

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

| <i>Name of Station (VOR/VAR)</i> | <i>ID</i> | <i>FREQ (CH)</i> | <i>Hours of Operation</i> | <i>Coordinates</i> | <i>ELEV DME antenna</i> | <i>Remarks</i> |
|--------------------------------------|-----------|------------------------|-------------------------------|-------------------------|---------------------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| VOR/DME CARRASCO ☛(12°W) | CRR | 116.9 MHZ (CH 116X) | H24 | 344957.8S 0560130.5W | 30 M | Coverage 100 NM |
| VOR/DME DURAZNO ☛(12°W) | DUR | 117.5 MHZ (CH 122X) | H24 | 332122.5S 0562945.8W | 90 M | Coverage 100 NM |
| VOR/DME CURBELO ☛(12°W) | LDS | 117.6 MHZ (CH 123X) | H24 | 345129.9S 0550530.2W | 30 M | Coverage 100 NM |

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>Coordinates TRANS STN</i> | <i>Remarks</i> |
|--|--------------------|--|-------------------------------|----------------------------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Global Positioning System (GPS) | Satellital | L1 - 1575.42 MHZ L2 - 1227.60 MHZ | H24 | - | Use authorized as <ul style="list-style-type: none"> ☛ primary en- ☛ route navigation ☛ aid and within oceanic airspace |

✶ENR 4.2.1 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)

Global navigation satellite system (GNSS) is the generic name used by ICAO to define any overall range system to determine position and hour, which comprises one or more satellite constellation, onboard receivers and several integrity monitoring systems, including those appropriate augmentation devices to comply with the operational performance requirements.

(GPS) Global Positioning System description

a) Space segment

24 NAVSTAR satellites arranged in 6 orbital planes (four by plane) at 20,200 KM above the earth. Completing an orbit every 12 hours and are located so that a minimum of 4 satellites will be seen from a user anywhere in the world. Each satellite has high precision atomic clocks to synchronize messages, which are used by the onboard receivers to compute the distance to the user

b) Control segment

One Master Station, 5 monitoring stations and 3 antennas which monitor and control the satellite system

c) User segment

GPS onboard receiver. Knowing satellite positions, GPS could determine the exact location by measuring the delay that the signal takes to reach the receiver, converting that measure into distance. Four satellites measures will be required to obtain a 3 dimension (3D) navigation fix.

ONBOARD RECEIVER

a) For VFR use

Use limitations:

- 1.- If Receiver autonomous integrity monitoring (RAIM) is not available, it could not warn the pilot in case of a faulty satellite was sending erroneous signals;
- 2.- Inadequate antenna installation and absence of database unable to update itself could also disturb the proper signal reception; and
- 3.- Incorrect waypoints insertion also could cause navigation error.

These receptors have in their Operations Manual a Note:

FOR VFR USE ONLY

and should not be used, under any circumstances, for IFR flights

b) For IFR use

Approved IFR receivers must comply with requirements detailed in Federal Aviation Administration (FAA) Technical Standard Order TSO C-129a (TECHNICAL STANDARD ORDER TSO C-129a AIRBORNE SUPPLEMENTAL NAVIGATION EQUIPMENT USING THE GLOBAL POSITIONING SYSTEM) of 20 FEB 96 and must be installed according to FAA AC-20-138 (AIRWORTHINESS APPROVAL OF GPS NAVIGATION EQUIPMENT FOR USE AS A VFR AND IFR SUPPLEMENTAL NAVIGATION SYSTEM) of 25 MAY 94.

These receivers has the (Receiver Autonomous Integrity Monitoring - RAIM) function. This function detect the failure of a GPS signal by comparing position information and time obtained from varied 4 satellite combinations, from a joint of at least 5 satellites in sight.

If a faulty satellite is detected, the receiver warns pilot that the system is not appropriate for navigational use, must switch to traditional navigation methods.

A minimum of 6 satellites must be in sight if RAIM function is desirable, after detection and faulty satellite deactivation from navigation solution.

USE OF GPS WITHIN MONTEVIDEO FIR

1. Within República Oriental del Uruguay jurisdictional airspace, it is possible to use GPS as the **only primary aid** to navigation.

OPERATIONAL REQUIREMENTS FOR GPS USE WITHIN URUGUAYAN OCEANIC AIRSPACE

- 1.1 For GPS use as primary navigation device within the República Oriental del Uruguay oceanic airspace, pilots must comply with the procedures and operation techniques described in the aircraft GPS IFR Receiver Manufacturer Operator Manual and with those described in N8110.60 / FAA.
- 1.2 Pilot in command should have the appropriate knowledge about:
 - a) Fundamentals of GPS navigation
 - i. Software use
 - ii. Hardware operations and GPS interfaces with other navigation systems
 - iii. Data base update procedures
 - iv. Equipment limitation
 - b) GPS operation
 - c) Before departure procedures
 - d) Enroute procedures
 - e) Emergency/contingency procedures

- 1.3 Uruguayan registered aircraft could use GPS as primary navigation device and, must have the airworthiness certificate issued by the competent authority.

✦ ONBOARD EQUIPMENT

1.4 ✦ GPS Double navigation system for oceanic flights.

In accordance with ICAO Annex 6 to the Convention on International Civil Aviation, Chapter 7 Communication Equipment and Onboard Navigation, paragraph 7.2.4 and to the Notice N8110.60 of F.A.A., point 4 paragraph f, Performance Requirements, the aircraft must be equipped with double GPS navigation system which must comply with technical specifications detailed in paragraph 5.2 of that AIC.

1.5 ✦ Technical specifications.

GPS navigation systems used over oceanic airspace flights must comply with technical requirements specified in FAA Technical Standard Order C-129a (Airborne Supplemental Navigation Equipment Using the GPS) of 20 FEB 96, with those contained in Notice N8110.6 of FAA (GPS as a Primary Means of Navigation for Oceanic/Remote Operations) of 4 DEC 96 and must have been installed in accordance with FAA Circular AC-20-130a (Airworthiness Approval of Navigation or Flight Management System Integrating Multiple Navigation Sensors) and/or to Circular AC 20-138 of FAA (Airworthiness Approval of GPS Navigation Equipment for Use as a VFR and IFR Supplemental Navigation System) of 25 MAY 94, as appropriate.

In addition, the aircraft must have the GPS navigation systems connected with FMS, or Auto Pilot, or Flight Director.

✦ REQUIRED GPS SATELLITE GEOMETRY

1.6 ✦ Overview

GPS navigation accuracy depends mostly of satellite geometry related with the receiver.

A minimum of four satellites simultaneously over horizon to obtain a three dimension fix (3-D).

RAIM technique could be used if five satellites are in a proper position range with the receiver, so five independent positions could be calculated. If the information compared between them does not fit, the receiver deduces that one satellite is giving incorrect information, and a warning light turns on the equipment panel (failure detection).

If there are six or more satellites in range, more positions could be calculated and receiver could identify exactly which satellite fails and exclude it from position calculations (failure exclusion).

From the foregoing it is clear that pilots should take into consideration that if there are only four satellites in view of receiver in case of any defective, such failure will not be reported by the receiver.

1.7 Procedures in case of GPS navigation failure

(Ref. Order 8400.10 of FAA Appendix 4 HBAT 95-09 "Guidelines for Operational Approval of GPS to Provide the Primary means of Class II Navigation in Oceanic and Remote Areas of Operation")

- a) **Lost of navigation function (*four satellites in sight or less*)**
If GPS receiver indicates a lost of navigation warning, the pilot will use immediately dead reckoning navigation (D/R) until GPS navigation could be reestablished.
- b) **Lost of RAIM (*five satellites in sight or less*)**
If GPS receiver indicates lost of RAIM, navigation integrity will be obtained by comparing GPS position with an extrapolated calculated position of last verified position against true airspeed, heading and estimated winds. If both positions do not fit within 10 NM, pilot will reassume immediately dead reckoning navigation (D/R) until the excluding function or navigation integrity reappear.
- c) **Fault detection warning (*less of 6 satellites in sight*)**
If GPS receiver indicates a fault detection warning (faulty satellite), pilot could continue navigation by using positions obtained by GPS, if monitors continually the actual dead reckoning of position ambiguity which appears on GPS display and was obtained from Failure Detection and Exclusion algorithm (FDE). If that value exceed 10 NM or is not available, the pilot will immediately reassume dead reckoning navigation (D/R) until faulty satellite was excluded.
In that three examples, if navigate with GPS is not possible, the pilot will report to ATC "**GPS navigation lost**" and when reassume GPS navigation "**GPS navigation reestablished**"

FLIGHT PLAN

In the Flight Plan form blank 10 the letter "R" must be inserted. In blank 18 the following letters must be inserted NAV/GPS-RNAV when GPS IFR receivers are available for oceanic airspace flights.

DEFINITIONS

- a) **Algorithm**
Step by step procedure to solve problems.
- b) **Augmentation**
Technique that provides the system with input data (input) in addition to those derived from the(s) principal(s) constellation(s) in a new service to provide distance information, or corrections or improvements in input data. This allows the system to improve performance in relation to that be obtained only with the basic information (raw data) from the satellites.
- c) **Continuity**
The ability of the whole system to perform its function without interruption during the planned period of operation. The risk of continuity is the probability that the system is interrupted and not provides guidance information for the proposed operation

d) **☛ (Fault Detection and Exclusion - FDE)**

GPS equipment capability for:

1. Satellite failure detection which affects navigation, and
2. Possibility to exclude these satellite automatically from the navigation solution

e) **☛ Availability**

Percentage of time that services are usable navigation system.

f) **☛ Integrity**

Navigation system capability to send appropriate warnings to users when the system must not be used with navigation objectives.

g) **Airborne Autonomous Integrity Monitoring - AAIM**

Onboard augmentation technique which is enhanced by the availability of the navigation function. This includes the INS, who can impersonate the GNSS antennas when aircraft satellite equipment are masked or when there is sufficient number of satellites to reach a more accurate time reference, a particular combination of data entry sensor through filtering techniques, and so on.

h) **☛ Receiver Autonomous Integrity Monitoring - RAIM**

Onboard augmentation technique for which a receiver / processor determines the integrity of GPS navigation signals using only GPS signals or the signals augmented with altitude information. This determination is obtained through an ongoing monitoring of the received signals. At least one other satellite, in addition to those used for navigational purposes, should be available to the receiver to perform RAIM.

i) **☛ Dead Reckoning - D/R**

Navigation made only by means of calculations based on airspeed, course, heading, wind direction and speed, ground speed and elapsed time

j) **☛ Accuracy**

It is the ability of a navigation aid to warn the pilot that it has failed or is giving incorrect markings.

k) **☛ Flight Management System - FMS**

Interactive computer system and display navigation to assist the pilot in flight with maximum economy by a route previously planned, defined in terms of waypoints and altitude changes.

l) **☛ Global Navigation Satellite System - GNSS**

Global System for determining position and time, which includes one or more satellite constellations, receivers onboard monitoring systems and system integrity, augmented as necessary to support the required navigation performance for the actual phase of operations.

m) **☛ Main navigation system**

Navigation system approved for a given operation or phase of flight and must meet accuracy and integrity, but not with the availability and continuity. Security is achieved by limiting flights to specific time periods and with certain procedural restrictions.

n) Airborne-Based Augmentation System - ABAS

GPS Built-in receivers/processors augmentation system installed onboard the aircraft. Could be AAIM or RAIM type.

INFORMATION ABOUT GPS CONSTELLATION STATUS

Information about GPS NAVSTAR satellites constellation availability could be obtained by contact U.S. Coast Guard Center, internet address:

• <http://www.navcen.uscg.gov/>

WARNING

It is the responsibility of the pilot in command of the aircraft which plans to conduct an oceanic airspace flight to verify their GPS receivers are in comply with FAA/TSO-129A, and are installed according to the AC 20-130A and / or 20-138 / FAA and meet the performance requirements of the N8110.60/FAA.

It will also be responsibility of the pilot in command to meet the other requirements of Chapter ENR 4.2 Global Navigation Satellite System (GNSS).

It should be understood that República Oriental del Uruguay is not responsible for the continuity of the GPS signals

**INTENTIONALLY
LEFT BLANK**

ENR 4.3 NAME-CODE DESIGNATORS FOR SIGNIFICANT POINTS

| <i>Name-code designator</i> | <i>Coordinates</i> | <i>ATS routes or other routes</i> | <i>Remarks, including supplementary definition of positions where required</i> |
|-----------------------------|-----------------------------|-----------------------------------|--|
| 1 | 2 | 3 | 4 |
| AKNUS | 341957.96S 0575012.96W | SUCA IAC RNAV (GNSS) 13 | Nil |
| AKPOD | 322757S 0533341W | UM540 | Nil |
| AKSET | 342848.96S 0575552.98W | SUCA IAC RNAV (GNSS) 13 | Nil |
| ALBES | 332209.24S 0564234.20W | SUDU IAC RNAV (GNSS) 10 | Nil |
| ALDUS | 313429.83S 0580641.90W | SUSO IAC RNAV (GNSS) 05 | Nil |
| ANKIR | ☛310617.95S ☛0553644.03W | ☛SURV IAC RNP RWY 05 IF | Nil |
| ANLUN | 304230S 0563605W | UL324 UM418 | Nil |
| ANRUP | 334741S 0561209W | UM402 UN857 | Nil |
| ARAPE | 310100S 0572213W | W19 W20 | Nil |
| AROMO | 333002S 0550244W | A310 W18 | Nil |
| ASIVA | 335026S 0562035W | P526 W19 | Nil |
| ASUMA | 315203S 0540919W | A310 | Nil |
| BISOK | 325246S 0564041W | P526 W19 | Nil |
| ☛BOBUM | ☛305426.27S ☛0552422.02W | ☛SURV IAC RNP RWY 23 FAF | Ni |
| BOLAT | 333949S 0540039W | A305 | Nil |

| <i>Name-code designator</i> | <i>Coordinates</i> | <i>ATS routes or other routes</i> | <i>Remarks, including supplementary definition of positions where required</i> |
|-----------------------------|---------------------------|-----------------------------------|--|
| 1 | 2 | 3 | 4 |
| BUTSI | 331149.53S 0562459.14W | SUDU IAC RNAV (GNSS) 21 | Nil |
| CUARA | ☛302313S ☛0562750W | UL324 | Nil |
| DAGUS | 350217S 0560725W | A306 A310 UL405 UM792 | Nil |
| DAMEV | 322001.29S 0580324.23W | SUPU IAC GNSS (RNAV) 20 | Nil |
| DAMPA | 312935.18S 0580212.84W | SUSO IAC RNAV (GNSS) 05 | Nil |
| DARKA | 351758S 0561502W | A310 UM792 | Nil |
| DAYMA | 314714S 0570514W | UL324 UP526 | Nil |
| DIDER | 332152.08S 0563636.48W | SUDU IAC RNAV (GNSS) 10 | Nil |
| DORVO | 344258S 0573102W | A305 UM424 UN857 | Nil |
| DRACA | 342524S 0562227W | W25 | Nil |
| EGDOK | 343214.89S 0573508.94W | SUCA IAC RNAV (GNSS) 31 | Nil |
| EGUPI | 342519.80S 0575054.30W | SUCA IAC RNAV (GNSS) 13 | Nil |
| EKEKI | 310706S 0561124W | W16 W25 | Nil |
| ENSAS | 315440S 0570849W | UL324 UM534 | Nil |
| ENTED | 331047S 0563348W | UN741 UP526 | Nil |
| ESORI | 331625.70S 0562720.32W | SUDU IAC RNAV (GNSS) 21 | Nil |

| <i>Name-code designator</i> | <i>Coordinates</i> | <i>ATS routes or other routes</i> | <i>Remarks, including supplementary definition of positions where required</i> |
|-----------------------------|---------------------------|-----------------------------------|--|
| 1 | 2 | 3 | 4 |
| GAMOT | 305640S 0552937W | UA432 UM654 | Nil |
| GEBAR | 342423.34S 0575302.34W | SUCA IAC RNAV (GNSS) 13 | Nil |
| GEMOT | 332058.38S 0561843.92W | SUDU IAC RNAV (GNSS) 10 | Nil |
| GEMSU | 301600S 0573818W | P526 UP526 W19 | Nil |
| GORIO | 330747S 0570139W | W23 | Nil |
| GUTUD | 302245.87S 0564220.45W | SUAG IAC RNAV (GNSS) 11 | Nil |
| GUVIN | 342302S 0561737W | W23 | Nil |
| GUVON | 335332S 0572303W | UL417 UN741 | Nil |
| ILMUL | 320844S 0562832W | UM402 UM654 | Nil |
| ILNAN | 302323.06S 0563636.27W | SUAG IAC RNAV (GNSS) 11 | Nil |
| ILSIM | 314400S 0563232W | UM402 UM534 | Nil |
| ISALA | 314034S 0542647W | A314 | Nil |
| KORBU | 330726S 0555805W | W15 | Nil |
| KOSPI | 344202S 0563856W | W29 | Nil |

| <i>Name-code designator</i> | <i>Coordinates</i> | <i>ATS routes or other routes</i> | <i>Remarks, including supplementary definition of positions where required</i> |
|-----------------------------|-----------------------------|-----------------------------------|--|
| 1 | 2 | 3 | 4 |
| KUDEN | ☛310234.38S ☛0553250.46W | ☛SURV IAC RNP RWY 05 FAF | Nil |
| KUGUG | 342939.60S 0574103.40W | SUCA IAC RNAV (GNSS) 31 | Nil |
| KUKEN | 341058S 0581302W | UL324 UM654 | Nil |
| LITOS | 342732S 0544334W | A305 | Nil |
| LOLIL | 315259S 0570303W | UM534 UP526 | Nil |
| LOMID | 335308S 0561945W | UN857 UP526 | Nil |
| LUCIO | 350318S 0555218W | A306 UL405 | Nil |
| MEVIV | 311839S 0571546W | W19 W25 | Nil |
| MIGOT | 305248S 0564042W | UM402 UL324 | Nil |
| MIMOL | 322033S 0541319W | W3, W18, UM792, UN857 | Nil |
| MOLBI | 342050S 0553018W | UM540 | Nil |
| MONSA | 342056S 0561053W | P526 W19 UP526 | Nil |
| MUKIB | 304311S 0564213W | UM418 UM402 | Nil |
| MUMET | 330038S 0560353W | A314 | Nil |
| NEGIR | 334054S 0565702W | A314 | Nil |
| NEMAS | 343503S 0571111W | W29 | Nil |

| <i>Name-code designator</i> | <i>Coordinates</i> | <i>ATS routes or other routes</i> | <i>Remarks, including supplementary definition of positions where required</i> |
|-----------------------------|-----------------------------|-----------------------------------|--|
| 1 | 2 | 3 | 4 |
| NIGRO | 315744S 0535501W | UM792 | Nil |
| NIMBO | 343049S 0562932W | B555 UL417 | Nil |
| OGMAR | 331735S 0540856W | A309 | Nil |
| OGRUN | 320343S 0535034W | UN857 | Nil |
| OKBAM | ☛311001.41S ☛0554037.90W | ☛SURV IAC RNP RWY 05 IAF | Nil |
| OPSOS | 322418S 0565125W | P526 G680 | Nil |
| ORELO | ☛310216.57S ☛0554155.58W | ☛SURV IAC RNP RWY 05 IAF | Nil |
| OSIXO | ☛304642.06S ☛0552541.31W | ☛SURV IAC RNP RWY 23 IAF | Nil |
| PABOT | 341536S 0565134W | UL417 UN857 | Nil |
| PAPIX | 342458S 0580002W | A314 UN741 | Nil |
| PONPA | 335625S 0571859W | A314 B555 UA314 | Nil |
| PORLI | 313419S 0560010W | UM534 UM654 | Nil |
| PUKAL | ☛311019.54S ☛0553132.47W | ☛SURV IAC RNP RWY 05 IAF/MAHF | Nil |
| PUMIL | 323227S 0564820W | UM654 UP526 | Nil |
| RAVEL | 342802S 0544249W | UM424 | Nil |
| REBIN | 325758S 0570718W | W23 W27 | Nil |

| <i>Name-code designator</i> | <i>Coordinates</i> | <i>ATS routes or other routes</i> | <i>Remarks, including supplementary definition of positions where required</i> |
|-----------------------------|---------------------------|-----------------------------------|--|
| 1 | 2 | 3 | 4 |
| REGOV | 341956S 0560029W | W15 | Nil |
| RIONE | 330330S 0565830W | W27 | Nil |
| RODOV | 305004S 0574817W | UM418 | Nil |
| SANDU | 321204S 0573323W | W23 | Nil |
| SASKU | 304754S 0572651W | UM418 UP526 | Nil |
| SEKLO | 300629S 0564758W | UM402 | Nil |
| SEKMI | 312605S 0575903W | W20, W23, W25 | Nil |
| SIMOL | 321130.14S 0580150.34W | SUPU IAC RNAV (GNSS) 20 | Nil |
| SISEL | 333654S 0555903W | W15 | Nil |
| SOLIS | 342057S 0552529W | A309 | Nil |
| SUGRA | 321234S 0581124W | UM534 | Nil |
| SURBO | 342658S 0575738W | Corredor SURBO VFR | Nil |
| TELAK | 342034S 0553938W | A310 W18 UM792 | Nil |
| TEMAL | 314501S 0555526W | W15, W16 | Nil |
| TESAD | 333931S 0570052W | W25 | Nil |
| TIDRU | 340057S 0550102W | A309 | Nil |

| <i>Name-code designator</i> | <i>Coordinates</i> | <i>ATS routes or other routes</i> | <i>Remarks, including supplementary definition of positions where required</i> |
|-----------------------------|-----------------------------|-----------------------------------|--|
| 1 | 2 | 3 | 4 |
| TILDA | 333820S 0574432W | UL417 UM654 | Nil |
| TOGAL | 333131S 0575406W | UL417 UL324 | Nil |
| TOKAM | 344653S 0564256W | A305 UM424 | Nil |
| TOLEP | 324341S 0530510W | UM424 UM661 | Nil |
| TOSIB | 342106S 0551955W | UM661 | Nil |
| TULIO | 313223S 0543001W | G680 | Nil |
| UBLAM | 303935S 0560944W | UM418 | Nil |
| UGELO | 324042S 0530850W | A305 | Nil |
| UGIMI | 345858S 0565302W | A306 UL405 | Nil |
| UGRES | 321627.18S 0580244.75W | SUPU IAC GNSS (RNAV) 20 | Nil |
| UGURA | 323525S 0531922W | A309 | Nil |
| UMRUD | 312632S 0543841W | UN741 | Nil |
| URURI | 311810S 0550726W | UM534 | Nil |
| ☛UTNAR | ☛305442.95S ☛0551517.69W | ☛SURV IAC RNP RWY 23 IAF/MAHF | Nil |
| ☛VANUD | ☛305042.32S ☛0552029.41W | ☛SURV IAC RNP RWY 23 IF | Nil |

| <i>Name-code designator</i> | <i>Coordinates</i> | <i>ATS routes or other routes</i> | <i>Remarks, including supplementary definition of positions where required</i> |
|-----------------------------|-----------------------------|-----------------------------------|--|
| 1 | 2 | 3 | 4 |
| VUDUP | 325854S 0562018W | UM402 UN741 | Nil |
| VUKAS | 342013S 0560637W | UM402 | Nil |
| VULRO | 335053S 0563637W | W23 | Nil |
| ☛XUXIP | ☛304658.24S ☛0551637.10W | ☛SURV IAC RNP RWY 23 IAF | Nil |

ENR 4.4 AERONAUTICAL GROUND LIGHTS - EN ROUTE

| <i>Name IDENT (coordinates)</i> | <i>Type and intensity (sparks)</i> | <i>Characteristics</i> | <i>Operating Hours</i> | <i>Remarks</i> |
|--|--|-----------------------------|----------------------------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Adami TWR 344700S/0561600W (*) | ☛ ABn ☛ W 1000 | ☛ Gp Flg (WGW) | ☛ HN IMC | |
| Cabo Polonio (Polonio Cape) 342400S/0534700W (*) | Marine 290.600 | Flg W | HN | |
| Cabo Santa María (Santa María Cape) 344000S/0540900W (*) | Marine 480.000 | Flg W ev 60 sec W F | HN | |
| Capitán Curbelo TWR 345100S/0550600W (*) | ABn 300 | Gp Flg W G ev 5 sec | HN IMC | |
| Carrasco Terminal Building 344500S/0500200W (*) | ABn W 880 | Gp Flg W G W ev 8 sec | HN IMC | |
| Cerro Montevideo 345300S/0561600W (*) | Marine 480.000 | Gp Flg W ev 10 sec 3 Flg | HN | |
| Colonia del Sacramento 342800S/0575200W (*) | Marine 620 | Flg R ev 9 sec | HN | |
| Farallón 342800S/0575600W (*) | Marine 1.300 | Gp Flg W ev 10 sec 2 Flg | HN | |
| Isla de Flores 345700/0555600W (*) | Marine 200.000 | Gp Flg W ev 16 sec 2 Flg | HN | |
| Isla de Lobos 350200S/0545300W (*) | Marine 1.084.800 | Flg W ev 5 sec F R al SE | HN | |
| La Panela 345500S/0562700W (*) | Marine 600 | Gp Flg W ev 10 sec | HN | |
| Punta Brava 345600S/0561000W (*) | Marine 14.400 | Flg W ev 10 sec | HN | |
| Punta del Este 345800S/0545700W (*) | Marine 43.000 | Flg W ev 8 sec | HN | |

| <i>Name IDENT (coordinates)</i> | <i>Type and intensity (1 000 candelas)</i> | <i>Characteristics</i> | <i>Operating Hours</i> | <i>Remarks</i> |
|--|--|------------------------|----------------------------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Punta José Ignacio 345100S/0543800W (*) | Marine 1.150 | Flg W ev 2 sec | HN | |
| Punta Palmar 340400S/0533300W (*) | Marine 1.150 | Flg W ev 6 sec | HN | |