHT PLAN "V" or "Z" daily from 10:00 to 15:45 and from 17:00 to 22:00. UTC. If not have service at the Aeronautical Telecommunications Station it shall be processed according to 1.1.2.
- 1.1.5 A Flight Plan shall be presented at least 60 minutes before departure, to the flight to which Control or Advice service of Air Traffic shall be provided. The FPL forms shall have a validity of 60 minutes, with respect to the estimated time of departure. If the aircraft does not take off within the referred 60 minutes or a DLA is not received, the FPL shall be automatically cancelled. If the Flight Plan is presented during the flight, it must be done at a time when there is certainty that it shall be received by the appropriate dependency of the Air Traffic Services, at least 10 minutes before the time when the aircraft is calculated shall start the flight as a controlled flight.
- 1.1.6 All VFR flights shall include in box 15 "ROUTE" of Flight Plan Form, the level/altitude visual flight intends to use, according to the table of levels published in the Uruguay AIP.
- 1.1.7 All IFR flights using standardized departures (SID) that include transitions shall use as designator, to enter it in box 15 "ROUTE" of Flight Plan Form, the designator in Column 3 Remarks of the SID.
- 1.1.8 When the destination does not have an ICAO designator, the flight plan shall also include in box 18 of the Flight Plan form the geographic coordinates for the destination.

1.1.9 **Intervention of the competent authority.** Before take-off and immediately after landing the pilot in command of the aircraft or designated representative of the airline, must report to the Office of Operations of the aerodrome, armed with appropriate documentation so that in this or in other units where it is routed, checks can be arranged for the crew, aircraft, passengers or cargo according to the legislation required. Acting authorities may require the submission of crew personnel.

1.1.10 **Expiration of the Flight Plan.** Not need to be given notice of arrival (ARR), when the arrival aerodrome has a unit of aerodrome control (TWR) in service, aerodrome flight information (AFIS) in service or provide information to staff airfield operations office of arrival.

1.1.11 **When there are no dependencies for air traffic services at the aerodrome of arrival, notice of arrival (ARR) will be given to the nearest dependency of air traffic control service as soon as possible and by the quickest means that are available.**

1.1.12 **When it is known that the means of communications at the aerodrome of arrival are inadequate and not available other means in the land for dispatching messages of arrival (ARR) the aircraft broadcast by radio to the Montevideo ACC, before landing, a message similar to the report of arrival. If this is not possible, then pass it on to the dependence of air traffic control or aerodrome flight information closer with which to communicate. When the pilot has a flight plan within national boundaries, know before starting, that none of the procedures for giving notice of arrival (ARR) is practicable, shall state that inability scoring in box 18 of Form Flight Plan, the following:
ARR/NIL.
Note: Entries ARR/NIL held in Box 18 of the Flight Plan form will prevent unnecessarily activate alerting services, search and rescue.**

1.1.13 **In any submitted flight plan to fly over the Montevideo FIR, necessarily must be included in Box 18 of the Flight Plan Form (Other Data) Operator's name and address and registration of the Aircraft.**

1.2 Aircrafts with RVSM approval

1.2.2 Aircraft operators must indicate their RVSM approval status by placing the letter **W** in **Box 10** of the flight plan form, regardless of the flight level requested.

1.2.3 In the case of **Repetitive Flight Plan**, you should indicate their RVSM approval status by placing the letter **W** **at the point Q of the RPL**, regardless of the level required, as follows: **EQPT/W**

1.3 Aircrafts without RVSM approval

1.3.1 STATE AIRCRAFTS WITHOUT RVSM APPROVAL

1.3.1.1 It shall be permitted to State aircrafts without RVSM approval operations in RVSM airspace in the CAR/SAM Regions. The flight plan completed serves as advance notice to ATC that the aircraft is requesting to operate in RVSM airspace. **The State Aircrafts without RVSM approved** to submit flight plans to enter RVSM airspace shall include the following in **box 18** of your flight plan: **STS/NONRVSM**.

1.3.1.2 The State aircrafts (military, customs, police) must also include the letter **M** in **section 8** of the flight plan form, regardless of the level required.

1.3.2 CIVIL AIRCRAFTS WITHOUT RVSM APPROVAL

1.3.2.1 *International Flights*

Civil aircrafts without RVSM approval conducting international flights shall **not planned** the flight at RVSM flight levels, except in the following cases:

- a. The aircraft is being delivered for the first time to the State of Registry or the operator
- b. The aircraft has had previous RVSM approval, but has suffered an equipment failure and is flying to a maintenance facility for repair in order to meet RVSM requirements and/or obtain approval
- c. The aircraft is being used for charitable or humanitarian

Aircraft operators who are leaving the MONTEVIDEO FIR, and requesting authorization according to the above must be approved by the MONTEVIDEO ACC usually no more than 12 hours nor less than 4 hours before the scheduled departure time.

The operator shall inform of this authorization to all ACC affected by the flight.

The operator must insert the text **STS/NONRVSM** in box **18** of the flight plan form.

NOTE: The presentation of the flight plan is not sufficient notice.

This authorization process has the above purposes only, and not serves as a means to avoid the normal RVSM approval process.

1.3.2.2 *Domestic flights*

Operators of **civil aircrafts without RVSM approved** shall not insert the letter **W** in box **10** of the flight plan form.

In the case of **Repetitive Flight Plan**, it shall indicate **the situation of lack** of RVSM approval regardless of the level required by placing the following code in the **box Q of the RPL: EQPT/-**

Operators of civil aircraft without RVSM approved shall not be placed flight levels between FL290 and FL410, inclusive, in box 15 of the flight plan form.

1.3.2.3 It shall be permitted to aircrafts without RVSM to climb or descend through RVSM airspace to or from flight levels above FL 410, whenever the aircraft climb or descend to at least one standard rate and no stop at any intermediate altitude in RVSM airspace.

2. Sanitary Flights

Exceptionally medical flights under instrument flight rules to aerodromes that temporarily do not have auxiliary power units can be authorized under the following conditions:

- 1) before the beginning of the flight the navaid serving the aerodrome in question must be operational;
- 2) in the event of primary power failure at the aerodrome of intended landing, the pilot will be evaluated using other alternative navaid to continue navigating and/or the aircraft have autonomous navigation equipment operative.

3. Assistance Plan for the Critical Multiple Traumas

Aircrafts (fixed wing or helicopter) that answer the call to a mission of search and rescue, sanitary or of assistance to the severe multiple traumas, so exceptional situation, have no obligation to wait for Air Traffic Services have received the corresponding flight plan prior to departure.

The company dispatcher or operations personnel (in case of aircraft of the Air Force and Naval Aviation) shall notify the appropriate control unit, the destination of the mission and when circumstances permit, shall forward the flight plan, specifying the type of mission. Control units involved, shall expedite by all available means, the departure of the aircraft, giving the corresponding priority.

4. Repetitive Flight Plan System (RPL)

1 Extension

1.1 The agreement signed on September 18th, 2009, signed in Lima Peru between the states of Argentina, Brazil, Paraguay and Uruguay concerning the implementation of the System of Repetitive Flight Plan (RPL), effective December 17th, 2009, is limited to regular international flights flying over

routes that cross the Flight Information Regions (FIR) adjacent to the signatory States, with origin or destination within them.

2 Objective

2.1 The purpose of this Agreement relates only to the application referred to in the Rules of the Air (Annex 2) of the International Civil Aviation Organization (ICAO), paragraph 3.3.1.3 and the Air Traffic Management Document (DOC 4444 ATM/501) of ICAO Chapter 16, paragraph 16.4 (USE OF REPETITIVE FLIGHT PLANS) and corresponding part of Appendix 2, paragraphs 6, 7 and 8 of this Appendix.

3 Procedures

3.1 Submission of Repetitive Flight Plans

3.1.1 The operator shall submit, by the media and the addresses indicated by each State, the RPL list and/or its corresponding amendments to the agency designated with at least FIFTEEN (15) days prior to the expiration date. (Exception from Paraguay, THIRTY (30) days in advance) and the amendments shall be presented with SEVEN (7) days in advance. (Exception from Paraguay, fifteen (15) days in advance)

3.1.2 The permanent cancellations will be reported as described in paragraph 3.1.1 but with a minimum of SEVEN (7) days.

3.1.3 The Lists of Repetitive Flight Plan must be submitted in the manner prescribed by ICAO in Doc 4444 ATM/501, Appendix 2 Paragraph 6.7 and 8. Dates should be indicated in terms of days, month and year (dd, mm, yy).

3.1.4 RPL lists must have the full name, address and telephone number of responsible.

3.1.5 RPL lists must be numbered consecutively.

4 Acceptance Control

4.1 The agencies designated to receive RPL lists, shall inform the operator by the most appropriate media, the receipt and acceptance of their RPL lists or modifications thereof.

4.2 The operator shall ensure the acceptance of his RPL list, by all involved agencies, designated by the State before the effective date of the RPL of the list.

4.3 The operator normally continues to submit the Flight Plans (FPL) still fulfilled the proposed effective date to receive confirmation of acceptance from its list of RPL by the agencies appointed by the State.

4.4 The RPL centres or agencies designated for receipt of the lists shall inform each other, via AFTN or fax or email of acceptance from the RPL list and its amendments.

4.5 In order to complement paragraphs 3 and 4 the States shall present indicative of the recipients of messages.

FOR URUGUAY

AFTN: SUMUZBZX ACC MVD and or SUMUZRZX for RPL Centre.

Telefax. (00598) 2604 0251 extension 5155

Telephone (00598) 2604 0251 extension 5111

E-mail atmрpl@dinacia.gub.uy

FOR ARGENTINA (ACCORDING TO THE FIR)

AFTN:

SAEZZRZX (Ezeiza ACC) Informative: SABARYX

SAMEZRZX (Mendoza ACC) Informative: SABARYX

SACOZRZX (Córdoba ACC) Informative: SABARYX

SAREZRZX (Resistencia ACC) Informative: SABARYX

SAVCZRZX (Com. Rivadavia ACC) Informative: SABARYX

Telefax:

Ezeiza ACC (5411) 4480 2203-2265

Mendoza ACC (54261) 4487486-4410900/0910 extension 24337

Córdoba ACC (54351) 4335350/ 4756450

Resistencia ACC (543722) 440939 or 436291/92/93

Com. Rivadavia ACC (54297) 4548375

FOR BRAZIL

Telephone 55-212101-6409 55-212101-6449
E-mail cpvr@cgna.gov.br

FOR PARAGUAY

Telefax GNNA 595-21-205365
E-mail rplparaguay@dinac.gov.py atm_gna@dinac.gov.py

4.6 The RPL Centres or ATS units so designated by the signatory countries of this Agreement shall inform operators with the ACCEPTANCE or NOT ACCEPTANCE of RPL submitted.

4.7 The RPL lists approved by the States shall be sent to other States for approval at intervals of 4 months a year. And the changes (up to 20% of total) will be made according to AIRAC calendar.

4.8 In the lists NOT use the term UFN, it being necessary to place final date of validity.

5 Messages for Air Traffic Services

5.1 The exchange of ATS messages related to the development of each flight covered by this Agreement and the application of additional procedures to those set forth shall be made in accordance with the principles contained in DOC 4444 ICAO ATM/501.

5.2 Also taken into account:

5.2.1 Delay messages (DLA) will be transmitted when the delay in the scheduled time of departure exceed thirty (30) minutes.

5.2.2 Message of Flight Plan Cancellation (CNL) will be transmitted when cancelling a flight on a given day. This message shall be sent the day of the flight cancellation.

5.2.3 Change Message (CHG) shall be transmitted when there are changes of a temporary nature, on any given day in a RPL.

NOTE: For the messages mentioned above it shall use as the primary coordination channel the AFTN network and as secondary the ATS oral Circuit.

ENR 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES

Flight movement messages relating to traffic into or via the MONTEVIDEO FIR shall be addressed as stated below in order to warrant correct relay and delivery.

Note 1. - The flight movement messages in this context include the flight plan messages, amendment messages relating thereto and cancellation messages flight plan. (See ATM/501 ICAO Doc 4444, Chapter 11, 11.2.1.2.3.3).

Note 2. - With respect to the filing of Flight Plans, e-Amendment and cancellation of flights originating in their territory, apply the provisions on page ENR 1.10-1 "Procedures for the submission of a flight plan."

Category of flight (IFR, VFR or both)	Route (into or via FIR and/or TMA)	Message address
1	2	3
IFR Flights	<ul style="list-style-type: none">- Overflights operating within the Montevideo FIR- Aircrafts operating in airports within the Carrasco- Aircraft operating in aerodromes within the Montevideo FIR outside Carrasco TMA and TWR in which they are operating- Every flight plan to operate within the Montevideo FIR must be sent	<p>SUEOZQZX</p> <p>•SUEOZQZX</p> <p>•SUEOZQZX</p> <p>SUBLWYX</p>
VFR Flights	<ul style="list-style-type: none">- Overflights operating within the Montevideo FIR- Aircrafts operating in airports within the Carrasco TMA- Aircraft operating in aerodromes within the Montevideo FIR outside Carrasco TMA and TWR in which they are operating- Every flight plan to operate within the Montevideo FIR must be sent	<p>SUEOZQZX</p> <p>•SUEOZQZX</p> <p>•SUEOZQZX</p> <p>SUBLWYX</p>

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ENR 1.12 INTERCEPTION OF CIVIL AIRCRAFT

1. Interception procedures

The following procedures and visual signals apply over the territory and Uruguay territorial waters, in the event of interception (*) of an aircraft.

1. An aircraft which is intercepted by another aircraft shall immediately:
 - a) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in pages ENR 1.12-3/4;
 - b) notify, if possible, the appropriate air traffic service unit;
 - c) attempt to establish radiocommunication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHZ, given the identity of the intercepted aircraft and nature of flight, if no contact has been established and if practicable, repeat this call on the emergency frequency 243 MHZ;
 - d) if equipped with SSR transponder, select immediately mode A code 7700, unless otherwise instructed by the appropriate air traffic service unit.
2. If radio contact is established during interception, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using the phrases and pronunciations in the following table, transmitting each phrase twice.

Phrase	Pronunciation	Meaning
CALL SIGN	<u>KOL</u> -SAIN	My call sign is (call sign)
WILCO	<u>UIL</u> -CO	Understood. Will comply
CAN NOT	<u>CAN</u> NOT	Unable to comply
REPEAT	RI- <u>P</u> IT	Repeat your instruction
AM-LOST	<u>AM</u> <u>LOST</u>	Position unknown
MAYDAY	<u>MEIDEI</u>	I am in distress
HIJACK**	<u>JAI</u> - <u>CHAK</u>	I have been hijacked
LAND (place)	<u>LAND</u> (place name)	I request to land at (place name)
DESCEND	DEE- <u>SEND</u>	I require descent

(*) The word "interception" in this context does not include intercept and escort service provided, on request, to an aircraft in distress, in accordance with the ICAO Search and Rescue Manual (Doc. 7333).

1. Syllables to be emphasized are printed in bold letters.
2. The call sign required to be given is that used in radiotelephony communications with air traffic services units and corresponding to the aircraft identification in the flight plan.

(**) Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

2.1 The intercepting aircraft, in the circumstances described in the preceding paragraph, use the following phrases:

Phrase	Pronunciation	Meaning
CALL SIGN	<u>KOL-SAIN</u>	What is your call sign?
FOLLOW	FOLOU	Follow me
DESCEND	<u>DISSEND</u>	Descend for landing
YOU LAND	YU LAND	Land at this aerodrome
PROCEED	PROSSID	You may proceed

3. If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.
4. If instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.
5. The visual signals for use in the event of interception are detailed on page ENR 1-12.3/4.

SIGNALS FOR USE IN THE EVENT OF INTERCEPTION
Signals initiated by intercepting aircraft and responses by intercepted aircraft:

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
1	<p>DAY or NIGHT – Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in case of an helicopter) from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is an helicopter) and, after acknowledgement, a slow level turn, normally to the left, (or to the right in the case of an helicopter) on the desired heading.</p> <p><i>Note 1.- Meteorological conditions or terrain may require the intercepting aircraft to reverse de positions and direction of turn given above in Series 1.</i></p> <p><i>Note 2.- If the intercepted aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of racetrack patterns and to rock the aircraft each time it passes the intercepted aircraft.</i></p>	You have been intercepted. Follow me.	<p>DAY or NIGHT- Rocking aircraft, flashing navigational lights at irregular intervals and follow interceptor aircraft.</p> <p><i>Note.- Additional action required to be taken by intercepted aircraft is prescribed in Annex 2, Chapter 3, 3.8..</i></p>	Understood, will comply.
2	DAY or NIGHT – An abrupt breakaway manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed.	DAY or NIGHT – Rocking the aircraft.	Understood will comply.

Signals initiated by intercepted aircraft and responses by intercepting aircraft:

Series	<i>INTERCEPTING Aircraft Signals</i>	<i>Meaning</i>	<i>INTERCEPTED Aircraft Responds</i>	<i>Meaning</i>
3	DAY or NIGHT – Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome.	DAY or NIGHT – Lowering landing gear, (if fitted), showing steady landing lights, and following the intercepting aircraft and, if, after overflying the runway in use or helicopter landing area, landing is considered safe, proceeding to land.	Understood will comply.

Signals initiated by intercepted aircraft and responses by intercepting aircraft:

Series	<i>INTERCEPTING Aircraft Signals</i>	<i>Meaning</i>	<i>INTERCEPTED Aircraft Responds</i>	<i>Meaning</i>
4	DAY or NIGHT – Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 300m (1000ft) but not exceeding 600m (2000ft) (in the case of a helicopter, at a height exceeding 50m (170ft) but not exceeding 100m (330ft)) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	DAY or NIGHT – If it is that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the Series 1 signals prescribed for the intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.	Understood follow me Understood you may proceed.
5	DAY or NIGHT - Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply.	DAY or NIGHT – Uses Series 2 signals prescribed for intercepting aircraft.	Understood .
6	DAY or NIGHT - Irregular flashing of all available lights.	In distress.	DAY or NIGHT - Uses Series 2 signals prescribed for intercepting aircraft.	Understood

ENR 1.13 UNLAWFUL INTERFERENCE

1. General

It is desired that the following procedures provide guidance for aircraft that are the subject of unlawful interference and can not report the matter to an ATS unit.

2. Procedures

2.1 Unless considerations aboard the aircraft dictate otherwise, the pilot-in-command should attempt to continue flying on the assigned track and at the assigned cruising level at least until notification to an ATS unit is possible or the aircraft is within radar coverage.

2.1.1 The pilot-in-command shall try to adjust the transponder in the Code 7500 Mode A to provide notice of the situation, unless the circumstances justify the use of the Code 7700.

2.1.2 When a pilot has selected the Code 7500 in A mode and the ATC asked for confirmation of the selected key, it shall confirm it or do not respond, depending on the circumstances.

Note: The absence of response from the pilot shall be interpreted by the ATC as an indication that the use of the Code 7500 is not due to inadvertent selection of an incorrect password.

2.2 When an aircraft subjected to an act of unlawful interference must depart from its assigned track or assigned cruising level without being able to make radiotelephone contact with ATS, the pilot-in-command should, whenever possible:

a) attempt to broadcast warnings on the VHF emergency frequency and other appropriate frequencies, unless considerations aboard the aircraft dictate otherwise. Other equipment such as on-board transponders, data links, etc. should also be used when it is advantageous to do so and circumstances permit; and

b) the stipulated in 2.1.1 and 2.1.2.

c) continue the flight in accordance with special procedures for in-flight contingencies, where such procedures have been established and promulgated in Doc 7030-*Regional Supplementary Procedures*.

d) if they had not established regional procedures applicable to the case, continuing the flight to a level which differs 300 m (1 000 ft) of cruising levels normally used for IFR flights in the region, if the aircraft is above flight level 290 or 150 m (500 ft) if it is below flight level 290.

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ENR 1.14 AIR TRAFFIC INCIDENTS

1. Definitions of air traffic incidents

1.1 "Air traffic incident" is used to mean a serious occurrence related to the provision of Air Traffic Services, such as:

- a) aircraft proximity (AIRPROX);
- b) serious difficulties resulting in a hazard to aircraft caused, for example, by:
 - 1) procedure failures;
 - 2) non-compliance with prescribed procedures; or
 - 3) failure of ground facilities.

1.1.1 Definitions for aircraft proximity and AIRPROX

Aircraft proximity: A situation in which, in the opinion of the pilot or the air traffic services personnel, the distance between aircraft, as well as their relative positions and speed, has been such that the safety of the aircraft involved may have been compromised. Aircraft proximity is classified as follows:

- *Risk of collision*. The risk classification of aircraft proximity in which serious risk of collision has existed.
- *Safety not assured*. The risk classification of aircraft proximity in which the safety of the aircraft may have been compromised.
- *No risk of collision*. The risk classification of aircraft proximity in which no risk of collision has existed.
- *Risk not determined*. The risk classification of aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.

AIRPROX. The code word used in an air traffic incident report to designate aircraft proximity.

1.2 Air traffic incidents are designated and identified in reports as follows:

<i>Type</i>	<i>Designation</i>
Air traffic incident	Incident
As a) above	AIRPROX (aircraft proximity)
As b) 1) and 2) above	Procedure
As b) 3) above	Facility

2. Using the Air Traffic Incident Report Form (See model on pages ENR 1.14-3 to 1.14-7)

The Air Traffic Incident Report Form is intended for use:

- a) by a pilot for filing a report on an air traffic incident after arrival or for confirming a report made initially by radio during flight.

Note 1.- The form, if available on board, may also be of use in providing a pattern for making the initial report in flight.

Note 2.- The Air Traffic Incident Report Form will be required and delivered in Operations and/or Aerodrome Air Traffic Services offices where the first landing occurs or, at any ATS unit (including in-flight procedures).

Note 3.- All forms must be sent to:

1.- Dirección General de Aviación Civil e Infraestructura Aeronáutica

Av. de las Industrias Wilson Ferreira Aldunate (ex Camino Carrasco) 5519

14002 Canelones – URUGUAY

• Phone.: (598) 2604 0408 ext 5102 and 5155

• Fax: (598) 2604 0408 ext 5155

• e-mail: smsats@dinacia.gub.uy, dca@dinacia.gub.uy, or

2.- Inspectores de Dirección General de Aviación Civil

Aeropuerto Internacional de Carrasco

Phone 2604 0329 ext. 1364

3. Reporting procedures (including in-flight procedures)

3.1 The following are the procedures to be followed by a pilot who is or has been involved in an incident:

- a) during flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft, so as to permit the fact to be ascertained immediately;
- b) as promptly as possible after landing, submit a completed Air Traffic Incident Report Form

- 1) for confirming a report of an incident made initially as in a) to made if it had not been possible, to report it by radio;
- 2) to report an incident that does not require an immediate report exactly when occurs.

3.2 An initial report made by radio should contain the following information:

- a) aircraft identification;
- b) type of incident for example aircraft proximity;
- c) the incident; 1. a) and b); 2. a), b), c), d), u); 3. a), b), c), i); 4. a), b);
- d) miscellaneous: 1. e),

3.3 The confirmation of a major incident report made by radio or the initial report of any other incident must be provided to the Operations and/or Aerodrome Air Traffic Services offices where the incident occurs.

4. Purpose of reporting and handling of the form

4.1 The aim of notification is to promote the safety of the aircraft and the improvement of the services involved and affected services.

AIR TRAFFIC INCIDENT REPORT FORM

For use when submitting and receiving reports on air traffic incidents. In an initial report by radio, shaded items should be included.

A - AIRCRAFT IDENTIFICATION	B - TYPE OF INCIDENT
	AIRPROX/ PROCEDURE/FACILITY *

C - THE INCIDENT

1. General

a) Date/time of incident UTC

b) Position

2. Own aircraft

i) Traffic avoidance advice issued by ATS
() Yes, based on radar () Yes, based on visual sighting () Yes, based on visual sighting
() No

j) Traffic information issued
() Yes, based on radar () Yes, based on visual sighting () Yes, based in other information
() No

k) Airborne collision avoidance system – ACAS
() Not carried () Type () Traffic advisory issued
() Resolution advisory issued () ~~■~~Traffic advisory or resolution advisory not issued

l) Radar identification
() No radar available () Radar identification () No radar identification

m) Other aircraft sighted
() Yes () No () Wrong aircraft sighted

n) Avoiding action taken
() Yes () No

o) Type of flight plan IFR/VFR/None *

3. Other aircraft

a) Type and call sign/registration (if known)

b) If a) above not known, describe below
() High wing () Mid wing () Low wing
() Rotorcraft
() 1 engine () 2 engines () 3 engines
() 4 engines () More than 4 engines

Markings, colour or other available details

.....
.....
.....
.....

c) Aircraft climbing or descending
() Level flight () Climbing () Descending
() Unknown

d) ~~■~~Aircraft bank angle
() Wings level () Slight bank () Moderate bank
() Steep bank () Inverted () Unknown

e) Aircraft direction of bank
 Right Left Unknown

f) Lights displayed
 Navigation lights Stroboscope lights Cabin lights
 Red anti-collision lights Landing/taxi lights Logo(tail fin) lights
 Other None Unknown

g) Traffic avoidance advice
 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 Unknown

i) Avoiding action taken
 Yes No Unknown

4. Distance

a) Closest horizontal distance.....

b) Closest vertical distance

5. Flight weather conditions

a) IMC/VMC*

b) Above/below * clouds/fog/haze or between layers *

c) Distance vertically from cloud m/ft * below m/ft* above

d) In clouds/rain/snow/sleet/fog/haze *

e) Flying into/out of * sun

f) Flight visibility m/km *

6. Any other information considered important by the pilot-in-command

.....
.....
.....
.....
.....

1.1 D - MISCELLANEOUS

1. Information regarding reporting aircraft

- a) Aircraft registration
- b) Aircraft type
- c) Operator
- d) Aerodrome of departure.....
- e) Aerodrome of first landing destination
- f) Reported by radio or other means to (name of ATS unit) at time UTC
- g) Date/time/place of completion of form

2. Function, address and signature of person submitting report

- a) Function.....
- b) Address
- c) Signature.....
- d) Telephone number

3. Function and signature of person receiving report

- a) Function b) 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 (name of ATS unit)

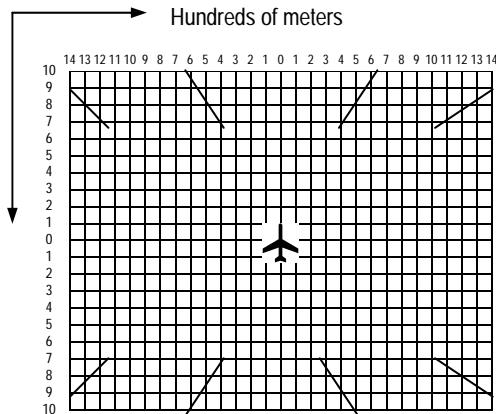
2. ~~█~~Details of ATS action

Clearance, incident seen (radar/visually, warning given, result of local enquiry, etc.)

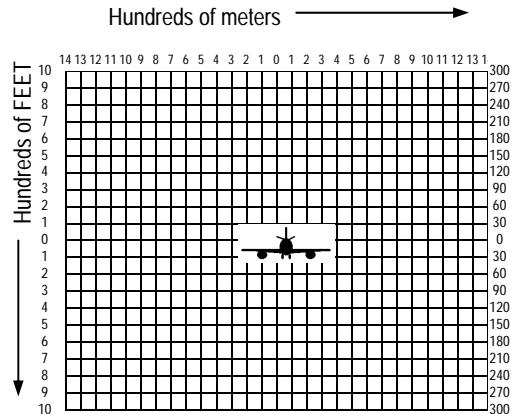
.....
.....
.....
.....

DIAGRAMS OF AIRPROX

Mark passage of other aircraft relative to you, in plan on the left and in elevation on the right, assuming YOU are the centre of each diagram. Include first sighting and passing distance.



VIEW FROM ABOVE



VIEW FROM ASTERN

* Delete as appropriate

Instructions for the completion Air Traffic Incident Report Form

Item

- A Identification of the aircraft filling the report.
- B An AIRPROX report should be filed immediately by radio.
- C1 Date/Time UTC and position in bearing and distance from a navigation aid or in LAT/LONG.
- C2 Information regarding aircraft filing the report, tick as necessary.
- C2 c) E.g. FL 350/0103 hPa or 2 500 ft/QNH 1 007 hPa or 1 200 ft/QFE 998 hPa.
- C3 Information regarding the other aircraft involved.
- C4 Passing distance – state units used.
- C6 Attach additional papers as required. The diagrams may be used to show aircraft's positions.
- D1 f) State name of ATS unit and date/time in UTC.
- D1 g) Date and time in UTC.
- E2 Include details of ATS units such as service provided, radiotelephony frequency, SSR Codes assigned and altimeter setting. Use diagram to show the aircraft's and attach additional papers as required.

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ENR 1.15 FIR MONTEVIDEO ATS CONTINGENCY PLAN

1. OBJECTIVE.

1.1. This contingency plan contains arrangements to guarantee the continued safety of air navigation in the event of partial or total interruption of Air Traffic Services (ATS) within Montevideo FIR and is related to ICAO Annex 11 - Air Traffic Services, Chapter 2, paragraph 2.32, and its attachment C, establishing contingency measures and a Simplified Network of ATS Routes to guide the traffic flow between Montevideo FIR and the Flight Information Regions of neighbouring countries.

2. FLIGHT INFORMATION REGIONS (FIR) AFFECTED.

2.1. The following FIRs are directly affected by this ATS Contingency Plan: URUGUAY: Montevideo, ARGENTINA: Ezeiza, Resistencia, BRAZIL: Curitiba

3. AIR TRAFFIC MANAGEMENT.

3.1. ATS contingency levels

- a) Contingency due to partial interruption of the ATS:
Operational scenario in which the routine supply of the ATC Service is not possible and/or in which it is only possible to supply the Flight Information and/or Alert Services
- b) Contingency due to total interruption or zero ATS:
Operational scenario in which it is not possible to provide any Air Traffic Service.

3.2. ATS Responsibilities

In case of partial or total interruption and ATS cannot be provided within Montevideo FIR normally, the corresponding NOTAM shall be published. If the interruption of services is foreseeable, the NOTAM must be issued 48 hours in advance.

3.2.1. The NOTAM shall specify:

- a) date and time of the beginning of the contingency measures;
- b) application of the Contingency Plan and contingency level (partial or total) that is taking place, as well as the corresponding mitigation measures;
- c) airspace available for landing or overflying traffic, and airspace to be avoided;
- d) details of facilities and services available or unavailable, and any limitations on the provision of ATS (example: ACC, APP, TWR and FIS), including the date services are expected to be restored, if available;
- e) information on provisions regarding alternative services;
- f) ATS contingency routes;
- g) procedures to be applied by adjacent ATS units;
- h) procedures to be applied by pilots, and
- i) any other details related to the interruption and the actions being taken, which could be useful to aircraft operators.

- 3.2.2. This plan shall be deactivated by means of a cancellation NOTAM.
- 3.2.3. The ATS Contingency Operational Group (AOCG) is assigned the responsibility of monitoring events and can order the execution of the contingency plan and the respective coordination arrangements.

STATE/ ORGANIZATION	CONTACT POINT POSITION	TELEPHONE	EMAIL
URUGUAY/DINACIA	Director de Circulación Aérea	(598) 26040408 extension 5102	dca@dinacia.gub.uy
URUGUAY/DINACIA	Director de División Tránsito Aéreo.	(598) 26040408 extension 5105	dta@dinacia.gub.uy

(*) Note: The point of contact shall be the person assigned or who holds the position at the time of activation of the Contingency Plan.

- 3.2.4. This Contingency Plan does not intend to cover all the contingencies, nor all the possible magnitudes of degradation in the ATS services; since these can be innumerable, so it shall be the ATS units involved who shall determine at the time, in a tactical way, the conducive and additional measures for situations not foreseen in this plan.

4. SEPARATIONS.

- 4.1. Lateral separation
- 4.1.1. The Simplified ATS Route Network has been developed ensuring sufficient lateral separation between aircraft during the contingency period.
- 4.2. Vertical separation
- 4.2.1. Vertical separation shall be established in accordance with the provisions of ICAO Annex 2, Appendix 3 Table a) of Cruising Levels. (RVSM)
- 4.3. Flight level restrictions
- 4.3.1. Long-range international air transport flights (more than three hours) shall have preference for the use of FL 290 or higher.
- 4.3.2. Level changes shall not be authorized within 10 minutes before the aircraft enters the adjacent FIR (unless previously coordinated between the dependencies).

4.4. Longitudinal separation

4.4.1. The longitudinal separation to be applied in the ATS contingency routes for international flights of more than three hours during the contingency period shall be fifteen (15) minutes or at the consideration of the corresponding jurisdiction controls and prior coordination between them, or what is established in contingency agreements with neighbouring countries.

4.5. Priority to the different types of flight

4.5.1. Priority shall be given to long-range international air operations and those special operations involving the following types of flight:

- a) aircraft in emergency or operating with a significant reduction in its efficiency;
- b) evacuation and relief flights, and search and rescue flights;
- c) State aircraft.

4.6. Transfer of control and coordination

4.6.1. The procedures applicable to the ATS units involved are specified in ANNEX II.

4.6.2. Unless otherwise established in the letters of operational agreement between adjacent FIRs, the transfer of control shall take place within the limits of the FIRs involved. If possible, the coordination of the transfer must be carried out at least 30 minutes before the estimated hours on the notification points of entry to the next FIR.

4.6.3. ATS coordination shall be carried out through the means of communication that have been established in the operational agreement letters between the ATS units of adjacent FIRs.

4.6.4. In case of failure of the communications channels, the alternative means of communication and procedures that appear in this Plan, Annex III, 2, shall be used.

4.7. Autotransference procedure

4.7.1. In the case that the normalized and alternative means of communication are terminated, the pilot of the aircraft shall be requested to proceed to communicate on the appropriate frequencies of the accepting ATC unit in order to report its transit (ANNEX III).

4.8. Transfer of communications

4.8.1. Unless another procedure is established between ATS units of adjacent FIRs, the transfer of communications shall take place 5 minutes before the scheduled time at the agreed transfer point.

- 4.9. EST message
- 4.9.1. In the event that an ATC unit has not been able to carry out the pertinent coordination to transfer responsibility for control of an aircraft, it shall send an estimated message (EST MSG) to all ATC units along the ATS route that the aircraft shall operate.
- 4.10. Acknowledgment of receipt
- 4.10.1. The respective acknowledgment of receipt of all ATS coordination's shall be made for the transfer of responsibilities.
- 4.11. Operations near the FIRs limits
- 4.11.1. As far as possible during the contingency period, operations near the limits of the FIRs shall be avoided. However, when this type of operations is essential, they must be coordinated with the corresponding ATC unit.
- 4.12. Coordination of route authorizations
- 4.12.1. During the contingency period, more time may be needed to coordinate route clearances with adjacent ATC units, so changes shall be limited after coordination is completed.

5. COMMUNICATIONS.

- 5.1. In those airspaces where ground-air communications are not available, pilots shall apply in-flight information broadcasting procedures and the following:
 - a) They shall keep a permanent watch on the VHF frequency appropriate to the FIR where the flight takes place and if they do not have contact with the pertinent ATC unit, they shall transmit the real or estimated position to the reporting points on that frequency.
 - b) Related operational procedures contained in ICAO Annex 11, Appendix C. For better reference, ANNEX III transcribes the aforementioned procedures. The frequency for In-Flight Information Broadcasting Procedures to be used in the SAM Region is 123.45 MHZ.
- 5.2. The measures to be applied during the contingency shall be published in a timely manner as soon as possible.
- 5.3. Any update/modification or emergency measures considered necessary to attend to ATS contingency situations shall be published by NOTAM.
- 5.4. The units shall use all available means of contact for coordination, including: ATS voice network, traditional phone lines and/or institutional cell phones, AFTN/AMHS messaging

6. PROVISIONS APPLICABLE TO THE CREWS.

- 6.1. The operational procedures for pilots, as well as the procedures to be applied in case of communication failure during the activation period of the Contingency Plan, appear in ANNEX III.

7. COORDINATION MEASURES.

- 7.1. The contingency arrangements provided for herein are provisional and shall be in force until such time as the plan's services and facilities resume normal activities.
- 7.2. This Plan should be reviewed, simulated and/or tested at appropriate intervals.
- 7.3. Amendments and revisions must be coordinated with the affected States, International Organizations, and ICAO.

8. MISCELLANEOUS.

- 8.1. Included as ANNEX IV are the Agreements established with neighbouring countries.

ANNEXES

ANNEX I: Simplified Network of ATS Routes.

ANNEX II: Procedures applicable to the ATS Units involved.

a) Appendix 1 - CNS and ATM Contingency Measures

ANNEX III: Operational procedures for pilots.

ANNEX IV: Contingency agreements with neighbouring countries.

ANNEX I SIMPLIFIED NETWORK OF ATS ROUTES.

1. SIMPLIFIED NETWORK OF AREA NAVIGATION ROUTES

During the activation of the Contingency Plan, only the ATS routes detailed below shall be used:

- UN 741 (direction from SBCW FIR to SAEF FIR).
- UN 857 (direction from SAEF FIR to SBCW FIR).
- UM 534 (direction from SAEF FIR to SBCW FIR).
- UM 424 (direction from SAEF FIR to SUEO FIR, from DORVO to LDS).
- UL 405 (direction from SUEO FIR to SAEF FIR).
- UM 424 (direction from SBCW FIR to SUEO FIR, from TOLEP to LDS).

2. SIMPLIFIED NETWORK OF CONVENTIONAL NAVIGATION ROUTES

During the activation of the Contingency Plan, only the ATS routes detailed below shall be used:

- A305 (direction from SAEF FIR to SUEO FIR).
- A306 (direction from SBCW FIR to SUEO FIR).
- A310 (direction from SBCW FIR to SUEO FIR).
- A309 (direction from SUEO FIR to SBCW FIR).

TABLA 1: OVERFLIGHTS

ENTRY POINT	EXIT POINT	ROUTE	DIRECTION
UMRUD	PAPIX	UN741	WEST
DORVO	OGRUN	UN857	EAST
SUGRA	URURI	UM534	EAST

TABLA 2: DESTINATIONS

MONTEVIDEO-CARRASCO (SUMU) / MALDONADO - LAGUNA DEL SAUCE (SULS)

ENTRY POINT	ROUTE
DORVO	UM424
DORVO	A305
TOLEP	UM424
BGE	A310
UGELO	A305

TABLA 3: DEPARTURES

MONTEVIDEO CARRASCO (SUMU) / MALDONADO-LAGUNA DEL SAUCE (SULS)

EXIT POINT	ROUTE
UGIMI	UL405 A306
UGURA	A309

ANEXO II PROCEDURES APPLICABLE TO THE ATS UNITS INVOLVED.

1. The ATS units involved must follow the following procedures:
 - a) Flight Plan messages must be transmitted through the AMHS/AFTN in accordance with normal procedures, or by alternative means.
 - b) They must communicate via the ATS coordination circuits (or alternatives) and sufficiently in advance, the estimated hours on the entry notification points in the next FIR.
 - c) They shall instruct the pilots in command of the aircraft that they must maintain the last assigned level and the present speed (MACH number, if applicable), until they receive instructions from the corresponding jurisdiction Control.
 - d) They shall not authorize any level or speed change (MACH number, if applicable) within 10 minutes before the aircraft enters another FIR.
 - e) The Control of previous jurisdiction shall indicate to the aircraft that they must communicate with the corresponding ATC unit 5 minutes before the expected time of entry to the corresponding FIR.
 - f) All flights shall be routed through the established Simplified Network of ATS Routes.
 - g) SSR responder codes shall be assigned, even if Radar Control is not available.
 - h) Repetitive Flight Plans shall not be authorized, a new FPL must be submitted.
2. Coordination between adjacent ACCs:
 - a) With coordination between the adjacent ACCs, the procedures established in the current Letters of Operational Agreements shall be applied.
 - b) Without coordination between the adjacent ACCs, the "Self-Transfer Procedures" shall be applied, as described below:
 - i) the ATS unit shall inform the pilot of the impossibility of communication with the accepting ATS unit, and provide instruction to contact the accepting unit;
 - ii) the pilot must contact the accepting unit, inform the accepting unit that he is carrying out a self-transfer, transmit his origin, destination, route, flight level, transponder code and estimate at the limit of the FIR, and inform the transferring agency when the accepting agency accepted the transfer.

APPENDIX 1 - CNS AND MET CONTINGENCY MEASURES

Note: In the event of failures in electrical systems, telecommunications, surveillance, consoles, air navigation aids and others, procedures are established in the **ATS Degradation Plan** to minimize the impact on the provision of services. The procedure shall be specified in the NOTAM when necessary.

1. Contingency measures for the VHF communications systems for the Control Centres.

In the event of a total interruption of the ground/air communications systems, the In-Flight Information Broadcasting Procedures, whose frequency established for the SAM Region is: 123.45 MHz, shall be applied as a contingency measure.

2. Contingency measures for navigation services

a) The contingency measures to be adopted in case of interruption of the navigation systems would be: in case of failure in the VOR system, use of the NDB for en-route navigation, use of autonomous navigation systems, use of receiver / GNSS processor (GPS) available.

b) In case of failure of the radio aid on which a FIR airway is based, the course of the airway and the authorized flight level shall be maintained, pending the application of procedures with use of surveillance system; if this is not available, operations on the route shall be suspended.

3. Contingency measures for security services in order to favour operational safety, the unit affected by the degradation of ATS services due to contingency in surveillance services, may coordinate specific entry/exit measures or limitations to the affected airspace. These specific limitations, documented in the Degradation Plan of the facilities, shall be incorporated into NOTAM information.

4. Contingency measures for the exchange of MET information. Contingency measures for the exchange of MET information are included in the AMHS/AFTN systems contingency procedures.

ANNEX III OPERATIONAL PROCEDURES FOR PILOTS

1. Pilots flying over the affected Uruguayan Airspace must comply with the following procedures:
 - a) During the contingency period, Repetitive Flight Plans (RPL) shall no longer be used, for which all flights must submit their respective Flight Plan (FPL) in advance and indicate any additional information in box 18 of the FPL that could be useful for ATS units.
 - b) All aircraft proceeding through the ATS contingency routes established in this Plan shall comply with the instrument flight rules (IFR) and shall be assigned a flight level according to Table a) of Cruise Levels (RVSM) listed in ICAO Annex 2, Appendix 3. The last level cleared by ATC shall be maintained except in an emergency situation.
 - c) They shall fly on the route or as close as possible to the axis of the assigned contingency route.
 - d) They shall keep a permanent watch on the VHF frequency appropriate to the FIR where the flight takes place and, if they do not have contact with the pertinent ATS unit, they shall transmit the real or estimated position to the reporting points on that frequency.
 - e) In the event of not having communication with the responsible ATS unit where the aircraft is flying, the pilot of the aircraft will proceed to communicate on the appropriate frequencies of the accepting ATS unit in order to report its traffic.
 - f) Likewise, if there is no communication with the ATS unit, they shall broadcast on the appropriate VHF frequency any ascent or descent manoeuvre that the circumstances so require, preferably 2 to 5 minutes in advance. Climbing and descending manoeuvres must be carried out clearly to the right of the axis of the route. The message must contain: aircraft identification, position, abandoned level, crossed level, and all the information considered pertinent.
 - g) The aforementioned transmissions shall also be made on the air/air frequency 123.45 MHZ.
 - h) They shall keep the navigation and anti-collision lights continuously on.
 - i) Regardless of whether or not they are in airspace with radar coverage, the pilots shall maintain the last SSR transponder in mode A and C assigned and if no transponder has been assigned, they shall maintain the A/C 2000 code activated.
2. Procedures in case of communication failures.
 - 2.1 On scheduled flights with staggered ascent, pilots must, in the event of a route change, coordinate the new ascent point with ATS.
 - 2.2 When an interruption occurs in air-ground communications, the flight crew must determine the origin of the problem, using all available means of communication and following the next procedure:
 - a) Attempt to establish contact with the ATS unit on the assigned frequency.
 - b) Attempt to establish contact with another aircraft on the assigned frequency.
 - c) Attempt to establish contact with the ATS unit or another aircraft on adjacent ATS frequencies.
 - d) Attempt to establish contact with another aircraft on the air/air frequency 123.45 MHZ.

2.3 If no communication is achieved after the contact attempts listed in paragraph 2.2:

- The procedures for failure cases in air-ground communications of ICAO Document 4444 PANS-ATM must be applied;
- The procedure in paragraph 2.2 should be repeated periodically to try to restore communications.

2.4 If communication is established with another aircraft, it can be deduced that the communication problem originates in the ATS facility.
In this case, an attempt shall be made to establish communication by asking another aircraft to relay information to the ATS unit in the following order of preference:

- The assigned ATS frequency;
- The ATS secondary frequency for said sector;
- The frequencies of adjacent ATS sectors/facilities; and
- The air/air frequency 123.45 MHZ.

3. The Self-Transfer Procedures shall be applied, in case of communications failure between the adjacent ACCs, in accordance with the following:

- The ATS unit must:
 - Inform the pilot of the impossibility of communication with the accepting ATS unit.
 - Provide instruction to make contact with the accepting agency.
- The pilot must:
 - Make contact with the accepting unit.
 - Inform the accepting unit that it is carrying out a self-transfer.
 - Transmit its origin, destination, route, flight level, transponder code, RVSM approval status and estimated FIR limit.
 - Inform the transferring dependency when the accepting dependency accepted the transfer.

ANNEX IV ATS CONTINGENCY AGREEMENTS WITH BORDERING COUNTRIES

A) ATS CONTINGENCY MEASURES AGREED ON BETWEEN ARGENTINA AND URUGUAY

1. **AFFECTED FIRs.**

RESISTENCIA – MONTEVIDEO
EZEIZA – MONTEVIDEO

2. **GENERAL.**

With coordination between the FIRs only with radar: the charts of operational agreement shall be applied.

2.1 Without coordination between jurisdiction control units, the auto-transfer method shall be applied.

3. **PROCEDURES IN CASE OF COMMUNICATION FAILURES.**

3.1 The following self-transfer procedures shall be applied as follows:

- a) The ATS unit must:
 - i) Inform the pilot of the impossibility of communication with the accepting ATC unit; and
 - ii) Provide instructions to make contact with the accepting dependency.
- b) The pilot must:
 - i) Make contact with the accepting dependency;
 - ii) Inform the accepting dependency that it is carrying out an auto-transfer;
 - iii) Transmit its origin, destination, route, flight level, transponder code, RVSM approval status and estimate at the limit of the FIR;
 - iv) Inform the transferring dependency when the accepting dependency accepted the transfer.

4. **RPL SUSPENSION**

4.1 While the contingency lasts, the application of the RPL lists shall be suspended, and users must submit, in all cases, the corresponding FPLs.

5. **PERMISSION LIMIT**

5.1 When the IFR flights en-route have communications coverage for the Aeronautical Mobile Service, but the ATS units do not have fixed communications between them, the traffic permit shall be valid until the control transfer point, with the condition of auto-transfer carried out by the pilot.

6. **ASSIGNMENT OF SSR CODES**

6.1 Even if the RADAR systems were out of service, SSR codes shall continue to be assigned to all aircraft.

7. IN-FLIGHT INFORMATION BROADCASTING PROCEDURES (TRAFFIC INFORMATION DISSEMINATED BY THE AIRCRAFT)

7.1 The aircraft must, in case of not being able to carry out their self-transfer and within 50 NM of the points indicated, use the procedures in the air-air frequency 123.45 MHZ.

8. FLIGHT PLAN NOT TRANSMITTED

8.1 In the contingency period, the ATS units shall accept flights whose FPLs have not been able to be transmitted. However, the presentation of the FPL by the user shall also be required.

9. VERTICAL SEPARATION

9.1 Minimum vertical separation shall be provided in accordance with the provisions of ICAO Annex 2, Appendix 3 Table a) of Cruise Levels (although the routes have been modified in only one direction of flight, the aircraft shall adopt the flight levels as if they were two-way flight routes).

10. TELEPHONES:

For Argentina:

Ezeiza ACC Phone / Fax	(54 11) 44802344
	(54 11) 44802203
	(54 11) 44802210/17
Extension	57203/57265
Resistencia ACC Phone / Fax	
MONTEVIDEO ACC Phone / Fax	(59 8) 26000619
	(59 8) 26040251
Extension	5119

11. ATS INTERNATIONAL TRUNK ROUTES:

11.1 When the Contingency Plans are activated, only those international trunk routes detailed below in ANNEX ALPHA shall be used.

ANNEX ALPHA			
ROUTES	SEGMENT	FIR	RESTRICTIONS
UL 324	EZE / KUKEN / DAYMA / CUARA / ELAMO / ALDOS / IGU / FOZ	EZEIZA MONTEVIDEO CURITIBA RESISTENCIA	<ul style="list-style-type: none">- With coordination between the FIRs only with radar: the Agreement Charts shall be applied.- Without coordination between the FIRs: EZEIZA ACC this airway will be disable to use.- En-route traffic capacity: one (1) aircraft every 15 minutes in KUKEN.- Without coordination, the auto-transfer method is applied, 5 minutes before KUKEN.- One-way flight: from EZEIZA towards CURITIBA.- The aircraft shall apply the IN-FLIGHT INFORMATION BROADCAST procedure 5 minutes before and after KUKEN.- In case of air-ground communications fail (cero ATS), the UL324 will be disable to use.
UM 534	ROS / SUGRA / ENSAS / URURI / NELOX	EZEIZA MONTEVIDEO CURITIBA	<ul style="list-style-type: none">- With coordination between the FIRs only with radar: the Agreement Charts shall be applied.- Without coordination between the FIRs: EZEIZA ACC this airway will be disable to use.- En-route traffic capacity: one (1) aircraft every 15 minutes in SUGRA.- Without coordination, the auto-transfer method is applied, 5 minutes before SUGRA.- One-way flight: from EZEIZA towards CURITIBA.- The aircraft shall apply the IN-FLIGHT INFORMATION BROADCAST procedure 5 minutes before and after SUGRA.
UN 741	UMRUD / VUDUP / ENTED / GUVON / PAPIX / EZE	CURITIBA MONTEVIDEO EZEIZA	<ul style="list-style-type: none">- With coordination between the FIRs only with radar: the Agreement Charts shall be applied.- Without coordination between the FIRs: MONTEVIDEO ACC shall deliver traffic in PAPIX levelled with FL 100.- En-route traffic capacity: one (1) aircraft every 15 minutes in PAPIX.- One-way traffic: from CURITIBA towards EZEIZA.- Without coordination, the auto-transfer method is applied with no less than 30 NM of PAPIX or 5 minutes before said point.- One-way flight: from EZEIZA towards CURITIBA.- The aircraft shall apply the IN-FLIGHT INFORMATION BROADCAST procedure at 50 NM or 5 minutes before and after PAPIX.

ANNEX ALPHA			
ROUTES	ROUTES	ROUTES	ROUTES
UN 857	EZE / PTA / DORVO / LOMID / MIMOL / OGRUN	EZEIZA MONTEVIDEO	<ul style="list-style-type: none">- With coordination between the FIRs only with radar: the Agreement Charts shall be applied.- Without coordination between the FIRs: EZEIZA ACC shall deliver traffic levelled with FL 170 or HIGHER in climb up to FL 250.- En-route traffic capacity: one (1) aircraft every 15 minutes in DORVO.- One-way flight: from EZEIZA towards CURITIBA.- Without coordination, the auto-transfer method is applied, with no less than 5 minutes before DORVO.- The aircraft shall apply the IN-FLIGHT INFORMATION BROADCAST procedure 5 minutes before and after DORVO.
UM 424	EZE / DORVO / CRR / UGURA / PTS	EZEIZA MONTEVIDEO	<ul style="list-style-type: none">- With coordination between the FIRs only with radar: the Agreement Charts shall be applied.- Without coordination between the FIRs: EZEIZA ACC shall deliver traffic to the MONTEVIDEO ACC levelled with FL 150 or LOWER in DORVO- En-route traffic capacity: one (1) aircraft every 15 minutes in DORVO.
A 305	EZE / DORVO / CRR / LDS / LITOS / UGELO / PTS	CURITIBA	<ul style="list-style-type: none">- One-way flight: from EZEIZA towards MONTEVIDEO or CURITIBA.- Without coordination, the auto-transfer method is applied, with no less than 5 minutes before DORVO.- The aircraft shall apply the IN-FLIGHT INFORMATION BROADCAST procedure 5 minutes before and after DORVO.

ANNEX ALPHA			
ROUTES	ROUTES	ROUTES	ROUTES
UL 405 A 306	LDS / CRR / UGIMI / PTA / EZE	MONTEVIDEO EZEIZA	<ul style="list-style-type: none">- With coordination between the FIRs only with radar: the Agreement Charts shall be applied.- Without coordination between the FIRs: MONTEVIDEO ACC shall deliver traffic levelled with FL 140 or LOWER in UGIMI.- En-route traffic capacity: one (1) aircraft every 15 minutes in UGIMI.- One-way traffic: from CURITIBA or MONTEVIDEO towards EZEIZA.- Without coordination, the auto-transfer method is applied with no less than 30 NM of UGIMI or 5 minutes before said point.- The aircraft shall apply the IN-FLIGHT INFORMATION BROADCAST procedure at 50 NM or 5 minutes before and after UGIMI.
<p><i>Note 1 . – The traffic between EZEIZA FIR and MONTEVIDEO FIR shall be of one (1) aircraft every fifteen (15) minutes, which constitutes a maximum flow of four (4) aircraft per hour between both FIRs, per transference point, regardless the flight level used by the aircraft.</i></p> <p><i>Note 2 . – Depending on the degradation level of the Services, the respective Supervisors may agree to coordinate an adaptation of more aircraft per transference point.</i></p> <p><i>Note 3 . – UL324 and UM534 are only for use with coordination between EZEIZA ACC and MONTEVIDEO ACC, and with air-ground communications and operational surveillance systems.</i></p>			

ANEXO IV ACUERDOS DE CONTINGENCIA ATS CON PAÍSES LÍMITROFES

B) MEDIDAS DE CONTINGENCIA ATS ACORDADAS ENTRE BRASIL Y URUGUAY

1. AFFECTED FIRs.

CURITIBA – MONTEVIDEO

2. GENERAL.

- 2.1 In case of activation of the contingency procedures, the initial point of contact shall be the Montevideo Control Centre. Telephones: 598 2 6040295; 598 2 6040251, extension 5119 REDDING: 6551; 6552. AFTN: SUEOZQZX
- 2.2 It is the ATS Contingency Operational Group (AOCG) that is responsible for monitoring events and can order the execution of the contingency plan and the respective coordination arrangements

3. AUTO-TRANSFERENCE.

- 3.1 Without coordination between jurisdiction control units, the aut-transfer method shall be applied.
- 3.2 The following aut-transfer procedures shall be applied as follows:
 - a) The ATS unit must:
 - i) Inform the pilot of the impossibility of communication with the accepting ATC unit; and
 - ii) Provide instructions to make contact with the accepting agency.
 - b) The pilot must:
 - i) Make contact with the accepting dependency;
 - ii) Inform the accepting dependency that it is carrying out an auto-transfer;
 - iii) Transmit its origin, destination, route, flight level, transponder code, RVSM approval status and estimate at the limit of the FIR;
 - iv) Inform the transferring dependency when the accepting dependency accepted the transfer.

4. RPL SUSPENSION

- 4.1 While the contingency lasts, the application of the RPL lists shall be suspended, and users must submit, in all cases, the corresponding FPLs, according to the routes established in Annex A.

5. PERMISSION LIMIT

- 5.1 When the IFR flights en-route have communications coverage for the Aeronautical Mobile Service, but the ATS units do not have fixed communications between them, the traffic permit shall be valid until the control transfer point, with the condition of auto-transfer carried out by the pilot.

6. ASSIGNMENT OF SSR CODES

6.1 Even if the RADAR systems were out of service, SSR codes shall continue to be assigned to all aircraft.

7. AIR/AIR COMMUNICATION PROCEDURES

7.1 The aircraft must, in case of not being able to carry out their auto-transfer and within 50 NM of the points indicated, use the air/air communication procedures in frequency 123.45 Mhz.

8. FLIGHT PLAN

8.1 In the contingency period, the ATS units shall accept flights whose FPL could not be transmitted. However, the FPL presentation by the user shall also be required.

9. VERTICAL SEPARATION

9.1 Minimum vertical separation shall be provided in accordance with the provisions of ICAO Annex 2, Appendix 3 – Cruise Levels Table (although the routes have been modified in only one direction of flight, the aircraft shall adopt the corresponding flight levels as if they were two-way flight paths).

10. ATS ROUTES

10.1 When the Contingency Plans are activated, only those routes detailed below in ANNEX ALPHA shall be used.

ANNEX ALPHA			
ROUTES	ROUTES	ROUTES	ROUTES
UM 424	TOLEP / LDS	CURITIBA MONTEVIDEO	<ul style="list-style-type: none">- With coordination between the FIRs (with radar): the Agreement Charts shall be applied.- Without coordination between the FIRs: CURITIBA ACC shall deliver traffic to MONTEVIDEO ACC levelled in TOLEP.- En-route traffic capacity: one (1) aircraft every 15 minutes in TOLEP.- One-way flight: from BRAZIL towards URUGUAY.- Without coordination, the auto-transfer method is applied, with no less than 5 minutes before TOLEP.- In case of not being able to carry out the self-transfer, the aircraft shall communicate on 123.45 MHZ 5 minutes before and after TOLEP.

ANNEX ALPHA			
ROUTES	ROUTES	ROUTES	ROUTES
A 310	BGE / ASUMA / MIMOL / AROMO / TELAK / CRR	CURITIBA MONTEVIDEO	<ul style="list-style-type: none">- With coordination between the FIRs (with radar): the Agreement Charts shall be applied.- Without coordination between the FIRs: CURITIBA ACC shall deliver traffic to MONTEVIDEO ACC levelled with an FL, according to the table of cruise levels in BGE.- En-route traffic capacity: one (1) aircraft every 15 minutes in BGE.- One-way flight: from BRAZIL towards URUGUAY.- Without coordination, the auto-transfer method is applied, with no less than 5 minutes before BGE.- The aircraft shall communicate in 123.45 MHZ 5 minutes before and after BGE.
A 309	CRR / SOLIS / OGMAR / UGURA / PTS	MONTEVIDEO CURITIBA	<ul style="list-style-type: none">- With coordination between the FIRs (with radar): the Agreement Charts shall be applied.- Without coordination between the FIRs: MONTEVIDEO ACC shall deliver traffic to CURITIBA ACC levelled with an FL, according to the table of cruise levels in UGURA.- En-route traffic capacity: one (1) aircraft every 15 minutes in UGURA.- One-way flight: from URUGUAY towards BRAZIL.- Without coordination, the auto-transfer method is applied, with no less than 5 minutes before UGURA.- The aircraft shall communicate in 123.45 MHZ 5 minutes before and after UGURA.

ANNEX ALPHA			
ROUTES	ROUTES	ROUTES	ROUTES
UN 741	UMRUD / ENTED / GUVON / PAPIX / EZE	CURITIBA MONTEVIDEO EZEIZA	<ul style="list-style-type: none">- With coordination between the FIRs (with radar): the Agreement Charts shall be applied.- Without coordination between the FIRs: MONTEVIDEO ACC shall deliver traffic to CURITIBA ACC levelled in UMRUD.- En-route traffic capacity: one (1) aircraft every 15 minutes in UMRUD.- One-way flight: from BRAZIL towards ARGENTINA.- Without coordination, the auto-transfer method is applied, with no less than 5 minutes before UMRUD.- The aircraft shall communicate in 123.45 MHZ 5 minutes before and after UMRUD.
A 305 A 306	UGELO / BOLAT / LITOS / LDS / LUCIO / DAGUS / UGIMI / PTA	CURITIBA MONTEVIDEO EZEIZA	<ul style="list-style-type: none">- With coordination between the FIRs (with radar): the Agreement Charts shall be applied.- Without coordination between the FIRs: CURITIBA ACC shall deliver traffic to MONTEVIDEO ACC levelled with an FL, according to the table of cruise levels in UGELO.- En-route traffic capacity: one (1) aircraft every 15 minutes in UGELO.- One-way flight: from BRAZIL towards ARGENTINA.- Without coordination, the auto-transfer method is applied, with no less than 5 minutes before UGELO.- In case of not being able to carry out the self-transfer, the aircraft shall communicate in 123.45 MHZ 5 minutes before and after UGELO.

ANNEX ALPHA			
ROUTES	ROUTES	ROUTES	ROUTES
UN 857	PTA / DORVO / PABOT / ANRUP / - MIMOL / OGRUN	EZEIZA MONTEVIDEO CURITIBA	<ul style="list-style-type: none"> - With coordination between the FIRs (with radar): the Agreement Charts shall be applied. - Without coordination between the FIRs: MONTEVIDEO ACC shall deliver traffic to CURITIBA ACC levelled in OGRUN. - En-route traffic capacity: one (1) aircraft every 15 minutes in OGRUN. - One-way flight: from ARGENTINA towards BRAZIL. - Without coordination, the auto-transfer method is applied, with no less than 5 minutes before OGRUN. - In case of not being able to carry out the self-transfer, the aircraft shall communicate in 123.45 MHZ 5 minutes before and after OGRUN.
A 305/ A 309	EZE / DORVO / TOCAM / CRR / SOLIS / TIDRU / OGMAR / UGURA	EZEIZA MONTEVIDEO CURITIBA	<ul style="list-style-type: none"> - With coordination between the FIRs (with radar): the Agreement Charts shall be applied. - Without coordination between the FIRs: MONTEVIDEO ACC shall deliver traffic to CURITIBA ACC levelled with FL, according to the table of cruise levels in UGURA. - En-route traffic capacity: one (1) aircraft every 15 minutes in UGURA. - One-way flight: from ARGENTINA towards BRAZIL. - Without coordination, the auto-transfer method is applied, with no less than 5 minutes before UGURA. - In case of not being able to carry out the self-transfer, the aircraft shall communicate in 123.45 MHZ 5 minutes before and after UGURA.

Note 1 . – The traffic between CURITIBA FIR and MONTEVIDEO FIR shall be of one (1) aircraft every fifteen (15) minutes, per transfer point, regardless of the flight level used by the aircraft.

Note 2 . – Depending on the degradation level of the Services, the respective Supervisors/Chiefs may, by mutual agreement, coordinate another number of aircraft per hour by transfer points.

Note 3 . – In case of failure of the surveillance systems, the MONTEVIDEO FIR shall apply the measures of the Degradation Plan, according to the coverage, and shall publish a NOTAM detailing the measures.

ENR 1.16 ACAS OPERATIONAL PROCEDURES

The use of ACAS (Airborne Collision Avoidance System) has proven to be an independent tool that helps efficiently to avoid collisions when the proximity of the aircrafts trespass the statutory limits.

The following wants to be remarked:

- a) When a pilot reports a manoeuvre performing due to a resolution advisory ACAS (RA), the controller shall not attempt to modify the flight path of the aircraft until receiving indications of the pilot in the sense that it conforms again to new the terms of the current instruction or authorization in force from air traffic control, but it will provide traffic information as appropriate.
- b) If the pilots simultaneously receive instructions to manoeuvre from ATC and from an RA that conflict, the pilot should follow the RA
- c) A pilot avoids manoeuvres opposite to the direction of RA since they result in a vertical reduction with other aircraft and the pilot must therefore follow the RA.
- d) In case of Right of Way, the aircraft having the right of way shall keep her course and speed, but none of these rules shall relieve the pilot in command of it from the obligation to proceed in the most effective way to avoid a collision. This includes carrying out the necessary avoidance manoeuvres based on resolution advisories provided by ACAS
- e) Operators shall ensure that these procedures are contained in the manuals of procedures for the use of ACAS and that flight crews have the initial and recurrent training for such procedures and will be required the necessary competence to respond to ACAS RA.

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► **ENR 1.17 PROCEDURES FOR THE SUSPENSION OF REDUCED VERTICAL SEPARATION MINIMUM (RVSM)**

The ATS shall consider suspending RVSM procedures within the MONTEVIDEO FIR when pilots reporting by higher than moderate turbulence.

When RVSM procedures are suspended, the minimum vertical separation between all aircraft will be 2000 feet.

1. Operational Procedures of the crew before entering RVSM airspace

1.1 Before entering RVSM airspace, the pilot in command of RVSM approved aircraft shall verify that the following equipment required flying in RVSM airspace are operating normally:

- a) two independent primary altimetry systems;
- b) SSR transponder mode C;
- c) altitude alerting system;
- d) an automatic altitude keeping system.

1.2 If any required equipment listed in paragraph 1.1 is not operating normally, the pilot must notify ATC before entering RVSM airspace using the phraseology "UNABLE RVSM DUE EQUIPMENT".

2. Operational procedures after entering RVSM airspace

2.1 During changes in flight level, an aircraft must not exceed the cleared flight level in more than 150 FT (45 M).

2.2 Failure of one of the Primary Altimetry Systems

2.2.1 In case of failure of one of the Primary Altimetry Systems, but the remaining altimetry system is functioning normally, the pilot shall:

- a) Connect the system to the Altitude Maintenance System;
- b) Increase surveillance in the maintenance of altitude, and
- c) Notify the ATC of the system failure using the phraseology, "For information, operating with an altimetry system only".

2.3 Failure of all Primary Altimetry Systems

2.3.1 In case of failure of all Primary Altimetry Systems, or that these are considered unreliable, the pilot must:

- a) maintain the flight level indicated on the altimeter "standby" (if the aircraft is equipped) at the time of failure or at the time that systems are considered unreliable;
- b) alert nearby aircraft by turning on all exterior lights and, if not in direct contact with ATC, broadcast position, flight level and intentions on 121.5 MHz.
- c) Notify the ATC the system failure using the phraseology "UNABLE RVSM DUE EQUIPMENT".

2.4 *Indication divergence in the Primary Altimetry Systems*

2.4.1 In the event of a divergence greater than 200 feet between the primary altimeters, the pilot shall:

- Try to determine the defective system through established procedures and / or comparing the primary altimeter system with "standby" altimeter (if required, using the correction card).
- If you can identify the defective system, fit the altimetry system is working to the Altitude Maintenance System and proceed in accordance with paragraph 2.2.1.
- If you can not identify the defective system, proceed in accordance with paragraph 2.3.1.

2.5 *Failure of Mode C SSR Transponder*

2.5.1 In case of failure of SSR Mode C transponder, the pilot must notify ATC of the above fails, use the phraseology "UNABLE RVSM DUE EQUIPMENT".

2.6 *Failure of the Altitude Alert System*

2.6.1 The pilot must notify ATC in the event of failure of the Altitude Alert System using the phraseology "UNABLE RVSM DUE EQUIPMENT".

2.7 *Failure of Automatic Altitude Maintenance System*

2.7.1 In case of failure of the Automatic Altitude Maintenance System, the pilot must take the following sequence:

- Keep the Cleared Flight Level;
- Evaluate the ability of aircraft to maintain altitude through manual control;
- Monitoring for conflicting traffic both visually and by reference to ACAS;
- Alert nearby aircraft by turning on all exterior lights and, if not make direct contact with ATC, broadcasting position, flight level and intentions on 121.5 MHz;
- Notify ATC the system failure using the phraseology "UNABLE RVSM DUE EQUIPMENT".

3. **Special procedures for in-flight contingencies in oceanic and remote areas**

3.1 *Introduction*

3.1.1 Although it can not be covered every possible contingency, the procedures in 3.2 and 3.3 provide the most frequent cases, such as:

- inability to maintain assigned flight level due to weather, aircraft performance or pressurization failure;
- en route deviations crossing the prevailing traffic flow, and
- loss or significant reduction of the required navigation capability when operating in airspace where the navigation performance accuracy is a prerequisite for the safe conduct of flight operations.

3.1.2 With regard to the procedures referred in 3.1.1 a) and b) are applicable primarily when rapid descent required and/or reversing the track or deviation. The pilot will determine, in its discretion, the order of the measures to be taken given the circumstances. The air traffic control will provide all possible assistance.

3.2 General Procedures

3.2.1 If an aircraft can not continue the flight in accordance with its ATC clearance, and/or can not maintain accurate navigation performance specified in the airspace will be obtained before initiating any action, a revised authorization, whenever possible.

3.2.2 When appropriate, you must use the radiotelephony distress signal (MAYDAY) or urgency signal (PAN PAN) preferably spoken three times. Subsequent ATC actions with respect to such aircraft are based on the intentions of the pilot and the overall air traffic situation.

3.2.3 If prior authorization can not be obtained, an ATC clearance shall be obtained as quickly as possible and until revised clearance is received, the pilot must do the following:

- a) leave the assigned route or track by initially turning 90 degrees right or left. When possible, the direction of turn should be determined by the position of the aircraft in relation to any route system or organized track. Other factors that may affect the direction of the turn are:
 1. the direction to an alternate airport, terrain clearance;
 2. any lateral offset being flown, and;
 3. flight levels assigned on adjacent routes or tracks.
- b) following the turn, the pilot should:
 - 1) if unable to maintain the assigned flight level, initially minimize the rate of descent as is operationally feasible;
 - 2) take into account any other aircraft being laterally offset from its track;
 - 3) establish and maintain in either direction a track laterally separated by 28 KM (15 NM) from the assigned route or track within a multi-track system or otherwise, at a distance which is the midpoint between the route or adjacent parallel track, and
 - 4) once established on the offset track, climb or descend to select a flight level which differs 150 M (500 FT) from those normally used.
- c) establish communications with nearby aircraft and alert by broadcasting, at suitable intervals the aircraft identification, flight level, position (including ATS route designator or the track code, as appropriate) and intentions in both the frequency in use and on 121.5 MHz (or, as a reserve, in the air to air frequency of 123.45 MHz for communications between pilots);
- d) maintain the traffic surveillance that may conflict, both visually and by reference to ACAS (if equipped);
- e) turn on all aircraft exterior lights (taking into account the appropriate operating limitations);
- f) keep activated at all times the SSR transponder, and
- g) take the necessary measures to ensure the safety of the aircraft.

3.2.4 Flights over long distances of airplanes with two turbine engine (ETOPS)

3.2.4.1 If the contingency procedures are employed by a twin-engine aircraft to have been an engine shutdown or failure of an ETOPS critical system, the pilot should notify ATC as soon as possible the situation, reminding ATC of the type of aircraft involved, and requesting immediate assistance.

3.3 Procedures for deviation due weather conditions

3.3.1 General

Note. - The following procedures are used for deviations in bad weather conditions.

- 3.3.1.1 When the pilot initiates communications with ATC, rapid response may be obtained by indicating "WEATHER DEVIATION REQUIRED" to indicate that priority is desired on the frequency and for ATC response. When necessary, the pilot should initiate the communications using the urgency call "PAN PAN" (preferably spoken three times).
- 3.3.1.2 The pilot shall advise ATC when no longer needs the deviation due to weather conditions or when the deviation is completed and the aircraft has returned to the axis of its cleared route.

3.3.1.3 Actions to be taken when controller-pilot communications

- 3.3.1.3.1 The pilot should notify ATC and request clearance to deviate from track, advising, when possible, the extent of the deviation expected.
- 3.3.1.3.2 ATC should take one of the following measures:
 - a) when appropriate separation can be applied, issue clearance to deviate from track, or
 - b) if exists traffic that might conflict and ATC can not establish appropriate separation, ATC shall:
 - 1) advise the pilot that is unable to issue clearance for requested deviation;
 - 2) advise the pilot of traffic to which of conflicting, and
 - 3) request the pilot's intentions.

SAMPLE OF PHRASEOLOGY

"UNABLE (requested deviation), TRAFFIC IS (call sign, position, altitude or flight level, direction), REPORT INTENTIONS".

3.3.1.3.3 The pilot should take the following measures:

- a) meet the authorization issued by ATC, or
- b) advise ATC of intentions and execute the procedures detailed in 3.3.1.3.4.

3.3.1.3.4 Actions to be taken if can not be obtain a revised ATC clearance

Note.- The provisions of this section apply to a situation in which the pilot must exercise his authority as commander under the provisions of Annex 2, 2.3.1.

3.3.1.3.5 If the aircraft required deviating from track to avoid adverse weather and prior authorization may not be obtained, an ATC clearance shall be obtained as soon as possible. Until an ATC clearance is received, the pilot shall take the following measures:

- a) if possible, deviate away from an organized track or route system;
- b) establish communications with nearby aircraft and give them warning by broadcasting, at suitable intervals the aircraft identification, flight level, position (including ATS route designator or the track code) and intentions, both the frequency in use as 121.5 MHz (or, as a reserve, in the air to air frequency of 123.45 MHz for communications between pilots);
- c) monitor the traffic if it can enter into conflict, both visually and by reference to ACAS (if equipped);
Note. —If as a result of actions taken under the provisions of paragraphs 3.3.1.3.5 b) and c), the pilot determines that there is another aircraft at or near the same flight level with which a conflict may occur, the pilot must adjust its flight path, as necessary, to avoid conflict.
- d) turn on all aircraft exterior lights, (taking into account the appropriate operating limitations);
- e) for deviations of less than 19 KM (10 NM), the aircraft should be maintained at a level assigned by ATC;
- f) in the case of deviations greater than 19 KM (10 NM), when the aircraft is approximately 19 KM (10 NM) from track, initiate a level change according to Table 1:

Table 1

Track of the axis of Route	Deviations >19 KM (10 NM)	Level change
EAST 000° - 179° magnetic	LEFT RIGHT	DESCIENDA 90 M (300 FT) ASCIENDA 90 M (300 FT)
WEST 180° - 359° magnetic	LEFT RIGHT	ASCIENDA 90 M (300 FT) DESCIENDA 90 M (300 FT)

- g) when returning to track, must be at its assigned flight level when the aircraft is approximately less than 19 KM (10 NM) from the axis of the route, and
- h) if no contact has been established prior to deviating, should attempt to contact ATC to obtain an authorization. If contact was established, continue to keep ATC advised of intentions and obtain essential traffic information.

4. Special procedures for strategic lateral offsets in controlled oceanic area and remote continental airspace within the SAM Region

Note. —The following paragraphs incorporate lateral deviation procedures to mitigate the effect of lateral overlap probability due to increased accuracy of navigation, as well as wake turbulence encounters.

- 4.1 The use of navigation systems of great accuracy [such as the Global Navigation Satellite System (GNSS)] by a growing number of aircraft has had the effect of reducing the magnitude of lateral deviations from the axis of route and therefore increase the likelihood of a collision in case of loss of vertical separation between aircraft navigating on the same route.
- 4.2 The application of lateral offsets to provide lateral separation between aircraft, according to the procedures specified in 4.4 and 4.5, can be used to mitigate the effect of this reduction in random lateral deviations and, thus, increase the safety of all the system.

Considerations for ATS authorities on the implementation

- 4.3 For the application of lateral offsets it requires authorization from the responsible ATS airspace concerned. In planning the authorization of strategic lateral offsets in a particular airspace shall take into account the following considerations:
 - a) strategic lateral offsets shall only be allowed in route at the oceanic airspace or remote continental. When part of the relevant airspace is controlled by radar, normally should be allowed the transit aircraft to initiate or continue the journey;
 - b) strategic lateral offsets may be authorized for the following types of routes (including the intersections of routes or route systems):
 - 1) unidirectional and bidirectional routes, and
 - 2) parallel route systems where the spacing between route centre lines is not less than 55.5 km (30 NM);
 - c) in some cases it may be necessary to impose restrictions on the use of strategic lateral offsets, e.g. when their application may be inappropriate for reasons relating to the margin of obstacle clearance;
 - d) these offset procedures should be implemented at regional level with the proper coordination between all relevant States;
 - e) routes or airspace within which strategic lateral offsets are authorized, and the procedures to be used by pilots, will be published in the Aeronautical Information Publication (AIP);
 - f) it shall inform the air traffic controllers about the airspace in which strategic lateral offsets are authorized.

Lateral offset procedures to be followed by pilots

- 4.4 When making strategic lateral movements, pilots should take into account:
 - a) only be made movements in the airspace in which they have been authorized by the appropriate ATS authority;
 - b) aircrafts with automatic offset tracking capability may only make movements;
 - c) the flight crew is responsible for the decision to apply a strategic lateral offset;
 - d) the distance of displacement shall be one or two nautical miles to the right of the axis, with respect to the direction of flight;
 - e) the strategic lateral offset procedure has been designed to include necessary movements to mitigate the effects of wake turbulence from a preceding aircraft. When necessary to avoid wake turbulence, you use one of the three available options (keep in the axis route or move to 1 NM or 2 NM to the right of the axis route);

- f) in the airspace in which it has authorized the use of lateral offsets, pilots, if possible, shall inform to the unit of air traffic control (ATC) that are undergoing a shift, and

4.5 The pilots may, if necessary, make contact with other aircraft to coordinate the lateral movements in the air-air frequency 123.45.

5. **RVSM Phraseology**

The following RVSM phraseology shall be used in RVSM operations

Circumstances		Phraseology
12.3.1.11	Operations with reduced vertical separation minima (RVSM)	
	... make sure the RVSM approval status aircraft	a) CONFIRM RVSM APPROVAL
	... to notify RVSM approval condition	*b) AFIRMATIVE RVSM
	... to notify aircraft status without RVSM approval, followed by additional information	*c) NEGATIVE RVSM [(<i>additional information, for example aircraft callsign</i>)]
	<i>NOTE.— See 12.2.4 and 12.2.5 for procedures related to operations in RVSM airspace by aircraft without RVSM approval</i>	
	... to deny ATC clearance to enter RVSM airspace	d) UNABLE CLEARANCE INTO RVSM AIRSPACE, MAINTAIN [or DESCEND TO, or CLIMB TO] (level)
	... to notify severe turbulence that affect the aircraft capability to meet the RVSM altitude maintenance requirements	*e) RVSM IMPOSSIBLE DUE TURBULENCE
	... to notify that the aircraft equipment has degraded below minimum performance standards of aviation system	*f) RVSM IMPOSSIBLE DUE EQUIPMENT
	... to request an aircraft to provide information When resumed RVSM approval status or the pilot is able to resume RVSM operations	g) INFORM IF ABLE TO REESTABLISH RVSM
	... to request confirmation that an aircraft has regained RVSM-approved status or a pilot is able to resume RVSM operations	h) INFORM IF ABLE TO REESTABLISH RVS
	... to report ability to resume RVSM operations after a contingency related to the equipment or weather	*i) READY TO RESUME RVSM
		* indicates a pilot transmission

Coordination between ATS units

12.3.5.8	Operations with reduced vertical separation minima (RVSM)	
	... to verbally supplement estimate messages of non-RVSM aircraft or to verbally supplement and automated forecast message exchange which does not automatically transfer information from flight plan Item 18 followed by supplementary information, as appropriate	NEGATIVE RVSM [<i>additional information, for example State aircraft</i>]);
	... to communicate the reason of contingency relative to an aircraft which can not conduct RVSM operations due to severe turbulence or other strong weather phenomenon or equipment failure, as appropriate	RVSM IMPOSSIBLE DUE TURBULENCE [<i>or EQUIPMENT, as appropriate</i>]);

CARSAMMA

Caribbean and Southamerica Monitoring Agency

The information contained in this form is confidential and will only be used for the purpose of statistical safety analysis.

ALTITUDE DEVIATION FORM

Report CARSAMMA of an altitude deviation of 300 feet or more, including those due to TCAS, Turbulence and Contingency.			
1. Date:	2. Agency Notification:		
DEVIATION DETAILS			
3. Operator Name:	4. Call sign:	5. Aircraft type:	6. Mode C Displayed:
7. Deviation Date:	8. Time UTC:	9. Location (lat/long or reference point):	
10. Cleared Flight route :			
11. Cleared Flight level :	12. Estimated time spent at incorrect flight level (seconds):		13. Deviation Observed (+/- ft):
14. Other traffic if there exist:			
15. Cause of deviation (brief title): (Examples: Operational error in the ATC coordination cycle, Turbulence, Weather, Equipment Failure)			
AFTER RESTORING DEVIATION			
16. Final Flight Level Observed/Reported*: *Please indicate the source of information – Pilot/Mode C	Check the appropriate box		19. Meet this FL with ICAO Annex 2 Tables of Cruising Levels ?
	17. Is the FL above cleared level: <input type="checkbox"/>		<input type="checkbox"/> Yes
	18. Is the FL below cleared level: <input type="checkbox"/>		<input type="checkbox"/> No
DESCRIPTION			
20. Detailed Description of the Deviation (Please give your assessment of the actual track flown by the aircraft and the cause of the deviation)			
21. CREW COMMENTS (IF ANY)			

When completing this form please send (the) report(s) to:

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