

HOLDING, APPROACH AND DEPARTURE PROCEDURES

1. GENERAL

A list of the applicable rules can be consulted in section GEN 1.6. In the sections below, a descriptive summary is offered to help airspace users, although if there is any discrepancy, the Rule will prevail over the content of the AIP. The content of this AIP section does not fulfil the quality requirements.

Civil holding, approach and departure procedures are based on those contained in ICAO DOC 8168-OPS/611 (PANSOPS).

Military holding, approach and departure procedures are based on those contained in APATC-1 and ICAO DOC 8168- OPS/611 (PANS/OPS).

Some of these procedures are liable to speed adjusting; the indicated speed admits a tolerance of ± 10 kt. As soon as speed adjusting is no longer necessary aircraft will be stated: "no ATC speed restrictions".

Pilots shall comply as closely as possible with the procedures specified in AD 2 and ENR 6. These procedures are considered noise abatement preferential routings. ATC shall be informed if for any reason a procedure cannot be performed.

READ-BACK OF CLEARANCES AND SAFETY-RELATED INFORMATION

1. The flight crew shall read back to the air traffic controller safety-related parts of air traffic control (ATC) clearances and instructions which are transmitted by voice. The following items shall always be read back:
 - i. ATC route clearances,
 - ii. clearances and instructions to enter, land on, take off from, hold short of, cross, taxi and backtrack on any runway;
 - iii. runway-in-use, altimeter settings, SSR codes, newly assigned communication channels, level instructions, heading and speed instructions; and
 - iv. transition levels, whether issued by the controller or contained in ATIS broadcasts.
2. Other clearances or instructions, including conditional clearances and taxi instructions, shall be read-back or acknowledged in a manner to clearly indicate that they have been understood and will be complied with.
3. The controller shall listen to the read-back to ascertain that the clearance or instruction has been correctly acknowledged by the flight crew and shall take immediate action to correct any discrepancies revealed by the read-back.
4. Voice read-back of CPDLC messages shall not be required, unless otherwise specified by the ANSP.
5. SERA.14001 shall be applied when standardized phraseology is not useful and, on that basis, it is expected that pilots, ATS personnel and other ground personnel use everyday language, which besides the clarity required by the aforementioned section of SERA, shall be as concise as possible, to a level that meets requirements of ICAO with regard to language proficiency required by the applicable legislation on personnel licenses.

2. ARRIVING FLIGHTS

TERMINAL ZONE

Area control service will clear IFR flights landing within a TMA to a specified point and will instruct them to contact with the ATS unit providing approach service.

Aircraft entering or overflying a TMA shall keep the flight paths indicated in the appropriate charts; a complete description of the pertinent arrival procedure may be obtained, on request, from the ACC. Nevertheless, the suitable ATS unit will clear aircraft to proceed on more direct routes to specific points whenever traffic permitting.

ENR 6 and AD 2 sections contain the arrival and overflying, standardized or not, specific IFR/VFR procedures of those terminal areas where they are defined.

CONTROL AND AERODROME TRAFFIC ZONES

VFR CROSSING:

VFR aircraft wishing to cross a control zone, or aerodrome traffic zone, shall proceed as follows:

- a. Contact radio with APP/TWR shall be established in the appropriate frequency, at least, 5 minutes before reaching the first VFR reporting point, and shall notify to APP/TWR of its intention to cross on VFR the corresponding CTR/ATZ.
- b. Normally, when aircraft is over the VFR reporting point, APP/TWR shall clear to cross the CTR/ATZ and shall indicate the way to follow, the altitude to maintain and, if necessary, it will provide essential traffic information during the aircraft permanence within the airspace to be crossed.
- c. Aircraft shall report to APP/TWR the entry and exit of CTR/ATZ and must maintain watch in the appropriate frequency while it is within the airspace to be crossed.

VFR ARRIVALS:

VFR flights entering to land within a CTR shall establish contact radio with the appropriate ATS unit over the reporting points indicated in the charts and they shall request clearance to enter in the CTR.

In certain cases, aircraft shall perform holdings in the above mentioned points before entering the CTR.

Under no circumstances runway approach areas should be crossed without prior permission from control tower.

AD 2 and ENR 6 sections contain specific visual approach procedures.

3. DEPARTING FLIGHTS

GENERAL

Flights departing from controlled aerodromes will receive initial ATC clearance from the control tower. For IFR flights, the clearance limit will normally be the aerodrome of destination and detailed instructions will be issued with regard to routes, turnings, etc. after taking-off.

ATC AND STARTUP CLEARANCE VIA DATA LINK (DCL)

A. INTRODUCTION

The DCL service provides an additional data link means of requesting and issuing ATC and startup clearance for departing aircraft, not intended to replace, but to co-exist with, voice communications.

In the event of any discrepancy, voice communications will prevail over data link.

The DCL service is compliant with the EUROCAE specification ED-85A and is available to all ACARS-equipped aircraft with a contract with the air communications service provider (ACSP) SITA and/or ARINC.

B. DCL MESSAGES

The following operational messages may be sent by the pilot:

- RCD: Request Clearance Departure message, which implicitly includes startup request.
- CDA: Clearance Departure Echoback message, equivalent to read back.

The following operational message may be sent by the controller:

- CLD: Clearance Departure message, including in field 9 additional information on the extent of the startup clearance or instructions for requesting it via voice.

The following system message is sent automatically by the ATC system:

- FSM: Flight System Message, a logical response that may be positive or negative.

C. OPERATIONAL PROCEDURE

The decision to use DCL or voice communications is entirely at the discretion of the pilot and/or controller involved, but DCL use is highly recommended to optimize voice communications and to avoid frequency congestion.

C.1 Step 1

Pilot shall request DCL ATC and startup clearance in advance according to the startup procedures of the local regulation for the departure aerodrome (AD 2, item 20).

The RCD (Request Clearance Departure) message shall include the following data:

- Aircraft call sign, according to the filed flight plan (FPL).
- Departure aerodrome.
- Parking position.
- Destination aerodrome.
- Letter of the ATIS information received.
- ICAO designator of the aircraft type.

Free text contained in the RCD message will not be considered by ATC. Any specific request shall be transmitted by voice.

C.2 Step 2

Pilot will receive one of the following messages:

RCD RECEIVED REQUEST BEING PROCESSED STANDBY

FSM automatically sent by the ATC system when an RCD message is correctly processed.

RCD REJECTED REVERT TO VOICE PROCEDURES*
RCD REJECTED ERROR IN MESSAGE REVERT TO VOICE PROCEDURES*

FSM automatically sent by the ATC system when any inconsistency is detected within the RCD message.

RCD REJECTED FLIGHT PLAN NOT HELD REVERT TO VOICE PROCEDURES*

FSM automatically sent by the ATC system when there is any inconsistency with flight plan data.

RCD REJECTED REQUEST TOO LATE REVERT TO VOICE PROCEDURES*

FSM automatically sent by the ATC system when an RCD message has been sent later than the parameter time specified for the departure aerodrome.

RCD REJECTED REQUEST TOO EARLY SEND REQUEST NN MIN BEFORE EOBT
RCD REJECTED REQUEST TOO EARLY SEND REQUEST NN MIN BEFORE TOBT

FSM automatically sent by the ATC system when an RCD message has been sent earlier than the parameter time specified for the departure aerodrome.

RCD REJECTED REQUEST ALREADY RECEIVED STANDBY

FSM automatically sent by the ATC system when an RCD message has been received previously and the reply by ATC is pending.

* When a REVERT TO VOICE PROCEDURES message is received, data link communication will be terminated and the revert to voice procedure will apply (see section 4).

C.3 Step 3

When an RCD is correctly processed, the controller may:

- a. Manually reject the request, sending the following FSM:
- b. **RCD RECEIVED CLEARANCE CANCELLED REVERT TO VOICE PROCEDURES***
 - * When a REVERT TO VOICE PROCEDURES message is received, data link communication will be terminated and the revert to voice procedure will apply (see section 4).
- c. Accept the request, sending a CLD message with the following fields:
 1. Aircraft call sign.
 2. Destination aerodrome.
 3. Departure runway.
 4. Standard Instrument Departure (SID).
 5. Note: The initial altitude will be the one specified in the SID description.
 6. Mode A SSR code (SQUAWK).
 7. ADT (Approved Departure Time).
 8. Note: ADT=CTOT of the flight, if any.
 9. Next frequency.
 10. Letter of the current ATIS information.
 11. Additional information, including the type of clearance issued in CLD message. Clearances requested via CLD will be granted based on time parameters from AIP local regulation of every aerodrome (AD 2, item 20).

STARTUP APPROVED

Startup approved and ATC clearance issued.

TSAT HHMM STAND BY ON XXX.XX FOR STARTUP

ATC clearance issued, TSAT information (CDM) and startup pending via voice.

TSAT HHMM READY MESSAGE SENT STAND BY ON XXX.XXX FOR STARTUP

ATC clearance issued (in the range TOBT±5'), READY message sent, TSAT (CDM) and startup information pending via voice.

CONTACT READY AT TOBT ON XXX.XXX

ATC clearance issued and startup request pending via voice according to TOBT (CDM).

STAND BY ON XXX.XXX FOR STARTUP

ATC clearance issued and startup pending via voice (no CDM).

CONTACT READY ACCORDING EOBT/CTOT ON XXX.XXX

ATC clearance issued and startup pending via voice according to EOBT/CTOT (n CDM).

C.4 Step 4

When a CLD message is received, pilot shall:

- a. Revert to voice to request a new clearance if any inconsistency is detected in the received message (see section 4).
- b. Respond via data link with a CDA (Departure Clearance Echoback) message if the clearance of the CLD message is considered correct.

If no CDA message is received within the time-out parameter, the CDA message is inconsistent with the previous CLD message, or an incorrect CDA message is received, data link communication will be terminated and one of the following FSM, respectively, will be received by the pilot:

RCD RECEIVED CLEARANCE CANCELLED REVERT TO VOICE PROCEDURES*

CDA REJECTED CLEARANCE CANCELLED REVERT TO VOICE PROCEDURES*

CDA REJECTED ERROR IN MESSAGE REVERT TO VOICE PROCEDURES*

* When a REVERT TO VOICE PROCEDURES message is received, data link communication will be terminated and the revert to voice procedure will apply (see section 4).

C.5 Step 5

When a correct CDA message is received, the ATC system will send the following FSM to the aircraft and terminate the data link communication:

CDA RECEIVED CLEARANCE CONFIRMED

D. REVERT TO VOICE PROCEDURE

Upon receiving a: "REVERT TO VOICE PROCEDURES" type of message, or if there is any inconsistency in the received clearance, the pilot shall contact the controller by voice to request a new clearance.

STANDARD INSTRUMENT DEPARTURES

The regulated departure procedures indicates, in an abbreviated way, the departure routes and the phraseology used by ATC in the initial clearances, in order to:

- a. simplify phraseology,
- b. give the pilot, prior take-off, the departure description in a written form.

The crossing flight levels/altitudes indicated in every clearance are the minimum at which each specific point must be crossed according to the route to be flown.

In order to provide vertical separation between aircraft, ATC may include in the initial clearance an specified flight level/altitude to be maintained up to a fixed point or time, that shall never be lower than those minimum ones above indicated.

A complete description of the pertinent departure procedure may be obtained by pilots when requested to the control tower prior to take-off.

The minimum climb gradient required for every SID is specified up to a flight level/altitude from which a minimum gradient of 3.3% must be maintained till the aircraft reaches the minimum altitude/flight level of the route to be flown.

A detailed description of these procedures is shown in ENR 6 and AD 2 sections.

4. OTHER RELEVANT INFORMATION AND PROCEDURES

4.1. HOLDINGS

Holding and approach procedures in use are based on the values and factors contained in Part II of the PANS-OPS.

Unless different conditions have been established for a specific procedure, the holding patterns shall be entered and flown as indicated below:

SPEED (Standard conditions)	
Up to FL140	170 kt (CAT A, B y H)
Up to FL140	230 kt
Above FL140 a FL200 inclusive	240 kt
Above FL200 a FL340 inclusive	265 kt
Above FL340	0.83 Mach

OUTBOUND TIME AND DISTANCE	
Up to FL140 inclusive	1 min
Above FL140	1 min 30 sec

DME distance is specified in the outbound leg where DME is available.

HOLDING PATTERN INCOMPATIBILITIES IN TERMINAL AREAS

COMPATIBILITY CRITERIA:

- Incompatibility has been considered up to FL240 (inclusive).
- The highest flight level or altitude on which both holding patterns are still compatible is indicated in the boxes.
- Empty boxes indicate that incompatibility does not occur up to the flight level considered.
- Headings in holding patterns are inbound.
- NC: Not compatible.

TMA ASTURIAS

CIRCUITO DE ESPERA // HOLDING PATTERN ON		ASTURIAS RWY 11		
		DVOR/DME VES	KUTIX	TUXAL
ASTURIAS RWY 11	DVOR/DME VES		NC	NC
	KUTIX	NC		FL120
	TUXAL	NC	FL120	

CIRCUITO DE ESPERA // HOLDING PATTERN ON		ASTURIAS RWY 29				
		NDB AV	DVOR/DME VES	LASIT	ROMIL	DORAR
ASTURIAS RWY 29	NDB AV		NC	NC	NC	NC
	DVOR/DME VES	NC		NC	NC	NC
	LASIT	NC	NC		FL070	-
	ROMIL	NC	NC	FL070		FL140
	DORAR	NC	NC	-	FL140	

NOTA // NOTE [TMA ASTURIAS]:

La incompatibilidad se ha considerado hasta FL155 (inclusive). // Incompatibility has been considered up to FL155 (inclusive).

En el caso de existir esperas RNAV y convencionales sobre un mismo waypoint, se ha considerado la más restrictiva. // In the case of RNAV and conventional waits on the same waypoint, it has been considered the most restrictive.

TMA ALMERÍA

CIRCUITO DE ESPERA // HOLDING PATTERN ON		ALMERÍA-LEAM									
		ROBIP	MAXET	NDB L AM 074°	VOR/DME AMR 285°	RIXAL	NIDON	MOLUV (RNAV)	ASNEP (RNAV)	NIDON (RNAV)	RIXAL (RNAV)
ALMERÍA-LEAM	ROBIP		FL100	NC	FL080	-	-	NC	-	-	-
	MAXET	FL100		FL090	NC	5000	-	NC	-	-	6000
	NDB L AM 074°	NC	FL090		NC	NC	NC	NC	NC (1)	NC	NC
	VOR/DME AMR 285°	FL080	NC	NC		NC	FL070	6000	NC (1)	NC	NC
	RIXAL	-	5000	NC	NC		-	-	-	-	NC
	NIDON	-	-	NC	FL070	-		-	NC (1)	NC	-
	MOLUV (RNAV)	NC	NC	NC	6000	-	-		FL100	-	-
	ASNEP (RNAV)	-	-	NC (1)	NC (1)	-	NC (1)	FL100		NC (1)	-
	NIDON (RNAV)	-	-	NC	NC	-	NC	-	NC (1)		FL130
	RIXAL (RNAV)	-	6000	NC	NC	NC	-	-	-	FL130	

NOTA // NOTE [TMA ALMERÍA]:

La espera ASNEP está restringida a nivel de vuelo mínimo FL090 sujeta a la actividad LER63, LER156 y LED36, y nivel de vuelo mínimo FL110 sujeta a la actividad LER63 y LED36. // ASNEP holding pattern is restricted to FL090 minimum subject to LER63, LER156 and LED36, and to FL110 minimum subject to LER63 and LED36.

TMA BARCELONA: CONFIGURACIÓN ESTE // EAST CONFIGURATION

CIRCUITO DE ESPERA // HOLDING PATTERN ON		BARCELONA/Jossep Terradellas Barcelona-EI Prat														GIRONA						REUS						LLEIDA/Alguare				ANDORRA/ La Seu D'Urgell														
		CONFIGURACIÓN ESTE // EAST CONFIGURATION														RWY						RWY						RWY				RWY														
		BGR	BOLOE	UTHAN	SLL Fello	KANWU	KOSIT	YUTHU	OSTUR	VIBIM	RUBOT	PAPOS	PLUJH	NEPAL	VLA	LRD	RES	DVOR CLE	OKETA	DVOR GIR 194*	DVOR GIR 014*	BANDL	NDB GRN	KERIP	DISET	VOR RES	DVOR VLA	NDB RUS 070*	NDB RUS 296*	RUS	VOR LLE	NDB LRD	RDVAP	UPISA												
BARCELONA/Jossep Terradellas Barcelona-EI Prat	CONFIGURACIÓN ESTE	BGR	-	-	FL180	-	-	-	-	-	-	-	-	-	-	-	-	FL200	NC	NC	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-											
		BOLOE	-	-	FL180	NC	NC	-	NC	-	-	-	-	-	-	-	-	-	FL200	NC	NC	NC	NC	NC	-	-	-	FL200	NC	-	FL200	-	-	-	-	FL140	NC									
		UTHAN	FL180	FL180	NC	NC	-	NC	-	-	-	-	-	-	-	-	-	-	NC	FL170	NC	NC	FL120	NC	-	-	-	FL210	-	-	-	-	-	-	-	-	-									
		SLL Fello	-	NC	NC	NC	-	NC	-	-	FL220	-	-	-	-	FL190	-	NC	-	FL220	FL140	-	-	-	-	-	FL200	FL090	-	FL220	-	-	-	-	-	-	-									
		SLL Fello	-	NC	NC	NC	-	NC	-	-	FL230	-	-	-	-	FL150	-	NC	-	FL200	FL140	-	-	-	-	-	-	FL110	-	-	-	-	-	-	-	-	-									
		KANWU	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	-	-	NC	-	-	-	-	-	-	-	NC	-	FL180	-	NC	FL180	-	-	-	-	-	-									
		KOSIT	-	NC	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	FL140	-	FL200	FL200	-	-	FL230	-	-	-	FL180	-	-	-	-	-	-	-	-	-								
		YUTHU	-	-	-	-	-	-	-	-	-	NC	FL200	-	-	-	-	-	-	FL210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
		OSTUR	-	-	-	-	-	-	-	-	NC	NC	-	-	-	FL210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
		VIBIM	-	-	-	FL220	FL230	-	-	FL200	NC	FL180	-	-	NC	-	-	-	FL210	-	-	-	-	-	-	-	-	FL230	-	-	-	-	-	-	-	-	-	-								
		RUBOT	-	-	-	-	NC	-	-	FL180	NC	FL200	NC	FL170	-	FL100	-	-	-	-	-	-	-	-	-	FL130	-	6000	FL130	FL140	6000	-	-	-	-	-	-	-								
		PAPOS	-	-	-	-	-	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL160	-	FL210	-	-	FL200	-	-	-	-	-									
		PLUJH	-	-	-	-	NC	-	-	-	-	FL200	-	-	FL190	NC	NC	-	-	-	-	-	-	-	-	NC	NC	NC	-	NC	NC	FL180	NC	-	-	-	-									
		NEPAL	-	-	-	-	-	-	-	FL210	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL220	-	-	FL220	-	-	-	-	-	-									
VLA	-	NC	-	FL180	FL150	-	-	-	-	FL170	-	FL190	-	FL200	NC	FL230	-	-	-	-	-	-	-	FL200	FL140	NC	NC	NC	NC	FL190	FL180	FL120	FL140	-	-											
LRD	-	-	-	-	-	-	-	-	-	-	NC	-	FL200	NC	NC	-	-	-	-	-	-	-	-	NC	-	-	FL200	-	NC	NC	NC	-	-	-	-											
RES	-	-	-	-	-	NC	-	-	-	FL100	-	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
GIRONA	RWY	01	DVOR CLE	FL200	FL200	NC	NC	NC	-	FL140	-	FL210	-	-	-	FL230	-	-	NC	FL090	NC	FL210	FL160	-	-	-	-	-	-	-	-	-	-	-	-	-										
		01	OKETA	NC	-	FL170	-	-	-	FL210	-	-	-	-	-	-	-	-	NC	NC	NC	FL160	FL080	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
		01	DVOR GIR 194*	NC	-	NC	FL220	FL200	-	FL200	-	-	-	-	-	-	-	-	-	FL090	NC	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-									
		19	DVOR GIR 014*	NC	-	NC	FL140	FL140	-	FL200	-	-	-	-	-	-	-	-	NC	NC	NC	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-									
		19	BANDL	NC	-	FL120	-	-	-	-	-	-	-	-	-	-	-	-	-	FL210	FL160	NC	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-									
REUS	RWY	07	KERIP	-	-	-	-	NC	-	-	-	FL130	FL160	NC	-	FL200	-	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL130	-	-											
		07	DISET	-	-	-	-	-	-	-	-	-	NC	-	FL140	NC	NC	-	-	-	-	-	-	-	NC	NC	-	NC	NC	FL110	NC	FL080	-	-	-											
		07/25	VOR RES	-	FL200	-	FL200	-	FL180	-	-	FL230	6000	FL210	NC	FL220	NC	-	NC	-	-	-	-	-	-	NC	NC	-	NC	NC	NC	FL210	FL140	FL170	-	-										
		25	DVOR VLA	-	NC	FL210	FL090	FL110	-	FL180	-	-	FL130	-	-	NC	-	FL100	FL160	-	-	-	-	-	-	FL180	-	NC	-	FL110	NC	-	-	FL180	FL170	-										
		25	NDB RUS 070*	-	-	-	-	NC	-	-	-	FL140	-	NC	-	NC	FL200	NC	-	-	-	-	-	-	NC	NC	NC	FL110	-	NC	FL170	FL120	FL200	-	-	-										
LLEIDA/Alguare	RWY	13/31	VOR LLE	-	-	-	-	-	-	-	-	-	-	FL180	-	FL190	NC	FL150	-	-	-	-	-	-	-	-	-	-	-	-	-	FL110	FL210	-	FL170	FL200	-	NC	NC	FL140						
		31	NDB LRD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL130	NC	FL140	-	FL120	FL140	NC	-	NC	FL210
		31	RDVAP	-	FL140	-	-	-	-	-	-	-	-	-	-	FL120	NC	FL140	-	-	-	-	-	-	-	-	FL080	FL170	FL180	FL200	FL190	NC	NC	-	-	-	-	-	-	-	-	-	-			
ANDORRA/ La Seu D'Urgell	RWY	03	UPISA	-	NC	-	-	-	-	-	-	-	-	FL140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

NOTA // NOTE [TMA BARCELONA: CONFIGURACIÓN ESTE // EAST CONFIGURATION]:

En el caso de existir esperas RNAV y convencionales sobre un mismo waypoint, se ha considerado la más restrictiva. // In the case of RNAV and conventional waits on the same waypoint, it has been considered the most restrictive.

TMA BILBAO, CTA LOGROÑO, CTA PAMPLONA, CTA SAN SEBASTIÁN, TMA SANTANDER, CTA VITORIA

CIRCUITO DE ESPERA / HOLDING PATTERN ON	TMA BILBAO				CTA LOGROÑO				CTA PAMPLONA				CTA SAN SEBASTIÁN				TMA SANTANDER				CTA VITORIA												
	SARRA	ALBIZ	DVOR/DME BLV 324°	ROSTO	SUNIR	DVOR/DME LPA 072°	DVOR/DME DGO 110°	VABUS NDB EAG 091°	(MIPS) NDB EAG 091°	DGO (RNAV)	VABUS (RNAV)	PPN (RNAV)	DVOR/DME PPN R-201 (1)	DVOR/DME PPN R-026 (2)	L PP 356° (3)	DVOR/DME SSN 034°	OSGOT (RNAV)	YESYO (RNAV)	YESYO (RNAV)	RESVA	SORPO	DVOR/DME SNR 112°	NORAY	NDB SA 111°	NDB SA 291°	ARBIN (RNAV)	ARBIN (RNAV)	LOPNA (RNAV)	LOPNA (RNAV)	DVOR/DME VFD 039°	VFD (RNAV)	VOR/DME BUR 219°	BUR (RNAV)
TMA BILBAO	SARRA	NC	NC	-	-	-	-	-	-	-	-	-	-	-	FL130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ALBIZ	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DVOR/DME BLV 324°	NC	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL140	FL130	-	-	-	-	FL140	FL140	-	-	-	-	-	-
	ROSTO	-	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-
	SUNIR	-	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-
CTA LOGROÑO	DVOR/DME LPA 072°	-	-	-	-	FL080	NC	NC	FL070	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL060	FL080	-	-	FL130	-	-	-
	DVOR/DME DGO 110°	-	-	-	-	FL080	NC	FL070	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL110	FL080	NC	NC	FL090	FL090	FL100	FL110
	VABUS	-	-	-	-	NC	NC	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC	FL070	FL070	-	-
	(MIPS) NDB EAG 091°	-	-	-	-	NC	FL070	NC	FL120	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DGO (RNAV)	-	-	-	-	FL070	NC	NC	FL120	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL070	NC	NC	NC	NC	NC	FL120	FL140
	VABUS (RNAV)	-	-	-	-	NC	NC	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC	FL060	NC	-	-
CTA PAMPLONA	PPN (RNAV)	-	-	-	-	-	-	-	-	-	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DVOR/DME PPN R-201 (1)	-	-	-	-	-	-	-	-	-	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DVOR/DME PPN R-026 (2)	-	-	-	-	-	-	-	-	-	NC	NC	NC	FL130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L PP 356° (3)	-	-	-	-	-	-	-	-	-	NC	NC	NC	FL120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CTA SAN SEBASTIÁN	DVOR/DME SSN 034°	FL130	-	-	-	-	-	-	-	-	-	FL130	FL120	-	-	FL100	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	OSGOT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	FL080	FL080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	OSGOT (RNAV)	-	-	-	-	-	-	-	-	-	-	-	FL100	NC	-	FL070	FL070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	YESYO	-	-	-	-	-	-	-	-	-	-	-	NC	FL080	FL070	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	YESYO (RNAV)	-	-	-	-	-	-	-	-	-	-	-	NC	FL080	FL070	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TMA SANTANDER	RESVA	-	-	FL140	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	-	-	-	NC	NC	-	-	-	-	-	-
	SORPO	-	-	FL130	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	FL090	-	-	-	NC	NC	-	-	-	-	-	-
	DVOR/DME SNR 112°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	FL090	NC	NC	-	-	-	-	-	-	-	-	-
	NORAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	-	-	-	-	-	-	-	-	-	-
	NDB SA 111°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	-	-	NC	-	-	-	-	-	-	-
	NDB SA 291°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC	NC	-	-	-	-	-	-	-	-
CTA VITORIA	ARBIN	-	-	FL140	-	FL060	FL110	NC	-	FL070	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	FL110 (4)	NC	NC	NC	NC	-
	ARBIN (RNAV)	FL120	-	FL140	-	FL060	FL080	NC	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	FL070	NC	NC	NC	NC	-	-
	LOPNA	-	-	-	-	-	NC	NC	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL110 (4)	FL070	NC	NC	NC	FL140	FL140	-
	LOPNA (RNAV)	-	-	-	-	-	NC	NC	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC	NC	FL100	FL110	-
	DVOR/DME VFD 039°	FL090	FL130	FL080	-	FL130	FL090	FL070	-	NC	FL060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC	NC	NC	-	-
	VFD (RNAV)	FL080	FL130	FL070	-	FL090	FL070	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC	NC	NC	-	-
	VOR/DME BUR 219°	-	-	-	-	-	FL100	-	-	FL120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL140	FL100	-	-	-	-	NC
	BUR (RNAV)	-	-	-	-	-	FL110	-	-	FL140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL140	FL110	-	-	-	-	NC

NOTA // NOTE [TMA BILBAO, CTA LOGROÑO, CTA PAMPLONA, CTA SAN SEBASTIÁN, TMA SANTANDER, CTA VITORIA]:

La incompatibilidad se ha considerado hasta FL145 (inclusive). // Incompatibility has been considered up to FL145 (inclusive).

En el caso de existir esperas RNAV y convencionales sobre un mismo waypoint y con los mismos parámetros, se ha considerado la más restrictiva. // In cases where both RNAV and conventional holding patterns exist over the same waypoint with identical parameters, the most restrictive one has been considered.

(1) El circuito de espera en DVOR/DME PPN R-202 tiene las mismas incompatibilidades que el circuito de espera en DVOR/DME PPN R-201. // The holding pattern over DVOR/DME PPN R-202 presents the same incompatibilities as the holding pattern over DVOR/DME PPN R-201.

(2) El circuito de espera en DVOR/DME PPN R-026 tiene las mismas incompatibilidades que el circuito de espera en DVOR/DME PPN R-027. // The holding pattern over DVOR/DME PPN R-206 presents the same incompatibilities as the holding pattern over DVOR/DME PPN R-207.

(3) El circuito de espera en frustrada sobre L PP 355° tiene las mismas incompatibilidades que las del IAF L PP 356°. // The ground holding pattern over L PP 355° has the same incompatibilities as for IAF L PP 356°

(4) Se requiere IAS MAX 230 kt en la espera sobre ARBIN. // MAX IAS 230 kt required holding over ARBIN.

TMA CANARIAS: ESTE

CIRCUITOS DE ESPERA // HOLDING PATTERN ON			FUERTEVENTURA														LANZAROTE/César Manrique Lanzarote											
			RWY 01				RWY 19										RWY 03					RWY 21						
			NDB FV	SIRPU 04 2° /049°	DURCO 246°	SOTAD (RNAV/RNP)	DURCO RNAV	TENDA 188°	TENDA 245°	TENDA (RNP)	KEMEV	DURCO (RNAV)	KEMEV (RNP)	DURCO 246°	TENDA 236°	TENDA 245°	BAMKU (RNAV/RNP)	MAPED	ROCAZ (RNAV)	DVOR/DME LTE 195°/196°	TICKE (RNAV)	ALEDU (RNAV)	BAPAL (RNAV)	LUNOB	LUNOB (RNAV)	DVOR/DME LTE 028°	INSER (RNAV)	NAVIM (RNAV)
FUERTEVENTURA	RWY 01	NDB FV	NC	-	7000	-	NC	NC	NC	NC	-	NC	-	NC	NC	6000	-	-	FL230	-	-	FL200	-	-	FL170	-	-	-
		SIRPU 04 2° /049°	NC	-	NC	-	-	-	-	-	-	FL200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DURCO 246°	-	-	-	NC	FL100	-	FL130	-	NC	-	NC	-	-	-	NC	-	-	NC	NC	-	-	-	FL110	-	-	
		SOTAD (RNAV/RNP)	7000	NC	-	-	-	-	-	-	-	-	-	-	-	FL170	-	-	-	-	-	-	-	-	-	-	-	-
		DURCO RNAV	-	-	NC	-	NC	-	NC	-	NC	-	NC	-	-	-	NC	-	-	NC	NC	-	-	-	NC	-	-	
		TENDA 188°	NC	-	FL100	-	NC	NC	NC	NC	NC	NC	FL100	NC	NC	NC	-	-	FL110	-	NC	NC	-	-	NC	-	-	-
		TENDA 245°	NC	-	-	-	NC	NC	FL140	-	FL150	-	NC	NC	NC	-	-	FL130	-	FL170	NC	-	-	NC	-	-	-	
	TENDA (RNP)	NC	-	FL130	-	NC	NC	NC	5000	NC	FL100	FL130	NC	NC	6000	-	-	FL100	-	7000	NC	-	-	NC	-	FL220	-	
	RWY 19	KEMEV	NC	-	-	-	NC	FL140	5000	-	NC	-	-	FL140	6000	6000	-	FL210	-	-	-	-	-	FL110	-	-	-	
		DURCO (RNAV)	-	-	NC	-	NC	NC	-	NC	-	NC	-	-	-	-	NC	-	-	NC	NC	-	-	-	NC	-	-	
		KEMEV (RNP)	NC	FL200	-	-	NC	FL150	FL100	NC	-	-	FL130	FL150	9000	7000	-	FL160	-	-	FL230	-	-	6000	-	-	-	
		DURCO 246°	-	-	NC	-	NC	FL100	-	FL130	-	NC	-	-	-	-	NC	-	-	NC	NC	-	-	-	FL110	-	-	
		TENDA 236°	NC	-	-	-	NC	NC	NC	-	-	FL130	-	NC	-	-	-	FL130	-	FL150	NC	-	-	NC	-	-	-	
		TENDA 245°	NC	-	-	-	NC	NC	NC	FL140	-	FL150	-	NC	NC	-	-	FL130	-	FL170	NC	-	-	NC	-	-	-	
BAMKU (RNAV/RNP)		6000	-	-	FL170	-	NC	NC	6000	6000	-	9000	-	-	NC	-	-	-	-	6000	-	-	FL140	-	-	-		
LANZAROTE/César Manrique Lanzarote	RWY 03	MAPED	-	-	-	-	-	-	6000	-	7000	-	-	-	-	-	-	FL230	-	-	-	FL190	NC	FL150	-	-		
		ROCAZ (RNAV)	-	-	NC	-	NC	-	-	-	NC	-	NC	-	-	-	-	-	-	NC	NC	-	-	-	NC	NC	-	
		DVOR/DME LTE 195°/196°	FL230	-	-	-	FL110	FL130	FL100	FL210	-	FL160	-	FL130	FL130	-	FL230	-	-	NC	NC	NC	NC	NC	-	NC	FL190	
		TICKE (RNAV)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	FL120	NC	
		ALEDU (RNAV)	-	-	NC	-	NC	NC	FL170	7000	-	NC	-	NC	FL150	FL170	-	-	NC	NC	-	NC	FL160	FL190	NC	NC	NC	
	RWY 21	BAPAL (RNAV)	FL200	-	NC	-	NC	NC	NC	-	NC	FL230	NC	NC	NC	6000	-	NC	NC	-	NC	-	-	NC	-	-	-	
		LUNOB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL190	-	NC	-	FL160	-	NC	FL080	-	FL210	-	
		LUNOB (RNAV)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	-	NC	-	FL190	-	NC	NC	-	FL170	-	
		DVOR/DME LTE 028°	FL170	-	-	-	NC	NC	NC	FL110	-	6000	-	NC	NC	FL140	FL150	-	NC	-	NC	NC	FL080	NC	-	NC	-	
		INSER (RNAV)	-	-	FL110	-	NC	-	-	-	NC	-	FL110	-	-	-	-	NC	-	NC	NC	-	-	-	-	NC	FL110	
NAVIM (RNAV)	-	-	-	-	-	-	FL220	-	-	-	-	-	-	-	-	NC	NC	FL120	NC	-	FL210	FL170	NC	NC	FL160			
GAKMI (RNAV)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL190	NC	-	-	-	-	-	FL110	FL160			

TMA GALICIA

CIRCUITO DE ESPERA // HOLDING PATTERN ON		A CORUÑA								SANTIAGO						VIGO	
		DVOR/DME LRA 214°	DVOR/DME LRA 217°	MISTE	ENONU	IDOTU	L SO 167°	DVOR/DME STG 167°	DVOR/DME STG 347°	NOLMU	XEBIK	NDB VON 014°	DVOR/DME VGO 193°	GESPU	BEKIN	OBOTI	PIVON
A CORUÑA	DVOR/DME LRA 214°		NC	NC	NC	NC	FL090	FL110	-	-	-	-	-	-	-	-	-
	DVOR/DME LRA 217°	NC		NC	NC	NC	FL080	FL100	-	-	-	-	-	-	-	-	-
	MISTE	NC	NC		NC	-	FL140	FL140	-	-	-	-	-	-	-	-	-
	ENONU	NC	NC	NC		-	-	-	-	-	-	-	-	-	-	-	-
	IDOTU	NC	NC	-	-		NC	FL070	-	-	-	-	-	-	-	-	-
SANTIAGO	L SO 167°	FL090	FL080	FL140	-	NC		NC	NC	FL140	-	-	-	-	-	-	FL100
	DVOR/DME STG 167°	FL110	FL100	FL140	-	FL070	NC		NC	FL100	FL140	-	FL140	-	-	-	6000 ft
	DVOR/DME STG 347°	-	-	-	-	-	NC	NC		NC	NC	-	FL110	-	FL140	-	NC
	NOLMU	-	-	-	-	-	FL140	FL100	NC		NC	FL140	NC	-	NC	FL120	NC
	XEBIK	-	-	-	-	-	-	FL140	NC	NC		-	-	-	-	-	FL140
VIGO	NDB VON 014°	-	-	-	-	-	-	-	-	FL140	-		NC	NC	NC	NC	FL070
	DVOR/DME VGO 193°	-	-	-	-	-	-	FL140	FL110	NC	-	NC		6000 ft	NC	NC	NC
	GESPU	-	-	-	-	-	-	-	-	-	-	NC	6000 ft		FL140	NC	-
	BEKIN	-	-	-	-	-	-	-	FL140	NC	-	NC	NC	FL140		8000 ft	NC
	OBOTI	-	-	-	-	-	-	-	-	FL120	-	NC	NC	NC	8000 ft		FL070
	PIVON	-	-	-	-	-	FL100	6000 ft	NC	NC	FL140	FL070	NC	-	NC		FL070

NOTA // NOTE [TMA GALICIA]:

La incompatibilidad se ha considerado hasta FL150 (inclusive). // Incompatibility has been considered up to FL150 (inclusive).

En el caso que existan esperas RNAV y convencionales, se ha considerado la más restrictiva entre las dos. // If there are RNAV and conventional holding patterns, it is considered the most restricted holding pattern of both.

MADRID TMA: CONFIGURACIÓN SUR // SOUTH CONFIGURATION

CIRCUITO DE ESPERA // HOLDING PATTERN ON	NONTU	ORBIS RNAV	ORBIS (CONV.) (STAR LETO)	PODOG	RILKO	SIE DVOR/DME CONV.	USATI	SECOO	NVS RNAV	NVS DVOR/DME CONV. (STAR LETO)	TLD RNAV	TLD DVOR/DME CONV. (STAR LETO)	BUREX CONV. (STAR LETO)	LULER	VENUX	BAN	NOSKO RNAV	NOSKO CONV. (STAR LETO)	CJN RNAV	CJN DVOR/DME CONV. (324 ° -144 °) (STAR LEGT)	CJN DVOR/DME CONV. (240 ° -060 °) (STAR LEGT)	ADUXO	PRADO	TERSA	SIRGU CONV. (STAR LETO)	DUKKE CONV. (STAR LETO)	VTB DVOR/DME CONV. (STAR LEGT)	GE NDB CONV. (STAR LEGT)	ROFIX FRUSTRADA IAC LEMD RWY 18L/R	
NONTU		NC	NC	NC	-	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ORBIS RNAV	NC		NC	NC	NC	12000	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ORBIS CONV. (STAR LETO)	NC	NC		NC	-	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PODOG	NC	NC	NC		-	FL200	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RILKO	-	NC	-	-		NC	-	-	-	-	-	-	-	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SIE DVOR/DME CONV.	NC	12000	NC	FL200	NC		-	-	-	-	-	-	NC	FL190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
USATI	-	NC	NC	NC	-	-		NC	-	FL200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SECOO	-	-	-	-	-	-	NC		NC	NC	-	FL170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL190	
NVS RNAV	-	-	-	-	-	-	-	NC		NC	NC	NC	FL150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	
NVS DVOR/DME CONV. (STAR LETO)	-	-	-	-	-	-	FL200	NC	NC		NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10000	
TLD RNAV	-	-	-	-	-	-	-	-	NC	NC		NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	
TLD DVOR/DME CONV. (STAR LETO)	-	-	-	-	-	-	-	FL170	NC	NC	NC		NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12000	
BUREX CONV. (STAR LETO)	-	-	-	-	-	-	-	-	FL150	-	NC	NC		-	-	-	-	-	-	-	-	-	-	-	-	-	9000	10000	-	
LULER	-	-	-	-	NC	NC	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
VENUX	-	-	-	-	-	FL190	-	-	-	-	-	-	-	-		NC	FL200	FL150	-	-	-	-	-	-	-	-	-	-	-	
BAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC		-	FL220	-	-	-	-	-	-	-	-	-	-	-	
NOSKO RNAV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL200	-	NC	NC	NC	NC	NC	NC	NC	FL200	NC	NC	NC	-	-	
NOSKO CONV. (STAR LETO)	-	-	-	-	-	-	-	-	-	-	-	-	-	FL150	FL220	NC		NC	NC	NC	NC	FL180	-	NC	FL180	NC	-	-	-	
CJN RNAV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC	NC	NC	NC	FL200	NC	NC	-	-	-	
CJN DVOR/DME CONV. (324 ° -144 °) (STAR LEGT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC		NC	NC	NC	FL170	NC	NC	-	-	-	
CJN DVOR/DME CONV. (240 ° -060 °) (STAR LEGT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC		NC	NC	NC	-	NC	-	-	-	
ADUXO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	FL180	NC	NC	NC	NC		NC	NC	NC	FL200	-	-	-
PRADO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL200	-	NC	NC	NC	NC	NC	-	NC	-	-	-	-	-
TERSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	FL200	FL170	NC	NC	-		FL180	FL190	-	-	-	
SIRGU CONV. (STAR LETO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	FL180	NC	NC	-	NC	NC	FL180		FL140	-	-	-	
DUKKE CONV. (STAR LETO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	NC	NC	NC	FL200	-	FL190	FL140		-	-	-	
VTB DVOR/DME CONV. (STAR LEGT)	-	-	-	-	-	-	-	-	-	-	-	-	9000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL200	
GE NDB CONV. (STAR LEGT)	-	-	-	-	-	-	-	FL190	NC	10000	NC	12000	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	FL200		NC	
ROFIX FRUSTRADA IAC LEMD RWY 18L/R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	

NOTA // NOTE [MADRID TMA: CONFIGURACIÓN SUR // SOUTH CONFIGURATION]:

De manera general, en los puntos donde existen definidas diferentes esperas para esta configuración del TMA, los valores corresponden a la interacción más restrictiva. Adicionalmente, en algunos casos particulares se incluye información segregada para diferentes esperas en un mismo punto. // As a general rule, for the points where different holdings are defined for this TMA configuration, the figures correspond to the most restrictive interaction. In addition, in specific cases segregated information on different holdings for the same point is provided.

MADRID TMA: CONFIGURACIÓN NORTE // NORTH CONFIGURATION

CIRCUITO DE ESPERA HOLDING PATTERN ON	BUREX	TLD	DAQSE	AVILA	ORBIS	FAFEQ	SIRGU	ADUXO	TERSA	PRADO	NOSKO	BAN	RUDBI	VTB DVOR/DME CONV. (STAR LEGT)	CJN DVOR/DME CONV. (324 ° -144 °) (STAR LEGT)	CJN DVOR/DME CONV. (240 ° -60 °) (STAR LEGT)	NVS DVOR/DME CONV. (STAR LETO)	TOBEK CONV. (STAR LETO)	ASBIN CONV. (STAR LETO)	GE NDB (STAR LEGT)	DUKKE CONV. (STAR LETO)	ROFIX FRUSTRADA IAC LEMD RWY 32L/R	PDT DVOR/DME CONV.
BUREX		NC	FL190	-	-	-	-	-	-	-	-	-	-	NC	-	-	-	-	-	-	-	-	-
TLD	NC		NC	FL200	-	-	-	-	-	-	-	-	-	-	-	-	NC	-	-	-	-	-	-
DAQSE	FL190	NC		NC	-	-	-	-	-	-	-	-	-	-	-	-	NC	-	-	-	-	-	-
AVILA	-	FL200	NC		FL210	-	-	-	-	-	-	-	-	-	-	-	NC	-	-	-	-	-	-
ORBIS	-	-	-	FL210		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FAFEQ	-	-	-	-	-		-	-	-	-	-	-	NC	-	-	-	NC	NC	-	-	NC	NC	-
SIRGU	-	-	-	-	-	-		NC	FL180	NC	FL160	-	NC	-	NC	-	-	-	NC	NC	-	-	-
ADUXO	-	-	-	-	-	-	NC		NC	NC	FL170	-	-	-	NC	-	-	-	-	-	FL190	-	-
TERSA	-	-	-	-	-	-	FL180	NC		-	NC	-	-	-	FL200	-	-	-	-	-	FL190	-	-
PRADO	-	-	-	-	-	-	NC	NC	-		-	-	-	-	NC	-	-	-	-	-	-	-	-
NOSKO	-	-	-	-	-	-	FL160	FL170	NC	-		FL190	12000	-	NC	-	-	-	-	-	NC	-	-
BAN	-	-	-	-	-	-	-	-	-	-	FL190		-	-	-	-	-	-	-	-	FL200	-	-
RUDBI	-	-	-	-	-	NC	NC	-	-	-	12000	-		-	NC	-	-	NC	NC	-	NC	-	NC
VTB DVOR/DME CONV. (STAR LEGT)	NC	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
CJN DVOR/DME CONV. (324 ° -144 °) (STAR LEGT)	-	-	-	-	-	-	NC	NC	FL200	NC	NC	-	NC	-		-	-	-	-	-	NC	-	-
CJN DVOR/DME CONV. (240 ° -60 °) (STAR LEGT)	-	-	-	-	-	-	-	NC	NC	NC	NC	-	NC	-	NC		-	-	-	-	NC	-	-
NVS DVOR/DME CONV. (STAR LETO)	-	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
TOBEK CONV. (STAR LETO)	-	-	-	-	-	NC	-	-	-	-	-	-	NC	-	-	-	-	-	NC	-	-	NC	NC
ASBIN CONV. (STAR LETO)	-	-	-	-	-	NC	NC	-	-	-	-	-	NC	-	-	-	-	-	NC	-	-	-	NC
GE NDB (STAR LEGT)	NC	NC	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	NC	NC	-	-	-	NC	-
DUKKE CONV. (STAR LETO)	-	-	-	-	-	-	NC	FL190	FL190	-	NC	FL220	NC	-	NC	-	-	-	-	-	-	-	-
ROFIX FRUSTRADA IAC LEMD RWY 32L/R	-	-	-	-	-	NC	-	-	-	-	-	-	-	-	-	-	-	-	NC	-	-	-	-
PDT DVOR/DME CONV.	-	-	-	-	-	NC	-	-	-	-	-	-	NC	-	-	-	-	-	NC	NC	-	-	-

NOTA // NOTE [MADRID TMA: CONFIGURACIÓN NORTE // NORTH CONFIGURATION]:

De manera general, en los puntos donde existen definidas diferentes esperas para esta configuración del TMA, los valores corresponden a la interacción más restrictiva. Adicionalmente, en algunos casos particulares se incluye información segregada para diferentes esperas en un mismo punto. // As a general rule, for the points where different holdings are defined for this TMA configuration, the figures correspond to the most restrictive interaction. In addition, in specific cases segregated information on different holdings for the same point is provided.

MURCIA/AEROPUERTO DE LA REGIÓN DE MURCIA

CIRCUITOS DE ESPERA //HOLDING PATTERN ON		MURCIA/Aeropuerto de la Región de Murcia				MURCIA/San Javier								ALICANTE/Alicante-Elche Miguel Hernández							
		RWY 05/23				RWY 04R/22L								RWY 10			RWY 28				
		VOR/DME ALT FL130 279°	DITRE FL090 234°	SANSI 4500 ft 353°	NERKU 5500 ft 037°	RWY 04R SANSI 3500 ft 035°	RWY 04R/22L VOR/TACAN VSJ 2400 ft 217°	(MIPS) RWY 22L VOR/TACAN VSJ 3000 ft 063°	(MIPS) RWY 04R 3500 ft R- 225 /15.0 DME VSJ	RWY 04R/22L PALOS 4000 ft 312°	RWY 22L DITRE 4000 ft 233°	(MIPS) RWY 22L FL170 R- 266 /5.0 DME VSJ	(MIPS) RWY 22L VOR/TACAN VSJ 3000 ft	VILNA FL070 144°	MAGAL FL070 (4000 ft ATC & MA) 305°	VOR/DME ALT 4000 ft 278°	BESOR 6500 ft 237°	VOR/DME ALT 4500 ft 100°	MAGAL STAR & MA 4000 ft 307°	DVOR/DME VLC FL080 R-168/37.0 DME VLC	
MURCIA/Aeropuerto de la Región de Murcia	RWY 05/23	VOR/DME ALT FL130 279°	NC	-	-	-	NC	FL200	-	-	NC	FL240	FL190	FL140	NC	NC	NC	NC	NC	-	
		DITRE FL090 234°	NC	-	-	-	NC	NC	-	FL110	NC	FL210	NC	-	NC	NC	-	NC	NC	-	
		SANSI 4500 ft 353°	-	-	-	FL130	NC	FL100	NC	NC	FL210	-	NC	NC	-	-	-	-	-	-	-
		NERKU 5500 ft 037°	-	-	FL130	-	FL130	-	FL190	FL130	-	-	FL220	FL190	-	-	-	-	-	-	-
MURCIA/San Javier	RWY 04R/22L	RWY 04R SANSI 3500 ft 035°	-	-	NC	FL130	-	FL140	3500	NC	-	-	NC	NC	-	-	-	-	-	-	
		RWY 04R/22L VOR/TACAN VSJ 2400 ft 217°	NC	NC	FL100	-	FL140	-	NC	NC	FL090	NC	NC	NC	-	FL150	FL120	-	FL120	FL150	-
		(MIPS) RWY 22L VOR/TACAN VSJ 3000 ft 063°	FL200	NC	NC	FL190	3500	NC	-	NC	FL130	NC	NC	NC	-	-	FL200	-	FL190	-	-
		(MIPS) RWY 04R 3500 ft R- 225 /15.0 DME VSJ	-	-	NC	FL130	NC	NC	NC	-	-	NC	NC	NC	-	-	-	-	-	-	-
		RWY 04R/22L PALOS 4000 ft 312°	-	FL110	FL210	-	-	FL090	FL130	-	-	FL110	-	FL120	-	-	-	-	-	-	-
		RWY 22L DITRE 4000 ft 233°	NC	NC	-	-	-	NC	NC	-	FL110	-	FL210	NC	-	NC	5000	-	NC	NC	-
		(MIPS) RWY 22L FL170 R- 266 /5.0 DME VSJ	FL240	FL210	NC	FL220	NC	NC	NC	NC	-	FL210	-	NC	-	-	FL200	-	FL190	-	-
		(MIPS) RWY 22L VOR/TACAN VSJ 3000 ft 046°	FL190	NC	NC	FL190	NC	NC	NC	NC	FL120	NC	NC	-	-	FL200	-	FL190	-	-	-
ALICANTE/Alicante-Elche Miguel Hernández	RWY 10	VILNA FL070 144°	FL140	-	-	-	-	-	-	-	-	-	-	-	NC	-	FL140	-	FL200		
		MAGAL FL070 (4000 ft ATC & MA) 305°	NC	NC	-	-	-	FL150	-	-	NC	-	-	-	-	FL140	FL140	NC	NC	-	
		VOR/DME ALT 4000 ft 278°	NC	NC	-	-	-	FL120	FL200	-	-	5000	FL200	FL200	NC	FL140	-	FL140	NC	FL140	-
	RWY 28	BESOR 6500 ft 237°	NC	-	-	-	-	-	-	-	-	-	-	-	FL140	FL140	-	NC	FL140	FL200	
		VOR/DME ALT 4500 ft 100°	NC	NC	-	-	-	FL120	FL190	-	-	NC	FL190	FL190	FL140	NC	NC	NC	-	NC	-
		MAGAL STAR & MA 4000 ft 307°	NC	NC	-	-	-	FL150	-	-	NC	-	-	-	NC	FL140	FL140	NC	-	-	
		DVOR/DME VLC FL080 R-168/37.0 DME VLC	-	-	-	-	-	-	-	-	-	-	-	FL200	-	-	FL200	-	-	-	

NOTA // NOTE [MURCIA/Aeropuerto de la Región de Murcia]:

La incompatibilidad se ha considerado hasta FL240 (inclusive). // Incompatibility has been considered up to FL240 (inclusive).

En los recuadros se indica el nivel de vuelo o altitud superior en el que ambas esperas son aún compatibles. // The highest flight level or altitude on which both holding patterns are still compatible is indicated in the boxes.

Los recuadros en blanco indican que no se produce incompatibilidad hasta el nivel de vuelo considerado. // Empty boxes indicate that incompatibility does not occur up to the flight level considered.

Los rumbos en las esperas son de acercamiento. // Headings in holding patterns are inbound.

En el caso que existan esperas RNAV y convencionales, se ha considerado la más restrictiva entre las dos. // If there are RNAV and conventional holding patterns, it is considered the most restricted holding pattern of both.

NC: No compatibles. // NC: Not compatible.

MA: Aproximación frustrada. // MA: Missed approach.

TMA VALENCIA

CIRCUITO DE ESPERA // HOLDING PATTERN ON		ALICANTE										CASTELLÓN					VALENCIA							
		RWY10			RWY28							RWY06				RWY24	RWY12				RWY30			
		VILNA	VOR/DME ALT (278°)	MAGAL (305°)	MAGAL (307°)	MAGAL RNAV	VOR/DME ALT (100°)	BESOR	BESOR RNAV	DVOR/DME VLC 370 DME R-168	SAURA	NIBEN	IQOEP	DVOR/DME CTN	OSPES	OPERA	DVOR/DME CLS	URIAS	DVOR/DME VLC (118°)	DVOR/DME VLC (298°)	DVOR/DME VLC (118°)	MULAT	NDB SGO	
ALICANTE	RWY10	VILNA	FL120	-	-	-	NC	-	-	FL200	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-	
		VOR/DME ALT (278°)	FL120	NC	NC	NC	NC	NC	NC	-	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-	
		MAGAL (305°)	-	NC	NC	NC	FL110	FL100	FL100	-	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-	
	RWY28	MAGAL (307°)	-	NC	NC	NC	FL100	FL100	FL100	-	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-	
		MAGAL RNAV	-	NC	NC	NC	NC	FL100	FL100	-	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-	
		VOR/DME ALT (100°)	NC	NC	FL110	FL100	NC	FL120	NC	-	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-	
		BESOR	-	NC	FL100	FL100	FL100	FL120	NC	FL200	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-	
BESOR RNAV	-	NC	FL100	FL100	FL100	NC	NC	FL180	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-			
DVOR/DME VLC 370 DME R-168	FL200	-	-	-	-	-	FL200	FL180	-	-	INFO NO AVBL	-	-	-	NC	FL200	FL140	FL200	FL150	-	-			
CASTELLÓN	RWY06	SAURA	-	-	-	-	-	-	-	-	NC	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-		
		NIBEN	-	-	-	-	-	-	-	-	NC	INFO NO AVBL	-	-	-	-	-	-	-	-	-	NC		
		IQOEP	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	INFO NO AVBL	
	DVOR/DME CTN	-	-	-	-	-	-	-	-	NC	-	INFO NO AVBL	-	NC	-	-	-	-	-	-	-	FL140		
RWY24	OSPES	-	-	-	-	-	-	-	-	-	INFO NO AVBL	-	-	-	-	-	-	-	-	-	-			
VALENCIA	RWY12	OPERA	-	-	-	-	-	-	-	-	-	INFO NO AVBL	-	-	NC	-	NC	NC	NC	-	-	FL190		
		DVOR/DME CLS	-	-	-	-	-	-	-	-	-	-	INFO NO AVBL	-	NC	-	NC	FL180	NC	-	-	-		
		URIAS	-	-	-	-	-	-	-	NC	-	-	INFO NO AVBL	-	-	-	NC	NC	NC	NC	NC	-		
		DVOR/DME VLC (118°)	-	-	-	-	-	-	-	FL200	-	-	INFO NO AVBL	-	-	NC	NC	NC	NC	NC	NC	NC		
		DVOR/DME VLC (298°)	-	-	-	-	-	-	-	FL140	-	-	INFO NO AVBL	-	-	NC	FL180	NC	NC	NC	NC	NC		
	RWY30	DVOR/DME VLC (118°)	-	-	-	-	-	-	-	FL200	-	-	INFO NO AVBL	-	-	NC	NC	NC	NC	NC	NC	NC		
		MULAT	-	-	-	-	-	-	-	FL150	-	-	INFO NO AVBL	-	-	-	NC	NC	NC	NC	NC	NC		
NDB SGO	-	-	-	-	-	-	-	-	-	NC	INFO NO AVBL	-	-	FL190	-	-	NC	NC	NC	NC				

4.2. PROCEDURES AT AFIS AERODROMES

GENERAL

The AFIS unit shall issue information to aircraft in its area of responsibility to achieve a safe, orderly and expeditious flow of air traffic. AFIS officers (AFISO) shall maintain a continuous watch by visual observation of all flight operations on and in the vicinity of an aerodrome, as well as vehicles and personnel on the manoeuvring area.

An Apron Management Service is provided by AFIS to regulate the activities and movement of aircraft on the apron.

Aircraft at AFIS aerodromes and within their associated FIZ shall operate in accordance with a flight plan and must be equipped for two way radio communications.

The pilot shall establish and maintain two way communications with the AFIS unit, and he/she shall notify his position, altitude, and any significant manoeuvres and intentions to this unit.

In general, the pilot shall provide all information requested by the AFIS unit for the fulfillment of its duties.

Whilst operating at the airport or in its vicinity, the pilot shall, based on the information provided by the AFIS unit and his/her own knowledge and observations, decide on the actions to take in order to ensure its separation from aircraft, land vehicles and obstacles.

AFIS shall stick to duly report essential traffic information, with which the pilot shall decide on the appropriate trajectory or manoeuvre to follow. Regardless of any pilot action, the

AFIS officer shall report, adequately and without delay, information with regard to any perceived dangerous situation in his area of responsibility.

Flight plans shall be submitted according to ENR 1.10, nevertheless, where an AFIS aerodrome has no associated air traffic reporting office, flight plans may be submitted or closed by means of a report to the AFIS unit of the aerodrome. The service provided by the AFIS unit in that case is comparable to that of an air traffic reporting office.

OPERATIONS IN THE FLIGHT INFORMATION ZONE

ARRIVALS

IFR traffic bound for an AFIS aerodrome, shall contact with the AFIS unit, notify their intentions and enter the FIZ following the procedures established in the approach charts.

VFR traffic bound for an AFIS aerodrome, shall contact the AFIS unit and notify their intentions prior to reaching the reporting points indicated in the Visual Approach Chart.

VFR traffic shall enter the FIZ via the designated points, proceeding on the indicated magnetic tracks to join the visual circuit maintaining the maximum altitude published in the Visual Approach Chart.

As soon as possible, after the aircraft have established contact with the AFIS unit and before the aircraft joins the traffic circuit, the following information shall be provided, except that known to have been already received by the pilot:

- a. the preferential runway and direction of the traffic circuit;
- b. up to date meteorological information; and
- c. essential traffic information and aerodrome conditions, when appropriate.

The AFIS officer shall not provide any instructions with regard to joining the traffic circuit, nor shall he/she establish a landing order.

The pilot will report joining the circuit, on base and on final.

Once the landing has been completed, the pilot shall report his/her taxi intentions, he/she shall request permission to enter the apron and he/she shall notify when the flight plan has been terminated.

As soon as possible aircraft shall report missed approaches and their intentions, if it is the case.

DEPARTURES

IFR traffic departing from an AFIS aerodrome shall contact with the AFIS unit and notify their intentions. Before take-off, the AFIS unit shall relay the appropriate ATC clearance (CTOT included when subject to ATFM measures) provided to enter in controlled airspace, the traffic information and the assigned transponder code.

VFR traffic intending to leave the FIZ, shall do so via the designated points and they shall notify their intentions to the AFIS unit,

including the reporting point to be used.

The VFR flight shall report the AFIS leaving the FIZ over the relevant reporting point.

COMMUNICATIONS FAILURE

The communications failure procedure is detailed in the Visual Approach Chart.