

**PART 2- EN ROUTE (ENR)  
EN ROUTE 0.**

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## ENR 1. GENERAL RULES AND PROCEDURES

### ENR 1.1 GENERAL RULES

Air traffic rules and procedures applicable to air traffic in Costa Rica conform to Annexes 2 and 11 to the Convention on International Civil Aviation and 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 national territory, except for the differences listed in GEN 1.7.

#### **1. MINIMUM SAFE HEIGHT (RAC 02, Section 02.119)**

Except when necessary for take-off or landing, or except by permission from the appropriate authority, aircraft shall not be flown over agglomerations of buildings, cities, towns or over an open-air assembly of persons, unless at such a height as will permit, in the event of an emergency arising, a landing to be made without excessive danger to persons or property on the surface; (prescribed in the Aeronautical Regulation of Costa Rica RAC 02).

#### **2. DROPPING OF OBJECTS (RAC 02, Section 02.15)**

Not pilot in-command of civil aircraft, will allow the dropping of objects from an aircraft in-flight that constitute a danger to persons and the property. However, this section do not prohibit the dropping of objects if they take in consideration reasonable cautions, in such way that avoid lesions or damages to persons or properties, whenever be authorized by the Civil Aviation Direction General, (prescribed in the Aeronautical Regulation of Costa Rica, RAC 02, Air Traffic Flow Management, Chapter 1).

Nothing shall be dropped or sprayed from an aircraft in-flight except under conditions prescribed by the appropriate authority and as indicated by relevant information, advice and/or clearance from the appropriate dependency.

#### **3. ACROBATIC FLIGHTS (RAC 02, Section 02.303)**

They are only allowed under visual meteorological conditions and with the clearance of the competent authority. Acrobatic flights are prohibited in heights less than 450m (1.500 FT) as well as over cities, other densely populated areas, open sky groups of people and airports. The Civil Aviation Direction General may grant exceptions in individual cases. Acrobatic flights conducted in the vicinity of aerodromes without an Air Traffic Services unit, require special permission in addition to the air traffic control clearance.

#### **4. TOWING AND ADVERTISING FLIGHTS (RAC 02, Section 02.311)**

No aircraft or other object shall be towed by an aircraft, except in accordance with requirements prescribed by the appropriate authority and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services dependency.

## 5. TIME SYSTEMS AND UNITS OF MEASURE.

The Coordinated Universal Time (UTC) and the prescribed Units of Measurement shall be applied to flight operations, which will be published in the Aeronautical Information Publication (AIP).

## 6. AIRSPACE STRUCTURE.

Establishing Flight Information Regions, which are published on AIP.

Flight Information Regions within controlled and uncontrolled airspace, are established, according to classification of the airspace described in the subsection ENR 1.4. Within controlled airspace, VFR flights may be prohibited completely or partly by the air traffic services because of limitations of space or time, if urgently required by degree intensity of air traffic, subject to air traffic control.

## 7. PROHIBITED, RESTRICTED, DANGEROUS AREAS.

Establishing prohibited and restricted areas, if necessary, to avoid hazards that affect safety or public order, particularly the air traffic safety. These areas are published on AIP.

The definition of each of these areas contained according to RAC 15 from the Aeronautical Information Management Regulation is the following:

**DANGER AREA:** An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.

**PROHIBITED AREA:** An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.

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

**ENR 1.2 VISUAL FLIGHT RULES**

1. Except in the case of a special VFR flight, VFR flights will be carried out so that the aircraft operates in conditions of visibility and distance from clouds equal to or greater than those specified in Table 1 (See RAC 02.157)
2. Except when authorized by the air traffic control unit, VFR flights will not take off or land at any aerodrome within a control zone, nor will the aerodrome traffic zone or traffic circuit be entered. said aerodrome:
  - a) When the cloud ceiling is less than 450 m (1500 ft); either
  - b) When the visibility on the ground is less than 5 km.
3. **Flights between sunset and sunrise.** VFR flights, between sunset and sunrise or during any other period between sunset and sunrise that may be prescribed by the Civil Aviation Authority, must be carried out in accordance with the conditions prescribed by said authority.
4. Unless authorized by the corresponding ATS authority, VFR flights will not be carried out:
  - a) above FL200;
  - b) at transonic and supersonic speeds.

**TABLE 1\***

	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Airspace class					Above 900 m (3,000 ft) AMSL or above 300 m (1,000 ft) above ground, whichever is greater	Up to or below 900 m (3,000 ft) AMSL or 300 m (1,000 ft) above terrain, whichever is greater.
Cloud Distance	Cloud free				1500m horizontally 300m (1000ft) vertically	Free of clouds and in sight of the surface

Flight visibility: 5 km

\* When the height of the transition altitude is less than 3050 m (10000 ft) AMSL, FL100 should be used instead of 10000 ft.

a) Lower flight visibility, up to 1,500 m, may be permitted for flights performed:

- 1) at speeds which, in prevailing visibility, will give sufficient opportunity to observe traffic, or any obstacles, in time to avoid a collision; either
- 2) in circumstances where the probability of encountering other traffic would normally be low, for example, in areas of low traffic volume and for low-level aerial work.

b) HELICOPTERS may be permitted to operate with a flight visibility of less than 1500 m, provided they operate at a speed that provides sufficient opportunity to observe other traffic or any obstacles in time to avoid a collision.

5. Except when necessary for takeoff or landing; or except by authorization of the corresponding authority, VFR flights will not be carried out:
  - a) Over congested areas of cities or towns, or over an outdoor gathering of people, at a height less than 300 m (1,000 ft) above the highest obstacle within 600 m of the aircraft;
  - b) Elsewhere than specified in a), at a height less than 150 m (500 ft) above ground or water.
6. Except where otherwise indicated in air traffic control clearances or otherwise specified by the appropriate ATS authority, VFR flights at cruising level above 900 m (3000 ft) of terrain or water or a point level specified by the corresponding ATS authority, will be carried out at a flight level appropriate to the track specified in the cruising level tables.
7. VFR flights will conform to the provisions of 3.6 of Annex 2:
  - a) When conducted in Class C airspace.
  - b) When they are part of the aerodrome traffic in controlled aerodromes; either
  - c) When carried out as special VFR flights.
8. An aircraft operated in accordance with visual flight rules that wishes to convert to instrument flight rules must:
  - a) If you have filed a flight plan, communicate the necessary changes that must be made to your current flight plan, or
  - b) When required by 3.3 of Annex 2, submit a flight plan to the corresponding air traffic services unit and obtain prior authorization or go to the IFR when in controlled airspace.

## ENR 1.3 INSTRUMENTS FLIGHT RULES.

### 1. Rules applicable to all IFR flights

#### 1.1 Aircrafts equipment

The aircraft will be equipped with suitable instruments and with navigation equipment appropriate for the route to be flown. Shall have; dual navigational equipment.

#### 1.2 Minimum levels

Except when necessary for take-off or landing, or when specifically authorized by the appropriate authority, an IFR flight shall be flown at a level that is not below the minimum flight altitude established by the State whose territory is over-flown, or, where no such minimum flight altitude has been established:

a) over high terrain or in mountainous areas, at a level which is at least 600 m (2000 ft) above the highest obstacle located within 8 KM of the estimated position of the aircraft.

b) elsewhere than as specified in a), at a level which is at least 300 m (1000 ft) above the highest obstacle located within 8 KM with of the estimated position of the aircraft.

*Note: The estimated position of the aircraft will take account of the navigational accuracy which can be achieved on the relevant route segment, having regard to the navigational facilities available on the ground and in the aircraft.*

### 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 the 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 and it has the purpose of continuing under such conditions.

### 2. Rules applicable to IFR flights within controlled airspace.

2.1 IFR flights shall comply with the provisions of 3.6 of ICAO Annex 2 to the Convention on International Civil Aviation when operated in controlled airspace.

2.2 An IFR flight operating in cruising flight in controlled airspace shall be flown at a cruising level, or if authorized to employ cruise climb techniques, between two levels or above a level, selected from:

a) The table of cruising levels in Appendix 3 of ICAO Annex 2, or

b) A modified table of cruising level, when so prescribed in accordance with Appendix 3 of ICAO Annex 2 for flight above FL 410,

Except that the correlation of levels to track prescribed therein shall not apply whenever otherwise indicated in air traffic control clearances or specified by the appropriate ATS authority in the Aeronautical Information Publication (AIP).

### **3. Rules applicable to IFR flights outside controlled airspace**

#### **3.1 Cruising levels**

An IFR flight operating in level cruising flight outside of controlled airspace shall be flown at a cruising level appropriate to its track as specified in:

- a) the table of cruising levels in Appendix 3 of ICAO Annex 2, except when otherwise specified by the appropriate ATS authority for flight at or below 900 m (3 000 ft) above mean sea level; or
- b) a modified table of cruising levels, when so prescribed in accordance with Appendix 3 of ICAO Annex 2 for flight above FL 410.

*Note- This provision does not preclude the use of cruise climb techniques by aircraft in supersonic flight.*

#### **3.2 Communications**

An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the appropriated ATS authority in accordance with 3.3.1.2 c) or d) of ICAO Annex 2 shall maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information service.

#### **3.3 Position reports**

An IFR flight operating outside controlled airspace and required by the appropriate ATS authority to:

- submit a flight plan, and
- maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information service, shall report position as specified in 3.6.3 of ICAO Annex 2 for controlled flights.

*Note: - Aircraft electing to use the air traffic advisory service while operating IFR within specified advisory airspace are expected to comply with the provisions of 3.6 of ICAO Annex 2, except that the flight plan and changes thereto are not subjected to clearances and that two-way communication will be maintained with the unit providing the air traffic advisory service.*



## ENR 1.4 ATS AIRSPACE CLASSIFICATION

### 1. Classification of airspaces

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

**Class A.** Only IFR flights 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.

**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 received traffic information in respect of all other flights.

**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.

**Class F.** IFR and VFR flights are permitted, all participating IFR flights receive and 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 flights within each class of airspace are shown in the following table.

<b>Class</b>	<b>Type of flight</b>	<b>Separation Provided</b>	<b>Services provided</b>	<b>VMC visibility and distance from cloud minima*</b>	<b>Speed limitation*</b>	<b>Radio communication requirement</b>	<b>Subject to an ATC Clearance</b>
<b>A</b>	IFR only	All aircraft	Air traffic control service	Not applicable	Not applicable	Continuous two-way	Yes
<b>B**</b>	IFR	All aircraft	Air traffic control service	Not applicable	Not applicable	Continuous two-way	Yes
	VFR	All aircraft	Air traffic control service	8 km above 3050 M (10 000 FT) AMSL 5 km below 3050 M (10 000 FT) AMSL clear of clouds	Not applicable	Continuous two-way	yes
<b>C</b>	IFR	IFR de IFR IFR de VFR	Air traffic control Service	Not applicable	Not applicable	Continuous two-way	Yes
	VFR	VFR from IFR	1) Air traffic control service for separation from IFR; 2) VFR/VFR traffic information (and traffic avoidance advice on request)	8 KM above 3050 M (10 000 FT) AMSL 5 KM below 3050 M (10 000 FT) AMSL 1500 M horizontal, 300 M vertical distance from cloud	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	Yes
	IFR	IFR from IFR	Air traffic control service including traffic information about VFR flights (and traffic avoidance advice on request)	Not applicable	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	Yes
<b>D**</b>	VFR	NIL	Traffic information between VFR and IFR flights (and traffic avoidance advice on request)	8 KM above 3 050 M (10 000 FT) AMSL 5 KM below 3 050 M (10 000 FT) AMSL 1 500 M horizontal; 300 M vertical distance from cloud	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	yes

Class	Type of flight	Separation Provided	Services provided	VMC visibility and distance from cloud minima*	Speed limitation*	Radio communication requirement	Subject to an ATC Clearance
<b>E**</b>	IFR	IFR from IFR	Air traffic control service and traffic information about VRF flights as far as practical	Not applicable	250 KT IAS below 3050 M (10 000 FT) AMSL	Continuous two-way	Yes
	VFR	NIL	Traffic information as far as practical	8 KM above 3050 M (10 000 FT) AMSL 5 KM below 3050 M (10 000 FT) AMSL 1500 M horizontal, 300 M vertical distance from cloud	250 KT IAS below 3050 M (10 000 FT) AMSL	Continuous two-way	No
	IFR	IFR as far as practical	Air traffic avoidance advice Flight information service	Not applicable	250 KT IAS below 3050 M (10 000 FT) AMSL	NO	No
<b>F**</b>	VFR	NIL	Flight information service	8 KM above 3050 M (10 000 FT) AMSL 5 KM below 3050 M (10 000 FT) AMSL 1500 M horizontal; 300 M vertical distance from cloud  Until 900 M AMSL or 300 M above terrain whichever is higher: 5 KM*** clear of cloud and in sight of ground or water	250 KT IAS below 3050 M (10 000 FT) AMSL	No	No
	IFR	NIL	Flight information service	Not applicable	250 KT IAS or below 3050 M (10 000 FT) AMSL	Continuous two-way	No
<b>G</b>	VFR	NIL	Flight information service	8 KM above 3050 M (10 000 FT) AMSL 5 km below 3050 M (10 000 FT) AMSL 1500 M horizontal; 300 M vertical distance from cloud  Until 900 M AMSL or 300 M above terrain whichever is higher- 5 KM***, clear of cloud and in sight of ground or water	250 KT IAS below 3050 M (10 000 FT) AMSL	No	No

\* When the height of the transition altitude is lower than 3 050 M (10 000 FT) AMSL, FT 100 should be used in lieu of 10 000 FT. (Not applicable)

\*\* classes of airspace A B E and F are not used in Costa Rica

\*\*\* when so prescribed by the appropriate ATS authority

a) lower flight visibilities to 1500 M may be permitted for flights operating:

- 1) at speeds that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or
- 2) in circumstances in which the probability of encounters with other traffic would normally be low, for example in areas of low traffic volume and for aerial work at low levels.

b) helicopters may be permitted to operate in less than 1500 M flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

→ Note: Service provided at Costa Rica controlled airspace corresponds to classification "C" and "D" and service provided on uncontrolled airspace corresponds to classification "G".

The controlled airspace includes the Terminal Control Area (TMA) Liberia, Control Zone (CTR), airways, "E" and "W" zones ("W zone" above 085 and "E zone" up to 115). El coco Terminal Control Area (TMA), El Coco Control Zone (CTR) and Aerodrome Traffic Zone, Pavas (ATZ).

**ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES**

**1. General**

1.1 The holding, approach and departure procedures of Juan Santamaria International Airport, are based on those contained in the latest edition of ICAO Doc. 8168/611 (PANS-OPS).

1.2 The holding and approach procedures in use have been based on the values and factors contained in Parts II III and IV of Vol.I of the PANS-OPS.

1.3 *Special procedures for: "EL COCO" Terminal Control Area.*

1.3.1 The entry, in transit and departure routes that are shown in charts can be change at ATC discretion.

1.3.2 If necessary, in case of traffic congestion, it can also instruct the aircrafts to hold in one of the reporting points of designated airways.

1.3.3 "EL COCO" TMA covers, the space within a circle of 30 nautical miles radius, centered on 095901,20335N 0841410,175472W and extends from **5.500 feet of altitude (QNH) until 11.500 feet of altitude. (QNH) inclusive.**

NOTE: Transition Altitude: 19.000 ft.

**2. Arriving flights**

2.1 IFR flights entering and landing within a terminal control area will be cleared to a specified holding point and instructed to contact approach control at a specified time, level or position. The terms of this clearance shall be adhered to until further instructions are received from approach control. If the clearance limit is reached before further instructions have been received, holding procedures shall be carried out at the level last authorized.

**3. Departing flights**

3.1 IFR flights departing from controlled aerodromes will receive initial ATC clearance. The clearance limit will normally be the aerodrome of destination.

3.2 Detailed instructions with regard to routes, turns etc will be issued after take-off.

Flight Level (FL)	Category A and B aircraft	Jet aircraft	
		Normal conditions	Turbulence conditions
Up to FL 140 (4 250 M) inclusive	170 KT	230 KT (425 KM/H)	280 KT (520 KM/H) or Mach 0,8, whichever is less
Above FL 140 (4 250 M) to FL 200 (6 100 M) inclusive	240 KT (445 KM/H)		
Above FL 200 (6 100 M) to FL 340 (10 350 M) inclusive	265 KT (490 KM/H)		
Above FL 340 (10 350 M)	Mach 0,83		Mach 0,83

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## ENR 1.6 RADAR SERVICES AND PROCEDURES

### 1. RADAR

#### 1.1 Complementary Service

1.1.1 Two radar dependences function as an integral part of the Air Navigation Service that provide approach control service with radar surveillance:

- a) El Coco Control Center
- b) Liberia Control Center

1.1.2 The following surveillance equipment is available:

**Radar San José**, coordinates: 100001N 0841206W, corresponds: A Primary Radar, Secondary Radar and ADS-B Receiver. The Primary Radar has a range of 80NM. The secondary radar (MSSR) and the ADS-B receiver have a range of 250NM.

**Radar Poás**, coordinates: 101037N 0841428W, corresponds to: Secondary Radar MSSR and ADS-B receiver, both has a range of 250NM.

**Radar Mata de Caña**, coordinates: 100759N 0853752W, corresponds to: Secondary Radar and ADS-B receiver, has a range of 250NM.

**Isla del Coco**, coordinates: 055472N 0870519W, corresponds to: ADS-B receiver, with a range of 250NM.

This equipment provides azimuth and distances, of those aircrafts that are within its cover and gives the altitude of aircrafts equipped with transponder mode C and/or S.

Hours of service: H24. From 0000 to 1200UTC service is provided only on frequency 119.6 MHz

1.1.3 Pilot will know when to provide radar services, because the radar controller will use the following call signs:

- a) Control APP dependency "Coco Approach"
- b) Control APP dependency "Liberia Approach"

1.1.4 The Coco Approach service is provided on frequency 119.6 and 120.5 MHz and frequency 120.5 MHz and 119.8 MHz for Liberia approach.

#### 1.2 Radar control service application

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

1.2.2 Radar control service is provided in controlled airspaces to aircrafts properly identified operating within Costa Rican territory.

Provided services are the following.

- a) Radar Surveillance
- b) Radar vectoring guide
- c) Radar separation of essential traffic
- d) Support to Higher Air Traffic Service

The radar information will be use to provide the aircrafts under visual flight rules (VFR), the following.

- a) Conflicting traffic information.
- b) Assistance to the navigation.

1.2.3 The minimum horizontal radar separations are:

- a) Horizontal (lateral) separation of 3 NM between the traffic established in the locator and the aircraft flying over the path of the Visual Charlie Corridor (CVC) and the Visual Corridor South (CVS). ←
- b) Horizontal (longitudinal) separation of 8 NM between IFR aircraft approaching the same runway at Juan Santamaría International Airport. Between 0000 and 1159 UTC the separation is 5 NM.
- c) Horizontal separation (longitudinal and lateral) of 5 NM, in airspace C.

1.2.4 The levels assigned by the Radar Controller to the pilots will provide minimum terrain clearance according to the phase of flight.

#### 1.3 Radar and radio failure procedures

##### 1.3.1 Radar failure

In the event of total radar failure or loss of radar identification, instructions will be issued to establish no-radar separation.

As emergency measure, it can be appealed temporarily the use of flight levels or altitudes spaced half of the applicable minimum vertical separation, if immediately non radar standard separation could not be provided.

## ENR 1.6 SERVICE AND RADAR PROCEDURES

Except when it has certainty that the complete failure of the radar equipment will be of very limited duration, ATFM measures shall be taken to limit the number of aircraft that can be safely controlled without the use of radar.

### 1.3.2 Radio Failure

1.3.2.1 In the event of loss of two-way communication; the radar controller will establish whether the aircraft radio receiver is working, by instructing the pilot of the aircraft on frequency to carry out a specified maneuver and observing the track, or indicating the pilot of the aircraft to operate IDENTIFICATION or to change the code.

1.3.2.2 If the aircraft's radio is completely unserviceable, the pilot should carry out the procedures for radio failure in accordance with ICAO provisions. If radar identification has already been established, the radar controller will vector other identified aircraft until such time as the aircraft leaves radar cover.

### 1.4 Graphic portrayal of radar coverage zone See ENR 1.6.-4 Graphic of radar coverage/SSR

## 2. Secondary radar

### 2.1 Emergency procedures

2.1.1 Except when encountering a state of emergency, pilots shall operate transponders and select modes and codes in accordance with ATC instructions, in particular, when entering "El Coco" Terminal Control Area (TMA), pilots who have already received specific instructions from ATC concerning the setting of the transponder shall maintain the setting until otherwise instructed.

2.1.2 Pilots of aircraft about to enter El Coco TMA who have not received specific instructions from ATC concerning the setting of the transponder shall operate the transponder on Mode C/3 Code 05 (0500) before entry and maintain that code setting until otherwise instructed.

Pilots performing **visual local operations** on national territory and to which the Air Traffic Control Services have assigned a transponder code; once they complete their landing, **they will return to code 0500.**

When beginning a new operation, they will maintain code 0500, **while a new radar code be assigned to them** by Coco Approach in 119.6 MHz or in 120.5 MHz, or by Liberia Approach in 119.8 MHz.

2.1.3 If the pilot of an aircraft encountering a state of emergency has previously been directed by ATC to operate the transponder on a specific code, this code setting shall be maintain until otherwise advise.

2.1.4 In all other circumstances, the transponder shall be set to Mode c/3 Code 77 (or 7700). Notwithstanding the procedure in 2.11 above, a pilot may select Mode c/3, code 77 (or 7700) whenever the nature of the emergency is such that this appears to be the most suitable course of action.

*NOTE: Continuous monitoring of responses on Mode C/3 clave 77 is provided.*

## **2.2 Radio communication failure and unlawful interference procedures**

### *2.2.1 Radio communication failure procedure.*

In the event of an aircraft radio receiver failure, pilots shall select Mode C\3 Code 76 (or 7600) and follow established procedures; subsequent control of the aircraft will be based on those procedures.

### *2.2.2 Unlawful interference procedure*

Pilots of aircraft in flight subjected to unlawful interference shall set the transponder to Mode C, Code 7500 to make the situation known, unless circumstances warrant the use of Mode A, Code 77 (or 7700).

## **2.3 System of SSR code assignment**

The Radar system assigns the following codes:

Traffic controlled within Costa Rica:

0500-0577

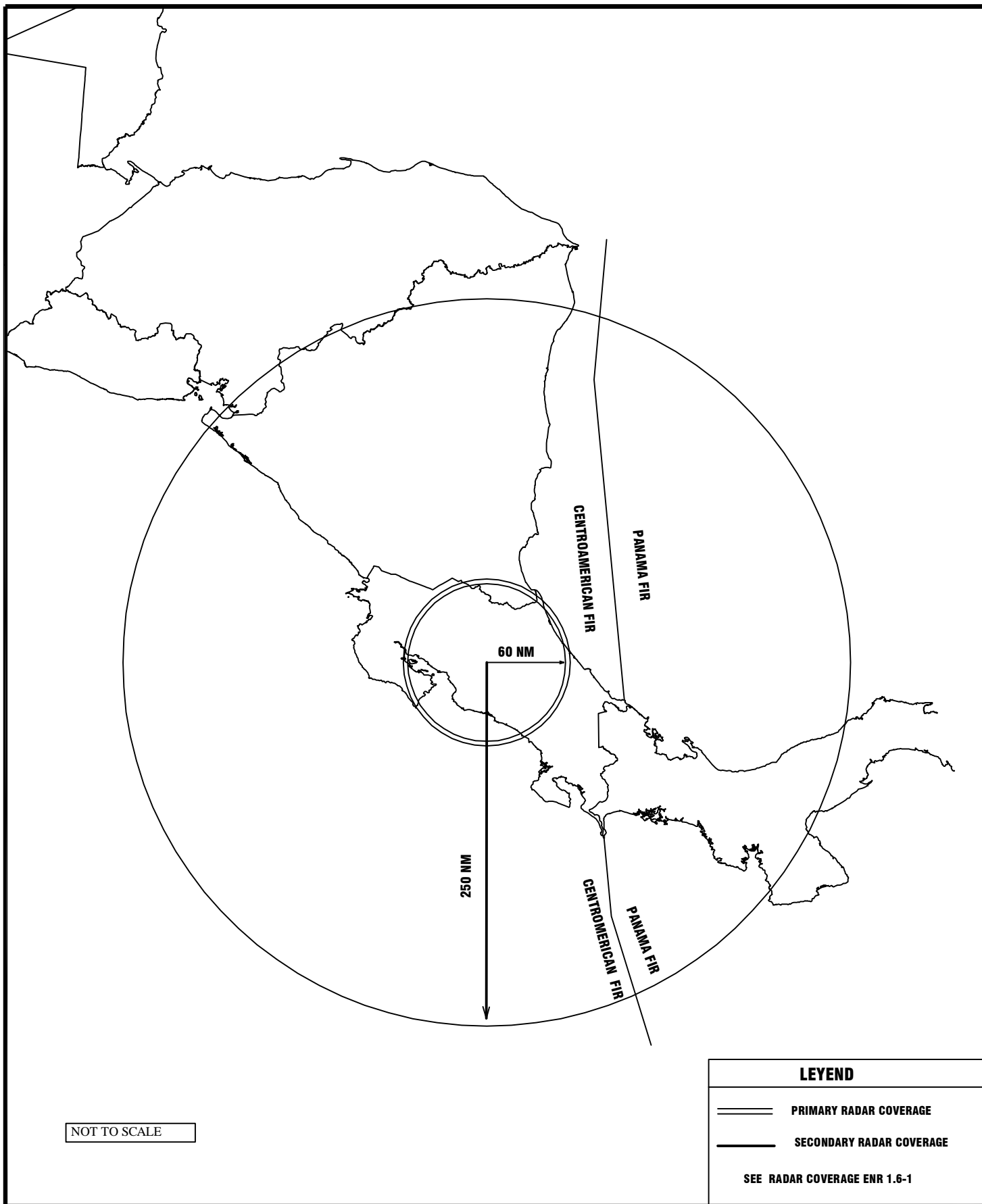
→ 1601-1677

Traffic controlled within Central  
America: 1500-1577

Traffic controlled outside Central  
America: 4600-4637

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# MINIMUM ALTITUDES CHART FOR RADAR VECTOR

JUAN SANTAMARIA INTL.  
SAN JOSE/ COSTA RICA

COCO ACC ( R ) 119.6  
ALTERNATE FREQUENCY 127.9

COCO APP ( R ) 120.5  
COCO TWR 118.6

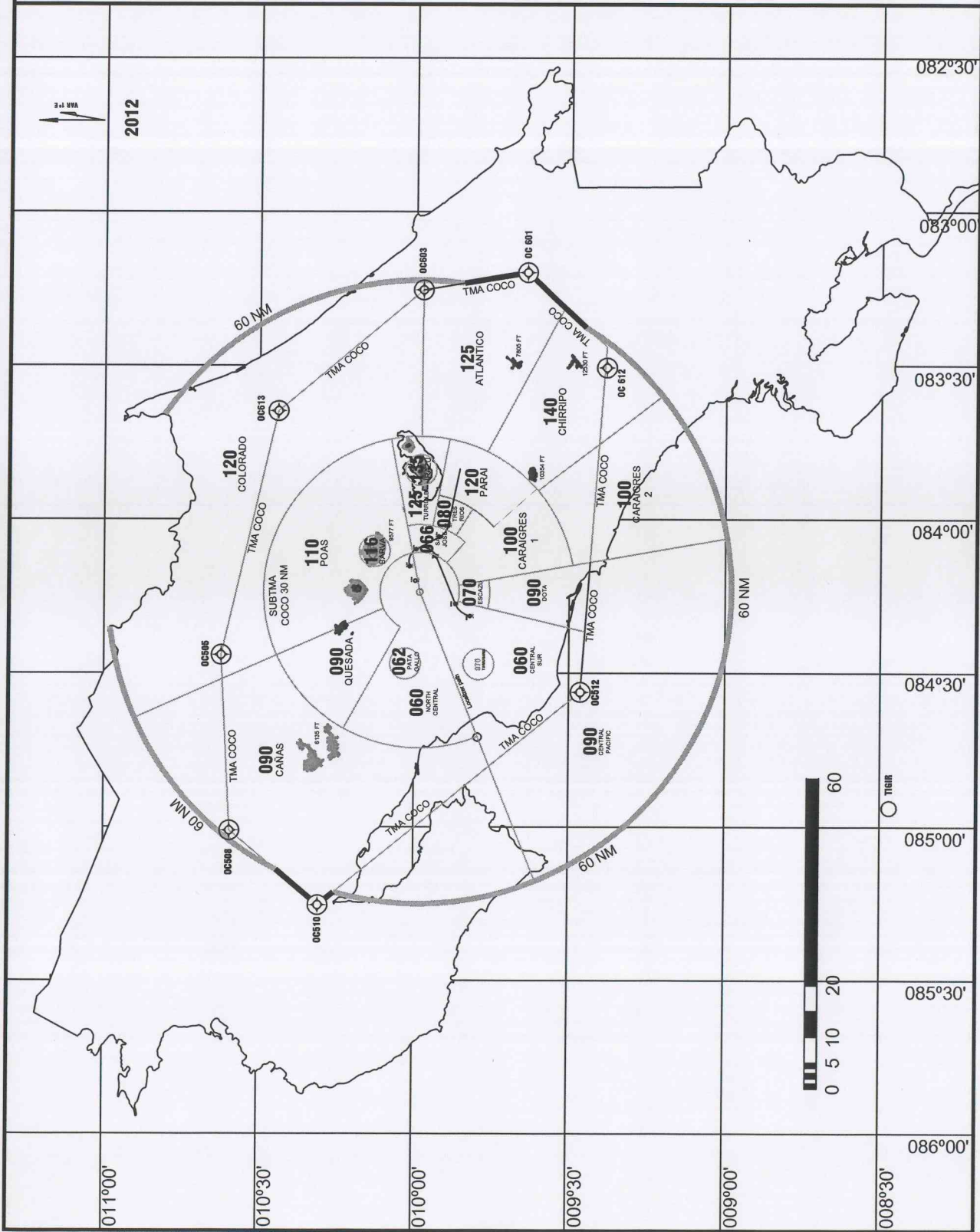
EN ROUTE FREQUENCY  
CENAMER CONTROL  
SEC 2 124.1

EL COCO TMA: IRREGULAR  
POLYGON, FORMED BY THE  
ENTRY CODED ARRIVALS

COCO TWR EMERG 121.5

GROUND 121.9

AP. ELEV. 3021'



### ENR 1.6-5 CHART CONFIGURATION

OC613	102602,1N	0833827,9W
OC603	095802,3N	0831515,2W
OC601	093747,5N	0831205,6W
OC611	091936,0N	0832819,7W
OC512	090703,1N	0842421,3W
OC510	101835,9N	0851446,4W
OC508	103518,5N	0850005,0W
OC505	104357,5N	0842434,3W

\*\*\*CHANGE: POINT OC612 IS REPLACED BY POINT OC611

## ENR 1.7 ALTIMETER SETTING PROCEDURES

### 1. Introduction

The altimeter setting procedures in use generally conform to those contained in ICAO Doc. 8168-OPS\611 Vol.I, part 6 and are given in full below.

Transition height for each international airport is given on AD 2.22 flight procedure.

QNH reports and temperature information for use in determining adequate terrain clearance are provided in MET broadcasts and are available on request from the air traffic services units. QNH values are given in inches of mercury.

### 2. Basic altimeter setting procedures

#### 2.1 General

2.1.1 The transition altitude for Juan Santamaría and Daniel Oduber Quirós International Airports is 19.000 feet.

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

2.1.3 Flight level (0) zero is located at the atmospheric pressure level of 1013.2 hPa (29.92 in). Consecutive flight levels are separated by a pressure interval corresponding to 500 ft (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	Meters
10	1 000	300
15	1 500	450
20	2 000	600
50	5 000	1500
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 during En-route flight shall be expressed in terms of flight levels at all times "during an IFR flight and at night"

2.3.2 IFR flights, and VFR flights above 900 m (3 000 ft), when in level cruising flight, shall be flown at such flight levels, corresponding to the magnetic tracks shown in the following table, so as to provide the required terrain clearance:

	000°-179°		180°-359°	
	IFR	VFR	IFR	VFR
	10		20	
	30	35	40	45
	50	55	60	65
Flight level	70	75	80	85
number	90	95	100	etc
	...	etc.	...	...
	270		280	
	290		310	
	330		350	
	etc.		etc.	

*Note: Some of the lower levels in the above table may not be usable due to terrain clearance requirements.*

### 2.4 Approach and landing

2.4.1 A QNH altimeter setting is made available in approach clearance and in clearance to enter the traffic pattern.

2.4.2 QFE altimeter settings are not available.

2.4.3 Vertical positioning of aircraft during approach is controlled by reference to flight levels until reaching the transition level below which vertical positioning is controlled by reference to altitudes.

## **2.5 Missed approach**

2.5.1 In the case of a missed approach, the relevant parts 2.1.2, 2.2 and 2.4 above will apply.



### 5. TABLE OF CRUISING LEVELS

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

a) In areas where, on the basis of regional air navigation agreement and in accordance with conditions specified therein, a vertical separation minimum (VSM) of 300 m (1 000 ft) is applied between FL 290 and FL 410 inclusive.\*

TRACK*											
From 000 degrees to 179 degrees						From 180 degrees to 359 degrees					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Altitude			Altitude			Altitude			Altitude		
FL	M	FT	FL	M	FT	FL	M	FT	FL	M	FT
-90			-	-	-	0			-	-	-
10	300	1 000	-	-	-	20	600	2 000	-	-	-
30	900	3 000	35	1 050	3 500	40	1 200	4 000	45	1 350	4 500
50	1 500	5 000	55	1 700	5 500	60	1 850	6 000	65	2 000	6 500
70	2 150	7 000	75	2 300	7 500	80	2 450	8 000	85	2 600	8 500
90	2 750	9 000	95	2 900	9 500	100	3 050	10 000	105	3 200	10 500
110	3 350	11 000	115	3 500	11 500	120	3 650	12 000	125	3 800	12 500
130	3 950	13 000	135	4 100	13 500	140	4 250	14 000	145	4 400	14 500
150	4 550	15 000	155	4 700	15 500	160	4 900	16 000	165	5 050	16 500
170	5 200	17 000	175	5 350	17 500	180	5 500	18 000	185	5 650	18 500
190	5 800	19 000	195	5 940	19 500	200	6 100	20 000			
210	6 400	21 000				220	6 700	22 000			
230	7 000	23 000				240	7 300	24 000			
250	7 600	25 000				260	7 900	26 000			
270	8 250	27 000				280	8 550	28 000			
290	8 850	29 000				300	9 150	30 000			
310	9 450	31 000				320	9 750	32 000			
330	10 050	33 000				340	10 350	34 000			
350	10 650	35 000				360	10 950	36 000			
370	11 300	37 000				380	11 600	38 000			
390	11 900	39 000				400	12 200	40 000			
410	12 500	41 000				430	13 100	43 000			
450	13 700	45 000				470	14 350	47 000			
490	14 950	49 000				510	15 550	51 000			

\* Except when based on regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum 300 m (1000 ft) is prescribed for use, under conditions, by aircrafts above FL 410 within designated portions of the airspace.

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## 1.8 REGIONAL SUPPLEMENTARY PROCEDURES (DOC 7030)

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

### 1. Visual flight rules (VFR) (ICAO Annex 2,4.8)

VFR flights will operate within a control zone established at an aerodrome serving international flights and in specified portions or the associated terminal control area:

- a) Will have two-way radio communications;
- b) Will obtain permission from the appropriate air traffic control unit; and
- c) Will report positions, as required.

*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

Fights shall be conducted in accordance with the instrument flight rules even when not operating in instrument meteorological conditions, when operated more than 90 km seaward from the shore-line.

### 3. Air traffic advisory service (PANS/ATM, 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 (ICAO ANNEX 2, 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 where the deviation was observed.



**Restriction at “PASO DE LA PALMA”**

1. VISUAL FLIGHT RULES (VFR) must be followed.

Visibility: 5 Kilometers

Distances from clouds

- a) Vertical 300 meters
- b) Horizontal 1.500 meters

Pilots unable to comply Visual Flight Rules (VFR), must hold on ground until VMC conditions exist, or if they are enabled for instrument flight (IFR), must request permission to fly instruments at Air Traffic Control Services, thirty minutes ahead, if the aircraft is on ground and five minutes ahead, if the aircraft is on VFR flight.

2. VFR Flight Rules minimum altitudes will be:

- a) Aircrafts crossing NORTHEAST, the minimum altitude is 7500 feet.
- b) Aircrafts crossing bound to Central Valley, the minimum altitude is 8500 feet.

3. The minimum altitude on VRF flight rules is established in 12000 feet and previous coordination with Air Traffic Control Services.

4. Flight below 7500 feet of altitude is restricted, according to RESTRICTED ZONE (MRR-2), see ENR 5.1-1)

NOTE: La Palma Visual Arrival Procedure used between sunset and 1100 UTC. between Sunset and 1100 UTC exclusive use is for PBN operations. ←

**Levels inverted at: “PASO DE PARRITA”**

Aircrafts entering “Paso de Parrita” must flight odd altitudes plus five hundred and the aircrafts flying from “Paso de Parrita” to Central Valley must fly even altitudes plus five hundred.

Establishing the above in view of aircraft in and out of “Paso de Parrita”, are just on the edge of the division of the semicircles that determine the altitude to fly according track.



## ENR 1.9 AIR TRAFFIC FLOW MANAGEMENT (ATFM)

### 1. Structure, service area, services provided, location of the units and hours of operation of the organization of the flow of air traffic

#### 1.1 Service area

The FMU Costa Rica area of responsibility comprises the airspace delimited by the lateral and vertical limits of the Costa Rica FIR as defined in the Costa Rica AIP.

The ATFM service is provided by an ATS unit called AIR TRAFFIC FLOW UNIT - Costa Rica (FMU Costa Rica), whose operations room is attached to the San José Radar Control Center.

#### 1.2 Service provided

The ATFM service fundamentally seeks to improve the balance between demand and the capacity of the most congested airspaces in the country, taking the Juan Santamaría International Airport as a starting point. This service will be made up of the central unit, but may be supported by flow management positions established in the ATS units.

The FMU Costa Rica will expand the ATFM service to the different airspaces and airports located within the Costa Rica FIR to the extent that the traffic demand or the airport infrastructure warrants.

The purpose of the service is to contribute to a safe, orderly and expeditious circulation of air traffic, ensuring that ATC capacity is used to the maximum possible, and that the traffic volume is compatible with the capacities declared by the competent ATS Authority. Balancing capacity and demand, strategically planned and tactically applied as a result of airspace or airport limitations.

The ATFM service is a service arranged in favor of the ATS services and the Air Operators conceived in such a way that it allows the FMU:

- Develop and maintain the highest level of ATS service quality, within the area of responsibility, in favor of ATC and Air Operators within the agreed ATFM policies and principles.
- Maintain and improve the efficiency of its operations by increasing the level of automation, taking advantage of technological advances.
- Adapt its procedures and systems to the evolution of its operational environment.
- Maintain a high level of listening to the different proposals for improving the system presented by the ATS or the Air Operators.

In this context, the following functions are carried out by the FMU unit:

- Plan, coordinate, promulgate and execute ATFM measures, bearing in mind the different planning phases, within their area of responsibility.
- Evaluate, declare and examine every twelve (12) months, the ATC's capacity regarding the AAR, control areas or control sectors within the area of responsibility.
- Provide reports and daily statistics of ATFM operations, delays and all relevant information to ATC and Air Operators.
- Provide daily reports and statistics of ATFM operations and delays for operational and administrative purposes.

- Receive and process ATFM incident reports.
- Monitor the meteorological conditions of the aerodromes within the FMU area of responsibility and thus determine the impact that these may cause to the capacity of the sectors / airports.

### 1.3 Location of the unit

FMU Costa Rica is located at:

**POSTAL ADDRESS:** Department of Air Navigation Services  
Air Traffic Flow Management Unit  
Juan Santamaria International Airport  
Radar Building, El Cacique neighborhood, Río  
Segundo, Alajuela  
P.O Box 5026-1000  
San José, Costa Rica

**AMHS:** MROCZDZX →  
**TELEPHONE:** (506) 2106-9089  
**E-MAIL:** [atfm@dgac.go.cr](mailto:atfm@dgac.go.cr)

### 1.4 Hours of operation

The hours of operation of the Air Traffic Flow Management Unit: Monday to Friday from 1400 UTC to 2200 UTC.

### 1.5 Remarks

NIL

## 2. Types of affluence messages and description of the formats

The FMU may, depending on the requirements of the Air Operators, send ATFM messages to a single centralized address or to the representative office of the users.

The FMU will send all messages related to ATFM regulations to the ATS units involved through AMHS.

The FMU will share information that may affect normal operation through electronic means specified in the ATFM Manual, and by common agreement in Regional agreements.

Initially, the FMU will generate ATFM regulation messages for the day of the operation.

### 2.1 ATFM exemptions

The STS indicator is used to indicate that the flight may require "special treatment", for the reasons stated eg FLIGHTS IN A STATE OF EMERGENCY. This indicator is for the use of all parties that may have responsibility for the management of this flight. To ensure correct processing, standardized abbreviations have been created for use in the STS field. (Box 18 of the flight plan).

Therefore, when required, the following abbreviations that are recognized by ATS systems should be used:

STS/EMER	for a flight in state of emergency
STS/SAR	for a flight performing search and rescue missions
STS/MEDEVAC	life-threatening medical emergency evacuation flight
STS/HEAD	for a flight with "Head of State" status
STS/HUM	for a flight for humanitarian reasons
STS/HOSP	for a medical flight, expressly declared by the medical authorities
STS/STATE	for registered Air Surveillance Service aircraft or registered civil aircraft used in police services
STS/ATFMX	for a flight specifically authorized by the FMU Costa Rica to be exempt from ATFM measures, regardless of any other STS used
STS/FLTCK	Flight Aids to Navigation Calibration

If more than one STS designator is to be used, they must be included in separate STS fields. For example, a "STATE" flight that is also specifically authorized as exempt from ATFM measures, must be registered as follows: STS / STATE STS / ATFMX

If any free text is required, it must be registered in a separate field. Example:  
STS / HEAD STS / NO DEVIATION FROM FPL ROUTE PERMITTED

Therefore, the following special flights will be exempt from the application of ATFM measures:

- Ambulances (MEDEVAC)
- Emergencies (EMER)
- Humanitarian character (HUM)
- Search and Rescue (SAR)
- State Aircraft (HEAD)
- All aircraft of the Air Surveillance Service will be exempt from ATFM measures (STATE)
- Aircraft belonging to international patrol agreements (ATFMX)
- Navigation Aids Check Flights (FLTCK)
- Medical flight specifically declared by the health authorities (HOSP)

### 3. Air Traffic Flow Management Measures (TMI)

Because the FMU Costa Rica aims to promote an efficient, fluid and orderly circulation of air traffic and adequately meet the demand for the service in take-off and landing operations at airports declared as coordinated and for which there is capacity data. and demand, and given that currently the levels of demand and congestion in peak hours and seasons are growing and to avoid delays in scheduled itineraries for essential public passenger service, it is considered necessary to establish the following measures:

#### 3.1 Flow Management Measures

##### 3.1.1 TMA MROC inflows and outflows for IFR flights

	NORTHWEST	NORTH	NORTHEAST	EAST	SOUTH
ARRIVALS	LIBERIA	PIRAS	COLOR	ISEBA	PARRI/COTOS
DEPARTURES	ULAPO	RADON	COLOR	LIMON	PARRI/COTOS

Refer to the airspace entry and exit flow chart for IFR flights (ENR 1.9-9)

### 3.2 Service responsible for providing information on the ATFM measures applied

Information regarding ATFM measures can be obtained from the Traffic Flow Management Post (FMP)

### 3.3 Flight plan requirements

3.3.1 The routes proposed in the FPL must comply with the entry and exit points to the TMA MROC as provided in 3.1

3.3.2 In the event that an aircraft indicates that it requires ATFM exemptions, it must comply in Box 18 of the flight plan with what is requested in 2.1

### 3.4 Assignment of shifts (SLOTS)

NIL

#### → 4. Declaration of the Juan Santamaría and Daniel Oduber Quirós International Airports as Coordinated and Capacity airports

→ The Department of Air Navigation Services of the Civil Aviation Authority declares as Coordinated airports the Juan Santamaría and Daniel Oduber Quirós International Airports on a permanent basis for which the capacity described in the following table that defines its distribution is declared.

#### 4.1 Airport Capacity and Sectors

INTERNATIONAL AIRPORT	ICAO CODE	RUNWAY	CONDITIONS	RUNWAY CAPACITY <sup>(1)</sup>	SECTOR	SECTOR CAPACITY <sup>(1)</sup>
JUAN SANTAMARÍA	MROC	07	VMC	30	APP/ACC	34/42
			IMC	16		
		25	VMC	20	APP/ACC	28/34
			IMC	15		
		07/25 <sup>(2)</sup>	IMC	10		
		DANIEL ODUBER QUIRÓS	MRLB	07	VMC	20
IMC	10					
25	VMC			20		
	IMC			10		

<sup>(1)</sup> Capacities are expressed in operations per hour

<sup>(2)</sup> Runway configuration: 07 for landings and 25 for take-offs

## 5. ATFM Incident Report

The purpose of the ATFM incident reporting system is to establish procedures to:

- Ensure that all reports and data required for analysis are collected as soon as practicable.
- Ensure that all incidents are fully analyzed, and that corrective actions are taken in such a way that their recurrence is prevented.

The following may be considered ATFM incidents:

- The overload of an-ATC sector. An overload occurs when an air traffic controller reports that he has handled more traffic than he considers safe, even though the capacity of the sector has not necessarily been exceeded.
- Denial of an-ATC unit to accept an aircraft in flight to a regulated area for capacity reasons or any other reason related to ATFM.
- Excessive and unexplained traffic delay.
- Application, by an-ATS unit, of unauthorized or uncoordinated ATFM measures.

An ATFM incident report may be originated by an ATS unit, by an AO or by the FMU itself.

ATFM incident reports must be prepared in open text, in Spanish or English, and should be addressed directly to the SMS Office in the report format provided by that agency, who should, as soon as possible, start the corresponding process.

FMU Costa Rica will obtain the corresponding verbal and written reports, as well as the other data specified in the ATFM incident report format in order to carry out the corresponding analysis of the incident, including proposing corrections, if applicable, and reporting the themselves to those involved.

FMU Costa Rica will keep an updated record of the different incident reports presented.

## 6. Abbreviations and definitions

**ADR (AERODROME DEPARTURE RATE):** Aerodrome departure regime. Number of departing aircraft that an aerodrome can manage per hour.

**COORDINATED AIRPORT:** Airport in which, to facilitate the activities of commercial air services companies that operate or intend to operate there, a SLOT coordination office has been established.

**AIS (AERONAUTICAL INFORMATION SERVICE):** Aeronautical information service.

**AMHS (ATS MESSAGE HANDLING SYSTEM):** ATS Message Handling System.

**ANM (ATFM NOTIFICATION MESSAGE):** ATFM Measurement Notification Message.

**AO's (AIRCRAFT OPERATOR):** Aircraft operator. Person, organization or company in charge of the operation of an aircraft.

**AAR (AERODROME ACCEPTANCE RATE):** Aerodrome acceptance regime. Number of aircraft that an aerodrome can accept per hour.

**SLOT ASSIGNMENT:** ATFM measure implemented as a CTOT in order to level the traffic demand against the available ATC capacity.

**ATC (AIR TRAFFIC CONTROL):** Air traffic control.

**ATFM (AIR TRAFFIC FLOW MANAGEMENT):** Air traffic flow management.

**ATM (AIR TRAFFIC MANAGEMENT):** Air traffic management.

**ATS (AIR TRAFFIC SERVICES):** Air traffic services.

**CAPACIDAD DECLARADA:** Declared (or published) capacity is understood to be the capacity notified to the appropriate bodies for ATFM planning purposes. La capacidad declarada estará basada en la capacidad sostenible.

Declared capacity will be based on sustainable capacity.

The declared capacity is defined as the measure of the capacity of the ATC system or any of its subsystems or workstations to provide service to the aircraft during the development of normal activities.

It is expressed as the number of aircraft that enter a specific portion of airspace in a given period.

**OPERATIONAL CAPACITY:** Capacity is understood to be the volume of air traffic that is operationally acceptable.

Capacity is expressed as a function of the number of aircraft that enter a specified part of the airspace (sector), fly over a point, take off or land at an aerodrome (or group of aerodromes) in a given period of time.

Thus, the ATM capacity is the one empowered to provide air navigation services to a certain volume of air traffic, complying with the maximum security objectives and without entailing a significant damage to the operation, the economy or the environment under normal conditions.

**SUSTAINABLE CAPACITY:** Sustainable capacity is understood to be the maximum traffic flow achievable in a specific unit of time that can be maintained over a period of time in accordance with safety requirements and the average acceptable delay factor. Sustainable capacity should be the main factor for planning purposes.

**CAR / SAM:** Caribbean and South American Regions.

**CTOT (CALCULATED TAKE-OFF TIME):** Calculated Take-off Time that absorbs flight delays. Therefore, based on the EOBT proposed by the operator, this time is calculated taking into account the TAXI TIME (taxi time) and the assigned delay (if any) to be assigned in response.

In the event of a delay, the EOBT time to be recorded in the flight plan should be reviewed in relation to the assigned CTOT.

$$\text{CTOT} = \text{EOBT} + \text{TAXI TIME} + \text{DELAY}$$

Thus, the aircraft is guaranteed that, taking off at the time indicated by the CTOT, it could not encounter problems at any point on its route, including the destination airport, so it would be possible to avoid possible delays in the flight air.

**DEMAND:** Number of aircraft requesting to use the system during a specified period

**DELAY:** Time elapsed since the operation is programmed until it is actually carried out, expressed in minutes.

It is the additional waiting time resulting from stopping in the parking lot, at the runway holding point, on the runway, on a taxiway and / or in any waiting circuit established along the route. Delays attributable to ATC will only be those generated by IFR flights and greater than 30 minutes (minutes).

For reporting and calculating delays, those caused by:

- Speed reductions (delays assumed en route).
- Deviations initiated by the crew due to weather conditions.
- Technical reasons or other AO problems.
- Congestion on platforms (Ramp Control).

The calculation of the delays begins when the aircraft enters under the jurisdiction of the ATC, such as the maneuvering area, or joins a waiting circuit in flight.

Delays are normally attributed to:

- Meteorological conditions.
- Volume of air traffic.
- CNS.
- Runway and taxiway conditions.
- And others such as: operational safety, accidents, noise abatement, check flights.

**EOBT (ESTIMATED OFF BLOCK TIME):** Expected off-block time. Estimated time at which the aircraft will begin the displacement associated with the departure.

**FIR: (FLIGHT INFORMATION REGION):** Flight information region.

**FMU (FLOW MANAGEMENT UNIT):** Air traffic flow management unit. A work unit established in an appropriate air traffic control unit in order to ensure the necessary link between the local unit and neighboring units in relation to air traffic flow management

**FMP:** Traffic Flow Management Post. Position established in the FMU with the aim of guaranteeing a link between the local agency and neighboring agencies

**FPL (FLIGHT PLAN):** Flight plan, as it has been presented to the ATS unit by the pilot or his representative without any subsequent change.

**GREPECAS:** CAR / SAM Regional Planning and Execution Group

**GROUND STOP:** Air traffic management contingency procedure, which under specific criteria keeps aircraft on the ground.

This procedure is implemented when ATC cannot safely accommodate additional aircraft in the system. The GS is also used due to severe reduced capacity situations such as:

- MET conditions below normal arrival minima.
- Severe MET conditions that reduce the usable routes of departures and arrivals (according to AIP "APPROACH PROCEDURES AND MINIMUM USE OF AERODROMES).
- Major failures of aeronautical infrastructure (total COM failure, power supply failure at the airport, Radar failures). • Catastrophic Events (earthquake).
- Aircraft in emergency
- Contingency by sectors reaching saturation levels.

**INCIDENTE ATFM:** Significant incident that affects an air traffic services unit, an aircraft operator or a flow management position, resulting from the application of traffic flow management measures or procedures.

**MARGEN DE CUMPLIMIENTO DE CTOT:** Time window around the CTOT available and used by ATC.



**ATFM MEASURES:** Actions taken to carry out air traffic flow and capacity management.

**REGUL:** Field used in ATFM messages that indicates the name of the most restrictive regulation that will affect a certain flight. The name of the regulation is built with the place of regulation and the day it applies.

**REGCAUSE:** Field used in ATFM messages with which the origin of the most restrictive delay is clarified.

**RMK (REMARK)** Observation.

**RPL (REPETITIVE FLIGHT PLAN):** Repetitive flight plan. Flight plan for each of the regular flights that are frequently performed with identical basic characteristics, presented by the operators for the ATS units to keep and use repeatedly.

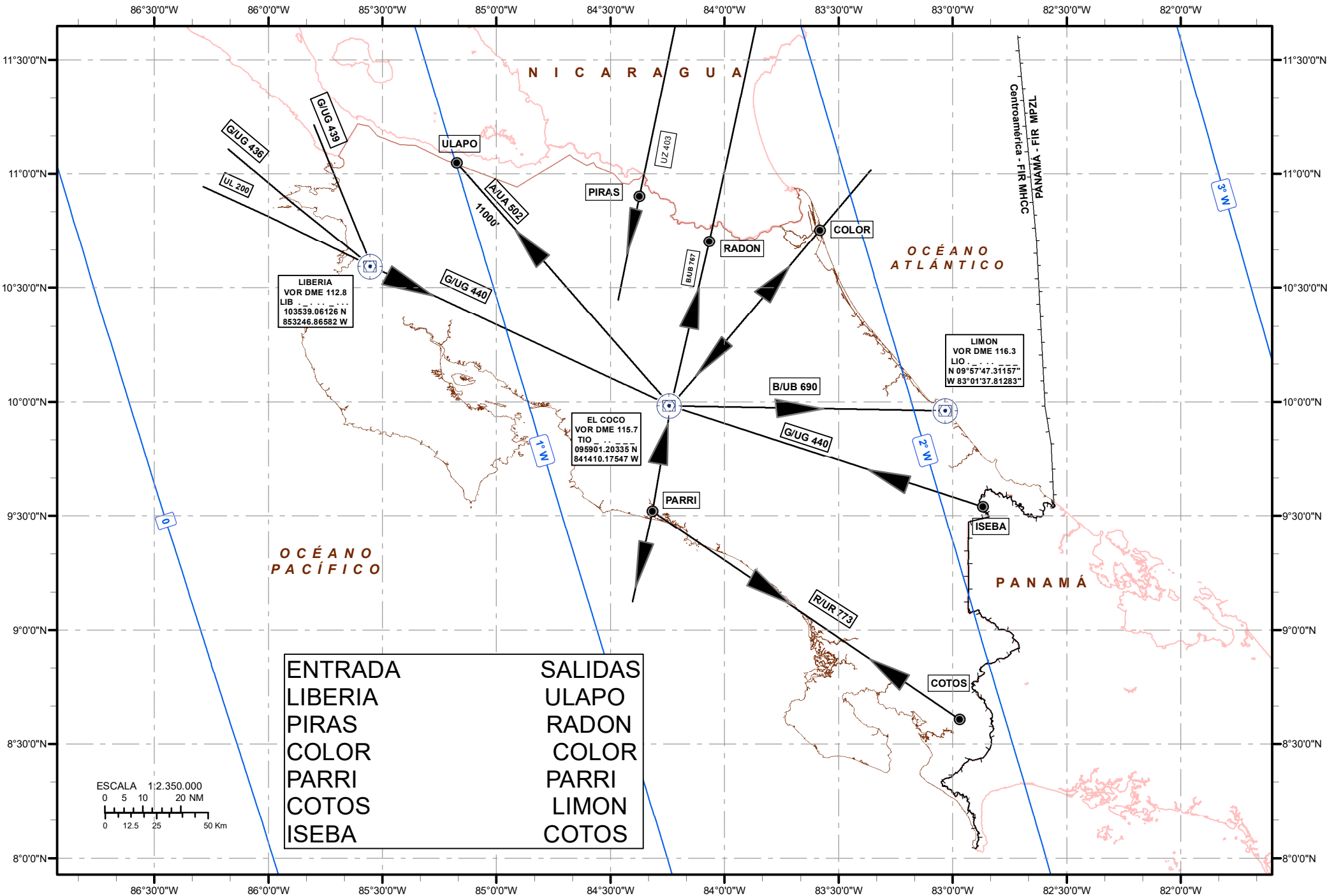
**RVR (RUNWAY VISUAL RANGE):** Visual range on runway.

**SLOT:** (For its acronym in English SPACE Limit Over Traffic). It is the "interval" of time, or time slot, foreseen in an airport for the operation of a specific flight, indicated by the precise time (day, hour and minutes) available or assigned to an aircraft for its operation (landing or take off ), according to its availability in relation to the declared and projected capacity of the airspace, runways and facilities and services of each airport.

**SLOT ATFM:** CTOT issued by the FMU.

**STS (STATUS):** Status indicator.

FLUJOS DE ENTRADA Y SALIDA



## ENR 1.10 FLIGHT PLANNING

(Restriction, limitation or advisory information)

### 1. Procedures for the submission of a flight plan

The information regarding the projected flight or part of it, to be supplied to the air traffic services units, will be given in the form of a flight plan. The expression flight plan is applied, as the case may be, to complete information about all the concepts contained in the description of the flight plan, which includes the entire route of a flight, or to the limited information that is required when it is required. It tries to obtain permission for a minor part of a flight, such as, for example, if you want to cross an airway, take off from or land on a controlled aerodrome.

Submit a flight plan in accordance with the provisions of the General Civil Aviation Law, article No. 185 and RAC OPS 1 to:

- a) Any IFR flight;
- b) Any VFR flight;
  - taking off from or destination to an aerodrome within a control zone;
  - crossing TMA's and CTR's
  - Operating along designated VFR routes in the TMAs;
  - Crossing the limit of the FIR / UIR, that is, international flights.

A flight plan will be submitted prior to a flight in accordance with:

- a) Any flight or part of it to which air traffic control service has to be provided;
- b) Any IFR flight within the airspace with advisory service;
- c) Any flight within designated areas or along designated routes, when required by the competent ATS authority to facilitate the provision of flight information, alert and search and rescue services.
- d) Any flight within designated areas or along designated routes, when required by the competent ATS authority to facilitate coordination with the competent air traffic services units in adjacent States, in order to avoid the possible need for interception for identification purposes;
- e) All flights across international borders

Part of the flight planning, it is the responsibility of the pilot-in-command, to duly verify the weather conditions, state of the destination aerodrome, radio aids for air navigation, facilities and services, routes- NOTAM/AIS information-Pre-Flight Bulletin (PIB).

#### 1.1 Time of submission:

**IFR** flight plans (**controlled/uncontrolled**) will be submitted **at least 60 minutes in advance** to the EOBT but **no more than 120 hours**. When the date of the flight is different from the day when the FPL is presented, it must be included in section 18 of the flight plan form by means of the indicator DOF/ (date of flight).

**VFR** flight plans may be submitted immediately before departure, except for international flights or in cases where a permit needs to be obtained, taking into account the requirements for timely information to ATS units in the airspace along the route that it is going to fly.

**1.2 Place of submission:**

**Forms of Presentation of the Flight Plan for International flights:**

**A) For all international flights at or above FL200 flight level:**

- 1) In case of having an automatic flight plan generator system, the operator will send (only once) to the email: [aiscr@dgac.go.cr](mailto:aiscr@dgac.go.cr) the commitment form to supply the aeronautical information/data of the section 19 of the FPL ([https://www.dgac.go.cr/wp-content/uploads/2021/09/ca11\\_21.pdf](https://www.dgac.go.cr/wp-content/uploads/2021/09/ca11_21.pdf)). After sending the form; the operator can send the flight plans in the Direct filing mode to the address of the Initial Flight Plan Processor (ProVIP): **MHFPZYX**.
- 2) The operator that does not have an automatic flight plan generator system may enter the IFR/VFR electronic flight plan (as well as the corresponding CHG, DLA and CNL messages) through the DGAC website: <https://www.dgac.go.cr/servicio/aismap/> or at: <https://apps.cocesna.org/CFPL>

**B) For all international flights below FL200 flight level:**

- 1) Flight plans can be presented in person at the AIS/ARO offices of international airports or by email:

<b>AIS/ARO</b>	<b>TELEPHONE (506)</b>	<b>EMAIL</b>	<b>AMHS</b>
Juan Santamaría International Airport	2441-4781 / 2443-3170	<a href="mailto:aisaijs@dgac.go.cr">aisaijs@dgac.go.cr</a>	MROCZPZX
Tobías Bolaños Palma International Airport	2232-8049	<a href="mailto:aisaropavas@dgac.go.cr">aisaropavas@dgac.go.cr</a>	MRPVZPZX
Daniel Oduber Quirós International Airport	2668-1026	<a href="mailto:aliberia@dgac.go.cr">aliberia@dgac.go.cr</a>	MRLBZPZX
Limón International Airport	2106-9156	<a href="mailto:ijones@dgac.go.cr">ijones@dgac.go.cr</a>	MRLMZPZX

**Forms of Presentation of the Flight Plan for National flights:**

- 1) For local IFR flights: for aircraft with **national registration**, the processing of documents will be facilitated and the presentation of the FPL on local IFR flights to national aerodromes will be expedited by the following means: telephone, email and radio. The telephones of the ATS units are the following:

<b>CONTROL TOWER</b>	<b>TELEPHONE (506)</b>	<b>EMAIL</b>
Juan Santamaría International Airport	2442-2570 / 2440-8722	<a href="mailto:torrecoco@dgac.go.cr">torrecoco@dgac.go.cr</a>
Tobías Bolaños Palma International Airport	2232-1165	<a href="mailto:tpavas@dgac.go.cr">tpavas@dgac.go.cr</a>
Daniel Oduber Quirós International Airport	2668-1075	<a href="mailto:tliberia@dgac.go.cr">tliberia@dgac.go.cr</a>
Flight Information Center (FIC)	2443-8965	<a href="mailto:rfic@dgac.go.cr">rfic@dgac.go.cr</a>

- 2) For local VFR flights: for aircraft with **national registration**; the presentation of the VFR FPL for local flights is mandatory via radio.

- 3) Repetitive flight plans for domestic flights: The lists of scheduled flight plans of national operators that operate only within the national territory will be submitted monthly - via email - to the AIS/ARO office of the corresponding international airport.

VFR flight plan closure in local operations:

All pilots in command of aircraft bound for national aerodromes and under VFR flight rules must communicate by any means available **the closure of the flight plan** to the Flight Information Center F.I.C. (Rescue Sub-Center/RSC), telephone (506) 2443-8965. They must communicate the registration of the aircraft, departure aerodrome, arrival aerodrome and landing time. Likewise, it must report the initial flight plan when the operation originates from an uncontrolled aerodrome, including the aircraft registration, route and destination.

**Failure** to comply with these provisions will cause the activation of the SAR protocols, in accordance with the provisions of article 138 of the Ley General de Aviación Civil. Consequently, it may carry the sanctions stipulated in articles 294, paragraph e) article 296, paragraph h) j) and m) of the law in reference.

Note: Consult: Ley General de Aviación Civil on the page: [www.dgac.go.cr/reglamentación](http://www.dgac.go.cr/reglamentación)

**1.3 Content and form of a flight plan:**

- a. The content and form of the FPL is found in ICAO Document 4444, Chapter 4 (4.4).
- b. The inclusion of calculated FIR limits is required for IFR flights and for international VFR flights. In IFR and VFR flight plans along and outside ATS routes, it is necessary to include estimates within the limits of the FIR/UIR.
- c. When submitting a flight plan by telephone or radio, the series of issues listed on the flight plan form should be strictly followed.

**1.4 Adherence to the ATS route structure:**

No flight plan will be submitted for routes that deviate from the published ATS route structure, unless prior permission has been obtained from ATC authorities.

**1.5 Authorization for special flights:**

Specific flights, such as surveillance flights, scientific research flights, etc., may be exempted from the specified restrictions. The operator will send one week in advance of the scheduled flight date; the exemption request by email to: [operationsaeronauticas@dgac.go.cr](mailto:operationsaeronauticas@dgac.go.cr)

**2. Changes to the submitted flight plan**

a. ATS Messages

For submitted flight plans, a single FPL message will be transmitted; as well as the DLA, CHG and CNL messages to the ATS unit of the departure aerodrome, the FIR (MHCC) and other addresses, if necessary.

The user who requires to carry out standardized CNL, CHG and DLA ATS messages to a submitted flight plan will do so as soon as possible.

b. Incidental changes and cancellations

1. Incidental changes and cancellations related to departures from international airports will be notified to the AIS/ARO offices at the departure aerodrome.
2. The information presented before departure regarding the range or the total number of people carried on board, if it is inaccurate at the time of departure, constitutes an important change in the flight plan and as such, the operator must notify it.
3. In the event of a delay of 30 minutes or more in the departure of a flight for which a flight plan has been submitted, the flight plan must be amended or a new flight plan submitted after the flight plan has been canceled the previous flight plan.
4. The flight plan that exceeds 1 hour after your EOBT will be automatically canceled by the system.
5. If a delay in the departure of a flight is not duly notified, the relevant flight plan data may no longer be available to the appropriate Air Traffic Services unit when an authorization is requested, ultimately, which will cause consequently an additional flight delay.
6. If you fail to properly notify a flight departure delay (or cancellation), an alert or search and rescue action may be initiated unnecessarily, when the flight does not arrive at the destination aerodrome within 30 minutes after the departure. your current Estimated Time of Landing (ETA). Failure to follow this procedure may result in automatic cancellation of the flight plan for that particular flight.

**3. Contingency plan**

As a contingency plan, in case of failure of the **Initial Flight Plan Processor (ProVIP)**, airlines and/or ground service companies must submit the flight plan in person or via email from the AIS offices. /ARO of each international airport. The AMHS addresses of the AIS/ARO offices are:

AIS/ARO	AMHS ADDRESS
Juan Santamaría International Airport	MROCZPZX
Tobías Bolaños Palma International Airport	MRPVZPZX
Daniel Oduber Quirós International Airport	MRLBZPZX
Limón International Airport	MRLMZPZX

**4. User service**

The AIS/ARO offices will be available to assist users, the contacts are:

AIS/ARO	TELEPHONE (506)	EMAIL
Juan Santamaría International Airport	2441-4781 / 2443-3170	<a href="mailto:aisaijs@dgac.go.cr">aisaijs@dgac.go.cr</a>
Tobías Bolaños Palma International Airport	2232-8049	<a href="mailto:aisaropavas@dgac.go.cr">aisaropavas@dgac.go.cr</a>
Daniel Oduber Quirós International Airport	2668-1026	<a href="mailto:aliberia@dgac.go.cr">aliberia@dgac.go.cr</a>
Limón International Airport	2106-9156	<a href="mailto:jjones@dgac.go.cr">jjones@dgac.go.cr</a>

**ENR. 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES**

Flight movement messages relating to traffic into or via Central American FIR shall be addressed as stated below to warrant correct relay and delivery.

*Note. -Flight movement in this context comprise flight plan messages, amendment messages relating thereto and flight plan cancellation messages (PANS-ATM refers).*

<i>Category of flight (IFR, VFR or both)</i>	<i>Route (into or via FIR and/or TMA)</i>	<i>Message address</i>
<b>1</b>	<b>2</b>	<b>3</b>
IFR Flights	Up to or via Central America FIR to or above FL200 From / To TMA EL COCO From / To TMA LIBERIA	MHFPZYZX
VFR Flights	To or via FIR Central America	MHCCYSYX
All IFR/VFR flights below FL200 (Controlled airports)	From / To Juan Santamaría International Airport	MROCZAZX
	From / To Daniel Oduber Quirós International Airport	MRLBZTZX
	From / To Tobías Bolaños Palma International Airport	MRPVZTZX

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**ENR 1.12 INTERCEPTION OF AIRCRAFTS**

**1. Interception procedures**

**1.1** The following procedures and visual signals apply over the territory and territorial waters of Costa Rica in the event of interception of an aircraft.

An aircraft which is intercepted by another aircraft shall immediately:

- a)** Follow the instructions given by intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in Appendix 1 of ICAO Annex 2.
- b)** Notify if possible, the appropriate air traffic services dependency;
- c)** Attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control dependency, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the 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 Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services dependency.

**1.2** If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and transmit the essential information by using the phrases and pronunciations in the following table, transmitting each phrase twice:

<i>Phrase</i>	<i>Pronunciation<sup>1</sup></i>	<i>Meaning</i>
CALL SIGN (call sign)	<b>KOL</b> SA-IN (call sign)	My call sign is (call sign)
WILCO	<b>UILL</b> -KO	Understood. Will comply
CAN NOT	<b>KANN</b> NOTT	Unable to comply
REPEAT	REE- <b>PEET</b>	Repeat your instruction
AM LOST	<b>AM LOSST</b>	Position unknown
MAYDAY	<b>MAYDAY</b>	I am in distress
HIJACK <sup>3</sup>	<b>HI-JACK</b>	I have been hijack
LAND (place name)	<b>LAAND</b> (place name)	I request to land at (place name)
DESCEND	DEE- <b>SEND</b>	I require descent

- 1. Syllables to be emphasized are printed in bold letters.
- 2. The call sing required to be given is that used in radiotelephony communication with air traffic services dependencies and corresponding to the aircraft identification in the flight plan.
- 3. Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

1.3 The phrases shown in the table below shall be used by the intercepting aircraft and transmitted twice in the circumstances described in the preceding paragraph.

1.4 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 give by the intercepting aircraft.

1.5 If instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepting aircraft shall request immediate clarification while continuing to comply with the radio instructions give by the intercepting aircraft.

1.6 The visual signals for use in the event of interception are detailed on page ENR 1.12-3.

<i>Phrase</i>	<i>Pronunciation<sup>1</sup></i>	<i>Meaning</i>
CALL SIGN	<b>KOL</b> SA-IN	What is your call sign?
FOLLOW	<b>FOL</b> -LO	Follow me
DESCEND	DEE- <b>SEND</b>	Descend for landing
YOU LAND	<b>YOU LAAND</b>	Land at this aerodrome
PROCEED	PRO- <b>SEED</b>	You may proceed

1. Syllables to be emphasized are printed in bold letters.

**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>Intercepting aircraft responds</i>	<i>Meaning</i>
1.	<p>DAY or NIGHT- Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a 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 a helicopter) and, after acknowledgement, a slow level turn, normally to the left, (or to the right in the case of a helicopter) on the desired heading.</p> <p>NOTA 1: Meteorological conditions or terrain may require the intercepting aircraft to reverse the positions and direction of turn given above in Series 1.</p> <p>NOTA 2: If the intercepted aircraft is no able to keep pace with the intercepting aircraft the latter is expected to fly a series of race-track patterns and to rock the aircraft each time it passes the intercepted aircraft.</p>	<p>You have been intercepted Follow me.</p>	<p>DAY or NIGHT - Rocking aircraft, flashing navigational lights at irregular intervals and follow the intercepting aircraft.</p>	<p>Understood Will comply</p>
2.	<p>DAY or NIGHT- An abrupt break-away manoeuver 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 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>Intercepting aircraft responds</i>	<i>Meaning</i>
3.	DAY or NIGHT - Lowering landing gear (if fitted), showing steady landing lights and over flying runway in use or, in use or, if the intercepted aircraft is a helicopter, over flying 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 an, if, after over-flying the runway in use or helicopter landing area, landing is considered safe, proceeding to land.	Understood Will comply

**SIGNALS FOR USE IN THE EVENT OF INTERCEPTION**

**Signals initiated by intercepted aircraft and responses by intercepting aircraft**

<i>Series</i>	<i>Intercepted aircraft signals</i>	<i>Meaning</i>	<i>Intercepting aircraft respond</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 300 M (1000 FT) but not exceeding 600 M (2000 FT) in the case of a helicopter, at a height exceeding 100 M (330 FT) 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 its is desired 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 intercepting aircraft.  If it is decided to release the intercepted aircraft, the interception 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- Use Series 2 signals prescribed for intercepting aircraft	Understood
6.	DAY or NIGHT- Irregular flashing of all available lights.	In distress	DAY or NIGHT- Use Series 2 signals prescribed for intercepting aircraft.	Understood

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## ENR 1.13 UNLAWFUL INTERFERENCE

### 1. General

The following procedures are intended for use by aircraft when unlawful interference occurs and the aircraft is unable to notify an ATS dependency of this fact.

### 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 dependency is possible or the aircraft is within radar coverage.

**2.2** When an aircraft subjected to an act of unlawful interference must depart from its assigned track or its assigned cruising level without being able to make radiotelephony 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 onboard transponders, data links, etc, should also be used when it is advantageous to do so and circumstances permit; and

**b)** Proceed in accordance with applicable special procedures for in-flight contingencies, where such procedures have been established and promulgated in DOC 7030 - *Regional Supplementary Procedures*; or

**c)** If no applicable regional procedures have been established, proceed at a level which differs from the cruising levels normally used for IFR flight in the area by 300 m (1 000 ft) if above FL 290 or by 150 m (500 ft) if below FL 290.

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## ENR 1.14 AIR TRAFFIC INCIDENTS

### 1. Definition of air traffic incidents

#### TYPE

#### DESIGNATION

**1.1 "AIR TRAFFIC INCIDENTS":** is used to mean a serious occurrence related to the provisions of air traffic services, such as:

Air traffic incident	Incident
as a) above	AIRPROX (aircraft proximity)
as b) 1) and 2) above	Procedure
as b) 3) above	Facility

a) aircraft proximity (AIRPROX);

b) serious difficulty resulting in a hazard to aircraft caused, for example, by:

### 2) Use of the Air traffic Incident Report Form (See model on pages ENR 1.14.3 to 1.14.7)

- 1) faulty procedures
- 2) non-compliance with procedures, or
- 3) failure of ground facilities.

The air traffic Incident Report Form is intended for use:

**1.1.1** Definitions for aircraft proximity and AIRPROX.

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

**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 compromised. Aircraft proximity is classified as follows:

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

*Risk of collision:* The risk classification of aircraft proximity in which serious risk of collision has existed.

b) By an ATS unit for recording an air traffic incident report received by radio, telephone or teleprinter.

*Safety not assured:* The risk classification of aircraft proximity in which the safety of the aircraft may have been compromised.

*NOT.- The form may be used as the format for the text of a message to be transmitted over the AFS network.*

*No risk of collision:* The risk classification of aircraft proximity in which no risk of collision has existed.

### 3) Reporting procedures (Including in-flight procedures)

*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.

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

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

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 facts to be ascertained immediately.

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

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) above, or for making the initial report on such an incident if it had not been possible to report it by radio.

2) For reporting an incident which did not require immediate notification at the time of occurrence.

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

- a) Aircraft identification
- b) Type of incident e.g. quasi collision;
- c) Position, heading or route, true airspeed;
- d) Flight Level, altitude or height, and performance of the aircraft;
- e) Flight Conditions (for example, instrument meteorological conditions (IMC) or visual meteorological conditions (VMC)).
- f) Time of the incident, according to the Coordinated Universal Time (UTC).
- g) Description of other aircrafts, when appropriate,
- h) Brief details of the incident, including the sighting distance and the avoiding distance, when appropriate.

The confirming report of a major incident initially reported by radio or the initial report of any incident must be submitted to the ATS Reporting Office (ARO/AIS) of the aerodrome of first landing. The pilot must complete the notification form of air traffic incident, to complete as needed the details of the initial reports. This form can be found on website: [www.dgac.go.cr](http://www.dgac.go.cr) in the AIP, page 1.14-3.

*Note: When there is not ATS Reporting Office (ARO/AIS) available, the report must be submitted to another ATS dependency; or deliver it by fax to Air Traffic Accidents and Incidents investigation Unit (506-22900664).*

#### **4. Purpose of reporting and handling of the form**

4.1 The purpose of the reporting of aircraft proximity incident and their investigations is to promote the safety of aircraft. The degree of risk involved in an aircraft proximity incident shall be determined in the incident investigation and classified as "risk of collision", "safety not assured", "no risk of collision" or "risk not determined".

4.2 The purpose of the form is to provide investigatory authorities with as complete information on an air traffic incident as possible and to enable them to report back with the least possible delay to the pilot or operator concerned, the result of the investigation of the incident and, if appropriate, the remedial action taken.

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 / OBSTRUCTION ON RUNWAY / RUNWAY INCURSION / 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		
( ) Level flight	( ) 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	( ) Cabin lights
( ) Red anti-collision lights	( ) Landing / taxi lights	( ) Logo (tail fin) lights
( ) Other	( ) None	
i) Traffic avoidance advice issued by ATS		
( ) Yes, based on ATS surveillance system	( ) Yes, based on visual sighting	( ) Yes, based on other information
( ) No		
j) Traffic information issued		
( ) Yes, based on ATS surveillance system	( ) Yes, based on visual sighting	( ) Yes, based on other information
( ) No		

\* Delete as appropriate.

k) Airborne collision avoidance system — ACAS		
<input type="checkbox"/> Not carried	<input type="checkbox"/> Type	<input type="checkbox"/> Traffic advisory issued
<input type="checkbox"/> Resolution advisory issued	<input type="checkbox"/> Traffic advisory or resolution advisory not issued	
l) Identification		
<input type="checkbox"/> No ATS surveillance system available	<input type="checkbox"/> Identification	<input type="checkbox"/> No identification
m) Other aircraft sighted		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Wrong aircraft sighted
n) Avoiding action taken		
<input type="checkbox"/> Yes	<input type="checkbox"/> 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		
<input type="checkbox"/> High wing	<input type="checkbox"/> Mid wing	<input type="checkbox"/> Low wing
<input type="checkbox"/> Rotorcraft		
<input type="checkbox"/> 1 engine	<input type="checkbox"/> 2 engines	<input type="checkbox"/> 3 engines
<input type="checkbox"/> 4 engines	<input type="checkbox"/> More than 4 engines	
Marking, colour or other available details		
_____		
_____		
_____		
c) Aircraft climbing or descending		
<input type="checkbox"/> Level flight	<input type="checkbox"/> Climbing	<input type="checkbox"/> Descending
<input type="checkbox"/> Unknown		
d) Aircraft bank angle		
<input type="checkbox"/> Wings level	<input type="checkbox"/> Slight bank	<input type="checkbox"/> Moderate bank
<input type="checkbox"/> Steep bank	<input type="checkbox"/> Inverted	<input type="checkbox"/> Unknown
e) Aircraft direction of bank		
<input type="checkbox"/> Left	<input type="checkbox"/> Right	<input type="checkbox"/> Unknown
f) Lights displayed		
<input type="checkbox"/> Navigation lights	<input type="checkbox"/> Strobe lights	<input type="checkbox"/> Cabin lights
<input type="checkbox"/> Red anti-collision lights	<input type="checkbox"/> Landing / taxi lights	<input type="checkbox"/> Logo (tail fin) lights
<input type="checkbox"/> Other	<input type="checkbox"/> None	<input type="checkbox"/> Unknown

\*Delete as appropriate.

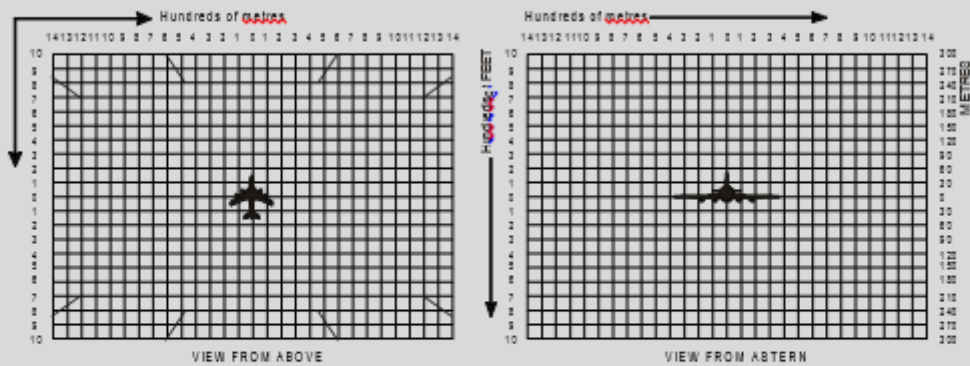
g)	Traffic avoidance advice issued by ATS	<input type="checkbox"/> Yes, based on ATS surveillance system <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes, based on visual sighting <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes, based on other information <input type="checkbox"/> Unknown
h)	Traffic information issued	<input type="checkbox"/> Yes, based on ATS surveillance system <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes, based on visual sighting <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes, based on other information <input type="checkbox"/> Unknown
i)	Avoiding action taken	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
4. Distance				
a)	Closest horizontal distance _____			
b)	Closest vertical distance _____			
5. Flight meteorological 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 cloud / 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				
_____				
_____				
_____				
_____				
_____				
D — MISCELLANEOUS				
1. Information regarding reporting aircraft				
a)	Aircraft registration _____			
b)	Aircraft type _____			
c)	Operator _____			
d)	Aerodrome of departure _____			
e)	Aerodrome of first landing _____		Destination _____	
f)	Reported by radio or other means to _____ (name of ATS unit) at date/time _____ UTC			
g)	Date / time / place of completion of form _____			

\*Delete as appropriate

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 (ATS surveillance system/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 at the centre of each diagram. Include first sighting and passing distance.



\* Delete as appropriate.

**Instructions for the completion of the  
air traffic incident report form**

Item

- A Aircraft identification of the aircraft filing 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 Distance that was passed. Indicate the units used.
- C6 Attach additional sheets as needed. Diagrams can be used to indicate the positions of aircraft.
- D1 f) Indicate name of ATS unit and date/time in UTC.
- D1 g) Date and time in UTC and place of completion of form.
- E2 Include details of ATS unit such as service provided, radiotelephony frequency, SSR codes assigned and altimeter setting. Use diagram to show the aircraft's position and attach additional paper as required.

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ENR 2. AIR TRAFFIC SERVICES AIRSPACE  
ENR 2.1 TMA

<b>Name</b> <b>Lateral limits</b> <b>Vertical limits</b> <b>Class of airspace</b>	<b>Unit</b> <b>providing</b> <b>service</b>	<b>Call sign</b> <b>Languages</b> <b>Area and conditions of use</b> <b>Hours of service</b>	<b>Frequency</b> <b>/</b> <b>Purpose</b>	<b>Remarks</b>
1	2	3	4	5
<p><u>CONTROL TERMINAL AREAS WITHIN CENTRAL AMERICAN FIR</u></p> <p><b><u>TMA COCO</u></b></p> <p>Airspace between 10 NM and 30 NM centered at the VOR TIO coordinates: <b>095901,20335N 0841410,17547W</b> and that excludes Training Zone E (See ENR 6.1-4.1)</p> <p><u>ALT 11500 ft</u> <u>ALT 5500 ft</u></p> <p>CLASS OF AIRSPACE: C</p>	COCO APP	<p>RTF: COCO APPROACH (SPANISH/ENGLISH) 1200/2359</p>	120.5 MHz PRIMARY FREQ	<p>S E C T O R</p> <p>1</p>
<p><b><u>CTA COCO</u></b></p> <p><u>CTA is divided in two sectors:</u> (View ENR 6.1-2)</p> <p>Sector W: <u>ALT 19000 ft</u> <u>ALT 8500 ft</u></p> <p>Sector E: <u>ALT 19000 ft</u> <u>ALT 11500 ft</u></p> <p>Polygon of irregular shape delimited by the following points: From the OROSI point, following the border line between Costa Rica and Nicaragua, towards PUNTA CASTILLA, direct to AMUBI direct ANSON direct to BUFEO, direct PUERTO VIEJO, then along the line border between Costa Rica and SANDINO approach to PUNTA BURICA, direct ULARA, direct PELDA, direct SELAK, direct to geographic coordinate 095447N0860000W, then direct to point ADRIB (excludes LIBERIA terminal control area)</p> <p>CLASS OF AIRSPACE: C</p>	COCO ACC	<p>RTF: COCO CONTROL (SPANISH/ENGLISH) H24</p>	<p>119.6 MHz PRIMARY FREQ</p> <p>120.5 MHz ALTERN FREQ</p>	<p>S E C T O R</p> <p>2</p>
<p><b><u>TMA LIBERIA</u></b></p> <p>Controlled airspace, irregular shape comprised by ADRIB, ALRAX, LODMI, LINAS, POCHO, SAPOA, A, POMEZ, B, OROSI, C, D, E, F and GARZA points and tangentially joined to 25 NM semicircle centered on coordinates: <b>103539,0N 0853246,8W</b> VOR LIB.</p> <p><u>ALT 19000 ft</u> <u>ALT 2500 ft</u></p> <p>CLASS OF AIRSPACE: C</p>	LIBERIA APP	<p>RTF: LIBERIA APPROACH (SPANISH/ENGLISH) 1200/0559</p>	119.8 MHz PRIMARY FREQ	

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ENR 2.2 OTHER REGULATED AIRSPACE

<b>Name</b> <b>Lateral limits</b> <b>Vertical limits</b> <b>Class of airspace</b>	<b>Unit</b> <b>providing</b> <b>service</b>	<b>Call sign</b> <b>Languages</b> <b>Area and conditions of use</b> <b>Hours of service</b>	<b>Frequency</b> <b>/</b> <b>Purpose</b>	<b>Remarks</b>										
1	2	3	4	5										
<p><b>CTR COCO</b>  Hippodrome shape airspace with two circumferences of 6 NM radius joint by two parallel lines.</p> <p>Circumference No.1: Centered on point located 2.4 NM of TIO VOR on R-251 coordinates: 0958.3N 08416.6W</p> <p>Circumference No.2: Centered on Runway 07 threshold. Its WGS-84 coordinates are: 095920,68131N 0841318,32249W</p> <p style="text-align: center;"><u>5.500</u> GND</p> <p style="text-align: center;">CLASS OF AIRSPACE:D</p>	<p style="text-align: center;">COCO TWR</p>	<p style="text-align: center;">COCO TOWER SPANISH/ENGLISH H24</p>	<p style="text-align: center;">118.6 MHz PRIMARY FREQ</p> <p style="text-align: center;">121.9 MHz ALTERN FREQ</p>											
<p><b>CTR LIBERIA</b>  Circle of 10 NM of radius centered on coordinates: <b>103539,0N 0853246,8W</b> (LIB VOR)</p> <p style="text-align: center;"><u>2.500</u> ELEV</p> <p style="text-align: center;">CLASS OF AIRSPACE: D</p>	<p style="text-align: center;">LIBERIA TWR</p>	<p style="text-align: center;">LIBERIA TOWER SPANISH/ENGLISH 1200/0559</p>	<p style="text-align: center;">118.8 MHz PRIMARY FREQ</p> <p style="text-align: center;">121.7 MHz ALTERN FREQ</p>											
<p><b>ATZ PAVAS</b>  Trapezoidal shape airspace, comprised by the following points</p> <table border="1" data-bbox="188 1388 618 1535"> <tr> <td>ITABO:</td> <td>095914,8N 0840301,8W</td> </tr> <tr> <td>BAREA:</td> <td>095839,2N 0840835,0W</td> </tr> <tr> <td>COPEY:</td> <td>095606,4N 0841431,3W</td> </tr> <tr> <td>COLON:</td> <td>095432,0N 0841431,3W</td> </tr> <tr> <td>MOTEL:</td> <td>095431,6N 0840302,0W</td> </tr> </table> <p style="text-align: center;"><u>5.500</u> GND</p> <p style="text-align: center;">CLASS OF AIRSPACE: D</p>	ITABO:	095914,8N 0840301,8W	BAREA:	095839,2N 0840835,0W	COPEY:	095606,4N 0841431,3W	COLON:	095432,0N 0841431,3W	MOTEL:	095431,6N 0840302,0W	<p style="text-align: center;">PAVAS TWR</p>	<p style="text-align: center;">PAVAS TOWER SPANISH/ENGLISH HJ</p>	<p style="text-align: center;">118.3 MHz PRIMARY FREQ</p> <p style="text-align: center;">121.7 MHz ALTERN FREQ</p>	
ITABO:	095914,8N 0840301,8W													
BAREA:	095839,2N 0840835,0W													
COPEY:	095606,4N 0841431,3W													
COLON:	095432,0N 0841431,3W													
MOTEL:	095431,6N 0840302,0W													

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**ENR 3. ATS ROUTES**  
**ENR 3.1 LOWER ATS ROUTES**

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
<b>ROUTE 317</b> <b>A 317</b> PANAMA/COSTA RICA BUFEO ▲ 094859,5N/ 0823414,3W	290° 110°  28,3474 NM	<u>19.000</u> 9.000FT MSL  9.000FT	10 NM	↓		COCO ACC 119.6
VOR LIO ▲ 095747,31157N/ 0830137,81283W	306° 126°  55,9979 NM	<u>19.000</u> 14.000FT MSL  14.000FT	10 NM			
TIGRE ▲ 102911,4N/ 0834838,2W	312° 132°  19,9742 NM	<u>19.000</u> 14.000FT MSL  14.000FT	10 NM			
RADON ▲ 104209,6N/ 0840406,8W	308° 128°  35,8309 NM	<u>19.000</u> 14.000FT MSL  14.000FT	10 NM			
CHILE ▲ 110336,7N/ 0843321,5W		<b>CLASS C</b>				
<b>ROUTE 322</b> <b>A 322</b> AMUBI ▲ 113617,7N/ 0824306,7W	228° 047°  72,0476 NM	<u>19.000</u> 12.000FT MSL  12.000FT	10 NM	↓		COCO ACC 119.6 APP 120.5
<b>COLOR</b> ▲ 104510,1N/ 0833459,5W	222° 042°  20,8207 NM	<u>19.000</u> 12.000FT MSL  12.000FT	10 NM			
TIGRE ▲ 102911,4N/ 0834838,2W	222° 041°  22,4628 NM	<u>19.000</u> 12.000FT MSL  12.000FT	10 NM			
BARVA △ 101155,0N/ 0840318,3W	222° 041°  16,6634 NM	<u>19.000</u> 12.000FT MSL  12.000FT	10 NM			
VOR TIO ▲ 095901,20335N/ 0841410,17547W		<b>CLASS C</b>				

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
<b>ROUTE 502</b> <b>A 502</b> ULAPO ▲ 110256,7N/ 0851025,5W	139° 319°  54,1599 NM	<u>19.000</u> 11.000FT MSL  11.000FT	10 NM		↓	COCO ACC 119.6 APP 120.5
ARENA ▲ 102149,9N/ 0843408,03W	139° 319°  7,3157 NM	<u>19.000</u> 11.000FT MSL  11.000FT	10 NM			
VILLA △ 101617,3N/ 0842915,8W	139° 319°  22,6838 NM	<u>19.000</u> 11.000FT MSL  11.000	10 NM			
VOR TIO ▲ 095901,20335N/ 0841410,17547W	139° 320°  29,9995 NM	<u>19.000</u> 15.000FT MSL  15.000FT	10 NM			
FINCA ▲ 093651,9N/ 0835339,1W	139° 320°  81,3043 NM	<u>19.000</u> 15.000FT MSL  15.000FT	10 NM			
COTOS ▲ 083630,9N/ 825817,5W	115° 295°  8,3183 NM	<u>19.000</u> 15.000FT MSL  15.000FT	10 NM			
POXON ▲ 083318,5N/ 0825032,5W		<b>CLASS C</b>		↑		
<b>ROUTE 690</b> <b>B 690</b> ANSON ▲ 104226,4N/ 0823809,3W	210° 030°  50,1921 NM	<u>19.000</u> 9.000FT MSL  9.000	10 NM		↓	COCO ACC 119.6 APP 120.5
VOR LIO ▲ 095747,31157N/ 0830137,81283W	273° 092°  41,2982 NM	<u>19.000</u> 14.000FT MSL  14.000FT	10 NM			
CLARA △ 095831,6N/ 0834326,1W	273° 092°  30,3297 NM	<u>19.000</u> 14.000FT MSL  14.000FT	10 NM			
VOR TIO ▲ 095901,20335N/ 08410,17547W		<b>CLASS C</b>		↑		

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
		Minimum Altitude Of flight Airspace Classification		Odd	Even	
1	2	3	4	5		6
<b>ROUTE 767</b> <b>B 767</b> RADON ▲ 104209,6N/ 0840406,8W	195° 014°  18,6020 NM	<u>19.000</u> 12.000FT MSL  12.000	10 NM		↓	COCO ACC 119.6 APP 120.5
SASAY △ 102352,9W/ 0840822,6W	195° 014°  15,3681 NM	<u>19.000</u> 12.000FT MSL  12.000FT	10 NM			
JANES △ 100854,6N/ 0841152,8W	195° 014°  10,0252 NM	<u>19.000</u> 12.000FT MSL  12.000	10 NM			
VOR TIO ▲ 095901,20335N/ 0841410,17547W	192° 012°  14,9999 NM	<u>19.000</u> 10.000FT MSL  10.000	10 NM			
TEREL △ 094415,3N/ 0841648,5W	192° 012°  5,0001 NM	<u>19.000</u> 10.000FT MSL  10.000FT	10 NM			
SANIG △ 093918,5N/ 0841741,1W	192° 012°  7,9950 NM	<u>9000</u> 10.000FT MSL  10.000FT				
<b>PARRI ▲</b> 093123,9N/ 0841905,3W		<b>CLASS C</b>		↑		
<b>ROUTE 436</b> <b>G 436</b> ELENA ▲ 105205,7N/ 0855319,8W	130° 310°  9,4045 NM	<u>19.000</u> 8.000FT MSL  8.000FT	10 NM		↓	COCO ACC 119.6  LIB APP 119.8
ORADA △ 104609,3N/ 0854553,9W	130° 310°  16,5941 NM	<u>19.000</u> 8.000FT MSL  8.000FT	10 NM			
VOR LIB ▲ 103539,0/ 0853246,8W	165° 345°  20,7428 NM	<u>19.000</u> 10.000FT MSL  10.000FT	10 NM			
AMAYO △ 101705,5N/ 0852724,7W	165° 345°  5,7898 NM	<u>19.000</u> 10.000FT MSL  10.000FT	10 NM			
TONIO △ 101130,0N/ 0852547,7W	165° 345°  47,1117 NM	<u>19.000</u> 10.000FT MSL  10.000FT	10 NM			
SELAK △ 092559,8N/ 0851240,0W	165° 345°  59,8264 NM	<u>19.000</u> 10.000FT MSL  10.000FT	10 NM			
<b>TIGIR ▲</b> 082812,9N/ 0845605,1W		<b>CLASS C</b>		↑		

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
ROUTE G439 IMOLA ▲ 111255.1N/ 0854802.5W	159° 339° 10,0346 NM	A180 A110	10 NM			APP LIBERIA 119.8
LINAS △ 110334.5N/ 0854412.6W	159° 339° 29,9630 NM		10 NM			
VOR LIB ▲ 103539.0N/ 0853246.8W	149° 329° 20,7428 NM		10 NM			
→ SAINO ▲ 101800.6N/ 0852137.0W	149° 329° 4,32 NM		10 NM			
ORRAL △ 101420.4N/ 0851917.8W	149° 329° 84,9705 NM		10 NM			
PELDA △ 090156.0N/ 0843344.6W	149° 330° 74,5817 NM		10 NM			
PULGO ▲ 075818.9N/ 0835402.9W		CLASS C				



Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
		Lower limit Minimum Altitude Of flight Airspace Classification		Odd	Even	
1	2	3	4	5		6
<b>ROUTE 440</b> <b>G 440</b> ISEBA ▲ 093229,0N/ 0825212,0W	290° 109°  55,1562 NM	<u>19.000</u> 15.000FT MSL  15.000FT	10 NM		↓	
CACHI △ 094916,1N/ 0834526,0W	290° 109°  4,9997 NM	<u>19.000</u> 15.000FT MSL  15.000FT	10 NM			
PARAI △ 095054,5N/ 0835013,2W	290° 109°  14,9999 NM	<u>19.000</u> 15.000FT MSL  15.000FT	10 NM			
ESRIO △ 095549,5N/ 0840435,2W	290° 109°  9,9999 NM	<u>19.000</u> 15.000FT MSL  15.000FT	10 NM			
VOR TIO ▲ 095901,20335N/ 0841410,17547W	295° 115°  11,9999 NM	<u>19.000</u> 9.000FT MSL  9.000FT	10 NM			
RAMON ▲ 100414,4N/ 0842510,1W	295° 115°  5,6898 NM	<u>19.000</u> 9.000FT MSL  9.000FT	10 NM			COCO ACC 119.6 APP 120.5
RIOBA △ 100640,7N/ 0843023,1W	295° 115° 5,2763 NM	<u>19.000</u> 9.000FT MSL 9.000FT	10 NM			LIB APP 119.8
MIRAM △ 100852,5N/ 0843513,6W	295° 115° 7,0335 NM	<u>19.000</u> 9.000FT MSL 9.000FT	10 NM			
CAÑAS ▲ 101156,7N/ 0844140,7W	295° 115° 24,8014 NM	<u>19.000</u> 9.000FT MSL 9.000FT	10 NM			
SANMI △ 102232,4N/ 0850427,1W	295° 115° 5,7403 NM	<u>19.000</u> 9.000FT MSL 9.000FT	10 NM			
TABOG △ 102459,2N/ 0850943,5W	295° 115° 25,0889 NM	<u>19.000</u> 9.000FT MSL 9.000FT	10 NM			
VOR LIB ▲ 103539,0N/ 0853246,8W		<b>CLASS C</b>			↑	

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
<b>ROUTE 773</b> <b>R 773</b> COTOS ▲ 083630,9N/ 0825817,5W	306°	<u>19.000</u> 10.000FT MSL	10 NM	↓		COCO ACC 119.6 APP 120.5  LIB 119.8
	126°	10.000FT				
	96,8444 NM					
<b>PARRI ▲</b> 093123,9N/ 0841905,3W	312°	<u>19.000</u> 10.000FT MSL	10 NM	↑		
	132°	10.000FT				
71,7735 NM						
EDERO △ 101903,4N/ 0851339,8W	312°	<u>19.000</u> 10.000FT MSL	10 NM	↑		
	132°	10.000FT				
25,0737 NM						
<b>VOR LIB ▲</b> 103539,0N/ 0853246,8W		<b>CLASS C</b>				

**ENR 3. ROUTES ATS**  
**ENR 3.2 ROUTES ATS SUPERIORES**

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
ROUTE 317 UA 317 PANAMA/COSTA RICA BUFEO ▲ 094859,5N/ 0823414,3W	290° 110° 28,3474 NM	UNL FL 200	10 NM		↓	ACC CENAMER 124.1
VOR LIO ▲ 095747,31157N/ 0830137,81283W	306° 126° 55,9979 NM		10 NM			
TIGRE ▲ 102911,4N/ 0834838,2W	312° 132° 19,9742 NM		10 NM			
RADON ▲ 104209,6N/ 0840406,8W	308° 128° 35,8309 NM		10 NM			
CHILE ▲ 110336,7N/ 0843321,5W		CLASS A		↑		



Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
ROUTE 502 UA 502 ULAPO ▲ 110256,7N/ 0851025,5W	139° 319° 54,1599 NM	UNL FL 200	10 NM		↓	ACC CENAMER 124.1
ARENA ▲ 102149,9N/ 0843408,03W	139° 319° 29,9995 NM		10 NM			
VOR TIO ▲ 095901,20335N/ 0841410,17547W	139° 320° 29,9995 NM		10 NM			
FINCA ▲ 093651,9N/ 0835339,1W	139° 320° 81,3043 NM		10 NM			
COTOS ▲ 083630,9N/ 825817,5W	115° 295° 8,3183 NM		10 NM			
POXON ▲ 083318,5N/ 0825032,5W		CLASS A		↑		

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
<b>ROUTE 767</b> <b>UB 767</b> RADON ▲ 104209,6N/ 0840406,8W	195° 014°  43,9953 NM	<u>UNL</u> FL 200	10 NM		↓	<b>ACC</b> <b>CENAMER</b> <b>124.1</b>
VOR TIO ▲ 095901,20335N/ 0841410,17547W	195° 014°  27,9950 NM		10 NM			
<b>PARRI ▲</b> 093123,9N/ 0841905,3W		<b>CLASS A</b>		↑		
<b>ROUTE 436</b> <b>UG 436</b> ELENA ▲ 105205,7N/ 0855319,8W	130° 310°  25,9988 NM	<u>UNL</u> FL 200	10 NM		↓	<b>ACC</b> <b>CENAMER</b> <b>124.1</b>
VOR LIB ▲ 103539.0N/ 0853246.8W	165° 345°  25,0267 NM		10 NM			
TONIO △ 101130.0N/ 0852547.7W	165° 345°  47,1117 NM		10 NM			
SELAKE △ 092559,8N/ 0851240,0W	165° 345°  59,8264 NM		10 NM			
<b>TIGIR ▲</b> 082812,9N/ 0845605,1W		<b>CLASS A</b>		↑		

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
ROUTE UZ512-UM328 IMOLA ▲ 111255,1N/ 0854802,5W	159° 339° 10,0346 NM	UNL FL 200	10 NM	↓		<b>ACC CENAMER 124.1</b>
LINAS △ 110334,5N/ 0854412,6W	159° 339° 29,9630 NM		10 NM			
VOR LIB ▲ 103539.0N/ 0853246.8W	149° 329° 25,0519 NM		10 NM			
ORRAL △ 101420,4N/ 0851917,8W	149° 329° 84,9705 NM		10 NM			
PELDA △ 090156,0N/ 0843344,6W	149° 329° 74,5817 NM		10 NM			
PULGO ▲ 075818,9N/ 0835402,9W		CLASS A		↑		

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
RUTA 440 UG 440 ISEBA ▲ 093229,0N/ 0825212,0W	290° 109° 55.1562 NM	UNL FL 200	10 NM	↓		<b>ACC CENAMER 124.1</b>
CACHI △ 094916,1N/ 0834526,0W	290° 109° 29,9995 NM		10 NM			
VOR TIO ▲ 095901,20335N/ 0841410,17547W	295° 115° 29,9995 NM		10 NM			
CAÑAS ▲ 101156,7N/ 0844140,7W	295° 115° 30,5417 NM		10 NM			
TABOG △ 102459,2N/ 0850943,5W	295° 115° 25,0889 NM		10 NM			
VOR LIB ▲ 103539.0N/ 0853246.8W		CLASS A		↑		

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
ROUTE 773 UR 773 COTOS ▲ 083630,9N/ 0825817,5W	306° 126°  96,8444 NM	<u>UNL</u> FL 200	10 NM		↓	ACC CENAMER 124.1
PARRI ▲ 093123,9N/ 0841905,3W	312° 132°  71,7735 NM		10 NM			
EDERO △ 101903,4N/ 0851339,8W	312° 132°  25,0737 NM		10 NM			
VOR LIB ▲ 103539.06126N/ 0853246.86582W		CLASS A		↑		



ENR 3.3 ROUTES DE NAVEGACIÓN DE ÁREA (RNAV)

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency	
				Odd	Even		
1	2	3	4	5		6	
<b>ROUTE UL 200</b> LIMON ▲ 095747,31157/ 0830137,81283W	285° 106° 153,7769NM	<u>UNL</u> FL 210	10 NM		↓	CENAMER ACC SECTOR 1 123.9 MHz	
VOR LIB ▲ 103539,0N/ 0853246,8W	297° 117° 29,7574NM						
DRITO ▲ 104849,9N/ 0855956,1W		CLASS A		↑			CENAMER ACC SECTOR 2 124.1
<b>ROUTE UL 423</b> ISEBA ▲ 093229,0N/ 0825212,0W	302° 121° 200,0600NM	<u>UNL</u> FL 210	10 NM		↓	CENAMER ACC SECTOR 1 123.9 MHz	
IMOLA ▲ 111255,1N/ 0854802,5W		CLASS A		↑			CENAMER ACC SECTOR 2 124.1
<b>ROUTE UL 655</b> EGODI ▲ 085148,0N/ 0824905,4W	313° 131° 211,0628NM	<u>UNL</u> FL 290	10 NM		↓	CENAMER ACC SECTOR 1 123.9 MHz	
POMEZ ▲ 111014,0N/ 0853107,9W		CLASS A		↑			CENAMER ACC SECTOR 2 124.1
<b>ROUTE UM 419</b> ANSON ▲ 104226,4N/ 0823809,3W	305° 125° 49,7744NM	<u>UNL</u> FL 290	10 NM		↓	CENAMER ACC SECTOR 1 123.9 MHz	
ILLOS ▲ 110922,6N/ 0832047,0W		CLASS A		↑			CENAMER ACC SECTOR 2 124.1

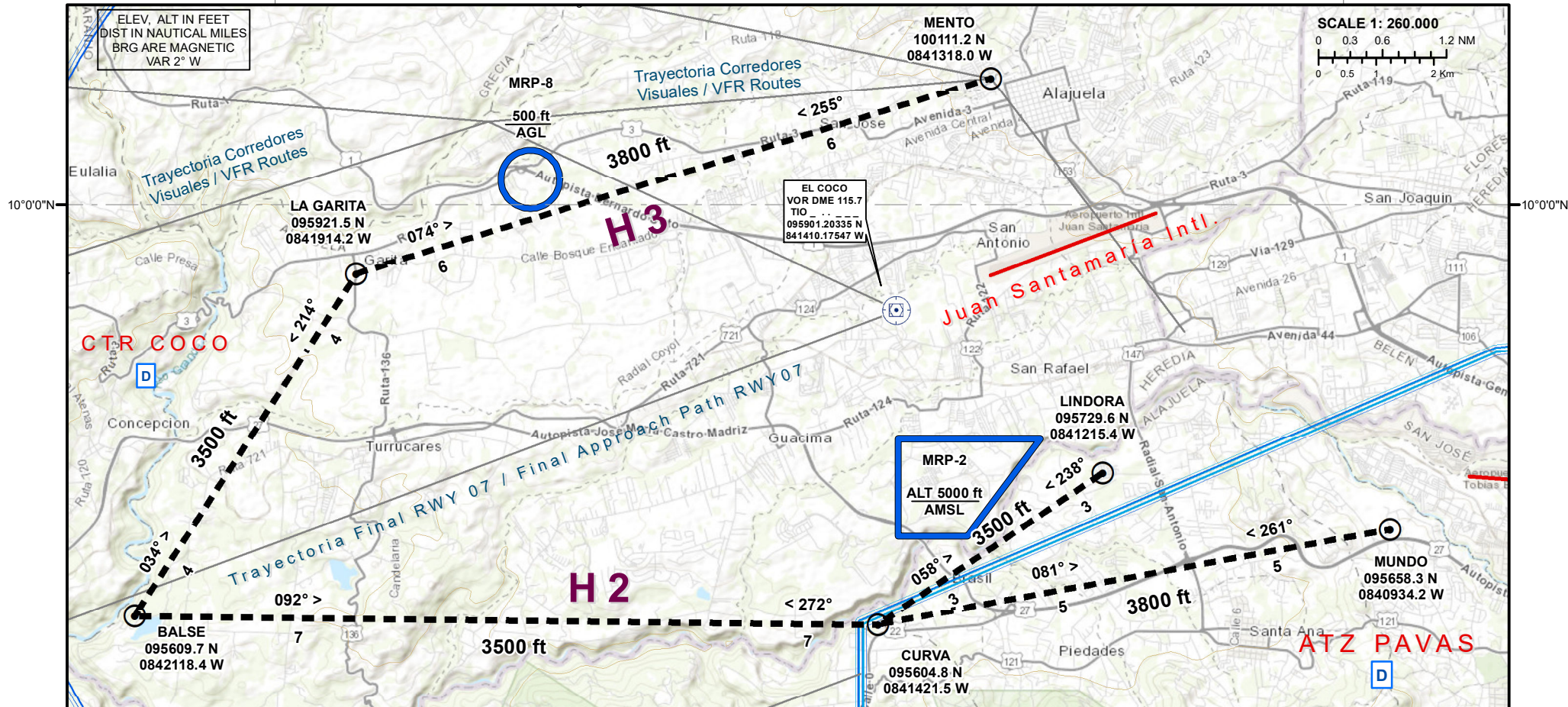
Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
<b>ROUTE UM 659</b> DRAKE ▲ 084048,6N/ 0840001,1W	341° 161° 53,6465NM	<u>UNL</u> FL 210	10 NM		↓	<b>CENAMER ACC SECTOR 2 124.1</b>
PARRI ▲ 093123,9N/ 0841905,3W		<b>CLASS A</b>		↑		
<b>ROUTE UM 796</b> PADUR ▲ 0958447,3N 0823550,5W	270° 090° 25,4337NM	<u>UNL</u> FL 210	10 NM		↓	<b>CENAMER ACC SECTOR 2 124.1</b>
LIMON ▲ 095747,31157N/ 0830137,81283W		<b>CLASS A</b>		↑		
<b>ROUTE UP 401</b> ANSON ▲ 104226,4N/ 0823809,3W	210° 030° 50,1 NM	<u>UNL</u> FL 200	10 NM		↓	<b>CENAMER ACC SECTOR 2 124.1</b>
VOR LIO ▲ 095747,31157N/ 0830137,81283W	273° 092° 71,6 NM		10 NM			
VOR TIO ▲ 095901,20335N/ 08410,17547W		<b>CLASS A</b>		↑		
<b>ROUTE UP 798</b> AMUBI ▲ 113617,7N/ 0824306,7W	228° 047° 72,1 NM	<u>UNL</u> FL 200	10 NM		↓	<b>CENAMER ACC SECTOR 2 124.1</b>
COLOR...▲ 104510,1N/ 0833459,5W	222° 041° 60,0 NM		10 NM			
VOR TIO ▲ 095901,20335N/ 0841410,17547W		<b>CLASS A</b>		↑		

Route Designator (type of RNP) Name of significant points Coordinates	MAG heading RDL VOR DIST NM KM (COP)	Upper limit Lower limit Minimum Altitude Of flight Airspace Classification	Lateral Limit NM KM	Direction of the Cruise levels		Remarks Control Unit Frequency
				Odd	Even	
1	2	3	4	5		6
<b>ROUTE UZ 403</b> PIRAS ▲ 105410,1N/ 0842229,6W	190° 010° 27.6327NM	<u>UNL</u> FL 210	10 NM		↓	<b>CENAMER ACC SECTOR 2 124.1</b>
FIORA ▲ 102657,4N/ 0842801,5W		<b>CLASS A</b>		↑		
<b>ROUTE UZ 593</b> ERABA ▲ 084805,8N/ 0841143,2W	352° 172° 43,5759NM	<u>UNL</u> FL 210	10 NM		↓	<b>CENAMER ACC SECTOR 3 124.3</b>
PARRI ▲ 093123,9N/ 0841905,3W		<b>CLASS A</b>		↑		

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**CORREDORES VISUALES PARA HELICOPTEROS /  
VFR HELICOPTER ROUTES**

**ALAJUELA, Intl. (MROC)**



INSTRUCCIONES GENERALES		Saliendo de MRPV	Llegando a MRPV	Saliendo de MROC	Llegando a MROC	Referencias visuales / Visual references	
La altitud máxima para cruzar la trayectoria final de la pista 07 de MROC, fuera del CTR, es de 4000 ft	H2	Vuele directo a MUNDO	Prevea instrucciones del ATC después de MUNDO	Vuele directo a LINDORA	Prevea instrucciones del ATC después de LINDORA	MUNDO	Almacén Pequeño Mundo, San Rafael Escazú. Pequeño Mundo Shopping Warehouse, San Rafael Escazú.
Mantenga las trayectorias y altitudes publicadas. Si necesita algún cambio solicítelo al ATC	H3	Prevea instrucciones del ATC para volar a MENTO	Prevea instrucciones del ATC después de MENTO	Vuele directo a MENTO	Prevea instrucciones del ATC después de MENTO	LINDORA	Cercanías de Lindora. Vicinity of Lindora town
<b>GENERAL INSTRUCTIONS</b>		<b>Departing from MRPV</b>	<b>Arriving to MRPV</b>	<b>Departing from MROC</b>	<b>Arriving to MROC</b>	<b>CURVA</b>	Curva de la Radial Colón hacia Ciudad Colón. Curve on Radial Colón road, heading to Ciudad Colón
Maximum altitude to fly across MROC's runway 07 final approach path, outside MROC's CTR, is 4000ft.	H2	Fly direct to MUNDO	Expect ATC instructions after MUNDO	Fly direct to LINDORA	Expect ATC instructions after LINDORA	BALSE	Embalse en Estación Hidroeléctrica de La Garita. Hydroelectric Station Reservoir in La Garita
Maintain published altitudes and remain on published paths. Any change must be requested to ATC.	H3	Expect ATC instructions to fly to MENTO	Expect ATC instructions after MENTO	Fly direct to MENTO	Expect ATC instructions after MENTO	MENTO	Cementerio de Alajuela. Alajuela's graveyard
<b>Disponibile únicamente entre la salida y puesta del sol / Available only between sunrise and sunset</b>						<b>LA GARITA</b>	Cercanías de La Garita. Vicinity of La Garita town

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**ENR 3.5 OTHER NATIONAL ROUTES  
LOWER**

**TO BE DEVELOPED**

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**ENR 3.6 HOLDING**

<b>HLDG ID / FIX / WPT COORDINATES</b>	<b>TR INBD (MAG)</b>	<b>PTN ADDRESS</b>	<b>IAS MAX (KT)</b>	<b>MNM-MAX LVL HLDG FL/FT (MSL)</b>	<b>HOUR (MIN) O DIST OUBD</b>	<b>DEPENDENCE OF CONTROL AND FREQUENCY</b>
1	2	3	4	5	6	7
<b>LIBERIA</b> VOR/DME LIB 103539,0N 0853246,8W	265	Left	250	3000 ft	1	LIB-APP 119.8 MHz
<b>FIORA</b> 102657,4N 0842801,5W	187	Left	250	18000 ft	1	COCO-APP 119.6 MHz
<b>COLOR</b> 104510,1N 0833459,5W	219	Left	250	11000 ft	1	COCO-APP 119.6 MHz
<b>PARZA</b> 095010.0N 0843752.4W	068	Left	250	10000 ft	1	COCO-APP 120.5 MHz
<b>PARRI</b> 093123,9N 0841905,3W	328	Left	250	15000 ft	1	COCO-APP 119.6 MHz
<b>LIMÓN</b> VOR/DME LIO 095747,31157N 0830137,81283W	119	Left	250	11000 ft	1	COCO-APP 119.6 MHz
<b>COTOS</b> 083630,9N 0825817,5W	360	Left	250	9000 ft	1	COCO-APP 119.6 MHz
<b>TOMAS</b> 095342.8N 0842823.7W	068	Left	250	8000 ft	1	COCO-APP 120.5 MHz

\* Holding can only be used when indicated as AUTHORIZATION LIMIT or after obtaining authorization from ATC.

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**ENR 4. RADIO NAVIGATION AIDS/SYSTEMS**  
**4.1 RADIO NAVIGATION AIDS - EN-ROUTE**

<i>Name of station</i>	<i>ID</i>	<i>Frequency (CH)</i>	<i>Hours of operation</i>	<i>WGS-84 coordinates</i>	<i>Remarks</i>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
COCO DVOR-DME	TIO	115.7 Mhz 104X	H24	095901,20335N 0841410,17547W	Frequency 115.7 Mhz available until 14 NM between radials 330/060. Available after 14 NM above En-Route Minimum Altitude
LIBERIA VOR-DME	LIB	112.8 Mhz 75X	H24	103539,0N 0853246,8W	
LIMON VOR-DME	LIO	116.3 Mhz 110X	H24	095747,31157N 0830137,81283W	



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**ENR 4.2 SPECIAL NAVIGATION SYSTEMS**

<i>Name of station (ID) Or chain</i>	<i>Type of SVC</i>	<i>Frequency</i>	<i>Hours of operation</i>	<i>Coordinate s TRANS STN</i>	<i>Remarks</i>
1	2	3	4	5	6
NIL					

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**GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)**

<i>Name of GNSS element</i>	<i>Frequency</i>	<i>Coordinates Nominal Service Area Cover area</i>	<i>Remarks</i>
1	2	3	4
GLOBAL POSITIONING SYSTEM (GPS)	L1- 1575-42 MHz L2- 1227.60 MHz	-	Authorized as a supplementary mean for En-route navigation.

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**ENR 4.3 DESIGNATORS OR CODE NAMES FOR SIGNIFICANT POINTS**

<i>Designator in code</i>	<i>Coordinates</i>	<i>ATS Route or another route</i>	<i>Designator in code</i>	<i>Coordinates</i>	<i>ATS Route or another route</i>
<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>
ADRI	105433,91524N 0862438,21580W	FIR	DUDKU	104033.2N 0854710.8W	
ADRUL	103836.9N 0852415.2W		ECOPE	095348,9N 0835628,1W	ENR 6.1-3.6
ADSOR	095156.4N 0843308.1W		EDERO	101903,4N 0851339,8W	R773
ALIDU	101215.8N 0852322.4W		EGODI	085148,0N 0824905,4W	UL 655
ALKEK	103652.9N 0852905.9W		ELENA	105205.7N 0855319.8W	G436
ALRAX	105702,52N 0861333,6W	FIR y UL200	ELTAS	093108,1N 0835824,5W	
ALTOS	094920,0N 0843027,5W		EPABE	0958,7N 98409,7W	MROC AD 11.1
			ERABA	084805,8N 0841143,2W	UZ593
AMBRO	100148,7N 0843056,6W	CV B	ESRIO	095549,5N 0840435,2W	G440
AMUBI	113617,7N 0824306,7W	A322	FANAL	100048,0N 0841801,7W	CV B
AMAYO	101705,5N 0852724,7W	MRLB AD 7.1	FINCA	093651,9N 0835339,1W	A502
		MROC AD 11.4 / MRPV AD 13	FIORA	102657,4N 0842801,5W	
AMAZO	095905,4N 0840916,7W		GARZA	095451,6N 0855938,9W	FIR
ANSON	104226,4N 0823809,3W	B690			
<b>*ARDIA</b>	<b>103343,5N 0853728,6W</b>	<b>MRLB AD 7</b>			
ARENA	102149,9N 0843408,3W	A502	GOVIX	103216.9N 854156.1W	
				101204,10N	
ARGEN	100242.2N 0842049,4W	CV A	GRAND	0835659,6W	ENR 6.1-3.2
ARUMA	094159,8N 0842548,2W				
ATENA	095912,0N 0842258,4W	CV C	ILLOS	110922,6N 0832047,0W	UM 419
AVSIS	100849.0N 0853034.4W		ITABO	095914,8N 0840301,8W	MRPV AD 13
BALSE	095609,7N 0842118,4W	ENR 3.4-1	IMOLA	111255,1N 0854802,5W	G439
BARVA	101155,0N 0840318,3W	A322	ISEBA	093229,0N 0825212,0W	G440
BAREA	095839,2N 0840835,0W	MRPV AD 13			
BELEN	095749,0N 0841250,3W	MROC AD 11.1	JANES	100854,6N 0841152,8W	B767
BOCAS	093101,1N 0841928,0W	ENR 6.1-3.7	JULIE	093235,4N 0841824,1W	ENR 6.1-3.7
			KITOL	102911.8N 0855031.6W	
BUFEO	094859,5N 0823414,3W	A317	LALIA	100106,8N 0842200,5W	CV B
BURGO	095240,9N 0842158,0W	MROC AD 7.4	LIB	103539,0N 0853246,8W	
				095747,31157N	
CACAO	100253,2N 0841729,6W	A502	LIO	0830137,81283W	
CACHI	094916,1N 0834526,0W	G440	LINAS	110334,5N 0854412,6W	G439
				105933,41616N	
CALDA	095608,8N 0844331,2W	ENR 6.1-3.8	LODMI	0860217,51748W	FIR y G/G440
CANAS	101156,7N 0844140,7W	G440			
CAPPE	110247.1N 0854746.3W				
CASCA	095436,5N 0843725,1W	ENR 6.1-3.8	MACDO	095814,6N 0840655,8W	MROC AD 11.4 / MRPV AD 13
CASTI	105611,7N 0833946,2W		MATEO	095629,7N 0843141,2W	CV C
CASTE	095810,3N 0840847,6W	MRPV AD 13	MATOS	095342,8N 0842823,7W	
<b>*CARBA</b>	<b>095529.0N 0842339.2W</b>	ILS	MATUM	103441.5N 0854708.2W	
CHILE	110336,7N 0843321,5W	A317	MAVIG	095706,7N 0841917,4W	
			MENTO	100111,2N 0841318,0W	CV
CLARA	095831,6N 0834326,1W	B690	MERBU	100710.7N 0853359.5W	
COCAL	092640,8N 0841258,5W	ENR 6.1-3.7	MIRAM	100852,5N 0843513,6W	MROC AD 11.4
COLON	095432,0N 0841431,3W	MRPV AD 13	MINGO	095849,3N 0840535,6W	MRPV AD 11.3
COLOR	104510,1N 0833459,5W		MOGOS	094959,2N 0835407,3W	ENR 6.1-3.6
COPEY	095606,4N 0841431,3W	MRPV AD 13	MONLI	095359,2N 0843340,2W	ENR 6.1-3.8
COTOS	083630,9N 0825817,5W				
<b>*COTAL</b>	<b>103154,2N 0854206,4W</b>	MRLB AD 9.1	MOTEL	095431,6N 0840302,0W	MRPV AD 13
CURVA	095604,8N 0841421,5W	ENR 3.4-1	MUNDO	095658,3N 0840934,2W	ENR 3.4-1
			MURCI	1055 04,1N 0854259,7W	ENR 6.1-3.1
CYRUS	0958,3N 08416,3W	MROC AD 11.1			
<b>*DANTA</b>	<b>103949,1N 0852326,4W</b>	<b>MRLB AD 9.2</b>	NUBES	100150,3N 0835757,8W	MRPV AD 11.3
			OLCIM	095654,4N 0841410,1W	ENR 6.1-3.5
DOTAS	093956,9N 0841410,4W	MROC AD 7.4	ORADA	104609,3N 0854553,9W	G436
DRAKE	084048,6N 0840001,1W	UM659	ORRAL	101420,4N 0851917,8W	G439
DRITO	104849,9N 0855956,1W	UL200	OROSI	110757,1N 0852136,7W	FIR

**ENR 4.3 DESIGNATORS OR CODE NAMES FOR SIGNIFICANT POINTS**

<i>Designator in code</i>	<i>Coordinates</i>	<i>ATS Route or another route</i>	<i>Designator in code</i>	<i>Coordinates</i>	<i>ATS Route or another route</i>
<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>
OTARU	103054,6N 0854545,3W		SASEK	101401,6N 0851950,5W	
PADUR	095847,3N 0823550,5W	UM796	SELAKE	092559,8N 0851240,0W	G436
PAQUI	092815,1N 0841154,5W	ENR 6.1-3.7	TABOG	102459,2N 0850943,5W	G440
		MRPV AD 11.4/ MRPV AD 11.5	TARCO	094747,8N 0844221,6W	ENR 6.1-3.8
PALIS	095655,0N 0840813,8W		TEJAR	095048,2N 0835623,4W	ENR 6.1-3.6
PARRI	093123,9N 0841905,3W	UM659	TEREL	094415,3N 0841648,5W	MROC AD 7.4
PARAI	095054,5N 0835013,2W	G440	TIGIR	082812,9N 0845605,1W	G436
			TIGRE	102911,4N 0834838,2W	A322
PELDA	090156,0N 0843344,6W	G440	TILAR	102205,3N 0845333,9W	
PEDRE	095829,5N 0841046,4W	ENR 3.4-1	TIO	095901,20335N 0841410,17547W	
PERKA	103338,4N 0853809,1W		TONIO	101130,0N 0852547,7W	G436
PIRAS	105410,1N 0842229,6W	UZ 403			
PITIC	102708,2N 0854422,1W		TOTOK	110331,5N 0854420,7W	
PRESA	095654,4N 0841331,2W	ENR 6.1-3.5	ULAPO	110256,7N 0851025,5W	A502
POCHO	110422,0N 0854118,4W	FIR	UNIVE	100048,0N 08400,06,0W	MRPV AD 11.3
POMEZ	111014,0N 0853107,9W	UL655	VALEN	095816,3N 0840823,6W	MRPV AD 11.3
			VILLA	101617,3N 0842915,8W	A502
POXON	083318,5N 0825032,5W	A502	VIVER	095331,0N 0835649,5W	ENR 6.1-3.6
PULGO	075818,9N 0835402,9W	G439	VIVES	095252,2N 0844133,3W	
<b>*PULIN</b>	<b>103727,4N 0852803,0W</b>	<b>MRLB AD 7.1</b>			
PUXAS	095010N 0843752,4W				
RADON	104209,6N 0840406,8W	B767			
RAKEN	102655,5N 0852142,4W				
RAMON	100414,4N 0842510,1W	G440			
RENAL	102752,2N 0844211,6W	ENR 6.1-3.4			
REXER	104815,6N 0853833,6W				
RIOBA	100640,7N 0843023,1W	G440			
RIOSA	101204,3N 0835959,5W	MRPV AD 11.3			
ROKBA	104544,8N 0853301,2W				
ROMKO	102201,6N 0854142,5W				
SAINO	101800,6N 0852137,0W	G439			
SALVA	100213,3N 0843611,4W	CV B			
SANIG	093918,5N 0841741,1W	MROC AD 7.4			
SANAT	095849,3N 0841129,6W	CV			
SANMI	102232,4N 0850427,1W	MRLB AD 7.1			
SANIS	100151,0N 0840256,7W	MRPV AD 11.3			
SAPOA	111251,7N 0853641,9W	FIR			
SASAY	102352,9W 0840822,6W	B767			

**NOTE: THE FIX WITH ASTERISK (\*) AND IN BOLD ARE POINTS TRANSFORMED TO THE WGS-84 SYSTEM BUT THEY ARE OF A CALCULATED CHARACTER**

**ENR 4.4 AERONAUTICAL GROUND LIGHTS- EN-ROUTE**

<i>Name IDENT (coordinates)</i>	<i>Type and intensity (1000 candelas)</i>	<i>Characteristics</i>	<i>Operating hours</i>	<i>Remarks</i>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Juan Santamaría 095953N 0841213W	ABN W 1.000	ALT FLG G/W 6 REV POR MIN	HN/IMC	
Daniel Oduber Internacional 103558N 0853221W	ABN W 1.000	ALT FLG G/W 6 REV POR MIN	HN/IMC	
Limón Internacional 095729N 0830119W	ABN W 1.0	ALT FLG G/W 6 REV POR MIN	O/R	



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**ENR 5. NAVIGATION WARNINGS  
ENR 5.1 PROHIBITED, RESTRICTED AND DANGER ZONES**

<i>Identification, name and lateral limits</i>	<i>Upper limit Lower limit</i>	<i>Observations (hour of activity, type of restriction nature of the risk, risk of interception)</i>
1	2	3
<p align="center"><b>RESTRICTED AREA MRR-1</b></p> <p>Configuration Airspace circular geometry comprised within a radius of 3 NM with center at the coordinates:</p> <p align="center">105437.4N    0854308.2W</p>	<p align="center"><u>ALT 2500 ft</u> AMSL</p>	<p align="center">Murciélago (MRMC) North border sector Nicaragua/Costa Rica</p> <p>Restricted area for all manned and unmanned aircraft except for manned and unmanned aircraft (RPAS) of the Ministry of Public Security.</p>
<p align="center"><b>RESTRICTED AREA MRR-2</b></p> <p>Irregularly shaped polygon located at 20 NM to the East of the Juan Santamaría International Airport included within the coordinates:</p> <p align="center">101204.3N    0835959.5W 101204.10N    0835659.6W 100150.3N    0835757.8W 100151.0N    0840256.7W</p>	<p align="center"><u>ALT 7500 ft</u> AMSL</p>	<p align="center">Paso de La Palma</p>

**ENR 5.1 PROHIBITED, RESTRICTED AND DANGER ZONES**

<i>Identification, name and lateral limits</i>	<u>Upper limit</u> <u>Lower limit</u>	<i>Observations</i> <i>(hour of activity, type of restriction nature of the risk, risk of interception)</i>
<b>1</b>	<b>2</b>	<b>3</b>
<p><b>RESTRICTED AREA MRR-3</b></p> <p>Circle of 1 NM radius with center at the coordinates:</p> <p>095531.37N 0840357.51W</p>	<p><u>ALT 5500 ft</u> AMSL</p>	<p>Government buildings (Presidential House, Ministry of Public Security, Legislative Assembly and Supreme Electoral Tribunal)</p> <p>Restricted area for all manned and unmanned aircraft except for manned and unmanned aircraft (RPAS) of the Ministry of Public Security.</p>

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER ZONES

<i>Identification and Lateral limits</i>	<i>Upper limit Lower limit</i>	<i>Remarks (time of activity, type of restriction, nature of hazard, risk of interception)</i>
1	2	3
<p><b>PROHIBITED ZONE MRP-1</b></p> <p>Airspace with a circular geometric configuration, included within a radius of 1 NM centered at the coordinates:</p> <p>102752,2N/0844211,6W</p>	<p><u>ALT 8500 ft</u> AMSL</p>	<p>ARENAL VOLCANO</p>
<p><b>PROHIBITED ZONE MRP-2</b></p> <p>Irregularly shaped polygon located 1.5 NM from the Juan Santamaría International Airport, with center at the coordinates:</p> <p>095749,0N/0841410,1W      AMASA 095749,0N/0841250,3W      BELEN 095654,4N/0841331,2W      PRESA 095654,4N/0841410,1W      OLCIM</p>	<p><u>ALT 5000 ft</u> AMSL</p>	<p>LA REFORMA</p>
<p>→ <b>PROHIBITED ZONE MRP-3</b></p> <p>Prohibited Zone No.3 in a circular shape with a radius of 800 m with a center at the coordinates:</p> <p>100034.44N/0830438.79W</p>	<p><u>ALT 500 ft</u> AGL</p>	<p>MOÍN 1, RECOPE</p>
<p>→ <b>PROHIBITED ZONE MRP-4</b></p> <p>Prohibited Zone No.4 in a circular shape with a radius of 800 m with a center at the coordinates:</p> <p>095933.97N/0830526.90W</p>	<p><u>ALT 500 ft</u> AGL</p>	<p>MOÍN 2, RECOPE</p>
<p>→ <b>PROHIBITED ZONE MRP-5</b></p> <p>Prohibited Zone No.5 in a circular shape with a radius of 500 m with a center at the coordinates:</p> <p>100523.06N/0833230.93W</p>	<p><u>ALT 500 ft</u> AGL</p>	<p>EL COCO, RECOPE</p>

**ENR 5.1 PROHIBITED, RESTRICTED AND DANGER ZONES**

<p>→ <b>Identification and Lateral limits</b></p>	<p><b>Upper limit Lower limit</b></p>	<p><b>Remarks (time of activity, type of restriction, nature of hazard, risk of interception)</b></p>
<p><b>1</b></p>	<p><b>2</b></p>	<p><b>3</b></p>
<p><b>PROHIBITED ZONE MRP-6</b></p> <p>Prohibited Zone No.6 in a circular shape with a radius of 500 m with a center at the coordinates:  095446.84N/0834113.61W</p>	<p><u>ALT 500 ft</u> AGL</p>	<p>DOMINICA, RECOPE</p>
<p><b>PROHIBITED ZONE MRP-7</b></p> <p>Prohibited Zone No.7 in a circular shape with a radius of 500 m with a center at the coordinates:  095342.00N/0835628.72W</p>	<p><u>ALT 500 ft</u> AGL</p>	<p>OCHOMOGO, RECOPE</p>
<p><b>PROHIBITED ZONE MRP-8</b></p> <p>Prohibited Zone No.8 in a circular shape with a radius of 500 m with a center at the coordinates:  100014.34N/0841736.60W</p>	<p><u>ALT 500 ft</u> AGL</p>	<p>MANOLOS, RECOPE</p>
<p><b>PROHIBITED ZONE MRP-9</b></p> <p>Prohibited Zone No.9 in a circular shape with a radius of 500 m with a center at the coordinates:  100034.90N/0844336.49W</p>	<p><u>ALT 500 ft</u> AGL</p>	<p>BARRANCA, RECOPE</p>



**ENR 5.2 MANOEUVERS AND TRAINING ZONES**

Name Lateral limits	System/means of activation announcement INFO for CIV FLT	Remarks time of ACT
1	2	3
<b>TRAINING ZONES</b>		
<p><b>ZONE E:</b> Polygon in irregular shape located between 22 DME and 30 DME of the VOR TIO, comprised by the visual reference points P1 to P5. (See ENR 6.1-4.1)</p>	<ul style="list-style-type: none"> <li>• Class G airspace</li> <li>• From the surface to 7000 ft altitude.</li> <li>• Maximum number of aircraft allowed: 6.</li> <li>• When entering the zone, announce your presence on the 123.0 MHz frequency and keep listening for traffic information.</li> <li>• Authorization by ATC is required before leaving the area if your intention is to enter the TMA del Coco.</li> </ul>	<p>Operating frequency 123.0 MHz</p> <p>The pilot in command is responsible for carrying out operations in accordance with the regulation for VFR flights and maintaining their separation from the ground and other transits in the area.</p>
<p><b>ZONE W:</b> Polygon of irregular shape located between 20 DME and 30 DME, between radials 200 and 240 of the VOR TIO. Understood by the points of visual reference P1 to P4. (See ENR 6.1-4.2)</p>	<ul style="list-style-type: none"> <li>• Class G airspace</li> <li>• From the surface to 3000 ft of altitude.</li> <li>• Maximum number of aircraft allowed: 15.</li> <li>• When entering the area announce your presence and keep listening for traffic information.</li> </ul>	<p>Operating frequency 123.0 MHz</p> <p>The pilot in command is responsible for carrying out operations in accordance with the regulation for VFR flights and maintaining their separation from the ground and other transits in the area.</p>
<p><b>ZONE 4:</b> Circular airspace with radius of 3.6 NM, centered at the coordinate: 095632.8N/0844331.5W (See ENR 6.1-4.3)</p>	<p><u>900 ft</u> SFC</p>	<p>For use of Paragliders</p>
<p><b>ZONE 5:</b> Triangular airspace, delimited by the points: ESTRA, CHORA, CAMAR (See ENR 6.1-4.4)</p>	<p><u>1500 ft</u> 500 ft</p>	<p>For Ultralight use</p>

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**ENR 5.3 Other Activities of Dangerous Nature and Other Potential risks**

**ENR 5.3.1 Other Activities of Dangerous Nature**

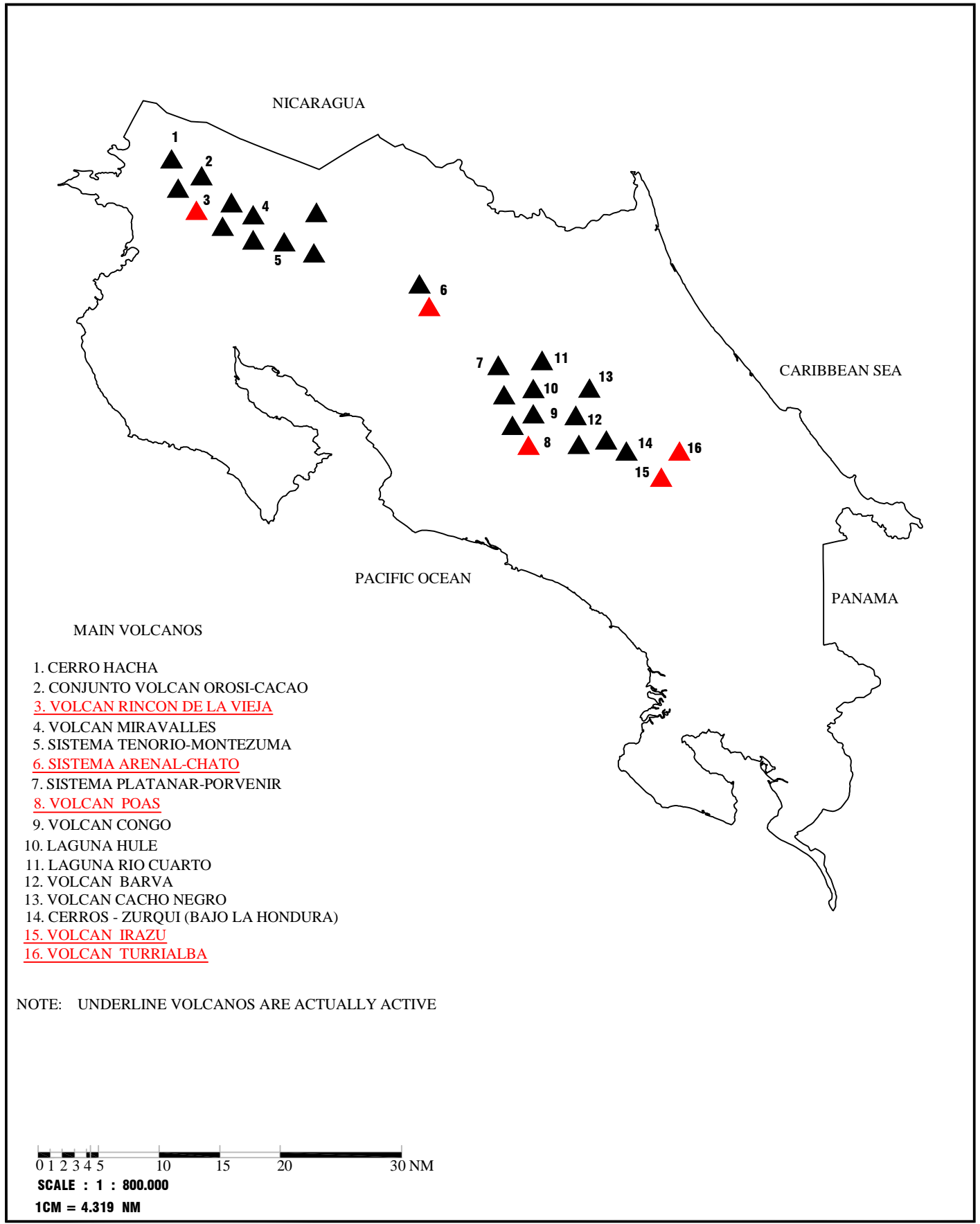
**ENR 5.3.2 Other Potential Risks**

<i>Lateral limits Coordinates Characteristics</i>	<i>Vertical Limits Elevation Number (#)</i>	<i>Advisory measures</i>	<i>Authority Responsible for INFO</i>	<i>Remarks Time of ACT</i>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<p><b>ARENAL VOLCANO</b> BETWEEN 150 AND 180 KM APROX COORD:1027.5N 08442.1W Formed by layers of lava and pyroclastic material (glowing avalanches), which arise sporadically. It is conical shape and the emission of gases is constant.</p>	<p>15 KM APROX 1.633 METERS ABOVE SEA LABEL  #1.405-033</p>	<p>LOCATED AT: 39 NM OF TIO VOR/DME, MAGNETIC HEADING 313°</p>	<p>VULCANOLOGIC AND SISMOLOGIC OBSERVATORY OF COSTA RICA</p>	<p>INFORMATION CAN BE REQUEST AT OBSERVATORY IN THEIR OFFICE SCHEDULE: 1400 TO 2230 UTC.  IN THE EVENT OF SOME EMERGENCY: ARE AVAILABLE OUT OF THE ESTABLISHED TIME</p>
<p><b>POAS VOLCANO</b> BETWEEN 150 AND 180 KM APROX COORD: 1012.0N 08413.6W Maintain a constant release of vapors and gases that are carried by prevailing wind toward west and southwest causing environmental impact until 10 kilometers distance from crater.</p>	<p>15 KM APROX 2.708 METERS OBOVE SEA LEVEL  #1.405-04</p>	<p>LOCATED AT: 12 NM FROM TIO VOR/DME MAGNETIC HEADING 358°</p>	<p>VULCANOLOGIC AND SISMOLOGIC OBSERVATORY OF COSTA RICA</p>	<p>IDEM</p>
<p><b>IRAIZU VOLCANO</b> BETWEEN 250 AND 300 KM APROX COORD: 0958.4N 08351.1W  Actually the Irazu activity is fumarolic at main crater and on northwest flank, with an average temperature of 90°C.</p>	<p>BETWEEN 18 Y 20 KM APROX 3.492 METERS ABOVE SEA LEVEL  #1.405-06</p>	<p>LOCATED AT: 22 NM FROM TIO VOR/DME MAGNETIC HEADING 087°</p>	<p>VULCANOLOGIC AND SISMOLOGIC OBSERVATORY OF COSTA RICA</p>	<p>IDEM</p>

**ENR 5.3.2 ACTIVE VOLCANOS OF COSTA RICA**

<i>Lateral limits Coordinates Characteristics</i>	<i>Vertical Limits Elevation Number (#)</i>	<i>Advisory measures</i>	<i>Authority Responsible for INFO</i>	<i>Remarks Time of ACT</i>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<p><b>TURRIALBA VOLCANO</b> BETWEEN 250 AND 300 KM APROX COORD: 1001.5N 08346.1W This volcano that in historical times has been Strombolian. Currently maintains fumarolic activity of 90 °C temperature.</p>	<p>BETWEEN 18 AND 15 KM APROX 3.330 METERS ABOVE SEA LEVEL #1.405-07</p>	<p>LOCATED AT: 27 NM FROM TÍO VOR/DME MAGNETIC HEADING 081°</p>	<p>VULCANOLOGIC AND SISMOLOGIC OBSERVATORY OF COSTA RICA</p>	<p>INFORMATION CAN BE REQUEST AT OBSERVATORY IN THEIR OFFICE SCHEDULE: 1400 TO 2230 UTC.  IN THE EVENT OF SOME EMERGENCY: ARE AVAILABLE OUT OF THE ESTABLISHED TIME</p>
<p><b>RINCON DE LA VIEJA VOLCANO</b> BETWEEN 150 AND 180 KM APROX COORD: 1049.5N 08519.3W Actually the activity is fumarolic with sporadic phreatic eruptions. This activity originates in a crater with a lake of 37°C temperature.</p>	<p>15 KM APROX 1.700 METERS ABOVE SEA LEVEL #1.405-02</p>	<p>LOCATED AT: 19 NM FROM LIB VOR/DME MAGNETIC HEADING 041°</p>		<p>IDEM</p>

# DISTRIBUTION OF MAIN VOLCANOS OF COSTA RICA



**ENR 5.4 AIR NAVIGATION OBSTACLES – EN-ROUTE**  
(ELEVATION/HEIGHT 100 M AGL OR MORE)

POINTS WITHIN TMA

<i>Designation</i>	<i>Type of obstacle (OBST)</i>	<i>OBST location</i>	<i>ELEV/HGT (M)</i>	<i>LGT OBST Type/colour</i>	<i>Remarks</i>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
IRAZU	VOLCANO	0958.4N 08351.1W	3.492/	NIL	
TURRIALBA	VOLCANO	1001.5N 08346.1W	3.330/	NIL	
POAS	VOLCANO	1012.0N 08413.6W	2.708/	NIL	
BARVA	VOLCANO	1008.1N 08406.0W	2.919/	NIL	
CACHO NEGRO	HILL	1011.7N 08402.7W	2.150/	NIL	
ZURQUI	HILL	1003.6N 08402.2W	2.134/	NIL	
PATA DE GALLO	HILL	1001.8N 08428.3W	1.600/	NIL	
PORVENIR	HILL	1016.2N 08421.8W	2.267/	NIL	
CAMACHO	HILL	1009.5N 08435.0W	1.598/	NIL	
TURRUBARES	HILL	0947.7N 08428.3W	1.756/	NIL	
LA CRUZ	HILL	0951.0N 08408.4W	2.430/	NIL	
CARAIGRES	HILL	0943.5N 08408.4W	2.506/	NIL	
SAN JERONIMO	HILL	0937.7N 08409.0W	2.116/	NIL	

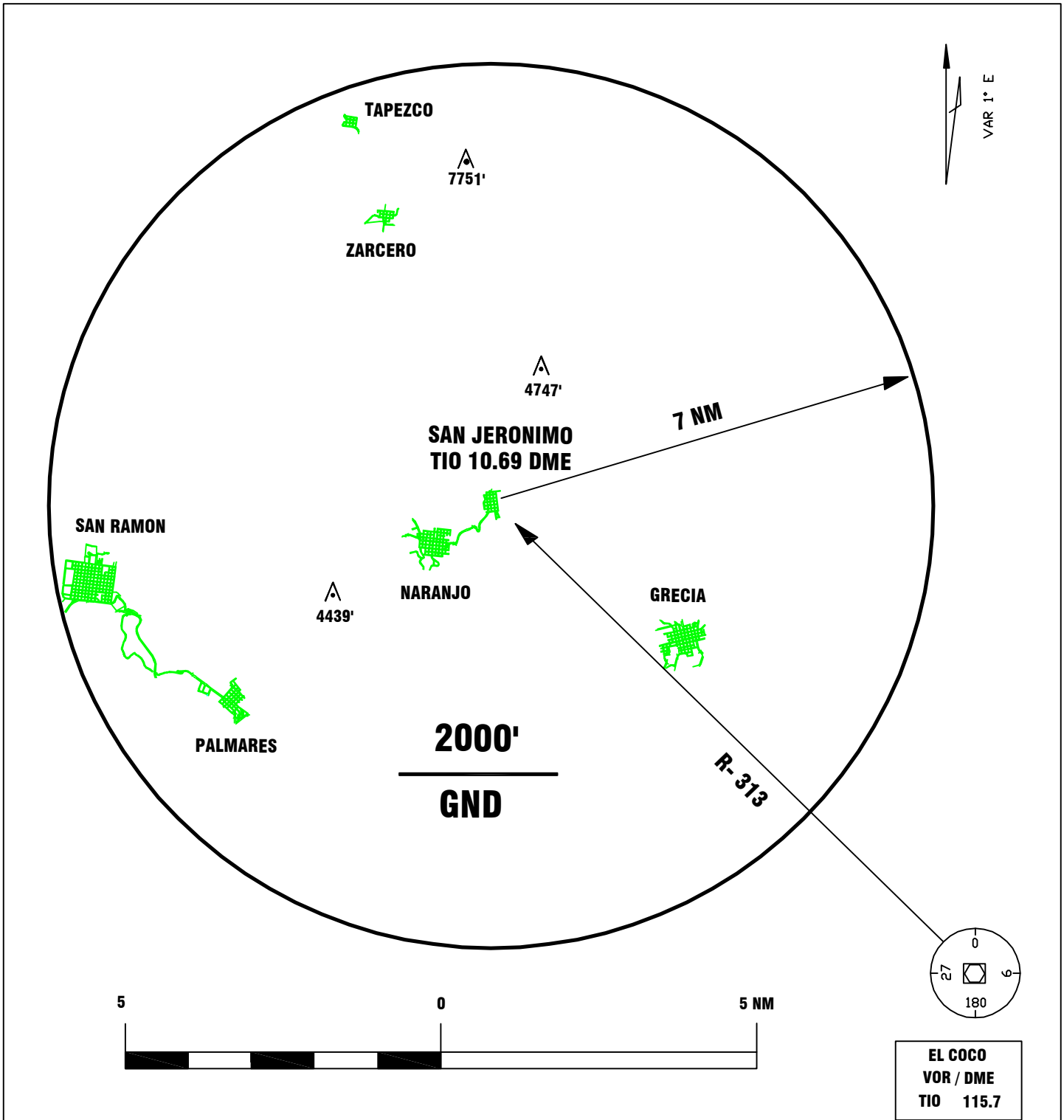
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**ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES**

<i>Designation and lateral limits</i>	<i>Vertical Limits</i>	<i>Browser or user phone number</i>	<i>Remarks and operation hour</i>																
1	2	3	4																
<b>Manned Balloon Operation Zone</b> 7 nautical mile radius centered at: 100636N 0842155W (San Jerónimo de Naranjo)	<u>2000 ft</u> GND	-	See chart ENR 5.5-2																
<b>Manned Balloon Operation Zone</b> Delimited by points: <table border="1" style="margin-left: 20px; width: 100%;"> <thead> <tr> <th colspan="2" style="text-align: center;">SAN CARLOS</th> </tr> </thead> <tbody> <tr> <td>La Fortuna</td> <td>1028N 08438W</td> </tr> <tr> <td>Venado</td> <td>1033N 08444W</td> </tr> <tr> <td>Santa Rosa de Poco Sol</td> <td>1037N 08431W</td> </tr> <tr> <td>Boca Tapada</td> <td>1040N 08413W</td> </tr> <tr> <td>Pital</td> <td>1027N 08416W</td> </tr> <tr> <td>Aguas Zarcas</td> <td>1022N 08420W</td> </tr> <tr> <td>Chachagua</td> <td>1024N 08435W</td> </tr> </tbody> </table>	SAN CARLOS		La Fortuna	1028N 08438W	Venado	1033N 08444W	Santa Rosa de Poco Sol	1037N 08431W	Boca Tapada	1040N 08413W	Pital	1027N 08416W	Aguas Zarcas	1022N 08420W	Chachagua	1024N 08435W	<u>8000 ft</u> GND	-	Caution daily between 1130/1430
SAN CARLOS																			
La Fortuna	1028N 08438W																		
Venado	1033N 08444W																		
Santa Rosa de Poco Sol	1037N 08431W																		
Boca Tapada	1040N 08413W																		
Pital	1027N 08416W																		
Aguas Zarcas	1022N 08420W																		
Chachagua	1024N 08435W																		
→ <b>Paragliding Operation Zone</b> Circular airspace with a radius of 2.5 NM With center in the coordinates: 09°36'52.3339"N 084°36'05.6865"W (Garabito, Puntarenas)	<u>2000 ft</u> SFC	-	When you arrive in the area, announce your presence on the 123.0 MHz frequency and listen for traffic information. See chart ENR 5.5-3																



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**OPERATION ZONE OF MANNED BALLOONS CENTERED IN**

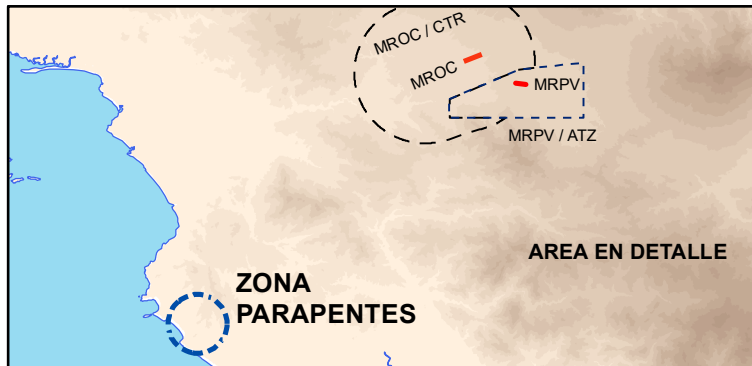
**"SAN JERONIMO DE NARANJO". COORDINATES 10° 06' 36"N AND 084° 21' 55"W**

**7 NM RADIUS. FROM SURFACE TO 2000' HEIGHT.**

**CAUTION IS ADVISE.**

ZONA DE OPERACION DE PARAPENTES

GARABITO



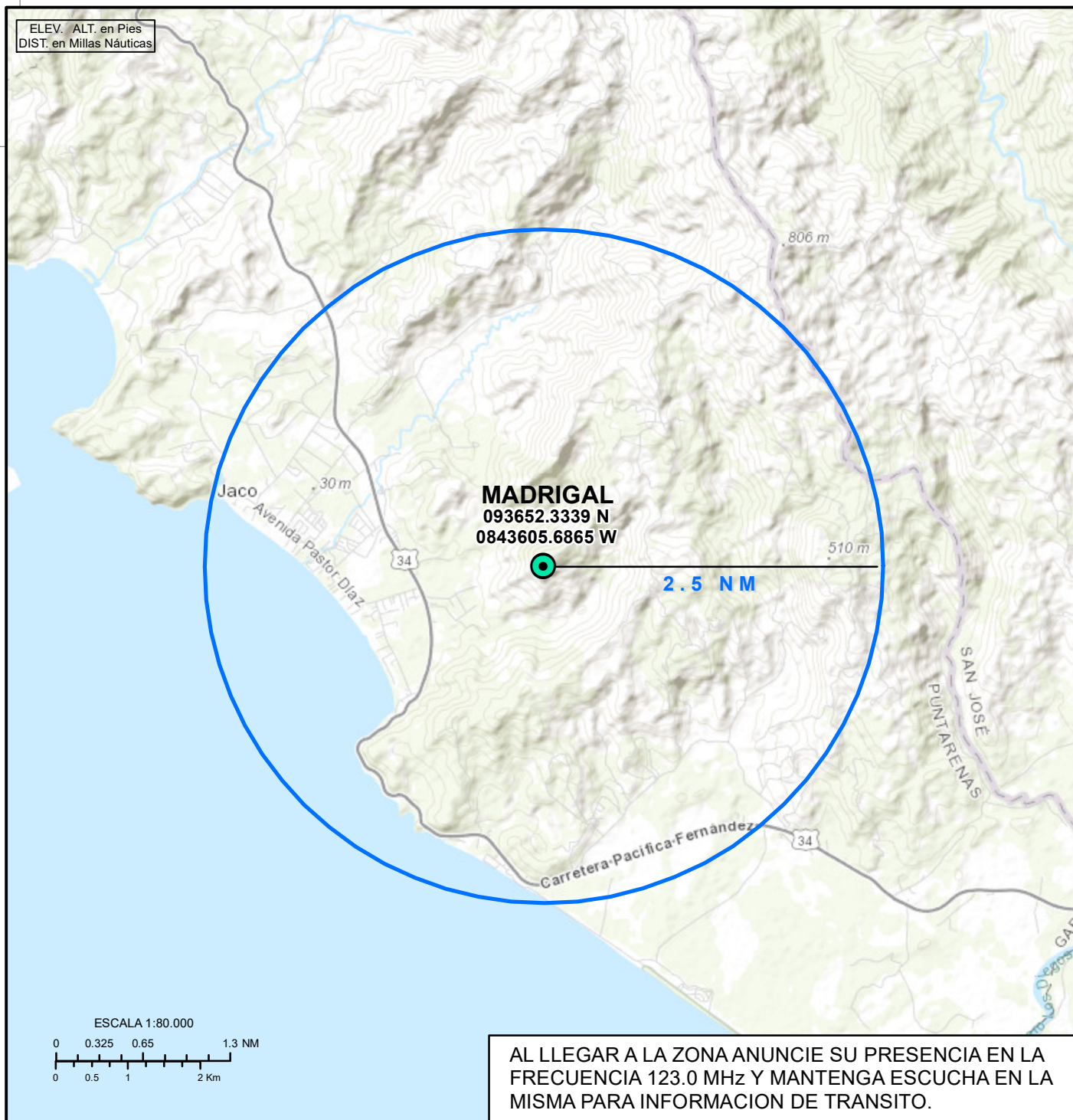
DESCRIPCIÓN:

Espacio aéreo de configuración circular con radio de 2.5 NM con centro en las coordenadas:

MADRIGAL  
N 09° 36' 52.3339"  
W 084° 36' 05.6865"

Frecuencia de Operación: 123.0 MHz

Altitudes de Operación: SFC hasta 2000 ft AMSL



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## ENR 5.6 BIRD MIGRATION AND ZONES WITH SENSITIVE FAUNA

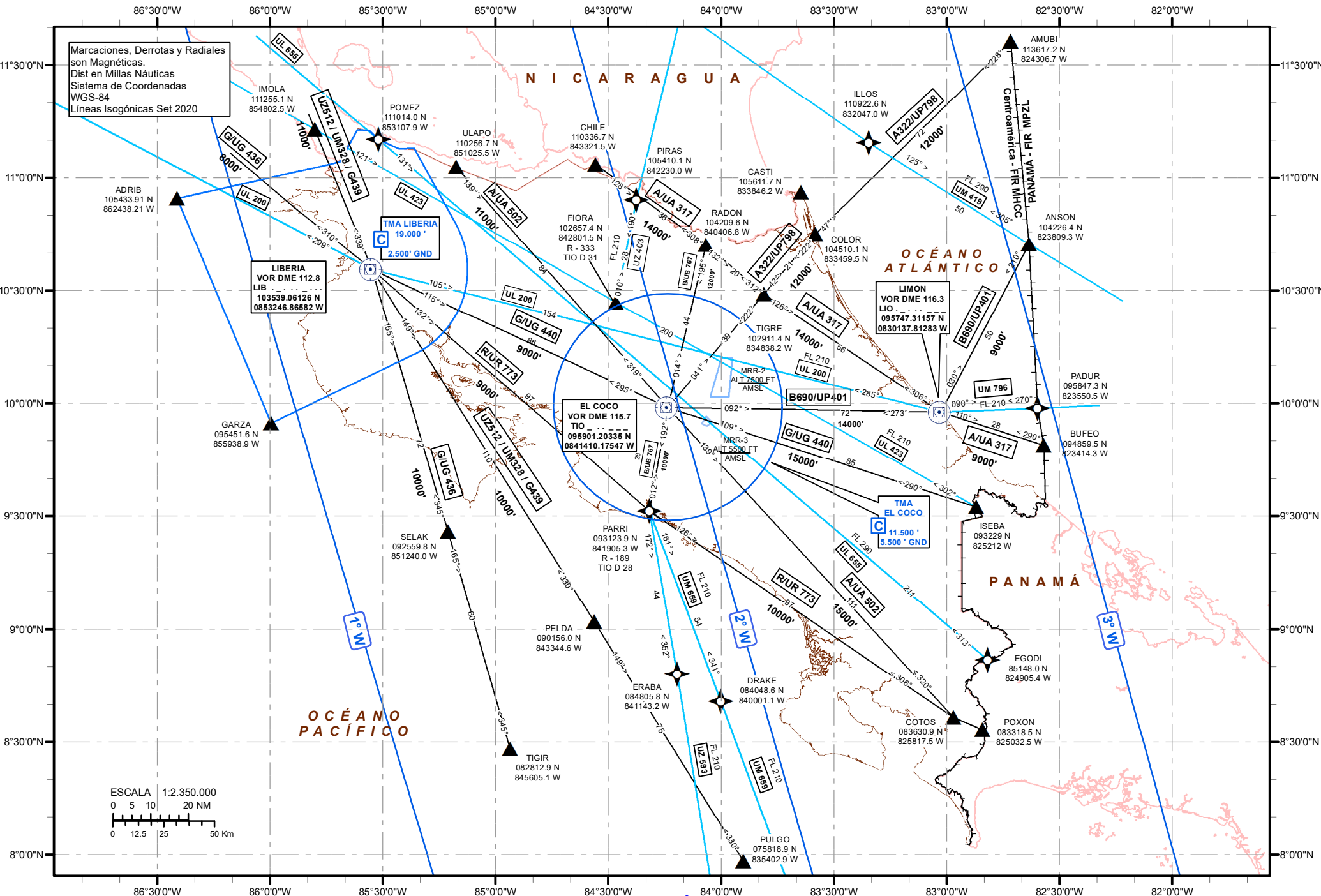
### 5.6.1 Bird migration

5.6.1-1 If information obtained either by pilot's report, watched by control tower personnel, or observed on radar and verified by pilot, concerning birds activity that could affect flights operation, the controller shall issue information, to aircraft on frequency; who may be affected by this condition. The information must include the specie or size of birds, if known, route of bird migration and altitude.

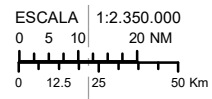
5.6.1-2 Information shall be issued during 15 minutes after first knowledge of the situation, unless visual observation or subsequent reports indicate that the condition has disappeared.

*NOTE: Birds and other wildlife are been observed at Daniel Oduber Quiros International Airport.*

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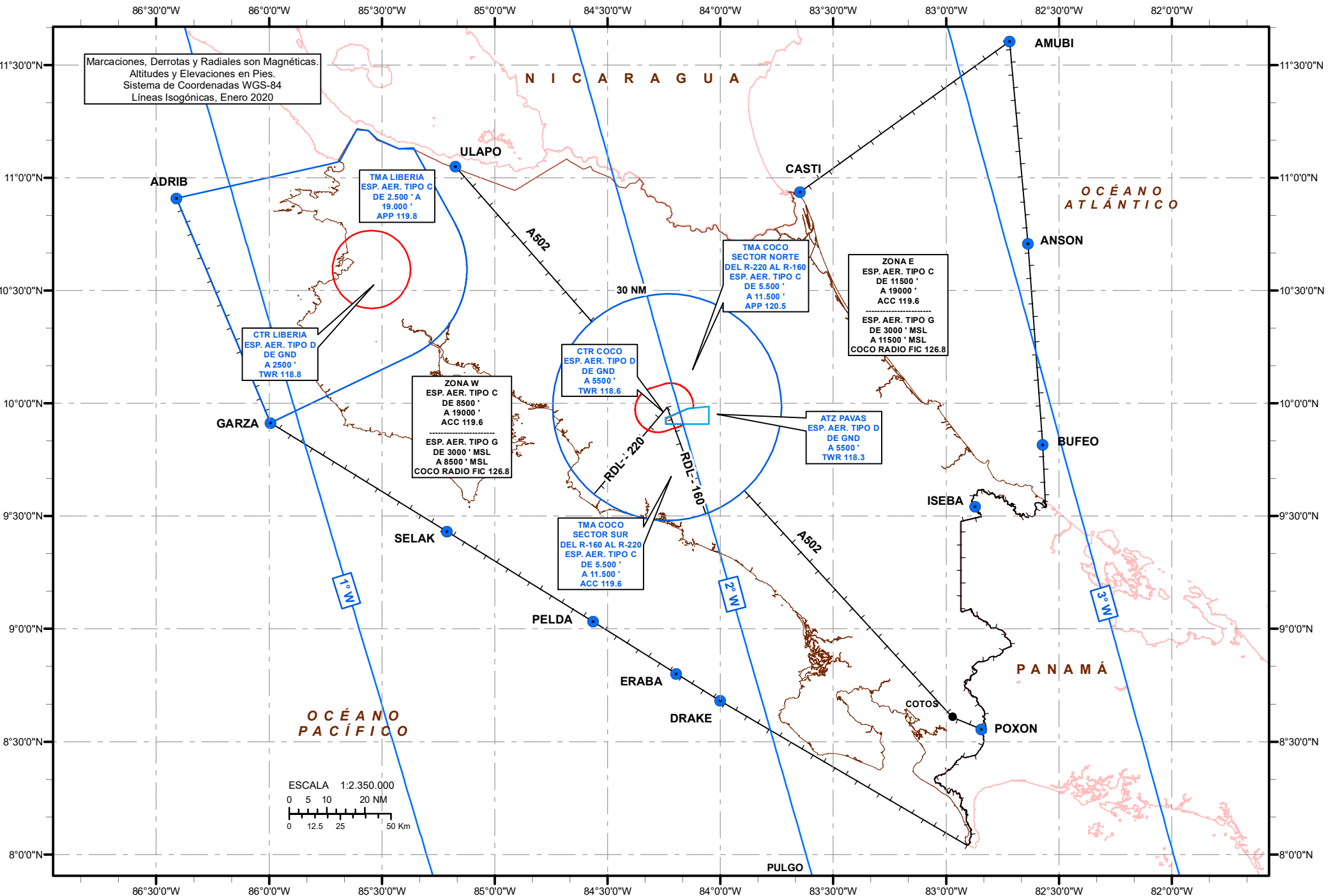


Marcaciones, Derrotas y Radiales  
son Magnéticas.  
Dist en Millas Náuticas  
Sistema de Coordenadas  
WGS-84  
Lineas Isogónicas Set 2020



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CARTA ÍNDICE DE ZONAS PROHIBIDAS, PELIGROSAS Y RESTRINGIDAS



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# RESTRICTED ZONE

# MURCIELAGO

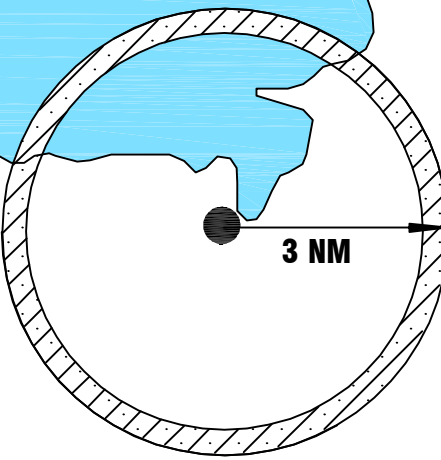
BEARINGS, TRACKS AND RADIALS ARE MAGNETIC.  
ALTITUDES AND ELEVATIONS IN FEET.  
DISTANCES IN NAUTICAL MILES.  
WGS 84 COORDINATES.



11°00' N

GUANACASTE PROVINCE

SANTA ELENA GULF



**MRR-1**  
**2500'**  
**AMSL**

# MURCIELAGO

N10° 55' 04.1" W 85° 42' 59.7"  
R- 330 21.5 NM LIB VOR

PACIFIC OCEAN



### RESTRICTED AREA PASO DE LA PALMA

**DETAILS OF THE AREA**



**DESCRIPTION :** IRREGULAR POLYGON, LOCATED 20 NAUTICAL MILES EAST FROM THE JUAN SANTAMARIA INTERNATIONAL AIRPORT UNDERSTOOD BY THE VISUAL REFERENCE POINTS:

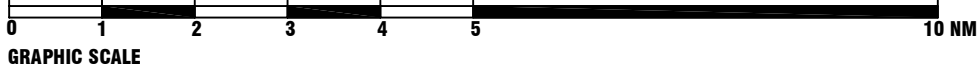
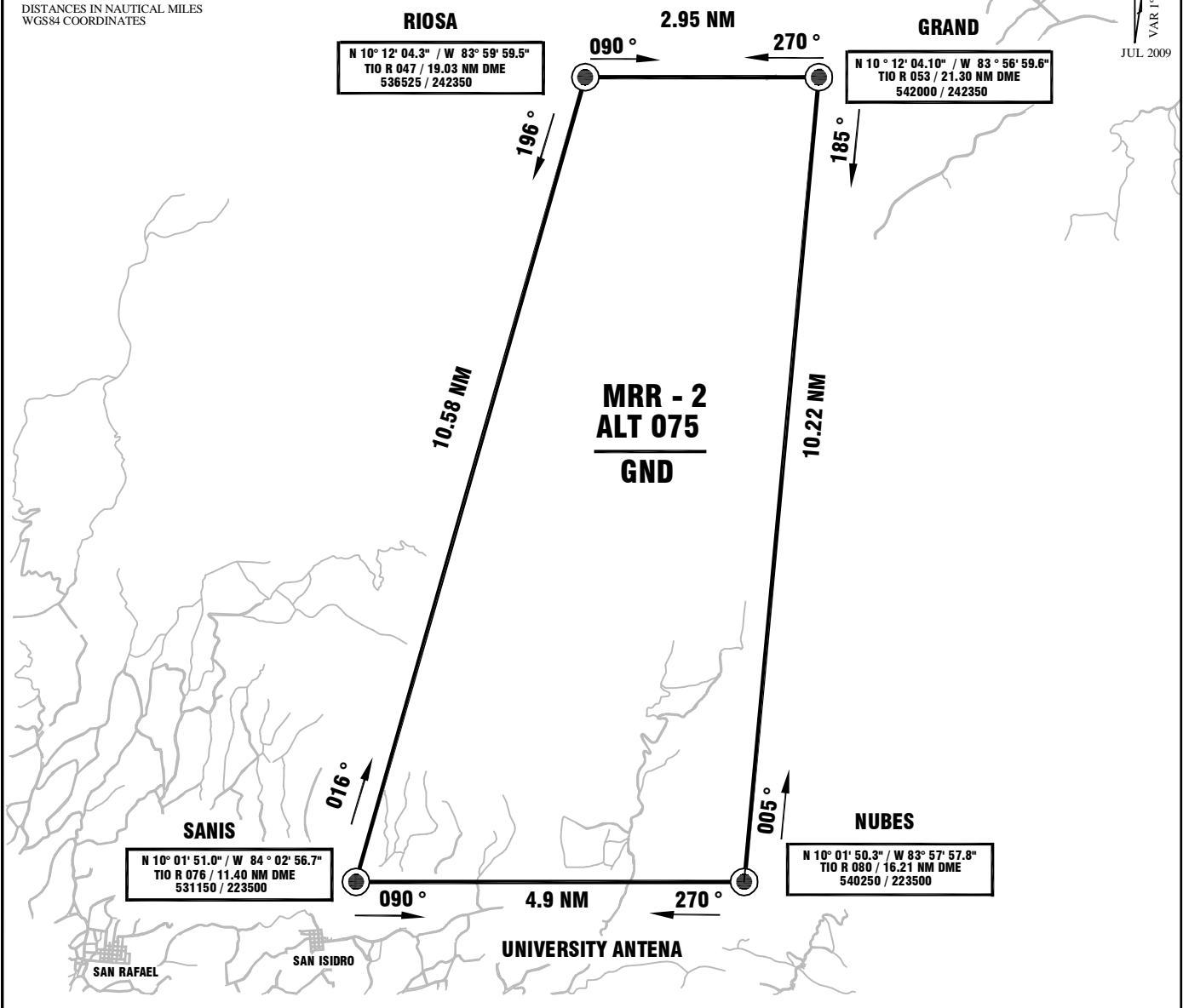
- RIOSA - RIO SAN JOSE ( 5 KM AL ESTE DE CERRO CACHO NEGRO )
- GRAND - RIO GRANDE ( 2 KM AL OESTE DEL MOJON KOVOK )
- SANIS - PLAZA DE DEPORTES CONCEPCION SAN ISIDRO - HEREDIA
- NUBES - PLAZA DE DEPORTES NUBES DE CORONADO, SAN JOSE

**CONTROL UNIT:** **COCO ACC ( R )**  
**119.6**

**AVAILABLE ALTITUDE:** **7500´ FEET**

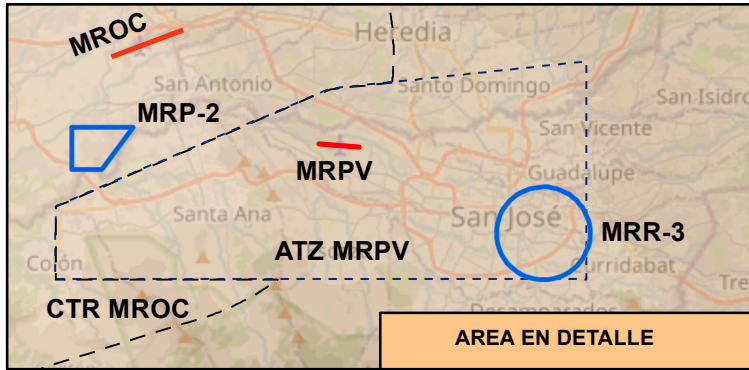
BEARINGS, TRACKS AND RADIALS ARE MAGNETIC  
ALTITUDES AND ELEVATIONS IN FEET  
DISTANCES IN NAUTICAL MILES  
WGS84 COORDINATES

VAR 1° E  
JUL 2009



MRR - 3

ZONA RESTRINGIDA: EDIFICIOS DE GOBIERNO



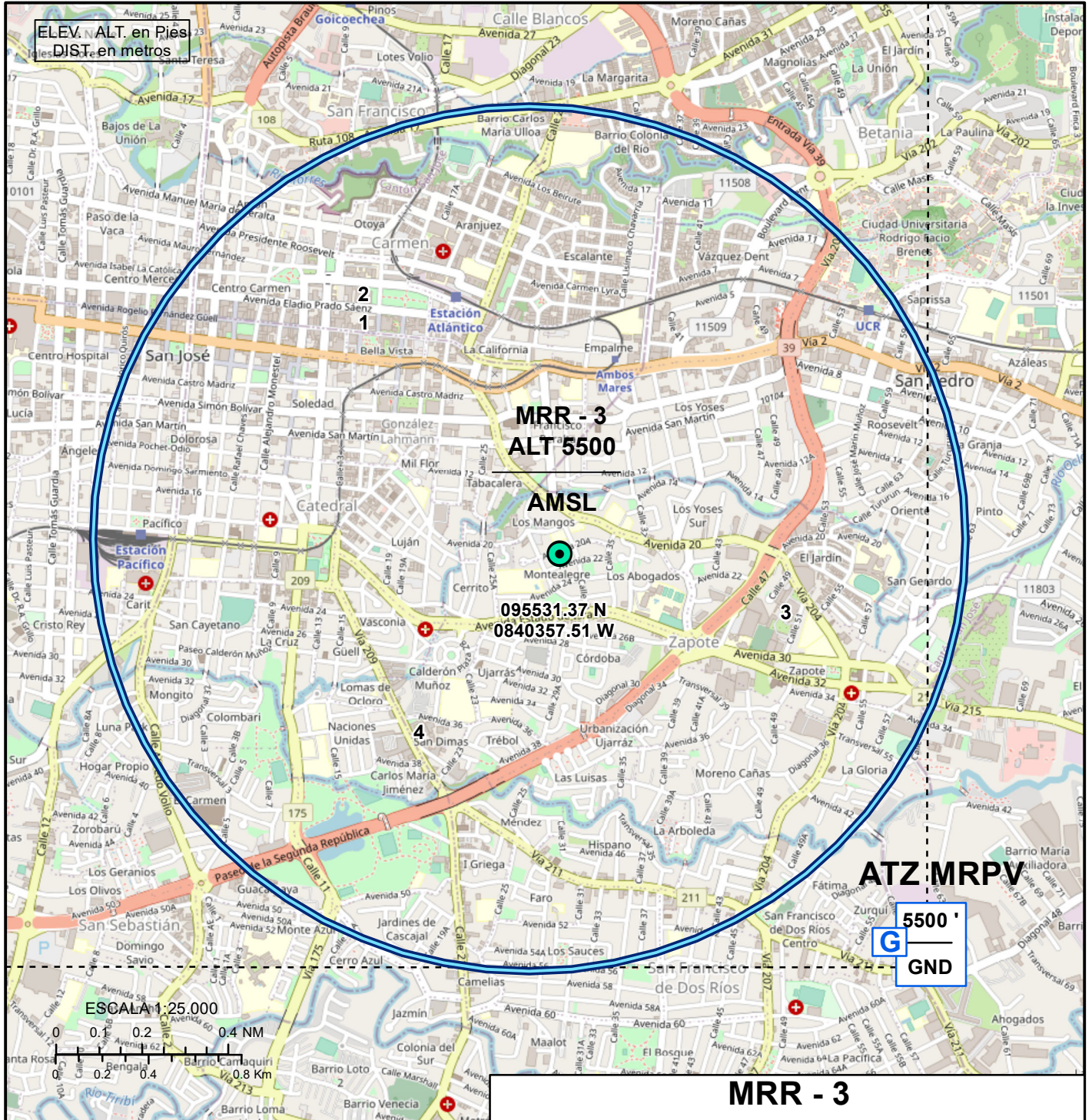
DESCRIPCIÓN:

Zona Restringida No.3 de forma circular con radio de 1 NM con centro en las coordenadas:

095531.37 N  
0840357.51 W

1. Asamblea Legislativa
2. Tribunal Supremo de Elecciones
3. Casa Presidencial
4. Ministerio de Seguridad.

Altitudes de Restricción: GND hasta 5500 AMSL



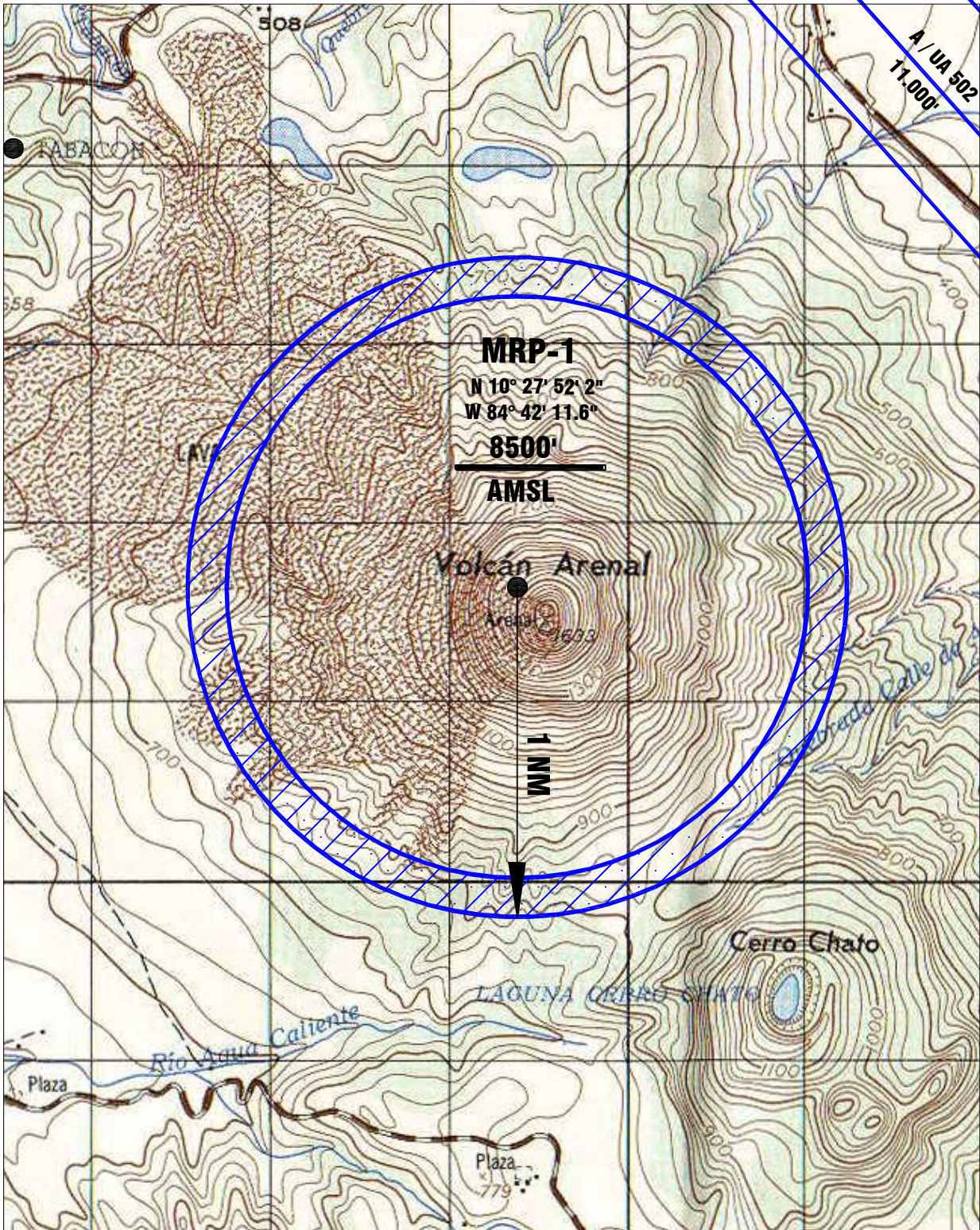
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# PROHIBITED AREA ARENAL VOLCANO MRP-1

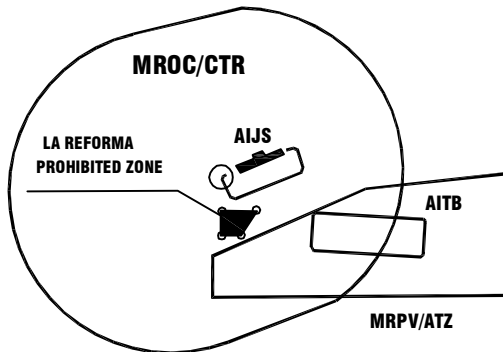
BEARINGS, TRACKS AND RADIALS ARE MAGNETIC  
ALTITUDES AND ELEVATIONS IN FEET  
DISTANCES IN NAUTICAL MILES  
WGS84 COORDINATES

VAR 1° E  
JUL 2009



## PROHIBITED AREA LA REFORMA

### AREA IN DETAIL



### DESCRIPTION:

Irregular shape polygon located 1.5 nautical miles from Juan Santamaría International Airport, suited by the following visual reference points:

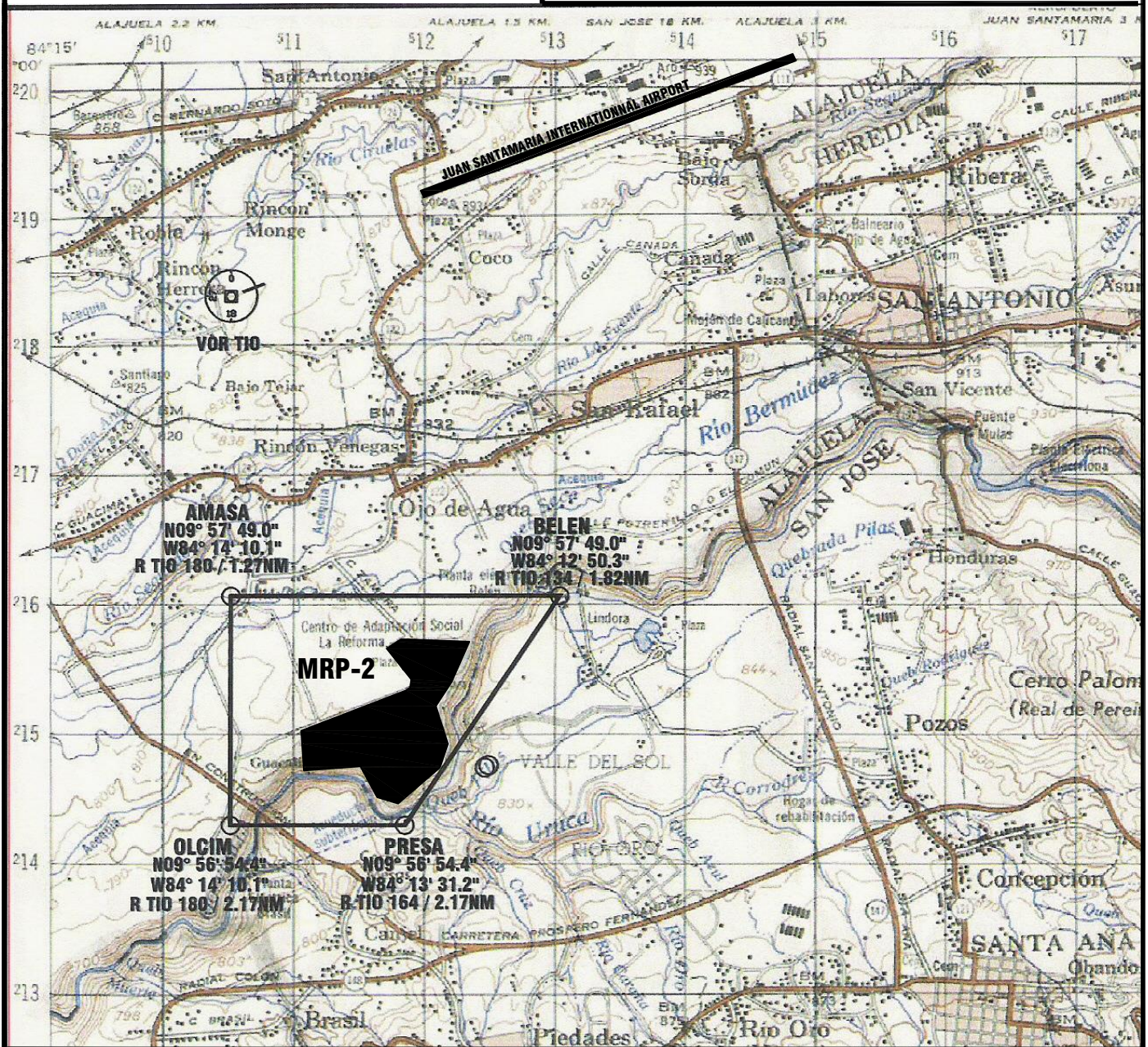
**AMASA:** "Silos and plant of Instamasa products".

**BELEN:** "Power plant at San Antonio de Belén".

**PRESA:** "Dam power plant at Brasil de Santa Ana".

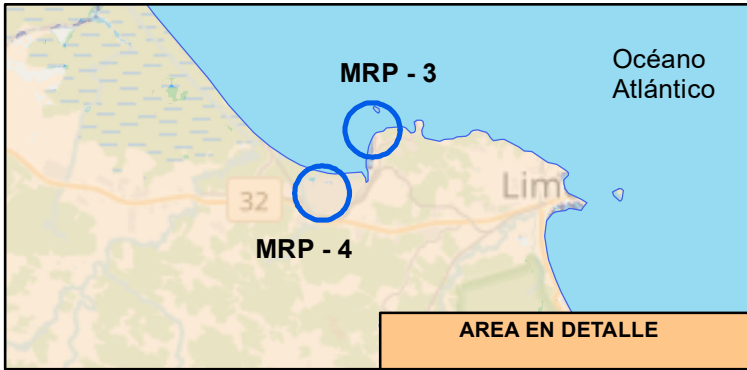
**OLCIM:** "Holcim plant at San Rafael de Alajuela".

**PROHIBITED ZONE FROM AMSL UNTIL 5000 FEET.**



MRP - 3

MOÍN 1, RECOPE



DESCRIPCIÓN:

Zona Prohibida No.3 de forma circular con radio de 800 m con centro en las coordenadas:

100034.44 N  
0830438.79 W

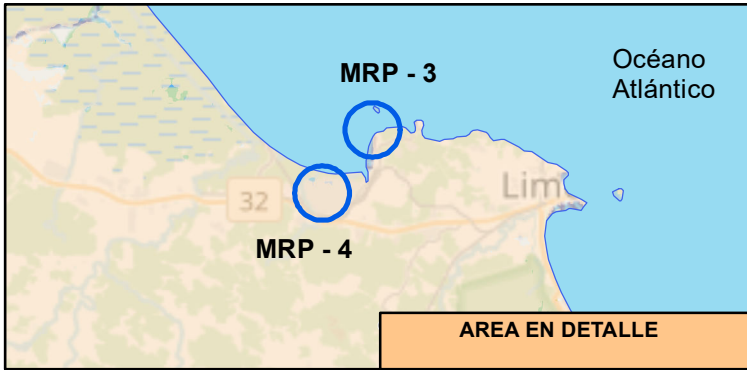
Altitudes de Restricción: 500 ft AGL



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MRP - 4

MOÍN 2, RECOPE

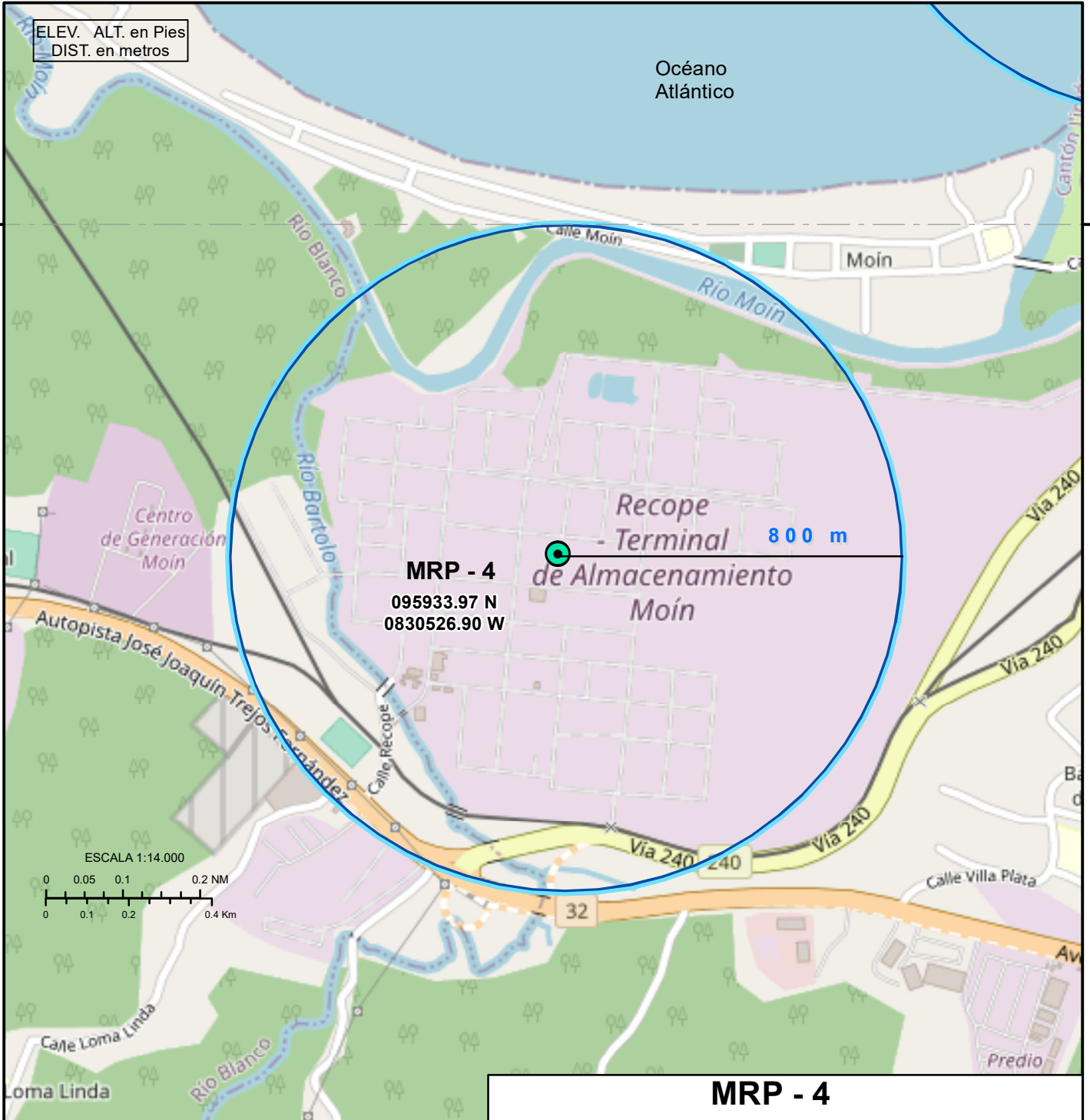


DESCRIPCIÓN:

Zona Prohibida No.4 de forma circular con radio de 800 m con centro en las coordenadas:

095933.97 N  
0830526.90 W

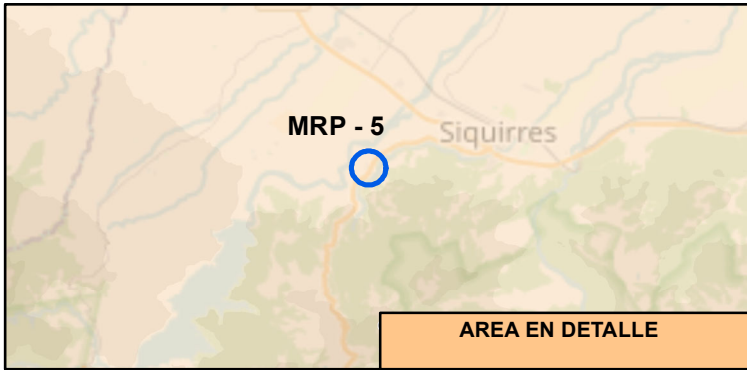
Altitudes de Restricción: 500 ft AGL



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MRP - 5

EL COCO, RECOPE

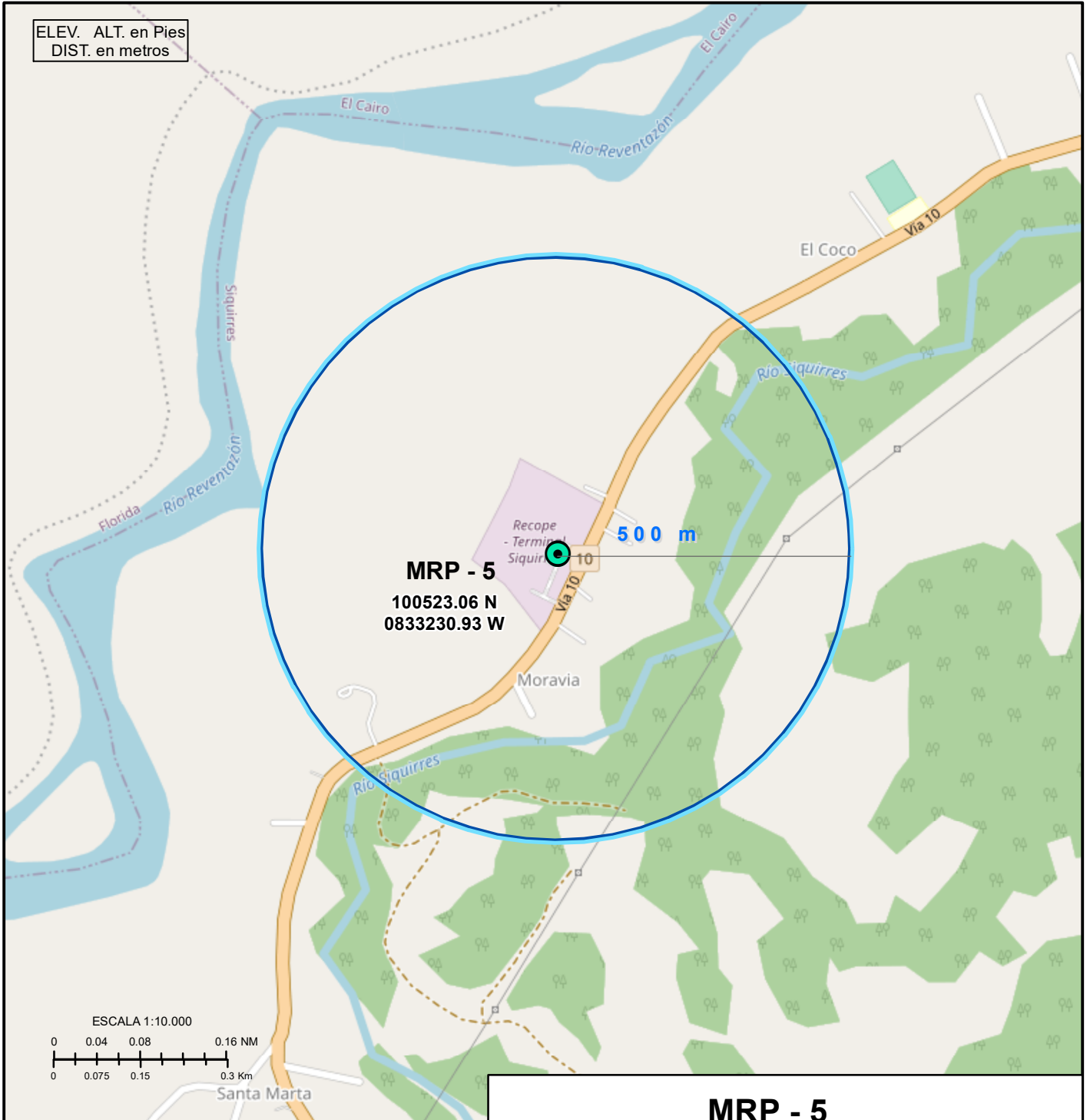


DESCRIPCIÓN:

Zona Prohibida No.5 de forma circular con radio de 500 m con centro en las coordenadas:

100523.06 N  
0833230.93 W

Altitudes de Restricción: 500 ft AGL



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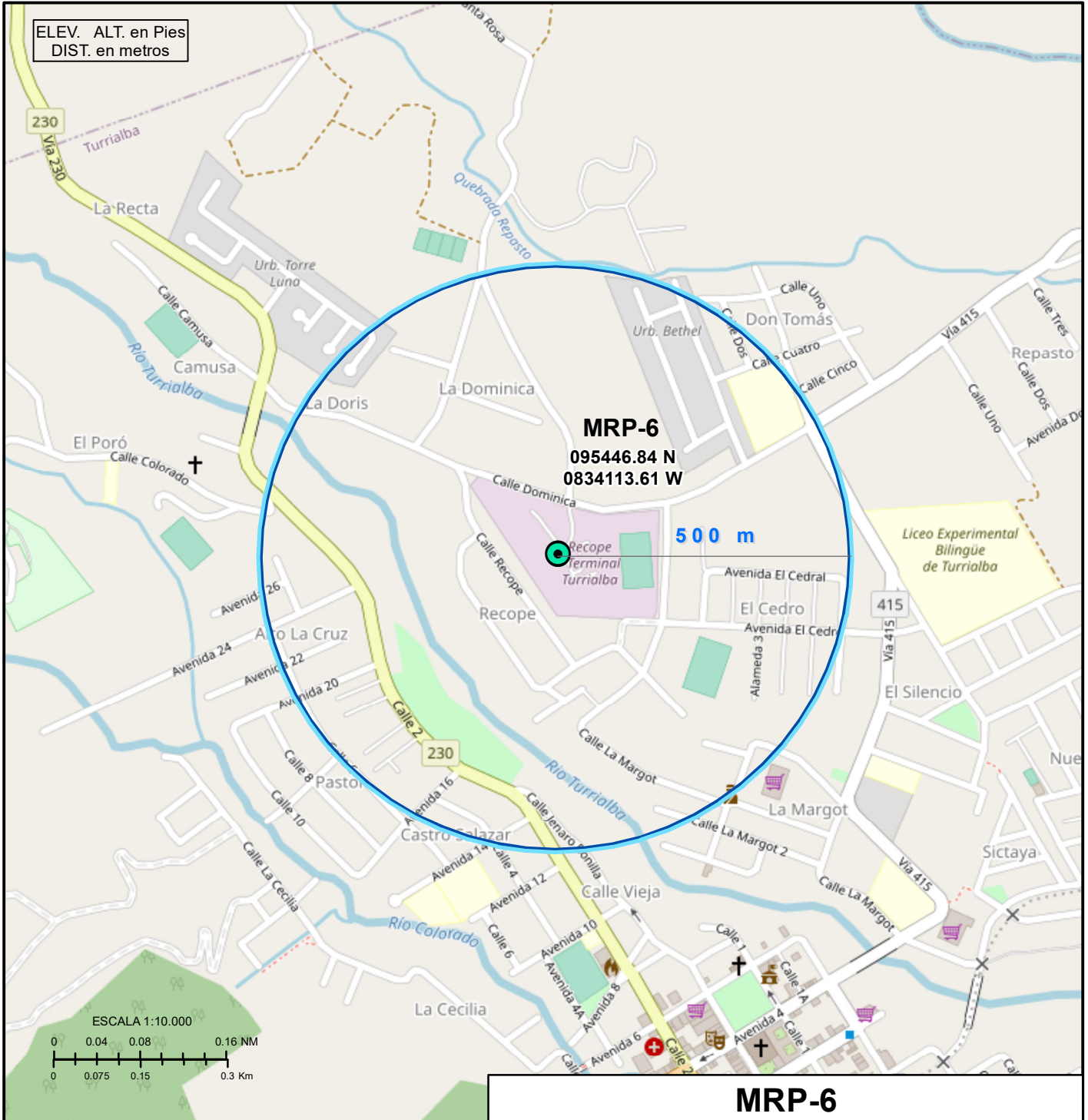


DESCRIPCIÓN:

Zona Prohibida No. 6 forma circular con radio de 500 m con centro en las coordenadas:

095446.84 N  
0834113.61 W

Altitudes de Restricción: 500 ft AGL



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MRP - 7

OCHOMOGO, RECOPE



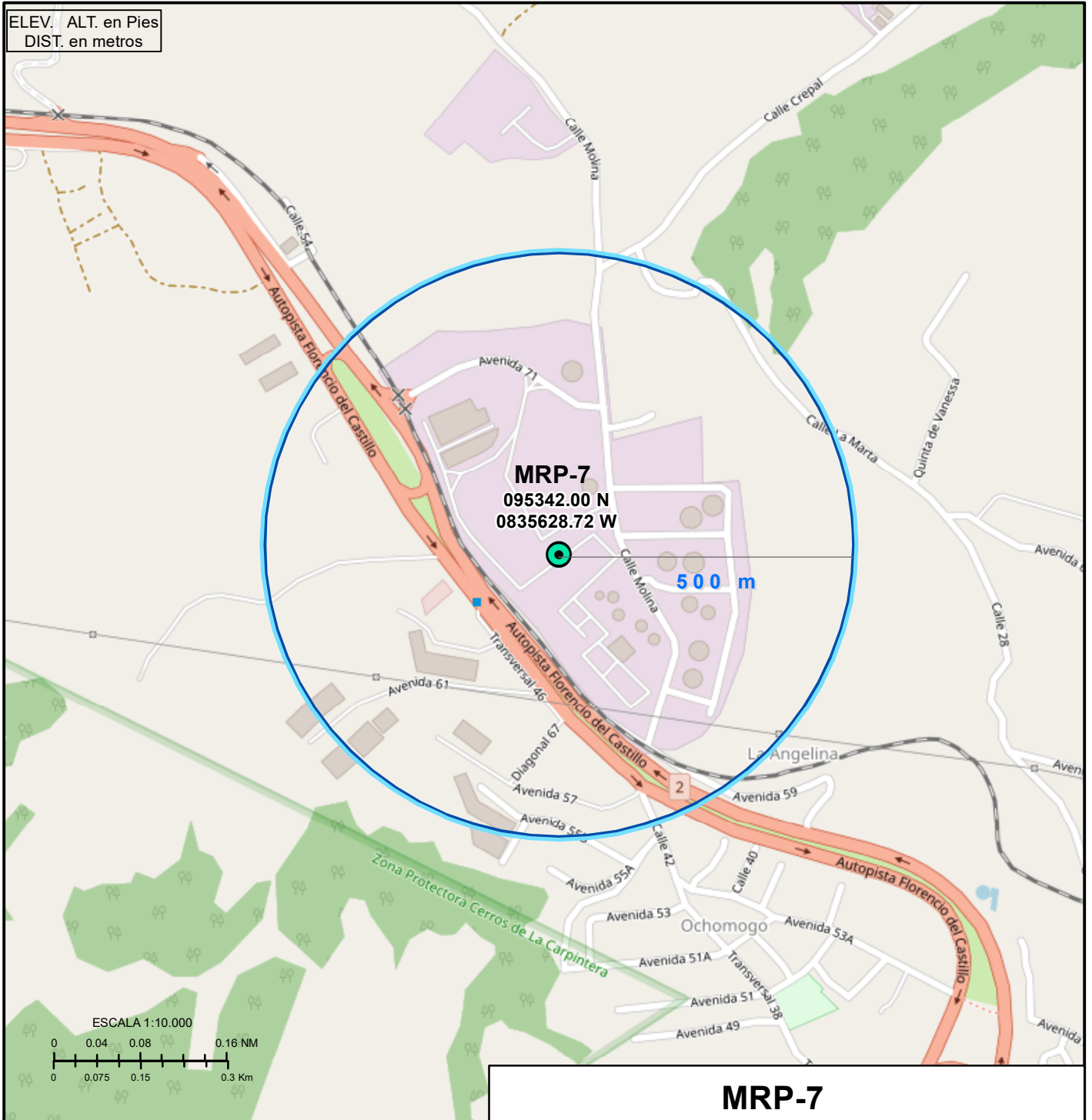
DESCRIPCIÓN:

Zona Prohibida No. 7 de forma circular con radio de 500 m con centro en las coordenadas:

095342.00 N  
0835628.72 W

Altitudes de Restricción: 500 ft AGL

AREA EN DETALLE

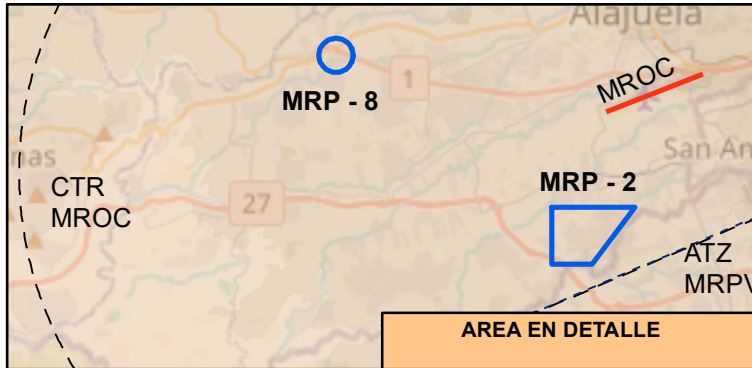


MRP-7

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MRP - 8

MANOLOS, RECOPE

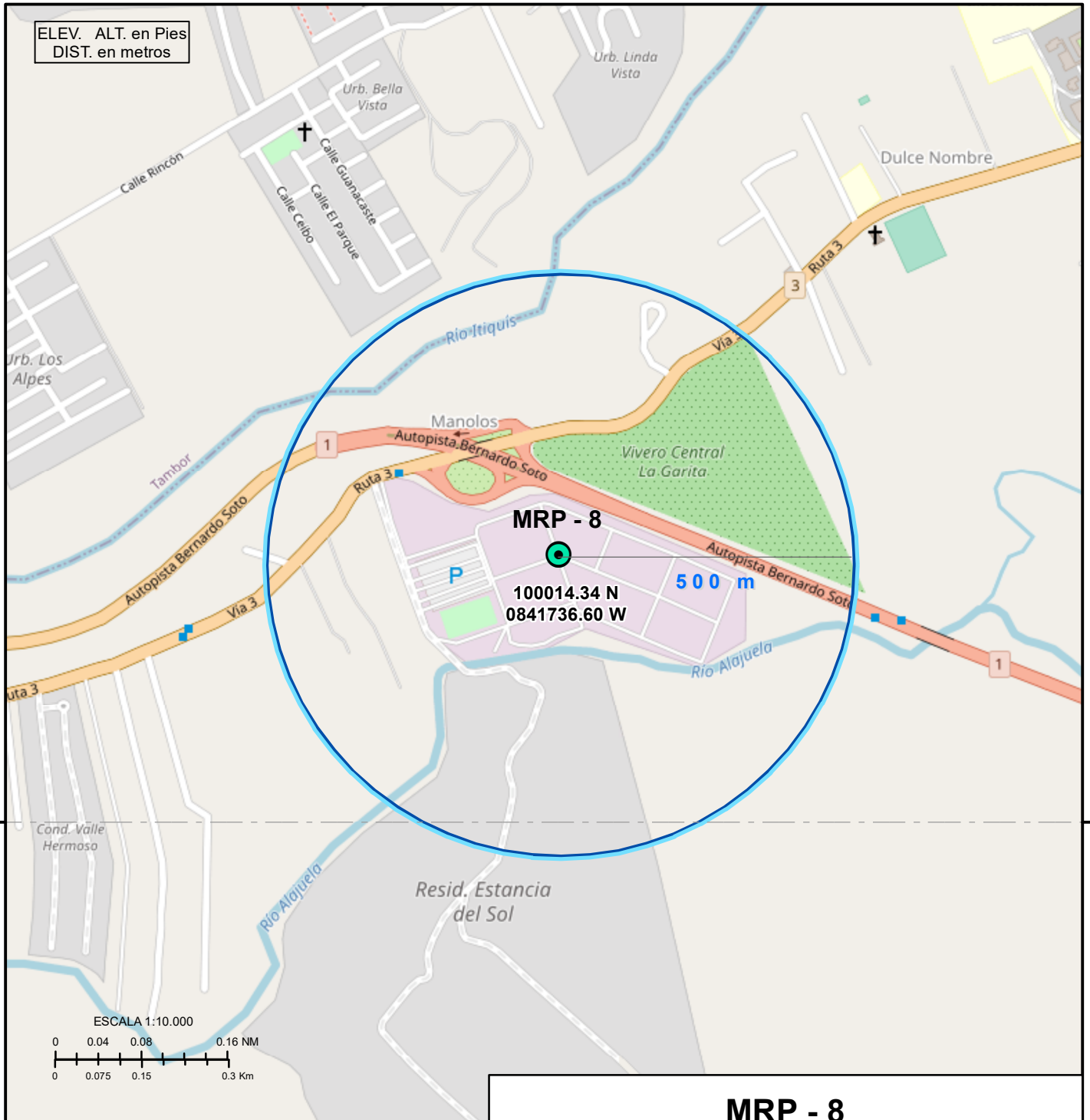


DESCRIPCIÓN:

Zona Prohibida No.8 de forma circular con radio de 500 m con centro en las coordenadas:

100014.34 N  
0841736.60 W

Altitudes de Restricción: 500 ft AGL



ELEV. ALT. en Pies  
DIST. en metros

ESCALA 1:10.000



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MRP - 9

BARRANCA, RECOPE

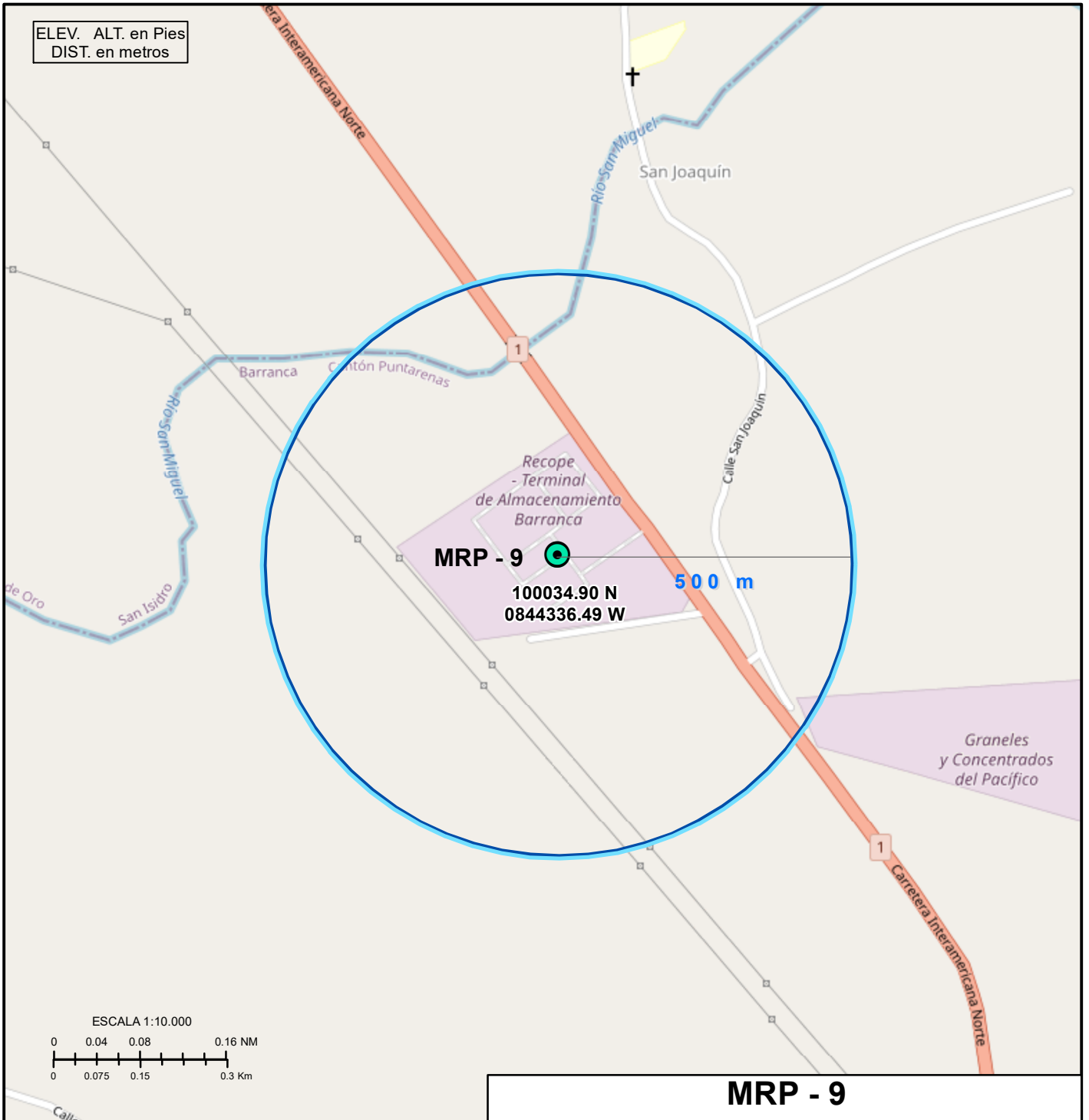


DESCRIPCIÓN:

Zona Prohibida No.9 de forma circular con radio de 500 m con centro en las coordenadas:

100034.90 N  
0844336.49 W

Altitudes de Restricción: 500 ft AGL



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CARTA ÍNDICE DE ZONAS DE ENTRENAMIENTO



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<p><b>AREA EN DETALLE</b></p> <p>ZONA ENTRENAMIENTO E</p>	<p><b>DESCRIPCIÓN:</b></p> <p>Polígono de forma irregular situado entre 22 DME y 30 DME del VOR TIO, Comprendido por los puntos de referencia visual P1 al P5.</p> <p><b>REGLAS DE OPERACIÓN:</b></p> <p>Máximo de aeronaves permitidas: 6</p> <p>Para fines de SAR, al ingresar a la zona informe en 126.8 MHz y emita reportes de posición cada 30 minutos en esa frecuencia.</p> <p>Posteriormente, anuncie su presencia en la Frecuencia 123.0 MHz y mantenga escucha para información de tránsito durante la operación</p> <p>Antes de abandonar la zona, solicite autorización de ingreso al TMA con COCO APP, frecuencia 120.5 MHz Frecuencia Alterna 119.6 MHz</p>	<p><b>ESPACIO AÉREO</b></p> <p><b>G</b></p> <p><b>FRECUENCIA DE OPERACIÓN</b></p> <p>123.0 MHz</p>
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ELEV. ALT. en Pies  
DIST. en Millas Náuticas

ESCALA 1: 110.000

0 0.45 0.9 1.8 NM  
0 0.75 1.5 3 Km

Punto	LATITUD	LONGITUD	Referencia Visual
P1	09°53'43.83" N	083°52'31.33" W	Pueblo Cot de Cartago
P2	09°48'39.56" N	083°54'28.67" W	Sur del pueblo Agua Caliente de Cartago
P3	09°47'27.60" N	083°50'45.96" W	Vivero en el pueblo de Orosi
P4	09°49'02.18" N	083°45'29.20" W	Cerros del parque nacional Tapantí
P5	09°53'53.69" N	083°44'12.58" W	Pueblo de Juan Vías

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ZONA ENTRENAMIENTO W



**DESCRIPCIÓN:**  
Polígono de forma irregular situado entre 20 DME y 30 DME del VOR TIO, entre los radiales RDL200 y RDL240.

**REGLAS DE OPERACIÓN:**  
Máximo de aeronaves permitidas: 15  
Para fines de SAR, al ingresar a la zona informe en 126.8 MHz y emita reportes de posición cada 30 minutos es esa frecuencia.  
Posteriormente, anuncie su presencia en la Frecuencia 123.0 MHz y mantenga escucha para información de tránsito durante la operación  
Antes de abandonar la zona, abra plan de vuelo en 126.8 MHz

**ESPACIO AÉREO**  
**G**  
**FRECUENCIA DE OPERACIÓN**  
123.0 MHz

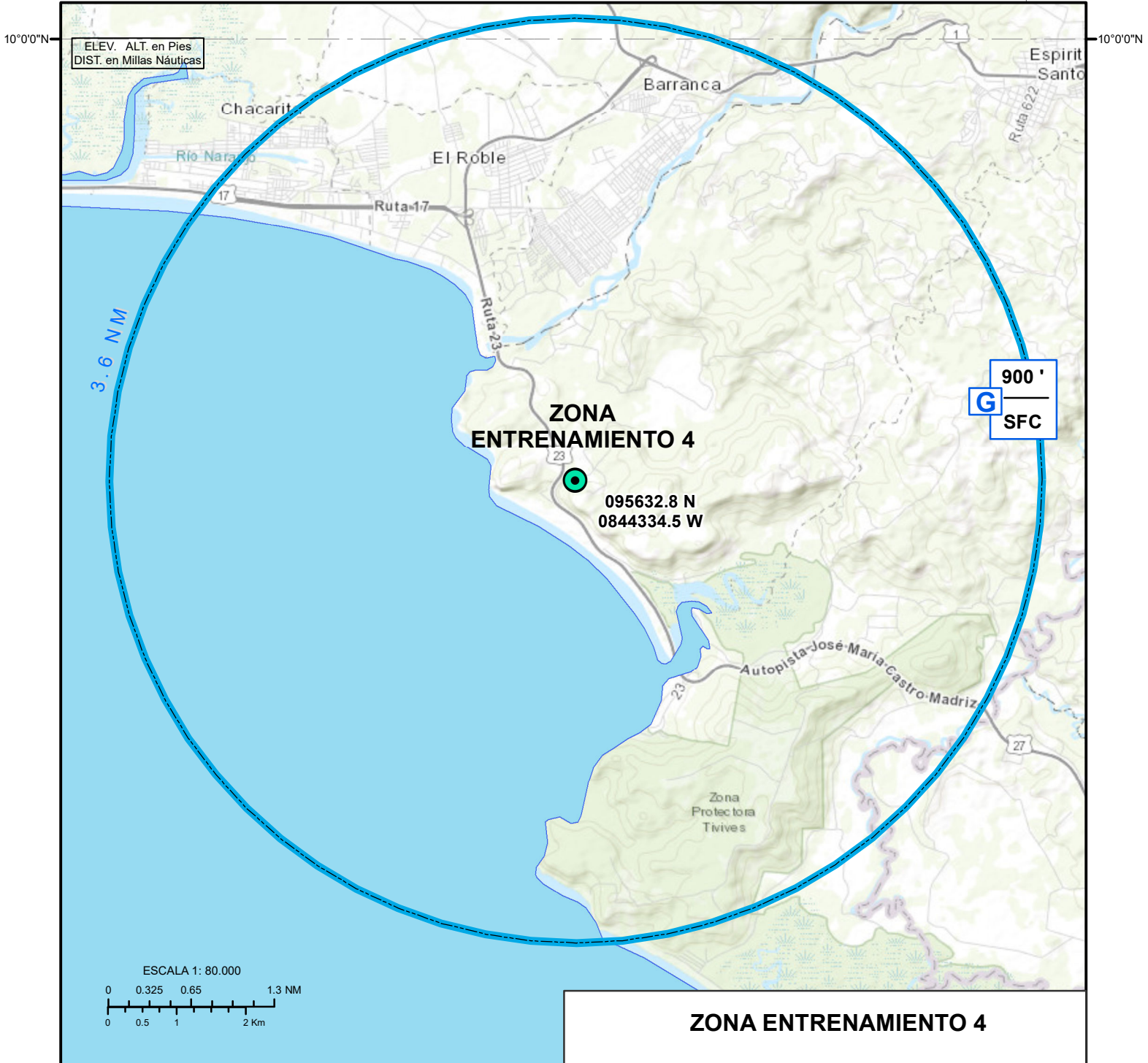


Punto	Latitud	Longitud	Referencia Visual	Punto	Latitud	Longitud	Referencia Visual
P1	09°48'21.1" N	084°31'20.6" W	Cara Noroeste del cerro Turruabares	P3	09°30'20.7" N	084°23'31.9" W	Playa Bandera
P2	09°43'00.8" N	084°39'55.4" W	Hotel Club Punta Leona	P4	09°39'54.2" N	084°20'24.8" W	Pueblo indígena Zapatón, Puriscal.

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ZONA ENTRENAMIENTO 4


<p><b>AREA EN DETALLE</b></p>  <p>ZONA ENTRENAMIENTO 4</p> <p>CTR COCO</p> <p>ATZ / MRPV</p>	<p><b>DESCRIPCIÓN:</b></p> <p>Espacio aéreo de configuración circular con radio de 3.6 NM con centro en las coordenadas: 095932.8 N 0844331.5 W</p> <p><b>REGLAS DE OPERACIÓN:</b></p> <p>Al llegar a la zona anuncie su presencia en la Frecuencia 123.0 MHz y mantenga escucha para información de tránsito.</p> <p>Frecuencia de Control: 123.0 MHz Altitudes disponibles: Desde SFC hasta 900 ft</p>	<p><b>ESPACIO AÉREO</b></p> <p><b>G</b></p> <p><b>FRECUENCIA DE OPERACIÓN</b></p> <p>123.0 MHz</p>
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ZONA ENTRENAMIENTO 5

<p><b>AREA EN DETALLE</b></p>  <p>OCÉANO PACÍFICO</p> <p>ZONA ENTRENAMIENTO 5</p> <p>OCÉANO PACÍFICO</p>	<p><b>DESCRIPCIÓN:</b></p> <p>Espacio aéreo de configuración triangular delimitado por los puntos de referencia visual: ESTRA, CHORA, CAMAR.</p> <p><b>REGLAS DE OPERACIÓN:</b></p> <p>Al llegar a la zona anuncie su presencia en la Frecuencia 123.0 MHz y mantenga escucha para información de tránsito.</p> <p>Frecuencia de Operación: 123.0 MHz Altitudes disponibles: Desde 500 ft hasta 1500 ft</p>	<p><b>ESPACIO AÉREO</b></p> <p><b>G</b></p> <p><b>FRECUENCIA DE OPERACIÓN</b></p> <p>123.0 MHz</p>
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CARTA ÍNDICE DE INSTALACIONES DE RADIO



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