

List of pages in this Trip Kit

Trip Kit Index

Airport Information For LEBB

Terminal Charts For LEBB

Revision Letter For Cycle 15-2013

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: 1.3°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: 0450 Z
Sunset: 1946 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 120.7

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.

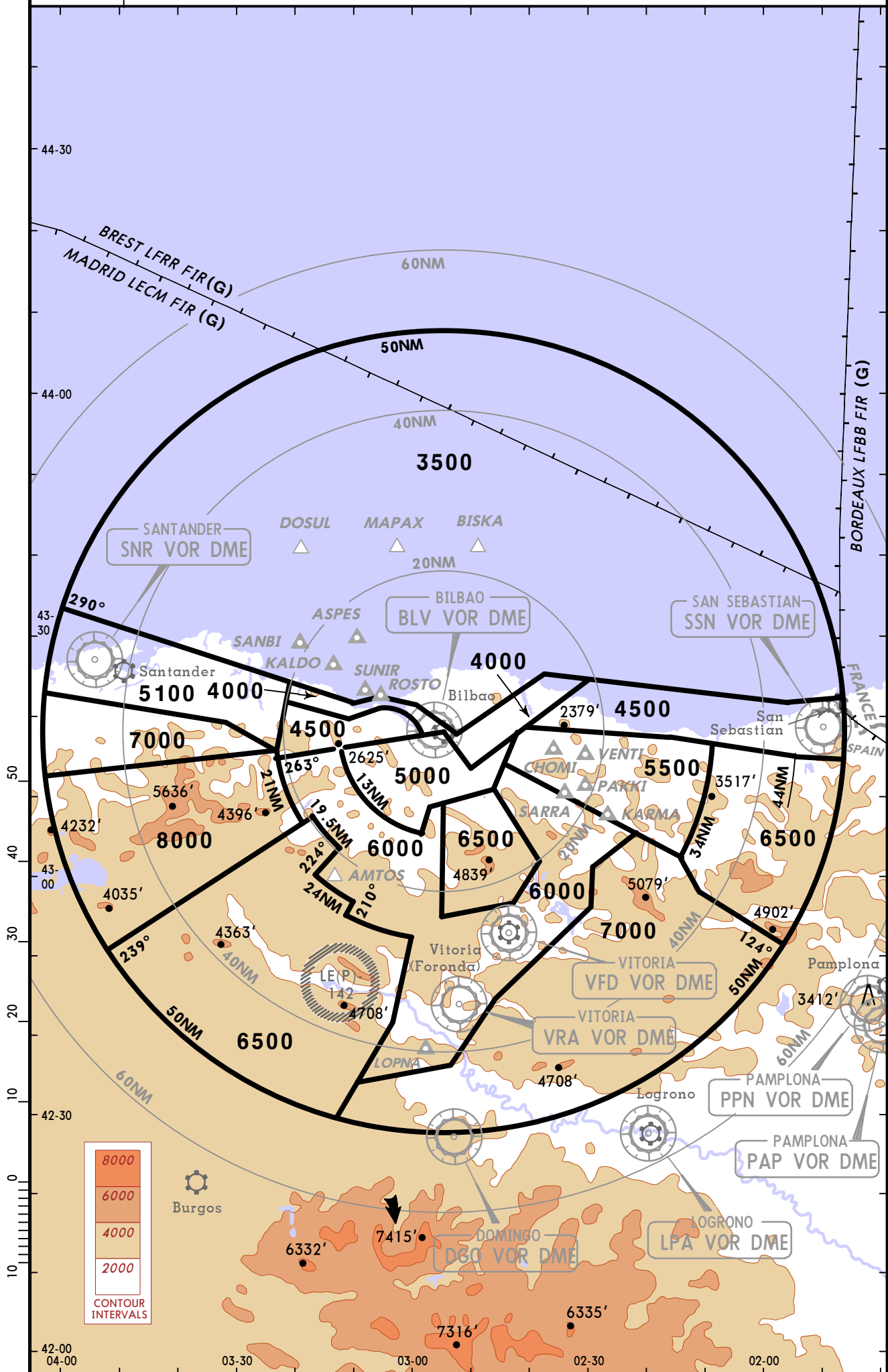
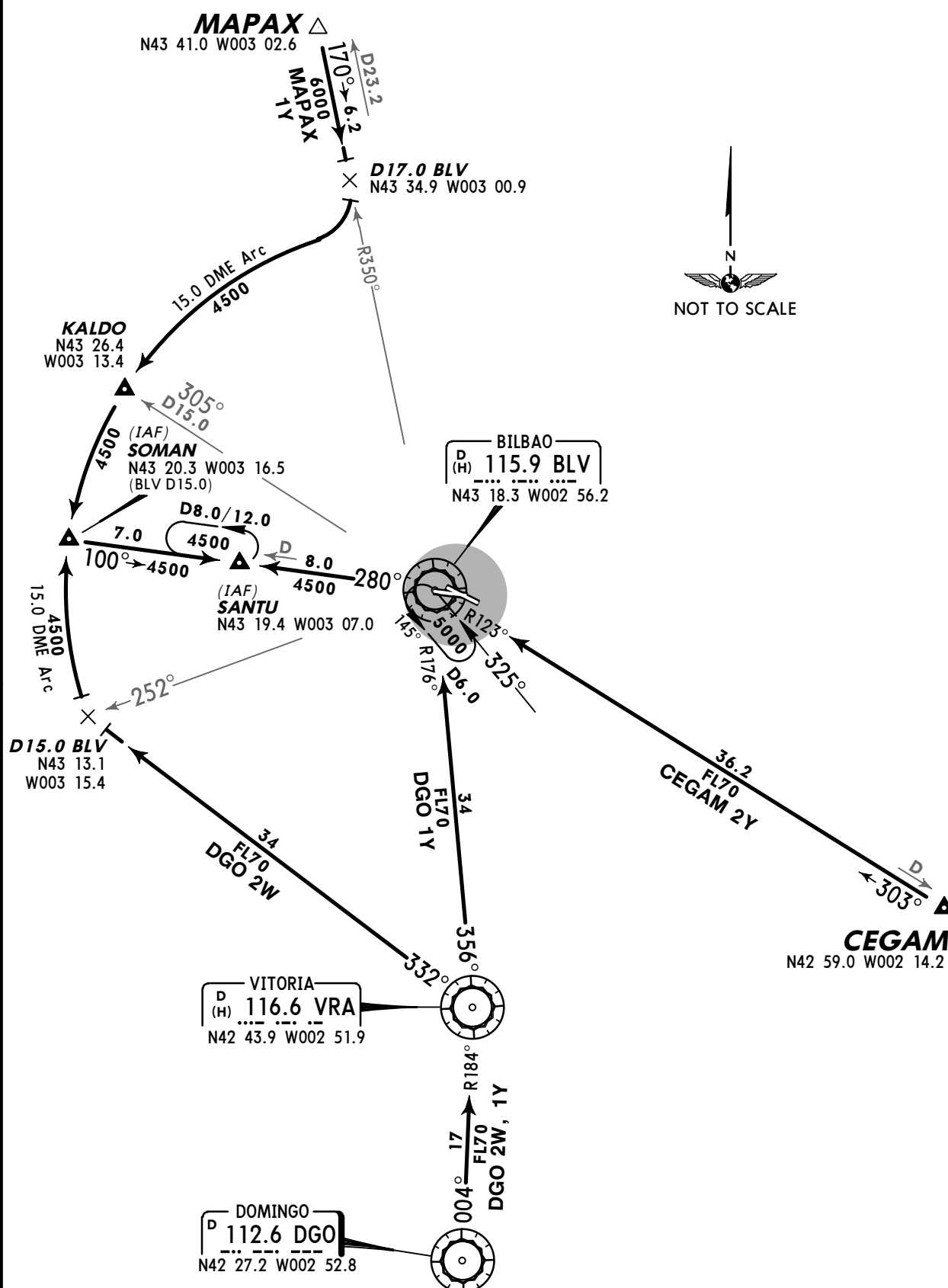
Apt Elev
137'Alt Set: hPa Trans level: By ATC Trans alt: 6000'
The published minimum altitudes integrate no correction for low temperatures.

Diagram illustrating a circle with a radius of 7000'. The circle is divided into two segments by a horizontal line. The upper segment is labeled 175° and 4500'. The lower segment is labeled 085° and 265°. The distance from the center to the upper boundary is 5700'. The distance from the center to the lower boundary is 7000'.

SPEED: MAX 250 KT AT OR BELOW FL120



SPEED: MAX 250 KT AT OR BELOW FL120

N43 41.0 W003 02.6

02.6
MAPAX
1T, 1Z
6000
170° → 6.2
D23.2

D17.0 BLV
N43 34.9 W003 00.9

(MAPAX 1T: IAF)
ASPES
N43 29.7
W003 09.4

(DGO 2X,
MAPAX 1Z:
IAF)
KALDO
N43 26.4
W003 13.4
(BLV D15.0)

KALDO
N43 26.4
W003 13.4
(BLV D15.0)

DGO 2X
MAPAX 1Z

(IAF)
ROSTO
N43 22.6 W003 05.4

(IAF)
BILBAO
15.9 BLV
.. ...
8.3 W002 56.2

(IAF) **SUNIR**
N43 23.3
W003 08.0

(IAF)
SOMAN
N43 20.3
W003 16.5

D15.0 BLV
N43 13.1
W003 15.4

VITORIA
D
(H) 116.6 VRA
... ..
N42 43.9 W002 51.9

DOMINGO
D 112.6 DGO
... ..
N42 27.2 W002 52.8

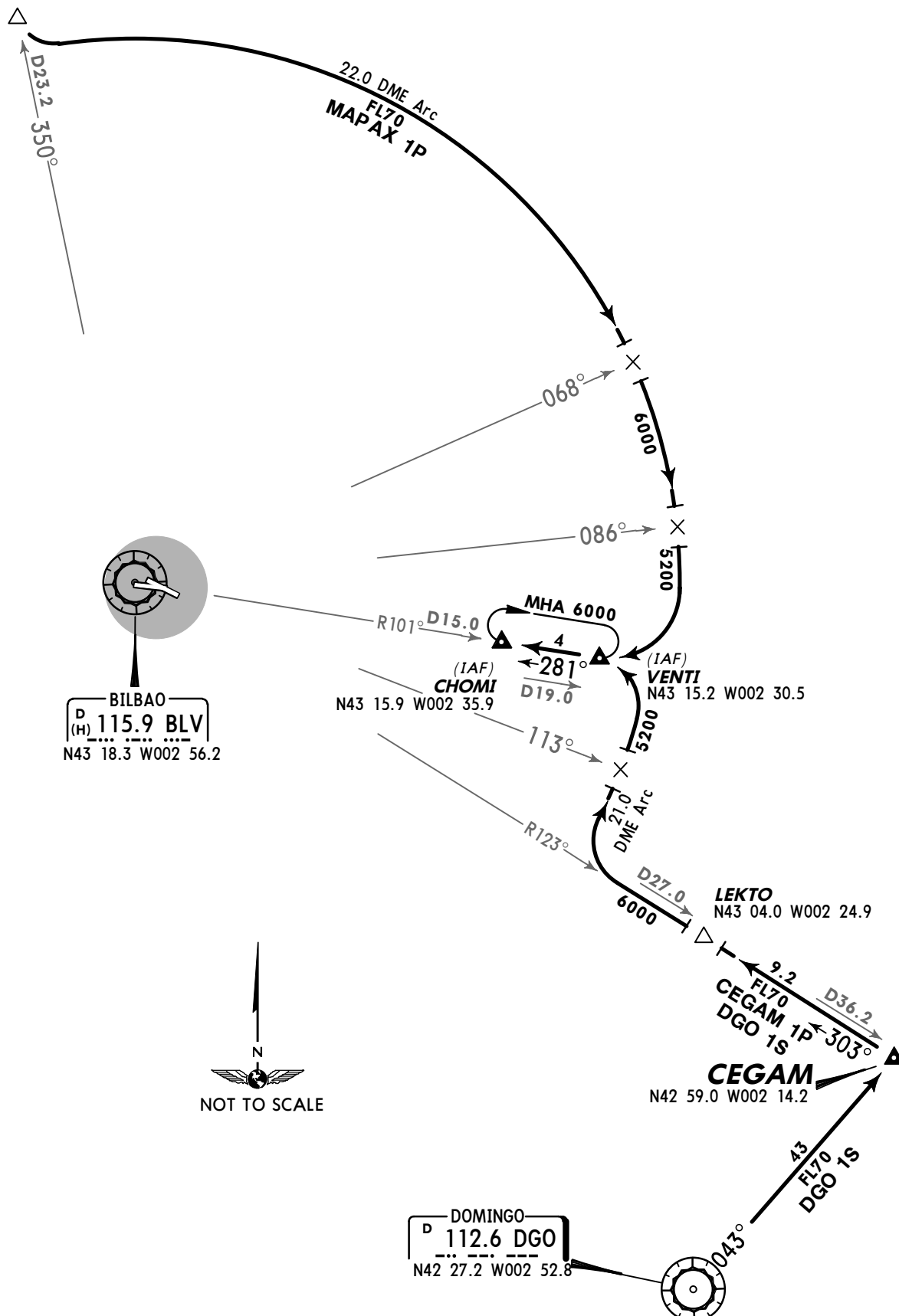
Diagram of a curved duct section. The duct has a length of 4000mm and a radius of R305. The angle of the curve is 125°. The duct is labeled with dimensions D8.0/12.0 and D8.0. The duct is shown with a 4000mm offset from the centerline.

CEGAM



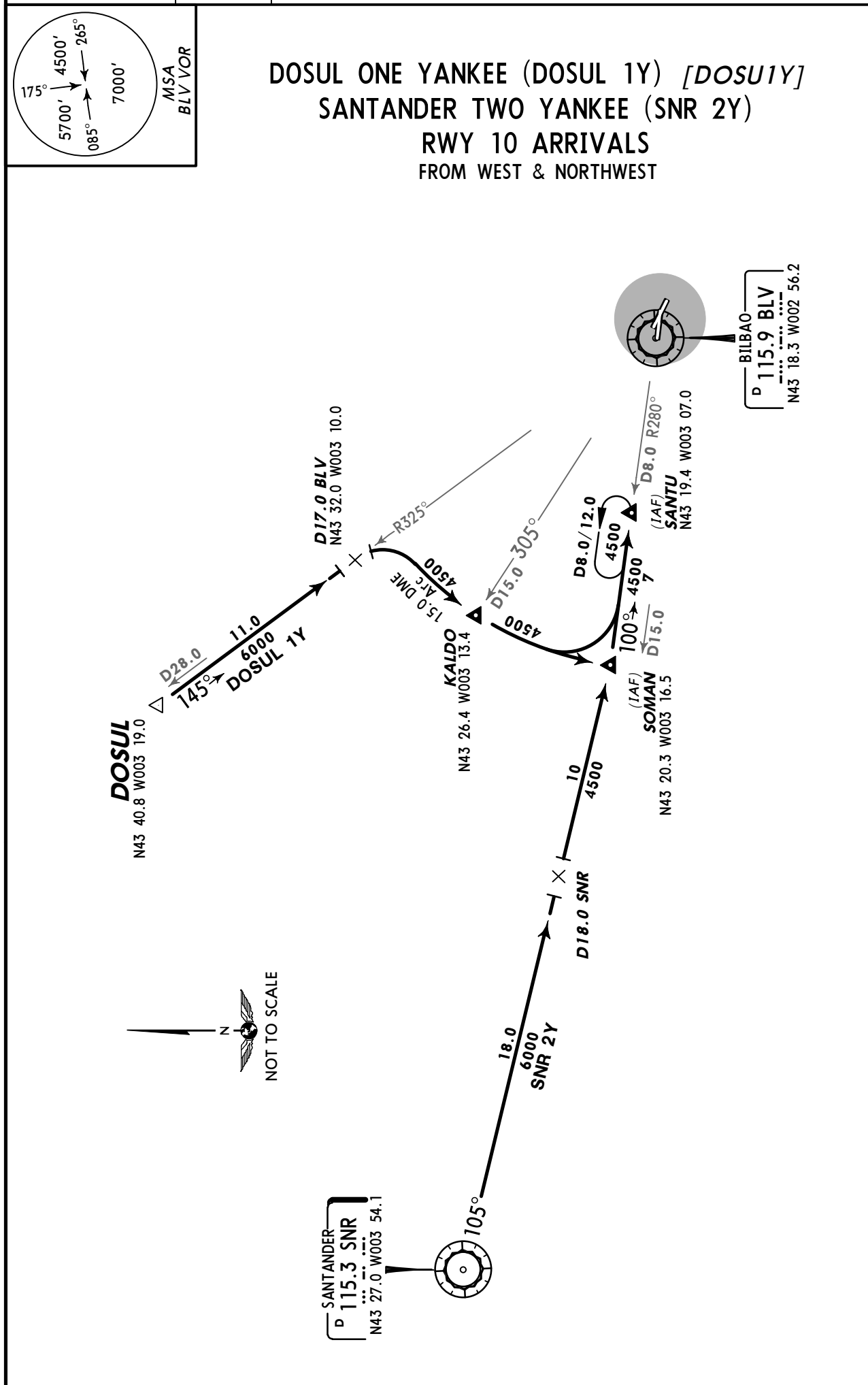
*ATIS
118.82Apt Elev
137'Alt Set: hPa
Trans level: By ATC Trans alt: 6000'CEGAM ONE PAPA (CEGAM 1P) [CEGA1P]
DOMINGO ONE SIERRA (DGO 1S)
MAPAX ONE PAPA (MAPAX 1P) [MAPA1P]
RWY 28 ARRIVALS**~~SPEED~~ MAX 250 KT AT OR BELOW FL120****MAPAX**

N43 41.0 W003 02.6



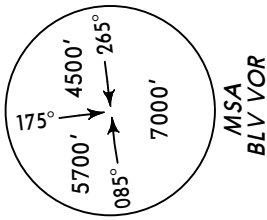
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*ATIS 118.82	<i>Apt Elev</i> 137'	Alt Set: hPa Trans level: By ATC Trans alt: 6000'
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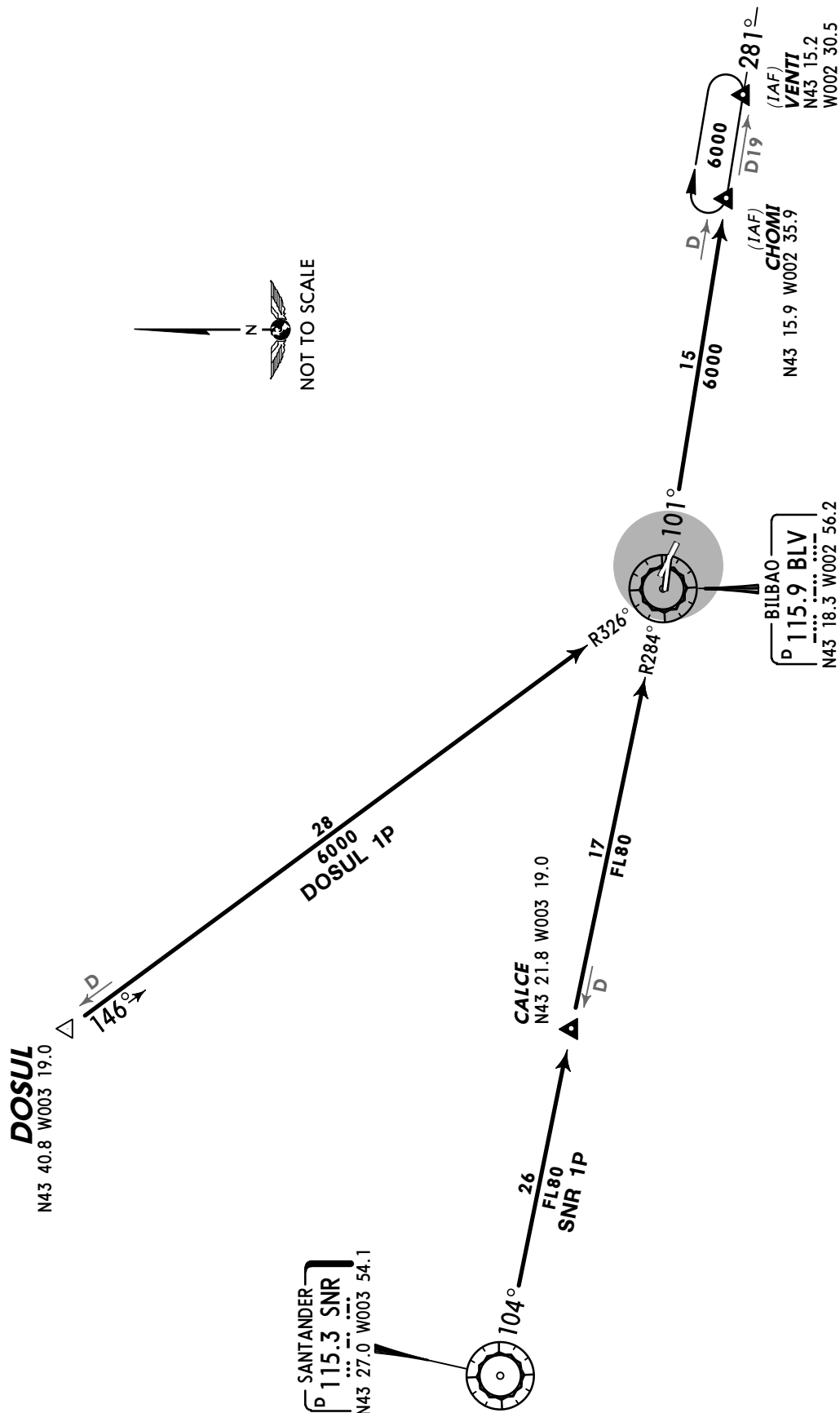
RWY 12 ARRIVALS FROM WEST & NORTHWEST

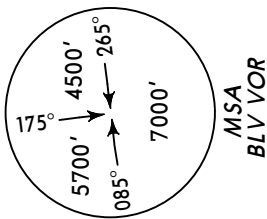


*ATIS
118.82Apt Elev
137'Alt Set: hPa
Trans level: By ATC Trans alt: 6000'

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

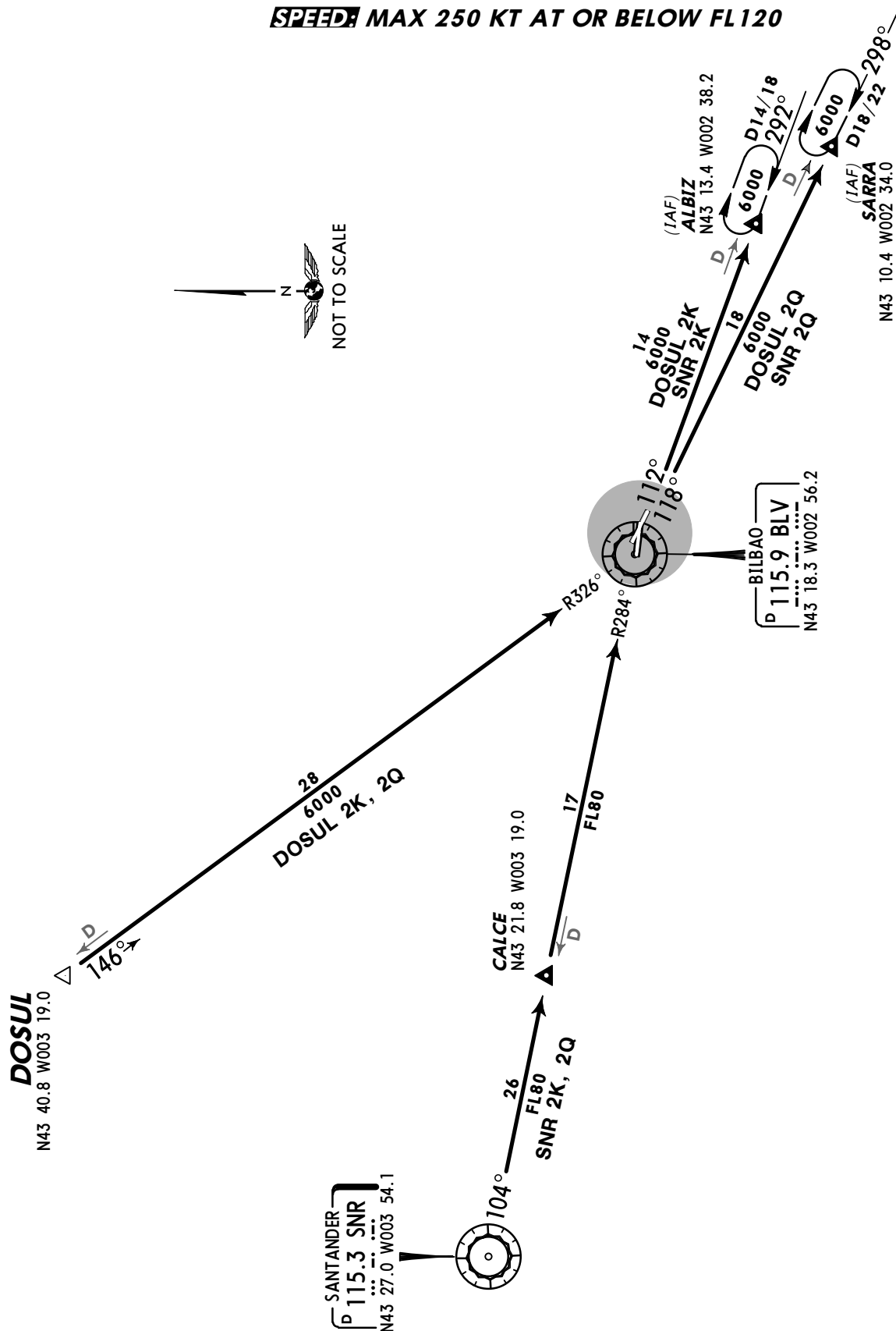


*ATIS
118.82Apt Elev
137'Alt Set: hPa
Trans level: By ATC Trans alt: 6000'

DOSUL TWO KILO (DOSUL 2K) [DOSU2K]
DOSUL TWO QUEBEC (DOSUL 2Q) [DOSU2Q]
SANTANDER TWO KILO (SNR 2K)
SANTANDER TWO QUEBEC (SNR 2Q)

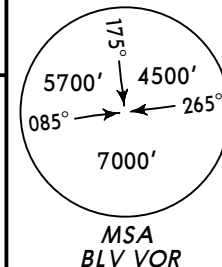
RWY 30 ARRIVALS

FROM WEST & NORTHWEST

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

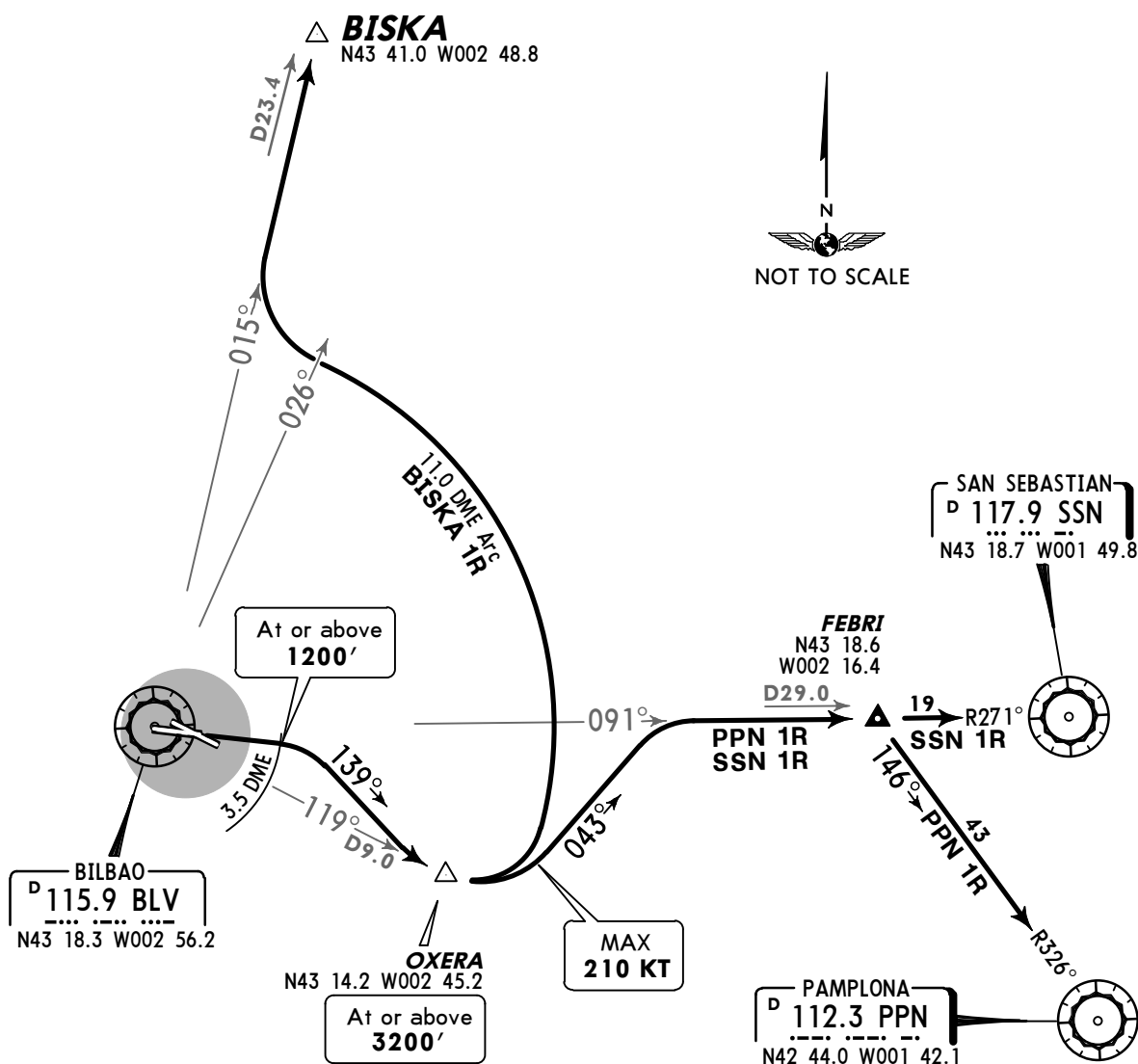
Apt Elev
137'

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'.

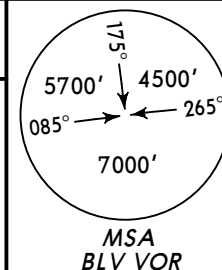
Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

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.

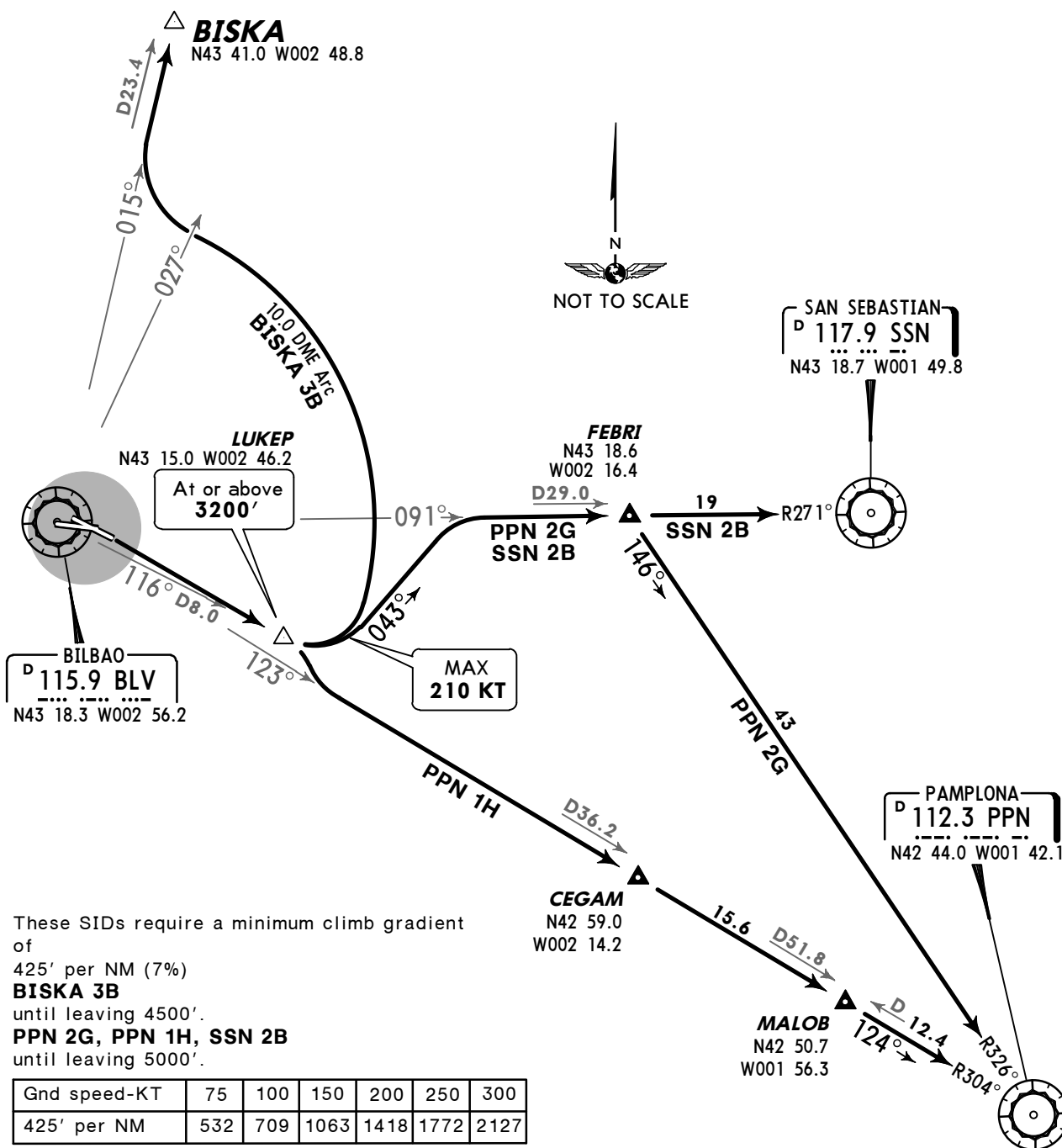
Apt Elev
137'

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 FL100



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

BISKA 3B
until leaving 4500'.
PPN 2G, PPN 1H, SSN 2B
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 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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Apt Elev
137'

Trans level: By ATC Trans alt: 6000'

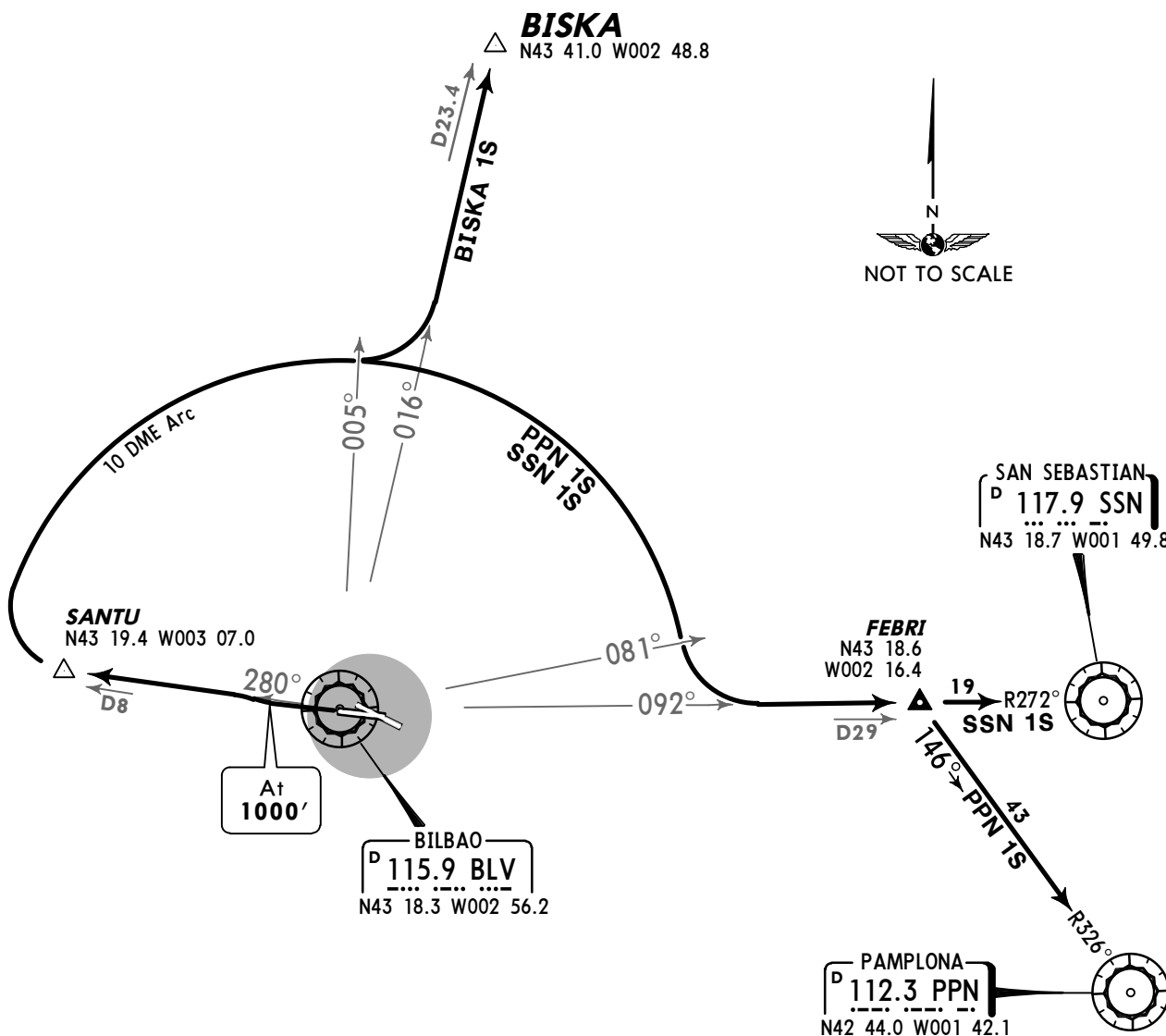
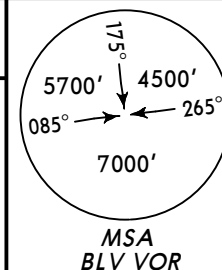
BISKA ONE SIERRA (BISKA 1S) [BISK1S]

PAMPLONA ONE SIERRA (PPN 1S)

SAN SEBASTIAN ONE SIERRA (SSN 1S)

RWY 28 DEPARTURES

TO NORTHEAST, EAST & SOUTHEAST

~~SPEED~~ MAX 250 KT UNTIL LEAVING FL100

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

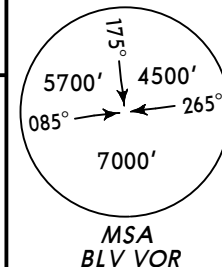
Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

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

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.

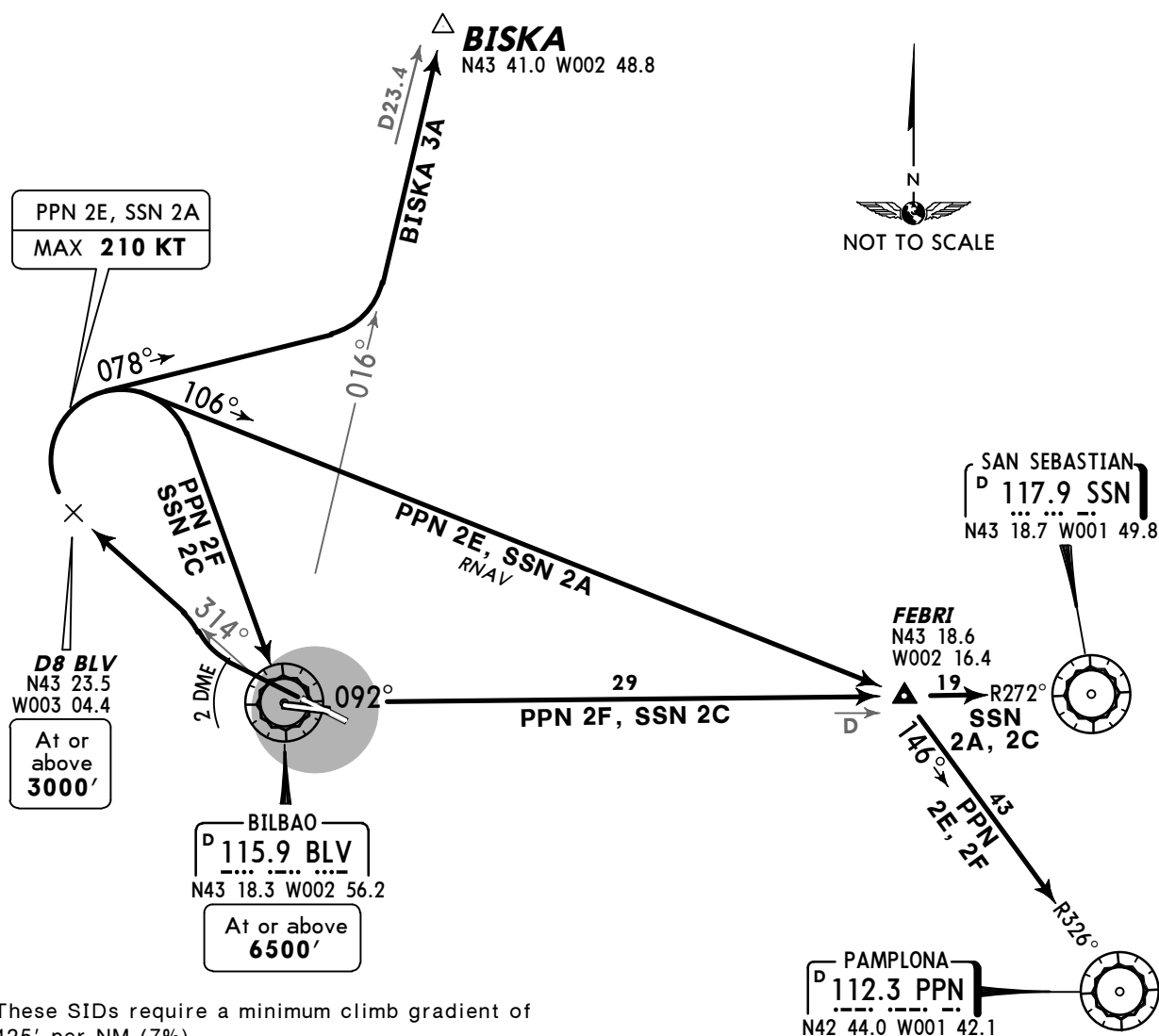
Apt Elev
137'

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 3A

until leaving 5000'.

PPN 2E, 2F, SSN 2A, 2C

until leaving 4000'.

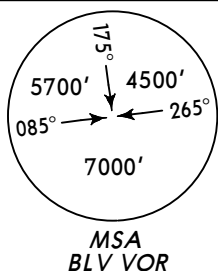
Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

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.

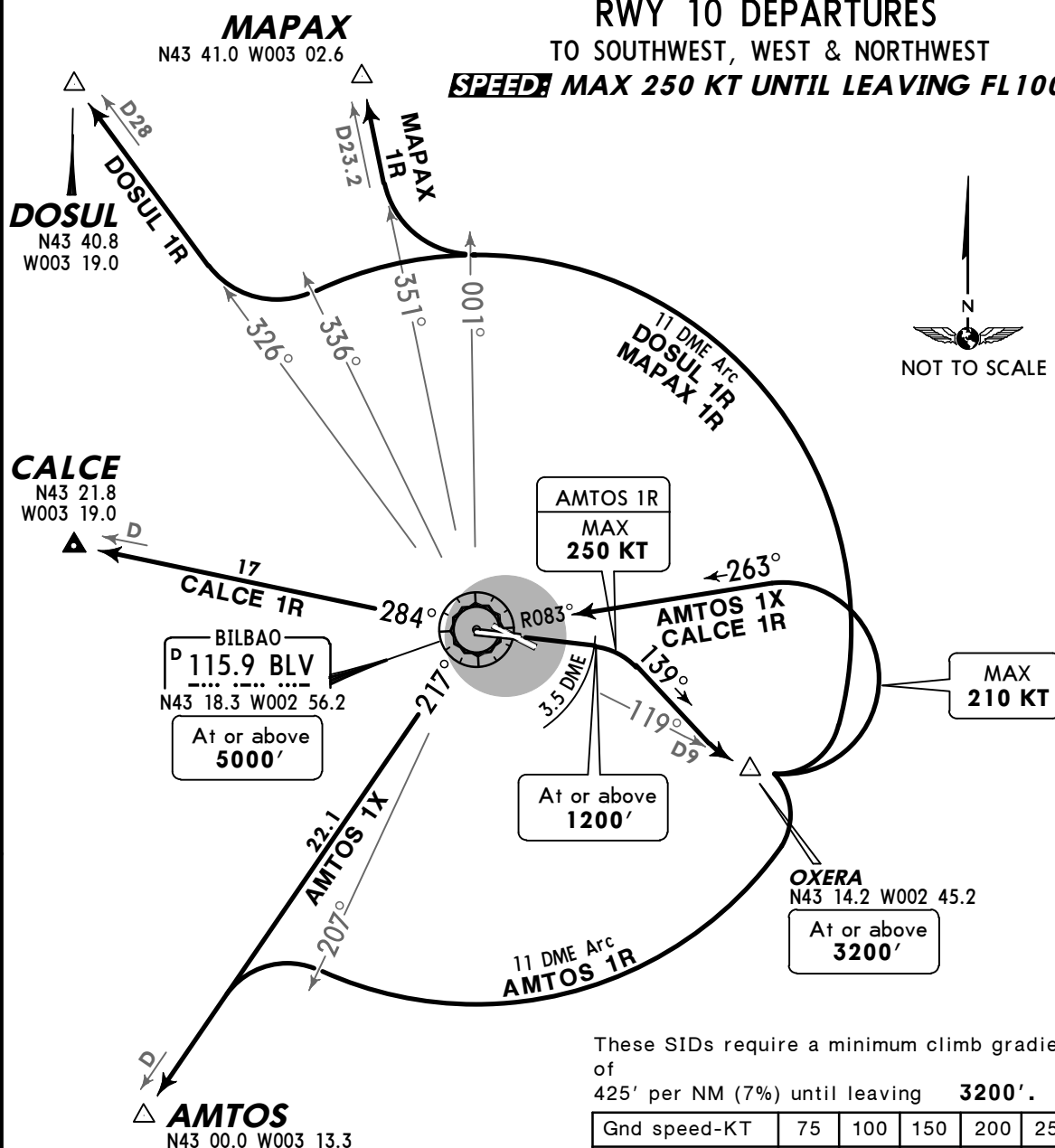
Trans level: By ATC Trans alt: 6000'



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

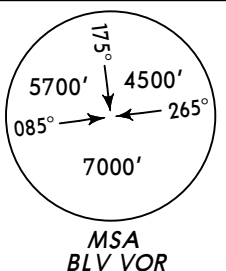
Initial climb clearance **FL80** , except ATC clearance

INITIAL CLIMB

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

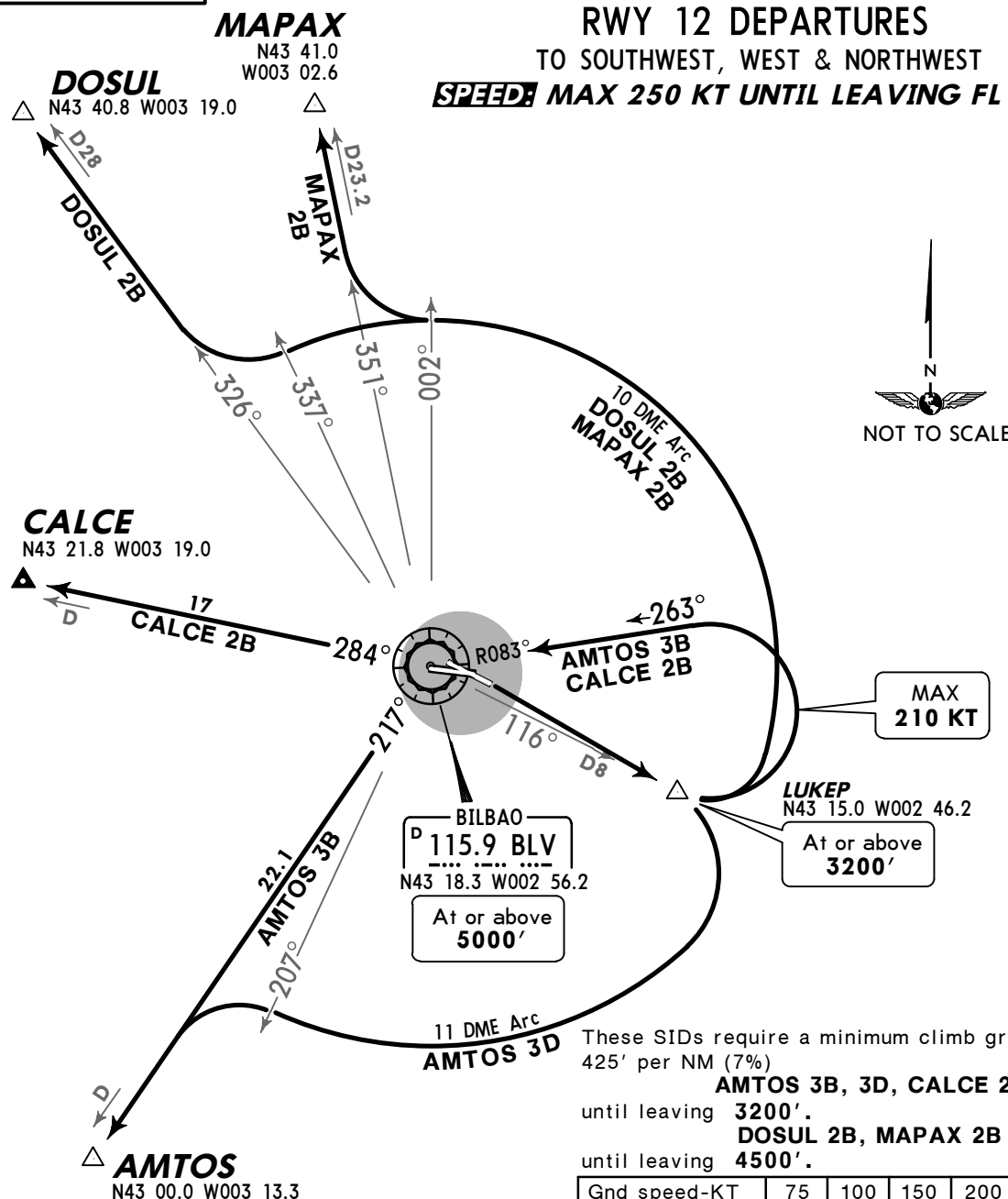
SID	ROUTING
AMTOS 1R	At OXERA turn RIGHT, along BLV 11 DME arc, when passing BLV R-207 turn LEFT, intercept BLV R-217 to AMTOS.
AMTOS 1X	At OXERA turn LEFT, intercept BLV R-083 inbound to BLV, BLV R-217 to AMTOS.
CALCE 1R	At OXERA turn LEFT, intercept BLV R-083 inbound to BLV, BLV R-284 to CALCE.
DOSUL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

Trans level: By ATC Trans alt: 6000'



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'**.

until leaving **DOSUL 2B, MAPAX 2B**
until leaving **4500'.**

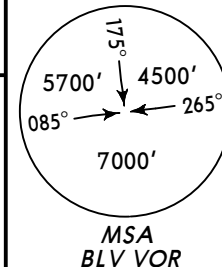
Gnd speed-KT	75	100	150	200	250	300
425' per NM	532	709	1063	1418	1772	2127

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.

Apt Elev
137'

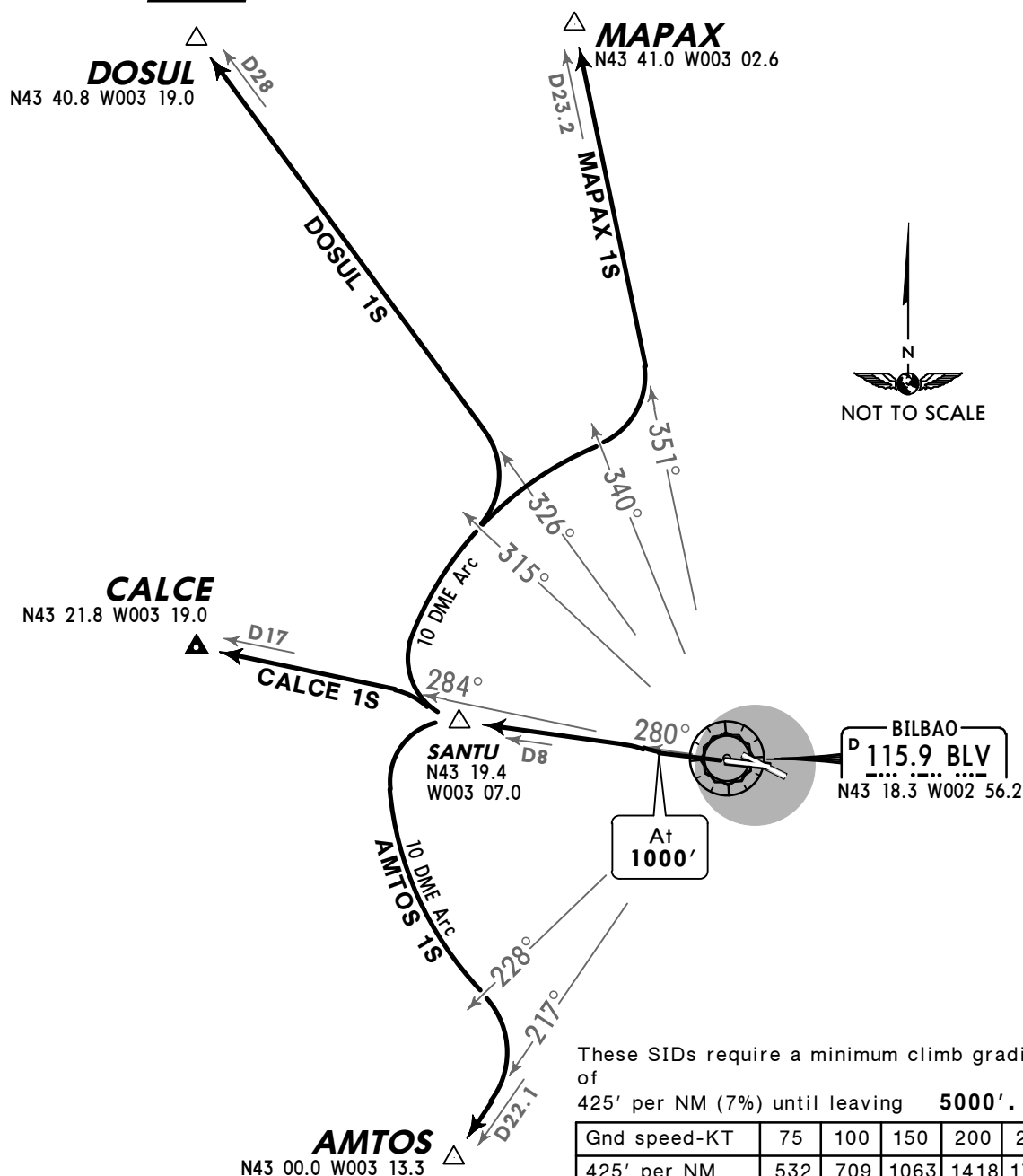
Trans level: By ATC Trans alt: 6000'



AMTOS ONE SIERRA (AMTOS 1S) [AMTO1S]
CALCE ONE SIERRA (CALCE 1S) [CALC1S]
DOSUL ONE SIERRA (DOSUL 1S) [DOSU1S]
MAPAX ONE SIERRA (MAPAX 1S) [MAPA1S]

RWY 28 DEPARTURES

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 **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

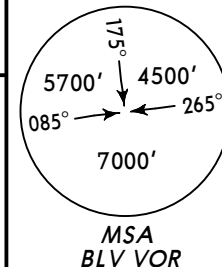
INITIAL CLIMB

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'

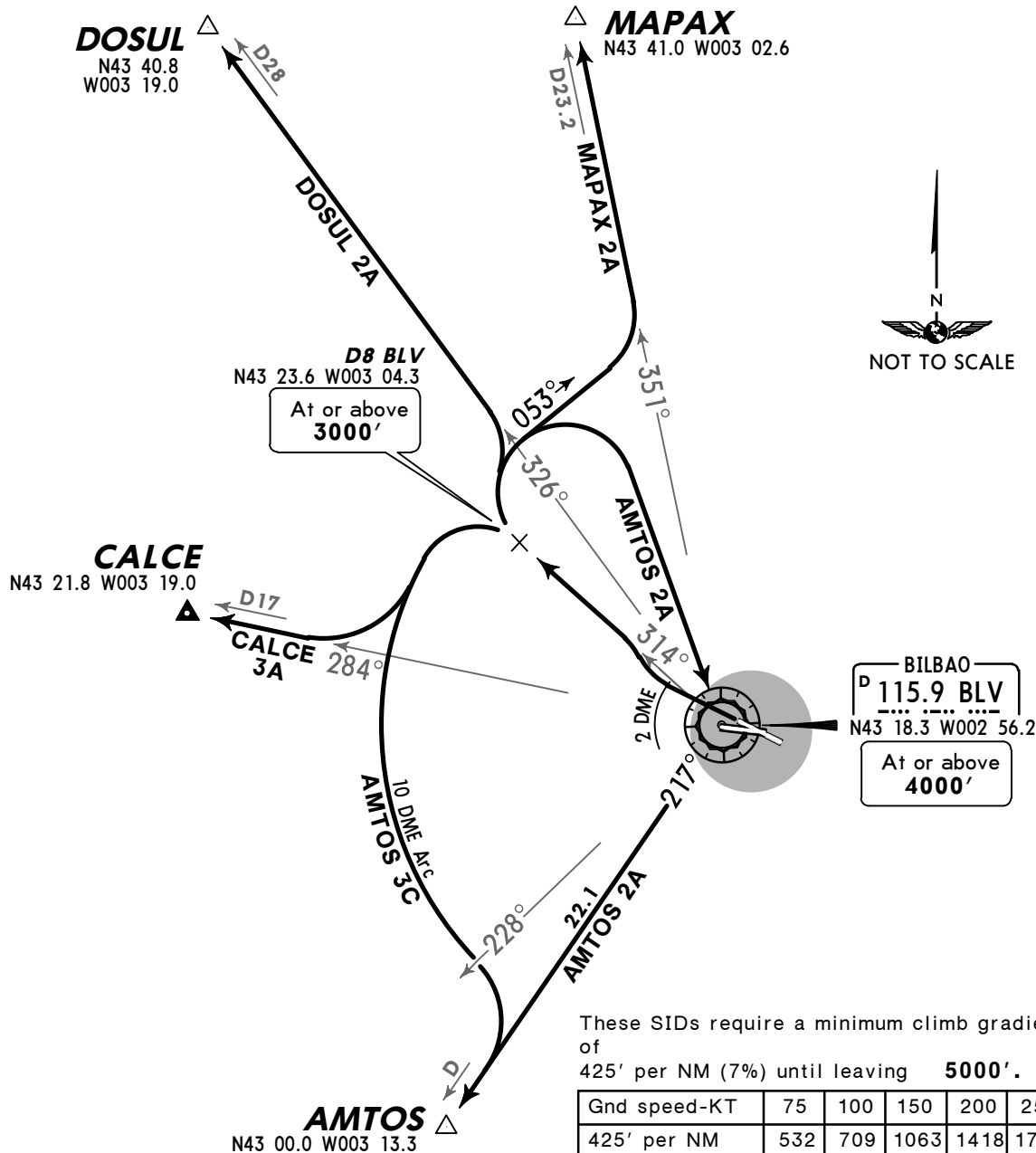
Trans level: By ATC Trans alt: 6000'



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.

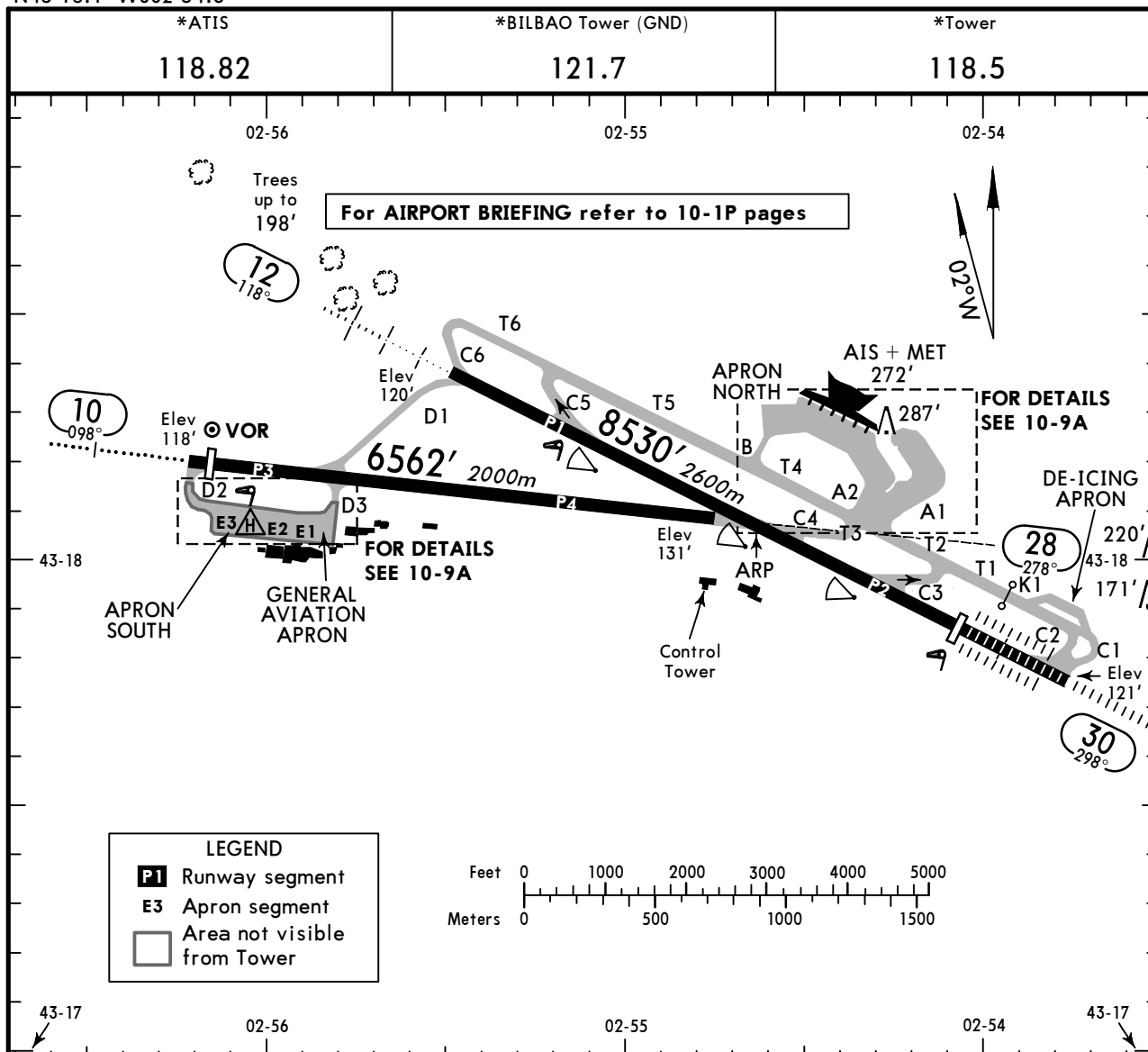
These departures require minimum climb gradients of

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

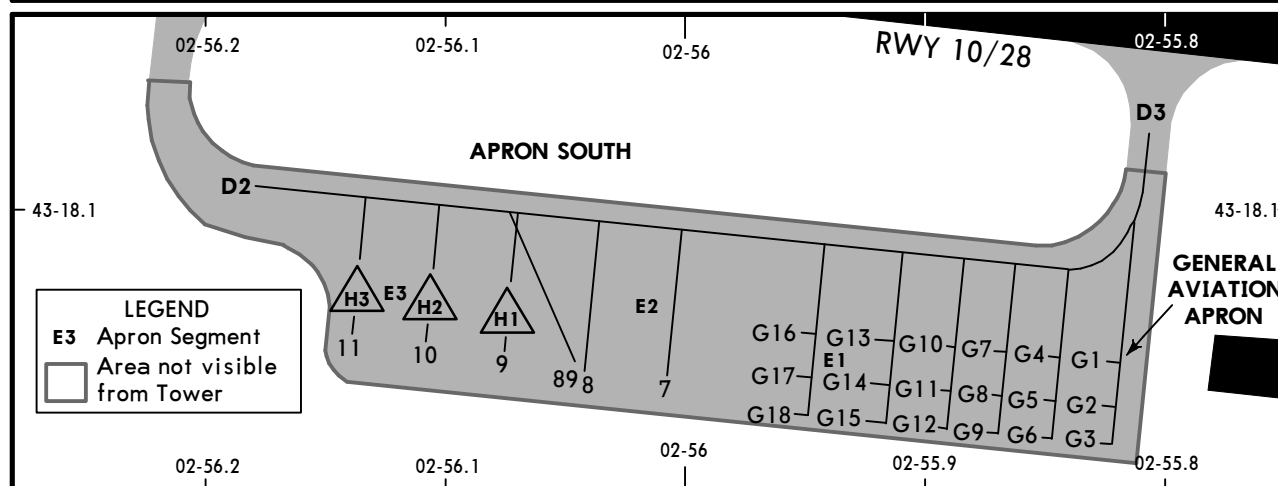
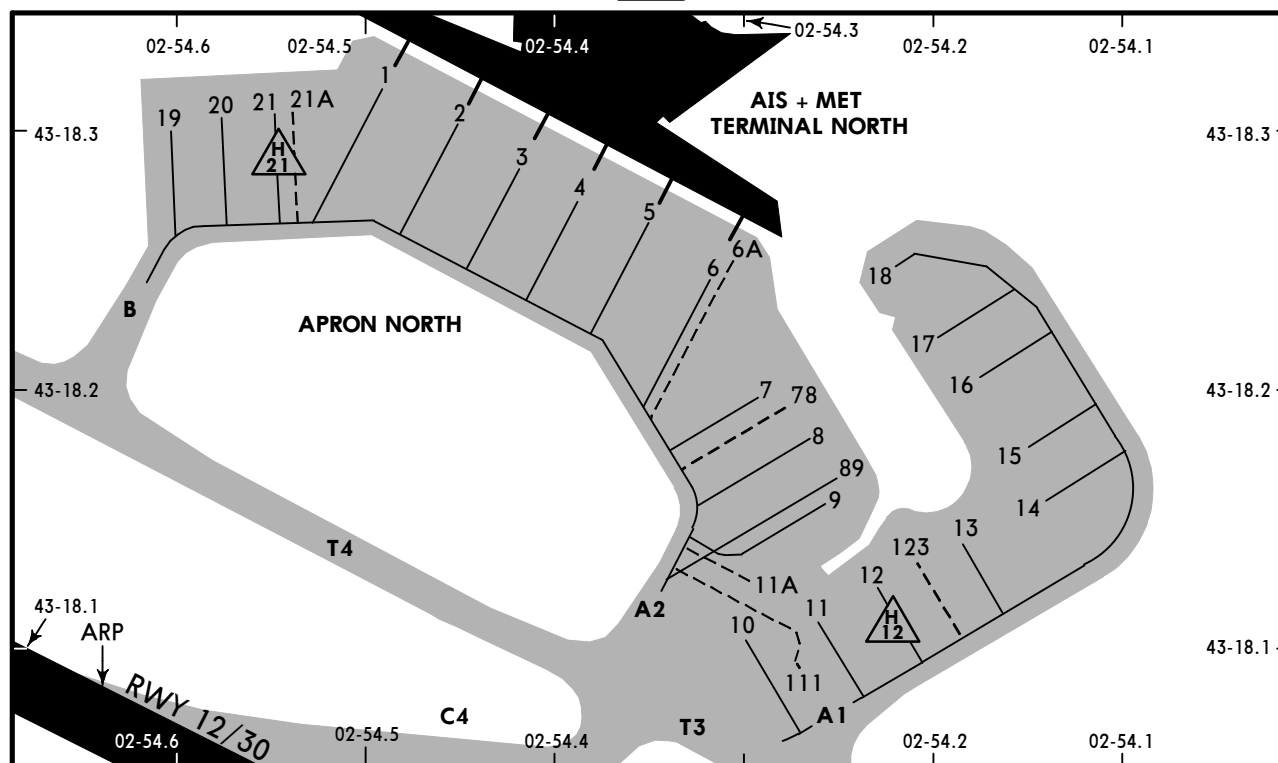


ADDITIONAL RUNWAY INFORMATION						
RWY		USABLE LENGTHS			WIDTH	
		LANDING BEYOND		TAKE-OFF		
		Threshold	Glide Slope			
10	HIRL (60m) HIALS PAPI (3.6°)	6266' 1910m			148'	
28	HIRL (60m) PAPI (3.4°)	6266' 1910m		6266' 1910m	45m	
12	HIRL (50m)CL (15m) HIALS PAPI (3.1°) RVR	8333' 2540m	7361' 2244m	8333' 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				
	Approved Operators HIRL, CL & mult. RVR req	RL, CL & mult. RVR req	RL & CL	RCLM (DAY only) or RL	
A					
B	125m	150m	200m	250m	400m
C					
D	150m	200m	250m	300m	500m

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 angles between the vertical line and the horizontal base are 085° on the left and 265° on the right.

MSA BIV VOR

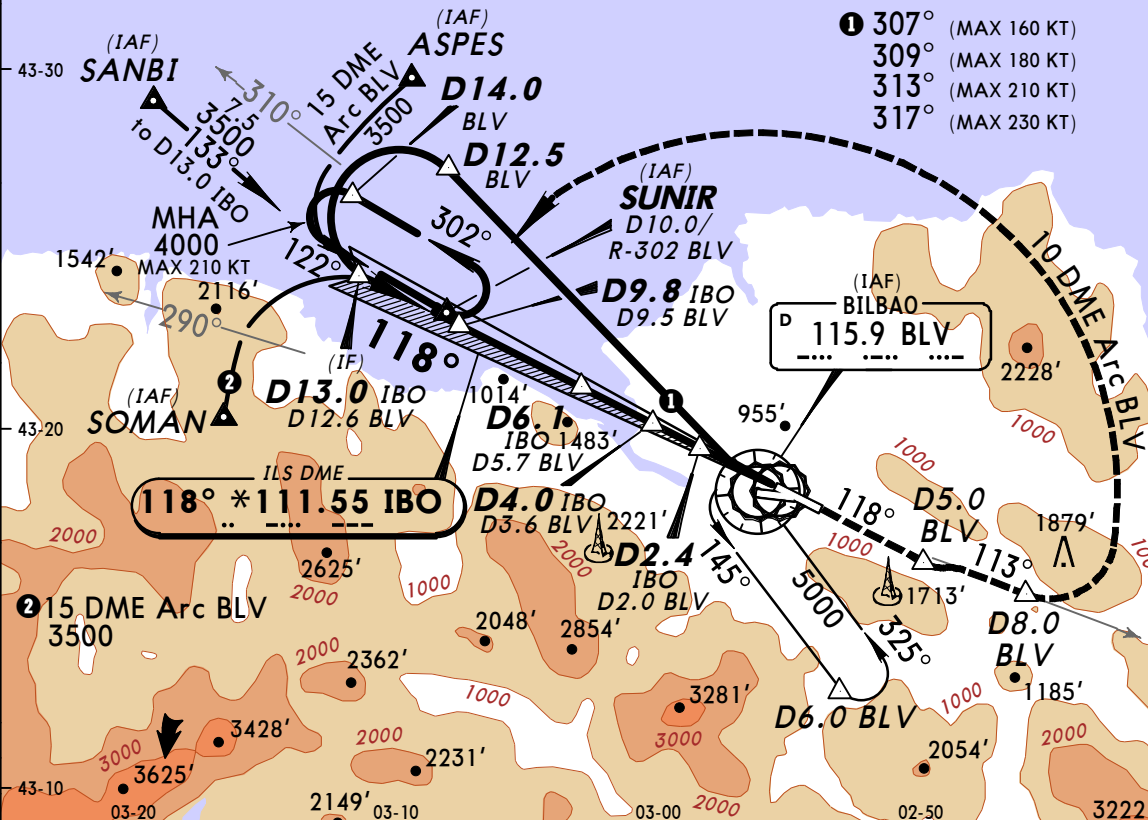
Alt Set: hPa

Rwv Elev: 4 hPa

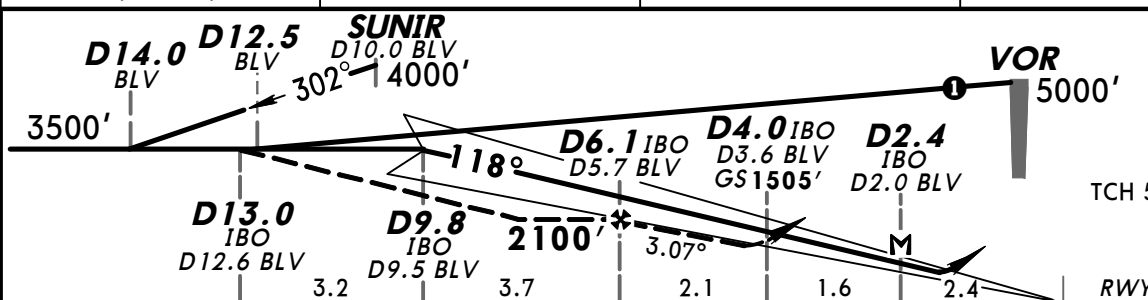
Trans |level|: Bv ATC

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	HIALS PAPI
<i>ILS GS</i> 3.10°	384	494	548	658	768	878	
<i>LOC Descent Angle</i> 3.07°	380	489	543	652	760	869	
<i>MAP at D2.4 IBO/D2.0 BLV</i>							

Standard

STRAIGHT-IN LANDING RWY 12

LOC (GS out)

CIRCLE-TO-LAND

1 2.5%

DA(H) **2** C: **1023'** (903')
D: **1033'** (913')

LOC (GS out)
DA(H)
1800' (1680')

3
Not authorized
South of airport

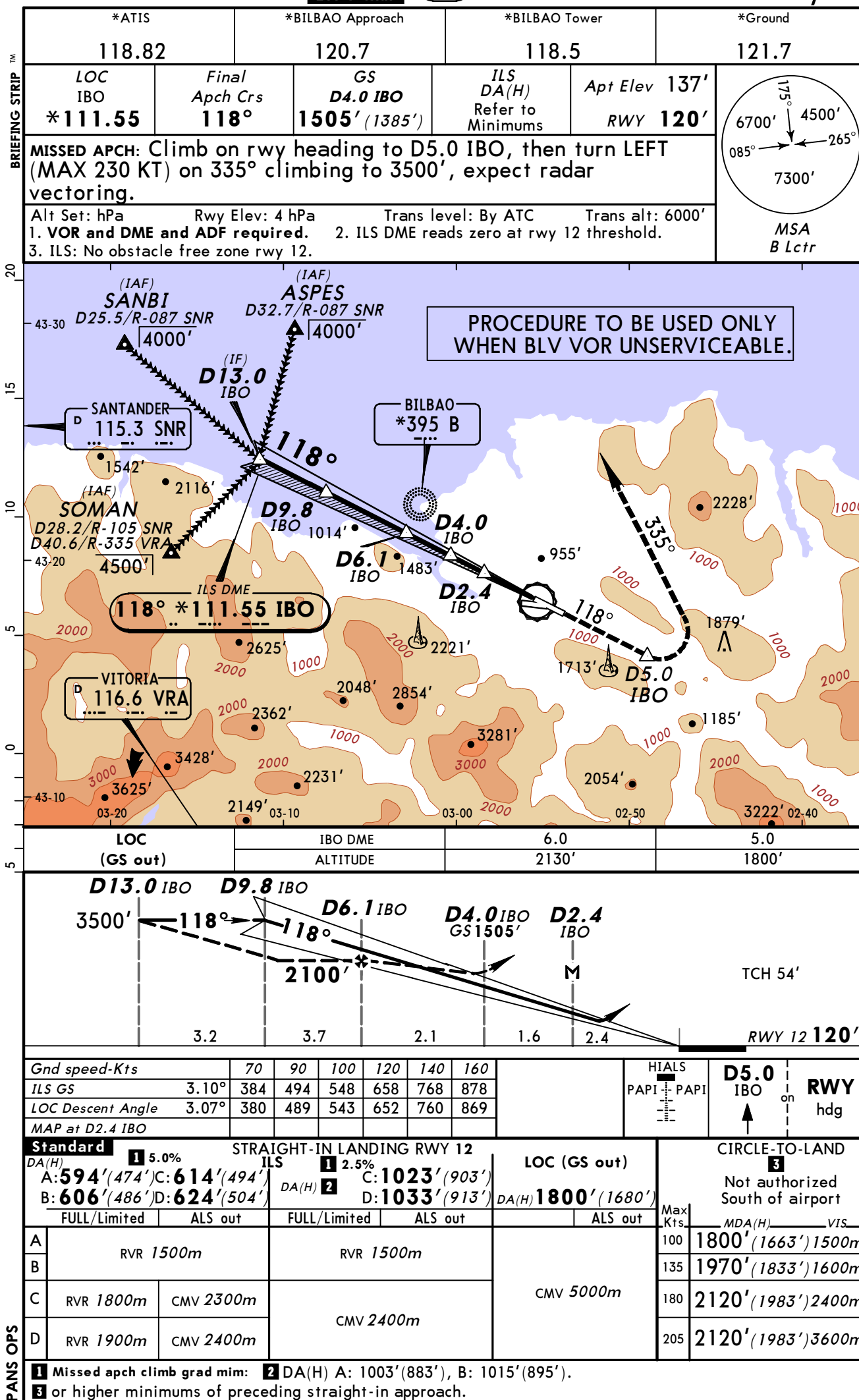
	FULL/Limited	ALS out	FULL/Limited	ALS out		ALS out	Max Kts	MDA(H)	VIS
A	RVR 1500m		RVR 1500m		CMV 5000m	100	1800'	(1663')	1500m
B						135	1970'	(1833')	1600m
C	RVR 1800m	CMV 2300m	CMV 2400m	180		2060'	(1923')	2400m	
D	RVR 1900m	CMV 2400m		205		2060'	(1923')	3600m	

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

3. ILS: No obstacle free zone rwy 30.

① CAT A & B

② 298° 3.9 6000

BILBAO
P 115.9 BLV

ILS DME
298° * 110.3 IBL

D2.0 BLV

D3.0 IBL
D4.5 BLV

D1.0 IBL
D2.6 BLV

D4.0 IBL
D5.5 BLV

D6.5 IBL
D8.0 BLV

D8.6 IBL
D10.1 BLV

D11.3 IBL
D12.9 BLV

D11.7 IBL
D13.2 BLV

D13.5 IBL
D15.0 BLV

D22.0 BLV

D18.0 BLV

D20.1 BLV

D18.6 IBL
D20.1 BLV

MHA 6000

SARRA (IAF)
D18.0 BLV

KARMA (IAF)

298°

1713'

1050'

1185'

3366'

2592'

1718'

318°

1014'

1483'

2221'

2048'

2854'

3281'

2264'

2064'

2018'

2074'

2362'

2428'

2228'

1264'

2379'

2241'

2025'

2054'

3222'

3291'

3052'

4039'

4249'

3577'

2969'

2012'

4265'

03-00

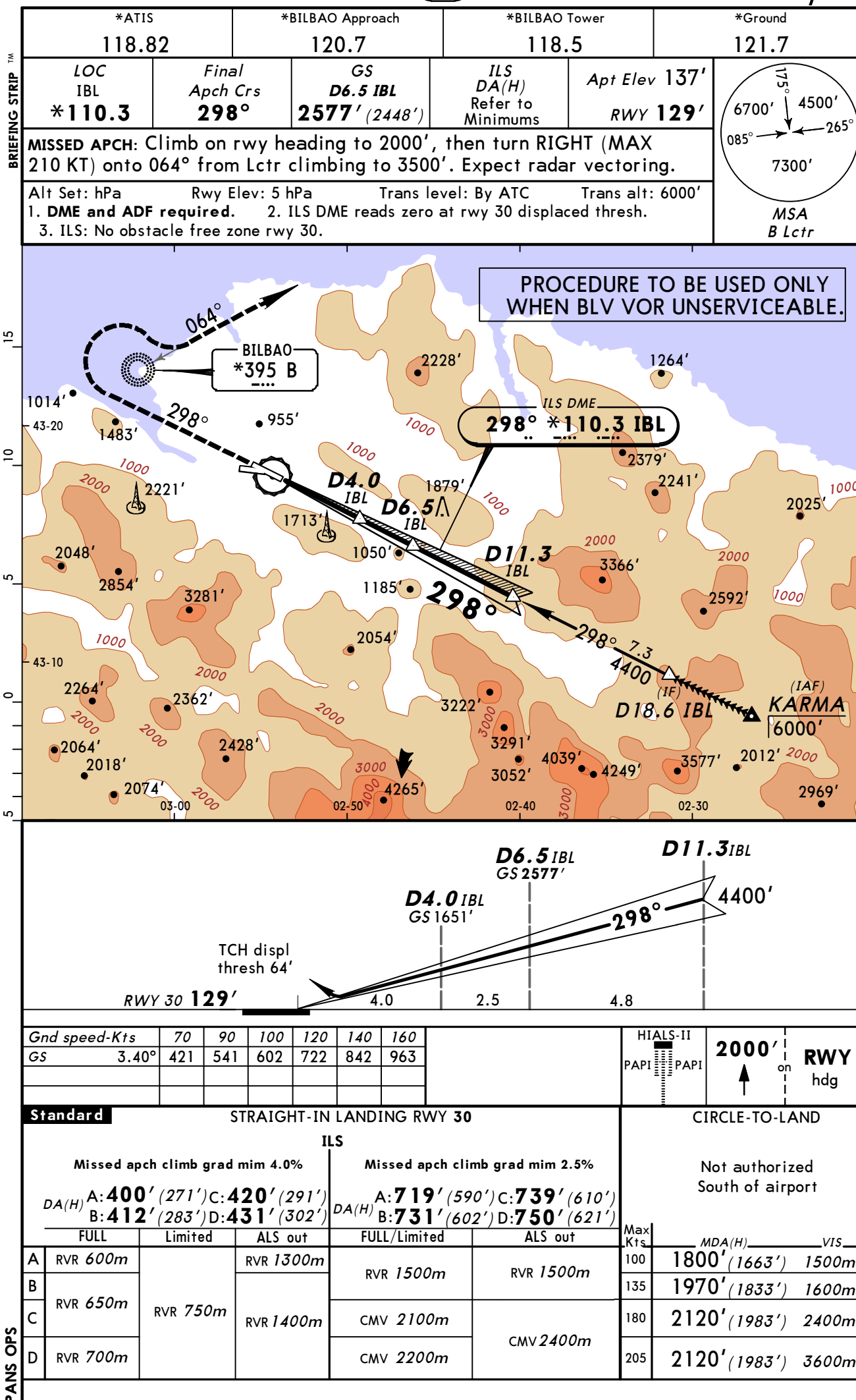
02-50

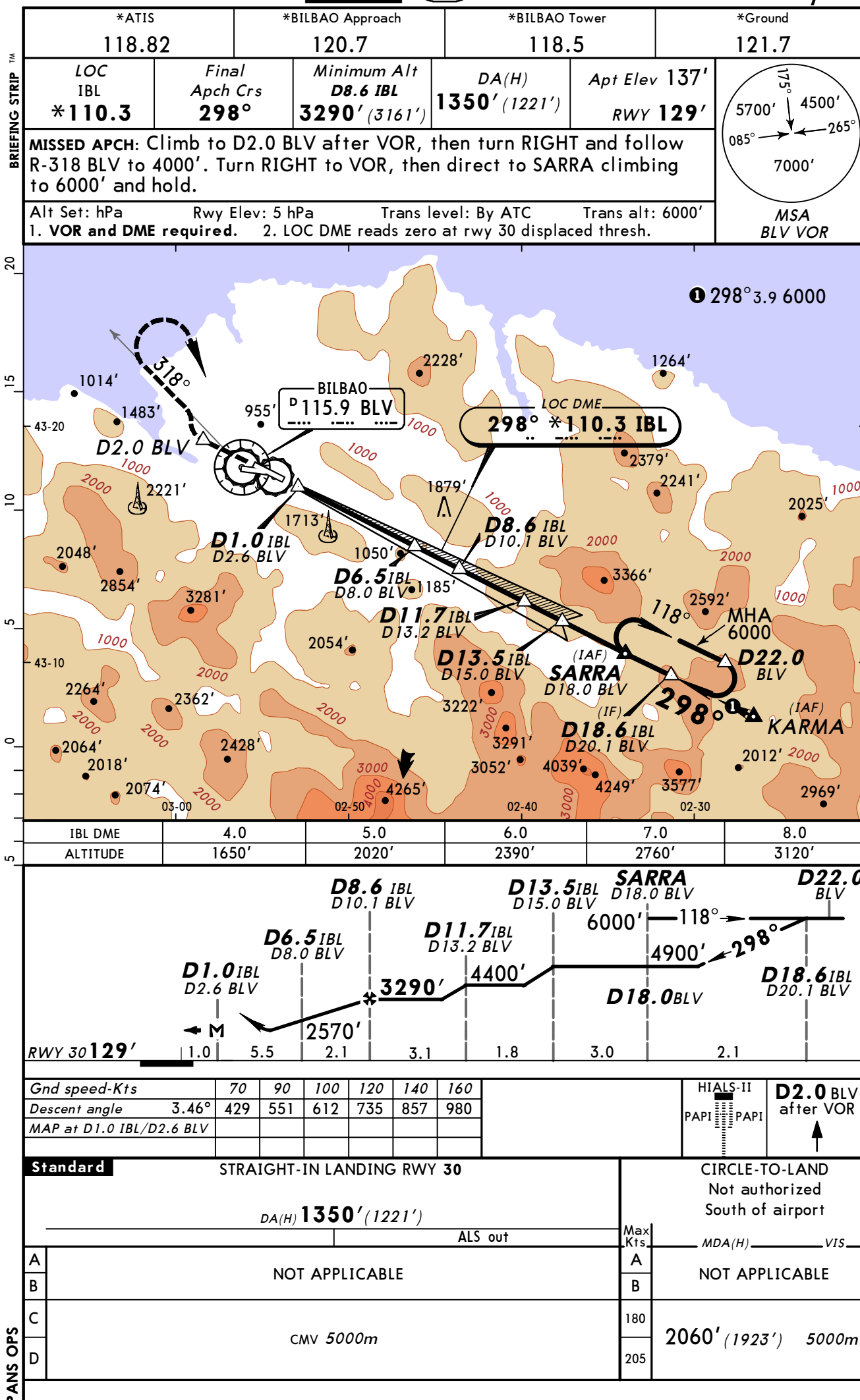
02-40

02-30

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		100	1710' (1573') 1500m
B	RVR 700m							135	1970' (1833') 1600m
C								180	2060' (1923') 2400m
D								205	2060' (1923') 3600m
NOT APPLICABLE									

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LEBB/BIO
BILBAOJEPPESSEN
1 MAR 13 11-4 Eff 7 MarBILBAO, SPAIN
ILS Y Rwy 30

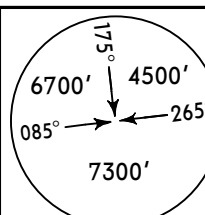
LEBB/BIO
BILBAOJEPPESEN
1 MAR 13
Eff 7 Mar 11-5 CAT C & DBILBAO, SPAIN
LOC Y Rwy 30

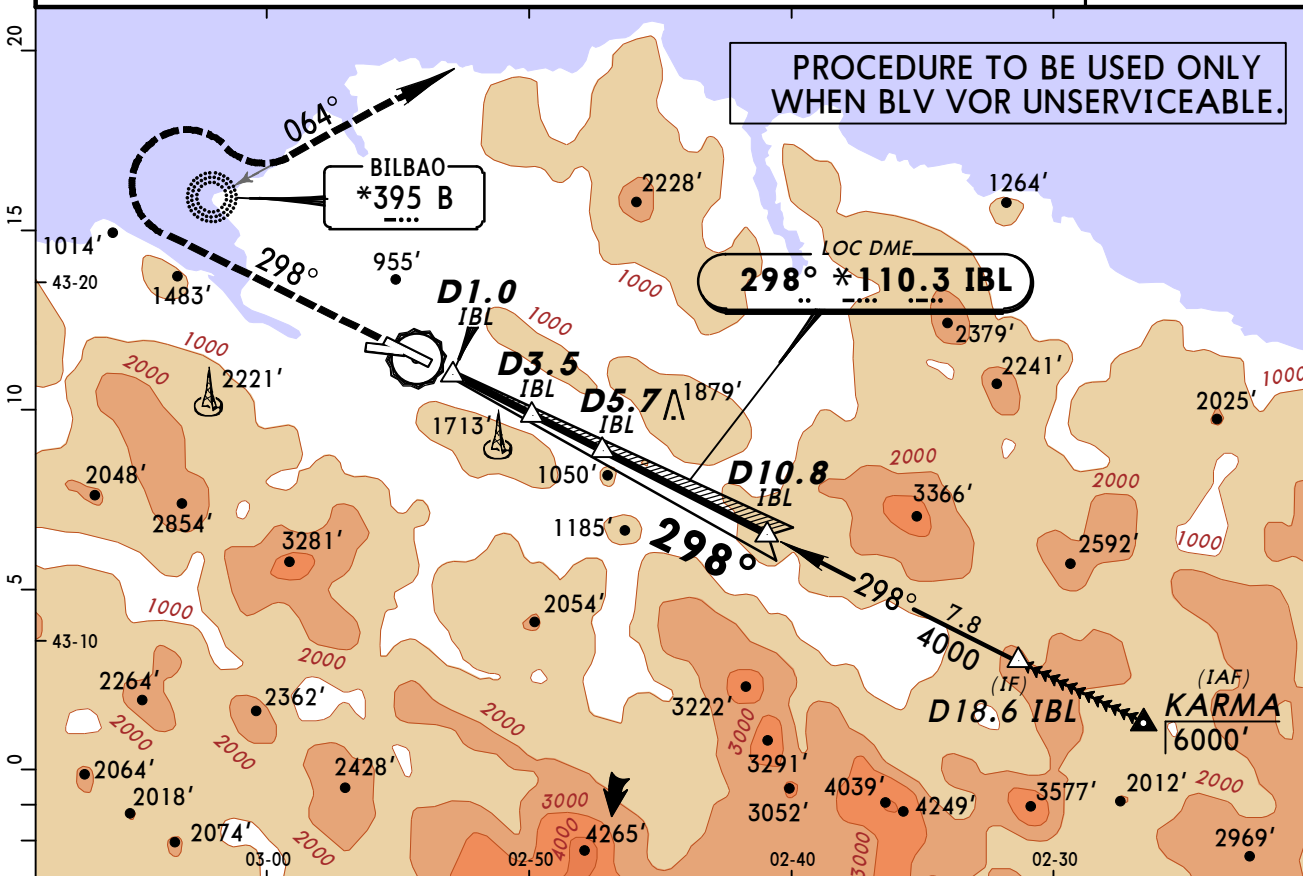
LEBB/BIO
BILBAO

JEPPESEN
1 MAR 13 11-6 Eff 7 Mar

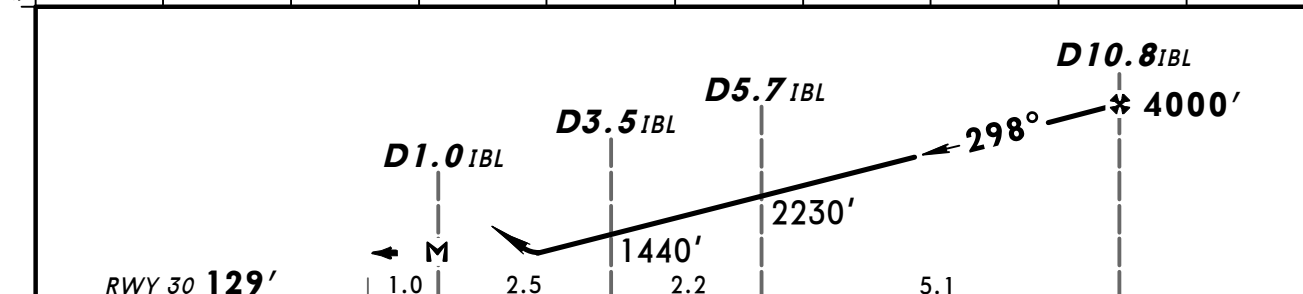
BILBAO, SPAIN
LOC X Rwy 30

BRIEFING STRIP™

*ATIS 118.82		*BILBAO Approach 120.7		*BILBAO Tower 118.5		*Ground 121.7	
LOC IBL *110.3	Final Apch Crs 298°	Minimum Alt D10.8 IBL 4000' (3871')	DA(H) 800' (671')	Apt Elev 137' RWY 129'			
MISSED APCH: Climb on rwy heading to 2000', then turn RIGHT (MAX 210 KT) onto 064° from Lctr climbing to 3500'. Expect radar vectoring.							MSA B Lctr
Alt Set: hPa		Rwy Elev: 5 hPa		Trans level: By ATC		Trans alt: 6000'	
1. DME and ADF required.		2. LOC DME reads zero at rwy 30 displaced thresh.					



IBL DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
ALTITUDE	900'	1260'	1620'	1980'	2330'	2690'	3050'	3410'	3770'

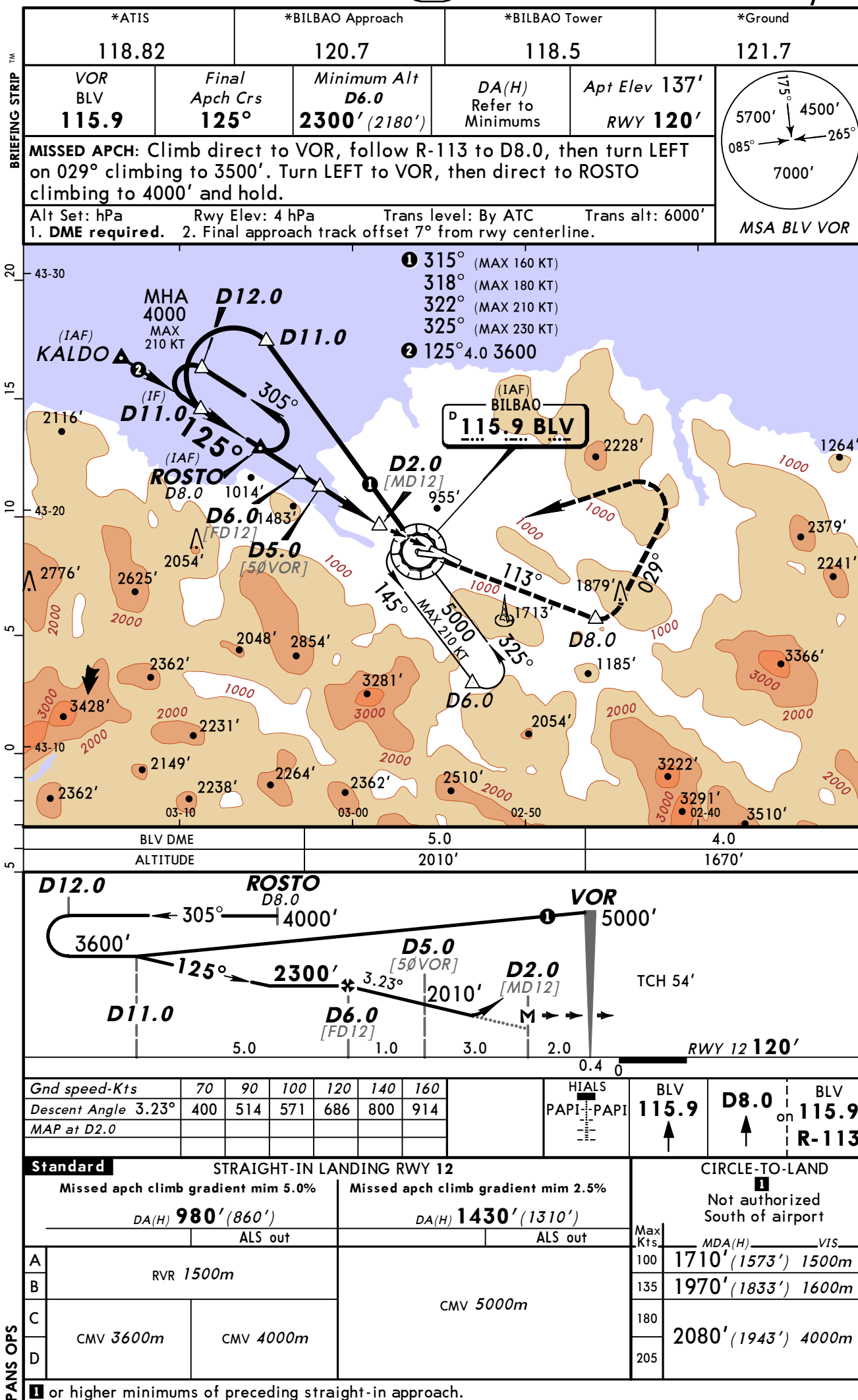


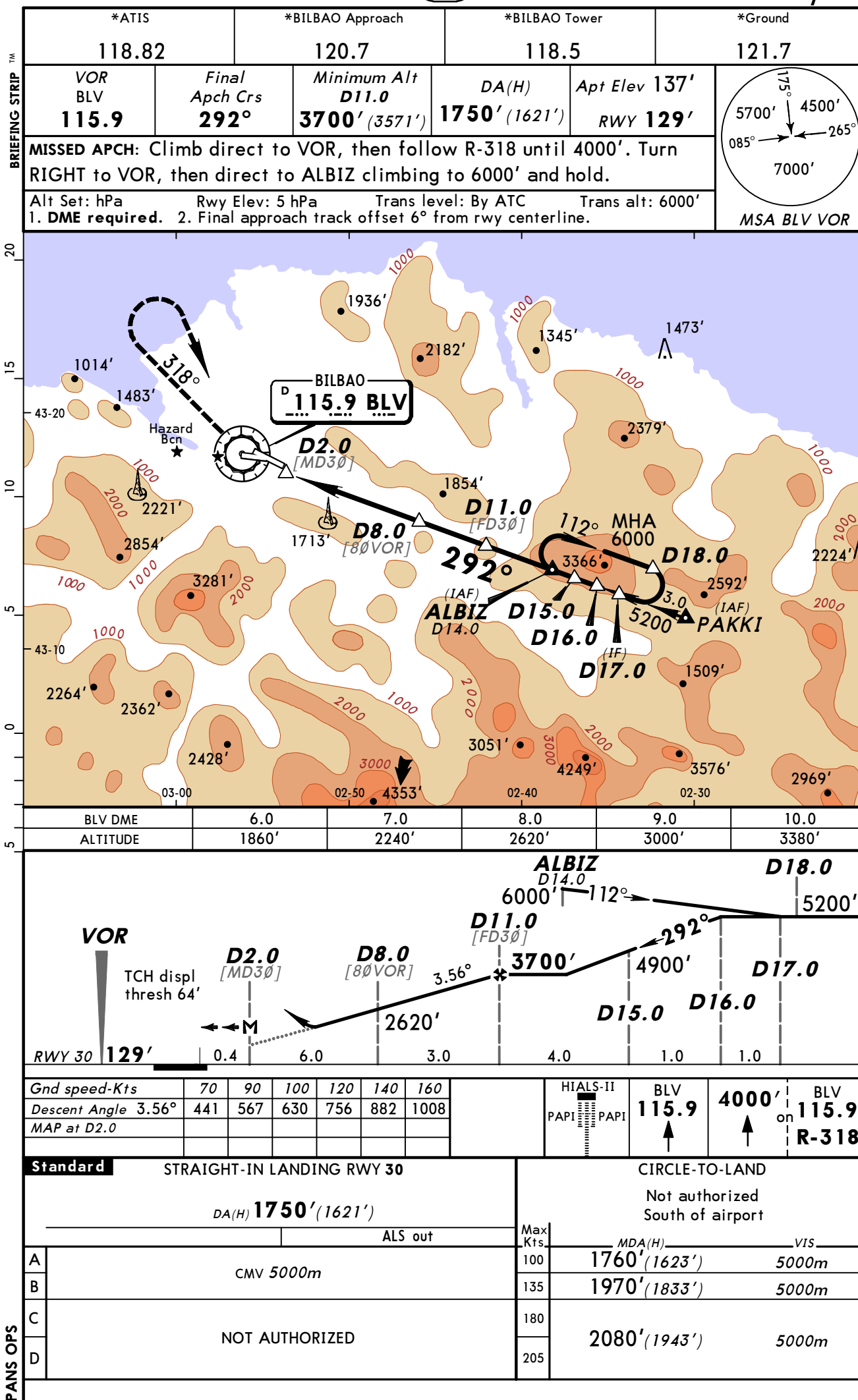
Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI PAPI 2000' on RWY hdg
Descent angle 3.38°	419	538	598	718	837	957	
MAP at D1.0 IBL							

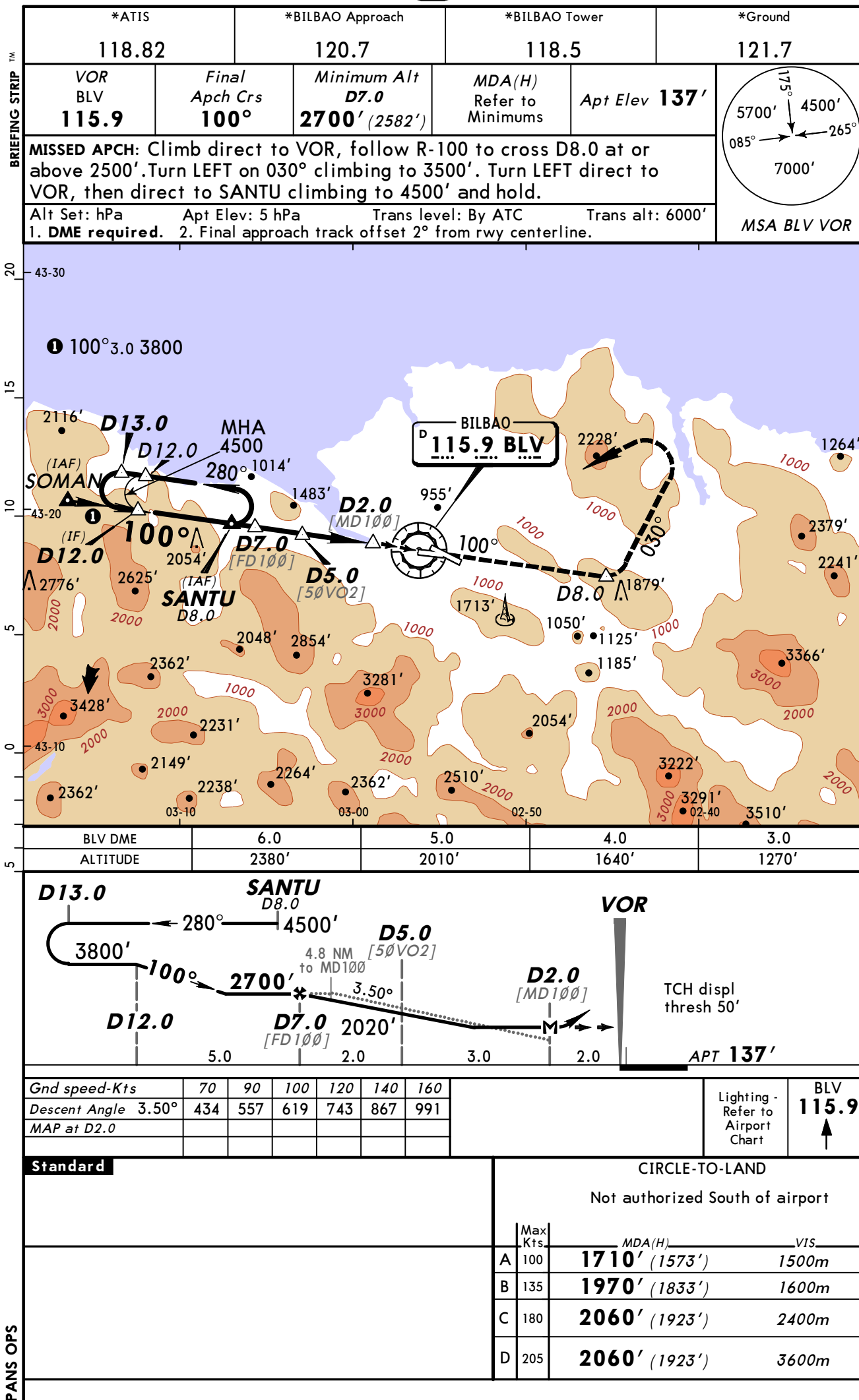
Standard		STRAIGHT-IN LANDING RWY 30		CIRCLE-TO-LAND	
		DA(H) 800' (671')		Not authorized South of airport	
		ALS out		Max Kts	MDA(H) VIS
A	RVR 1500m			100	1800' (1663') 1500m
B				135	1970' (1833') 1600m
C	CMV 2400m			180	2120' (1983') 2400m
D				205	2120' (1983') 3600m

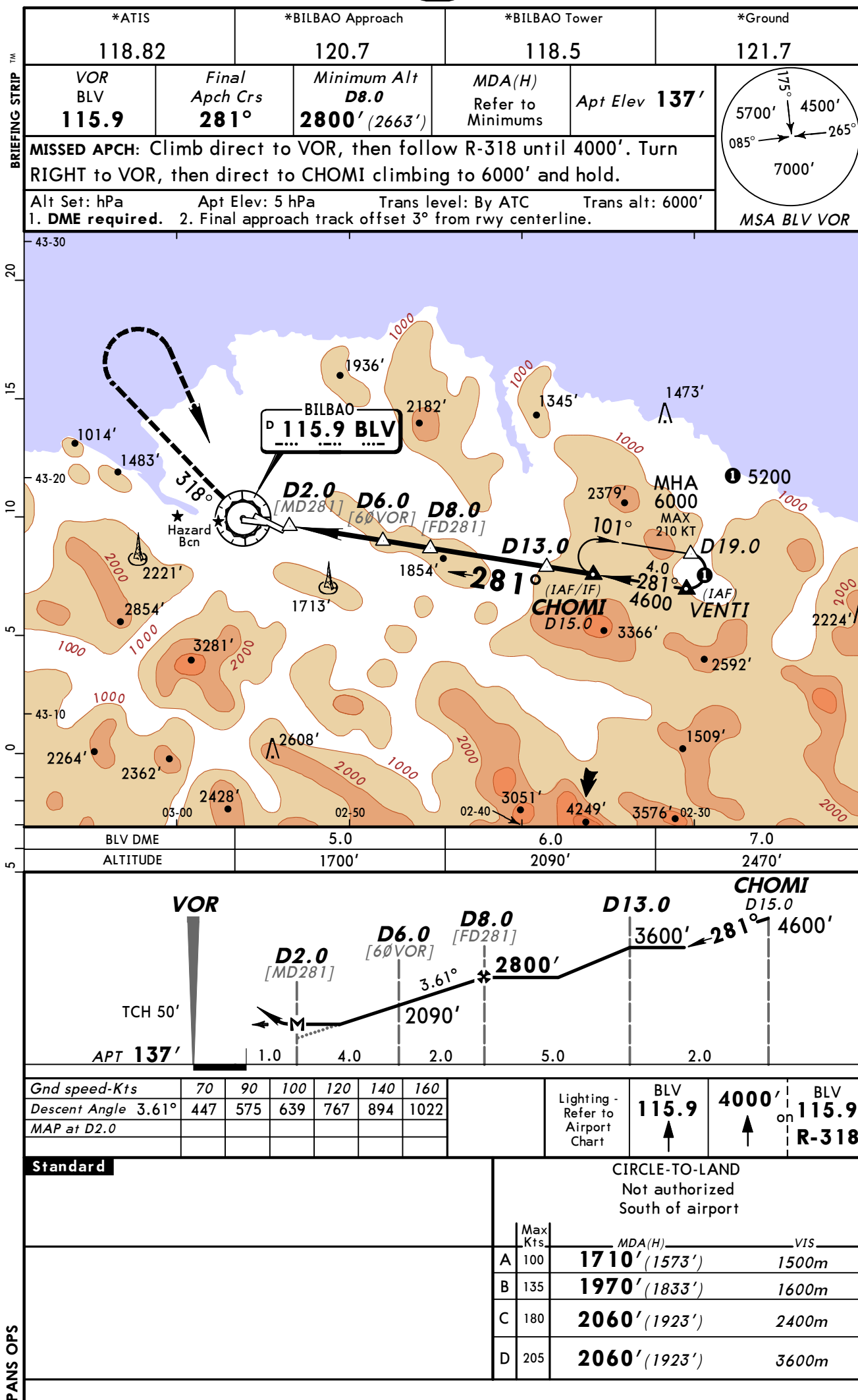
CHANGES: New procedure.

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

LEBB/BIO
BILBAOJEPPESSEN
1 MAR 13 13-2 Eff 7 MarBILBAO, 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: Temporary

Begin Date: Immediately

End Date: Until Further Notice

(11-2, 11-4, 11-6) MSA in Northwest sector shall read 5700'.