



# SANTA MARIA OCA STANDARD OPERATING PROCEDURE (SOP)

Not for operational use!  
For Flight Simulation only!



**IVAO PT**  
**ATC Operations Department**  
**LPPO Santa Maria FIR**



## REVISION HISTORY

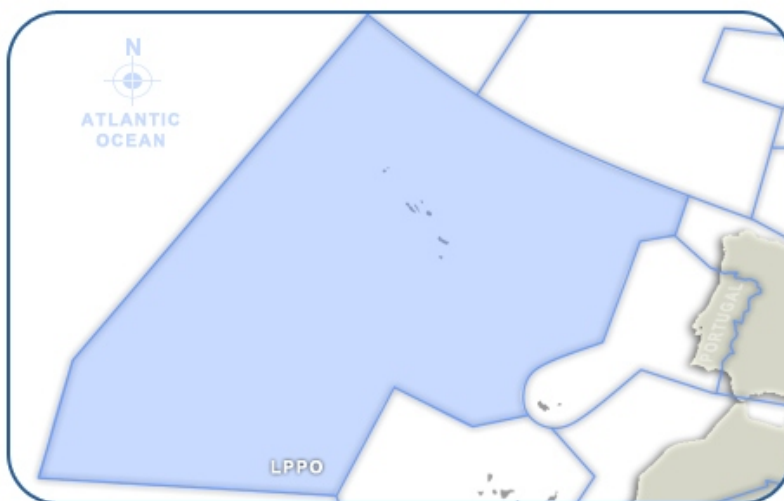
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## 1. THE SANTA MARIA FIR



Santa Maria FIR, LPP0 represented by ICAO, is a Concessional Control Area and almost entirely a Non Radar Area. All standard Procedures are important for the good functioning of the Oceanic FIR, as well as it guarantees the safety throughout the Portuguese Airspace.

LPP0 is one of the largest FIRs (Flight Information Region) in the world. And yet, it provides control to the nine airfields of the archipelago of Azores (A total of nine Islands, one airfield in each Island.), as well as it provides control to some of the NATs (North Atlantic Tracks). In summary, it offers a huge capacity to control hundreds of flights per day: In and out of the archipelago of Azores and Transatlantic flights to other destinations.

On this FIR, the Westbound/Eastbound RVSM system is implemented. Hence, flights in a direction range between 180 degrees and 359 degrees should fly on even flight levels, whilst flights in a direction range of 000 degrees to 179 should fly on odd flights levels.

## 2. DESCRIPTION OF AIRSPACE AND SECTORS

Santa Maria Oceanic FIR covers the eastbound zone of the Atlantic from 040W to the Lisboa FIR (LPPC), being West of 040W the New York Oceanic FIR (KZQY). It also makes frontier with Canarias FIR (GCCC), Gander FIR (CZQX), Shanwick FIR (EGGX), Sal FIR (GVSC) and Piarco FIR (TTZP). By North of 045N the Atlantic is controlled by Shanwick and Gander.

### ***Santa Maria Oceanic Control Area Policy***

LPP0 OCA is divided into three ATC Positions: Santa Maria (LPP0\_CTR), Santa Maria Radio (LPP0\_OC\_CTR) and Santa Maria Clearance Delivery (LPP0\_D\_CTR). Santa Maria Radar (TMA), partly radar, partly WAM serviced, has its own sector: LPAZ\_CTR frequency 132.150MHz.

### ***Santa Maria OCA***

For the purpose of the policy, "Santa Maria OCA" refers to the LPP0 positions.

Santa Maria LPP0\_CTR (Oceanic and TMA Controller) is known as the "master" position. When online, if there are no other sectors manned, this station will provide a band boxed coverage to the

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entire Oceanic Control Area and TMA area. Controllers must be able to comply and respect the local and general oceanic procedures. Before assuming control, the controller shall coordinate with adjacent FIRs/Controllers. Frequency is 127.900 (12790.0 kHz).

Santa Maria Radio LPPO\_OC\_CTR (Oceanic Controller) will provide a band boxed coverage to the entire Oceanic Control Area. Controllers can only control traffic overflying Santa Maria TMA over FL285. At anytime an airplane is to enter TMA airspace and/or radar coverage, the same should be handedoff to LPAZ\_CTR or to UNICOM if the TMA sector is not online. Frequency is 127.900 (12790.0 kHz).

Santa Maria Clearance Delivery (LPPO\_D\_CTR) is as the name states, the Santa Maria Oceanic Clearance Delivery facility. It must not be open if LPPO\_CTR or LPPO\_OC\_CTR is not already online. The Clearance Delivery controller must not give a clearance without previously coordinate with the Oceanic Controller. The Oceanic Controller has the right to restrict any segment of an oceanic clearance. Frequency is 132.075 (13207.5 kHz).

### 3. FLIGHT PLANNING

#### 3.1 EQUIPMENT

All the crews intended to operate within Santa Maria OCA should note if their aircraft have the following equipment and have a properly filled flight plan:


- HF Radio (H in Field 10a)
- ADS-C (D2 in Field 10b if with FANS 1/A capabilities)
- CPDLC (J2 to J7 in Field 10a if with FANS 1/A capabilities)
- REG/XXXXX (Field 18)
- SEL/XXXX (Field 18)

#### 3.2

To improve the safety and efficiency in service provision, from 45N013W to 2218N04000W, along Santa Maria's East and South FIR boundaries, all operators shall flight plan to enter and leave the LPPO FIR through the designated FIR boundary points.

#### 3.3

With the exception of the recommendation to make use of the existing designated boundary waypoints, within Santa Maria FIR, all flights which generally route in an eastbound or westbound direction should normally be flight planned so that specified ten degrees of longitude (20°W, 30°W, 40°W etc.) are crossed at whole degrees of latitude; and all generally northbound or southbound flights should normally be flight planned so that specified parallels of latitude spaced at five degree intervals (25°N, 30°N, 35°N etc.) are crossed at whole degrees of longitude.

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### 3.4 NAT OTS MESSEGES

#### 3.4.1

Day Tracks within Santa Maria FIR, whenever implemented, will be included in the Shanwick OTS message, while Night Tracks, whenever implemented, will be included in the Gander OTS message.

#### 3.4.2

The current NAT Tracks are available here: [blackswan.ch/nat](http://blackswan.ch/nat)

#### 3.4.3

For flights conducted along one of the Organized Tracks from the entry point into the NAT Flight Information Regions to the exit point, the Organized Track shall be defined in the Flight Plan by the abbreviation "NAT" followed by the code letter assigned to the track.

#### 3.4.4

For flights conducted along one of the Organized Tracks from the entry point into the NAT flight Information Regions to the exit point, the estimated time of arrival only over the first Oceanic FIR boundary shall be specified in the item 18 of the Flight Plan (e.g. EET/LPPO0045). For turbo-jet aircraft operating in the OTS the Mach number planned to be used shall be specified in the item 15 of the Flight Plan.

## 4. OCEANIC CONTROL PROCEDURES

The OCC position is responsible for maintaining required separation within the Oceanic Control area by using the position reports. OCC shall also approve/deny all requests for altitude and/or speed changes.

IvAc shall only be used to communicate via text to other pilots and controllers.


The OCC shall process and approve all oceanic clearances.

### 4.1 MINIMUM SEPARATION

#### 4.1.1 VERTICAL

Minimum vertical separation within MNPS airspace is 1,000 feet up to and including FL410, and 2,000 feet above that.

Supersonic flights require 4,000 feet vertical separation from all other traffic if no other form of separation exists. This applies at any level for aircraft at supersonic speeds.

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#### 4.1.2 LATERAL

Minimum lateral separation is sixty (60) Nautical Miles.

Parallel tracks which are spaced apart by one (1) degree, and which change latitude by no more than two (2) degrees over a longitude of ten (10) degrees are deemed to be separated.

Example: tracks from 50N020W to 52N030W and 49N020W to 51N030W are separated. 52N010W to 55N020W and 51N010W to 54N020W are not separated.

NATs are normally defined so that they do not change latitude by more than 2 degrees for each 10 degrees longitude difference thereby ensuring separation.

#### 4.1.3 LONGITUDINAL

Minimum longitudinal separation for aircraft on the same track is ten (10) minutes flying time.

Example: An aircraft passing 49N040W at FL380 must not be followed by another at the same level on the same track until ten minutes have elapsed after the first one passed that point.

Aircraft on crossing tracks at the same level must be fifteen (15) minutes apart at the point where their tracks cross.

#### 4.1.4 SPEED DIFFERENCES

Aircraft with different speeds on the same track/FL will gradually get closer or further apart. It is imperative to monitor this change of spacing closely for loss of separation. Aircrafts are requested to maintain the cleared speed given with the oceanic clearance.

When calculating initial spacing use the following formula: Slow followed by fast: Add one (1) minute to the standard for every increase of 0.01 Mach number of the second aircraft.


Example: M0.80 followed by M0.84 requires FOURTEEN minutes at ocean entry same track same level.

Fast followed by slow. Subtract one (1) minute from the standard for every decrease of 0.02 Mach number of the second aircraft. The minimum is 5 minutes at Oceanic entry.

Example: M0.84 followed by M0.80 requires a minimum of EIGHT minutes separation at ocean entry same track same level.

If two aircraft at different speeds are entering Oceanic Airspace at the same point but following tracks which will be separated by no less than sixty (60) nautical miles, or ten (10) degrees of longitude after entry the increase above is not required. The reduction above may still be applied.

If this situation occurs inside Oceanic Airspace (as opposed to at entry) then they are considered to be on crossing tracks and the fifteen (15) minute rule applies. There is no reduction to the fifteen minute rule for fast followed by slow on crossing tracks.

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#### 4.1.5 OPOSITE DIRECTION

The following is included in order to determine the separation requirement for aircraft wishing to climb/descend through the level of another aircraft opposite direction, whether on the same track or crossing tracks opposite direction.

Vertical separation must be established by a position calculated to be thirty (30) minutes flying time before the position/time at which it is estimated that they will pass one another, and must continue to exist until 30 minutes after they are estimated to have passed. If it can be positively established that they have passed, by both having reported passing the same Oceanic Reporting Point then the separation may be reduced to 10 minutes after they are known to have passed each other.

Example: Two aircrafts,

A: routing 55N010W 56N020W 57N030W  
 estimates 56N020W at 1234Z and 57N030W at 1304Z  
 B: routing 56N030W 56N020W 56N010W.  
 estimates 56N030W at 1224Z and 56N020W at 1254Z.

Inspection and calculation indicates that they will both be approximately one third of the way from 20W to 30W (or two thirds of the way from 30W to 20W) at approximately the same time (1244Z). So vertical separation must exist from 1214Z until 1314Z. Once (B) has reported coordinate 20W the pass will have been established and one or other may climb/descend through the other aircraft's level after 1304 (ten minutes after they are known to have passed).



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## 4.2 SELCAL

SELCAL shall be used whenever aircraft are equipped. On initial call-up SELCAL should be verified. Subsequent communications shall always be initiated with a SELCAL signal.

SELCAL watch on the assigned frequency should be maintained even in areas of the Region where VHF coverage is available and used for air / ground communications.

Normal SELCAL service is available on HF General Purpose 127.900 (12790.0 kHz).

To transmit a SELCAL signal enter .selcal [callsign] in the IvAc comm. box and transmit. If the SELCAL check fails the aircraft should be advised to monitor the frequency continuously.

## 4.3 SSR CODES

Unless otherwise directed by ATC, aircraft equipped with SSR transponders in North Atlantic Flight Information Regions, shall operate transponders continuously on mode A code 2000 regardless of direction of flight except that the last assigned code shall be retained for a period of 30 minutes after entry into NAT airspace.

NOTE: This procedure does not affect the use of special purpose codes 7500, 7600 and 7700 in cases of unlawful interference, radio failure or emergency.

## 4.4 SLOP

The Strategic Lateral Offset Procedure (SLOP) is now a Standard Operating Procedure throughout the North Atlantic (NAT) Region. This procedure mitigates collision risk and wake turbulence encounters. Pilots conducting oceanic flight within the NAT Region with automatic offset programming capability are recommended to fly lateral offsets of either 1 or 2 NM of centre line.

The introduction of very accurate aircraft navigation systems, along with sophisticated flight management systems, has drastically reduced the number of risk bearing lateral navigation errors reported in NAT airspace. Paradoxically, the capability of aircraft to navigate to such a high level of accuracy has led to a situation where aircraft on the same track but at a different levels, are increasingly likely to be in lateral overlap. This results in an increased risk of collision if an aircraft departs from its cleared level for any reason.


SLOP reduces risks by distributing aircraft laterally. It is applicable within the New York Oceanic, Gander Oceanic, Shanwick Oceanic, Santa Maria Oceanic, Sondrestrom and Reykjavik Flight Information Regions, and within the Bodo Oceanic Flight Information Region when flights are operated more than 185KM (100NM) seaward from the shoreline.

SLOP conforms to direction in the International Civil Aviation Organization's (ICAO) Procedures for Air Navigation Services - Air Traffic Management (PANS-ATM, Doc. 4444, 15.2.4) and is subject to the following guidelines.

Aircraft without automatic offset programming capability must fly the route centre line.

Operators capable of programming automatic offset may fly the centre line or offset one or two nautical miles right of centre line, allowing for 3 possible positions along route. Offsets are not to



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exceed 2NM right of centre line and offsets to the left of centre line are not permitted. An aircraft overtaking another aircraft should offset within the confines of this procedure, if capable, so as to create the least amount of wake turbulence for the aircraft being overtaken. The pilot should take into account wind and estimated wake vortex drift and time to descend. (Nominal descent rates for wakes are 300-600fpm).

Pilots should use whatever means is available (e.g. TCAS, communications, visual acquisition) to determine the best flight path to fly. Pilots may contact other aircraft on frequency 123.45MHZ, as necessary, to coordinate the best wake turbulence offset option.

Pilots may apply an offset outbound after the Oceanic Entry Point and must return to centre line before the Oceanic Exit Point. Position reports transmitted via voice should be based on the waypoints of the current ATC clearance and not the offset positions.

Aircraft transiting Oceanic Radar Areas may remain on their established offset positions. There is no ATC clearance required for this procedure and it is not necessary that ATC be advised.

#### 4.5 RADIO FREQUENCIES

All communications take place HF frequencies. As the current pilot/controller software doesn't support HF frequencies a modified decimal system has been arranged where the frequency 12237 kHz is entered as 122.37 in IvAc. Phraseology for the said frequency remains "one two two three seven kilohertz"

#### 4.6 COMUNICATION WITH AIRCRAFT

Communication with aircraft over the North Atlantic in real life are made by relay through the FSS stations. For the simulation purposes we will omit that fact and the radio operator and controller work is done by the same person.

### 5. OCEANIC CLEARANCES

#### 5.1 OCEANIC CLEARANCES REQUESTS

##### 5.1.1 FLIGHTS ENTERING THE NAT REGION THROUGH SANTA MARIA OACC


All operators should request their Oceanic Clearance from Santa Maria OACC, through Santa Maria Radio, on appropriate frequencies, at least 40 minutes before the ETO for the NAT Region boundary.

Departures from Aerodromes situated close to the NAT Region Boundary shall request Oceanic Clearance as soon as possible after departure.

All flights shall carefully monitor the estimate for the OCA entry point as the non-compliance with applicable ICAO provisions may result in re-clearance to a less economical flight profile.

Pilots should always endeavour to obtain Oceanic Clearance prior to entering Santa Maria Oceanic Control Area; however if any difficulty is encountered the pilot should not hold while awaiting Clearance unless so directed by ATC.

Flights from Lisboa shall inform Lisboa ACC of the flight level and entry point in the NAT Region, as contained in the Oceanic Clearance.

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## 5.1.2 FLIGHTS DEPARTING FROM AZORES

Flights departing Azores will not receive the full Oceanic Clearance whilst on ground. The appropriate tower must be informed of the intend flight level for oceanic crossing and will issue an initial flight level clearance. After departure Santa Maria Radar will assure the climb to the approved final level. The pilot will only receive the route and speed clearance later on, usually through Santa Maria Radio on HF.

All operators should inform the appropriate Tower about the intended flight level for oceanic crossing, as well as the Mach Speed if operating with a turbojet when requesting the ATC Clearance.

## 5.2 DELIVERY OF OCEANIC CLEARANCES

### 5.2.1 OCEANIC CLEARANCE DELIVERY FOR AIRCRAFT IN NAT TRACKS

Santa Maria ACC will issue an Oceanic Clearance for aircraft flying on NAT Tracks using the track letter, flight level and Mach number, without the current NAT Track message identification number.

Pilots are expected to include the NAT Track Message Identification number in the read back of the Oceanic Clearance. If the Track Message identification number is included on the read back there is no requirement for the pilot to read back the NAT Track coordinates.

If any doubts exist as to the Track Message Identification number or the NAT Track co-ordinates the pilot should request the full Track coordinates.

Similarly, if the pilot cannot correctly identify the Track Message Identification number, Santa Maria will read the cleared NAT Track co-ordinates in full and request a full read back of those coordinates.

The Oceanic Clearance may be issued beyond NAT Track limit and may include ATS route designators (ex: A637, A705, B646, B891, R513, R514, etc.). When ATS route designators are included as part of the Oceanic Clearance, there is no requirement for the pilot to read back the significant points that make up the ATS route.

**Example of ATC issued clearance:** Santa Maria Control clears RZO351 to [ABCD] via Track G BDA B646 GRATX. After passing GRATX, FPL route to destination. From KOMUT maintain flight level three five zero, Mach decimal eight zero.

**Example of pilot read back:** Santa Maria Control clears RZO351 to ABCD via Track G BDA B646 GRATX. After passing GRATX, FPL route to destination. From KOMUT maintain flight level three five zero, Mach decimal eight zero.

### 5.2.2 OCEANIC CLEARANCE DELIVERY FOR AIRCRAFT IN RANDOM ROUTES

Santa Maria ACC will issue an Oceanic Clearance for aircraft flying on random routes, specifying the full route details, flight level and Mach number.

Flights that operate partially along a published NAT Track are considered as random routes.

ATS route designators may be included as part of the Oceanic Clearance route details (ex: T16, A637, A705, B646, B891, R513, R514, etc.).

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Pilots are to read back the full details of the Oceanic Clearance as received although when ATS route designators are included as part of the Oceanic Clearance, there is no requirement for the pilot to read back the significant points that make up the ATS route.

### 5.2.3 OCEANIC CLEARANCE DELIVERY FOR AIRCRAFT DEPARTING FROM AZORES

After departure pilots shall expect final flight level assignment by Santa Maria Radar and Mach Number assignment and a detailed route confirmation on HF by Santa Maria Radio.

Pilots are to read back the full details of the speed and route as received although when ATS route designators are included in the clearance, there is no requirement for the pilot to read back the significant points that make up the ATS route.

## 6. POSITION REPORTS

### 6.1 POSITION REPORT WAYPOINTS

Position report for flights on routes not defined by designated reporting points shall be made at the significant route waypoints authorized by ATC on the Oceanic Clearance or on subsequent amended route clearances and should be transmitted to Santa Maria Radio.

### 6.2 DATALINK POSITION REPORTS

Santa Maria OAC accepts ADS-C Waypoint Position Reports. Additionally to Waypoint position reports, Santa Maria also accepts and processes periodic position reports. On IVAC we will assume the flight track as ADS-C track.


## 7. COMMUNICATION FAILURES

### 7.1 GENERAL

If so equipped, the pilot of an aircraft experiencing a two-way radio communications failure shall operate the secondary radar transponder on identity (Mode A) Code 7600 and Mode C. The pilot shall also attempt to contact any ATC facility and inform them of the difficulty and request they relay information to the ATC facility with whom communications are intended.

### 7.2 COMMUNICATIONS FAILURE PRIOR TO ENTERING NAT OCEANIC AIRSPACE

If operating with a received and acknowledged oceanic clearance, the pilot shall enter oceanic airspace at the cleared oceanic entry point, level and speed, and proceed in accordance with the received and acknowledged oceanic clearance. Any level or speed changes required to comply with the oceanic clearance shall be completed within the vicinity of the oceanic entry point. If operating without a received and acknowledged oceanic clearance, the pilot shall enter oceanic airspace at the first oceanic entry point, level and speed, as contained in the filed flight plan and proceed via the filed flight plan route to landfall. That first oceanic level and speed shall be maintained to landfall.

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## 7.3 COMMUNICATIONS FAILURE PRIOR TO EXITING NAT OCEANIC AIRSPACE

If cleared on filed flight plan route, the pilot shall proceed in accordance with the last received and acknowledged oceanic clearance including level and speed, to the last specified oceanic route point, normally landfall, then continue on the filed flight plan route. The pilot shall maintain the last assigned oceanic level and speed to landfall. After passing the last specified oceanic route point, the pilot shall conform with the relevant State procedures/regulations.

If cleared on other than flight plan route, the pilot shall proceed in accordance with the last received and acknowledged oceanic clearance, including level and speed to the last specified oceanic route point, normally landfall. After passing this point, the pilot shall conform with the relevant State procedures/regulations and rejoin the filed flight plan route by proceeding, via the published ATS route structure where possible to the next significant point ahead as contained in the filed flight plan. directly to the next significant point ahead of the track of the aircraft as contained in the filed flight plan. After passing this point conform with the relevant State procedures/regulations.

## 8. DATALINK SERVICES

### 8.1 INTRODUCTION

Within Santa Maria Oceanic Control Area (OCA), data link services for Air Traffic Control (ATC) purposes are available for suitable equipped aircraft. These services include FANS1/A functions as Automatic Dependent Surveillance Contracts (ADS-C) and Controller Pilot Data Link Communications (CPDLC).

### 8.2 FANS 1/A APPLICATIONS


These applications will be available after the proper establishment of a logon to the Santa Maria OACC. ADS contracts and CPDLC connections are automatically initiated by ground systems after receiving the AFN logon initiated by flight crews or by automatic transfer from other ATS Unit.

#### 8.2.1 ADS-C

ADS-C is a data link service for use by Santa Maria OACC in which aircraft automatically transmits via an air-ground data link, aircraft position-related data derived from on-board navigation and position fixing systems. In IVAC we will assume aircraft equipped track as ADS-C track.

#### 8.2.2 CPDLC

Is a data link service that allows FANS 1/A equipped aircraft the exchange of data link messages between pilots and controllers. Communications can be conducted via a defined message element (a message element whose content and format are pre-determined) or via a free text message element, usually referred as a free-text message (a message element whose content is variable, i.e., composed by the sender). Pilots shall not use a free-text message if a standard message exists for the purpose of the required communication.

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### 8.3 GENERAL REQUIREMENTS

To use ADS-C/CPDLC aircraft must be FANS 1/A equipped.

### 8.4 CONNECTION INFORMATION FOR SANTA MARIA OCA DATALINK SERVICES

For ADS/CPDLC the logon address of Santa Maria OACC is the ICAO four letters designator LPPO.

### 8.5 GENERAL PROCEDURES

The backup system for the CPDLC service in the Santa Maria OCA is voice radio service provided by the Santa Maria Radio Station.

In order to assure that aircraft are always reachable via voice radio, flight crews shall always make a contact prior to the boundary with Santa Maria Radio Station to check the SELCAL and receive the frequencies allocation for the Santa Maria OCA and for the next ATS Unit, in accordance with flight crew procedures included in this document.

Flight crews should be aware that the requirements to establish successfully a CPDLC connection are different and depends from where the aircraft is entering the Santa Maria OAC airspace.

Entering from an airspace where CPDLC services are used:

Flights entering the Santa Maria OCA from airspace where CPDLC services are being received, such as Shanwick OAC, Gander OAC or New York OAC, do not need to perform another AFN logon, unless specified by any of those ATS Units, because the transfer of communications will occur automatically.

Entering from an airspace where CPDLC services are not used:


Flights entering the Santa Maria OCA from airspace where CPDLC services are not being received, such as Madrid ACC, Lisboa ACC, Canaries ACC, Sal ACC and Piarco ACC, should ensure that their ADS function is turned on and perform an AFN logon:

- a) 15 to 45 minutes prior to entering the airspace; or
- b) Prior to departure, for flights departing airports adjacent to or underlying the airspace.

Note: To avoid misunderstandings with oceanic clearance request procedures, flight crews are advised that they should verify the Portuguese AIP for the proper oceanic clearance request procedures, which may have different time requirements that should be complied.

Flight Crew: As stated before, flight crews shall contact the Santa Maria Radio Station on the proper or allocated HF or VHF frequencies prior to entering the Santa Maria OAC and identify the data link status of the aircraft using the term "CPDLC".

Flight crews should continue to use the data link term "CPDLC" until either the selective calling system (SELCAL) check has been completed or the frequency assignment has been received.

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On initial contact with the Santa Maria Radio Station the flight crews shall:

- a) not include a position report;
- b) use the data link term “CPDLC” after the aircraft call sign;
- c) state the name of the next OCA or flight information region (FIR) to be entered; and
- d) request the SELCAL check

**- Example:**

*Santa Maria Radio, Airline 251, CPDLC.*

*Airline 251, Santa Maria Radio, CPDLC, go ahead.*

*Santa Maria, Airline 251, CPDLC, Next Shanwick, request SELCAL check ABCD.*

*Airline 251, Santa Maria, CPDLC, Voice reports not required in LPPO, primary frequency 1234, secondary frequency 4567, next contact Shanwick on 1245, SELCAL ABCD coming up for check.*

*Santa Maria, Airline 251, SELCAL received, out.*

**Position Reporting:**

Flight crews are required to submit position reports via voice unless otherwise advised by Santa Maria Radio.

To reduce frequency congestion, when instructed “ VOICE REPORTS NOT REQUIRED IN SANTA MARIA OCA” flight crews should not send position reports via voice.

CPDLC flights that have been instructed “VOICE REPORTS NOT REQUIRED” are exempted from all routine voice meteorological reporting. Reports of unusual meteorological conditions such as severe turbulence should be made by voice to Santa Maria Radio. CPDLC should not be used for meteorological reports unless voice contact cannot be established.

**Radio Station Procedures:**

On the initial contact with the Santa Maria Radio Station, flight crews should expect that the radio operator:

- a) use the proper data link term after the aircraft call sign;
- b) advise the flight crew that voice reports are not required in the Santa Maria OCA
- c) allocate the primary and secondary frequencies to be used within the Santa Maria OAC;
- d) provides the frequency or frequencies for the next OCA/ FIR; and
- e) perform the SELCAL check.

For other voice communications, flight crews should expect that radio operator will use the standard ICAO procedures for voice communications.

## 8.6 SAFETY RELATED ISSUES

Attention is called to flight crew that the use of data link services do not exempt the requirement of establishing voice communications with Santa Maria Radio at or before the FIR Boundary, whether on HF or VHF, even if a CPDLC connection is established.

To avoid misunderstandings in the communication process all communications initiated on CPDLC should be concluded via CPDLC and communications initiated via voice should also be concluded on voice. In cases of messages initiated via CPDLC that creates uncertainties or doubts the dialog should be terminated with UNABLE and a new dialog should be initiated via voice.





## 9. SANTA MARIA SPECIFIC PROCEDURES

The overflying or arriving/departing traffic from azores islands should expect the allocation of a SSR Radar transponder code and a subsequent radar identification.

The SSR Radar station is located in Santa Maria Island and have a maximum theoretical range of 250 nm.

All the traffic within radar coverage should be transferred to Santa Maria Radio (TMA) if the position is open.

## 10. COORDINATION WITH OTHER ATC UNITS

### 10.1 COORDINATION WITH RADAR UNITS

SECTOR	INBOUND	OUTBOUND	PHRASEOLOGY
<b>Lisboa Control</b> LPPC_CTR 125.550 Mhz ABALO, IRKID, NAVIX, MANOX, LUTAK, KOMUT, GUNTI, ERPE, DETOX, BANAL, ARMED, RETEN	Oceanic clearances must be obtained by the latest 40 Minutes prior to entrypoint. Lisboa Control is therefore to release aircraft to meet that deadline accordingly.	A coordination message should be sent to Lisbon around 5 Minutes prior to reaching the exitpoint quoting Level, Speed, ETA for the point and destination.	ATC: "TAP123, reaching KOMUT contact Lisboa Control on 125.550 Megahertz." Pilot: "Reaching KOMUT, Lisboa Control on 125.550 Megahertz, TAP123."
<b>Canarias Control</b> GCCC_CTR 133.000 Mhz LAPTU, KUXOV, IXIKU, INSAD, GOBEG, RIPOD, PIBIL, OSLEV, NEXUX, KETID, TENKO	Oceanic clearances must be obtained by the latest 40 Minutes prior to entrypoint. Canarias Control is therefore to release aircraft to meet that deadline accordingly.	A coordination message should be sent to Canarias around 5 Minutes prior to reaching the exitpoint quoting Level, Speed, ETA for the point and destination.	ATC: "TAP123, reaching OSLEV contact Canarias Control on 133.000 Megahertz." Pilot: "Reaching OSLEV, Canarias Control on 133.000 Megahertz, TAP123."
<b>Sal Control</b> GVSC_CTR 119.700 Mhz XIBOT, VEPOP, ERNEK, ULTEM, BAMUX	Oceanic clearances must be obtained by the latest 40 Minutes prior to entrypoint. Sal Control is therefore to release aircraft to meet that deadline accordingly.	A coordination message should be sent to Sal around 5 Minutes prior to reaching the exitpoint quoting Level, Speed, ETA for the point and destination.	ATC: "TAP123, reaching ULTEM contact Sal Control on 119.700 Megahertz." Pilot: "Reaching ULTEM, Sal Control on 119.7 Megahertz, TAP123."
<b>Madrid Control</b> LECM_CTR 136.525 Mhz (Above FL 305) RETEM, MUDOS, KOPAS, HIDRA, PASAS	Oceanic clearances must be obtained by the latest 40 Minutes prior to entrypoint. Madrid Control is therefore to release aircraft to meet that deadline accordingly.	A coordination message should be sent to Madrid around 5 Minutes prior to reaching the exitpoint quoting Level, Speed, ETA for the point and destination.	ATC: "TAP123, reaching RETEM contact Madrid Control on 136.525 Megahertz." Pilot: "Reaching RETEM, Madrid Control on 136.525 Megahertz, TAP123."



## 10.2 COORDINATION WITH OTHER OCEANIC SECTORS

SECTOR	COORDINATION
<b>Shanwick / Gander</b>	Handoffs to and from Santa Maria should be coordinated on an individual basis as the majority of flights will be on random tracks. Ideally transfer of communications should occur on the 45N Parallel. <b>Caution:</b> When Santa Maria comes online, Shanwick radio must relinquish the normal frequency and switch to the backup frequency, i.e. 12035.0 Khz.
EGGX_SG_CTR	
12790.0 Khz	
<b>New York Oceanic</b>	Handoffs to and from New York Oceanic should be coordinated on an individual basis as the majority of flights will be on random tracks. Ideally transfer of communications should occur on the meridian 40W.
KZWY_E_FSS	
12212.0 Khz	
<b>Piarco Control</b>	Handoffs to and from Piarco Control should be coordinated on an individual basis as the majority of flights will be on random tracks. Ideally transfer of communications should occur when crossing the border.
TTZP_CTR	
12370.0 Khz	

## 11. ATIS

When controlling Oceanic please use this ATIS:

ATC Position: Santa Maria Radio

Remarks: CPDLC available / Clearance to be obtained NO LATER than 40 Mins prior to Entry / Position reports mandatory and to include: Callsign, Waypoint, Time, FL, Mach, NAME+ETA of next waypoint/ Name ONLY of waypoint thereafter / For further Info please consult [www.ivao.pt](http://www.ivao.pt)

Add if the position opened is LPPO\_CTR: Radar service available within a radius of 250nm centered on Santa Maria Island.

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