

CARTA DE SALIDA NORMALIZADA-VUELO
POR INSTRUMENTOS - OACI
ICAO STANDARD INSTRUMENT DEPARTURE CHART

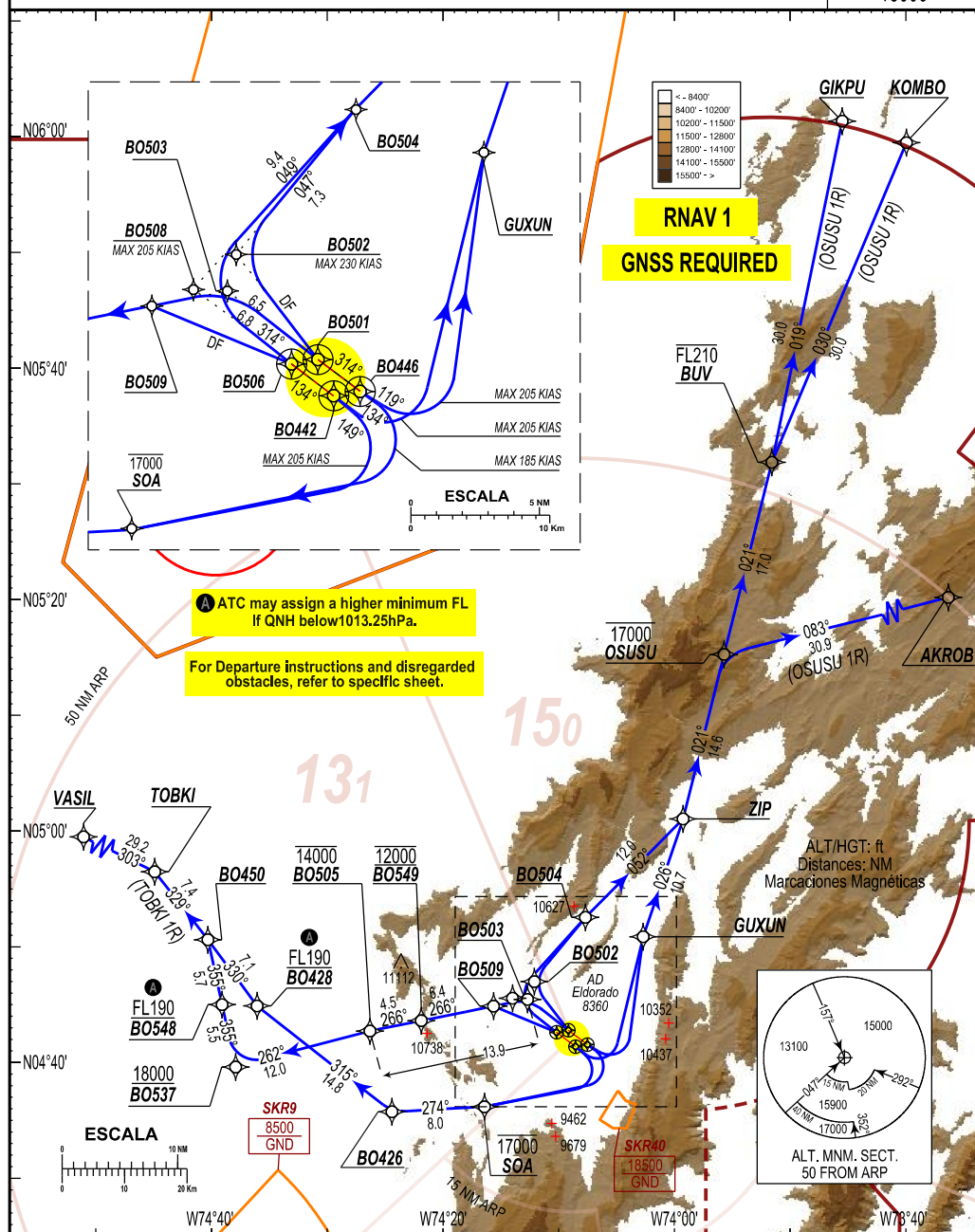
BOGOTA
ELDORADO
CAT: A/B/C/D
RNAV DEPARTURES RWY 13L/13R/31L/31R

RW13L, RW13R, RW31L, RW31R: TOBKI UNO ROMEO [TOBK1R], OSUSU UNO ROMEO [OSUS1R], to AKROB, GIKPU, KOMBO

DECL/ARP/EDR
7° W/17
VAR: 0°8.3'W/Año

APP: Bogota North Term 121.3 MHz Alternate 120.3 MHz, Bogota South Term 119.65 MHz Alternate 120.65 MHz, Bogota West Term 119.95 MHz Alternate 120.95 MHz. Arrivals 119.50 MHz, Alternate 119.05 MHz, ATIS: 127.8 MHz. TWR: North ELDORADO 118.1 MHz Alternate 118.35 MHz, South EL DORADO 118.25 MHz Alternate 118.35 MHz.

ALTITUD DE TRANSICION	18000'
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BOGOTA / ELDORADO
SKBO / SID1 RNAV RWY 13L / 13R / 31L / 31R

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°10'0.00"	LONGITUDE (WEST) 0°10'0.00"	FB FO	THETA MAGNETIC (°)	RHO (NM)	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + /AT / - / B	SPEED LIMIT (Kts)	TRANSITION IDENTIFIER	RWY DIRECTION	NAV PERF
OSUSU 1R														
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	119° (112.0°)	X	X	8900 +	205	RW13L	13L	RNAV1
DF	GUXUN	04°50'54.0000"	074°02'39.0000"	FB	X	X	X	X	L	X	X	RW13L	13L	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	026° (018.8°)	10.7	X	17000 -	X	RW13L	13L	RNAV1
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.0°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	134° (127.1°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	GUXUN	04°50'54.0000"	074°02'39.0000"	FB	X	X	X	X	L	X	X	RW13R	13R	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	026° (018.8°)	10.7	X	17000 -	X	RW13R	13R	RNAV1
CF	BO508	04°45'31.7160"	074°13'58.6580"	FB	141.03	7.538	314° (307.1°)	6.8	X	X	205	RW31L	31L	RNAV1
TF	BO504	04°52'34.0140"	074°07'38.5820"	FB	X	X	049° (042.1°)	9.4	X	X	X	RW31L	31L	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	052° (044.8°)	12.0	X	17000 -	X	RW31L	31L	RNAV1
CF	BO501	04°42'48.2210"	074°09'07.4590"	FO	134.72	12.983	314° (307.0°)	2.1	X	X	X	RW31R	31R	RNAV1
DF	BO502	04°46'54.0380"	074°12'18.7430"	FB	X	X	X	X	R	X	230	RW31R	31R	RNAV1
TF	BO504	04°52'34.0140"	074°07'38.5820"	FB	X	X	047° (039.6°)	7.3	X	X	X	RW31R	31R	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	052° (044.8°)	12.0	X	17000 -	X	RW31R	31R	RNAV1
IF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	X	X	X	17000 -	X	X	X	RNAV1
TF	OSUSU	05°15'19.2370"	073°55'39.3460"	FB	X	X	021° (014.0°)	14.6	X	17000 -	X	X	X	RNAV1
IF	OSUSU	05°15'19.2370"	073°55'39.3460"	FB	X	X	X	X	X	17000 -	X	KOMBO	X	RNAV1
TF	BUV	05°31'56.0000"	073°51'31.0000"	FB	X	X	021° (014.0°)	17.0	X	FL210 -	X	KOMBO	X	RNAV1
TF	KOMBO	05°59'35.1600"	073°39'53.0400"	FB	X	X	030° (022.8°)	30.0	X	X	X	KOMBO	X	RNAV1
IF	OSUSU	05°15'19.2370"	073°55'39.3460"	FB	X	X	X	X	X	17000 -	X	GKPU	X	RNAV1
TF	BUV	05°31'56.0000"	073°51'31.0000"	FB	X	X	021° (014.0°)	17.0	X	FL210 -	X	GKPU	X	RNAV1
TF	GKPU	06°01'26.8700"	073°45'26.1900"	FB	X	X	019° (011.7°)	30.0	X	17000 -	X	GKPU	X	RNAV1
IF	OSUSU	05°15'19.2370"	073°55'39.3460"	FB	X	X	X	X	X	17000 -	X	AKROB	X	RNAV1
TF	AKROB	05°22'49.0000"	073°25'37.0000"	FB	X	X	083° (076.0°)	30.9	X	X	X	AKROB	X	RNAV1
TOBKI 1R														
CF	BO506	04°42'43.6660"	074°10'16.7390"	FO	138.34	12.143	314° (307.1°)	2.2	X	X	X	RW31L	31L	RNAV1
DF	BO509	04°44'53.3050"	074°15'35.8510"	FB	X	X	X	X	L	X	X	RW31L	31L	RNAV1
TF	BO549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	6.4	X	12000 AT	X	RW31L	31L	RNAV1
TF	BO505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31L	31L	RNAV1
TF	BO537	04°39'37.2060"	074°37'54.0550"	FB	X	X	262° (255.0°)	12.0	X	X	X	RW31L	31L	RNAV1
TF	BO548	04°45'01.1670"	074°39'04.6190"	FB	X	X	355° (347.7°)	5.5	X	FL190 +	X	RW31L	31L	RNAV1
TF	BO450	04°50'38.4280"	074°40'18.1010"	FB	X	X	355° (347.7°)	5.7	X	X	X	RW31L	31L	RNAV1
CF	BO503	04°45'28.6540"	074°12'39.5060"	FB	135.13	8.564	314° (307.0°)	6.5	X	X	X	RW31R	31R	RNAV1
TF	BO549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	9.4	X	12000 AT	X	RW31R	31R	RNAV1
TF	BO505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31R	31R	RNAV1
TF	BO537	04°39'37.2060"	074°37'54.0550"	FB	X	X	262° (255.0°)	12.0	X	X	X	RW31R	31R	RNAV1
TF	BO548	04°45'01.1670"	074°39'04.6190"	FB	X	X	355° (347.7°)	5.5	X	FL190 +	X	RW31R	31R	RNAV1
TF	BO450	04°50'38.4280"	074°40'18.1010"	FB	X	X	355° (347.7°)	5.7	X	X	X	RW31R	31R	RNAV1
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.0°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	149° (142.1°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13R	13R	RNAV1
TF	BO426	04°35'44.9110"	074°24'22.9740"	FB	X	X	274° (266.9°)	8.0	X	X	X	RW13R	13R	RNAV1
TF	BO428	04°44'54.6280"	074°36'03.0470"	FB	X	X	315° (308.1°)	14.8	X	FL190 +	X	RW13R	13R	RNAV1
TF	BO450	04°50'38.4280"	074°40'18.1010"	FB	X	X	330° (323.3°)	7.1	X	X	X	RW13R	13R	RNAV1
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	134° (127.0°)	X	X	8900 +	185	RW13L	13L	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13L	13L	RNAV1
TF	BO426	04°35'44.9110"	074°24'22.9740"	FB	X	X	274° (266.9°)	8.0	X	X	X	RW13L	13L	RNAV1
TF	BO428	04°44'54.6280"	074°36'03.0470"	FB	X	X	315° (308.1°)	14.8	X	FL190 +	X	RW13L	13L	RNAV1
TF	BO450	04°50'38.4280"	074°40'18.1010"	FB	X	X	330° (323.3°)	7.1	X	X	X	RW13L	13L	RNAV1
IF	BO450	04°50'38.4280"	074°40'18.1010"	FB	X	X	X	X	X	X	X	X	X	RNAV1
TF	TOKI	04°55'30.7860"	074°44'54.1670"	FB	X	X	329° (321.8°)	7.4	X	X	X	X	X	RNAV1
TF	VASIL	05°09'20.0000"	075°11'15.0000"	FB	X	X	303° (295.9°)	29.2	X	X	X	X	X	RNAV1

RWY	TURN DIR	INSTRUCTIONS	SPEED REST. FIRST TURN
RW13L	Left	Climb on course 119°MT until 8900ft, then direct to GUXUN. Maintain MCG 5.5% until 10700ft, then resume MCG 3.3%.	205 KIAS
RW13L	Right	Climb on course 134°MT straight ahead at MCG 5.5% until 8900ft, then direct to SOA.	185 KIAS
RW13R	Left	Climb on course 134°MT straight ahead until 8900ft, then direct to GUXUN. Maintain MCG 5.5% until 10800ft, then resume MCG 3.3%.	205 KIAS
RW13R	Right	Climb on course 149°MT at MCG 5.0% until 8900ft, then direct to SOA.	205 KIAS
AII	All	Do not turn before DER.	-

RWY	TURN DIR	INSTRUCTIONS	SPEED REST. FIRST TURN
RW31L	Left	Climb direct to BO509 then to BO549. Maintain MCG 4.1% until 11400ft. Do not turn before DER.	None
RW31L	Right	Climb to BO508 on course 314°MT, then to BO504. Maintain MCG 3.9% until 11000ft then resume MCG 3.3%.	205 KIAS
RW31R	Left	Climb to BO503 on course 314°MT, then to BO549. Maintain MCG 3.7% until 11500ft.	None
RW31R	Right	Climb direct to BO502 then to BO504, Maintain MCG 4.0% until 11000ft then resume MCG 3.3%. Do not turn before DER.	230 KIAS

Disregarded obstacles for Minimum Climb Gradient (MCG) computation								
RWY	Turn Dir.	Obstacle ID	Altitude (m)	Altitude (ft)	Type	Latitude N	Longitud W	Height above DER (m)
RW13L	Left	BO9045	2569,18	8429	Tree	04°41'36.009"N	074°07'21.895"W	21,03
		BO9046	2567,24	8423	Tree	04°41'34.860"N	074°07'20.197"W	19,09
	Right	BO9046	2567,24	8423	Tree	04°41'34.860"N	074°07'20.197"W	19,09
RW13R	Left	BO9019	2569,48	8430	Tree	04°41'05.816"N	074°08'17.049"W	22,41
	Right	BO9019	2569,48	8430	Tree	04°41'05.816"N	074°08'17.049"W	22,41
		BO9020	2569,31	8430	Tree	04°41'12.075"N	074°08'25.007"W	22,24
RW31L	Left	BO9089	2568,5	8427	Tree	04°42'55.191"N	074°10'21.671"W	22,68
		BO9092	2566,68	8421	Tree	04°42'50.494"N	074°10'31.020"W	20,86
		BO9093	2569,44	8430	Tree	04°42'45.746"N	074°10'26.955"W	23,62
		BO9095	2569,04	8429	Tree	04°42'40.077"N	074°10'22.742"W	23,22
	Right	BO9089	2568,5	8427	Tree	04°42'55.191"N	074°10'21.671"W	22,68
		BO9092	2566,68	8421	Tree	04°42'50.494"N	074°10'31.020"W	20,86
		BO9093	2569,44	8430	Tree	04°42'45.746"N	074°10'26.955"W	23,62
RW31R	Left	BO9078	2560,61	8401	Tree	04°42'49.172"N	074°09'14.355"W	13,62
		BO9079	2559,8	8399	Tree	04°42'50.797"N	074°09'15.195"W	12,81
		BO9080	2559,27	8397	Tree	04°42'51.246"N	074°09'15.375"W	12,28
		BO9082	2573,91	8445	Tree	04°43'03.329"N	074°09'16.446"W	26,92
	Right	BO9078	2560,61	8401	Tree	04°42'49.172"N	074°09'14.355"W	13,62
		BO9079	2559,8	8399	Tree	04°42'50.797"N	074°09'15.195"W	12,81
		BO9080	2559,27	8397	Tree	04°42'51.246"N	074°09'15.375"W	12,28
		BO9082	2573,91	8445	Tree	04°43'03.329"N	074°09'16.446"W	26,92
		BO9083	2580,53	8467	Tree	04°43'04.954"N	074°09'12.942"W	33,54

SID RNAV

CARTA DE SALIDA NORMALIZADA-VUELO

POR INSTRUMENTOS - OACI

ICAO STANDARD INSTRUMENT DEPARTURE CHART

BOGOTA

ELDORADO

CAT: A/B/C/D

RNAV DEPARTURES RWY 13L/13R/31L/31R

RW13L, RW31R, RW31L, RW13R: DANSA UNO ROMEO [DANS1R] to AKROB, ANLAV, DANSA, GIKPU, KOMBO

RW13LR: VASIL UNO UNIFORM [VASI1U]

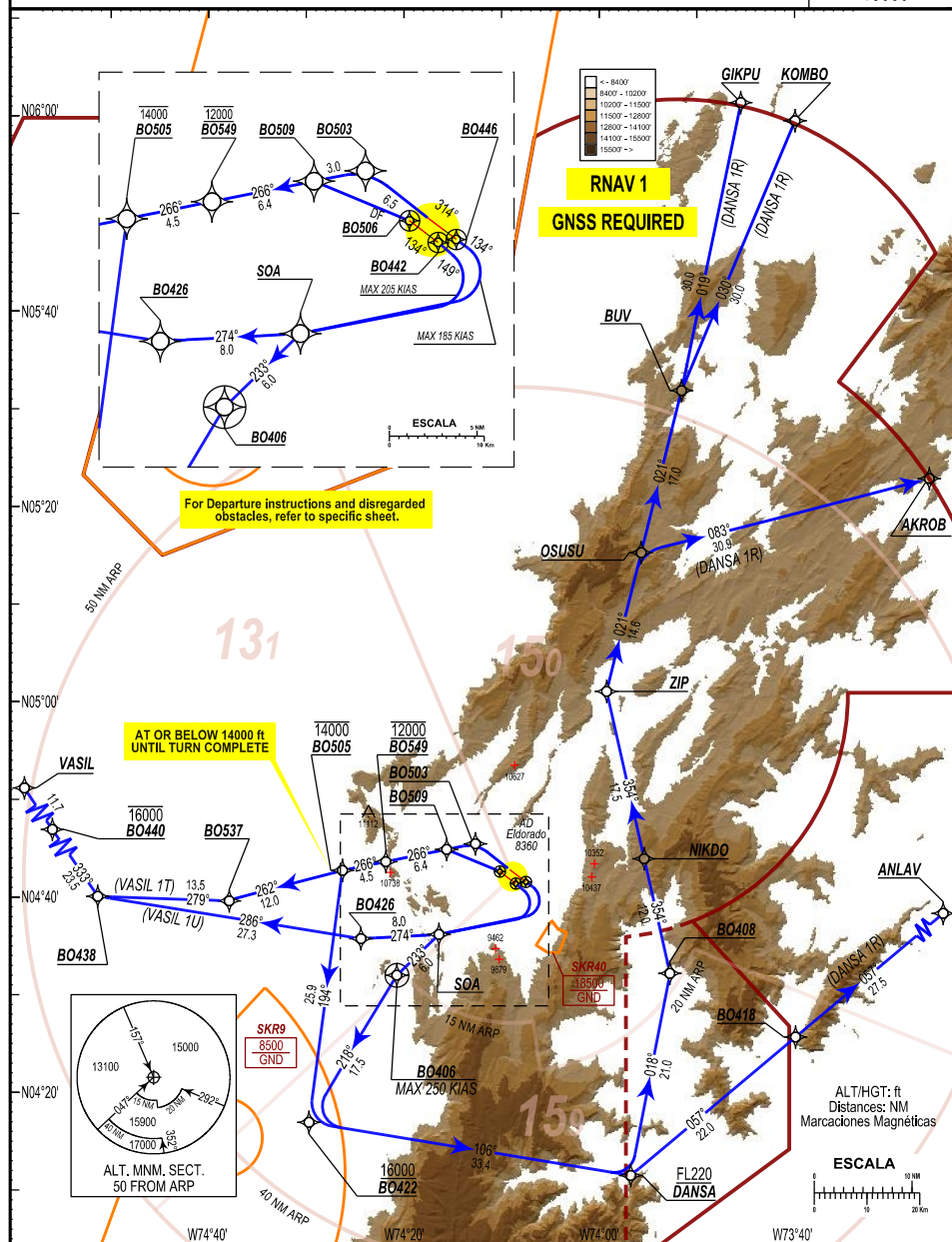
RW31LR: VASIL UNO TANGO [VASI1T]

DECL/ARP/EDR
7° W/17

VAR: 0°8.3'W/Año

APP: Bogota North Term 121.3 MHz Alternate 120.3 MHz, Bogota South Term 119.65 MHz Alternate 120.65 MHz, Bogota West Term 119.95 MHz Alternate 120.95 MHz, Arrivals 119.50 MHz, Alternate 119.05 MHz, ATIS: 127.8 MHz, TWR: North ELDORADO 118.1 MHz Alternate 118.35 MHz, South EL DORADO 118.25 MHz Alternate 118.35 MHz.

ALTITUD DE TRANSICION
18000'



BOGOTA / ELDORADO
SKBO / SID2 RNAV RWY 13L / 13R / 31L / 31R

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0° 0' 0.00"	LONGITUDE (WEST) 0° 0' 0.00"	FB FO	THETA MAGNETIC (°)	RHO (NM)	ORIENTATION M° (1°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	NAV PERF
DANSA 1R														
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.0°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	149° (127.0°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	X	X	RW13R	13R	RNAV1
TF	BO406	04°31'59.6920"	074°20'42.3040"	FO	X	X	233° (226.0°)	6.0	X	X	250	RW13R	13R	RNAV1
TF	BO422	04°16'54.5830"	074°29'42.5610"	FB	X	X	218° (210.9°)	17.5	X	16000 +	X	RW13R	13R	RNAV1
CF	BO502	04°42'43.6660"	074°10'16.7390"	FO	138.34	12.143	314° (307.1°)	2.2	X	X	X	RW31L	31L	RNAV1
DF	BO509	04°44'53.3050"	074°15'35.8510"	FB	X	X	X	X	L	X	X	RW31L	31L	RNAV1
TF	BO549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	6.4	X	12000 AT	X	RW31L	31L	RNAV1
TF	BO505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31L	31L	RNAV1
TF	BO422	04°16'54.5830"	074°29'42.5610"	FB	X	X	194° (187.6°)	25.9	X	16000 +	X	RW31L	31L	RNAV1
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	134° (127.0°)	X	X	8900 +	185	RW13L	13L	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	X	X	RW13L	13L	RNAV1
TF	BO406	04°31'59.6920"	074°20'42.3040"	FO	X	X	233° (226.0°)	6.0	X	X	250	RW13L	13L	RNAV1
TF	BO422	04°16'54.5830"	074°29'42.5610"	FB	X	X	218° (210.9°)	17.5	X	16000 +	X	RW13L	13L	RNAV1
IF	BO422	04°16'54.5830"	074°29'42.5610"	FB	X	X	X	X	X	16000 +	X	X	X	RNAV1
TF	DANSA	04°11'28.0000"	073°56'43.0000"	FB	X	X	106° (099.3°)	33.4	X	FL220 +	X	X	X	RNAV1
IF	DANSA	04°11'28.0000"	073°56'43.0000"	FB	X	X	X	X	X	FL220 +	X	ANLAV	X	RNAV1
TF	BO418	04°25'39.5210"	073°39'49.8730"	FB	X	X	057° (050.1°)	22.0	X	X	X	ANLAV	X	RNAV1
TF	ANLAV	04°43'23.0000"	073°18'43.0000"	FB	X	X	057° (050.1°)	27.5	X	X	X	ANLAV	X	RNAV1
IF	DANSA	04°11'28.0000"	073°56'43.0000"	FB	X	X	X	X	X	FL220 +	X	AKROB	X	RNAV1
TF	BO408	04°32'10.8720"	073°52'42.2640"	FB	X	X	018° (011.0°)	21.0	X	X	X	AKROB	X	RNAV1
TF	NIKDO	04°43'56.6690"	073°55'20.8210"	FB	X	X	354° (347.3°)	12.0	X	X	X	AKROB	X	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	354° (347.3°)	17.5	X	X	X	AKROB	X	RNAV1
TF	OSUSU	05°15'19.2370"	073°55'39.3460"	FB	X	X	021° (014.0°)	14.6	X	X	X	AKROB	X	RNAV1
TF	AKROB	05°22'49.0000"	073°25'37.0000"	FB	X	X	083° (076.0°)	30.9	X	X	X	AKROB	X	RNAV1
TF	DANSA	04°11'28.0000"	073°56'43.0000"	FB	X	X	X	X	X	FL220 +	X	GIKPU	X	RNAV1
TF	BO408	04°32'10.8720"	073°52'42.2640"	FB	X	X	018° (076.0°)	21.0	X	X	X	GIKPU	X	RNAV1
TF	NIKDO	04°43'56.6690"	073°55'20.8210"	FB	X	X	354° (347.3°)	12.0	X	X	X	GIKPU	X	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	354° (347.3°)	17.5	X	X	X	GIKPU	X	RNAV1
TF	OSUSU	05°15'19.2370"	073°55'39.3460"	FB	X	X	021° (014.0°)	14.6	X	X	X	GIKPU	X	RNAV1
TF	BUV	05°31'56.0000"	073°51'31.0000"	FB	X	X	021° (014.0°)	17.0	X	X	X	GIKPU	X	RNAV1
TF	GIKPU	06°01'26.8700"	073°45'26.1900"	FB	X	X	019° (011.6°)	30.0	X	X	X	GIKPU	X	RNAV1
IF	DANSA	04°11'28.0000"	073°56'43.0000"	FB	X	X	X	X	X	FL220 +	X	KOMBO	X	RNAV1
TF	BO408	04°32'10.8720"	073°52'42.2640"	FB	X	X	018° (011.0°)	21.0	X	X	X	KOMBO	X	RNAV1
TF	NIKDO	04°43'56.6690"	073°55'20.8210"	FB	X	X	354° (347.3°)	12.0	X	X	X	KOMBO	X	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	354° (347.3°)	17.5	X	X	X	KOMBO	X	RNAV1
TF	OSUSU	05°15'19.2370"	073°55'39.3460"	FB	X	X	021° (014.0°)	14.6	X	X	X	KOMBO	X	RNAV1
TF	BUV	05°31'56.0000"	073°51'31.0000"	FB	X	X	021° (014.0°)	17.0	X	X	X	KOMBO	X	RNAV1
TF	KOMBO	05°59'35.1600"	073°39'53.0400"	FB	X	X	030° (022.8°)	30.0	X	X	X	X	X	RNAV1

BOGOTA / ELDORADO
SKBO / SID2 RNAV RWY 13L / 13R

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°/0'/0.00"	LONGITUDE (WEST) 0°/0'/0.00"	FB FO	THETA MAGNETIC (°)	RHO (NM)	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	NAV PERF
VASIL 1U														
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.0°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	149° (142.1°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	X	X	RW13R	13R	RNAV1
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	134° (127.0°)	X	X	8900 +	185	RW13L	13L	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	X	X	RW13L	13L	RNAV1
IF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	X	X	X	X	X	RNAV1
TF	BO426	04°35'44.9110"	074°24'22.9740"	FB	X	X	274° (267.0°)	8.0	X	X	X	X	X	RNAV1
TF	BO438	04°40'05.3900"	074°51'22.1280"	FB	X	X	286° (279.0°)	27.3	X	16000 -	X	X	X	RNAV1
TF	BO440	04°59'36.0670"	075°04'37.7740"	FB	X	X	333° (325.7°)	23.5	X	16000 -	X	X	X	RNAV1
TF	VASIL	05°09'20.0000"	075°11'15.0000"	FB	X	X	333° (325.7°)	11.7	X	X	X	X	X	RNAV1

BOGOTA / ELDORADO
SKBO / SID2 RNAV RWY 31L / 31R

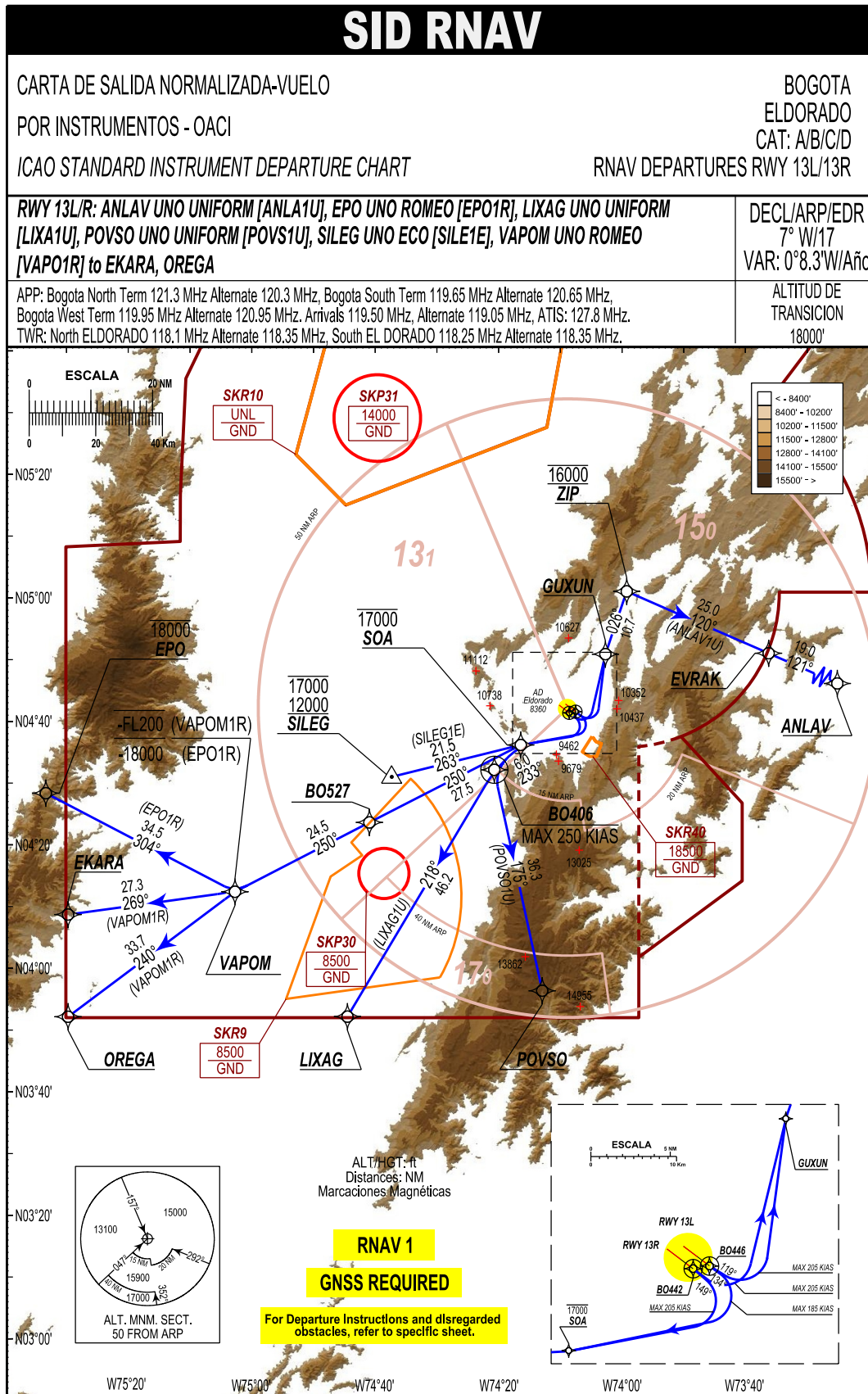
PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°/0'/0.00"	LONGITUDE (WEST) 0°/0'/0.00"	FB FO	THETA MAGNETIC (°)	RHO (NM)	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	NAV PERF
VASIL 1T														
CF	BO503	04°45'28.6540"	074°12'39.5060"	FB	135.13	8.564	314° (307.0°)	6.5	X	X	X	RW31R	31R	RNAV1
TF	BO549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	9.4	X	12000AT	X	RW31R	31R	RNAV1
TF	BO505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31R	31R	RNAV1
CF	BO506	04°42'43.6660"	074°10'16.7390"	FO	138.34	12.143	314° (307.1°)	2.2	X	X	X	RW31L	31L	RNAV1
DF	BO509	04°44'53.3050"	074°15'35.8510"	FB	X	X	X	X	L	X	X	RW31L	31L	RNAV1
TF	BO549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	6.4	X	12000 AT	X	RW31L	31L	RNAV1
TF	BO505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31L	31L	RNAV1
IF	BO505	04°42'44.5590"	074°26'17.5470"	FB	X	X	X	X	X	14000 -	X	X	X	RNAV1
TF	BO537	04°39'37.2060"	074°37'54.0550"	FB	X	X	262° (255.0°)	12.0	X	X	X	X	X	RNAV1
TF	BO438	04°40'05.3900"	074°51'22.1280"	FB	X	X	279° (272.0°)	13.5	X	16000 -	X	X	X	RNAV1
TF	BO440	04°59'36.0670"	075°04'37.7740"	FB	X	X	333° (325.7°)	23.5	X	16000 -	X	X	X	RNAV1
TF	VASIL	05°09'20.0000"	075°11'15.0000"	FB	X	X	333° (325.7°)	11.7	X	X	X	X	X	RNAV1

RWY	TURN DIR	INSTRUCTIONS	SPEED REST. FIRST TURN
RW13L	Right	Climb on course 134°MT straight ahead at MCG 5.5% until 8900ft, then direct to SOA. After 8900ft, resume climb at 3.3%.	185 KIAS
RW13R	Right	Climb on course 149°MT, at MCG 5.0% until 8900ft, then direct to SOA. After 8900ft, resume climb at 3.3%.	205 KIAS
ALL	All	Do not turn before DER.	-

RWY	TURN DIR	INSTRUCTIONS	SPEED REST. FIRST TURN
RW31L	Left	Climb direct to BO509 then to BO549. Maintain MCG 4.1% until 11400ft then resume 3.3%. Do not turn before DER.	None
RW31R	Left	Climb to BO503 on course 314°MT, then to BO549. Maintain MCG 3.7% until 11500ft then resume 3.3%.	None

Disregarded obstacles for Minimum Climb Gradient (MCG) computation								
RWY	Turn Dir.	Obstacle ID	Altitude (m)	Altitude (ft)	Type	Latitude N	Longitud W	Height above DER (m)
RW13L	Left	BO9045	2569,18	8429	Tree	04°41'36.009"N	074°07'21.895"W	21,03
		BO9046	2567,24	8423	Tree	04°41'34.860"N	074°07'20.197"W	19,09
	Right	BO9046	2567,24	8423	Tree	04°41'34.860"N	074°07'20.197"W	19,09
RW13R	Left	BO9019	2569,48	8430	Tree	04°41'05.816"N	074°08'17.049"W	22,41
	Right	BO9019	2569,48	8430	Tree	04°41'05.816"N	074°08'17.049"W	22,41
		BO9020	2569,31	8430	Tree	04°41'12.075"N	074°08'25.007"W	22,24
RW31L	Left	BO9089	2568,5	8427	Tree	04°42'55.191"N	074°10'21.671"W	22,68
		BO9092	2566,68	8421	Tree	04°42'50.494"N	074°10'31.020"W	20,86
		BO9093	2569,44	8430	Tree	04°42'45.746"N	074°10'26.955"W	23,62
	Right	BO9095	2569,04	8429	Tree	04°42'40.077"N	074°10'22.742"W	23,22
		BO9089	2568,5	8427	Tree	04°42'55.191"N	074°10'21.671"W	22,68
		BO9092	2566,68	8421	Tree	04°42'50.494"N	074°10'31.020"W	20,86
RW31R	Left	BO9093	2569,44	8430	Tree	04°42'45.746"N	074°10'26.955"W	23,62
		BO9078	2560,61	8401	Tree	04°42'49.172"N	074°09'14.355"W	13,62
		BO9079	2559,8	8399	Tree	04°42'50.797"N	074°09'15.195"W	12,81
	Right	BO9080	2559,27	8397	Tree	04°42'51.246"N	074°09'15.375"W	12,28
		BO9082	2573,91	8445	Tree	04°43'03.329"N	074°09'16.446"W	26,92
		BO9078	2560,61	8401	Tree	04°42'49.172"N	074°09'14.355"W	13,62
	Right	BO9079	2559,8	8399	Tree	04°42'50.797"N	074°09'15.195"W	12,81
		BO9080	2559,27	8397	Tree	04°42'51.246"N	074°09'15.375"W	12,28
		BO9082	2573,91	8445	Tree	04°43'03.329"N	074°09'16.446"W	26,92
		BO9083	2580,53	8467	Tree	04°43'04.954"N	074°09'12.942"W	33,54

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BOGOTA / ELDORADO
SKBO / SID3 RNAV RWY 13L / 13R

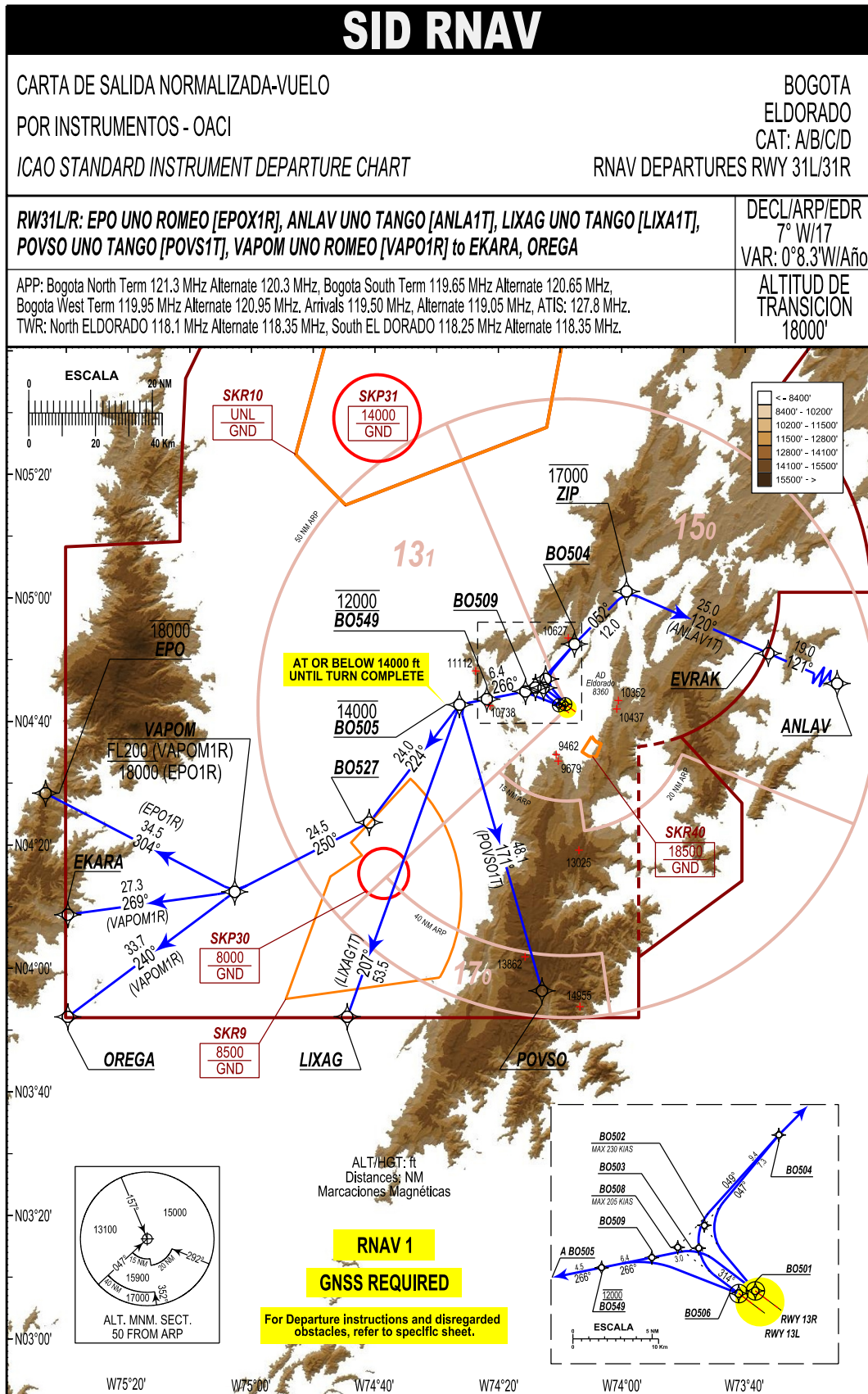
PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°0'0.00"	LONGITUDE (WEST) 0°0'0.00"	FB FO	THETA MAGNETIC (°)	RHO (NM)	ORIENTATION M° (1°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (Kts)	TRANSITION IDENTIFIER	RWY DIRECTION	NAV PERF
ANLAV 1U														
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.0°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	134° (127.1°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	GUXUN	04°50'54.0000"	074°02'39.0000"	FB	X	X	X	X	L	X	X	RW13R	13R	RNAV1
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	119° (112.0°)	X	X	8900 +	205	RW13L	13L	RNAV1
DF	GUXUN	04°50'54.0000"	074°02'39.0000"	FB	X	X	X	X	L	X	X	RW13L	13L	RNAV1
IF	GUXUN	04°50'54.0000"	074°02'39.0000"	X	X	X	X	X	X	X	X	X	X	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	026° (018.8°)	10.7	X	16000 AT	X	X	X	RNAV1
TF	EVRAK	04°51'03.0000"	073°36'11.0000"	FB	X	X	120° (113.5°)	25.0	X	X	X	X	X	RNAV1
TF	ANLAV	04°43'23.0000"	073°18'43.0000"	FB	X	X	121° (113.6°)	19.0	X	X	X	X	X	RNAV1
EPO 1R														
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.0°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	149° (142.1°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13R	13R	RNAV1
TF	BO527	04°23'37.2120"	074°40'55.4600"	FB	X	X	250° (243.0°)	27.5	X	X	X	RW13R	13R	RNAV1
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	134° (127.0°)	X	X	8900 +	185	RW13L	13L	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13L	13L	RNAV1
TF	BO527	04°23'37.2120"	074°40'55.4600"	FB	X	X	250° (243.0°)	27.5	X	X	X	RW13L	13L	RNAV1
IF	BO527	04°23'37.2120"	074°40'55.4600"	X	X	X	X	X	X	X	X	X	X	RNAV1
TF	VAPOM	04°12'23.0670"	075°02'43.8020"	FB	X	X	250° (242.8°)	24.5	X	18000 -	X	X	X	RNAV1
TF	EPO	04°28'22.0000"	075°33'24.0000"	FB	X	X	304° (297.5°)	34.5	X	18000 -	X	X	X	RNAV1
LIXAG 1U														
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.0°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	149° (142.1°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13R	13R	RNAV1
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	134° (127.0°)	X	X	8900 +	185	RW13L	13L	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13L	13L	RNAV1
IF	SOA	04°36'11.0000"	074°16'23.0000"	X	X	X	X	X	X	17000 -	X	X	X	RNAV1
TF	BO406	04°31'59.6920"	074°20'42.3040"	FO	X	X	233° (226.0°)	6.0	X	X	250	X	X	RNAV1
TF	LIXAG	03°52'08.0000"	074°44'29.0000"	FB	X	X	218° (210.9°)	46.2	X	X	X	X	X	RNAV1

BOGOTÁ / EL DORADO

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°'0'0.00"	LONGITUDE (WEST) 0°'0'0.00"	FB FO	THETA MAGNETIC (°)	RHO (NM)	ORIENTATION M° (1°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	NAV PERF
POVSO 1U														
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	134° (127.0°)	X	X	8900 +	185	RW13L	13L	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13L	13L	RNAV1
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.1°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	149° (142.1°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13R	13R	RNAV1
TF	SILEG	04°31'01.0000"	074°37'18.0000"	FB	X	X	263° (256.0°)	21.5	X	12000/17000 B	X	RW13R	13R	RNAV1
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	134° (127.0°)	X	X	8900 +	185	RW13L	13L	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13L	13L	RNAV1
TF	SILEG	04°31'01.0000"	074°37'18.0000"	FB	X	X	263° (256.0°)	21.5	X	12000/17000 B	X	RW13L	13L	RNAV1
VAPOM 1R														
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	137.63	14.512	134° (127.0°)	2.2	X	X	X	RW13R	13R	RNAV1
CA	X	X	X	X	X	X	149° (142.1°)	X	X	8900 +	205	RW13R	13R	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13R	13R	RNAV1
TF	BO527	04°23'37.2120"	074°40'55.4600"	FB	X	X	250° (243.0°)	27.5	X	X	X	RW13R	13R	RNAV1
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134.62	15.035	134° (127.0°)	2.1	X	X	X	RW13L	13L	RNAV1
CA	X	X	X	X	X	X	134° (127.0°)	X	X	8900 +	185	RW13L	13L	RNAV1
DF	SOA	04°36'11.0000"	074°16'23.0000"	FB	X	X	X	X	R	17000 -	X	RW13L	13L	RNAV1
TF	BO527	04°23'37.2120"	074°40'55.4600"	FB	X	X	250° (243.0°)	27.5	X	X	X	RW13L	13L	RNAV1
IF	BO527	04°23'37.2120"	074°40'55.4600"	X	X	X	X	X	X	X	X	X	X	RNAV1
TF	VAPOM	04°12'23.0670"	075°02'43.8020"	FB	X	X	250° (242.8°)	24.5	X	FL200 -	X	X	X	RNAV1
IF	VAPOM	04°12'23.0670"	075°02'43.8020"	X	X	X	X	X	X	FL200 -	X	EKARA	X	RNAV1
TF	EKARA	04°08'41.0000"	075°29'48.0000"	FB	X	X	269° (262.3°)	27.3	X	FL200 -	X	EKARA	X	RNAV1
IF	VAPOM	04°12'23.0670"	075°02'43.8020"	X	X	X	X	X	X	FL200 -	X	OREGA	X	RNAV1
TF	OREGA	03°52'07.0000"	075°29'48.0000"	FB	X	X	240° (233.3°)	33.7	X	X	X	OREGA	X	RNAV1

RWY	TURN DIR	INSTRUCTIONS	SPEED REST. FIRST TURN
RW13L	Left	Climb on course 119°MT until 8900ft, then direct to GUXUN. Maintain MCG 5.5% until 10700ft, then resume MCG 3.3%.	205 KIAS
RW13L	Right	Climb on course 134°MT straight ahead at MCG 5.5% until 8900ft, then direct to SOA.	185 KIAS
RW13R	Left	Climb on course 134°MT straight ahead until 8900ft, then direct to GUXUN. Maintain MCG 5.5% until 10800ft, then resume MCG 3.3%.	205 KIAS
RW13R	Right	Climb on course 149°MT at MCG 5.0% until 8900ft, then direct to SOA.	205 KIAS
ALL	All	Do not turn before DER.	-

Disregarded obstacles for Minimum Climb Gradient (MCG) computation								
RWY	Turn Dir.	Obstacle ID	Altitude (m)	Altitude (ft)	Type	Latitude N	Longitud W	Height above DER (m)
RW13L	Left	BO9045	2569,18	8429	Tree	04°41'36.009"N	074°07'21.895"W	21,03
		BO9046	2567,24	8423	Tree	04°41'34.860"N	074°07'20.197"W	19,09
	Right	BO9046	2567,24	8423	Tree	04°41'34.860"N	074°07'20.197"W	19,09
RW13R	Left	BO9019	2569,48	8430	Tree	04°41'05.816"N	074°08'17.049"W	22,41
	Right	BO9019	2569,48	8430	Tree	04°41'05.816"N	074°08'17.049"W	22,41
		BO9020	2569,31	8430	Tree	04°41'12.075"N	074°08'25.007"W	22,24
RW31L	Left	BO9089	2568,5	8427	Tree	04°42'55.191"N	074°10'21.671"W	22,68
		BO9092	2566,68	8421	Tree	04°42'50.494"N	074°10'31.020"W	20,86
		BO9093	2569,44	8430	Tree	04°42'45.746"N	074°10'26.955"W	23,62
	Right	BO9095	2569,04	8429	Tree	04°42'40.077"N	074°10'22.742"W	23,22
		BO9089	2568,5	8427	Tree	04°42'55.191"N	074°10'21.671"W	22,68
		BO9092	2566,68	8421	Tree	04°42'50.494"N	074°10'31.020"W	20,86
RW31R	Left	BO9093	2569,44	8430	Tree	04°42'45.746"N	074°10'26.955"W	23,62
		BO9078	2560,61	8401	Tree	04°42'49.172"N	074°09'14.355"W	13,62
		BO9079	2559,8	8399	Tree	04°42'50.797"N	074°09'15.195"W	12,81
	Right	BO9080	2559,27	8397	Tree	04°42'51.246"N	074°09'15.375"W	12,28
		BO9082	2573,91	8445	Tree	04°43'03.329"N	074°09'16.446"W	26,92
		BO9078	2560,61	8401	Tree	04°42'49.172"N	074°09'14.355"W	13,62
		BO9079	2559,8	8399	Tree	04°42'50.797"N	074°09'15.195"W	12,81
		BO9080	2559,27	8397	Tree	04°42'51.246"N	074°09'15.375"W	12,28
		BO9082	2573,91	8445	Tree	04°43'03.329"N	074°09'16.446"W	26,92
		BO9083	2580,53	8467	Tree	04°43'04.954"N	074°09'12.942"W	33,54



BOGOTA / ELDORADO
SKBO / SID4 RNAV RWY 31L / 31R

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°10'0.00"	LONGITUDE (WEST) 0°10'0.00"	FB FO	THETA MAGNETIC (°)	RHO (NM)	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	NAV PERF
POVSO 1T														
CF	B0506	04°42'43.6660"	074°10'16.7390"	FO	138.3	12.143	314° (307.0°)	2.2	X	X	X	RW31L	31L	RNAV1
DF	B0509	04°44'53.3050"	074°15'35.8510"	FB	X	X	X	X	L	X	X	RW31L	31L	RNAV1
TF	B0549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	6.4	X	12000 AT	X	RW31L	31L	RNAV1
TF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31L	31L	RNAV1
CF	B0503	04°45'28.6540"	074°12'39.5060"	FB	135.1	8.564	314° (307.0°)	6.5	X	X	X	RW31R	31R	RNAV1
TF	B0549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	9.4	X	12000AT	X	RW31R	31R	RNAV1
TF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31R	31R	RNAV1
IF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	X	X	X	14000 -	X	X	X	RNAV1
TF	POVSO	03°56'20.0000"	074°12'54.0000"	FB	X	X	171° (163.8°)	48.1	X	X	X	X	X	RNAV1
VAPOM 1R														
CF	B0506	04°42'43.6660"	074°10'16.7390"	FO	138.3	12.143	314° (307.0°)	2.2	X	X	X	RW31L	31L	RNAV1
DF	B0509	04°44'53.3050"	074°15'35.8510"	FB	X	X	X	X	L	X	X	RW31L	31L	RNAV1
TF	B0549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	6.4	X	12000 AT	X	RW31L	31L	RNAV1
TF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31L	31L	RNAV1
TF	B0527	04°23'37.2120"	074°40'55.4600"	FB	X	X	224° (217.5°)	24.0	X	X	X	RW31L	31L	RNAV1
CF	B0503	04°45'28.6540"	074°12'39.5060"	FB	135.1	8.564	314° (307.0°)	6.5	X	X	X	RW31R	31R	RNAV1
TF	B0549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	9.4	X	12000AT	X	RW31R	31R	RNAV1
TF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31R	31R	RNAV1
TF	B0527	04°23'37.2120"	074°40'55.4600"	FB	X	X	224° (217.5°)	24.0	X	X	X	RW31R	31R	RNAV1
IF	VAPOM	04°12'23.0670"	075°02'43.8020"	FB	X	X	250° (242.8°)	24.5	X	FL200 -	X	X	X	RNAV1
IF	VAPOM	04°12'23.0670"	075°02'43.8020"	FB	X	X	X	X	X	FL200 -	X	X	X	RNAV1
TF	EKARA	04°08'41.0000"	075°29'48.0000"	FB	X	X	269° (262.3°)	27.3	X	X	X	X	X	RNAV1
IF	VAPOM	04°12'23.0670"	075°02'43.8020"	FB	X	X	X	X	X	FL200 -	X	X	X	RNAV1
TF	OREGA	03°52'07.0000"	075°29'48.0000"	FB	X	X	240° (233.3°)	33.7	X	X	X	X	X	RNAV1

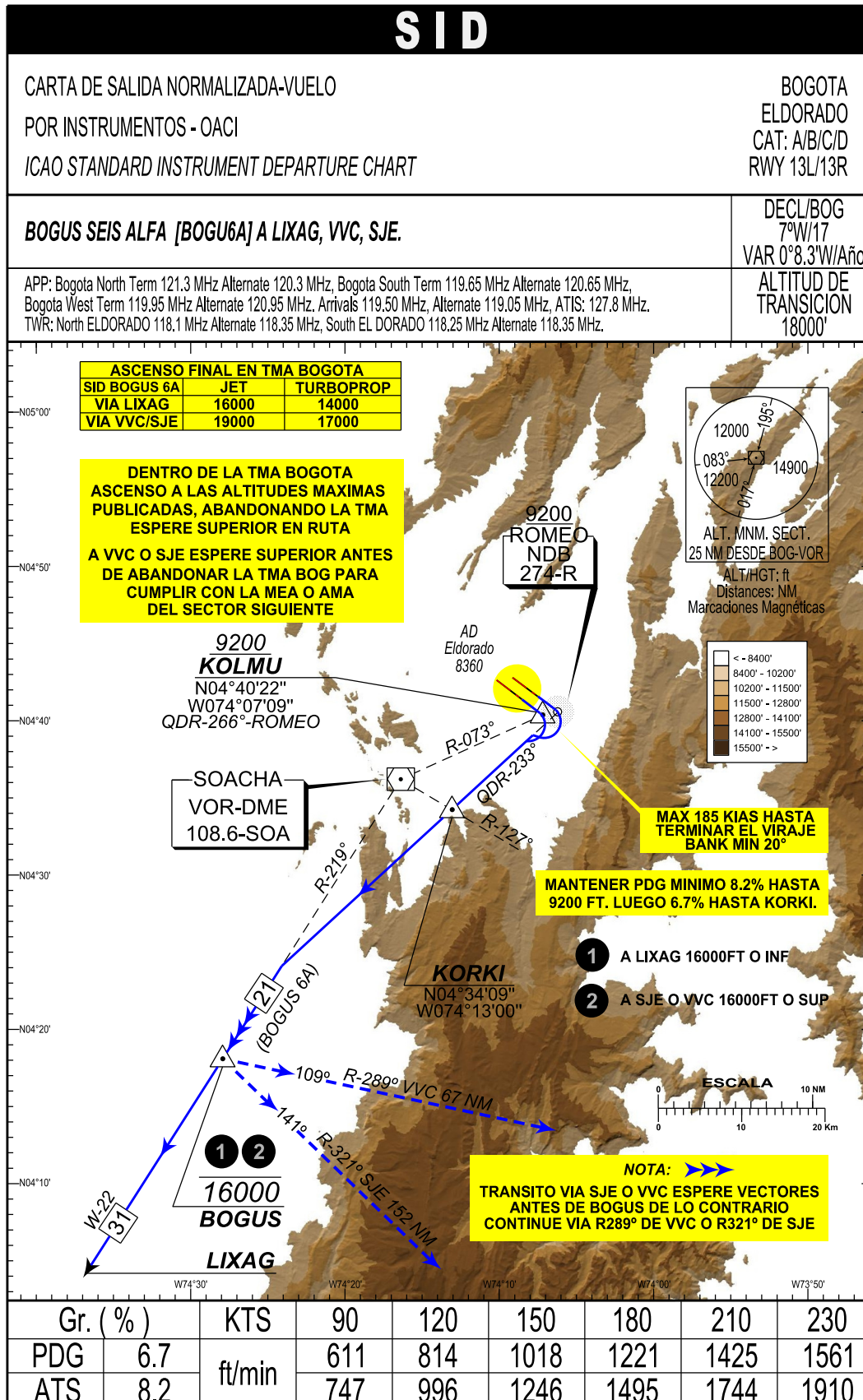
BOGOTA / ELDORADO
SKBO / SID4 RNAV RWY 31L / 31R

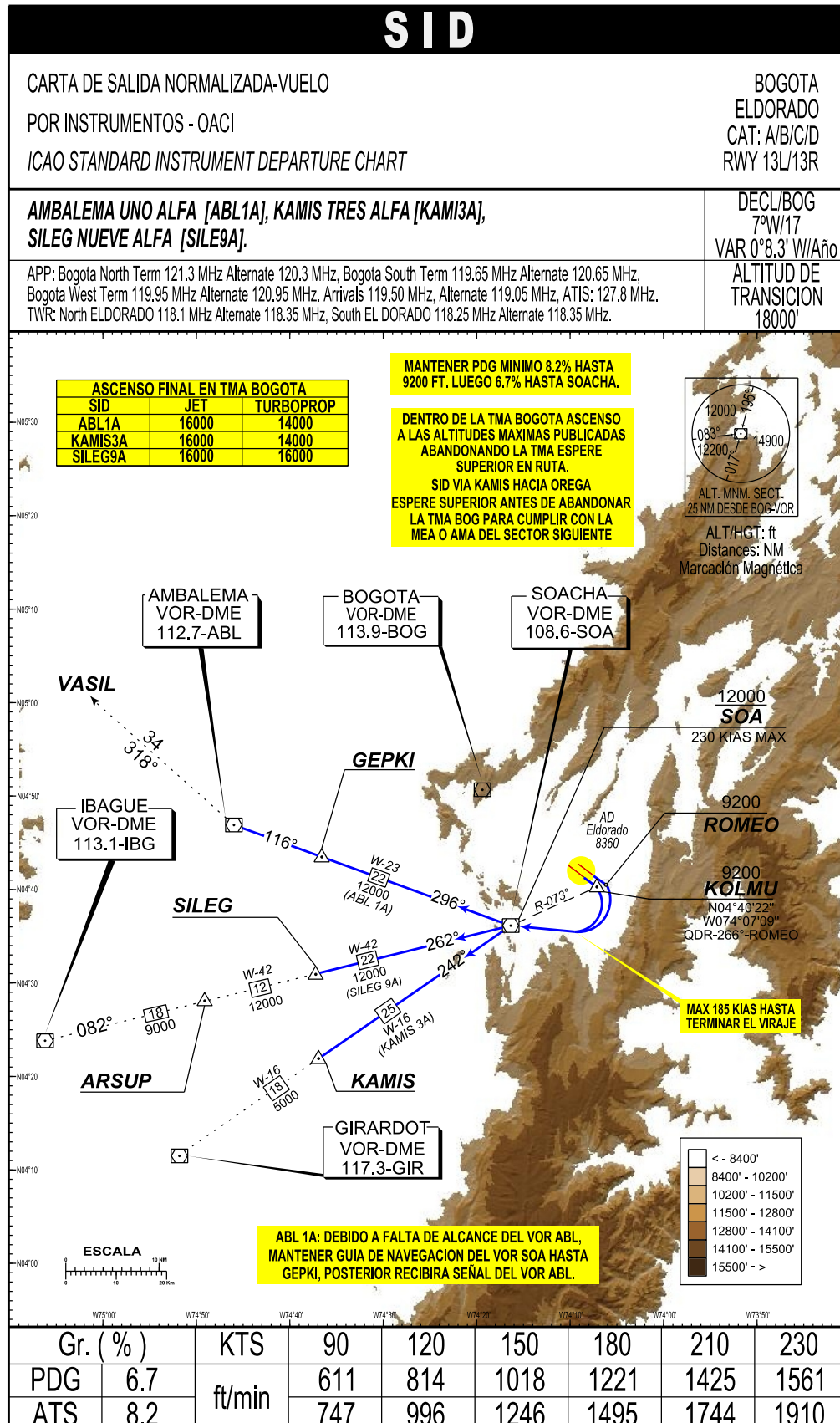
PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°/0'0,00"	LONGITUDE (WEST) 0°/0'0,00"	FB FO	THETA MAGNETIC (°)	RHO (NM)	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	NAV PERF
ANLAV 1T														
CF	B0501	04°42'48.2210"	074°09'07.4590"	FO	134.72	12.983	314° (307.0°)	2.1	X	X	X	RW31R	31R	RNAV1
DF	B0502	04°46'54.0380"	074°12'18.7430"	FB	X	X	X	X	R	X	230	RW31R	31R	RNAV1
TF	B0504	04°52'34.0140"	074°07'38.5820"	FB	X	X	047° (039.6°)	7.3	X	X	X	RW31R	31R	RNAV1
CF	B0508	04°45'31.7160"	074°13'58.6580"	FB	141.03	7.538	314° (307.1°)	6.8	X	X	205	RW31L	31L	RNAV1
TF	B0504	04°52'34.0140"	074°07'38.5820"	FB	X	X	049° (042.1°)	9.4	X	X	X	RW31L	31L	RNAV1
TF	B0504	04°52'34.0140"	074°07'38.5820"	FB	X	X	X	X	X	X	X	X	X	RNAV1
TF	ZIP	05°01'05.0000"	073°59'12.0000"	FB	X	X	052° (044.8°)	12.0	X	17000 -	X	X	X	RNAV1
TF	EVRAK	04°51'03.0000"	073°36'11.0000"	FB	X	X	120° (113.5°)	25.0	X	X	X	X	X	RNAV1
TF	ANLAV	04°43'23.0000"	073°18'43.0000"	FB	X	X	121° (113.6°)	19.0	X	X	X	X	X	RNAV1
EPO 1R														
CF	B0506	04°42'43.6660"	074°10'16.7390"	FO	138.3	12.143	314° (307.1°)	2.2	X	X	X	RW31L	31L	RNAV1
DF	B0509	04°44'53.3050"	074°15'35.8510"	FB	X	X	X	X	L	X	X	RW31L	31L	RNAV1
TF	B0549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	6.4	X	12000 AT	X	RW31L	31L	RNAV1
TF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31L	31L	RNAV1
TF	B0527	04°23'37.2120"	074°40'55.4600"	FB	X	X	224° (217.5°)	24.0	X	X	X	RW31L	31L	RNAV1
CF	B0503	04°45'28.6540"	074°12'39.5060"	FB	135.1	8.564	314° (307.0°)	6.5	X	X	X	RW31R	31R	RNAV1
TF	B0549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	9.4	X	12000 AT	X	RW31R	31R	RNAV1
TF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31R	31R	RNAV1
TF	B0527	04°23'37.2120"	074°40'55.4600"	FB	X	X	224° (217.5°)	24.0	X	X	X	RW31R	31R	RNAV1
IF	B0527	04°23'37.2120"	074°40'55.4600"	FB	X	X	X	X	X	X	X	X	X	RNAV1
TF	VAPOM	04°12'23.0670"	075°02'43.8020"	FB	X	X	250° (242.8°)	24.5	X	18000 -	X	X	X	RNAV1
TF	EPO	04°28'22.0000"	075°33'24.0000"	FB	X	X	304° (297.4°)	34.5	X	18000 -	X	X	X	RNAV1
LIXAG 1T														
CF	B0506	04°42'43.6660"	074°10'16.7390"	FO	138.3	12.143	314° (307.0°)	2.2	X	X	X	RW31L	31L	RNAV1
DF	B0509	04°44'53.3050"	074°15'35.8510"	FB	X	X	X	X	L	X	X	RW31L	31L	RNAV1
TF	B0549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	6.4	X	12000 AT	X	RW31L	31L	RNAV1
TF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31L	31L	RNAV1
CF	B0503	04°45'28.6540"	074°12'39.5060"	FB	135.1	8.564	314° (307.0°)	6.5	X	X	X	RW31R	31R	RNAV1
TF	B0549	04°43'38.1579"	074°21'50.5075"	FB	X	X	266° (258.7°)	9.4	X	12000 AT	X	RW31R	31R	RNAV1
TF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	266° (258.7°)	4.5	X	14000 -	X	RW31R	31R	RNAV1
IF	B0505	04°42'44.5590"	074°26'17.5470"	FB	X	X	X	X	X	14000 -	X	X	X	RNAV1
TF	LIXAG	03°52'08.0000"	074°44'29.0000"	FB	X	X	207° (199.8°)	53.5	X	X	X	X	X	RNAV1

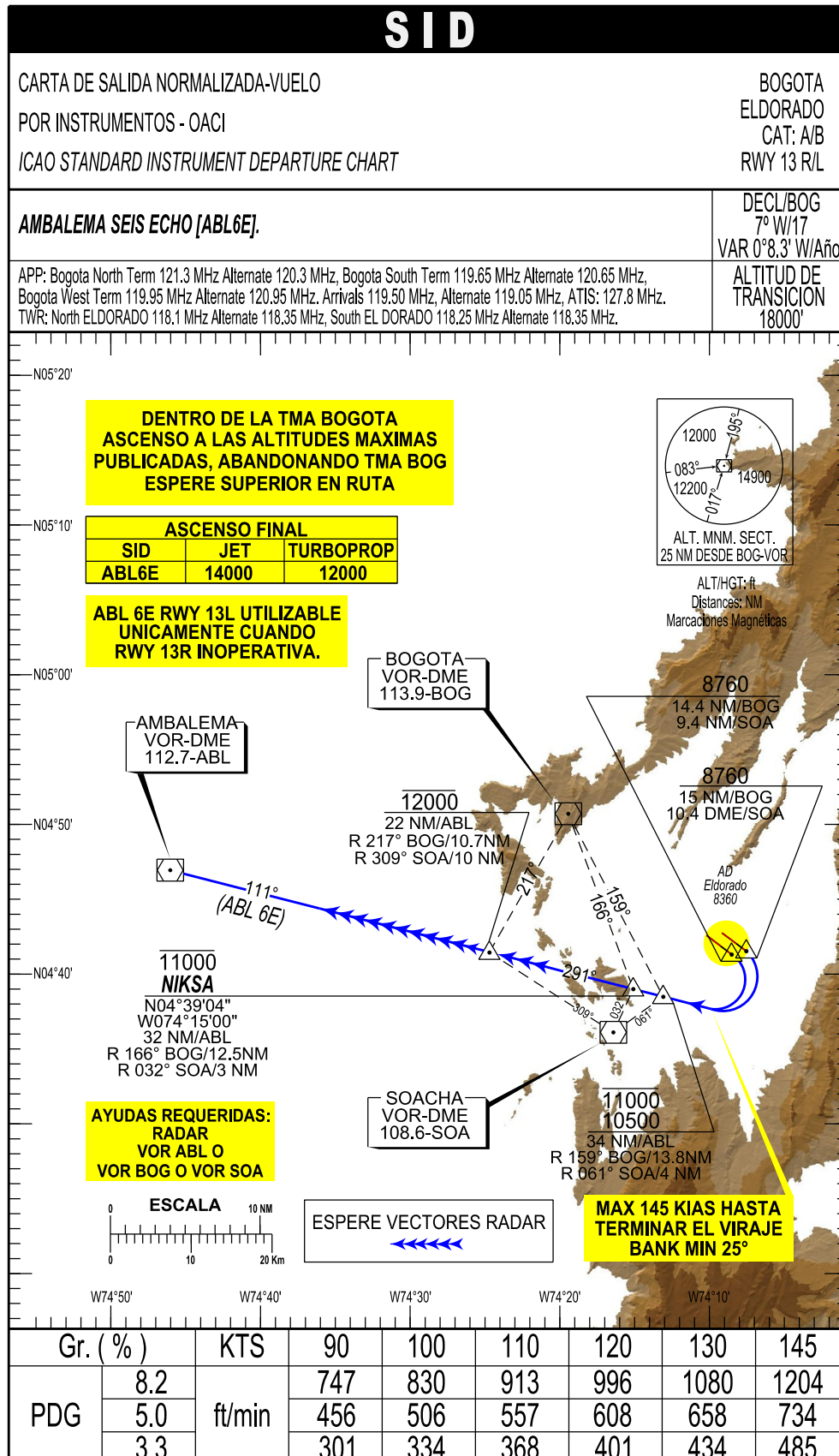
RWY	TURN DIR	INSTRUCTIONS	SPEED REST. FIRST TURN
RW31L	Left	Climb direct to BO509 then to BO549. Maintain MCG 4.1% until 11400ft . Do not turn before DER.	None
RW31L	Right	Climb to BO508 on course 314°MT, then to BO504. Maintain MCG 3.9% until 11000ft then resume MCG 3.3%.	205 KIAS
RW31R	Left	Climb to BO503 on course 314°MT, then to BO549. Maintain MCG 3.7% until 11500ft.	None
RW31R	Right	Climb direct to BO502 then to BO504, Maintain MCG 4.0% until 11000ft then resume MCG 3.3%. Do not turn before DER.	230 KIAS

Disregarded obstacles for Minimum Climb Gradient (MCG) computation								
RWY	Turn Dir.	Obstacle ID	Altitude (m)	Altitude (ft)	Type	Latitude N	Longitud W	Height above DER (m)
RW13L	Left	BO9045	2569,18	8429	Tree	04°41'36.009"N	074°07'21.895"W	21,03
		BO9046	2567,24	8423	Tree	04°41'34.860"N	074°07'20.197"W	19,09
	Right	BO9046	2567,24	8423	Tree	04°41'34.860"N	074°07'20.197"W	19,09
RW13R	Left	BO9019	2569,48	8430	Tree	04°41'05.816"N	074°08'17.049"W	22,41
		BO9019	2569,48	8430	Tree	04°41'05.816"N	074°08'17.049"W	22,41
	Right	BO9020	2569,31	8430	Tree	04°41'12.075"N	074°08'25.007"W	22,24
RW31L	Left	BO9089	2568,5	8427	Tree	04°42'55.191"N	074°10'21.671"W	22,68
		BO9092	2566,68	8421	Tree	04°42'50.494"N	074°10'31.020"W	20,86
		BO9093	2569,44	8430	Tree	04°42'45.746"N	074°10'26.955"W	23,62
		BO9095	2569,04	8429	Tree	04°42'40.077"N	074°10'22.742"W	23,22
		BO9089	2568,5	8427	Tree	04°42'55.191"N	074°10'21.671"W	22,68
		BO9092	2566,68	8421	Tree	04°42'50.494"N	074°10'31.020"W	20,86
RW31R	Left	BO9093	2569,44	8430	Tree	04°42'45.746"N	074°10'26.955"W	23,62
		BO9078	2560,61	8401	Tree	04°42'49.172"N	074°09'14.355"W	13,62
		BO9079	2559,8	8399	Tree	04°42'50.797"N	074°09'15.195"W	12,81
	Right	BO9080	2559,27	8397	Tree	04°42'51.246"N	074°09'15.375"W	12,28
		BO9082	2573,91	8445	Tree	04°43'03.329"N	074°09'16.446"W	26,92
		BO9078	2560,61	8401	Tree	04°42'49.172"N	074°09'14.355"W	13,62
		BO9079	2559,8	8399	Tree	04°42'50.797"N	074°09'15.195"W	12,81
		BO9080	2559,27	8397	Tree	04°42'51.246"N	074°09'15.375"W	12,28
		BO9082	2573,91	8445	Tree	04°43'03.329"N	074°09'16.446"W	26,92
		BO9083	2580,53	8467	Tree	04°43'04.954"N	074°09'12.942"W	33,54

PAGINA
DEJADA
INTENCIONALMENTE
EN BLANCO







SID

CARTA DE SALIDA NORMALIZADA-VUELO

POR INSTRUMENTOS - OACI

ICAO STANDARD INSTRUMENT DEPARTURE CHART

BOGOTA

ELDORADO

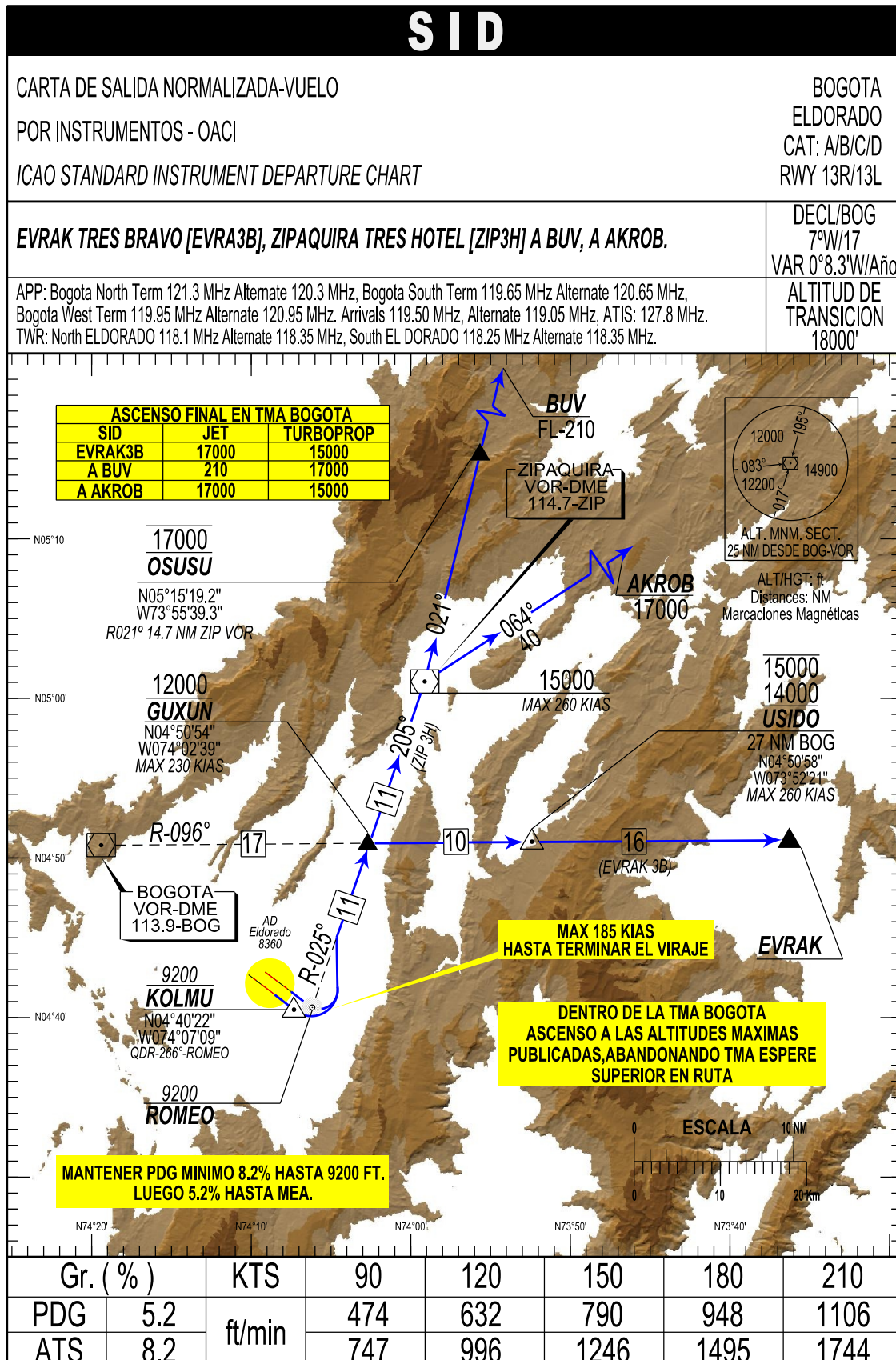
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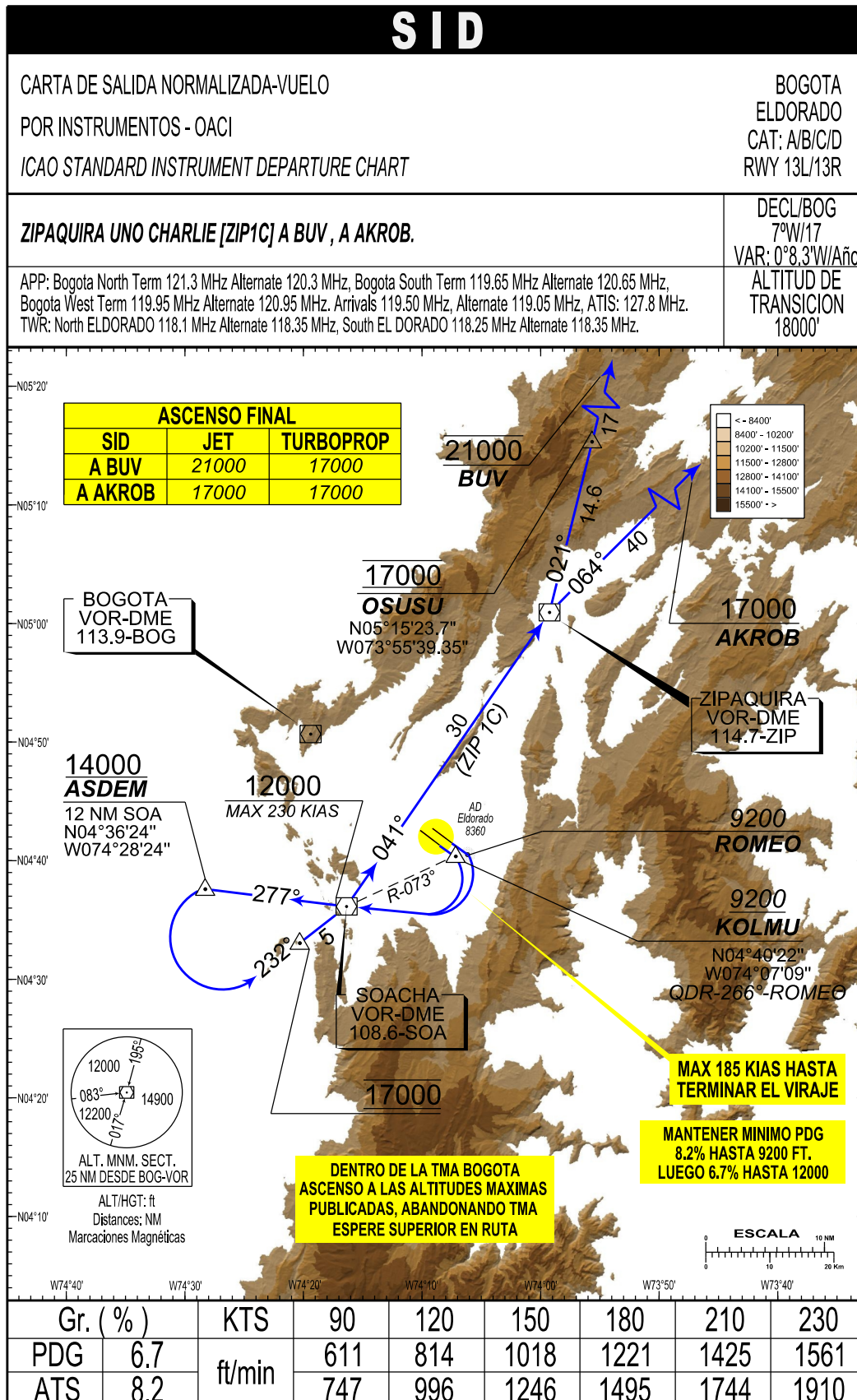
RWY 13 R/L

AMBALEMA SEIS ECHO [ABL6E]

DESPEGANDO RWY 13 R/L:

MANTENGA 8.2 % HASTA FINALIZAR EL VIRAJE,
INCORPORÁNDOSE EN RUMBO 291°, LUEGO
5.0% HASTA ALCANZAR 11000 FT , LUEGO
PDG 3.3% HASTA ALCANZAR 12000 FT.
A PARTIR DEL FIX NIKSA (32 NM/ABL) ESPERE
GUIA VECTORIAL PARA INTERCEPTAR LA RUTA.





SID RNAV

CARTA DE SALIDA NORMALIZADA

VUELO POR INSTRUMENTOS - OACI

ICAO STANDARD INSTRUMENT DEPARTURE CHART

BOGOTA

ELDORADO

CAT: A/B/C/D

SID RNAV (GNSS) RWY 13L

AKROB UNO ALFA [AKRO1A], To KIKAS, CUC

DECL/ARP/BOG

7°W/17

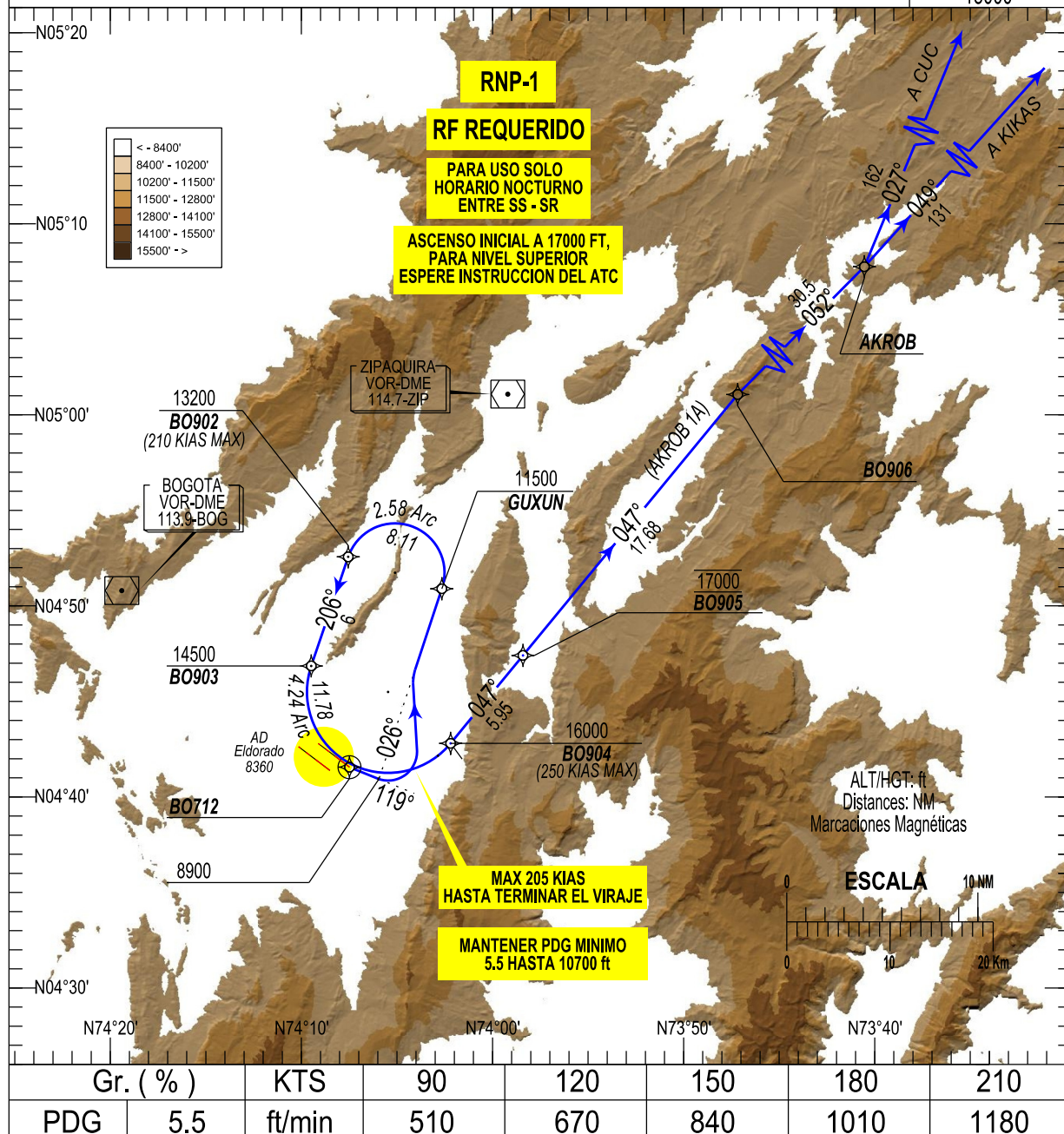
VAR 0°8.3'W/Año

ALTITUD DE

TRANSICION

18000'

APP: Bogota North Term 121.3 MHz Alternate 120.3 MHz, Bogota South Term 119.65 MHz Alternate 120.65 MHz,
Bogota West Term 119.95 MHz Alternate 120.95 MHz, Arrivals 119.50 MHz, Alternate 119.05 MHz, ATIS: 127.8 MHz.
TWR: North ELDORADO 118.1 MHz Alternate 118.35 MHz, South EL DORADO 118.25 MHz Alternate 118.35 MHz.



BOGOTA / ELDORADO
SKBO / SID10 RNAV (GNSS) RWY 13L

PATH TERM	NOMBRE PUNTO DE RECORRIDO	LATITUD (NORTE) 0°'00'0.00"	LONGITUD (WHISKEY) 0°'00'0.00"	FB FO	RUMBO M°(T°)	DISTANCIA ENTRE PUNTOS (NM)	DIRECCIÓN VIRAJE	CENTRO ARCO (RF) LATITUD (NORTE) 0°'00'0.00 "	CENTRO ARCO (RF) LONGITUD (WHISKEY) 0°'00'0.00"	RADIO DE VIRAJE (NM)	ALTITUD 1 + / AT / -	LIMITE DE VELOCIDAD (Kts)	PDG	PERF DE NAV
AKROB 1A TRANSICIÓN KIKAS / TRANSICIÓN CUC														
CF	BO712(DER)	04°41'33.74"	074°07'29.01"	FO	134°(127.00°)	X	X				X	X	X	RNP 1
CA	X	X	X	FO	119°(112.00°)	X	X				8900+	205	5.5%	RNP 1
CF	GUXUM	04°50'54.00"	074°02'39.00"	FB	026°(018.77°)	X	X				11500+		5.5%	RNP 1
	ARC CENTER				X			04°51'44.10"	074°05'06.00"	2.58 ARC				
RF	BO902	04°52'34.20"	074°07'33.00"	FB	X	8.11	L				13200+	210	X	RNP 1
TF	BO903	04°46'51.67"	074°09'28.99"	FB	206°(198.76°)	6	X				14500+		X	RNP 1
	ARC CENTER				X			04°45'30.07"	074°05'28.03"	4.24 ARC				
RF	BO904	04°42'48.45"	074°02'11.57"	FB	X	11.78	L				16000+	250	X	RNP 1
TF	BO905	04°47'24.56"	073°58'24.42"	FB	047°(039.44°)	5.95	X				17000AT		X	RNP 1
TF	BO906	05°01'04.89"	073°47'10.54"	FB	047°(039.44°)	17.68	X				X		X	RNP 1
TF	AKROB	05°22'49"	073°25'37"	FO	052°(044.82°)	30.5	X				X		X	RNP 1
TRANSICIÓN KIKAS														
IF	AKROB	05°22'49"	073°25'37"	FO	052°(044.82°)	X	X				X		X	RNP 1
TF	KIKAS	07°00'59"	071°58'01"	FO	049°(041.69°)	131	X				X		X	RNP 1
TRANSICIÓN CUC														
IF	AKROB	05°22'49"	073°25'37"	FO	052°(044.82°)	X	X				X		X	RNP 1
TF	CUC	07°56'01"	072°30'50"	FO	027°(019.62°)	162	X				X		X	RNP 1

SID RNAV

CARTA DE SALIDA NORMALIZADA-VUELO
POR INSTRUMENTOS - OACI
ICAO STANDARD INSTRUMENT DEPARTURE CHART

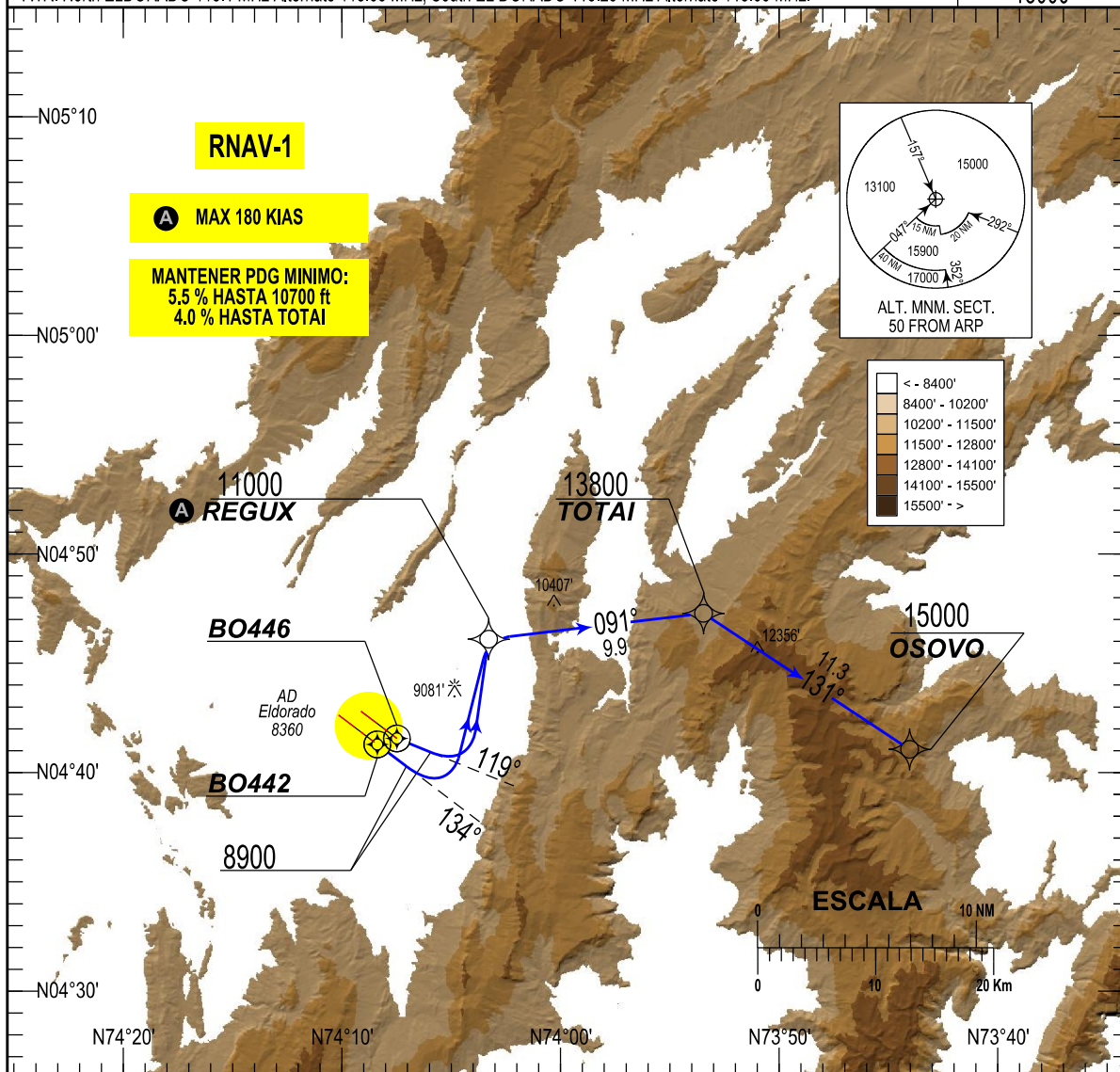
BOGOTA
ELDORADO
CAT: A/B/C
RNAV (GNSS) Rwy 13L/R

OSOVO UNO FOXTROT [OSOV1F].

DECL/ARP/BOG
7°W/17
VAR 0°8.3'W/Año

APP: Bogota North Term 121.3 MHz Alternate 120.3 MHz, Bogota South Term 119.65 MHz Alternate 120.65 MHz,
Bogota West Term 119.95 MHz Alternate 120.95 MHz. Arrivals 119.50 MHz, Alternate 119.05 MHz, ATIS: 127.8 MHz.
TWR: North ELDORADO 118.1 MHz Alternate 118.35 MHz, South EL DORADO 118.25 MHz Alternate 118.35 MHz.

ALTITUD DE
TRANSICION
18000'



Gr. (%)	KTS	90	120	150	180
5.5	ft/min	500	670	840	1000
4.0	ft/min	365	490	610	730

BOGOTA / ELDORADO
SKBO / SID11 RNAV RWY 13L / 13R

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°0'0,00"	LONGITUDE (WEST) 0°0'0,00"	FB FO	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	PDG %	NAV PERF
OSOVO 1F													
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134° (127.0°)	2.1	X	X	X	RW13L	13L	5,5	RNAV1
CA	X	X	X	X	119° (112.0°)	X	X	8900 +	180	RW13L	13L	5,5	RNAV1
DF	REGUX	N 04° 46 ' 6.32 "	W74° 03' 17.91 "	FB	X X	4,52	L	11000 +	180	RW13L	13L	5,5	RNAV1
TF	TOTAL	N 04° 47 ' 17.18 "	W73° 53' 28.07 "	FB	091° (083.2°)	9,9	R	13800 +	X	RW13L	13L	4	RNAV1
TF	OSOVO	N 04° 41 ' 4.04 "	W73° 44' 2.59 "	FB	131° (123.3°)	11,28	R	15000 +	X	RW13R	13L	4	RNAV1
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	134° (127.0°)	2.2	X	X	X	RW13R	13R	5,5	RNAV1
CA	X	X	X	X	134° (127.1°)	X	X	8900 +	180	RW13R	13R	5,5	RNAV1
DF	REGUX	N 04° 46 ' 6.32 "	W74° 03' 17.91 "	FB	X X	4,52	L	11000 +	180	RW13R	13R	5,5	RNAV1
TF	TOTAL	N 04° 47 ' 17.18 "	W73° 53' 28.07 "	FB	091° (083.2°)	9,9	R	13800 +	X	RW13R	13R	4	RNAV1
TF	OSOVO	N 04° 41 ' 4.04 "	W73° 44' 2.59 "	FB	131° (123.3°)	11,28	R	15000 +	X	RW31L	13R	4	RNAV1

CARTA DE SALIDA NORMALIZADA-VUELO
POR INSTRUMENTOS - OACI
ICAO STANDARD INSTRUMENT DEPARTURE CHART

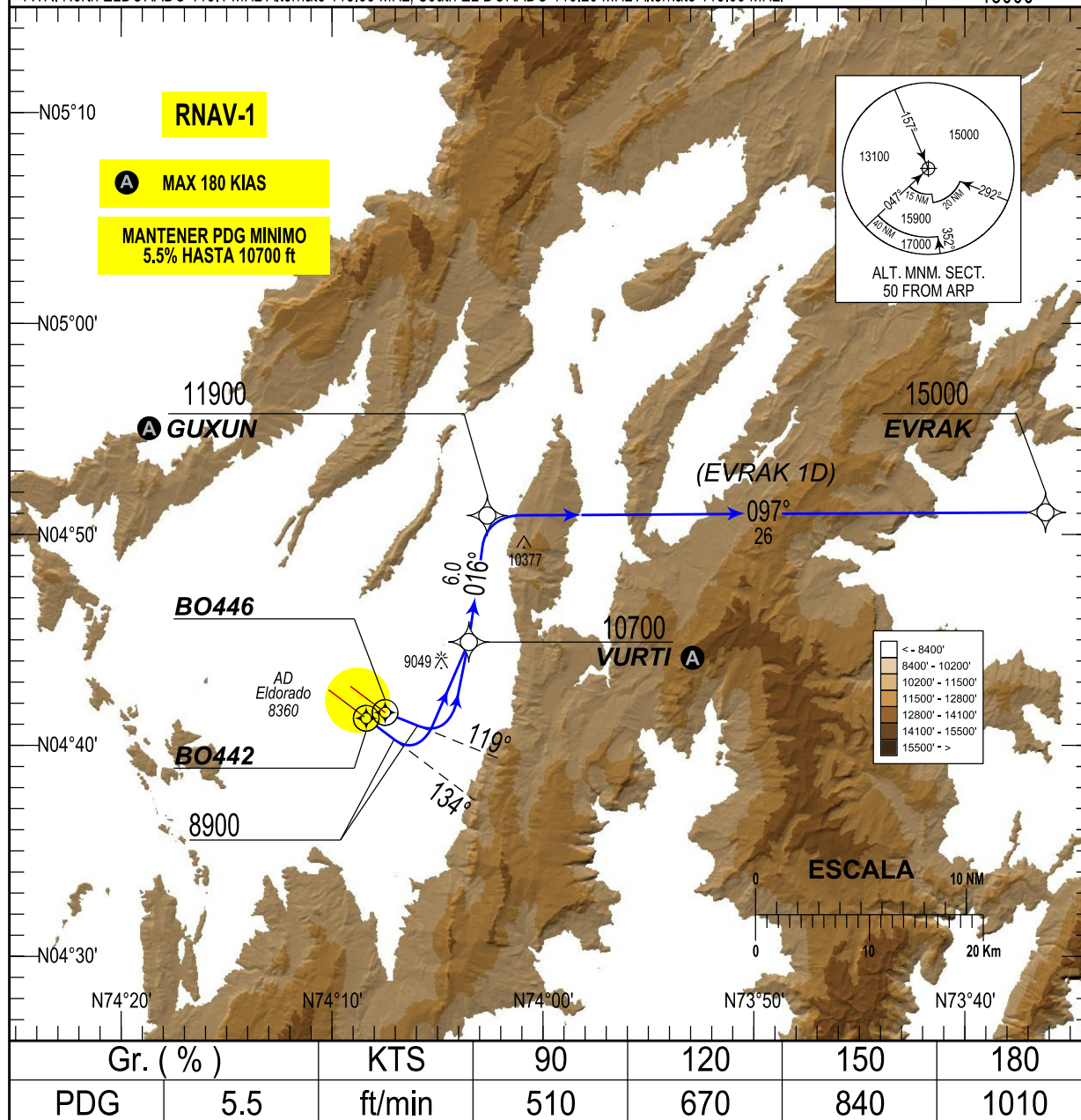
BOGOTA
ELDORADO
CAT: A/B/C
RNAV (GNSS) Rwy 13L/R

EVRAK UNO DELTA [EVRA1D].

DECL/ARP/BOG
7°W/17
VAR 0°8.3"W/Año

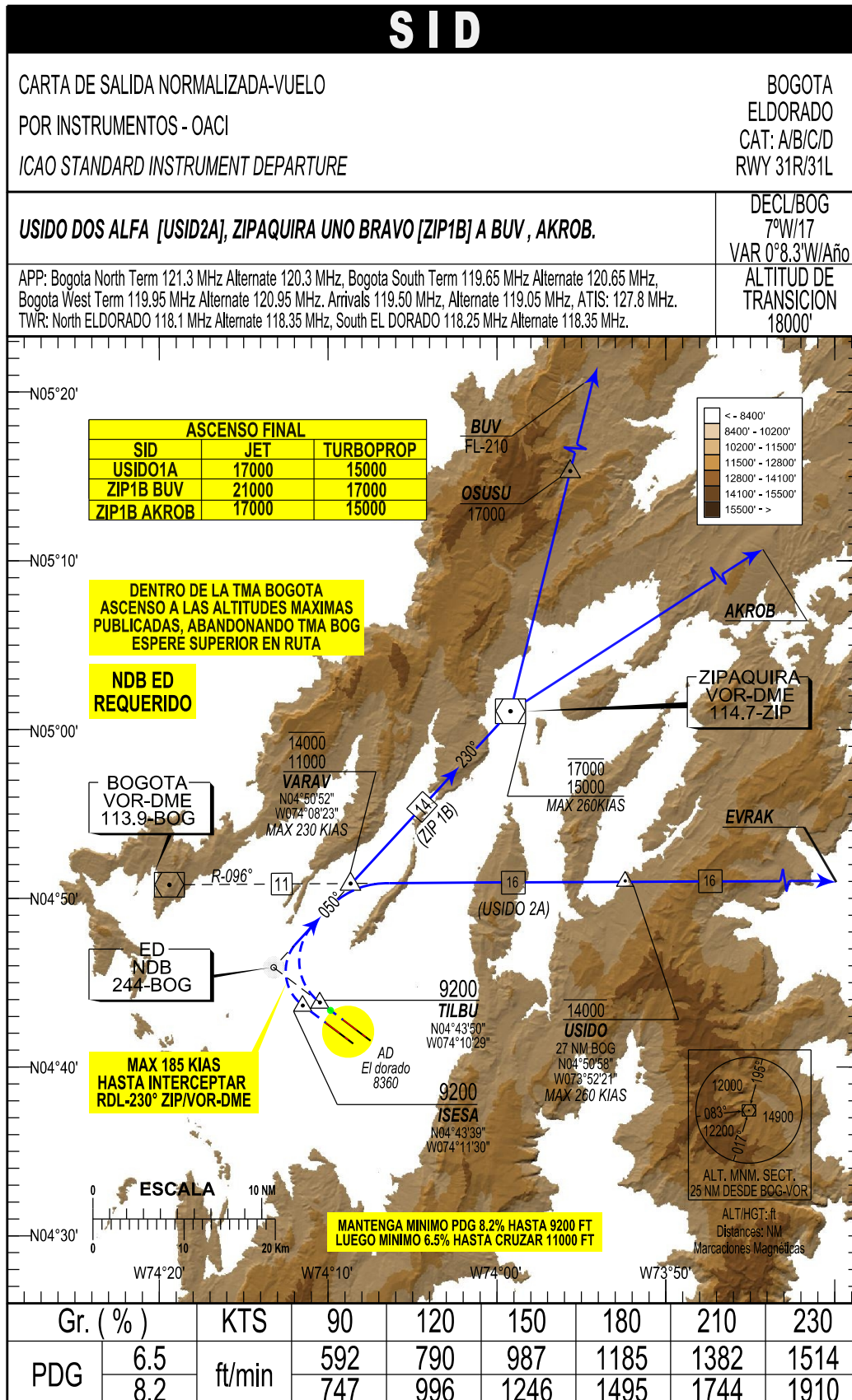
APP: Bogota North Term 121.3 MHz Alternate 120.3 MHz, Bogota South Term 119.65 MHz Alternate 120.65 MHz.
Bogota West Term 119.95 MHz Alternate 120.95 MHz. Arrivals 119.50 MHz, Alternate 119.05 MHz, ATIS: 127.8 MHz.
TWR: North ELDORADO 118.1 MHz Alternate 118.35 MHz. South EL DORADO 118.25 MHz Alternate 118.35 MHz.

ALTITUD DE
TRANSICION
18000'



BOGOTA / ELDORADO
SKBO / SID12 RNAV RWY 13L / 13R

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°10'10,00"	LONGITUDE (WEST) 0°10'10,00"	FB FO	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	RWY DIRECTION	PDG %	NAV PERF
EVRAK 1D												
CF	BO446	04°41'33.7280"	074°07'29.0180"	FO	134° (127.0°)	2.1	X	X	X	13L	5,5	RNAV1
CA	X	X	X	X	119° (112.0°)	X	X	8900 +	180	13L	5,5	RNAV1
DF	VURTI	N 04° 44 ' 54,20 "	W74° 03' 31.41 "	FB	X	X	L	10700 +	180	31L	3,3	RNAV1
TF	GUXUN	N 04° 50 ' 54.00 "	W74° 02' 39.0 "	FB	015.62° (08.31°)	6,03	R	11900 +	180	13L	3,3	RNAV1
TF	EVRAK	04°51'03.0000"	073°36'11.0000"	FB	097.1° (090.2°)	26,46	X	15000 +	X	13L	3,3	RNAV1
CF	BO442	04°41'17.3930"	074°08'22.8330"	FO	134° (127.0°)	2.2	X	X	X	13R	5,5	RNAV1
CA	X	X	X	X	134° (127.1°)	X	X	8900 +	180	13R	5,5	RNAV1
DF	VURTI	N 04° 44 ' 54,20 "	W74° 03' 31.41 "	FB	X	X	L	10700 +	180	13R	3,3	RNAV1
TF	GUXUN	N 04° 50 ' 54.00 "	W74° 02' 39.0 "	FB	015.62° (08.31°)	6,03	R	11900 +	180	13R	3,3	RNAV1
TF	EVRAK	04°51'03.0000"	073°36'11.0000"	FB	097.1° (090.2°)	26,46	X	15000 +	X	13R	3,3	RNAV1



PAGINA
DEJADA
INTENCIONALMENTE
EN BLANCO

SID RNAV

CARTA DE SALIDA NORMALIZADA-VUELO
POR INSTRUMENTOS - OACI
ICAO STANDARD INSTRUMENT DEPARTURE CHART

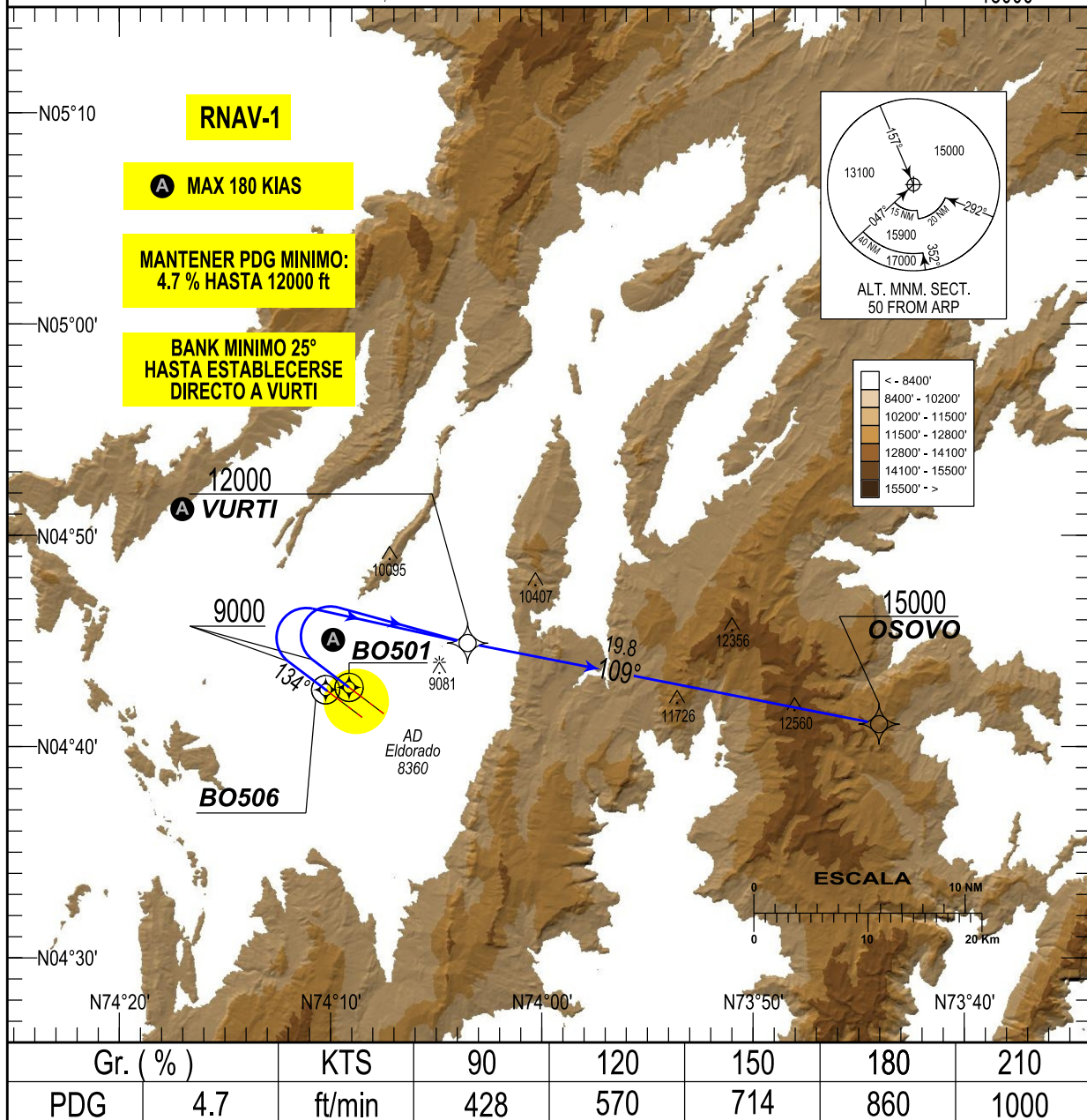
BOGOTA
ELDORADO
CAT: A/B/C
RNAV (GNSS) Rwy 31L/R

OSOVO UNO GOLF [OSOV1G].

DECL/ARP/BOG
7°W/17
VAR 0°8.3'W/Año

APP: Bogota North Term 121.3 MHz Alternate 120.3 MHz, Bogota South Term 119.65 MHz Alternate 120.65 MHz,
Bogota West Term 119.95 MHz Alternate 120.95 MHz, Arrivals 119.50 MHz, Alternate 119.05 MHz, ATIS: 127.8 MHz.
TWR: North ELDORADO 118.1 MHz Alternate 118.35 MHz, South EL DORADO 118.25 MHz Alternate 118.35 MHz.

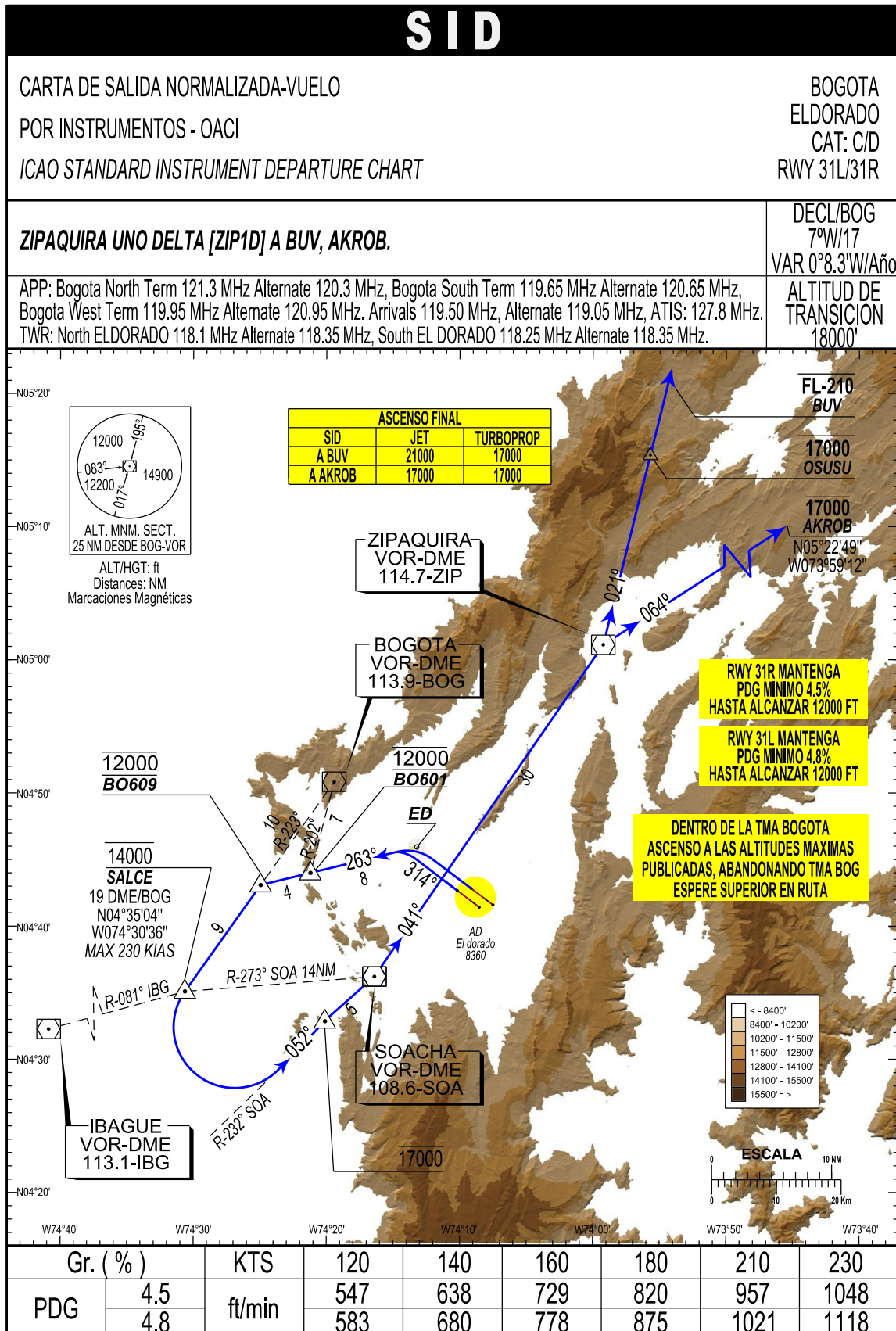
ALTITUD DE
TRANSICION
18000'

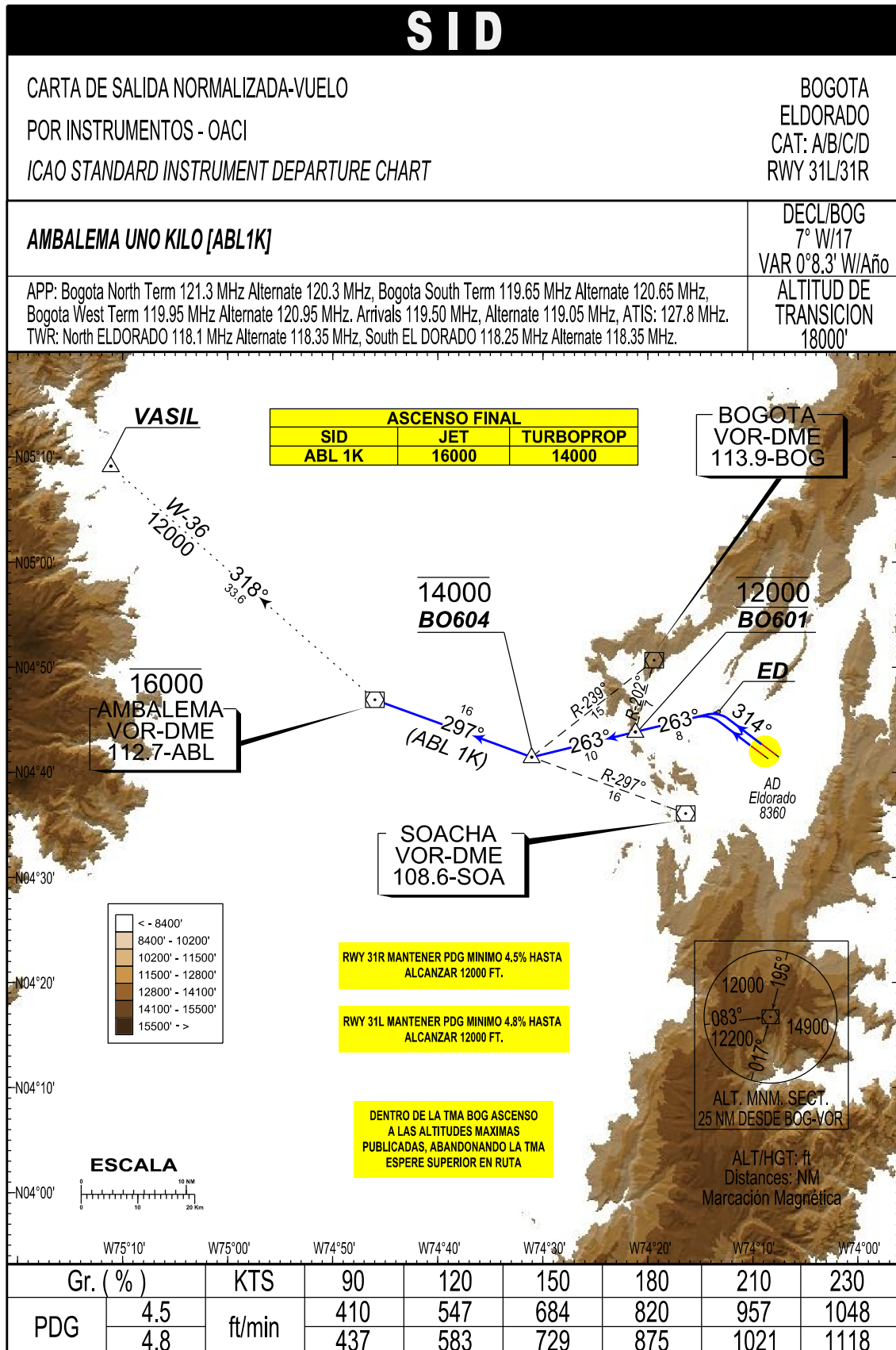


BOGOTA / ELDORADO
SKBO / SID14 RNAV RWY 31L / 31R

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°0'0,00"	LONGITUDE (WEST) 0°0'0,00"	FB FO	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	PDG %	NAV PERF
OSOVO 1G													
CF	BO501	N04°42'48.2210"	W074°09'07.4590"	FO	314° (307.0°)	2,2	X	X	X	RW31R	31R	4,7	RNAV1
CA	X	X	X	X	314° (307.0°)	X	X	9000 +	180	RW31R	31R	4,7	RNAV1
DF	VURTI	N04°44'54.2000 "	W074°03'31.4100"	FB	X	X	R	12000 +	180	RW31R	31R	4,7	RNAV1
TF	OSOVO	N04°41'04.0400"	W073°44'02.5900"	FB	108.60° (101.12°)	19.82	X	15000 +	X	X	X		RNAV1

PATH TERM	WAYPOINT NAME	LATITUDE (NORTH) 0°0'0,00"	LONGITUDE (WEST) 0°0'0,00"	FB FO	ORIENTATION M° (T°)	DISTANCE BETWEEN POINTS (NM)	TURNING DIRECTION	ALTITUDE + / AT / - / B	SPEED LIMIT (KTS)	TRANSITION IDENTIFIER	RWY DIRECTION	PDG %	NAV PERF
OSOVO 1G													
CF	BO506	N04°42'43.6660"	W074°10'16.7390"	FO	314° (307.0°)	2,2	X	X	X	RW31L	31L	4,7	RNAV1
CA	X	X	X	X	314° (307.0°)	X	X	9000 +	180	RW31L	31L	4,7	RNAV1
DF	VURTI	N04°44'54.2000 "	W074°03'31.4100 "	FB	X	X	R	12000 +	180	RW31L	31L	4,7	RNAV1
TF	OSOVO	N04°41'04.0400 "	W073°44'02.5900"	FB	108.60° (101.12°)	19.82	X	15000 +	X	X	X		RNAV1





CARTA DE SALIDA NORMALIZADA-VUELO
POR INSTRUMENTOS - OACI
ICAO STANDARD INSTRUMENT DEPARTURE CHART

BOGOTA
ELDORADO
CAT: A/B/C/D
RWY 31L/31R

BOGUS UNO CHARLIE [BOGU1C] A VVC, SJE, LIXAG, KAMIS UNO CHARLIE [KAMI1C], SILEG UNO DELTA [SILE1D].

DECL/BOG 7° W/17 VAR 0°8.3' W/Año	ALTITUD DE TRANSICION 18000'
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APP: Bogota North Term 121.3 MHz Alternate 120.3 MHz, Bogota South Term 119.65 MHz Alternate 120.65 MHz,
Bogota West Term 119.95 MHz Alternate 120.95 MHz. Arrivals 119.50 MHz, Alternate 119.05 MHz, ATIS: 127.8 MHz.
TWR: North ELDORADO 118.1 MHz Alternate 118.35 MHz South EL DORADO 118.25 MHz Alternate 118.35 MHz.

ASCENSO FINAL EN TMA BOGOTA		
SID	JET	TURBOPROP
BOGUS 1C VIA LIXAG	16000	14000
BOGUS 1C VIA VVC/SJE	19000	17000
KAMIS 1C	16000	14000
SIL EG 1D	16000	14000

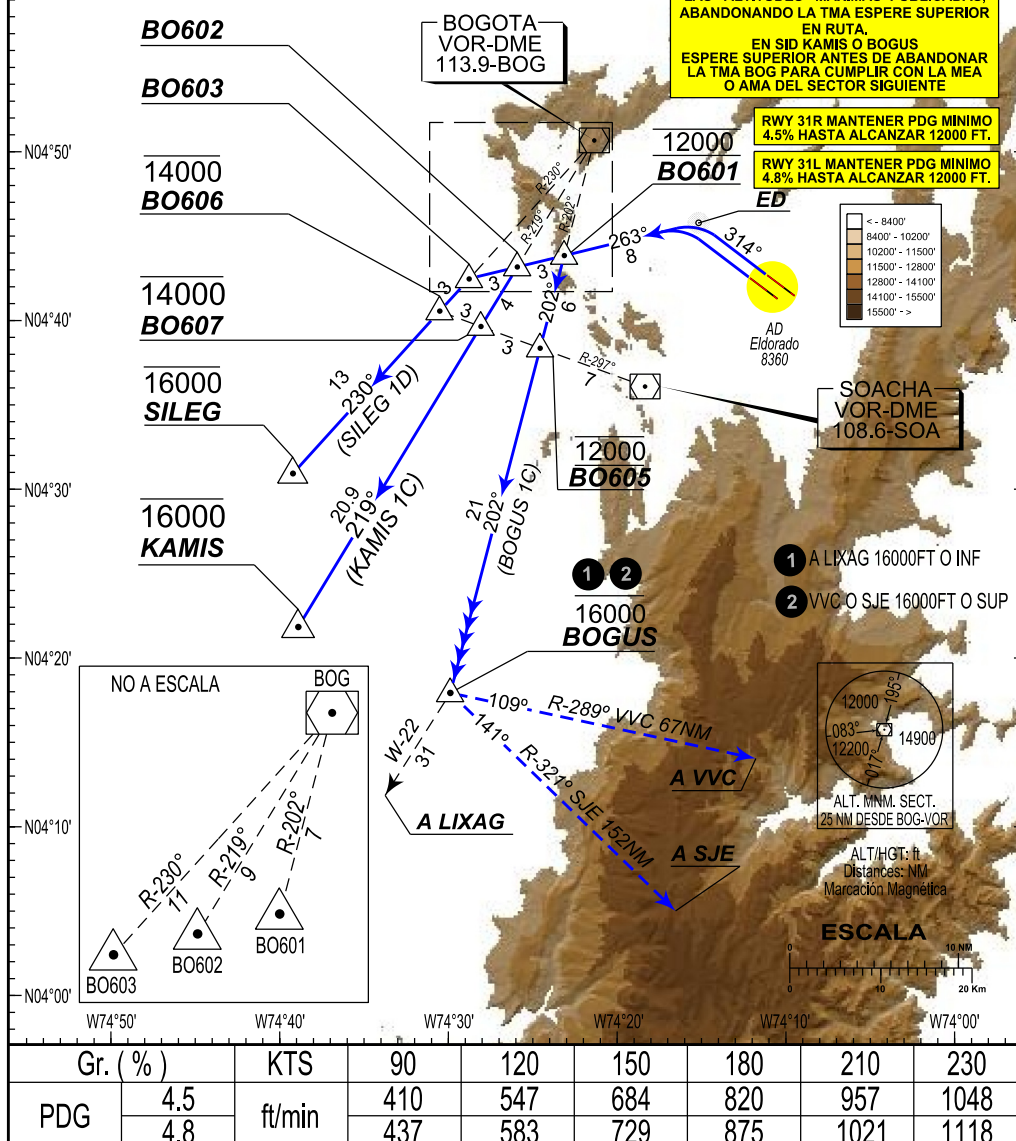
NOTA: ➡➡➡
TRANSITO VIA SJE O VVC ESPERE VECTORES
ANTES DE BOGUS, DE LO CONTRARIO
CONTINUE VIA R-289° DE VVC O R-321° DE SJE.

DENTRO DE LA TMA BOGOTA ASCENSO A LAS ALTITUDES MAXIMAS PUBLICADAS, ABANDONANDO LA TMA ESPERE SUPERIOR EN RUTA.

EN SID KAMIS O BOGUS
ESPERE SUPERIOR ANTES DE ABANDONAR
LA TMA BOG PARA CUMPLIR CON LA MEA
O AMA DEL SECTOR SIGUIENTE

**RWY 31R MANTENER PDG MINIMO
4.5% HASTA ALCANZAR 12000 FT.**

**RWY 31L MANTENER PDG MINIMO
4.8% HASTA ALCANZAR 12000 FT.**



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