

ENR 1. GENERAL RULES AND PROCEDURES

ENR 1.1 GENERAL RULES

1. General

The air traffic rules and procedures applicable to air traffic in the territory of República Oriental del Uruguay conform to ICAO'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.

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 are promptly 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.

- a) 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.
- b) 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.
- c) The takeoffs shall be coordinated with Capitan Curbelo TWR.
- d) 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.
- e) Assign a sector of airspace;
- f) 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.

**INTENTIONALLY
LEFT BLANK**

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.

Any person conducting aeronautical activities of any nature, when it believes that an international rule, law or regulation stipulates something different than the technical information published in the AIP, strictly for reasons of Operational Safety, should continue to apply as indicated in the AIP, to therefore it is modified, and inform in writing the discrepancy to DINACIA.

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 are not authorized when the cloud ceiling is less than 800 FT or visibility is less than 1500 M.

Table of visibility and distance from clouds for VFR flights

Airspace class	C F	G
		A 900 M AMSL or below, or at 300 M above terrain, whichever is higher.
Distance from cloud	1 500 M horizontally 300 M vertically	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	1 500 M For helicopters: 800 M
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.

**INTENTIONALLY
LEFT BLANK**

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*

LAR 91 #91.340 is applicable

☛ LAR 91 #91.340 is applicable (Landing shall not be attempted when the flight visibility is lower than that prescribed in the instrument approach procedure that is being used)

☛ Note: it is considered a NON-OPERATING airport when at least one of the published values is lower than what is established in the instrument approach chart.

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.

**INTENTIONALLY
LEFT BLANK**

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.

<i>Class</i>	<i>Type of flight</i>	<i>Separation provided</i>	<i>Service provided</i>	<i>Speed limitation</i>	<i>Radio communication requirement</i>	<i>Subject to an ATC clearance</i>
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

<i>Class</i>	<i>Type of flight</i>	<i>Separation provided</i>	<i>Service provided</i>	<i>Speed limitation</i>	<i>Radio communication requirement</i>	<i>Subject to an ATC clearance</i>
C	IFR	IFR from IFR IFR from VFR	Air traffic control service	Not applicable	Continuous two-way	Yes
	VFR	VFR from IFR	1) Air traffic control service for separation from IFR; 2) VFR/VFR traffic information (and traffic avoidance)	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

<i>Class</i>	<i>Type of flight</i>	<i>Separation provided</i>	<i>Service provided</i>	<i>Speed limitation</i>	<i>Radio communication requirement</i>	<i>Subject to an ATC clearance</i>
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

☛ The helicopters assigned to fire fighting, medical flights, search and rescue and natural disaster tasks, shall be authorized to develop flights with visibility equal or greater than 800 M and the cloud base equal or greater than 800 FT, whenever the operation is conducted without hazard to persons and property on the surface, manoeuvring at a speed of adequate opportunity to observe other traffic or any obstacles in time to avoid a collision.

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.

NOTE: † Airspace Classes B, D and E do not apply

**INTENTIONALLY
LEFT BLANK**

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)	(280 KT) ³ (520 KM/H) or Mach 0.8, whichever is less (170 KT) ⁴
Above FL 140 (4 250 M) to FL 200 (6 100 M) inclusive	(240 KT) ⁵ (445 KM/H)		
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.

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

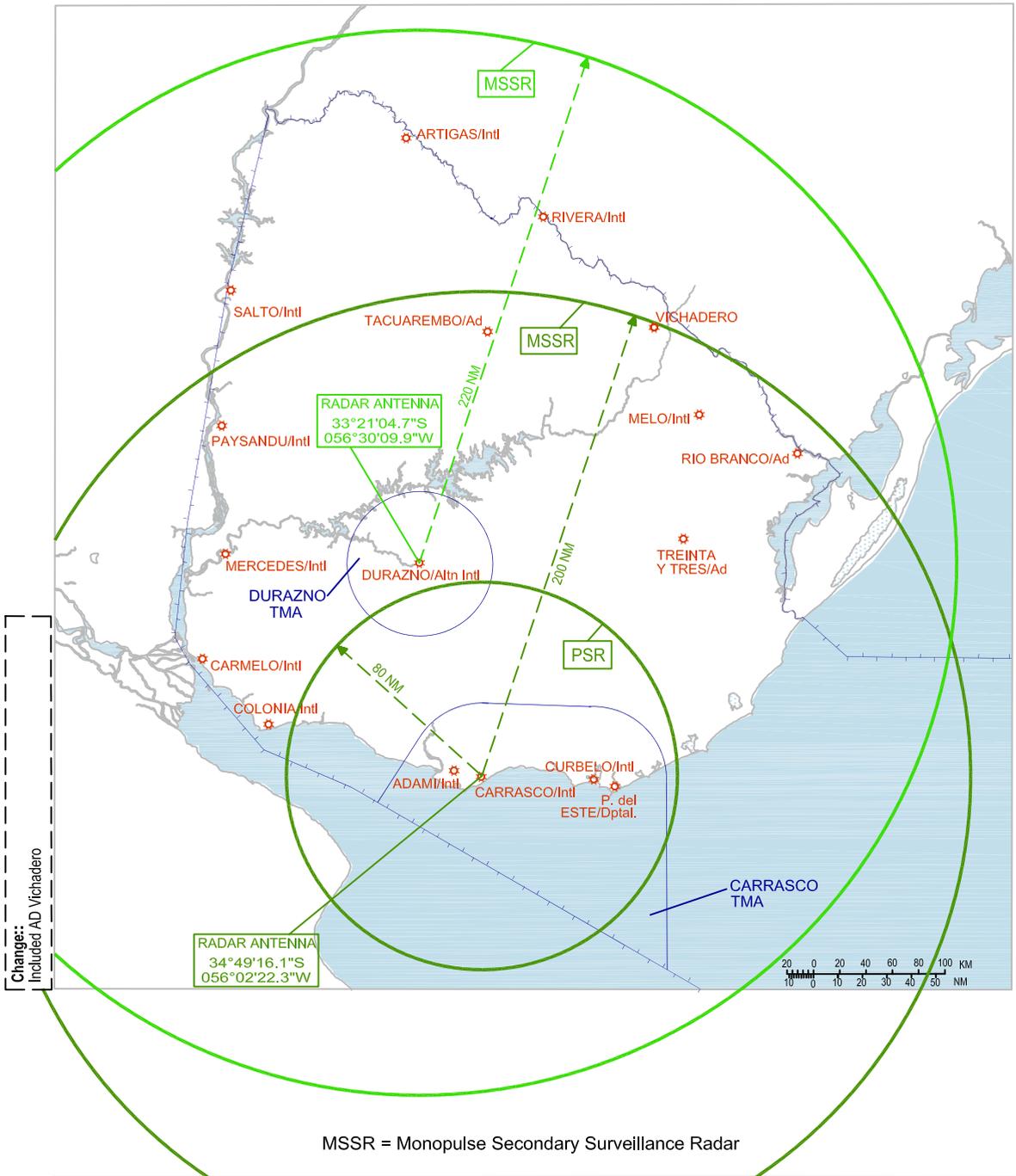
7600 - Communications Failure

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



MSSR = Monopulse Secondary Surveillance Radar

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 level		35	40	45
number	50	55	60	65
	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

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.

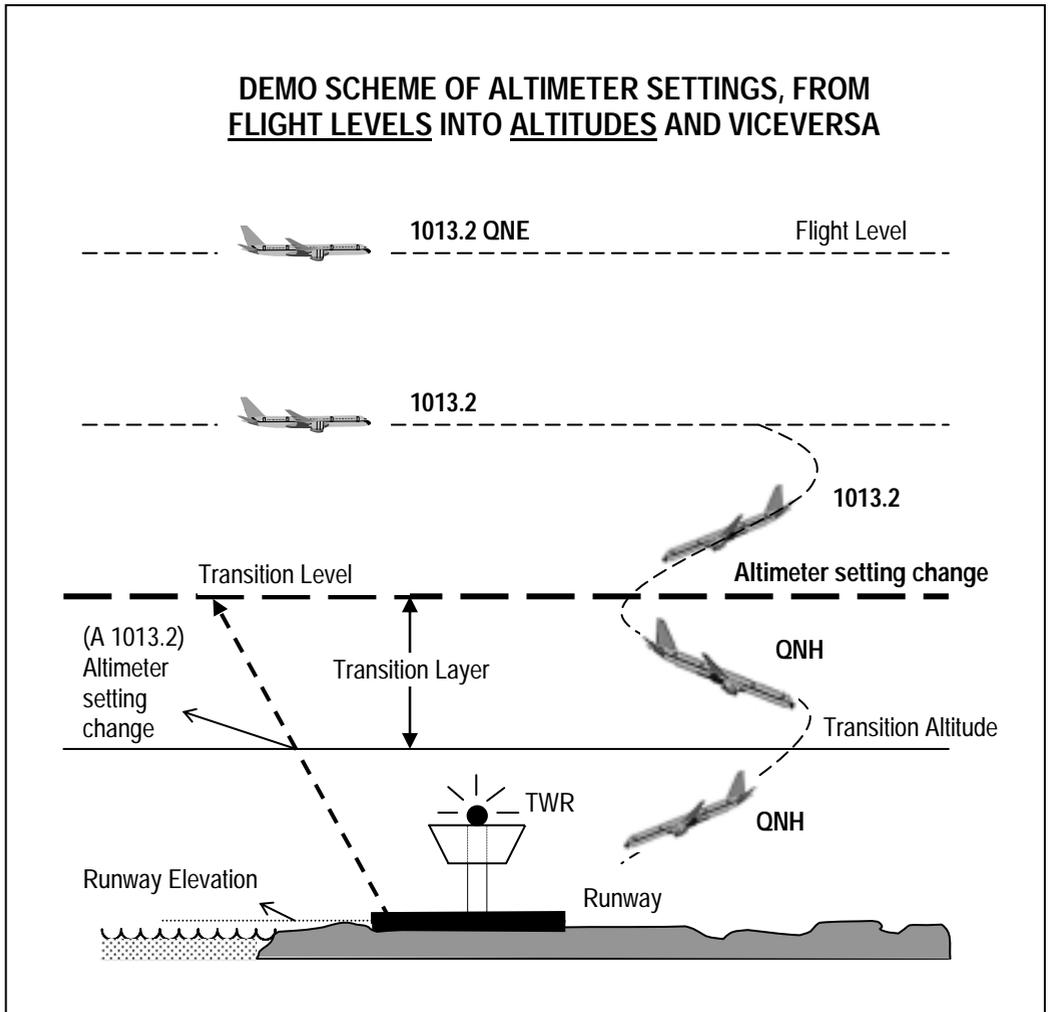
4. Procedures applicable to operators (including pilots)

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

- a) in terms of flight levels if the flight is to be conducted at or above the transition level;
- b) in terms of altitudes if the flight is to be conducted in the vicinity of an aerodrome and at or below the transition altitude.
- c) 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.



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		Metres	Feet		Metres	Feet
☞-			-	-	-	☞-			-	-	-
☞-	☞-	☞-	-	-	-	☞-	☞-	☞-	-	☞-	☞-
☞-	☞-	☞-	35	1050	3500	40	1200	4000	45	1350	4500
50	1500	5000	55	1700	5500	60	1850	6000	65	2000	6500
70	2150	7000	75	2300	7500	80	2450	8000	85	2600	8500
90	2750	9000	95	2900	9500	100	3050	10000	105	3200	10500
110	3350	11000	115	3500	11500	120	3650	12000	125	3800	12500
130	3950	13000	135	4100	13500	140	4250	14000	145	4400	14500
150	4550	15000	155	4700	15500	160	4900	16000	165	5050	16500
170	5200	17000	175	5350	17500	180	5500	18000	185	5650	18500
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									
						☞300	☞9150	☞30000			
☞310	☞9450	☞31000				☞320	☞9750	☞32000			
330	10050	33000				☞340	☞10350	☞34000			
☞350	☞10650	☞35000				☞360	☞10950	☞36000			
370	11300	37000				☞380	☞11600	☞38000			
☞390	☞11900	☞39000				☞400	☞12200	☞40000			
410	12500	41000				430	13100	43000			
450	13700	45000				470	14350	47000			
490	14950	49000				510	15550	51000			
Etc.	etc.	etc.				etc.	etc.	etc.			

**INTENTIONALLY
LEFT BLANK**

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.
- 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.

**INTENTIONALLY
LEFT BLANK**

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 - SAEZZTZR - SAEZZPZX - SABEZTZX - SABEZPZX - SADDZTZX - SADFZTZX -
SAREZRZX - SUEOZQZX - SUMUZAZX - SUMUZTZX - SUMUYIYX - SULSZTZX - SULSZPZX -
SBCWZQZX
- b) Originators as appropriate:
SUEOZQZX - SUMUZAZX - SUMUZTZX - SAEZZRZX - SAEZZTZR - 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.

**INTENTIONALLY
LEFT BLANK**

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 Prior to departure. Except when other arrangements have been made for submission of repetitive flight plans, flight plan must be presented and without exception before departure at the Oficinas de Operaciones (Plan de Vuelo – Flight Plan) of the departure aerodrome. If no such office in the departure aerodrome, the flight plan should be forwarded to the dependence of Air Traffic Services designed to serve the departure aerodrome. The submission of flight plan shall be in writing using the ICAO corresponding form.
- 1.1.2 When the Operations Office does not operate or does not exist at the departure aerodrome, the FPL "V" and FPL "Z", that are carried out within the national territory, may be routed through the Aeronautical Telecommunications Station (CXK), through 0800-PLAN (0800-7526) or fax 2604 0298 or through the electronic form provided for this purpose at www.dinacia.gub.uy FLIGHT PLAN "V" or "Z". The Department of Operations of DINACIA of the International Airport of Carrasco, receives Flight Plans by the following means: 1) personally in the office of the Department; 2) Telefax (598) 2604 0311; 3) e-mail: plandevuelo@dinacia.gub.uy.
- 1.1.3 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.
- 1.1.4 ☛ 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.
- 1.1.5 ☛ 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.
- 1.1.6 ☛ 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.
- 1.1.7 ☛ 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.

- 1.1.8 ● **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.
- 1.1.9 ● 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.
- 1.1.10 ● 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.
- 1.1.11 ● 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 continue 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: SUMUZZBZX ACC MVD and or SUMUZZRZX for RPL Centre.

Telefax. (00598) 2604 0251 extension 5155

Telephone (00598) 2604 0251 extension 5111

E-mail atmprl@dinacia.gub.uy

FOR ARGENTINA (ACCORDING TO THE FIR)

AFTN:

SAEZZRZX (Ezeiza ACC) Informative: SABAYRYX

SAMEZZRZX (Mendoza ACC) Informative: SABAYRYX

SACZZRZX (Córdoba ACC) Informative: SABAYRYX

SAREZZRZX (Resistencia ACC) Informative: SABAYRYX

SAVCZZRZX (Com. Rivadavia ACC) Informative: SABAYRYX

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."

<i>Category of flight (IFR, VFR or both)</i>	<i>Route (into or via FIR and/or TMA)</i>	<i>Message address</i>
1	2	3
IFR Flights	<ul style="list-style-type: none"> - Overflights not operating within the Montevideo FIR - Aircrafts operating in airports within the Carrasco TMA and aerodrome TWR in which they are operating - 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>SUMUZQZX – SUMUZAZX</p> <p>SUMUZQZX</p> <p>SUBLYWYX</p>
VFR Flights	<ul style="list-style-type: none"> - Overflights not operating within the Montevideo FIR - Aircrafts operating in airports within the Carrasco TMA and aerodrome TWR in which they are operating - 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>SUMUZFZX – SUMUZAZX</p> <p>SUMUZFZX</p> <p>SUBLYWYX</p>

**INTENTIONALLY
LEFT BLANK**

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.

<i>Phrase</i>	<i>Pronunciation</i>	<i>Meaning</i>
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:

<i>Phrase</i>	<i>Pronunciation</i>	<i>Meaning</i>
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:

<i>Series</i>	<i>INTERCEPTING Aircraft Signals</i>	<i>Meaning</i>	<i>INTERCEPTED Aircraft Responds</i>	<i>Meaning</i>
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>	<p>You have been intercepted. Follow me.</p>	<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>	<p>Understood, will comply.</p>
2	<p>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.</p>	<p>You may proceed.</p>	<p>DAY or NIGHT – Rocking the aircraft.</p>	<p>Understood will comply.</p>

Signals initiated by intercepted aircraft and responses by intercepting aircraft:

<i>Series</i>	<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:

<i>Series</i>	<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.

**INTENTIONALLY
LEFT BLANK**

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.: 2604 0408 ext 4035

☎ Fax :2604 0427

e-mail: dgacuru@adinet.com.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

- a) Heading and route
- b) True airspeed measured in () kt () km/h
- c) Level and altimeter setting
- d) Aircraft climbing or descending
 Flight level Climbing Descending
- e) Aircraft bank angle
 Wings level Slight bank Moderate bank
 Steep bank Inverted Unknown
- f) Aircraft direction of bank
 Left Right Unknown
- g) Restrictions to visibility (select as many as required)
 Sun glare Windscreen pillar Dirty windscreen
 Other cockpit structure None
- h) Use of aircraft lighting (select as many as required)
 Navigation lights Strobe lights Cockpit lights
 Red anti-collision lights Landing/taxi lights Logo (tail fin) lights
 Other None

- 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 Strobe 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 - MISCELANEOUS

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)

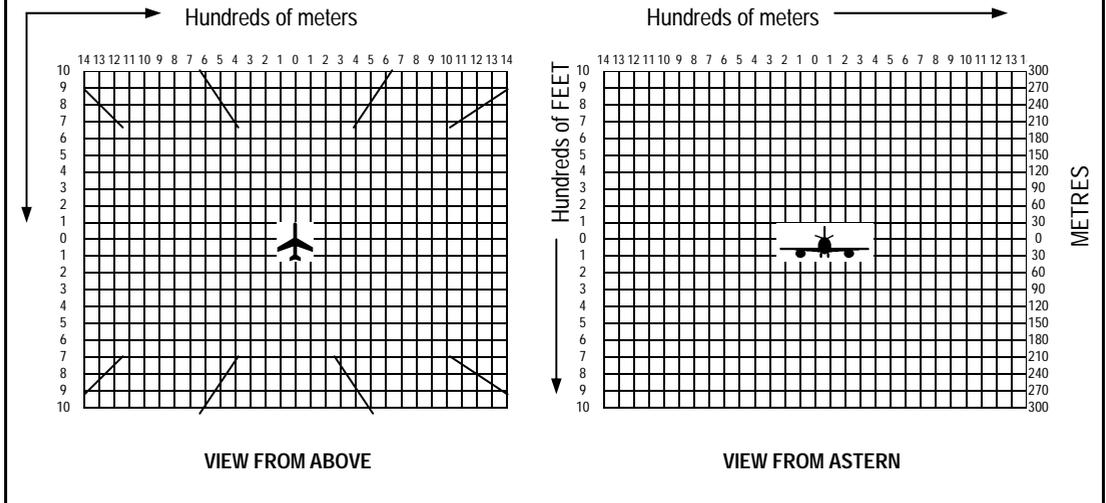
2. Details of ATS action

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.



* 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 350/1 013 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.

**INTENTIONALLY
LEFT BLANK**

✈️ ENR 1.15 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.

**INTENTIONALLY
LEFT BLANK**

➤ **ENR 1.16 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 down 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

<i>Circumstances</i>		<i>Phraseology</i>
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 [(additional information, for example aircraft callsign)]
	<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 (<i>brief title</i>):		
(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:

Agencia de Monitoreo del Caribe y América del Sur (CARSAMMA)
Av. Brig. Faria Lima, 1941 São José dos Campos, SP
Cep: 12227-000 Brasil
Telephone: (55-12) 3904-5004 o 3904-5010
Fax: (55-12) 3941-7055
E-Mail: carsamma@cgna.gov.br

**INTENTIONALLY
LEFT BLANK**