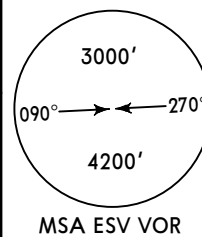
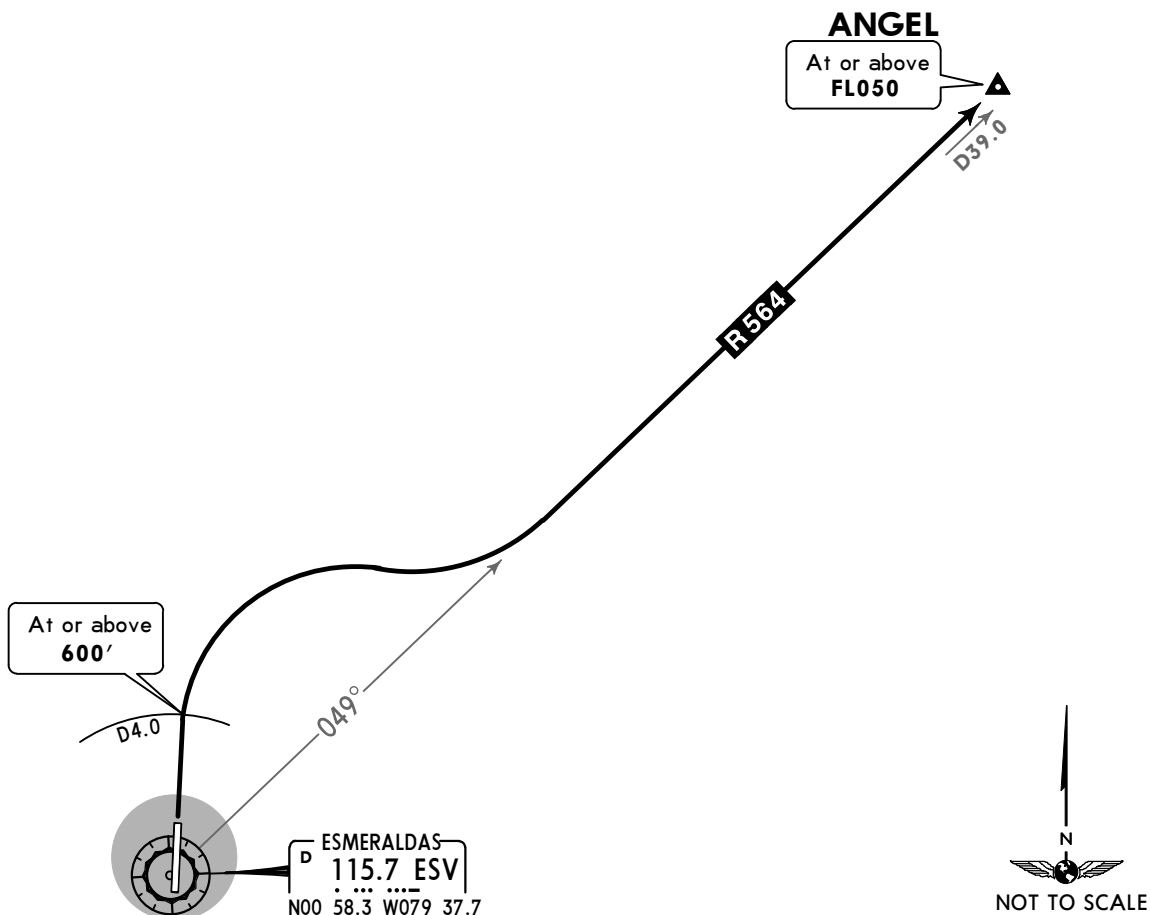


Apt Elev
32'

Trans level: By ATC Trans alt: 4000'



ANGEL 1 DEPARTURE
(ANGEL 1)
(RWY 01)



This SID requires take-off minimums:

Ceiling 100m, Visibility 1300m; and a minimum climb gradient of 3.3% (201' per NM).

Gnd speed-KT	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003

Altitude at distance from ESV VOR/DME.

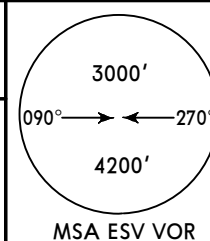
ESV DME	2	3	4
ALTITUDE	240	440	600

INITIAL CLIMB

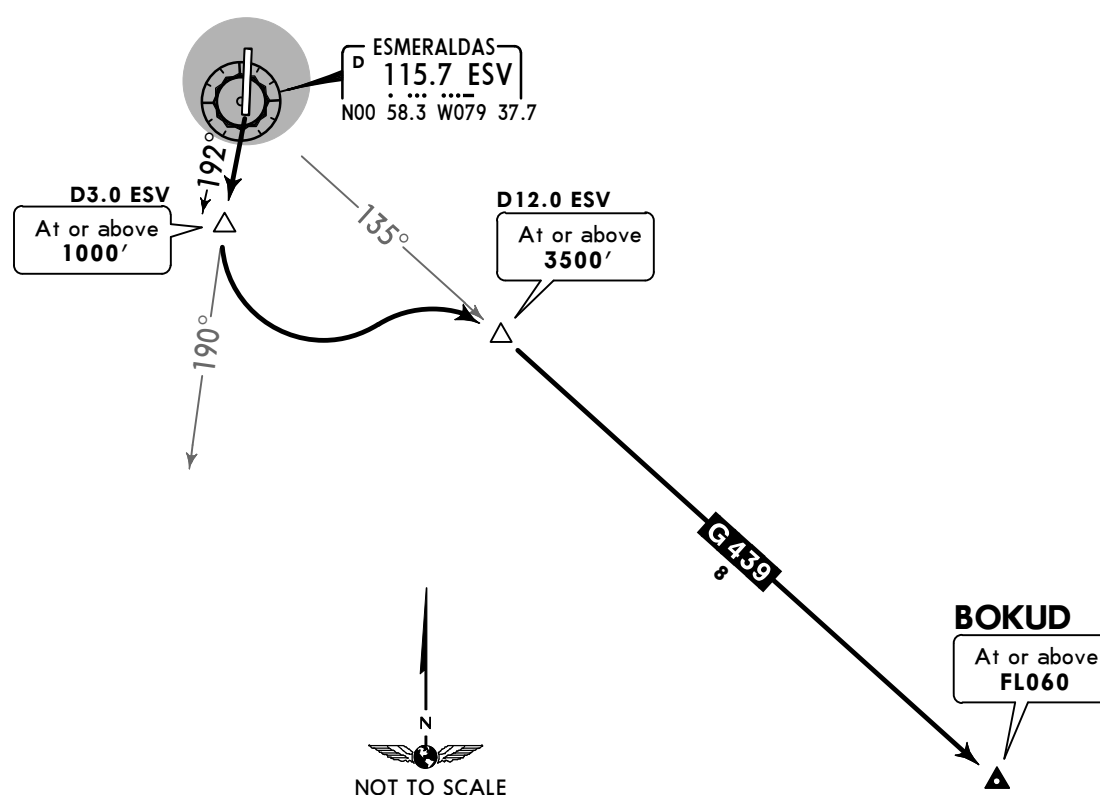
After take-off MAINTAIN runway heading to D4.0 ESV at or above 600', turn RIGHT to intercept ESV R-049 (course 049°), proceed direct to ANGEL at D39.0 ESV/airway R-564, cross at or above FL050 or proceed according to ATC instructions.

Apt Elev
32'

Trans level: By ATC Trans alt: 4000'



BOKUD 1 DEPARTURE (BOKUD 1) (RWY 19)



This SID requires take-off minimums:
Ceiling 100m, Visibility 1300m; and a minimum
climb gradient of 5.0% (304' per NM).

Gnd speed-KT	75	100	150	200	250	300
5.0% V/V (fpm)	380	506	760	1013	1266	1519

Altitude at distance from ESX VOR/DME.

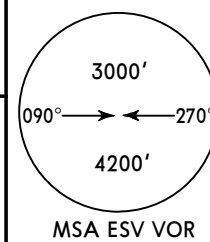
ESX DME	1	2	3
ALTITUDE	350	670	1000

INITIAL CLIMB

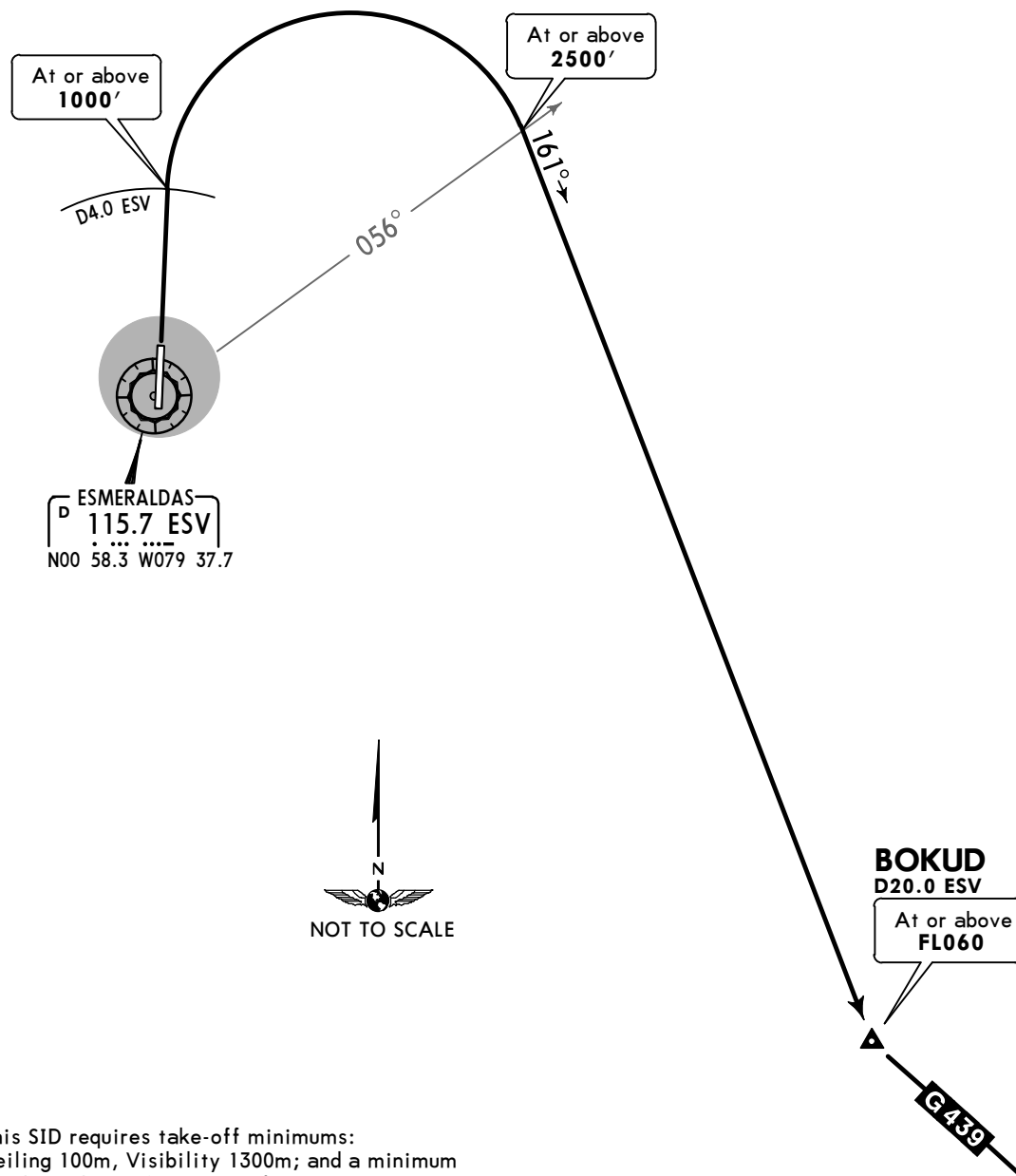
Immediately after take-off turn RIGHT course 192° to intercept ESX R-190. At D3.0 ESX at or above 1000', turn LEFT to intercept ESX R-135 (course 135°) at D12.0 ESX at or above 3500' and then direct to BOKUD, or proceed according to ATC instructions.

Apt Elev
32'

Trans level: By ATC Trans alt: 4000'



BOKUD 1A DEPARTURE
(BOKUD 1A) [BOKU1A]
(RWY 01)



This SID requires take-off minimums:
Ceiling 100m, Visibility 1300m; and a minimum
climb gradient of 5.0% (304' per NM).

Gnd speed-KT	75	100	150	200	250	300
5.0% V/V (fpm)	380	506	760	1013	1266	1519

Altitude at distance from ESV VOR/DME.

ESV DME	2	3	4
ALTITUDE	350	670	1000

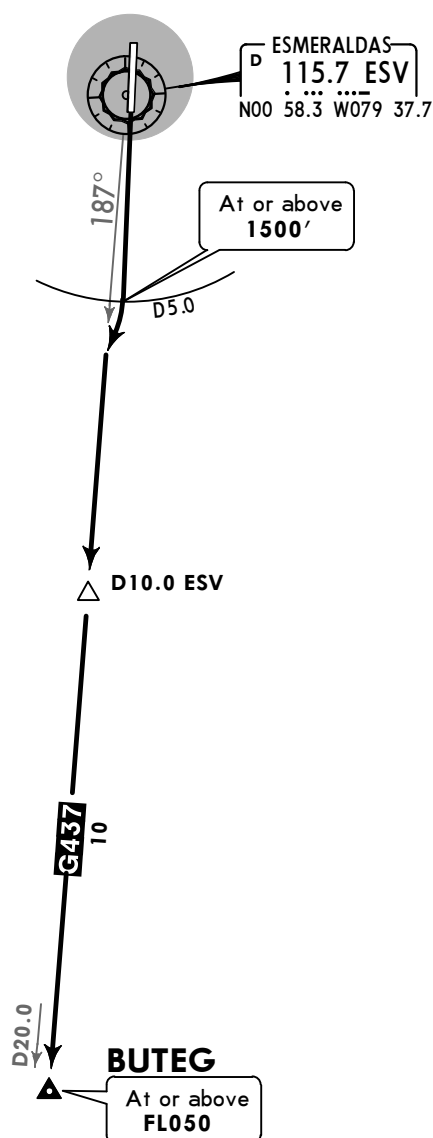
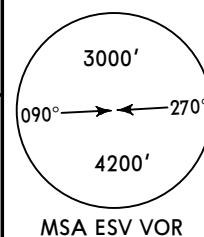
INITIAL CLIMB

After take-off MAINTAIN runway heading to D4.0 ESV at or above 1000', turn RIGHT to cross ESV R-056 at or above 2500', course 161° direct to BOKUD to intercept airway at D20.0 ESV at or above FL060. Then, proceed according to ATC instructions.

Apt Elev
32'

Trans level: By ATC Trans alt: 4000'

BUTEG 1 DEPARTURE
(BUTEG 1)
(RWY 19)



This SID requires take-off minimums:
Ceiling 100m, Visibility 1300m; and a minimum
climb gradient of 5.2% (316' per NM) until crossing
at or above 1500', then 201' per NM.

Gnd speed-KT	75	100	150	200	250	300
5.2% V/V (fpm)	395	527	790	1053	1316	1580

Altitude at distance from ESV VOR/DME.

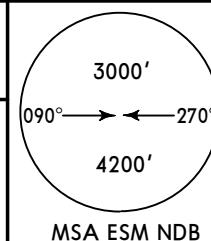
ESV DME	1	2	3	4	5
ALTITUDE	260	580	890	1200	1500

INITIAL CLIMB

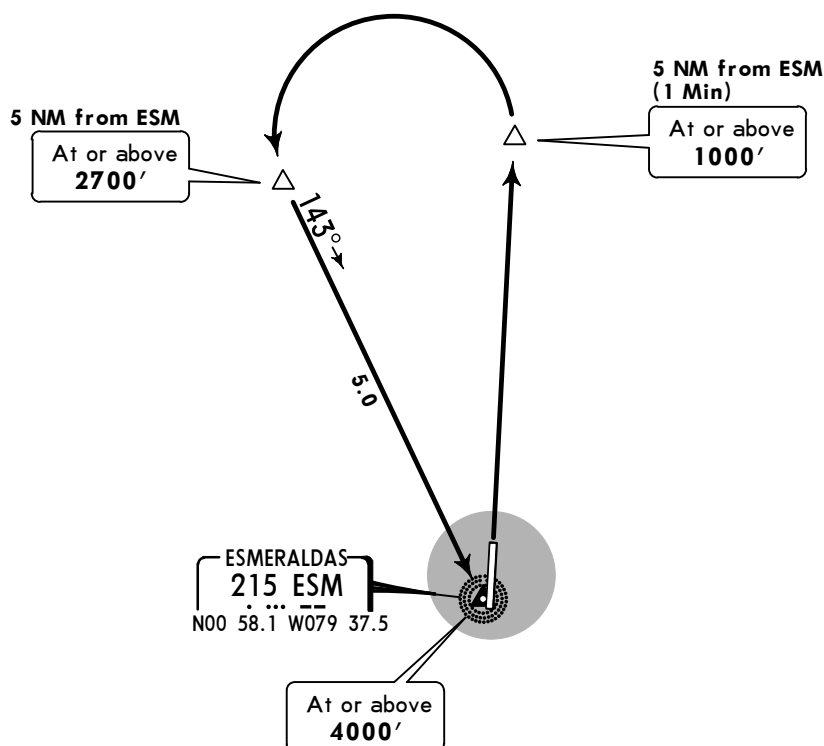
After take-off MAINTAIN runway heading to D5.0 ESV at or above 1500', turn RIGHT to intercept ESV R-187 (G-437), within D10.0 ESV, then proceed direct to BUTEG, cross at or above FL050, or proceed according to ATC instructions.

Apt Elev
32'

Trans level: By ATC Trans alt: 4000'



ESMERALDAS NDB 1 DEPARTURE
(ESM 1)
(RWY 01)



This SID requires take-off minimums:
Ceiling 100m, Visibility 1300m; and a minimum
climb gradient of 4.0% (243' per NM).

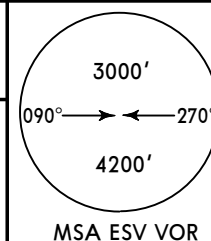
Gnd speed-KT	75	100	150	200	250	300
4.0% V/V (fpm)	304	405	608	810	1013	1215

INITIAL CLIMB

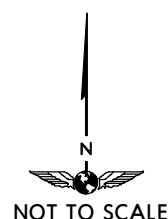
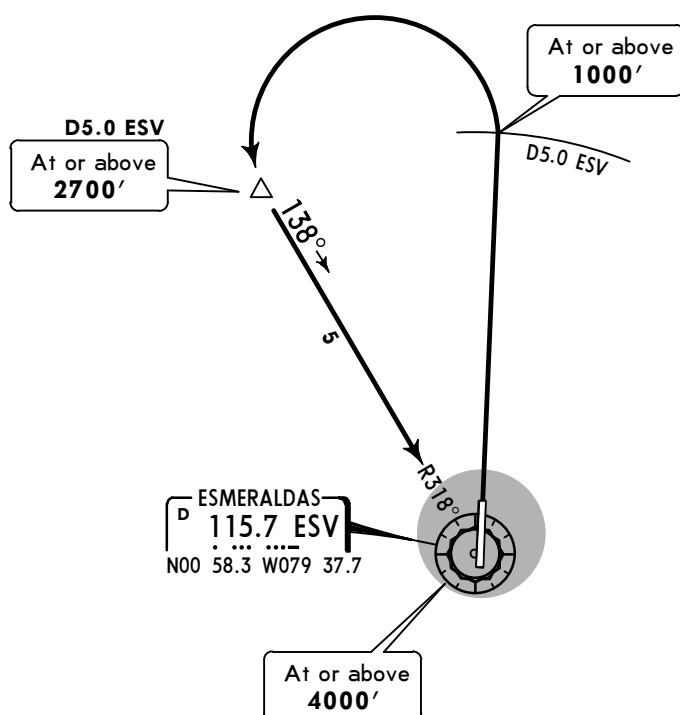
After take-off, MAINTAIN runway heading to 5 NM from ESM (1 Min) at or above 1000', turn LEFT
course 143° at 5 NM from ESM at or above 2700', continue to ESM NDB at or above 4000', or proceed
according to ATC instructions.

Apt Elev
32'

Trans level: By ATC Trans alt: 4000'



ESMERALDAS VOR 1 DEPARTURE
(ESV 1)
(RWY 01)



This SID requires take-off minimums:
Ceiling 100m, Visibility 1300m; and a minimum
climb gradient of 4.0% (243' per NM).

Gnd speed-KT	75	100	150	200	250	300
4.0% V/V (fpm)	304	405	608	810	1013	1215

Altitude at distance from ESX VOR/DME.

ESX DME	1	2	3	4	5
ALTITUDE	36	279	522	765	1008

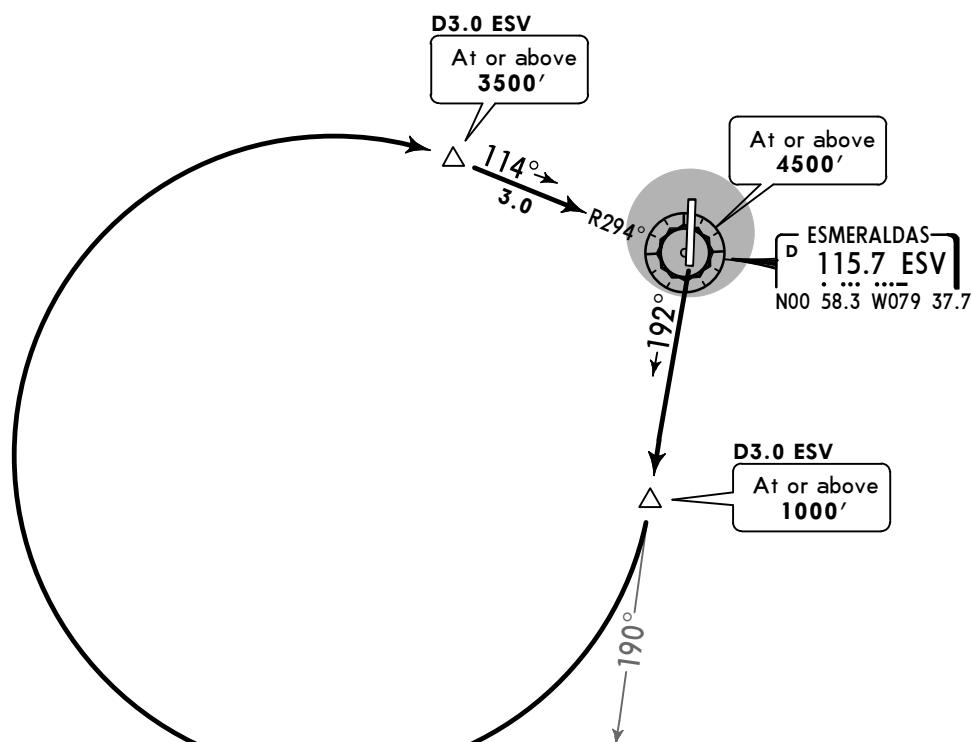
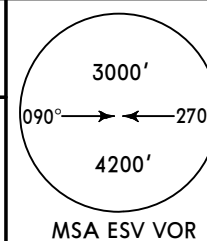
INITIAL CLIMB

After take-off, MAINTAIN runway heading to D5.0 ESX at or above 1000', turn LEFT to intercept ESX R-318 (course 138°) to D5.0 ESX at or above 2700', continue to ESX VOR at or above 4000', or proceed according to ATC instructions.

Apt Elev
32'

Trans level: By ATC Trans alt: 4000'

ESMERALDAS VOR 1A DEPARTURE
(ESV 1A)
(RWY 19)



This SID requires take-off minimums:
Ceiling 100m, Visibility 1300m; and a minimum
climb gradient of 5.0% (304' per NM).

Gnd speed-KT	75	100	150	200	250	300
5.0% V/V (fpm)	380	506	760	1013	1266	1519

Altitude at distance from ESX VOR/DME.

ESX DME	1	2	3
ALTITUDE	350	670	1000

INITIAL CLIMB

Immediately after take-off turn RIGHT course 192° to intercept ESX R-190. At D3.0 ESX at or above 1000', turn RIGHT course 114° to intercept ESX R-294 at D3.0 ESX at or above 3500' to ESX VOR at or above 4500', then proceed according to ATC instructions.

SETN/ESM

Apt Elev 32'

N00 58.7 W079 37.6

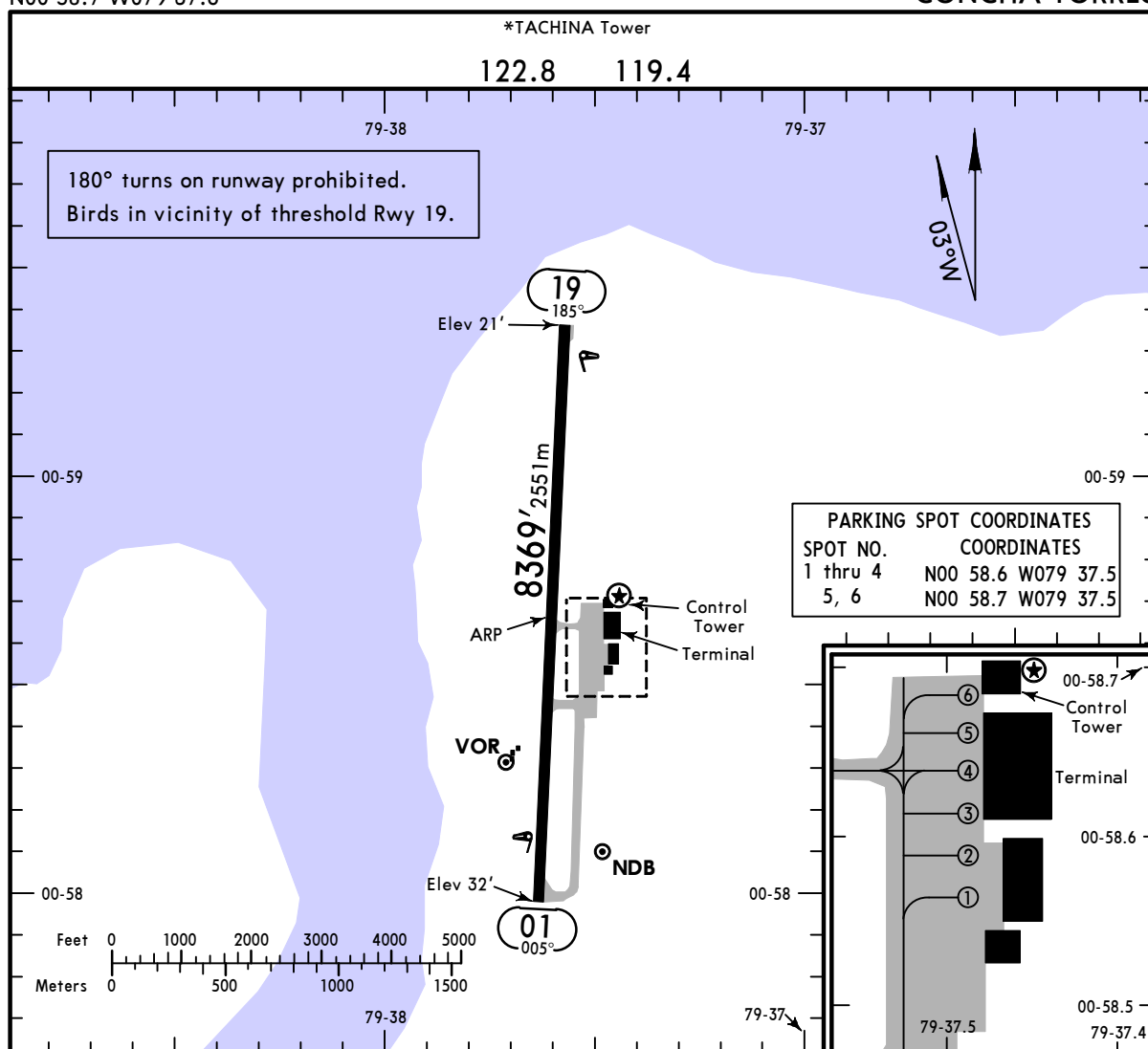
JEPPesen

13 JAN 17 (10-9)

TACHINA, ECUADOR

CORONEL CARLOS

CONCHA TORRES



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			WIDTH
		LANDING BEYOND		TAKE-OFF	
		Threshold	Glide Slope		
01	HIRL				148'
19	HIRL PAPI-L (angle 3.00°)		7371' 2247m		45m

TAKE-OFF

All Rwys

1 & 2
Eng3 & 4
Eng

150m - 3000m

CHANGES: Rwy numbers.

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STRAIGHT-IN RWY		A	B	C	D
19	① ILS	290' (270') 1300m	290' (270') 1300m	290' (270') 1300m	NA
	① ② LOC	460' (440') 2000m	460' (440') 2000m	460' (440') 2000m	NA
	① LOC	460' (440') 2200m	460' (440') 2200m	460' (440') 2400m	NA
	① ② VOR	460' (440') 2000m	460' (440') 2000m	460' (440') 2000m	NA
	① VOR	460' (440') 2200m	460' (440') 2200m	460' (440') 2400m	NA
	① ② NDB	460' (440') 2000m	460' (440') 2000m	460' (440') 2000m	NA
	① NDB	460' (440') 2200m	460' (440') 2200m	460' (440') 2400m	NA
01	② ③ VOR	460' (428') 2000m	460' (428') 2000m	460' (428') 2000m	NA
	③ VOR	460' (428') 2200m	460' (428') 2200m	460' (428') 2400m	NA

① Missed apch climb gradient mim 4.5%.

② Continuous Descent Final Approach.

③ Missed apch climb gradient mim 3.3%.

CIRCLE-TO-LAND	100 Kt	135 Kt	180 Kt	205 Kt
After all approaches	1420' (1388') 5000m	1420' (1388') 5000m	1420' (1388') 5000m	NA

TAKE-OFF

	All Rwys
1 & 2 Eng	150m- 3000m
3 & 4 Eng	

SETN/ESM
CORONEL CARLOS
CONCHA TORRES

19 MAY 17
Eff 25 May

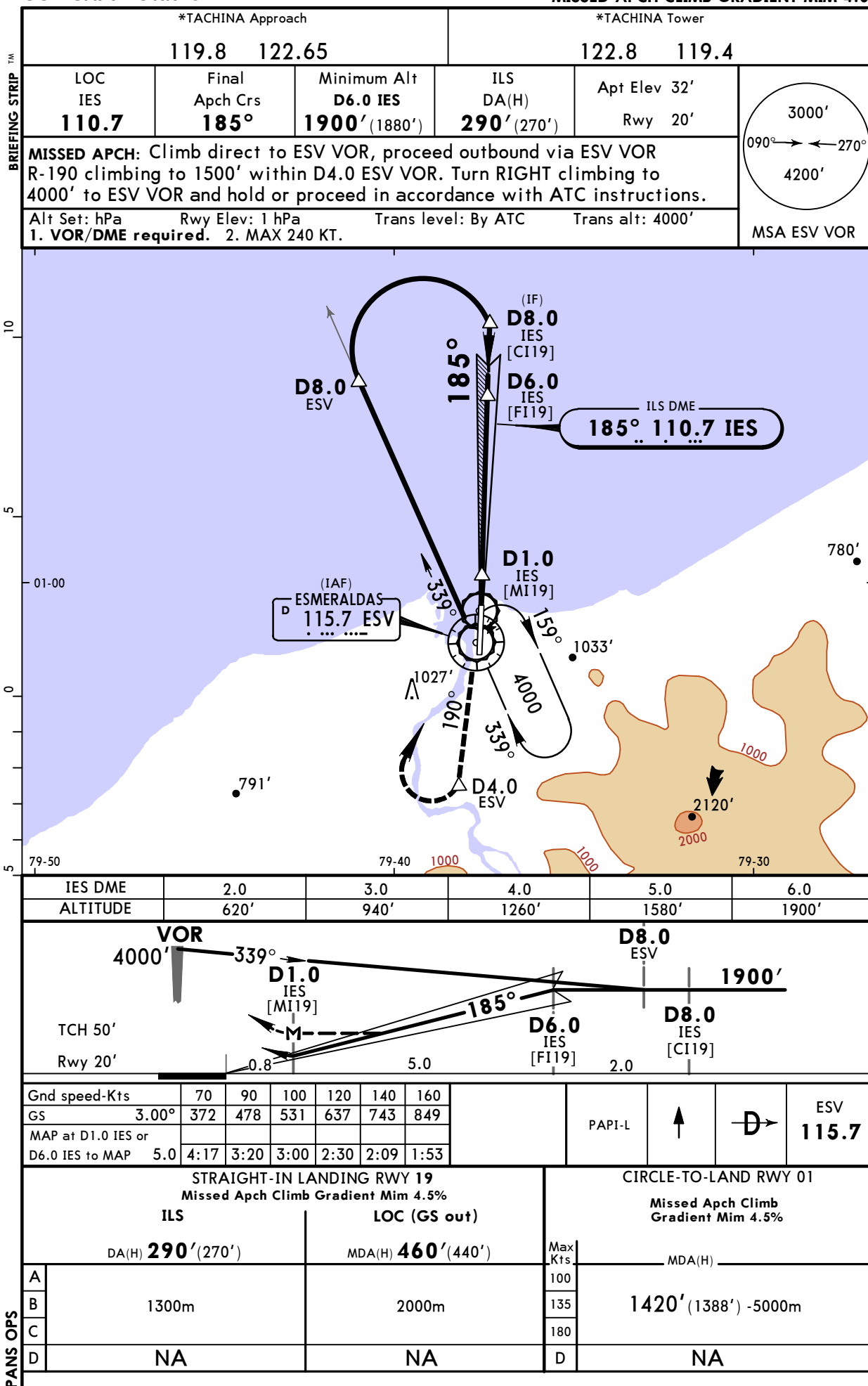
(11-1)

CAT A, B & C

TACHINA, ECUADOR

ILS or LOC Z Rwy 19

MISSED APCH CLIMB GRADIENT MIM 4.5%



SETN/ESM

CORONEL CARLOS
CONCHA TORRES19 MAY 17
Eff 25 May

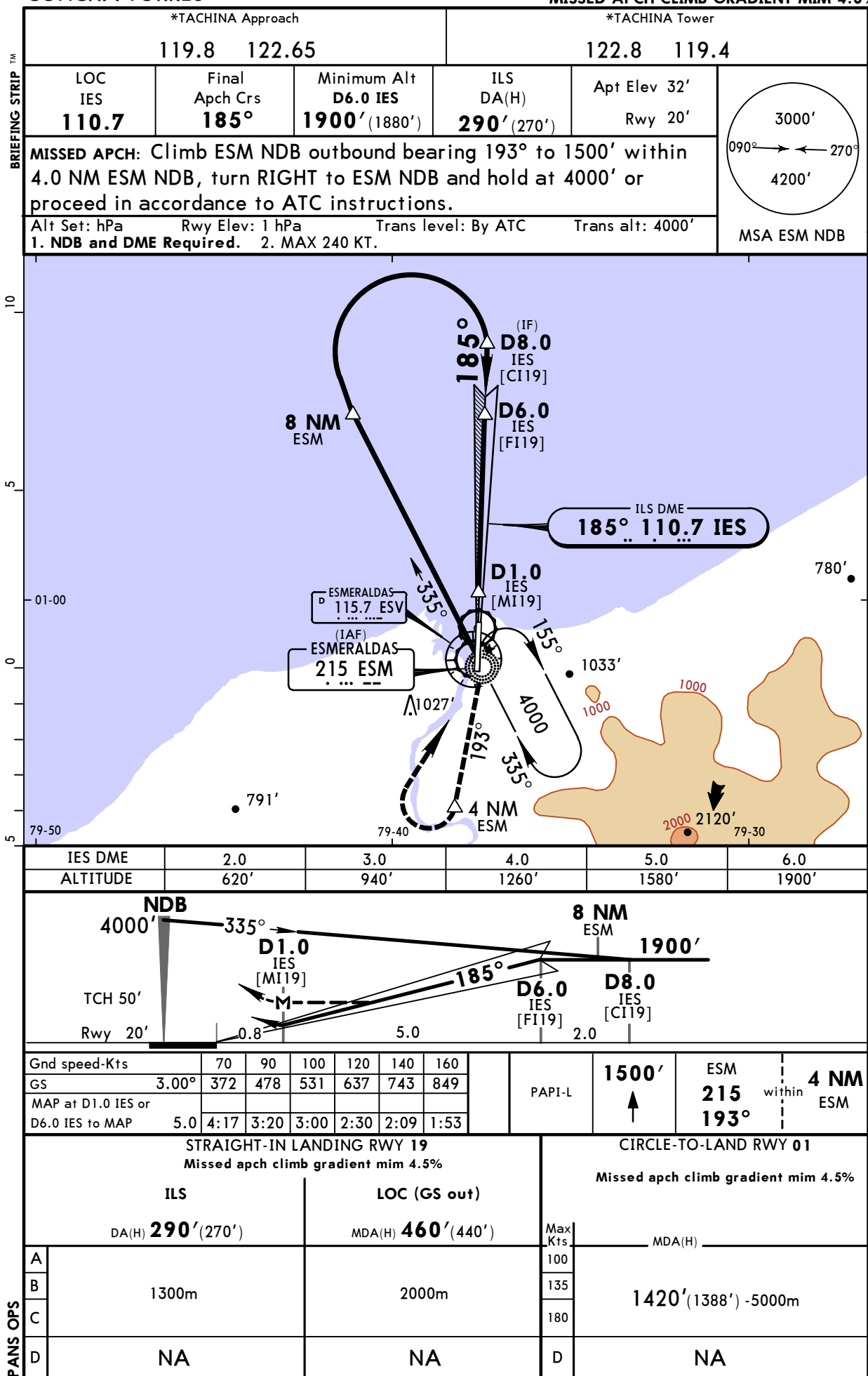
(11-3)

CAT A, B & C

TACHINA, ECUADOR

ILS or LOC X Rwy 19

MISSED APCH CLIMB GRADIENT MIM 4.5%



CHANGES: Rwy elevation.

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CORONEL CARLOS
CONCHA TORRES

19 MAY 17
Eff 25 May

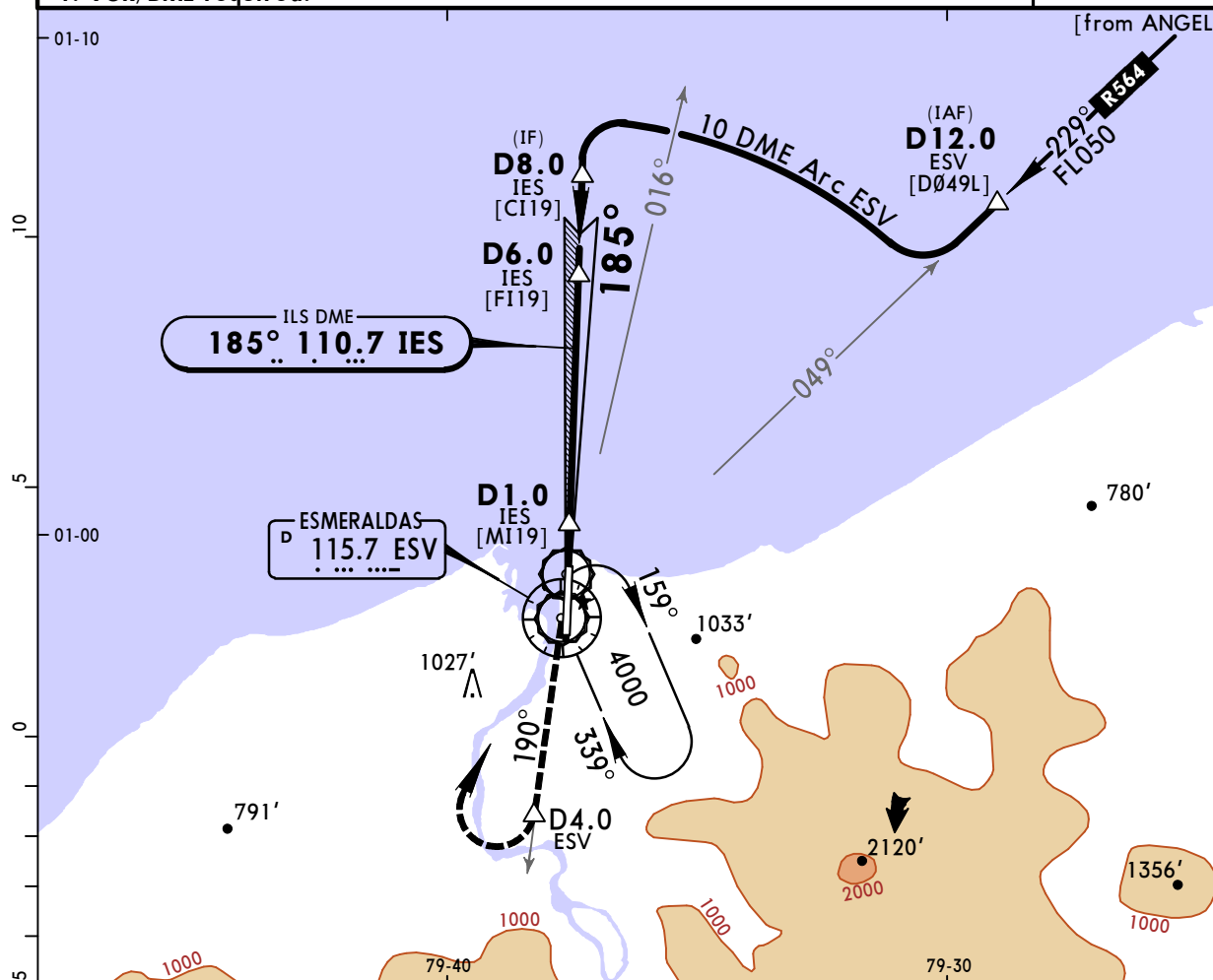
11-4

CAT A, B & C

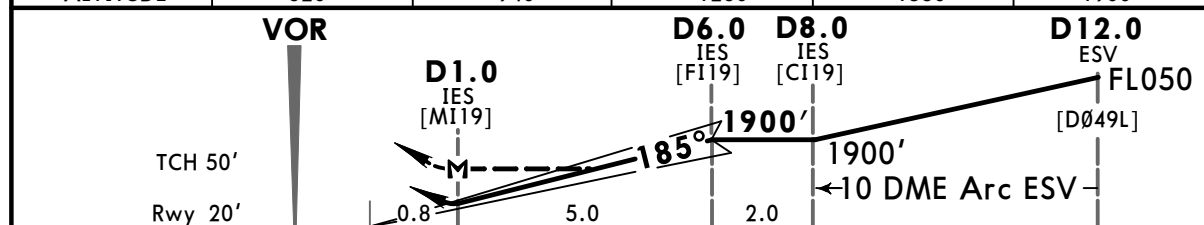
ILS or LOC W Rwy 19



MISSED APCH CLIMB GRADIENT MIN 4.5%

*TACHINA Approach				*TACHINA Tower	
119.8		122.65		122.8 119.4	
LOC IES 110.7	Final Apch Crs 185°	Minimum Alt D6.0 IES 1900' (1880')	ILS DA(H) 290' (270')	Apt Elev 32' Rwy 20'	
MISSED APCH: Climb direct to ESV VOR, proceed outbound via ESV VOR R-190 climbing to 1500' within D4.0 ESV VOR. Turn RIGHT climbing to 4000' to ESV VOR and hold or proceed in accordance with ATC instructions.					
Alt Set: hPa		Rwy Elev: 1 hPa	Trans level: By ATC		
1. VOR/DME required.					MSA ESV VOR



IES DME	2.0	3.0	4.0	5.0	6.0
ALTITUDE	620'	940'	1260'	1580'	1900'



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L			ESV 115.7
GS 3.00°	372	478	531	637	743	849				
MAP at D1.0 IES or										
D6.0 IES to MAP 5.0	4:17	3:20	3:00	2:30	2:09	1:53				

STRAIGHT-IN LANDING RWY 19 Missed apch climb gradient mim 4.5%			CIRCLE-TO-LAND RWY 01 Missed apch climb gradient mim 4.5%	
ILS		LOC (GS out)	Max Kts	
DA(H) 290' (270')		MDA(H) 460' (440')		MDA(H) _____
A			100	1420' (1388') -5000m
B	1300m		135	
C			180	
D	NA	NA	D	NA

CHANGES: Rwy elevation.

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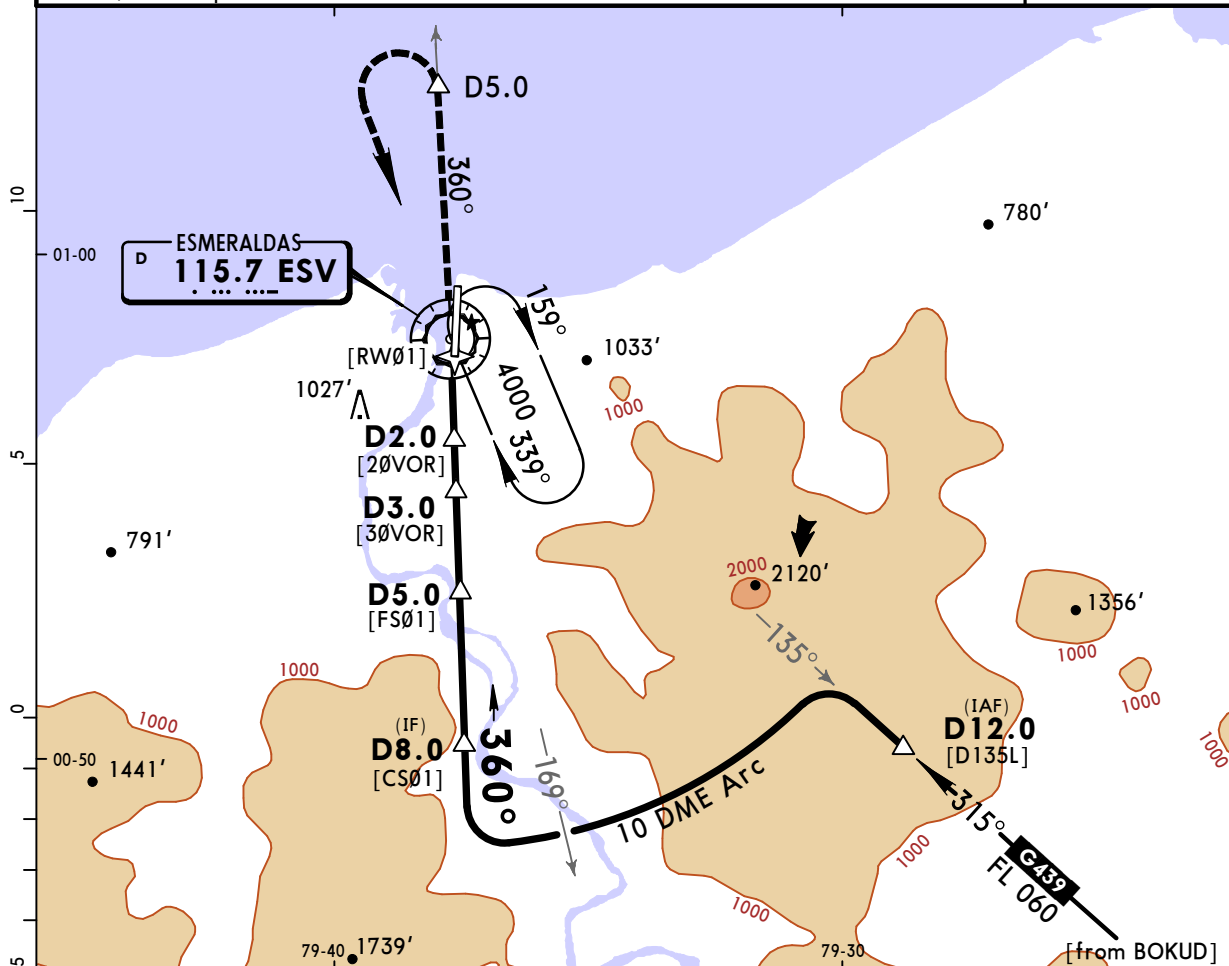
SETN/ESM
CORONEL CARLOS
CONCHA TORRES

JEPPESSEN
17 MAY 19
Eff 23 May (13-1)

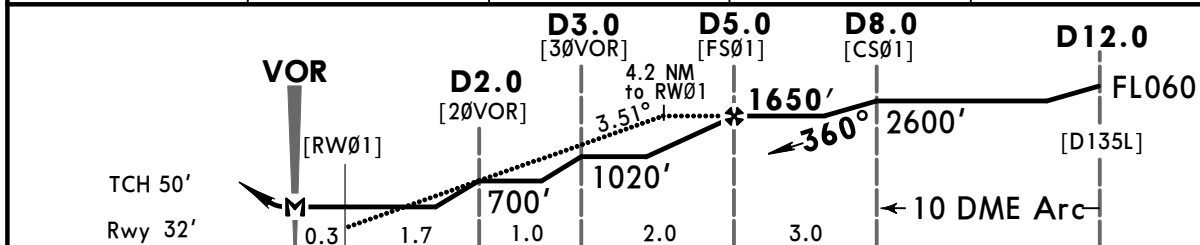
TACHINA, ECUADOR
CAT A, B & C VOR Z Rwy 01
MISSED APCH CLIMB GRADIENT MIN 3.3%

BRIEFING STRIP™

*TACHINA Approach				*TACHINA Tower			
119.8		122.65		122.8		119.4	
VOR ESV 115.7	Final Apch Crs 360°	Minimum Alt D5.0 1650' (1618')	MDA(H) 460' (428')	Apt Elev 32'	Rwy 32'	<div><div>3000</div><div>090° → ← 270°</div><div>4200</div></div>	
MISSED APCH: Climb outbound on ESV VOR R-360 to 1500' within D5.0, turn LEFT climbing to 4000' to ESV VOR and hold, or proceed in accordance with ATC instructions.							MSA ESV VOR
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: By ATC		Trans alt: 4000'	
1. VOR/DME required.							



DME	5.0	4.0	3.0	2.0
ALTITUDE	1650	1330'	1020'	700'



Gnd speed-Kts	70	90	100	120	140	160		
Descent Angle	3.51°	435	559	621	745	870	994	
MAP at VOR								
D5.0 to MAP	5.0	4:17	3:20	3:00	2:30	2:09	1:53	

STRAIGHT-IN LANDING RWY01				CIRCLE-TO-LAND RWY19			
Missed apch climb gradient min 3.3%				Missed apch climb gradient min 3.3%			
MDA(H) 460' (428')				Max Kts			
				MDA(H)			
A				100			
B				135			
C				180			
D				D			
NA				NA			

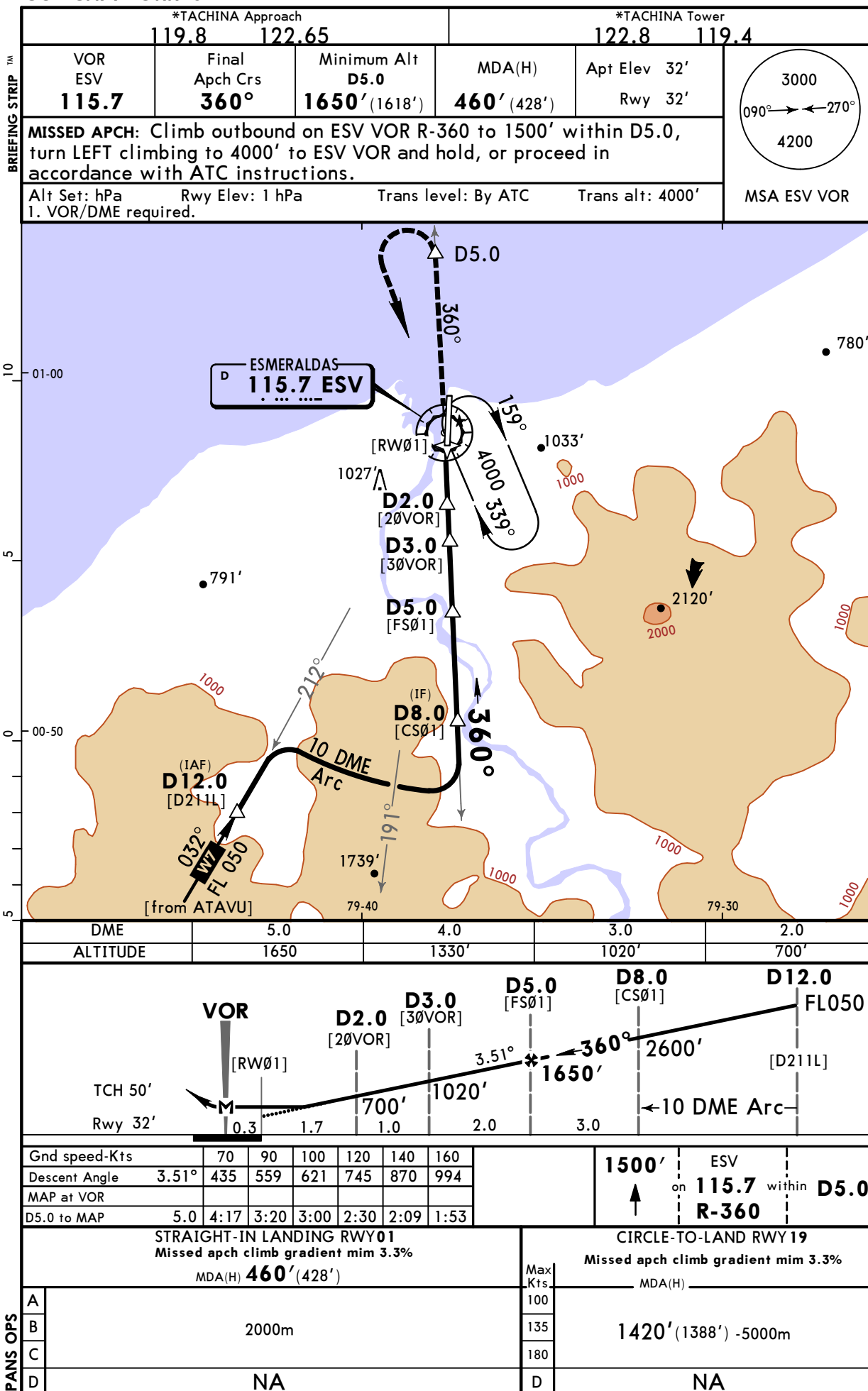
CHANGES: None.

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SETN/ESM
CORONEL CARLOS
CONCHA TORRES

JEPPESSEN
17 MAY 19
Eff 23 May (13-2)

TACHINA, ECUADOR
CAT A, B & C VOR Y Rwy 01
MISSED APCH CLIMB GRADIENT MIM 3.3%



CHANGES: Transition bearing from ATAVU.

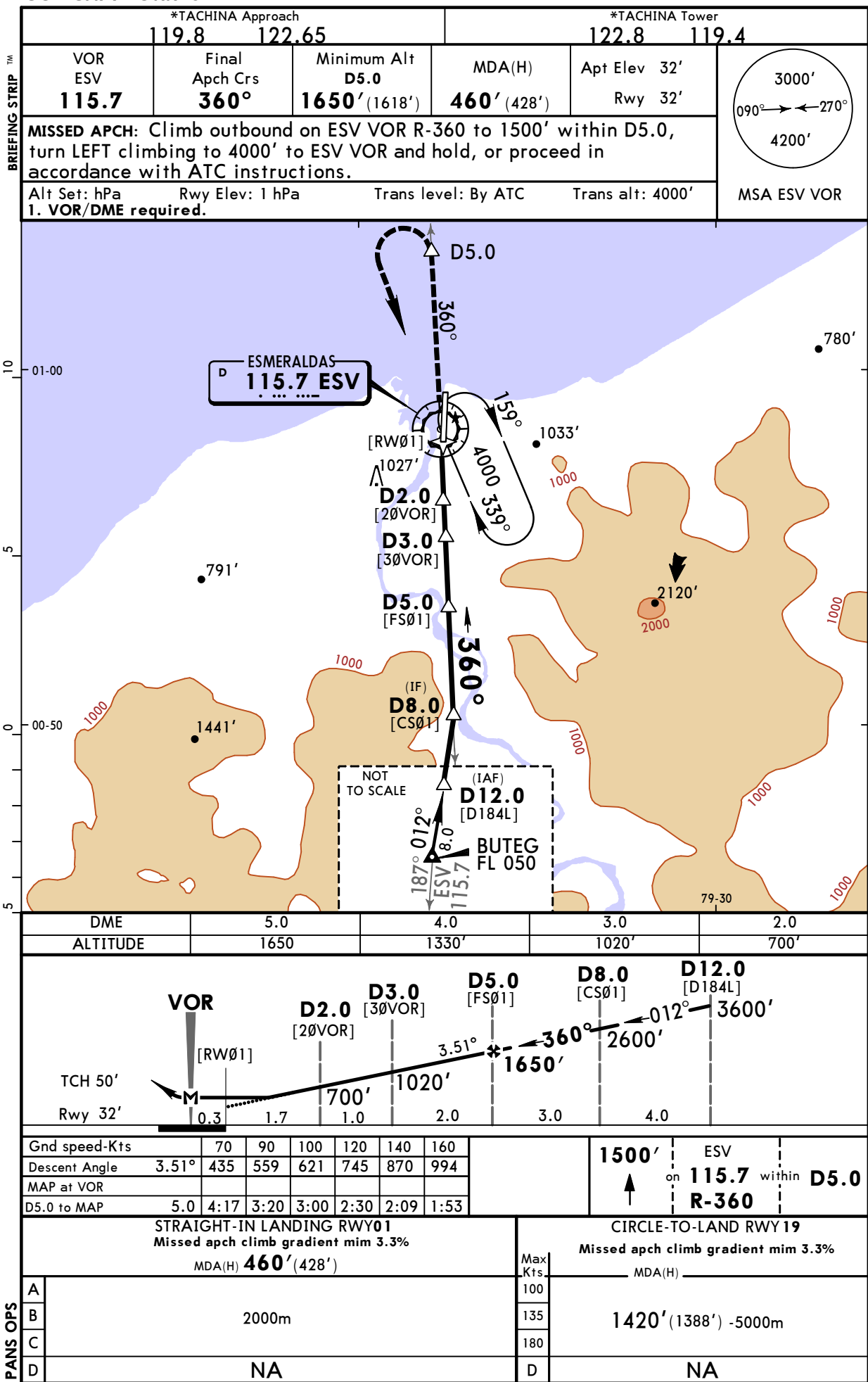
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SETN/ESM
CORONEL CARLOS
CONCHA TORRES

JEPPESSEN
19 MAY 17
Eff 25 May 13-3

TACHINA, ECUADOR

CAT A, B & C VOR X Rwy 01
MISSED APCH CLIMB GRADIENT MIM 3.3%



SETN/ESM

JEPPESSEN

TACHINA, ECUADOR

CORONEL CARLOS
CONCHA TORRES19 MAY 17
Eff 25 May (13-4)

CAT A, B & C

VOR Z Rwy 19
MISSED APCH CLIMB GRADIENT MIM 4.5%

CHANGES: Communications, rwy elevation.

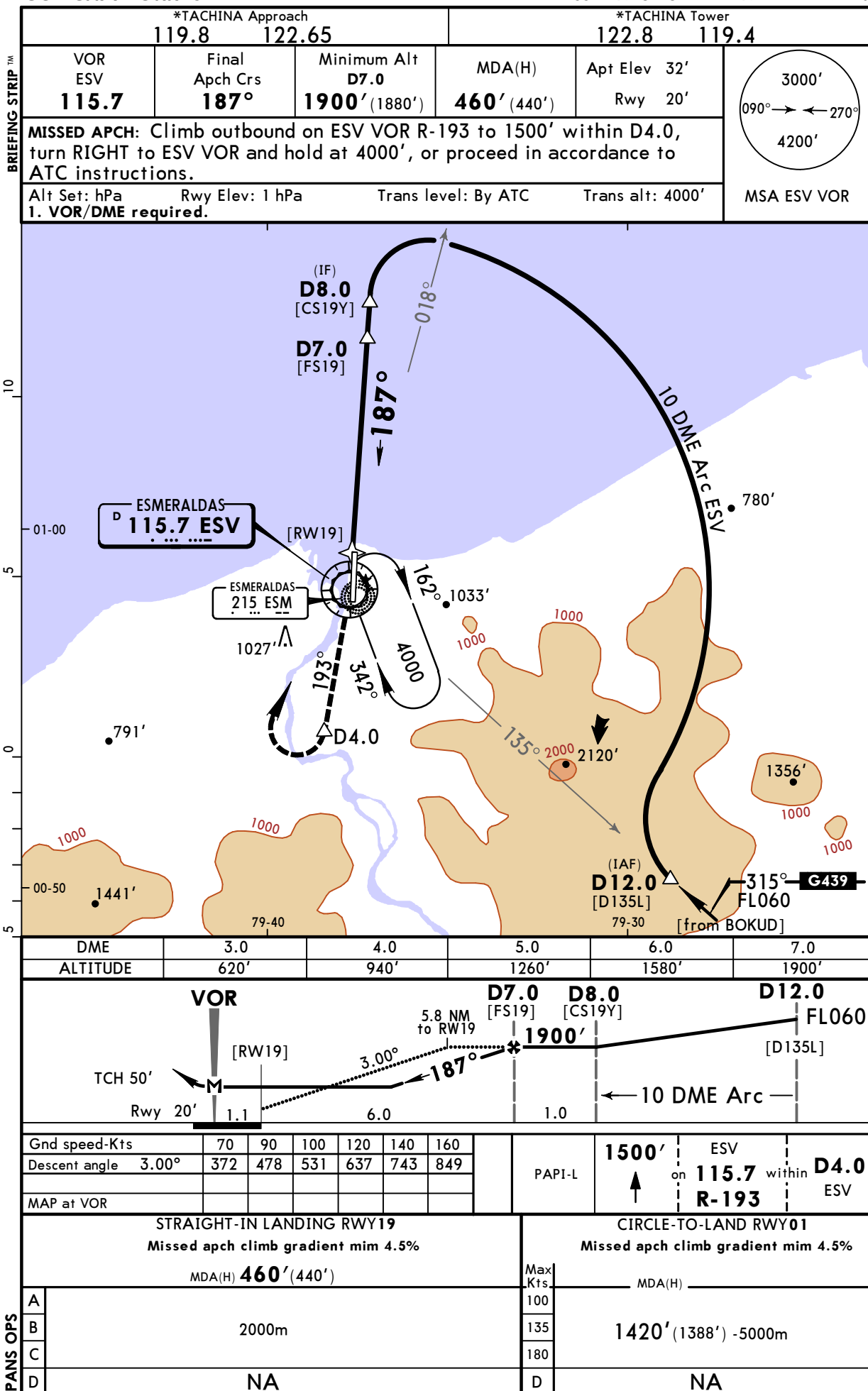
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SETN/ESM
CORONEL CARLOS
CONCHA TORRES

JEPPESSEN
19 MAY 17
Eff 25 May 13-5

TACHINA, ECUADOR

CAT A, B & C VOR Y Rwy 19
MISSED APCH CLIMB GRADIENT MIM 4.5%



SETN/ESM

CORONEL CARLOS
CONCHA TORRES

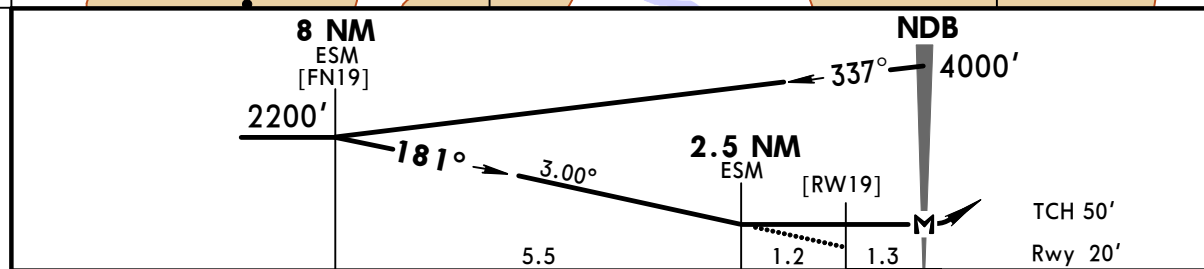
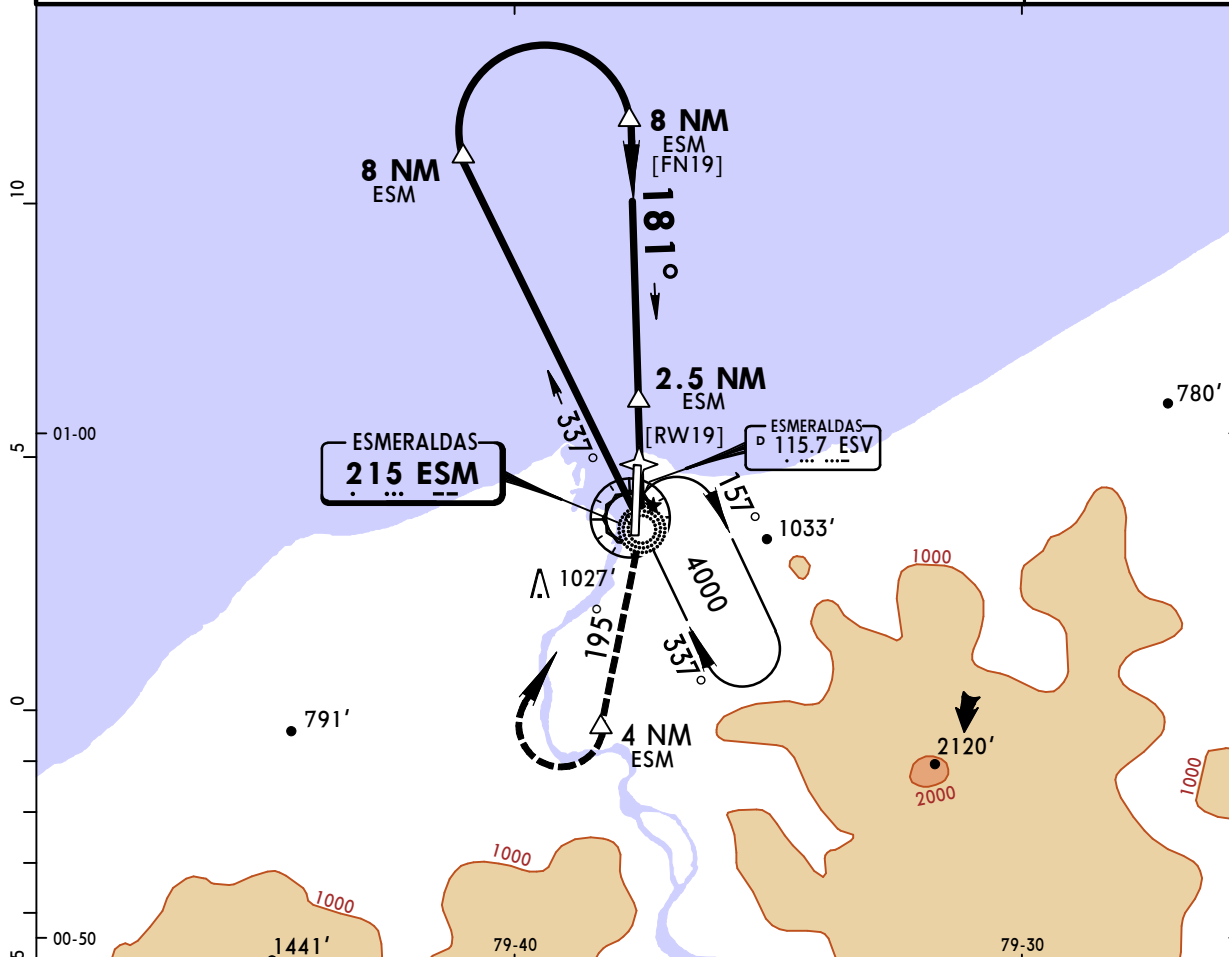
JEPPESSEN
19 MAY 17
Eff 25 May (16-1)

TACHINA, ECUADOR

CAT A, B & C NDB Rwy 19
MISSED APCH CLIMB GRADIENT MIM 4.5%

BRIEFING STRIP™

*TACHINA Approach				*TACHINA Tower	
119.8		122.65		122.8 119.4	
NDB ESM 215	Final Apch Crs 181°	No FAF	MDA(H) 460' (440')	Apt Elev 32' Rwy 20'	<div><div>3000'</div><div>090° → ← 270°</div><div>4200'</div></div> <div>MSA ESM NDB</div>
MISSED APCH: Climb on ESM NDB bearing 195° to 1500' within 4.0 NM ESM NDB, turn RIGHT to ESM NDB and hold at 4000', or proceed in accordance to ATC instructions.					
Alt Set: hPa 1. MAX 240 KT.	Rwy Elev: 1 hPa	Trans level: By ATC	Trans alt: 4000'		



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

STRAIGHT-IN LANDING RWY19 Missed apch climb gradient mim 4.5%					CIRCLE-TO-LAND RWY01				
MDA(H) 460' (440')					Max Kts				
2000m					MDA(H)				
NA					1420' (1388') -5000m				
NA					NA				

CHANGES: Communications, rwy elevation.

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