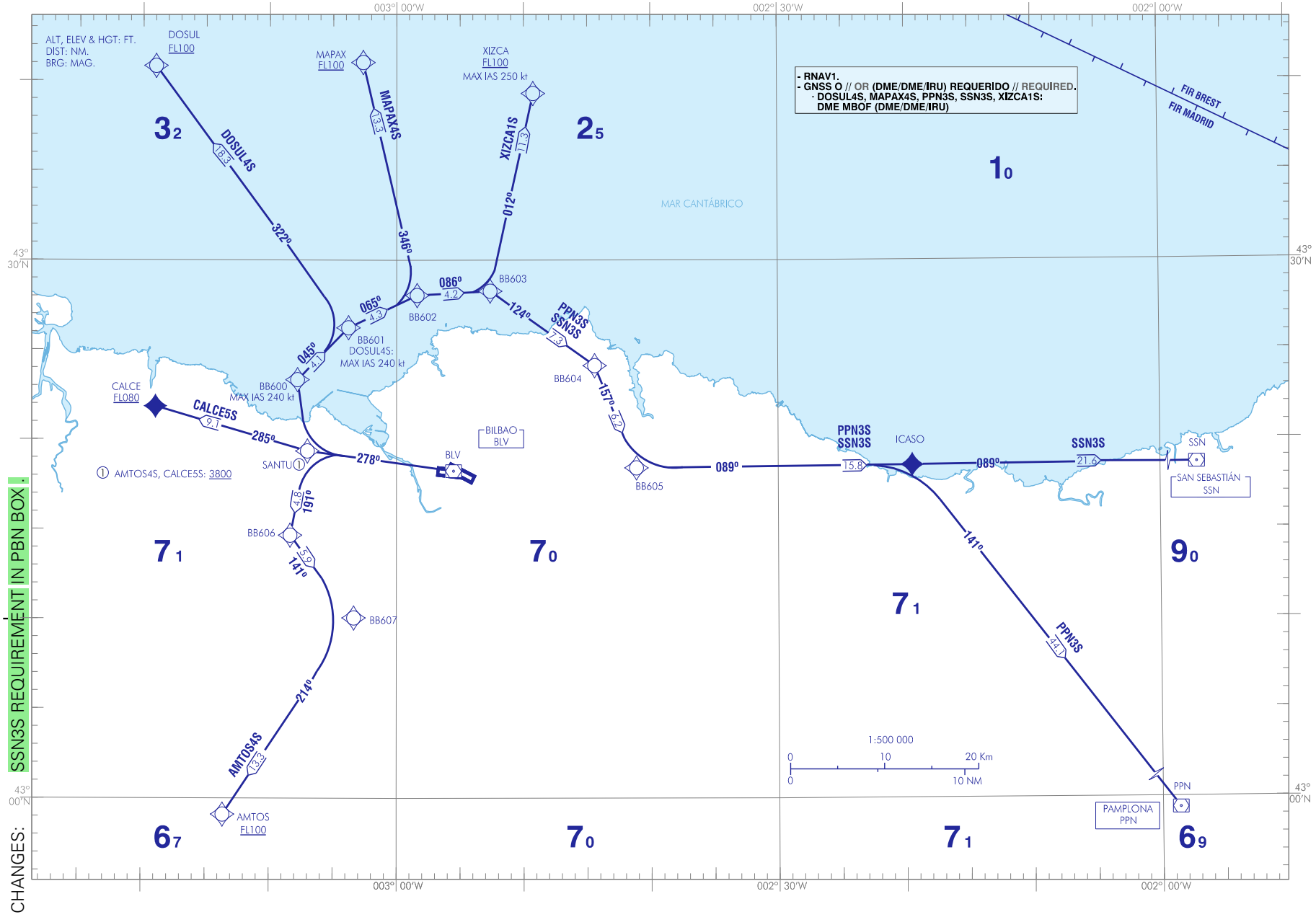
CARTA DE SALIDA NORMALIZADA
VUELO POR INSTRUMENTOS (SID)-OACI

TA 6000 ft
VAR 1°E (2025)

APP 127.450 MHz
TWR 118.500 MHz

BILBAO
RNAV RWY 28

AMTOS4S PPN3S | CALCE5S SSN3S | DOSUL4S XIZCA1S | MAPAX4S



SSN3S REQUIREMENT IN PBN BOX .

CHANGES:

WAYPOINTS COORDINATES

WPT	COORD
AMTOS	425906.6N 0031336.7W
BB600	432320.2N 0030747.3W
BB601	432614.2N 0030347.0W
BB602	432802.4N 0025822.7W
BB603	432816.9N 0025237.9W
BB604	432407.5N 0024424.9W
BB605	431825.2N 0024108.2W
BB606	431440.2N 0030820.8W
BB607	431003.6N 0030321.1W
CALCE	432145.8N 0031900.0W
DOSUL	434050.0N 0031900.0W
ICASO	431833.6N 0021928.3W
MAPAX	434101.5N 0030238.7W
PPN	424401.5N 0014207.2W
SANTU	431922.1N 0030700.3W
SSN	431840.3N 0014949.4W
XIZCA	433918.1N 0024915.4W

STANDARD INSTRUMENT DEPARTURES (SID)
RUNWAY 28

NOTES APPLICABLE TO ALL SID:

- RNAV1.
- GNNS or (DME/DME/IRU) required.
- SPEED CONTROL:
  - MAX IAS 250 kt below FL100.

CONTINGENCY DEPARTURE (ODP).

LEBB ONE SIERRA (LEBB1S). TACTICAL USE ONLY.

UNPLANNED.

Departing aircraft without RNAV1 operational approval that intend to follow an RNAV1-exclusive departure routing shall notify Bilbao TWR by voice as soon as possible and will be instructed to proceed in accordance with this contingency departure

Climb on magnetic heading 291° up to reach 4500 ft AMSL.

Turn following for ATC instructions.

Minimum climb gradient of 6.7% up to 4500 ft AMSL.

In case of communication failure, proceed according to the established in section ENR 1.8, item “Air ground Communication Failure” in AIP ESPAÑA.

CRITICAL DME

FACILITY (ID)	FREQ/CH	COORD
BILBAO (BLV)	117.650 MHz	

FACILITY (ID)	FREQ/CH	COORD
	CH 123Y	431815.4945N 0025530.9468W

PROCEDURE TABULAR DESCRIPTION

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
AMTOS4S Minimum climb gradient of 7.7% up to SANTU, Minimum climb gradient of 7.0% from SANTU up to AMTOS.											
001	CF	SANTU	-	278 (278.5)	-0.7	-	-	+3800	-	-	RNAV1
002	TF	BB606	-	191 (191.8)	-0.7	4.8	-	-	-	-	RNAV1
003	TF	BB607	-	141 (141.6)	-0.7	5.9	-	-	-	-	RNAV1
004	TF	AMTOS	-	214 (214.5)	-0.7	13.3	-	+FL100	-	-	RNAV1

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
CALCE5S Minimum climb gradient of 7.7% up to CALCE.											
001	CF	SANTU	-	278 (278.5)	-0.7	-	-	+3800	-	-	RNAV1
002	TF	CALCE	-	285 (285.4)	-0.7	9.1	-	+FL080	-	-	RNAV1

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
DOSUL4S Minimum climb gradient of 7.0% up to DOSUL. - DME BLV must be operational for (DME/DME/IRU).											
001	CF	SANTU	-	278 (278.5)	-0.7	-	-	-	-	-	RNAV1
002	TF	BB600	-	351 (351.8)	-0.7	4.0	-	-	-	-	RNAV1
003	TF	BB601	-	045 (045.2)	-0.7	4.1	-	-	-240	-	RNAV1
004	TF	DOSUL	-	322 (322.9)	-0.7	18.3	-	+FL100	-	-	RNAV1

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
MAPAX4S Minimum climb gradient of 7.0% up to MAPAX. - DME BLV must be operational for (DME/DME/IRU).											
001	CF	SANTU	-	278 (278.5)	-0.7	-	-	-	-	-	RNAV1
002	TF	BB600	-	351 (351.8)	-0.7	4.0	-	-	-240	-	RNAV1
003	TF	BB601	-	045 (045.2)	-0.7	4.1	-	-	-	-	RNAV1
004	TF	BB602	-	065 (065.4)	-0.7	4.3	-	-	-	-	RNAV1
005	TF	MAPAX	-	346 (346.6)	-0.7	13.3	-	+FL100	-	-	RNAV1

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
PPN3S Minimum climb gradient of 7.0% up to ICASO. - DME BLV must be operational for (DME/DME/IRU).											
001	CF	SANTU	-	278 (278.5)	-0.7	-	-	-	-	-	RNAV1
002	TF	BB600	-	351 (351.8)	-0.7	4.0	-	-	-240	-	RNAV1
003	TF	BB601	-	045 (045.2)	-0.7	4.1	-	-	-	-	RNAV1
004	TF	BB602	-	065 (065.4)	-0.7	4.3	-	-	-	-	RNAV1
005	TF	BB603	-	086 (086.6)	-0.7	4.2	-	-	-	-	RNAV1
006	TF	BB604	-	124 (124.7)	-0.7	7.3	-	-	-	-	RNAV1
007	TF	BB605	-	157 (157.2)	-0.7	6.2	-	-	-	-	RNAV1
008	TF	ICASO	-	089 (089.4)	-0.7	15.8	-	-	-	-	RNAV1
009	TF	PPN	-	141 (141.4)	-0.7	44.1	-	-	-	-	RNAV1

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
SSN3S											
Minimum climb gradient of 7.0% up to ICASO.											
- DME BLV must be operational for (DME/DME/IRU).											
001	CF	SANTU	-	278 (278.5)	-0.7	-	-	-	-	-	RNAV1
002	TF	BB600	-	351 (351.8)	-0.7	4.0	-	-	-240	-	RNAV1
003	TF	BB601	-	045 (045.2)	-0.7	4.1	-	-	-	-	RNAV1
004	TF	BB602	-	065 (065.4)	-0.7	4.3	-	-	-	-	RNAV1
005	TF	BB603	-	086 (086.6)	-0.7	4.2	-	-	-	-	RNAV1
006	TF	BB604	-	124 (124.7)	-0.7	7.3	-	-	-	-	RNAV1
007	TF	BB605	-	157 (157.2)	-0.7	6.2	-	-	-	-	RNAV1
008	TF	ICASO	-	089 (089.4)	-0.7	15.8	-	-	-	-	RNAV1
009	TF	SSN	-	089 (089.5)	-0.7	21.6	-	-	-	-	RNAV1

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
XIZCA1S											
Minimum climb gradient of 7.0% up to XIZCA.											
- DME BLV must be operational for (DME/DME/IRU).											
001	CF	SANTU	-	278 (278.5)	-0.7	-	-	-	-	-	RNAV1
002	TF	BB600	-	351 (351.8)	-0.7	4.0	-	-	-240	-	RNAV1
003	TF	BB601	-	045 (045.2)	-0.7	4.1	-	-	-	-	RNAV1
004	TF	BB602	-	065 (065.4)	-0.7	4.3	-	-	-	-	RNAV1
005	TF	BB603	-	086 (086.6)	-0.7	4.2	-	-	-	-	RNAV1
006	TF	XIZCA	-	012 (012.5)	-0.7	11.3	-	+FL100	-250	-	RNAV1

SIGNIFICANT OBSTACLES

OBS	RWY	LAT	LON	HGT (ft)	ELEV (ft)
Terrain	28	431739.3N	0030303.9W	0	1331
Terrain	28	432004.6N	0030346.4W	0	1465
Terrain	28	431717.3N	0030603.1W	0	2002
Terrain	28	431822.5N	0030905.2W	0	2050
Terrain	28	431715.0N	0030601.1W	0	2003
Terrain	28	431822.5N	0030905.4W	0	2051
Terrain	28	431536.3N	0030406.4W	0	2674
Terrain	28	431659.3N	0030406.5W	0	1612
Terrain	28	431208.2N	0025846.2W	0	3277
Terrain	28	431703.2N	0030219.3W	0	1693
LEBB-OBS-00497-005-2024	28	432044.8N	0030441.1W	233	1014
LEBB-OBS-00500-022-2024	28	432024.2N	0030418.5W	170	1339
LEBB-OBS-00674-005-2024	28	431828.6N	0025802.5W	46	346
LEBB-OBS-00674-006-2024	28	431825.8N	0025758.6W	47	346
LEBB-OBS-00674-007-2024	28	431821.9N	0025753.1W	56	341
LEBB-OBS-00674-008-2024	28	431818.2N	0025748.1W	65	313
LEBB-OBS-00677-000-2024	28	431815.9N	0025750.4W	29	307
LEBB-OBS-00678-001-2024	28	431817.1N	0025751.7W	27	322
LEBB-OBS-00678-002-2024	28	431818.6N	0025751.7W	26	324
LEBB-OBS-00678-003-2024	28	431819.9N	0025752.7W	25	323
LEBB-OBS-00679-000-2024	28	431818.5N	0025755.1W	22	342

OBS	RWY	LAT	LON	HGT (ft)	ELEV (ft)
LEBB-OBS-00681-001-2024	28	431819.0N	0025758.4W	20	359
LEBB-OBS-00681-002-2024	28	431818.7N	0025757.9W	26	363
LEBB-OBS-00682-000-2024	28	431824.5N	0025801.3W	28	353
LEBB-OBS-00686-000-2024	28	431755.5N	0030442.6W	14	1172
LEBB-OBS-00689-000-2024	28	431759.3N	0030411.6W	0	1044
LEBB-OBS-00691-000-2024	28	431753.9N	0030358.7W	0	1141
LEBB-OBS-00696-001-2024	28	431800.0N	0030436.9W	23	1077
LEBB-OBS-00696-002-2024	28	431759.9N	0030436.9W	23	1079
LEBB-OBS-00698-000-2024	28	431751.9N	0030521.0W	42	1239
LEBB-OBS-00700-000-2024	28	431754.1N	0030620.4W	76	1381
LEBB-OBS-00795-000-2024	28	432003.8N	0030345.2W	6	1485
LEBB-OBS-00796-001-2024	28	432003.6N	0030346.0W	164	1629
LEBB-OBS-00796-002-2024	28	432003.6N	0030346.0W	159	1624
LEBB-OBS-00796-003-2024	28	432003.6N	0030346.0W	144	1608
LEBB-OBS-00816-000-2024	28	431718.4N	0030244.3W	169	1613
LEBB-OBS-00820-000-2024	28	432020.9N	0030408.4W	94	1321
LEBB-OBS-02287-000-2024	28	431811.4N	0025752.8W	35	310
LEBB-OBS-02296-000-2024	28	431809.9N	0025749.7W	66	306
LEBB-OBS-02350-000-2024	28	431816.1N	0025755.1W	26	334
LEBB-OBS-02351-000-2024	28	431816.3N	0025756.4W	27	343
LEBB-OBS-02359-000-2024	28	431823.7N	0025802.4W	26	346
LEBB-OBS-03072-000-2024	28	431821.6N	0025753.4W	18	316
LEBB-OBS-03073-001-2024	28	431822.9N	0025757.8W	26	332
LEBB-OBS-03073-002-2024	28	431822.2N	0025758.0W	24	342
LEBB-OBS-03074-000-2024	28	431822.3N	0025758.9W	29	347
LEBB-OBS-03075-000-2024	28	431822.2N	0025757.8W	25	341
LEBB-OBS-03078-001-2024	28	431820.5N	0025760.0W	23	354
LEBB-OBS-03078-002-2024	28	431820.7N	0025759.9W	25	355
LEBB-OBS-03080-001-2024	28	431819.6N	0025757.7W	26	363
LEBB-OBS-03080-002-2024	28	431819.0N	0025756.9W	26	361
LEBB-OBS-03081-000-2024	28	431819.0N	0025753.9W	24	336
LEBB-OBS-03082-000-2024	28	431817.6N	0025753.2W	21	325
LEBB-OBS-03084-000-2024	28	431816.3N	0025752.5W	29	316
LEBB-OBS-03086-000-2024	28	431817.3N	0025750.6W	23	308
LEBB-OBS-03087-000-2024	28	431817.6N	0025751.2W	25	317
LEBB-OBS-03089-000-2024	28	431817.7N	0025750.0W	23	307
LEBB-OBS-03090-000-2024	28	431818.7N	0025750.5W	26	310
LEBB-OBS-07602-000-2024	28	432017.5N	0030401.3W	94	1330
LEBB-OBS-07621-000-2024	28	431752.5N	0030437.1W	31	1252
LEBB-OBS-07622-000-2024	28	431756.3N	0030435.5W	24	1159
LEBB-OBS-07624-000-2024	28	431803.9N	0030419.9W	77	1032
LEBB-OBS-07627-000-2024	28	431802.7N	0030350.2W	0	1049
LEBB-OBS-07686-000-2024	28	431823.1N	0025758.2W	31	337
LEBB-OBS-07708-001-2024	28	431821.1N	0025759.8W	27	355
LEBB-OBS-07708-002-2024	28	431820.3N	0025758.9W	27	362
LEBB-OBS-07708-003-2024	28	431819.6N	0025757.8W	29	366

OBS	RWY	LAT	LON	HGT (ft)	ELEV (ft)
LEBB-OBS-07708-004-2024	28	431818.8N	0025756.7W	29	363
LEBB-OBS-07709-000-2024	28	431819.9N	0025757.6W	24	356
LEBB-OBS-07710-000-2024	28	431818.8N	0025757.0W	35	372
LEBB-OBS-07714-000-2024	28	431819.0N	0025759.4W	24	362
LEBB-OBS-07715-000-2024	28	431819.4N	0025758.5W	29	368
LEBB-OBS-07717-000-2024	28	431821.9N	0025759.9W	29	355
LEBB-OBS-07718-000-2024	28	431824.5N	0025759.1W	31	341
LEBB-OBS-07719-000-2024	28	431825.8N	0025800.2W	30	339
LEBB-OBS-07722-000-2024	28	431820.0N	0025759.4W	31	369
LEBB-OBS-07723-000-2024	28	431819.4N	0025759.9W	27	365
LEBB-OBS-07725-000-2024	28	431817.5N	0025749.7W	30	312
LEBB-OBS-07727-002-2024	28	431810.6N	0025754.9W	37	319
LEBB-OBS-08300-000-2024	28	432003.2N	0030345.0W	28	1495
LEBB-OBS-08435-000-2024	28	431541.0N	0030538.3W	39	1385
LEBB-OBS-09944-000-2024	28	431809.2N	0025749.6W	71	305
LEBB-OBS-09946-000-2024	28	431819.1N	0025756.0W	34	361
LEBB-OBS-10085-000-2024	28	431811.1N	0025749.8W	67	308