**General Info**

Barcelona, ESP  
N 41° 17.8’ E 02° 04.7’ Mag Var: 1.4° W  
Elevation: 14’  

Public, Control Tower, IFR, Landing Fee, Customs  
Fuel: 100LL, Jet A-1  

Time Zone Info: GMT+1:00 uses DST

**Runway Info**

Runway 02-20 8333’ x 148’ asphalt  
Runway 07L-25R 10997’ x 197’ asphalt  
Runway 07R-25L 8727’ x 197’ asphalt

Runway 02 (20.0°M) TDZE 7’  
Lights: Edge, ALS, Centerline, REIL  

Runway 07L (67.0°M) TDZE 8’  
Lights: Edge, ALS, Centerline, REIL, TDZ  
Right Traffic  
Displaced Threshold Distance 1411’  

Runway 07R (67.0°M) TDZE 8’  
Lights: Edge, ALS, Centerline, REIL, TDZ  

Runway 20 (200.0°M) TDZE 12’  
Lights: Edge, Centerline  

Runway 25L (247.0°M) TDZE 8’  
Lights: Edge, ALS, Centerline, REIL, TDZ  

Runway 25R (247.0°M) TDZE 10’  
Lights: Edge, ALS, Centerline, REIL, TDZ

**Communications Info**

ATIS 121.975 Departure Service  
ATIS 118.65 Arrival Service  
Barcelona Tower 118.325  
Barcelona Tower 118.1  
Barcelona Tower 257.80 Military  
Barcelona Ground Control 121.65  
Barcelona Ground Control 121.85  
Barcelona Ground Control 121.7  
Barcelona Clearance Delivery 121.8  
Barcelona Approach Control 127.7  
Barcelona Approach Control 126.5  
Barcelona Approach Control 125.25  
Barcelona Approach Control 124.7  
Barcelona Approach Control 119.1  
Barcelona Approach Control 118.05  
Barcelona Approach Control 362.30 Military

**Notebook Info**
1. GENERAL

1.1. ATIS
ATIS Arrival 118.65
ATIS Departure 121.97

1.2. NOISE ABATEMENT PROCEDURES

1.2.1. GENERAL
Barcelona APT is not available to ACFT without radio or unable to maintain a continuous two-way communication on appropriate tower frequency.
Between 0800-1000LT, 1400-1630LT and 2030-2300LT the use of APT is restricted to ACFT with a cruising speed lower than 220 KT, except state APT, hospital and SAR ACFT. Affected ACFT requiring the use of APT during these times, will assume possible delays since non-restricted ACFT will always have priority.

1.2.2. PREFERENTIAL RWYS
Whenever the RWY conditions are equal to or better than the following conditions, between 0700-2300LT West configuration will have priority over East configuration and between 2300-0700LT East configuration will have priority over West configuration due to environmental reasons:
- RWY is dry or wet with braking action good;
- ceiling 500';
- VIS 3.7km (2NM);
- tailwind component 5 KT (gusts included) and/or crosswind 15 KT;
- wind shear has been reported or forecasted or storms are expected to affect the approach or departure.

Nonetheless and depending on the traffic situation, operational needs and good meteorological conditions, under ATC criteria, the following configuration of the RWY in use will be allowed until wind components (gusts included) are less than 10 KT tailwind and 25 KT crosswind.

Between 0700-2300LT West configuration parallel RWYS:
- Arrivals RWY 25R
- Departures RWY 25L and 25R
East configuration parallel RWYS:
- Arrivals RWY 07L
- Departures RWY 07R and 07L

The use of RWY 25R is restricted to those ACFT that can justify the need for a RWY length higher than on RWY 25L (the lack of justification can be considered as non-compliance). The justification must be submitted to APT Operations as soon as possible.

The use of RWY 07L for take-off is restricted to those ACFT that can justify the need for a RWY length higher than RWY 07R and APT with an overall height above 54'/16.46m. The justification must be submitted to APT Operations as soon as possible.

Between 2300-0700LT West configuration:
- Arrivals RWY 25L
- Departures RWY 25L
East configuration:
- Arrivals RWY 02
- Departures RWY 07R

When RWY 02 can not be used for arrivals West configuration will be in force and only as a last resort, East configuration with arrivals for RWY 07L will be used.

ATIS message will provide information of the configuration in use.

1.3. LOW VISIBILITY PROCEDURES (LVP)

1.3.1. GENERAL
During LVP CAT II/III all operations on RWYs 07L/R, 25L/R.
LVP will be applied subject to the following conditions:
- Manoeuvring area: When RVR is 600m or below with any transmissometer of arriving RWY in use, when VIS is 900m or below, or when ceiling is 250' or below.
- Apron: When RVR is 400m or below with any transmissometer of RWY 07L/25R.

Pilots will be informed about the application of LVP by ATIS or by radio frequency.

Any notified or detected incidence that may affect the LVP will be immediately communicated to ACFT and ATC services implicated.

The control tower will supply RWYS in use RVR directly, in accordance to the following order: RVR A: TDZ; RVR B: RYV Mid-point; RVR C: RYV end.

When CAT II/III approaches will take place, the landing permission will not be given, after the ACP is located at 2NM from TDZ and only will be supplied when ILS sensitive areas (LSA) are vacated. Every ACFT on final approach at 2NM from TDZ without clearance to land, will have to execute missed approach.

LVP will be cancelled when the meteorological conditions will be the following:
- Manoeuvring area: When RVR is above 800m with the transmissometers of RWY-in-use, ceiling is 300' or above and with a strong tendency to the improvement of the meteorological conditions.
- Apron: When RVR is above 450m from transmissometers of RWY 07L/25R and with a strong tendency to the improvement of the meteorological conditions.

1.3.2. GROUND MOVEMENT

1.3.2.1. GENERAL
Pilots will proceed to verify at every moment the ACFT position, especially at intersections, checking that taxiing is being executed under total safety conditions. In case of being disoriented or in doubt, pilots will stop the ACFT and immediately will notify ATC.

ACFT will abandon the landing RWY only through those exits having centerline lights.

1.3.2.2. GENERAL TAXI DIRECTIONS

<table>
<thead>
<tr>
<th>Arrival Rwy</th>
<th>Departure Rwy</th>
<th>General Taxi Direction On</th>
</tr>
</thead>
<tbody>
<tr>
<td>07L</td>
<td>07L</td>
<td>no restrictions</td>
</tr>
<tr>
<td>07R</td>
<td>07R</td>
<td>East, West, East</td>
</tr>
<tr>
<td>25L</td>
<td>25L</td>
<td>East, West, East</td>
</tr>
<tr>
<td>25R</td>
<td>25R</td>
<td>bidirectional, East, West</td>
</tr>
</tbody>
</table>

1.3.2.3. PARALLEL RWY OPERATIONS IN WEST CONFIGURATION

When the pilot has left the last yellow light (of the alternated green and yellow lights) of the TWY centerline to vacate the RWY, ACFT has to stop and notify its position and that LSA is vacated. In this position, has reached the safety distance with the TWY T and out of LSA. As a general procedure, arriving ACFT will taxi via TWY S (Westbound) or TWY T (Eastbound) through any of the gates indicated by TWY. Departure from RWY 25L on TWY S through any gate indicated by ACP, follow TWY S until S14, M10 thru M6, D2, D1 and K to holding point Rwy 25L.
1. GENERAL

1.3.2.4. RWY 07R IN USE ONLY
Arriving ACFT will notify vacated LSA when reaching TWY K, then follow TWYS K, D1, D2, D3, D4, DB and TWY S (Westbound) or TWY T (Eastbound) through any of the gates indicated by TWR.

Departures should taxi via TWY S Westbound to TWYs M14, M13, M12, M11, M10, M9, M8, M7, E3, J1 and K to RWY 07R.

1.3.2.5. RWY 25L IN USE ONLY
Arriving ACFT will notify vacated LSA when reaching TWY K, then follow TWYS K, J1, E3, M7, M8, M9, M10 and TWY S through any of the gates indicated by TWR.

Departures should taxi via TWY S (Eastbound) or TWY T (Westbound), then via TWYs DB, D4, D3, D2, D1 and K to RWY 25L.

1.3.2.6. RWY 25R IN USE ONLY
When the pilot has left the last yellow light (of the alternated green and yellow lights) of the TWY centerline to vacate the RWY, ACFT has to stop and notify its position and that LSA is vacated. In this position, it has reached the safety distance with the TWY T and out of LSA. As a general procedure, arriving ACFT will taxi via TWY S (Eastbound) or TWY T (Westbound) through any of the gates indicated by Tower. Departing ACFT will taxi via TWY S to RWY 25R.

1.3.3. COMMUNICATION FAILURE
Arriving ACFT will vacate the RWY as soon as possible and hold the position in order to be in safe distance of taxiing. There it will wait arriving follow-me in order to be guided to the assigned stand.

Departing ACFT will continue the assigned route to its clearance limit, taking extreme caution to avoid detours. Once that point has been reached, ACFT must maintain the position and wait for a “Follow Me” vehicle in order to be guided to the stand or the holding point assigned.

1.4. TAXI PROCEDURES

1.4.1. GENERAL
TWY 07L MAX wingspan 79'/24m.

1.4.2. STANDARD TAXI ROUTES
Arrival RWY is 07L, departure RWY is 07R (East configuration) or arrival RWY is 25R and departure RWY is 25L (West configuration).

During both configurations, general taxi direction on TWY M is East, on TWY S is West and TWY T is bidirectional.

1.5. PARKING INFORMATION

1.5.1. GENERAL

1.5.2. PUSH-BACK
Pushback required on all stands on R-2 (except X1 thru X3) & stands 60, 61, 62, 63 and 64 on R-3.

1.5.3. AUXILIARY POWER UNIT (APU)
Stands in contact with Terminal:
The use of 400 Hz facilities is obligatory. The use of air-conditioning facilities will be obligatory when the ACFT air conditioning is needed. The use of APU is forbidden in these stands between 2 minutes after on-block time and 5 minutes before off-block time. Use APU only when fixed units are not operative and mobile units are not available.

Remote stands:
The use of APU is forbidden except 10 minutes after on-block time and 10 minutes before off-block time; however wide fuselage ACFT are permitted to use APU 50 minutes before departure and 15 minutes after arrival.

1.6. OTHER INFORMATION

Birds.
2. ARRIVAL

2.4. RWY OPERATIONS

2.4.1. MINIMUM RWY OCCUPANCY TIME

Commensurate with the ACFT safety and standard operation, pilots are reminded that rapid exit from the RWY enables maximum RWY utilization, lessens its occupancy time and minimizes the occurrence of ‘go-arounds’. If ATC advises otherwise, ACFT will vacate the corresponding RWY by the following rapid exit TWYs:

<table>
<thead>
<tr>
<th>RWY</th>
<th>Rapid Exit</th>
<th>ACFT</th>
<th>Dist from THR ft(m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>UB</td>
<td>all</td>
<td>6696' (2041m)</td>
</tr>
<tr>
<td>07L</td>
<td>ZA</td>
<td>all</td>
<td>6115' (1864m)</td>
</tr>
<tr>
<td></td>
<td>BA</td>
<td>light &amp; medium</td>
<td>4029' (1228m)</td>
</tr>
<tr>
<td></td>
<td>CA</td>
<td>light</td>
<td>3015' (919m)</td>
</tr>
<tr>
<td>07R</td>
<td>G4</td>
<td>all</td>
<td>6736' (2053m)</td>
</tr>
<tr>
<td></td>
<td>G5</td>
<td>all</td>
<td>5587' (1703m)</td>
</tr>
<tr>
<td></td>
<td>G6</td>
<td>light &amp; medium</td>
<td>4600' (1402m)</td>
</tr>
<tr>
<td>25L</td>
<td>G9</td>
<td>all</td>
<td>6736' (2053m)</td>
</tr>
<tr>
<td></td>
<td>G8</td>
<td>all</td>
<td>5587' (1703m)</td>
</tr>
<tr>
<td></td>
<td>G7</td>
<td>light &amp; medium</td>
<td>4600' (1402m)</td>
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<tr>
<td>25R</td>
<td>KA</td>
<td>all</td>
<td>10212' (3115m)</td>
</tr>
<tr>
<td></td>
<td>HA</td>
<td>all</td>
<td>7903' (2409m)</td>
</tr>
<tr>
<td></td>
<td>GA</td>
<td>all</td>
<td>6870' (2094m)</td>
</tr>
<tr>
<td></td>
<td>EB</td>
<td>light &amp; medium</td>
<td>5305' (1617m)</td>
</tr>
<tr>
<td></td>
<td>CB</td>
<td>light &amp; medium</td>
<td>4183' (1275m)</td>
</tr>
</tbody>
</table>

In crossed operations ACFT not able to leave RWY 07L before crossing RWY 02/20 shall maintain constant speed in order to accelerate at the crossing with the RWY and to leave via TWY 2A.

In crossed operations, ACFT landing in RWY 25R or 25L shall maintain speed to accelerate the crossing with RWY 20 or its extension.

2.4.2. ATC PROCEDURES

Although the RWY is temporarily occupied by a landing or arriving traffic, landing clearance may be issued to the successive arriving ACFT if the controller is sure that the ACFT crossing the THR of the RWY in use has the prescribed separation from the preceding ACFT. When issuing a "Landing Clearance based on Anticipated Separation ", ATC shall issue clearance to the succeeding ACFT with the following instructions:

".... (Call sign) BEHIND LANDING/DEPARTING (ACFT type) CLEARED TO LAND RUNWAY (number)".

2.5. TAXI PROCEDURES

When leaving the RWY, if taxiing instructions have not been received, ACFT shall stop at the end of the exit TWY segment.

To reduce the risk of RWY incursions, pilots should follow the green TWY center lights. If losing this visual reference, pilots must stop taxiing, notify their position and request instructions from ATC. Taxi instructions shall include clearance to cross active and non-active RWYS. If clearance is not received, ACFT maintain their position on the holding point of the appropriate RWY.

Arriving ACFT on RWY 25R (West configuration) or RWY 07L (East configuration) should follow ATC instructions to leave RWY.

2.6. COMMUNICATION FAILURE

When failure occurs during the missed approach, do not initiate the missed approach before the MAPt. Intercept the "MISSED APPCH WITH LOST COMM" procedure on the corresponding approach chart and execute at least one holding at:
- SLL for RWYs 07L, 25R and 02;
- VIBIM for RWYs 07R and 25L;
accomplish a new approach and land.

2.7. OTHER INFORMATION

Non-certified ACFT for RNAV arrival procedures or other ACFT unable to follow them, must await radar vectoring to follow the same path as the RNAV procedure.
3. DEPARTURE

3.1. START-UP, PUSH-BACK & TAXI PROCEDURES (GENERAL)

3.1.1. START-UP
ACFT must be ready to start-up before calling on the appropriate frequency.

- The Flight Activation Monitoring (FAM) managed by Eurocontrol is applied. In order to avoid flight plan being cancelled automatically, EOBT must be actualized and CTOT must be accomplished.

ACFT on departure shall contact Barcelona CLEARANCE DELIVERY not more than 15 minutes prior to the EOBT or modified EOBT in case a CTOT has been received, in order to:
- Report the type and series of the ACFT, the stand and the ATIS message received.
- Request delay information for engine start-up.
- Receive ATC clearances.
- Report possible restriction to comply with local regulations (RNAV equipment, take-off performance, etc.)

3.1.2. PUSH-BACK & TAXIING
ACFT must be ready for towed push-back or taxiing within the next 5 minutes to the approved start-up time; otherwise pilots will contact ATC.

All ACFT with a wingspan of 170’/52m or above or an overall height at or above 54’/16,5m will report ACFT type on the first call to BARCELONA GROUND.

When ACFT is ready for towing and/or taxiing, it will request clearance on the taxiing frequency before starting the towing and/or taxiing.

Unless BARCELONA GROUND advises another route in parallel runways operation, ACFT will taxi following the STANDARD TAXI ROUTES corresponding to the configuration in use.

3.1.3. TAKE-OFF FROM INTERSECTIONS AND THE BEGINNING OF RWY 07L/25R
Pilots who request to take-off from the beginning of RWY 07L or RWY 25R or who request and/or accept to take-off from a standard intersection shall inform ATC of the corresponding point with the configuration in use.

3.2. TAXI PROCEDURES (STANDARD TAXI ROUTES)

3.2.1. WEST CONFIGURATION
Taxi on TWY S through any gate indicated by ATC, follow S until S14, then TWYs M14, M13, M12, M11, M10, M9, M8, M7, M6, D1 or E3, E2, E1, K to holding point RWY 25L.

3.2.2. EAST CONFIGURATION
Taxi on TWY S through any gate indicated by ATC, follow S until S14, then TWYs M14, M13, M12, M11, M10, M9, M8, M7, E3, J1, K to holding point RWY 07R.

3.3. SPEED RESTRICTIONS
MAX 250 KT below FL100.

3.4. NOISE ABATEMENT PROCEDURES
For additional depiction refer to 10-4.

3.4.1. GENERAL
The following procedures have been established to avoid excessive noise in areas surrounding the APT. Non compliance may result in sanctions to ACFT operators.

- Departure paths will be radar monitored and noise level will be measured for each operation.
- In addition to RWY configuration described in 1.2.2. and due to noise abatement, RWY's 02 & 20 shall not be used for take-off between 2300-0700LT, except for safety reasons or when explicitly cleared. The use of RWY 25R for take-off between 2300-0700LT shall be restricted to ACFT that can justify the need to fly a RWY length higher than on RWYs 25L or 25R. The justification must be submitted to APT Operations as soon as possible.

3.4.2. TAKE-OFF
Except for safety reasons or ATC instructions based on the same reasons, ACFT must follow the nominal trajectory of SID until having reached 6000’ unless over the sea, above 3500’ in ascents and moving away from the coastline or at more than 3 NM from the coastline being parallel.

- RNAV SIDs will preferably be adopted by ACFT able to reach the minimum altitudes in the relevant points on initial SID segments.
- All ACFT which cannot comply with the previous instructions and ACFT flying in conventional SID, will adopt the ICAO NADP1 procedure described below:
  - up to 1500' take-off power, take-off flaps, climb maintaining V2 ±10 to 20 KT;
  - at 1500' reduce power and climb at Vzf +10 to 20 KT;
  - at 3500' accelerate smoothly to enroute climb speed maintaining positive rate of climb, retract flaps.

RWY 25L: ACFT must comply with bank & speed restrictions published on SID charts. Except for emergency reasons do not overshoot BCN R-236 on initial turn.

ACFT may be exempted when using different procedures, which have been duly reported to APT management in advance, and proved to lead to a less acoustic impact, or due to properly justified safety reasons.

3.5. RUNWAY OPERATIONS

3.5.1. MINIMUM RUNWAY OCCUPANCY TIMES
Pilots, when the corresponding clearance is issued, shall be able to taxi to the take-off position at the RWY as soon as the preceding departing ACFT has started the take-off or the preceding arriving ACFT has passed its holding position.

ACFT shall be able to initiate the take-off immediately after clearance is issued.

Pilots unable to comply with this requirement and once in contact with Barcelona TOWER shall notify ATC as soon as possible.

In order to reduce delays and to increase the total aerodrome capacity, departures from RWY 25R shall be carried out from RWY 25R intersection W or from RWY 25L intersection W.

Departures from the beginning of RWY 07L and RWY 25R are allowed.

3.6. OTHER INFORMATION
If RNAV equipment is not available, it must be notified to Barcelona CLEARANCE DELIVERY at first call.
MARTA TWO TANGO (MARTA 2T) [MART2T]
NEPAL TWO VICTOR (NEPAL 2V) [NEPA2V]
RWYS 25L/R ARRIVALS
FROM SOUTH

CASPE TWO SIERRA (CASPE 2S) [CASP2S]
CASPE ONE UNIFORM (CASPE 1U) [CASPIU]
MATEX ONE SIERRA (MATEX 1S) [MATE1S]
RWYS 02, 07L/R ARRIVALS
FROM SOUTHWEST

NOT TO SCALE
### SID DESIGNATION REFER TO CHART

<table>
<thead>
<tr>
<th>SID</th>
<th>Refer to Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGENA 1A, 1G</td>
<td>10-3N6</td>
</tr>
<tr>
<td>AGENA 1B, 1E</td>
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<tr>
<td>AGENA 2D, 2W</td>
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<td>VLA 1B, 1E</td>
<td>10-3X3</td>
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<td>VLA 2D, 2W</td>
<td>10-3X4</td>
</tr>
</tbody>
</table>

### Changes:
- SID LOTOS 2D, 2W renumbered 3D, 3W.
- AGENA ONE KILO (AGENA 1K) [AGEN1K]
- AGENA ONE LIMA (AGENA 1L) [AGEN1L]
- AGENA ONE MIKE (AGENA 1M) [AGEN1M]

**RWYS 02, 20, 07L RNAV DEPARTURES**

**SPEED MAX 250 KT BELOW FL 100**

- **AGENA 1K**
  - Climb on runway heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 091° bearing from VNV to CORVA, then to BL050, then to SALON, then to AGENA.
  - These SIDs require minimum climb gradients of 304' per NM (5%) until leaving AGENA 1K.

- **AGENA 1L**
  - Climb on runway heading to BCN, BCN R-067 to DILUM (D3 BCN), then to BL050, then to SALON, then to AGENA.
  - These SIDs require minimum climb gradients of 304' per NM (5%) until leaving AGENA 1L.

- **AGENA 1M**
  - Climb on runway heading to PRA R-079 to DILUM (D9.8 PRA), then to BL050, then to SALON, then to AGENA.
  - These SIDs require minimum climb gradients of 304' per NM (5%) until leaving AGENA 1M.

**RWYS 07L RNAV DEPARTURES**

- **AGENA ONE KILO (AGENA 1K)**
  - Climb on runway heading to BCN, BCN R-067 to DILUM (D3 BCN), then to BL050, then to SALON, then to AGENA.

**ERRORS: AIRPORT NAME.**

**NOT TO SCALE**

**0** Turns before departure end of runway (DER) are not allowed.

**AIRPORT NAME.**

**ERRORS: CHANGES.**

**AIRPORT NAME.**

**NOT TO SCALE**

**0** Turn before departure end of runway (DER) are not allowed.
<table>
<thead>
<tr>
<th>SID</th>
<th>RWY</th>
<th>INITIAL CLIMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGENA 2P</td>
<td>25R</td>
<td>Climb on BCN R-247 to D5.5 BCN, then to GAVMA (D6 BCN).</td>
</tr>
<tr>
<td>AGENA 2Q</td>
<td>20</td>
<td>Climb on runway heading to 500', turn RIGHT, intercept PRA R-200 to PERAL (D6 PRA).</td>
</tr>
<tr>
<td>AGENA 2Q</td>
<td>25L</td>
<td>Climb on runway heading to 500', turn LEFT, 170' track, intercept PRA R-200 to PERAL (D6 PRA).</td>
</tr>
</tbody>
</table>

**SID ROUTING**

| AGENA 2P | GAVMA (3500') - NITBA (6000') - BL057 - AGENA. |
| AGENA 2Q | PERAL (3000') - NITBA (6000') - BL057 - AGENA. |

**INITIAL CLIMB/ROUTING**

- **AGENA 2Q (fly-by)**
  - MITRA N1 15.9 E001 59.2
  - At or above 3500'

- **AGENA 2P (fly-by)**
  - EL PRAT N1 114.3 E002 04.9
  - At 500'
  - At or above 6000'

- **AGENA 2Q (fly-by)**
  - AGENA N1 32.2 E003 29.3
  - N1 116.7 BCN N1 18.4 E002 06.5
  - At or above 3500'

- **AGENA 2P (fly-by)**
  - AGENA N1 22.0 E002 36.7
  - N1 29.7 E003 11.2 (BCN R-077/D50)
  - At or above 500'

- **AGENA 2Q (fly-by)**
  - SALON N1 29.7 E003 11.2
  - BCN R-077/D50

- **AGENA 2P (fly-by)**
  - SUKOS N1 17.1 E002 14.2
  - At or above 4000'

**AGENA ONE ROMEO (AGENA 1R) [AGE2R]**

- **RWY 07R RNAV DEPARTURE**
  - CLIMB 140 KT below FL100
  - To AGENA.

**AGENA TWO QUEBEC (AGENA 2Q) [AGEN2Q]**

- **RWY 28R, 20, 25L RNAV DEPARTURES**
  - CLIMB 140 KT below FL100
  - To AGENA.

**AGENA TWO PAPA (AGENA 2P) [AGEN2P]**

- **RWY 25R, 20, 25L RNAV DEPARTURES**
  - CLIMB 140 KT below FL100
  - To AGENA.

**SPEED:**

- MAX 250 KT below FL100

**NOT TO SCALE**

- 4300' within 15 NM

**CHANGES:**

- RNAV SIDs renumbered & revised; airport name.

**Functionality:**

- These SIDs are restricted BRNAV procedures to equipment that supports fly-by functionality. If such equipment is not available, it must be notified to BARCELONAClearance at first call.

**Speed:**

- MAX 250 KT below FL100

**At:**

- 500'
- At or above 3000'
- At or above 4000'
- At or above 6000'

**Turns before departure end of runway (DER) are not allowed.**

**FL120.**

- Cross AGENA at or below FL120.
1. These SIDs are restricted BRNAV procedures to equipment that supports fly-by.

2. For runway configuration refer to Airport Briefing pages.

SIDs:

- **DALIN IK**: Initial climb to 1000' after turning right on BCN R-247 to D5.5 BCN.
- **DALIN 1L**: Initial climb to 500' after turning right on BCN R-200 to PERAL (D6 PRA).
- **DALIN 1M**: Initial climb to 500' after turning right on BCN R-200 to PERAL (D6 PRA).

Initial Climb/Routing:

- Climb on BCN R-247 to D5.5 BCN.
- Climb on BCN R-200 to PERAL (D6 PRA).
- Climb on BCN, BCN R-067 to DILUM (D3 BCN), then to BL049, then to FEVIK, then to DALIN.
- Climb on runway heading to BCN, BCN R-067 to DILUM (D3 BCN), then to BL049, then to FEVIK, then to DALIN.
- Climb on runway heading to BCN, BCN R-067 to DILUM (D3 BCN), then to BL049, then to FEVIK, then to DALIN.

Speeds:

- MAX 250 KT below FL100

**NOT TO SCALE**
INITIAL CLIMB/ROUTING

**RWYS 02, 20, 07L RNAV DEPARTURES**

**SPEED:** MAX 250 KT BELOW FL100

**CHANGES:**

- [DUNE1K]
- [DUNE1L]
- [DUNE1M]
- [DUNE1K]

These SIDs require minimum climb gradients of:

- DUNES 1K: 304' per NM (5%) until leaving 1000'.
- DUNES 1M: 346' per NM (5.7%) until leaving 1800'.

INITIAL CLIMB/ROUTING

Climb on runway heading to 500°, turn RIGHT, intercept PRA R-090 to SUKOS (D7 PRA), then to BL049, then to FEVIK, then to DALIN.

At or above 500', MAX 200 KT.

Climb on runway heading to 500°, turn RIGHT, 185° heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 091° bearing from VNV to CORVA, then to BL010, then to DUNES.

Climb on runway heading to BCN, BCN R-067 to DILUM (D3 BCN), then to BL010, then to DUNES.

Apt Elev 14'

**Speed:** MAX 250 KT BELOW FL100

**Not to scale**

**BARCELONA**

**VILLANUEVA**

**DUNES**

**DUNES ONE KILO (DUNES 1K) [DUNE1K]**

**DUNES ONE LIMA (DUNES 1L) [DUNE1L]**

**DUNES ONE MIKE (DUNES 1M) [DUNE1M]**

**RWY 07R RNAV DEPARTURE**

**SPEED:** MAX 250 KT BELOW FL100

**CHANGES:**

1. These SIDs are restricted BRNAV procedures to equipment that supports fly-by functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
2. For runway configuration refer to Airport Briefing pages.

**Apt Elev 14'**

**Speed:** MAX 250 KT BELOW FL100

**Not to scale**

**BARCELONA**

**VILLANUEVA**

**DUNES**

**DUNES ONE KILO (DUNES 1K) [DUNE1K]**

**DUNES ONE LIMA (DUNES 1L) [DUNE1L]**

**DUNES ONE MIKE (DUNES 1M) [DUNE1M]**

**RWY 07R RNAV DEPARTURE**

**SPEED:** MAX 250 KT BELOW FL100

**CHANGES:**

1. These SIDs are restricted BRNAV procedures to equipment that supports fly-by functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
2. For runway configuration refer to Airport Briefing pages.
**DUNES TWO PAPA (DUNES 2P) [DUNE2P]**

- RWY 25R, 20, 25L RNAV DEPARTURES
- RNAV (DME/DME)
- P-RNAV APPROVAL REQUIRED
- DME ASSOCIATED TO ILS ARE NOT USABLE FOR P-RNAV DEPARTURES

**SPEED: MAX 250 KT BELOW FL100**

**INITIAL CLIMB**

- **DUNES 2P**
  - 25R: Climb on BCN R-247 to D5.5 BCN, then to GAVMA (D6 BCN).

- **DUNES 2Q**
  - 20: Climb on runway heading to Peral (D8 PRA).

**ROUTING**

- **DUNES 2P**
  - GAVMA (3500') - NITBA (6000') - BL057 - DUNES.

- **DUNES 2Q**
  - PERAL (3000') - NITBA (6000') - BL057 - DUNES.

**CHANGES:** RNAV SIDs renumbered & revised; airport name.

For runway configuration refer to Airport Briefing pages.

- At 500', 180 KT MAX
- At or above 3000', 210 KT MAX
- At or below 4000', 200 KT MAX

**SPEED:**

**BANKING:**

- At or above 3000', Bank 15'
- At or above 3500', Bank 20'
- At or above 6000', Bank 20'

**NOT TO SCALE**

**Challenges:**

- RNAV procedures are restricted P-RNAV procedures to equipment that supports fly-by functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
- For runway configuration refer to Airport Briefing pages.

**BARCELONA, SPAIN**

**31 OCT 06**

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**Graus One Kilo (Graus 1K) [Grau1K]**
Graus One Lima (Graus 1L) [Grau1L]
Graus One Mike (Graus 1M) [Grau1M]

**RWYS 02, 20, 07L RNAV DEPARTURES**

**SPEED MAX 250 KT BELOW FL100**

**Barcelona, Spain**

Eff. 26 Oct

**Apt Elev**

14°

**Trans level:** By ATC
**Trans alt:** 6000'

**For runway configuration refer to Airport Briefing pages.**

**Comms lost**

These SIDs require minimum climb gradients of

Graus 1K
304' per NM (5%) until leaving 1000'.
Graus 1M
346' per NM (5.7%) until leaving 1800'.

**Initial Climb/Routing**

**Graus 1K**
02CLimb on runway heading to 500°, turn RIGHT, intercept BCN R-054 to BLO07 (D12.4 BCN), then to BLO05, then to BLO09, then to Graus.

**Graus 1L**
20CLimb on runway heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 091° bearing from VNV to CORVA, then to BLO40, then to BLO09, then to Graus.

**Graus 1M**
07LCLimb on runway heading to BCN, BCN R-087 to DILUM (D3 BCN), turn LEFT, intercept BCN R-054 to BLO07 (D12.4 BCN), then to BLO05, then to BLO09, then to Graus.

**Note:**
- All speeds are in knots (KT).
- These SID's are restricted BRNAV procedures to equipment that supports fly-by-functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
- For runway configuration refer to Airport Briefing pages.

**RNAV (DME/DME)**

**Graus Two Papa (Graus 2P) [Grau2P]**
Graus Two Quebec (Graus 2Q) [Grau2Q]

**RWYS 25R, 25L RNAV DEPARTURES**

**SPEED MAX 250 KT BELOW FL100**

**Barcelona, Spain**

Eff. 26 Oct

**Apt Elev**

14°

**For runway configuration refer to Airport Briefing pages.**

**Comms lost**

**Note:**
- All speeds are in knots (KT).
- These SID's are restricted BRNAV procedures to equipment that supports fly-by-functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
- For runway configuration refer to Airport Briefing pages.

**RNAV (DME/DME)**

**Graus Two Papa (Graus 2P) [Grau2P]**
Graus Two Quebec (Graus 2Q) [Grau2Q]

**RWYS 25R, 25L RNAV DEPARTURES**

**SPEED MAX 250 KT BELOW FL100**

**Barcelona, Spain**

Eff. 26 Oct

**Apt Elev**

14°

**For runway configuration refer to Airport Briefing pages.**

**Comms lost**

These SIDs require minimum climb gradients of

Graus 1K
304' per NM (5%) until leaving 1000'.
Graus 1M
346' per NM (5.7%) until leaving 1800'.

**Initial Climb/Routing**

**Graus 1K**
02CLimb on runway heading to 500°, turn RIGHT, intercept BCN R-054 to BLO07 (D12.4 BCN), then to BLO05, then to BLO09, then to Graus.

**Graus 1L**
20CLimb on runway heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 091° bearing from VNV to CORVA, then to BLO40, then to BLO09, then to Graus.

**Graus 1M**
07LCLimb on runway heading to BCN, BCN R-087 to DILUM (D3 BCN), turn LEFT, intercept BCN R-054 to BLO07 (D12.4 BCN), then to BLO05, then to BLO09, then to Graus.
These SIDs require minimum climb gradients of:
- LARPA 1K: 304°/NM (5%) until leaving 1000'.
- LARPA 1M: 346°/NM (6.7%) until leaving 1800'.

INITIAL CLIMB/ROUTING

Turns before departure end of runway (DER) are not allowed.

Climb on runway heading to 500', turn RIGHT, 185° heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 091° bearing from VNV to CORVA, then to BL010, then to TASOS, then to LARPA.

转换单位：机场名称。
LARPA TWO PAPA (LARPA 2P) [LARP2P]
LARPA TWO QUEBEC (LARPA 2Q) [LARP2Q]
RWYS 25R, 20, 25L RNAV DEPARTURES
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
DME ASSOCIATED TO ILS ARE NOT USEFUL FOR P-RNAV DEPARTURES

**SID**
Rwy 25L: Do not overshoot BCN R-236 on initial turn.  
Rwy 25L: Climb on runway heading to 3000', then to GAVMA (D6 BCN).
Rwy 25L: Climb on runway heading to PERAL (D6 PRA).
Rwy 20: Climb on runway heading to PERAL (D6 PRA).
Rwy 25L: Cross LARPA at or below FL120.

**INITIAL CLIMB**

**ROUTING**

**CHANGES:** P-RNAV SIDs renumbered & revised; airport name.
These SIDs require minimum climb gradients of

**LOBAR 1K** 304’ per NM (5%) until leaving 1000’. 346’ per NM (5.7%) until leaving 1800’.

**LOBAR 1M** 304’ per NM (5%) until leaving 1000’.

**SID** | **RWY** | **INITIAL CLIMB/ROUTING**
---|---|---
**LOBAR 1K** | 02 | Climb on runway heading to 500’, turn **RIGHT**, intercept BCN R-054 to BL007 (D12.4 BCN), then to BL008, then to BL003, then to LOBAR.
| 11 | Climb on runway heading, intercept PRA R-196 to D2 PRA, turn **LEFT**, intercept 091° bearing from VNV to CORVA, then to BL008, then to BL003, then to LOBAR.
| 07L | Climb on runway heading to BCN, BCN R-087 to DILUM (D3 BCN), turn **LEFT**, intercept BCN R-054 to BL007 (D12.4 BCN), turn **LEFT** to BL008, then to BL003, then to LOBAR.

**COMMENTS**
1. These SIDs are restricted BRNAV procedures to equipment that supports fly-by-functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
2. For runway configuration refer to Airport Briefing pages.
LOBAR ONE ROMEO (LOBAR 1R) [LOBA1R]
RWY 07R RNAV DEPARTURE

**SPEED** MAX 250 KT BELOW FL100

**INITIAL CLIMB/ROUTING**

- Trans level: By ATC
- Trans alt: 6000'

1. These SIDs are restricted BRNAV procedures to equipment that supports fly-by functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
2. For runway configuration refer to Airport Briefing pages.

At or above 500', MAX 200 KT

Turns before departure end of runway (DER) are not allowed.

**CHANGES:**
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**LOTOS ONE KILO (LOTOS 1K) [LOTO1K]**
**LOTOS ONE LIMA (LOTOS 1L) [LOTO1L]**
**LOTOS ONE MIKE (LOTOS 1M) [LOTO1M]**

RWYS 02, 20, 07L RNAV DEPARTURES

**SPEED** MAX 250 KT BELOW FL100

**INITIAL CLIMB/ROUTING**

- Climbs on runway heading to 500', turn RIGHT, intercept PRA R-090 to SUKOS (D7 PRA), then to BLO08, then to BLO53, then to LOBAR.
- Climbs on runway heading to 500', turn RIGHT, intercept PRA R-196 to D2 PRA, then to BL042, then to LOTOS.
- Climbs on runway heading to BCN, BCN R-067 to DILUM (D3 BCN), turn LEFT, intercept 091° bearing to VNV to CORVA, then to BL011, then to BL042, then to LOTOS.

**CHANGES:**
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**LOTOS TWO PAPA (LOTOS 2P) [LOTO2P]**

**LOTOS TWO QUEBEC (LOTOS 2Q) [LOTO2Q]**

**RWYS 25R, 20, 25L RNAV DEPARTURES**

**RNAV (DME/DME)**

P-RNAV APPROVAL REQUIRED

DME ASSOCIATED TO ILS ARE NOT USABLE FOR P-RNAV DEPARTURES

**SPEED:** MAX 250 KT BELOW FL100

**INITIAL CLIMB**

- **LOTOS 2P**
  - **RWY 25R:** Climb on BCN R-247 to D5.5 BCN, then to GAVMA (D6 BCN).
  - **LOTOS 2Q**
    - **RWY 20:** Climb on runway heading to 500', turn RIGHT, intercept PRA R-209 to DOTIS (D5.5 PRA).
    - **RWY 25L:** Climb on runway heading to 500', turn LEFT, 179° track, intercept PRA R-209 to DOTIS (D5.5 PRA).

**ROUTING**

**LOTOS 2P**
- GAVMA (113.15 VLA R-208/D53.6) - BL042 - LOTOS.

**LOTOS 2Q**
- DOTIS (3000') - BL047 - BL014 - LOTOS.

---

**LOTOS ONE ROMEO (LOTOS 1R) [LOTO1R]**

**RWY 07R RNAV DEPARTURE**

**SPEED:** MAX 250 KT BELOW FL100

**INITIAL CLIMB/ROUTING**

- Climb on runway heading to 500', turn RIGHT, intercept PRA R-096 to SUKOS (D7 PRA), then to BL011, then to BL042, then to LOTOS.

---

**CHANGES:** RNAV SIDs renumbered & revised; airport name.

**Barcelona, Spain**

For runway configuration refer to Airport Briefing pages.
These SIDs require minimum climb gradients of
MOPAS 1K
304' per NM (5%) until leaving 1000'.
MOPAS 1M
346' per NM (5.7%) until leaving 1800'.

MOPAS ONE KILO (MOPAS 1K) [MOPA1K]
MOPAS ONE LIMA (MOPAS 1L) [MOPA1L]
MOPAS ONE MIKE (MOPAS 1M) [MOPA1M]

RWYS 02, 20, 07L RNAV DEPARTURES
SPEED: MAX 250 KT BELOW FL100

Changés: Airport name.
MOPAS ONE ROMEO (MOPAS 1R) / MOPA 1R

RWY 07R RNAV DEPARTURE

**SPEED** MAX 250 KT BELOW FL100

**MOPAS**
N41 26.1 E002 02.1
(14.2 N38-336/277.4)
(SIL R-320/073)

**SABADELL**
N41 31.2 E002 06.6

**BARCELONA**
116.7 BCN
N41 18.4 E002 06.5

**VILLANUEVA**
380 VNV
N41 12.6 E002 16.5

**SUROS**
N41 17.1 E002 14.2

**FL100**
At or above

**MAX**
200 KT

**MOPAS**
N41 31.2 E002 06.6

**SABADELL**
N41 31.2 E002 06.6

**BARCELONA**
116.7 BCN
N41 18.4 E002 06.5

**VILLANUEVA**
380 VNV
N41 12.6 E002 16.5

**SUROS**
N41 17.1 E002 14.2

**FL100**
At or above

**MAX**
200 KT

**OKABI ONE KILO (OKABI 1K) [OKAB1K]**
OKABI ONE LIMA (OKABI 1L) [OKAB1L]
OKABI ONE MIKE (OKABI 1M) [OKAB1M]

**RWYS 02, 20, 07L RNAV DEPARTURES**

**SPEED** MAX 250 KT BELOW FL100

**OKABI**
N41 25.8 E002 19.7

**BL007**
N41 25.8 E002 23.7
At or above FL100

**OKABI 1K**
MAX 200 KT

**OKABI 1L**
MAX 200 KT

**OKABI 1M**
MAX 200 KT

**D2 PRA**
At or above FL120

**DILUM**
N41 12.6 E002 04.9
At or above FL120

**CORVA**
N41 12.6 E002 16.5
(PRA D9.8)
(BCN R-342/D03.3)

**OKABI 1K, 1M:** OKABI 1L:

At or above FL120

**OKABI 1K:**

At or above FL120

**OKABI 1M:**

At or above FL120

**OKABI 1L:**

At or above FL120

**MOPAS ONE ROMEO (MOPAS 1R) [MOPA 1R]**

**RWY 07R RNAV DEPARTURE**

**SPEED** MAX 250 KT BELOW FL100

**MOPAS**
N41 26.1 E002 02.1
(14.2 N38-336/277.4)
(SIL R-320/073)

**SABADELL**
N41 31.2 E002 06.6

**BARCELONA**
116.7 BCN
N41 18.4 E002 06.5

**VILLANUEVA**
380 VNV
N41 12.6 E002 16.5

**SUROS**
N41 17.1 E002 14.2

**FL100**
At or above

**MAX**
200 KT

**OKABI ONE KILO (OKABI 1K) [OKAB1K]**
OKABI ONE LIMA (OKABI 1L) [OKAB1L]
OKABI ONE MIKE (OKABI 1M) [OKAB1M]

**RWYS 02, 20, 07L RNAV DEPARTURES**

**SPEED** MAX 250 KT BELOW FL100

**OKABI**
N41 25.8 E002 19.7

**BL007**
N41 25.8 E002 23.7
At or above FL100

**OKABI 1K**
MAX 200 KT

**OKABI 1L**
MAX 200 KT

**OKABI 1M**
MAX 200 KT

**D2 PRA**
At or above FL120

**DILUM**
N41 12.6 E002 04.9
At or above FL120

**CORVA**
N41 12.6 E002 16.5
(PRA D9.8)
(BCN R-342/D03.3)

**OKABI 1K, 1M:** OKABI 1L:

At or above FL120

**OKABI 1K:**

At or above FL120

**OKABI 1M:**

At or above FL120

**OKABI 1L:**

At or above FL120

**MOPAS ONE ROMEO (MOPAS 1R) [MOPA 1R]**

**RWY 07R RNAV DEPARTURE**

**SPEED** MAX 250 KT BELOW FL100

**MOPAS**
N41 26.1 E002 02.1
(14.2 N38-336/277.4)
(SIL R-320/073)

**SABADELL**
N41 31.2 E002 06.6

**BARCELONA**
116.7 BCN
N41 18.4 E002 06.5

**VILLANUEVA**
380 VNV
N41 12.6 E002 16.5

**SUROS**
N41 17.1 E002 14.2

**FL100**
At or above

**MAX**
200 KT

**OKABI ONE KILO (OKABI 1K) [OKAB1K]**
OKABI ONE LIMA (OKABI 1L) [OKAB1L]
OKABI ONE MIKE (OKABI 1M) [OKAB1M]

**RWYS 02, 20, 07L RNAV DEPARTURES**

**SPEED** MAX 250 KT BELOW FL100

**OKABI**
N41 25.8 E002 19.7

**BL007**
N41 25.8 E002 23.7
At or above FL100

**OKABI 1K**
MAX 200 KT

**OKABI 1L**
MAX 200 KT

**OKABI 1M**
MAX 200 KT

**D2 PRA**
At or above FL120

**DILUM**
N41 12.6 E002 04.9
At or above FL120

**CORVA**
N41 12.6 E002 16.5
(PRA D9.8)
(BCN R-342/D03.3)

**OKABI 1K, 1M:** OKABI 1L:

At or above FL120

**OKABI 1K:**

At or above FL120

**OKABI 1M:**

At or above FL120

**OKABI 1L:**

At or above FL120

**MOPAS ONE ROMEO (MOPAS 1R) [MOPA 1R]**

**RWY 07R RNAV DEPARTURE**

**SPEED** MAX 250 KT BELOW FL100

**MOPAS**
N41 26.1 E002 02.1
(14.2 N38-336/277.4)
(SIL R-320/073)

**SABADELL**
N41 31.2 E002 06.6

**BARCELONA**
116.7 BCN
N41 18.4 E002 06.5

**VILLANUEVA**
380 VNV
N41 12.6 E002 16.5

**SUROS**
N41 17.1 E002 14.2

**FL100**
At or above

**MAX**
200 KT

**OKABI ONE KILO (OKABI 1K) [OKAB1K]**
OKABI ONE LIMA (OKABI 1L) [OKAB1L]
OKABI ONE MIKE (OKABI 1M) [OKAB1M]

**RWYS 02, 20, 07L RNAV DEPARTURES**

**SPEED** MAX 250 KT BELOW FL100

**OKABI**
N41 25.8 E002 19.7

**BL007**
N41 25.8 E002 23.7
At or above FL100

**OKABI 1K**
MAX 200 KT

**OKABI 1L**
MAX 200 KT

**OKABI 1M**
MAX 200 KT

**D2 PRA**
At or above FL120

**DILUM**
N41 12.6 E002 04.9
At or above FL120

**CORVA**
N41 12.6 E002 16.5
(PRA D9.8)
(BCN R-342/D03.3)

**OKABI 1K, 1M:** OKABI 1L:

At or above FL120

**OKABI 1K:**

At or above FL120

**OKABI 1M:**

At or above FL120

**OKABI 1L:**

At or above FL120
**OKABI TWO PAPA (OKABI 2P) [OKAB2P]**

**OKABI TWO QUEBEC (OKABI 2Q) [OKAB2Q]**

**RWYS 25R, 20, 25L RNAV DEPARTURES**

**RNAV (DME/DME)**

**P-RNAV APPROVAL REQUIRED**

**DME ASSOCIATED TO ILS ARE NOT USABLE FOR P-RNAV DEPARTURES**

**SPEED: MAX 250 KT BELOW FL100**

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<thead>
<tr>
<th>SID</th>
<th>RWY</th>
<th>INITIAL CLIMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>OKABI 2P</td>
<td>25R</td>
<td>Climb on BCN R-247 to D5.5 BCN, then to GAVMA (D6 BCN).</td>
</tr>
<tr>
<td>OKABI 2Q</td>
<td>20</td>
<td>Climb on runway heading to DOTIS (D9 BCN).</td>
</tr>
<tr>
<td>OKABI 2Q</td>
<td>25L</td>
<td>Climb on runway heading to R-209 to DOTIS (D5.5 PRA).</td>
</tr>
</tbody>
</table>

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**SPEED: MAX 250 KT BELOW FL100**

**CHANGES:** RNAV SIDs renumbered & revised; airport name.
These SIDs require minimum climb gradients of:

**SENIA 1K**
- 304' per NM (5%) until leaving 1000'.
- 346' per NM (5.7%) until leaving 1800'.

**SENIA 3M**
- 304' per NM (5%) until leaving 1000'.
- 346' per NM (5.7%) until leaving 1800'.

Grid speed-KT:
- 304' per NM: 75, 100, 150, 200, 250, 300
- 346' per NM: 380, 506, 760, 1013, 1266, 1519
- 346' per NM: 433, 577, 866, 1155, 1443, 1732

**SENI A ONE KILO (SENI A 1K) [SENI A 1K]**
- Climb on runway heading to 500', turn RIGHT, 185° heading, intercept BCN R-129 to CORVA (D9.6 BCN), then to BLO1; then to BLO42, then to SENIA.

**SENI A THREE LIMA (SENI A 3L) [SENI A 3L]**
- Climb on runway heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 091° bearing from VNV to CORVA, turn RIGHT to BLO11, then to BLO42, then to SENIA.

**SENI A THREE MIKE (SENI A 3M) [SENI A 3M]**
- Climb on runway heading to BCN, BCN R-067 to DILUM (D3 BCN), turn RIGHT to BLO11, then to BLO42, then to SENIA.

**SENIA DEPARTURES**
- SPEED: MAX 250 KT BELOW FL100
**SENIA THREE ROMEO (SENIA 3R) [SENIA3R]**

**RWY 07R RNAV DEPARTURE**

**SPEED** MAX 250 KT BELOW FL100

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**INITIAL CLIMB/ROUTING**

1. These SIDs are restricted RNAV procedures to equipment that supports fly-by functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
2. For runway configuration refer to Airport Briefing pages.

**CHANGES:**

1. These SIDs are restricted RNAV procedures to equipment that supports fly-by functionality. If such equipment is not available, it must be notified to BARCELONA Clearance at first call.
2. For runway configuration refer to Airport Briefing pages.
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</thead>
<tbody>
<tr>
<td>VERSO 2P</td>
<td>25R</td>
<td>Climb on BCN R-247 to D5.5 BCN, then to GAVMA (D6 BCN)</td>
</tr>
<tr>
<td>VERSO 2Q</td>
<td>20</td>
<td>Climb on runway heading to 500', turn RIGHT, intercept PRA R-200 to PERAL (D6 PRA).</td>
</tr>
<tr>
<td>VERSO 2L</td>
<td>25L</td>
<td>Climb on runway heading to 500', turn LEFT, 170° track, intercept PRA R-200 to PERAL (D6 PRA).</td>
</tr>
</tbody>
</table>

**SID ROUTING**

<table>
<thead>
<tr>
<th>SID</th>
<th>RWY</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERSO 2P</td>
<td>GAVMA (3500'-)</td>
<td>- NITBA (6000'-) - BL057 - VERSO.</td>
</tr>
<tr>
<td>VERSO 2Q</td>
<td>PERAL (3000'-)</td>
<td>- NITBA (6000'-) - BL057 - VERSO.</td>
</tr>
</tbody>
</table>

**VERSIF ONE ROMEO (D58.5)**

Climb on runway heading to 500', turn RIGHT, intercept PRA R-090 to SUKOS (D7 PRA), then to BL051, then to BL037, then to VERSO.

**VERSIF TWO PAPA (VERSIF 2P)**

Climb on runway heading to 500', turn LEFT, 170° track, intercept PRA R-200 to PERAL (D6 PRA).

**VERSIF TWO QUEBEC (VERSIF 2Q)**

At or above 3000', turn LEFT, 170° track, intercept PRA R-200 to PERAL (D6 PRA).

**FL120.**

Cross VERSO at or below FL120.

**VERSO**

N41 09.2 E003 45.4 (115.35 CLE R-121/D58.5)

**MAX 250 KT**

Climb on runway heading to 500', turn RIGHT, intercept PRA R-090 to SUKOS (D7 PRA), then to BL051, then to BL037, then to VERSO.

**MAX 200 KT**

Climb on runway heading to 500', turn LEFT, 170° track, intercept PRA R-200 to PERAL (D6 PRA).

**VERSIF ONE ROMEO (D58.5)**

Climb on runway heading to 500', turn LEFT, 170° track, intercept PRA R-090 to SUKOS (D7 PRA), then to BL051, then to BL037, then to VERSO.
For runway configuration refer to Airport Briefing pages.
**DUNES ONE ALFA (DUNES 1A) [DUNE1A]**

**DUNES ONE GOLF (DUNES 1G) [DUNE1G]**

**RWYS 20, 07R DEPARTURES**

**SPEED MAX 250 KT BELOW FL100**

**CLIMB ON RUNWAY HEADING, INTERCEPT PRA R-196 TO D2 PRA, TURN LEFT,**

**INTERCEPT 091° BEARING FROM VNV VIA CORVA TO D22 PRA, TURN RIGHT,**

**INTERCEPT SLL R-130 TO DUNES.**
DUNES ONE BRAVO (DUNES 1B) [DUNE1B]
DUNES ONE ECHO (DUNES 1E) [DUNE1E]
RWYS 07L, 02 DEPARTURES
SPEED: MAX 250 KT BELOW FL100

DUNES TWO DELTA (DUNES 2D) [DUNE2D]
DUNES TWO WHISKEY (DUNES 2W) [DUNE2W]
RWYS 25R, 20, 25L DEPARTURES
SPEED: MAX 250 KT BELOW FL100

For runway configuration refer to Airport Briefing pages.

These SIDs require minimum climb gradients of
340' per NM (5.6%) until D5 BCN.
DUNES 1E
304' per NM (5%) until leaving 1000'.

SID
Rwy

DUNES 1B
07L
Climb on runway heading to BCN, BCN R-087 to D5 BCN, turn RIGHT, 145° heading, intercept BCN R-098 to D17 BCN, turn RIGHT, intercept SLL R-130 to DUNES.

DUNES 1E
02
Climb on runway heading to 500', turn RIGHT, 145° heading, intercept BCN R-098 to D17 BCN, turn RIGHT, intercept SLL R-130 to DUNES.

DUNES 2W
maintenance 6000' until D14.5 PRA, except ATC clearance.

Climb on runway heading to BCN, BCN R-098 to D5 BCN, turn LEFT, 145° heading, intercept BCN R-098 to D17 BCN, turn LEFT, intercept SLL R-130 to DUNES.

DCS required minimum climb gradients of
340' per NM (5.6%) until D5 BCN.

These SIDs require minimum climb gradients of
304' per NM (5%) until leaving 1000'.

SID
Rwy

DUNES 1B
07L
Climb on runway heading to BCN, BCN R-087 to D5 BCN, turn RIGHT, 145° heading, intercept BCN R-098 to D17 BCN, turn RIGHT, intercept SLL R-130 to DUNES.

DUNES 1E
02
Climb on runway heading to 500', turn RIGHT, 145° heading, intercept BCN R-098 to D17 BCN, turn RIGHT, intercept SLL R-130 to DUNES.

DUNES 2W
maintenance 6000' until D14.5 PRA, except ATC clearance.

Climb on runway heading to BCN, BCN R-098 to D5 BCN, turn LEFT, 145° heading, intercept BCN R-098 to D17 BCN, turn LEFT, intercept SLL R-130 to DUNES.

Turns before departure end of runway (DER) are not allowed.
GRAUS 5A

This SID requires a minimum climb gradient of 334' per NM (5.5%) until leaving 4000'.

Gnd speed-KT 75 100 150 200 250 300
334' per NM 418 557 835 1114 1392 1671

SID Rwy ROUTING
GRAUS 5A 20 Climb on runway heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 090° bearing from PRA to CORVA, turn LEFT, intercept CLE R-213 inbound to D2 CLE, turn LEFT, intercept CLE R-283 via POBIL to GRAUS.

GRAUS 1G 07R Climb on runway heading to 500', turn RIGHT, intercept PRA R-098 to D12 PRA, turn LEFT, intercept CLE R-207 inbound to D2 CLE, turn LEFT, intercept CLE R-283 via POBIL to GRAUS.

These SIDs require minimum climb gradients of
GRAUS 5B 340' per NM (5.6%) until D5 BCN.
GRAUS 5E 304' per NM (5.5%) until leaving 10000'.

Gnd speed-KT 75 100 150 200 250 300
340' per NM 425 567 851 1134 1418 1701
304' per NM 380 506 760 1013 1266 1519

SID Rwy ROUTING
GRAUS 5B 07L Climb on runway heading to BCN, BCN R-067 to D5 BCN, turn LEFT, intercept CLE R-228 inbound to D2 CLE, turn LEFT, intercept CLE R-283 via POBIL to GRAUS.
GRAUS 5E 02 Climb on runway heading to 500', turn RIGHT, 090° heading, intercept CLE R-228 inbound to D2 CLE, turn LEFT, intercept CLE R-283 via POBIL to GRAUS.

Turns before departure end of runway (DER) are not allowed.

NOTE: PRINTED FROM AN EXPIRED REVISION. Disc 01-2008.
GRUAS SIX DELTA (GRAUS 6D) [GRAUSD]  
GRUAS TWO WHISKEY (GRAUS 2W) [GRAU2W]  
RWYS 25R, 20, 25L DEPARTURES  
SPEED MAX 250 KT BELOW FL100  

At or above 500', turn LEFT, 336⁰ bearing to GRAUS. 

At or above 500', turn RIGHT, 354⁰ bearing, intercept BCN R-284 to RILUK, intercept 284⁰ bearing to LRD, turn RIGHT, 336⁰ bearing to GRAUS. 

Climb on runway heading to 

75 100 150 200 250 300
Gnd speed-KT 
334' per NM (5.5%) until leaving 4000'.

This SID requires a minimum climb gradient of 334' per NM (5.5%) until leaving 4000'.

SID RWY  
LARPA 1A 20  
Climb on runway heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 091⁰ bearing from VNV via CORVA to D22 PRA, turn RIGHT, along SLL 36 DME arc, intercept CLE R-193 to LARPA. 

LARPA 1G 07R  
Climb on runway heading to 500', turn RIGHT, intercept PRA R-098 to D20 PRA, turn RIGHT, intercept SLL R-130 to D34 SLL, turn RIGHT, along SLL 36 DME arc, intercept CLE R-193 to LARPA.  

AIRPORT NAME: BARCELONA, SPAIN  

NOT TO SCALE
**SID RWY ROUTING**

**LARPA 1B**
- RWY 07L
  - Climbing on runway heading to BCN, BCN R-067 to D5 BCN, turn RIGHT, 145° heading, Intercept BCN R-098 to D17 BCN, turn RIGHT, intercept SLL R-130 to D34 SLL, turn RIGHT, along SLL 36 DME arc, intercept CLE R-193 to LARPA.

**LARPA 1E**
- RWY 03L
  - Climbing on runway heading to 500°, turn RIGHT, 145° heading, Intercept BCN R-098 to D17 BCN, turn RIGHT, intercept SLL R-130 to D34 SLL, turn RIGHT, along SLL 36 DME arc, intercept CLE R-193 to LARPA.

These SIDs require minimum climb gradients of:
- **LARPA 1B**
  - 34° per NM (5.6%) until D5 BCN.
  - 30° per NM (5%) until leaving 1000'.
- **LARPA 1E**
  - 34° per NM (5.6%) until D5 BCN.
  - 30° per NM (5%) until leaving 1000'.

**LARPA 2D**
- RWY 25R
  - Climbing on runway heading to 998', turn RIGHT, Intercept PRA R-200 to D16 PRA, turn LEFT, intercept VLA R-139 (139° bearing from VNV), Intercept PRA R-164 to LARPA.

- RWY 20
  - Climbing on runway heading to 998', turn RIGHT, intercept PRA R-200 to D16 PRA, turn LEFT, intercept VLA R-139 (139° bearing from VNV), Intercept PRA R-164 to LARPA.

- RWY 25L
  - Climbing on runway heading to 998', turn LEFT, 170° track, Intercept PRA R-200 to D16 PRA, turn LEFT, intercept VLA R-139 (139° bearing from VNV), Intercept PRA R-164 to LARPA.

These SIDs require minimum climb gradients of:
- **LARPA 2D**
  - 37° per NM (6.1%) until D10.2 BCN.
  - 30° per NM (5%) until D16 PRA.

**LARPA 2W**
- RWY 25R
  - Climbing on runway heading to 998', turn RIGHT, Intercept PRA R-200 to D16 PRA, turn LEFT, intercept VLA R-139 (139° bearing from VNV), Intercept PRA R-164 to LARPA.

- RWY 20
  - Climbing on runway heading to 998', turn LEFT, intercept VLA R-139 (139° bearing from VNV), Intercept PRA R-164 to LARPA.

- RWY 25L
  - Climbing on runway heading to 998', turn RIGHT, 170° track, Intercept PRA R-200 to D16 PRA, turn LEFT, intercept VLA R-139 (139° bearing from VNV), Intercept PRA R-164 to LARPA.

These SIDs require minimum climb gradients of:
- **LARPA 2W**
  - 37° per NM (6.1%) until D10.2 BCN.
  - 30° per NM (5%) until D16 PRA.

**RWY ROUTING**

For runway configuration refer to Airport Briefing pages.

**SPEED:**
- Max 250 KT below FL100

**NOT TO SCALE**
For runway configuration refer to Airport Briefing pages.

1. Lobar Delta (Lobar SD, Lobar SW)

2. Lobar One Whiskey (Lobar 2W, 2SW Departures)

3. Lobar Two Whiskey (Lobar 2R, 20 SSW Departures)

4. Lobar One Golf (Lobar 1G) (Lobar 1G, Lobar 1G)

5. Lobar Two Golf (Lobar 2G) (Lobar 2G, Lobar 2G)

6. Lobar Two Alpha (Lobar 2A) (Lobar 2A, Lobar 2A)

7. Lobar Two Charlie (Lobar 2C) (Lobar 2C, Lobar 2C)

8. Lobar Two Delta (Lobar 2D) (Lobar 2D, Lobar 2D)

9. Lobar Two Echo (Lobar 2E) (Lobar 2E, Lobar 2E)

10. Lobar Two Lima (Lobar 2L) (Lobar 2L, Lobar 2L)

11. Lobar Two Sierra (Lobar 2S) (Lobar 2S, Lobar 2S)

12. Lobar Two Whiskey (Lobar 2W) (Lobar 2W, Lobar 2W)

13. Lobar Two Whiskey (Lobar 2Y) (Lobar 2Y, Lobar 2Y)

14. Lobar Two Whiskey (Lobar 2P) (Lobar 2P, Lobar 2P)

15. Lobar Two Whiskey (Lobar 2R) (Lobar 2R, Lobar 2R)

16. Lobar Two Whiskey (Lobar 2C) (Lobar 2C, Lobar 2C)

17. Lobar Two Whiskey (Lobar 2L) (Lobar 2L, Lobar 2L)

18. Lobar Two Whiskey (Lobar 2S) (Lobar 2S, Lobar 2S)

19. Lobar Two Whiskey (Lobar 2X) (Lobar 2X, Lobar 2X)

20. Lobar Two Whiskey (Lobar 2Q) (Lobar 2Q, Lobar 2Q)

21. Lobar Two Whiskey (Lobar 2N) (Lobar 2N, Lobar 2N)

22. Lobar Two Whiskey (Lobar 2M) (Lobar 2M, Lobar 2M)

23. Lobar Two Whiskey (Lobar 2K) (Lobar 2K, Lobar 2K)

24. Lobar Two Whiskey (Lobar 2J) (Lobar 2J, Lobar 2J)

25. Lobar Two Whiskey (Lobar 2I) (Lobar 2I, Lobar 2I)

26. Lobar Two Whiskey (Lobar 2H) (Lobar 2H, Lobar 2H)

27. Lobar Two Whiskey (Lobar 2G) (Lobar 2G, Lobar 2G)

28. Lobar Two Whiskey (Lobar 2F) (Lobar 2F, Lobar 2F)

29. Lobar Two Whiskey (Lobar 2E) (Lobar 2E, Lobar 2E)

30. Lobar Two Whiskey (Lobar 2D) (Lobar 2D, Lobar 2D)

31. Lobar Two Whiskey (Lobar 2C) (Lobar 2C, Lobar 2C)

32. Lobar Two Whiskey (Lobar 2B) (Lobar 2B, Lobar 2B)

33. Lobar Two Whiskey (Lobar 2A) (Lobar 2A, Lobar 2A)

34. Lobar Two Whiskey (Lobar 2W) (Lobar 2W, Lobar 2W)

35. Lobar Two Whiskey (Lobar 2Q) (Lobar 2Q, Lobar 2Q)

36. Lobar Two Whiskey (Lobar 2N) (Lobar 2N, Lobar 2N)

37. Lobar Two Whiskey (Lobar 2M) (Lobar 2M, Lobar 2M)

38. Lobar Two Whiskey (Lobar 2K) (Lobar 2K, Lobar 2K)

39. Lobar Two Whiskey (Lobar 2J) (Lobar 2J, Lobar 2J)

40. Lobar Two Whiskey (Lobar 2I) (Lobar 2I, Lobar 2I)

41. Lobar Two Whiskey (Lobar 2H) (Lobar 2H, Lobar 2H)

42. Lobar Two Whiskey (Lobar 2G) (Lobar 2G, Lobar 2G)

43. Lobar Two Whiskey (Lobar 2F) (Lobar 2F, Lobar 2F)

44. Lobar Two Whiskey (Lobar 2E) (Lobar 2E, Lobar 2E)

45. Lobar Two Whiskey (Lobar 2D) (Lobar 2D, Lobar 2D)

46. Lobar Two Whiskey (Lobar 2C) (Lobar 2C, Lobar 2C)

47. Lobar Two Whiskey (Lobar 2B) (Lobar 2B, Lobar 2B)

48. Lobar Two Whiskey (Lobar 2A) (Lobar 2A, Lobar 2A)
MOPAS FIVE ALFA (MOPAS 5A) [MOPA5A]
MOPAS ONE GOLF (MOPAS 1G) [MOPA1G]
RWYS 20, 07 DEPARTURES

SPEED: MAX 250 KT BELOW FL100

MOPAS 5A
N42 26.1 E001 02.1
(114.2 RES R-356/D77.4)
334' per NM
A1 or above 4000'
Gnd speed-KT
75 100 105 120 150 200 250 300
334' per NM
418 567 835 1114 1390 1671

MOPAS 1G
N14 18.4 E002 06.5
A1 or above FL70

MOPAS 5B
N42 26.1 E001 02.1
(114.2 RES R-356/D77.4)
304' per NM (5%) until leaving 1000'
Gnd speed-KT
75 100 105 120 150 200 250 300
304' per NM
425 567 835 1114 1390 1671 1950

MOPAS 5E
N41 17.5 E002 16.5
A1 or above 1800'

MOPAS FIVE BRAVO (MOPAS 5B) [MOPA5B]
MOPAS FIVE ECHO (MOPAS 5E) [MOPA5E]
RWYS 07L, 02 DEPARTURES

SPEED: MAX 250 KT BELOW FL100

MOPAS 5B
N42 26.1 E001 02.1
(114.2 RES R-356/D77.4)
304' per NM (5%) until leaving 1000'
Gnd speed-KT
75 100 105 120 150 200 250 300
304' per NM
425 567 835 1114 1390 1671 1950
OKABI FIVE ALFA (OKABI 5A) [OKAB5A]  
OKABI ONE GOLF (OKABI 1G) [OKAB1G]  
RWYS 20, 07R DEPARTURES  
SPEED: MAX 250 KT BELOW FL100  

Climb on runway heading to 500', turn RIGHT, intercept PRA R-209 to D8 PRA, turn RIGHT, 179° track, intercept PRA R-098 to D2 PRA, turn LEFT, 131° track, intercept PRA R-196 to D10.2 BCN, turn RIGHT, intercept SLL R-320 to OKABI.

Climb on runway heading to 500', turn RIGHT, intercept PRA R-098 to D12 PRA, turn LEFT, intercept PRA R-207 to D2 PRA, turn LEFT, intercept PRA R-283 to PRA, turn LEFT, intercept PRA R-320 to OKABI, turn RIGHT, intercept SLL R-320, turn RIGHT, 354° bearing from VNV to OKABI.

OKABI SA  
RWY 20  
SPEED: MAX 250 KT BELOW FL100  

Climb on runway heading to 1000', turn RIGHT, intercept PRA R-196 to D2 PRA, turn LEFT, intercept PRA R-207 to D2 PRA, turn LEFT, intercept PRA R-283 to PRA, turn LEFT, intercept PRA R-320 to OKABI, turn RIGHT, intercept SLL R-320, turn RIGHT, 354° bearing from VNV to OKABI.

Climb on runway heading to 1000', turn RIGHT, intercept PRA R-098 to D12 PRA, turn LEFT, intercept PRA R-207 to D2 PRA, turn LEFT, intercept PRA R-283 to PRA, turn LEFT, intercept PRA R-320 to OKABI, turn RIGHT, intercept SLL R-320, turn RIGHT, 354° bearing from VNV to OKABI.
OKABI FIVE BRAVO (OKABI 5B) [OKAB5B]  
OKABI FIVE ECHO (OKABI 5E) [OKAB5E]

RWYS 07L, 02 DEPARTURES

SPEED MAX 250 KT BELOW FL100

Trans level: By ATC
Trans alt: 6000'

For runway configuration refer to Airport Briefing pages.

Apt Elev

Not TO SCALE

OKABI 37.0 E001 29.0

N42 37.0 E001 29.0

340' per NM (5.6%) until D5 BCN.

304' per NM (5%) until leaving 1000'.

Gnd speed-KT

371' per NM (6.1%) until VNV.

OKABI 6D

OKABI 2W

At or above 2500'

At or above 500'

OKABI 2W

OKABI 5B

OKABI 5E

340' per NM (5.6%) until D5 BCN.

304' per NM (5%) until leaving 1000'.

Gnd speed-KT

371' per NM (6.1%) until VNV.

OKABI 6D

OKABI 2W

At or above 2500'

At or above 500'

OKABI 2W

OKABI 5B

OKABI 5E

340' per NM (5.6%) until D5 BCN.

304' per NM (5%) until leaving 1000'.

Gnd speed-KT

371' per NM (6.1%) until VNV.
These SIDs require minimum climb gradients of 34° per NM (5.5%) until leaving 4000'.

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<tr>
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<tr>
<td>SENIA 3A</td>
<td>20</td>
<td>Climb on runway heading, intercept PRA R-196 to D2 PRA, turn LEFT, intercept 091° bearing from VNV via CORVA to D32 PRA, turn RIGHT, intercept SLL R-130 to D34 SLL, turn RIGHT, along SLL 36 DME arc, intercept CLE R-193 to D58 CLE, turn RIGHT, intercept MLA R-107 inbound via VILGA to PEXOT, turn LEFT, intercept CMA R-090 inbound via CAMBY to SENIA.</td>
</tr>
<tr>
<td>SENIA 1G</td>
<td>07R</td>
<td>Climb on runway heading to 500', turn RIGHT, intercept PRA R-086 to D20 PRA, turn RIGHT, intercept SLL R-130 to D34 SLL, turn RIGHT, along SLL 36 DME arc, intercept CLE R-193 to D58 CLE, turn RIGHT, intercept MLA R-107 inbound via VILGA to PEXOT, turn LEFT, intercept CMA R-090 inbound via CAMBY to SENIA.</td>
</tr>
</tbody>
</table>

**SENIA THREE BRAVO (SEA 3B) / SENIA 3B**

Climb on runway heading to BCN, BCN R-067 to D5 BCN, turn RIGHT, 145° heading, intercept BCN R-098 to D17 BCN, turn RIGHT, intercept SLL R-130 to D34 SLL, turn RIGHT, along SLL 36 DME arc, intercept CLE R-193 to D58 CLE, turn RIGHT, intercept MLA R-107 inbound via VILGA to PEXOT, turn RIGHT, intercept CMA R-090 inbound via CAMBY to SENIA.

NOT TO SCALE

**SENIA THREE ALFA (SEA 3A) / SENIA 3A**

Climb on runway heading to BCN, BCN R-067 to D5 BCN, turn RIGHT, 145° heading, intercept BCN R-098 to D17 BCN, turn RIGHT, intercept SLL R-130 to D34 SLL, turn RIGHT, along SLL 36 DME arc, intercept CLE R-193 to D58 CLE, turn RIGHT, intercept MLA R-107 inbound via VILGA to PEXOT, turn LEFT, intercept CMA R-090 inbound via CAMBY to SENIA.
LEBL/BCN
BARCELONA, SPAIN

Apt Elev: 14'

These SIDs require minimum climb gradients of:

SEEN 5D
371’ per NM (6.1%) until D10.2 BCN.

SEEN 2W
304’ per NM (5%) until D8 PRA.

SEEN 2W: Maintain 6000’ until D11.2 PRA except ATC clearance.

SID RWY
SEEN 5D 25R
SEEN 2W 20

For runway configuration refer to Airport Briefing pages.
These SIDs require minimum climb gradients of

**VERSO 1B**
- 340' per NM (6.6%) until D5 BCN.
- 304' per NM (5%) until leaving 1000'.

**VERSO 1E**
- 340' per NM (6.6%) until D5 BCN.
- 304' per NM (5%) until leaving 1000'.

### RWY 07L, 02 DEPARTURES

#### VERSO 2D
- Climbing on runway heading to BCN R-247 to D12.5 BCN, turn LEFT to 209° track, intercept VLA R-139 (139° bearing from VNV) to D47 VLA, turn LEFT, along BCN 36 DME arc until passing BCN R-108, Intersect VLA R-098 via SADEM to VERSO.

**VERSO 2W**
- Climbing on runway heading to BCN R-247 to D12.5 BCN, turn LEFT, 209° track, intercept VLA R-139 to D47 VLA, turn LEFT, along BCN 36 DME arc until passing BCN R-108, Intersect VLA R-098 via SADEM to VERSO.

#### RWY 25R, 20, 25L DEPARTURES

- Climbing on BCN R-247 to D12.5 BCN, turn LEFT, 209° track, Intersect VLA R-139 to D47 VLA, turn LEFT, along BCN 36 DME arc until passing BCN R-108, Intersect VLA R-098 via SADEM to VERSO.
**VILLAFLANCA ONE BRAVO (VLA 1B)**

**VILLAFLANCA ONE ECHO (VLA 1E)**

**RWYS 07L, 02 DEPARTURES**

**SPEED MAX 250 KT BELOW FL100**

**SPEED:**

- **VLA 1B**
  - 340° per NM (5.6%) until D5 BCN.
  - 304° per NM (5%) until leaving 1000'.

- **VLA 1E**
  - 340° per NM (5.6%) until D5 BCN.
  - 304° per NM (5%) until leaving 1000'.

**CHANGES:**
- For runway configuration refer to Airport Briefing pages.
- Terms before departure end of runway (DER) are not allowed.

---

This SID requires a minimum climb gradient of 334° per NM (5.5%) until leaving 4000'.

<table>
<thead>
<tr>
<th>SID</th>
<th>RWY</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLA 1A</td>
<td>20</td>
<td>Climb on runway heading, intercept PRA R-198 to D2 PRA, turn LEFT, intercept CLE R-213 inbound to D2 CLE, turn LEFT, intercept CLE R-275, intercept VLA R-031 inbound to VLA.</td>
</tr>
<tr>
<td>VLA 1G</td>
<td>07R</td>
<td>Climb on runway heading to 500°, turn RIGHT, intercept CLE R-098 to D12 PRA, turn LEFT, intercept CLE R-207 inbound to D2 CLE, turn LEFT, intercept CLE R-275, intercept VLA R-031 inbound to VLA.</td>
</tr>
</tbody>
</table>
VILLAFRANCA TWO DELTA (VLA 2D)
VILLAFRANCA TWO WHISKEY (VLA 2W)
RWYS 25R, 20, 25L DEPARTURES

SID
VILA 2D
A1 or above
3000' VLA
VILA 2W
A1 or above
4800' VLA

These SIDs require minimum climb gradients of
VILA 2D
371' per NM (6.1%) until VNV.
VILA 2W
304' per NM (5%) until DB PRA.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>371' per NM</td>
<td>463</td>
<td>618</td>
<td>927</td>
<td>1235</td>
<td>1544</td>
<td>1853</td>
</tr>
<tr>
<td>304' per NM</td>
<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

Rwy 25L: Do not overshoot BCN R-236 on initial turn.

Rwy 25L: Do not overshoot BCN R-236 on initial turn.

Rwy 25L: Do not overshoot BCN R-236 on initial turn.

For AIRPORT BRIEFING refer to 10-1P pages.
ADDITIONAL RUNWAY INFORMATION

USEABLE LENGTHS

<table>
<thead>
<tr>
<th>RWY</th>
<th>LANDING BEYOND</th>
<th>Glide Slope</th>
<th>TAKE-OFF</th>
<th>WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>HRL; 50m(CL)</td>
<td>17.8</td>
<td>25.0</td>
<td>148'</td>
</tr>
<tr>
<td>07L</td>
<td>HRL; 50m(CL)</td>
<td>17.85</td>
<td>25.0</td>
<td>197'</td>
</tr>
<tr>
<td>25R</td>
<td>HRL; 50m(CL)</td>
<td>17.65</td>
<td>25.0</td>
<td>197'</td>
</tr>
</tbody>
</table>

TAKE-OFF RUN AVAILABLE

RWY 02:
From rwy head 8333' (2540m)
twy UB int 6690' (2039m)
twy W3 int 9971' (2972m)
twy W1 int 9534' (2906m)
twy HA int 7782' (2372m)
twy BA int 6345' (1936m)

RWY 07L:
From rwy head 10,997' (3352m)
twy W3 int 9971' (2972m)
twy W2 int 9751' (2938m)
twy W1 int 9534' (2906m)
twy HA int 7782' (2372m)
twy ZA int 7526' (2294m)
twy BA int 6345' (1936m)

RWY 25R:
From rwy head 10,997' (3352m)
twy W3 int 9971' (2972m)
twy W2 int 9751' (2938m)
twy W1 int 9534' (2906m)
twy HA int 7782' (2372m)
twy ZA int 7526' (2294m)
twy BA int 6345' (1936m)

LEGEND

1 Parking stand
T3 Taxiway
R-1 Ramp number
Area not visible from Tower

FOR PARKING POSITIONS

RWY 02:
Airports: BARCELONA/C clears delivery

RWY 07L:
Airports: BARCELONA/C clears delivery

RWY 25R:
Airports: BARCELONA/C clears delivery


CHANGES: Apr 8-16 added Twys. See 10-9B
VISUAL DOCKING GUIDANCE SYSTEM

GENERAL
This system contains information about azimuth guidance (shows the aircraft position with relation to the centerline of the parking area) and distance to the stop position, that is provided by display unit in front of the cockpit.

DISPLAY UNIT
Consists of:
1. One alphanumeric presentation line of 4 characters composed by yellow indicators, which can indicate the following information:
   - Aircraft type, stand position ("STND"), stop position ("STOP"), aircraft parked in the correct position ("OK"), surpassed stop position ("TOO FAR") and speed exceeding in the approach ("SLOW DOWN").
2. Azimuth guidance display (centerline and arrows indicating the direction to follow to be centred), as well as red bars when stop aircraft is indicated.
3. Distance indicators to the stop position composed by yellow and black lines located in a centred vertical column.

PILOT INSTRUCTIONS
1. Check that the indicated aircraft type is the appropriate.
2. Taxi aligned with centerline watching centerline guidance.
3. Check that the distance indicator is completely yellow. It means that the system has captured the aircraft.
4. Observe the yellow arrow located in the centerline guidance indicator to follow the correct position and direction. A flashing red arrow indicate the turn direction.
5. If the aircraft speed exceeds the scheduled speed, the unit display indicates "SLOW DOWN" and the taxiing speed must be reduced.
6. The distance indicator is activated at 52'/16m before the stop position and, as the aircraft is approaching, gradually the yellow lines are switched-off showing the rest distances to the stop position (each line indicates 2'/0.66m covered).
7. At the stop position, the distance indicator shows completely black and "STOP" will appear in the upper presentation line.
**JEPPSON BARCELONA, SPAIN**

**VOR Rwy 02**

- **ATIS Arrival**
  - **Air Crs**: 020°
  - **Alt Elev**: 1143 PRA
  - **Apt Elev**: 1185
  - **Alt Set**: 1800 (1786')
  - **Trans Level**: By ATC
  - **Trans Alt**: 6000'

**Missed Approach**

- Immediately turn **RIGHT** (MAX 185 KT) to intercept R-055 PRA climbing to 3000' and as directed.
- Holding protected with 3 NM buffer area.

**DME REQUIRED**

- Alt Set: 1185 PRA
- Apt Elev: 1185
- Trans level: By ATC
- Trans alt: 6000'

**VOR Rwy 07L**

- **Alt Set**: 1185
- **Apt Elev**: 1185
- **Alt Set**: 1185
- **Apt Elev**: 1185

**Missed Approach**

- Climb **STRAIGHT AHEAD** to BCN VOR and follow R-060 BCN to 4000'. Turn **LEFT** to SLL VOR climbing to 5000' and hold.
- Holding protected with 3 NM buffer area.

**DME REQUIRED**

- Alt Set: 1185
- Apt Elev: 1185
- Trans level: By ATC
- Trans alt: 6000'

**Gnd speed-Kts**

- 70 90 100 120 140 160

**Gnd speed-ktas**

- 384 494 548 658 768 878

**Descent Gradient**

- 5.41%