1.1. ATIS
ATIS Arrival 118.25
ATIS Departure 130.85

1.2. NOISE ABATEMENT PROCEDURES
1.2.1. GENERAL
Madrid APT is not available to ACFT without radio communication and to General Aviation and Business ACFT (except cargo) with a MTOW less than 50000 kgs and a capacity less than 70 passengers between 0700-2300LT. Affected ACFT requiring the use of APT during these times, will assume the possible delays, as jets will always have priority. Arrival or Departure operations of ACFT licensed according to ICAO Annex 16, VOL 1, Chapter II are forbidden.
Changes on the procedures must not be asked until reaching FL 100, except for propeller ACFT.

1.2.2. PREFERENTIAL RWYs
1.2.2.1. NORTH CONFIGURATION
In normal operation conditions when the tail wind component is not higher than 10 KT (RWY surface is dry or wet with braking action good):
- Between 0700-2300LT RWYs 36L/R will be used for take-off and RWYs 33L/R for landing.
- Between 2300-0700LT RWY 36L will be used for take-off and RWY 33R for landing. RWYs 15L/R will not be authorized for take-off.

1.2.2.2. SOUTH CONFIGURATION
In normal operation conditions (RWY surface is dry or wet with braking action good):
- Between 0700-2300LT RWYs 15L/R will be used for take-off and RWYs 18L/R for landing.
- Between 2300-0700LT RWY 15L will be used for take-off and RWY 18L for landing. RWYs 33L/R will not be authorized for take-off.

1.2.3. RUN-UP TESTS
Run-up tests higher than idle regime are allowed H24 at qualified motor test areas. Procedures of preferential taxiing to motor test areas:
- entry in both configurations via MZ
- exit in both configurations via AZ.
The request of run-up test clearance in any regime type and any question about the test procedure must be addressed to:
Centro de Gestion Aeroportuaria (GCA)
Tel: 34-913 93 65 52
Fax: 34-913 93 62 01

1.2.4. NIGHT OPERATING RESTRICTION DUE TO NOISE QUOTA
1.2.4.1. OPERATING RESTRICTIONS
Departure and arrival operations classified as CR-4 or above are forbidden. The APT authority may exceptionally authorize such ACFT to take-off or land if:
- the operation takes place within 30 minutes after or before the time limits expected as long as this is due to a delay caused by the programmed operation.
- the operation is justified on safety reasons as well as transportation of urgent humanitarian aid or in consequence of operational alterarions like meteorological conditions, industrial actions and other exceptional occurrences.
A system of total noise quota is established between 2300-0700LT.

1.2.4.2. NOISE QUOTA AIRCRAFT CLASSIFICATION
ACFT are classified according to their Effective Perceived Noise measured in decibels (EPNdB):

<table>
<thead>
<tr>
<th>EPNdB</th>
<th>NOISE CLASSIFICATION (CR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>more than 101.9</td>
<td>CR-16</td>
</tr>
<tr>
<td>99 - 101.9</td>
<td>CR-8</td>
</tr>
<tr>
<td>96 - 98.9</td>
<td>CR-4</td>
</tr>
<tr>
<td>93 - 95.9</td>
<td>CR-2</td>
</tr>
<tr>
<td>90 - 92.9</td>
<td>CR-1</td>
</tr>
<tr>
<td>less than 90</td>
<td>CR-0.5</td>
</tr>
</tbody>
</table>

Prop ACFT certified with regard to ICAO Annex 16 Chapters 6 and 10, and prop or jet ACFT certified according to Chapters 3 and 5 with a noise level less than 87 EPNdB, will be considered as CR-0.

1.2.5. AUXILIARY POWER UNITS (APU)
1.2.5.1. GENERAL
Stands T1 thru T35, 300 thru 312, 330 thru 394 and 500 thru 586:
- use of 400 Hz facilities is obligatory.
- use of air-conditioning facilities will be obligatory when the ACFT air conditioning is needed.
- use of ACFT APU is forbidden in stands stated above between 2 minutes after on-block time and 5 minutes before off-block time.
- use of ACFT APU only when fixed units are not operative and mobile units are not available.

Stands 70 thru 74 between 0700-2300LT:
- use of 400 Hz facilities is obligatory.
- use of air-conditioning facilities will be obligatory when the ACFT air conditioning is needed.
- use of ACFT APU is forbidden in stands stated above between 2 minutes after on-block time and 5 minutes before off-block time.
- use of ACFT APU only when fixed units are not operative and mobile units are not available.

Stands 70 thru 74 between 2300-0700LT:
- use of APU is not allowed.

Stands 70 thru 74 between 2300-0700LT:
- use of APU is not allowed.

Stands 50 thru 69 and 80 thru 162:
- between 2300-0700LT use of APU is not allowed.

Stands 1 thru 49, 163 thru 175 and T36 thru T41:
- between 2300-0700LT the use of APU is forbidden except 10 minutes after departure and 15 minutes before arrival.
- use of APU is not allowed.
### 3. DEPARTURE

#### 3.2. START-UP, PUSH-BACK & TAXI PROCEDURES

##### 3.2.1. GENERAL

ACFT must be ready to start-up before calling on the appropriate frequency:

- Clearance Delivery West if they proceed via SIE, ZMR, BARDI, CCS or VTB and North Configuration.
- Clearance Delivery East if they proceed via RBO, PINAR, NANDO, TEMIR or NASOS.

With South Configuration, the appropriate frequency for NASOS departures is Clearance Delivery East.

On requesting engine start-up clearance to ATC, pilots will report:
- ACFT call sign
- Parking stand
- ACFT type and series
- ATIS message received

Clearance will be issued as soon as requested. When delays are expected to exceed 15 minutes, the appropriate engine start-up time will be provided by ATC. Pilots should be aware that the taxi time to RWY 36L from the South apron is approximately between 10 and 20 minutes. ACFT with assigned Calculated Take-off Time (CTOT) must take into account these taxi time to start-up time accordingly.

It is forbidden to start-up engines higher than idle regime at all stands in contact with the terminal, until the ACFT is line-up with the TWY. It is forbidden to use reverse power to leave the stands, except for express clearance of the APT authority.

Contact BARAJAS Ground for towing push-back and taxi clearance. ACFT must be ready for towing push-back or taxiing within 5 minutes to the approved start-up time, otherwise contact ATC.

Long push-back from stand 73 to TWY C3.

Simultaneous push-back will be strictly forbidden between stands 334 and 336.

##### 3.2.2. PUSH-BACK DIRECTIONS

<table>
<thead>
<tr>
<th>STANDS</th>
<th>PUSH-BACK WITH NOSE TO</th>
<th>STANDS</th>
<th>PUSH-BACK WITH NOSE TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 thru 34</td>
<td>SW</td>
<td>330 thru 334</td>
<td>N</td>
</tr>
<tr>
<td>35</td>
<td>SE</td>
<td>336 thru 370</td>
<td>S</td>
</tr>
<tr>
<td>36</td>
<td>NE</td>
<td>372A thru 378</td>
<td>N</td>
</tr>
<tr>
<td>37</td>
<td>N</td>
<td>380 thru 394</td>
<td>S</td>
</tr>
<tr>
<td>44, 45</td>
<td>N</td>
<td>500 thru 538</td>
<td>S</td>
</tr>
<tr>
<td>70, 71</td>
<td>NE</td>
<td>540 thru 586</td>
<td>N</td>
</tr>
<tr>
<td>72</td>
<td>SW</td>
<td>T1 thru T8</td>
<td>SW</td>
</tr>
<tr>
<td>73, 74</td>
<td>NW</td>
<td>T9 thru T13</td>
<td>S</td>
</tr>
<tr>
<td>99 thru 109</td>
<td>SE</td>
<td>T14 thru T16</td>
<td>N</td>
</tr>
<tr>
<td>122 thru 135</td>
<td>SE</td>
<td>T17, T18</td>
<td>S</td>
</tr>
<tr>
<td>145 thru 162</td>
<td>NE</td>
<td>T19 thru T21</td>
<td>SE</td>
</tr>
<tr>
<td>163, 165</td>
<td>W</td>
<td>T22 thru T25</td>
<td>NW</td>
</tr>
<tr>
<td>173</td>
<td>W</td>
<td>T26, T27</td>
<td>N</td>
</tr>
<tr>
<td>175</td>
<td>S</td>
<td>T28 thru T30</td>
<td>NW</td>
</tr>
<tr>
<td>300 thru 312</td>
<td>N</td>
<td>T31 thru T35</td>
<td>N</td>
</tr>
<tr>
<td>320 thru 328</td>
<td>W</td>
<td>T36 thru T41</td>
<td>E</td>
</tr>
</tbody>
</table>

#### 3.2.3. STANDARD TAXI ROUTES

##### 3.2.3.1. NORTH CONFIGURATION

TO RWY 33L from:

- **R-7:** E3 to E4
  - Stands 201, 202, 204, 206, 207, 209, 211, 214 and 218: Direct to E2 to E3 to E4.

  - In R-6 and R-5 or ACFT which are on stands 134 thru 162 and need push-back to leave will head Southwest to use TWY A to enter TWY M by first possible intersection.

  - R-6: C1 or C3 to TWY M1 until M7 to A7 to E1 until E4.
    - Stands 68 thru 70, 72 to C5 to M5 to M7 to A7 to E1 until E4.
    - R-5: C3 or C5 to TWY M3 until M7 to A7 to E1 until E4.
    - Stands 69, 73 and 74: I6 to C5 to M5 to M6 to M7 to A7 to E1 until E4.

  - R-4: C7 to C5 to M5 to M6 to M7 to A7 to E1 until E4 or C6 to M6 to M7 to A7 to E1 until E4.
    - Stand 45: M7 to A7 to E1 until E4.
    - Stand 67: E0 to A5 to C6 to M6 to M7 to A7 to E1 until E4.
    - Stand 169: E3 until E4.
    - Stand 171: Noseing Southeast E1 until E4.
    - Stand 173: F2 to A7 to E1 until E4.
    - Stand 175: F1 to A7 to E1 until E4.

- **R-3:** I7 to C5 to M5 to M6 to M7 to A7 to E1 until E4 or C6 to M6 to M7 to A7 to E1 until E4.
  - I7 to C5 to M5 to M6 to M7 to A7 to E1 until E4 or C6 to M6 to M7 to A7 to E1 until E4.
  - C6 to M6 to M7 to A7 to E1 until E4.

- **R-2:** I8 or I9 to G2 to A8 to A7 to E1 until E4.
  - Stands 22 thru 27: M8 to G2 to A8 to A7 to E1 until E4.

- **R-1:** I9, 110 or 112 to Gate 5 to G5 to A10 until A7 to E1 until E4.
  - Stands 20 and 21: M8 to G2 to A8 to A7 to E1 until E4.

- **R-0:** Gate 5 to G5 to A10 until A7 to E1 until E4.
3. DEPARTURE

TO RWY 36L from:

Terminal 1, 2 or 3
R-7: E3 to F4 to F3 to F2 to G1 to M8 until M17 to R5 or R6 or R7 to R8

Stands 201, 202, 204, 206, 207, 211, 214 and 218: Direct to E2 to F4 to F3 to F2 to G1 to M8 until M17 to R5 or R6 or R7 to R8 to Z2.

R-6 thru R3: The same route as for RWY 33L until TWY M7 to M8 until M17 to R5 or R6 or R7 to R8 to Z2.

Stands 22 thru 27: Direct to M8 until M17 to R5 or R6 or R7 to R8 to Z2.

Stand 45: Left direct to M7 until M17 to R5 or R6 or R7 to R8 to Z2.

Stand 167: E0 to A5 to C6 to M6 to M7 until M17 to R5 or R6 or R7 to R8 to Z2.

Stand 169: E1 to A7 to G1 to M8 until M17 to R5 or R6 or R7 to R8 to Z2.

Stands 171 and 173: F2 to G1 to M8 until M17 to R5 or R6 or R7 to R8 to Z2.

Stand 175: F1 to A8 to G1 to M8 until M17 to R5 or R6 or R7 to R8 to Z2.

R-2: I8 or I9 to G2 to M9 until M17 to R5 or R6 or R7 to R8 to Z2.

Stands 20 and 21: Direct to M8 until M17 to R5 or R6 or R7 to R8 to Z2.

R-1: I9, I10 or I12 to G5 to M11 until M17 to R5 or R6 or R7 to R8 to Z2.

R-0: 111 to G5 to M11 until M17 to R5, R6 or R7 to R8 to Z2.

Terminal 4

Standard route: W4 until W2 to AZ6 until AZ4 to R1 to R8 to Z4 or W4 until W2 to W1 to ZW2 to ZW1 to R1 to Z4.

R-10: Stands 380 thru 394: J16 to J15 to D2 until D4 to D5 to W4, then standard route.

Stands 364 thru 378: D3 until D5 to W4, then standard route.

Stands 444 thru 448: D2 to D3 until D5 to W4, then standard route.

R-11: Stands 342 thru 362: D14 to D4 or D13 to D3 until D5 to W4, then standard route.

Stands 430 thru 442: D3 until D5 to W4, then standard route.

R-12: Stands 300 thru 329: W6 to WN1 to WN2 to WN3 to W4, then standard route.

Stands 330 thru 340: D14 to D4 or D13 to D3 until D5 to W4, then standard route.

Stands 420 thru 428: D4 to D5 to W4, then standard route.

R-13: Stands 400 thru 419: WN2 to WN5 to W4, then standard route.

TO RWY 36R from:

Terminal 1, 2 or 3

The same route as for RWY 36L until M17, then to M18 until M51 to NY13 to Y1 or M18 until M52 to N13 to Y2 or M18 until M53 to B13 to Y3.

Terminal 4

Standard route: S3 to M15 until M31 to NY13 to Y1 or S3 to M15 until M32 to N13 to Y2 or S3 to M15 until M33 to B13 to Y3.

R-10: Stands 380 thru 394: J16 to J15 to D1 to D2, then standard route.

Stands 364 thru 378: D2 to S4, then standard route.

Stand 444 and 446: D3 to R4 to X3 to S3, then standard route.

Stand 448: D2 to S4, then standard route.

R-11: Stands 342 thru 362: D13 to D14, then standard route.

Stands 430 and 432: D4 to D5 to W4 to X3 to S3, then standard route.

Stands 434 thru 442: D3 to R3 to X3 to S3, then standard route.

R-12: Stands 300 thru 312: W6 to WN1 to WN2 to WN3 to W4 to X5 until X3 to S3, then standard route.

Stands 320 thru 329: W5 to WN1 to WN2 to WN3 to W4 to X5 until X3 to S3, then standard route.

Stands 330 thru 340: D14 to D13 to S4 to S3, then standard route.

Stands 420 thru 428: D4 to D5 to W4 to X5 to S3, then standard route.

R-13: Stands 400 thru 419: WN2 to WN5 to W4 to X5 to X3 to S3, then standard route.
### 3. DEPARTURE

#### 3.2.3.2. SOUTH CONFIGURATION

**TO RWY 15L from:**

<table>
<thead>
<tr>
<th>Terminal 1, 2 or 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The same routes as for RWY 15R until A12, then until A27 to A28 to A29 to K1 to holding point or until A28 to KB2 to K2 or K3 to holding point.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terminal 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-10:</td>
</tr>
<tr>
<td>Stands 364 thru 370: D13 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or</td>
</tr>
<tr>
<td>D13 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point.</td>
</tr>
<tr>
<td>Stands 372 thru 378: D2 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or</td>
</tr>
<tr>
<td>D2 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point.</td>
</tr>
<tr>
<td>Stands 380 thru 394: J16 to J15 to D13 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or</td>
</tr>
<tr>
<td>J16 to J15 to D13 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point.</td>
</tr>
<tr>
<td>Stands 444 and 446: D3 to R4 to X3 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or</td>
</tr>
<tr>
<td>D3 to R4 to X3 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point.</td>
</tr>
<tr>
<td>Stand 448: D2 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or</td>
</tr>
<tr>
<td>D2 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point.</td>
</tr>
</tbody>
</table>

| R-11: |
| Stands 342 thru 362: D13 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or |
| D13 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point. |
| Stands 430 and 432: D4 to D5 to W4 to X5 to X4 to X3 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or |
| D4 to D5 to W4 to X5 to X4 to X3 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point. |
| Stand 434: D3 to R4 to X3 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or |
| D3 to R4 to X3 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point. |

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#### AIRPORT BRIEFING

**TO RWY 36R from:**

<table>
<thead>
<tr>
<th>Terminal 45</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-20:</td>
</tr>
<tr>
<td>Stands 582 thru 586: Gate 11 to G11 to B3 until B13 to Y3 or</td>
</tr>
<tr>
<td>Gate 11 to G11 to B3 until EC8 to N12 to N13 to Y2 or</td>
</tr>
<tr>
<td>Gate 11 to G11 to B3 until EC8 to EC7 to NY12 to NY13 to Y1 or</td>
</tr>
<tr>
<td>Gate 11 to G11 to B3 until EC9 to BY12 to M34 to B13 to Y3.</td>
</tr>
<tr>
<td>Stands 568 thru 580: EB2 to EC2 to EC6 to NY12 to NY13 to Y1.</td>
</tr>
<tr>
<td>Stands 620 thru 628: EC2 to EC6 to NY12 to NY13 to Y1.</td>
</tr>
<tr>
<td>R-21:</td>
</tr>
<tr>
<td>Stands 556 thru 566: EB2 to EC2 to EC6 to NY12 to NY13 to Y1.</td>
</tr>
<tr>
<td>Stands 608 thru 618: EC2 to EC6 to NY12 to NY13 to Y1.</td>
</tr>
<tr>
<td>R-22:</td>
</tr>
<tr>
<td>Stands 540 thru 554: EB6 to EC6 to NY12 to NY13 to Y1.</td>
</tr>
<tr>
<td>Stands 600 thru 606: EC6 to NY12 to NY13 to Y1.</td>
</tr>
<tr>
<td>R-23:</td>
</tr>
<tr>
<td>Stands 500 thru 536: EA6 to EA5 to Gate 12 to G12 to B5 until B13 to Y3 or</td>
</tr>
<tr>
<td>EA6 to EA5 to Gate 12 to G12 to B5 until EC8 to N12 to N13 to Y2 or</td>
</tr>
<tr>
<td>EA6 to EA5 to Gate 12 to G12 to B5 until EC8 to EC7 to NY12 to NY13 to Y1 or</td>
</tr>
<tr>
<td>EA6 to EA5 to Gate 12 to G12 to B5 until EC9 to BY12 to M34 to B13 to Y3.</td>
</tr>
<tr>
<td>Stand 538: EA6 to N9 to BN2 to B7 until B13 to Y3 or</td>
</tr>
<tr>
<td>EA6 to N9 to BN2 to B7 until EC8 to N12 to N13 to Y2 or</td>
</tr>
<tr>
<td>EA6 to N9 to BN2 to B7 until EC8 to EC7 to NY12 to NY13 to Y1 or</td>
</tr>
<tr>
<td>EA6 to N9 to BN2 to B7 until EC9 to BY12 to M34 to B13 to Y3.</td>
</tr>
</tbody>
</table>
3. DEPARTURE

TO RWY 15L from:
Terminal 4

R-12: Stands 300 thru 312: W6 to WN1 to WN3 to W4 to X5 to X4 to X3 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point.

R-13: Stands 400 thru 419: WN2 to WN3 to W4 to X5 to X4 to X3 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point.

Terminal 45

R-20: Stands 568 thru 580: EB3 to EC2 to Gate 14 to KA1 to K1 to holding point.

R-21: Stands 556 thru 560: EB6 to EC6 to NY12 to M31 to M30 to KA1 to K1 to holding point.

R-22: Stands 540 thru 554: EB6 to EC6 to NY12 to M31 to M30 to KA1 to K1 to holding point.

R-23: Stands 500 thru 536: EA6 to EA5 to Gate 12 to B5 until B12 to M33 until M30 to KA1 to K1 to holding point.

R-7: Stands 201, 202, 204, 206, 207, 209, 211, 214 and 218: Direct to E2 to F4 to F3 to F2 to A8 until holding point 15A/B.

R-6: C1 or C3 to A1 until A12 to holding point 15A/B.

R-5: C3 or C5 to A3 until A12 to holding point 15A/B.

R-4: Stands 30 thru 37: I7 to C5 to A5 until A12 to holding point 15A/B.

R-3: I8 to G1 to A8 until A12 to holding point 15A/B.

R-2: I8 or I9 to G2 to A9 until A12 to holding point 15A/B.

R-1: I9 to I10 or I12 to G5 to A11 to A12 to holding point 15A/B.

R-0: G5 to A11 to A12 to holding point 15A/B.

Terminal 4

R-10: Stands 364 thru 370: D13 to D3 to R3 to R2 to R8 to R5 to MC to holding point 15C.

R-11: I9 to I10 or I12 to G5 to A11 to A12 to holding point 15A/B.
### 3. DEPARTURE

**To RWY 15R from:**

#### Terminal 4

| R-11: | Stands 342 thru 362: D13 to D3 or D14 to R4 to R3 to R2 to R8 to R5 to MC to holding point 15C. |
|      | Stands 430 and 432: D4 to D5 to W4 to X5 to X4 to R3 to R2 to R8 to R5 to MC to holding point 15C. |
|      | Stands 434 thru 446: D3 to R4 to R3 to R2 to R8 to R5 to MC to holding point 15C. |

| R-12: | Stands 300 thru 312: W6 to WN1 to WN2 to WN3 to W4 to X5 to X4 to R3 to R2 to R8 to R5 to MC to holding point 15C. |
|      | Stands 320 thru 329: W5 to WN1 to WN2 to WN3 to W4 to X5 to X4 to R3 to R2 to R8 to R5 to MC to holding point 15C. |
|      | Stands 330 thru 340: DI4 to R4 to R3 to R2 to R8 to R5 to MC to holding point 15C. |

| R-13: | Stands 400 thru 419: WN2 to WN3 to W4 to X5 to X4 to R3 to R2 to R8 to R5 to MC to holding point 15C. |

| Terminal 45 |

| R-20: | Stands 568 thru 580: EB2 to EB6 to EB7 to N10 until N2 to M21 to B1 to MG to holding point 15H. |
|       | Stands 582 thru 586: Gate 11 to N2 to M21 to B1 to MG to holding point 15H. |
|       | Stands 620 thru 628: EC2 to EB2 to EB6 to EB7 to N10 until N2 to M21 to B1 to MG to holding point 15H. |

| R-21: | Stands 556 thru 566: EB2 to EB6 to EB7 to N10 until N2 to M21 to B1 to MG to holding point 15H. |
|       | Stands 610 thru 618: EC2 to EB2 to EB6 to EB7 to N10 until N2 to M21 to B1 to MG to holding point 15H. |

| R-22: | Stands 540 thru 554: EB6 to EB7 to N10 until N2 to M21 to B1 to MG to holding point 15H. |
|       | Stands 600 thru 606: EC6 to EB6 to EB7 to N10 until N2 to M21 to B1 to MG to holding point 15H. |

| R-23: | Stands 500 thru 536: EA6 to EA5 to Gate 12 to N4 until N2 to M21 to B1 to MG to holding point 15H. |
|       | Stand 538: N9 until N2 to M21 to B1 to MG to holding point 15H. |

### 3.4. NOISE ABATEMENT PROCEDURES

**3.4.1. GENERAL**

The following procedures are applicable to all ACFT for landing and take-off, except for safety reasons - to avoid excessive noise in areas surrounding the APT. Non-compliance will cause sanctions to ACFT operators. If unable to comply submit alternative procedures to correspondent authority for approval.

Departure paths will be radar monitored and noise level will be measured for each operation.

Departures shall be performed in accordance to ICAO DOC 8168 NOISE ABATEMENT DEPARTURE PROCEDURE A (NADP A). ACFT may be exempted when using different procedures, duly reported to APT Management in advance, which are proved to lead to a less acoustic impact or due to safety reasons.

**North configuration**

- RWY 36L: Usable for take-off between 0700-2300LT.
- SIDs BARDI 1L, CCS 1L, NYS 2D, SIE 6E, VTB 1E, ZMR 1AE, 1N, 1X are mandatory for ACFT included in the list shown below. Non-compliance will cause sanctions.
- ACFT not included in the list are allowed to use SIDs BARDI 1E, CCS 1E, NYS 2A, SIE 2A, 1L, VTB 1D, ZMR 1AD, 1L, 1Y.

**ACFT LIST**

- AN72, A124, A340-600, B721, B722, B731, B732, B747, DC8, DC10, H25A, IL62, L101, MD11, SW1, T134, YK42.

- RWY 36L: Usable for take-off between 2300-0700LT.

**South configuration**

- RWY 15L/R: Usable for landing between 2300-0700LT.

**ACFT LIST**

- AN72, A124, A340-600, B721, B722, B731, B732, B747, DC8, DC10, H25A, IL62, L101, MD11, SW1, T134, YK42.

- RWY 36L: Usable for take-off between 2300-0700LT.

**3.5. RWY OPERATIONS**

**MINIMUM RWY OCCUPANCY TIME**

- ACFT not ready to initiate take-off run immediately when cleared for take-off, will have take-off clearance cancelled and will receive instructions to vacate the RWY at the first available TWY.
1. GENERAL

1.3. LOW VISIBILITY PROCEDURES (LVP)

1.3.1. GENERAL

Low Visibility Procedure will be in force when:
- Manoeuvring area - RVR (or VIS if RVR is out) is 600m or below.
- Ceiling is 250' or below.
- Rapid deterioration in weather conditions recommends so.
- Apron - RVR (or VIS if RVR out) is 400m or below.

Pilots will be informed when Low Visibility Procedures are in use by ATIS.

Low Visibility Procedure will be cancelled when:
- Manoeuvring area - RVR (or VIS if RVR is out) is higher than 800m.
- Ceiling is 300'.
- The improvement tendency of meteorological conditions is strong.
- Apron - VIS is higher than 400m.

1.3.2. GROUND MOVEMENT

At South apron (T123): TWY I11 and Gate 6 at Ramp 0 will be closed.

In case of any doubt about the position of the ACFT or in case of difficulties, stop, notify ATC and request "FOLLOW ME" assistance.

1.3.3. ARRIVAL

Except otherwise authorized by ATC, ACFT must vacate the landing RWY via TWYS specified below:

LANDING RWY
EXIT
18L Y5, Y4, Y3
18R Z10, Z8, Z7
33L L7, L5, L4, L3, L2
33R K5, K4, K3

After leaving the RWY pilots shall report:
- Sensitive area vacated
- TWY used (when SMR out of service, or by ATC requirement)

After landing on RWY 18L/R or 33L/R follow appropriate TWY centerline lights until clear of Sensitive area and await instructions from BARAJAS Ground or STOP if lacking instructions.

1.3.4. DEPARTURE

Pilots in command will request permission for engine start-up from ATC if reported RVR values are the same or upper than their Minimum for take-off.

When permitted to taxi to a RWY holding point, hold short at the CAT II markings and stop bar lights.

1.4. TAXI PROCEDURES

Between 2300-0700LT movements on Ramps 5 and 6 are forbidden.

1.5. PARKING INFORMATION

Stands 70 thru 74 and T1 thru T35 equipped with docking guidance system.

Stands 31 thru 33, 35 thru 37, 44, 45, 70 thru 74, 99 thru 109, 122 thru 135, 145 thru 155, 157, 175, 173, 345 thru 328, 330 thru 394, 500 thru 586 and T1 thru T41 exit by towing.

T41: Caution in push-back manoeuvre due to closeness of antiblast barrier.

1.6. OTHER INFORMATION

WAKE VORTEX CATEGORIES

Due to unusual wake vortex characteristics, B757 is categorized as heavy when followed by a medium or light, but as medium when it follows a heavy. ACFT unable to accept minimum wake vortex separation will advise ATC as soon as possible on transfer to departure frequency but before line-up clearance is issued. Pilots accepting line-up clearance without declaring the need for additional vortex separation will be assumed to have accepted the standard wake vortex minima.
## NORTH CONFIGURATION

<table>
<thead>
<tr>
<th>RWY</th>
<th>Rapid exit</th>
<th>ACFT</th>
<th>Dist from THR ft (m)</th>
<th>TWY</th>
</tr>
</thead>
<tbody>
<tr>
<td>33L</td>
<td>L7</td>
<td>all</td>
<td>5446' (1660m)</td>
<td>A10</td>
</tr>
<tr>
<td>33L</td>
<td>L5</td>
<td>all</td>
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<td>A11</td>
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<tr>
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<td>L4</td>
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<tr>
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<td>6988' (2150m)</td>
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<tr>
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<td>L3</td>
<td>all</td>
<td>8251' (2515m)</td>
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<tr>
<td>33R</td>
<td>K5</td>
<td>all</td>
<td>5906' (1800m)</td>
<td>KA4</td>
</tr>
<tr>
<td>33R</td>
<td>K4</td>
<td>all</td>
<td>7874' (2400m)</td>
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## SOUTH CONFIGURATION

<table>
<thead>
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<th>RWY</th>
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<th>ACFT</th>
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<th>TWY</th>
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<td>Y5</td>
<td>all</td>
<td>5906' (1800m)</td>
<td>AY</td>
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<tr>
<td>18L</td>
<td>Y4</td>
<td>all</td>
<td>7874' (2400m)</td>
<td>AY</td>
</tr>
<tr>
<td>18R</td>
<td>Z10</td>
<td>all</td>
<td>6319' (1926m)</td>
<td>ZW5, W-I</td>
</tr>
<tr>
<td>18R</td>
<td>Z8</td>
<td>all</td>
<td>7771' (2352m)</td>
<td>W-1</td>
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<tr>
<td>18R</td>
<td>Z7</td>
<td>all</td>
<td>7771' (2352m)</td>
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</tbody>
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### 2.5. TAXI PROCEDURES
#### 2.5.1. STANDARD TAXI ROUTES

#### 2.5.1.1. NORTH CONFIGURATION

From RWY 33L to:

<table>
<thead>
<tr>
<th>Terminal 1, 2 or 3</th>
<th>From RWY 33L to:</th>
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</thead>
<tbody>
<tr>
<td>7</td>
<td>L7, L5, L3, L1 or LEFT RWY end to TWY A to E1 or E2 to E3 to C7.</td>
</tr>
<tr>
<td>6</td>
<td>L7, L5, L3, L1 or LEFT RWY end to TWY A to C1 or C2.</td>
</tr>
<tr>
<td>5</td>
<td>L7, L5, L3, L1 or LEFT RWY end to TWY A to C4.</td>
</tr>
<tr>
<td>4</td>
<td>L7, L5, L3, L1 or LEFT RWY end to TWY A until A6 direct to stands 40 thru 43. L7, L5, L3, L1 or LEFT RWY end to TWY A until A5 to C6 to M6 direct to stands 44 and 45. L7, L5, L3, L1 or LEFT RWY end to TWY A to G1 to Gate 1 to I7 to C5 to stands 30 thru 37. L7, L5, L3, L1 or LEFT RWY end to TWY A to A6 direct to stand 167. L7, L5, L3, L1 or LEFT RWY end to TWY A to A6 to E0 direct to stand 169. L7, L5, L3, L1 or LEFT RWY end to TWY A to A7 to E1 direct to stand 171. L7, L5, L3, L1 or LEFT RWY end to TWY A to A8 to F2 direct to stand 173. L7, L5, L3, L1 or LEFT RWY end to TWY A to A6 to F1 direct to stand 175.</td>
</tr>
<tr>
<td>3</td>
<td>L7, L5, L3, L1 or LEFT RWY end to TWY A to G1 to Gate 1 to I 7 or 18. R-3: Stands T1 thru T3: 0700 - 2259LT: Via A5 to A4 to C4 to J6; 2300 - 0659LT: Via A7 to A4 to C4 to J6.</td>
</tr>
<tr>
<td>2</td>
<td>L7, L5, L3, L1 or LEFT RWY end to TWY A until A9 to G3 to M9 direct to stands 14 thru 17. L7, L5, L3, L1 or LEFT RWY end to TWY A to G9 to Gate 3 to I8 or 19.</td>
</tr>
<tr>
<td></td>
<td>R-23: Stands 500 thru 530: Standard route to B2 until B5 to Gate 13 to EA5. Stands 532 thru 538: Standard route to B1 until B9 to EA7 to EA6.</td>
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</table>

From RWY 33L to:

<table>
<thead>
<tr>
<th>Terminal 1, 2 or 3</th>
<th>From RWY 33L to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-1:</td>
<td>L7, L5, L3, L1 or LEFT RWY end to TWY A until A9 to G3 to M9 direct to stands 10 thru 13. L7, L5, L3, L1 or LEFT RWY end to TWY A to G4 to Gate 4 to I9 or I10 to I12.</td>
</tr>
<tr>
<td>R-0:</td>
<td>L7 to G5 to M10 to M11. L5 to A11 to G5 to M11. L3, L1 or LEFT RWY end to A12 to G6 to M11.</td>
</tr>
</tbody>
</table>

Terminal 4

Follow ATC instructions to leave to the LEFT side of RWY. (If ACFT is to leave to the RIGHT, it will receive proper instruction from ATC, other than standard routes.)

Standard route: L1, L3, L5 or L7 to TWY A, incorporate to TWY M by the first possible TWY, follow to TWY M13 to J4.


R-11: Stands 342 thru 362: Standard route to D1 until D4. Stands 430 and 432: Standard route to D1 until D5 to W4 to X5 to X4. Stands 434 thru 442: Standard route to D1 until D3 to R4 to X3.

R-12: Stands 300 thru 320: Standard route to D1 until D5 to W5 to W16 Stands 320 thru 329: Standard route to D1 until D5 to W5. Stands 330 thru 340: Standard route to D1 until D4. Stands 420 thru 428: Standard route to D1 until D5 to W4 to X5 to X4.

R-13: Stands 400 thru 411: Standard route to D1 until D5 to W5. Stands 412 thru 419: Standard route to D1 until D5 to W5 to WN1 to WA.

Terminal 4S

Follow ATC instructions to leave to the RIGHT side of RWY.

Standard route: L4 to LA2 to LA4 to B1 or L2 to LA4 to B1.


R-23: Stands 500 thru 530: Standard route to B2 until B5 to Gate 13 to EA5. Stands 532 thru 538: Standard route to B1 until B9 to EA7 to EA6.
2. ARRIVAL

From RWY 33R to:

Terminal 1, 2 or 3
K5 to KA4 to KA3 to KB2 to TWY A or
K5 to KA4 to KC3 to KC2 to TWY A or
K4 to KA3 to KB2 to TWY A or
K3 to KB2 to TWY A, then same route as for RWY 33L.

Terminal 4
Follow ATC instructions to leave RWY to TWY A.
Standard route: K5 to KA4 to KA3 to KB2 to TWY A or
K5 to KA4 to KC3 to KC2 to TWY A or
K3 to KB2 to TWY A or
K5 to KA4 until KA1 or
K4 to KA3 until KA1 or
K3 to KA2 to KA1.
R-11 thru R13: Follow standard route and the same route as for RWY 33L.

R-10: Stands 364 thru 378: Standard route to H3 to H4 to D2 to D3.
Stands 380 thru 394: Standard route to X1 to J4 until J6.
Stand 448: Standard route to X2.

Terminal 45
Follow ATC instructions to leave RWY to TWY A.
Standard route: K5 to KA4 to KA3 to KB2 to TWY A or
K5 to KA4 to KC3 to KC2 to TWY A or
K3 to KB2 to TWY A or
K5 to KA4 until KA1 or
K4 to KA3 until KA1 or
K3 to KA2 to KA1.

R-20: Stands 568 thru 580: Standard route to A25 to EC1 to EC2.
Stand 582 thru 586: Standard route to A23 to EA1 to EA2.
Stands 620 thru 628: Standard route to A26 to AM1 to M27.

R-21: Stands 554 thru 566: Standard route to G14 to EC6.
Stands 562 thru 566: Standard route to A25 to EC1 to EC2.
Stand 608: Standard route to M30.
Stands 612 and 614: K5 to KA4 to KA3 to KB2 to KB1 to M29.
Stands 616 and 618: K5 to KA4 to KC3 until KC1 to M28 or
K4 to KC3 until KC1 to M28 or
K3 to KB2 to A2B to A2C to M28.

R-22: Stands 540 thru 554: Standard route to Gate 14 to G14 to EB6.
Stands 600 thru 606: Standard route to M30 to M31.

2.5.1.2. SOUTH CONFIGURATION

From RWY 18L to:

Terminal 1, 2 or 3
Y5 to ATY to BY13 to M34 until M12 or
Y4 to BY13 to M34 until M12 or
Y3 to A33 to N13 to M32 until M12 and
follow the same routes as for RWY 18R.

Terminal 4
Follow ATC instructions.
Standard route: Y5 to ATY to BY13 to M34 until M14 or
Y4 to BY13 to M34 until M14 or
Y3 to A33 to N13 to M32 to M14 to H3.

From RWY 18L to:

Terminal 1, 2 or 3
Y5 to ATY to BY13 to M34 until M12 or
Y4 to BY13 to M34 until M12 or
Y3 to A33 to N13 to M32 until M12 and
follow the same routes as for RWY 18R.

Terminal 4
Follow ATC instructions.
Standard route: Y5 to ATY to BY13 to M34 until M14 or
Y4 to BY13 to M34 until M14 or
Y3 to A33 to N13 to M32 to M14 to H3.
2. ARRIVAL

From RWY 18R to:

Terminal 1, 2 or 3

R-2: M11 until M9 direct to stands 14 thru 17 or Gate 3 to 18 or 19.

R-1: M11 to M10 to Gate 4 to 19, 110 or 112.


R-0: M11.

Terminal 4

Leave RWY to the RIGHT side.

Standard route: Z10 to ZW3 to W1 to W2 to MZ6 to U3 or Z8 to W1 to W2 to MZ6 to U3 or Z4 to ZW1 to V1 to AZ5 to U2 to U3.

R-10: Stands 364 thru 370: Standard route to U4 to D14 to D13.

R-11: Stands 342 thru 362: Standard route to U4 to D14 to D13.

R-12: Stands 300 thru 312: Standard route to U4 to D5 to W5 to W16.

Stands 320 thru 329: Standard route to U4 to D5 to W5.


Stands 420 thru 428: Standard route to X4.

R-13: Stands 400 thru 411: Standard route to U4 to D5 to W5.

Stands 412 thru 419: Standard route to U4 to D5 to W5 to WN1 to WA.

Terminal 45

Leave RWY to the LEFT side.

R-20: Stands 568 thru 580: Z7 to B6 until B12 to M33 until M24 to EB2.

Stands 582 thru 586: Z7 to B6 until B12 to M33 until M23 to EA2.

Stands 620 thru 628: Z7 to B6 until B12 to M33 until M27.

R-21: Stands 562 thru 566: Z7 to B6 until B12 to M33 until M24 to EB2.

Stands 608 thru 610: Z7 to B6 until B12 to M33 until M30.

Stands 612 thru 618: Z7 to B6 until B12 to M33 until M29.

R-22: Stands 540 thru 554: Z7 to B6 until B12 to M33 until M24 to EB2 to EB6.

Stands 600 thru 606: Z7 to B6 until B12 to M33 until M31.

R-23: Stands 500 thru 536: Z7 to G13 to Gate 13 to EA5.

Stands 532 thru 538: Z7 to B6 until B9 to EA7 to EA6.

2.5.2. COMMUNICATION FAILURE

ACFT will hold in the first segment of the TWY in which the ILS sensitive area is vacated and wait for a FOLLOW ME vehicle which will guide the ACFT to the assigned parking stand.

3. DEPARTURE

3.1. DE-ICING PROCEDURE

3.1.1. OPERATION ON DE-ICING AREAS

Pilots will request clearance for starting up and taxiing to the de-icing area 35 minutes before the estimated time of departure between 0500 - 1000.

On this request pilots will report the complete ACFT call sign and its stand position.

Pilots will maintain permanent watch on BARAJAS Ground frequency during taxiing and de-icing operation.

To carry out the de-icing operation pilots will park the ACFT at the corresponding position, taking into account the ACFT size.

Once the de-icing operation is finished pilots will notify BARAJAS Tower (DEP) 'Ready for Departure' and when cleared, will vacate as soon as possible the spraying area.

ACFT affected by ATFM measures and with assigned approved departure time will have priority over another kind of traffic not affected by the restrictions.

Clearance for the entry to the de-icing area will be granted when an ACFT occupying a position on this area has vacated it after having finished its operation, except for established in item below.

Pilot in command will make sure that ACFT is properly located on the stand position in order to safeguard the movement of the de-icing equipments.

De-icing operation of ACFT will be carried out with idle regime and ready for taking-off.

When an ACFT operator with autohandling exceptionally could not give service to an ACFT located in the de-icing area, the ACFT will be serviced by the airport handling operator with priority over holding ACFT.

When an ACFT can not leave the de-icing area by its own, its responsible operator shall compulsorily remove it immediately from the mentioned area according with the established procedure with its handling agent.

An operator will communicate with the pilot in command of the ACFT on De-Icing area RWY 36L: BARAJAS De-Icing 123.32 or De-Icing area RWY 36R: BARAJAS De-Icing 130.25, or upon failure, by means of communication JACK, reporting the de-icing service conclusion.

Type and registration on refer to ACFT shall be mentioned.

Pilots will request the de-icing service 60 minutes before the estimated time of departure (ETD) when the ACFT operates before 0500 and after 1000. The request shall be addressed to Iberia handling agent to one of the SITA directions: MADKIIB or MADKOIB, including the following data: Company name, registration and type of ACFT, number of flight and ETD.

3.1.2. PROHIBITIONS

It is totally forbidden to carry out a motor test at the de-icing area.
NASOS ONE ALFA (NASOS 1A) [NASO1A]
PRADO ONE ECHO (PRADO 1E) [PRADIE]
VILLA ONE ECHO (VILLA 1E) [VILA1E]

RWYS 18L/R ARRIVALS
VIA IAF TAGOM
FROM SOUTH

SLP Speed Limit Point

HOLDINGS OVER CIN
SLP 1 D6.3 CIN
MAX 250 KT

HOLDING OVER PRADO
NASOS N40 23.7 W002 30.7

CHANGES: SLPs renamed & established; descent planning revised.
**CHANGES:** SLPs renamed & established; descent planning revised.

**RNAV SID DESIGNATION**

<table>
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<tbody>
<tr>
<td>BARDI 1U, 1Z</td>
<td>10-3B</td>
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<tr>
<td>CCS 1U, 1Z</td>
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**FOR NASOS, NVS, PINAR, RBO, SIE, TEMIR, VTB & ZMR SID DESIGNATION REFER TO PAGE 10-3A**
### SID DESIGNATION

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<td>SIE 2V</td>
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<td>TEMIR 2B, 1S</td>
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<td>VTB 1C, 1S, 1V</td>
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<td>ZMR 1L, 1N, 2Z</td>
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<td>ZMR 1P</td>
<td>10-3X6</td>
</tr>
<tr>
<td>ZMR 1X, 1Y</td>
<td>10-3X7</td>
</tr>
</tbody>
</table>

#### CHANGES
- SIDs transferred.
- RNAV SIDs established & transferred.

---

**Apt Elev**

- **Trans level:** By ATC
- **Trans alt:** 13000'

SIDs are also noise abatement procedures (refer to 10-4).

---

**BARDI 1U [BARDIU]**

**BARDI 1Z [BARDIZ]**

**RWYS 15L/R P-RNAV DEPARTURES**

**USABLE BETWEEN 0700-2300LT**

P-RNAV APPROVAL REQUIRED

SUBJECT TO LE(R)-71B & LE(R)-71C ACTIVITY

**SPEED:** MAX 250 KT BELOW 10000'

---

**RNOT TO SCALE**

**MD030**

<p>| | |</p>
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<tbody>
<tr>
<td>MD030</td>
<td>6200'</td>
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<tr>
<td>MDA</td>
<td>4500'</td>
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**MD031**

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<tr>
<td>MD031</td>
<td>6800'</td>
</tr>
<tr>
<td>MDA</td>
<td>4500'</td>
</tr>
</tbody>
</table>

These SIDs require a minimum climb gradient of 334' per NM (5.5%) until MD030.

- **Ond speed-KT:** 75 100 150 200 250 300
- **334' per NM:** 418 537 630 1114 1392 1671

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

---

**NOT TO SCALE**
CCS 1U, CCS 1Z
RWYS 15L/R P-RNAV DEPARTURES

USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED

SPEED: MAX 250 KT BELOW 10000'

These SIDs require a minimum climb gradient of
334' per NM (5.5%) until MD030.
Gnd speed-KT 75 100 150 200 250 300
Gnd speed-KT 418 457 535 641 700 800

At or above 13000'

Initial ATC clearance: Maintain 13000' and request flight level change enroute

MADRID, SPAIN
RNAV SID

TRANS LEVEL: By ATC
TRANS ALT: 13000'
SIDs are also noise abatement procedures (refer to 10-4).

These SIDs require a minimum climb gradient of
334' per NM (5.5%) until MD030.
Gnd speed-KT 75 100 150 200 250 300
Gnd speed-KT 418 457 535 641 700 800

At or above 13000'

Initial ATC clearance: Maintain 13000' and request flight level change enroute

NANDO 1U [NAND1U]
NANDO 1Z [NAND1Z]
RWYS 15L/R P-RNAV DEPARTURES

USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED

SPEED: MAX 250 KT BELOW 10000'

These SIDs require minimum climb gradients of
NANDO 1U: 425 per NM (7%) until MD034, then 334 per NM (5.5%) until MD035.
NANDO 1Z: 334 per NM (5.5%).

Gnd speed-KT 75 100 150 200 250 300
Gnd speed-KT 418 457 535 641 700 800

At or above 5700'

Initial ATC clearance: Maintain 13000' and request flight level change enroute

SIDs and Request Flight Level Change Enroute

CHANGES: RNAV SIDs established and transferred.
NAPOS 1U [NASO1U]
NAPOS 1Z [NASO1Z]
RWYS 15L/R P-RNAV DEPARTURES
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED MAX 250 KT BELOW 10000'

These SIDs require a minimum climb gradient of 334' per NM (5.5%) until MD012.

Initial ATC clearance: Maintain 13000' and request flight level change enroute

ROUTING
MD012 (6200'+) - MD013 (7600'+) - NASOS (13000'+).

CHANGES: RNAV SIDs estbld; SIDs tranferred; chart redrawn.

NVS 2A, NVS 2D
RWY 36L P-RNAV DEPARTURES
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED MAX 250 KT BELOW 10000'

These SIDs require minimum climb gradients of
NVS 2A: 456' per NM (7.5%) until MD012.
NVS 2D: 425' per NM (7%) until MD018.

Initial ATC clearance: Maintain 13000' and request flight level change enroute

ROUTING
MD012 (6200'+) - MD013 (7600'+) - NASOS (13000'+).

CHANGES: RNAV SIDs estbld; SIDs tranferred; chart redrawn.
SIDs are also noise abatement procedures (refer to 10-4).

EXPECTED close-in obstacles.

This SID requires minimum climb gradients of 456' per NM (7.5%) until SSY, then 425' per NM (7%) until MD024.

Initial ATC clearance: Maintain 13000' and request flight level change enroute.
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24 Aug 07  Eff. 30 Aug

TRANSPORT LEVEL: By ATC  TRANS ALT: 13000'

SPEED: MAX 250 KT BELOW 10000'

P-RNAV APPROVAL REQUIRED

USABLE BETWEEN 0700-2300LT

RNAV (DME/DME)

RWYS 15L/R P-RNAV DEPARTURES

P-RNAV APPROVAL REQUIRED

SIDS are also noise abatement procedures (refer to 10-4).

These SIDs require minimum climb gradients of

P-RNAV APPROVAL REQUIRED

These SIDs require minimum climb gradients of

Initial ATC clearance: Maintain 13000' and request flight level change enroute

Initial ATC clearance: Maintain 13000' and request flight level change enroute

CHANGES: RNAV SIDs estbld; SIDs transferred; chart redrawn.

CHANGES: RNAV SIDs estbld; SIDs transferred; chart redrawn.

**NOT SCALED**
SIE 2A
RWY 36L P-RNAV DEPARTURE
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED

Speed MAX 250 KT BELOW 10000'

This SID requires minimum climb gradients of 456' per NM (7.5%) until MD014, then 365' per NM (6%).

Initial ATC clearance: Maintain 13000' and request flight level change enroute.
TEMIR 1U (TEM11U)
TEMIR 1Z (TEM11Z)
RWYS 15L/R P-RNAV DEPARTURES
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED

SPEED MAX 250 KT BELOW 10000'

These SIDs require minimum climb gradients of
TEMIR 1U: 425' per NM (7%) until MD034, then 334' per NM (5.5%).
TEMIR 1Z: 334' per NM (5.5%).

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

MD034
N40 26.6 W003 30.4
At or above 2600'

MD038
N40 17.0 W003 22.4
At or above 6200'

MD039
N40 17.0 W003 22.4

VTB 1T, VTB 1U
RWYS 15L/R P-RNAV DEPARTURES
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED

SPEED MAX 250 KT BELOW 10000'

These SIDs require a minimum climb gradient of
334' per NM (5.5%) until MD031.

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

MD030
N40 17.0 W003 22.4
At or above 6200'

MD033
N40 11.8 W003 25.5
At or above 7600'

MD031
N40 11.8 W003 25.5

VILLATOBAS
N39 46.8 W003 27.8
At or above 13000'

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

Initial ATC clearance: Maintain 13000' and request flight level change enroute.
LEMD/MAD
BARAJAS
MADRID, SPAIN
RNAV SID

**ZMR 1AD, ZMR 1AE**
**RWY 36L P-RNAV DEPARTURES**
**USABLE BETWEEN 0700-2300LT**
**RNAV (DME/DME)**
**P-RNAV APPROVAL REQUIRED**

**SPEED:** MAX 250 KT BELOW 10000’

These SIDs require minimum climb gradients of:
- **ZMR 1AD:** 456’ per NM (7.5%) until MD014, then 365’ per NM (6%) until DISKO.
- **ZMR 1AE:** 425’ per NM (7%) until MD025.

**Initial ATC clearance:** Maintain 13000’ and request flight level change enroute.

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
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<tbody>
<tr>
<td><strong>ZMR 1AD</strong></td>
<td>SSY (2400’; K180°/K210°/K240°) - MD014 (5700’) - MD026 (8100’) - DISKO (12000’) - ZMR (12000’).</td>
</tr>
<tr>
<td><strong>ZMR 1AE</strong></td>
<td>MD016 (3600’) - MD017 (4300’) - MD025 (7200’) - DISKO (12000’) - ZMR (12000’).</td>
</tr>
</tbody>
</table>

**NOT SCALE**
ZMR 1AG, ZMR 1AH
RWY 36R P-RNAV DEPARTURES

USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED: MAX 250 KT BELOW 10000'

These SIDs require minimum climb gradients
of
ZMR 1AG: 425' per NM (7%) until MD025.
ZMR 1AH: 425' per NM (7%) until MD014, then
365' per NM (6%) until DISKO.

Gnd speed-KT: 75 100 150 200 250 300
425' per NM: 532 709 1064 1418 1772 2127
365' per NM: 456 608 911 1215 1519 1823

ZMR 1AH: Maintain runway heading until DER.
As soon as possible fly over MD028 at or above 2400'.
Initial ATC clearance: Maintain 13000' and request flight level change enroute.

SPEED ROUTING
ZMR 1AG: MD025 (7200') - DISKO (12000') - ZMR (12000').
ZMR 1AH: MD028 (2000' - K040) - MD014 (5700') - MD026 (8100') - DISKO (12000') - ZMR (12000').

SIDs are also noise abatement procedures (refer to 10-4).
BARDI ONE BRAVO (BARDI 1B) [BARD1B]
BARDI ONE KILO (BARDI 1K) [BARD1K]
BARDI ONE VICTOR (BARDI 1V) [BARD1V]

RWYS 15R/L DEPARTURES
SUBJECT TO LE(R)-71B & LE(R)-71C ACTIVITY

SPEED: MAX 250 KT BELOW 10000'

1. SIDs are also noise abatement procedures (refer to 10-4A).
2. EXPECT close-in obstacles.

CHANGES: Chart reindexed.
SIDs are also noise abatement procedures (refer to 10-4A).

1. RWY 36L: EXPECT close-in obstacles.

2. Subject to LE(R)-71B & LE(R)-71C activity.

3. Usable 0700-2300LT. Only available with previous ATC clearance.

4. For aircraft usability refer to Airport Briefing Pages.

These SIDs require a minimum climb gradient of 334' per NM (5.5%) until leaving 5000'.

CCS 1B: Changes in initial climb track are not permitted before DER (BRA 1 DME).

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

CCS 1R: Usually 2300-0700LDT

CCS 1K: Usually 0700-2300LDT

CCS 1V: 15L

Climb on 130° track as soon as possible, not later than reaching to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to 08 BRA, turn RIGHT, intercept NYS R-102 inbound to NYS, turn LEFT, intercept CCS R-065 inbound to CCS.

Climb on runway heading to PDT 12 DME/BRA 4.1 DME, turn RIGHT, intercept PDT R-525 inbound to D5 4 PDT, turn RIGHT, intercept NYS R-102 inbound to NYS, turn LEFT, intercept CCS R-065 inbound to CCS.

Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept NYS R-102 inbound to NYS, turn LEFT, intercept CCS R-065 inbound to CCS.

Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept NYS R-102 inbound to NYS, turn LEFT, intercept CCS R-065 inbound to CCS.
SPEED: MAX 250 KT BELOW 10000'

Initial ATC clearance: Maintain 13000' and request flight level change after TMA limit.

Caceres One Charlie (CCS 1C)
Caceres One Foxtrot (CCS 1F)

RWY 36L DEPARTURES

SIDs are also noise abatement procedures (refer to 10-4A).

1. SIDs are also noise abatement procedures (refer to 10-4A).
2. RWY 36L: EXPECT close-in obstacles.

At or above 6500'

Max 240 KT

At or above 12000'

Max 250 KT

Below 10000'

Max 205 KT

BANK 15°

Max 210 KT

BANK 20°

Max 240 KT

BANK 25°

Max 250 KT

For aircraft usability refer to airport briefing pages.
**Caceres Two Mike (CCS 2M)**

RWY 36L DEPARTURE

FOR AIRCRAFT USABILITY REFER TO AIRPORT BRIEFING PAGES

**Caceres One Papa (CCS 1P)**

RWY 36R DEPARTURE

**ROUTEING**

**SPEED** MAX 250 KT BELOW 10000'

---

**CHANGES:**

- New chart.

**CONTACTS:**

- **AVILA**
  - MSA BRA VOR 10,000'
  - 4500'

**Usables:**

- **2300-0700LT**
- **Only available with previous ATC clearance**

**INITIAL ATC CLEARANCE:**

Maintain 13000' and request flight level change enroute.

**GROUND SPEED:**

- 75 100 150 200 250
- 300

---

**Possible fluctuations of CNR VOR on CNR R-071**

**SPEED:**

- MAX 250 KT below 10000'

---

**RWY 36R DEPARTURE**

USABLE 2300-0700LT

FOR AIRCRAFT USABILITY REFER TO AIRPORT BRIEFING PAGES

**SPEED:** MAX 250 KT BELOW 10000'

**ROUTEING**

**INITIAL ATC CLEARANCE:**

Maintain 13000' and request flight level change enroute.

**GROUND SPEED:**

- 75 100 150 200 250
- 300

---

**Possible fluctuations of CNR VOR on CNR R-071**

**SPEED:**

- MAX 250 KT below 10000'
CACELES ONE X-RAY (CCS 1X)
CACELES ONE YANKEE (CCS 1Y)
RWY 36L DEPARTURES

FOR AIRCRAFT USABILITY REFER TO AIRPORT BRIEFING PAGES

SPEED: MAX 250 KT BELOW 10000'

NANDO TWO CHARLIE (NANDO 2C) [NAND2C]
NANDO ONE SIERRA (NANDO 1S) [NAND1S]
RWY 15R DEPARTURES

SPEED: MAX 250 KT BELOW 10000'

These SIDs require minimum climb gradients
of
NANDO 2C: 371' per NM (5.5%) until leaving 7000'.
NANDO 1S: 334' per NM (5.1%) until leaving 7000'.

Initial ATC clearance: Maintain 13000' and request flight level change enroute

NANDO 2C: Changes in initial climb track are not permitted before DER (BRA 1 DME).

Initial ATC clearance: Maintain 13000' and request flight level change enroute

Not to scale
NANDO THREE DELTA (NANDO 3D) [NAND3D] RWY 33L DEPARTURE

**SPEED** MAX 250 KT BELOW 10000'

This SID requires a minimum climb gradient of 425' per NM (7%) until leaving 9000'.

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

**ROUTING**

Climb on runway heading to 2650', turn RIGHT not before DER (BRA 1.3 DME), 011° heading to D10 BRA, turn RIGHT, intercept RBO R-231 inbound to CASAR, turn RIGHT to VJZ, intercept PDT R-350 inbound to PDT, PDT R-117 to D37 PDT, turn LEFT, intercept TLD R-091 to NANDO.

VJZ u/s: A1 CASAR turn RIGHT, intercept PDT R-360 inbound via D19 PDT to PDT, PDT R-108 to NANDO.

**NANDO 4G**

- Usable 0700-2300LT
- Gnd speed-KT: 75 100 150 200 250 300
- 425 per NM: 532 709 1063 1418 1772 2127

**NANDO 2M**

- Usable 2300-0700LT
- Gnd speed-KT: 418 557 635 1114 1350 1617
- 334 per NM: 100 150 200 250 300

**NOT TO SCALE**

- These SIDs require minimum climb gradients.
- **NANDO 4G** 425' per NM (7%) until leaving 9000'.
- **NANDO 2M** 334' per NM (5.5%) until leaving 8000'.

**Initial ATC clearance:** Maintain 13000' and request flight level change enroute.

**ROUTING**

Climb on runway heading to 2650', turn RIGHT not before DER (BRA 1.3 DME), 011° heading to D10 BRA, turn RIGHT, intercept RBO R-231 inbound to CASAR, turn RIGHT to VJZ, intercept PDT R-350 inbound to PDT, PDT R-117 to D37 PDT, turn LEFT, intercept TLD R-091 to NANDO.

VJZ u/s: A1 CASAR turn RIGHT, intercept PDT R-360 inbound via D19 PDT to PDT, PDT R-108 to NANDO.

**NANDO 4G**

- Usable 0700-2300LT
- Gnd speed-KT: 75 100 150 200 250 300
- 425 per NM: 532 709 1063 1418 1772 2127

**NANDO 2M**

- Usable 2300-0700LT
- Gnd speed-KT: 418 557 635 1114 1350 1617
- 334 per NM: 100 150 200 250 300

**NOT TO SCALE**

- These SIDs require minimum climb gradients.
- **NANDO 4G** 425' per NM (7%) until leaving 9000'.
- **NANDO 2M** 334' per NM (5.5%) until leaving 8000'.

**Initial ATC clearance:** Maintain 13000' and request flight level change enroute.

**ROUTING**

Climb on runway heading to 2650', turn RIGHT not before DER (BRA 1.3 DME), 011° heading to D10 BRA, turn RIGHT, intercept RBO R-231 inbound to CASAR, turn RIGHT to VJZ, intercept PDT R-350 inbound to PDT, PDT R-117 to D37 PDT, turn LEFT, intercept TLD R-091 to NANDO.

VJZ u/s: A1 CASAR turn RIGHT, intercept PDT R-360 inbound via D19 PDT to PDT, PDT R-108 to NANDO.
CHANGES: Chart reindexed.

NANDO TWO VICTOR (NANDO 2V) [NAND2V]
NANDO ONE X-RAY (NANDO 1X) [NAND1X]
RWY 15L DEPARTURES

SPEED: MAX 250 KT BELOW 10000'

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

NANDO 2V: Changes in initial climb track are not permitted before DER (SSY 5 DME).

SIDs are also noise abatement procedures (refer to 10-4A).

SPEED:

Gnd speed-KT

NANDO 2V

At or above 2200', then 4800'.

NANDO 1X

At or above 11000'.

These SIDs require minimum climb gradients of:

425' per NM (7%) until leaving 2200', then 4800'.

352' per NM (5.8%) until leaving 11000'.

Gnd speed-KT

NANDO 2V

425' per NM (7%) until leaving 2200'.

NANDO 1X

352' per NM (5.8%) until leaving 11000'.

NANDO 2V

334’ per NM (5.5%) until leaving 11000’.

NANDO 1X

334’ per NM (5.5%) until leaving 11000’.

NANDO 2V: Changes in initial climb track are not permitted before DER (SSY 5 DME).

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

SIDs are also noise abatement procedures (refer to 10-4A).

SPEED:

Gnd speed-KT

NANDO 2V

At or above 2200', then 4800'.

NANDO 1X

At or above 11000'.

NANDO 2V: Changes in initial climb track are not permitted before DER (SSY 5 DME).

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

SIDs are also noise abatement procedures (refer to 10-4A).
NASOS TWO BRAVO (NASOS 2B) [NASO2B]
NASOS ONE SIERRA (NASOS 1S) [NASO1S]
NASOS ONE VICTOR (NASOS 1V) [NASO1V]

RWYS 15R/L DEPARTURES

SPEED: MAX 250 KT BELOW 10000'

These SIDs require minimum climb gradients of:

NASOS 2B
371' per NM (6.1%) until leaving 7000'.
334' per NM (5.5%) until leaving 7000'.

NASOS 1V
334' per NM (5.5%) until leaving 5000'.

Gnd speed-KT
75 100 150 200 250 300
371' per NM
463 618 927 1235 1544 1853
334' per NM
418 557 835 1114 1392 1671

NASOS 2B: Changes in initial climb track are not permitted before DER (BRA 1.3 DME). Initial ATC clearance: Maintain 13000' and request flight level change enroute.

NASOS 1V:
Climb on runway heading to PDT R-325 inbound to PDT, PDT R-166 to NASOS.
NASOS TWO MIKE (NASOS 2M) [NASO2M]  
NASOS TWO ROMEO (NASOS 2R) [NASO2R]  
NASOS TWO YANKEE (NASOS 2Y) [NASO2Y]

**Rwy 36R Departures**  
*Speed: Max 250 KT below 10000’*

**SIDs**

1. **NASOS 4E**
   - Initial ATC clearance: Maintain 9000’ and request flight level change enroute.
   - Usable 0700-2300LT.
   - Initial climb track: 017° (CASAR).
   - Speed: 425 Kts.
   - Minimum climb: 534' per NM (5.5%).

2. **NASOS 2M**
   - Initial ATC clearance: Maintain 13000’ and request flight level change enroute.
   - Usable 2300-0700LT.
   - Initial climb track: 017° (CASAR).
   - Speed: 425 Kts.
   - Minimum climb: 534' per NM (5.5%).

These SIDs require minimum climb gradients of:

- **NASOS 4E**  
  425 Kts. per NM, minimum 9000’
  234 Kts. per NM, minimum 8000’

- **NASOS 2M**  
  425 Kts. per NM, minimum 9000’
  234 Kts. per NM, minimum 8000’

**CHANGES:**
- New chart.
- Chart reindexed.
**SID ROUTING**

**NVS 5C**
- Climb on 333° heading to 2550', turn RIGHT not before DER (BRA 1.3 DME), intercept BRA R-341 to D6 BRA, turn LEFT, intercept NVS R-068 inbound to NVS.
- At or above 2400', intercept PDE R-136 to D8 BRA, turn RIGHT, intercept PDE R-333 inbound to D5 PDT, turn LEFT, intercept PDE R-052 to D11.7 PDT, turn LEFT, intercept PDE R-064 inbound to PDE, RBO R-029 to PINAR.

**NVS 5S**
- Climb on 334° heading to 2550', turn RIGHT not before DER (BRA 1.3 DME), intercept RBO R-078 to PINAR.
- At or above 2000', intercept RBO R-169 inbound to RBO, RBO R-078 to PINAR.

**Initial ATC clearance:** Maintain 13000' and request flight level change enroute.

**Change:** Initial ATC clearance.

**SID ROUTING**

**PINAR 2B**
- Climb on 130° track as soon as possible, not later than reaching 2500', at or above 2400', intercept BRA R-136 to D8 BRA, turn RIGHT, intercept PDE R-333 inbound to D5 PDT, turn LEFT, intercept PDE R-052 to D11.7 PDT, turn LEFT, intercept PDE R-064 inbound to PDE, RBO R-029 to PINAR.

**PINAR 1S**
- Climb on runway heading to PDE 12 DME/BRA 1.4 DME, turn RIGHT, intercept PDE R-325 inbound to D3 PDT, turn LEFT, intercept PDE R-052 to D11.7 PDT, turn LEFT, intercept RBO R-169 inbound to RBO, RBO R-078 to PINAR.

**Change:** Initial ATC clearance.

**NOT TO SCALE**

**These SIDs require minimum climb gradients of**

- 304° per NM (5%) until leaving 3000',
- 334° per NM (5.5%) until leaving 3000',
- 371° per NM (6.1%) until leaving 2500'.

**These SIDs require minimum climb gradients of**

- PINAR 1S
- PINAR 2B
- PINAS 1S & 2S

**SPEED:**

- MAX 250 KT BELOW 10000'

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**SID**

**PINAR TWO ROMEO (PINAR 2R) [PINA2R]**

**PINAR TWO WHISKEY (PINAR 2W) [PINA2W]**

**PINAR TWO DEPARTURES**

**SPEED MAX 250 KT BELOW 10000’**

**INITIAL ATC CLEARANCE:** Maintain 13000’ and request flight level change enroute.

**ROUTEING**

**PINAR 2R**

- Climb on 017° track as soon as possible, not later than reaching 2500’ to BRA 5.8 DME, turn RIGHT, intercept RBO R-223 inbound to RBO, RBO R-078 to PINAR.

**PINAR 2W**

- Climb on 017° track as soon as possible, not later than reaching 2500’ to BRA 5.8 DME, turn RIGHT, intercept RBO R-238 inbound to RBO, RBO R-078 to PINAR.

**SPEED:**

- Max 250 KT below 10000’.
- 304’ per NM (5%) until reaching 8000’.
- 334’ per NM (5.5%) until reaching 8000’.

**CHANGES:** None.

---

**SID**

**PINAR TWO CHARLIE (PINAR 2C) [PINA2C]**

**PINAR TWO ECHO (PINAR 2E) [PINA2E]**

**PINAR TWO NOVEMBER (PINAR 2N) [PINA2N]**

**RWY 33L, 36L DEPARTURES**

**SPEED MAX 250 KT BELOW 10000’**

**INITIAL ATC CLEARANCE:** Maintain 13000’ and request flight level change enroute.

**ROUTEING**

**PINAR 2C**

- Climb on runway heading to 2500’, turn RIGHT not before DER (BRA 5.8 DME), 011° heading to D10 BRA, turn RIGHT, intercept RBO R-231 inbound via CASAR to RBO, turn RIGHT, RBO R-078 to PINAR.

**PINAR 2E**

- Climb on runway heading to SSY, SSY R-018 to D10 BRA, turn RIGHT, intercept RBO R-231 inbound via CASAR to RBO, RBO R-078 to PINAR.

**PINAR 2N**

- Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept RBO R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to RBO, RBO R-078 to PINAR.

**SPEED:**

- Max 250 KT below 10000’.
- 304’ per NM (5%) until reaching 8000’.
- 334’ per NM (5.5%) until reaching 8000’.

**CHANGES:** None.

---

**SID**

**PINAR TWO DEPARTURES**

**SPEED MAX 250 KT BELOW 10000’**

**INITIAL ATC CLEARANCE:** Maintain 13000’ and request flight level change enroute.

**ROUTEING**

**PINAR 2R**

- Climb on 017° track as soon as possible, not later than reaching 2500’ to BRA 5.8 DME, turn RIGHT, intercept RBO R-223 inbound to RBO, RBO R-078 to PINAR.

**PINAR 2W**

- Climb on 017° track as soon as possible, not later than reaching 2500’ to BRA 5.8 DME, turn RIGHT, intercept RBO R-238 inbound to RBO, RBO R-078 to PINAR.

**SPEED:**

- Max 250 KT below 10000’.
- 304’ per NM (5%) until reaching 8000’.
- 334’ per NM (5.5%) until reaching 8000’.

**CHANGES:** None.
**SPEED** MAX 250 KT BELOW 10000'
ROBLEDILLO ONE LIMA (RBO 1L)
ROBLEDILLO TWO MIKE (RBO 2M)
RWY 36L DEPARTURES

**SPEED** MAX 250 KT BELOW 10000'

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBO 1L</td>
<td>Climb on runway heading to SSY, SSY R-018 to D10 BRA, turn RIGHT, intercept RBO R-231 inbound via CASAR to RBO.</td>
</tr>
<tr>
<td>RBO 2M</td>
<td>Climb on runway heading to SSY, SSY R-018 to D10 BRA/DS 6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to RBO.</td>
</tr>
</tbody>
</table>

Initial ATC clearance: Maintain **13000’** and request flight level change enroute

**SPEED** MAX 250 KT BELOW 10000’

Initial ATC clearance: Maintain **13000’** and request flight level change enroute

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBO 1R</td>
<td>Climb on runway heading to SSY, SSY R-018 to D10 BRA, turn RIGHT, intercept RBO R-231 inbound via CASAR to RBO.</td>
</tr>
<tr>
<td>RBO 1W</td>
<td>Climb on runway heading to SSY, SSY R-018 to D10 BRA/DS 6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to RBO.</td>
</tr>
</tbody>
</table>

**SPEED** MAX 250 KT BELOW 10000’

Initial ATC clearance: Maintain **13000’** and request flight level change enroute

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBO 1R</td>
<td>Climb on runway heading to SSY, SSY R-018 to D10 BRA, turn RIGHT, intercept RBO R-231 inbound via CASAR to RBO.</td>
</tr>
<tr>
<td>RBO 1W</td>
<td>Climb on runway heading to SSY, SSY R-018 to D10 BRA/DS 6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to RBO.</td>
</tr>
</tbody>
</table>

**SPEED** MAX 250 KT BELOW 10000’
ROBLEDILLO ONE VICTOR (RBO 1V)  
ROBLEDILLO ONE X-RAY (RBO 1X)  
RWY 15L DEPARTURES

**SID ROUTING**

- **Initial ATC clearance:** Maintain 13000' and request flight level change enroute.
- **SPEED:** MAX 250 KT BELOW 10000'
### LEMD/MAD BARajas
#### 20 JUL 07 (10-3T8)

**SOMOSIERRA TWO CHARLIE (SIE 2C) RWY 33L DEPARTURE**

**SPEED:** MAX 250 KT BELOW 10000'

**ROUTING**

- Climb on runway heading to 2550', turn RIGHT not before DER (BRA 1.3 DME), 011° heading to D10 BRA, intercept BRA R-006 to MOLAS, turn LEFT, intercept SIE R-169 inbound to SIE.

**SOMOSIERRA SIX ECHO (SIE 6E)**

**SOMOSIERRA ONE LIMA (SIE 1L)**

**SOMOSIERRA TWO QUEBEC (SIE 2Q)**

**SOMOSIERRA TWO ROMEO (SIE 2R)**

**RWYS 36L/R DEPARTURES**

**SPEED:** MAX 250 KT BELOW 10000'

**ROUTING**

- Climb on runway heading to D2.7 SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE.

This SIDs require a minimum climb gradient of 389' per NM (6.4%) until leaving 5600'.

**SIE 6E, 2Q, 2R**

389' per NM (6.4%) until leaving 5600'.

**SIE 1L**

456' per NM (7.5%) until leaving 10000'.

**Initial ATC clearance:** Maintain 13000' and request flight level change enroute.

**CHANGES:** None.

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This SID requires minimum climb gradients of:
334' per NM (5.5%) until leaving 5000', then
273' per NM (4.5%) until leaving FL145.

Gnd speed-KT: 75 100 150 200 250 300
334' per NM: 418 557 835 1144 1392 1671
273' per NM: 342 456 684 911 1139 1367

Initial ATC clearance: Maintain 13000' and request flight level change enroute.
TEMIR TWO BRAVO (TEMIR 2B) [TEMI2B]
TEMIR ONE SIERRA (TEMIR 1S) [TEMI1S]
RWY 15R DEPARTURES

SPEED: MAX 250 KT BELOW 10000'

These SIDs require minimum climb gradients of

TEMIR 2B
37° per NM (6.1%) until leaving 7000'.

TEMIR 1S
33° per NM (5.5%) until leaving 7000'.

Initial ATC clearance: Maintain 13000' and request flight level change en route.

SIDs

TEMIR 2B (Use 2300-0700)
Climb on 130° track as soon as possible, not later than reaching 2500' to BRA 2.4 DME, turn RIGHT, intercept BRA R-128 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to PDT, PDT R-117 to TEMIR.

TEMIR 1S (Use 0700-2300)
Climb on runway heading to PDT R-325 inbound to PDT, PDT R-117 to TEMIR.

ROUTING

Climb on runway heading to 2500', turn RIGHT not before DER (BRA 1.3 DME), D10 BRA, turn RIGHT, intercept RBO R-231 inbound to CASAR, turn RIGHT to VJZ, intercept PDT R-360, turn RIGHT to TEMIR.

VJZ u/s: At CASAR turn RIGHT, intercept PDT R-360 inbound via D19 PDT to PDT, PDT R-117 to TEMIR.

CHANGES: None.
TEMIR FOUR ECHO (TEMIR 4E) [TEM14E]  
TEMIR TWO MIKE (TEMIR 2M) [TEM12M]  
RWY 36L DEPARTURES  
SPEED MAX 250 KT BELOW 10000'  

TEMIR TWO ROMEO (TEMIR 2R) [TEM12R]  
TEMIR TWO YANKEE (TEMIR 2Y) [TEM12Y]  
RWY 36R DEPARTURES  
SPEED MAX 250 KT BELOW 10000'  

SIDs are also noise abatement procedures (refer to 10-4).

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

These SIDs require minimum climb gradients of:
- TEMIR 4E: 425' per NM (7%) until leaving 9000'.  
- TEMIR 2M: 334' per NM (5.5%) until leaving 8000'.

Initial ATC clearance: Maintain 13000' and request flight level change enroute.

These SIDs require minimum climb gradients of:
- TEMIR 2R: 365' per NM (6%) until leaving 9000'.  
- TEMIR 2Y: 334' per NM (5.5%) until leaving 8000'.

**CHANGES:** SID TEMIR 1M renumbered 2M; initial climb out.

**CHANGES:** SID TEMIR 2R revised.
TEMIR ONE VICTOR (TEMIR 1V) [TEMIR IV]
TEMIR ONE X-RAY (TEMIR 1X) [TEMIR I X]

RWY 15L DEPARTURES

**SPEED MAX 250 KT BELOW 10000'**

**CHANGES:**

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**Initial ATC clearance:** Maintain 13000' and request flight level change enroute.

**SIDs are also noise abatement procedures (refer to 10-4).**

**These SIDs require minimum climb gradients of:**
- 371' per NM (6.1%) until leaving 7000'.
- 334' per NM (5.5%) until leaving 7000'.

**SIDs are also noise abatement procedures (refer to 10-4).**

**These SIDs require minimum climb gradients of:**
- 371' per NM (6.1%) until leaving 7000'.
- 334' per NM (5.5%) until leaving 7000'.

**INITIAL ATC CLEARANCE:** Maintain 13000' and request flight level change enroute.

**ROUTE**

- **VTB 1C**
  - Climb on 130° track as soon as possible, not later than reaching 2400' to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to PDT, intercept VTBR-013 inbound to VTB.
  - Climb on runway heading to PDT 12 DME/BRA 4.1 DME, turn RIGHT, intercept PDT R-335 inbound to PDT, turn RIGHT, intercept VTBR-013 inbound to VTB.
  - Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept PDT R-338 inbound to PDT, turn RIGHT, intercept VTBR-013 inbound to VTB.

- **VTB 1S**
  - Climb on 130° track as soon as possible, not later than reaching 2400' to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to PDT, intercept VTBR-013 inbound to VTB.
  - Climb on runway heading to PDT 12 DME/BRA 4.1 DME, turn RIGHT, intercept PDT R-335 inbound to PDT, turn RIGHT, intercept VTBR-013 inbound to VTB.
  - Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept PDT R-338 inbound to PDT, turn RIGHT, intercept VTBR-013 inbound to VTB.

- **VTB 1V**
  - Climb on 130° track as soon as possible, not later than reaching 2400' to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to PDT, intercept VTBR-013 inbound to VTB.
  - Climb on runway heading to PDT 12 DME/BRA 4.1 DME, turn RIGHT, intercept PDT R-335 inbound to PDT, turn RIGHT, intercept VTBR-013 inbound to VTB.
  - Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept PDT R-338 inbound to PDT, turn RIGHT, intercept VTBR-013 inbound to VTB.
**VILLATOBAS ONE DELTA (VTB 1D)**
**VILLATOBAS ONE ECHO (VTB 1E)**
**RWY 36L DEPARTURES**

SIDs are also noise abatement procedures (refer to 10-4).

**1.** SIDs are also noise abatement procedures (refer to 10-4).

**2.** SIDs are also noise abatement procedures (refer to 10-4).

SIDs require minimum climb gradients of
- VTB 1D: 456' per NM (7.5%) until leaving 10000'
- VTB 1E: 389' per NM (6.4%) until leaving 10000'

Initial ATC clearance: Maintain 13000' and request flight level change enroute

**VILLATOBAS ONE ASCENSION (VTB 1D)**

| Speed: 250 KT Below 10000' |

**INITIAL ROUTING**

**VTB 1D**
- Initial climb out: D19 PDT, turn RIGHT, intercept VTB R-002 to D15 BRA, turn LEFT, intercept RBO R-259 to D21 RBO, turn LEFT, intercept VTB R-346 inbound to VTB.
- Usable: 2300-0700LT

**VTB 1E**
- Initial climb out: D19 PDT, turn RIGHT, intercept VTB R-002 to D15 BRA, turn LEFT, intercept RBO R-259 to D21 RBO, turn LEFT, intercept VTB R-346 inbound to VTB.
- Usable: 2300-0700LT

**NOT TO SCALE**

CHANGES: VTB 1D initial climb-out; restriction in chart heading.

CHANGES: VTB 2F initial climb-out; restriction in chart heading.

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VILLATOBAS ONE QUEBEC (VTB 1Q)
RWY 36R DEPARTURE
USEABLE 0700-2300LT
SPEED MAX 250 KT BELOW 10000'

Initial ATC clearance: Maintain 13000' and request flight level change enroute

Climb on 017° track as soon as possible, not later than reaching 2600' to BRA 5 DME, turn RIGHT, intercept RBO R-233 inbound to D10 BRA, turn RIGHT to VJZ, VJZ R-169 to D20.4 VJZ, turn RIGHT, intercept VTB R-356 inbound to VTB.

VILLATOBAS ONE ROMEO (VTB 1R)
RWY 36R DEPARTURES
SPEED MAX 250 KT BELOW 10000'

Initial ATC clearance: Maintain 13000' and request flight level change enroute

Climb on runway heading to BRA 5 DME, intercept RBO R-002 to D15 BRA, turn LEFT, intercept BRA R-309 to D15 BRA, turn LEFT to VTB, VTB R-021 inbound to VTB.

NOT TO SCALE
ZAMORA ONE LIMA (ZMR 1L)
ZAMORA ONE NOVEMBER (ZMR 1N)
ZAMORA TWO ZULU (ZMR 2Z)

RWY 36L DEPARTURES

Initial ATC clearance: Maintain 13000' and request flight level change on route.

ROUTING

ZMR 1L
Usable 0700-2300LT
Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D9.5 SSY, turn RIGHT, intercept CNR R-013/SIE R-193 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 1N
Usable 0700-2300LT
Climb on runway heading to SSY, SSY R-018 to D10 BRA, turn LEFT to CNR, CNR R-271 to AVILA, turn RIGHT, intercept ZMR R-141 inbound to ZMR.

ZMR 2Z
Usable 2300-0700LT
Climb on runway heading to SSY, SSY R-016 to D10 BRA/D5.6 SSY, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

Possible fluctuations of SIE VOR on SIE R-174 into SIE between SIE 11 DME & SIE 7 DME. Alternatively, follow 354° heading until VOR signal becomes stabilized.

These SIDs require minimum climb gradients of
456° per NM (7.5%) until leaving 10000'.
389° per NM (6.4%) until leaving 10000'.
389° per NM (6.4%) until leaving 8000'.

GND speed-KT
75 100 125 200 250 300
456° per NM
570 760 1119 1519 1944
389° per NM
486 646 922 1366 1844

Usable 0700-2300LT
Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 1L
Usable 0700-2300LT
Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D9.5 SSY, turn RIGHT, intercept CNR R-013/SIE R-193 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 1N
Usable 0700-2300LT
Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° track, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 2Z
Usable 2300-0700LT
Climb on runway heading to SSY, SSY R-016 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D17 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

Initial ATC clearance: Maintain 13000' and request flight level change on route.

ZMR 1L
Usable 0700-2300LT
Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D9.5 SSY, turn RIGHT, intercept CNR R-013/SIE R-193 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 1N
Usable 0700-2300LT
Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° track, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 2Z
Usable 2300-0700LT
Climb on runway heading to SSY, SSY R-016 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D17 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

Note: These SIDs require a minimum climb gradient of 456° per NM (7.5%) until leaving 10000'.

Initial ATC clearance: Maintain 13000' and request flight level change on route.

ZMR 1L
Usable 0700-2300LT
Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D9.5 SSY, turn RIGHT, intercept CNR R-013/SIE R-193 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 1N
Usable 0700-2300LT
Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° track, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 2Z
Usable 2300-0700LT
Climb on runway heading to SSY, SSY R-016 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D17 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

These SIDs require a minimum climb gradient of 456° per NM (7.5%) until leaving 10000'.
389° per NM (6.4%) until leaving 10000'.
389° per NM (6.4%) until leaving 8000'.

GND speed-KT
75 100 150 200 250 300
456° per NM
570 760 1119 1519 1944
389° per NM
486 646 922 1366 1844

Initial ATC clearance: Maintain 13000' and request flight level change on route.

ZMR 1L
Usable 0700-2300LT
Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D9.5 SSY, turn RIGHT, intercept CNR R-013/SIE R-193 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 1N
Usable 0700-2300LT
Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° track, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 2Z
Usable 2300-0700LT
Climb on runway heading to SSY, SSY R-016 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D17 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

Note: These SIDs require a minimum climb gradient of 456° per NM (7.5%) until leaving 10000'.

Initial ATC clearance: Maintain 13000' and request flight level change on route.

ZMR 1L
Usable 0700-2300LT
Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D9.5 SSY, turn RIGHT, intercept CNR R-013/SIE R-193 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 1N
Usable 0700-2300LT
Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° track, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.

ZMR 2Z
Usable 2300-0700LT
Climb on runway heading to SSY, SSY R-016 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D17 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.
LEMD/MAD
BARAJAS
MADRID, SPAIN
SID

ZAMORA ONE PAPA (ZMR 1P)
RWY 36R DEPARTURE
SPEED: MAX 250 KT BELOW 10000'

This SID requires a minimum climb gradient of 389' per NM (6.4%) until leaving 8000'.

Gnd speed-KT 75 100 150 200 250 300
389' per NM 486 648 972 1296 1620 1944

Initial ATC clearance: Maintain 13000' and request flight level change enroute

Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, turn LEFT, SIE R-287 via ORBIS to ZMR.

ZAMORA ONE X-RAY (ZMR 1X)
ZAMORA ONE YANKEE (ZMR 1Y)
RWY 36L DEPARTURES
USABLE 0700-2300LT

FOR AIRCRAFT USABILITY REFER TO AIRPORT BRIEFING PAGES
SPEED: MAX 250 KT BELOW 10000'

Subject to LE(D)-60 activity.

Changes:
- ZAMORA X-RAY climb out; ZAMORA X-RAY restriction in chart heading.

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NOISE ABATEMENT - P-RNAV SID

For AIRPORT BRIEFING refer to 10-1P pages

Noise monitoring point

For AIRPORT BRIEFING refer to 10-1P pages

Noise monitoring point
### VISUAL DOCKING GUIDANCE SYSTEM

**A. DESCRIPTION**

The 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 (based on a laser radar measurement), that is provided by a display unit in front of the cockpit.

**B. DISPLAY UNIT**

Consist of:

1. Two alphanumeric presentation lines of 4 characters, composed by yellow fluorescent indicators, which can indicate several information: Aircraft type, stand position ("STND"), number of flight, origin, destination, planned hour, occupied position ("BON"-"Block on") and occupation hour, chocks on ("CHCK ON"), "SLOW DOWN", "STOP OK", "TOO FAR", emergency stop ("ESTP STOP"), connection to 400 Hz ("400 H") and/or airconditioned ("PCA") and connection hours.
2. Azimuth guidance display sub-unit with centerline indicator (centered guidance and design of deviation arrows): yellow fluorescent.
3. Distance indicator to the stop position: 4 dashboards composed by yellow and black fluorescent lines organized in a vertical column.

**C. PILOT INSTRUCTIONS**

1. Check that the indicated aircraft type is the appropriate.
2. Taxi in-line watching centerline guidance.
3. If the actf speed exceeds 10'/3m per second, the unit display indicates "SLOW DOWN"; the entry speed must be reduced.
4. Check that the distance indicator is completely yellow.
5. The distance indicator is activated at 53'/16.2m before the stop position changing gradually from yellow to black lights.
6. At the stop position the distance indicator shows completely black and "STOP" will appear in the upper presentation line. If the parking is correct, it shows "OK".
7. If the actf exceeds 3'/1m from the stop position the indicator will show "TOO FAR" and it may be necessary to make a push-back.

### INS COORDINATES

<table>
<thead>
<tr>
<th>STAND No.</th>
<th>COORDINATES</th>
<th>STAND No.</th>
<th>COORDINATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>548 thru 554</td>
<td>N40 29.9 W003 33.9</td>
<td>T6, T7</td>
<td>N40 27.8 W003 34.1</td>
</tr>
<tr>
<td>556 thru 560</td>
<td>N40 29.8 W003 33.9</td>
<td>T8 thru T14</td>
<td>N40 27.9 W003 34.1</td>
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<tr>
<td>562 thru 565</td>
<td>N40 29.7 W003 33.9</td>
<td>T15, T16</td>
<td>N40 28.0 W003 34.1</td>
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<tr>
<td>566 thru 573</td>
<td>N40 29.6 W003 33.9</td>
<td>T17 thru T19</td>
<td>N40 28.1 W003 34.1</td>
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<tr>
<td>574 thru 580</td>
<td>N40 29.5 W003 33.9</td>
<td>T20</td>
<td>N40 28.2 W003 34.1</td>
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<tr>
<td>582 thru 586</td>
<td>N40 29.5 W003 34.0</td>
<td>T21 thru T24</td>
<td>N40 28.2 W003 34.2</td>
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<tr>
<td>600 thru 604</td>
<td>N40 29.9 W003 33.8</td>
<td>T25 thru T29</td>
<td>N40 28.3 W003 34.2</td>
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<tr>
<td>606 thru 610</td>
<td>N40 29.8 W003 33.8</td>
<td>T30</td>
<td>N40 28.4 W003 34.3</td>
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<tr>
<td>612</td>
<td>N40 29.7 W003 33.8</td>
<td>T31 thru T33</td>
<td>N40 28.3 W003 34.3</td>
</tr>
<tr>
<td>614 thru 618</td>
<td>N40 29.6 W003 33.8</td>
<td>T34 thru T37</td>
<td>N40 28.2 W003 34.3</td>
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<td>N40 29.5 W003 33.8</td>
<td>T38</td>
<td>N40 28.3 W003 34.4</td>
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<tr>
<td>624 thru 628</td>
<td>N40 29.4 W003 33.8</td>
<td>T39 thru T41</td>
<td>N40 28.2 W003 34.4</td>
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<tr>
<td>T1, T2</td>
<td>N40 27.7 W003 34.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3, T4</td>
<td>N40 27.7 W003 34.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T5</td>
<td>N40 27.8 W003 34.2</td>
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</tr>
</tbody>
</table>

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B: **DISPLAY UNIT**

- **VISUAL DOCKING GUIDANCE SYSTEM**

A. **DESCRIPTION**

The 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 (based on a laser radar measurement), that is provided by a display unit in front of the cockpit.

B. **DISPLAY UNIT**

Consist of:

1. Two alphanumeric presentation lines of 4 characters, composed by yellow fluorescent indicators, which can indicate several information: Aircraft type, stand position ("STND"), number of flight, origin, destination, planned hour, occupied position ("BON"-"Block on") and occupation hour, chocks on ("CHCK ON"), "SLOW DOWN", "STOP OK", "TOO FAR", emergency stop ("ESTP STOP"), connection to 400 Hz ("400 H") and/or airconditioned ("PCA") and connection hours.
2. Azimuth guidance display sub-unit with centerline indicator (centered guidance and design of deviation arrows): yellow fluorescent.
3. Distance indicator to the stop position: 4 dashboards composed by yellow and black fluorescent lines organized in a vertical column.

C. **PILOT INSTRUCTIONS**

1. Check that the indicated aircraft type is the appropriate.
2. Taxi in-line watching centerline guidance.
3. If the actf speed exceeds 10'/3m per second, the unit display indicates "SLOW DOWN"; the entry speed must be reduced.
4. Check that the distance indicator is completely yellow.
5. The distance indicator is activated at 53'/16.2m before the stop position changing gradually from yellow to black lights.
6. At the stop position the distance indicator shows completely black and "STOP" will appear in the upper presentation line. If the parking is correct, it shows "OK".
7. If the actf exceeds 3'/1m from the stop position the indicator will show "TOO FAR" and it may be necessary to make a push-back.
Within 10 NM radius of PDT VOR between R-249 and R-073 between 4000' and 5000' false alarm indication at Ground Proximity Warning System (GPWS) may occur.

Final approach track offset 12° from rwy centerline.

<table>
<thead>
<tr>
<th>Visibility (m)</th>
<th>RVR (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9400</td>
<td>3620</td>
</tr>
<tr>
<td>7600</td>
<td>2995</td>
</tr>
<tr>
<td>4000</td>
<td>2400</td>
</tr>
<tr>
<td>2500</td>
<td>2050</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Altitude (m)</th>
<th>RVR (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>2000</td>
</tr>
<tr>
<td>600</td>
<td>2500</td>
</tr>
<tr>
<td>0</td>
<td>3600</td>
</tr>
</tbody>
</table>

Descent gradient 4.93% or 12° 
Descent angle 4.93°