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Airport Information For LEBB

Terminal Charts For LEBB

Revision Letter For Cycle 01-2014

Change Notices

Notebook

General Information

Location: Bilbao Esp
IATA Code: BIO
Lat/Long: N43° 18.1' W002° 54.6'
Elevation: 137 ft

Airport Use: Public
Magnetic Variation: 1.2°W

Fuel Types: 100 Octane (LL), Jet A-1
Customs: Yes
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: No

Sunrise: 0744 Z
Sunset: 1651 Z,

Runway Information

Runway: 10
Length x Width: 6562 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 118 ft
Lighting: Edge, ALS
Displaced Threshold: 296 ft

Runway: 12
Length x Width: 8530 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 131 ft
Lighting: Edge, ALS, Centerline

Runway: 28
Length x Width: 6562 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 131 ft
Lighting: Edge

Runway: 30
Length x Width: 8530 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 137 ft
Lighting: Edge, ALS, Centerline, TDZ
Displaced Threshold: 1509 ft

Communication Information

ATIS 118.825
Bilbao Tower 118.5
Bilbao Tower 25.78 Military
Bilbao Ground Control 121.7
Bilbao Approach Control 128.575 Secondary
Bilbao Approach Control 127.45

1. GENERAL

1.1. ATIS

*ATIS 118.82

1.2. NOISE ABATEMENT PROCEDURES

1.2.1. RUN-UP TESTS

Run-up test higher than idle regime will be requested to CECOPS through SITA or fax.
Run-up tests at medium or high regime are not allowed between 2400-0600 LT.

1.3. LOW VISIBILITY PROCEDURES (LVP)

1.3.1. GENERAL

Low visibility take-offs are authorized from RWY 30.

LVP will be applied for take-off, when RVR measurement of any transmissometer or meteorological visibility is 500m or below.

Pilots will be informed about the application of LVP by the appropriate ATIS service.

Pilots will be informed when the application of procedures is cancelled, which will take place when RVR measurements are higher than 1000 m and with a strong tendency to improve.

1.3.2. GROUND MOVEMENT

1.3.2.1. GENERAL

When operating in low visibility conditions, TWR will activate, besides the appropriate marking lights, all the available stop bars and the intermediate holding point lights in gates A-1, A-2 and B will open the appropriate stop bar to allow the entry of ONLY ONE ACFT, closing it as soon as the ACFT has gone over it.

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

When a departing ACFT needs to return to the apron, the pilot will inform TWR and wait for new taxiing instructions.

1.3.2.2. ARRIVAL:

ACFT, that have already landed:

- notify RWY vacated, and TWY used.
- wait for taxiing instructions from TWR.

At the apron entry, ACFT must wait for the arrival of a Follow-me car in order to be guided to the assigned stand.

1.3.2.3. DEPARTURE:

From North apron:

ACFT will exit via gates A-1, A-2 or B, taxiing along TWY segments T-4, T-3 and/or T-2, T-1 and C-1, as appropriate, to RWY 30 holding point (stop bar).

From there, ACFT will enter RWY 30 to accomplish the take-off.

From South apron:

ACFT will taxi to leave the apron via TWY D-3 and will continue along TWY D-1 to RWY 12 holding point (stop bar).

From there, ACFT will enter RWY 12 to perform a complete "back track" to RWY 30.

1. GENERAL

1.3.3. COMMUNICATION FAILURE

Whenever an ACFT operating in the manoeuvring area experiences a communication failure, it will comply as follows:

Departing ACFT will continue by the assigned route to its clearance limit, taking extreme caution to avoid deviations. Once that point has been reached, it will hold position and wait for the arrival of a Follow-me car in order to be guided to the stand position.

1.4. TAXI PROCEDURES

TWY C1 MAX wingspan 118'/36m.

Taxi to holding position C1 is not allowed if holding position C2 is occupied.

1.5. PARKING INFORMATION

On stands 12 and 13 push-back required when stand 123 is occupied by ACFT larger CRJ2.

Stand 19 push-back required if stand 20 is occupied.

Stand 21 push-back required when stand 20 is occupied by ACFT larger B734.

Exit stands 1 thru 6A, 8, 11, 11A, 20, 21A, 78, 89 and 123 on North Ramp by towing.

1.6. OTHER INFORMATION

RWYs 10 and 30 right-hand circuit.

Apron South not visible from Control Tower.

2. ARRIVAL

2.1. SPEED RESTRICTIONS

2.2.1. SPEED ADJUSTMENTS UNDER RADAR CONTROL

- MAX 250 KT at or below FL 120.
- MAX 210 KT when starting the turn to intercept ILS/LOC.
- MAX 180 KT when turn is completed and ACFT is established on ILS/LOC course within 20NM of the landing THR.
- MAX 160 KT when crossing 4NM to landing THR.
- ACFT with cruising speed lower than the mentioned above shall maintain cruising speed up to the adjusting fix concerned.

3. DEPARTURE

3.1. START-UP, PUSH-BACK & TAXI PROCEDURES

Request clearance to start-up engines from Tower (GND) and report:

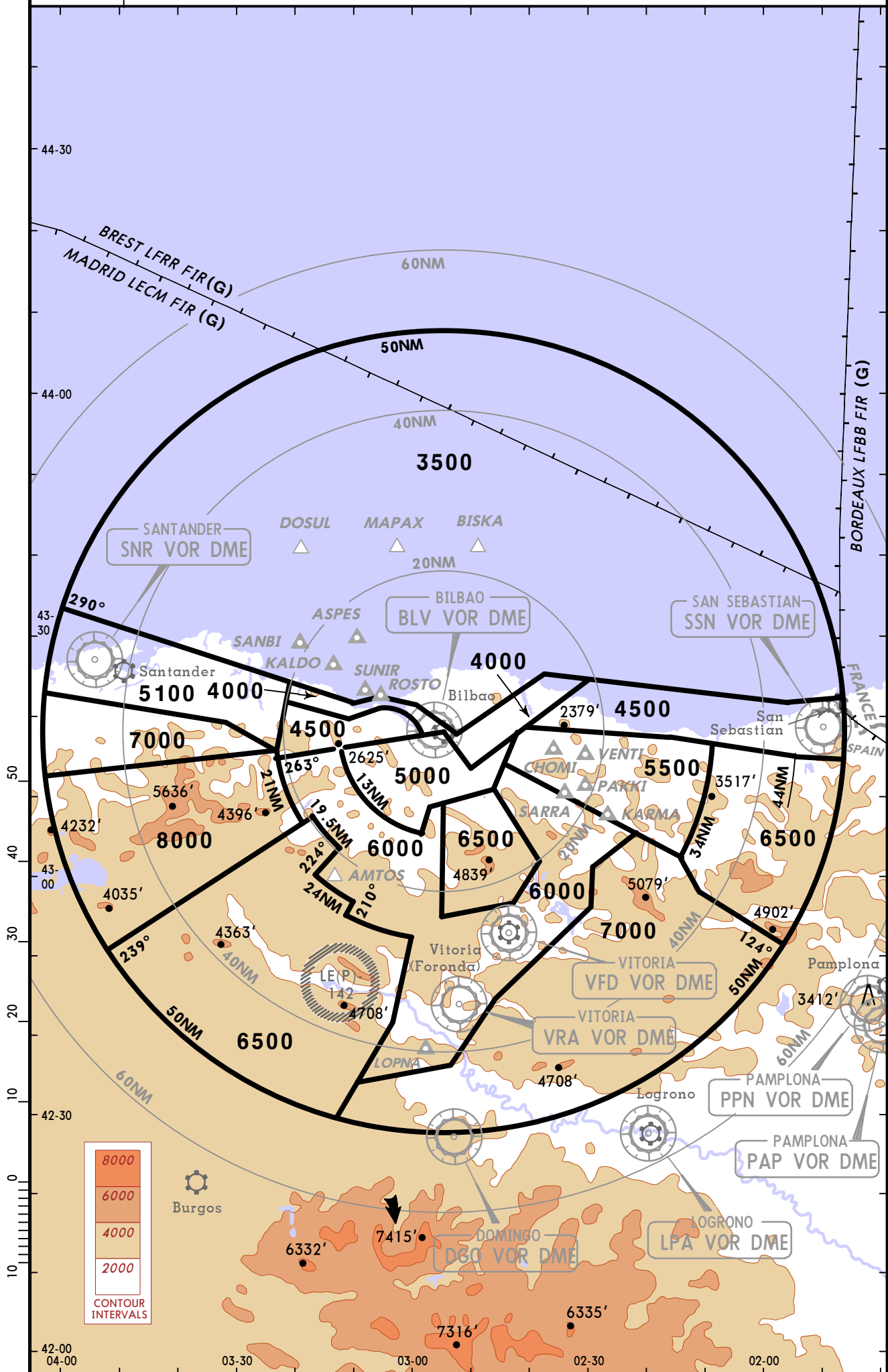
- Type of ACFT
- Parking stand
- ATIS message received

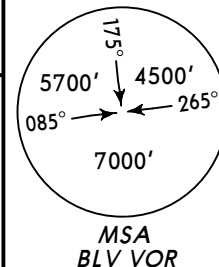
Pilots will request clearance for push-back and/or taxi on the appropriate frequency.

Departing ACFT with wingspan more than 118'/36m report to ATC during first contact.

3.2. SPEED RESTRICTIONS

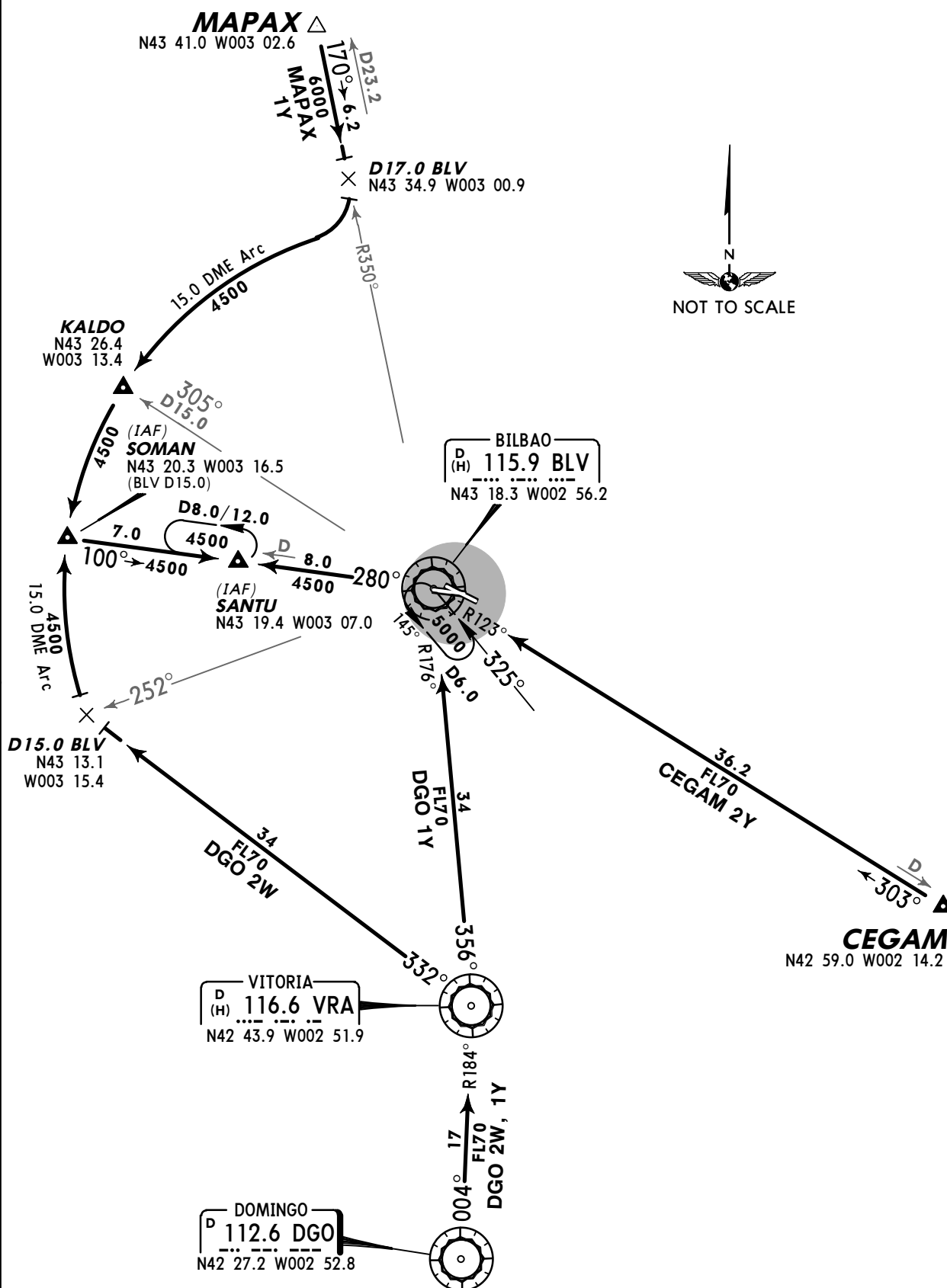
MAX 250 KT until leaving FL 100.

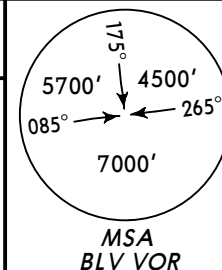
Apt Elev
137'Alt Set: hPa Trans level: By ATC Trans alt: 6000'
The published minimum altitudes integrate no correction for low temperatures.

*ATIS
118.82Apt Elev
137'Alt Set: hPa
Trans level: By ATC Trans alt: 6000'

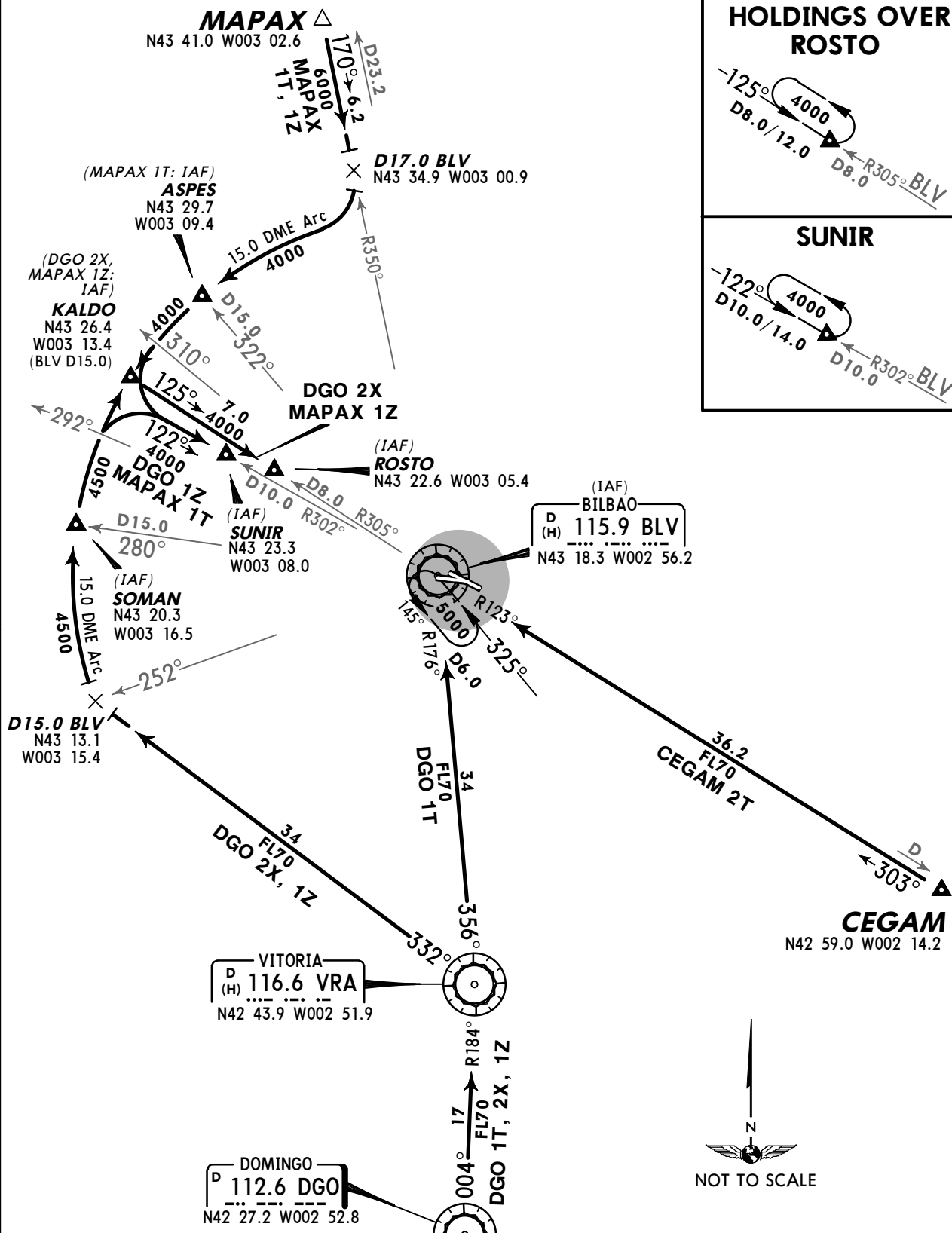
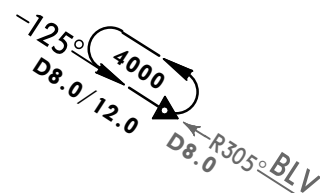
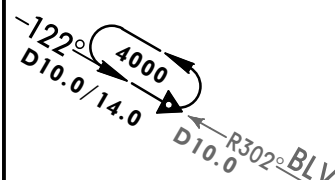
CEGAM TWO YANKEE (CEGAM 2Y) [CEGA2Y]
DOMINGO TWO WHISKEY (DGO 2W)
DOMINGO ONE YANKEE (DGO 1Y)
MAPAX ONE YANKEE (MAPAX 1Y) [MAPA1Y]
RWY 10 ARRIVALS

~~SPEED~~ MAX 250 KT AT OR BELOW FL120



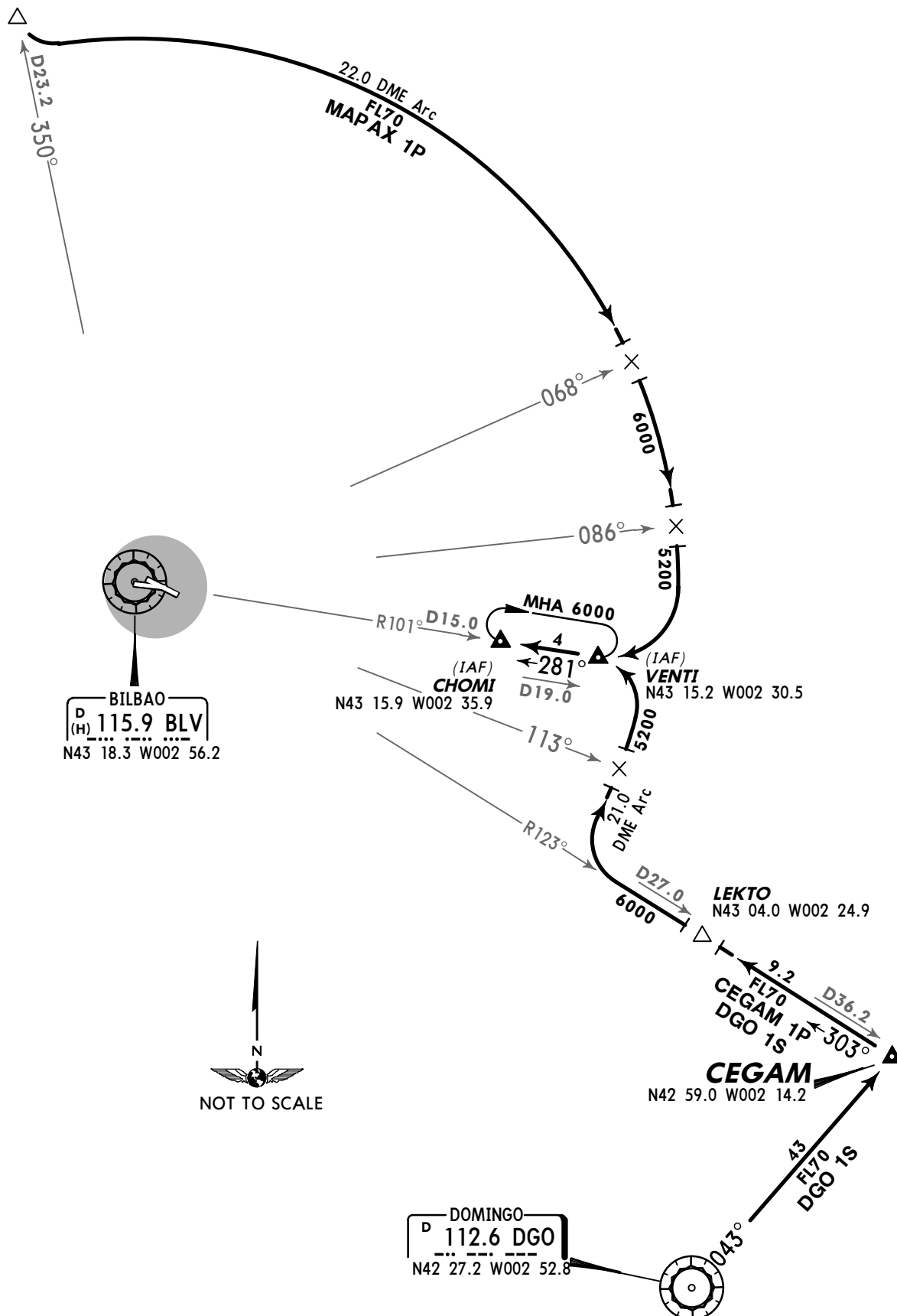
*ATIS
118.82Apt Elev
137'Alt Set: hPa
Trans level: By ATC Trans alt: 6000'

CEGAM TWO TANGO (CEGAM 2T) [CEGA2T]
DOMINGO ONE TANGO (DGO 1T)
DOMINGO TWO X-RAY (DGO 2X)
DOMINGO ONE ZULU (DGO 1Z)
MAPAX ONE TANGO (MAPAX 1T) [MAPA1T]
MAPAX ONE ZULU (MAPAX 1Z) [MAPA1Z]
RWY 12 ARRIVALS

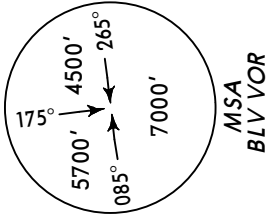
~~SPEED~~ MAX 250 KT AT OR BELOW FL120**HOLDINGS OVER
ROSTO****SUNIR**

*ATIS
118.82Apt Elev
137'Alt Set: hPa
Trans level: By ATC Trans alt: 6000'CEGAM ONE PAPA (CEGAM 1P) [CEGA1P]
DOMINGO ONE SIERRA (DGO 1S)
MAPAX ONE PAPA (MAPAX 1P) [MAPA1P]
RWY 28 ARRIVALS**~~SPEED~~ MAX 250 KT AT OR BELOW FL120****MAPAX**

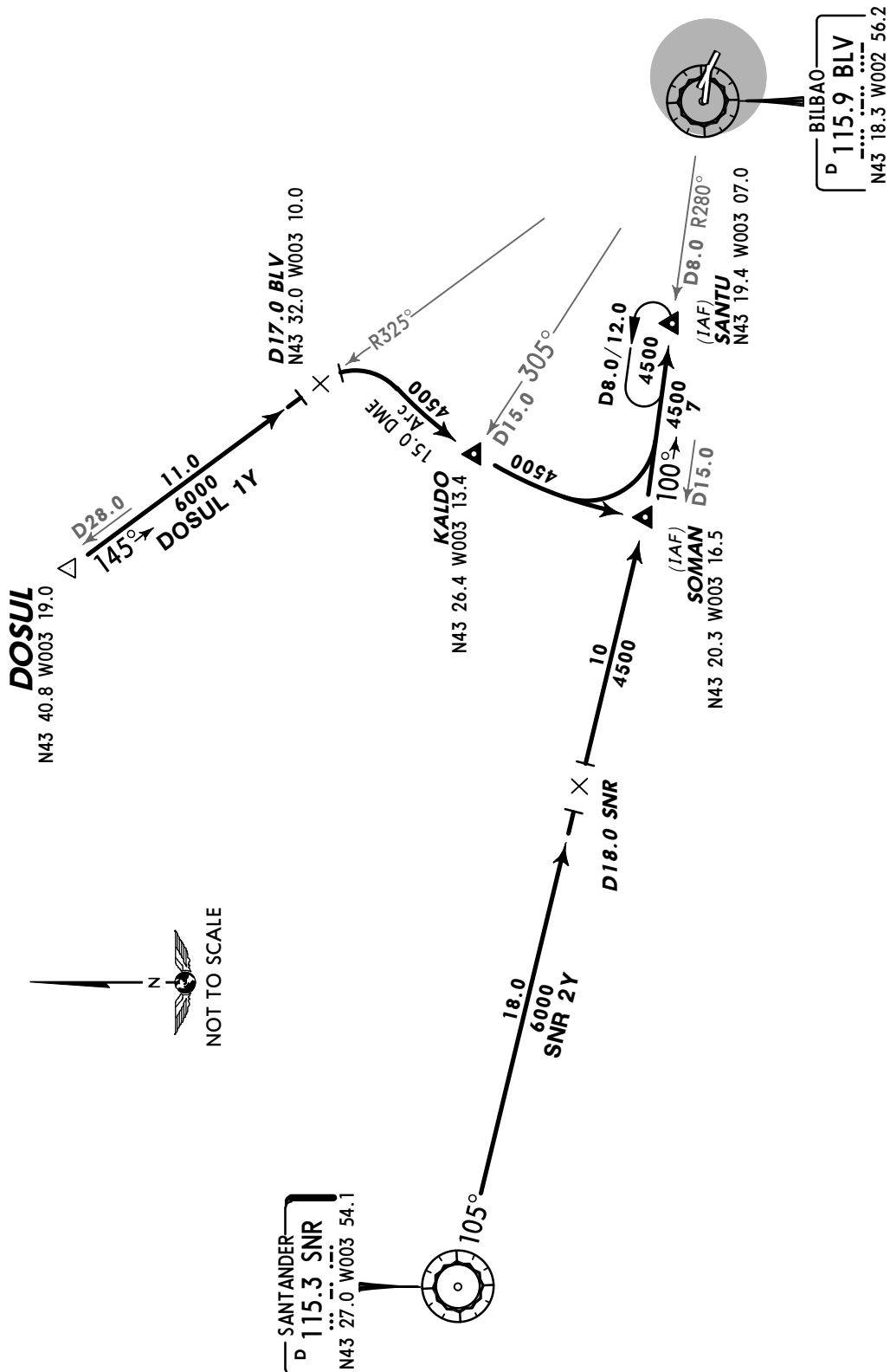
N43 41.0 W003 02.6



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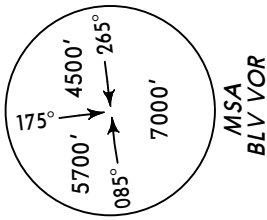
*ATIS
118.82Apt Elev
137'Alt Set: hPa
Trans level: By ATC Trans alt: 6000'

DOSUL ONE YANKEE (DOSUL 1Y) [DOSU1Y]
SANTANDER TWO YANKEE (SNR 2Y)
RWY 10 ARRIVALS
FROM WEST & NORTHWEST



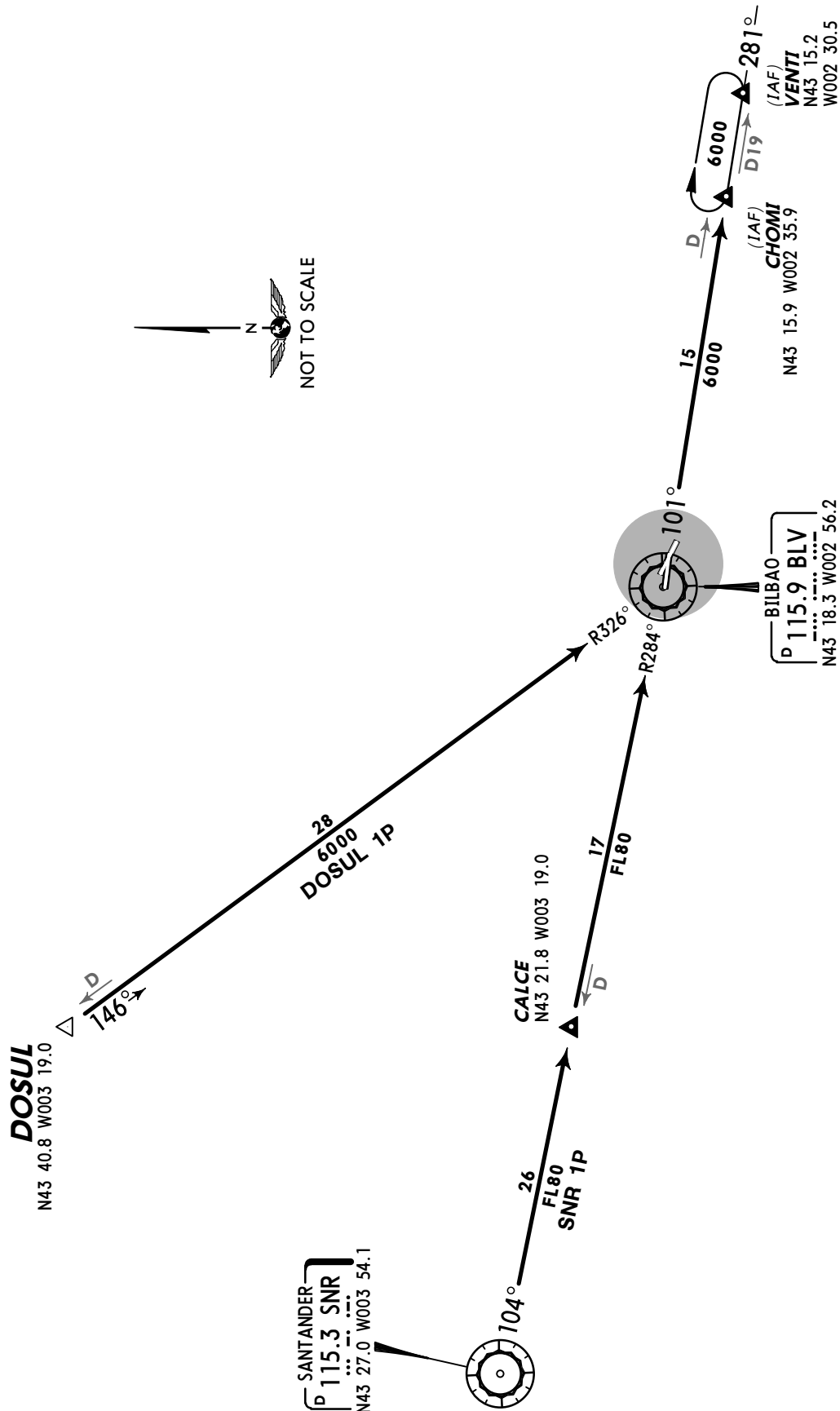
RWY 12 ARRIVALS FROM WEST & NORTHWEST



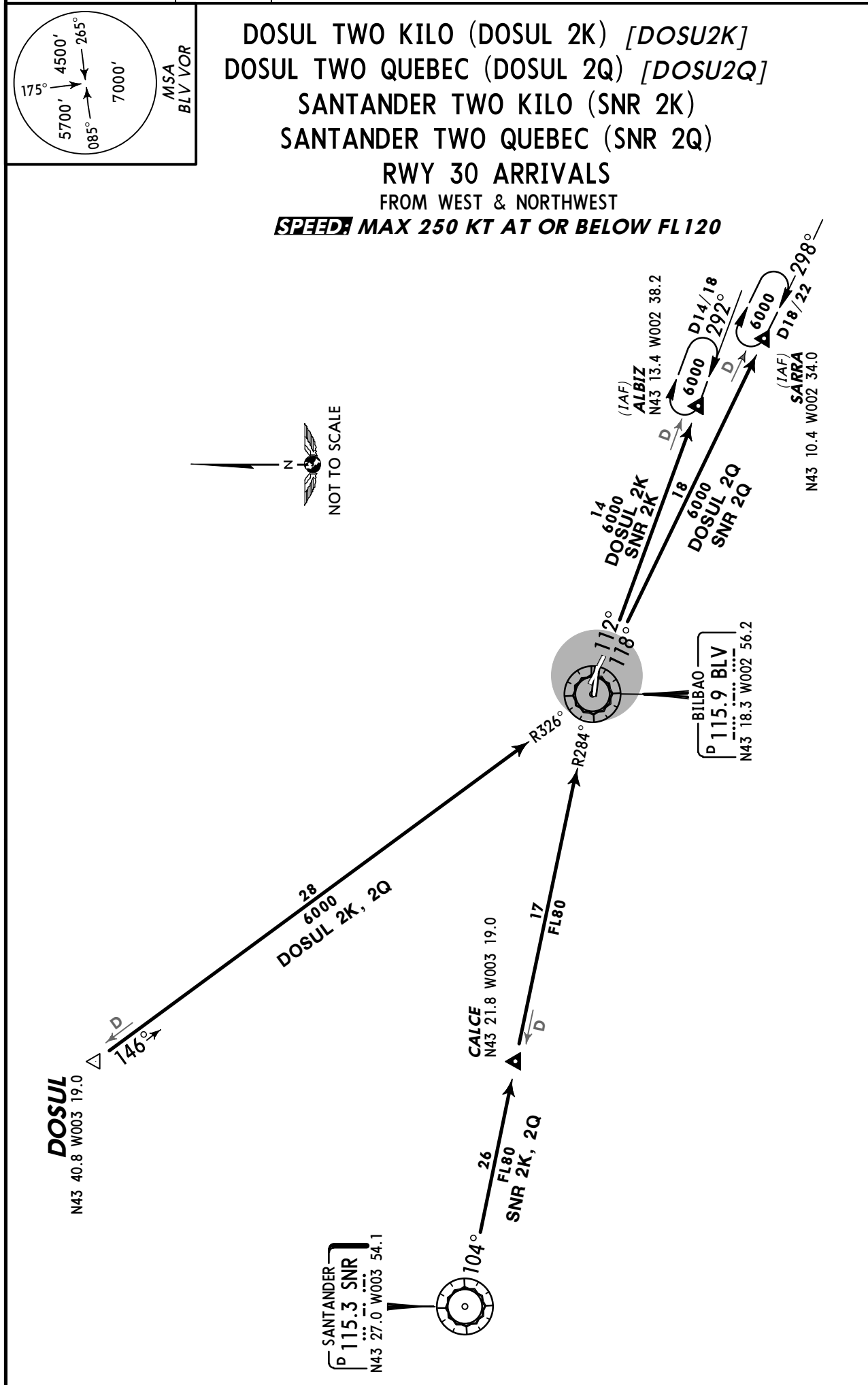
*ATIS
118.82Apt Elev
137'Alt Set: hPa
Trans level: By ATC Trans alt: 6000'

DOSUL ONE PAPA (DOSUL 1P) [DOSU1P]
SANTANDER ONE PAPA (SNR 1P)
RWY 28 ARRIVALS
FROM WEST & NORTHWEST

~~SPEED~~ MAX 250 KT AT OR BELOW FL120



*ATIS 118.82	<i>Apt Elev</i> 137'	Alt Set: hPa Trans level: By ATC Trans alt: 6000'
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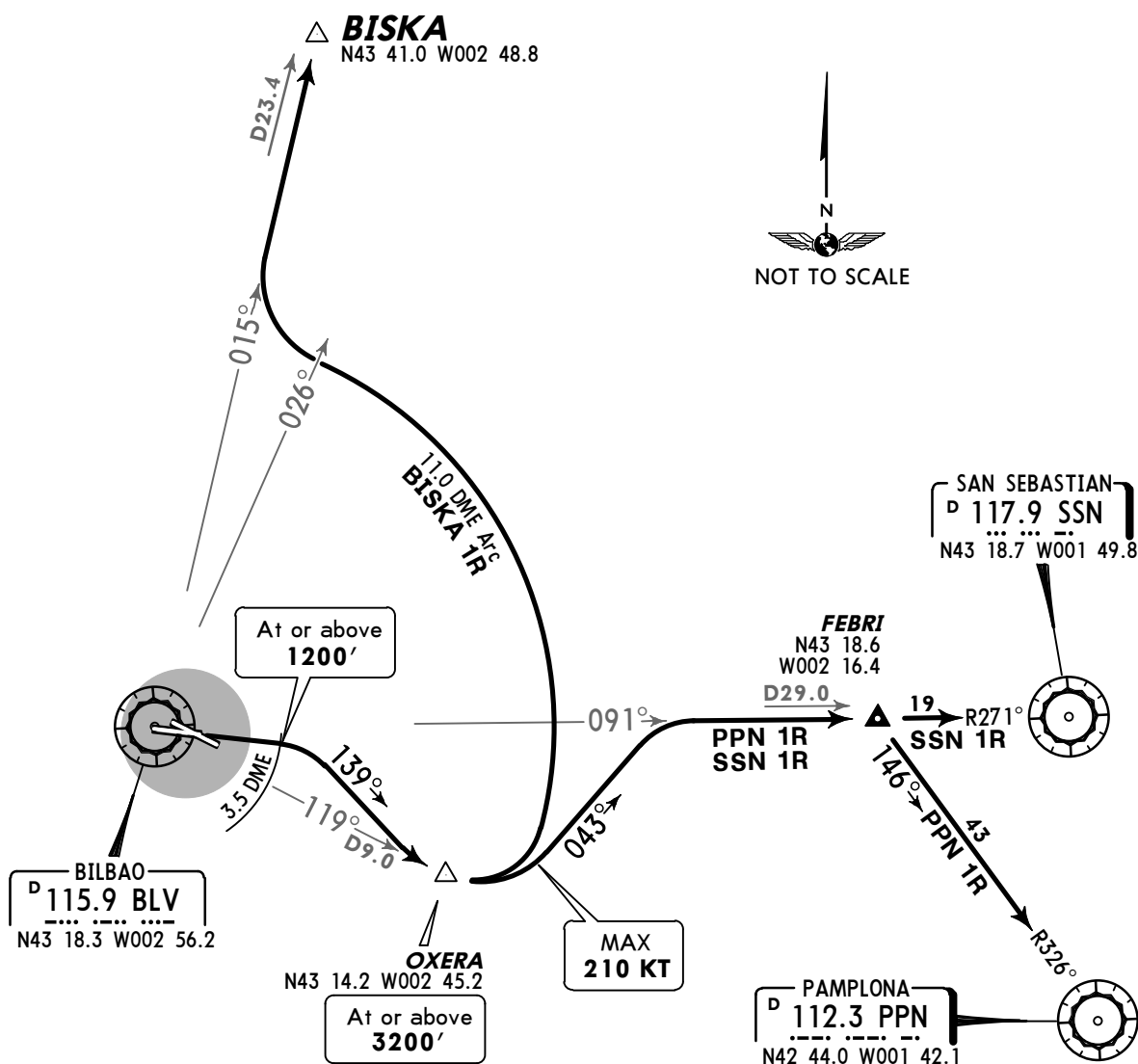
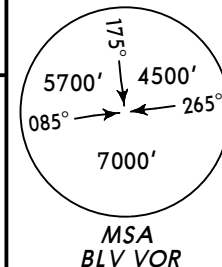


Apt Elev
137'

Trans level: By ATC Trans alt: 6000'

BISKA ONE ROMEO (BISKA 1R) [BISK1R]
PAMPLONA ONE ROMEO (PPN 1R)
SAN SEBASTIAN ONE ROMEO (SSN 1R)
RWY 10 DEPARTURES

TO NORTHEAST, EAST & SOUTHEAST

~~SPEED~~ MAX 250 KT UNTIL LEAVING FL100

These SIDs require a minimum climb gradient
of

425' per NM (7%)

BISKA 1R:

until leaving 3200'.

PPN 1R, SSN 1R:

until leaving 5000'.

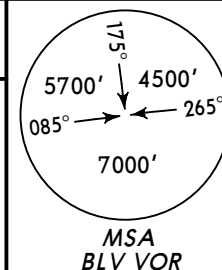
Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

Initial climb clearance **FL80** , except ATC clearance

SID	INITIAL CLIMB/ROUTING
BISKA 1R	Climb on runway heading to BLV 3.5 DME, turn RIGHT, 139° track, intercept BLV R-119 to OXERA, turn LEFT, along BLV 11.0 DME arc, when passing BLV R-026 turn RIGHT, intercept BLV R-015 to BISKA.
PPN 1R	Climb on runway heading to BLV 3.5 DME, turn RIGHT, 139° track, intercept BLV R-119 to OXERA, turn LEFT, 043° track, intercept BLV R-091 to FEBRI, turn RIGHT, intercept PPN R-326 inbound to PPN.
SSN 1R	Climb on runway heading to BLV 3.5 DME, turn RIGHT, 139° track, intercept BLV R-119 to OXERA, turn LEFT, 043° track, intercept BLV R-091 via FEBRI to SSN.

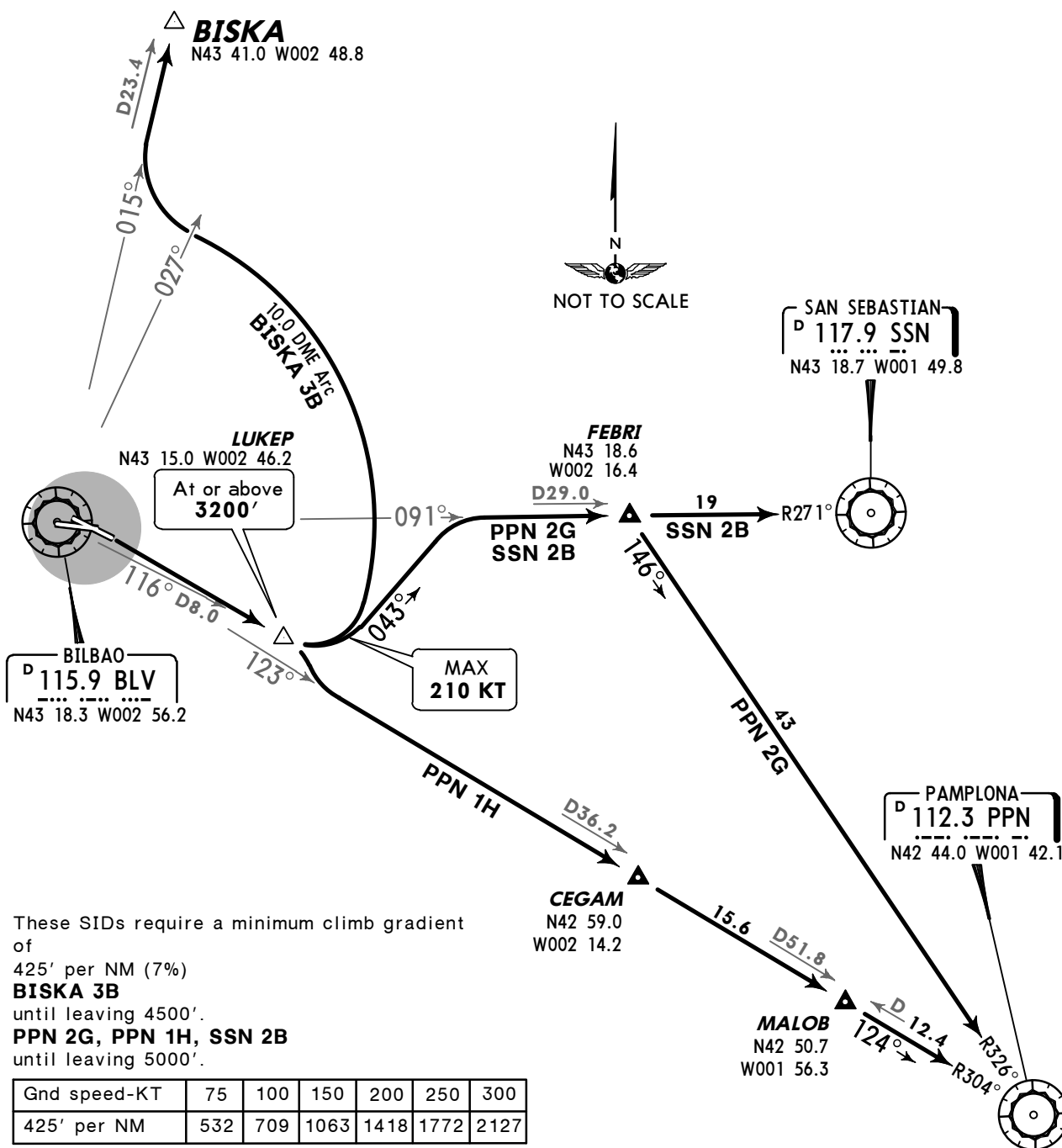
Apt Elev
137'

Trans level: By ATC Trans alt: 6000'



BISKA THREE BRAVO (BISKA 3B) [BISK3B]
PAMPLONA TWO GOLF (PPN 2G)
PAMPLONA ONE HOTEL (PPN 1H)
SAN SEBASTIAN TWO BRAVO (SSN 2B)
RWY 12 DEPARTURES

TO NORTHEAST, EAST & SOUTHEAST

~~SPEED~~ MAX 250 KT UNTIL LEAVING FL100Initial climb clearance **FL80**, except ATC clearance

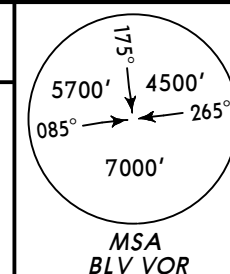
SID	INITIAL CLIMB/ROUTING
BISKA 3B	Climb on runway heading to LUKEP, turn LEFT, along BLV 10.0 DME arc, when passing BLV R-027 turn RIGHT, intercept BLV R-015 to BISKA.
PPN 2G	Climb on runway heading to LUKEP, turn LEFT, 043° track, turn RIGHT, intercept BLV R-091 to FEBRI, turn RIGHT, intercept PPN R-326 inbound to PPN.
PPN 1H	Climb on runway heading to LUKEP, turn RIGHT, intercept BLV R-123 via CEGAM to MALOB, then to PPN.
SSN 2B	Climb on runway heading to LUKEP, turn LEFT, 043° track, turn RIGHT, intercept BLV R-091 via FEBRI to SSN.

CHANGES: SID CEGAM 1G replaced by PPN 1H.

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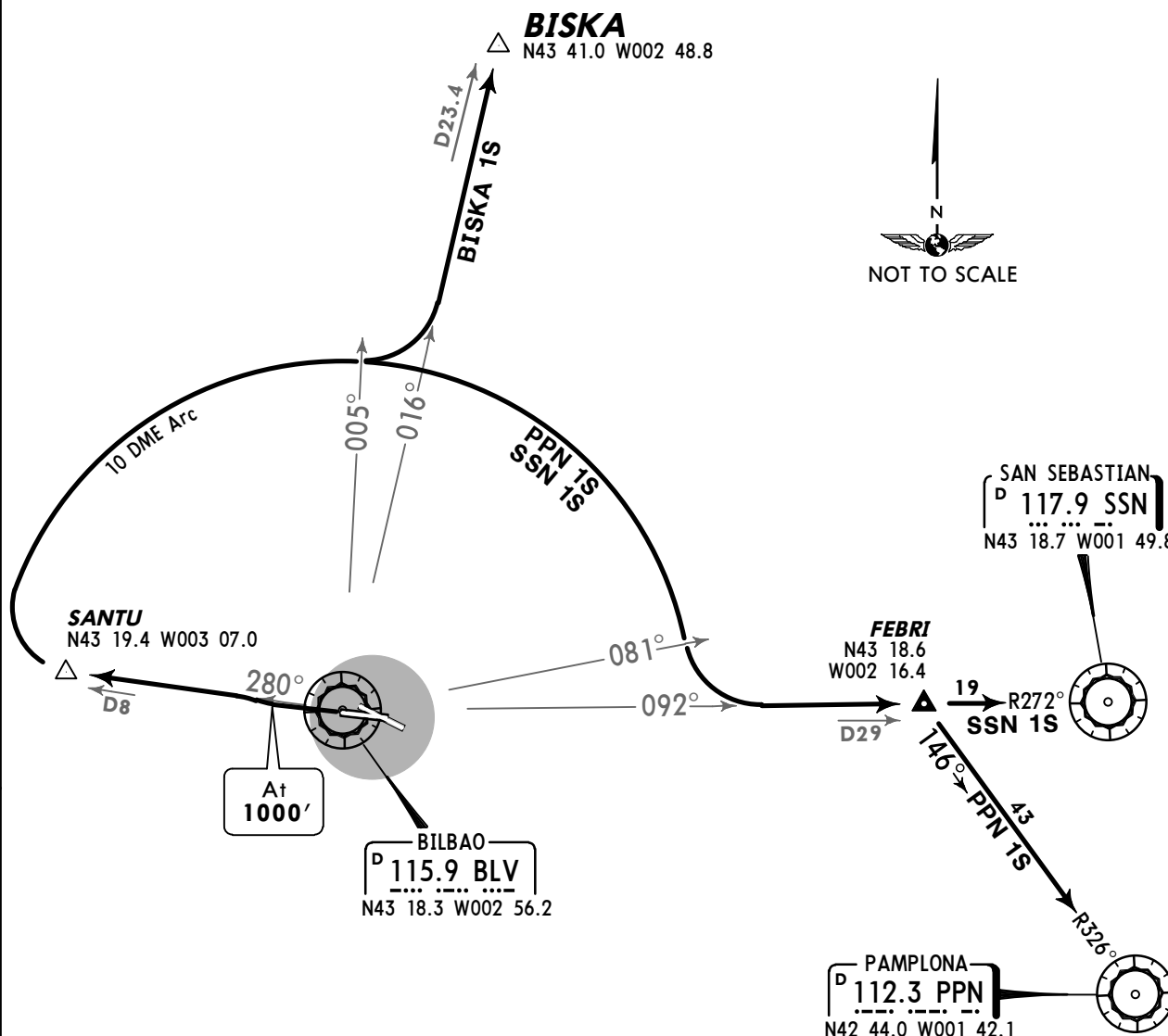
10-3B

Trans level: By ATC Trans alt: 6000'



TO NORTHEAST, EAST & SOUTHEAST

SPEED: MAX 250 KT UNTIL LEAVING FL100



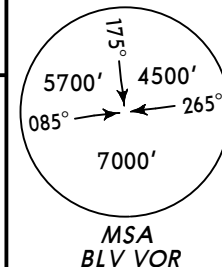
Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

Initial climb clearance **FL80** , except ATC clearance

SID	INITIAL CLIMB/ROUTING
BISKA 1S	Climb on runway heading to 1000' , turn RIGHT, intercept BLV R-280 to SANTU, turn RIGHT, along BLV 10 DME arc, when passing BLV R-005 turn LEFT, intercept BLV R-016 to BISKA.
PPN 1S	Climb on runway heading to 1000' , turn RIGHT, intercept BLV R-280 to SANTU, turn RIGHT, along BLV 10 DME arc, when passing BLV R-081 turn LEFT, intercept BLV R-092 to FEBRI, turn RIGHT, intercept PPN R-326 inbound to PPN.
SSN 1S	Climb on runway heading to 1000' , turn RIGHT, intercept BLV R-280 to SANTU, turn RIGHT, along BLV 10 DME arc, when passing BLV R-081 turn LEFT, intercept BLV R-092 via FEBRI to SSN.

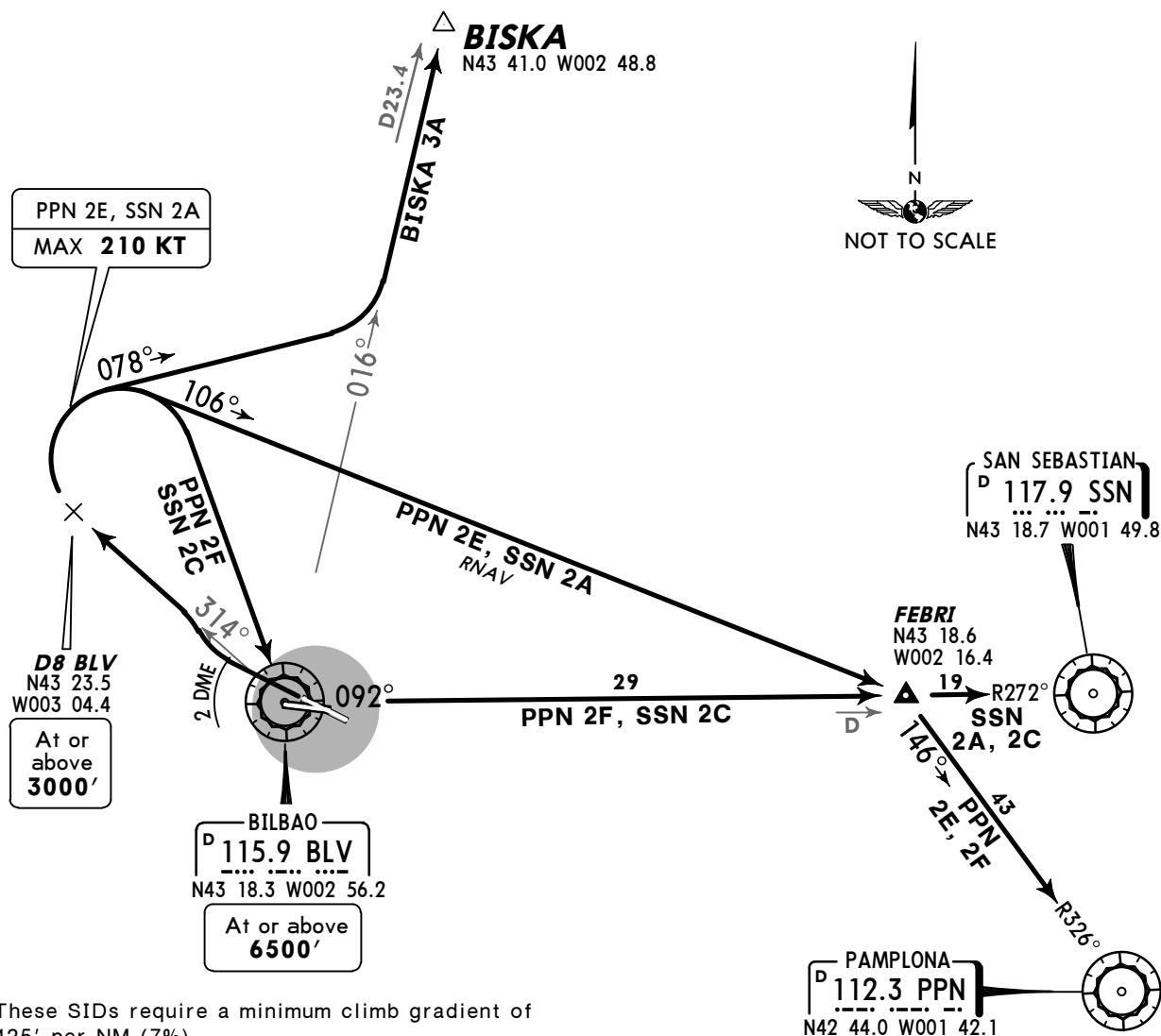
Apt Elev
137'

Trans level: By ATC Trans alt: 6000'



**BISKA THREE ALFA (BISKA 3A) [BISK3A]
PAMPLONA TWO ECHO (PPN 2E)
PAMPLONA TWO FOXTROT (PPN 2F)
SAN SEBASTIAN TWO ALFA (SSN 2A)
SAN SEBASTIAN TWO CHARLIE (SSN 2C)
RWY 30 DEPARTURES**

TO NORTHEAST, EAST & SOUTHEAST

~~SPEED~~ MAX 250 KT UNTIL LEAVING FL100

These SIDs require a minimum climb gradient of
425' per NM (7%)

BISKA 3Auntil leaving **5000'**.**PPN 2E, 2F, SSN 2A, 2C**until leaving **4000'**.

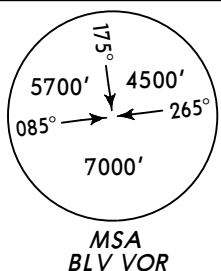
Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

Initial climb clearance **FL80** , except ATC clearance**INITIAL CLIMB**

Climb on runway heading to BLV 2 DME, turn RIGHT, intercept BLV R-314 to D8 BLV.

SID	ROUTING
BISKA 3A	At D8 BLV turn RIGHT, 078° track, intercept BLV R-016 to BISKA.
PPN 2E RNAV	At D8 BLV turn RIGHT, 106° track to FEBRI, turn RIGHT, intercept PPN R-326 inbound to PPN.
PPN 2F	At D8 BLV turn RIGHT to BLV, BLV R-092 to FEBRI, turn RIGHT, intercept PPN R-326 inbound to PPN.
SSN 2A RNAV	At D8 BLV turn RIGHT, 106° track to FEBRI, turn LEFT, intercept BLV R-092 to SSN.
SSN 2C	At D8 BLV turn RIGHT to BLV, BLV R-092 via FEBRI to SSN.

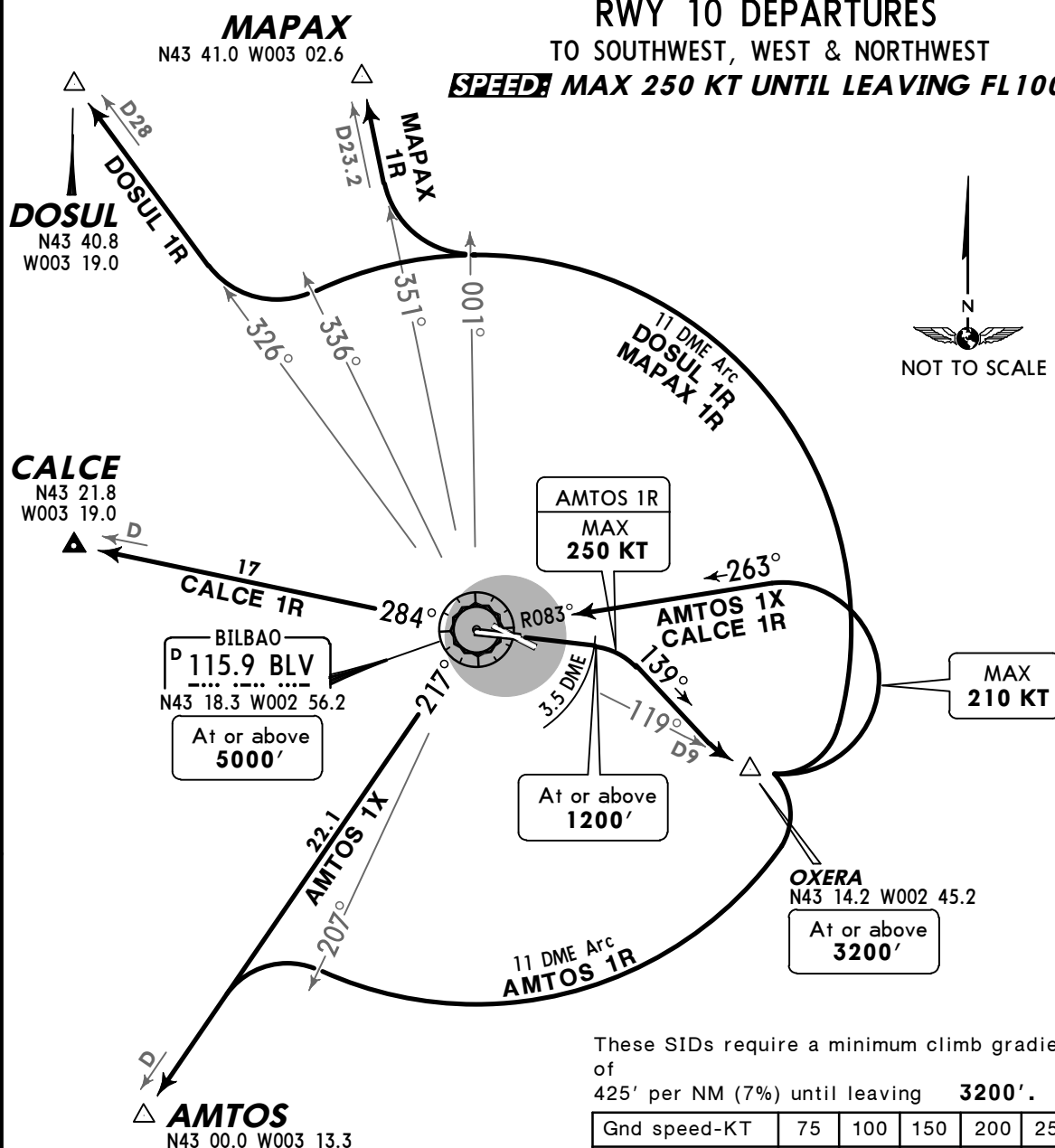
Trans level: By ATC Trans alt: 6000'



AMTOS ONE ROMEO (AMTOS 1R) [AMTO1R]
 AMTOS ONE X-RAY (AMTOS 1X) [AMTO1X]
 CALCE ONE ROMEO (CALCE 1R) [CALC1R]
 DOSUL ONE ROMEO (DOSUL 1R) [DOSU1R]
 MAPAX ONE ROMEO (MAPAX 1R) [MAPA1R]

TO SOUTHWEST, WEST & NORTHWEST

SPEED: MAX 250 KT UNTIL LEAVING FL100



These SIDs require a minimum climb gradient of 425' per NM (7%) until leaving **3200'**.

Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

Initial climb clearance **FL80** , except ATC clearance

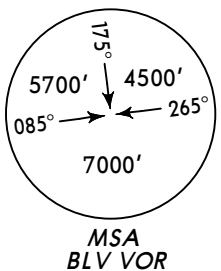
INITIAL CLIMB

Climb on runway heading to BLV 3.5 DME, turn RIGHT, 139° track, intercept BLV R-119 to OXERA.

SID	ROUTING
AMTOS 1R	At OXERA turn RIGHT, along BLV 11 DME arc, when passing BLV R-207 turn LEFT, intercept BLV R-217 to AMTOS.
AMTOS 1X	At OXERA turn LEFT, intercept BLV R-083 inbound to BLV, BLV R-217 to AMTOS.
CALCE 1R	At OXERA turn LEFT, intercept BLV R-083 inbound to BLV, BLV R-284 to CALCE.
DOSUL 1R	At OXERA turn LEFT, along BLV 11 DME arc, when passing BLV R-336 turn RIGHT, intercept BLV R-326 to DOSUL.
MAPAX 1R	At OXERA turn LEFT, along BLV 11 DME arc, when passing BLV R-001 turn RIGHT, intercept BLV R-351 to MAPAX.

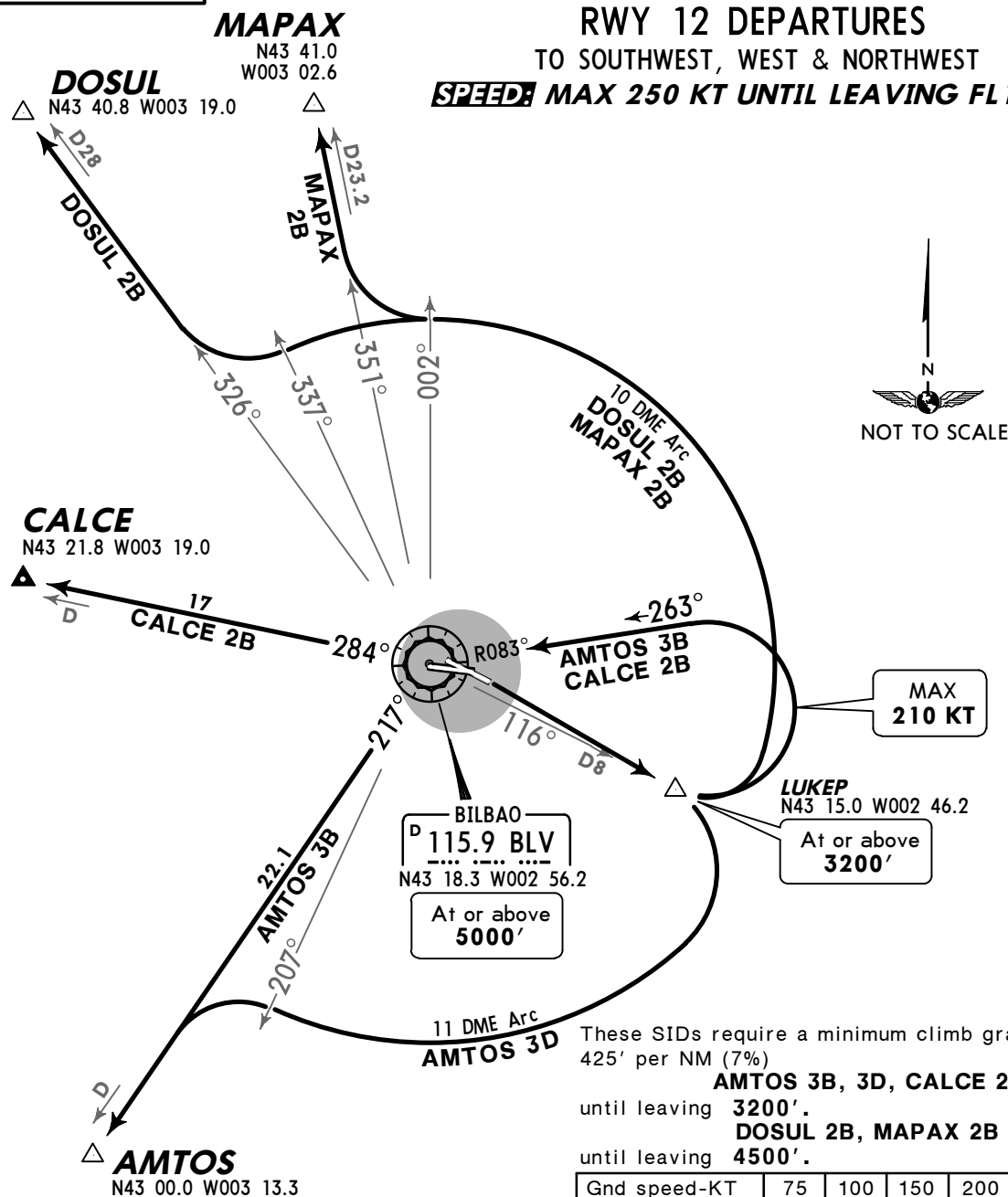
Apt Elev
137'

Trans level: By ATC Trans alt: 6000'



AMTOS THREE BRAVO (AMTOS 3B) [AMTO3B]
AMTOS THREE DELTA (AMTOS 3D) [AMTO3D]
CALCE TWO BRAVO (CALCE 2B) [CALC2B]
DOSUL TWO BRAVO (DOSUL 2B) [DOSU2B]
MAPAX TWO BRAVO (MAPAX 2B) [MAPA2B]
RWY 12 DEPARTURES

TO SOUTHWEST, WEST & NORTHWEST

SPEED: MAX 250 KT UNTIL LEAVING FL100

These SIDs require a minimum climb gradient of 425' per NM (7%)

AMTOS 3B, 3D, CALCE 2B
until leaving 3200'.
DOSUL 2B, MAPAX 2B
until leaving 4500'.

Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

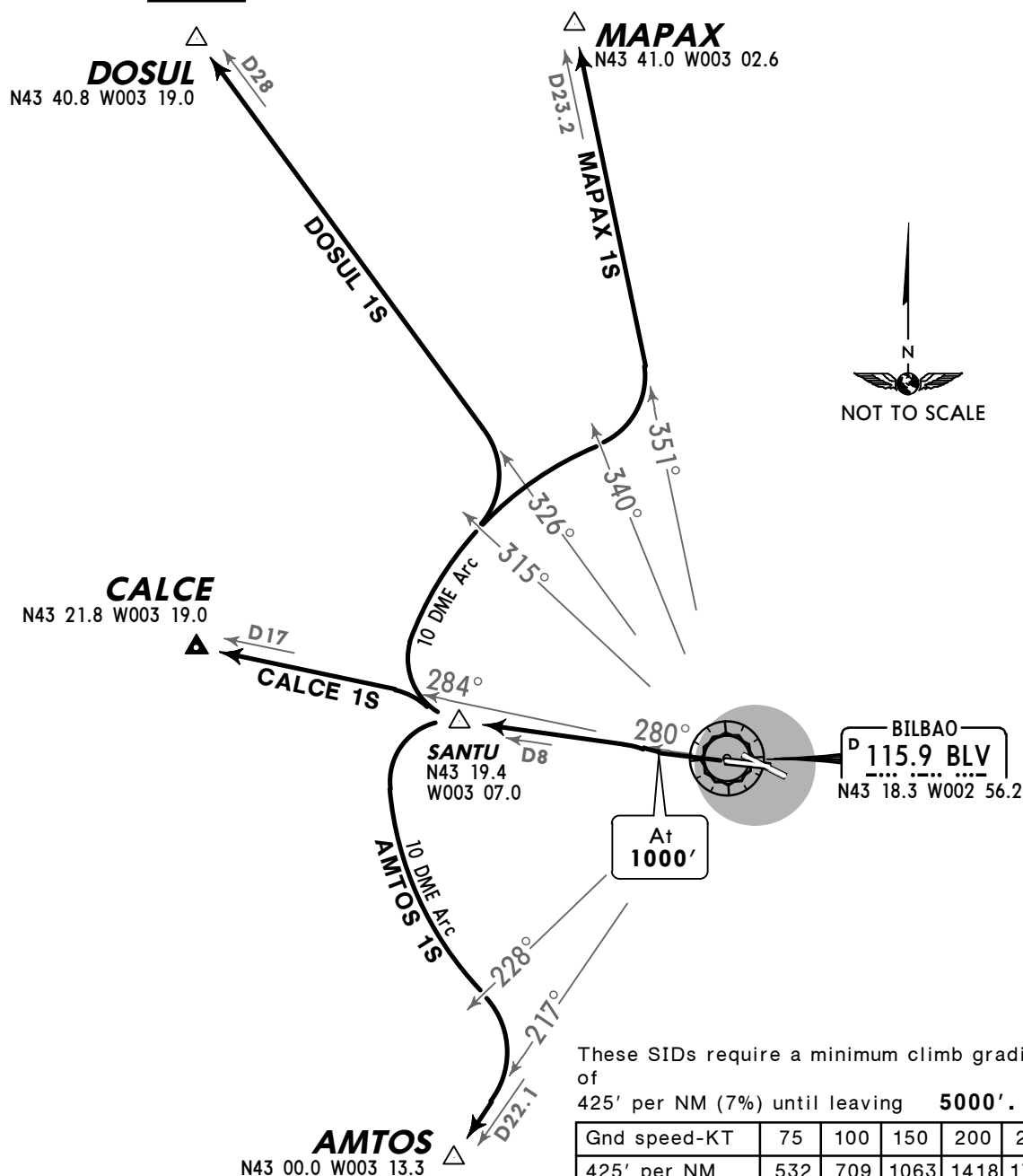
Initial climb clearance **FL80** , except ATC clearance

SID	INITIAL CLIMB/ROUTING
AMTOS 3B	Climb on runway heading to LUKEP, turn LEFT, intercept BLV R-083 inbound to BLV, BLV R-217 to AMTOS.
AMTOS 3D	Climb on runway heading to LUKEP, turn RIGHT, along BLV 11 DME arc, when passing BLV R-207 turn LEFT, intercept BLV R-217 to AMTOS.
CALCE 2B	Climb on runway heading to LUKEP, turn LEFT, intercept BLV R-083 inbound to BLV, BLV R-284 to CALCE.
DOSUL 2B	Climb on runway heading to LUKEP, turn LEFT, along BLV 10 DME arc, when passing BLV R-337 turn RIGHT, intercept BLV R-326 to DOSUL.
MAPAX 2B	Climb on runway heading to LUKEP, turn LEFT, along BLV 10 DME arc, when passing BLV R-002 turn RIGHT, intercept BLV R-351 to MAPAX.

Trans level: By ATC Trans alt: 6000'

Diagram illustrating a VOR station (BLV VOR) with a 7000' radius. The diagram shows a circular area with a center point. A bearing of 175° is indicated from the center to a point on the circle. A bearing of 085° is indicated from the center to a point on the circle. A bearing of 265° is indicated from the center to a point on the circle. Distances are marked: 5700' from the center to the 085° point, 4500' from the center to the 175° point, and 7000' from the center to the 265° point. The station is identified as MSA BLV VOR.

SPEED: MAX 250 KT UNTIL LEAVING FL100



These SIDs require a minimum climb gradient of 425' per NM (7%) until leaving **5000'**.

Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

Initial climb clearance **FL80** , except ATC clearance

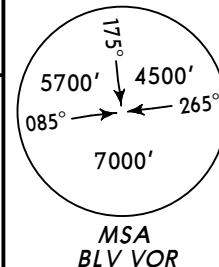
INITIAL CLIMB

Climb on runway heading to **1000'**, turn RIGHT, intercept BLV R-280 to SANTU.

SID	ROUTING
AMTOS 1S	At SANTU turn LEFT, along BLV 10 DME arc, when passing BLV R-228 turn RIGHT, intercept BLV R-217 to AMTOS.
CALCE 1S	At SANTU turn RIGHT, intercept BLV R-284 to CALCE.
DOSUL 1S	At SANTU turn RIGHT, along BLV 10 DME arc, when passing BLV R-315 turn LEFT, intercept BLV R-326 to DOSUL.
MAPAX 1S	At SANTU turn RIGHT, along BLV 10 DME arc, when passing BLV R-340 turn LEFT, intercept BLV R-351 to MAPAX.

Apt Elev
137'

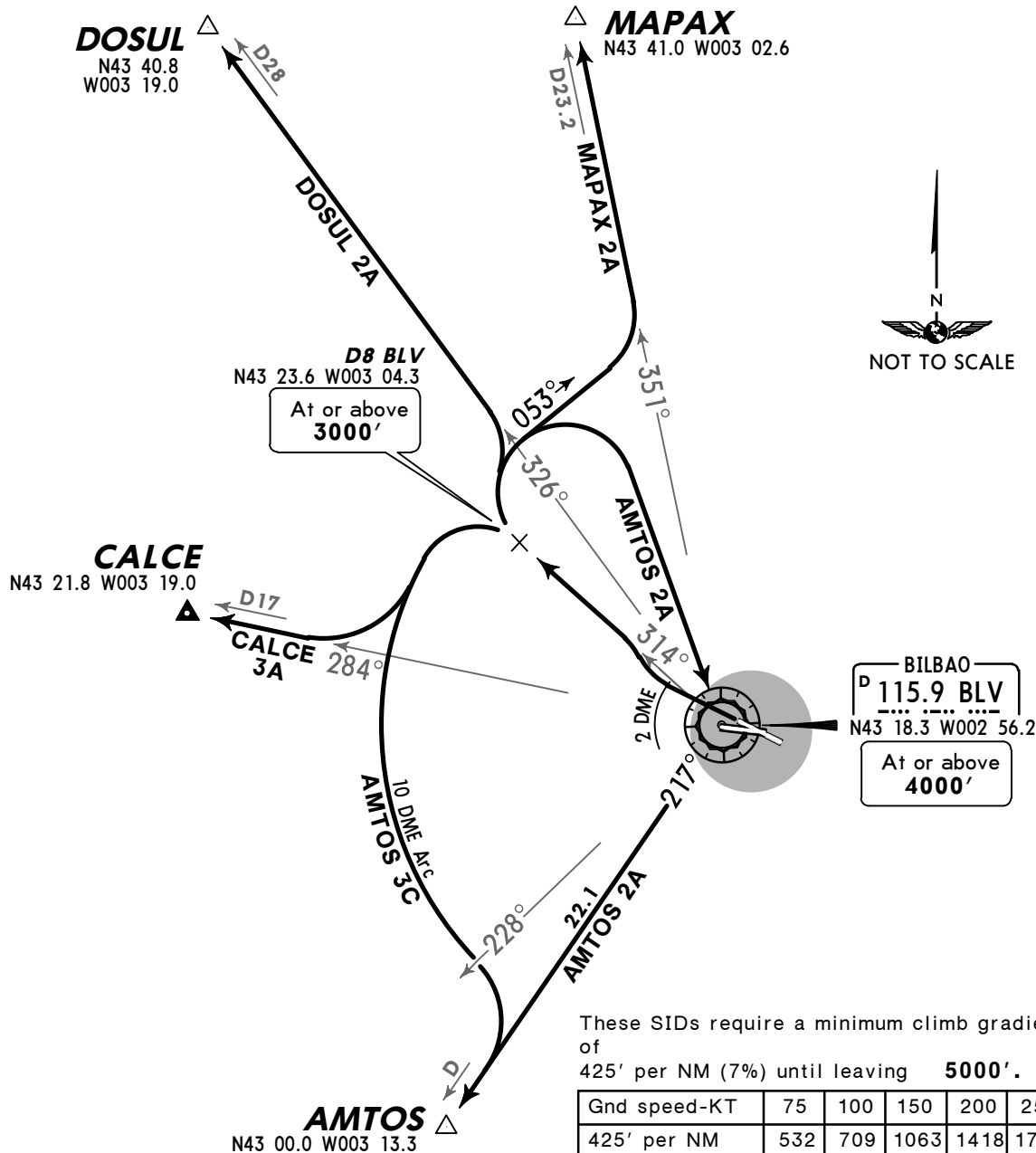
Trans level: By ATC Trans alt: 6000'



AMTOS TWO ALFA (AMTOS 2A) [AMTO2A]
AMTOS THREE CHARLIE (AMTOS 3C) [AMTO3C]
CALCE THREE ALFA (CALCE 3A) [CALC3A]
DOSUL TWO ALFA (DOSUL 2A) [DOSU2A]
MAPAX TWO ALFA (MAPAX 2A) [MAPA2A]

RWY 30 DEPARTURES

TO SOUTHWEST, WEST & NORTHWEST

~~SPEED~~ MAX 250 KT UNTIL LEAVING FL100Initial climb clearance **FL80** , except ATC clearance

INITIAL CLIMB

Climb on runway heading to BLV 2 DME, turn RIGHT, intercept BLV R-314 to D8 BLV.

SID	ROUTING
AMTOS 2A	At D8 BLV turn RIGHT to BLV, BLV R-217 to AMTOS.
AMTOS 3C	At D8 BLV turn LEFT, along BLV 10 DME arc, when passing BLV R-228 turn RIGHT, intercept BLV R-217 to AMTOS.
CALCE 3A	At D8 BLV turn LEFT, intercept BLV R-284 to CALCE.
DOSUL 2A	At D8 BLV turn RIGHT, intercept BLV R-326 to DOSUL.
MAPAX 2A	At D8 BLV turn RIGHT, 053° track, intercept BLV R-351 to MAPAX.

RWYS 10, 12, 28, 30 CONTINGENCY DEPARTURES

In the event of failure of one or more nav aids used for the departures from runways 10, 12, 28, 30 the following procedures shall be carried out:

RWY 10: Climb on runway heading to 1800', turn LEFT (MAX 250 KT), climb on 002° heading to 4000' and wait for ATC instructions.

RWY 12: Climb on runway heading to 1800', turn LEFT (MAX 250 KT), climb on 002° heading to 5000' and wait for ATC instructions.

RWY 28: Climb on 293° heading to 4500', turn following ATC instructions.

RWY 30: Climb on runway heading to 4500', turn following ATC instructions.

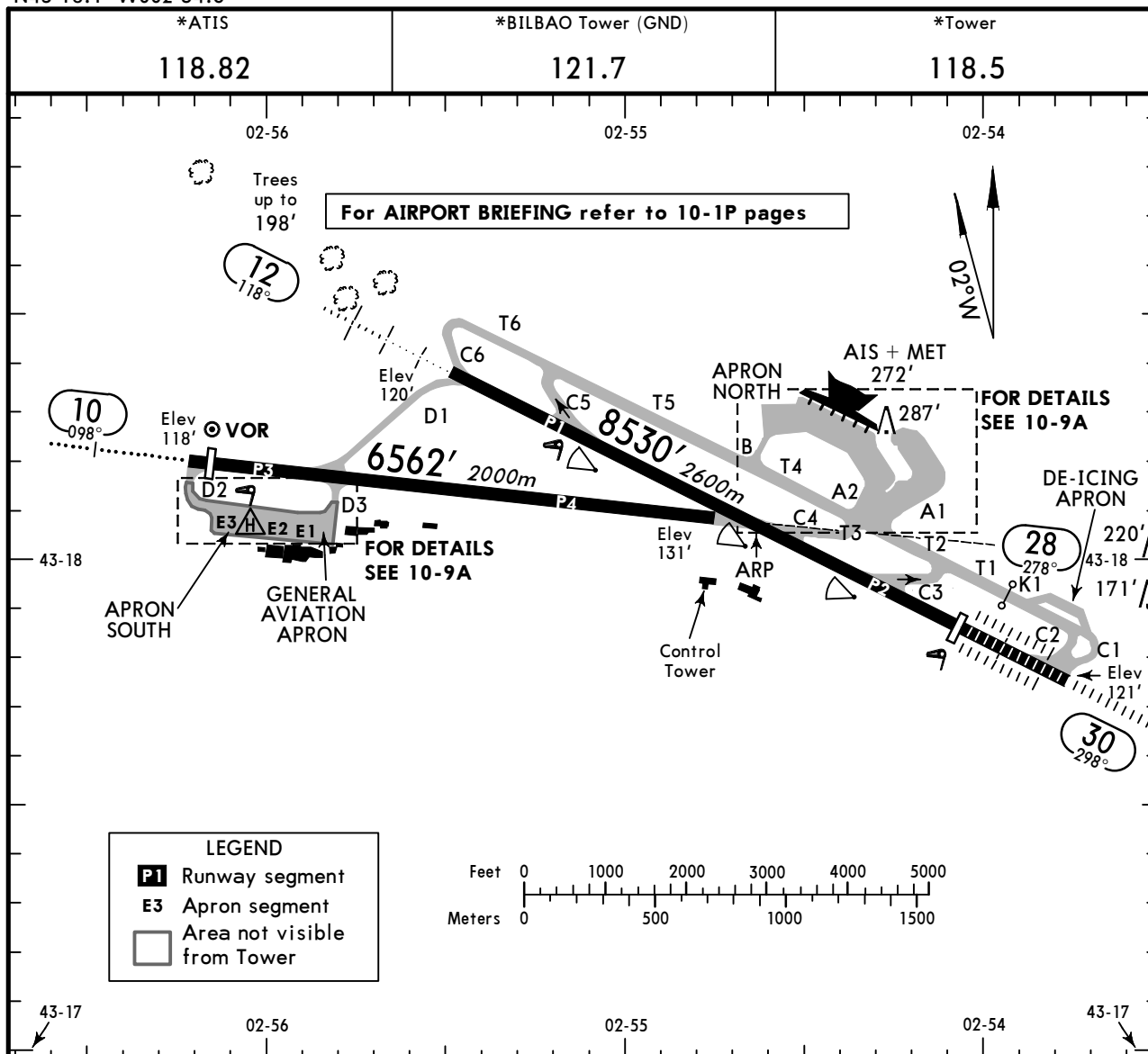
These departures require minimum climb gradients of

RWY 10: 6.5% to 4000'.

RWY 12: 6.5% to 5000'.

RWY 28, 30: 6.7% to 4500'.

Gnd speed-KT	75	100	150	200	250	300
6.7% V/V(fpm)	509	679	1018	1357	1696	2036
6.5% V/V(fpm)	494	658	987	1317	1646	1975



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			WIDTH
		Threshold	Landing Beyond Glide Slope	TAKE-OFF	
10	HIRL (60m) HIALS PAPI (3.6°)	6266' 1910m			148'
28	HIRL (60m) PAPI (3.4°)	6266' 1910m		6266' 1910m	45m
12	HIRL (50m) CL (15m) HIALS PAPI (3.1°) RVR	8333' 2540m	7361' 2244m	8333' 2540m	148'
30	HIRL (50m) CL (15m) HIALS-II TDZ PAPI (3.4°) ① RVR	7021' 2140m	6004' 1830m	②	45m

① HST-C5.

② TAKE-OFF RUN AVAILABLE

RWY 30:

From rwy head 8530' (2600m)

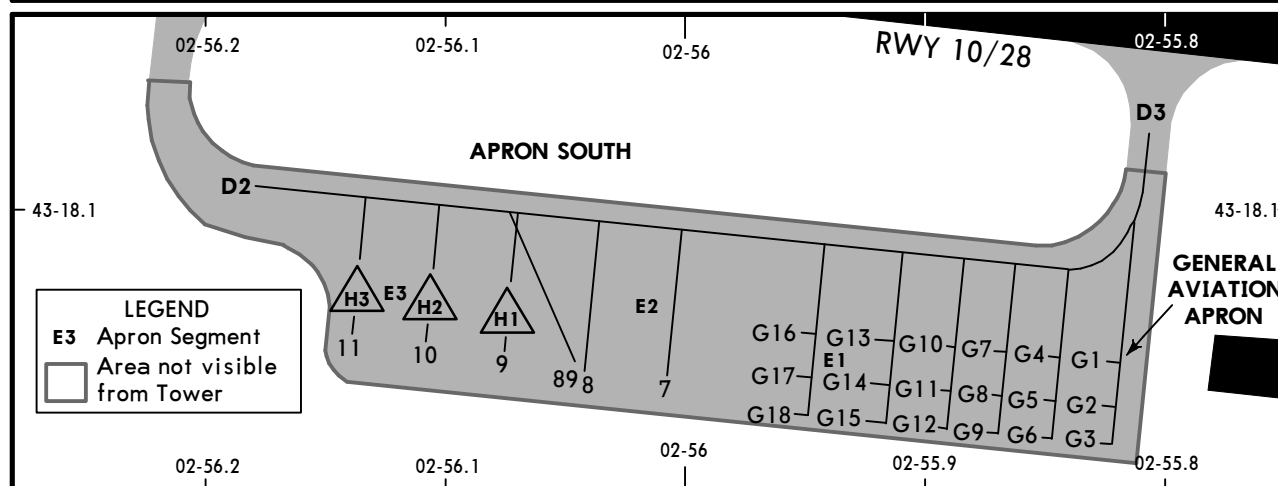
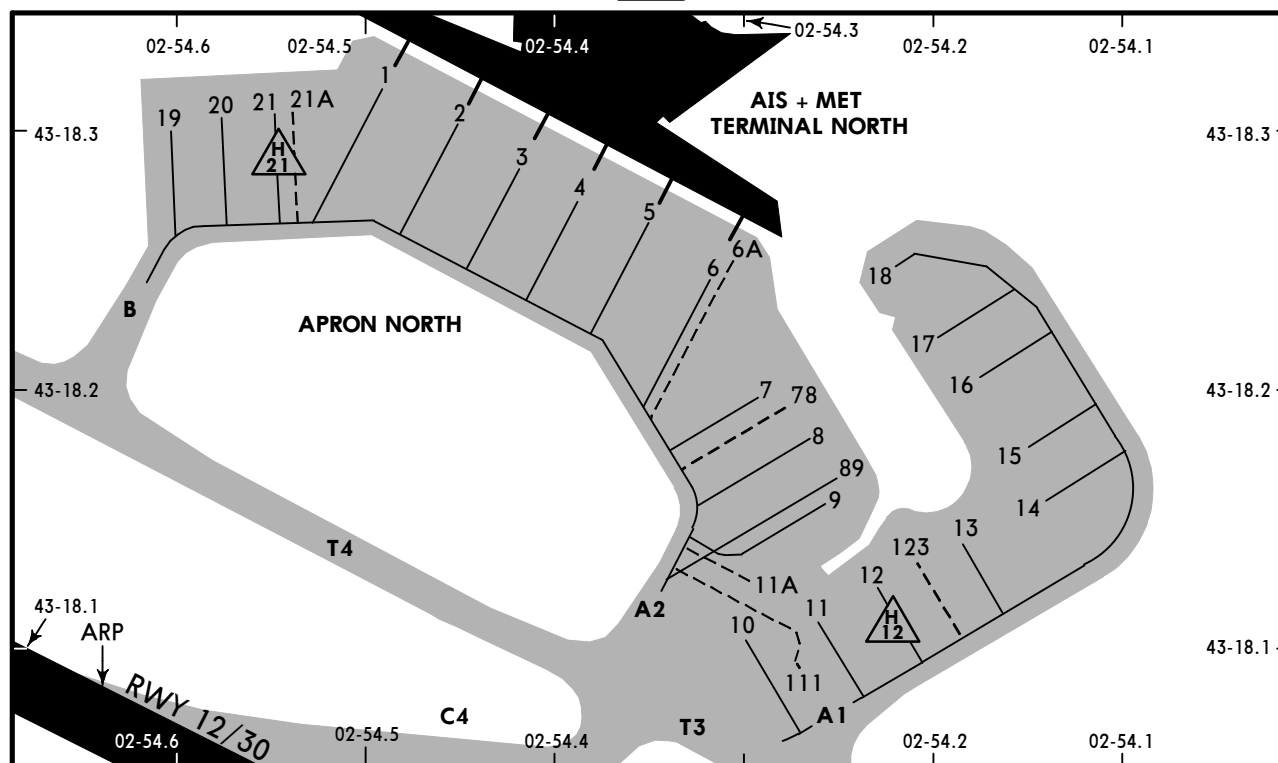
twy C2 int 7661' (2335m)

Standard

TAKE-OFF ①

	LVP must be in Force				RCLM (DAY only) or RL	NIL (DAY only)
	Approved Operators HIRL, CL & mult. RVR req	RL, CL & mult. RVR req	RL & CL	RCLM (DAY only) or RL		
A					400m	500m
B	125m	150m	200m	250m		
C						
D	150m	200m	250m	300m		

① Operators applying U.S. Ops Specs: CL required below 300m; approved HUD required below 150m.



INS COORDINATES

STAND No.	COORDINATES	STAND No.	COORDINATES
APRON NORTH		APRON SOUTH	
1	N43 18.3 W002 54.5	7 thru 8	N43 18.0 W002 56.0
2 thru 4	N43 18.3 W002 54.4	9 thru 11	N43 18.1 W002 56.1
5 thru 8	N43 18.2 W002 54.3	89	N43 18.0 W002 56.0
9	N43 18.1 W002 54.2	G1	N43 18.1 W002 55.8
10 thru 11A	N43 18.1 W002 54.3	G2, G3	N43 18.0 W002 55.8
12, 13	N43 18.1 W002 54.2	G4	N43 18.1 W002 55.9
14	N43 18.1 W002 54.1	G5, G6	N43 18.0 W002 55.9
15 thru 18	N43 18.2 W002 54.2	G7	N43 18.1 W002 55.9
19, 20	N43 18.3 W002 54.6	G8, G9	N43 18.0 W002 55.9
21, 21A	N43 18.3 W002 54.5	G10	N43 18.1 W002 55.9
78	N43 18.2 W002 54.3	G11, G12	N43 18.0 W002 55.9
89	N43 18.2 W002 54.2	G13 thru G15	N43 18.1 W002 55.9
111	N43 18.1 W002 54.3	G16 thru G18	N43 18.1 W002 56.0
123	N43 18.1 W002 54.2	H1 thru H3	N43 18.1 W002 56.1
H12	N43 18.1 W002 54.2		
H21	N43 18.3 W002 54.5		

ILS Z or LOC Z Rwy 12 BILBAO, SPAIN

A circular structure with a diameter of 7000'. The structure is divided into two main sections by a vertical line. The left section has a height of 5700' and a width of 175'. The right section has a height of 4500' and a width of 265'. The angle between the vertical line and the horizontal line is 085° on the left and 265° on the right.

MSA BIV VOR

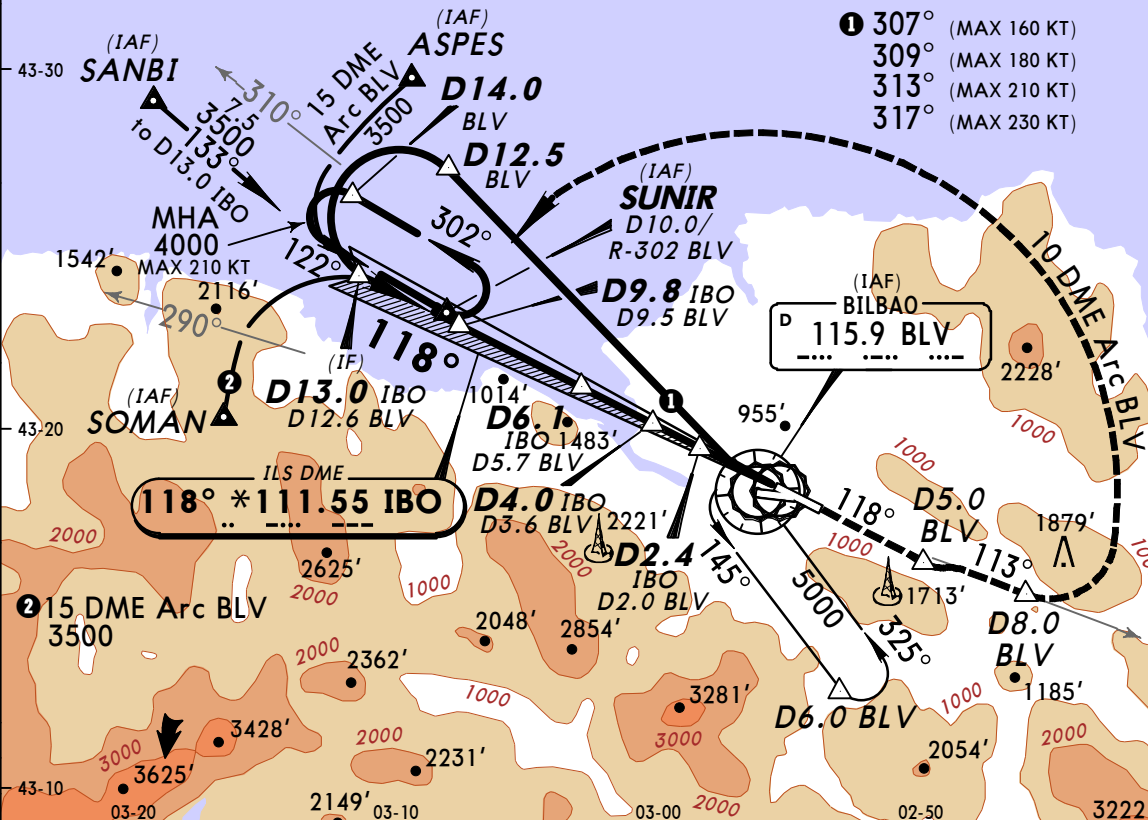
Alt Set: hPa

Rwv Elev: 4 hPa

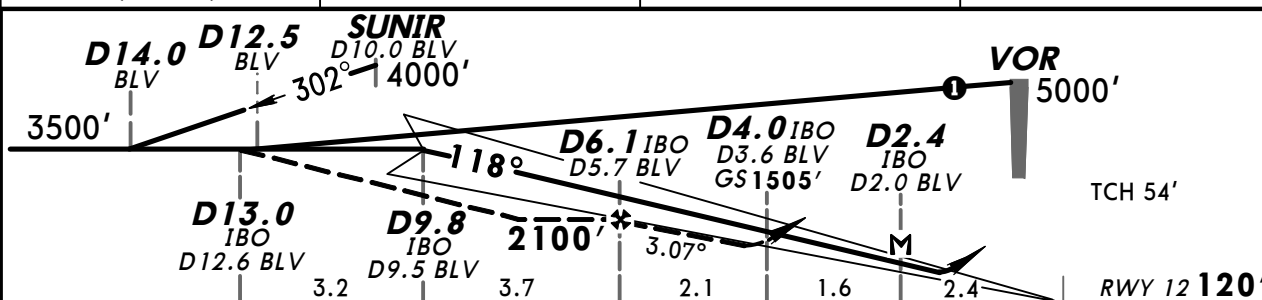
Trans |level|: Bv ATC

Trans alt: 6000'

1. **VOR and DME required.** 2. ILS DME reads zero at rwy 12 thresh. 3. ILS: No obstacle free zone rwy 12.



LOC (GS out)	IBO DME	6.0	5.0
	ALTITUDE	2130'	1800'



<i>Gnd speed-Kts</i>	70	90	100	120	140	160	
<i>ILS GS 3.10°</i>	384	494	548	658	768	878	
<i>LOC Descent Angle 3.07°</i>	380	489	543	652	760	869	
<i>MAP at D2.4 IBO/D2.0 BLV</i>							

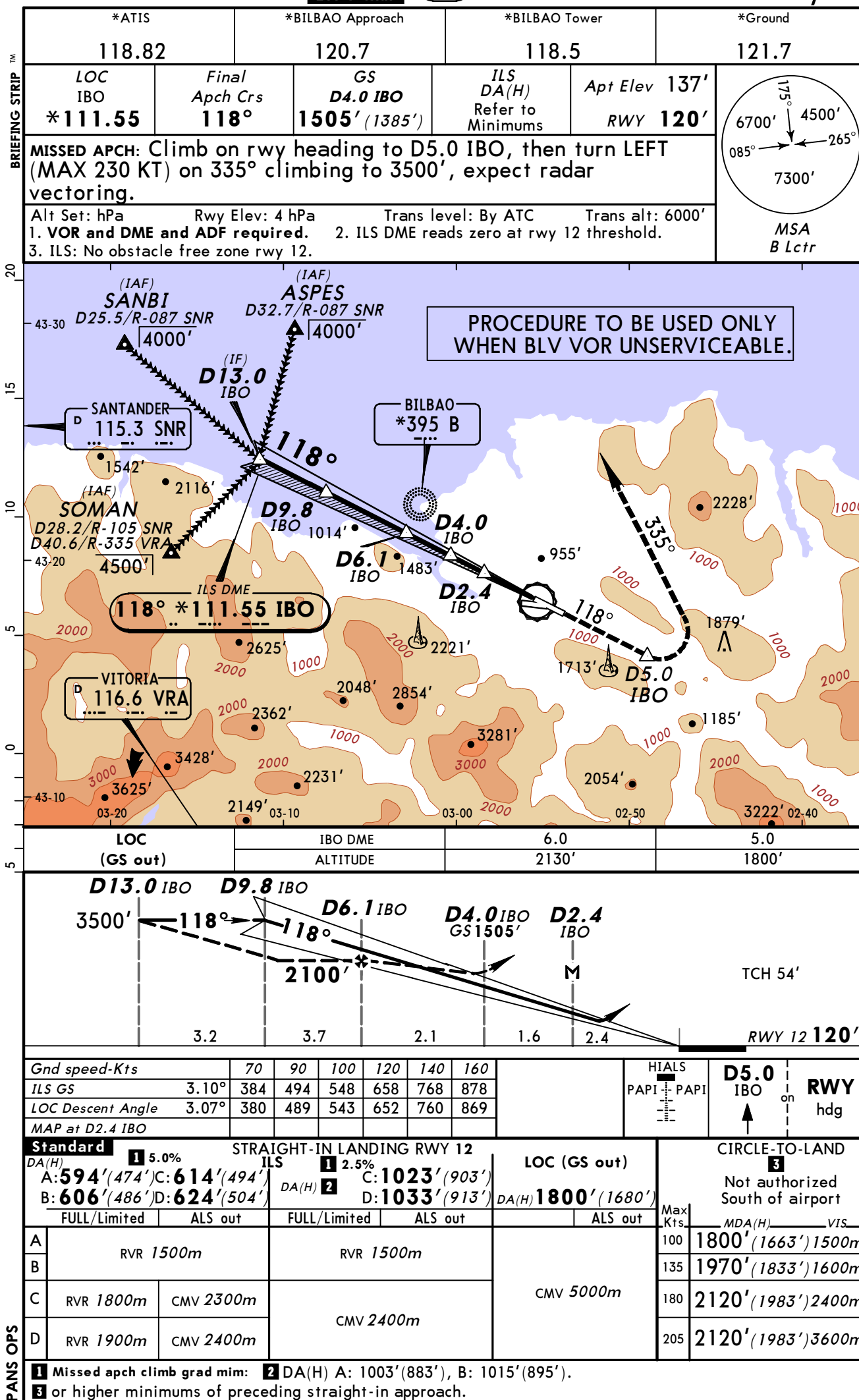
Standard			STRAIGHT-IN LANDING RWY 12				CIRCLE-TO-LAND	
DA(H) 1 5.0%			ILS 1 2.5%		LOC (GS out)		3	
A: 594' (474') C: 614' (494')			DA(H) 2 C: 1023' (903')		DA(H) 1800' (1680')		Not authorized South of airport	
B: 606' (486') D: 624' (504')			DA(H) 2 D: 1033' (913')				MDA(H) _____ VIS _____	
FULL/Limited		ALS out	FULL/Limited		ALS out		Max Kts	
A	RVR 1500m		RVR 1500m		CMV 5000m		100	1800' (1663') 1500m
B							135	1970' (1833') 1600m
C	RVR 1800m	CMV 2300m	CMV 2400m				180	2060' (1923') 2400m
D	RVR 1900m	CMV 2400m					205	2060' (1923') 3600m

1 Missed apch climb grad mim: **2** DA(H) A: 1003'(883'), B: 1015'(895').

3 or higher minimums of preceding straight-in approach.

CHANGES: Procedure title.

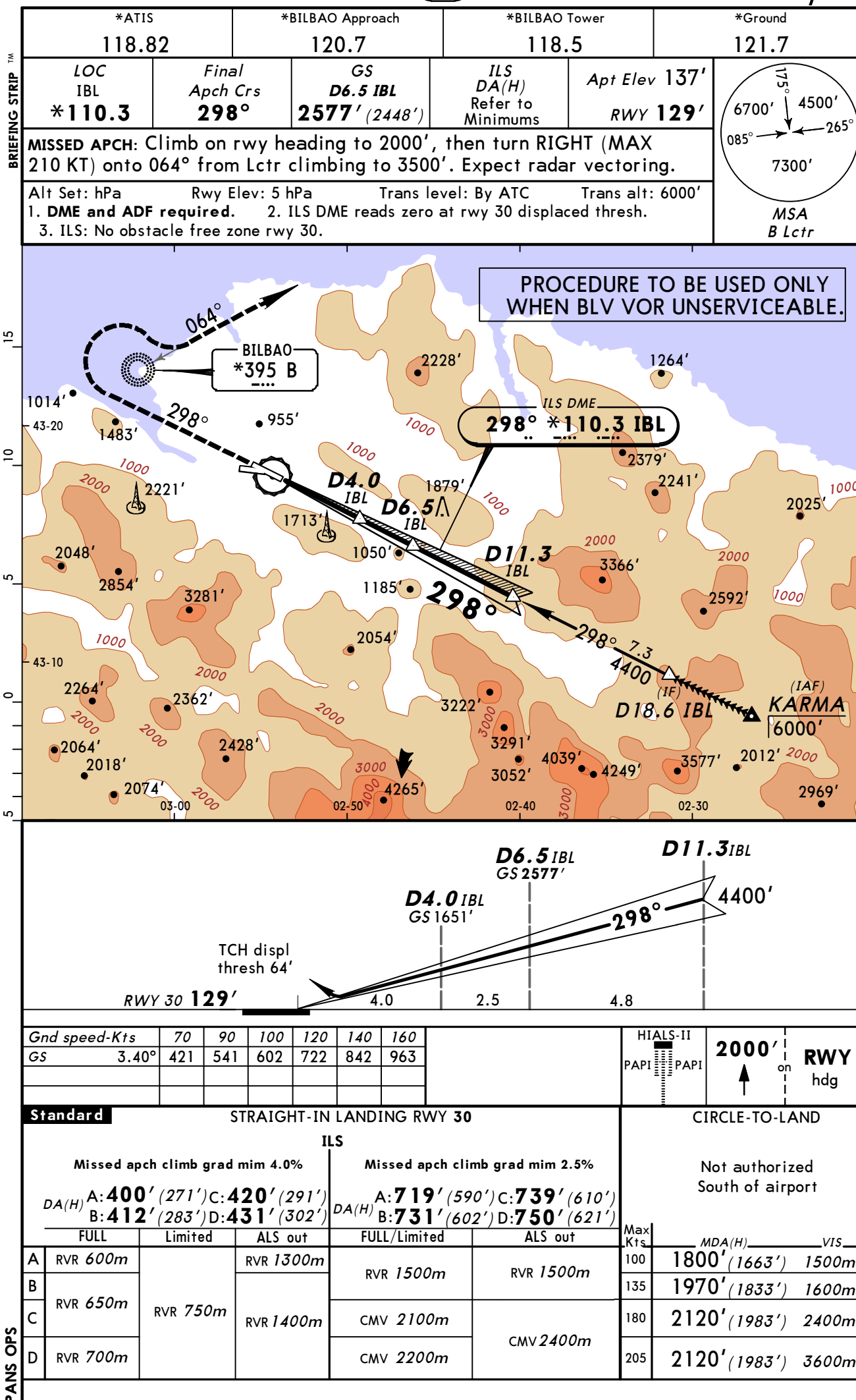
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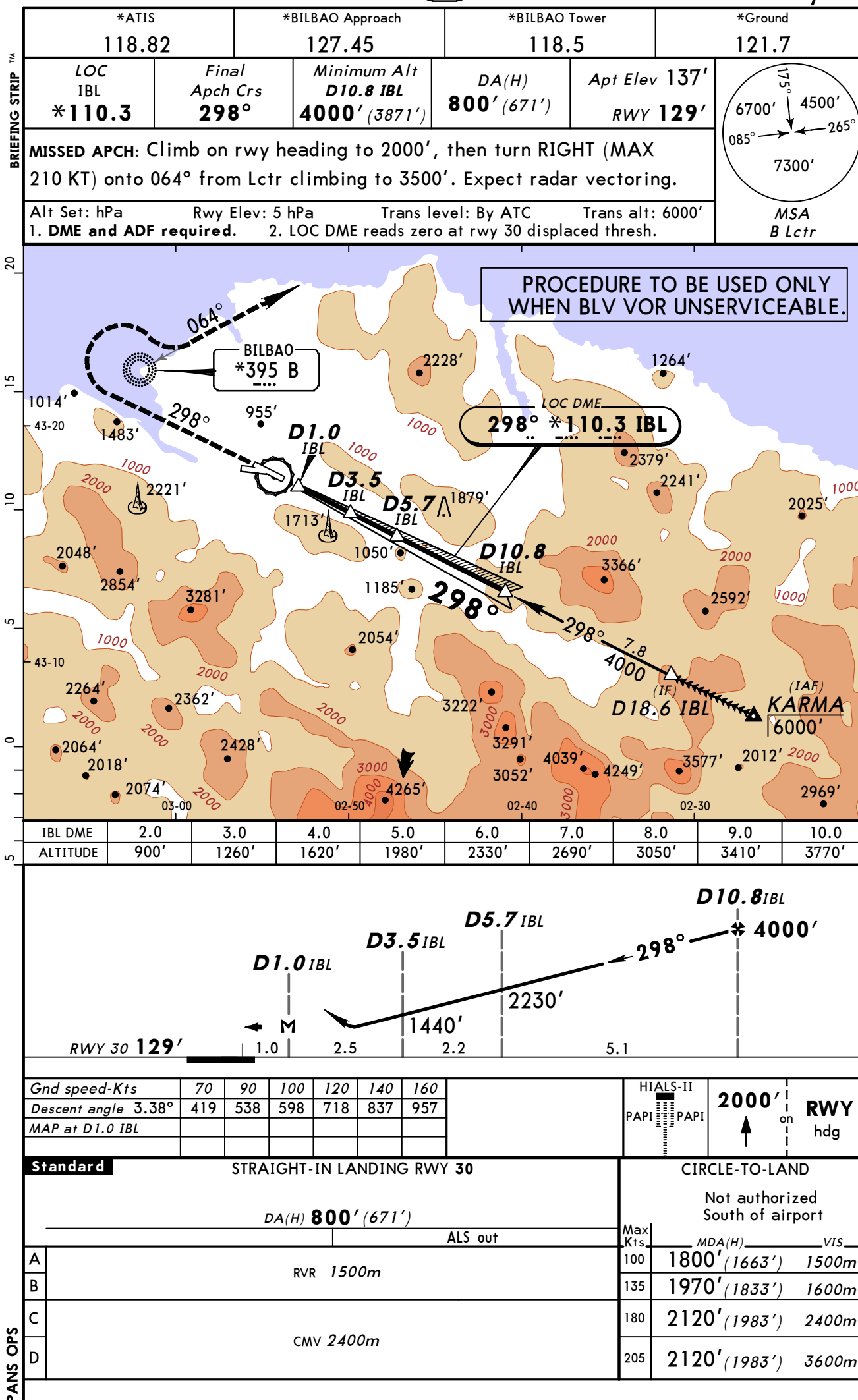
LEBB/BIO
BILBAOJEPPESEN
1 MAR 13
Eff 7 Mar 11-2BILBAO, SPAIN
ILS Y or LOC Y Rwy 12

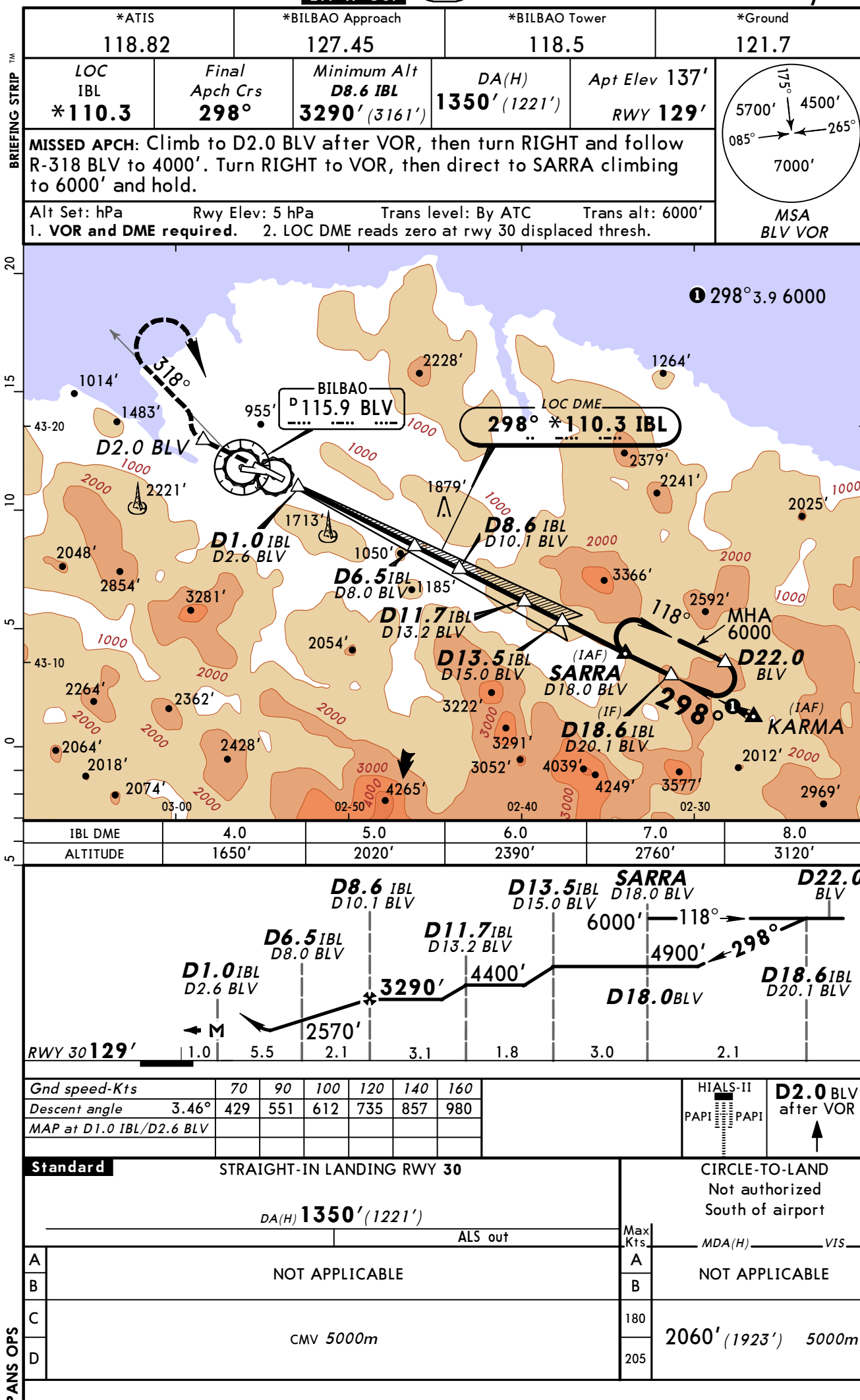
BILBAO, SPAIN
ILS Z or ① LOC Z Rwy 30

Gnd speed-Kts		70	90	100	120	140	160		D2.0 BLV after VOR ↑
ILS GS 3.40°		421	541	602	722	842	963		
LOC Desc Angle FAF - D3.0 IBL 3.34°		414	532	591	709	827	946		
LOC Desc Angle after D3.0 IBL 3.68°		456	586	651	782	912	1042		
MAP at D1.0 IBL/D2.6 BLV									
Standard									
STRAIGHT-IN LANDING RWY 30									
ILS A: 418' (289') C: 438' (309') DA(H) B: 430' (301') D: 449' (320')				LOC (GS out) DA(H) 700' (571')				CIRCLE-TO-LAND I Not authorized South of airport	
FULL		Limited		ALS out		ALS out		Max Kts	MDA(H) VIS
A	RVR 650m	RVR 750m		RVR 1400m		RVR 1900m CMV 2600m NOT APPLICABLE		100	1710' (1573') 1500m
B	RVR 700m							135	1970' (1833') 1600m
C								180	2060' (1923') 2400m
D								205	2060' (1923') 3600m

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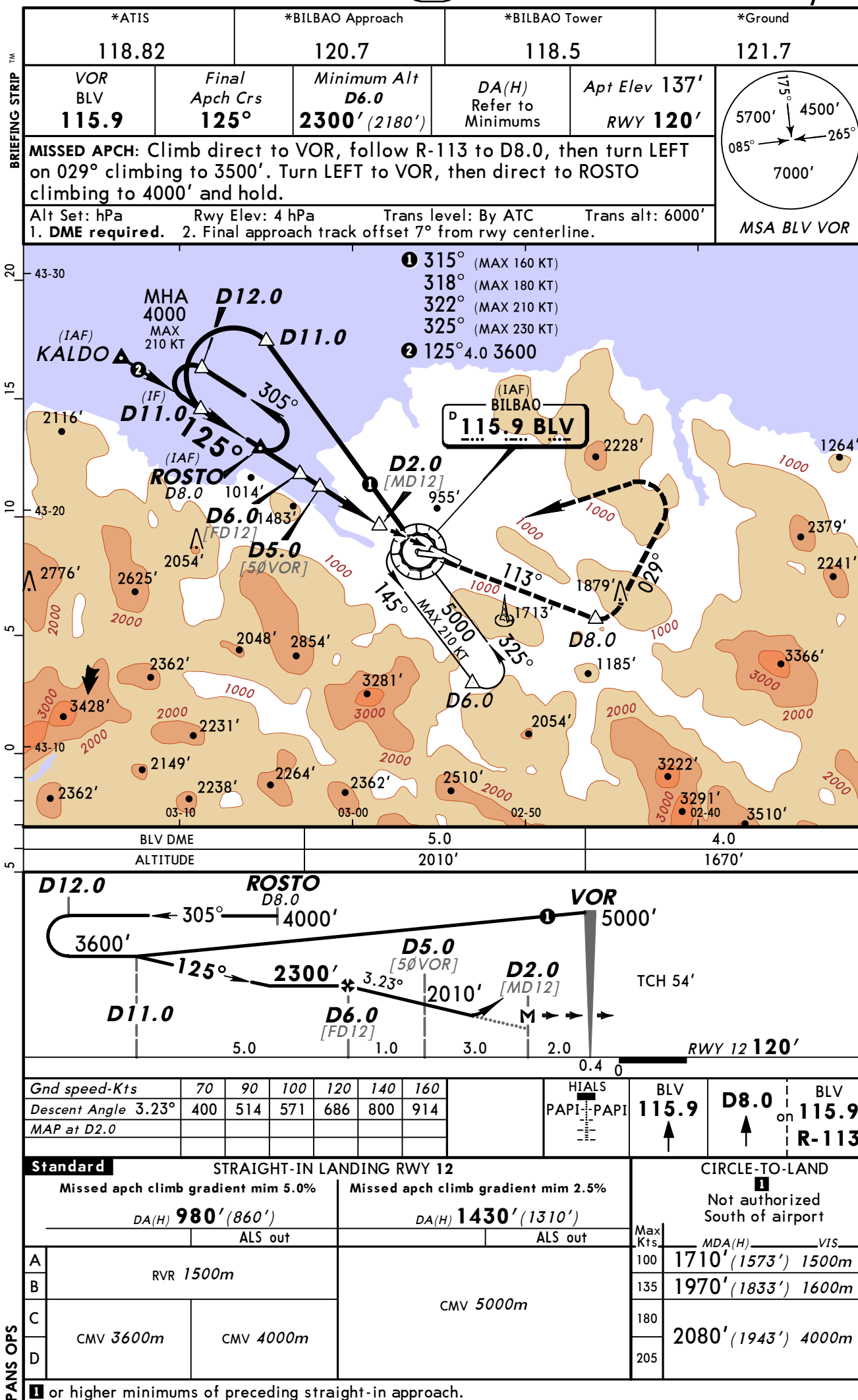


LEBB/BIO
BILBAOJEPPesen
4 OCT 13 11-5 Eff 17 OctBILBAO, SPAIN
LOC Y Rwy 30

LEBB/BIO
BILBAOJEPPESEN
4 OCT 13
Eff 17 Oct 11-6 CAT C & DBILBAO, SPAIN
LOC X Rwy 30

CHANGES: Chart reindexed. Procedure title. Approach frequency.

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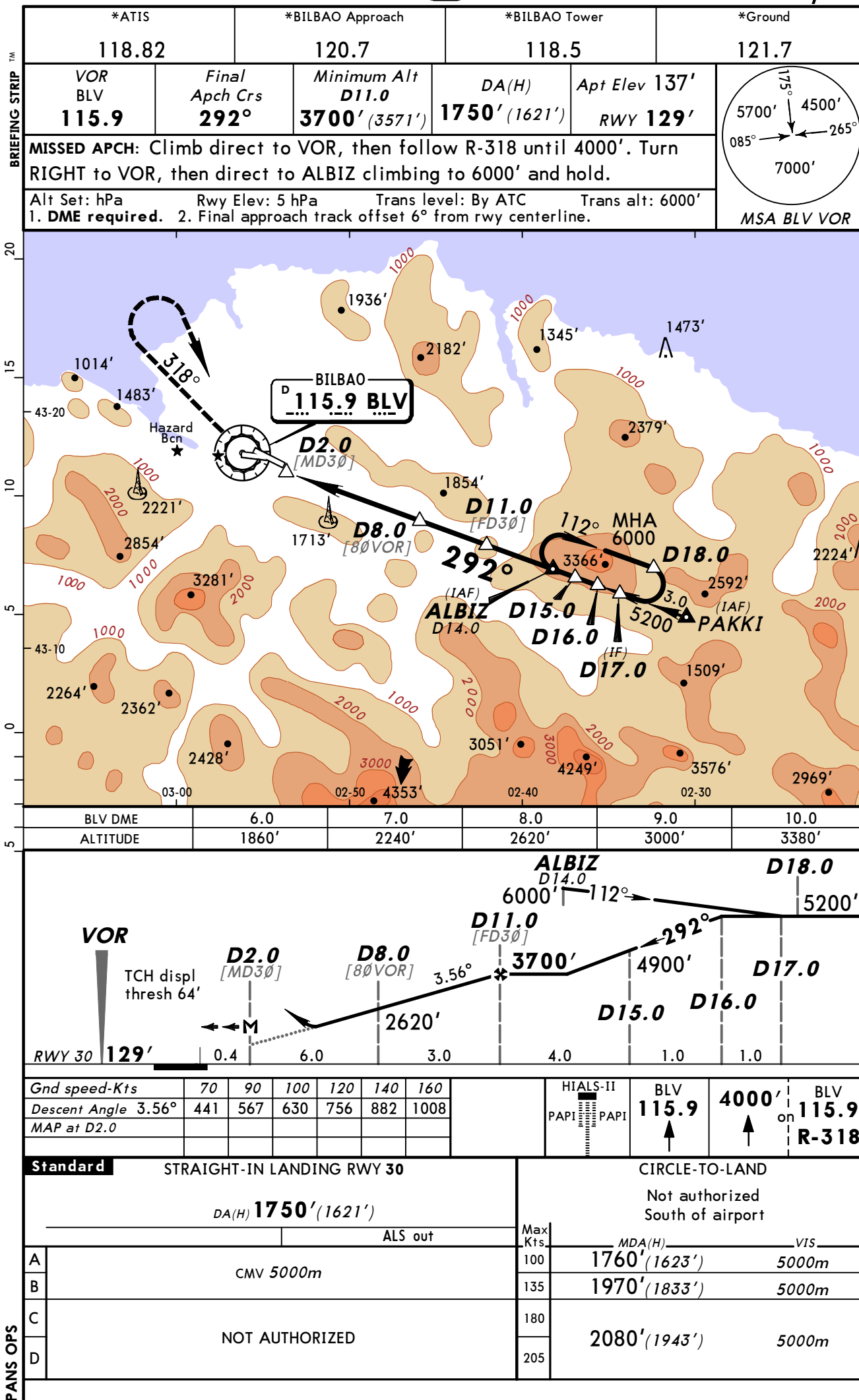
LEBB/BIO
BILBAOJEPPesen
1 MAR 13 13-1 Eff 7 MarBILBAO, SPAIN
VOR Rwy 12

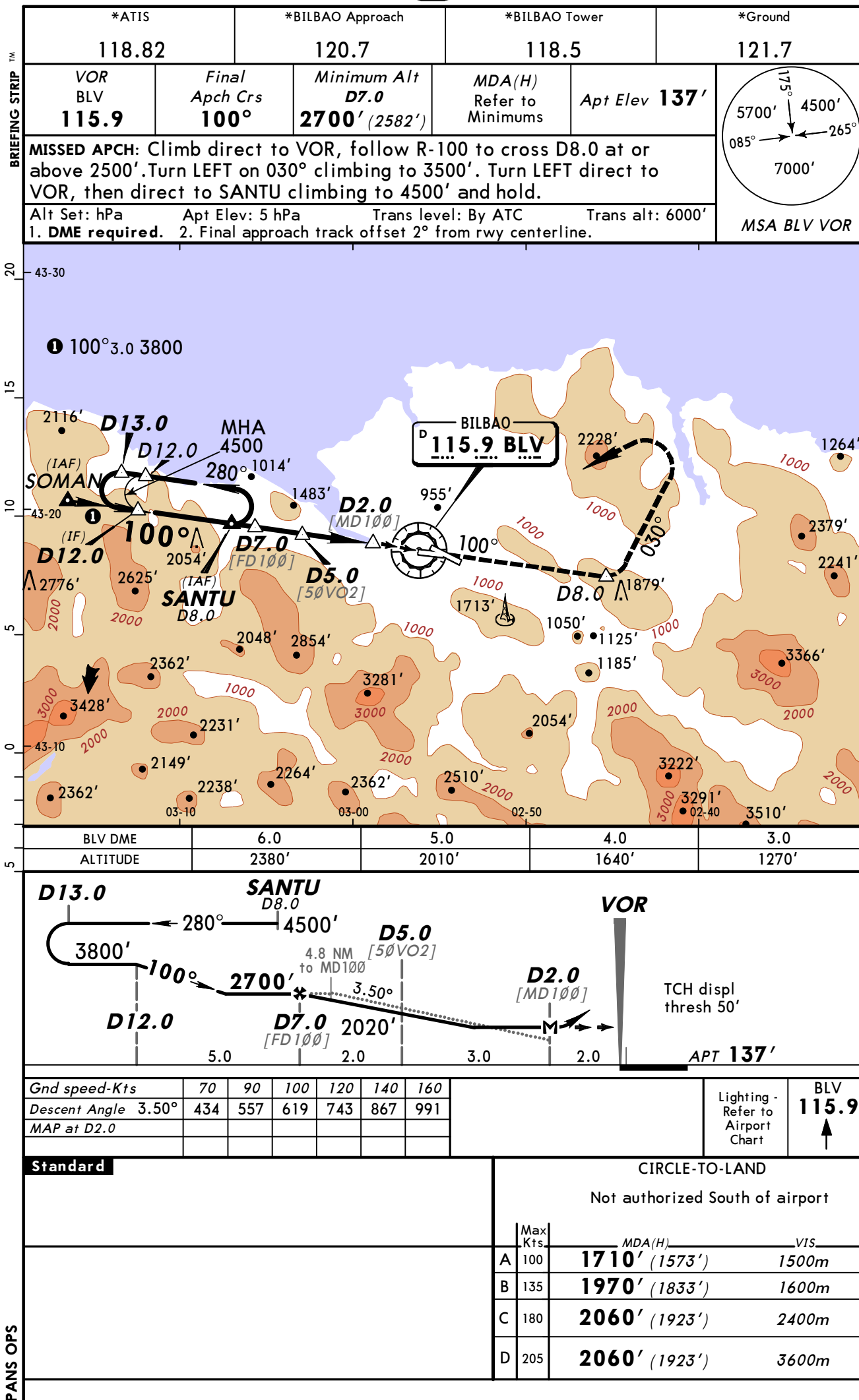
LEBB/BIO
BILBAO

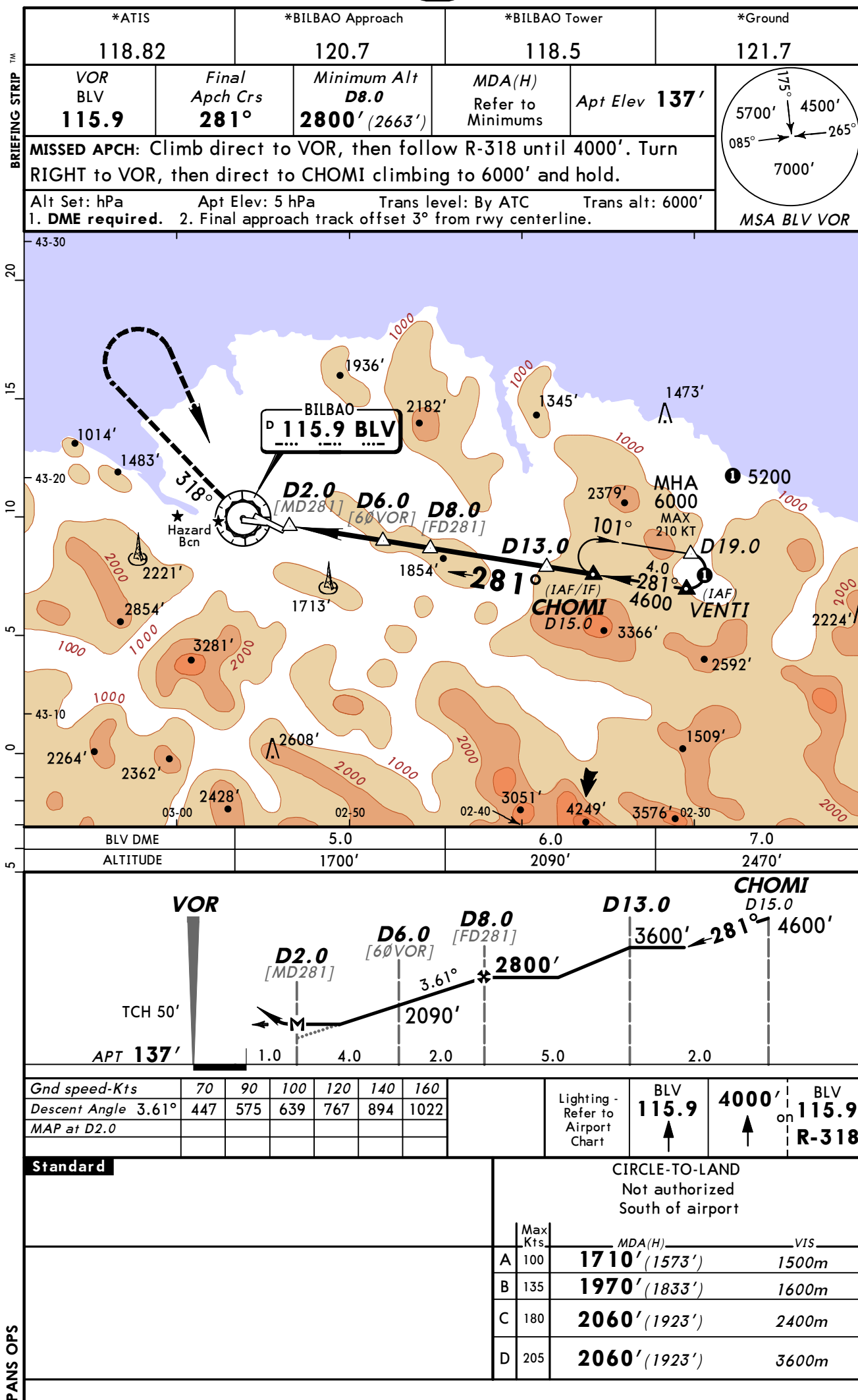
1 MAR 13

13-2

Eff 7 Mar

BILBAO, SPAIN
VOR Rwy 30



LEBB/BIO
BILBAOJEPPESSEN
1 MAR 13 (13-4) Eff 7 MarBILBAO, SPAIN
VOR Y

BILBAO, (BILBAO - LEBB)

TERMINAL CHART CHANGE NOTICES

Chart Change Notices for Airport LEBB

Type: Terminal

Effectivity: Permanent

Begin Date: 20130919

End Date: No end date

BILBAO Approach frequency changed from 120.7 MHz to 127.45 MHz.