Page 1
Changed chart(s) since Disc 22-2010
ADD = Added chart, REV = Revised chart, DEL = Deleted chart.

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE

No revision activity since Disc 22-2010

TERMINAL CHART NOTAMs

No Chart NOTAMs for Airport LEMD

General Info

Madrid, ESP
N 40° 28.3' W 03° 33.6' Mag Var: 3.1°W
Elevation: 2000'

Public, IFR, Control Tower, Customs, Landing Fee
Fuel: Jet A-1
Repairs: Minor Airframe, Minor Engine

Time Zone Info: GMT+1:00 uses DST

Runway Info

Runway 15L-33R 11483' x 197' asphalt
Runway 15R-33L 13451' x 197' asphalt
Runway 18L-36R 11483' x 197' asphalt
Runway 18R-36L 14268' x 197' asphalt

Runway 15L (145.0°M) TDZE 1942'
  Lights: Edge, Centerline
Runway 15R (145.0°M) TDZE 1995'
  Lights: Edge, Centerline
  Right Traffic
Runway 18L (182.0°M) TDZE 1922'
  Lights: Edge, ALS, Centerline, TDZ
  Right Traffic
  Displaced Threshold Distance 1640'
Runway 18R (182.0°M) TDZE 1991'
  Lights: Edge, ALS, Centerline, TDZ
  Displaced Threshold Distance 3228'
Runway 33L (325.0°M) TDZE 1933'
  Lights: Edge, ALS, Centerline, TDZ
  Displaced Threshold Distance 3445'
Runway 33R (325.0°M) TDZE 1886'
  Lights: Edge, ALS, Centerline, TDZ
  Displaced Threshold Distance 1640'
Runway 36L (2.0°M) TDZE 1983'
  Lights: Edge, Centerline
Runway 36R (2.0°M) TDZE 1942'
  Lights: Edge, Centerline

Communications Info

ATIS **130.85** Departure Service
ATIS **118.25** Arrival Service
Barajas Tower **120.65** Secondary
Barajas Tower **120.15** Secondary
Barajas Tower **118.975**
Barajas Tower **118.675**
Barajas Tower **118.15** Arrival Service
Barajas Tower **118.075** Departure Service
Barajas Tower Ground Control **121.975**
Barajas Tower Ground Control **121.75**
Barajas Tower Ground Control **123.25**
Barajas Tower Ground Control **123.15**
Barajas Tower Ground Control **123.0**
Barajas Tower Ground Control **121.85**
Barajas Tower Ground Control **121.7**
Barajas Tower Ground Control **121.625**
Barajas Tower Clearance Delivery **130.35**
Barajas Tower Clearance Delivery **130.075**
Madrid Approach Control **134.025**
Madrid Approach Control **130.8**
Madrid Approach Control **127.5**
Madrid Approach Control **124.225**
Madrid Approach Control **124.025**

Notebook Info

1. GENERAL

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 15000 kg between 0700-2300LT.
Arrival or Departure operations of ACFT licensed according to ICAO Annex 16, VOL I, 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 area:
- 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 occurences.

A system of total noise quota is established between 2300-0700LT.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

1. GENERAL

1.2.4.2. NOISE QUOTA AIRCRAFT CLASSIFICATION

ACFT are classified according to their Effective Perceived Noise measured in decibels (EPNdB):

EPNdB	NOISE CLASSIFICATION (CR)
more than 101.9	CR-16
99 - 101.9	CR-8
96 - 98.9	CR-4
93 - 95.9	CR-2
90 - 92.9	CR-1
less than 90	CR-0.5

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 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 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.

1.2.5.2. ACFT WITH NIGHT RESTRICTIONS FOR THE USE OF APU

IL (all models), DC8 (all models), F50, MD8 (all models), MD11, B747 (all models), CRJ2, E120, B717 (all models), B727 (all models).

1.3. LOW VISIBILITY PROCEDURES

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.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

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 I8 or I9.
R-1:	M11 to M10 to Gate 4 to I9, I10 or I12.
Stands 10 thru 13: M9.	
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 DI4 to DI3. Stands 380 thru 394: Standard route to X4 until X1 to J4 until J6. Stands 444 and 446: Standard route to X4 to X3. Stand 448: Standard route to X4 until X2.
R-11:	Stands 342 thru 362: Standard route to U4 to DI4 to DI3. Stands 430 and 432: Standard route to X4. Stands 434 thru 442: Standard route to X4 to X3.
R-12:	Stands 300 thru 312: Standard route to U4 to D5 to W5 to WI6. Stands 320 thru 329: Standard route to U4 to D5 to W5. Stands 330 thru 340: Standard route to U4 to DI4. 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 4S	
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 B12to 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

In case of communication failure proceed as follows depending on position:

- Before or at the clearance limit: proceed to clearance limit of the STAR, fly 2 holding pattern and complete the ILS approach to land on the nearest available RWY.
- Passed the clearance limit: complete the ILS approach to land on the nearest available RWY.

ACFT will hold in the first segment of the TWY in which the ILS sensitive area is vacated and wait for a Follow-me car which will guide the ACFT to the assigned parking stand.

2.6. OTHER INFORMATION

2.6.1. PROCEDURE AGAINST OVERSHOOTING RWY CENTERLINE WHEN RADIO CONTACT TEMPORARILY IMPOSSIBLE

After the pilot has been given a radar vector converging the assigned RWY centerline at an angle of less than 70°, pilots will take the initiative to intercept the ILS localizer or any replacement approach aid unless they have previously been instructed to cross the LOC or RWY centerline by ATC.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

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 min before the estimated time of departure between 0500 -1000.

On this request pilots will report the complete ACFT callsign 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"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 take-off. For de-icing operation of a four-engine ACFT, according to the presence of ice at the back-side of the ACFT, pilot can be required by the agent in charge of the de-icing operation in order to turn-off some of the outer engines.

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 compulsory 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.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

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 will proceed via SIE, ZMR, BARDI, CCS or VTB and 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 West.
On requesting engine start-up clearance to ATC, pilots will report:

- ACFT call sign
- ACFT type and series
- parking stand
- ATIS message received

Clearance will be issued as soon as requested. When delays are expected to exceed 15 min, 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 min. 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 lined-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 towed push-back and taxi clearance. ACFT must be ready for towed push-back or taxiing within next 5 min 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.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

3. DEPARTURE

3.2.2. PUSH-BACK DIRECTIONS

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

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

3. DEPARTURE

3.2.3. STANDARD TAXI ROUTES

3.2.3.1. NORTH CONFIGURATION

To RWY 36L from:	
Terminal 1, 2 or 3	
R-7:	Stands 200 thru 208: C11 to E3 until E1 to A7 to G1 to M8 until M17 to R5 or R6 or R7 to R8 to Z2. Stands 210 thru 227: Direct to E2 to E1 to A7 to G1 to M8 until M17 to R5 or R6 or R7 to R8 to Z2. Stands 230 thru 249: Direct to C8 to A6 to A5 to C6 to M6 until M17 to R5 or R6 or R7 to R8 to Z2.
R-6:	C1 or C3 to M3 until M17 to R5 or R6 or R7 to R8 to Z2.
Stands 86 thru 89: I6 to C5 to M5 until M17 to R5 or R6 or R7 to R8 to Z2.	
R-5:	C3 or C5 to M5 until M17 to R5 or R6 or R7 to R8 to Z2.
Stands 69, 73 and 74: I6 to C5 to M5 until M17 to R5 or R6 or R7 to R8 to Z2	
In R-6 and R-5, ACFT which are in stands 134 thru 162 and need push-back to leave them, will head Southwest in TWY A, taxiing by the first possible intersection to TWY M.	
R-4:	I7 to C5 to M5 until M17 to R5 or R6 or R7 to R8 to Z2 or C6 to M6 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 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-3:	I8 to M7 until M17 to R5 or R6 or R7 to R8 to Z2 or I7 to C5 to M5 until M17 to R5 or R6 or R7 to R8.
Stands 22 thru 27: Direct 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:	I11 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: JI6 to JI5 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: DI4 to D4 or DI3 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: DI4 to D4 to 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 WN3 to W4, then standard route.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

3. DEPARTURE

To RWY 36L from:	
Terminal 4S	
R-20:	Stands 582 thru 586: Gate 11 to G11 to Z1. Stands 568 thru 580: EB2 to EB6 to EB7 to N10 to N9 to N6 until N4 to BN1 to Z3 or EB2 to EB6 to EB7 to N10 to N9 to N6 until N3 to G11 to Z1. Stands 620 thru 628: EC2 to EC6 to EC7 to N11 until N9 to N6 until N4 to BN1 to Z3 or EC2 to EC6 to EC7 to N11 until N9 to N6 until N3 to G11 to Z1.
R-21:	Stands 556 thru 566: EB2 to EB to EB7 to N10 until N4 to BN1 to Z3 or EB2 to EB to EB7 to N10 until N3 to G11 to Z1. Stands 608 thru 618: EC2 to EC6 to EC7 to N11 until N4 to BN1 to Z3 or EC2 to EC6 to EC7 to N11 until N3 to G11 to Z1.
R-22:	Stands 540 thru 554: EB6 to EB7 to N10 until N4 to BN1 to Z3 or EB6 to EB7 to N10 until N3 to G11 to Z1. Stands 600 thru 606: EC6 to EC7 to N11 until N4 to BN1 to Z3 or EC6 to EC7 to N11 until N3 to G11 to Z1.
R-23:	Stands 500 thru 536: EA6 to EA5 to Gate 12 to N4 to BN1 to Z3 or EA6 to EA5 to Gate 12 to N3 to G11 to Z1. Stand 538: EA6 to N9 until N4 to BN1 to Z3 or EA6 to N9 until N3 to G11 to Z1.
To RWY 36R from:	
Terminal 1, 2 or 3	
The same route as for RWY 36L until M17, then to M18 until M31 to NY13 to Y1 or M18 until M32 to N13 to Y2 or M18 until M33 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: JI6 to JI5 to D1 to D2, then standard route. Stands 364 thru 378: D2 to S4, then standard route. Stands 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: DI3 to DI4, then standard route. Stands 430 and 432: D4 to D5 to W4 to X4 to X3 to S3, then standard route. Stands 434 thru 442: D3 to R4 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: DI4 to DI3 to S4 to S3, then standard route. Stands 420 thru 428: D4 to D5 to W4 to X5 to X3 to S3, then standard route.
R-13:	Stands 400 thru 419: WN2 to WN3 to W4 to X5 to X4 to X3 to S3, then standard route.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

3. DEPARTURE

To RWY 36R from:	
Terminal 4S	
R-20:	Stands 582 thru 586: Gate 11 to G11 to B3 until B13 to Y3 or Gate 11 to G11 to B3 until EC8 to N12 to N13 to Y2 or Gate 11 to G11 to B3 until EC8 to EC7 to NY12 to NY13 to Y1 or Gate 11 to G11 to B3 until EC9 to BY12 to M34 to B13 to Y3. Stands 568 thru 580: EB2 to EC2 to EC6 to NY12 to NY13 to Y1. Stands 620 thru 628: EC2 to EC6 to NY12 to NY13 to Y1.
R-21:	Stands 556 thru 566: EB2 to EC2 to EC6 to NY12 to NY13 to Y1. Stands 608 thru 618: EC2 to EC6 to NY12 to NY13 to Y1.
R-22:	Stands 540 thru 554: EB6 to EC6 to NY12 to NY13 to Y1. Stands 600 thru 606: EC6 to NY12 to NY13 to Y1.
R-23:	Stands 500 thru 536: EA6 to EA5 to Gate 12 to G12 to B5 until B13 to Y3 or EA6 to EA5 to Gate 12 to G12 to B5 until EC8 to N12 to N13 to Y2 or EA6 to EA5 to Gate 12 to G12 to B5 until EC8 to EC7 to NY12 to NY13 to Y1 or EA6 to EA5 to Gate 12 to G12 to B5 until EC9 to BY12 to M34 to B13 to Y3. Stand 538: EA6 to N9 to BN2 to B7 until B13 to Y3 or EA6 to N9 to BN2 to B7 until EC8 to N12 to N13 to Y2 or EA6 to N9 to BN2 to B7 until EC8 to EC7 to NY12 to NY13 to Y1 or EA6 to N9 to BN2 to B7 until EC9 to BY12 to M34 to B13 to Y3.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

3. DEPARTURE

3.2.3.2.SOUTH CONFIGURATION

To RWY 15L from:	
Terminal 1, 2 or 3	
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.	
Terminal 4	
R-10:	Stands 364 thru 370: DI3 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or DI3 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point. Stands 372 thru 378: D2 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or D2 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point. Stands 380 thru 394: JI6 to JI5 to D2 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or JI6 to JI5 to D2 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point. 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 D3 to R4 to X3 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point. Stand 448: D2 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or D2 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point.
R-11:	Stands 342 thru 362: DI3 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or DI3 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. Stands 434 thru 442: 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.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

3. DEPARTURE

To RWY 15L from:	
Terminal 4	
R-12:	Stands 300 thru 312: W6 to WN1 until WN3 to W4 to X5 to X4 to X3 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or 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. Stands 320 thru 329: W5 to WN1 until WN3 to W4 to X5 to X4 to X3 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or W5 to WN1 until 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. Stands 330 thru 340: DI4 to DI3 to S4 to S3 to S2 to A17 until A28 to A29 to K1 to holding point or DI4 to DI3 to S4 to S3 to S2 to A17 until A28 to KB2 to K2 or K3 to holding point. Stands 420 thru 428: 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.
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 A29 to K1 to holding point or 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 4S	
R-20:	Stands 568 thru 580: EB2 to EC2 to Gate 14 to KA1 to K1 to holding point. Stands 582 thru 586: Gate 11 to G11 to B3 until B12 to M33 to M30 to KA1 to K1 to holding point. Stands 620 thru 628: 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. Stands 562 thru 566: EB2 to EC2 to Gate 14 to KA1 to K1 to holding point. Stands 608 thru 610: EC6 to NY12 to M31 to M30 to KA1 to K1 to holding point. Stands 612 thru 618: EC2 to Gate 14 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. Stands 600 thru 608: 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. Stand 538: EA6 to EA7 to B10 until B12 to M33 until M30 to KA1 to K1 to holding point.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

3. DEPARTURE

To RWY 15R from:	
Terminal 1, 2 or 3	
R-7:	Stands 200 thru 208: C11 to E3 until E1 to A7 until A12 to holding point 15A/B. Stands 210 thru 227: Direct to E2 to E1 to A7 until A12 to holding point 15A/B. Stands 230 thru 249: Direct to C8 to A6 until A12 to holding point 15A/B.
In R-6 and R-5 or ACFT which need push-back to leave stands 134 and 135 will head Southeast and on stands 146 thru 162 will head Northeast to use TWY A directly.	
R-6:	C1 or C3 to A1 until A12 to holding point 15A/B.
Stands 86 thru 89: I6 to C5 to A5 until A12 to holding point 15A/B.	
R-5:	C3 or C5 to A3 until A12 to holding point 15A/B.
Stands 69, 73 and 74: I6 to C5 to A5 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. Stands 40 thru 45: M6 to C6 to A5 until A12 to holding point 15A/B. Stands 171 and 173: F2 to A8 until A12 to holding point 15 A/B. Stand 175: F1 to A8 until A12 to holding point 15 A/B.
R-3:	I8 to G1 to A8 until A12 to holding point 15A/B.
Stands 22 thru 27: M8 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.
Stands 20 and 21: M8 to A8 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: DI3 to D3 to R4 to R3 to R2 to R8 to R5 to MC to holding point 15C. Stands 372A thru 378: D1 until D3 to R4 to R3 to R2 to R8 to R5 to MC to holding point 15C. Stands 380 thru 394: JI6 to JI5 to D1 until D3 to R4 to R3 to R2 to R8 to R5 to MC to holding point 15C. Stands 444 thru 448: D2 to D3 or D14 to R4 to R3 to R2 to R8 to R5 to MC to holding point 15C.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

1. GENERAL

Pilots will be informed when Low Visibility Procedures are in use via 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 car.

ACFT vacating RWY via a rapid exit TWY will always have priority over the rest of ACFT, that must give way to them using the intermediate holding position.

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

When leaving RWY sensitive area 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 stopbar lights.

© JEPPESEN, 2006, 2008. ALL RIGHTS RESERVED.

3. DEPARTURE

To RWY 15R from:	
Terminal 4	
R-11:	Stands 342 thru 362: DI3 to D3 or DI4 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. Stands 420 thru 428: D4 to D5 to W4 to X5 to X4 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 4S	
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.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

3.2.4. COMMUNICATION FAILURE

ACFT will continue with extreme CAUTION on the asssigned route to stop at an intermediate holding position or its clearance limit and wait for a Follow-me car which will guide the ACFT to the designated holding position or parking stand.

3.3. SPEED RESTRICTIONS

MAX 250 KT below 10000'.

3.4. NOISE ABATEMENT PROCEDURES

For additional depiction refer to 10-4 & 10-4A.

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 1X, 1AX, CCS 1X, 1AX, SIE 1X, VTB 1AX, 1XE, ZMR 1AX, 1XN are mandatory for ACFT included in the list shown below.
ACFT not included in the list are allowed to use SIDs BARDI 1Y, 1AY, CCS 1Y, 1AY, SIE 2L, 1AL, VTB 1AY, 1YD, ZMR 2L, 1AL.

ACFT LIST
AN72, A124, A340-600, B721, B722, B731, B732, B747, DC8, DC10, H25A, IL62, L101, MD11, SBR1, T134, YK42.

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

South configuration

RWY 15L/R: Usable for take-off between 0700-2300LT, following the initial segments of all publicated SIDs. Between 2300-0700LT RWY 15L will be used following the initial segments of all publicated SIDs.
RWY 18L: Usable for landing between 2300-0700LT.
RWY 18L/R: Usable for landing between 0700-2300LT.

3.5. RWY OPERATIONS

3.5.1. 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.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

1. GENERAL

1.4. SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM

1.4.1. OPERATION OF MODE S TRANSPONDER WHEN THE ACFT IS ON THE GROUND

ACFT operators shall ensure that the Mode S transponders are able to operate when the ACFT is on the ground.

From the request for push-back or taxi, whichever is earlier and after landing continuously until ACFT is fully parked on stand, pilots shall select AUTO mode or the equivalent according to specific installation, XPDR or ON if AUTO is not available, and the assigned Mode A code.
Do not select OFF or STDBY.

Select STBY when ACFT is fully parked.
After parking, Mode A code 2000 must be set before selecting OFF or STDBY.

Whenever ACFT is capable of reporting ACFT ident (i.e. callsign used in flight), ACFT ident should also be entered from the request for push-back or taxi, whichever is earlier (through the FMS or the transponder control panel). Flight crew must use the specific format defined by ICAO for entry the ACFT ident (e.g. AFR6380, SAS589, BAW68PG).

To ensure that the performance of systems based on SSR frequencies (including airborne TCAS units and SSR radars) are not compromised, TCAS should be selected when approaching the holding point. Then it should be deselected after vacating the RWY.

ACFT taxiing without flight plan, Mode A code 2000 should be selected.

1.5. TAXI PROCEDURES

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

1.6. PARKING INFORMATION

Stands 70 thru 74 and T1 thru T35 equipped with docking guidance system.
On stands 31 thru 33, 35 thru 37, 44, 45, 70 thru 74, 99 thru 109, 122 thru 135, 145 thru 165, 173, 175, 300 thru 328, 330 thru 394, 500 thru 586 and T1 thru T41 push-back required.
Stand T41: CAUTION in push-back manoeuvre due to closeness of antiblast barrier.
Do not enter stands T1, T2 and T3 from TWY I7.

1.7. OTHER INFORMATION

1.7.1. 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.

© JEPPESEN, 2006, 2008. ALL RIGHTS RESERVED.

2. ARRIVAL

2.1. SPEED RESTRICTIONS

Pilot must plan the descent profile to comply with the following speed and altitude restrictions at specified points, unless ATC clears otherwise. If it is not possible to comply, then advise ATC of it.

RWY 18L/18R

POSITION	SPEED	ALTITUDE
TAGOM or equivalent position	220 KT	10,000'
LALPI or equivalent position	220 KT	11,000' or above
12 DME ILS or equivalent position	180 KT	-
6 DME ILS or equivalent position	160 KT	-
4 DME ILS or equivalent position	160 KT	-

RWY 33L/33R

POSITION	SPEED	ALTITUDE
TOBEK or equivalent position	220 KT	5000'
ASBIN or equivalent position	220 KT	6000' or above
12 DME ILS or equivalent position	180 KT	-
6 DME ILS or equivalent position	160 KT	-
4 DME ILS or equivalent position	160 KT	-

2.2. NOISE ABATEMENT PROCEDURES

2.2.1. 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 except the execution of approach to RWY 18R with reduced flaps. If unable to comply submit alternative procedures to correspondent authority for approval.
Arrival paths will be radar monitored and noise level will be measured for each operation.

South configuration
RWY 18L: Usable for landing between 2300-0700LT.
RWY 18L/R: Usable for landing between 0700-2300LT.

Landing and approach procedures in VMC will be performed with an angle equal to or higher than the ILS GP or PAPI of each RWY.
Approaching RWY 18R the following landing procedure with reduced flaps is recommended, although its use is subject to pilot's decision and safety must prevail at all times:
- intercept ILS with minimum flap configuration and landing gear retracted;
- do not extend landing gear and keep the minimum possible flaps configuration up to 5 DME ILS.

2.2.2. REVERSE THRUST

The use of reverse thrust above idle is forbidden between 2300-0700LT except for safety reasons. In this case, it must be notified to the tower and the 'Departamento de Medio Ambiente' of the APT.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

2. ARRIVAL

2.3. CAT II/III OPERATIONS

RWYs 18L/R and 33R approved for CAT II/III operations, special aircrew and ACFT certification required.

2.4. RWY OPERATIONS

2.4.1. MINIMUM REDUCED SEPARATION ON THE SAME RWY

Any ACFT on final approach will not be allowed to cross the beginning of the RWY until the following minimum separation from the preceding ACFT applies:

- Landing after take-off: The departing ACFT has taken off and is, at least, 2000m from THR.

These minimums will be applied only under the following conditions:

- Between SR and SS.
- While VMC prevails at the aerodrome.
- When the braking action is not negatively affected by precipitation remains on the RWY (slush, water, etc.).
- When the involved ACFT operates without any anomalies.

When issuing the landing clearance according to this procedure, the follwing instructions shall be used: "...(ACFT call sign) BEHIND LANDING/DEPARTING (ACFT type), CLEARED TO LAND RUNWAY (number)".

2.4.2. MINIMUM RWY OCCUPANCY TIME

In order to minimize the occurrence of "go-around", lessen the RWY occupancy time and, therefore, get the maximum RWY utilization, pilots shall exit the RWY as soon as possible and this will not affect the ACFT safety and standard operation.
Unless ATC advises otherwise and without prejudice to the noise abatement procedures, ACFT will vacate the corresponding RWY by the following rapid exit TWYs and reach the following TWY:

NORTH CONFIGURATION

RWY	Rapid exit	ACFT	Dist from THR	TWY
33L	L7	all	5446' (1660m)	A10
33L	L5	all	6594' (2010m)	A11
33L	L4	all	6594' (2010m)	LA2
33L	L2	all	6988' (2130m)	LA4
33L	L3	all	8251' (2515m)	A12
33R	K5	all	5906' (1800m)	KA4
33R	K4	all	7874' (2400m)	KA3 or KC3, KC2

SOUTH CONFIGURATION

RWY	Rapid exit	ACFT	Dist from THR	TWY
18L	Y5	all	5906' (1800m)	AY
18L	Y4	all	7874' (2400m)	BY13
18R	Z10	all	6319' (1926m)	ZW3
18R	Z8	all	7717' (2352m)	W1
18R	Z7	all	7717' (2352m)	B6

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

2. ARRIVAL

2.5. TAXI PROCEDURES

2.5.1. STANDARD TAXI ROUTES

2.5.1.1. NORTH CONFIGURATION

From RWY 33L to:	
Terminal 1, 2 or 3	
R-7:	Stands 200 thru 239: L7, L5 or L3 to TWY A to C7. Stands 240 thru 249: L7, L5 or L1 to TWY A to C9.
R-6:	L7, L5 or L3 to TWY A to C1 or C2.
R-5:	L7, L5 or L3 to TWY A to C4.
R-4:	L7, L5 or L3 to TWY A until A6 direct to stands 40 thru 43. L7, L5 or L3 to TWY A until A5 to C6 to M6 direct to stands 44 and 45. L7, L5 or L3 to TWY A to G1 to Gate 1 to I7 to C5 to stands 30 thru 37. L7, L5 or L3 to TWY A to A7 to E1 direct to stand 171. L7, L5 or L3 to TWY A to A8 to F2 direct to stand 173. L7, L5 or L3 to TWY A to A8 to F1 direct to stand 175.
R-3:	L7, L5 or L3 to TWY A to G1 to Gate 1 to I7 or I8.
Stands T1 thru T3: 0700 - 2259LT: Via A5 to A4 to C4 to I6; 2300 - 0659LT: Via A5 to C5.	
R-2:	L7, L5 or L3 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 A9 to Gate 3 to I8 or I9.
R-1:	L7, L5 or L3 to TWY A until A9 to G3 to M9 direct to stands10 thru 13. L7, L5, L3, L1 or LEFT RWY end to TWY A to G4 to Gate 4 to I9 or I10 to I12.
R-0:	L7, L5 or L3 to TWY A, incorporate to TWY M by G4 or G5 (first possible) to M11.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

2. ARRIVAL

From RWY 33L to:	
Terminal 4	
Standard route: L7, L5 or L3 to TWY A, incorporate to TWY M by the first possible TWY, follow to TWY M13 to J3 to J4. (If ACFT is to leave to the RIGHT, it will receive proper instruction from ATC, other than standard routes.) Alternative route: L2 to LA4 or L4 to LA2 to LA4 or L4 to LA1 to TWY A to A14 to H2 to H3.	
R-10:	Stands 364 thru 370: Standard route to D1 to D2. Stands 380 thru 394: Standard route to J5 to J6. Stands 444 and 446: Standard route to D1 until D3 to R4 to X3. Stand 448: Standard route to J3 to X1 to X2.
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 312: Standard route to D1 until D5 to W5 to WI6 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-20:	Stands 568 thru 580: Standard route to M21 until M24 to EB2. Stands 582 thru 586: Standard route to M21 to EA2. Stands 620 thru 628: Standard route to M21 until M27.
R-21:	Stands 556 thru 566: Standard route to M21 until M23 to EB2 to EB6. Stands 608 thru 618: Standard route to M21 until M30.
R-22:	Stands 540 thru 554: Standard route to M21 until M23 to EB2 to EB6. Stands 600 thru 606: Standard route to M21 until M31.
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.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

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 to H2 to H3. Standard route: K5 to KA4 to KC3 to KC2 to TWY A to H2 to H3 or K4 to KC3 to KC2 to TWY A to H2 to H3 or K3 to KB2 to TWY A to H2 to H3.	
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 4S	
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. Stands 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 556 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 A28 to KC1 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.
R-23:	Stands 500 thru 530: Standard route to Gate 14 to EC6 to EC7 to N11 to N10 to EA6 to EA5. Stands 532 thru 538: Standard route to Gate 14 to EC6 to EC7 to N11 to N10 to EA6.

2.5.1.2. SOUTH CONFIGURATION

From RWY 18L to:
Terminal 1, 2 or 3
Y5 to AY to BY13 to M34 until M12 or Y4 to BY 13 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 AY to BY13 to M34 until M14 or Y4 to BY13to M34 until M14 or Y3 to A33 to N13 to M32 to M14 to H3.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

2. ARRIVAL

From RWY 18L to:	
Terminal 4	
R-10:	Stands 364 thru 370: Standard route to H4 to D2 to D3. Stands 380 thru 394: Standard route to X1 to J4 until J6. Stands 444 and 446: Standard route to H4 to D2 to D3 to R4 to X3. Stand 448: Standard route to H4 to D2 to S4 to X2.
R-11:	Stands 342 thru 362: Standard route to H4 to D2 until D4. Stands 430 and 432: Standard route to H4 to D2 until D5 to W4 to X5 to X4. Stands 434 thru 446: Standard route to H4 to D2 to D3 to R4 to X3.
R-12:	Stands 300 thru 312: Standard route to H4 to D2 until D5 to W5 to WI6 to W6. Stands 320 thru 329: Standard route to H4 to D2 until D5 to W5. Stands 330 thru 340: Standard route to H4 to D2 until D4. Stands 420 thru 428: Standard route to H4 to D2 until D5 to W4 to X5 to X4.
R-13:	Stands 400 thru 411: Standard route to H4 to D2 until D5 to W5. Stands 412 thru 419: Standard route to H4 to D2 until D5 to W5 to WN1 to WA
Terminal 4S	
Leave RWY. Standard route: Y5 to AY to BY13 to M34 to M33 or Y4 to BY13 to M34 to M33 or Y3 to A33 to N13.	
R-20:	Stands 568 thru 580: Standard route to M32 until M24 to EB2. Stands 582 thru 586: Standard route to M32 until M23 to EA2. Stands 620 thru 628: Standard route to M32 until M27.
R-21:	Stands 556 thru 566: Standard route to M32 until M24 to EB2. Stands 608 thru 610: Standard route to M32 until M30. Stands 612 thru 618: Standard route to M32 until M29.
R-22:	Stands 540 thru 554: Standard route to M32 until M24 to EB2 to EB6. Stands 600 thru 608: Standard route to M32 to M31.
R-23:	Stands 500 thru 538: Standard route to N12 until N10 to EA6 to EA5.
From RWY 18R to:	
Terminal 1, 2 or 3	
Standard route: Z10 to ZW3 to W1 to W2 to MZ6 until MZ3 to M15 until M12 or Z8 to W1 to W2 to MZ6 until MZ3 to M15 until M12 or Z4 to ZW1 to V1 to V2 to MZ4 to MZ3 to M15 until M12.	
R-7:	Stands 200 thru 239: M11 until M6 to C6 to A5 to A6 to C7. Stands 240 thru 249: M11 until M6 to C 6 to A5 to C9.
R-6:	M11 until M1 to C1 or M2 to C2.
R-5:	M11 until M4 to C4.
R-4:	M11 until M8 to Gate 1 to I7 or M11 until M6 to C6 or M11 until M6 to C6 to A5 to A6 to E1 direct to stand 171 or M11 until M8 to G1 to F2 direct to stand 173 or M11 until M8 to G1 to A8 to F1 direct to stand 175.
R-3:	M11 until M8 to Gate 1 to I7 or I8.
Stands T1 thru T3: 0700 - 2259LT: M8 until M4 to C4 to I6; 2300 - 0659LT: M8 until M5 to C5.	

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

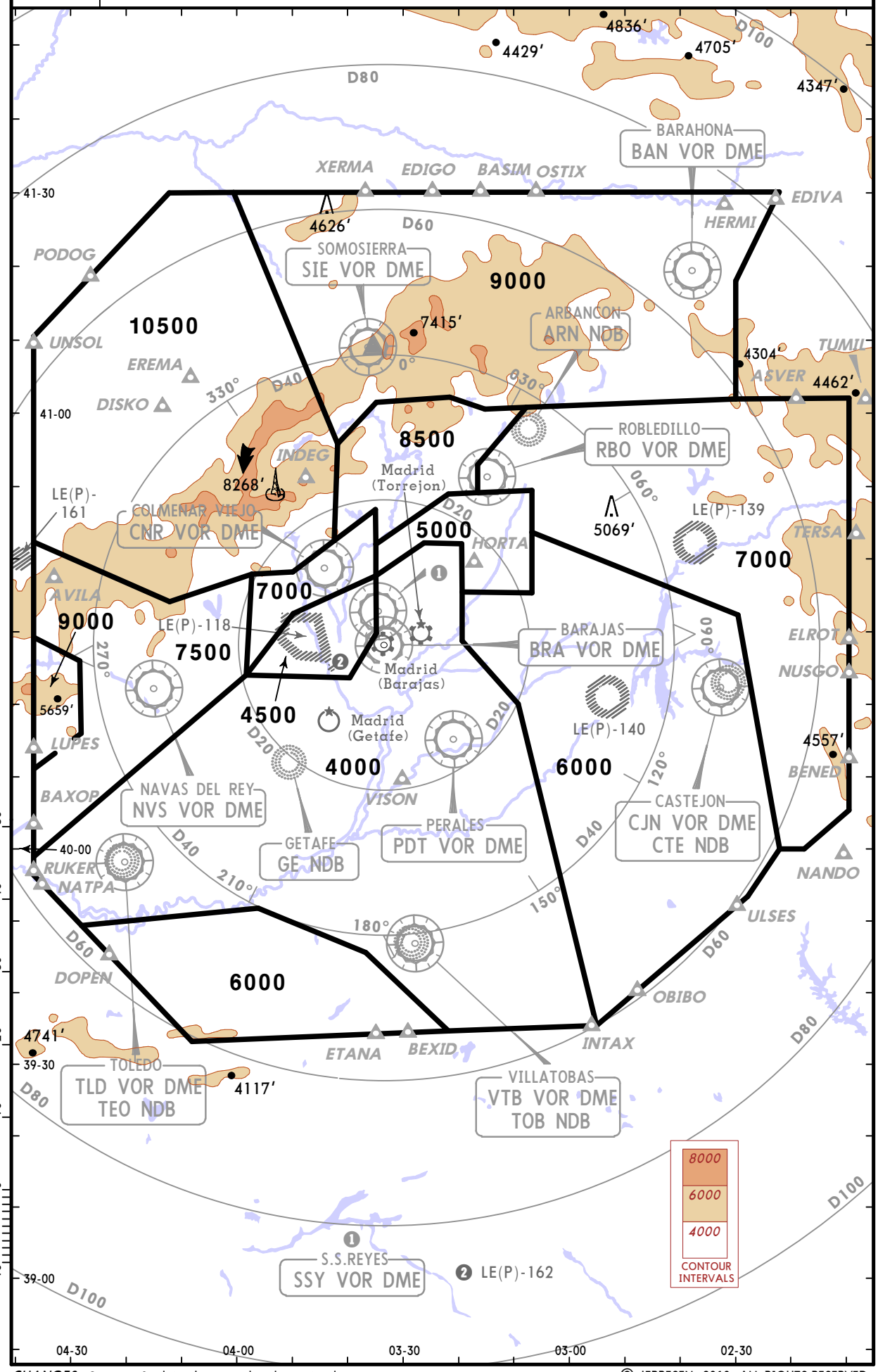
LEMD/MAD
BARAJAS

JEPPESEN
3 SEP 10 (10-1R)

MADRID, SPAIN
RADAR MINIMUM ALTITUDES

Apt Elev 2000′

Alt Set: hPa Trans level: By ATC Trans alt: 13000′
The published minimum altitudes integrate no correction for low temperatures.



CHANGES: Sectors & altitudes completely revised.

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

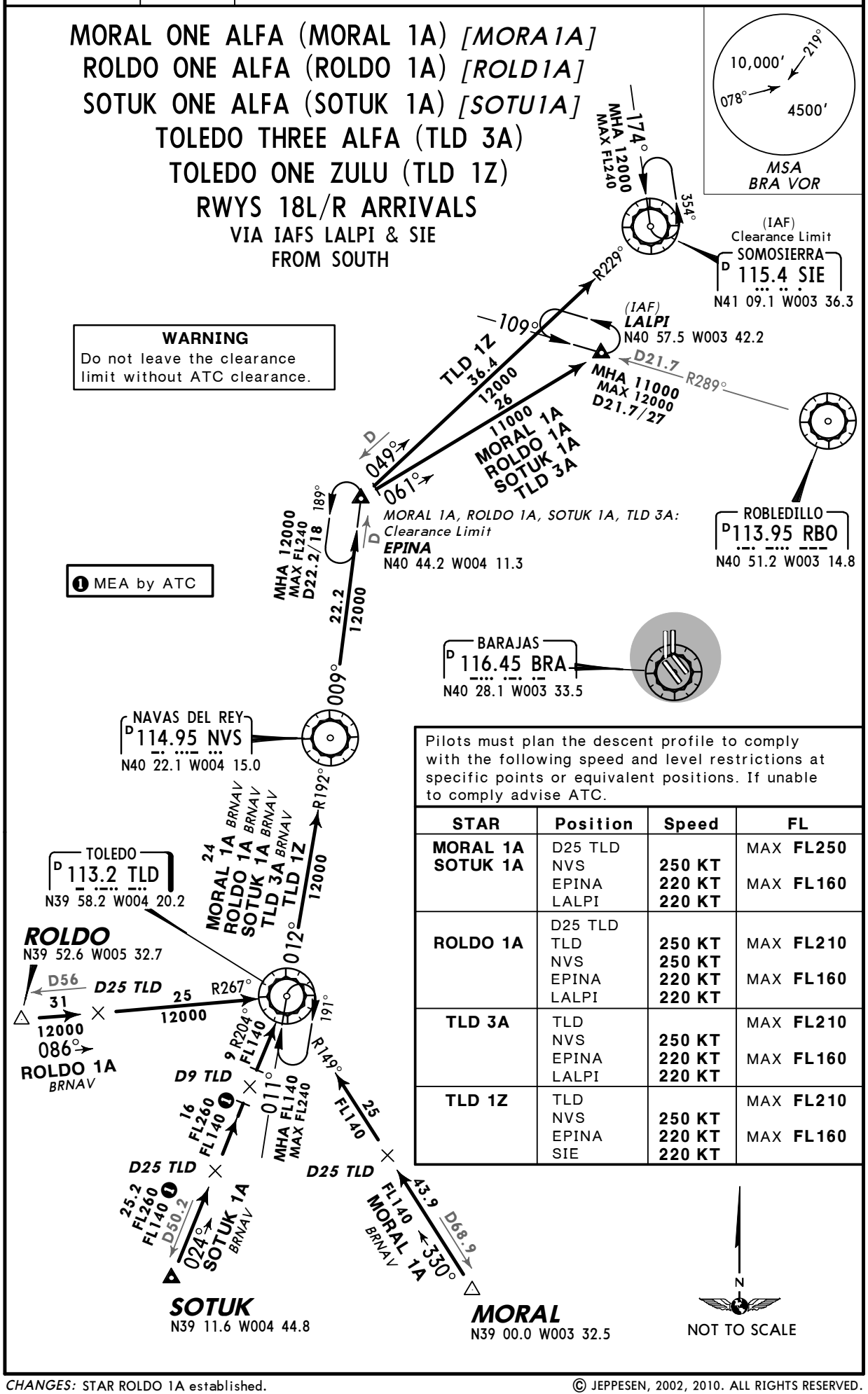
LEMD/MAD
BARAJAS

JEPPESEN
20 AUG 10 (10-2) Eff 26 Aug

MADRID, SPAIN
STAR

ATIS	Apt Elev	
118.25	2000′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′

MORAL ONE ALFA (MORAL 1A) *[MORA1A]*
ROLDO ONE ALFA (ROLDO 1A) *[ROLD1A]*
SOTUK ONE ALFA (SOTUK 1A) *[SOTU1A]*
TOLEDO THREE ALFA (TLD 3A)
TOLEDO ONE ZULU (TLD 1Z)
RWYS 18L/R ARRIVALS
VIA IAFS LALPI & SIE
FROM SOUTH



WARNING
Do not leave the clearance limit without ATC clearance.

❶ MEA by ATC

Pilots must plan the descent profile to comply with the following speed and level restrictions at specific points or equivalent positions. If unable to comply advise ATC.

STAR	Position	Speed	FL
MORAL 1A SOTUK 1A	D25 TLD		MAX FL250
	NVS	250 KT	
	EPINA	220 KT	MAX FL160
	LALPI	220 KT	
ROLDO 1A	D25 TLD		
	TLD	250 KT	MAX FL210
	NVS	250 KT	
	EPINA	220 KT	MAX FL160
	LALPI	220 KT	
TLD 3A	TLD		MAX FL210
	NVS	250 KT	
	EPINA	220 KT	MAX FL160
	LALPI	220 KT	
TLD 1Z	TLD		MAX FL210
	NVS	250 KT	
	EPINA	220 KT	MAX FL160
	SIE	220 KT	

CHANGES: STAR ROLDO 1A established.

© JEPPESEN, 2002, 2010. ALL RIGHTS RESERVED.

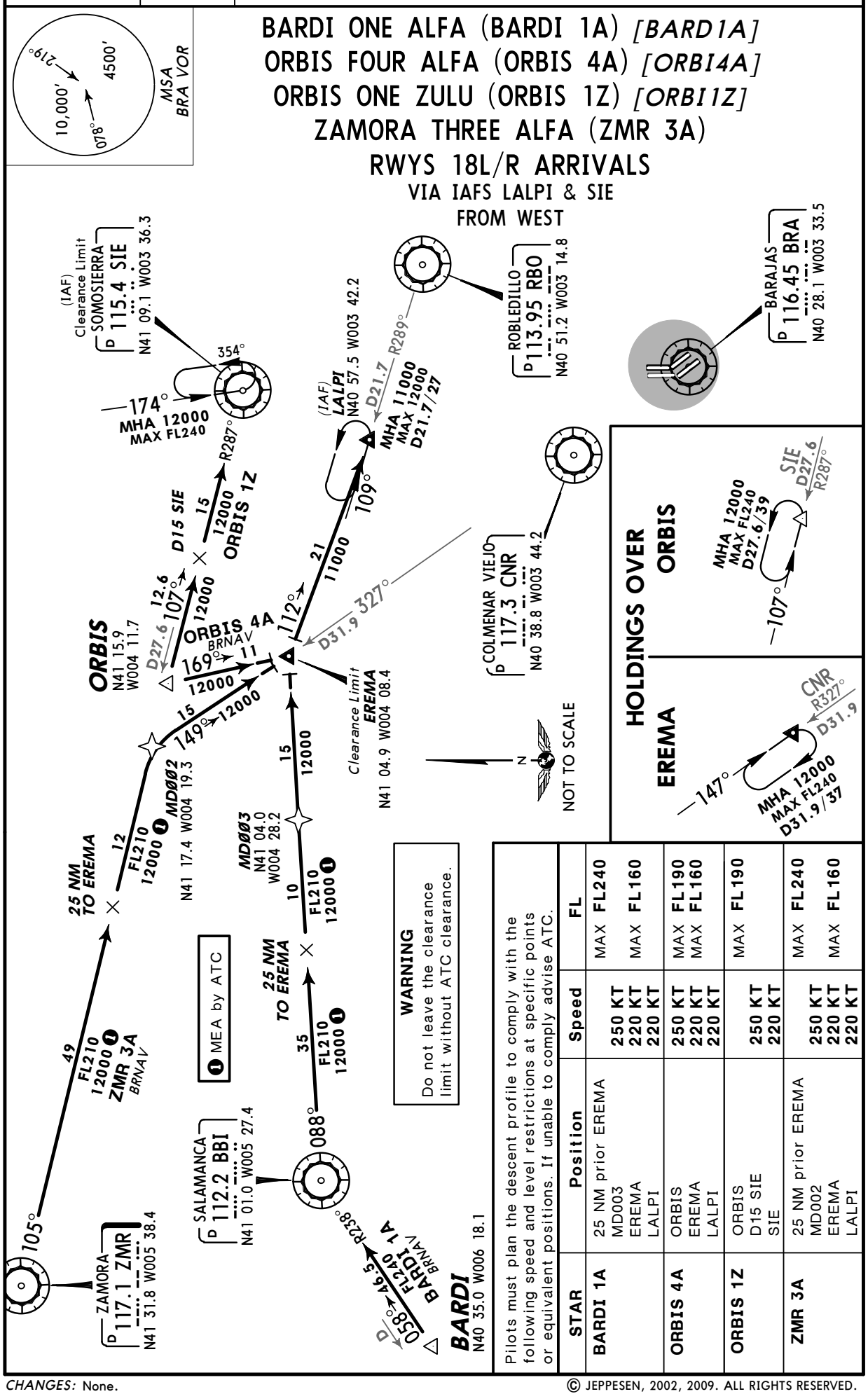
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

LEMD/MAD
BARAJAS

JEPPESEN
20 AUG 10 (10-2A) Eff 26 Aug

MADRID, SPAIN
STAR

ATIS	Apt Elev	
118.25	2000′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′



Pilots must plan the descent profile to comply with the following speed and level restrictions at specific points or equivalent positions. If unable to comply advise ATC.

STAR	Position	Speed	FL
BARDI 1A	25 NM prior EREMA MD003 EREMA LALPI	250 KT 220 KT 220 KT	MAX FL240 MAX FL160
ORBIS 4A	ORBIS EREMA LALPI	250 KT 220 KT 220 KT	MAX FL190 MAX FL160
ORBIS 1Z	ORBIS D15 SIE SIE	250 KT 220 KT	MAX FL190
ZMR 3A	25 NM prior EREMA MD002 EREMA LALPI	250 KT 220 KT 220 KT	MAX FL240 MAX FL160

CHANGES: None.

© JEPPESEN, 2002, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

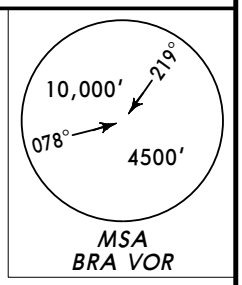
LEMD/MAD
BARAJAS

JEPPESEN
2 APR 10 (10-2B) Eff 8 Apr

MADRID, SPAIN
STAR

ATIS	Apt Elev	
118.25	2001′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′

ADUXO ONE BRAVO (ADUXO 1B) *[ADUX1B]*
BARAHONA THREE BRAVO (BAN 3B)
TERSA ONE ECHO (TERSA 1E) *[TERS1E]*
RWYS 18L/R ARRIVALS
VIA IAF TAGOM
FROM EAST



WARNING
Do not leave the clearance limit without ATC clearance.

MHA 12000
MAX FL240
208°
028°
BARAHONA
D 112.8 BAN
N41 19.4 W002 37.8
11.9
243°
D 12000
BAN 3B
MHA 10000
MAX FL240
220°
RBO 39 DME
040°
Clearance Limit
OBIKI
N41 13.6 W002 51.6
29.8
10000
D41.7
(IAF)
TAGOM
N40 59.0
W003 25.9
D8.1 RBO
N40 58.3 W003 20.0
8.1
10000
333°
ROBLEDILLO
D 113.95 RBO
N40 51.2 W003 14.8
R123°
22.9
10000
D
MHA 10000
MAX FL240
D22.9/32
Clearance Limit
BUDOM
N40 39.4 W002 49.0
14.9
10000
D37.8 RBO
D10.6 CJN
N40 30.3
W002 23.5
303°
10000
R043°
R071°
CASTEJON
D 115.6 CJN
N40 22.3 W002 32.7
D11.6 CJN
N40 26.5
W002 18.5
12
10000
ADUXO
1B
251°
D23.6
ADUXO
N40 30.7
W002 03.9
17.6
10000
TERSA
1E
D28.2
223°
TERSA
N40 43.5
W002 08.3
MHA 10000
MAX FL240
D28.2/37
BARAJAS
D 116.45 BRA
N40 28.1 W003 33.5

HOLDINGS OVER

ADUXO
MHA 10000
MAX FL240
D23.6/29
251°
CJN
D23.6
R071°

TAGOM
BAN
243°
D41.7
063°
D41.7/37
MHA 10000
MAX 12000

Pilots must plan the descent profile to comply with the following speed and level/altitude restrictions at specific points or equivalent positions. If unable to comply advise ATC.

STAR	Position	Speed	FL/Altitude
ADUXO 1B	ADUXO		MAX **FL210**
	D37.8 RBO	**250 KT**	
	BUDOM	**220 KT**	MAX **FL160**
	TAGOM	**220 KT**	**10000′**
BAN 3B	BAN	**250 KT**	MAX **FL190**
	OBIKI	**220 KT**	MAX **FL160**
	TAGOM	**220 KT**	**10000′**
TERSA 1E	TERSA		MAX **FL210**
	D37.8 RBO	**250 KT**	
	BUDOM	**220 KT**	MAX **FL160**
	TAGOM	**220 KT**	**10000′**

NOT TO SCALE

CHANGES: STAR BAN 3B level restrictions revised.

© JEPPESEN, 2002, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

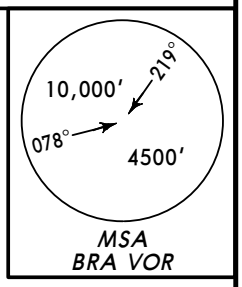
LEMD/MAD
BARAJAS

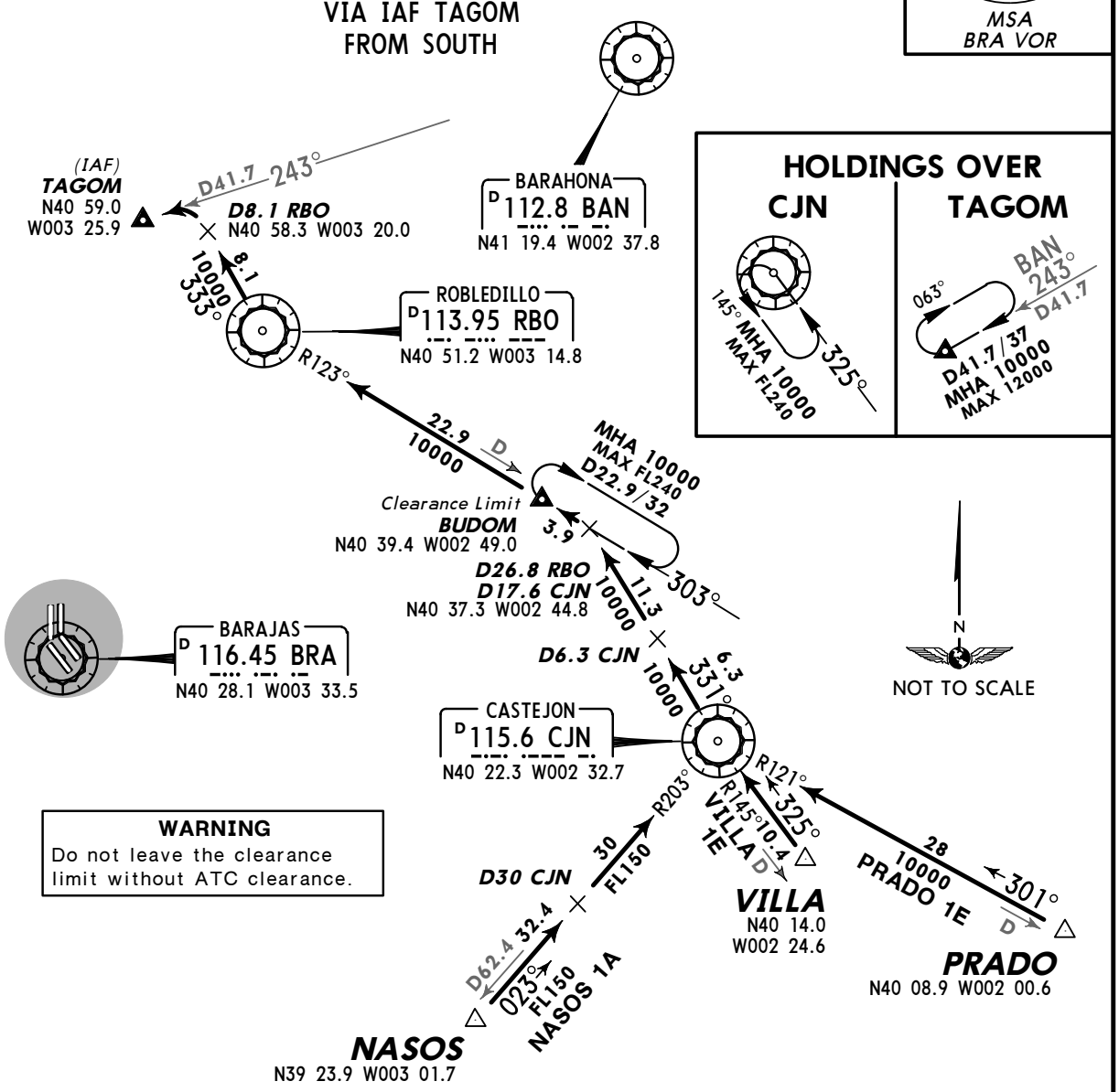
JEPPESEN
2 APR 10 (10-2C) Eff 8 Apr

MADRID, SPAIN
STAR

ATIS	Apt Elev	
118.25	2001′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′

NASOS ONE ALFA (NASOS 1A) [NASO1A]
PRADO ONE ECHO (PRADO 1E) [PRAD1E]
VILLA ONE ECHO (VILLA 1E) [VILA1E]
RWYS 18L/R ARRIVALS
VIA IAF TAGOM
FROM SOUTH

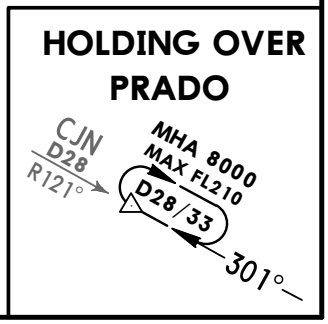




WARNING
Do not leave the clearance limit without ATC clearance.

Pilots must plan the descent profile to comply with the following speed and level/altitude restrictions at specific points or equivalent positions. If unable to comply advise ATC.

STAR	Position	Speed	FL/Altitude
NASOS 1A	D30 CJN		MAX **FL210**
	D6.3 CJN	**250 KT**	
	BUDOM	**220 KT**	MAX **FL160**
	TAGOM	**220 KT**	**10000′**
PRADO 1E	PRADO		MAX **FL210**
	D6.3 CJN	**250 KT**	
	BUDOM	**220 KT**	MAX **FL160**
	TAGOM	**220 KT**	**10000′**
VILLA 1E	VILLA		MAX **FL210**
	D6.3 CJN	**250 KT**	
	BUDOM	**220 KT**	MAX **FL160**
	TAGOM	**220 KT**	**10000′**



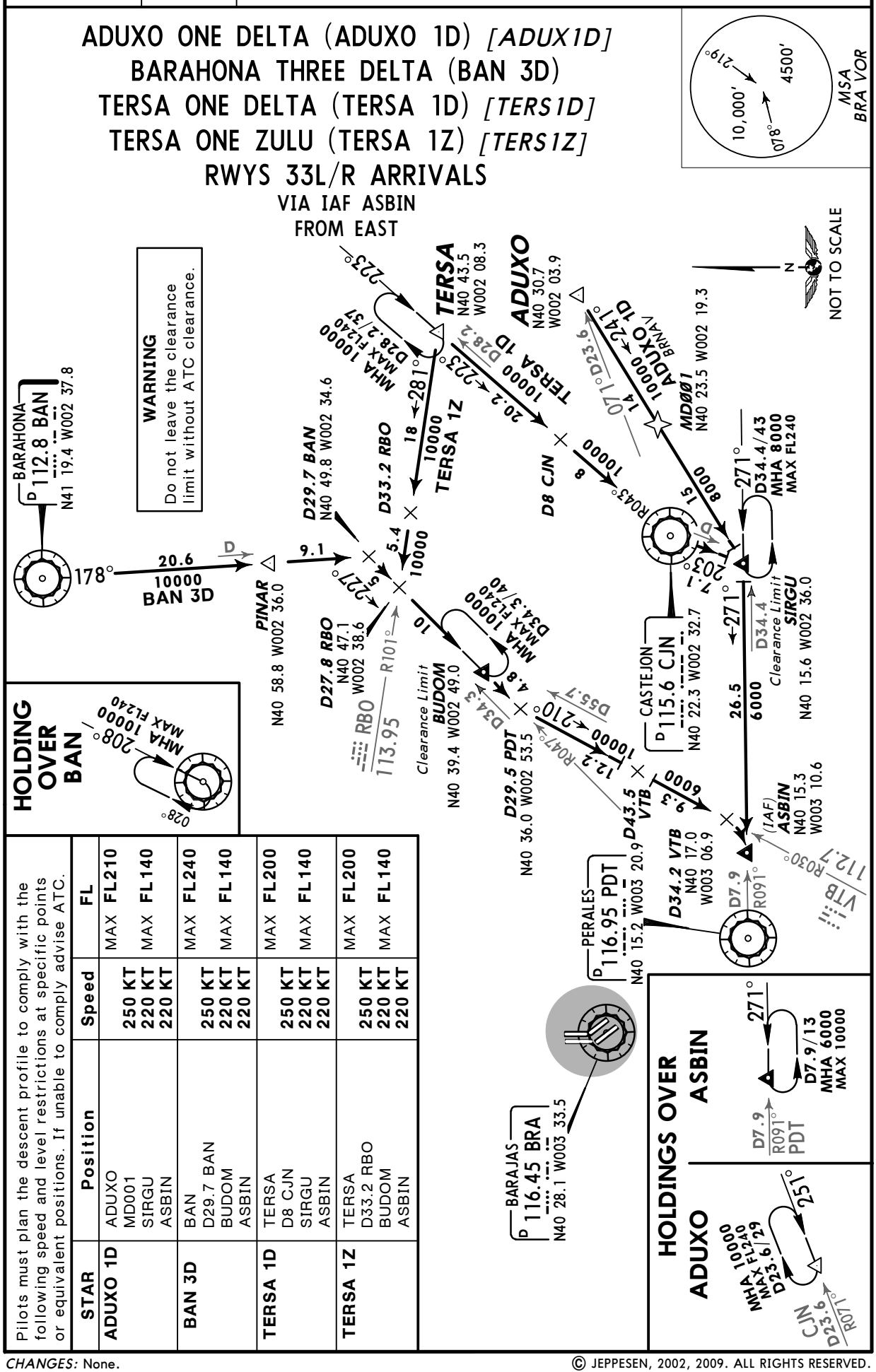
CHANGES: None.

© JEPPESEN, 2002, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

ATIS	Apt Elev	
118.25	2001′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′ Within 10 NM radius of PDT between R-249 and R-073 and between 4000′ and 5000′ Ground Proximity Warning System (GPWS) alarm signal may occur due to orographic characteristics of terrain.

ADUXO ONE DELTA (ADUXO 1D) *[ADUX1D]*
BARAHONA THREE DELTA (BAN 3D)
TERSA ONE DELTA (TERSA 1D) *[TERS1D]*
TERSA ONE ZULU (TERSA 1Z) *[TERS1Z]*
RWYS 33L/R ARRIVALS
VIA IAF ASBIN FROM EAST



Pilots must plan the descent profile to comply with the following speed and level restrictions at specific points or equivalent positions. If unable to comply advise ATC.

STAR	Position	Speed	FL
ADUXO 1D	ADUXO	250 KT	MAX FL210
	MD001	220 KT	MAX FL140
	SIRGU	220 KT	
	ASBIN	220 KT	
BAN 3D	BAN	250 KT	MAX FL240
	D29.7 BAN	220 KT	MAX FL140
	BUDOM	220 KT	
	ASBIN	220 KT	
TERSA 1D	TERSA	250 KT	MAX FL200
	D8 CJN	220 KT	MAX FL140
	SIRGU	220 KT	
	ASBIN	220 KT	
TERSA 1Z	TERSA	250 KT	MAX FL200
	D33.2 RBO	220 KT	MAX FL140
	BUDOM	220 KT	
	ASBIN	220 KT	

CHANGES: None.

© JEPPESEN, 2002, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

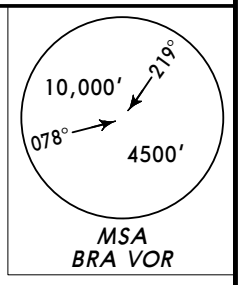
LEMD/MAD
BARAJAS

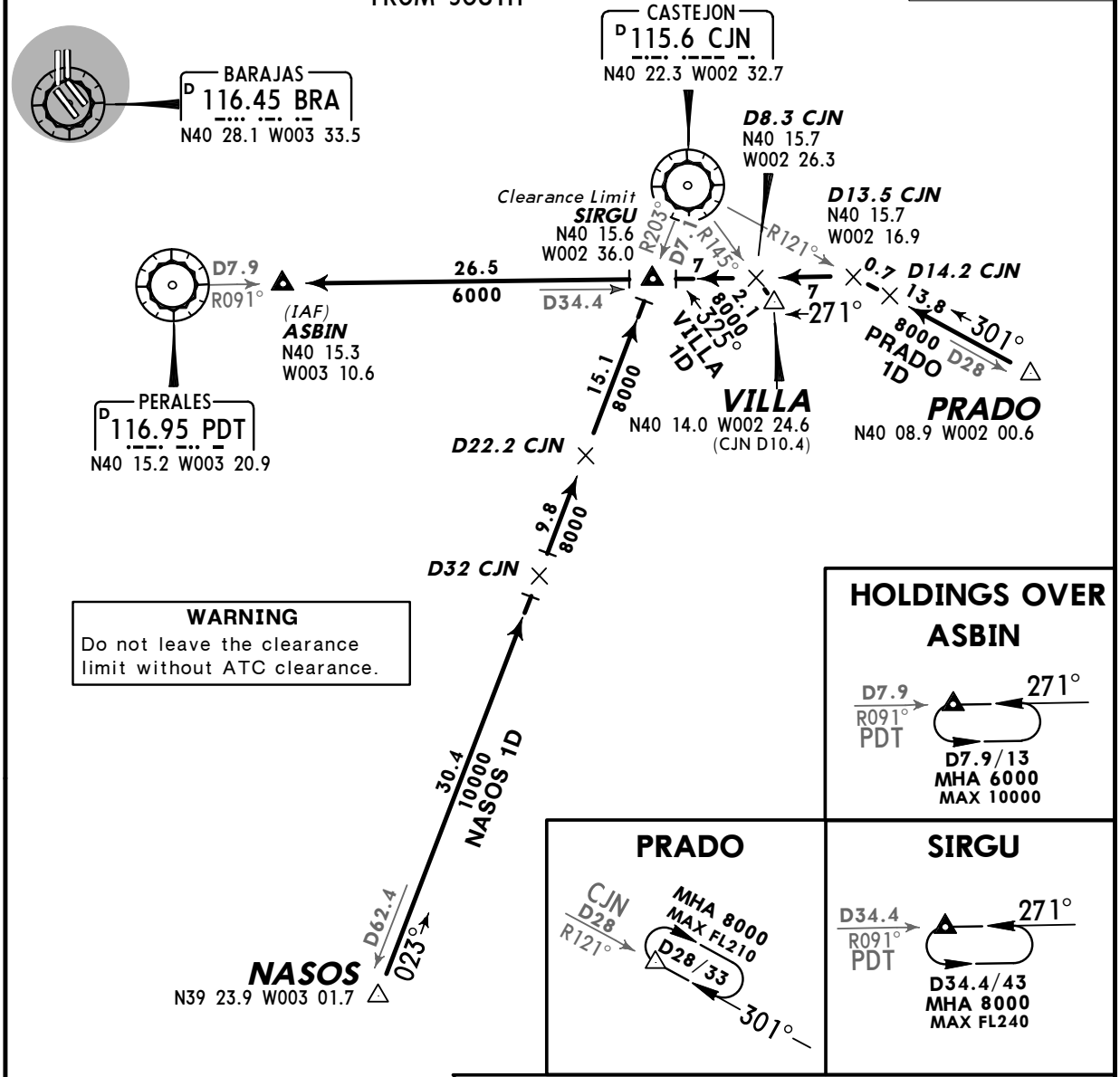
JEPPESEN
2 APR 10 (10-2E) Eff 8 Apr

MADRID, SPAIN
STAR

ATIS	Apt Elev	
118.25	2001′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′ Within 10 NM radius of PDT between R-249 and R-073 and between 4000′ and 5000′ Ground Proximity Warning System (GPWS) alarm signal may occur due to orographic characteristics of terrain.

NASOS ONE DELTA (NASOS 1D) *[NASO1D]*
PRADO ONE DELTA (PRADO 1D) *[PRAD1D]*
VILLA ONE DELTA (VILLA 1D) *[VILA1D]*
RWYS 33L/R ARRIVALS
VIA IAF ASBIN
FROM SOUTH





WARNING
Do not leave the clearance limit without ATC clearance.

NOT TO SCALE

Pilots must plan the descent profile to comply with the following speed and level restrictions at specific points or equivalent positions. If unable to comply advise ATC.

STAR	Position	Speed	FL
NASOS 1D	D32 CJN		MAX FL210
	D22.2 CJN	250 KT	
	SIRGU	220 KT	MAX FL140
	ASBIN	220 KT	
PRADO 1D	PRADO		MAX FL210
	D14.2 CJN	250 KT	
	SIRGU	220 KT	MAX FL140
	ASBIN	220 KT	
VILLA 1D	VILLA	250 KT	MAX FL190
	SIRGU	220 KT	MAX FL140
	ASBIN	220 KT	

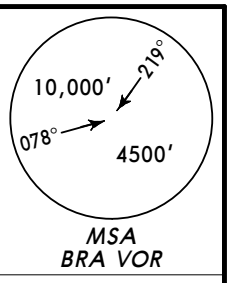
CHANGES: STARs NASOS & VILLA 1D revised.

© JEPPESEN, 2002, 2010. ALL RIGHTS RESERVED.

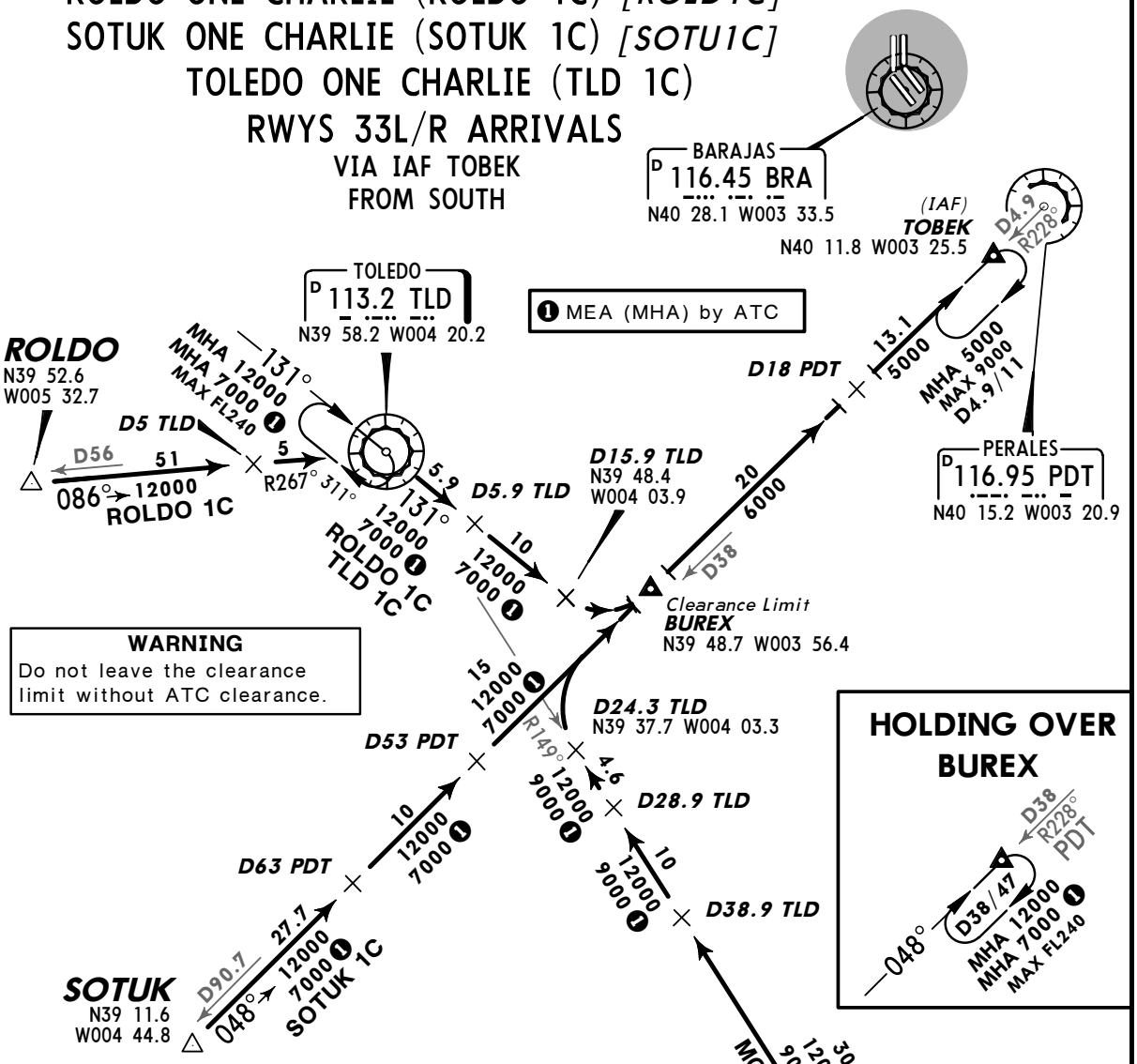
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

ATIS	Apt Elev	
118.25	2000′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′ Within 10 NM radius of PDT between R-250 and R-074 and between 4000′ and 5000′ Ground Proximity Warning System (GPWS) alarm signal may occur due to orographic characteristics of terrain.



MORAL ONE CHARLIE (MORAL 1C) *[MORA1C]*
ROLDO ONE CHARLIE (ROLDO 1C) *[ROLD1C]*
SOTUK ONE CHARLIE (SOTUK 1C) *[SOTU1C]*
TOLEDO ONE CHARLIE (TLD 1C)
RWYS 33L/R ARRIVALS
VIA IAF TOBEK
FROM SOUTH



WARNING
Do not leave the clearance limit without ATC clearance.

HOLDING OVER BUREX

Pilots must plan the descent profile to comply with the following speed and level/altitude restrictions at specific points or equivalent positions. If unable to comply advise ATC.

STAR	Position	Speed	FL/Altitude
MORAL 1C	D38.9 TLD		MAX **FL210**
	D28.9 TLD	**250 KT**	
	BUREX	**220 KT**	MAX **FL140**
	TOBEK	**220 KT**	**5000′**
ROLDO 1C	D5 TLD		MAX **FL210**
	D5.9 TLD	**250 KT**	
	BUREX	**220 KT**	MAX **FL140**
	TOBEK	**220 KT**	**5000′**
SOTUK 1C	D63 PDT		MAX **FL210**
	D53 PDT	**250 KT**	
	BUREX	**220 KT**	MAX **FL140**
	TOBEK	**220 KT**	**5000′**
TLD 1C	TLD		MAX **FL210**
	D5.9 TLD	**250 KT**	
	BUREX	**220 KT**	MAX **FL140**
	TOBEK	**220 KT**	**5000′**

CHANGES: STAR ROLDO 1C established.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

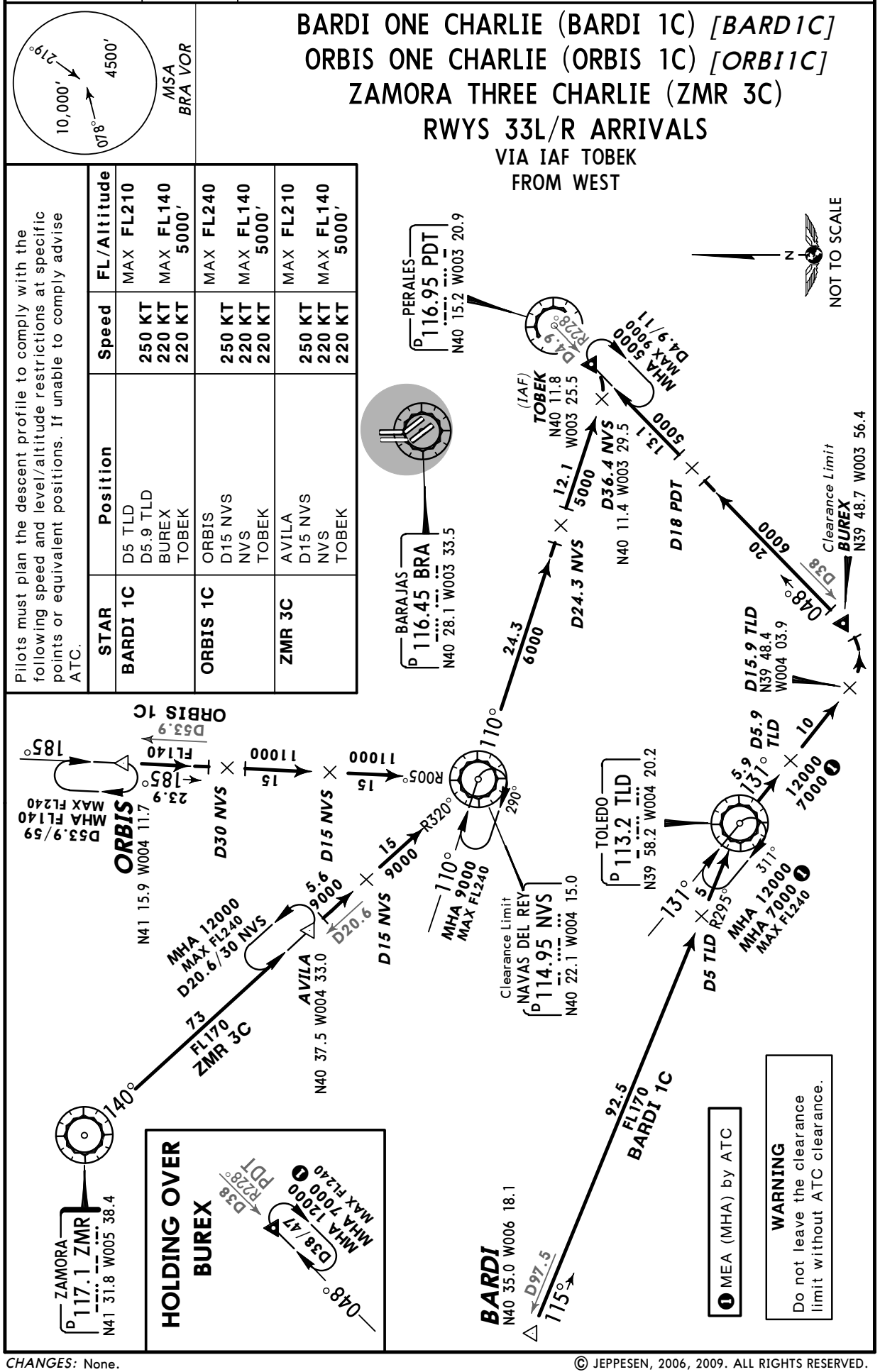
LEMD/MAD
BARAJAS

JEPPESEN
20 AUG 10 (10-2G) Eff 26 Aug

MADRID, SPAIN
STAR

ATIS	Apt Elev	
118.25	2000′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′ Within 10 NM radius of PDT between R-250 and R-074 and between 4000′ and 5000′ Ground Proximity Warning System (GPWS) alarm signal may occur due to orographic characteristics of terrain.

BARDI ONE CHARLIE (BARDI 1C) *[BARD1C]*
ORBIS ONE CHARLIE (ORBIS 1C) *[ORBI1C]*
ZAMORA THREE CHARLIE (ZMR 3C)
RWYS 33L/R ARRIVALS
VIA IAF TOBEK
FROM WEST



Pilots must plan the descent profile to comply with the following speed and level/altitude restrictions at specific points or equivalent positions. If unable to comply advise ATC.

STAR	Position	Speed	FL/Altitude
BARDI 1C	D5 TLD D5.9 TLD BUREX TOBEK	250 KT 220 KT 220 KT	MAX FL210 MAX FL140 5000′
ORBIS 1C	ORBIS D15 NVS NVS TOBEK	250 KT 220 KT 220 KT	MAX FL240 MAX FL140 5000′
ZMR 3C	AVILA D15 NVS NVS TOBEK	250 KT 220 KT 220 KT	MAX FL210 MAX FL140 5000′

CHANGES: None.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

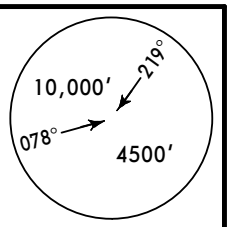
JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
20 AUG 10 (10-2H) Eff 26 Aug

MADRID, SPAIN
STAR

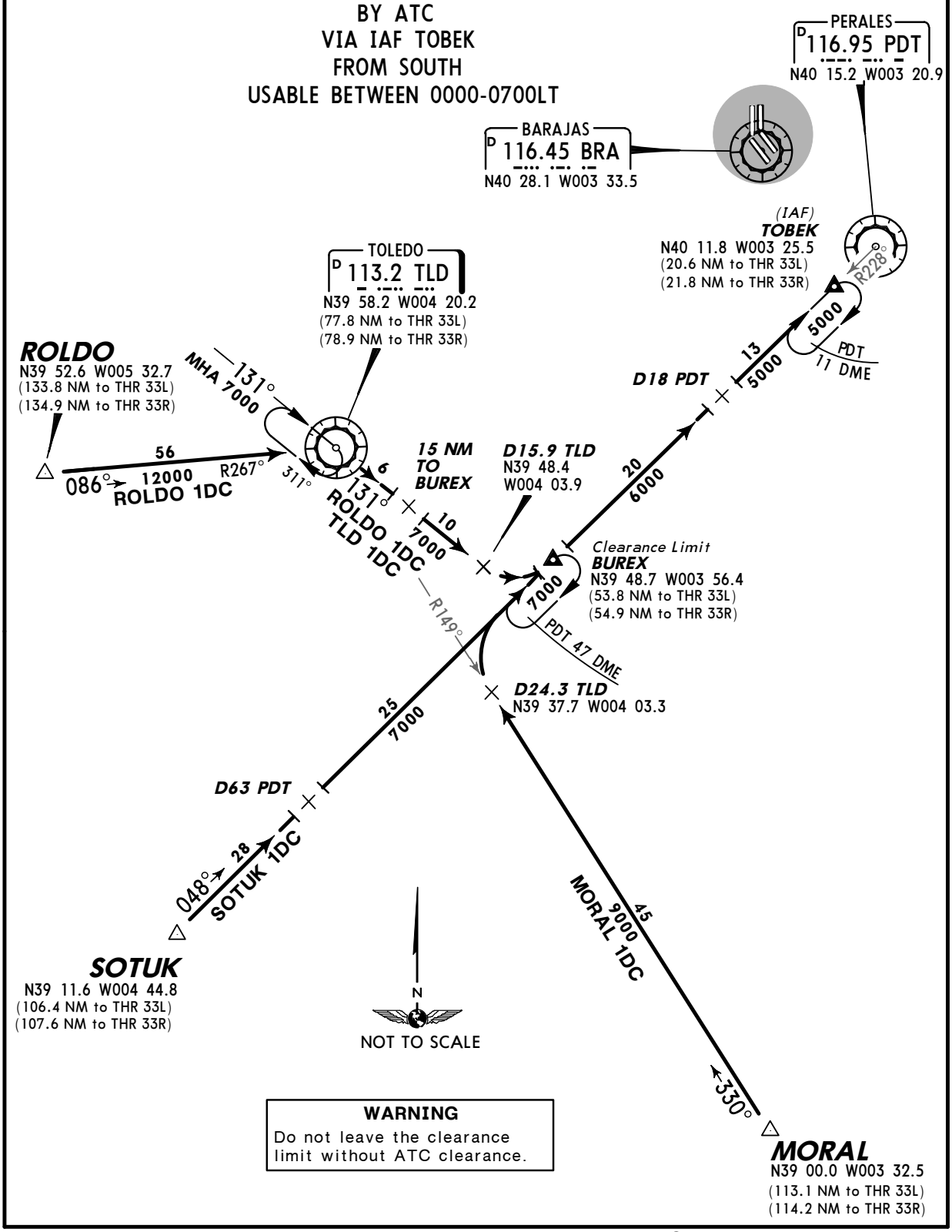
ATIS	Apt Elev	
118.25	2000′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′ Within 10 NM radius of PDT between R-250 and R-074 and between 4000′ and 5000′ Ground Proximity Warning System (GPWS) alarm signal may occur due to orographic characteristics of terrain.



MSA
BRA VOR

MORAL ONE DELTA CHARLIE (MORAL 1DC) *[MOR1DC]*
ROLDO ONE DELTA CHARLIE (ROLDO 1DC) *[ROL1DC]*
SOTUK ONE DELTA CHARLIE (SOTUK 1DC) *[SOT1DC]*
TOLEDO ONE DELTA CHARLIE (TLD 1DC)
RWYS 33L/R ARRIVALS

BY ATC
VIA IAF TOBEK
FROM SOUTH
USABLE BETWEEN 0000-0700LT



WARNING
Do not leave the clearance limit without ATC clearance.

CHANGES: New chart.

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

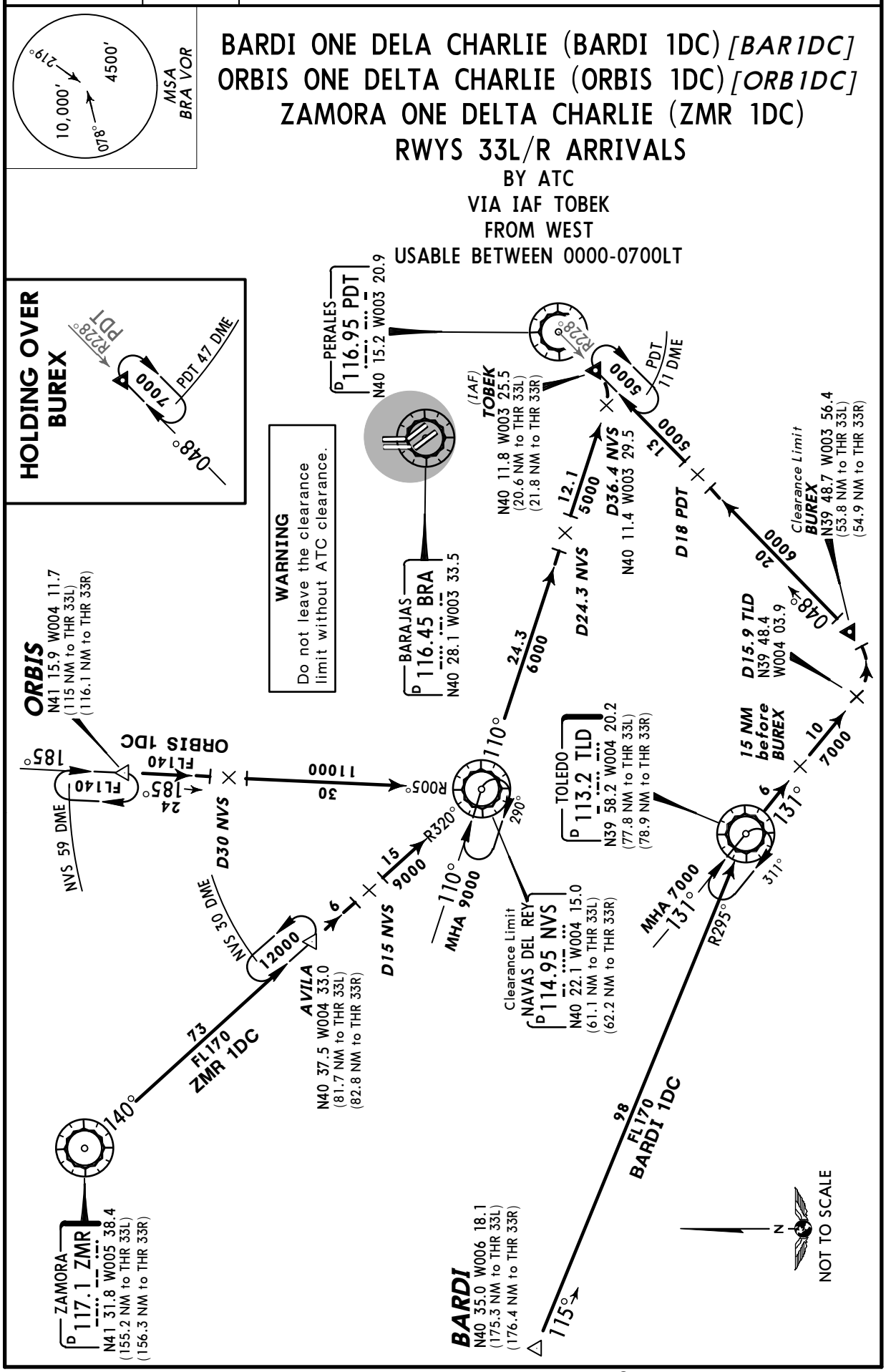
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

LEMD/MAD
BARAJAS

JEPPESEN
20 AUG 10 (10-2J) Eff 26 Aug

MADRID, SPAIN
STAR

ATIS	Apt Elev	
118.25	2000′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′ Within 10 NM radius of PDT between R-250 and R-074 and between 4000′ and 5000′ Ground Proximity Warning System (GPWS) alarm signal may occur due to orographic characteristics of terrain.



CHANGES: New chart.

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

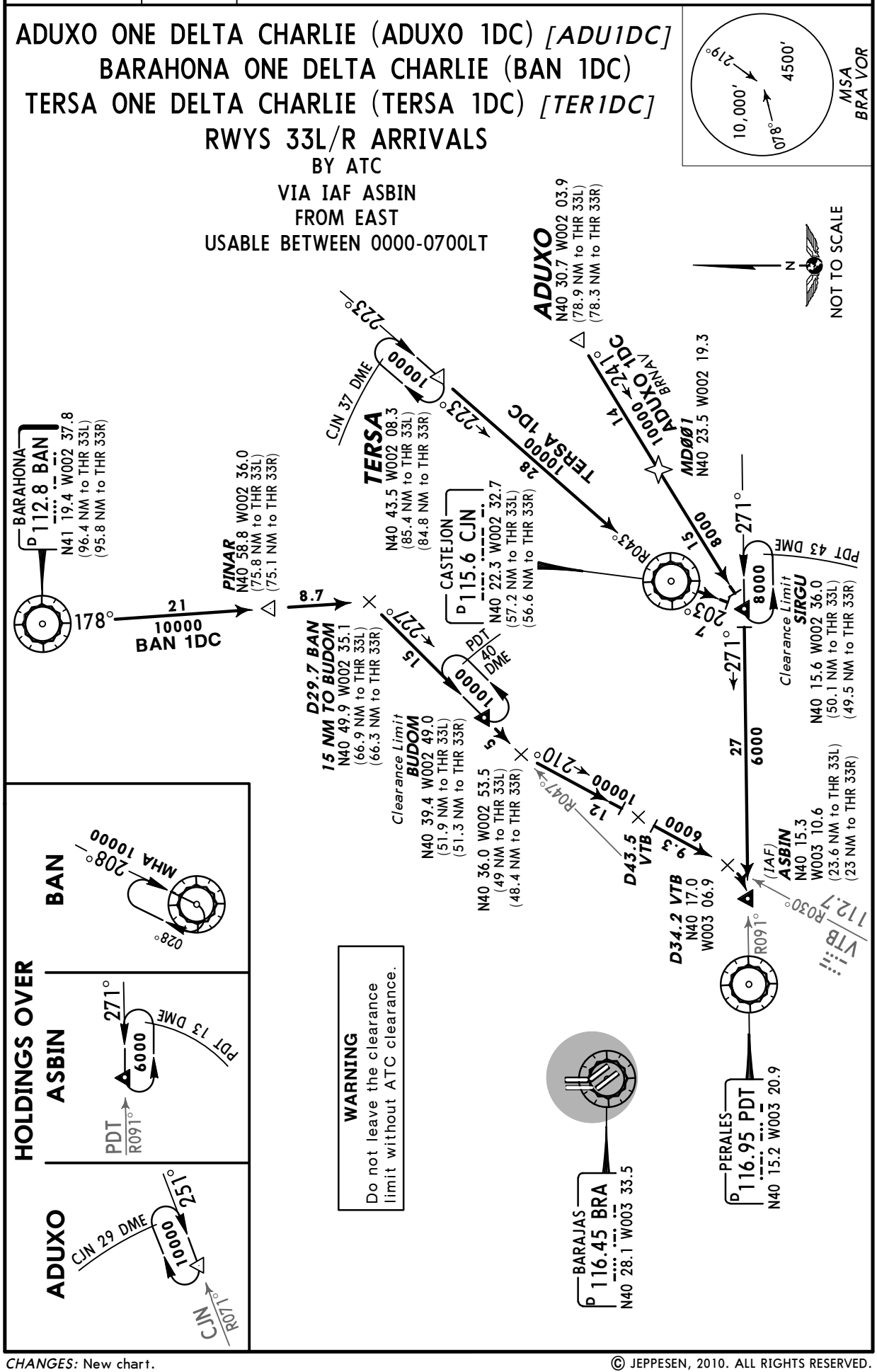
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

ATIS	Apt Elev	
118.25	2000′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′ Within 10 NM radius of PDT between R-250 and R-074 and between 4000′ and 5000′ Ground Proximity Warning System (GPWS) alarm signal may occur due to orographic characteristics of terrain.

ADUXO ONE DELTA CHARLIE (ADUXO 1DC) *[ADU1DC]*
BARAHONA ONE DELTA CHARLIE (BAN 1DC)
TERSA ONE DELTA CHARLIE (TERSA 1DC) *[TER1DC]*
RWYS 33L/R ARRIVALS

BY ATC
VIA IAF ASBIN
FROM EAST
USABLE BETWEEN 0000-0700LT



© JEPPESEN, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

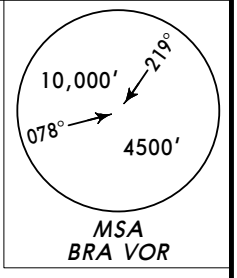
JEPPESEN
20 AUG 10 (10-2L) Eff 26 Aug

MADRID, SPAIN
STAR

ATIS	Apt Elev	
118.25	2000′	Alt Set: hPa Trans level: By ATC Trans alt: 13000′ Within 10 NM radius of PDT between R-250 and R-074 and between 4000′ and 5000′ Ground Proximity Warning System (GPWS) alarm signal may occur due to orographic characteristics of terrain.

NASOS ONE DELTA CHARLIE (NASOS 1DC) *[NAS1DC]*
PRADO ONE DELTA CHARLIE (PRADO 1DC) *[PRA1DC]*
VILLA ONE DELTA CHARLIE (VILLA 1DC) *[VIL1DC]*
RWYS 33L/R ARRIVALS

BY ATC
VIA IAF ASBIN
FROM SOUTH
USABLE BETWEEN 0000-0700LT



BARAJAS
D 116.45 BRA
N40 28.1 W003 33.5

CASTEJON
D 115.6 CJN
N40 22.3 W002 32.7
(57.2 NM to THR 33L)
(56.6 NM to THR 33R)

D8.3 CJN
N40 15.7
W002 26.3

D13.5 CJN
N40 15.7
W002 16.9

(IAF)
ASBIN
N40 15.3 W003 10.6
(23.6 NM to THR 33L)
(23 NM to THR 33R)

Clearance Limit
SIRGU
N40 15.6 W002 36.0
(50.1 NM to THR 33L)
(49.5 NM to THR 33R)

R203° R145° R121° R091°
27 6000
7 8000 325° VILLA 1DC
2 271°
7
15 301° 8000 PRADO 1DC
8000 301°
CJN 33 DME
PDT 13 DME
25 8000
30 10000 NASOS 1DC
023°

PERALES
D 116.95 PDT
N40 15.2 W003 20.9

VILLA
N40 14.0 W002 24.6
(59.7 NM to THR 33L)
(59.1 NM to THR 33R)

PRADO
N40 08.9 W002 00.6
(79 NM to THR 33L)
(78.3 NM to THR 33R)

D32 CJN

NASOS
N39 23.9 W003 01.7
(105.4 NM to THR 33L)
(104.8 NM to THR 33R)

WARNING
Do not leave the clearance limit without ATC clearance.

N
NOT TO SCALE

HOLDING OVER SIRGU

PDT R091° 8000 271°
PDT 43 DME

CHANGES: New chart.

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010
JEPPESEN
JeppView 3.7.2.1

RNAV SID DESIGNATION	REFER TO CHART
BARDI 1AS	10-3B
BARDI 1AX, 1AY	10-3C
CCS 1AS	10-3D
CCS 1AX, 1AY	10-3E
CJN 1AU	10-3E1
CJN 1AR	10-3E2
NANDO 1AR, 1AU	10-3F
NASOS 1AR, 1AS	10-3G
PINAR 1AR	10-3H
PINAR 1AU	10-3J
RBO 1AR, 1AU	10-3K
SIE 1AL	10-3L
SIE 1AS	10-3L1
VTB 1AS	10-3L2
VTB 1AX, 1AY	10-3L3
ZMR 1AL, 1AX	10-3L4
ZMR 1AS	10-3L5

SID DESIGNATION	REFER TO CHART
BARDI 1B, 1S, 1V	10-3M
BARDI 1X, 1Y	10-3N
BARDI 1N, 1W	10-3N1
CCS 1B, 1S, 1V	10-3N2
CCS 1W	10-3N3
CCS 3N	10-3N4
CCS 1X, 1Y	10-3N5
CJN 1B, 1UV	10-3N6
CJN 1R, 1Z	10-3N7
NANDO 1B	10-3N8
NANDO 1N	10-3P
NANDO 3R, 1W	10-3Q
NANDO 1UV, 1VX	10-3S

FOR NASOS, PINAR, RBO, SIE, VTB & ZMR
SID DESIGNATION REFER TO PAGE 10-3A

CHANGES: CJN RNAV SIDs & SIDs established; NASOS SIDs transferred.

© JEPPESEN, 2002, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010
JEPPESEN
JeppView 3.7.2.1

SID DESIGNATION	REFER TO CHART
NASOS 2B, 2S, 1V	10-3T
NASOS 1N	10-3T1
NASOS 3R, 1W	10-3T2
PINAR 2B	10-3T3
PINAR 2N	10-3T4
PINAR 2R, 2W	10-3T5
PINAR 1UV, 1VX	10-3T6
RBO 1B	10-3T7
RBO 1N	10-3T8
RBO 1R, 1W	10-3U
RBO 1UV, 1VX	10-3V
SIE 2B	10-3V1
SIE 2L, 1NQ	10-3V2
SIE 1W, 1X	10-3V3
SIE 2S	10-3V4
SIE 2V	10-3V5
VTB 1B, 2S, 1V	10-3V6
VTB 1XE, 1YD	10-3V7
VTB 1NF	10-3W
VTB 2W	10-3X
ZMR 1BJ, 1SK, 1V	10-3X1
ZMR 2L, 1NZ, 1XN	10-3X2
ZMR 1W	10-3X3

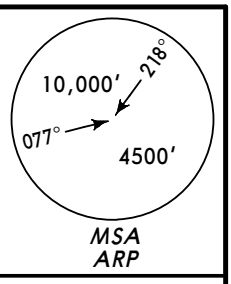
CHANGES: NASOS SIDs transferred.

© JEPPESEN, 2006, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′

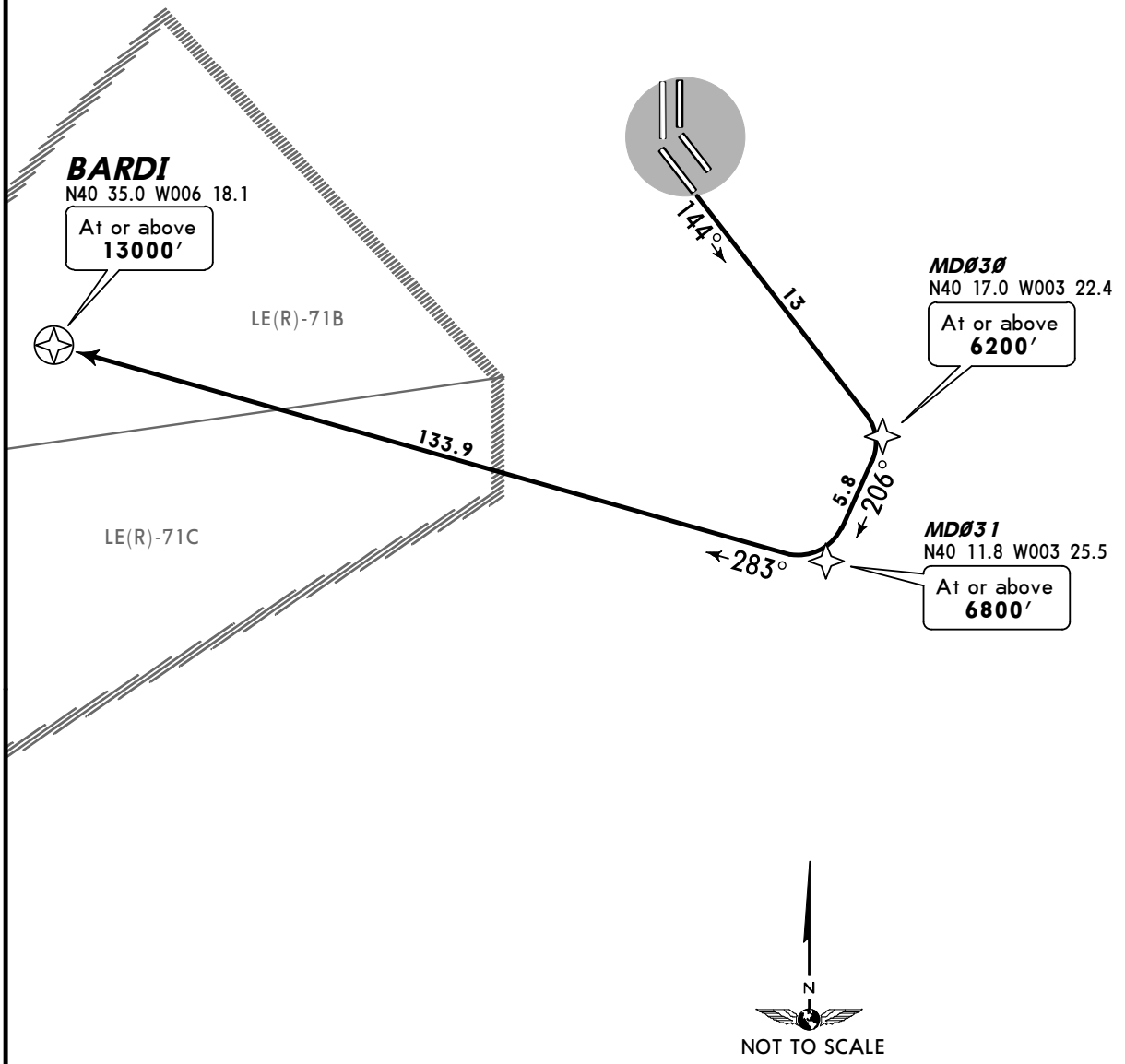
Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4).



BARDI 1AS *[BAR1AS]*

RWY 15R P-RNAV DEPARTURE

USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SUBJECT TO LE(R)-71B & LE(R)-71C ACTIVITY
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
334′ per NM (5.5%) until MD030.

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

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

ROUTING

MD030 **(6200′+)** - MD031 **(6800′+)** - BARDI **(13000′+)**.

CHANGES: None.

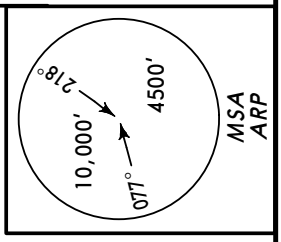
© JEPPESEN, 2003, 2009. ALL RIGHTS RESERVED.

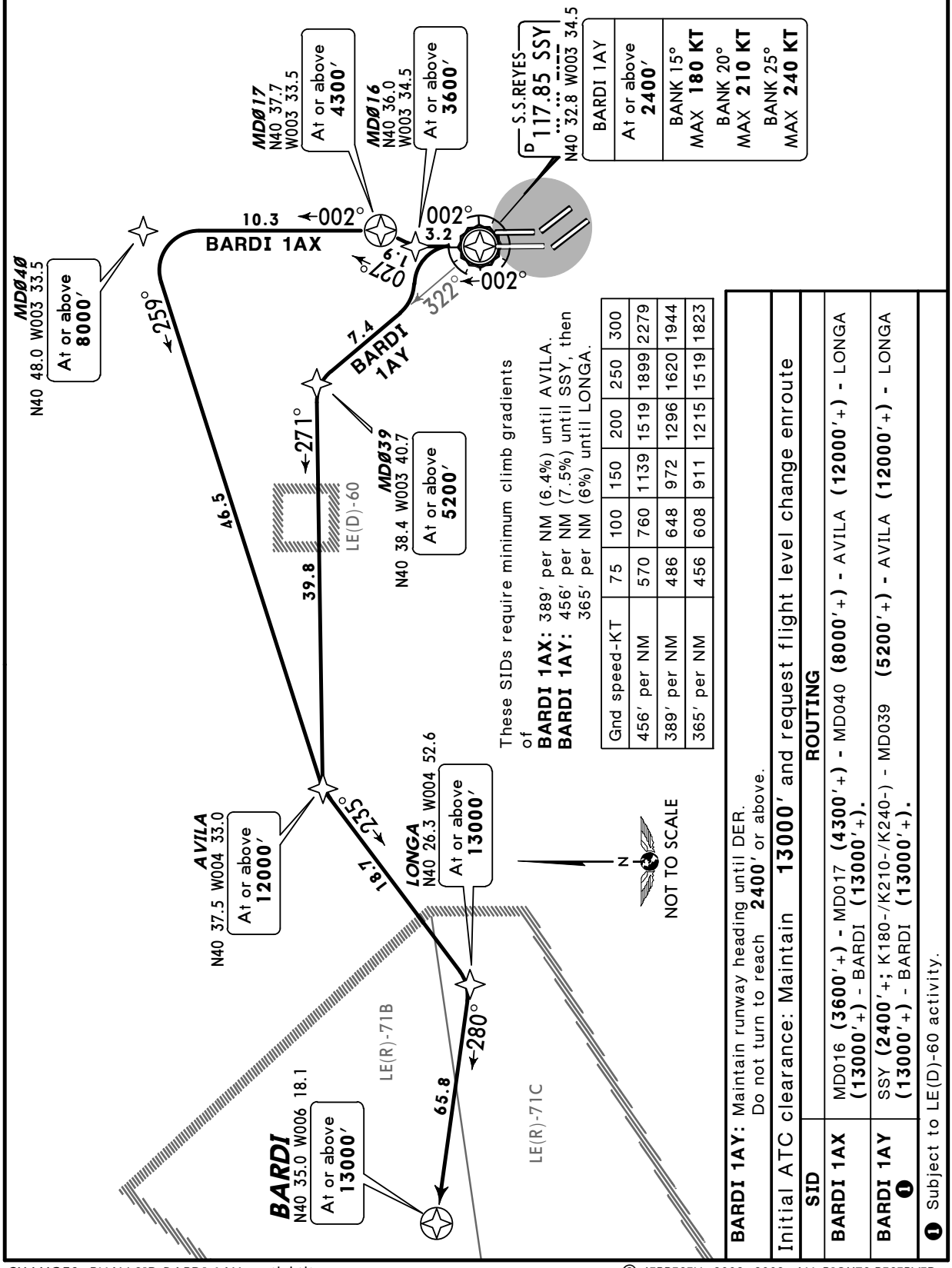
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4). 2. EXPECT close-in obstacles.

BARDI 1AX *[BAR1AX]*, BARDI 1AY *[BAR1AY]*
RWY 36L P-RNAV DEPARTURES

USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SUBJECT TO LE(R)-71B & LE(R)-71C ACTIVITY
SPEED: MAX 250 KT BELOW 10000′





These SIDs require minimum climb gradients of
BARDI 1AX: 389′ per NM (6.4%) until AVILA.
BARDI 1AY: 456′ per NM (7.5%) until SSY, then 365′ per NM (6%) until LONGA.

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
389′ per NM	486	648	972	1296	1620	1944
365′ per NM	456	608	911	1215	1519	1823

BARDI 1AY: Maintain runway heading until DER.
Do not turn to reach **2400′** or above.

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

SID	ROUTING
BARDI 1AX	MD016 **(3600′+)** - MD017 **(4300′+)** - MD040 **(8000′+)** - AVILA **(12000′+)** - LONGA **(13000′+)** - BARDI **(13000′+)**.
BARDI 1AY ❶	SSY **(2400′+;** K180-/K210-/K240-) - MD039 **(5200′+)** - AVILA **(12000′+)** - LONGA **(13000′+)** - BARDI **(13000′+)**.

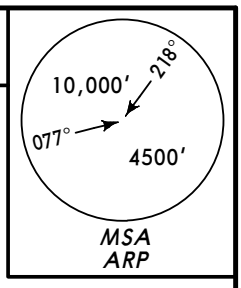
❶ Subject to LE(D)-60 activity.

CHANGES: RNAV SID BARDI 1AY availability.

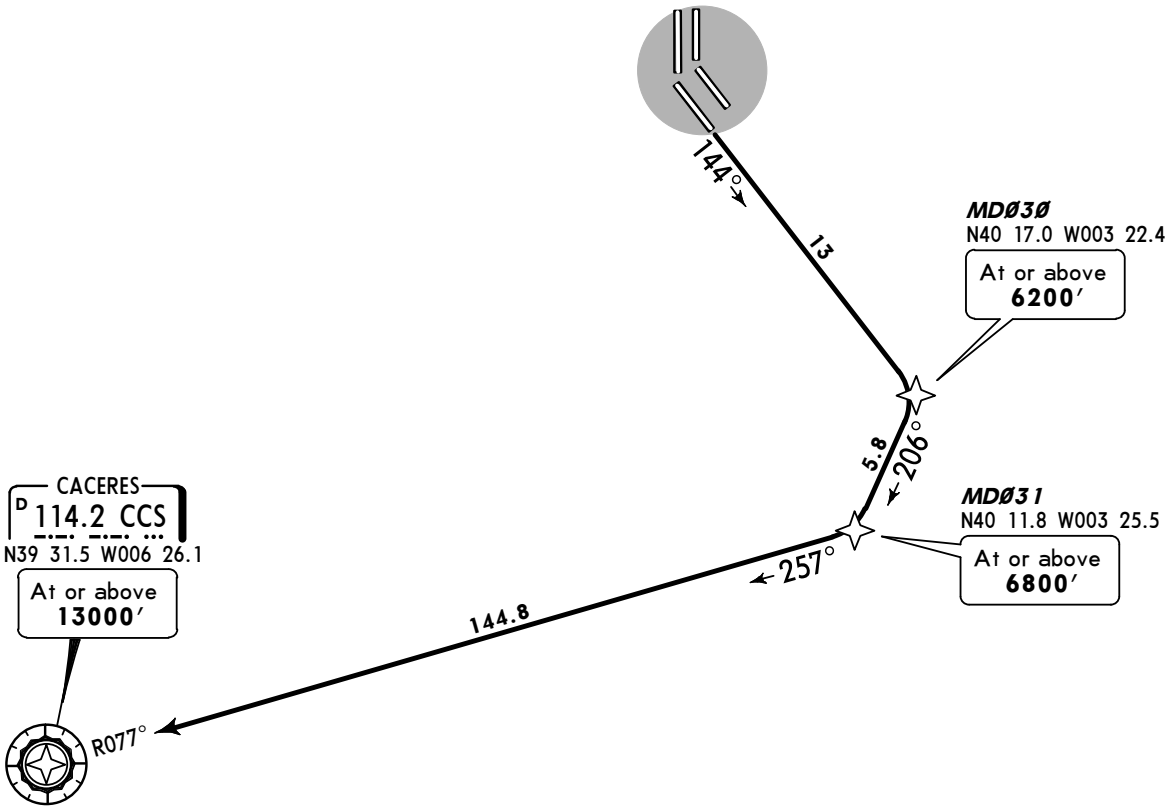
© JEPPESEN, 2002, 2009. ALL RIGHTS RESERVED.

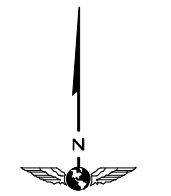
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4).



CCS 1AS
RWY 15R P-RNAV DEPARTURE
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED: MAX 250 KT BELOW 10000′





NOT TO SCALE

This SID requires a minimum climb gradient of
334′ per NM (5.5%) until MD030.

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

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

ROUTING

MD030 **(6200′+)** - MD031 **(6800′+)** - CCS **(13000′+)**.

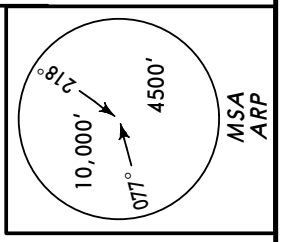
CHANGES: None.

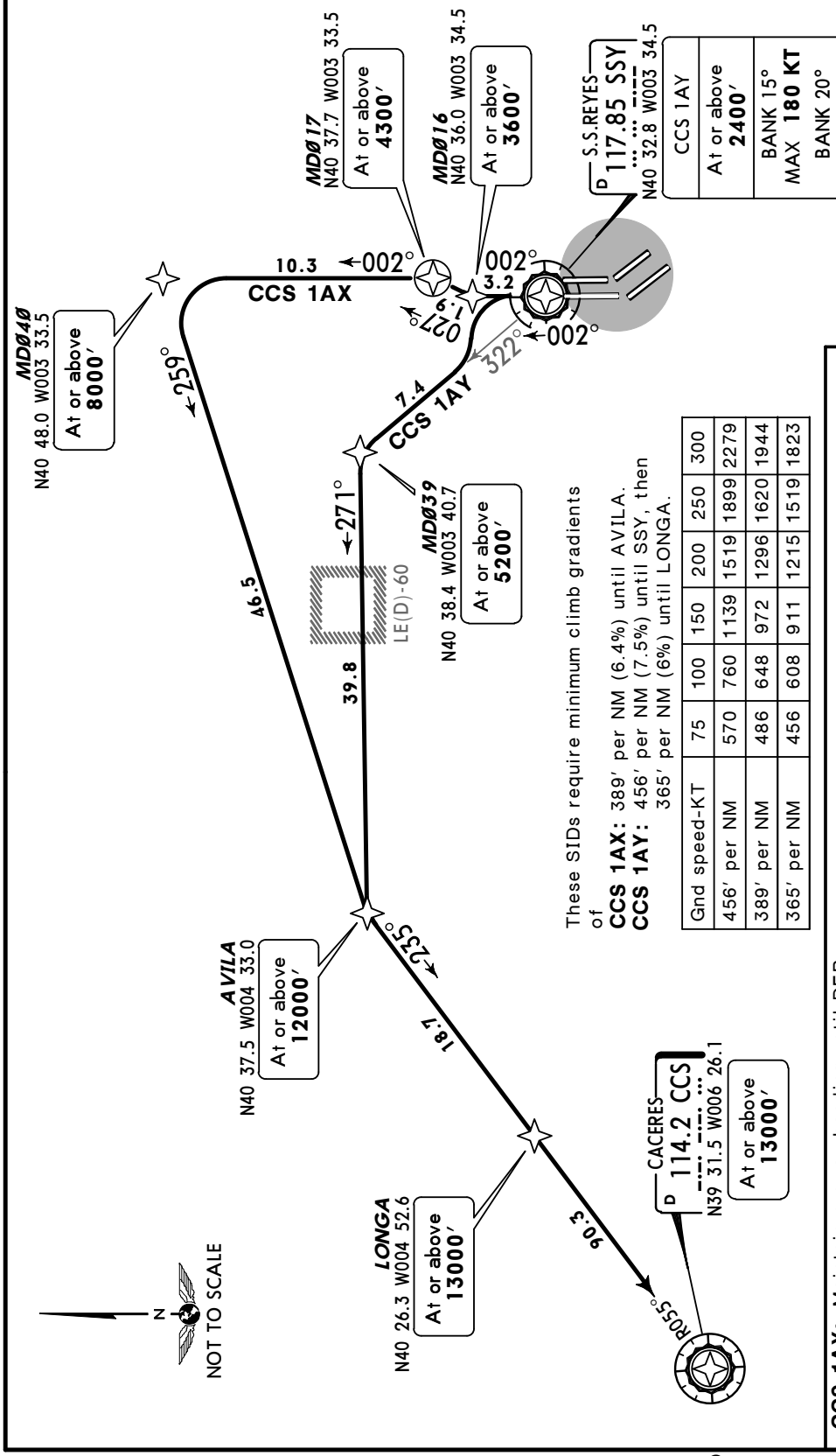
© JEPPESEN, 2003, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4). 2.EXPECT close-in obsacles.

CCS 1AX , CCS 1AY
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
CCS 1AX: 389′ per NM (6.4%) until AVILA.
CCS 1AY: 456′ per NM (7.5%) until SSY, then 365′ per NM (6%) until LONGA.

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
389′ per NM	486	648	972	1296	1620	1944
365′ per NM	456	608	911	1215	1519	1823

CCS 1AY: Maintain runway heading until DER.
Do not turn to reach **2400′** or above.

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

SID	ROUTING
CCS 1AX	MD016 **(3600′+)** - MD017 **(4300′+)** - MD040 **(8000′+)** - AVILA **(12000′+)** - LONGA **(13000′+)** - CCS **(13000′+)**.
CCS 1AY ❶	SSY **(2400′+**; K180-/K210-/K240-) - MD039 **(5200′+)** - AVILA **(12000′+)** - LONGA **(13000′+)** - CCS **(13000′+)**.

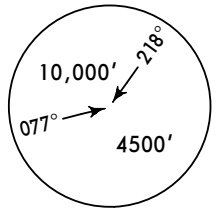
❶ Subject to LE(D)-60 activity.

CHANGES: RNAV SID CCS 1AY availability.

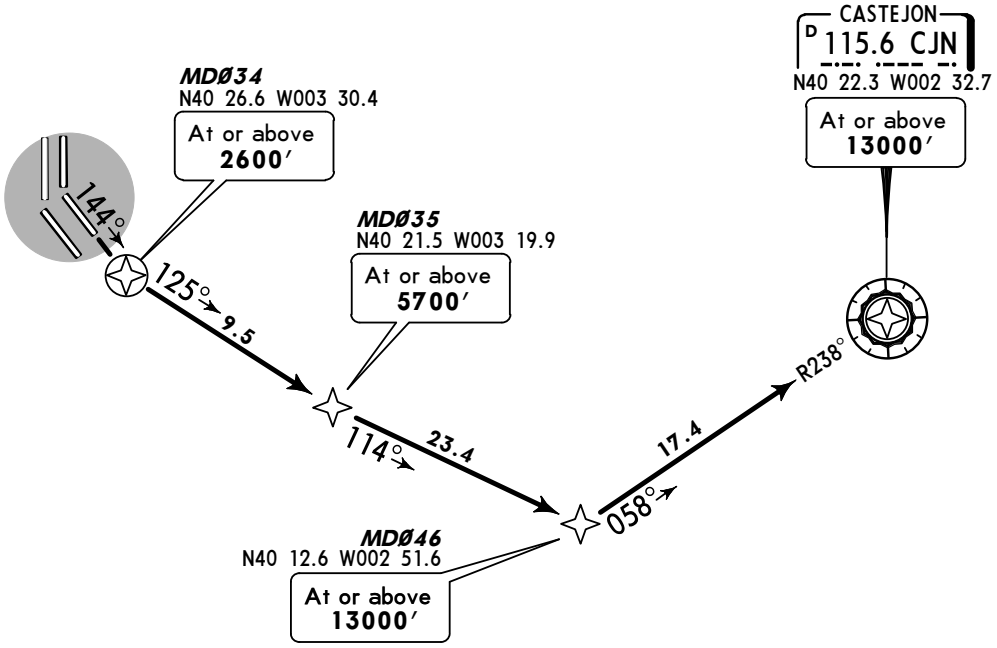
© JEPPESEN, 2003, 2009. ALL RIGHTS RESERVED.

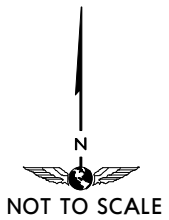
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2000′	Trans level: By ATC Trans alt: 13000′ SID is also noise abatement procedure (refer to 10-4).



CJN 1AU
RWY 15L P-RNAV DEPARTURE
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED: MAX 250 KT BELOW 10000′





This SID requires a minimum climb gradients of
425′ per NM (7%) until MD034, then
334′ per NM (5.5%) until MD046.

Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
334′ per NM	418	557	835	1114	1392	1671

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

ROUTING

MD034 **(2600′+)** - MD035 **(5700′+)** - MD046 **(13000′+)** - CJN **(13000′+)**.

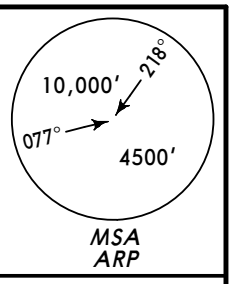
CHANGES: New chart.

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

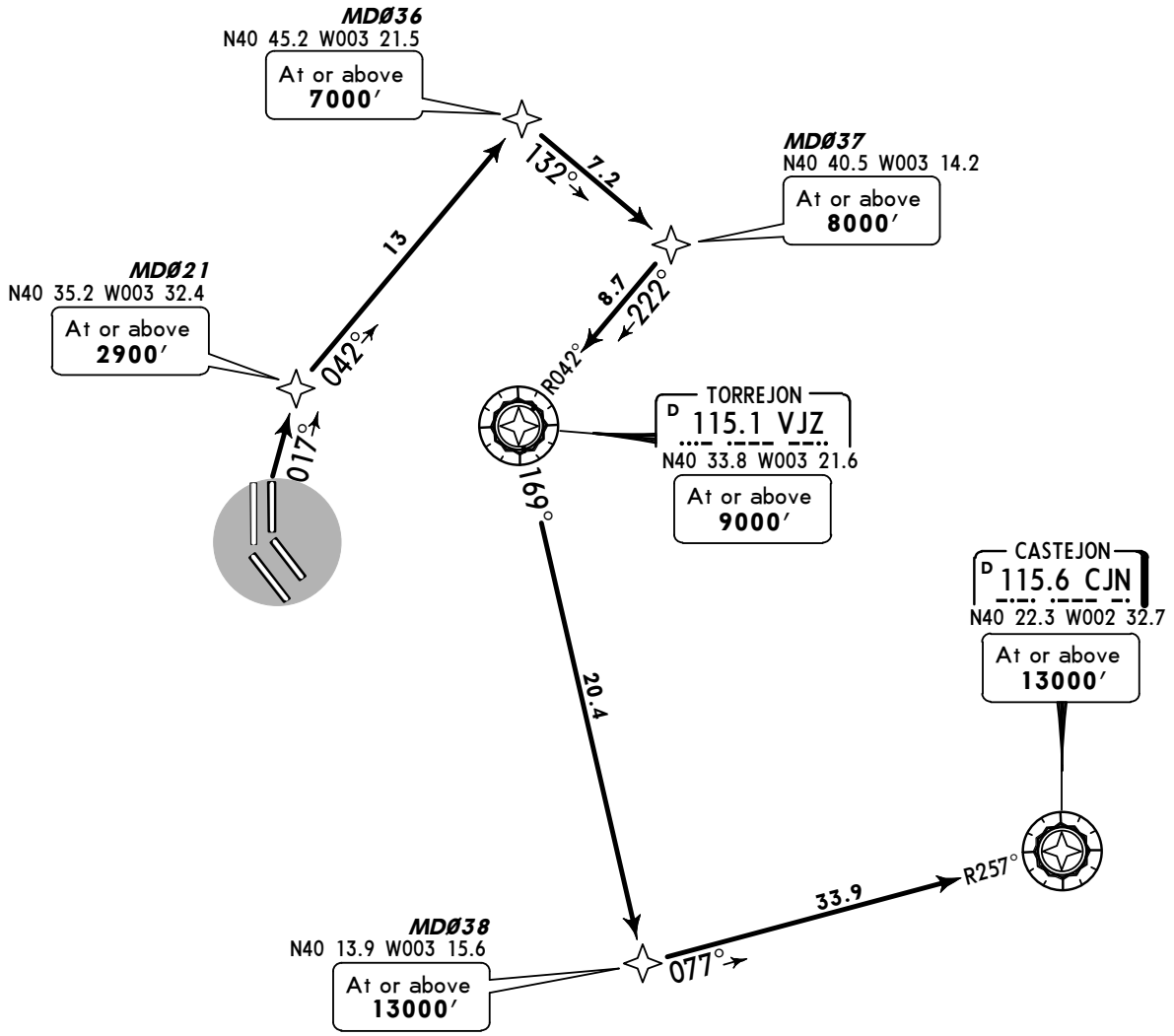
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

Apt Elev	
2000′	Trans level: By ATC Trans alt: 13000′ SID is also noise abatement procedure (refer to 10-4).



CJN 1AR
RWY 36R P-RNAV DEPARTURE
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
365′ per NM (6%) until VJZ.

Gnd speed-KT	75	100	150	200	250	300
365′ per NM	456	608	911	1215	1519	1823

N
NOT TO SCALE

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

ROUTING

MD021 **(2900′+)** - MD036 **(7000′+)** - MD037 **(8000′+)** - VJZ **(9000′+)** - MD038 **(13000′+)** - CJN **(13000′+)**.

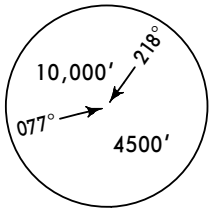
CHANGES: New chart.

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′

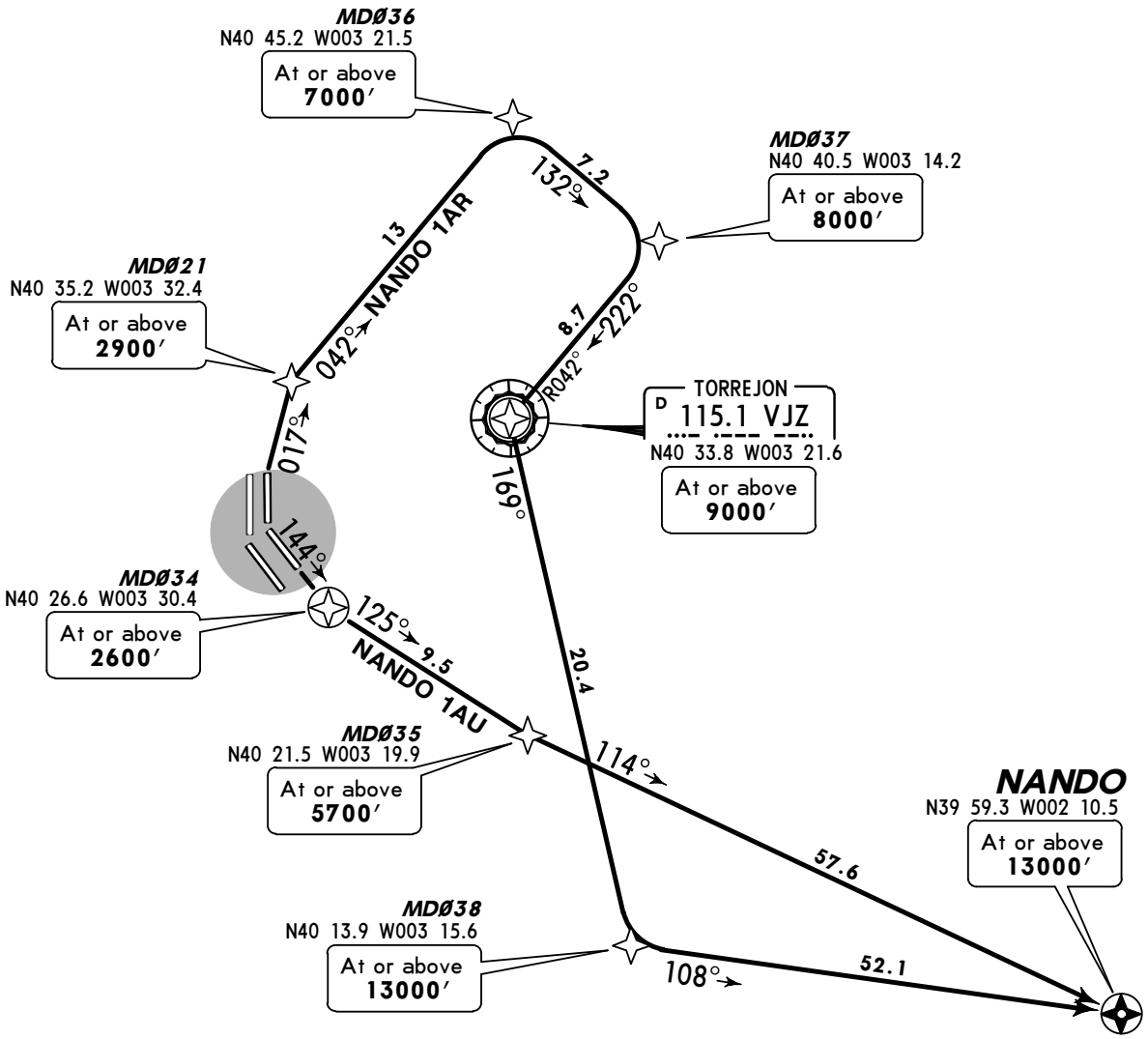
Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4).



MSA
ARP

NANDO 1AR *[NAN1AR]*
NANDO 1AU *[NAN1AU]*
RWYS 36R, 15L 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 1AR: 365′ per NM (6%) until VJZ.
NANDO 1AU: 425′ per NM (7%) until MD034, then 334′ per NM (5.5%) until MD035.

Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
365′ per NM	456	608	911	1215	1519	1823
334′ per NM	418	557	835	1114	1392	1671

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

SID	RWY	ROUTING
NANDO 1AR	**36R**	MD021 **(2900′+)** - MD036 **(7000′+)** - MD037 **(8000′+)** - VJZ **(9000′+)** - MD038 **(13000′+)** - NANDO **(13000′+).**
NANDO 1AU	**15L**	MD034 **(2600′+)** - MD035 **(5700′+)** - NANDO **(13000′+).**

CHANGES: RNAV SIDs completely revised.

© JEPPESEN, 2002, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

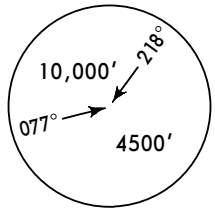
LEMD/MAD
BARAJAS

JEPPESEN
1 MAY 09 (10-3G) Eff 7 May

MADRID, SPAIN
RNAV SID

Apt Elev 2001′

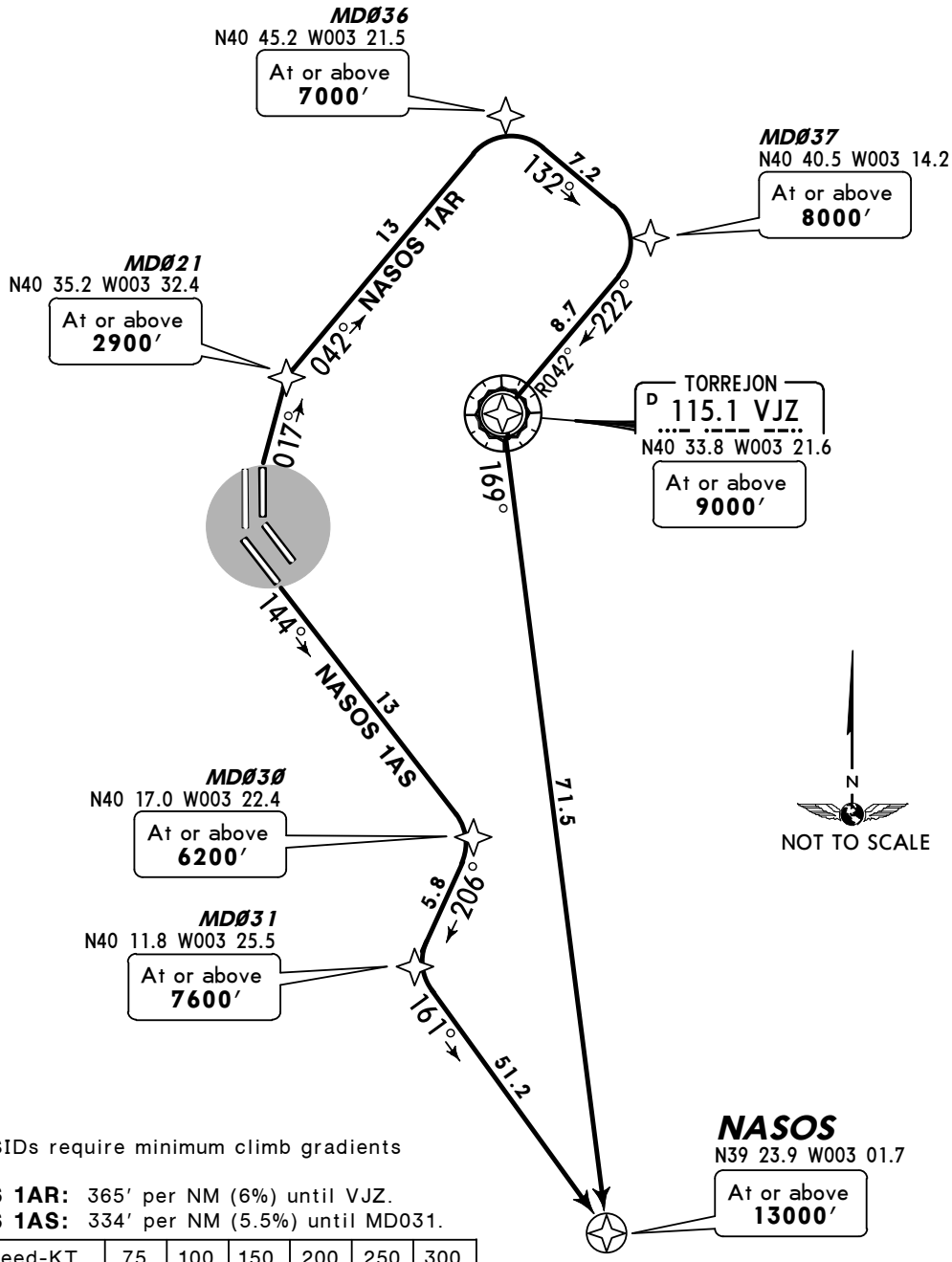
Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4).



MSA ARP

NASOS 1AR *[NAS1AR]*
NASOS 1AS *[NAS1AS]*
RWYS 36R, 15R 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
NASOS 1AR: 365′ per NM (6%) until VJZ.
NASOS 1AS: 334′ per NM (5.5%) until MD031.

Gnd speed-KT	75	100	150	200	250	300
334′ per NM	418	557	835	1114	1392	1671
365′ per NM	456	608	911	1215	1519	1823

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

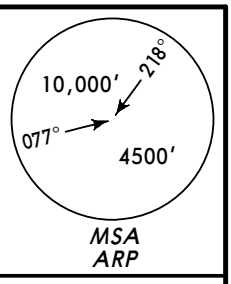
SID	RWY	ROUTING
NASOS 1AR	**36R**	MD021 **(2900′+)** - MD036 **(7000′+)** - MD037 **(8000′+)** - VJZ **(9000′+)** - NASOS **(13000′+).**
NASOS 1AS	**15R**	MD030 **(6200′+) -** MD031 **(7600′+) -** NASOS **(13000′+).**

CHANGES: RNAV SIDs completely revised.

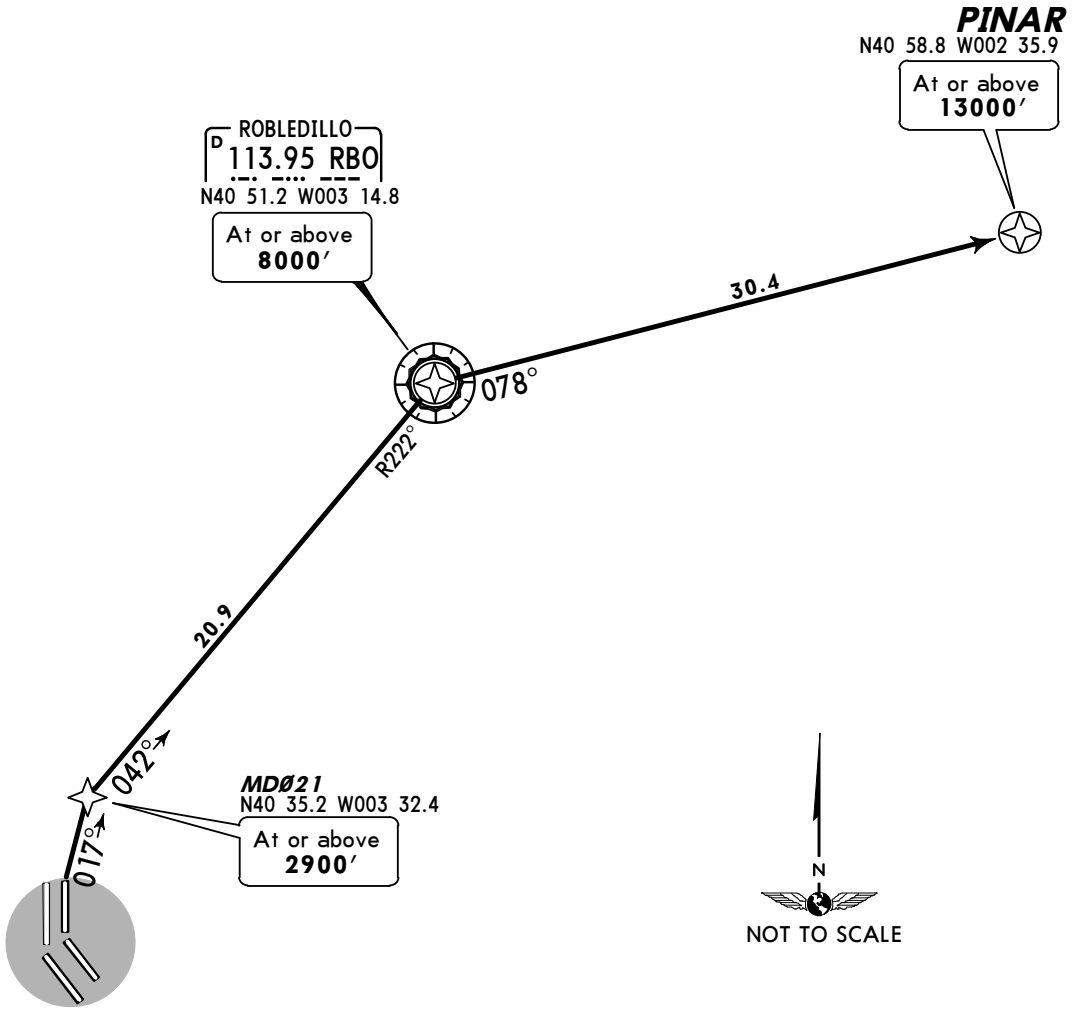
© JEPPESEN, 2002, 2008. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4).



PINAR 1AR *[PIN1AR]*
RWY 36R P-RNAV DEPARTURE
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
304′ per NM (5%) until RBO.

Gnd speed-KT	75	100	150	200	250	300
304′ per NM	380	506	760	1013	1266	1519

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

ROUTING

MD021 **(2900′+)** - RBO **(8000′+)** - PINAR **(13000′+).**

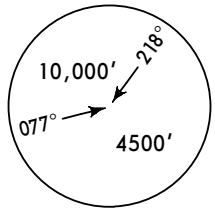
CHANGES: RNAV SID redesignated & revised.

© JEPPESEN, 2003, 2009. ALL RIGHTS RESERVED.

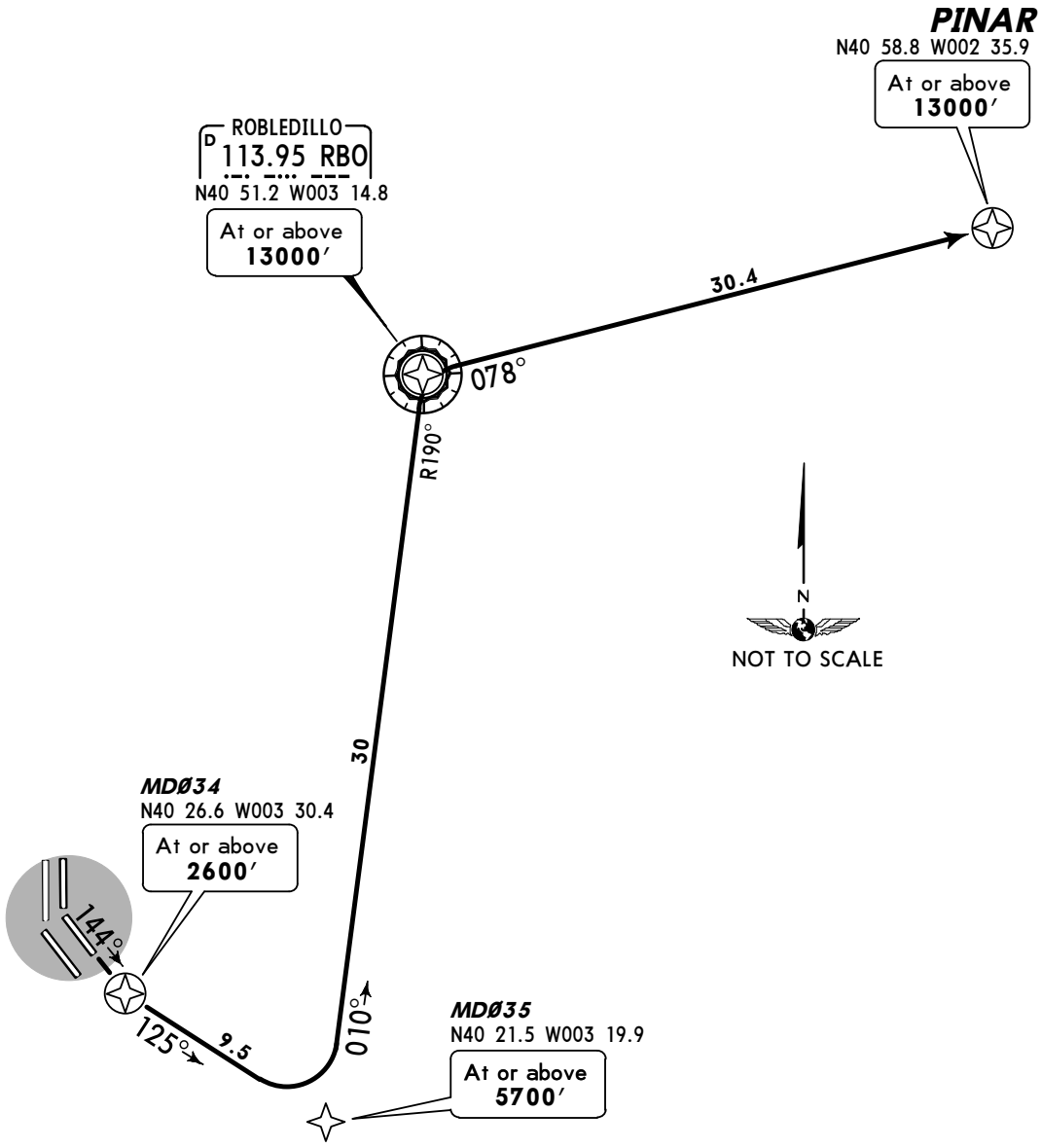
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′

Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4).



PINAR 1AU *[PIN1AU]*
RWY 15L 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
425′ per NM (7%) until MD034, then
365′ per NM (6%) until RBO.

Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
365′ per NM	456	608	911	1215	1519	1823

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

ROUTING

MD034 **(2600′+)** - MD035 **(5700′+)** - RBO **(13000′+)** - PINAR **(13000′+)**.

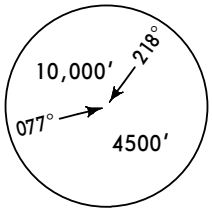
CHANGES: RNAV SIDs PINAR 1U & 1Z repleced by PINAR 1AU.

© JEPPESEN, 2003, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′

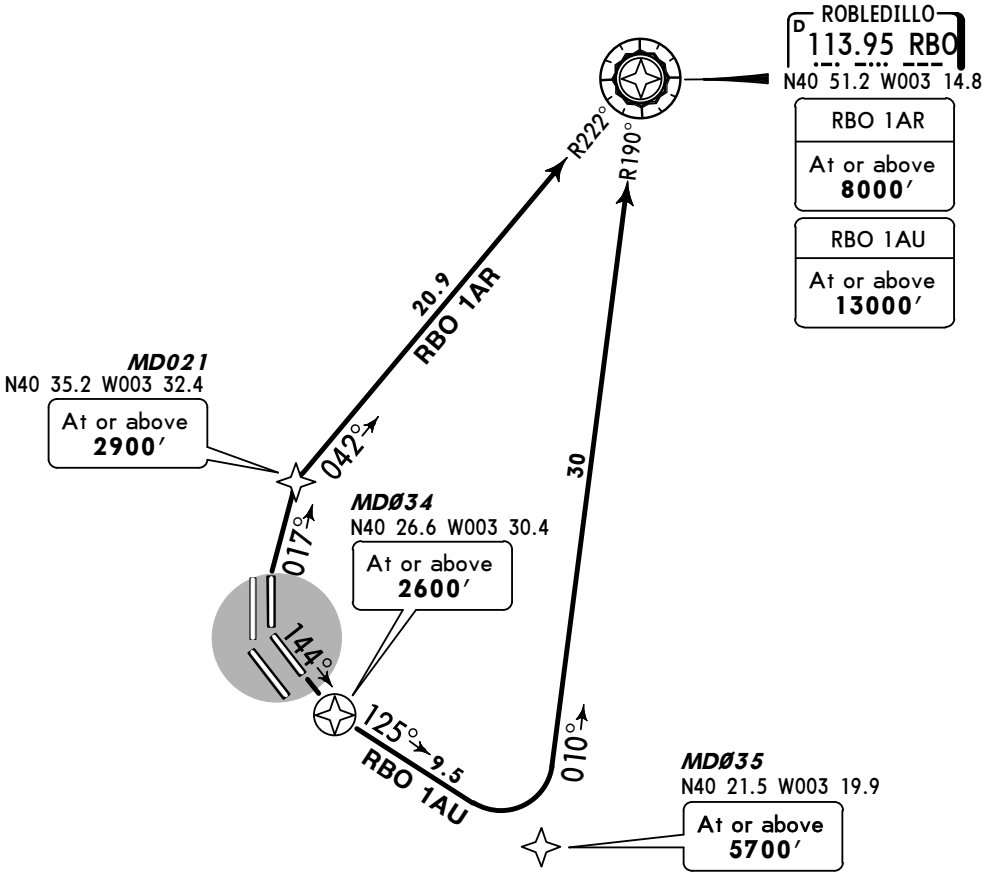
Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4).



MSA
ARP

RBO 1AR, RBO 1AU
RWYS 36R, 15L P-RNAV DEPARTURES

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



NOT TO SCALE

These SIDs require minimum climb gradients of
RBO 1AR: 304′ per NM (5%).
RBO 1AU: 425′ per NM (7%) until MD034, then 365′ per NM (6%).

Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
365′ per NM	456	608	911	1215	1519	1823
304′ per NM	380	506	760	1013	1266	1519

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

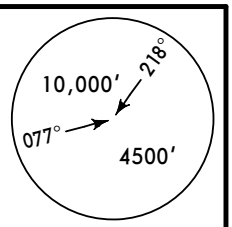
SID	RWY	ROUTING
RBO 1AR	**36R**	MD021 **(2900′+)** - RBO **(8000′+).**
RBO 1AU	**15L**	MD034 **(2600′+)** - MD035 **(5700′+)** - RBO **(13000′+).**

CHANGES: RNAV SIDs RBO 1U & 1Z replaced by RBO 1AR & 1AU.

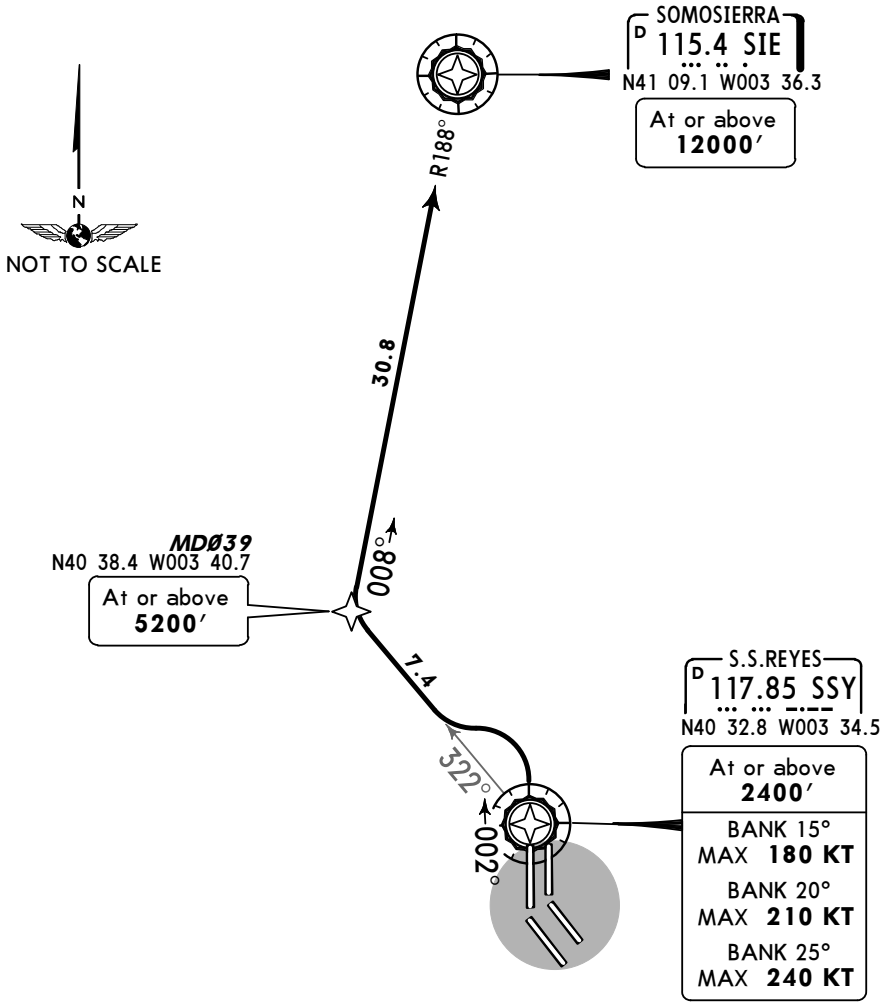
© JEPPESEN, 2002, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4). 2. Maintain runway heading until DER. Do not turn to reach 2400′ or above. 3. EXPECT close-in obstacles.



SIE 1AL
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 MD039, then
365′ per NM (6%).

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
365′ per NM	456	608	911	1215	1519	1823

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

ROUTING

SSY **(2400′+;** K180-/K210-/K240-) - MD039 **(5200′+) -** SIE **(12000′+).**

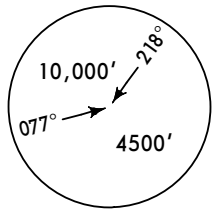
CHANGES: RNAV SID redesignated & revised.

© JEPPESEN, 2002, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

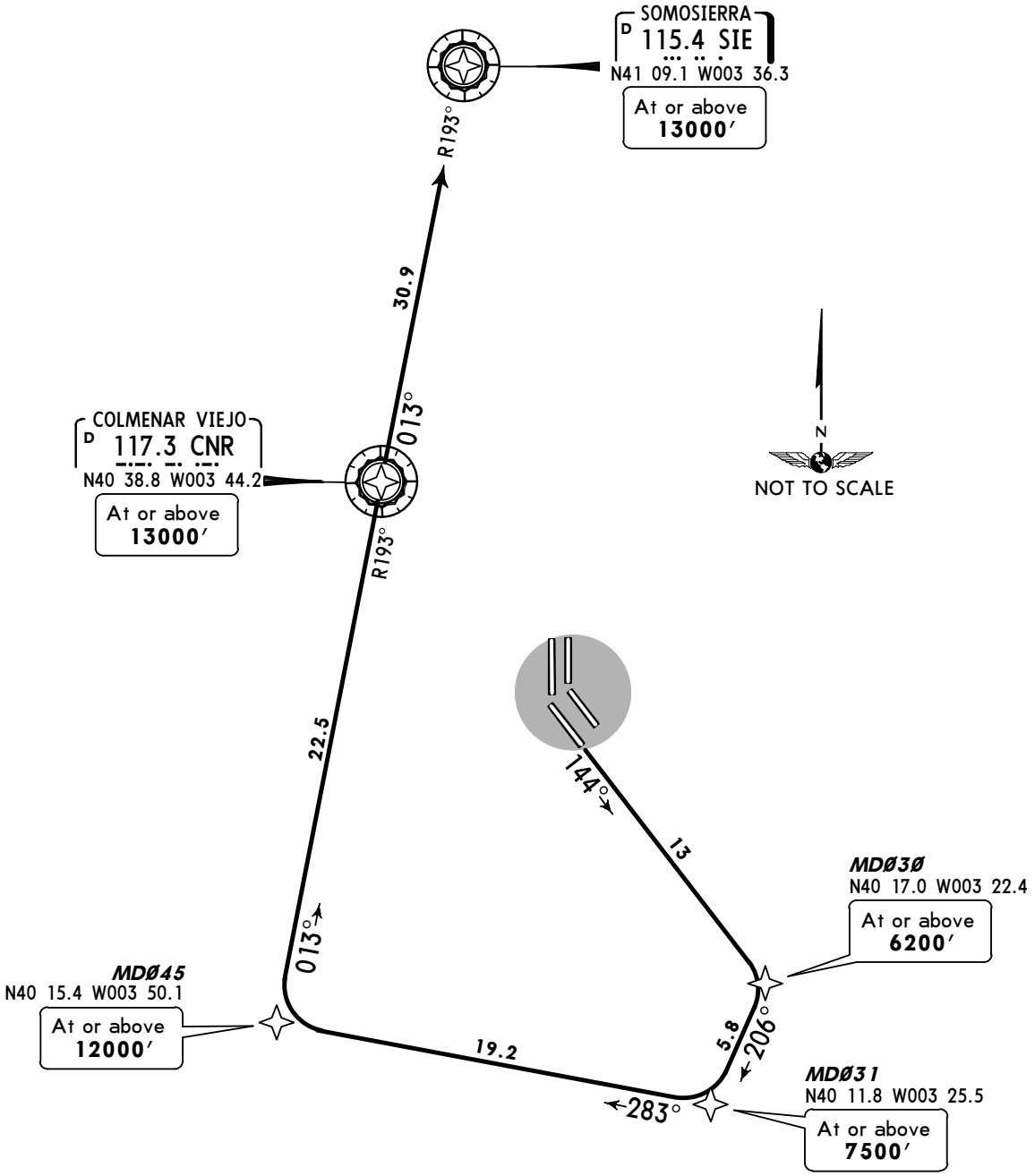
Apt Elev 2001′

Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4).



MSA
ARP

SIE 1AS
RWY 15R 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
334′ per NM (5.5%) until MD030, then
273′ per NM (4.5%) until CNR.

Gnd speed-KT	75	100	150	200	250	300
334′ per NM	418	557	835	1114	1392	1671
273′ per NM	342	456	684	911	1139	1367

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

ROUTING

MD030 **(6200′+)** - MD031 **(7500′+)** - MD045 **(12000′+)** - CNR **(13000′+)** - SIE **(13000′+)**.

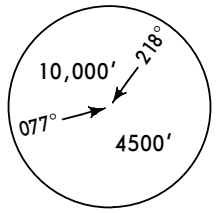
CHANGES: RNAV SIDs SIE 1U & 1Z replaced by SIE 1AS.

© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

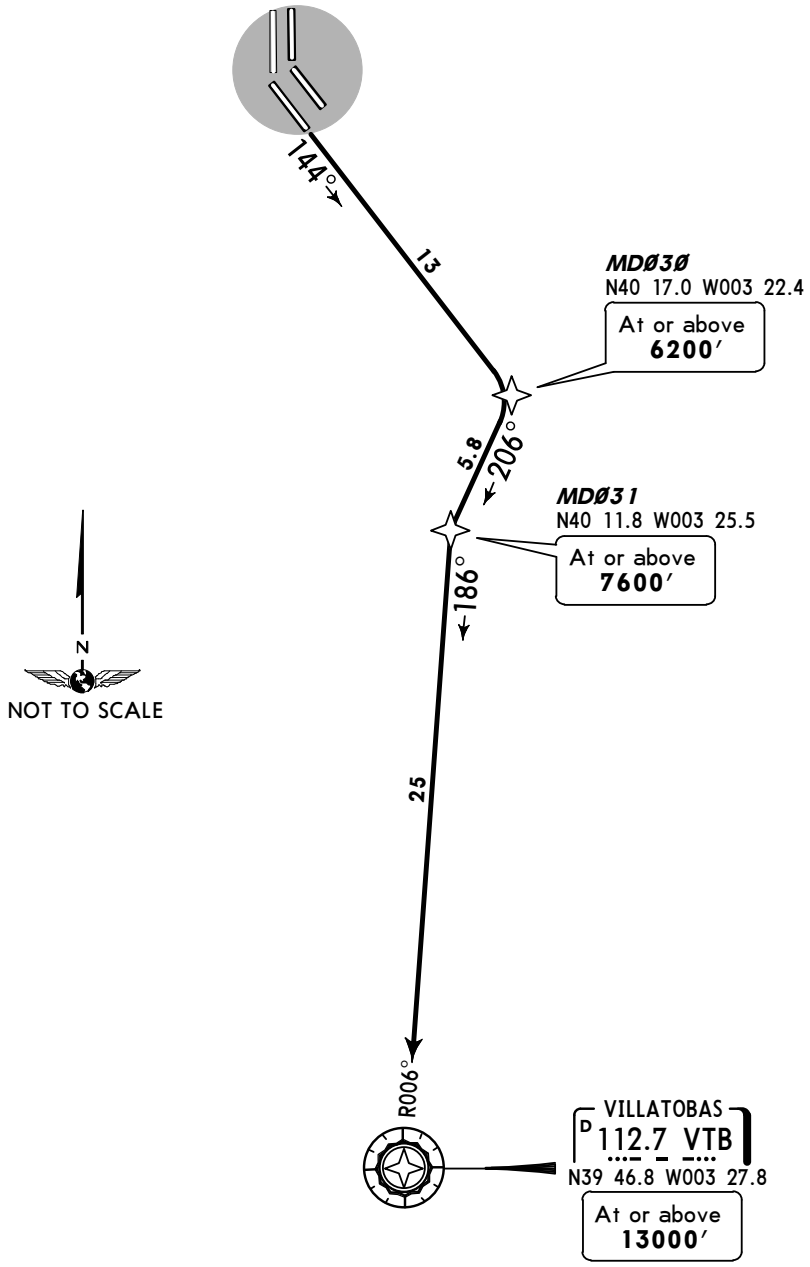
Apt Elev 2001′

Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4).



MSA
ARP

VTB 1AS
RWY 15R P-RNAV DEPARTURE
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
334′ per NM (5.5%) until MD031.

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

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

ROUTING

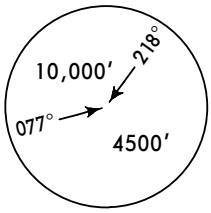
MD030 **(6200′+)** - MD031 **(7600′+)** - VTB **(13000′+)**.

CHANGES: RNAV SID transferred, redesignated & revised.

© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

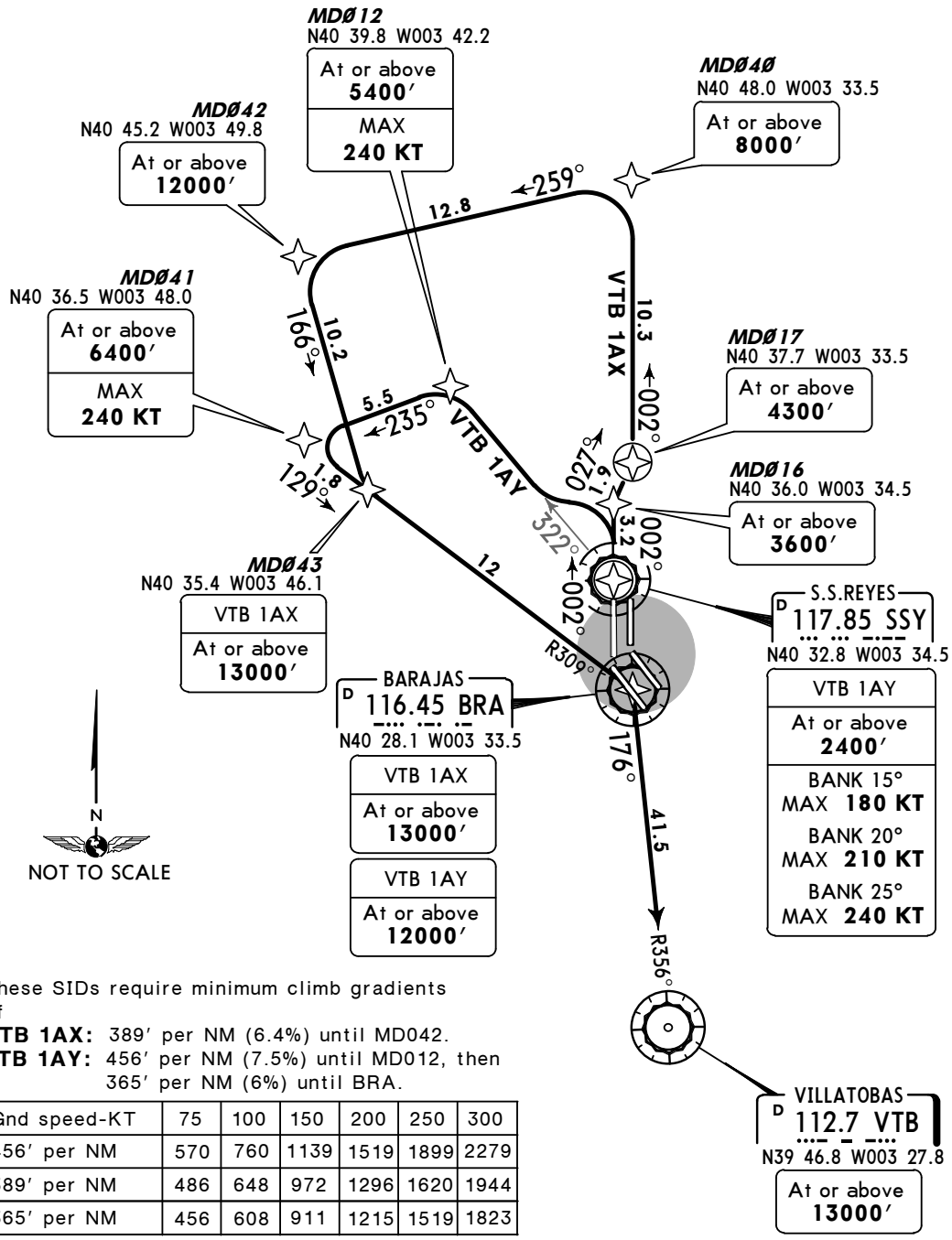
Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4). 2. EXPECT close-in obstacles.



MSA
ARP

VTB 1AX, VTB 1AY
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
VTB 1AX: 389′ per NM (6.4%) until MD042.
VTB 1AY: 456′ per NM (7.5%) until MD012, then 365′ per NM (6%) until BRA.

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
389′ per NM	486	648	972	1296	1620	1944
365′ per NM	456	608	911	1215	1519	1823

VTB 1AY: Maintain runway heading until DER.
Do not turn to reach **2400′** or above.

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

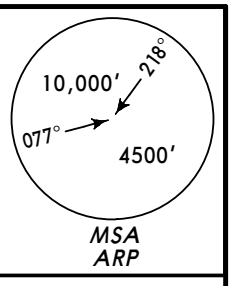
SID	ROUTING
VTB 1AX	MD016 **(3600′+)** - MD017 **(4300′+)** - MD040 **(8000′+)** - MD042 **(12000′+)** - MD043 **(13000′+)** - BRA **(13000′+)** - VTB **(13000′+).**
VTB 1AY	SSY **(2400′+;** K180-/K210-/K240-) - MD012 **(5400′+;** K240-) - MD041 **(6400′+;** K240-) - BRA **(12000′+)** - VTB **(13000′+).**

CHANGES: RNAV SID VTB 1AY initial climb out.

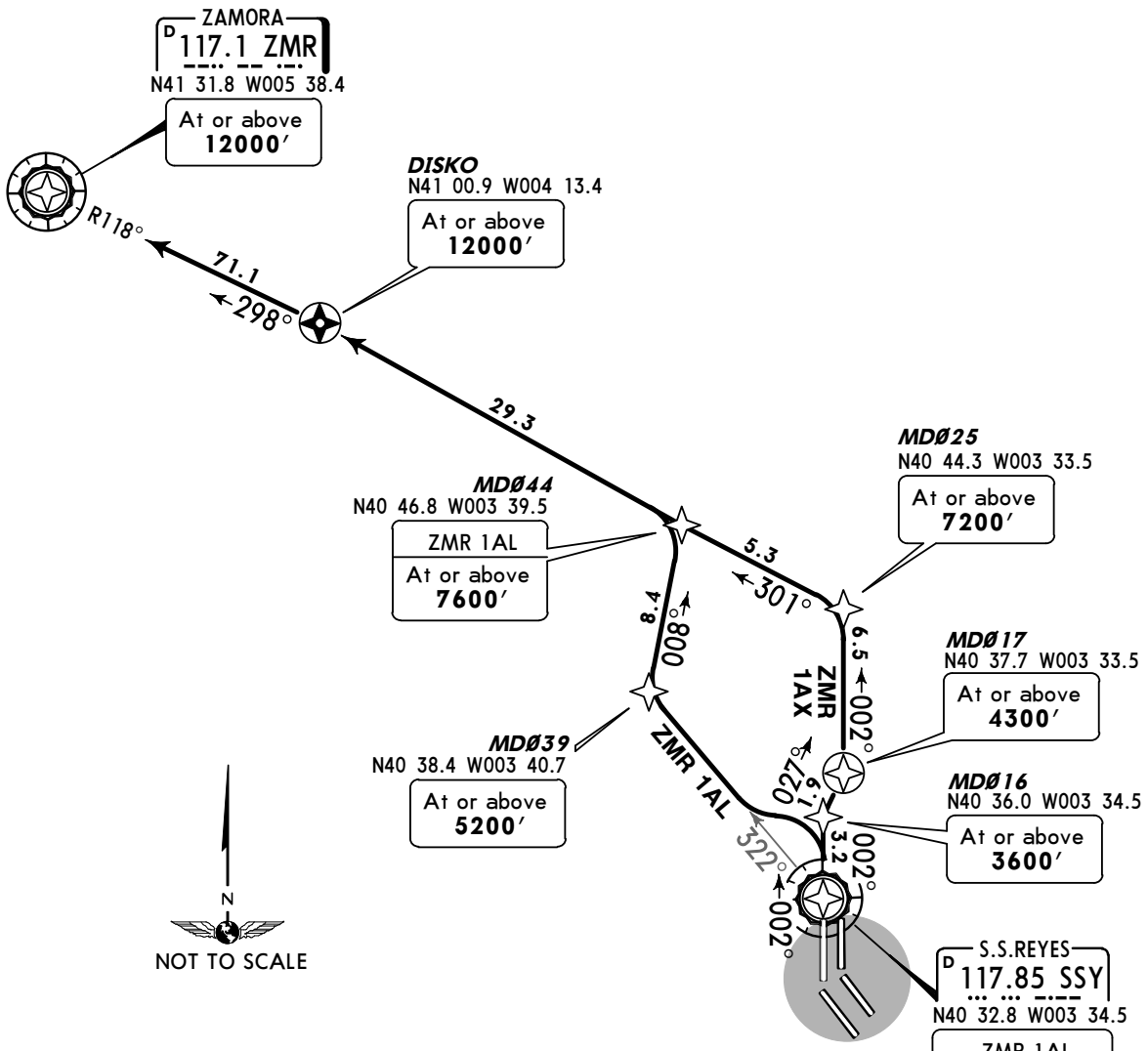
© JEPPESEN, 2007, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4). 2. EXPECT close-in obstacles.



ZMR 1AL, ZMR 1AX
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 1AL: 456′ per NM (7.5%) until MD039, then 365′ per NM (6%) until DISKO.
ZMR 1AX: 425′ per NM (7%) until MD025.

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
425′ per NM	532	709	1063	1418	1772	2127
365′ per NM	456	608	911	1215	1519	1823

ZMR 1AL: Maintain runway heading until DER.
Do not turn to reach **2400′** or above.

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

SID	ROUTING
ZMR 1AL	SSY **(2400′+;** K180-/K210-/K240-) - MD039 **(5200′+) -** MD044 **(7600′+) -** DISKO **(12000′+) -** ZMR **(12000′+).**
ZMR 1AX	MD016 **(3600′+) -** MD017 **(4300′+) -** MD025 **(7200′+) -** DISKO **(12000′+) -** ZMR **(12000′+).**

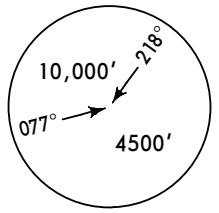
CHANGES: None.

© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

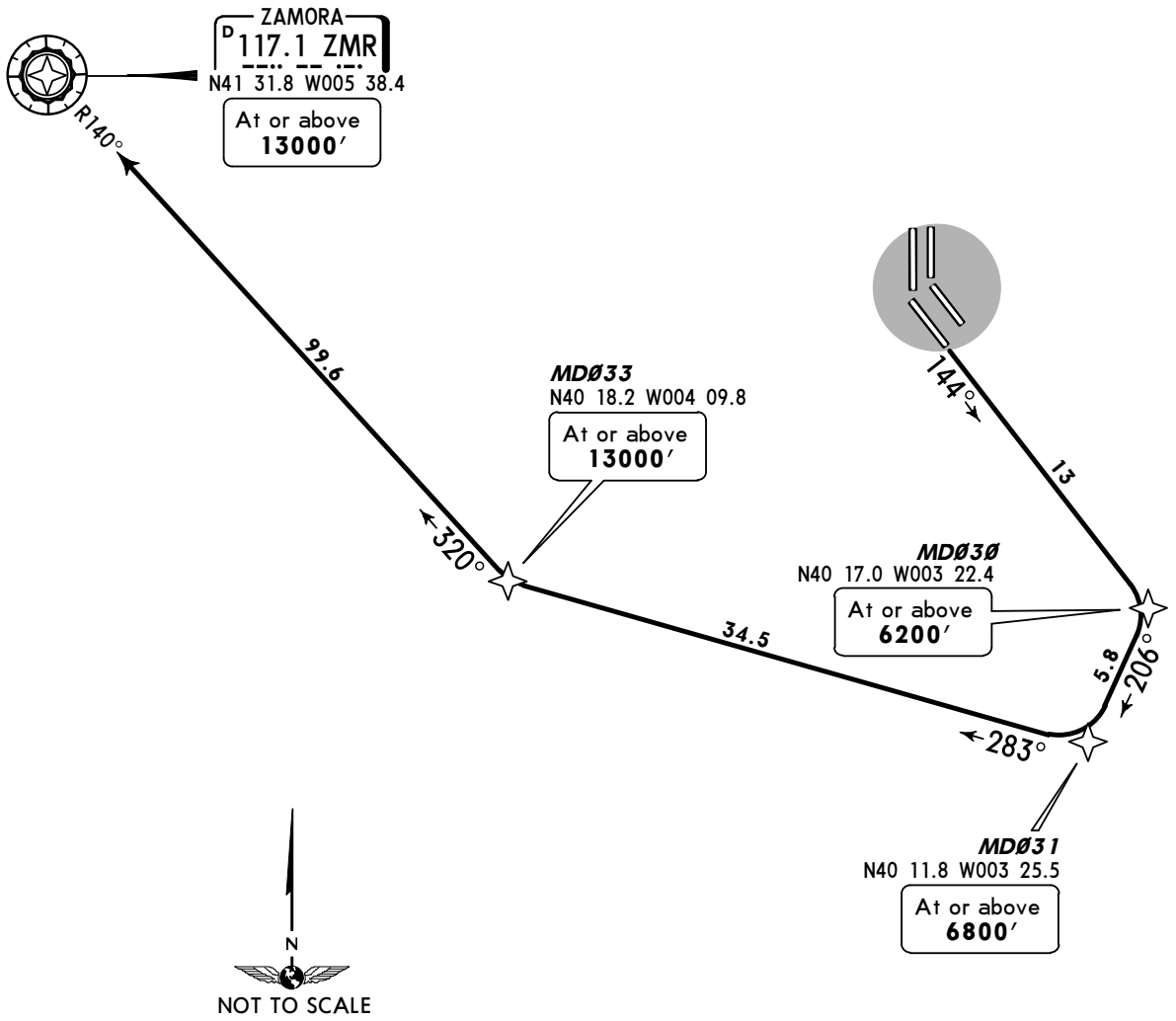
Apt Elev 2001′

Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4).



MSA
ARP

ZMR 1AS
RWY 15R P-RNAV DEPARTURE
USABLE BETWEEN 0700-2300LT
RNAV (DME/DME)
P-RNAV APPROVAL REQUIRED
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
334′ per NM (5.5%) until MD030.

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

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

ROUTING

MD030 **(6200′+)** - MD031 **(6800′+)** - MD033 **(13000′+)** - ZMR **(13000′+)**.

CHANGES: RNAV SID ZMR 1AG replaced by ZMR 1AS.

© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

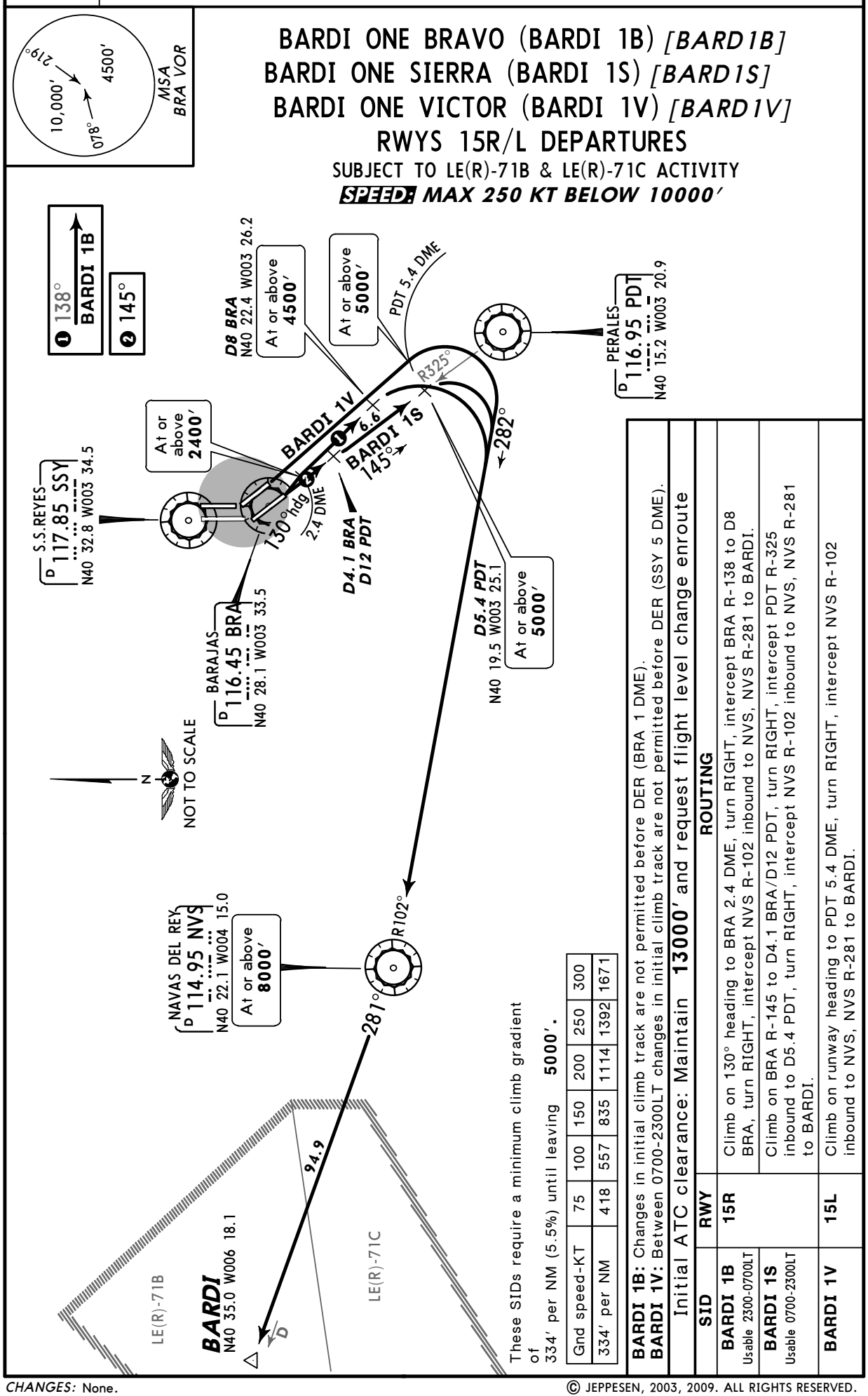
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).

BARDI ONE BRAVO (BARDI 1B) *[BARD1B]*
BARDI ONE SIERRA (BARDI 1S) *[BARD1S]*
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′



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

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

BARDI 1B: Changes in initial climb track are not permitted before DER (BRA 1 DME).
BARDI 1V: Between 0700-2300LT changes in initial climb track are not permitted before DER (SSY 5 DME).

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

SID	RWY	ROUTING
BARDI 1B Usable 2300-0700LT	**15R**	Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept NVS R-102 inbound to NVS, NVS R-281 to BARDI.
BARDI 1S Usable 0700-2300LT		Climb on BRA R-145 to D4.1 BRA/D12 PDT, turn RIGHT, intercept PDT R-325 inbound to D5.4 PDT, turn RIGHT, intercept NVS R-102 inbound to NVS, NVS R-281 to BARDI.
BARDI 1V	**15L**	Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept NVS R-102 inbound to NVS, NVS R-281 to BARDI.

CHANGES: None.

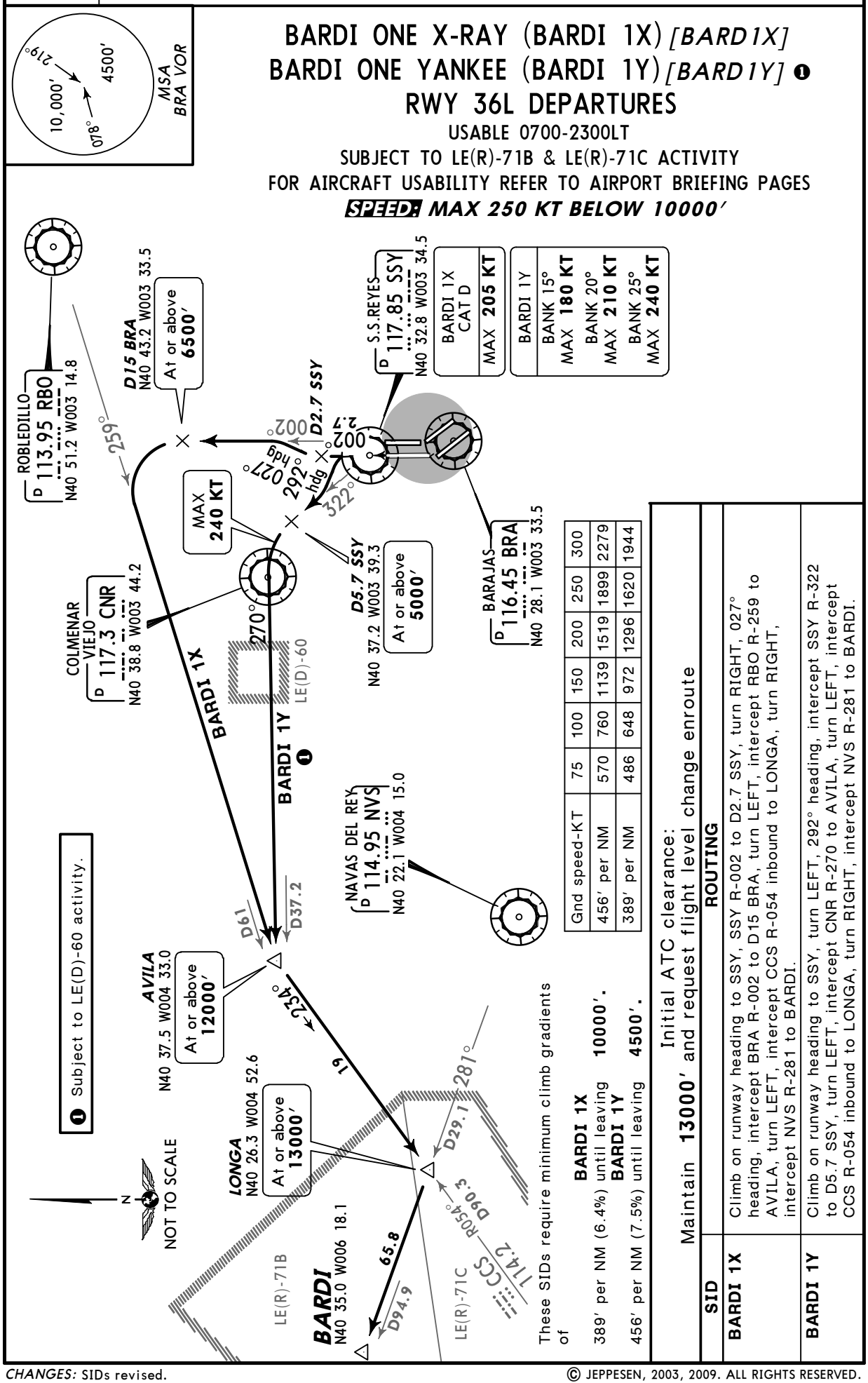
© JEPPESEN, 2003, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. EXPECT close-in obstacles.

BARDI ONE X-RAY (BARDI 1X) *[BARD1X]*
BARDI ONE YANKEE (BARDI 1Y) *[BARD1Y]* ❶
RWY 36L DEPARTURES

USABLE 0700-2300LT
SUBJECT TO LE(R)-71B & LE(R)-71C ACTIVITY
FOR AIRCRAFT USABILITY REFER TO AIRPORT BRIEFING PAGES
***SPEED:* MAX 250 KT BELOW 10000′**



Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
389′ per NM	486	648	972	1296	1620	1944

These SIDs require minimum climb gradients of

BARDI 1X
389′ per NM (6.4%) until leaving **10000′.**

BARDI 1Y
456′ per NM (7.5%) until leaving **4500′.**

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

SID	ROUTING
BARDI 1X	Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° heading, intercept BRA R-002 to D15 BRA, turn LEFT, intercept RBO R-259 to AVILA, turn LEFT, intercept CCS R-054 inbound to LONGA, turn RIGHT, intercept NVS R-281 to BARDI.
BARDI 1Y	Climb on runway heading to SSY, turn LEFT, 292° heading, intercept SSY R-322 to D5.7 SSY, turn LEFT, intercept CNR R-270 to AVILA, turn LEFT, intercept CCS R-054 inbound to LONGA, turn RIGHT, intercept NVS R-281 to BARDI.

© JEPPESEN, 2003, 2009. ALL RIGHTS RESERVED.

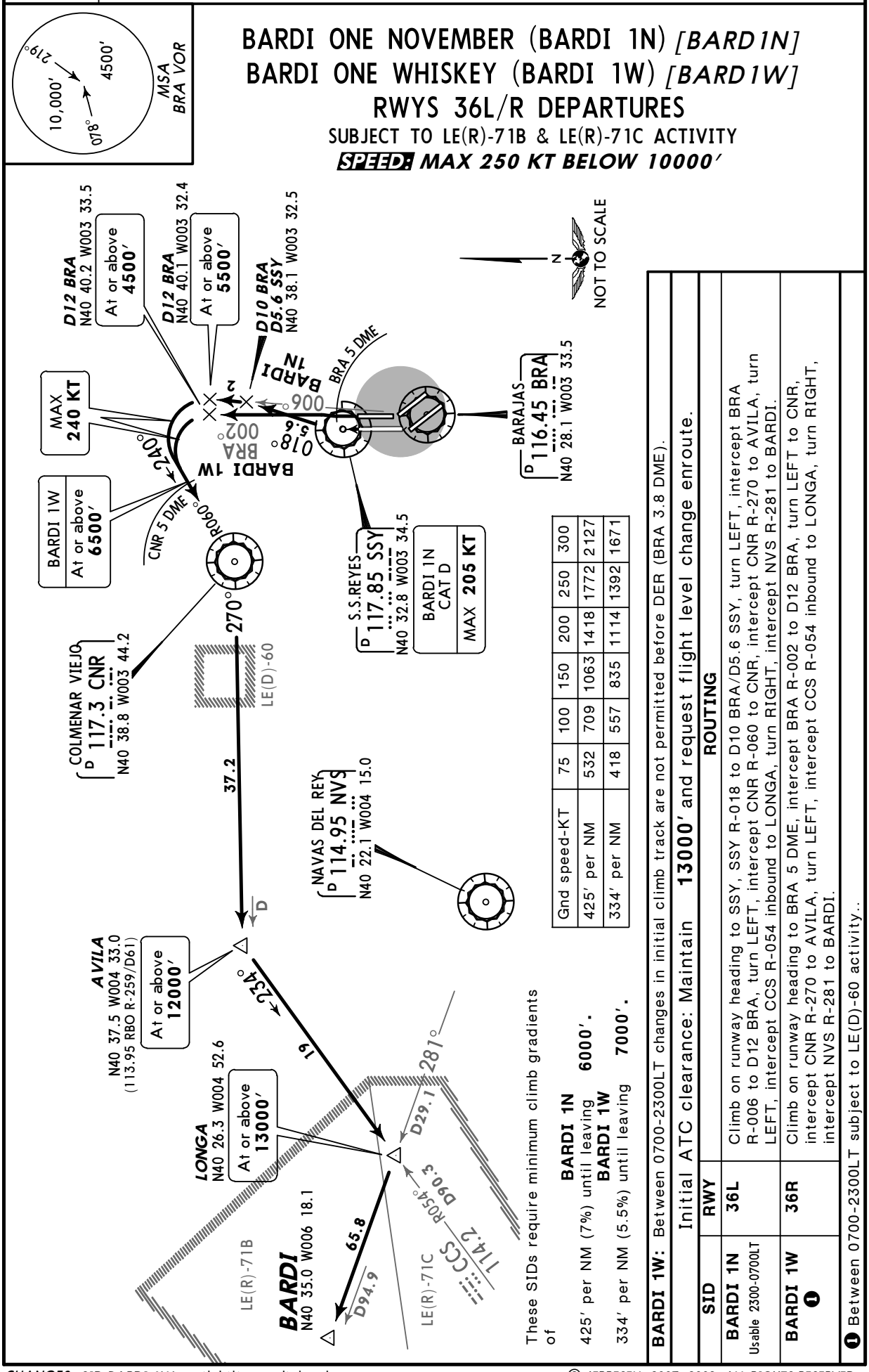
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. RWY36L: EXPECT close-in obstacles

BARDI ONE NOVEMBER (BARDI 1N) *[BARD1N]*
BARDI ONE WHISKEY (BARDI 1W) *[BARD1W]*
RWYS 36L/R DEPARTURES

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

SPEED: MAX 250 KT BELOW 10000′



Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
334′ per NM	418	557	835	1114	1392	1671

These SIDs require minimum climb gradients of

425′ per NM (7%) until leaving **BARDI 1N** **6000′**.
334′ per NM (5.5%) until leaving **BARDI 1W** **7000′**.

BARDI 1W: Between 0700-2300LT changes in initial climb track are not permitted before DER (BRA 3.8 DME).

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

SID	RWY	ROUTING
BARDI 1N Usable 2300-0700LT	**36L**	Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn LEFT, intercept CNR R-060 to CNR, intercept CNR R-270 to AVILA, turn LEFT, intercept CCS R-054 inbound to LONGA, turn RIGHT, intercept NVS R-281 to BARDI.
BARDI 1W ❶	**36R**	Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D12 BRA, turn LEFT to CNR, intercept CNR R-270 to AVILA, turn LEFT, intercept CCS R-054 inbound to LONGA, turn RIGHT, intercept NVS R-281 to BARDI.

❶ Between 0700-2300LT subject to LE(D)-60 activity..

CHANGES: SID BARDI 1W availability; radial update.

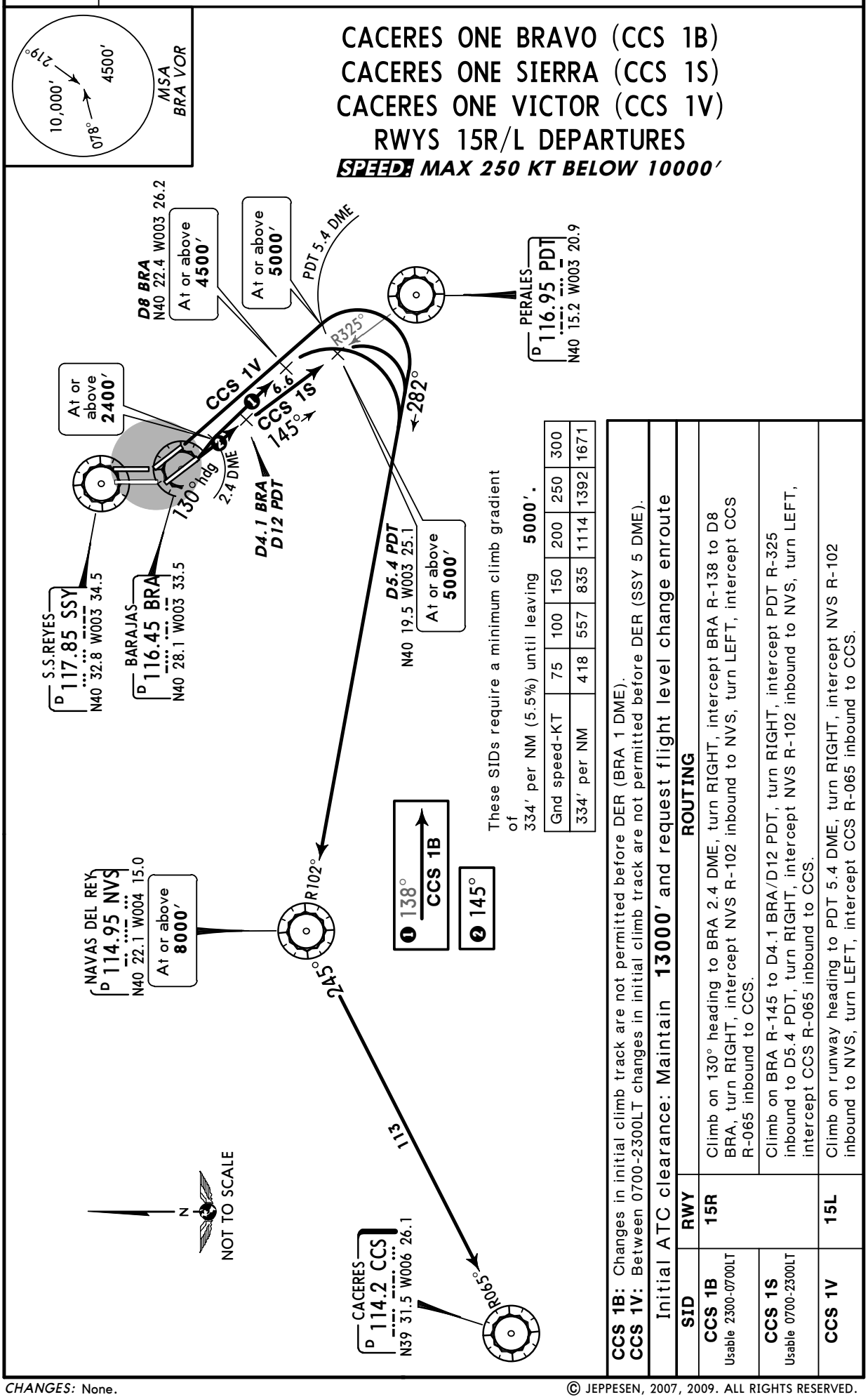
© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).

CACERES ONE BRAVO (CCS 1B)
CACERES ONE SIERRA (CCS 1S)
CACERES ONE VICTOR (CCS 1V)
RWYS 15R/L DEPARTURES

SPEED: MAX 250 KT BELOW 10000′



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

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

CCS 1B: Changes in initial climb track are not permitted before DER (BRA 1 DME).
CCS 1V: Between 0700-2300LT changes in initial climb track are not permitted before DER (SSY 5 DME).

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

SID	RWY	ROUTING
CCS 1B Usable 2300-0700LT	**15R**	Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept NVS R-102 inbound to NVS, turn LEFT, intercept CCS R-065 inbound to CCS.
CCS 1S Usable 0700-2300LT		Climb on BRA R-145 to D4.1 BRA/D12 PDT, turn RIGHT, intercept PDT R-325 inbound to D5.4 PDT, turn RIGHT, intercept NVS R-102 inbound to NVS, turn LEFT, intercept CCS R-065 inbound to CCS.
CCS 1V	**15L**	Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept NVS R-102 inbound to NVS, turn LEFT, intercept CCS R-065 inbound to CCS.

CHANGES: None.

© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

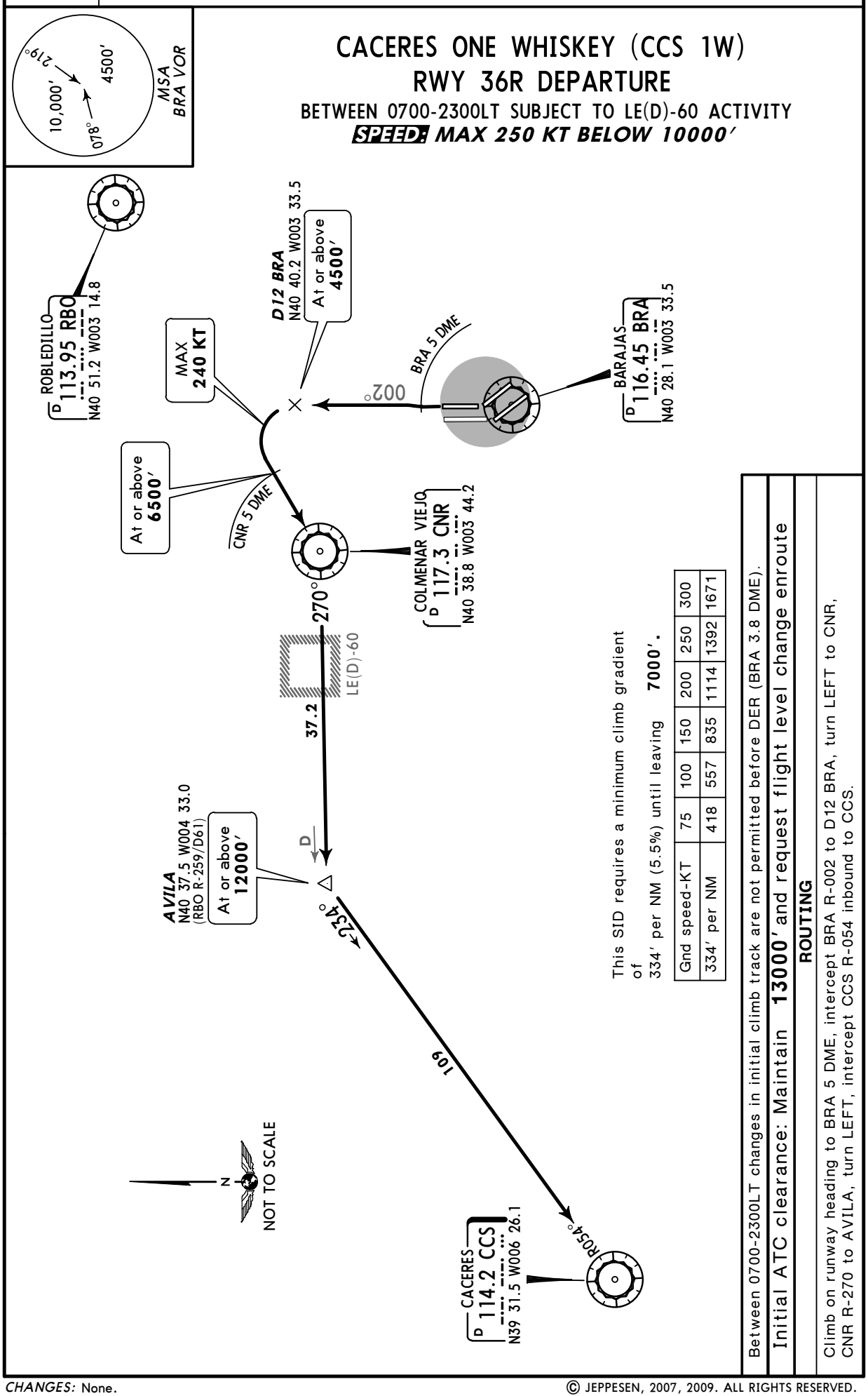
Apt Elev 2001′

Trans level: By ATC Trans alt: 13000′
SIDs are also noise abatement procedures (refer to 10-4A).

CACERES ONE WHISKEY (CCS 1W)
RWY 36R DEPARTURE

BETWEEN 0700-2300LT SUBJECT TO LE(D)-60 ACTIVITY

SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of 334′ per NM (5.5%) until leaving **7000′**.

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

Between 0700-2300LT changes in initial climb track are not permitted before DER (BRA 3.8 DME).

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

ROUTING

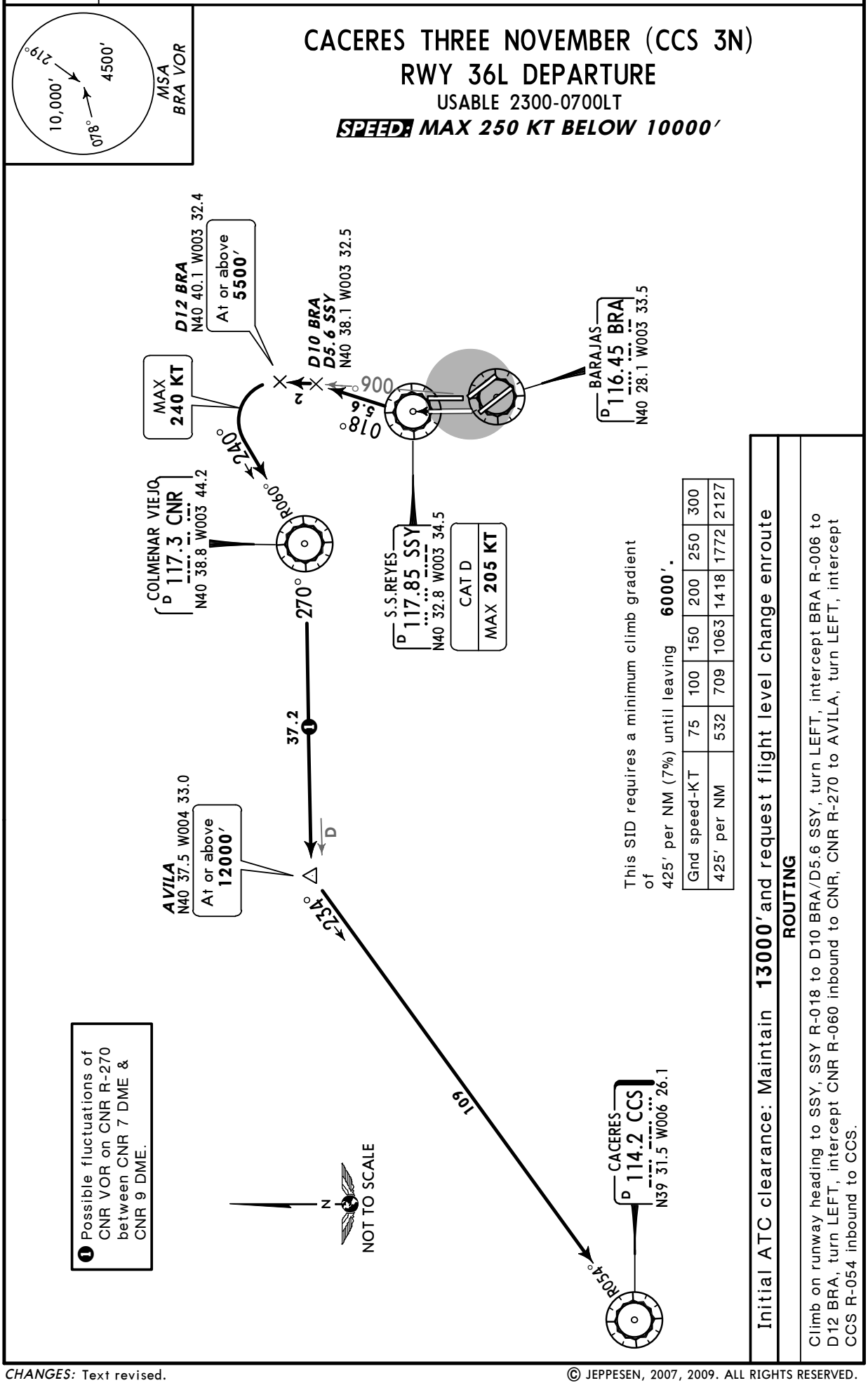
Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D12 BRA, turn LEFT to CNR, CNR R-270 to AVILA, turn LEFT, intercept CCS R-054 inbound to CCS.

CHANGES: None.

© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. EXPECT close-in obstacles.

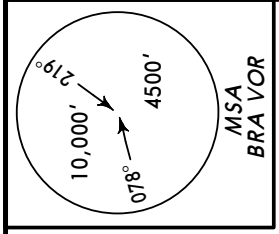


CHANGES: Text revised.

© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2000′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. RWY 36L: EXPECT close-in obstacles.



CACERES ONE X-RAY (CCS 1X)
CACERES ONE YANKEE (CCS 1Y)
RWY 36L DEPARTURES

USABLE 0700-2300LT

FOR AIRCRAFT USABILITY REFER TO AIRPORT BRIEFING PAGES

SPEED: MAX 250 KT BELOW 10000′

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

SID	ROUTING
CCS 1X	Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° heading, intercept BRA R-002 to D15 BRA, turn LEFT, intercept RBO R-259 to AVILA, turn LEFT, intercept CCS R-054 inbound to CCS.
CCS 1Y ❶	Climb on runway heading to SSY, turn LEFT, 292° heading, intercept SSY R-322 to D5.7 SSY, turn LEFT, intercept CNR R-270 to AVILA, turn LEFT, intercept CCS R-054 inbound to CCS.

❶ Subject to LE(D)-60 activity.

ROBLEDILLO
D 113.95 RBO
N40 51.2 W003 14.8

D15 BRA
N40 43.2 W003 33.5
At or above 6500′

D2.7 SSY

S.S.REYES
D 117.85 SSY
N40 32.8 W003 34.5

CCS 1Y
BANK 15° MAX **180 KT**
BANK 20° MAX **210 KT**
BANK 25° MAX **240 KT**

COLMENAR VIEJO
D 117.3 CNR
N40 38.8 W003 44.2

D5.7 SSY
N40 37.2 W003 39.3
At or above 5000′

BARAJAS
D 116.45 BRA
N40 28.1 W003 33.5

CCS 1X
CCS 1Y
LE(D)-60
D61
D37.2

AVILA
N40 37.5 W004 33.0
At or above 12000′

CACERES
D 114.2 CCS
N39 31.5 W006 26.1

NOT TO SCALE

These SIDs require minimum climb gradients of

389′ per NM (6.4%) until leaving **CCS 1X** **10000′**.

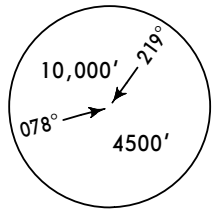
456′ per NM (7.5%) until leaving **CCS 1Y** **4500′**.

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
389′ per NM	486	648	972	1296	1620	1944

© JEPPESEN, 2007, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2000′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).

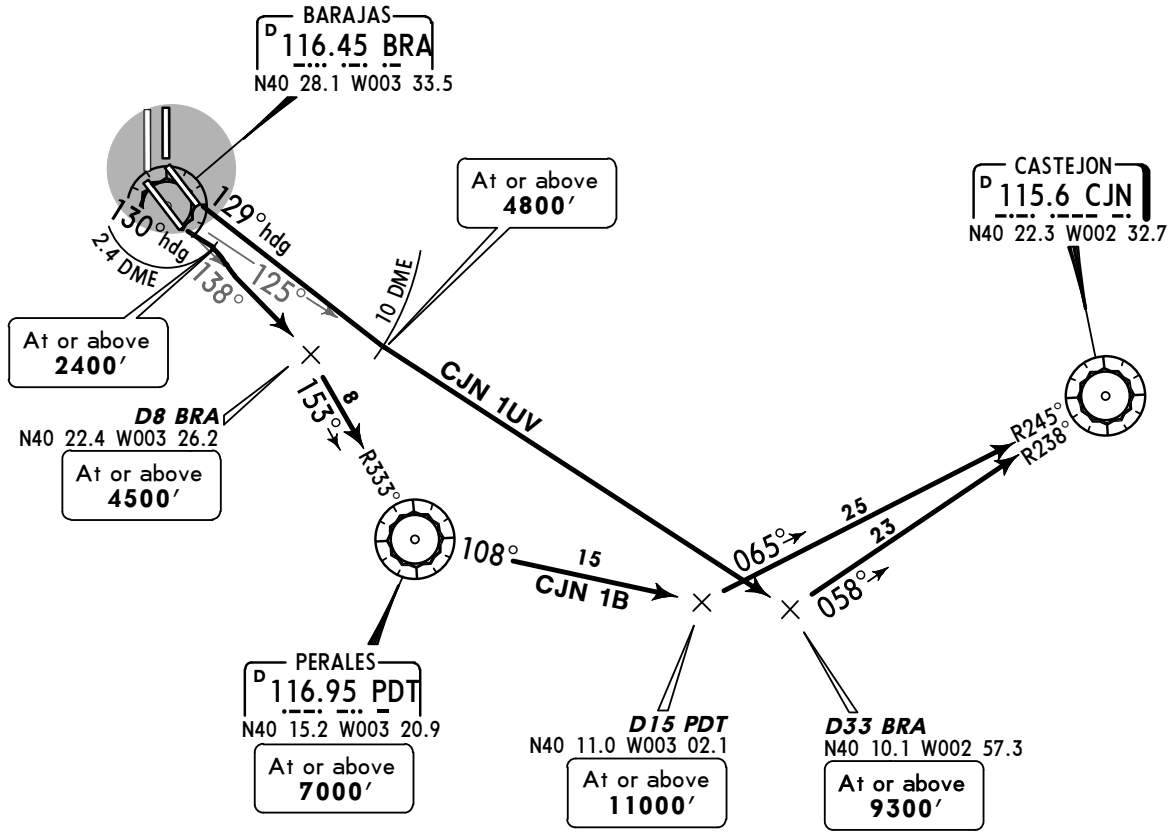


MSA
BRA VOR

CASTEJON ONE BRAVO (CJN 1B)
CASTEJON ONE UNIFORM VICTOR (CJN 1UV)
RWYS 15R/L DEPARTURES

USABLE BETWEEN 0700-2300LT

SPEED: MAX 250 KT BELOW 10000′

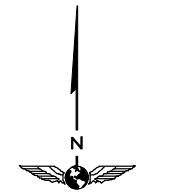


These SIDs require minimum climb gradients of

CJN 1B
371′ per NM (6.1%) until leaving **7000′.**

CJN 1UV
425′ per NM (7%) until leaving **2200′,** then
352′ per NM (5.8%) until leaving **4800′.**

Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
371′ per NM	463	618	927	1235	1544	1853
352′ per NM	441	587	881	1175	1468	1762



NOT TO SCALE

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

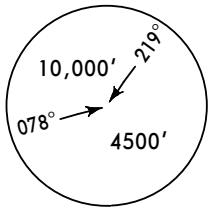
SID	RWY	ROUTING
CJN 1B	**15R**	Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to PDT, PDT R-108 to D15 PDT, turn LEFT, intercept CJN R-245 inbound to CJN.
CJN 1UV	**15L**	Climb on 129° heading to BRA 10 DME, turn LEFT, intercept BRA R-125 to D33 BRA, turn LEFT, intercept CJN R-238 inbound to CJN.

CHANGES: New procedures at this airport; SID transferred.

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2000′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).

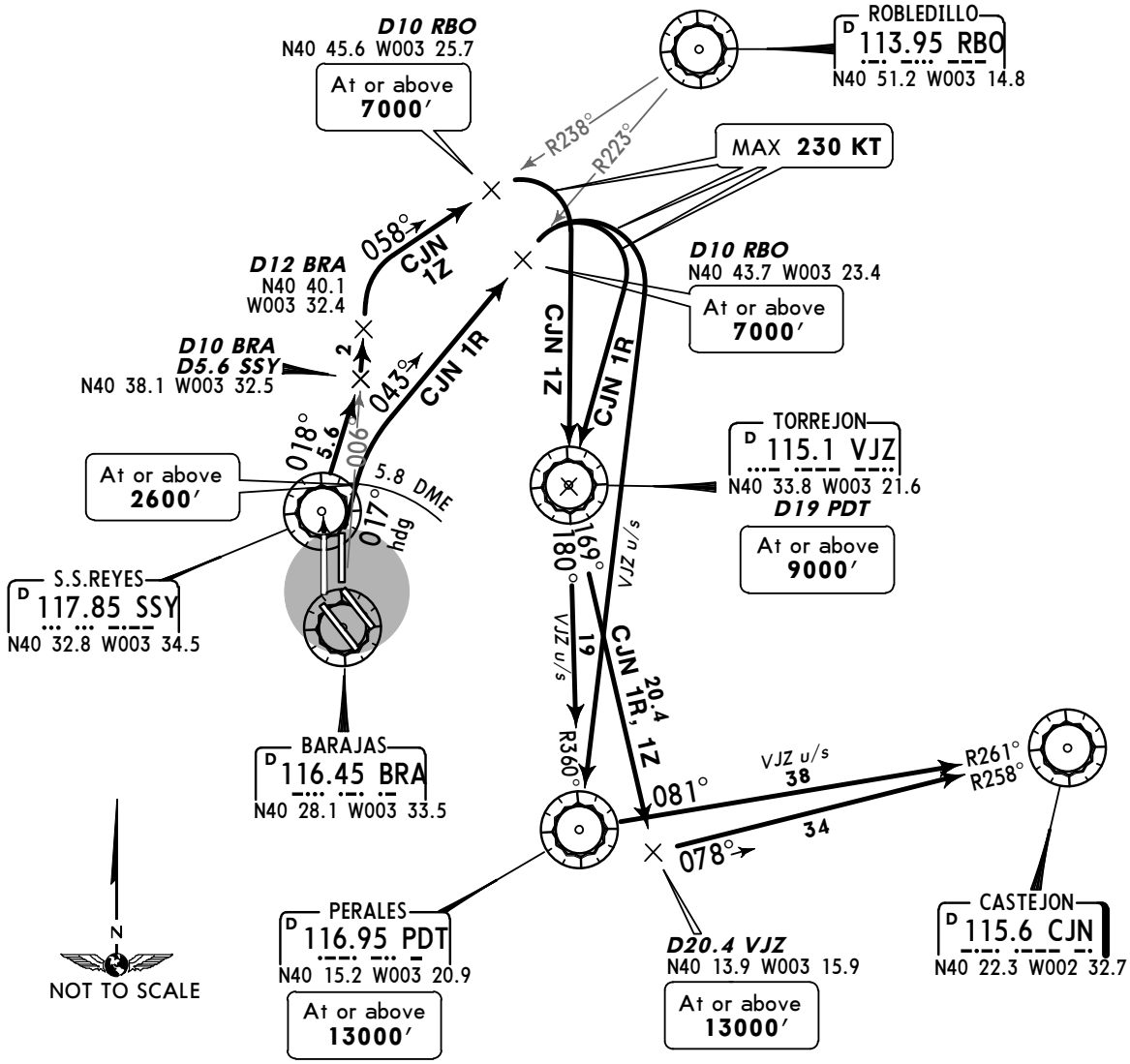


MSA
BRA VOR

CASTEJON ONE ROMEO (CJN 1R)
CASTEJON ONE ZULU (CJN 1Z)
RWYS 36R/L DEPARTURES

USABLE BETWEEN 0700-2300LT

SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of

CJN 1R
365′ per NM (6%) until leaving **9000′.**

CJN 1Z
334′ per NM (5.5%) until leaving **8000′.**

Gnd speed-KT	75	100	150	200	250	300
365′ per NM	456	608	911	1215	1519	1823
334′ per NM	418	557	835	1114	1392	1671

CJN 1R: Changes in initial climb track are not permitted before DER (BRA 3.8 DME).

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

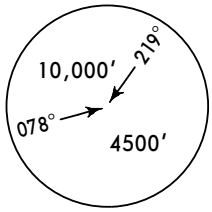
SID	RWY	ROUTING
CJN 1R	**36R**	Climb on 017° heading to BRA 5.8 DME, intercept RBO R-223 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to D20.4 VJZ, turn LEFT, intercept CJN R-258 inbound to CJN. **VJZ u/s:** At D10 RBO turn RIGHT to PDT, PDT R-081 to CJN.
CJN 1Z	**36L**	Climb on runway heading to SSY, SSY R-018 to D10 BRA/5.6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to D20.4 VJZ, turn LEFT, intercept CJN R-258 to CJN. **VJZ u/s:** At D10 RBO turn RIGHT, intercept PDT R-360 inbound via D19 PDT to PDT, PDT R-081 to CJN.

CHANGES: New chart.

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

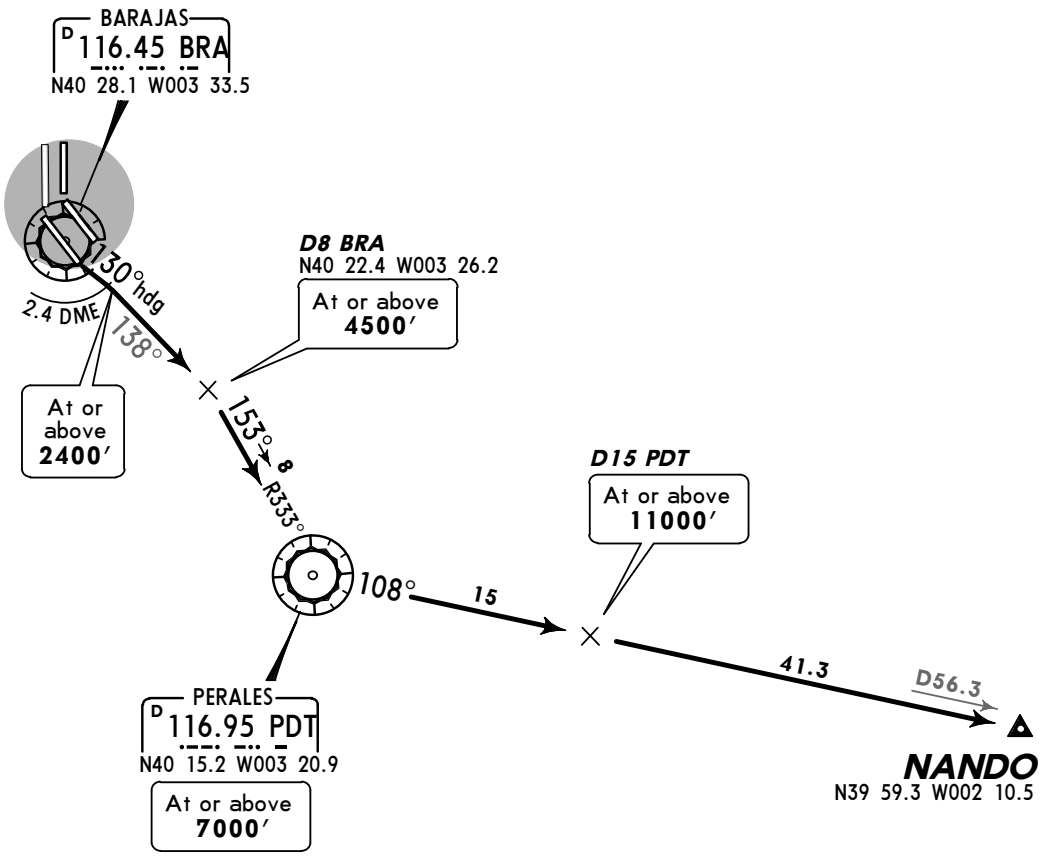
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

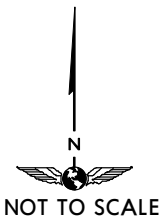
Apt Elev	
2000′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

NANDO ONE BRAVO (NANDO 1B) *[NAND1B]*
RWY 15R DEPARTURE
SPEED: MAX 250 KT BELOW 10000′





This SID requires a minimum climb gradient of
371′ per NM (6.1%) until leaving **7000′.**

Gnd speed-KT	75	100	150	200	250	300
371′ per NM	463	618	927	1235	1544	1853

Between 2300-0700LT changes in initial climb track are not permitted before DER (BRA 1 DME).

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

ROUTING

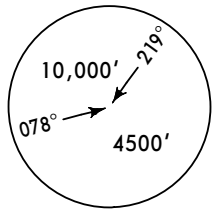
Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to PDT, PDT R-108 to NANDO.

CHANGES: New chart (SID transferred).

© JEPPESEN, 2010. ALL RIGHTS RESERVED.

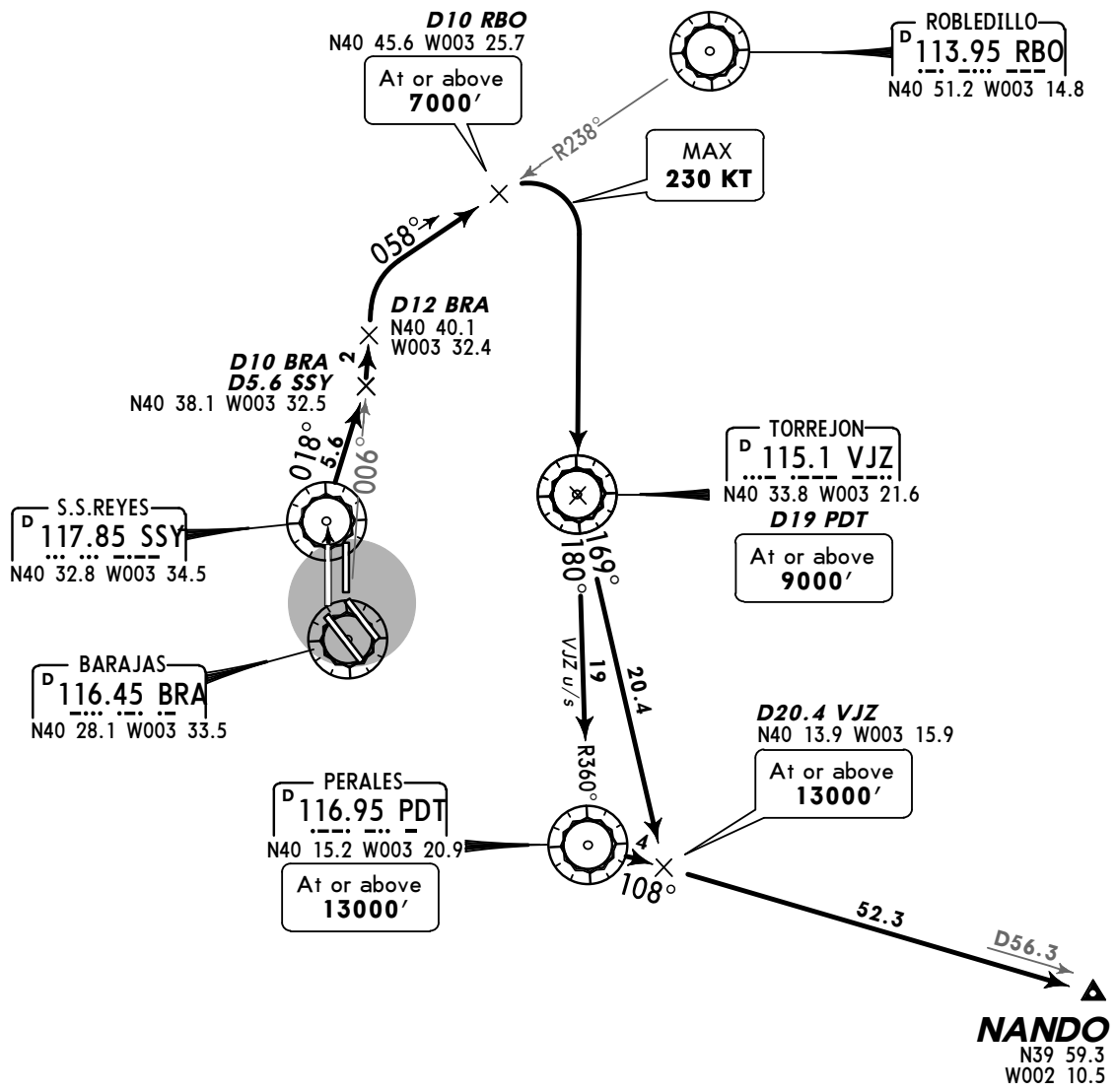
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. EXPECT close-in obstacles.



MSA
BRA VOR

NANDO ONE NOVEMBER (NANDO 1N) *[NAND1N]*
RWY 36L DEPARTURE
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
334′ per NM (5.5%) until leaving **8000′.**

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

N
NOT TO SCALE

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

ROUTING

Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to D20.4 VJZ, turn LEFT, intercept PDT R-108 to NANDO.

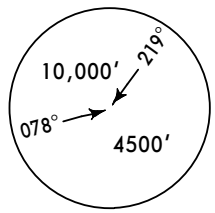
VJZ u/s: At D10 RBO turn RIGHT, intercept PDT R-360 inbound via D19 PDT to PDT, PDT R-108 to NANDO.

CHANGES: SID NANDO 3D withdrawn; SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

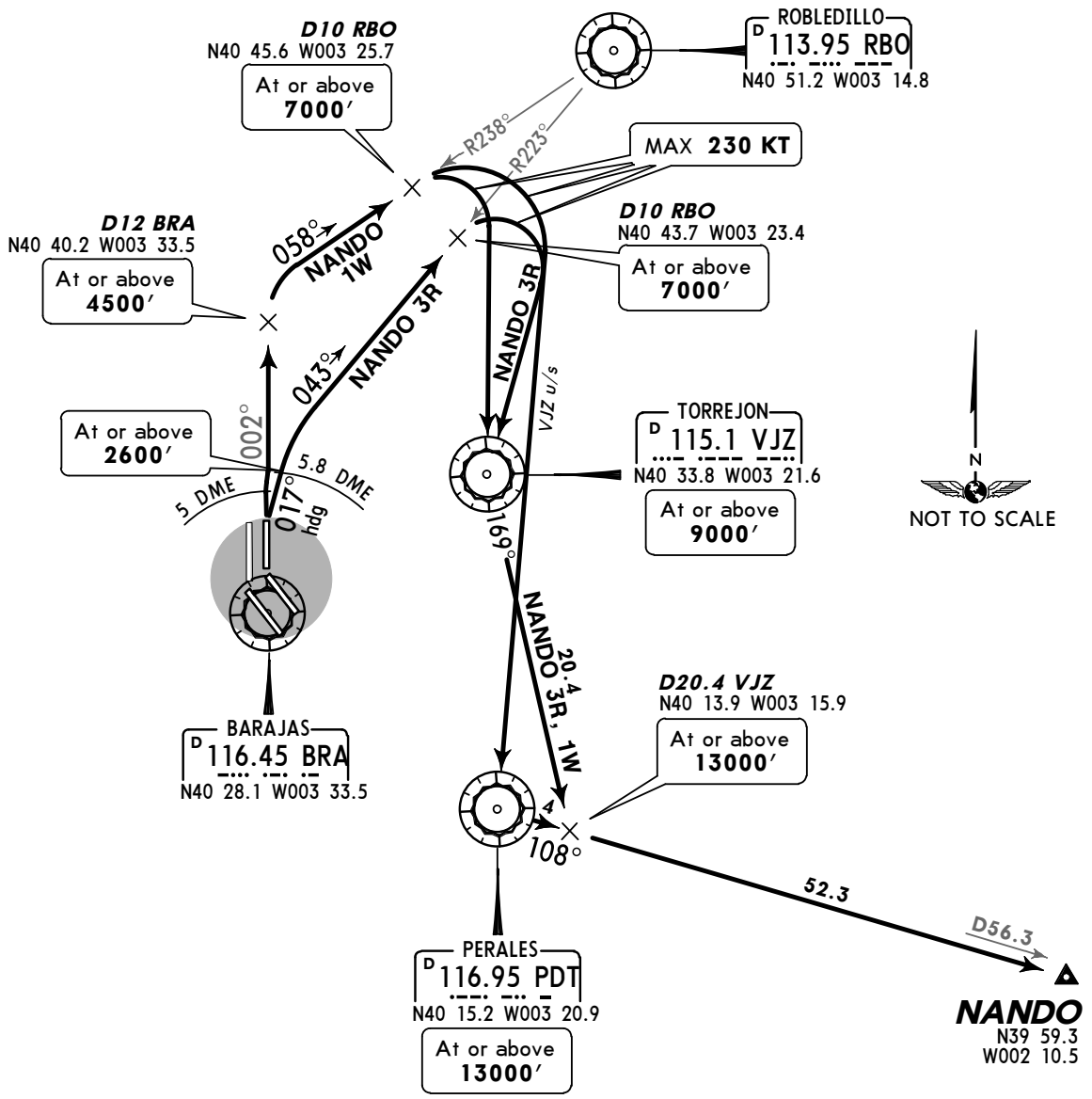
Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

NANDO THREE ROMEO (NANDO 3R) *[NAND3R]*
NANDO ONE WHISKEY (NANDO 1W) *[NAND1W]*
RWY 36R DEPARTURES

SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of

NANDO 3R
365′ per NM (6%) until leaving **9000′.**

NANDO 1W
334′ per NM (5.5%) until leaving **8000′.**

Gnd speed-KT	75	100	150	200	250	300
365′ per NM	456	608	911	1215	1519	1823
334′ per NM	418	557	835	1114	1392	1671

NANDO 3R: Changes in initial climb track are not permitted before DER (BRA 3.8 DME).

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

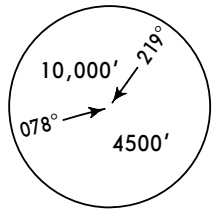
SID	ROUTING
NANDO 3R Usable 0700-2300LT	Climb on 017° heading to BRA 5.8 DME, intercept RBO R-223 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to D20.4 VJZ, turn LEFT, intercept PDT R-108 to NANDO. **VJZ u/s:** At D10 RBO turn RIGHT to PDT, PDT R-108 to NANDO.
NANDO 1W Usable 2300-0700LT	Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to D20.4 VJZ, turn LEFT, intercept PDT R-108 to NANDO. **VJZ u/s:** At D10 RBO turn RIGHT to PDT, PDT R-108 to NANDO.

CHANGES: SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

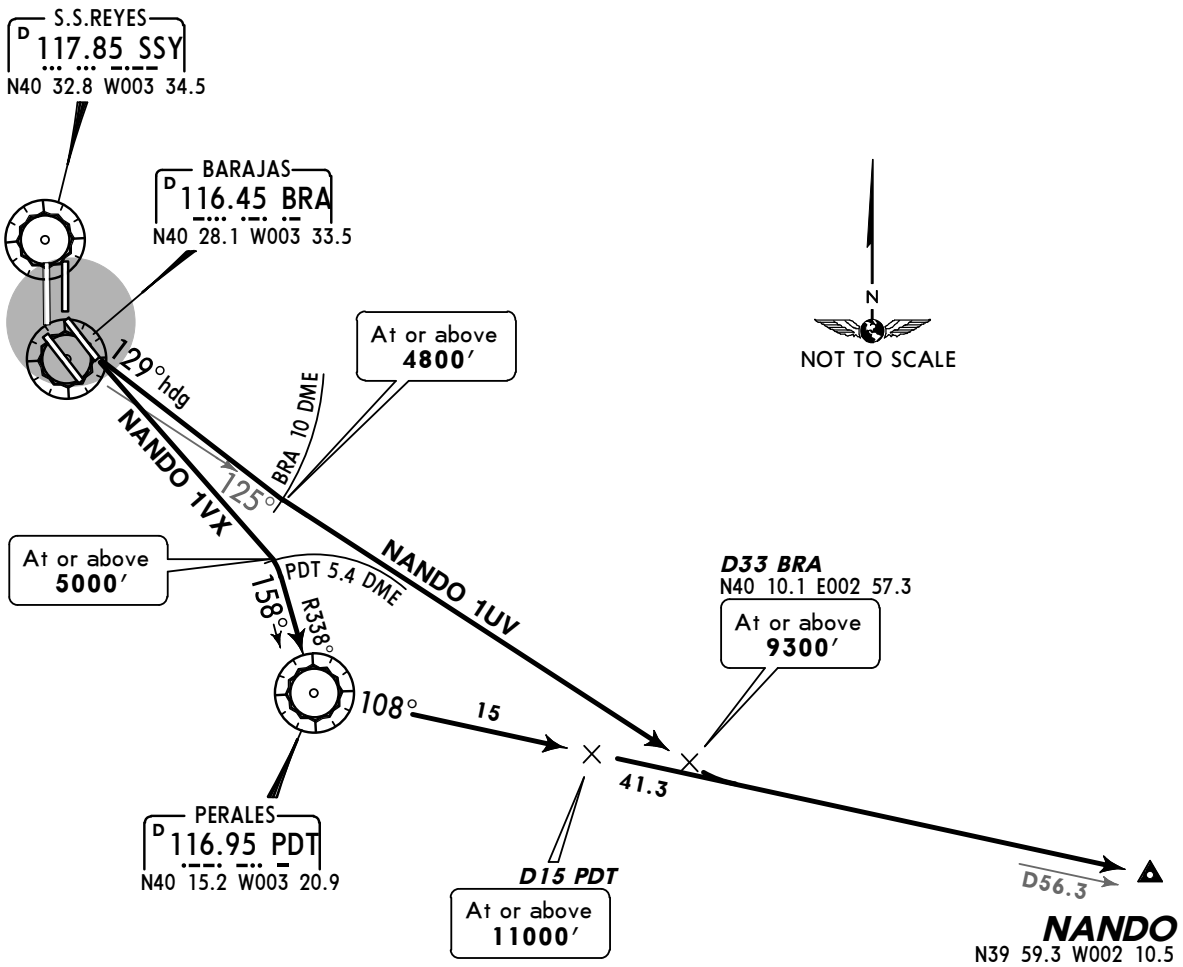
Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

NANDO ONE UNIFORM VICTOR (NANDO 1UV) *[NAN1UV]*
NANDO ONE VICTOR X-RAY (NANDO 1VX) *[NAN1VX]*
RWY 15L DEPARTURES

SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of
425′ per NM (7%) until leaving **2200′**, then
NANDO 1UV
352′ per NM (5.8%) until leaving **4800′**.
NANDO 1VX
334′ per NM (5.5%) until leaving **11000′**.

Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
352′ per NM	441	587	881	1175	1468	1762
334′ per NM	418	557	835	1114	1392	1671

NANDO 1UV: Changes in initial climb track are not permitted before DER (SSY 5 DME).

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

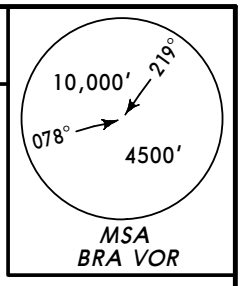
SID	ROUTING
NANDO 1UV Usable 0700-2300LT	Climb on 129° heading to BRA 10 DME, turn LEFT, intercept BRA R-125 to D33 BRA, turn LEFT, intercept PDT R-108 to NANDO.
NANDO 1VX Usable 2300-0700LT	Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept PDT R-338 inbound to PDT, PDT R-108 to NANDO.

CHANGES: SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

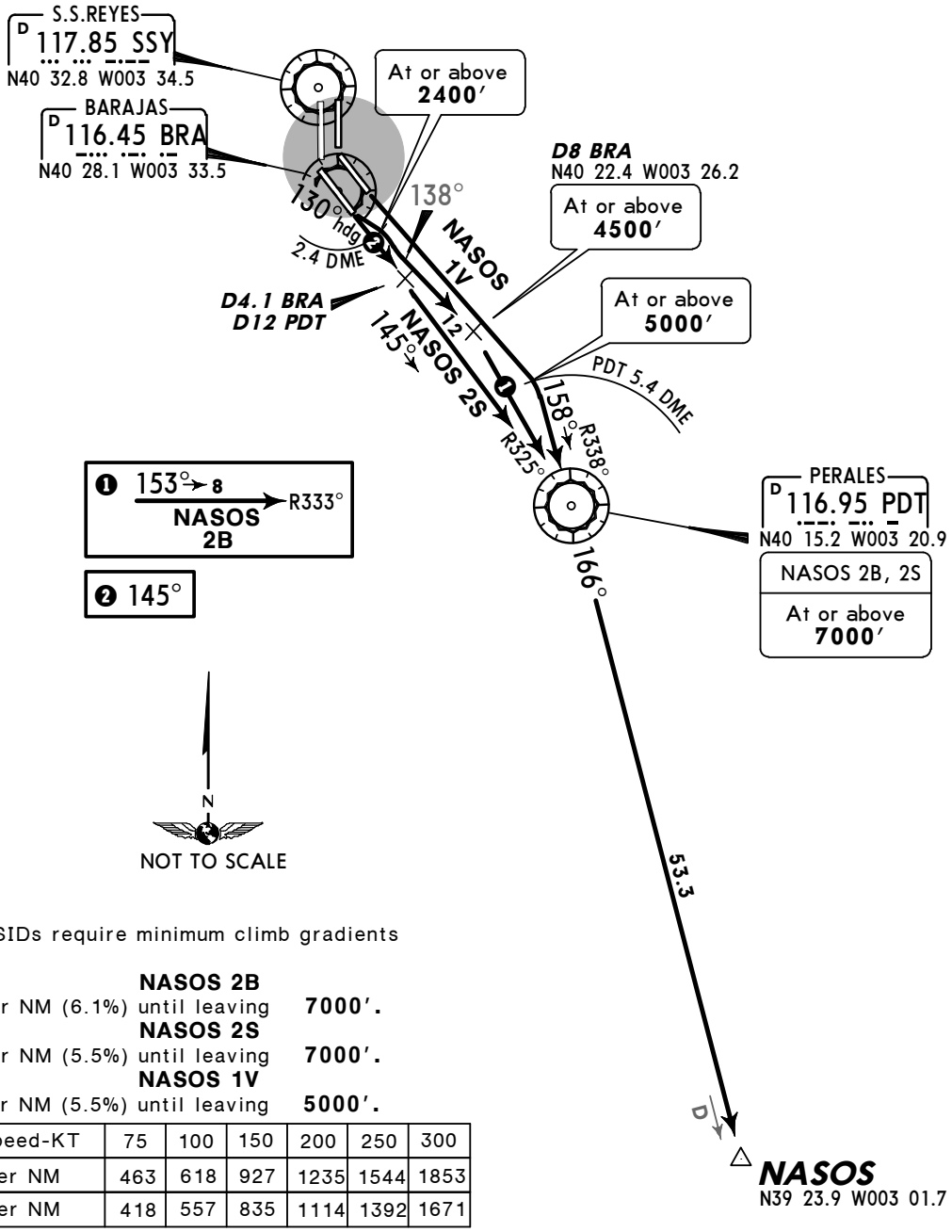
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



NASOS TWO BRAVO (NASOS 2B) *[NASO2B]*
NASOS TWO SIERRA (NASOS 2S) *[NASO2S]*
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′.**

NASOS 2S
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 DME).
NASOS 1V: Between 0700-2300LT changes in initial climb track are not permitted before DER (SSY 5 DME).

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

SID	RWY	ROUTING
NASOS 2B Usable 2300-0700LT	**15R**	Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to PDT, PDT R-166 to NASOS.
NASOS 2S Usable 0700-2300LT		Climb on BRA R-145 to D4.1 BRA/D12 PDT, turn RIGHT, intercept PDT R-325 inbound to PDT, PDT R-166 to NASOS.
NASOS 1V	**15L**	Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept PDT R-338 inbound to PDT, PDT R-166 to NASOS.

CHANGES: SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

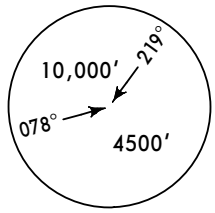
JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
9 OCT 09 (10-3T1)

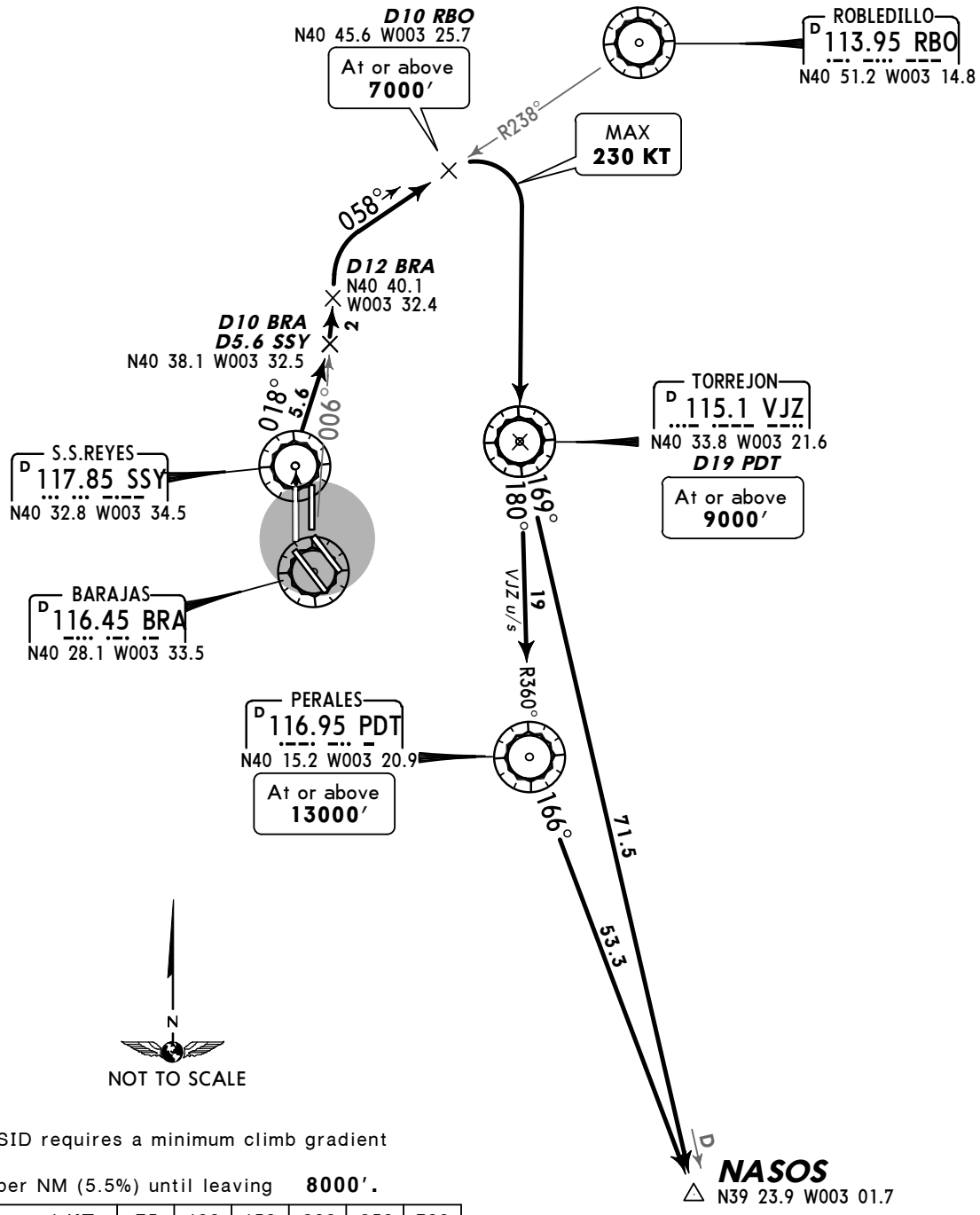
MADRID, SPAIN
SID

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. EXPECT close-in obstacles.



MSA
BRA VOR

NASOS ONE NOVEMBER (NASOS 1N) *[NASO1N]*
RWY 36L DEPARTURE
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
334′ per NM (5.5%) until leaving **8000′.**

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

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

ROUTING

Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to NASOS.

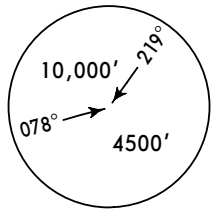
VJZ u/s: At D10 RBO turn RIGHT, intercept PDT R-360 inbound via D19 PDT to PDT, PDT R-166 to NASOS.

CHANGES: SIDs transferred.

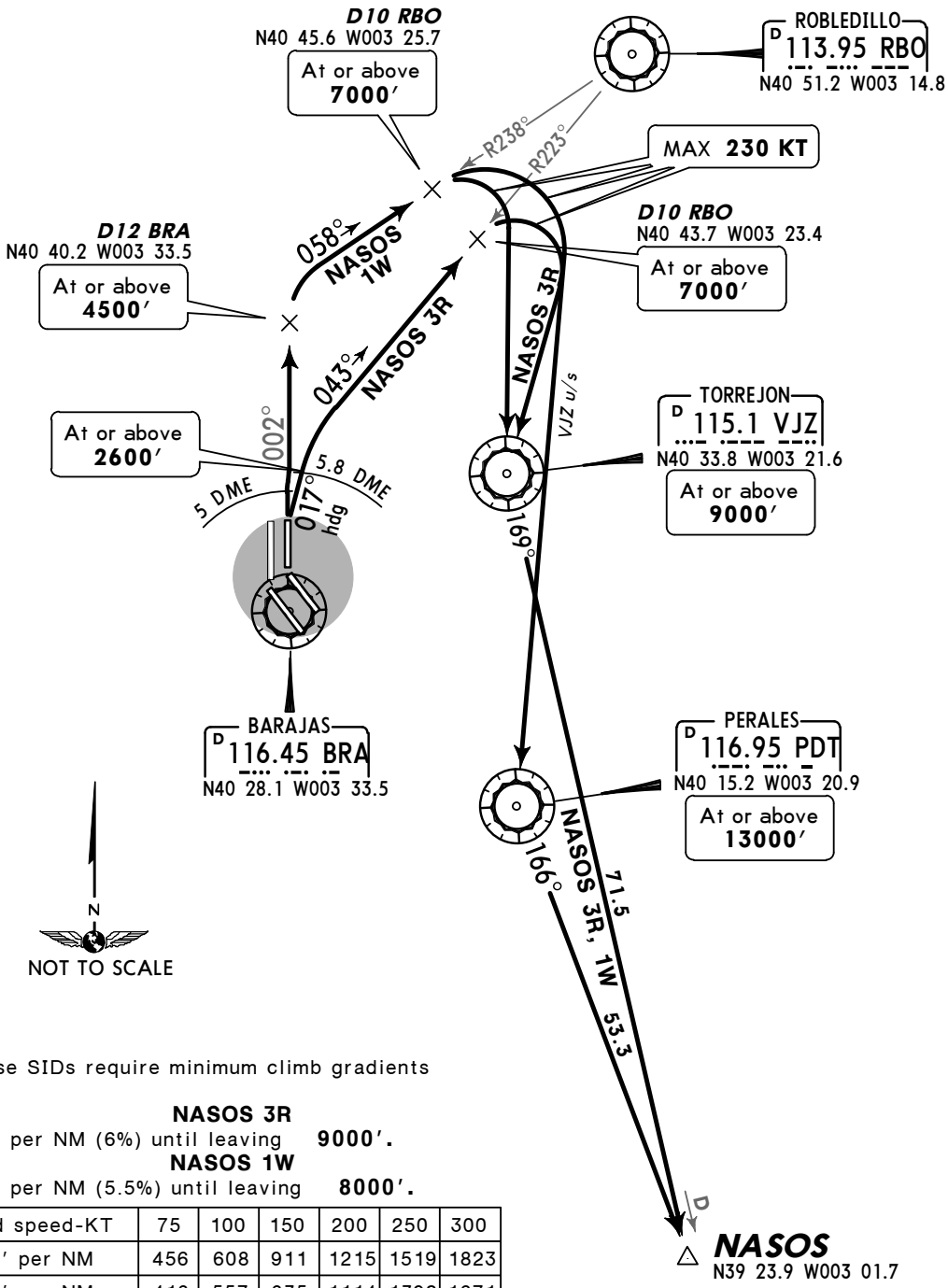
© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



NASOS THREE ROMEO (NASOS 3R) *[NASO3R]*
NASOS ONE WHISKEY (NASOS 1W) *[NASO1W]*
RWY 36R DEPARTURES
SPEED: *MAX 250 KT BELOW 10000′*



These SIDs require minimum climb gradients of

NASOS 3R
365′ per NM (6%) until leaving **9000′.**

NASOS 1W
334′ per NM (5.5%) until leaving **8000′.**

Gnd speed-KT	75	100	150	200	250	300
365′ per NM	456	608	911	1215	1519	1823
334′ per NM	418	557	835	1114	1392	1671

NASOS 3R: Changes in initial climb track are not permitted before DER (BRA 3.8 DME).

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

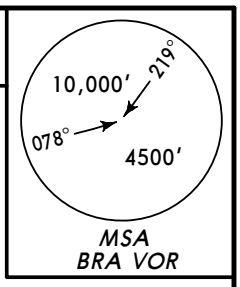
SID	ROUTING
NASOS 3R Usable 0700-2300LT	Climb on 017° heading to BRA 5.8 DME, intercept RBO R-223 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to NASOS. **VJZ u/s:** At D10 RBO turn RIGHT to PDT, PDT R-166 to NASOS.
NASOS 1W Usable 2300-0700LT	Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to NASOS. **VJZ u/s:** At D10 RBO turn RIGHT to PDT, PDT R-166 to NASOS.

CHANGES: SIDs transferred.

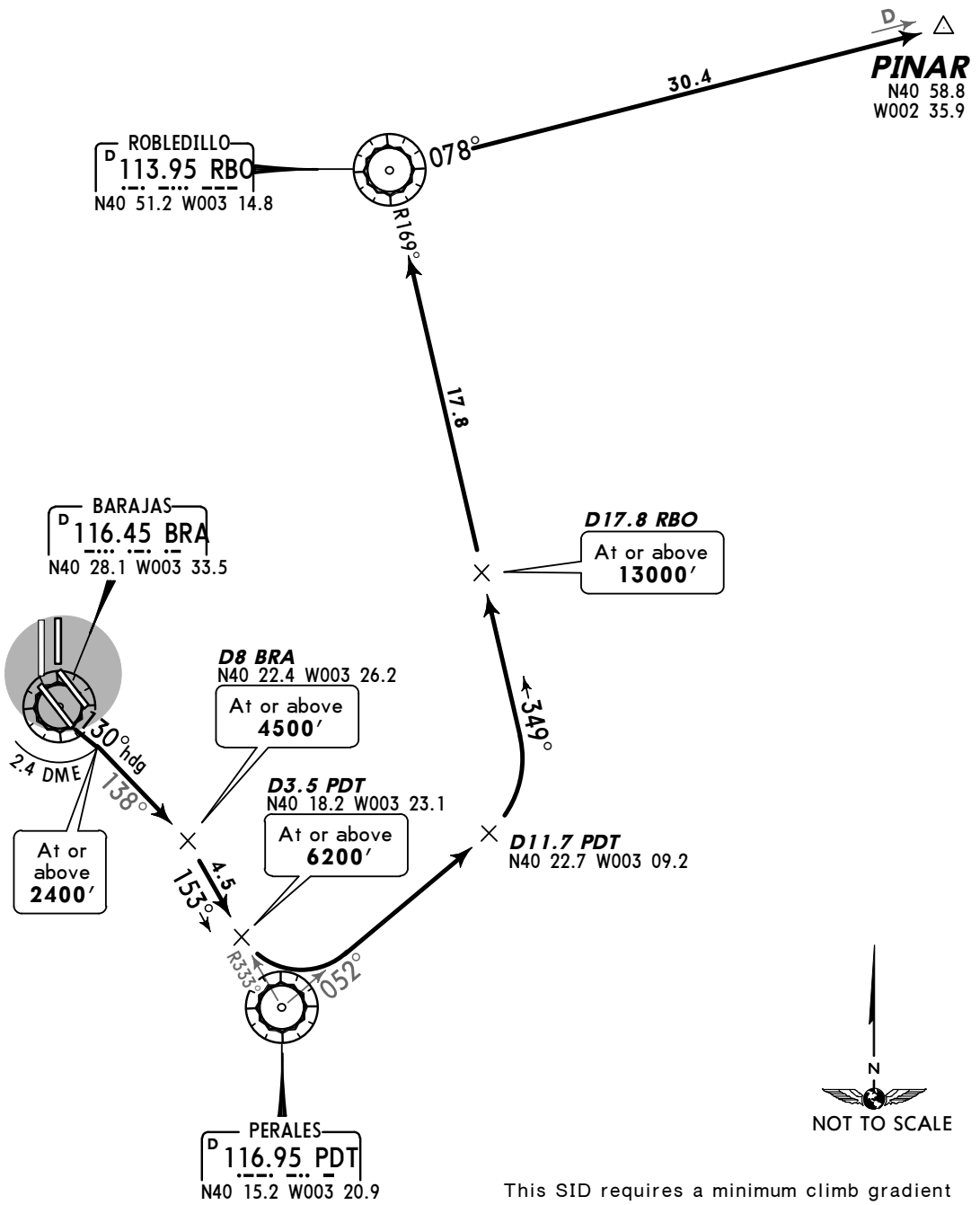
© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



PINAR TWO BRAVO (PINAR 2B) *[PINA2B]*
RWY 15R DEPARTURE
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
371′ per NM (6.1%) until leaving **13000′.**

Gnd speed-KT	75	100	150	200	250	300
371′ per NM	463	618	927	1235	1544	1853

Between 2300-0700LT changes in initial climb track are not permitted before DER (BRA 1 DME).

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

ROUTING

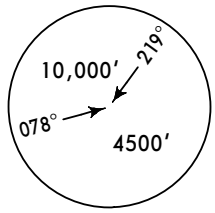
Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to D3.5 PDT, turn LEFT, intercept PDT R-052 to D11.7 PDT, turn LEFT, intercept RBO R-169 inbound to RBO, RBO R-078 to PINAR.

CHANGES: SIDs transferred.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

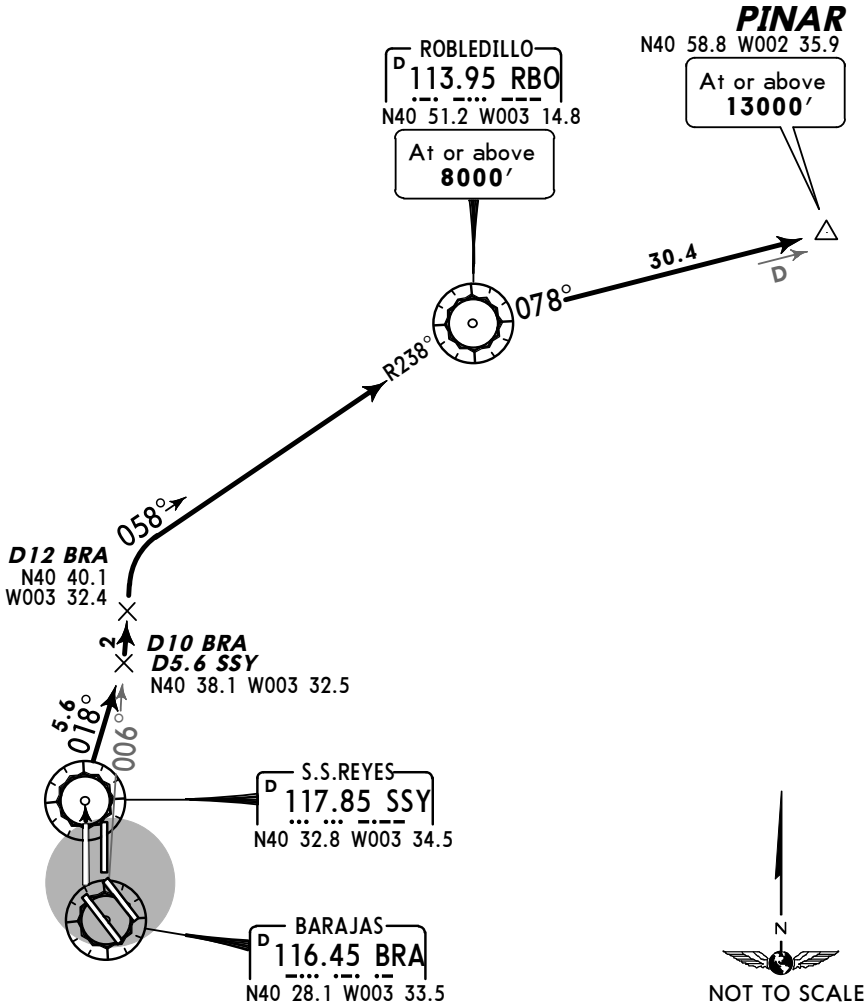
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. EXPECT close-in obstacles.



MSA
BRA VOR

PINAR TWO NOVEMBER (PINAR 2N) *[PINA2N]*
RWY 36L DEPARTURE
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
334′ per NM (5.5%) until leaving **8000′.**

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

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

ROUTING

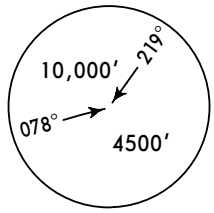
Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to RBO, RBO R-078 to PINAR.

CHANGES: SIDs transferred.

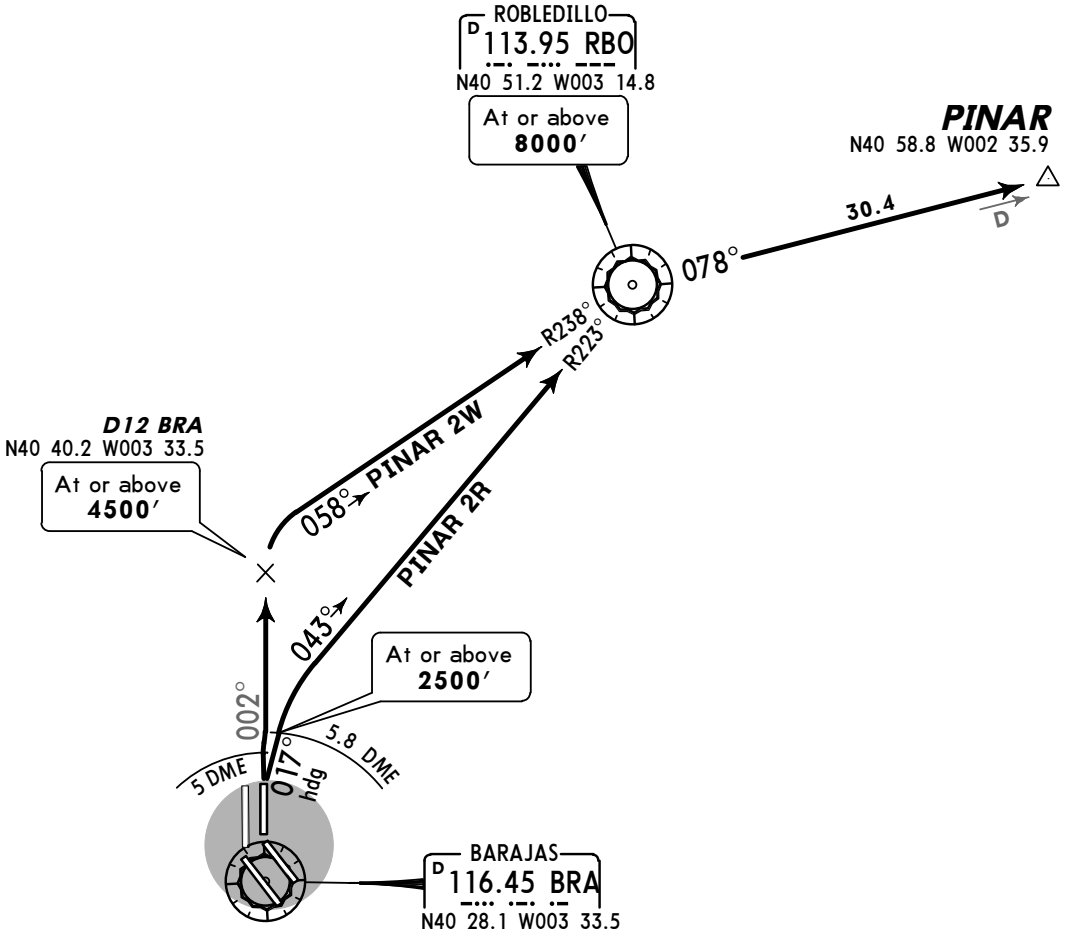
© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



PINAR TWO ROMEO (PINAR 2R) *[PINA2R]*
PINAR TWO WHISKEY (PINAR 2W) *[PINA2W]*
RWY 36R DEPARTURES
SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of

PINAR 2R
304′ per NM (5%) until leaving **8000′.**

PINAR 2W
334′ per NM (5.5%) until leaving **8000′.**

Gnd speed-KT	75	100	150	200	250	300
334′ per NM	418	557	835	1114	1392	1671
304′ per NM	380	506	760	1013	1266	1519

PINAR 2R: Changes in initial climb track are not permitted before DER (BRA 3.8 DME).

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

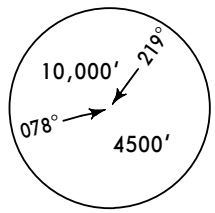
SID	ROUTING
PINAR 2R Usable 0700-2300LT	Climb on 017° heading to BRA 5.8 DME, intercept RBO R-223 inbound to RBO, RBO R-078 to PINAR.
PINAR 2W Usable 2300-0700LT	Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to RBO, RBO R-078 to PINAR.

CHANGES: SIDs transferred.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

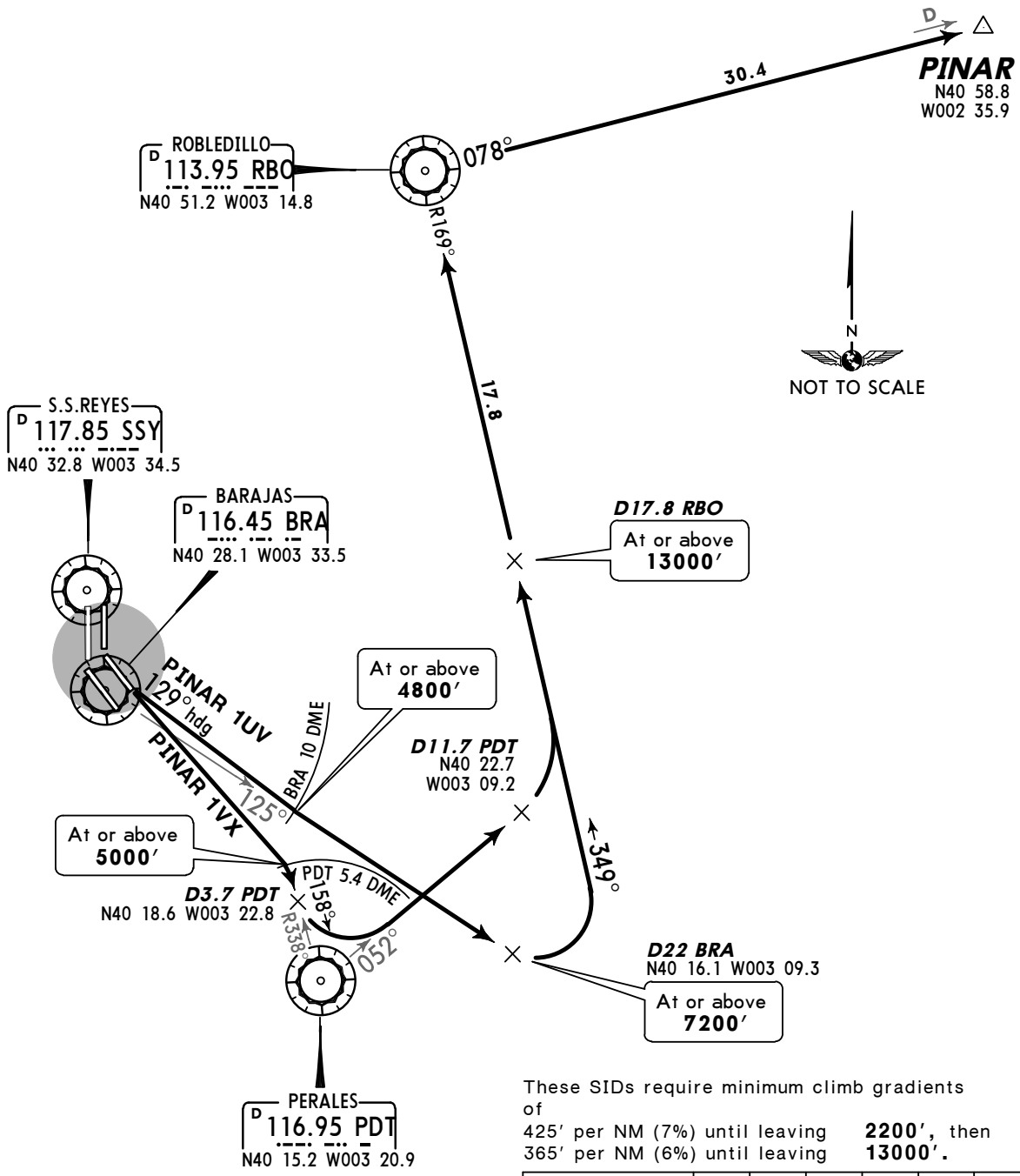
Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

PINAR ONE UNIFORM VICTOR (PINAR 1UV) *[PIN1UV]*
PINAR ONE VICTOR X-RAY (PINAR 1VX) *[PIN1VX]*
RWY 15L DEPARTURES

SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of
425′ per NM (7%) until leaving **2200′**, then
365′ per NM (6%) until leaving **13000′**.

Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
365′ per NM	456	608	911	1215	1519	1823

PINAR 1UV: Changes in initial climb track are not permitted before DER (SSY 5 DME).

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

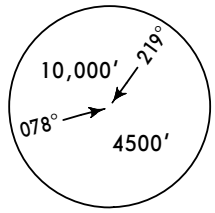
SID	ROUTING
PINAR 1UV Usable 0700-2300LT	Climb on 129° heading to BRA 10 DME, turn LEFT, intercept BRA R-125 to D22 BRA, turn LEFT, intercept RBO R-169 inbound to RBO, RBO R-078 to PINAR.
PINAR 1VX Usable 2300-0700LT	Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept PDT R-338 inbound to D3.7 PDT, turn LEFT, intercept PDT R-052 to D11.7 PDT, turn LEFT, intercept RBO R-169 inbound to RBO, RBO R-078 to PINAR.

CHANGES: SIDs transferred.

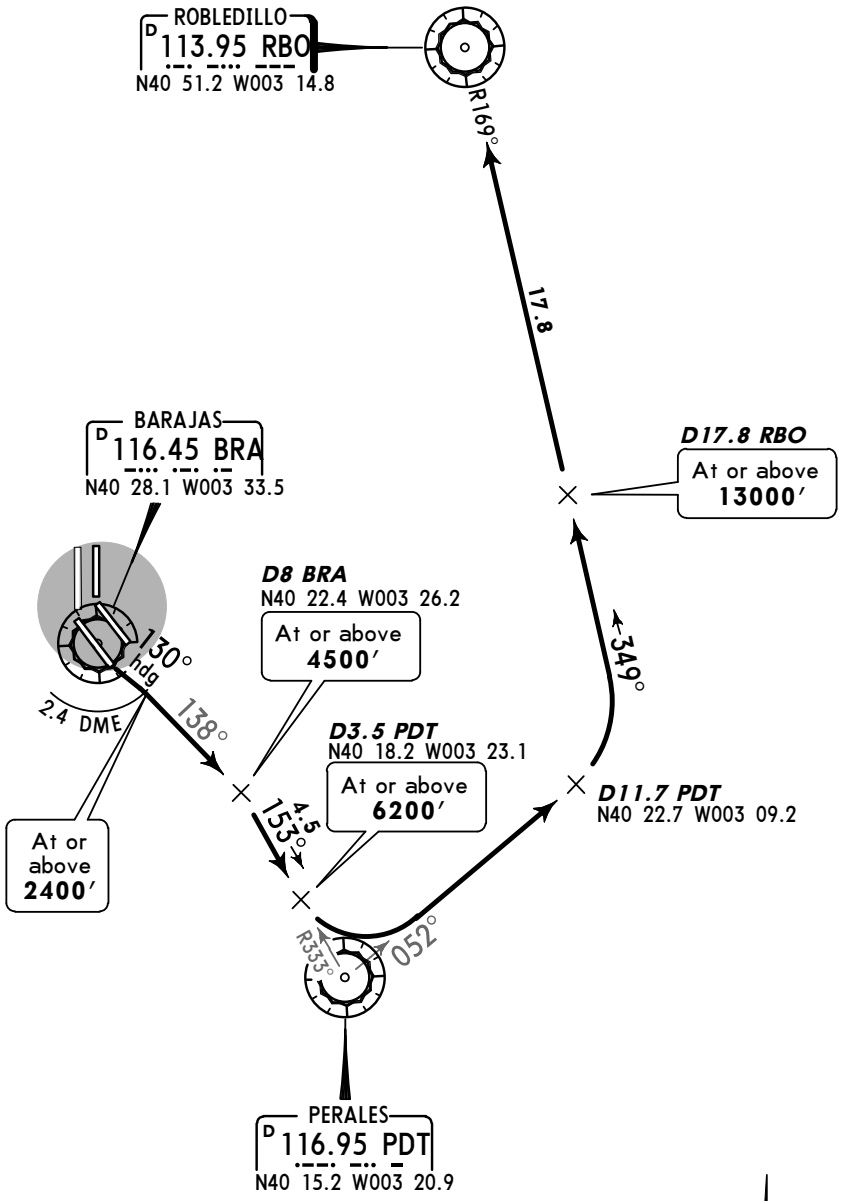
© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



ROBLEDILLO ONE BRAVO (RBO 1B)
RWY 15R DEPARTURE
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
371′ per NM (6.1%) until leaving **13000′.**

Gnd speed-KT	75	100	150	200	250	300
371′ per NM	463	618	927	1235	1544	1853

Beween 2300-0700LT changes in initial climb track are not permitted before DER (BRA 1 DME).

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

ROUTING

Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to D3.5 PDT, turn LEFT, intercept PDT R-052 to D11.7 PDT, turn LEFT, intercept RBO R-169 inbound to RBO.

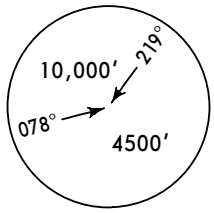
CHANGES: SIDs transferred.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

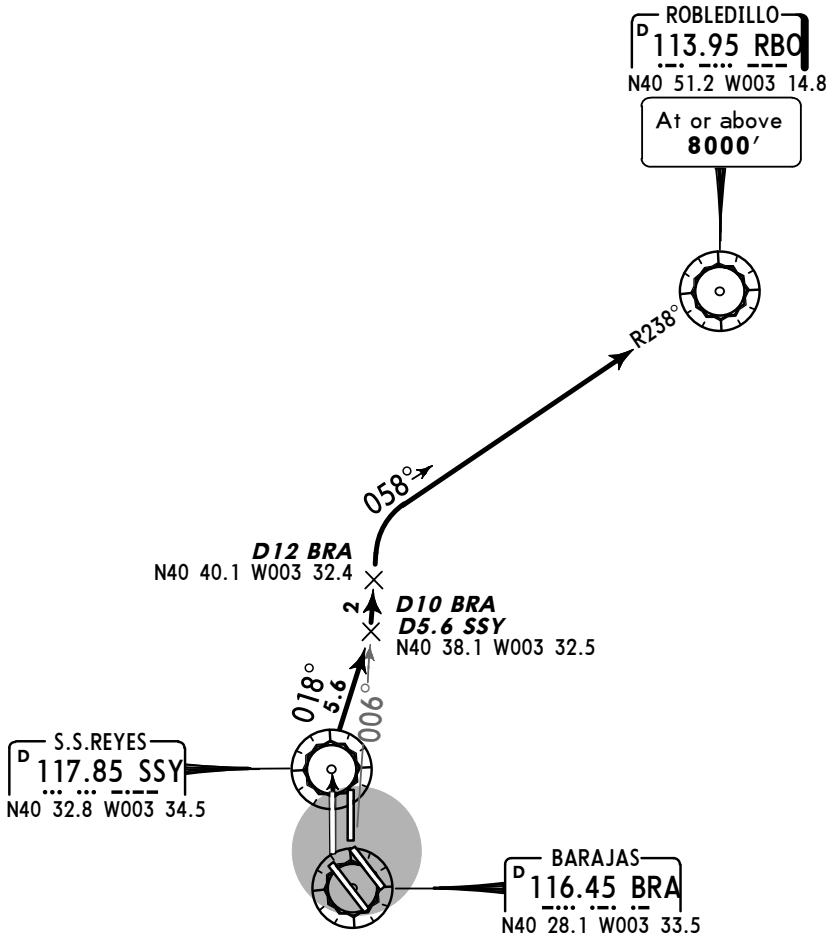
JEPPESEN
JeppView 3.7.2.1

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. EXPECT close-in obstacles.



MSA
BRA VOR

ROBLEDILLO ONE NOVEMBER (RBO 1N)
RWY 36L DEPARTURES
SPEED: MAX 250 KT BELOW 10000′



NOT TO SCALE

This SID requires a minimum climb gradient of
334′ per NM (5.5%) until leaving **8000′.**

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

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

ROUTING

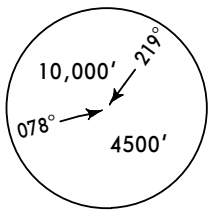
Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to RBO.

CHANGES: SID SIE 2C withdrawn; SIDs transferred.

© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

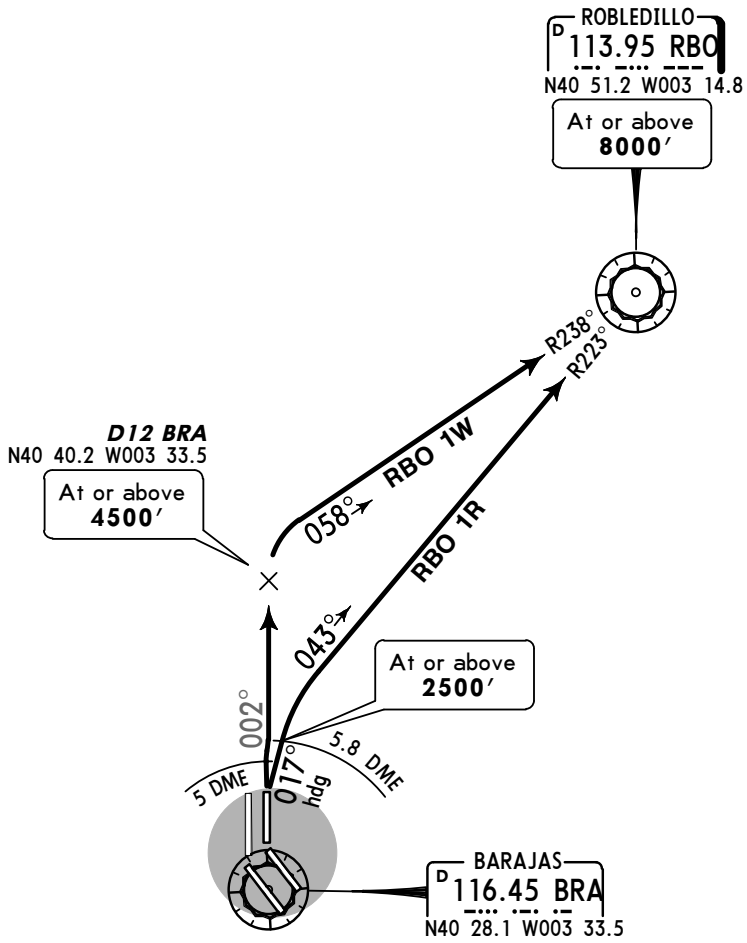
Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

ROBLEDILLO ONE ROMEO (RBO 1R)
ROBLEDILLO ONE WHISKEY (RBO 1W)
RWY 36R DEPARTURES

SPEED: MAX 250 KT BELOW 10000′

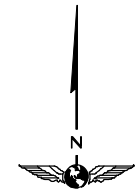


These SIDs require minimum climb gradients of

RBO 1R
304′ per NM (5%) until leaving **8000′.**

RBO 1W
334′ per NM (5.5%) until leaving **8000′.**

Gnd speed-KT	75	100	150	200	250	300
334′ per NM	418	557	835	1114	1392	1671
304′ per NM	380	506	760	1013	1266	1519



NOT TO SCALE

RBO 1R: Changes in initial climb track are not permitted before DER (BRA 3.8 DME).

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

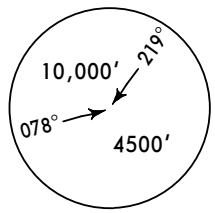
SID	ROUTING
RBO 1R Usable 0700-2300LT	Climb on 017° heading to BRA 5.8 DME, intercept RBO R-223 inbound to RBO.
RBO 1W Usable 2300-0700LT	Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to RBO.

CHANGES: SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

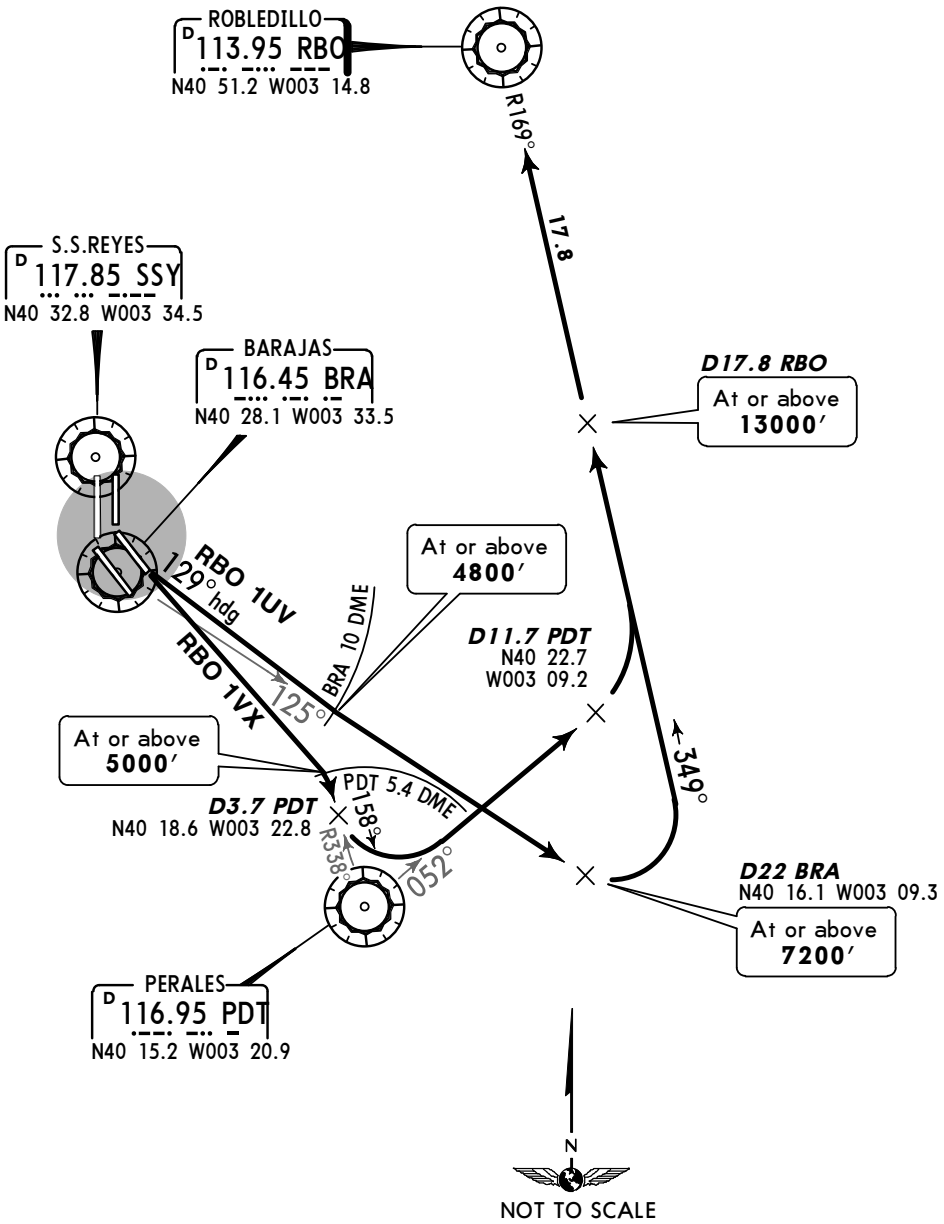
Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

ROBLEDILLO ONE UNIFORM VICTOR (RBO 1UV)
ROBLEDILLO ONE VICTOR X-RAY (RBO 1VX)
RWY 15L DEPARTURES

SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of

425′ per NM (7%) until leaving **2200′**, then **RBO 1UV**

365′ per NM (6%) until leaving **13000′**. **RBO 1VX**

304′ per NM (5%) until leaving **13000′**.

Gnd speed-KT	75	100	150	200	250	300
425′ per NM	532	709	1063	1418	1772	2127
365′ per NM	456	608	911	1215	1519	1823
304′ per NM	380	506	760	1013	1266	1519

RBO 1UV: Changes in initial climb track are not permitted before DER (SSY 5 DME).

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

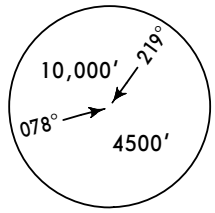
SID	ROUTING
RBO 1UV Usable 0700-2300LT	Climb on 129° heading to BRA 10 DME, turn LEFT, intercept BRA R-125 to D22 BRA, turn LEFT, intercept RBO R-169 inbound to RBO.
RBO 1VX Usable 2300-0700LT	Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept PDT R-338 inbound to D3.7 PDT, turn LEFT, intercept PDT R-052 to D11.7 PDT, turn LEFT, intercept RBO R-169 inbound to RBO.

CHANGES: SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

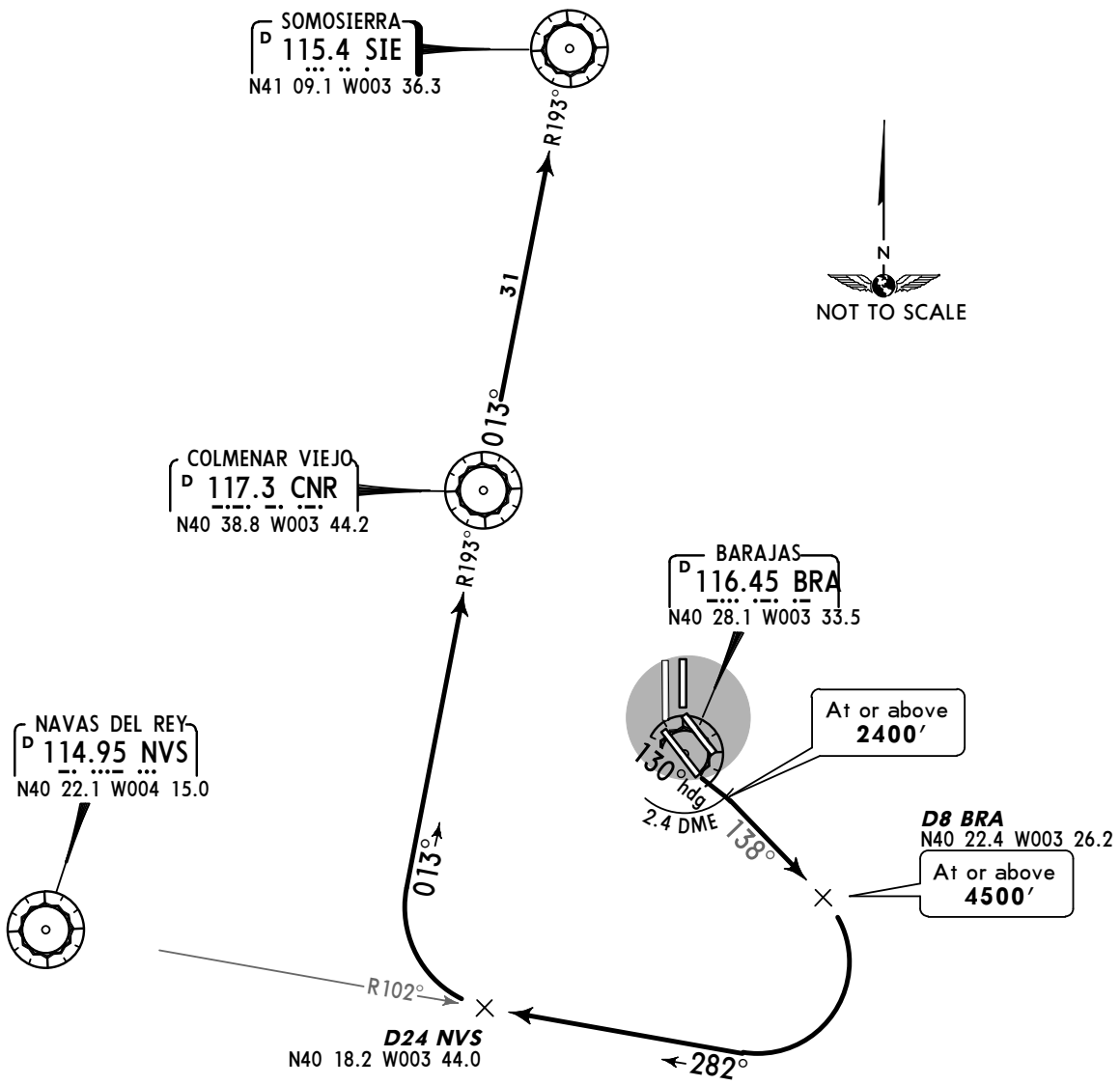
Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

SOMOSIERRA TWO BRAVO (SIE 2B)
RWY 15R DEPARTURE
USABLE 2300-0700LT

SPEED: MAX 250 KT BELOW 10000′



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	1114	1392	1671
273′ per NM	342	456	684	911	1139	1367

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

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

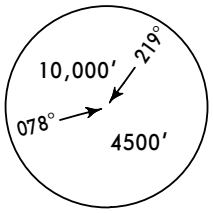
ROUTING

Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept NVS R-102 inbound to D24 NVS, turn RIGHT, intercept CNR R-193 inbound to CNR, intercept SIE R-193 inbound to SIE.

CHANGES: SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010



MSA
BRA VOR

Apt Elev
2001′

Trans level: By ATC Trans alt: 13000′
1. SIDs are also noise abatement procedures (refer to 10-4A).
2. EXPECT close-in obstacles.

SOMOSIERRA TWO LIMA (SIE 2L)❶
SOMOSIERRA ONE NOVEMBER QUEBEC (SIE 1NQ)
RWY 36L DEPARTURES

SPEED: MAX 250 KT BELOW 10000′

❶ For aircraft usability refer to Airport Briefing Pages.

SOMOSIERRA
D 115.4 SIE
N41 09.1 W003 36.3
At or above **12000′**

R188°
R174°
15
❷
D15 SIE
At or above **9000′**
SIE 2L
9
354°
D17 BRA
N40 45.1 W003 31.9
At or above **6500′**
7
SIE 1NQ
D10 BRA
D5.6 SSY
N40 38.1 W003 32.5
D5.7 SSY
N40 37.2 W003 39.3
At or above **5200′**
800°
5.6
018°
900°
322°
❸
S.S.REYES
D 117.85 SSY
N40 32.8 W003 34.5
BARAJAS
D 116.45 BRA
N40 28.1 W003 33.5

N
NOT TO SCALE

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

❸ ←292°

SIE 2L
BANK 15° MAX **180 KT**
BANK 20° MAX **210 KT**
BANK 25° MAX **240 KT**

These SIDs require minimum climb gradients of
SIE 2L
456′ per NM (7.5%) until leaving **10000′.**
SIE 1NQ
389′ per NM (6.4%) until leaving **8000′.**

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
389′ per NM	486	648	972	1296	1620	1944

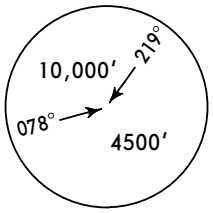
Initial ATC clearance: Maintain **13000′** and request flight level change enroute

SID	ROUTING
SIE 2L Usable 0700-2300LT	Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D5.7 SSY, turn RIGHT, intercept SIE R-188 inbound to SIE.
SIE 1NQ Usable 2300-0700LT	Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D17 BRA, turn LEFT, intercept SIE R-174 inbound to SIE.

CHANGES: SID TEMIR 3C withdrawn; SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010



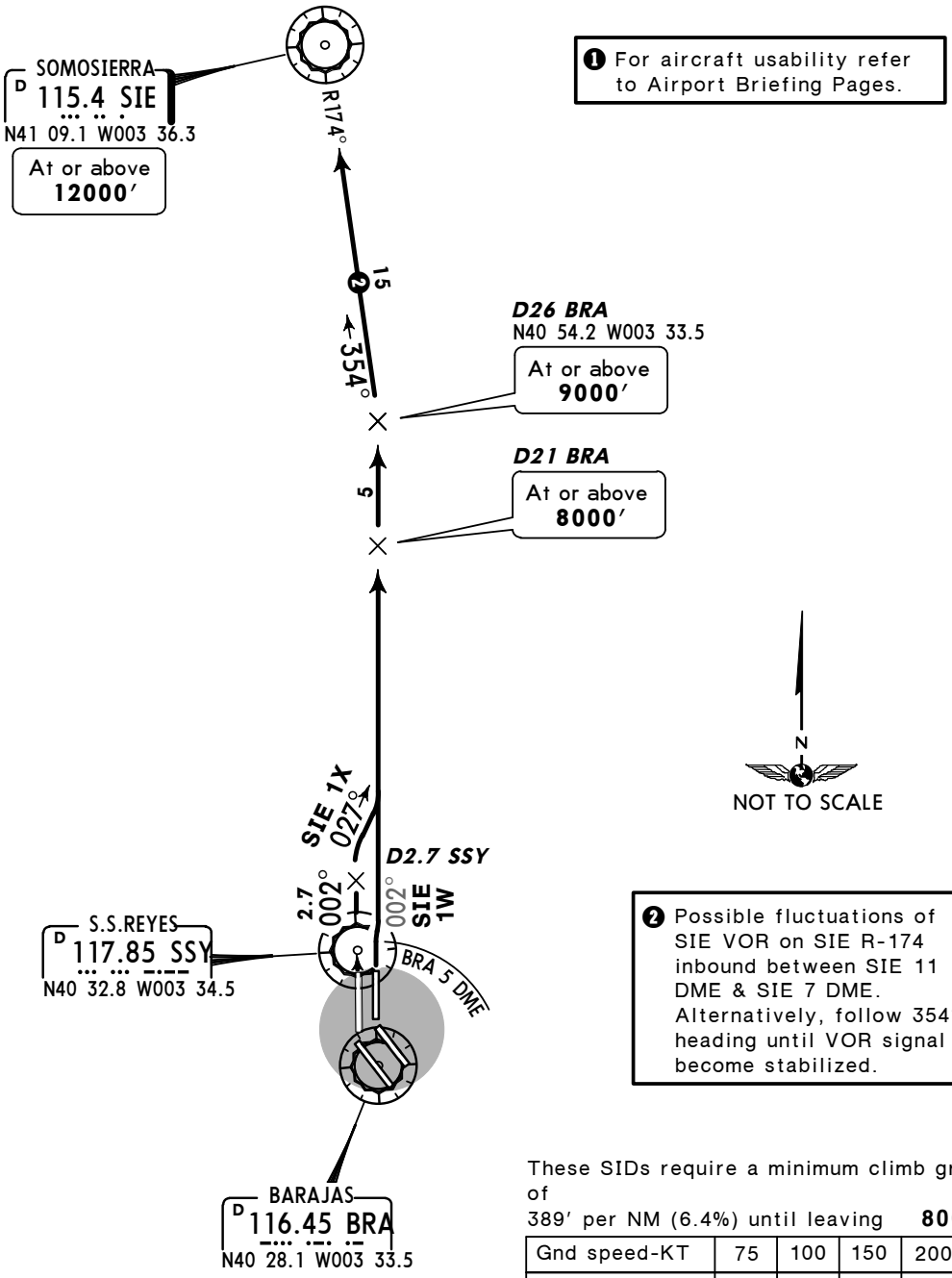
MSA
BRA VOR

Apt Elev
2001′

Trans level: By ATC Trans alt: 13000′
1. SIDs are also noise abatement procedures (refer to 10-4A).
2. RWY 36L: EXPECT close-in obstacles.

SOMOSIERRA ONE WHISKEY (SIE 1W)
SOMOSIERRA ONE X-RAY (SIE 1X)❶
RWYS 36L/R DEPARTURES

SPEED: MAX 250 KT BELOW 10000′



❶ For aircraft usability refer to Airport Briefing Pages.

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

These SIDs require 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

SIE 1W: Between 0700-2300LT changes in initial climb track are not permitted before DER (BRA 3.8 DME).

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

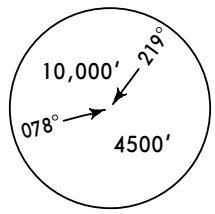
SID	RWY	ROUTING
SIE 1W	**36R**	Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE.
SIE 1X Usable 0700-2300LT	**36L**	Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° track, intercept BRA R-002 to D26 BRA, turn LEFT, intercept SIE R-174 inbound to SIE.

CHANGES: SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

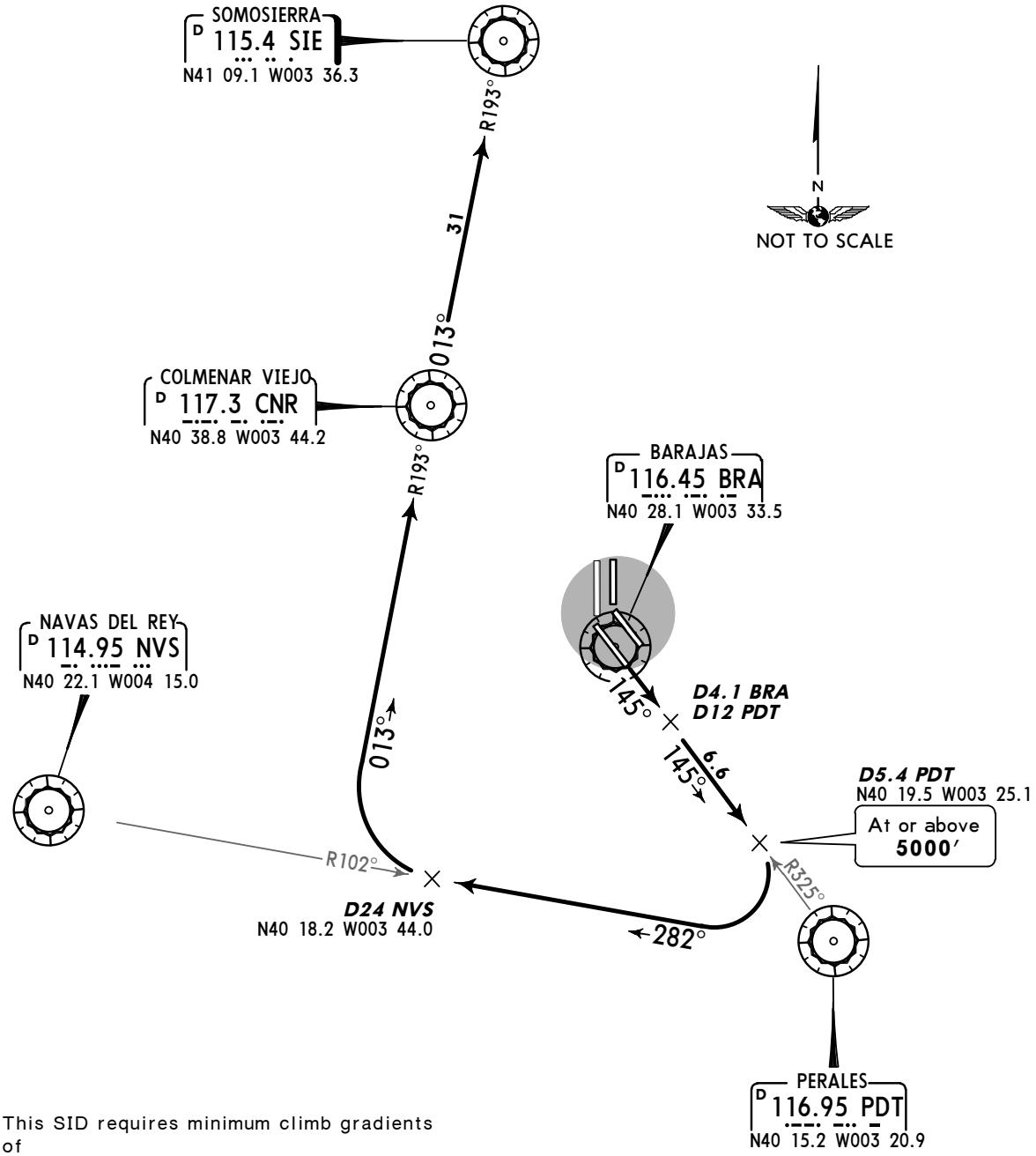
Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

SOMOSIERRA TWO SIERRA (SIE 2S)
RWY 15R DEPARTURE
USABLE 0700-2300LT

SPEED: MAX 250 KT BELOW 10000′



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	1114	1392	1671
273′ per NM	342	456	684	911	1139	1367

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

ROUTING

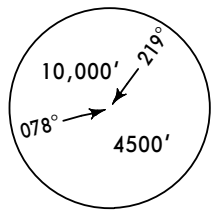
Climb on BRA R-145 to D4.1 BRA/D12 PDT, turn RIGHT, intercept PDT R-325 inbound to D5.4 PDT, turn RIGHT, intercept NVS R-102 inbound to D24 NVS, turn RIGHT, intercept CNR R-193 inbound to CNR, intercept SIE R-193 inbound to SIE.

CHANGES: SIDs transferred.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

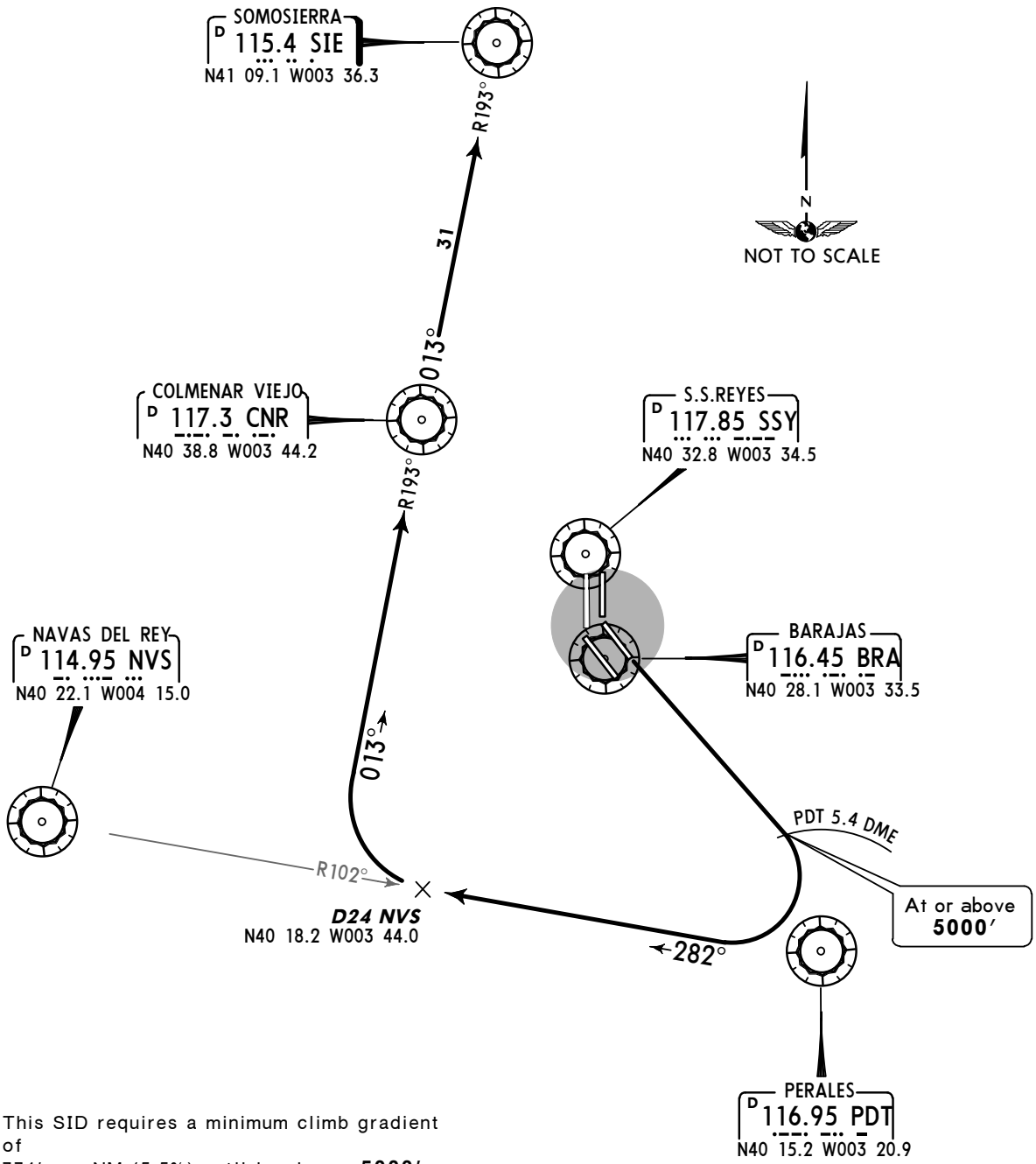
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

SOMOSIERRA TWO VICTOR (SIE 2V)
RWY 15L DEPARTURE
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
334′ per NM (5.5%) until leaving **5000′.**

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

Between 0700-2300LT changes in initial climb track are not permitted before DER (SSY 5 DME).

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

ROUTING

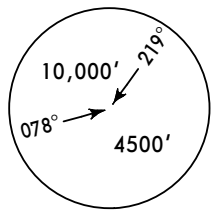
Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept NVS R-102 inbound to D24 NVS, turn RIGHT, intercept CNR R-193 inbound to CNR, intercept SIE R-193 inbound to SIE.

CHANGES: New chart (SIDs transferred).

© JEPPESEN, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

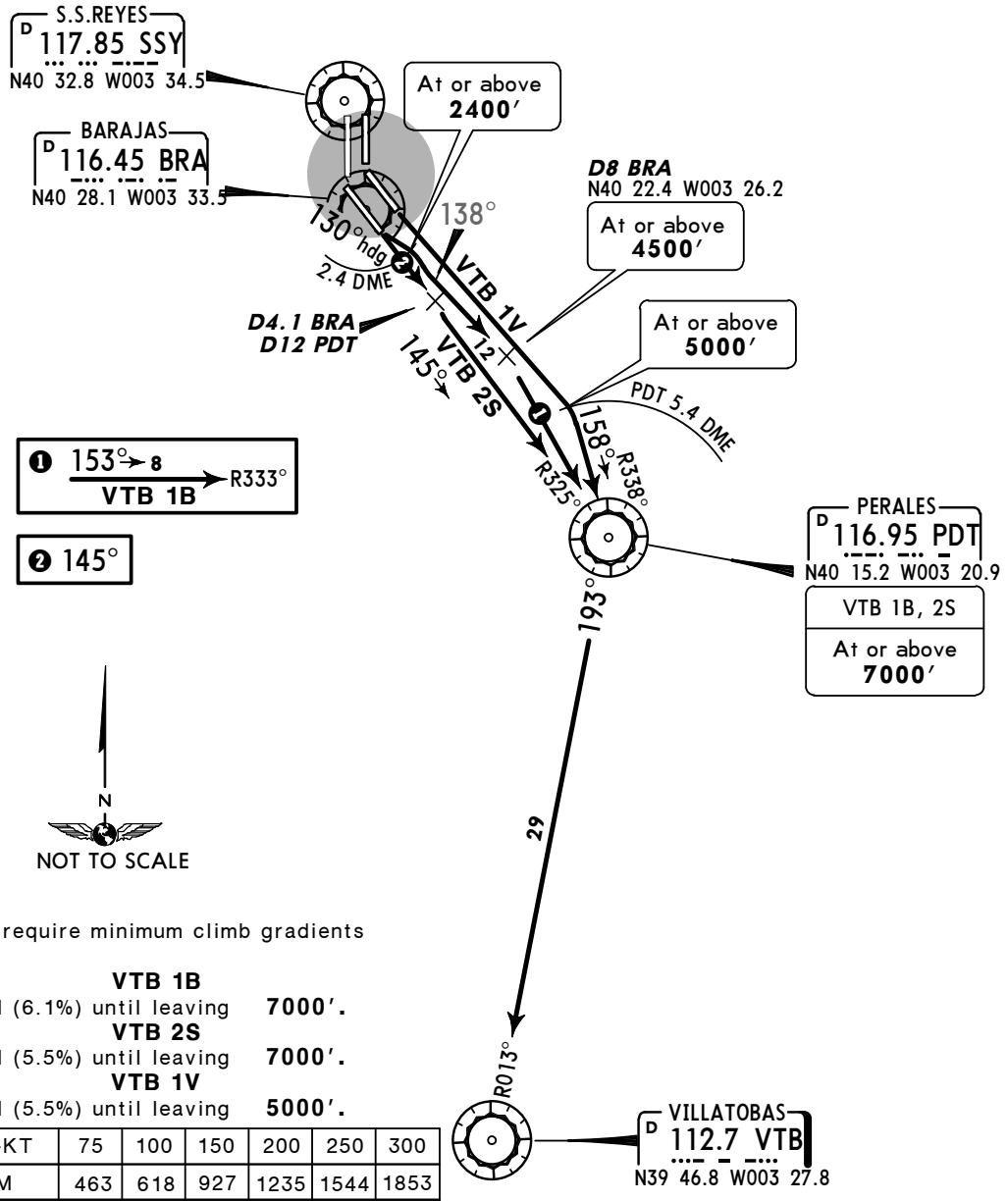
Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

VILLATOBAS ONE BRAVO (VTB 1B)
VILLATOBAS TWO SIERRA (VTB 2S)
VILLATOBAS ONE VICTOR (VTB 1V)
RWY 15R/L DEPARTURES

SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of

VTB 1B
371′ per NM (6.1%) until leaving **7000′.**

VTB 2S
334′ per NM (5.5%) until leaving **7000′.**

VTB 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

VTB 1B: Changes in initial climb track are not permitted before DER (BRA 1 DME).
VTB 1V: Between 0700-2300LT changes in initial climb track are not permitted before DER (SSY 5 DME).

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

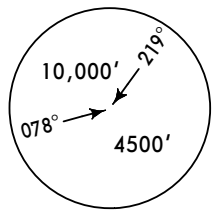
SID	RWY	ROUTING
VTB 1B Usable 2300-0700LT	**15R**	Climb on 130° heading to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept PDT R-333 inbound to PDT, turn RIGHT, intercept VTB R-013 inbound to VTB.
VTB 2S Usable 0700-2300LT		Climb on BRA R-145 to D4.1 BRA/D12 PDT, turn RIGHT, intercept PDT R-325 inbound to PDT, turn RIGHT, intercept VTB R-013 inbound to VTB.
VTB 1V	**15L**	Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept PDT R-338 inbound to PDT, turn RIGHT, intercept VTB R-013 inbound to VTB.

CHANGES: New chart (SIDs transferred).

© JEPPESEN, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ 1. SIDs are also noise abatement procedures (refer to 10-4A). 2. EXPECT close-in obstacles.



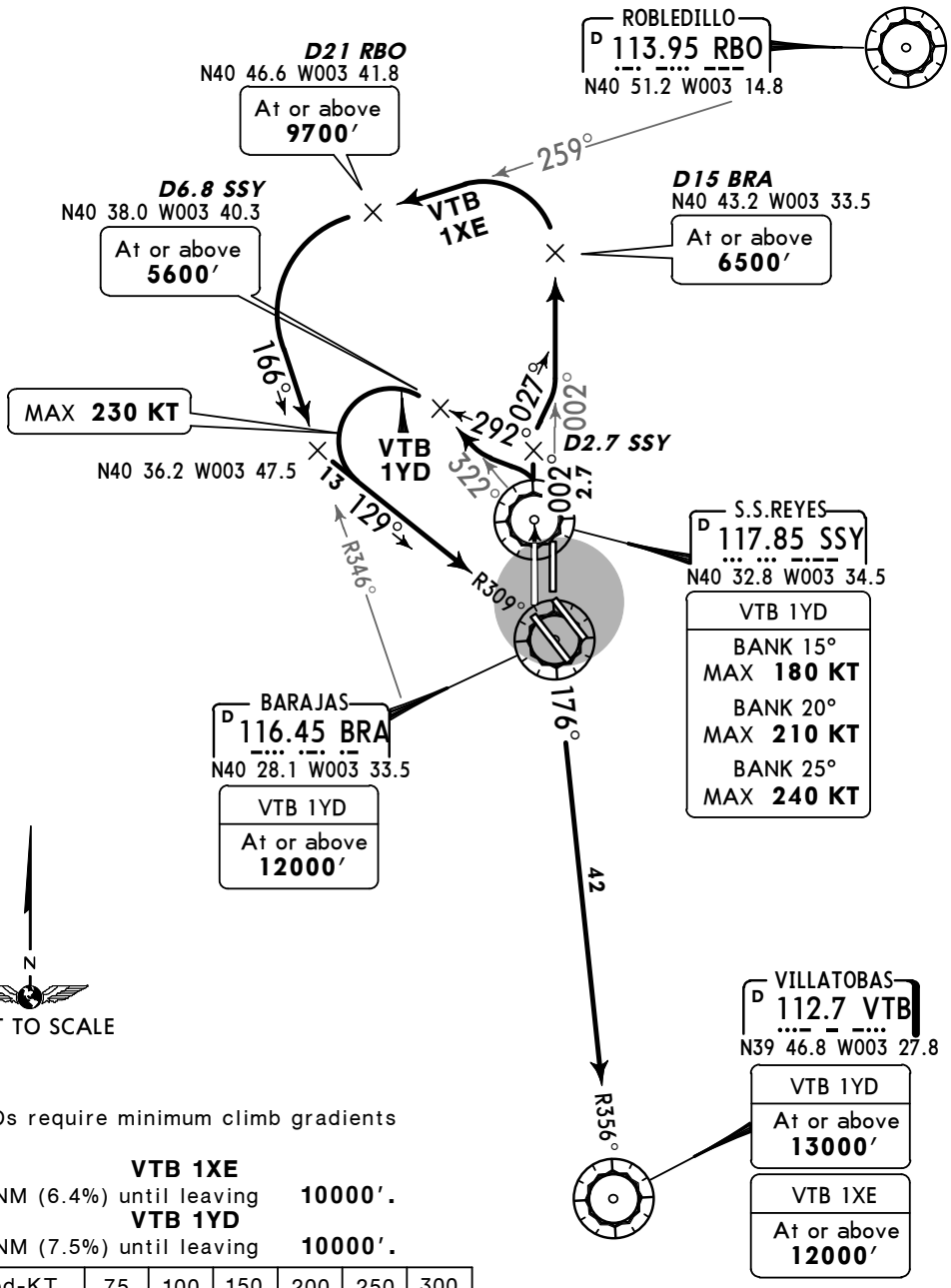
MSA
BRA VOR

VILLATOBAS ONE X-RAY ECHO (VTB 1XE)
VILLATOBAS ONE YANKEE DELTA (VTB 1YD)
RWY 36L DEPARTURES

USABLE 0700-2300LT

FOR AIRCRAFT USABILITY REFER TO AIRPORT BRIEFING PAGES

SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of

VTB 1XE
389′ per NM (6.4%) until leaving **10000′.**

VTB 1YD
456′ per NM (7.5%) until leaving **10000′.**

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
389′ per NM	486	648	972	1296	1620	1944

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

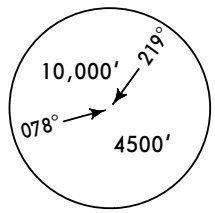
SID	ROUTING
VTB 1XE	Climb on runway heading to SSY, SSY R-002 to D2.7 SSY, turn RIGHT, 027° track, intercept BRA R-002 to D15 BRA, turn LEFT, intercept RBO R-259 to D21 RBO, turn LEFT, intercept VTB R-346 inbound, intercept BRA R-309 inbound to BRA, turn RIGHT, intercept VTB R-356 inbound to VTB.
VTB 1YD	Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D6.8 SSY, turn LEFT, intercept BRA R-309 inbound to BRA, turn RIGHT, intercept VTB R-356 inbound to VTB.

CHANGES: New chart (SIDs transferred).

© JEPPESEN, 2009. ALL RIGHTS RESERVED.

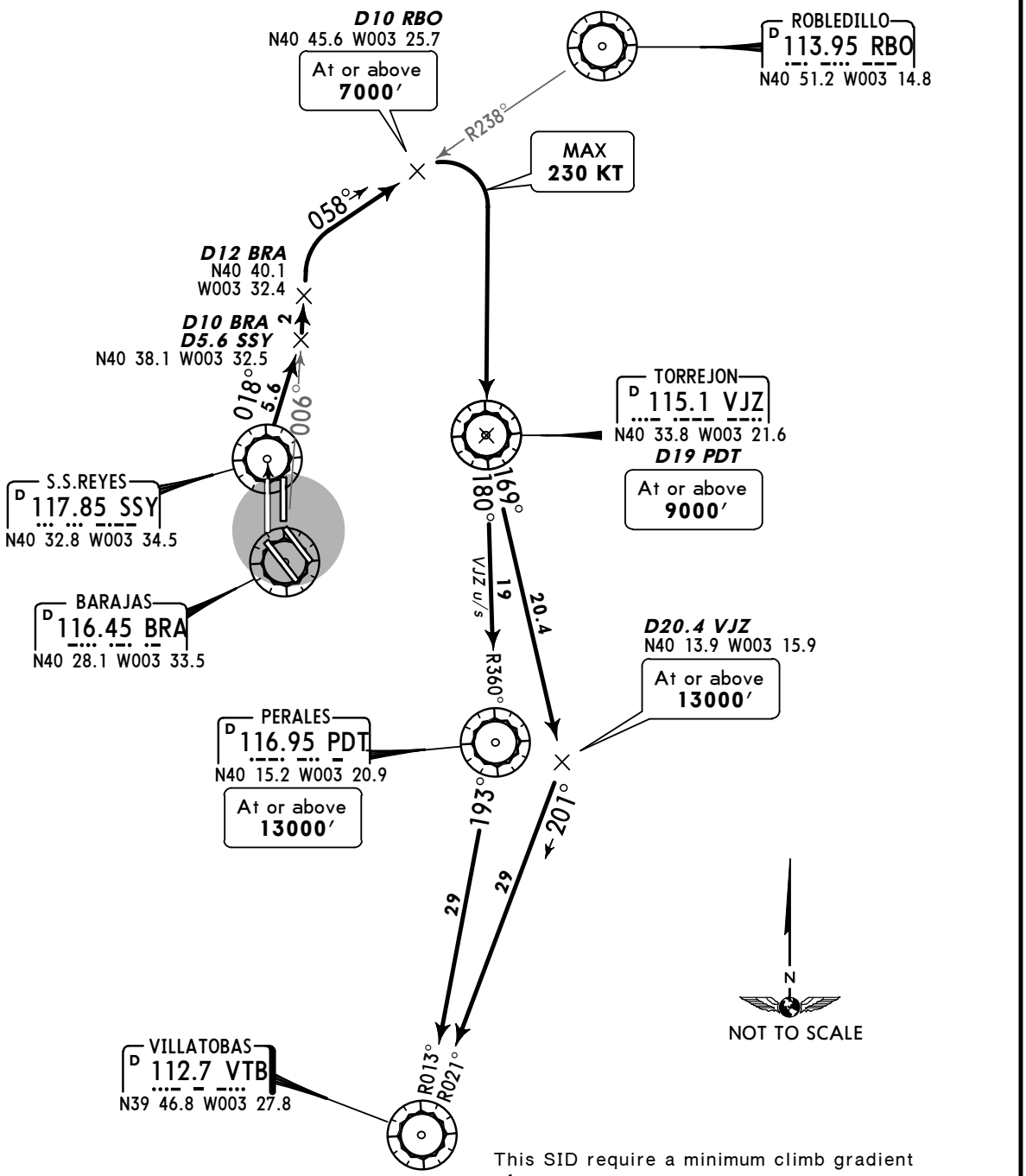
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ **1.** SIDs are also noise abatement procedures (refer to 10-4A). **2.** EXPECT close-in obstacles.



MSA
BRA VOR

VILLATOBAS ONE NOVEMBER FOXTROT (VTB 1NF)
RWY 36L DEPARTURES
USABLE BETWEEN 2300-0700LT
SPEED: MAX 250 KT BELOW 10000′



This SID require a minimum climb gradient of
334′ per NM (5.5%) until leaving **8000′.**

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

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

ROUTING

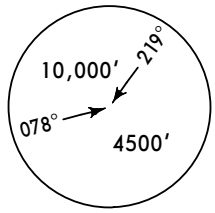
Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to D20.4 VJZ, turn RIGHT, intercept VTB R-021 inbound to VTB.
VJZ u/s: At D10 RBO turn RIGHT, intercept PDT R-360 inbound via D19 PDT to PDT, turn RIGHT, intercept VTB R-013 inbound to VTB.

CHANGES: SIDs VTB 3F & 2G replaced by VTB 1NF.

© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

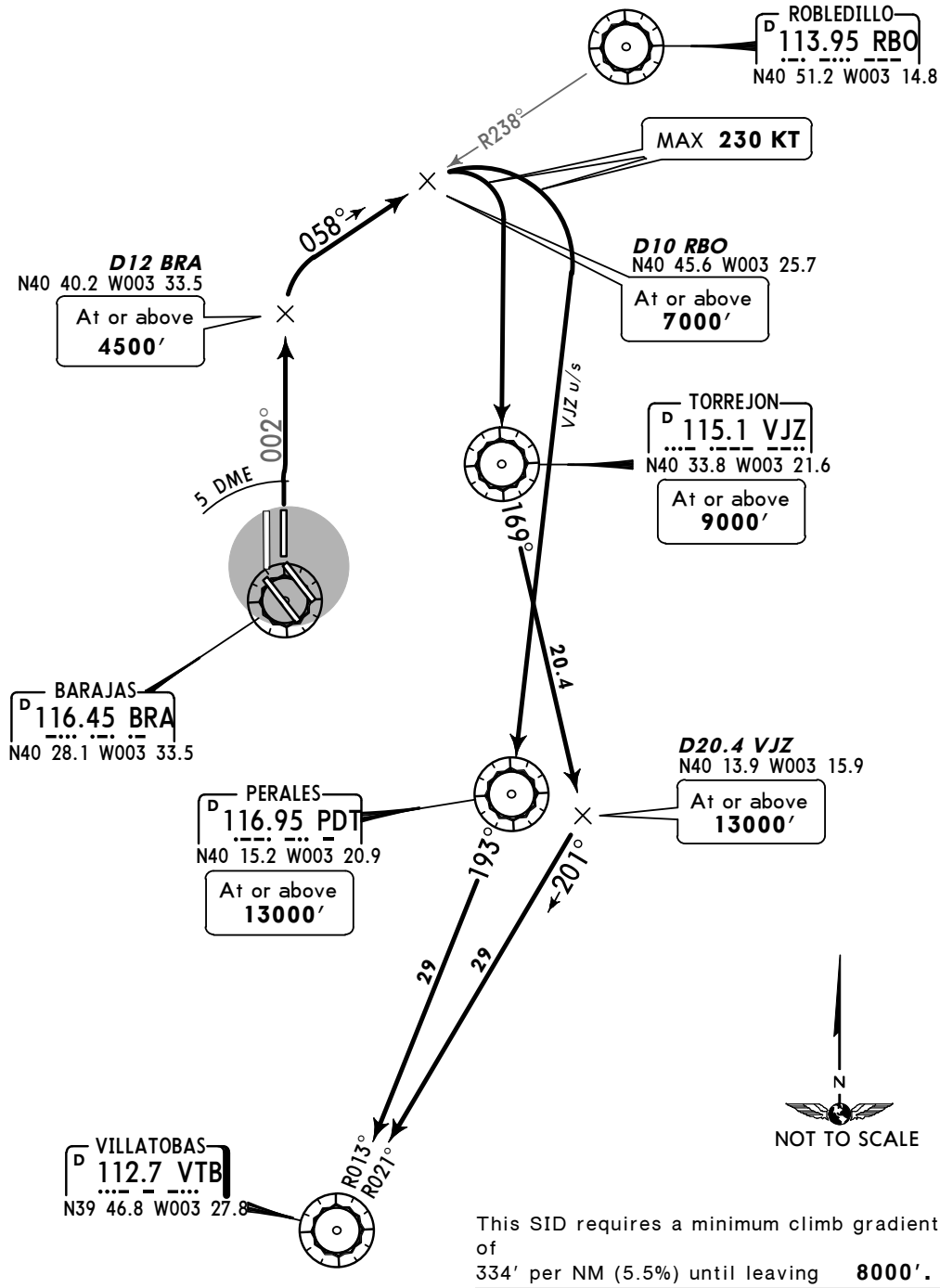
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



MSA
BRA VOR

VILLATOBAS TWO WHISKEY (VTB 2W)
RWY 36R DEPARTURES
SPEED: MAX 250 KT BELOW 10000′



This SID requires a minimum climb gradient of
334′ per NM (5.5%) until leaving **8000′.**

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

Between 0700-2300LT changes in initial climb track are permitted before DER (BRA 3.8 DME).

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

ROUTING

Climb on runway heading to BRA 5 DME, intercept BRA R-002 to D12 BRA, turn RIGHT, intercept RBO R-238 inbound to D10 RBO, turn RIGHT to VJZ, VJZ R-169 to D20.4 VJZ, turn RIGHT, intercept VTB R-021 inbound to VTB.

VJZ u/s: At D10 RBO turn RIGHT to PDT, turn RIGHT, intercept VTB R-013 inbound to VTB.

CHANGES: SIDs transferred & revised.

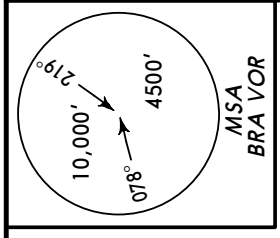
© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

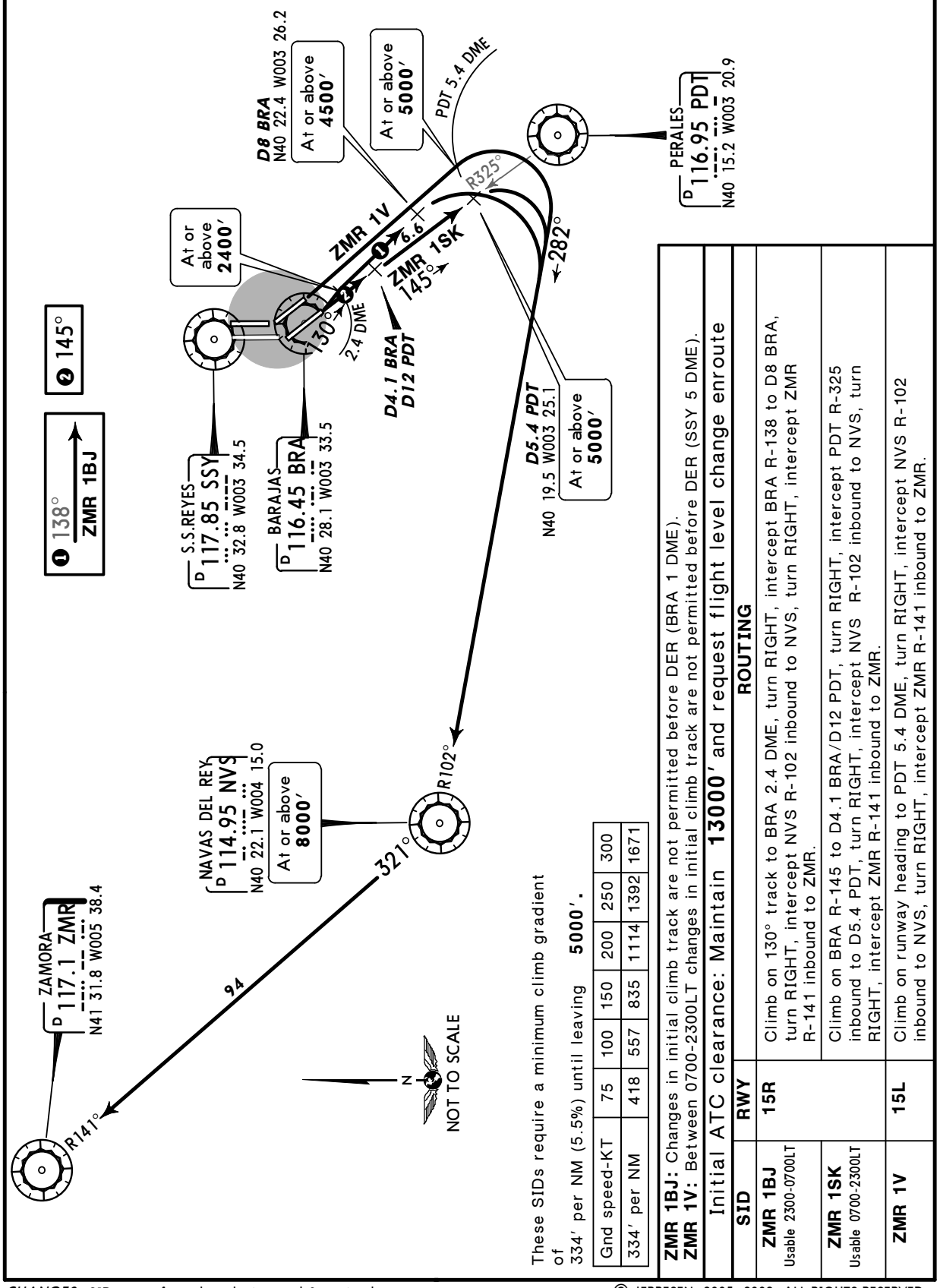
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).

ZAMORA ONE BRAVO JULIETT (ZMR 1BJ)
ZAMORA ONE SIERRA KILO (ZMR 1SK)
ZAMORA ONE VICTOR (ZMR 1V)
RWYS 15R/L DEPARTURES

SPEED: MAX 250 KT BELOW 10000′





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

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

ZMR 1BJ: Changes in initial climb track are not permitted before DER (BRA 1 DME).
ZMR 1V: Between 0700-2300LT changes in initial climb track are not permitted before DER (SSY 5 DME).

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

SID	RWY	ROUTING
ZMR 1BJ Usable 2300-0700LT	**15R**	Climb on 130° track to BRA 2.4 DME, turn RIGHT, intercept BRA R-138 to D8 BRA, turn RIGHT, intercept NVS R-102 inbound to NVS, turn RIGHT, intercept ZMR R-141 inbound to ZMR.
ZMR 1SK Usable 0700-2300LT		Climb on BRA R-145 to D4.1 BRA/D12 PDT, turn RIGHT, intercept PDT R-325 inbound to D5.4 PDT, turn RIGHT, intercept NVS R-102 inbound to NVS, turn RIGHT, intercept ZMR R-141 inbound to ZMR.
ZMR 1V	**15L**	Climb on runway heading to PDT 5.4 DME, turn RIGHT, intercept NVS R-102 inbound to NVS, turn RIGHT, intercept ZMR R-141 inbound to ZMR.

CHANGES: SIDs transferred, redesignated & revised,

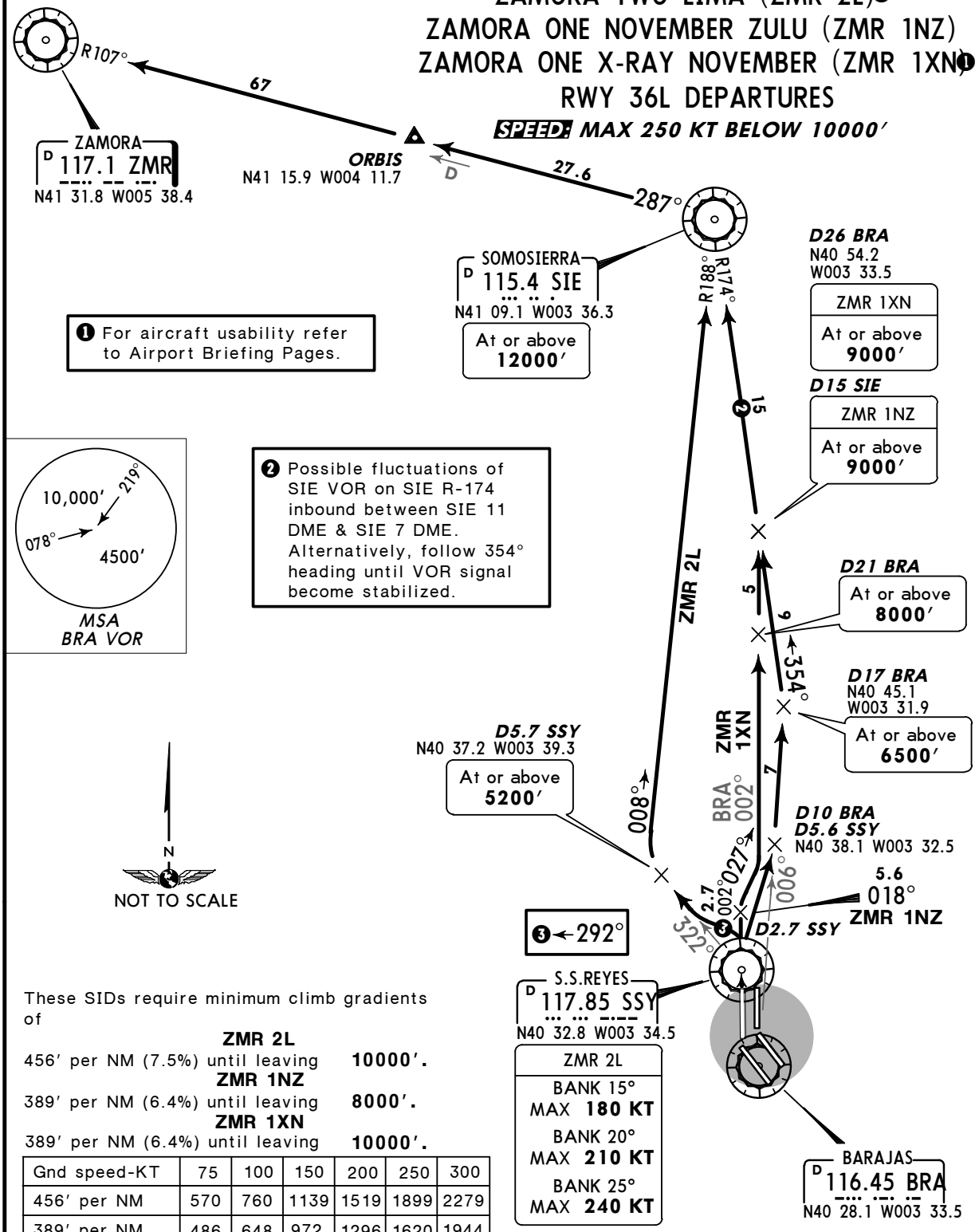
© JEPPESEN, 2005, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2001′	Trans level: By ATC Trans alt: 13000′ **1.** SIDs are also noise abatement procedures (refer to 10-4A). **2.** EXPECT close-in obstacles.

ZAMORA TWO LIMA (ZMR 2L)❶
ZAMORA ONE NOVEMBER ZULU (ZMR 1NZ)
ZAMORA ONE X-RAY NOVEMBER (ZMR 1XN)❶
RWY 36L DEPARTURES

SPEED: MAX 250 KT BELOW 10000′



These SIDs require minimum climb gradients of

ZMR 2L
456′ per NM (7.5%) until leaving **10000′.**

ZMR 1NZ
389′ per NM (6.4%) until leaving **8000′.**

ZMR 1XN
389′ per NM (6.4%) until leaving **10000′.**

Gnd speed-KT	75	100	150	200	250	300
456′ per NM	570	760	1139	1519	1899	2279
389′ per NM	486	648	972	1296	1620	1944

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

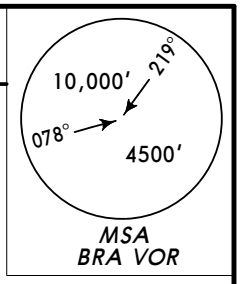
SID	ROUTING
ZMR 2L Usable 0700-2300LT	Climb on runway heading to SSY, turn LEFT, 292° track, intercept SSY R-322 to D5.7 SSY, turn RIGHT, intercept SIE R-188 inbound to SIE, SIE R-287 via ORBIS to ZMR.
ZMR 1NZ Usable 2300-0700LT	Climb on runway heading to SSY, SSY R-018 to D10 BRA/D5.6 SSY, turn LEFT, intercept BRA R-006 to D17 BRA, turn LEFT, intercept SIE R-174 inbound to SIE, SIE R-287 via ORBIS to ZMR.
ZMR 1XN 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.

CHANGES: SIDs transferred & reindexed.

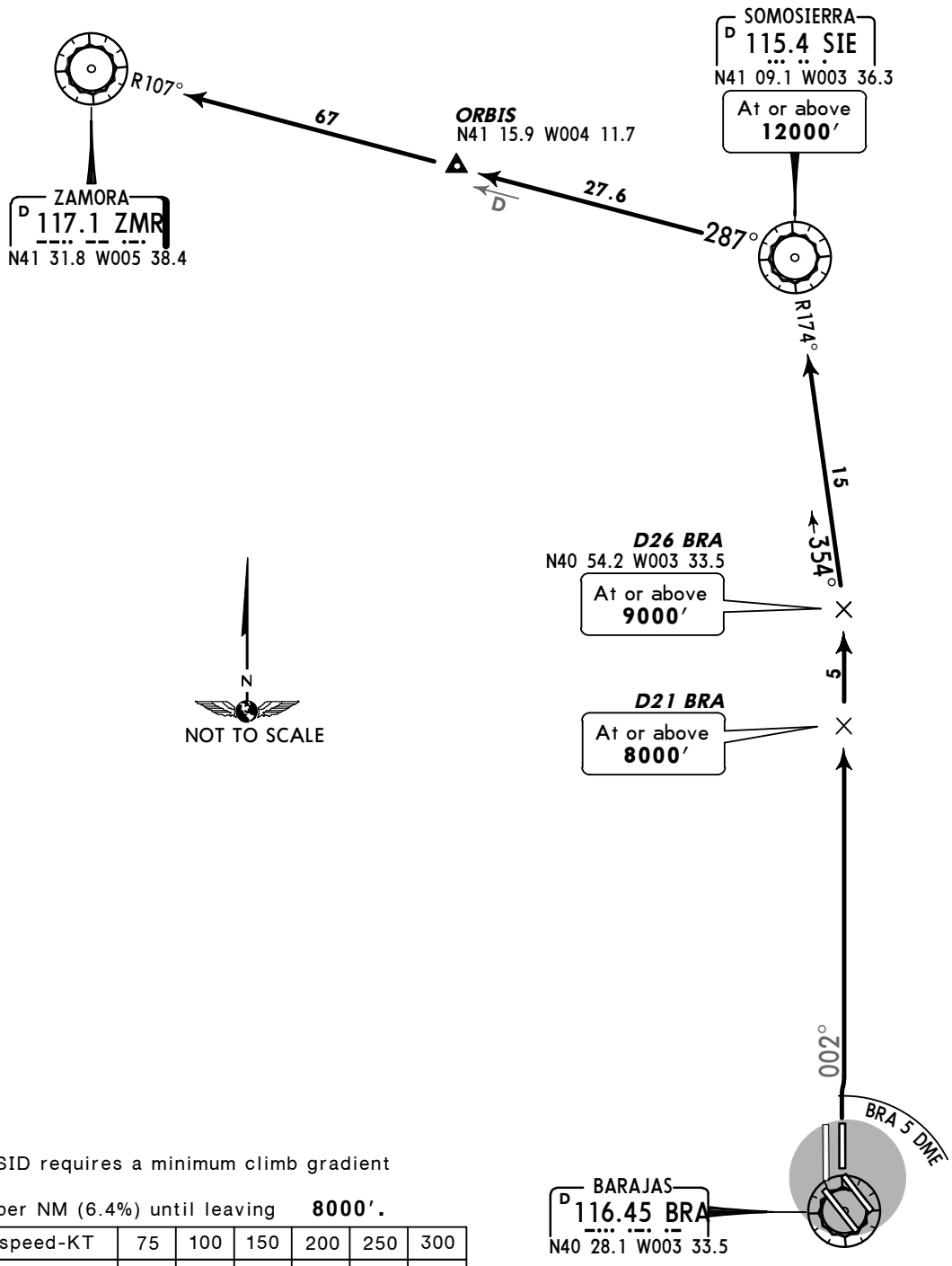
© JEPPESEN, 2006, 2009. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev	
2001′	Trans level: By ATC Trans alt: 13000′ SIDs are also noise abatement procedures (refer to 10-4A).



ZAMORA ONE WHISKEY (ZMR 1W)
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

Between 0700-2300LT changes in the initial departure track are not permitted before DER (BRA 3.8 DME).

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

ROUTING

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.

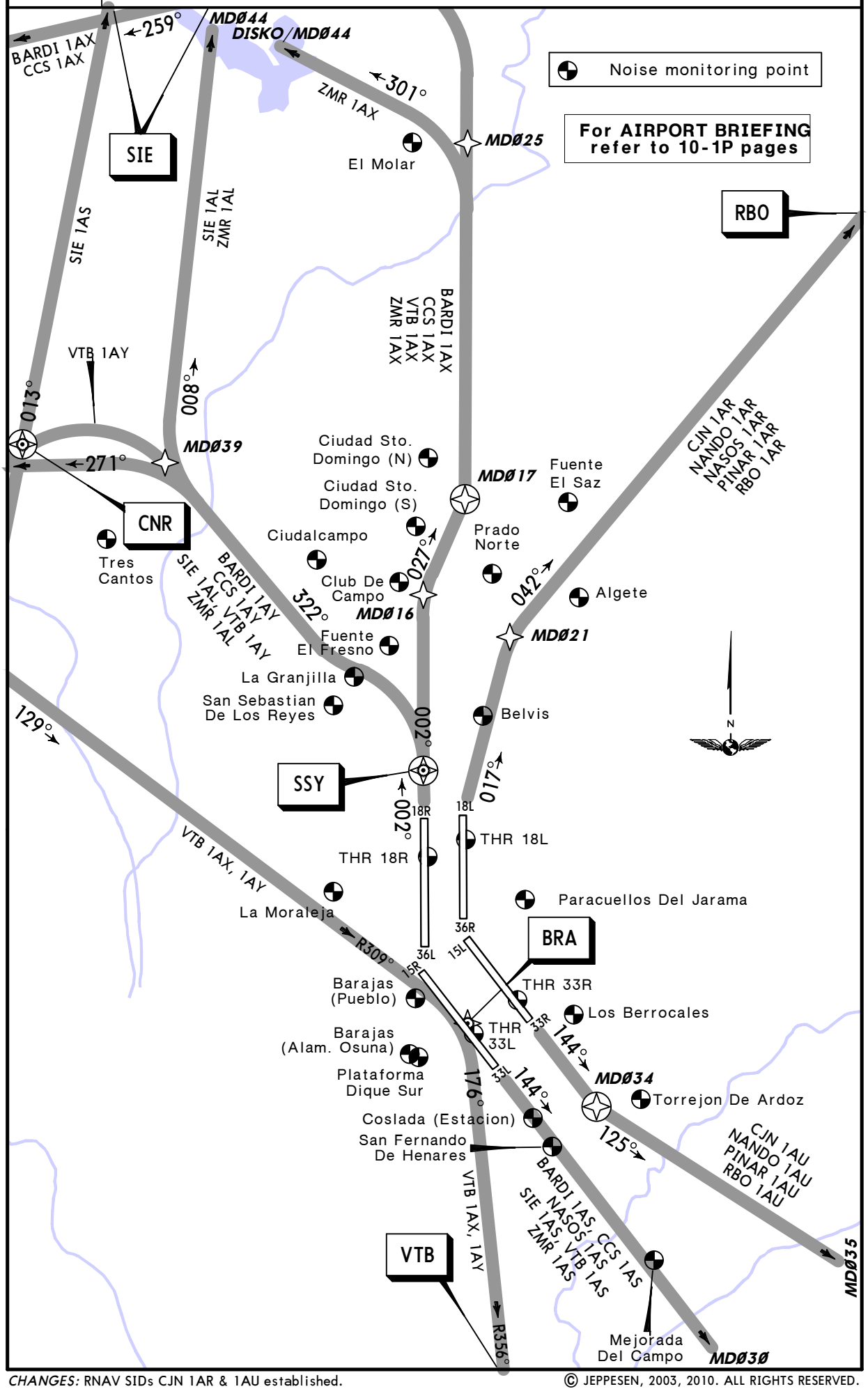
CHANGES: SIDs transferred & revised,

© JEPPESEN, 2006, 2008. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

Apt Elev 2000'

NOISE ABATEMENT - P-RNAV SID



CHANGES: RNAV SIDs CJN 1AR & 1AU established.

© JEPPESEN, 2003, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

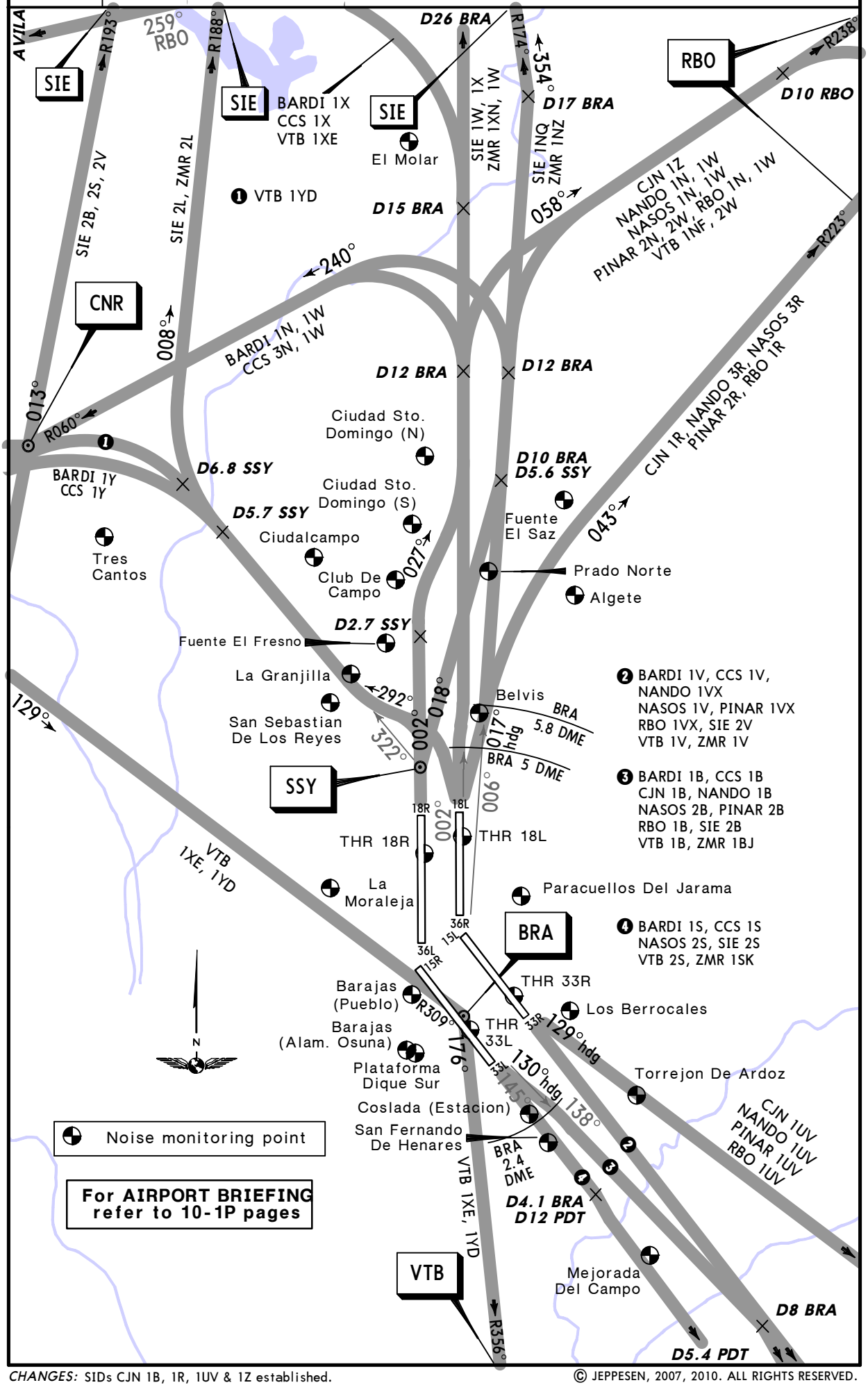
LEMD/MAD
BARAJAS

JEPPESEN
15 OCT 10 (10-4A) Eff 21 Oct

MADRID, SPAIN
NOISE

Apt Elev
2000'

NOISE ABATEMENT - SID



❷ BARDI 1V, CCS 1V,
NANDO 1VX
NASOS 1V, PINAR 1VX
RBO 1VX, SIE 2V
VTB 1V, ZMR 1V

❸ BARDI 1B, CCS 1B
CJN 1B, NANDO 1B
NASOS 2B, PINAR 2B
RBO 1B, SIE 2B
VTB 1B, ZMR 1BJ

❹ BARDI 1S, CCS 1S
NASOS 2S, SIE 2S
VTB 2S, ZMR 1SK

CHANGES: SIDs CJN 1B, 1R, 1UV & 1Z established.

© JEPPESEN, 2007, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

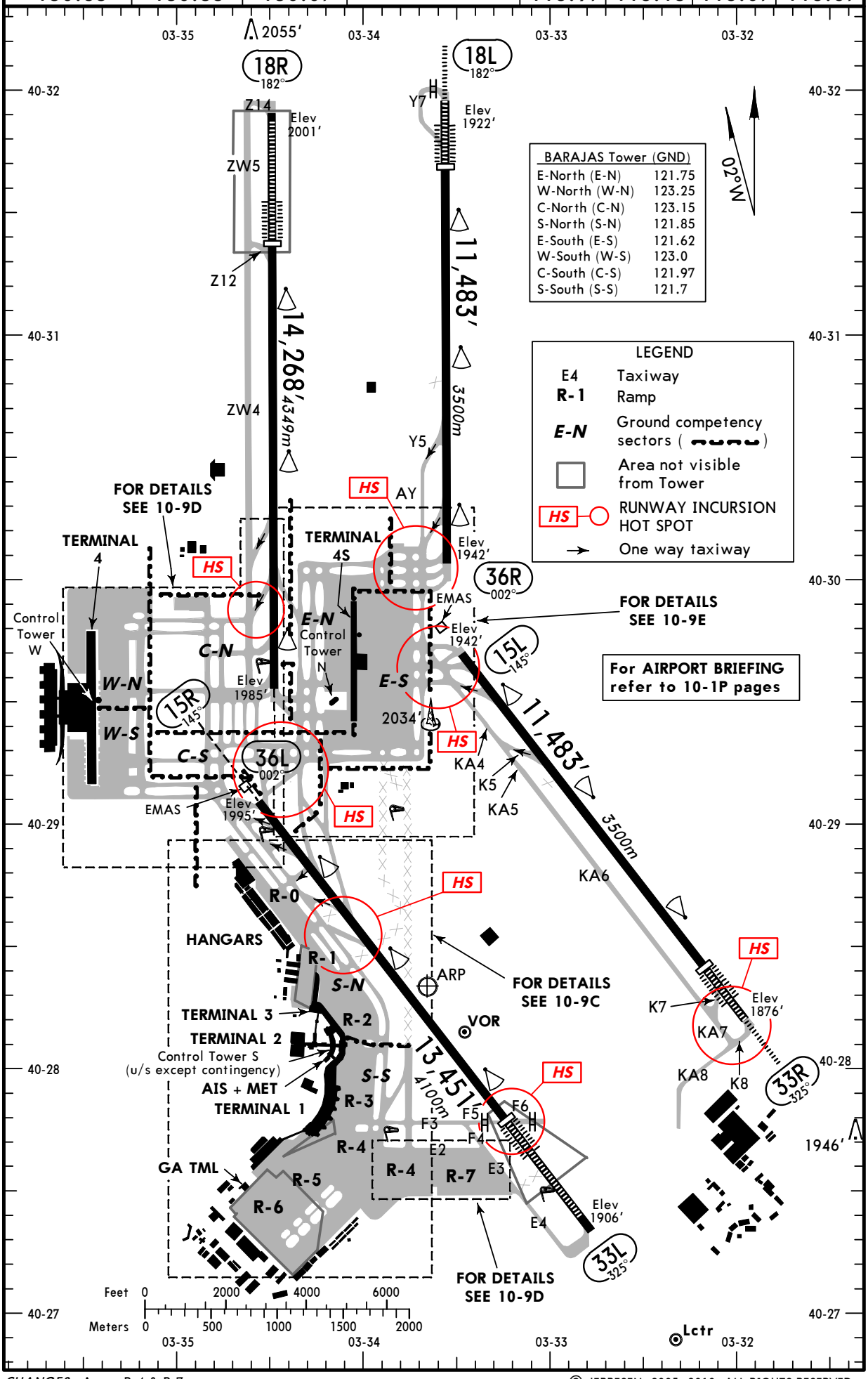
LEMD/MAD

Apt Elev **2000′**
N40 28.3 W003 33.7

JEPPESEN
23 APR 10 (10-9)

MADRID, SPAIN
BARAJAS

ATIS Departure	BARAJAS Clearance Delivery West	BARAJAS Clearance Delivery East	Tower (GND) For sectors see table below	Tower (DEP) Rwy 15L	Tower (DEP) Rwy 15R	Tower (DEP) Rwy 36L	Tower (DEP) Rwy 36R
130.85	130.35	130.07		118.97	118.15	118.07	118.67



CHANGES: Apron R-4 & R-7.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS LANDING BEYOND Threshold	Glide Slope	TAKE-OFF	WIDTH
15L	HIRL *(60m)* CL *(15m)* RVR	NA		❷	197′ *60m*
33R	HIRL *(60m)* CL *(15m)* HIALS-II TDZ PAPI(3.0°) ❶ RVR	9843′ *3000m*	8932′ *2722m*	NA	

❶ HSTIL-K5 & K4
❷ TAKE-OFF RUN AVAILABLE
RWY 15L:
From rwy head 11,483′(3500m)
twy K3 int 10,761′(3280m)
twy K4 int 9514′(2900m)
twy K5 int 7546′(2300m)

15R	HIRL *(60m)* CL *(15m)* RVR	NA		❹	197′ *60m*
33L	HIRL *(60m)* CL *(15m)* HIALS-II TDZ PAPI(3.0°) ❸ RVR	10,006′ *3050m*	9042′ *2756m*	NA	

❸ HSTIL-L7, L5, L4, L3 & L2
❹ TAKE-OFF RUN AVAILABLE
RWY 15R:
From rwy head 13,451′(4100m)
twy 15R-M int 11,434′(3485m)

18L	HIRL *(60m)* CL *(15m)* HIALS-II TDZ PAPI(3.0°) ❻ RVR	9843′ *3000m*	8871′ *2704m*	NA	197′ *60m*
❺ 36R	HIRL *(60m)* CL *(15m)* RVR	NA		❼	

❺ RWY with antiskid layer.
❻ HSTIL-Y5 & Y4
❼ TAKE-OFF RUN AVAILABLE
RWY 36R:
From rwy head 11,483′(3500m)
twy Y2 int 11,302′(3445m)
twy Y3 int 10,974′(3345m)
twy Y4 int 9514′(2900m)

18R	HIRL *(60m)* CL *(15m)* HIALS-II TDZ PAPI(3.0°) ❾ RVR	11,040′ *3365m*	9962′ *3036m*	NA	197′ *60m*
❽ 36L	HIRL *(60m)* CL *(15m)* RVR	NA		❿	

❽ RWY with antiskid layer.
❾ HSTIL-Z10, Z8 & Z7
❿ TAKE-OFF RUN AVAILABLE
RWY 36L:
From rwy head 14,268′(4349m)
twy Z6 int 12,762′(3890m)
twy Z8 int 10,948′(3337m)
twy Z10 int 9551′(2911m)

Standard TAKE-OFF [1]

Rwys 15L/R, 36L/R
LVP must be in Force

Approved Operators	HIRL, CL & mult. RVR req	RL, CL & mult. RVR req	RL & CL	RCLM (DAY only) or RL	RCLM (DAY only) or RL	NIL (DAY only)
A	*125m*	*150m*	*200m*	*250m*	*400m*	*550m*
B						
C						
D	*150m*	*200m*	*250m*	*300m*		

[1] Operators applying U.S. Ops Specs: CL required below 300m; approved guidance system required below 150m.

CHANGES: None.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

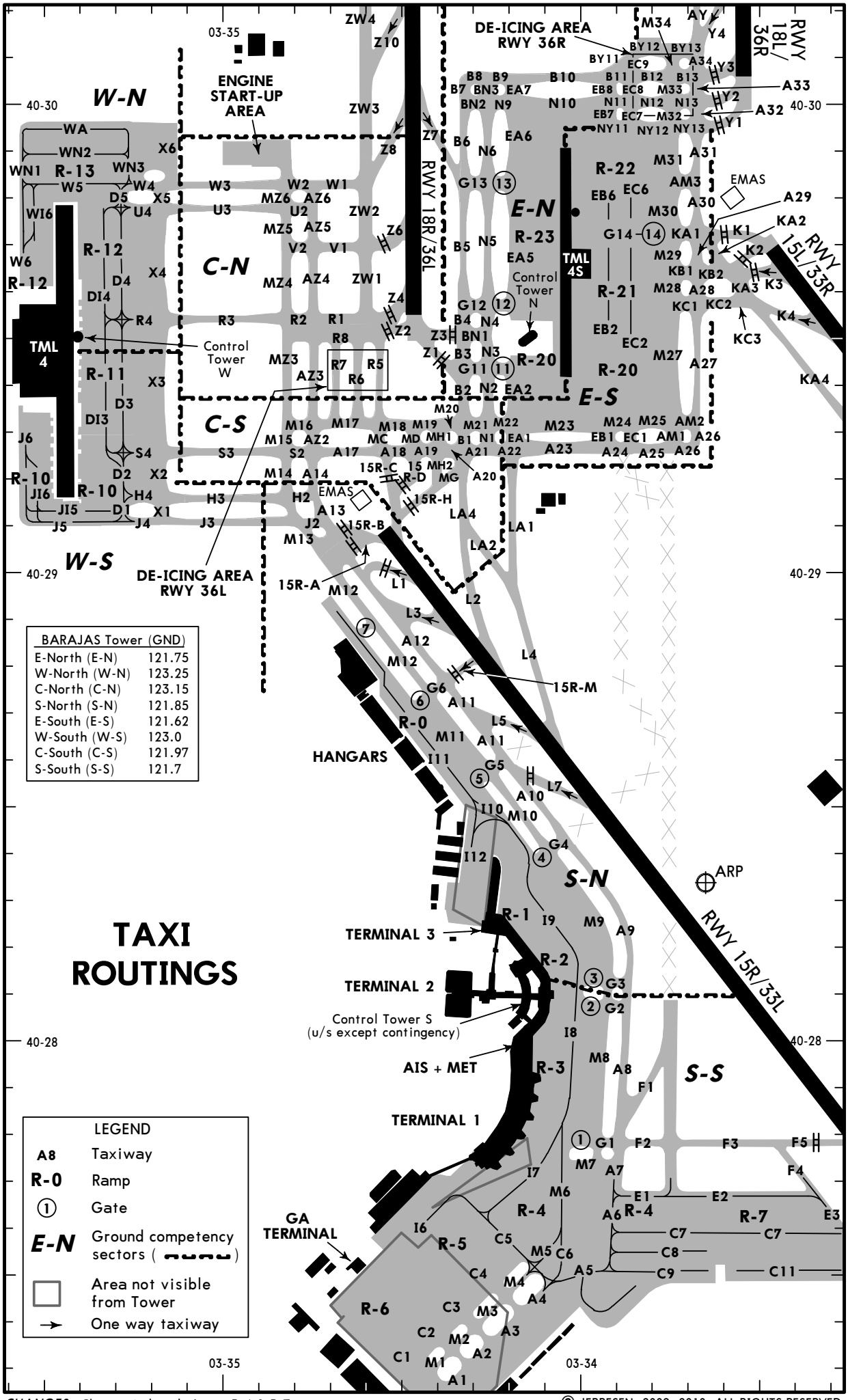
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

LEMD/MAD

JEPPESEN

23 APR 10 (10-9B)

MADRID, SPAIN
BARAJAS



BARAJAS Tower (GND)	
E-North (E-N)	121.75
W-North (W-N)	123.25
C-North (C-N)	123.15
S-North (S-N)	121.85
E-South (E-S)	121.62
W-South (W-S)	123.0
C-South (C-S)	121.97
S-South (S-S)	121.7

CHANGES: Chart reindexed. Apron R-4 & R-7.

© JEPPESEN, 2009, 2010. ALL RIGHTS RESERVED.

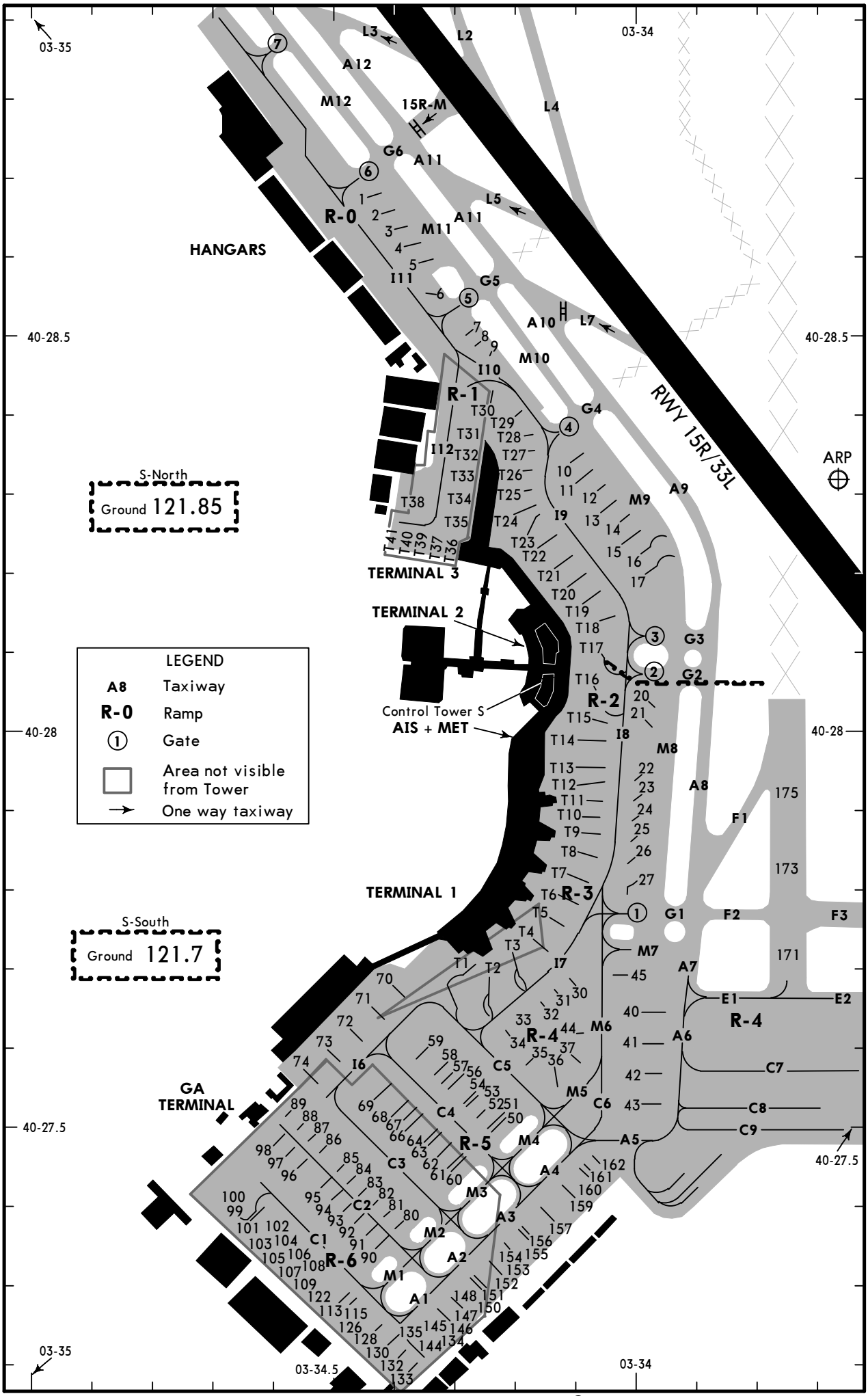
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD

JEPPESEN
23 APR 10 (10-9C)

MADRID, SPAIN
BARAJAS



CHANGES: Chart reindexed. Apron R-4.

© JEPPESEN, 1998, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

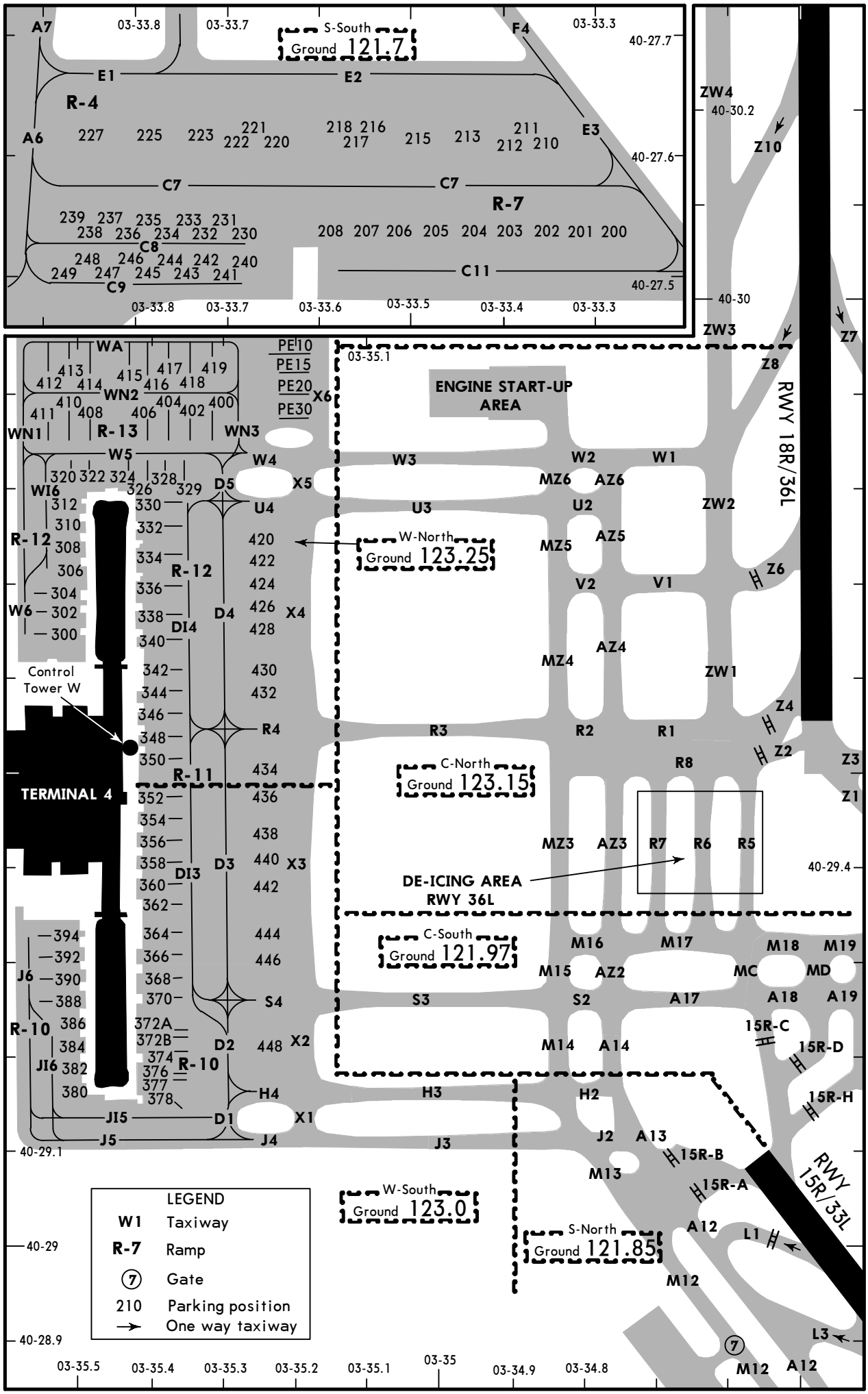
JEPPESEN
JeppView 3.7.2.1

LEMD/MAD

JEPPESEN

23 APR 10 (10-9D)

MADRID, SPAIN
BARAJAS



CHANGES: Chart reindexed. Ramp R-4 & R-7. Stands.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

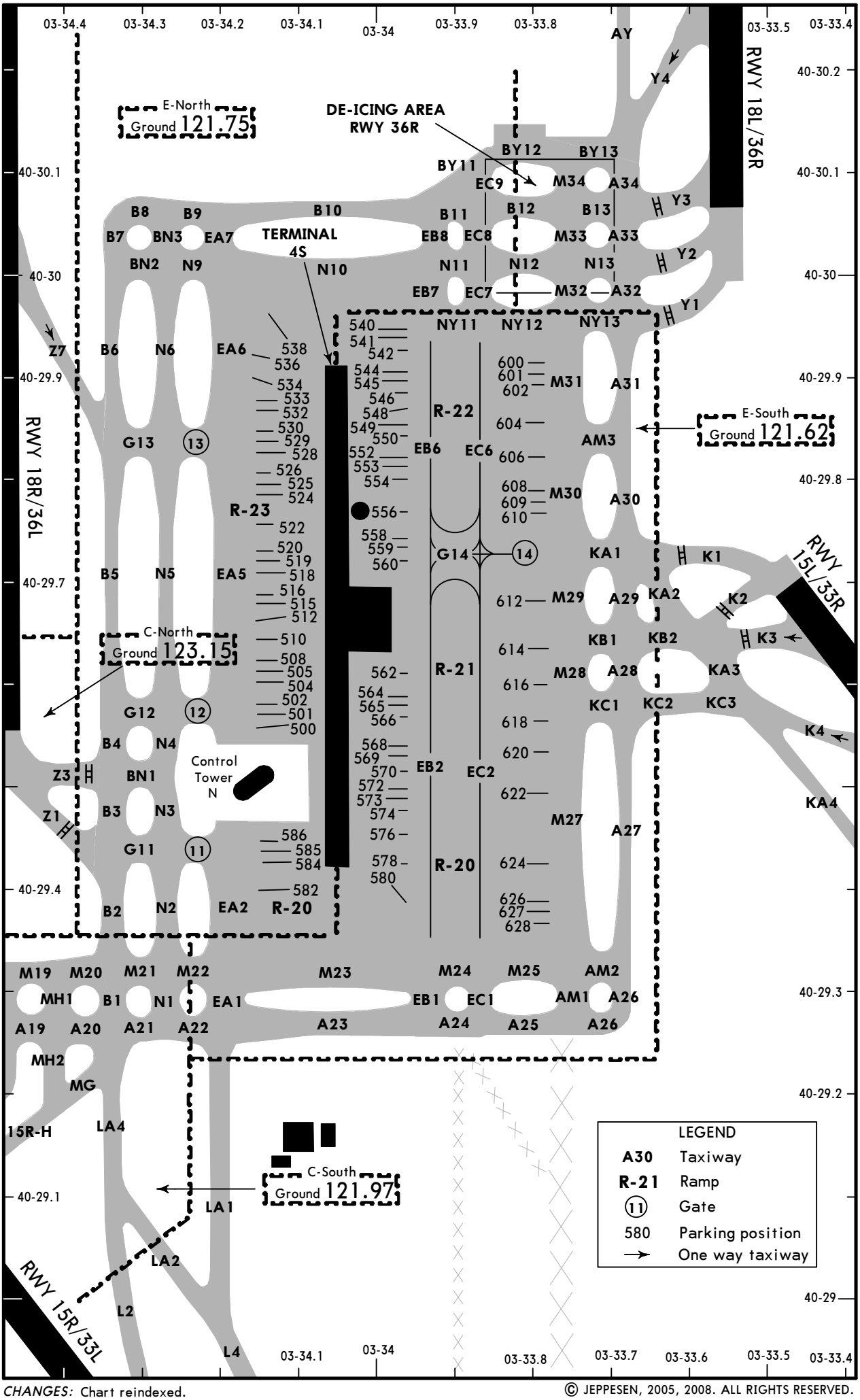
LEMD/MAD

JEPPESEN

23 APR 10 (10-9E)

MADRID, SPAIN

BARAJAS



CHANGES: Chart reindexed.

© JEPPESEN, 2005, 2008. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

INS COORDINATES

STAND No.	COORDINATES	STAND No.	COORDINATES
1	N40 28.7 W003 34.5	171	N40 27.7 W003 33.8
2	N40 28.7 W003 34.4	173	N40 27.8 W003 33.8
3 thru 5	N40 28.6 W003 34.4	175	N40 27.9 W003 33.8
6	N40 28.6 W003 34.3	200, 201	N40 27.5 W003 33.3
7, 8	N40 28.5 W003 34.3	202 thru 204	N40 27.5 W003 33.4
9	N40 28.5 W003 34.2	205 thru 207	N40 27.5 W003 33.5
10 thru 13	N40 28.3 W003 34.1	208	N40 27.5 W003 33.6
14	N40 28.3 W003 34.0	210 thru 213	N40 27.6 W003 33.4
15 thru 17	N40 28.2 W003 34.0	215, 216	N40 27.6 W003 33.5
20 thru 22	N40 28.0 W003 34.0	217 thru 220	N40 27.6 W003 33.6
23 thru 26	N40 27.9 W003 34.0	221 thru 223	N40 27.6 W003 33.7
27	N40 27.8 W003 34.0	225	N40 27.6 W003 33.8
30, 31	N40 27.7 W003 34.1	227	N40 27.6 W003 33.9
32	N40 27.6 W003 34.1	230 thru 232	N40 27.5 W003 33.7
33 thru 35	N40 27.6 W003 34.2	233 thru 237	N40 27.5 W003 33.8
36, 37	N40 27.6 W003 34.1	238, 239	N40 27.5 W003 33.9
40 thru 42	N40 27.6 W003 34.0	240 thru 242	N40 27.5 W003 33.7
43	N40 27.5 W003 34.0	243 thru 247	N40 27.5 W003 33.8
44	N40 27.6 W003 34.1	248, 249	N40 27.5 W003 33.9
45	N40 27.7 W003 34.0	300	N40 30.0 W003 35.5
50 thru 52	N40 27.5 W003 34.2	302 thru 308	N40 29.7 W003 35.5
53	N40 27.6 W003 34.2	310 thru 322	N40 29.8 W003 35.5
54 thru 59	N40 27.6 W003 34.3	324 thru 328	N40 29.8 W003 35.4
60, 61	N40 27.4 W003 34.3	329	N40 29.8 W003 35.3
62	N40 27.5 W003 34.3	330, 332	N40 29.8 W003 35.4
63 thru 69	N40 27.5 W003 34.4	334 thru 338	N40 29.7 W003 35.4
70	N40 27.7 W003 34.4	340 thru 346	N40 29.6 W003 35.4
71	N40 27.7 W003 34.5	348 thru 352	N40 29.5 W003 35.4
72, 73	N40 27.6 W003 34.5	354 thru 362	N40 29.4 W003 35.4
74	N40 27.6 W003 34.6	364 thru 370	N40 29.3 W003 35.4
80 thru 83	N40 27.4 W003 34.4	372 thru 378	N40 29.2 W003 35.4
84	N40 27.4 W003 34.5	380 thru 386	N40 29.2 W003 35.5
85 thru 88	N40 27.5 W003 34.5	388 thru 394	N40 29.3 W003 35.5
89	N40 27.5 W003 34.6	400, 402	N40 29.9 W003 35.3
90	N40 27.3 W003 34.4	404, 406	N40 29.9 W003 35.4
91	N40 27.3 W003 34.5	408 thru 414	N40 29.9 W003 35.5
92 thru 95	N40 27.4 W003 34.5	415 thru 417	N40 29.9 W003 35.4
96, 97	N40 27.4 W003 34.6	418, 419	N40 29.9 W003 35.3
98	N40 27.5 W003 34.6	420 thru 428	N40 29.7 W003 35.3
99, 100	N40 27.4 W003 34.7	430, 432	N40 29.6 W003 35.3
101 thru 103	N40 27.4 W003 34.6	434, 436	N40 29.5 W003 35.3
104	N40 27.3 W003 34.6	438 thru 442	N40 29.4 W003 35.3
105	N40 27.3 W003 34.5	444, 446	N40 29.3 W003 35.3
106	N40 27.5 W003 34.5	448	N40 29.2 W003 35.3
107	N40 27.4 W003 34.6	500, 501	N40 29.6 W003 34.0
108	N40 27.3 W003 34.6	502 thru 510	N40 29.6 W003 34.1
109	N40 27.3 W003 34.5	512 thru 520	N40 29.7 W003 34.1
113 thru 128	N40 27.2 W003 34.5	522 thru 529	N40 29.8 W003 34.1
130 thru 133	N40 27.2 W003 34.4	530 thru 538	N40 29.9 W003 34.1
134, 135	N40 27.2 W003 34.3	540	N40 30.0 W003 34.0
144 thru 146	N40 27.2 W003 34.3	541 thru 549	N40 29.9 W003 34.0
147, 148	N40 27.3 W003 34.3	550 thru 556	N40 29.8 W003 34.0
150 thru 156	N40 27.3 W003 34.2	558 thru 560	N40 29.7 W003 34.0
157 thru 160	N40 27.4 W003 34.1	562 thru 566	N40 29.6 W003 34.0
161, 162	N40 27.4 W003 34.0	568 thru 576	N40 29.5 W003 34.0

CHANGES: Chart reindexed. Stands. Coordinates.

© JEPPESEN, 1998, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010
JEPPESEN
JeppView 3.7.2.1

INS COORDINATES

STAND No.	COORDINATES	STAND No.	COORDINATES
578, 580	N40 29.4 W003 34.0	T13 thru T15	N40 28.0 W003 34.1
582 thru 586	N40 29.4 W003 34.1	T16 thru T18	N40 28.1 W003 34.1
600 thru 604	N40 29.9 W003 33.8	T19, T21	N40 28.2 W003 34.1
606 thru 610	N40 29.8 W003 33.8	T22	N40 28.2 W003 34.2
612	N40 29.7 W003 33.8	T23 thru T26	N40 28.3 W003 34.2
614 thru 618	N40 29.6 W003 33.8	T27 thru T29	N40 28.4 W003 34.2
620, 622	N40 29.5 W003 33.8	T30 thru T32	N40 28.4 W003 34.3
624 thru 628	N40 29.4 W003 33.8	T33 thru T35	N40 28.3 W003 34.3
PE10, PE15	N40 30.0 W003 35.2	T36, T37	N40 28.2 W003 34.3
PE20, PE30	N40 29.9 W003 35.2	T38	N40 28.3 W003 34.4
T1	N40 27.7 W003 34.3	T39 thru T41	N40 28.2 W003 34.4
T2, T3	N40 27.7 W003 34.2		
T4, T5	N40 27.8 W003 34.2		
T6, T7	N40 27.8 W003 34.1		
T8 thru T12	N40 27.9 W003 34.1		

CHANGES: Chart reindexed.

© JEPPESEN, 2005, 2008. ALL RIGHTS RESERVED.

VISUAL DOCKING GUIDANCE SYSTEM

A. 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 by means, in both cases, of the achieve of images by an optical sensor that sends the sign to a computer in order to process them and to provide the information to the pilot by a display unit, in front of the cockpit.

B. DISPLAY UNIT

The display unit to the pilot is designed by 5 modules LCD in 2 sections. As a consequence of the pixel technology, each module allows to show letters, numbers and also symbols. The size of the characters of the display allows the reading from a distance of approximately 328′/100m. If the aircraft is seeded, the situation of the aircraft respect of the docking centerline is indicated by means of the symbol of a plane in the low section of the unit. The lateral diversion with regard to the docking centerline of guided and the remaining distance to the stop point are also presented in a clear and unequivocal way. Beginning from a distance of 98′/30m to the stop point, the remaining distance is showed in an additional way in the top section of the unit. When the blocks are placed, the unit presents in an optional way the message "CHOCK ON" using the special push-button installed in the apron area.

C. PILOT INSTRUCTIONS

The following sequence of events identifies how a pilot would use this system to dock an aircraft at this gate.

1. GATE READY FOR DOCKING.
Aircraft type and gate number are alternated in a flashing sequence across the top of display board.

2. AIRCRAFT DETECTED.
When the aircraft is detected, only the aircraft type is displayed steady across the top of the display. At this point, the symbol of a plane is showed across the bottom of the display and the pilot will obtain information about the remaining distance to the stop point as a consequence of passing by fixed distances from stop point as well as azimuth guidance with regard to the centerline:

98′/30m to 66′/20m	16′/5m steps
66′/20m to 33′/10m	7′/2m steps
33′/10m to 3′/1m	3′/1m steps
3′/1m to STOP	0.7′/0.2m steps

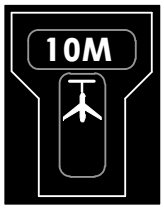
© JEPPESEN, 2008. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010
JEPPESEN
JeppView 3.7.2.1

VISUAL DOCKING GUIDANCE SYSTEM

3. AIRCRAFT IS RIGHT OF CENTERLINE.
Correction to the LEFT is required.

4. AIRCRAFT IS LEFT OF CENTERLINE.
Correction to the RIGHT is required.



5. AIRCRAFT IS ON CENTERLINE.
It is 33′/10m to final stop position.
Important: Approach slowly to final stop position.

6. AIRCRAFT IS ON CENTERLINE.
It is 1.3′/0.4m to final stop position.
Prepare to stop the aircraft.

7. STOP.
Stop now, docking point reached.

8. OK.
Successful docking.

© JEPPESEN, 2008. ALL RIGHTS RESERVED.

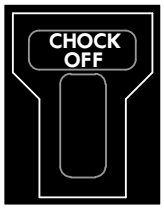
Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010
JEPPESEN
JeppView 3.7.2.1

VISUAL DOCKING GUIDANCE SYSTEM

9. TOO FAR.
Aircraft has gone beyond docking position.

10. ESTOP (EMERGENCY STOP).
Stop aircraft immediately,
wait for docking instructions from
TWR to resume docking procedure.

11. CHOCKS INSERTED AND CHOCKS REMOVED.
When the chocks are inserted, the docking guidance presents the message CHOCK-ON during 5 minutes.



12. When the chocks are removed, the docking guidance presents the message CHOCK-OFF and it stays during 10 seconds.

If the following events occur, the pilot must stop the docking procedure, report problem to TWR and wait for further instructions:

- Displayed aircraft type is not the incoming aircraft.
- Display board become unreadable (loss of display).
- ESTOP message is displayed.
- Pilot believes system is transmitting erroneous docking data.
- Display board illuminates error messages.

If the system does not detect the aircraft and the pilot does not get a steady aircraft type read out on the top of display until the aircraft nose reached the passengers boarding bridge, pilot should contact TWR and wait for a marshall guidance.

© JEPPESEN, 2008, 2010. ALL RIGHTS RESERVED.

LEMD/MAD

JEPPESEN

29 OCT 10 10-9X

JAA MINIMUMS

MADRID, SPAIN
BARAJAS

STRAIGHT-IN RWY		A	B	C	D
18L	CAT 3B ILS	approved	approved	approved	approved
	CAT 3A ILS	RA 50′R200m	RA 50′R200m	RA 50′R200m	RA 50′R200m
	CAT 2 ILS	2022′(100′)	2022′(100′)	2032′(110′)	2046′(124′)
		RA104′R300m	RA104′R300m	RA114′R300m	RA129′R400m
	ILS	2122′(200′)	2122′(200′)	2122′(200′)	2122′(200′)
		R550m	R550m	R550m	R550m
	ALS out	R1000m	R1000m	R1000m	R1000m
	LOC	2400′(478′)	2400′(478′)	2400′(478′)	2400′(478′)
		R1000m	R1200m	R1200m	R1600m
	ALS out	R1500m	R1500m	R2000m	R2000m
	VOR	2500′(578′)	2500′(578′)	2500′(578′)	2500′(578′)
		R1000m	R1200m	R1200m	R1600m
	ALS out	R1500m	R1500m	R2000m	R2000m
18R	CAT 3B ILS	approved	approved	approved	approved
	CAT 3A ILS	RA 50′R200m	RA 50′R200m	RA 50′R200m	RA 50′R200m
	CAT 2 ILS	2091′(100′)	2091′(100′)	2091′(100′)	2101′(110′)
		RA98′ R300m	RA98′ R300m	RA98′ R300m	RA107′R300m
	ILS	2191′(200′)	2191′(200′)	2191′(200′)	2191′(200′)
		R550m	R550m	R550m	R550m
	ALS out	R1000m	R1000m	R1000m	R1000m
	LOC	2480′(489′)	2480′(489′)	2480′(489′)	2480′(489′)
		R1000m	R1200m	R1200m	R1600m
	ALS out	R1500m	R1500m	R2000m	R2000m
	VOR	2550′(559′)	2550′(559′)	2550′(559′)	2550′(559′)
		R1000m	R1200m	R1200m	R1600m
	ALS out	R1500m	R1500m	R2000m	R2000m
33L	ILS	2227′(294′)	2239′(306′)	2247′(314′)	2258′(325′)
		R650m	R800m	R800m	R800m
	ALS out	R1200m	R1200m	R1200m	R1200m
	LOC	2350′(417′)	2350′(417′)	2350′(417′)	2350′(417′)
		R900m	R1000m	R1000m	R1400m
	ALS out	R1500m	R1500m	R1800m	R2000m
	VOR	2400′(467′)	2400′(467′)	2400′(467′)	2400′(467′)
		R1000m	R1200m	R1200m	R1600m
	ALS out	R1500m	R1500m	R2000m	R2000m

CHANGES: Minimums.

© JEPPESEN, 2009, 2010. ALL RIGHTS RESERVED.

LEMD/MAD

JEPPESEN

29 OCT 10 10-9X1

JAA MINIMUMS

MADRID, SPAIN
BARAJAS

STRAIGHT-IN RWY		A	B	C	D
33R	CAT 3B ILS	approved	approved	approved	approved
	CAT 3A ILS	RA 50′R200m	RA 50′R200m	RA 50′R200m	RA 50′R200m
	CAT 2 ILS	1986′(100′)	1986′(100′)	1993′(107′)	2007′(121′)
		RA109′R300m	RA109′R300m	RA118′R300m	RA135′R400m
	ILS	2086′(200′)	2086′(200′)	2094′(208′)	2105′(219′)
		R550m	R550m	R600m	R600m
	ALS out	R1000m	R1000m	R1000m	R1000m
	LOC	2340′(454′)	2340′(454′)	2340′(454′)	2340′(454′)
		R1000m	R1200m	R1200m	R1600m
	ALS out	R1500m	R1500m	R2000m	R2000m
	VOR	2490′(604′)	2490′(604′)	2490′(604′)	2490′(604′)
		R1000m	R1200m	R1200m	R1600m
	ALS out	R1500m	R1500m	R2000m	R2000m

CIRCLE-TO-LAND	100 KT	135 KT	180 KT	205 KT
	2720′(720′)	2860′(860′)	3280′(1280′)	3620′(1620′)
	V1500m	V1600m	V2400m	V3600m

TAKE-OFF RWY 15L/R, 36L/R

	LVP must be in Force					
	Approved Operators HIRL, CL & mult. RVR req	RL, CL & mult. RVR req	RL & CL	RCLM (DAY only) or RL	RCLM (DAY only) or RL	NIL (DAY only)
A, B, C	*125m*	*150m*	*200m*	*250m*	*400m*	*550m*
D	*150m*	*200m*	*250m*	*300m*		

CHANGES: Minimums.

© JEPPESEN, 2009, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (11-1)

MADRID, SPAIN
ILS or LOC Rwy 18L

BRIEFING STRIP ™

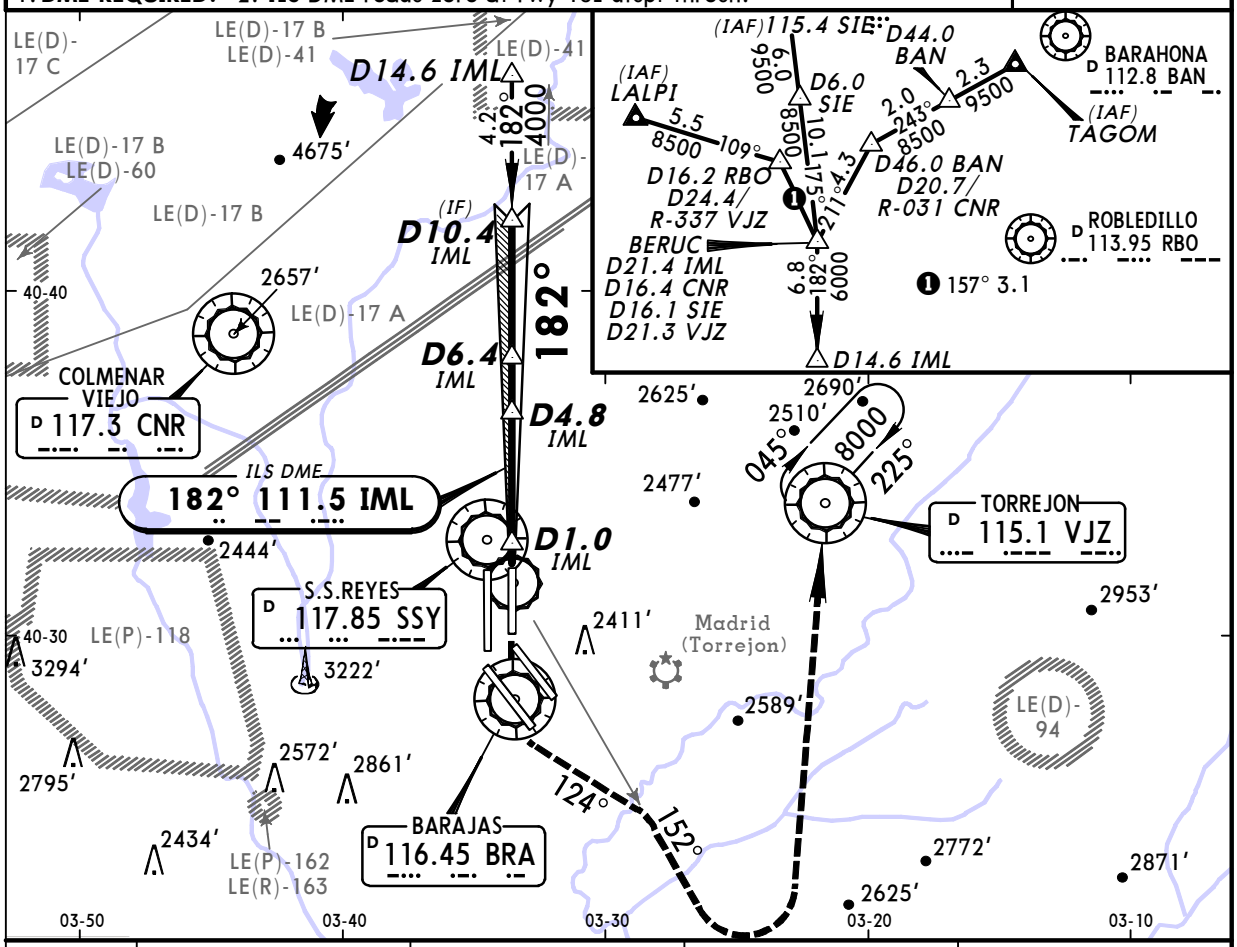
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.67 118.07 118.15 118.97	

LOC IML	Final Apch Crs	GS D6.4 IML	ILS DA(H)	Apt Elev 2000′
111.5	182°	4000′ (2078′)	2122′ (200′)	RWY 1922′

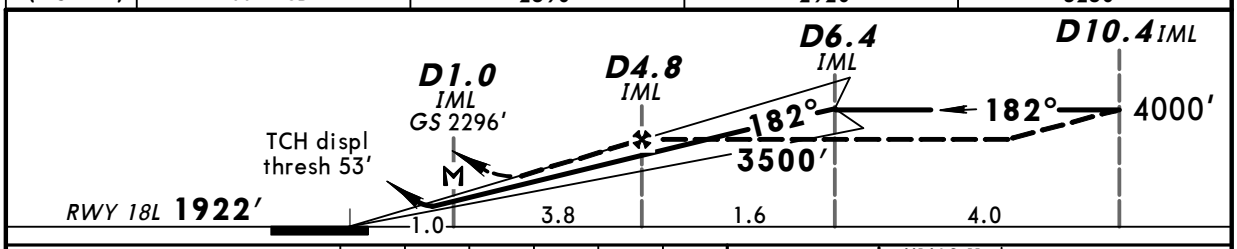
MISSED APCH: Climb on rwy heading to BRA VOR, then turn LEFT onto 124° to intercept and follow R-152 SSY. At 4500′ turn LEFT direct to VJZ VOR to join holding at 8000′. Contact ATC before reaching 4000′.

10,000′ 219° 078° 4500′
MSA BRA VOR

Alt Set: hPa Rwy Elev: 68 hPa Trans level: By ATC Trans alt: 13000′
1. **DME REQUIRED.** 2. ILS DME reads zero at rwy 18L displ thresh.



LOC (GS out)	IML DME	2.0	3.0	4.0
	ALTITUDE	2590′	2920′	3250′



Gnd speed-Kts		70	90	100	120	140	160
ILS GS	3.00°	377	485	539	647	755	862
LOC Descent Angle	3.10°	384	494	548	658	768	878
MAP at D1.0 IML							

HIALS-II PAPI PAPI
BRA 116.45 on Rwy hdg

Standard STRAIGHT-IN LANDING RWY 18L

	ILS DA(H) 2122′ (200′) FULL	Limited	ALS out	LOC (GS out) DA(H) 2400′ (478′)	ALS out
A	RVR 550m	RVR 750m	RVR 1200m	RVR 1500m	
B					
C				RVR 1500m	CMV 2200m
D					

CIRCLE-TO-LAND

Max Kts	MDA(H)	VIS
100	2720′ (720′)	1500m
135	2860′ (860′)	1600m
180	3280′ (1280′)	2400m
205	3620′ (1620′)	3600m

PANS OPS 4

CHANGES: Apt elev. Minimums.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (11-1A)

MADRID, SPAIN
CAT II ILS Rwy 18L

BRIEFING STRIP ™

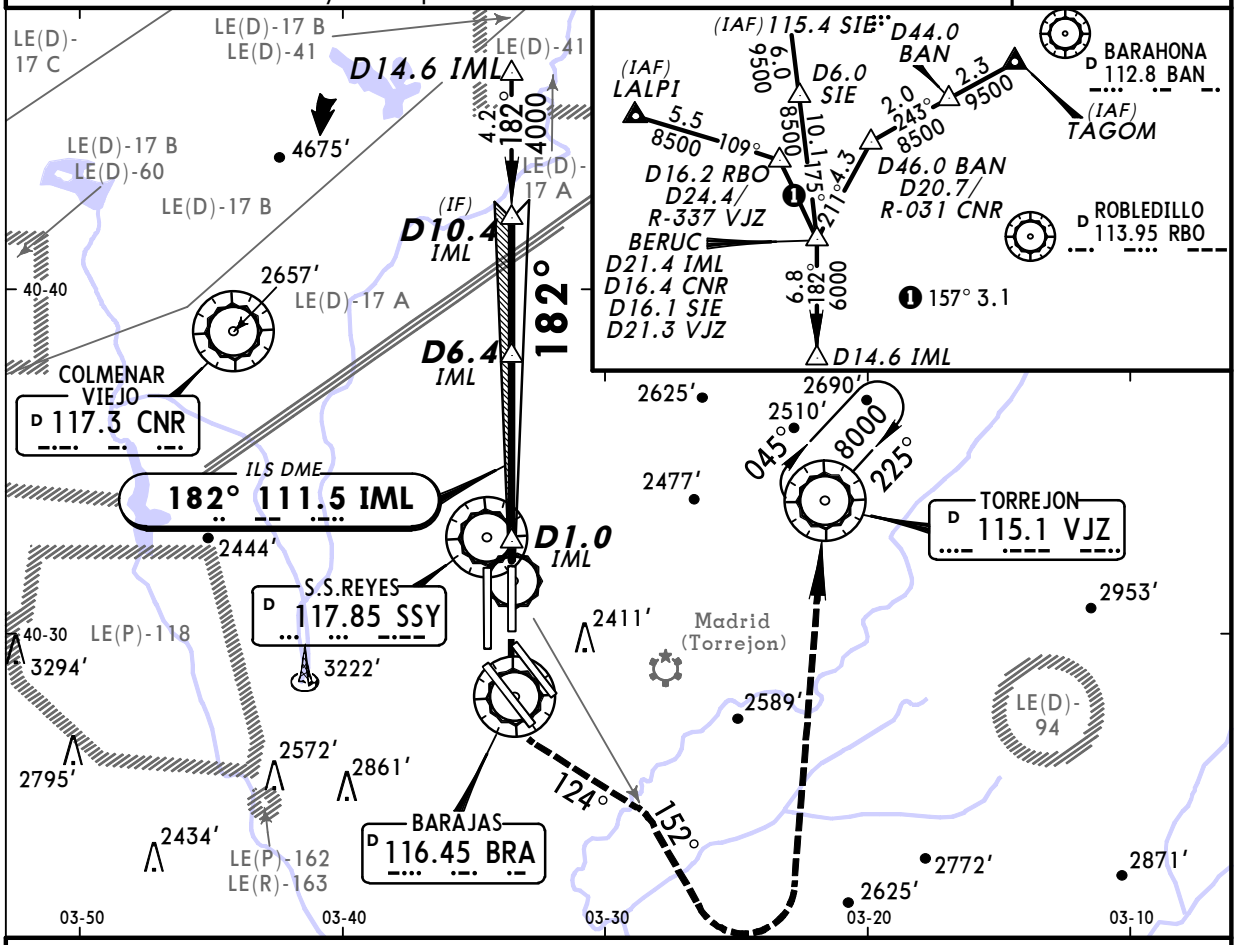
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.67 118.07 118.15 118.97	

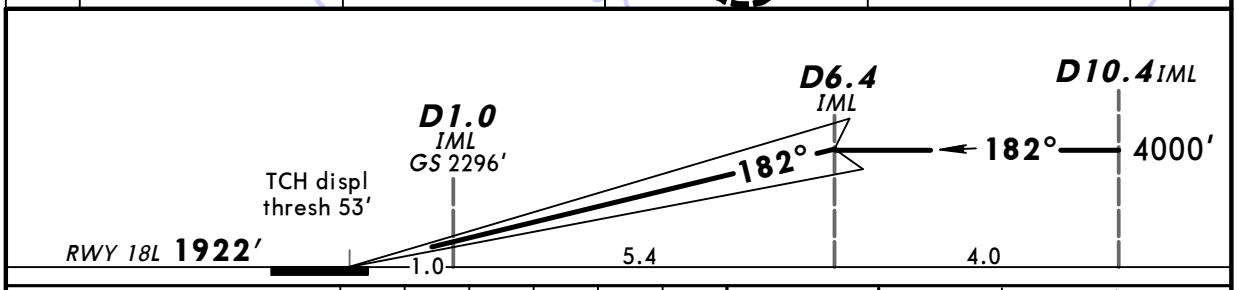
LOC IML	Final Apch Crs	GS	CAT II ILS RA/DA(H)	Apt Elev 2000′
111.5	182°	D6.4 IML 4000′ (2078′)	Refer to Minimums	RWY 1922′

MISSED APCH: Climb on rwy heading to BRA VOR, then turn LEFT onto 124° to intercept and follow R-152 SSY. At 4500′ turn LEFT direct to VJZ VOR to join holding at 8000′. Contact ATC before reaching 4000′.

Alt Set: hPa Rwy Elev: 68 hPa Trans level: By ATC Trans alt: 13000′
1. **DME REQUIRED.** 2 Special Aircrew & Acft Certification Required.
3. ILS DME reads zero at rwy 18L displ thresh.

MSA BRA VOR: 10,000′ (078°–219°), 4500′





Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	377	485	539	647	755	862

HIALS-II PAPI PAPI

BRA 116.45 on Rwy hdg

Standard STRAIGHT-IN LANDING RWY **18L**
CAT II ILS

AB	C	D
RA 104′	RA 114′	RA 129′
DA(H) 2022′(100′)	DA(H) 2032′(110′)	DA(H) 2046′(124′)
RVR 300m 1		RVR 400m

1 Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

PANS OPS 4

CHANGES: Apt elev.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (11-2)

MADRID, SPAIN
ILS or LOC Rwy 18R

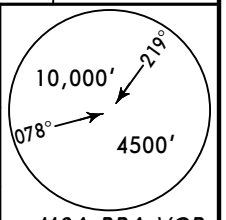
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.07 118.15 118.67 118.97	

BRIEFING STRIP ™

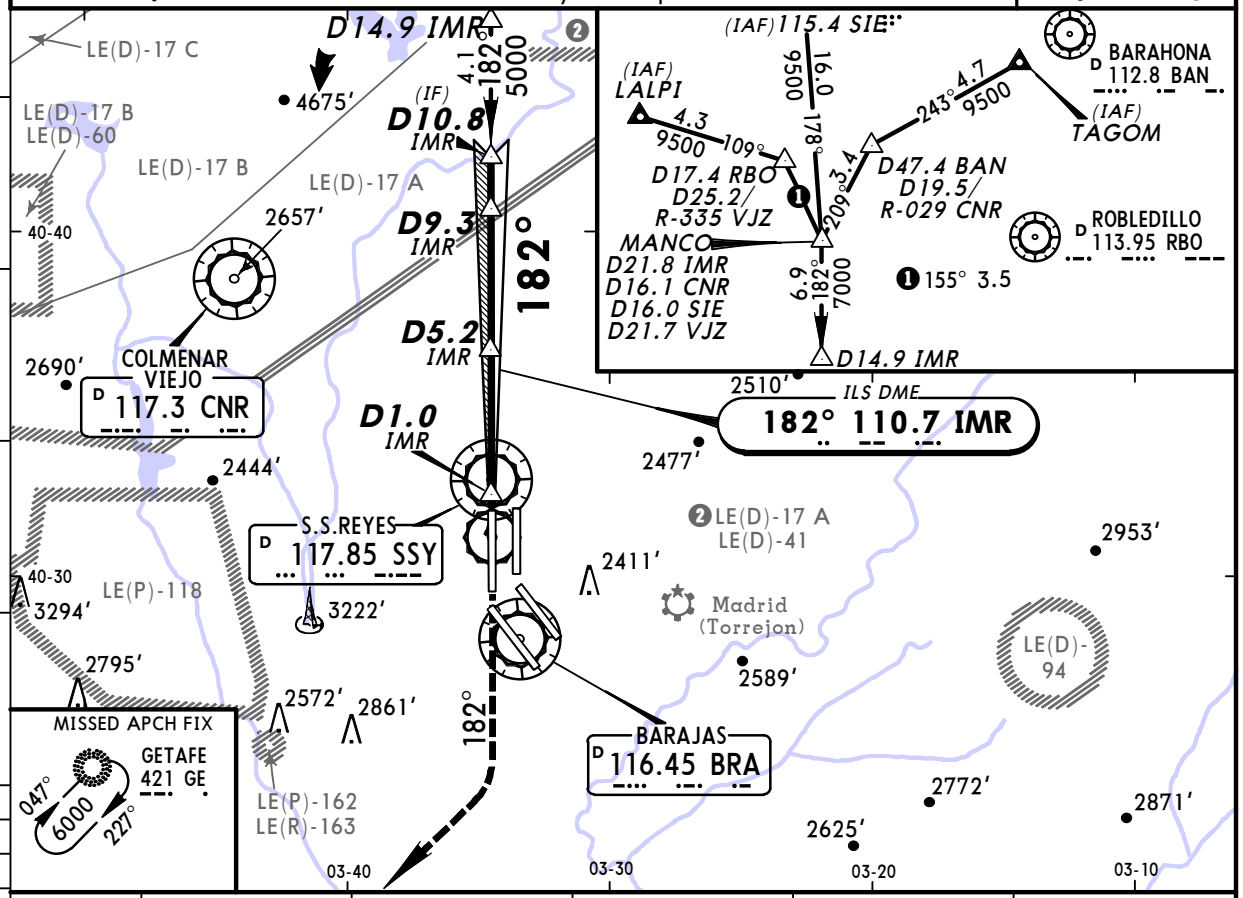
LOC IMR	Final Apch Crs	GS	ILS DA(H)	Apt Elev 2000'
110.7	182°	D9.3 IMR 5000' (3009')	2191' (200')	RWY 1991'

MISSED APCH: Climb on R-182 SSY to 5000', then turn RIGHT direct to NDB to join holding at 6000'.

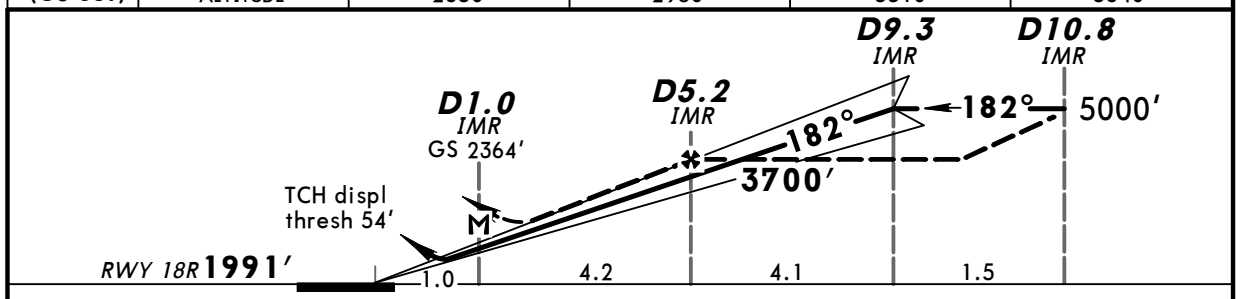
Alt Set: hPa Rwy Elev: 71 hPa Trans level: By ATC Trans alt: 13000'
1. **DME REQUIRED.** 2. ILS DME reads zero at rwy 18R displ thresh.



MSA BRA VOR



LOC (GS out)	IMR DME	2.0	3.0	4.0	5.0
	ALTITUDE	2650'	2980'	3310'	3640'



Gnd speed-Kts		70	90	100	120	140	160
ILS GS	3.00°	377	485	539	647	755	862
LOC Descent Angle	3.10°	384	494	548	658	768	878
MAP at D1.0 IMR							

HIALS-II
PAPI PAPI
5000' on R-182
SSY 117.85

Standard STRAIGHT-IN LANDING RWY 18R

	ILS DA(H) 2191' (200')			LOC (GS out) DA(H) 2480' (489')	
	FULL	Limited	ALS out		ALS out
A	RVR 550m	RVR 750m	RVR 1200m	RVR 1500m	
B					
C				RVR 1500m	CMV 2300m
D					

CIRCLE-TO-LAND

Max Kts.	MDA(H)	VIS
100	2720' (720')	1500m
135	2860' (860')	1600m
180	3280' (1280')	2400m
205	3620' (1620')	3600m

PANS OPS 4

CHANGES: Apt elev. Minimums.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (11-2A)

MADRID, SPAIN
CAT II ILS Rwy 18R

BRIEFING STRIP ™

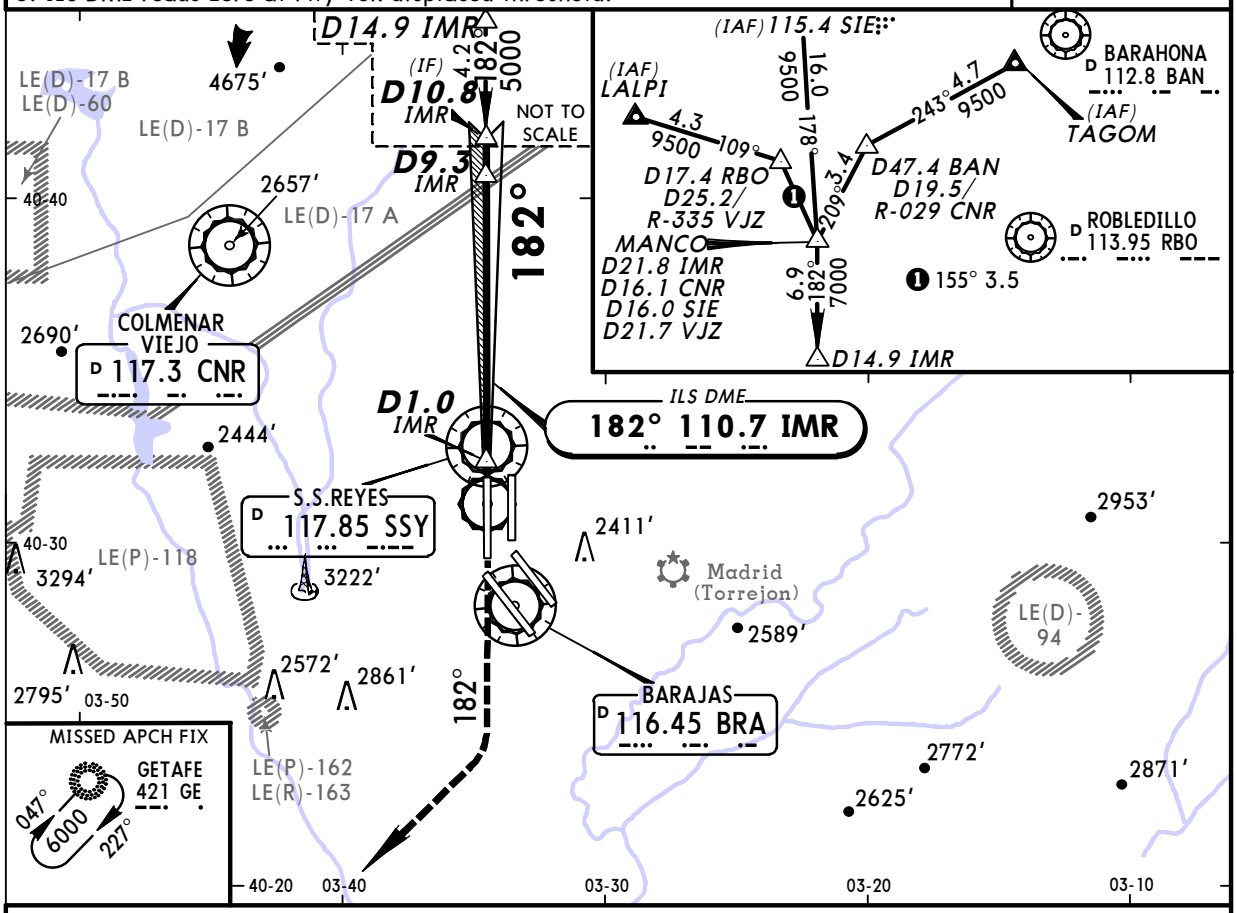
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.07 118.15 118.67 118.97	

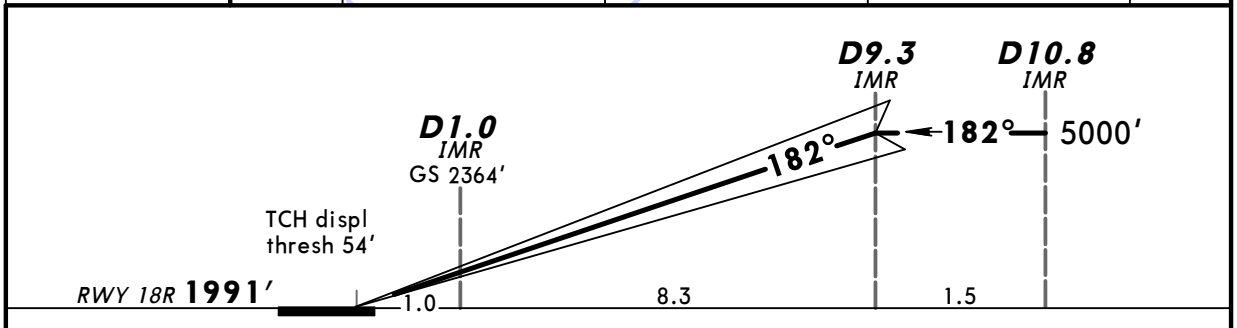
LOC IMR	Final Apch Crs	GS	CAT II ILS RA/DA(H)	Apt Elev 2000′
110.7	182°	D9.3 IMR 5000′ (3009′)	Refer to Minimums	RWY 1991′

MISSED APCH: Climb on R-182 SSY to 5000′, then turn RIGHT direct to NDB to join holding at 6000′.

Alt Set: hPa Rwy Elev: 71 hPa Trans level: By ATC Trans alt: 13000′
1. **DME REQUIRED.** 2. Special Aircrew & Acft Certification Required.
3. ILS DME reads zero at rwy 18R displaced threshold.

MSA BRA VOR
10,000′ 219° 078° 4500′





Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	377	485	539	647	755	862

HIALS-II PAPI PAPI
5000′
SSY 117.85 on R-182

Standard

STRAIGHT-IN LANDING RWY **18R**
CAT II ILS

ABC	D
RA 98′	**RA 107′**
DA(H) **2091′**(100′)	DA(H) **2101′**(110′)

RVR 300m [1]

PANS OPS 4

[1] Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m

CHANGES: Apt elev.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (11-3)

MADRID, SPAIN
ILS or LOC Rwy 33L

ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.15 118.07 118.67 118.97	

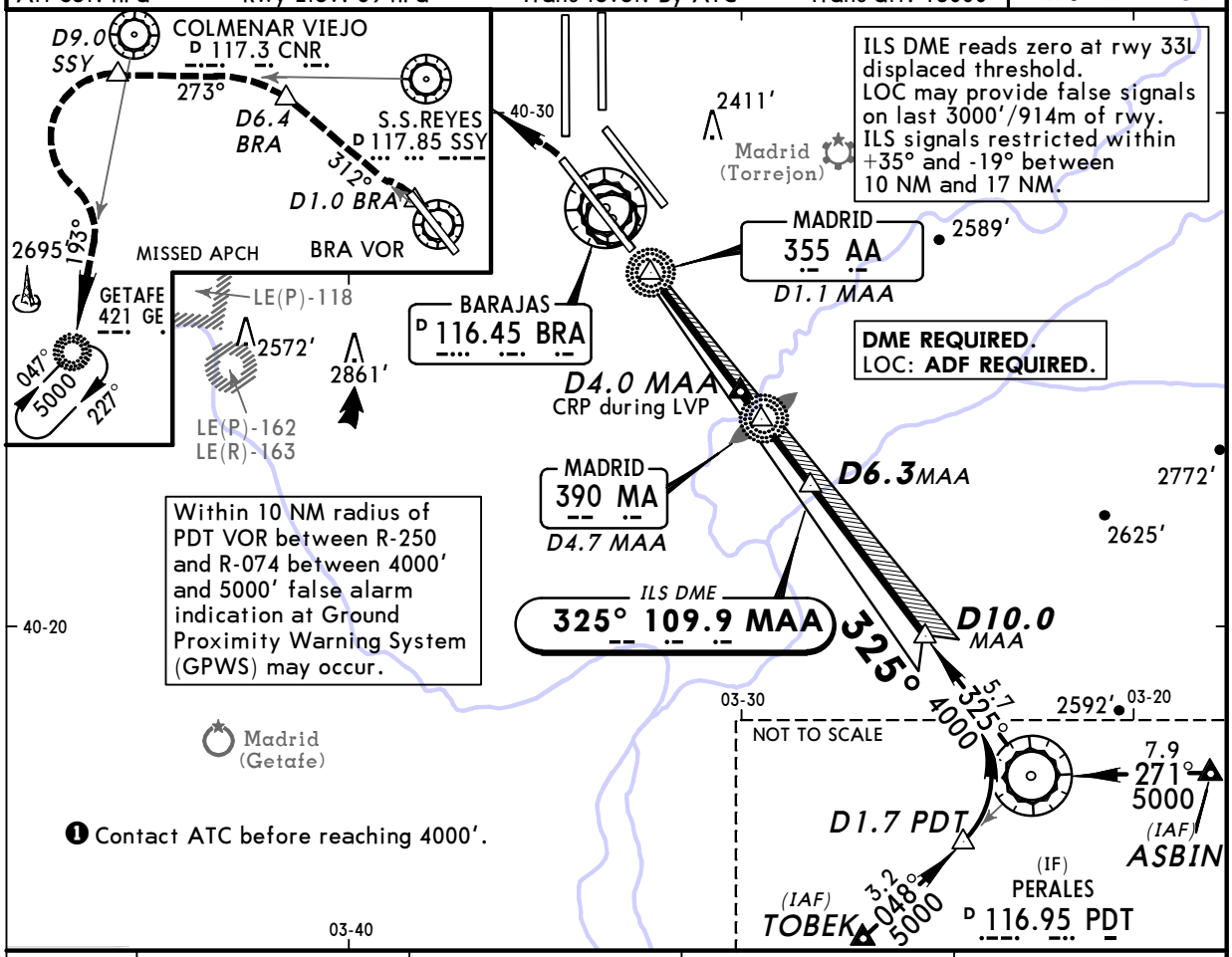
BRIEFING STRIP ™

LOC MAA	Final Apch Crs	GS LOM	ILS DA(H)	Apt Elev 2000′
109.9	325°	3513′ (1580′)	Refer to Minimums	RWY 1933′

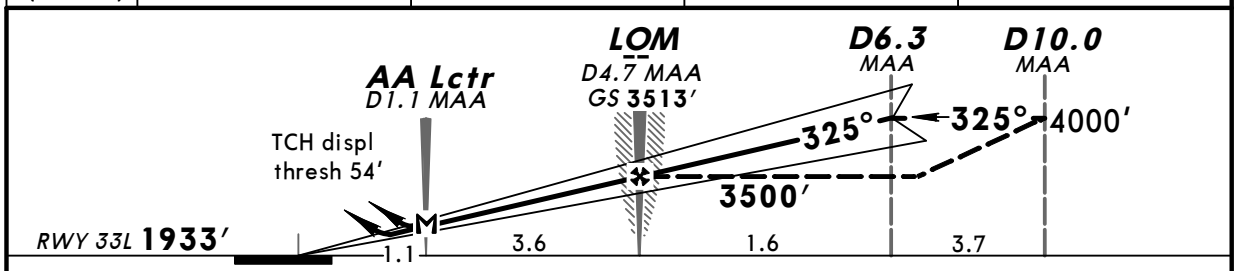
MISSED APCH: Climb on rwy heading to D1.0 BRA at or above 2300′ (LOC: 2500′). Turn LEFT onto R-312 BRA to D6.4 BRA. Turn LEFT (MAX 185 KT) to intercept R-273 SSY. Pass D9.0 SSY at 4000′ or above, then turn LEFT (MAX 220 KT) to intercept R-193 CNR direct to GE NDB to join holding at 5000′. ❶

Alt Set: hPa | Rwy Elev: 69 hPa | Trans level: By ATC | Trans alt: 13000′

MSA PDT VOR: 161° 5000′; 4300′; 003°



LOC (GS out)	MAA DME	2.0	3.0	4.0
	ALTITUDE	2600′	2930′	3260′



Gnd speed-Kts		70	90	100	120	140	160
ILS GS	3.00°	377	484	538	646	753	861
LOC Descent Angle	3.10°	384	494	548	658	768	878
MAP at AA Lctr/D1.1 MAA							

HIALS-II; PAPI PAPI; D1.0 BRA on Rwy hdg

Standard STRAIGHT-IN LANDING RWY 33L

ILS DA(H) A: 2227′ (294′) B: 2239′ (306′) C: 2247′ (314′) D: 2258′ (325′)

LOC (GS out) DA(H) 2350′ (417′)

	FULL	Limited	ALS out		ALS out
A	RVR 650m	RVR 750m	RVR 1400m	RVR 1200m	RVR 1500m
B	RVR 700m				
C					RVR 1900m
D	RVR 800m		RVR 1500m		

CIRCLE-TO-LAND

Max Kts	MDA(H)	VIS
100	2720′ (720′)	1500m
135	2860′ (860′)	1600m
180	3280′ (1280′)	2400m
205	3620′ (1620′)	3600m

PANS OPS 4

CHANGES: Apt elev. Minimums.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (11-4)

MADRID, SPAIN
ILS or LOC Rwy 33R

BRIEFING STRIP ™

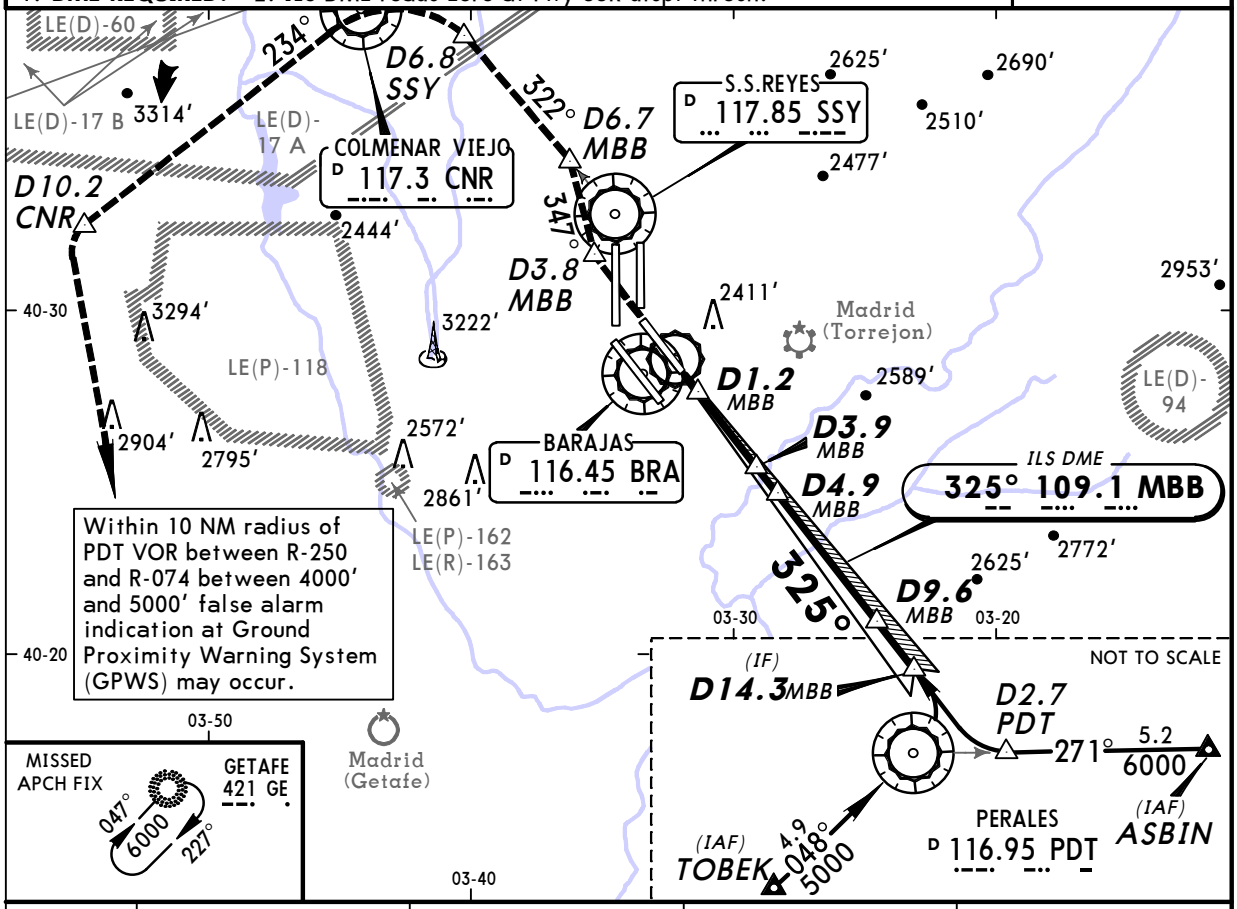
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.97 118.07 118.15 118.67	

LOC MBB	Final Apch Crs	GS	ILS DA(H)	Apt Elev 2000′
109.1	325°	D3.9 MBB 3195′ (1309′)	Refer to Minimums	RWY 1886′

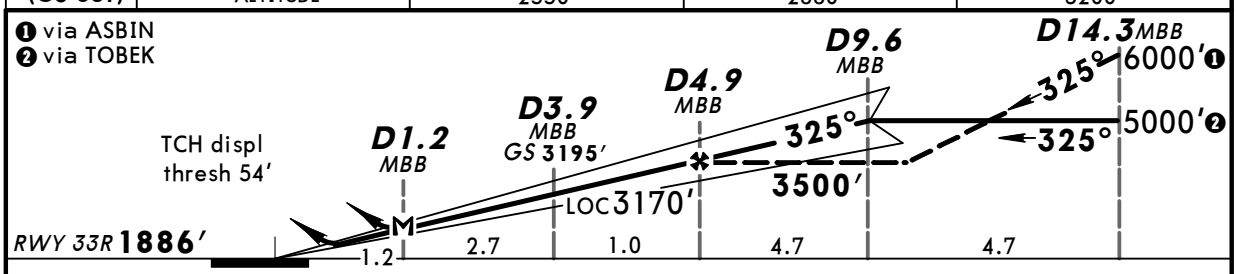
MISSED APCH: Climb on rwy heading to D3.8 MBB, then turn RIGHT onto 347°. At D6.7 MBB turn LEFT and follow R-322 SSY. At D6.8 SSY turn LEFT (MAX 210 KT) to intercept R-234 CNR. At D10.2 CNR turn LEFT direct to NDB to join holding at 6000′. Contact ATC before reaching 4000′.

Alt Set: hPa Rwy Elev: 67 hPa Trans level: By ATC Trans alt: 13000′
1. **DME REQUIRED.** 2. ILS DME reads zero at rwy 33R displ thresh.

MSA PDT VOR: 161° 5000′; 003° 4300′



LOC (GS out)	MBB DME	2.0	3.0	4.0
	ALTITUDE	2550′	2880′	3200′



Gnd speed-Kts		70	90	100	120	140	160
ILS GS	3.00°	377	484	538	646	753	861
LOC Descent Angle	3.10°	384	494	548	658	768	878
MAP at D1.2 MBB							

HIALS-II PAPI PAPI — D3.8 MBB on Rwy hdg

Standard STRAIGHT-IN LANDING RWY 33R

ILS DA(H) AB: 2086′ (200′) C: 2094′ (208′) D: 2105′ (219′)

LOC (GS out) DA(H) 2340′ (454′)

	FULL	Limited	ALS out		ALS out
A	RVR 550m	RVR 750m	RVR 1200m	RVR 1400m	RVR 1500m
B					
C					CMV 2100m
D					

CIRCLE-TO-LAND

Max Kts	MDA(H)	VIS
100	2720′ (720′)	1500m
135	2860′ (860′)	1600m
180	3280′ (1280′)	2400m
205	3620′ (1620′)	3600m

PANS OPS 4

CHANGES: Minimums.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (11-4A)

MADRID, SPAIN
CAT II ILS Rwy 33R

ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.97 118.07 118.15 118.67	

BRIEFING STRIP ™

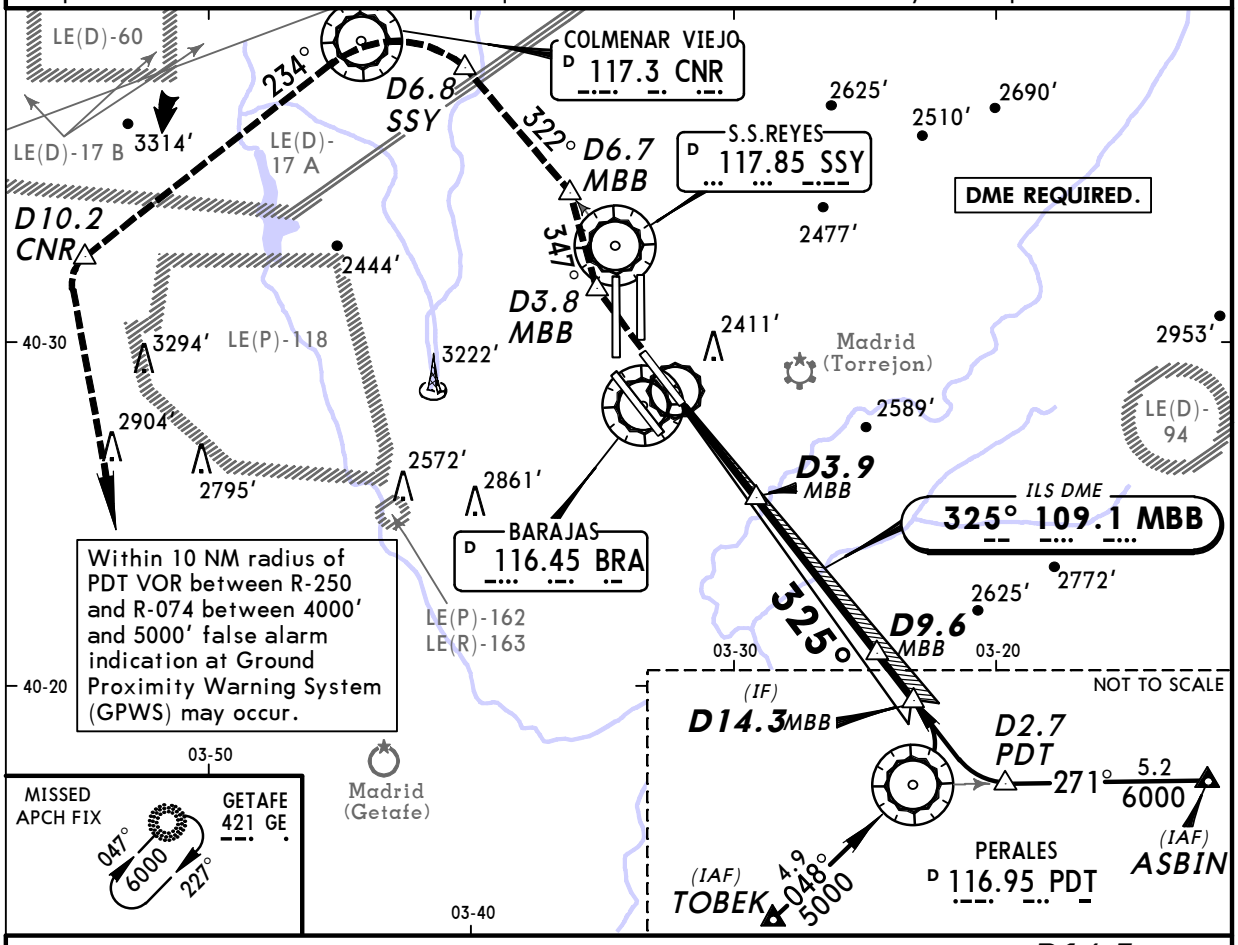
LOC MBB	Final Apch Crs	GS	CAT II ILS RA/DA(H)	Apt Elev 2000'
109.1	325°	D3.9 MBB 3195' (1309')	Refer to Minimums	RWY 1886'

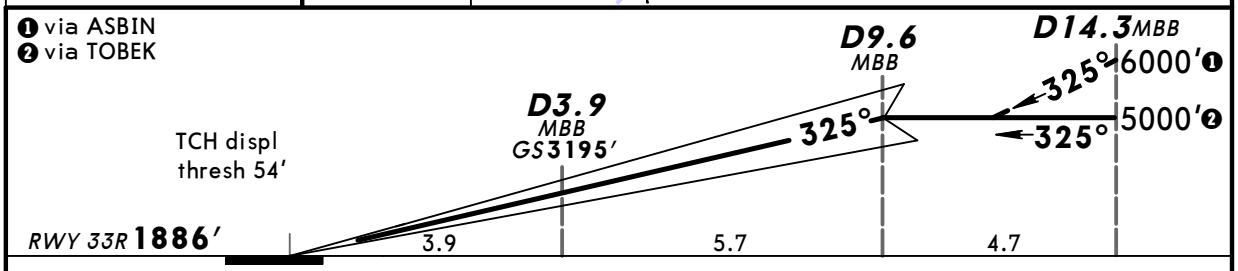
MISSED APCH: Climb on rwy heading to D3.8 MBB, then turn RIGHT onto 347°. At D6.7 MBB turn LEFT and follow R-322 SSY. At D6.8 SSY turn LEFT (MAX 210 KT) to intercept R-234 CNR. At D10.2 CNR turn LEFT direct to NDB to join holding at 6000'. Contact ATC before reaching 4000'.

161° 5000' 4300' 003°
MSA PDT VOR

Alt Set: hPa Rwy Elev: 67 hPa Trans level: By ATC Trans alt: 13000'

1. Special Aircrew & Acft Certification Required. 2. ILS DME reads zero at rwy 33R displ thresh.





Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	377	484	538	646	753	861

HIALS-II PAPI PAPI

D3.8 MBB on Rwy hdg

PANS OPS 4

Standard STRAIGHT-IN LANDING RWY **33R**

CAT II ILS

AB	C	D
RA 109'	RA 118'	RA 135'
DA(H) 1986' (100')	DA(H) 1993' (107')	DA(H) 2007' (121')
RVR 300m 1		RVR 400m

1 Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

CHANGES: None.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (13-1)

MADRID, SPAIN
VOR Rwy 18L

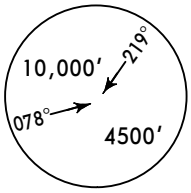
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.67 118.07 118.15 118.97	

BRIEFING STRIP ™

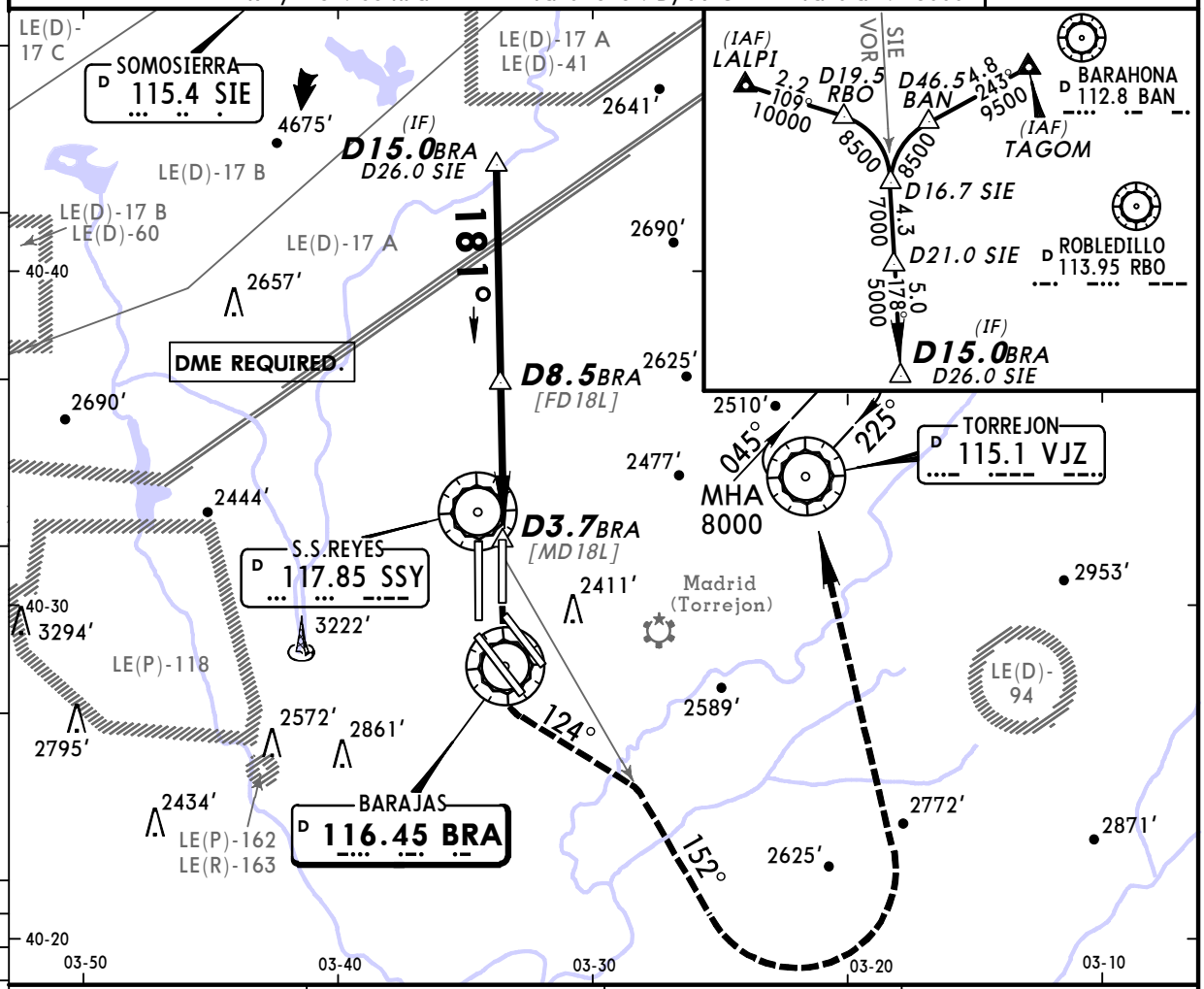
VOR	Final Apch Crs	Minimum Alt	DA(H)	Apt Elev 2000′
BRA 116.45	181°	D8.5 BRA 3500′ (1578′)	2500′ (578′)	RWY 1922′

MISSED APCH: Climb on R-001 to BRA VOR, then turn LEFT onto 124° to intercept R-152 SSY. At 4500′ turn LEFT direct to VJZ VOR to join holding at 8000′. Contact ATC before reaching 4000′.

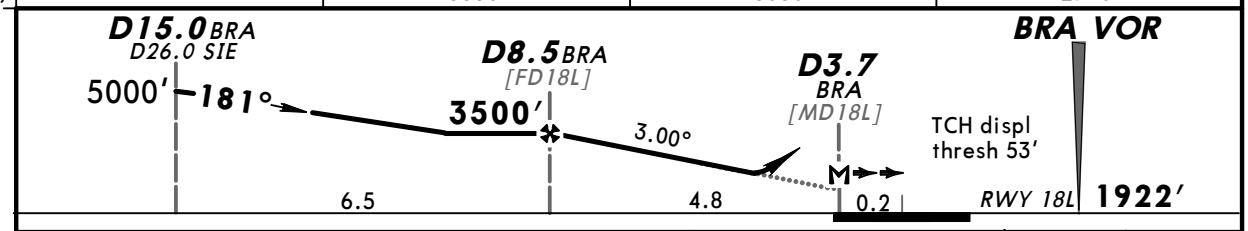
Alt Set: hPa | Rwy Elev: 68 hPa | Trans level: By ATC | Trans alt: 13000′



MSA BRA VOR



BRA DME	8.0	7.0	6.0
ALTITUDE	3350′	3030′	2710′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at D3.7 BRA							

HIALS-II
PAPI PAPI
BRA
116.45

Standard STRAIGHT-IN LANDING RWY 18L

DA(H) 2500′ (578′)

		ALS out
A	RVR 1500m	
B		
C	RVR 1900m	CMV 2400m
D		

CIRCLE-TO-LAND

Max Kts	MDA(H)	VIS
100	2720′ (720′)	1500m
135	2860′ (860′)	1600m
180	3280′ (1280′)	2400m
205	3620′ (1620′)	3600m

PANS OPS 4

CHANGES: Apt elev. Minimums.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD BARAJAS

JEPPESEN

29 OCT 10 (13-2)

MADRID, SPAIN VOR Rwy 18R

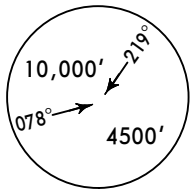
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.07 118.15 118.67 118.97	

BRIEFING STRIP ™

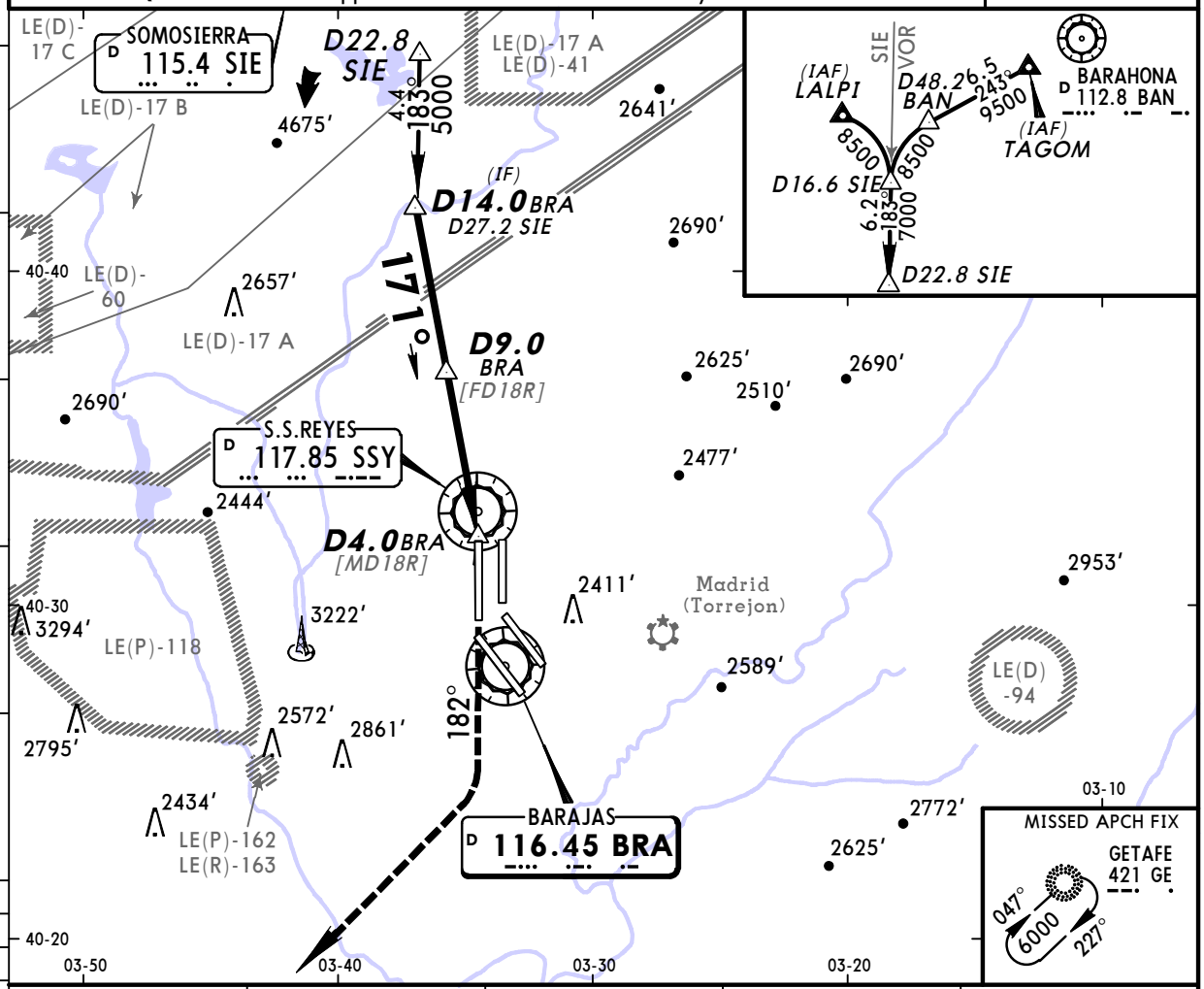
VOR	Final Apch Crs	Minimum Alt	DA(H)	Apt Elev 2000′
BRA 116.45	171°	D9.0 BRA 3900′ (1909′)	2550′ (559′)	RWY 1991′

MISSED APCH: Turn RIGHT and follow R-182 SSY to 5000′, then turn RIGHT direct to NDB to join holding at 6000′.

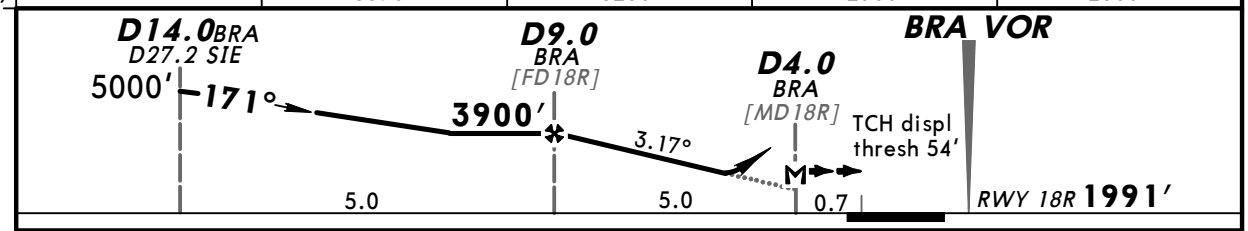
Alt Set: hPa Rwy Elev: 71 hPa Trans level: By ATC Trans alt: 13000′
1. **DME REQUIRED.** 2. Final approach track offset 11° from rwy centerline.



MSA BRA VOR



BRA DME	8.0	7.0	6.0	5.0
ALTITUDE	3570′	3230′	2900′	2560′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.17°	393	505	561	673	785	897
MAP at D4.0 BRA							

HIALS-II
PAPI PAPI
RT

SSY
117.85
R-182

Standard STRAIGHT-IN LANDING RWY **18R**

DA(H) **2550′** (559′)

		ALS out
A	RVR 1500m	
B		
C	RVR 1800m	CMV 2500m
D		

CIRCLE-TO-LAND

Max Kts	MDA(H)	VIS
100	2720′ (720′)	1500m
135	2860′ (860′)	1600m
180	3280′ (1280′)	2400m
205	3620′ (1620′)	3600m

PANS OPS 4

CHANGES: Apt elev. Minimums.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD
BARAJAS

JEPPESEN
29 OCT 10 (13-3)

MADRID, SPAIN
VOR Rwy 33L

BRIEFING STRIP ™

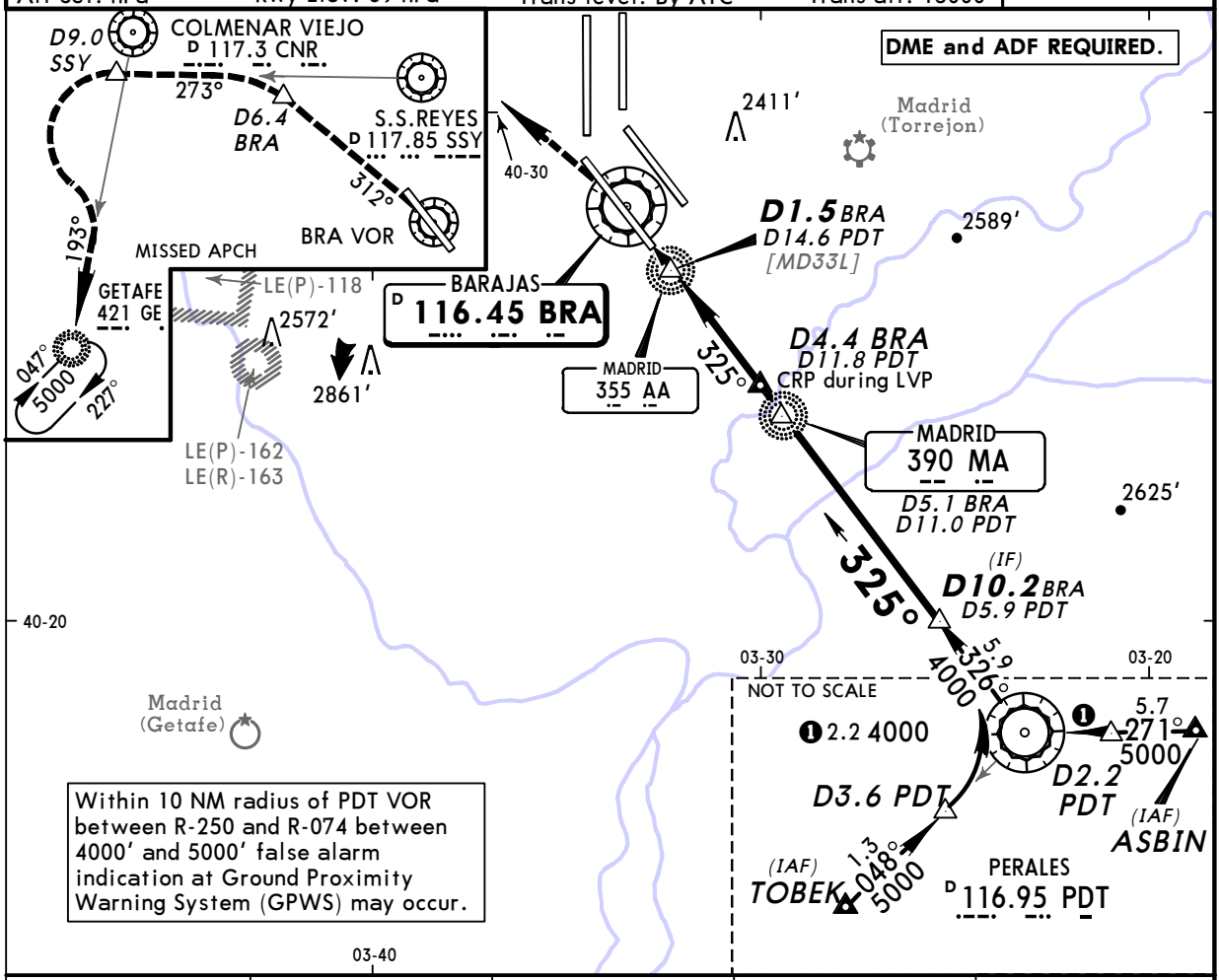
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.15 118.07 118.67 118.97	

VOR	Final Apch Crs	Minimum Alt MA Lctr	DA(H)	Apt Elev / RWY
BRA 116.45	325°	3400′ (1467′)	2400′ (467′)	2000′ / 1933′

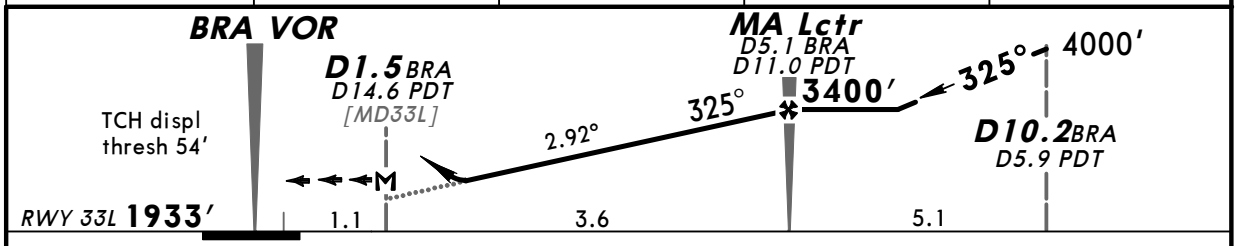
MISSED APCH: Climb on R-145 BRA inbound to BRA VOR. Follow R-312 BRA to D6.4 BRA. Turn LEFT (MAX 185 KT) to intercept R-273 SSY. Pass D9.0 SSY at 4000′ or above, then turn LEFT (MAX 220 KT) to intercept R-193 CNR direct to GE NDB to join holding at 5000′. Contact ATC before reaching 4000′.

Alt Set: hPa | Rwy Elev: 69 hPa | Trans level: By ATC | Trans alt: 13000′

MSA PDT VOR: 161° 5000′; 4300′; 003° 5000′



BRA DME	2.0	3.0	4.0	5.0
ALTITUDE	2440′	2750′	3060′	3370′



Gnd speed-Kts	70	90	100	120	140	160
Descent Angle 2.92°	362	465	517	620	723	826
MAP at D1.5 BRA/D14.6 PDT						

HIALS-II PAPI PAPI BRA 116.45

Standard STRAIGHT-IN LANDING RWY 33L

DA(H) 2400′(467′)

		ALS out
A	RVR 1500m	
B		
C	RVR 1500m	CMV 2200m
D		

CIRCLE-TO-LAND

Max Kts	MDA(H)	VIS
100	2720′ (720′)	1500m
135	2860′ (860′)	1600m
180	3280′ (1280′)	2400m
205	3620′ (1620′)	3600m

PANS OPS 4

CHANGES: Apt elev. Minimums.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.

Licensed to Admin. Printed on 23 Nov 2010.
Notice: After 3 Dec 2010 0901Z, this chart may no longer be valid. Disc 23-2010

JEPPESEN
JeppView 3.7.2.1

LEMD/MAD BARAJAS

JEPPESEN
29 OCT 10 (13-4)

MADRID, SPAIN VOR Rwy 33R

BRIEFING STRIP ™

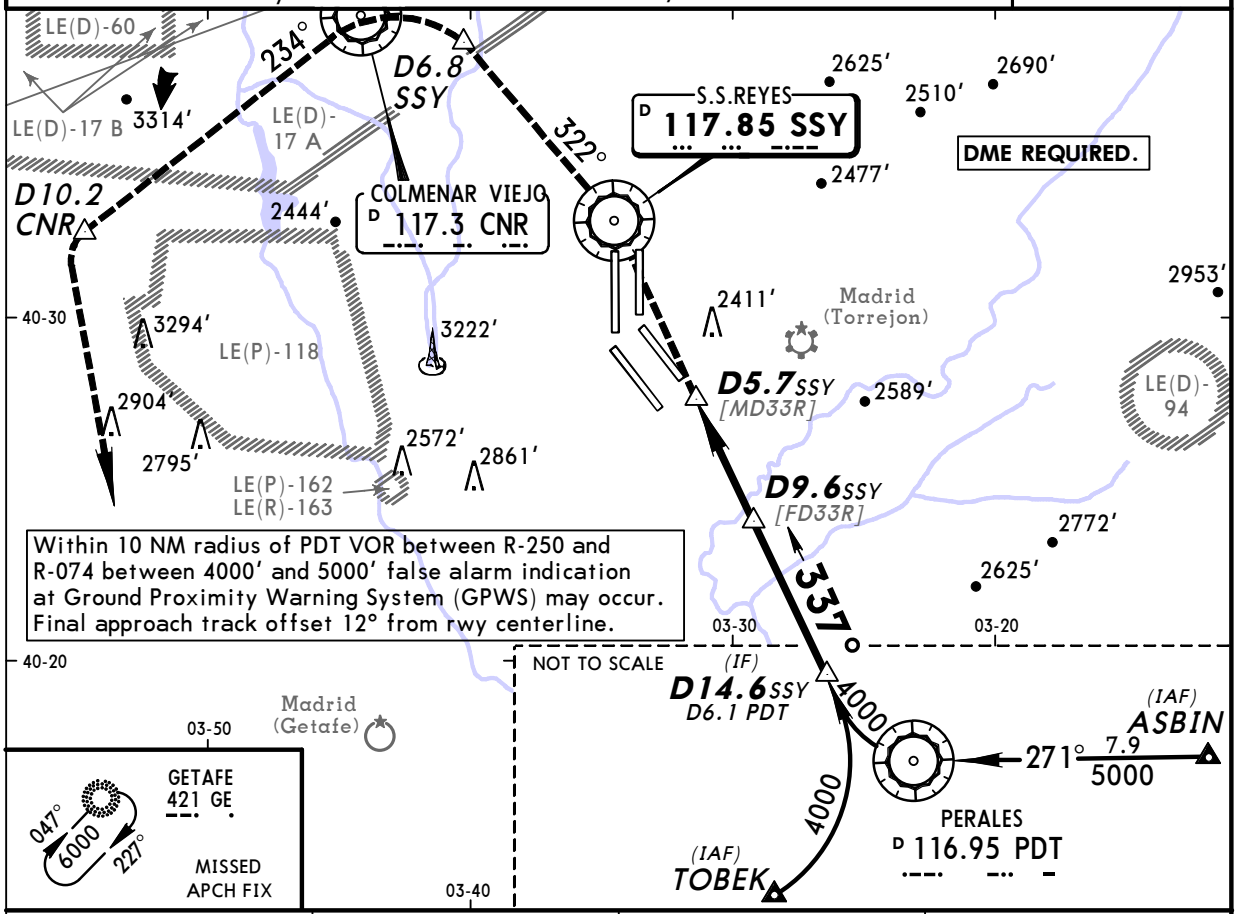
ATIS Arrival	MADRID Approach	BARAJAS Tower	For Ground frequencies refer to 10-9
118.25	124.02 124.22 127.5	118.97 118.07 118.15 118.67	

VOR	Final Apch Crs	Minimum Alt	DA(H)	Apt Elev 2000′
SSY 117.85	337°	D9.6 SSY 3400′ (1514′)	2490′ (604′)	RWY 1886′

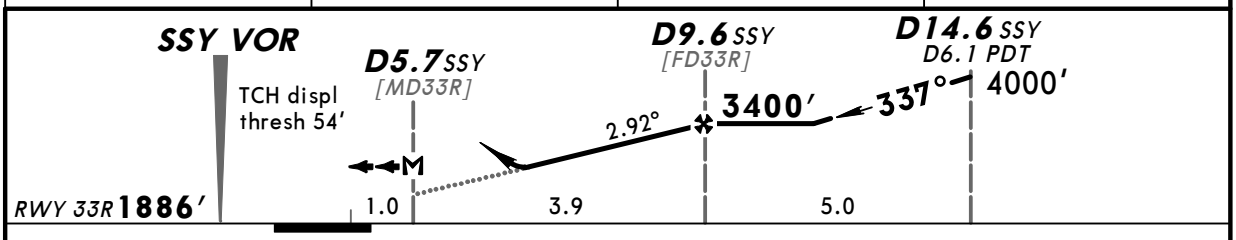
MISSED APCH: Climb direct to SSY VOR, then follow R-322 SSY to D6.8 SSY. Turn LEFT (MAX 210 KT) to intercept and follow R-234 CNR to D10.2 CNR. Turn LEFT direct to NDB to join holding at 6000′. Contact ATC before reaching 4000′.

Alt Set: hPa | Rwy Elev: 67 hPa | Trans level: By ATC | Trans alt: 13000′

MSA PDT VOR: 161° 5000′; 4300′; 200°



SSY DME	7.0	8.0	9.0
ALTITUDE	2600′	2910′	3220′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	2.92°	362	465	517	620	723	826
MAP at D5.7 SSY							

HIALS-II PAPI PAPI SSY 117.85

Standard STRAIGHT-IN LANDING RWY **33R**

DA(H) **2490′** (604′)

	ALS out		CIRCLE-TO-LAND Max Kts	MDA(H)	VIS
A	RVR 1500m		100	2720′ (720′)	1500m
B			135	2860′ (860′)	1600m
C	CMV 2100m	CMV 2800m	180	3280′ (1280′)	2400m
D			205	3620′ (1620′)	3600m

PANS OPS 4

CHANGES: Apt elev. Minimums.

© JEPPESEN, 2005, 2010. ALL RIGHTS RESERVED.