

MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 10-2

KINGSTON,
JAMAICA
STAR

ATIS
127.7

Apt Elev
18'

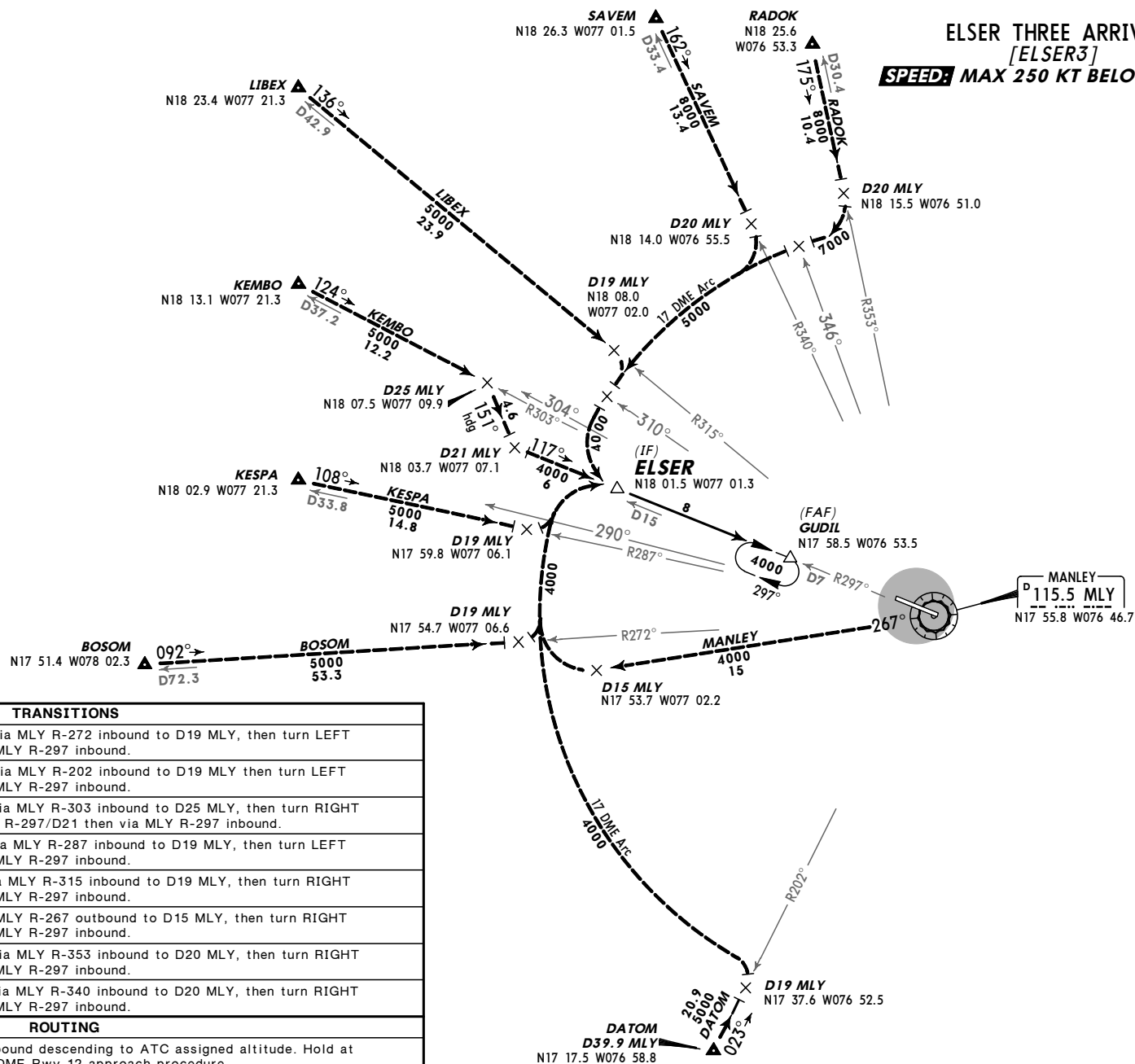
Alt Set: hPa (IN on req) Trans level: FL180 Trans alt: 17000'

VOR/DME required.

ELSER THREE ARRIVAL

[ELSER3]

SPEED: MAX 250 KT BELOW 10000'



MKJP/KIN
NORMAN MANLEY INTL

JEPPesen
5 DEC 14 10-2A

KINGSTON,
JAMAICA
STAR

ATIS
127.7

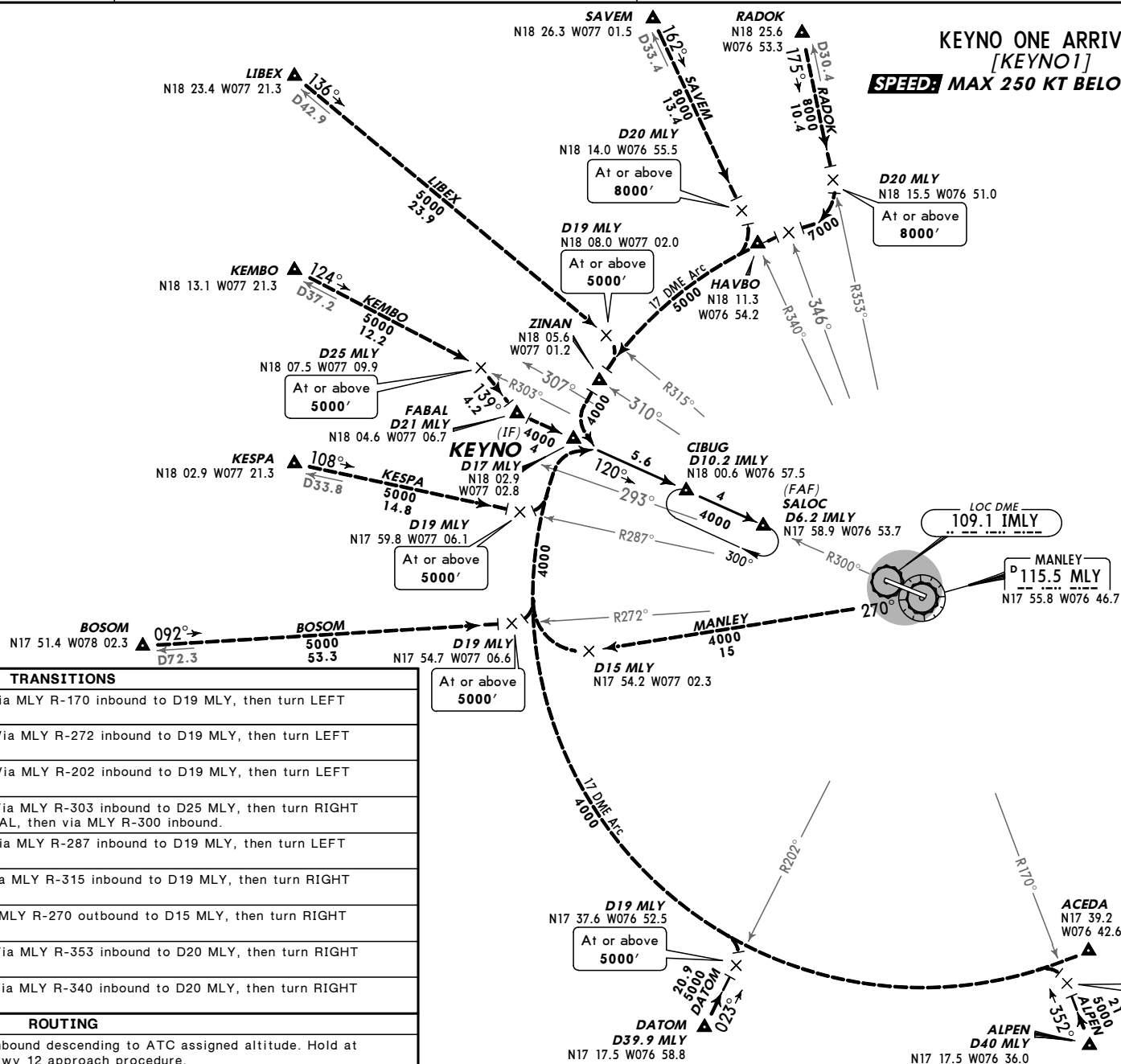
Apt Elev
18'

Alt Set: hPa (IN on req) Trans level: FL180 Trans alt: 17000'

1. VOR/DME required.
2. DME Arcs are based on MLY.

KEYNO ONE ARRIVAL
[KEYNO1]

SPEED: MAX 250 KT BELOW 10000'



TRANSITIONS

ALPEN	From ALPEN to KEYNO: Via MLY R-170 inbound to D19 MLY, then turn LEFT via MLY 17 DME Arc.
BOSOM	From BOSOM to KEYNO: Via MLY R-272 inbound to D19 MLY, then turn LEFT via MLY 17 DME Arc.
DATOM	From DATOM to KEYNO: Via MLY R-202 inbound to D19 MLY, then turn LEFT via MLY 17 DME Arc.
KEMBO	From KEMBO to KEYNO: Via MLY R-303 inbound to D25 MLY, then turn RIGHT via a 139° heading to FABAL, then via MLY R-300 inbound.
KESPA	From KESPA to KEYNO: Via MLY R-287 inbound to D19 MLY, then turn LEFT via MLY 17 DME Arc.
LIBEX	From LIBEX to KEYNO: Via MLY R-315 inbound to D19 MLY, then turn RIGHT via MLY 17 DME Arc.
MANLEY	From MLY to KEYNO: Via MLY R-270 outbound to D15 MLY, then turn RIGHT via MLY 17 DME Arc.
RADOK	From RADOK to KEYNO: Via MLY R-353 inbound to D20 MLY, then turn RIGHT via MLY 17 DME Arc.
SAVEM	From SAVEM to KEYNO: Via MLY R-340 inbound to D20 MLY, then turn RIGHT via MLY 17 DME Arc.

ROUTING

From KEYNO to SALOC via MLY R-300 inbound descending to ATC assigned altitude. Hold at SALOC unless/until cleared for the ILS Rwy 12 approach procedure.

MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 **(10-3)**

KINGSTON, JAMAICA
SID

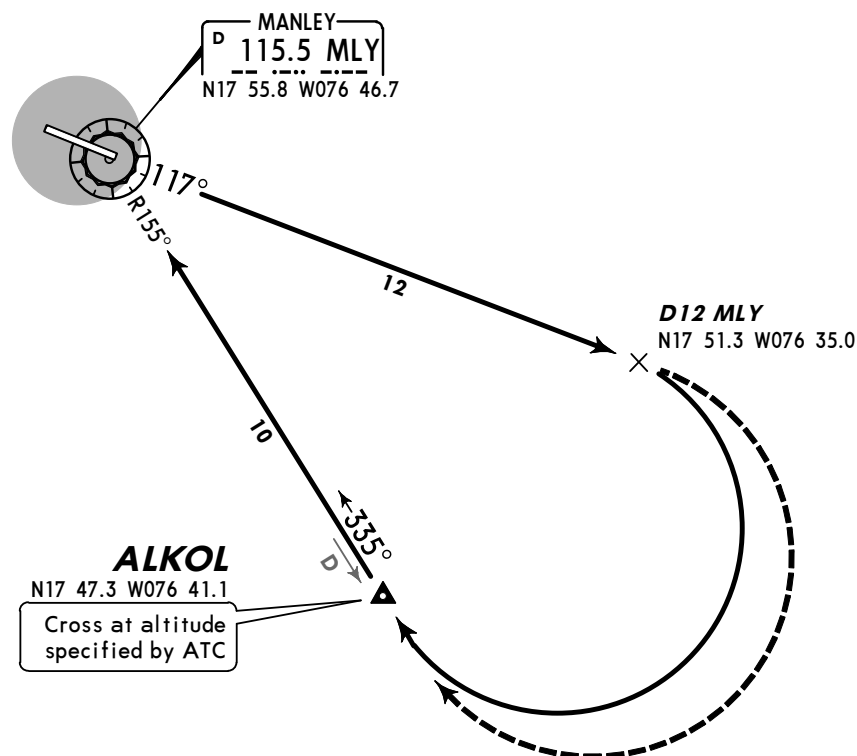
Apt Elev
18'

Trans level: FL180 Trans alt: 17000'
1. VOR/DME required.
2. WESTBOUND departure.

ALKOL THREE DEPARTURE
[ALKOL3]

(RWY 12)

~~SPEED~~ MAX 250 KT BELOW 10000'



INITIAL CLIMB

Climb on MLY R-117 to or beyond D12 MLY. Then turn RIGHT to intercept and proceed via MLY R-155 inbound climbing to cross ALKOL at an altitude specified by ATC.

MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 **(10-3A)**

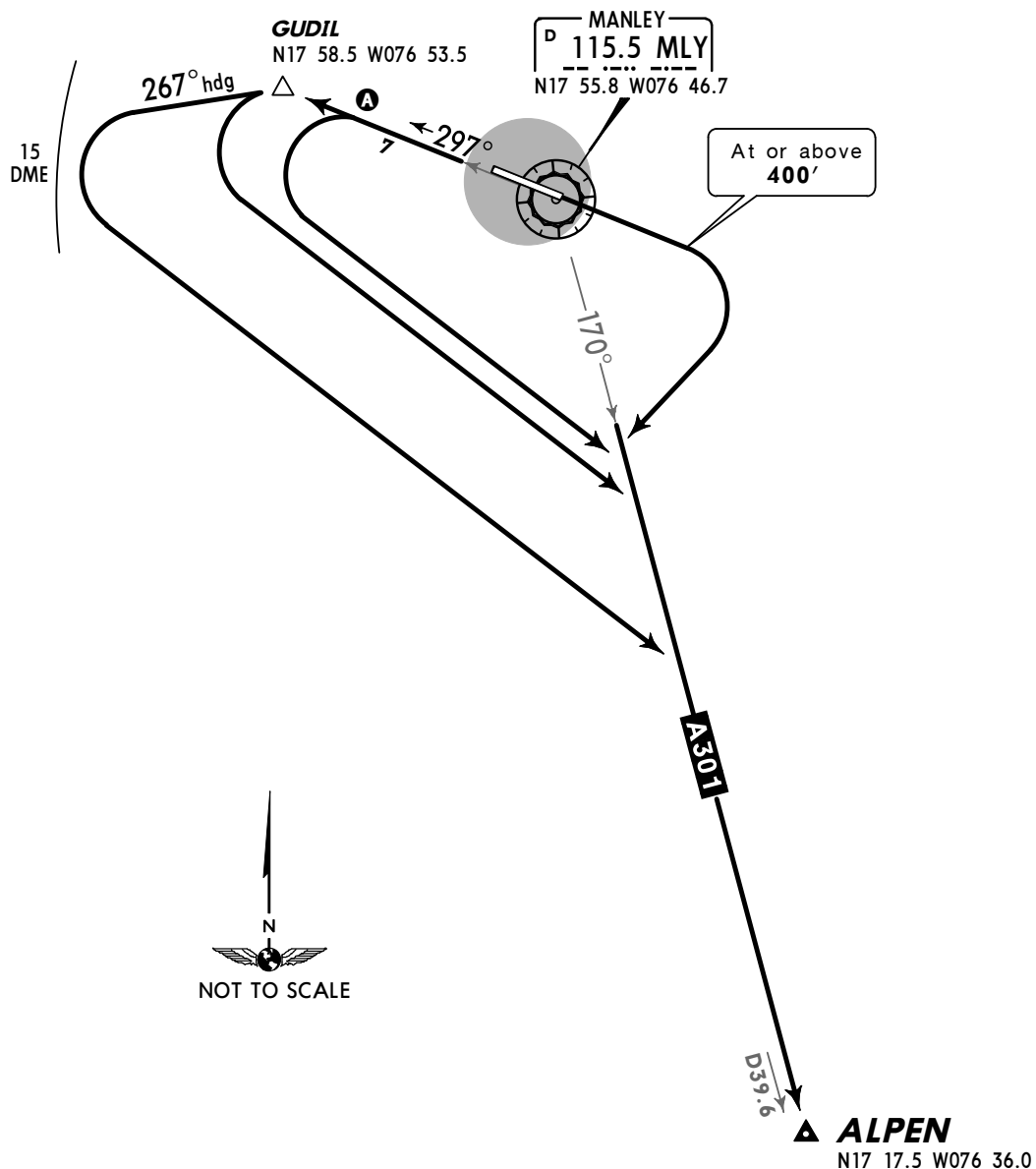
KINGSTON, JAMAICA
SID

Apt Elev
18'

Trans level: FL180 Trans alt: 17000'
1. VOR/DME required.
2. SOUTHBOUND departure via ATS route A-301.

ALPEN ONE DEPARTURE
[ALPEN1]

SPEED: MAX 250 KT BELOW 10000'



RWY	INITIAL CLIMB
12	Climb on runway heading to at or above 400', then turn RIGHT.
30	A Climb on MLY R-297 to cross 2000' at or prior to GUDIL. Then turn LEFT. (If unable to cross GUDIL at 2000', use maximum rate of climb direct to GUDIL, then turn LEFT via 267° heading climbing to 2000' within MLY 15 DME).
ROUTING	
Intercept and proceed via MLY R-170 to ALPEN.	

MKJP/KIN
NORMAN MANLEY INTL

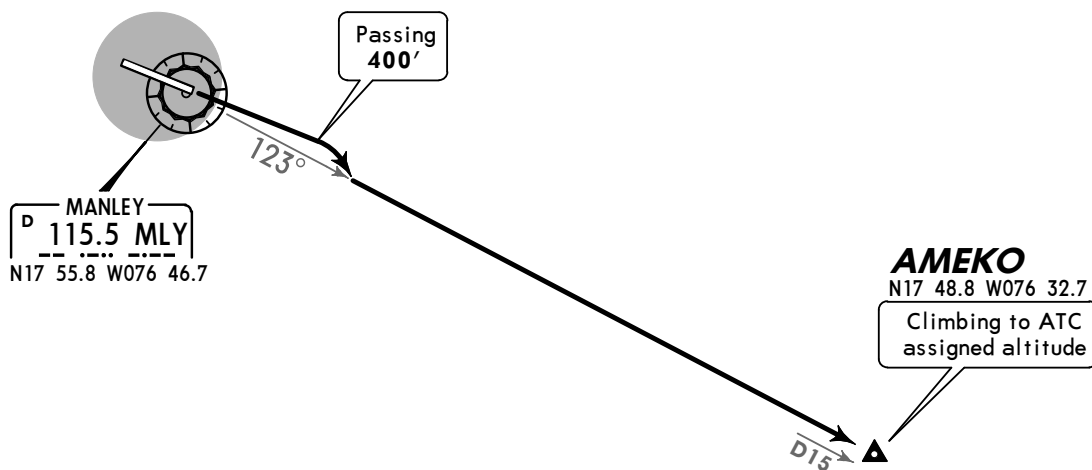
JEPPESEN
5 DEC 14 **(10-3B)**

KINGSTON, JAMAICA
SID

Apt Elev
18'

Trans level: FL180 Trans alt: 17000'
All routes from MLY.

AMEKO ONE DEPARTURE (VECTOR)
[AMEKO1]
(RWY 12)



LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

LOST COMMS ▼

On recognition of communication failure 7 minutes or less after take-off and in instrument meteorological conditions, proceed as follows:

1. Squawk 7600; and
2. MAINTAIN last assigned altitude and heading for 7 minutes after recognition of communication failure; then
3. Climb to 10000' maintaining last assigned heading; then
4. Proceed direct to nearest Fix associated with filed flight plan route continuing climb to flight plan cruising level.

If in visual meteorological conditions, continue to fly in VMC and land at the nearest suitable aerodrome.

If communication failure occurs more than 7 minutes after take-off, comply with the appropriate procedures for communication failure and proceed according to the current flight plan route to destination airport, unless it is considered inadvisable.

LOST COMMS ▼

INITIAL CLIMB

MAINTAIN runway heading until passing 400', then turn **RIGHT** and proceed on track 123° to AMEKO climbing to altitude assigned by ATC. ATC will provide RADAR vectors to intercept filed/assigned ATS routes, before reaching AMEKO.

MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 **(10-3C)**

KINGSTON, JAMAICA
SID

Apt Elev
18'

Trans level: FL180 Trans alt: 17000'

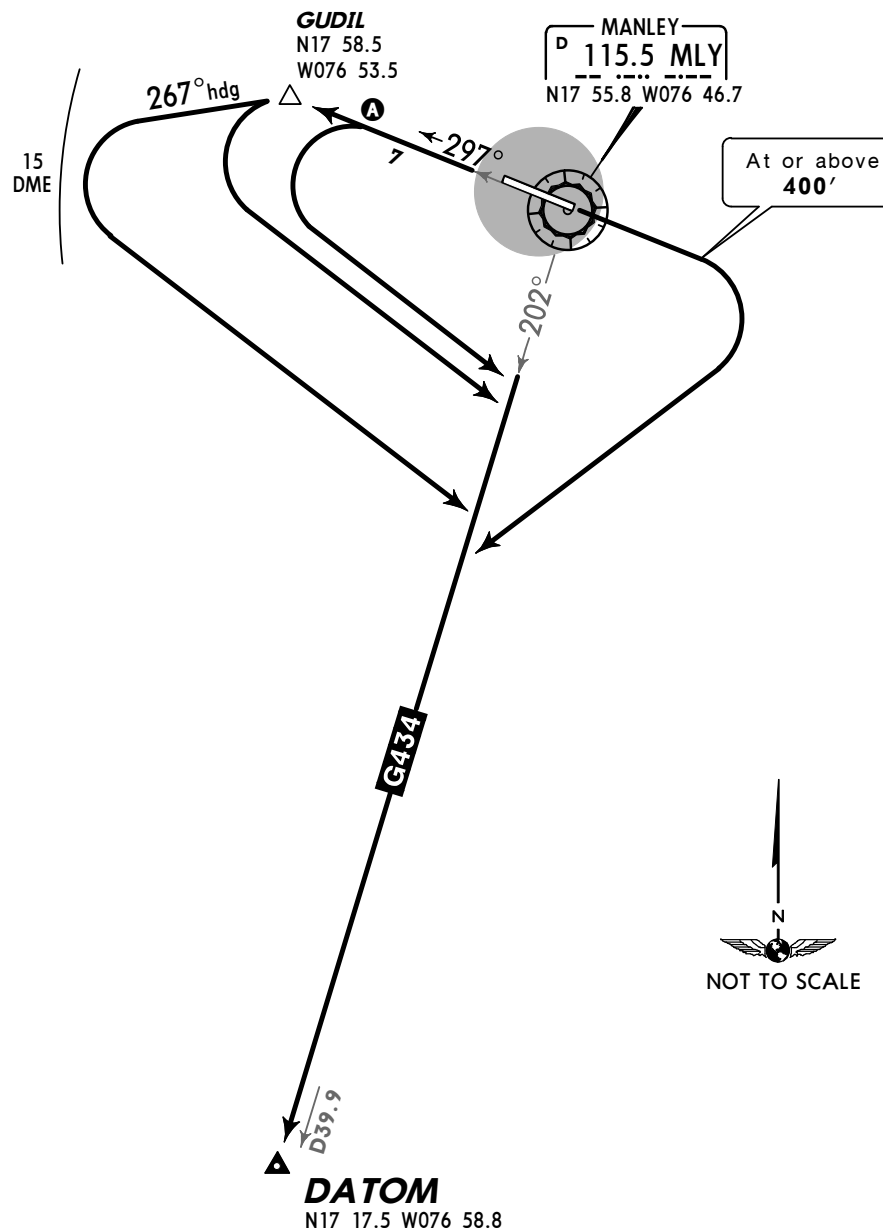
1. VOR/DME required.

2. EASTBOUND departure via ATS route G-434.

DATOM ONE DEPARTURE

[DATOM1]

~~SPEED:~~ MAX 250 KT BELOW 10000'

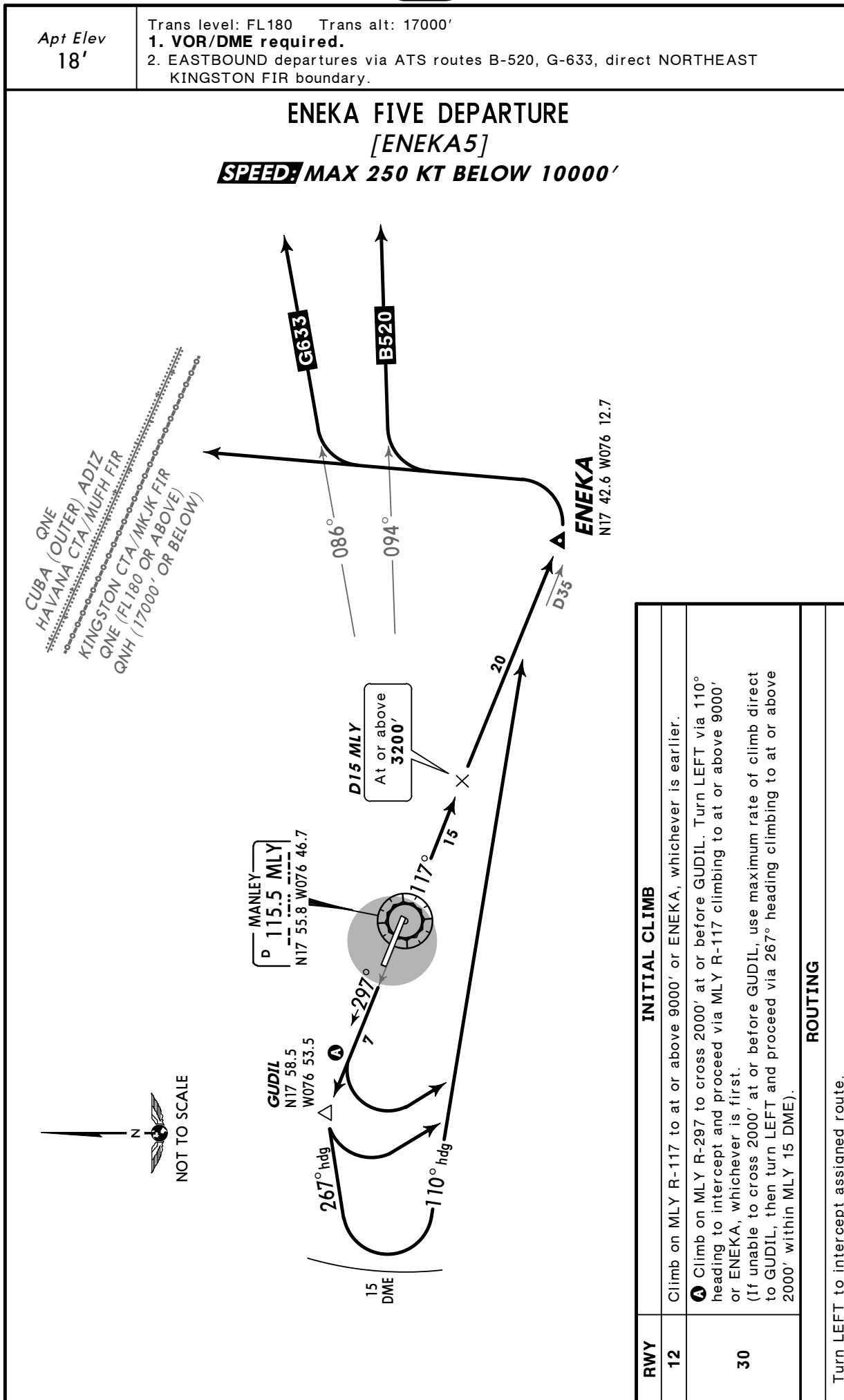


RWY	INITIAL CLIMB
12	Climb on runway heading to at or above 400', then turn RIGHT.
30	A Climb on MLY R-297 to cross 2000' at or prior to GUDIL. Then turn LEFT. (If unable to cross GUDIL at 2000', use maximum rate of climb direct to GUDIL, then turn LEFT via 267° heading climbing to 2000' within MLY 15 DME).
ROUTING	
Intercept and proceed via MLY R-202 to DATOM.	

MKJP/KIN
NORMAN MANLEY INTL

JEPPesen
 5 DEC 14 **10-3D**

KINGSTON, JAMAICA
SID



MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 **(10-3E)**

KINGSTON, JAMAICA

SID

Apt Elev
18'

Trans level: FL180 Trans alt: 17000'

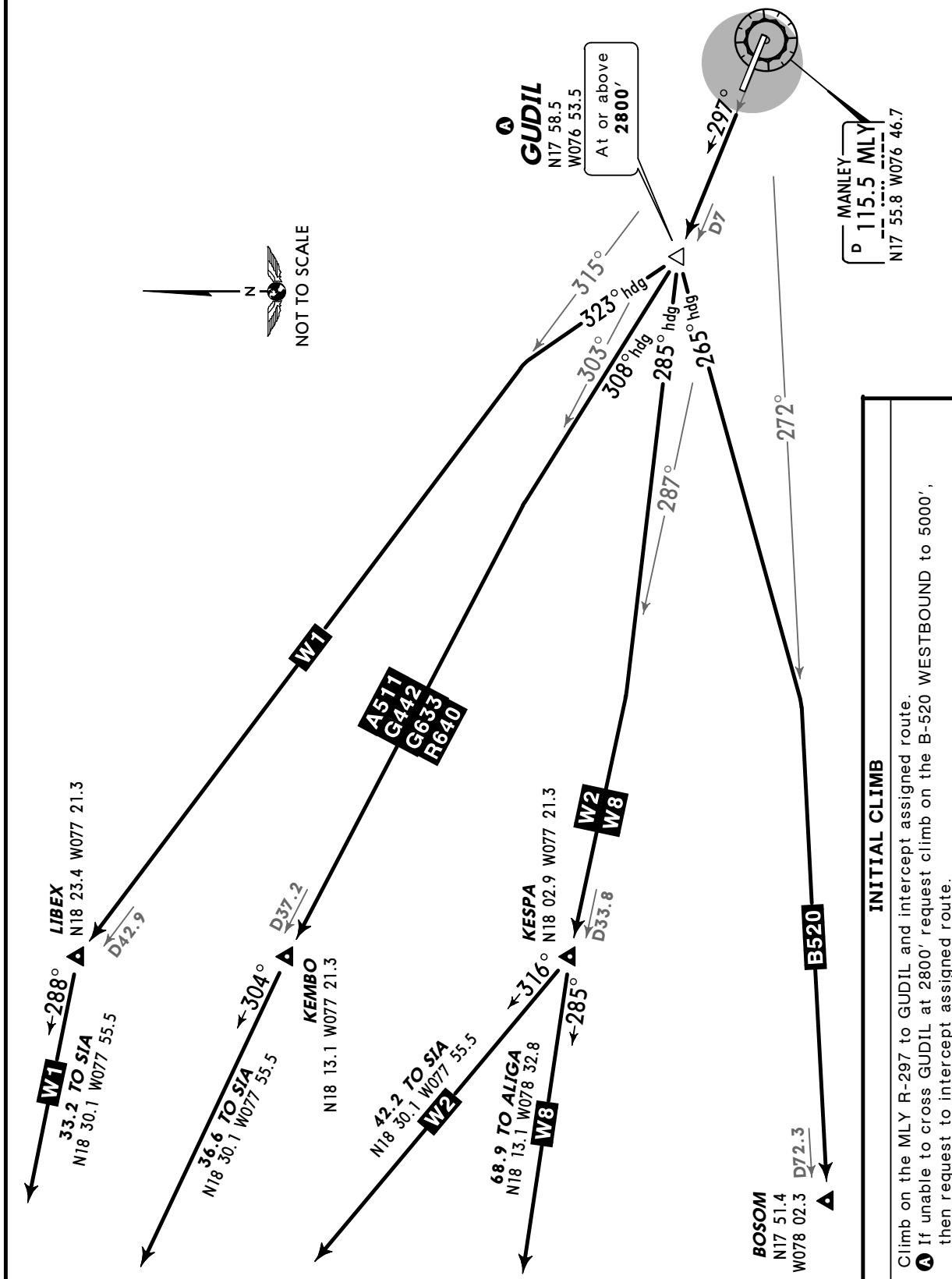
1. VOR/DME required.

2. WESTBOUND departures from runway 30 via ATS route A-511, B-520, G-442, G-633, R-640, W-1, W-2, W-8.

GUDIL THREE DEPARTURE
[GUDIL3]

(RWY 30)

~~SPEED~~ MAX 250 KT BELOW 10000'



MKJP/KIN
NORMAN MANLEY INTL

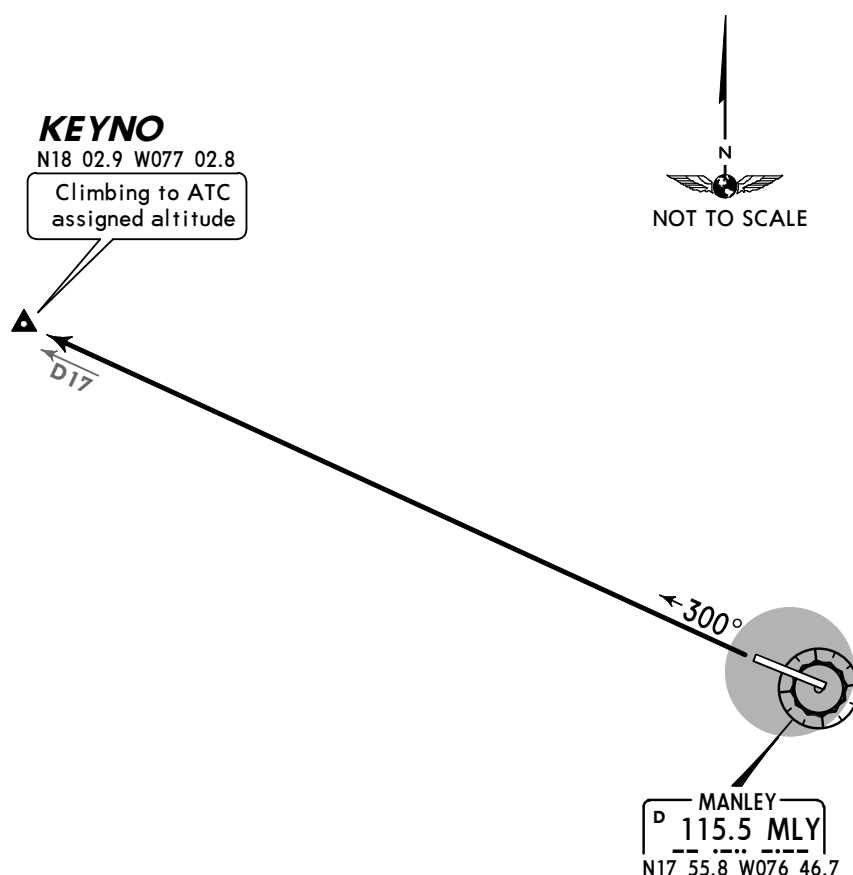
JEPPESEN
5 DEC 14 **(10-3F)**

KINGSTON, JAMAICA
SID

Apt Elev
18'

Trans level: FL180 Trans alt: 17000'
All routes from MLY.

KEYNO ONE DEPARTURE (VECTOR)
[KEYNO1]
(RWY 30)



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LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

On recognition of communication failure 7 minutes or less after take-off and in instrument meteorological conditions, proceed as follows:

1. Squawk 7600; and
2. MAINTAIN last assigned altitude and heading for 7 minutes after recognition of communication failure; then
3. Climb to 10000' maintaining last assigned heading; then
4. Proceed direct to nearest Fix associated with filed flight plan route continuing climb to flight plan cruising level.

If in visual meteorological conditions, continue to fly in VMC and land at the nearest suitable aerodrome.

If communication failure occurs more than 7 minutes after take-off, comply with the appropriate procedures for communication failure and proceed according to the current flight plan route to destination airport, unless it is considered inadvisable.

INITIAL CLIMB

Proceed on track 300° to KEYNO (MLY R-300/D17), climbing to altitude assigned by ATC. ATC will provide RADAR vectors to intercept filed/assigned ATS routes, before reaching KEYNO.

MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 10-3G

KINGSTON, JAMAICA
RNAV SID

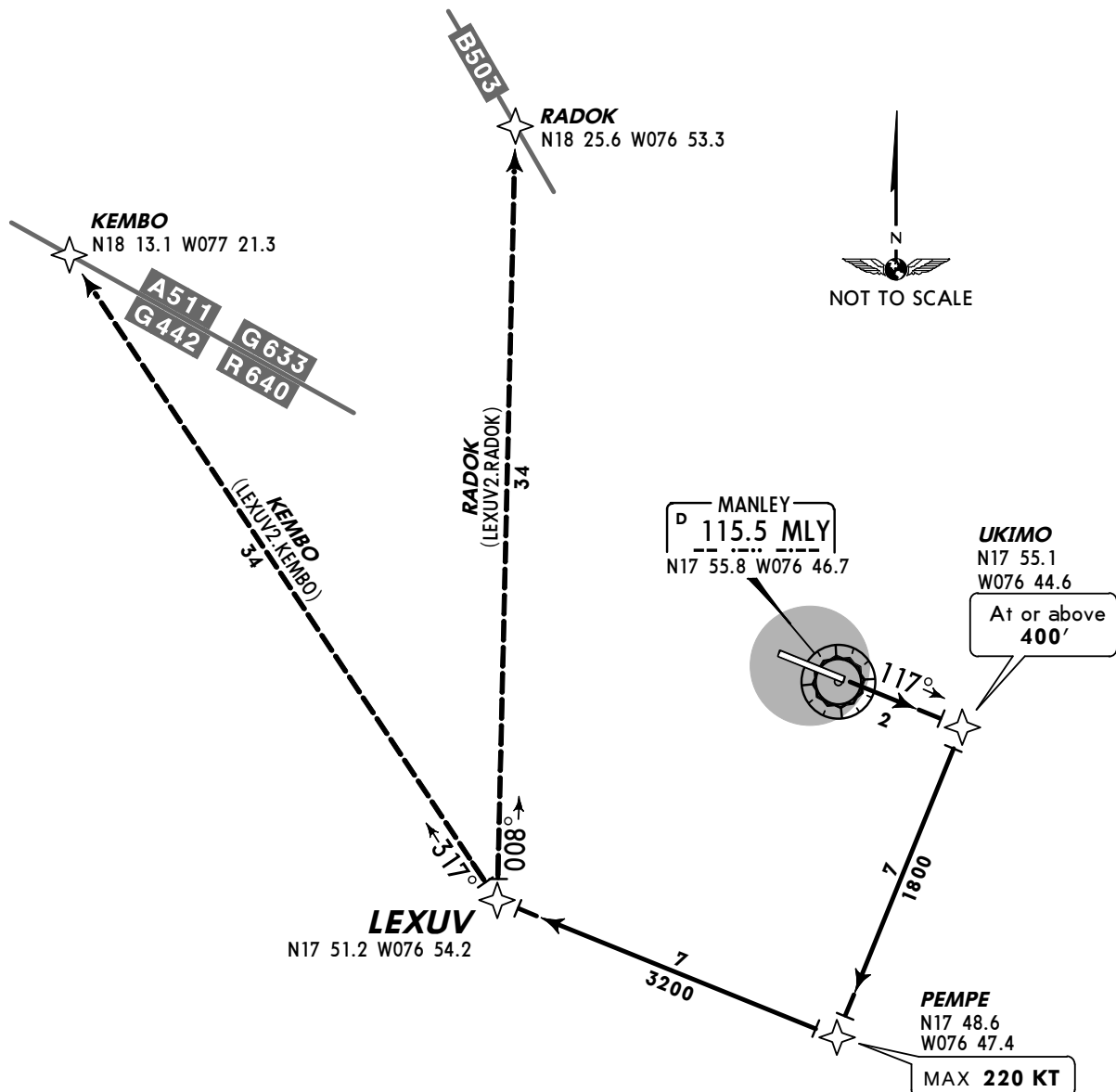
<i>Apt Elev</i> 18'	Trans level: FL180 Trans alt: 17000' 1. GPS required.
	2. For use by /E, /F, /R (RNP 2.0), and /G equipped aircraft. Use 1 NM Course Deviation Indicator (CDI) sensitivity.

LEXUV TWO RNAV DEPARTURE (LEXUV2.LEXUV)

[LEXUV2]

(RWY 12)

SPEED: MAX 220 KT UNTIL PEMPE



This SID requires take-off minimums
(for standard minimums, refer to airport chart):
Standard.

INITIAL CLIMB

Proceed via 117° course to UKIMO, then turn RIGHT direct PEMPE, then turn RIGHT direct LEXUV. Climb to assigned altitude.

TRANSITIONS

KEMBO	Turn RIGHT direct KEMBO, then as filed.
RADOK	Turn RIGHT direct RADOK, then as filed.

MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 **(10-3H)**

KINGSTON, JAMAICA

SID

Apt Elev
18'

Trans level: FL180 Trans alt: 17000'

1. VOR/DME required.

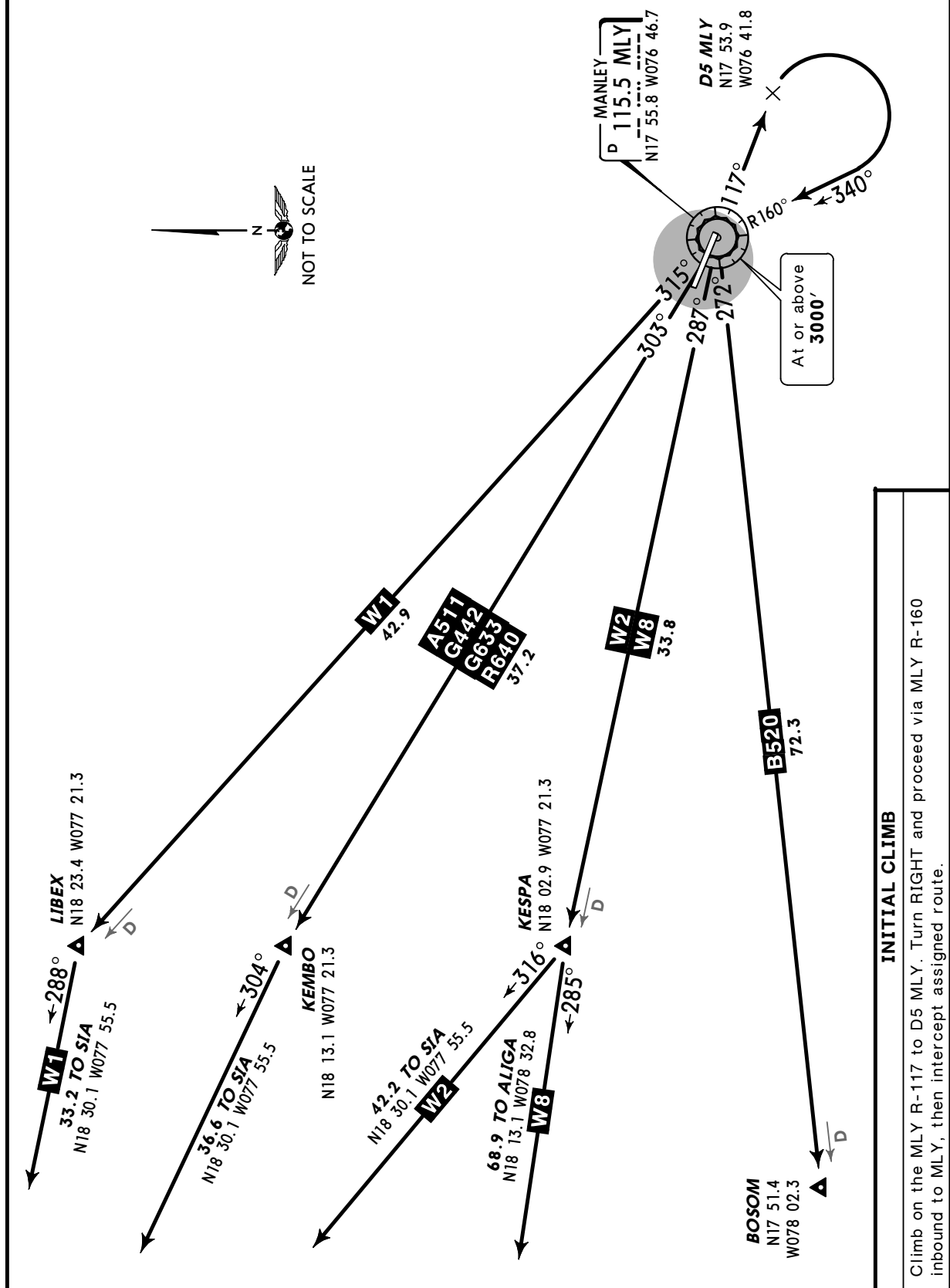
2. WESTBOUND departures from runway 12 via ATS route A-511, B-520, G-442, G-633, R-640, W-1, W-2, W-8.

MANLEY FIVE DEPARTURE

[MLY5]

(RWY 12)

SPEED: MAX 250 KT BELOW 10000'



MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
 5 DEC 14 **(10-3J)**

KINGSTON, JAMAICA
SID

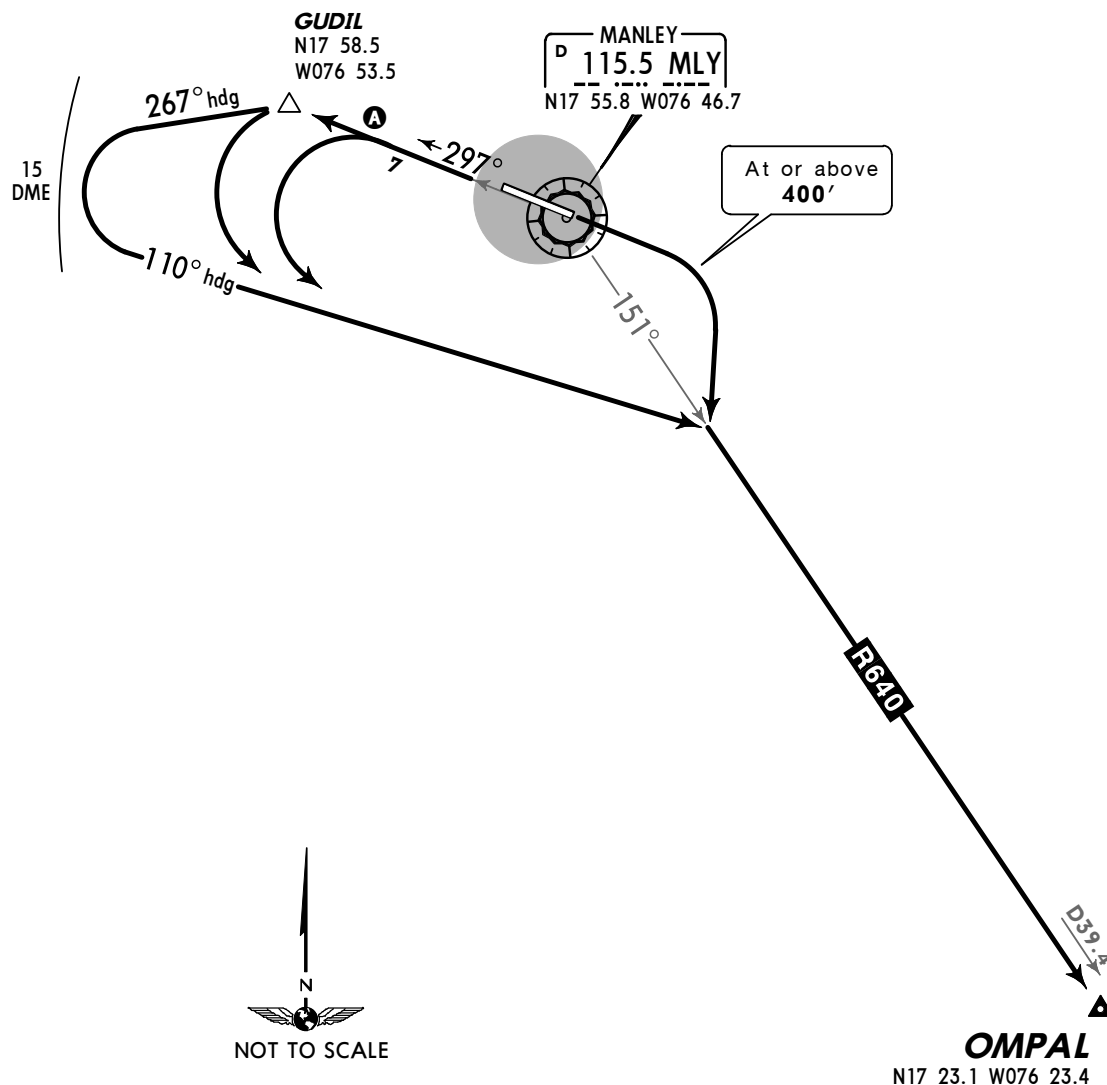
Apt Elev
 18'

Trans level: FL180 Trans alt: 17000'
1. VOR/DME required.
 2. SOUTHEASTBOUND departure via ATS route R-640.

OMPAL ONE DEPARTURE

[OMPAL 1]

SPEED: MAX 250 KT BELOW 10000'



RWY	INITIAL CLIMB
12	Climb on runway heading to at or above 400', then turn RIGHT.
30	A Climb on MLY R-297 to cross 2000' at or prior to GUDIL. Then turn LEFT. (If unable to cross GUDIL at 2000', use maximum rate of climb direct to GUDIL, then turn LEFT via 267° heading climbing to 2000' within MLY 15 DME).
ROUTING	
Intercept and proceed via MLY R-151 to OMPAL.	

MKJP/KIN
NORMAN MANLEY INTLJEPPESSEN
5 DEC 14 (10-3K)KINGSTON, JAMAICA
SIDApt Elev
18'

Trans level: FL180 Trans alt: 17000'

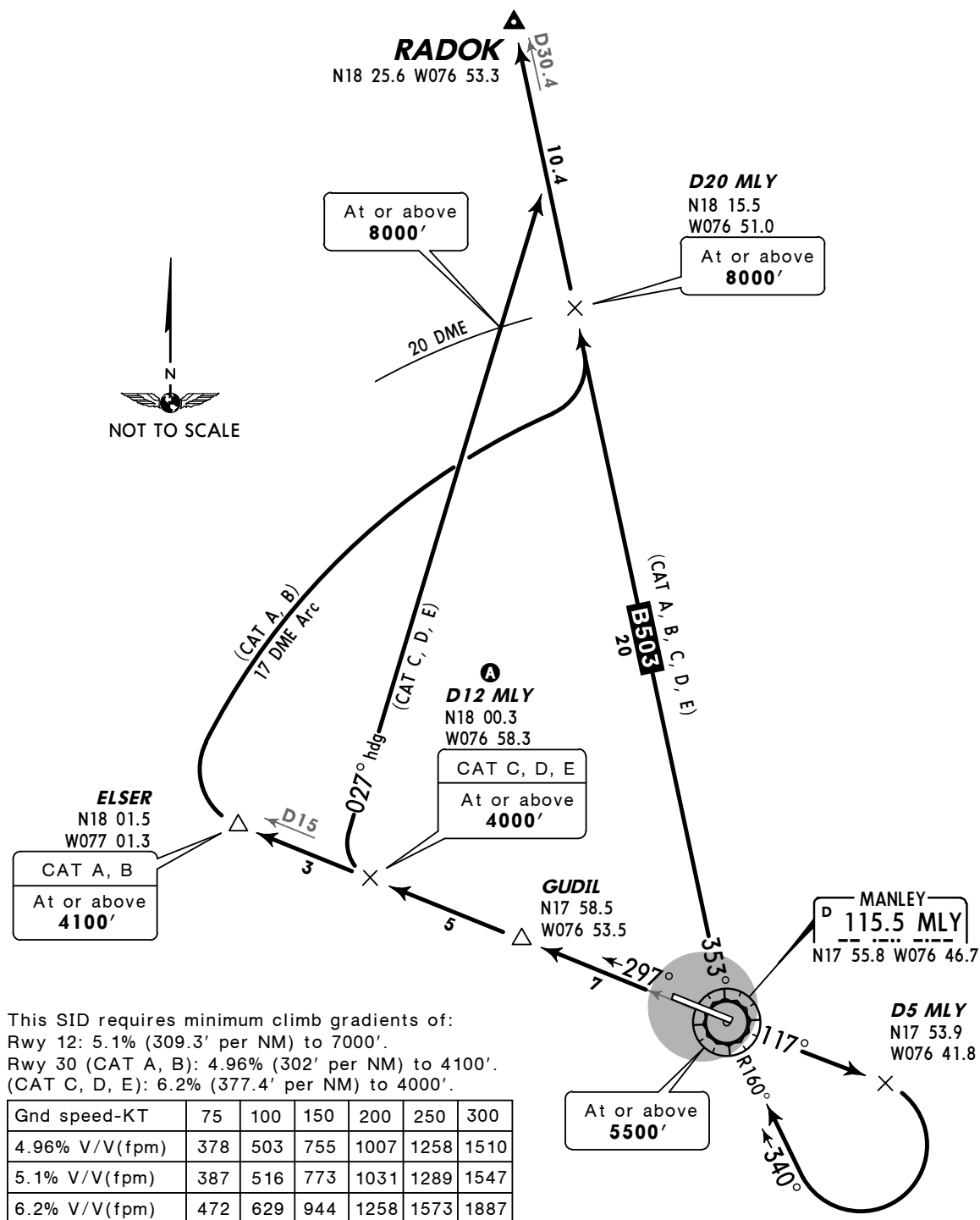
1. VOR/DME required.

2. NORTHBOUND departure via ATS route B-503.

3. Subdivided according to aircraft categories.

RADOK FIVE DEPARTURE

[RADOK5]

SPEED: MAX 250 KT BELOW 10000'

RWY

INITIAL CLIMB

12

CAT A, B, C, D, E: Climb on MLY R-117 to D5 MLY, turn RIGHT to intercept and proceed via MLY R-160 inbound to MLY. Turn RIGHT and proceed via MLY R-353 to RADOK.

30

CAT A, B: Climb on MLY R-297 to ELSER, then turn RIGHT to intercept and proceed via MLY 17 DME Arc to intercept MLY R-353 to RADOK.
CAT C, D, E: Climb on MLY R-297 to D12 MLY then turn RIGHT and proceed via 027° heading to intercept MLY R-353 to RADOK.

A Provision: CAT A or B aircraft able to cross D12 MLY on MLY R-297 at or above 4000' may turn RIGHT and proceed according to CAT C and D departure.

MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 (10-3L)

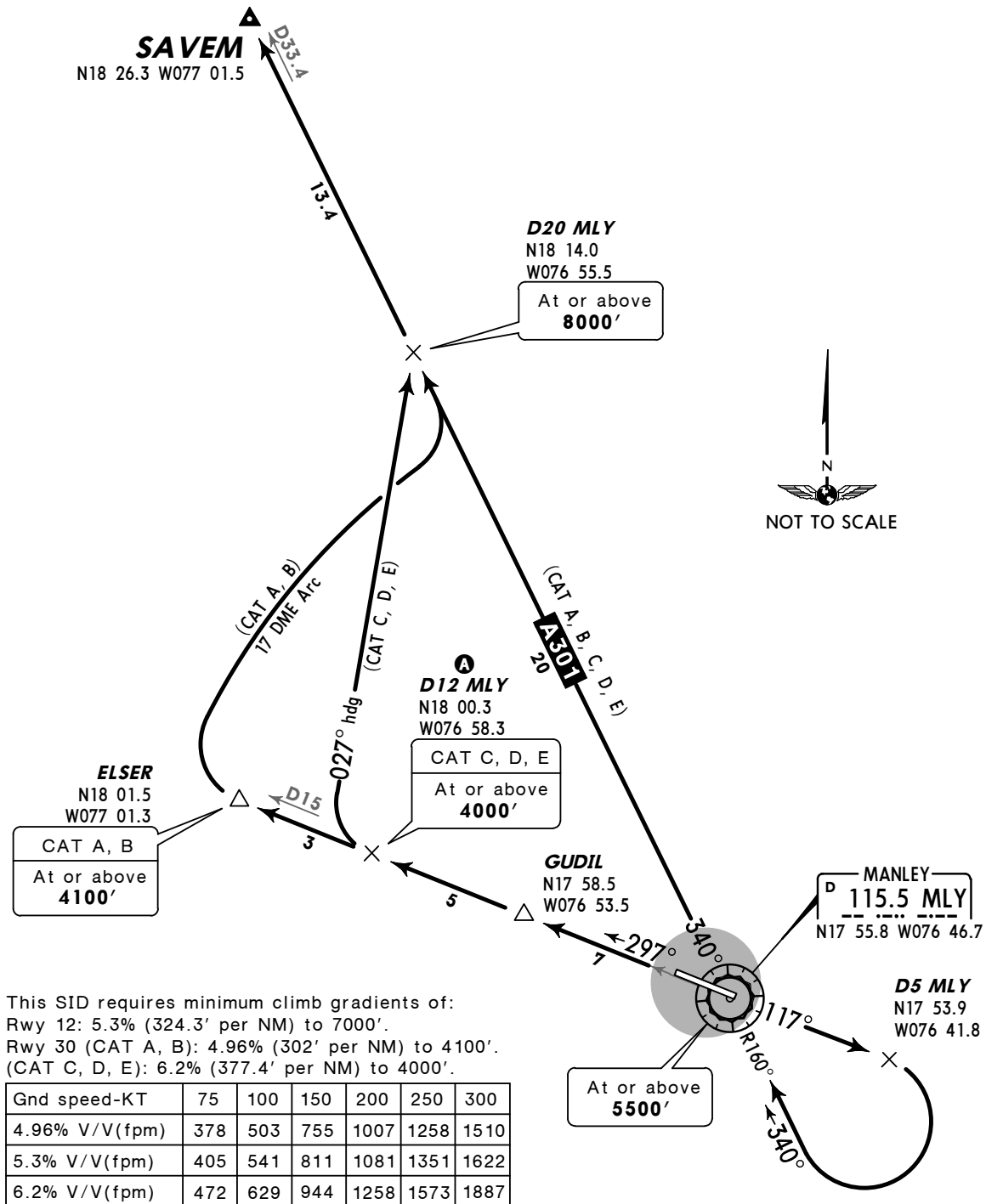
KINGSTON, JAMAICA
SID

Apt Elev
18'

Trans level: FL180 Trans alt: 17000'
1. VOR/DME required.
2. NORTHBOUND departure via ATS route A-301.
3. Subdivided according to aircraft categories.

SAVEM FIVE DEPARTURE
[SAVEM5]

~~SPEED:~~ MAX 250 KT BELOW 10000'



RWY	INITIAL CLIMB
12	CAT A, B, C, D, E: Climb on MLY R-117 to D5 MLY, turn RIGHT to intercept and proceed via MLY R-160 inbound to MLY. Turn RIGHT and proceed via MLY R-340 to SAVEM.
30	CAT A, B: Climb on MLY R-297 to ELSE, then turn RIGHT to intercept and proceed via MLY 17 DME Arc to intercept MLY R-340 to SAVEM. CAT C, D, E: Climb on MLY R-297 to D12 MLY then turn RIGHT and proceed via 027° heading to intercept MLY R-340 to SAVEM. Ⓐ Provision: CAT A or B aircraft able to cross D12 MLY on MLY R-297 at or above 4000' may turn RIGHT and proceed according to CAT C and D departure.

MKJP/KIN
NORMAN MANLEY INTL

JEPPESSEN
 5 DEC 14 **(10-3M)**

KINGSTON, JAMAICA
SID

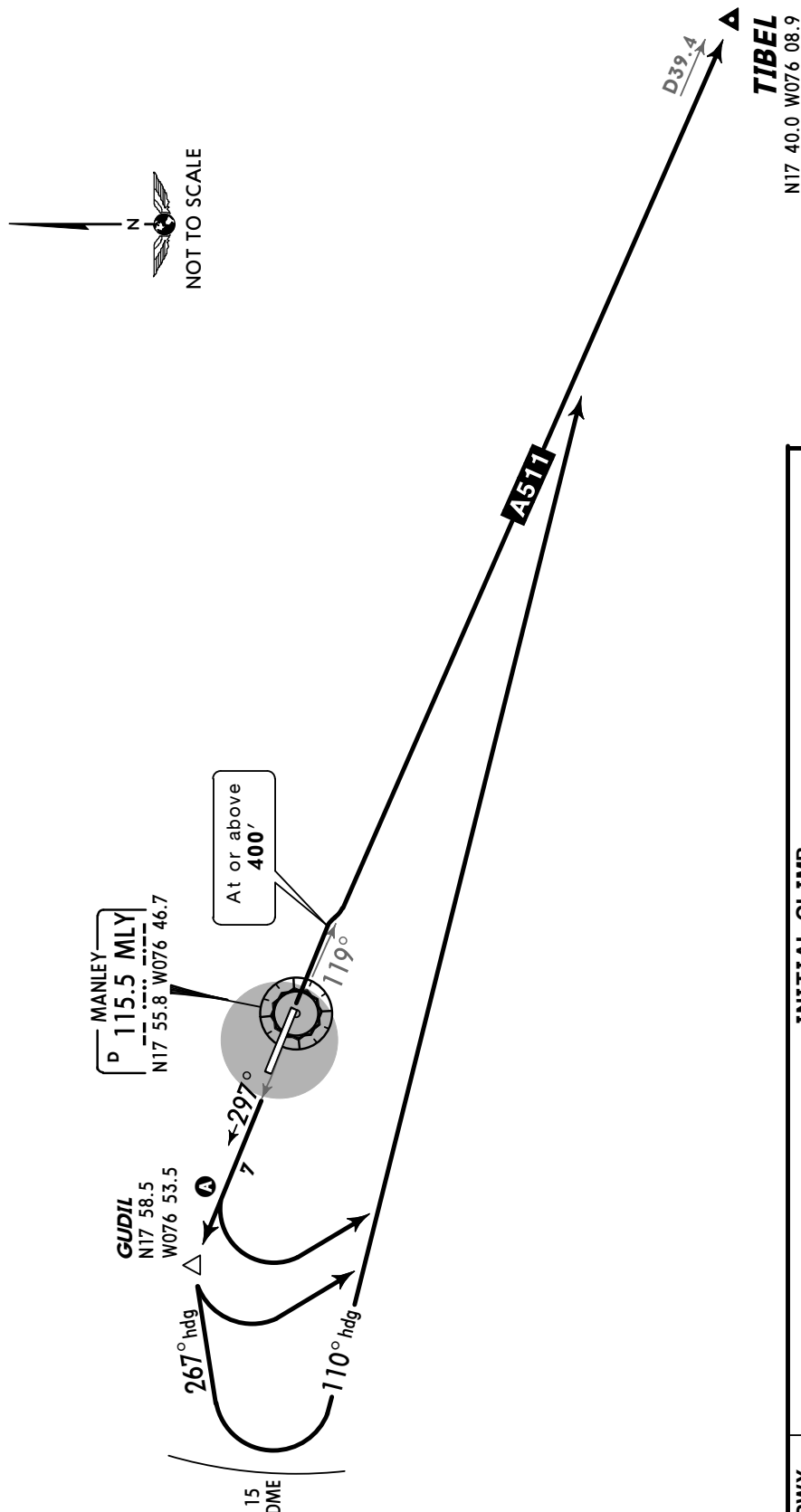
Apt Elev
 18'

Trans level: FL180 Trans alt: 17000'
1. VOR/DME required.
 2. SOUTHBOUND departure via ATS route A-511.

TIBEL ONE DEPARTURE

[TIBEL 1]

~~SPEED~~ MAX 250 KT BELOW 10000'



INITIAL CLIMB	
RWY	12
	Climb on runway heading to at or above 400', then turn RIGHT.
30	<p>Ⓐ Climb on MLY R-297 to cross 2000' at or prior to GUDIL. Then turn LEFT. (If unable to cross GUDIL at 2000', use maximum rate of climb direct to GUDIL, then turn LEFT via 267° heading climbing to 2000' within MLY 15 DME).</p>
ROUTING	
Intercept and proceed via MLY R-119 to TIBEL.	

MKJP/KIN
NORMAN MANLEY INTL

JEPPESEN
5 DEC 14 **(10-3N)**

KINGSTON, JAMAICA
SID

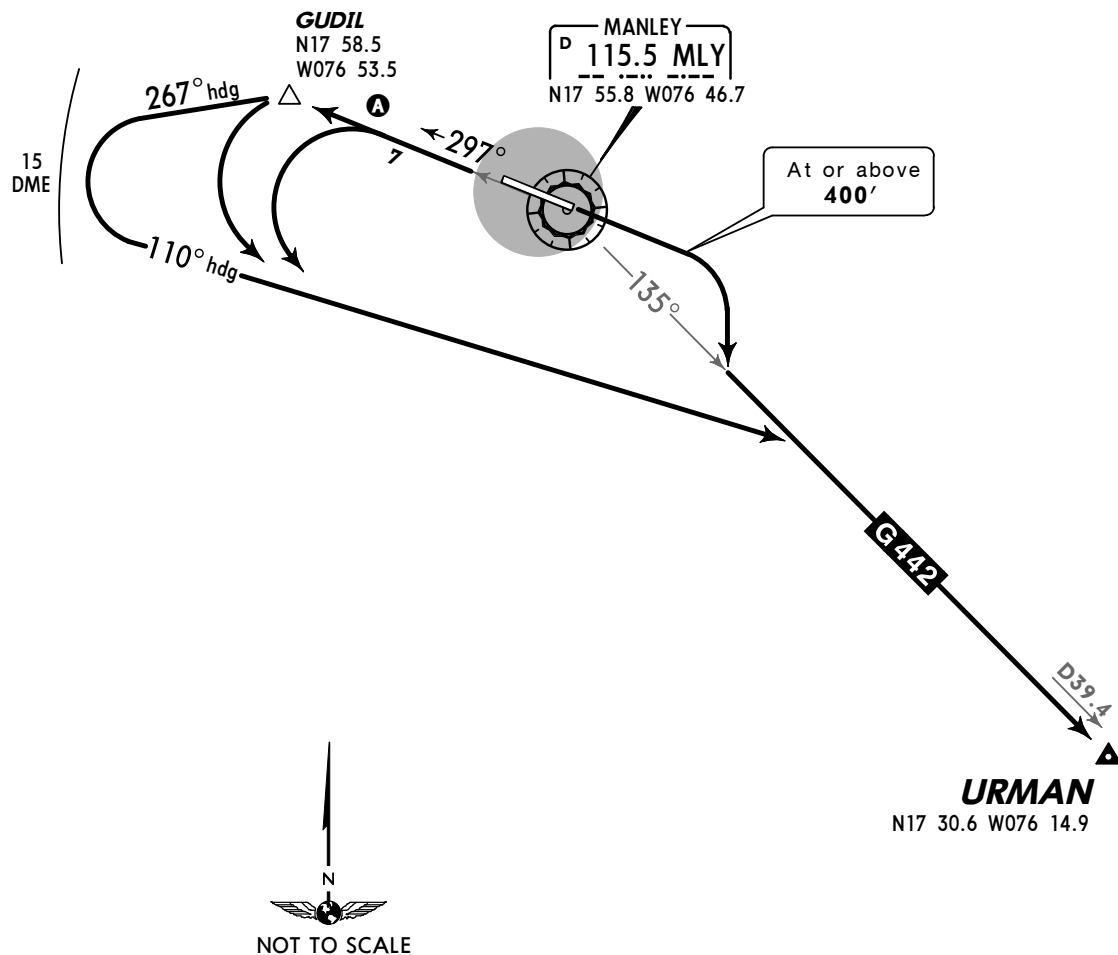
Apt Elev
18'

Trans level: FL180 Trans alt: 17000'
1. VOR/DME required.
2. SOUTHEASTBOUND departure via ATS route G-442.

URMAN ONE DEPARTURE

[URMAN1]

SPEED: MAX 250 KT BELOW 10000'



RWY	INITIAL CLIMB
12	Climb on runway heading to at or above 400', then turn RIGHT.
30	A Climb on MLY R-297 to cross 2000' at or prior to GUDIL. Then turn LEFT. (If unable to cross GUDIL at 2000', use maximum rate of climb direct to GUDIL, then turn LEFT via 267° heading climbing to 2000' within MLY 15 DME).
ROUTING	
Intercept and proceed via MLY R-135 to URMAN.	

MKJP/KIN

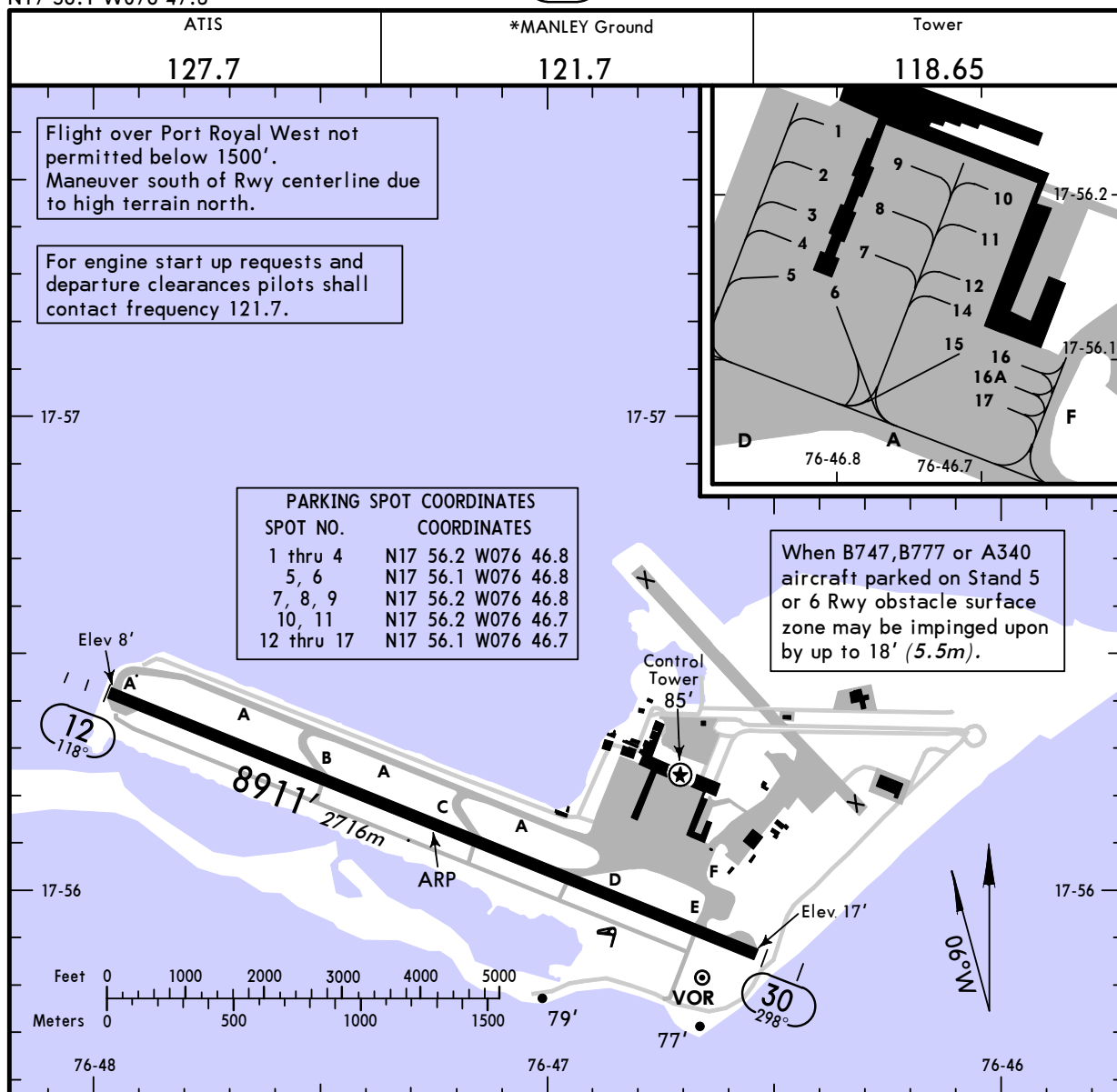
Apt Elev **10'**
N17 56.1 W076 47.3

JEPPesen

24 OCT 14 **(10-9)**

KINGSTON, JAMAICA

NORMAN MANLEY INTL



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
12	HIRL SALS PAPI (angle 3.0°)		7889' 2405m		150'
30	HIRL SALS REIL PAPI (angle 3.0°)				46m

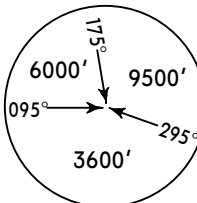
TAKE-OFF		
All Rwys		
1 & 2 Eng	1.9 km	
3 & 4 Eng	930m	

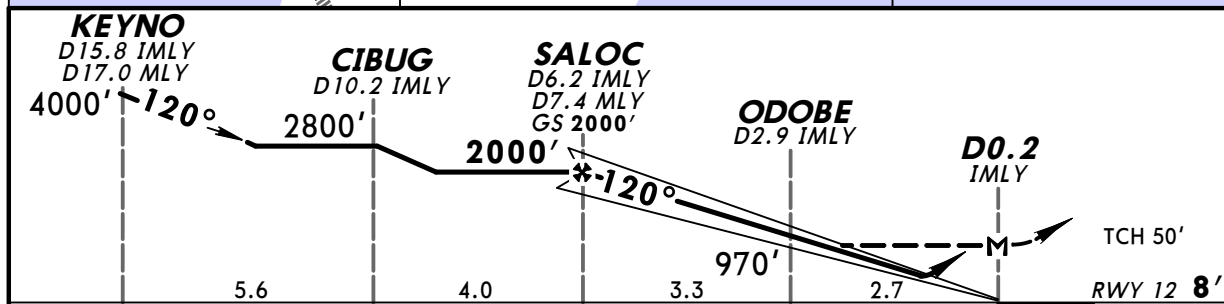
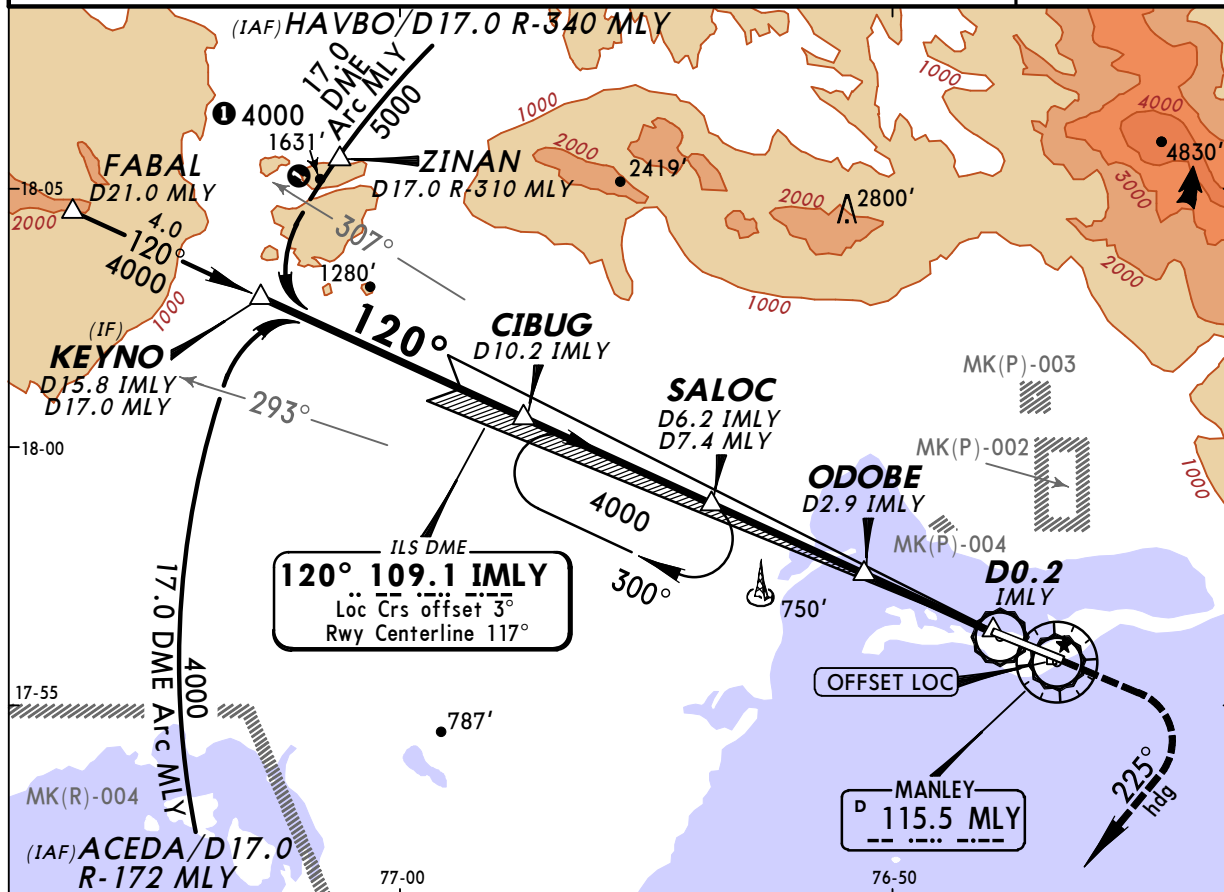
MKJP/KIN
NORMAN MANLEY INTL

JEPPesen
30 APR 10 **(11-1)**

KINGSTON, JAMAICA
ILS Rwy 12

BRIEFING STRIP

ATIS 127.7		MANLEY Approach (R) 120.6		MANLEY Tower 118.65		*Ground 121.7	
LOC IMLY 109.1	Final Apch Crs 120°	GS SALOC 2000' (1992')	ILS DA(H) 278' (270')	Apt Elev 10' RWY 12 8'			
MISSED APCH: Climb to 1000'. Then turn RIGHT to hdg 225° to intercept 17.0 DME MLY VOR Arc at 4000' to KEYNO D17.0 MLY. Thence to SALOC D7.4 MLY and hold.							
Alt Set: hPa (IN on req) Rwy Elev: 0 hPa Trans level: FL 180 Trans alt: 17000'							



Gnd speed-Kts	70	90	100	120	140	160	SALS PAPI --- PAPI 1000'
GS	3.00°	377	484	538	646	753	
MAP at D0.2 IMLY or SALOC to MAP	6.0	5:09	4:00	3:36	3:00	2:34	

STRAIGHT-IN LANDING RWY 12				CIRCLE-TO-LAND	
ILS		LOC (GS out)		Not Authorized North of Extended Rwy Centerline	
DA(H) 278' (270')		MDA(H) 328' (320')			
FULL	ALS out		ALS out	Max Kts	MDA(H)
1.9 Km		1.9 Km		100	1050' (1040') - 1.9 Km
		2.3 Km		135	1050' (1040') - 2.8 Km
		2.8 Km		180	1150' (1140') - 3.7 Km
		3.2 Km		205	1150' (1140') - 4.6 Km

PANS OPS

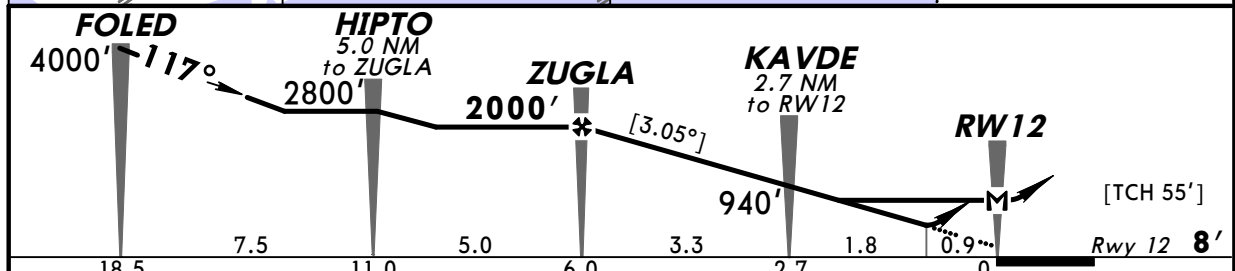
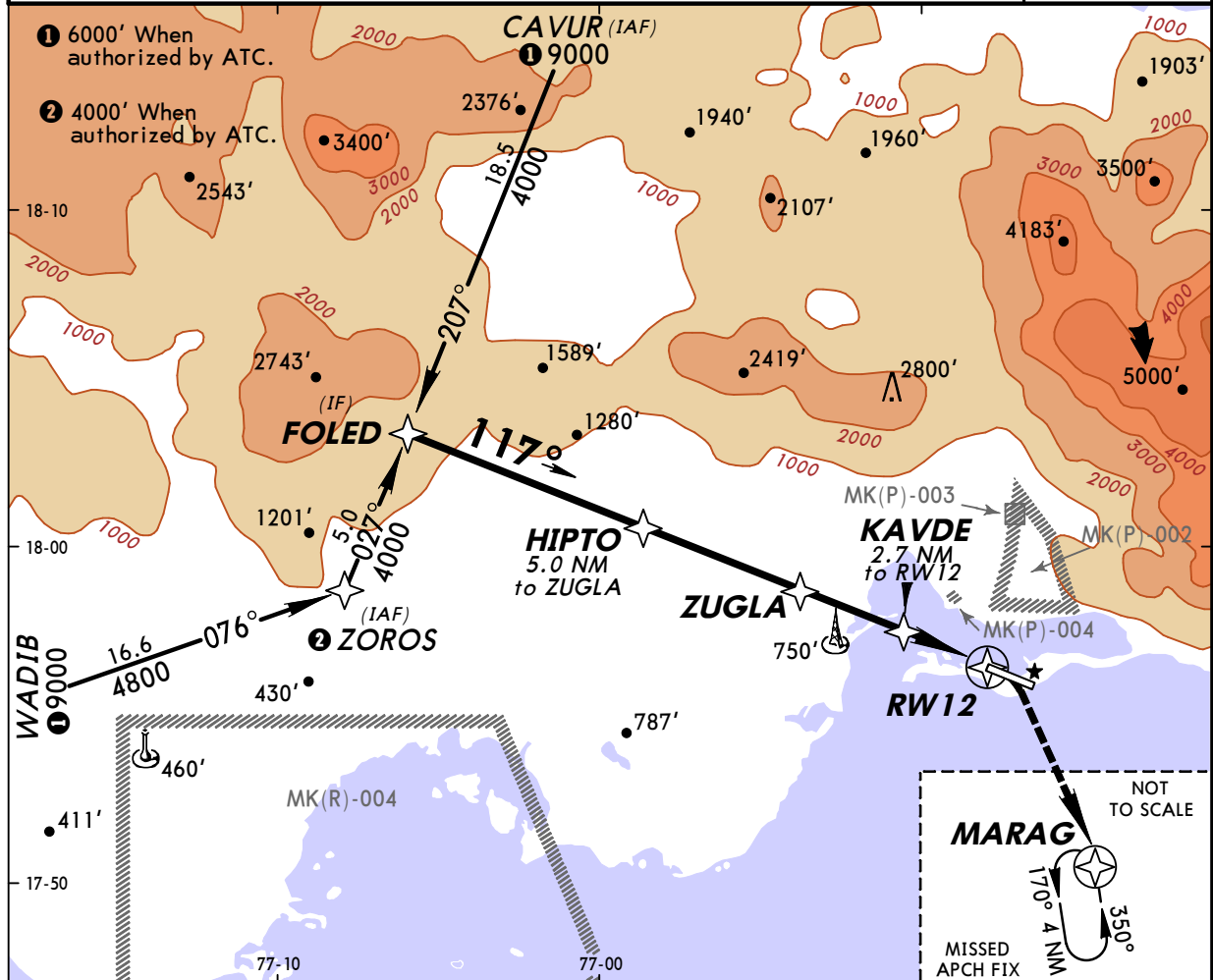
MKJP/KIN
NORMAN MANLEY INTL

JEPPesen
25 MAY 12 (12-1)

KINGSTON, JAMAICA
RNAV (GNSS) Rwy 12

BRIEFING STRIP™

ATIS 127.7	MANLEY Approach (R) 120.6	MANLEY Tower 118.65	*Ground 121.7
RNAV	Final Apch Crs 117°	Minimum Alt ZUGLA 2000' (1992')	LNAV/VNAV DA(H) 300' (292')
		Apt Elev 10' Rwy 12 8'	
MISSED APCH: Climbing RIGHT turn to 4000' direct MARAG and hold.			
Alt Set: hPa (IN on req) Rwy Elev: 0 hPa Trans level: FL 180 Trans alt: 17000'			
1. GPS or RNP-0.30 required. 2. DME/DME RNP-0.30 not authorized.			
<div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 9000' </div>			
MSA MKJP ARP			



Gnd speed-Kts	70	90	100	120	140	160				
Descent angle [3.05°]	378	486	540	648	755	863				
MAP at RW12										

STRAIGHT-IN LANDING RWY 12				CIRCLE-TO-LAND		
LNAV/VNAV		LNAV		Not Authorized North of Extended Rwy Centerline		
DA(H) 300' (292')		MDA(H) 390' (382')				
ALS out		ALS out		Max Kts	MDA(H)	
A	1.9 Km		1.9 Km		100	1050' (1040') -2.3 Km
B					135	1050' (1040') -2.8 Km
C					180	1150' (1140') -5.6 Km
D			2.3 Km		205	

PANS OPS

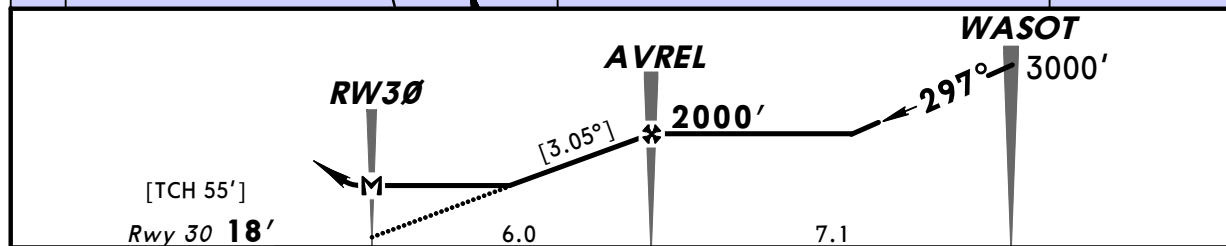
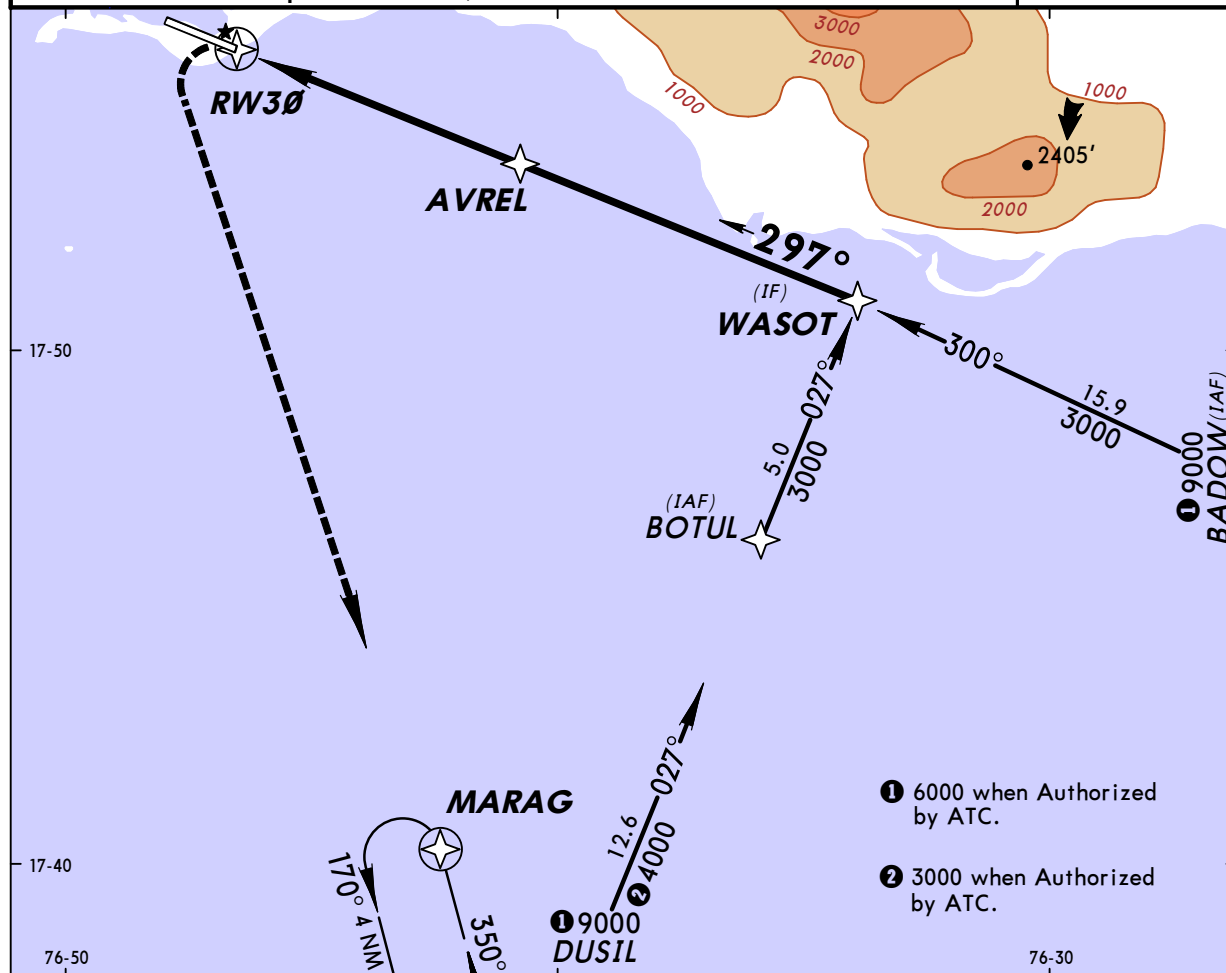
MKJP/KIN
NORMAN MANLEY INTL

JEPPESSEN
25 MAY 12 **(12-2)**

KINGSTON, JAMAICA
RNAV (GNSS) Rwy 30

BRIEFING STRIP

ATIS <div>127.7</div>		MANLEY Approach (R) <div>120.6</div>		MANLEY Tower <div>118.65</div>		*Ground <div>121.7</div>	
RNAV	<div>Final Apch Crs 297°</div>	<div>Minimum Alt AVREL 2000' (1982')</div>	<div>LNAV MDA(H) 390' (372')</div>	<div>Apt Elev 10' Rwy 30 18'</div>		<div>9000'</div>	
MISSED APCH: Climbing LEFT turn to 3000' direct MARAG and hold.							
<div>Alt Set: hPa (IN on req) Rwy Elev: 1 hPa Trans level: FL 180 Trans alt 17000'</div> <div>1. GPS or RNP-0.30 required. 2. DME/DME RNP-0.30 not authorized.</div>							
MSA MKJP ARP							



Gnd speed-Kts	70	90	100	120	140	160	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">SALS</div> <div style="border: 1px solid black; width: 20px; height: 10px; display: flex; align-items: center; justify-content: center;"> <div style="width: 5px; height: 5px; background-color: black;"></div> </div> </div>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">REIL</div> <div style="border: 1px solid black; width: 20px; height: 10px; display: flex; align-items: center; justify-content: center;"> <div style="width: 5px; height: 5px; background-color: black;"></div> </div> </div>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">PAPI</div> <div style="border: 1px solid black; width: 20px; height: 10px; display: flex; align-items: center; justify-content: center;"> <div style="width: 5px; height: 5px; background-color: black;"></div> </div> </div>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">LT</div> <div style="border: 1px solid black; width: 20px; height: 10px; display: flex; align-items: center; justify-content: center;"> <div style="width: 5px; height: 5px; background-color: black;"></div> </div> </div>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">MARAG</div> <div style="border: 1px solid black; width: 20px; height: 10px; display: flex; align-items: center; justify-content: center;"> <div style="width: 5px; height: 5px; background-color: black;"></div> </div> </div>
Descent angle [3.05°]	378	486	540	648	755	863					
MAP at RW30											

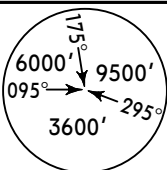
PANS OPS

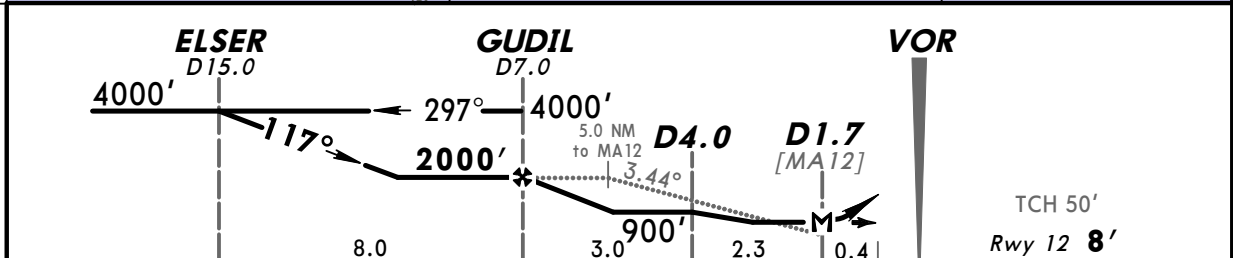
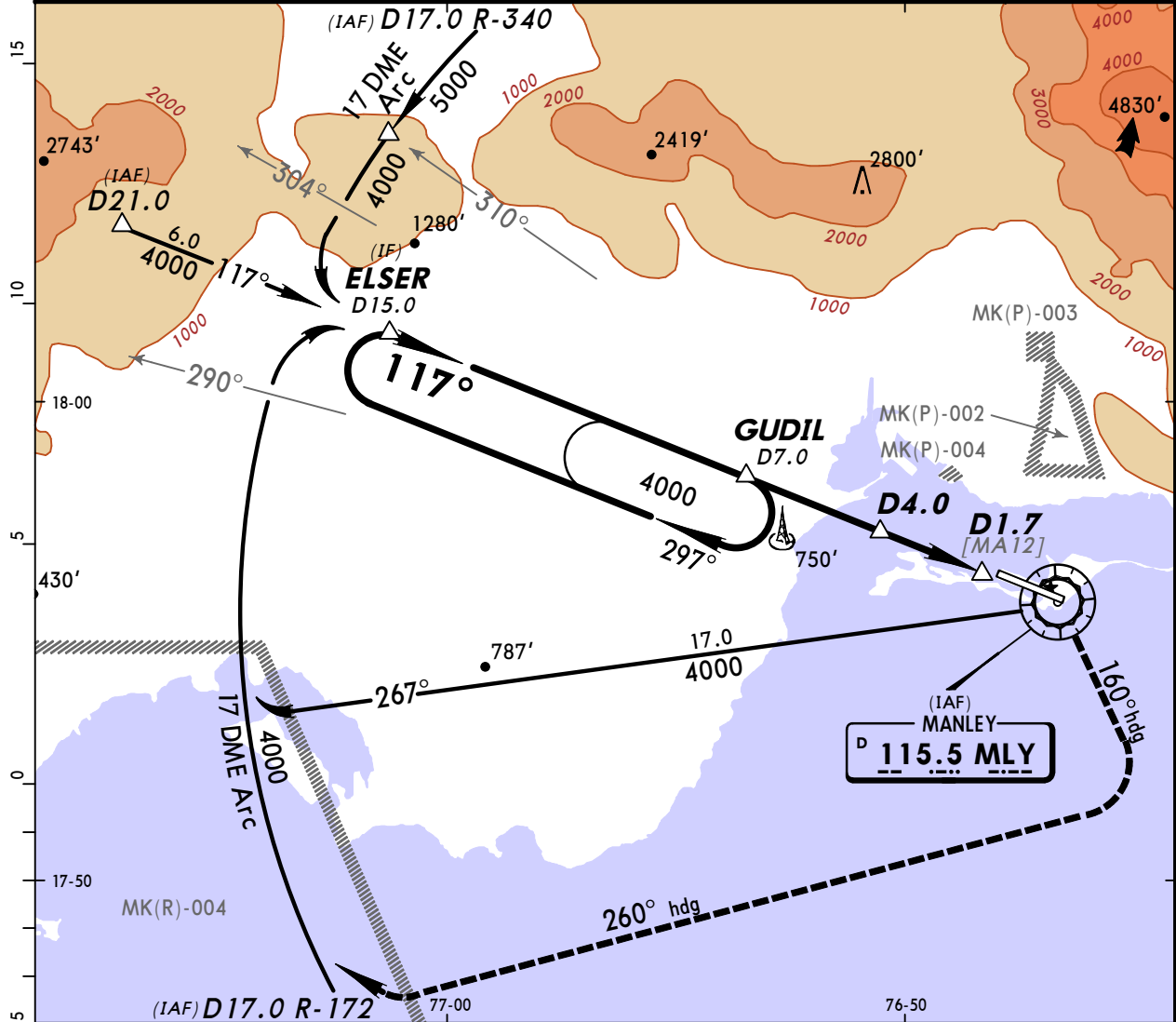
STRAIGHT-IN LANDING RWY 30				CIRCLE-TO-LAND	
LNAV				Not Authorized North of Extended Rwy Centerline	
MDA(H) 390' (372')				Max Kts	MDA(H)
ALS out					
A	1.9 Km			100	1050' (1040') - 2.3 Km
B				135	1050' (1040') - 2.8 Km
C				180	1150' (1140') - 5.6 Km
D				205	

MKJP/KIN
NORMAN MANLEY INTL

JEPPesen
4 JUL 14 **(13-1)**

KINGSTON, JAMAICA
VOR DME Rwy 12

BRIEFING STRIP™	ATIS 127.7		MANLEY Approach (R) 120.6		MANLEY Tower 118.65		*Ground 121.7	
	VOR MLY 115.5	Final Apch Crs 117°	Minimum Alt GUDIL 2000' (1992')	MDA(H) 400' (392')	Apt Elev RWY 12 10' 8'			
	MISSED APCH: Pull up to MLY VOR then climbing RIGHT turn via 160° heading to 2000', thence climbing RIGHT turn via 260° heading to intercept MLY VOR 17 DME Arc at 4000' to ELSEER D15.0 thence to hold at GUDIL D7.0.							
	Alt Set: hPa (IN on req) Rwy Elev: 0 hPa Trans level: FL 180 Trans alt: 17000'					MSA MLY VOR		
	1. Arrivals from East sector enter the holding pattern at or above 9500'.							



Gnd speed-Kts	70	90	100	120	140	160		SALS — PAPI — PAPI	↑	MLY 115.5
Descent Angle 3.44°	426	548	609	730	852	974				
MAP at D1.7										

STRAIGHT-IN LANDING RWY12				CIRCLE-TO-LAND			
MDA(H) 400' (392')				Not Authorized North of Extended Rwy Centerline			
ALS out				MDA(H)			
A				Max Kts			
B	1.9 Km			100	1040' (1030') - 1.9 Km		
C	2.4 Km			135	1040' (1030') - 2.8 Km		
D	3.3 Km			180	1040' (1030') - 3.7 Km		
				205	1040' (1030') - 4.6 Km		

CHANGES: Descent angle added.

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SKBO/BOG**BOGOTA, COLOMBIA****ELDORADO INTL**

18 NOV 16

(10-1P)**AIRPORT BRIEFING****1. General**

Every aircraft that uses PUENTE AEREO, the regional and international passenger and/or cargo aprons must be towed until reaching the SPOT or the taxiway that Ground control indicates.

A340- 600 aircraft using the international gate must be towed on taxiway FOXTROT, to start taxi.

Taxiway D prohibited for aircraft category E, between taxiway MIKE and WHISKEY.

Aircraft stand C5 limited to aircraft type B757, B767, A300, must enter towed to this stand.

Aircraft stand C7 authorized up to aircraft type A340-600.

Turbine aircraft category C that enter aircraft stands A13 to A15 must be towed.

These speeds are subject to change per ATC requirements.

2. GROUND CONTROL

In order to quickly evacuate the runway fast exit, aircraft exiting via taxiways D and J shall continue its taxi following the appropriate standard route to go to its parking stand, applying the right of way, as established in ICAO Annex 2. Contact with the corresponding Ground Control unit shall be done without stopping the aircraft when crossing the safety line informing of the current position and apron or parking stand of destination, if no contact is established, the pilot in command shall stop the aircraft prior to crossing the next intersection.

Note: This procedure does not apply when the reported RVR is equal or below 550 meters, in this case shall proceed in accordance with the provision of the Low Visibility Procedures.

3. AERODROME CONTROL

1. Aircraft taxiing to the runway threshold shall apply the provisions of 2.10 (see below) and shall keep listening to the Aerodrome Control Frequency until clearance to enter the take-off runway or any other type of instruction is received.

(Provisions of 2.10: Normally, crews of departing aircraft may make the change to the corresponding Aerodrome Control frequency without waiting for instructions from Ground Control, by applying the monitoring procedure as follows:

- Rwy 13L, when entering the holding bay.
- Rwy 13R, crossing Taxiway Q.
- Rwy 31L, when entering the holding bay.
- Rwy 31R, crossing at the level of Taxiway L.)

2. In order to speed up the traffic, the immediate take-off of an aircraft may be authorized prior to entering the runway. By accepting such authorization, the aircraft shall circulate via the taxiway to the runway and take-off without stopping.

3. Unless there is a different request before granting permission to take-off, once in the air, all aircraft in climb and leaving the take-off trajectory, shall change to the corresponding departure frequency, without prior warning from the aerodrome control as follows:

- On EAST configuration with SID's which first turn is on heading to SOA VOR, shall call on frequency 119.95 MHz and for those whose turn is on heading to ZIP VOR shall call on frequency 121.30 MHz.
- On WEST configuration, traffic with SID's ending with N or NE course, shall call on frequency 121.30 MHz and traffic with SID's ending with W, WSW, SW or SE course, shall call on frequency 119.95 MHz.

4. Normally, crews of arriving aircraft can change the corresponding Ground Control frequency without waiting for instructions from the Aerodrome Control.

5. Between Sunset and Sunrise or in low visibility conditions, aircraft shall notify clear runway on the Aerodrome Control frequency.

4. SPEED ADJUSTMENTS

Within Bogota TMA, unless ATC indicates another speed setting, the departures, arrivals and approaches to Eldorado Intl Airport under RADAR control should adjust their speeds as specified below:

- IAS 185 Kts until turn complete on departures to SOA VOR and ZIP VOR.
- IAS 230 Kts at or below 14,000'.
- IAS 250 Kts at SLP.

Approximate speed settings:

- IAS 190 Kts at BOG VOR.
- IAS 170 Kts at Outer Marker Rwy 13L.

(Continue on next page)

SKBO/BOG**BOGOTA, COLOMBIA****ELDORADO INTL**

18 NOV 16

(10-1P1)**AIRPORT BRIEFING****4. SPEED ADJUSTMENTS (cont.)**

- IAS 170 Kts at D5.0 ILS 13R.
- IAS 185 Kts at MAP Circling VOR-C.

Note 1: Speed adjustments upon request of ATC. Aircraft unable to adjust to previously described speeds must maintain maximum allowable speed at all times up to the LOM of Rwy 13L or 5 DME ILS of Rwy 13R and must inform of the maintained speed.

Note 2: The controller is authorized to initiate missed approach to crews that do not comply with speed restrictions.

Note 3: Above restrictions do not apply when weather conditions (turbulence, windshear, tailwind and rain) that affect the safety of aircraft maneuvers and braking approximation are presented on the runway.

Note 4: Speed Restrictions:

Aircraft Category C, D, E:

- IAS 270 Kts below FL250 and 40 NM BOG VOR
- IAS 250 Kts at ABL/VULAM/PUNPU.
- IAS 190 Kts at BOG VOR.
- IAS 170 Kts at FAF/FAP Runway 13L/13R.
- IAS 185 Kts at Rwy 31L/31R MAP Circling.

Aircraft Category B:

- IAS 200 Kts at ABL/VULAM/PUNPU.
- IAS 190 Kts at BOG VOR.
- IAS 170 Kts at FAF/FAP Rwy 13L/13R.
- IAS 185 Kts at Rwy 31L/31R MAP Circling.

Crews must inform ATC if aircraft speeds differ from speed restrictions by more than 10 Kts to allow for accurate sequence and spacing.

Turboprop aircraft that cannot comply with established speeds must maintain highest possible speed.

The speed restrictions for FAP/FAF Rwy 13L/13R do not apply when the aircraft follows an NPA without guide vector (LOC/VOR/NDB/RNAV/LNAV).

Restrictions do not apply if tailwind exceeds 8 Kts that may affect vertical path control.

ATC may cancel an active approach and initiate missed approach procedures or provide vector guidance to those aircraft not in compliance with restricted airspeeds for sequence requirements.

ATC may supply alternate speed requirements which must be achieved by crews as quickly as possible.

SKBO/BOG
ELDORADO INTL

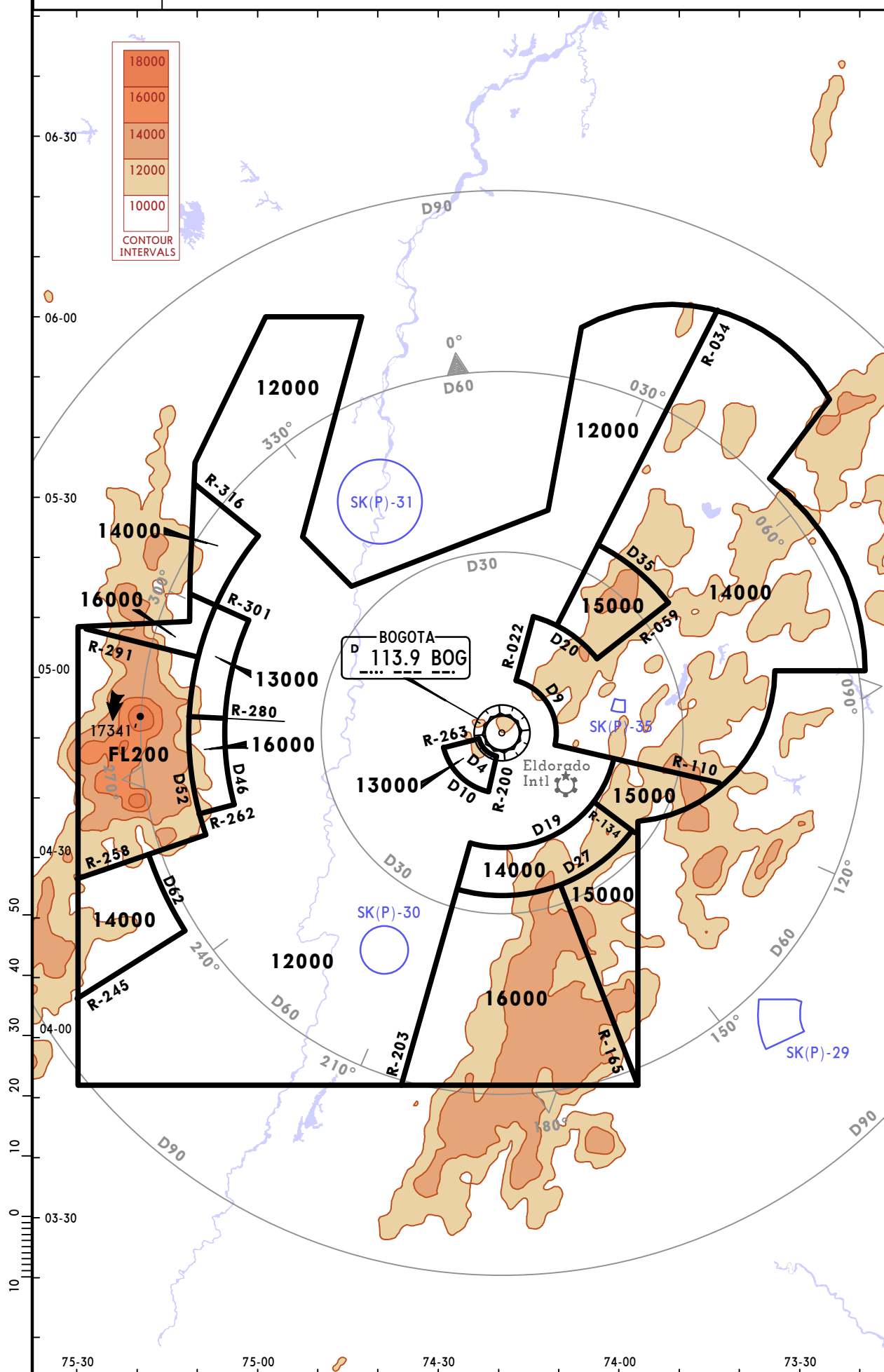
JEPPESSEN
3 JUN 16 (10-1R)

BOGOTA, COLOMBIA

RADAR MINIMUM ALTITUDES

Apt Elev
8360'

Alt Set: IN (hPa on req)
Trans level: FL190 Trans alt: 18000'



CHANGES: Chart revised, scale.

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SKBO/BOG
ELDORADO INTL

JEPPESEN
6 NOV 15 **10-2** Eff 12 Nov

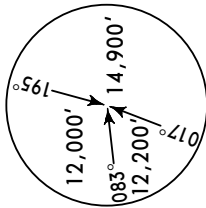
BOGOTA, COLOMBIA

STAR

ATIS
113.9

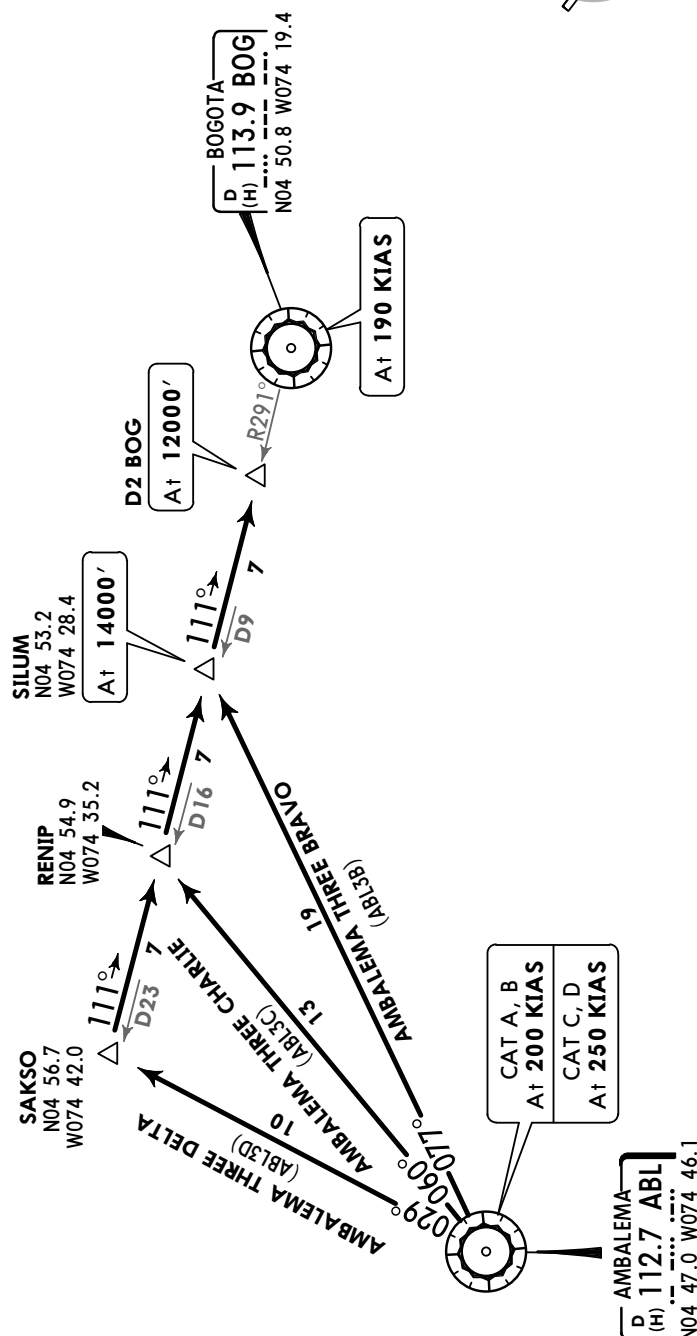
Apt Elev
8360'

Alt set: IN (hPa on req)
Trans level: FL190 Trans alt: 18000'
Adjust speeds per 10-1P.

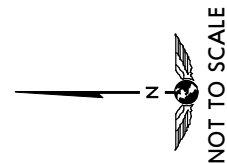


MSA BOG VOR

**AMBALEMA THREE BRAVO (ABL3B),
AMBALEMA THREE CHARLIE (ABL3C),
AMBALEMA THREE DELTA (ABL3D) ARRIVALS**
(RWYS 13L/R, 31L/R)



Direct distance from D2 BOG to:
Eldorado Intl 16 NM



SKBO/BOG
ELDORADO INTL

JEPPesen
6 NOV 15 **(10-2A)** **Eff 12 Nov**

BOGOTA, COLOMBIA

STAR

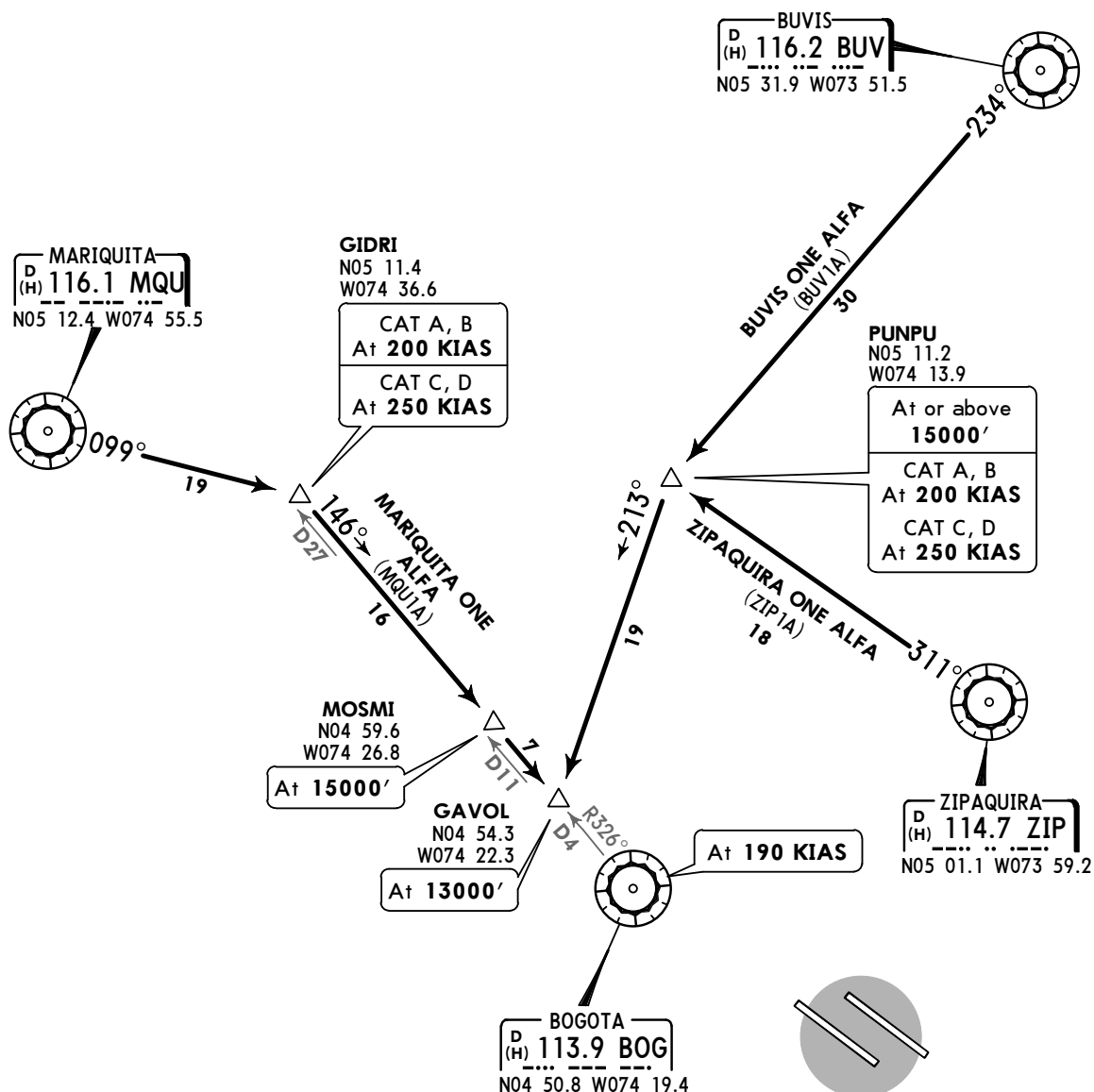
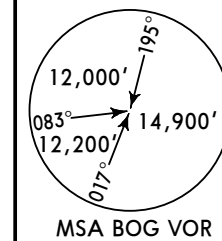
ATIS
113.9

Apt Elev
8360'

Alt set: IN (hPa on req) Trans level: FL190
1. BUVIS ONE ALFA, ZIPAQUIRA ONE ALFA:
PUNPU EXPECT vectors to localizer.
2. Adjust speeds per 10-1P.

Trans alt: 18000'
RNAV 1 required or from

**BUVIS ONE ALFA (BUV1A),
MARIQUITA ONE ALFA (MQU1A),
ZIPAQUIRA ONE ALFA (ZIP1A) ARRIVALS**
(RWYS 13L/R, 31L/R)



SKBO/BOG
ELDORADO INTL

JEPPESEN
6 NOV 15 **10-2B** **Eff 12 Nov**

BOGOTÁ, COLOMBIA

STAR

ATIS
113.9

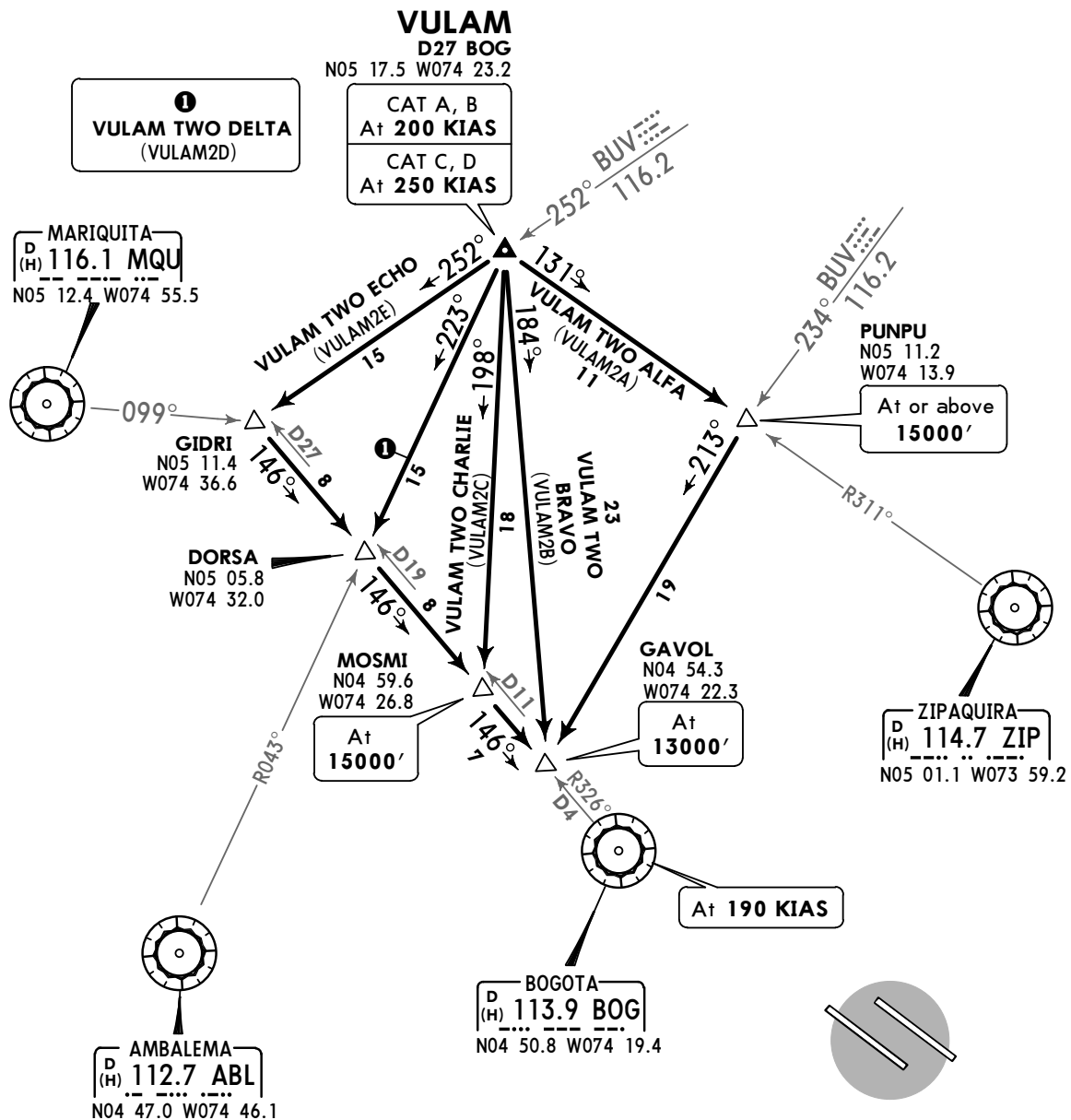
Apt Elev
8360'

Alt set: IN (hPa on req) Trans level: FL190 Trans alt: 18000'

1. VULAM TWO BRAVO, VULAM TWO CHARLIE: **RNAV 1 required** or assigned heading to VULAM and follow the procedure and EXPECT vectors.
2. VULAM TWO ALFA: **RNAV 1 required** or at PUNPU EXPECT vectors to localizer.
3. Adjust speeds per 10-1P.

VULAM TWO ALFA (VULAM2A)[VULA2A],
VULAM TWO BRAVO (VULAM2B)[VULA2B],
VULAM TWO CHARLIE (VULAM2C)[VULA2C],
VULAM TWO DELTA (VULAM2D)[VULA2D],
VULAM TWO ECHO (VULAM2E)[VULA2E]
ARRIVALS

(RWYS 13L/R, 31L/R)



Direct distance from GAVOL to:
Eldorado Intl 18 NM

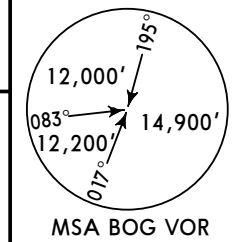


SKBO/BOG
ELDORADO INTL

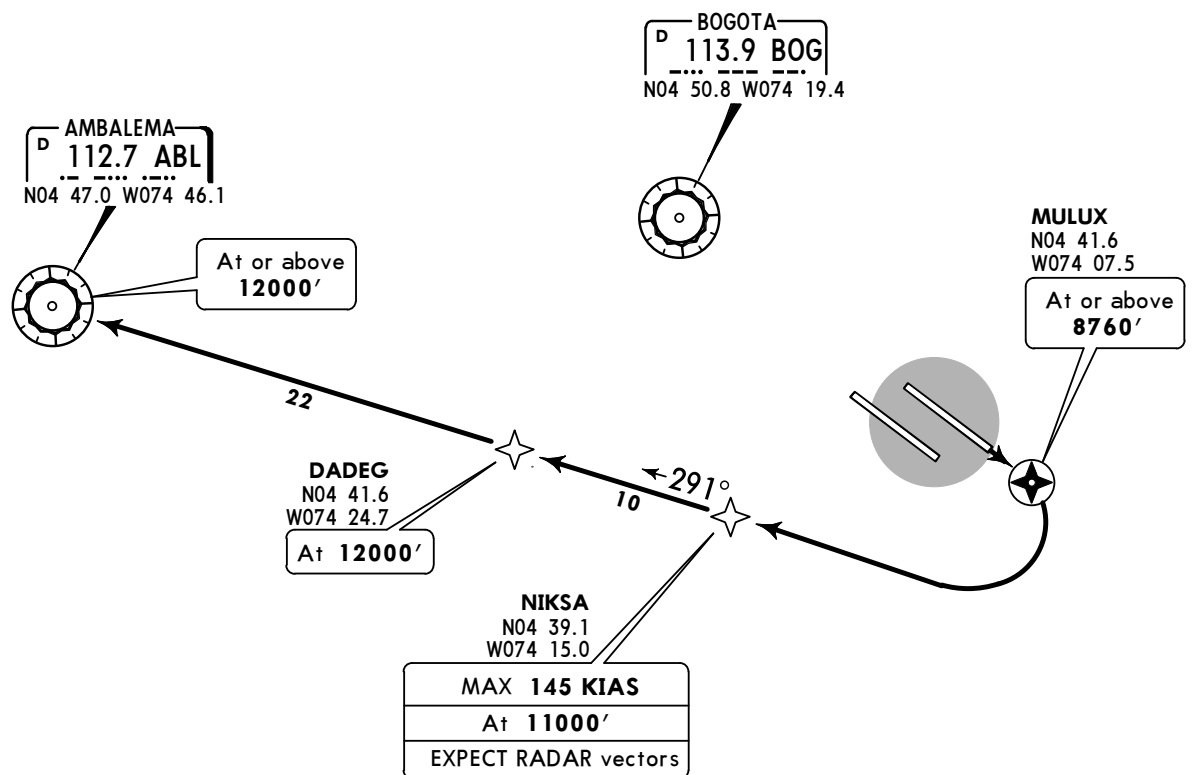
JEPPESEN
12 FEB 16 **(10-3)**

BOGOTA, COLOMBIA
RNAV SID

BOGOTA Departure			Apt Elev 8360'	Trans level: FL190 Trans alt: 18000' RNAV 1 certification required.
North	Central	South		
121.3	119.5	119.95		



AMBALEMA 2F (ABL 2F) [ABL2F]
RNAV (GNSS)
(RWY 13L)
CAT A, B



Direct distance from Eldorado Intl to:
MULUX 1 NM



This SID requires the following minimum climb
gradients: MAINTAIN 8.2% until MULUX, then
5.0% to NIKSA.

Gnd speed-KT	75	100	150	200	250	300
5.0% V/V (fpm)	380	506	760	1013	1266	1519
8.2% V/V (fpm)	623	830	1246	1661	2076	2491

INITIAL CLIMB

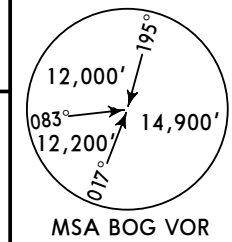
Climb to 12000'.

SKBO/BOG
ELDORADO INTL

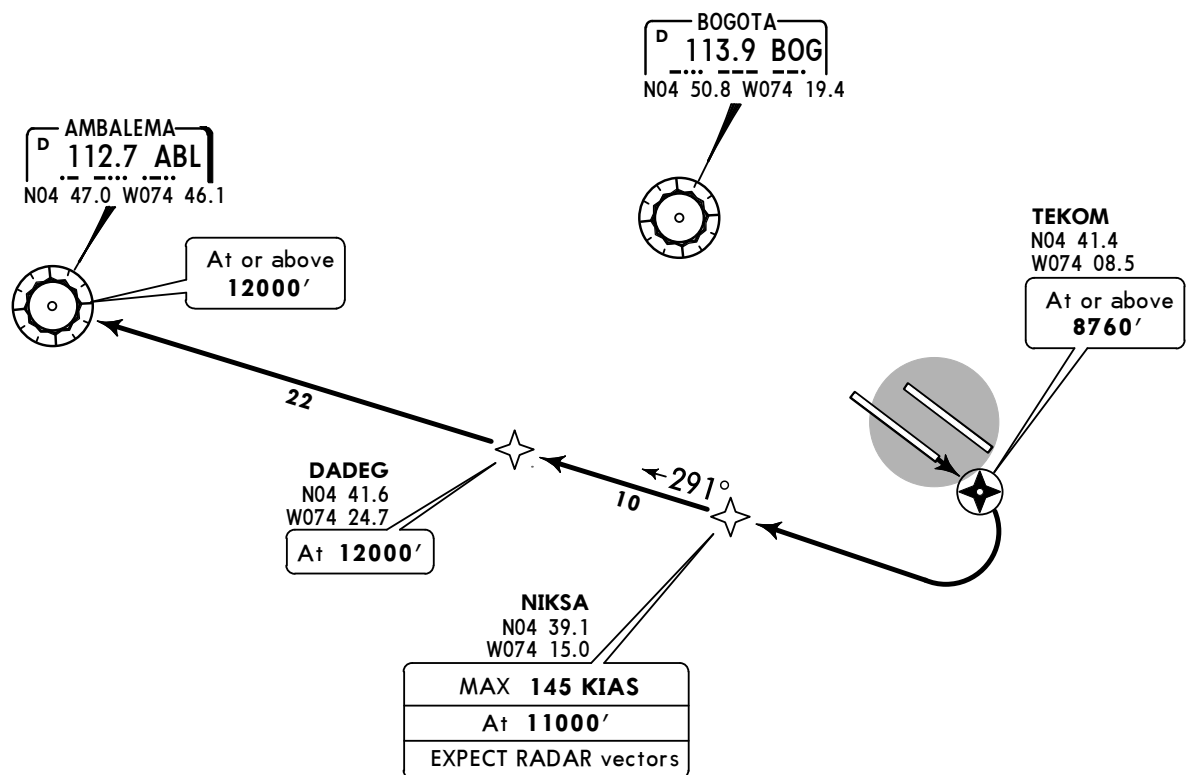
JEPPESEN
12 FEB 16 **10-3A**

BOGOTA, COLOMBIA
RNAV SID

BOGOTA Departure			Apt Elev 8360'	Trans level: FL190 Trans alt: 18000' RNAV 1 certification required.
North	Central	South		
121.3	119.5	119.95		



AMBALEMA 2G (ABL 2G) [ABL2G]
RNAV (GNSS)
(RWY 13R)
CAT A, B



Direct distance from Eldorado Intl to:
TEKOM 1 NM



This SID requires the following minimum climb
gradients: MAINTAIN 8.2% until TEKOM, then
5.0% to NIKSA.

Gnd speed-KT	75	100	150	200	250	300
5.0% V/V (fpm)	380	506	760	1013	1266	1519
8.2% V/V (fpm)	623	830	1246	1661	2076	2491

INITIAL CLIMB

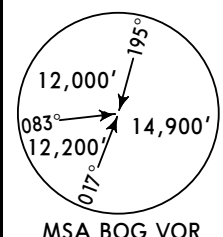
Climb to 12000'.

SKBO/BOG
ELDORADO INTL

JEPPESEN
30 DEC 16 **10-3B** Eff 5 Jan

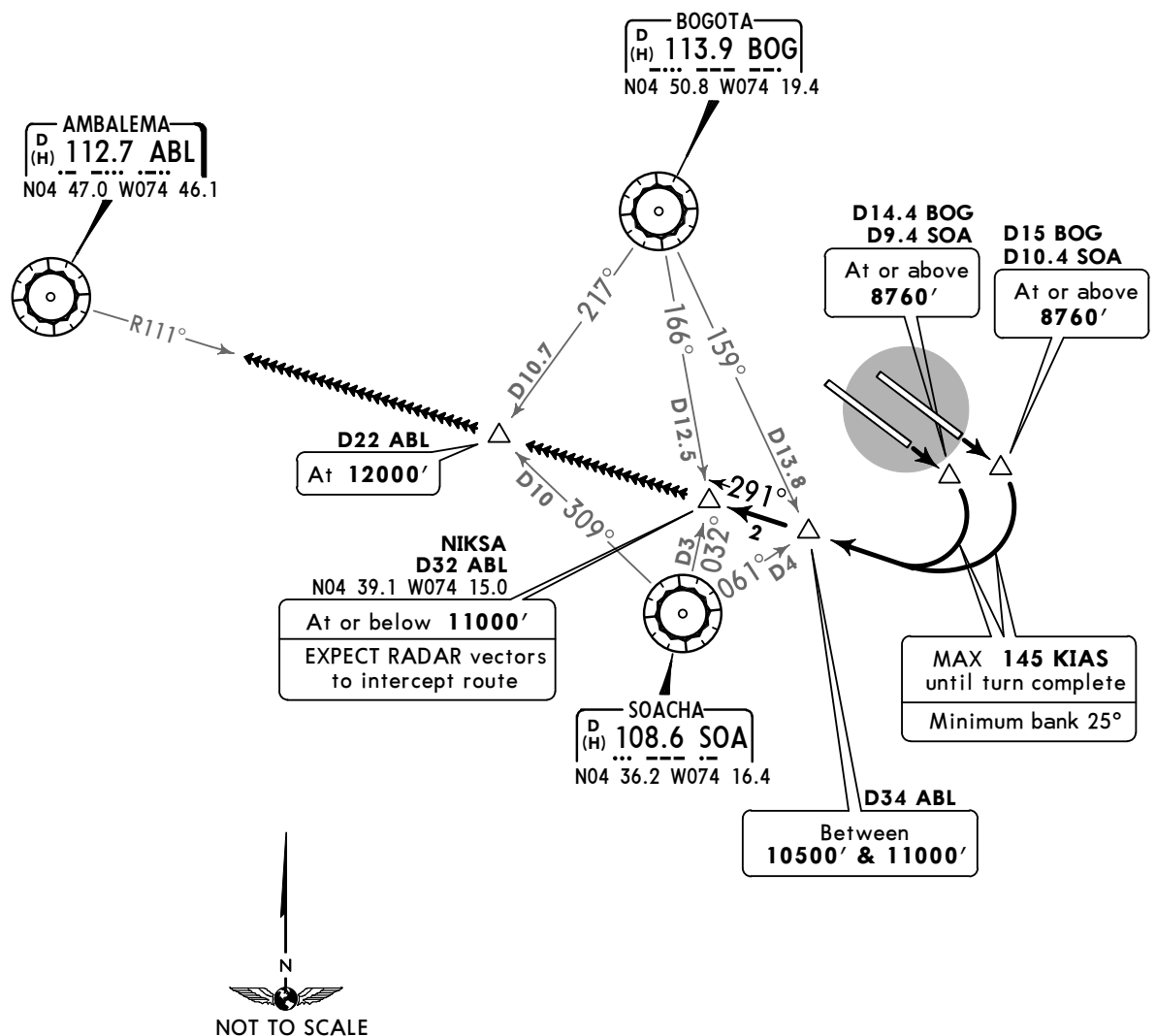
BOGOTA, COLOMBIA

SID

BOGOTA Departure			Apt Elev 8360'	Trans level: FL190 Trans alt: 18000' 1. RADAR required. 2. ABL, BOG and SOA VORs required. 3. ABL5E RWY 13L is only available when RWY 13R is inoperative.	
North	Central	South			
121.3	119.5	119.95			

AMBALEMA FIVE ECHO (ABL 5E) DEPARTURE
(RWYS 13L/R)

CAT A, B



This SID requires the following minimum climb gradients:
MAINTAIN 8.2% until turn complete on bearing 291°, then 5.0% to 11000'.

Gnd speed-KT	75	100	150	200	250	300
5.0% V/V (fpm)	380	506	760	1013	1266	1519
8.2% V/V (fpm)	623	830	1246	1661	2076	2491

INITIAL CLIMB

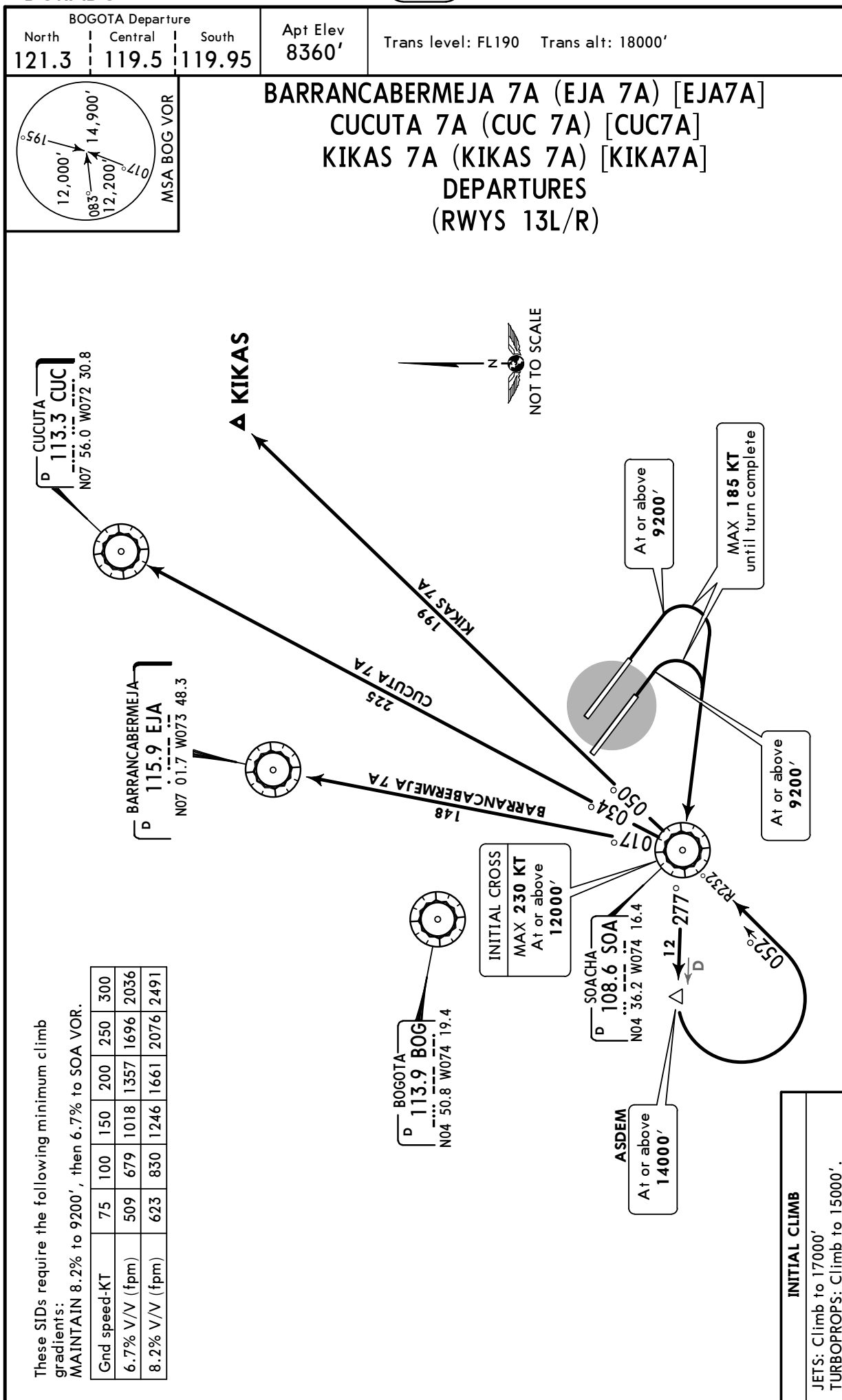
JETS: Climb to 12000'.
TURBOPROPS: Climb to 12000'.

SKBO/BOG
ELDORADO INTL

JEPPESEN
30 DEC 16 **(10-3C)** Eff 5 Jan

BOGOTA, COLOMBIA

SID



SKBO/BOG
ELDORADO INTL

JEPPESEN

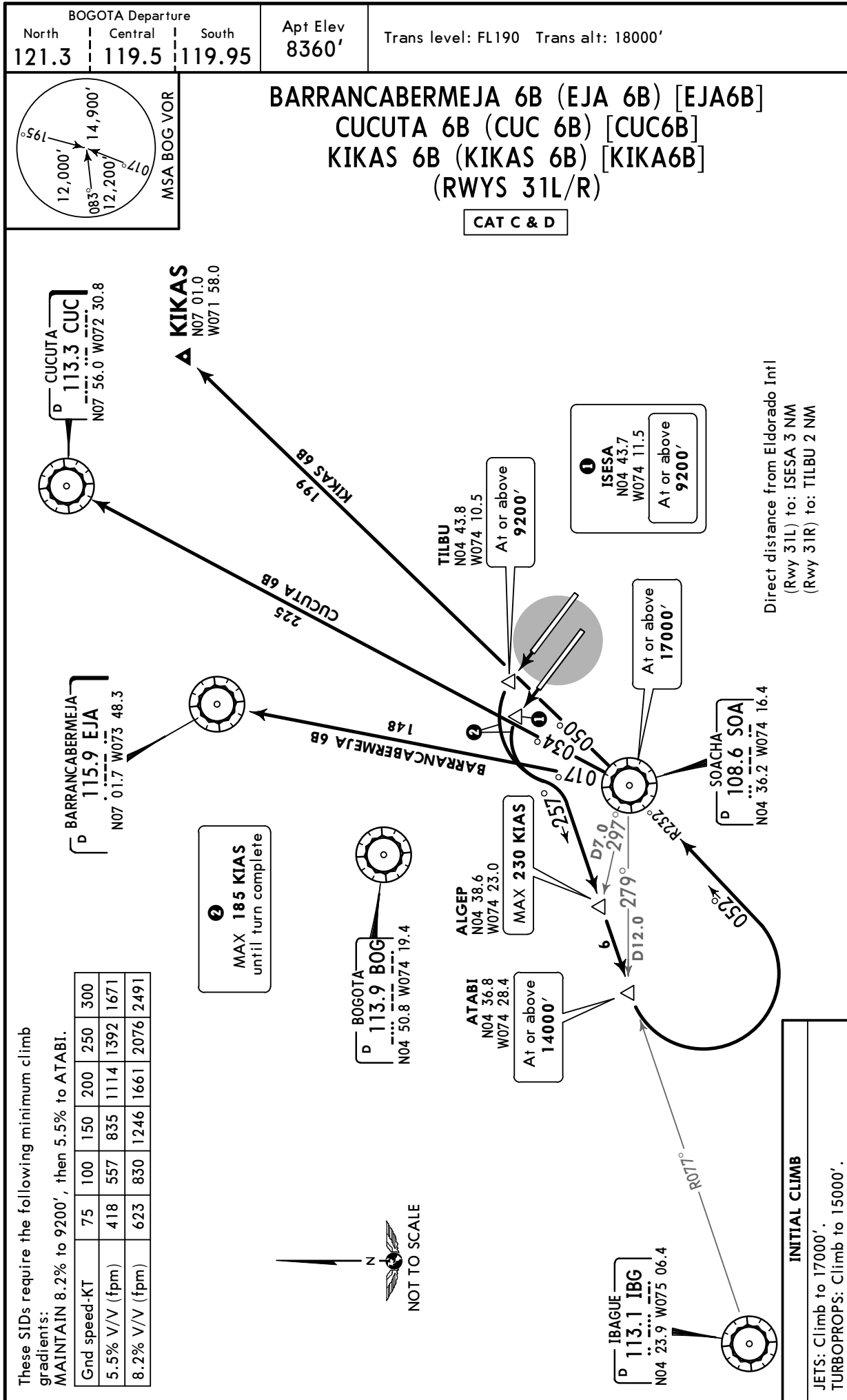
22 APR 16

(10-3D)

Eff 28 Apr

BOGOTA, COLOMBIA

SID



SKBO/BOG
ELDORADO INTL

JEPPesen

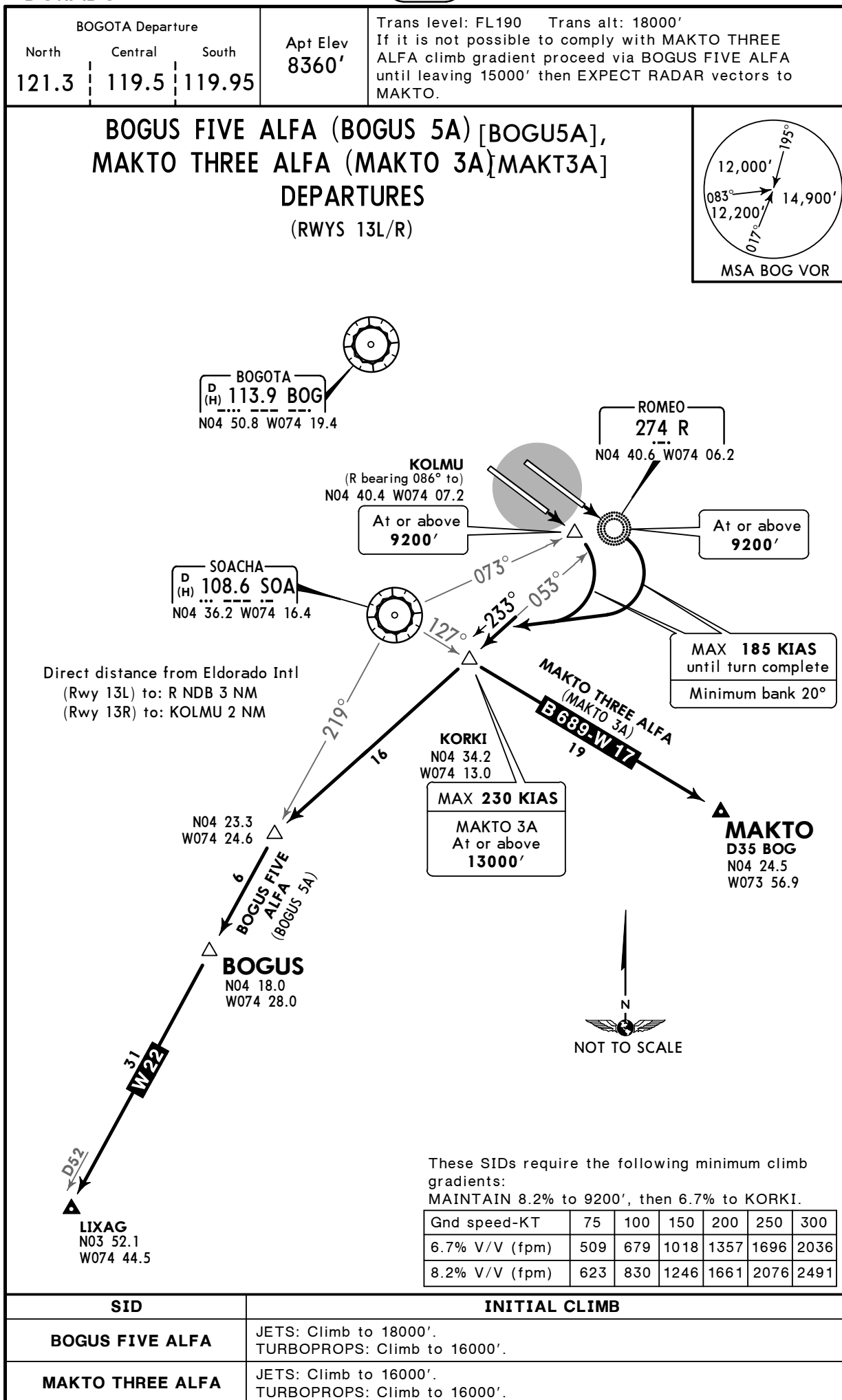
22 APR 16

10-3E

Eff 28 Apr

BOGOTA, COLOMBIA

SID

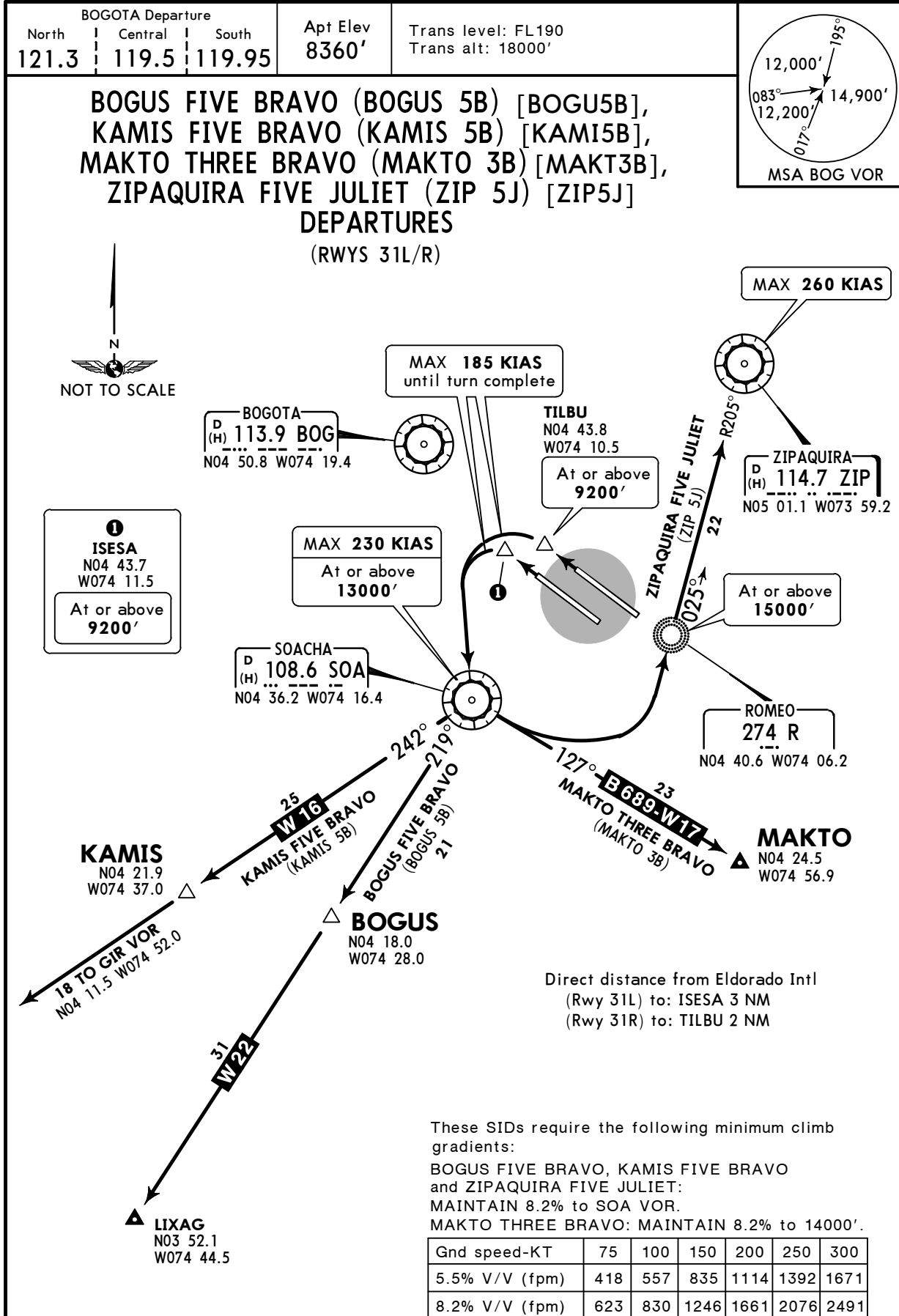


SKBO/BOG
ELDORADO INTL**JEPPESEN**

6 NOV 15

10-3F

Eff 12 Nov

BOGOTA, COLOMBIA**SID**

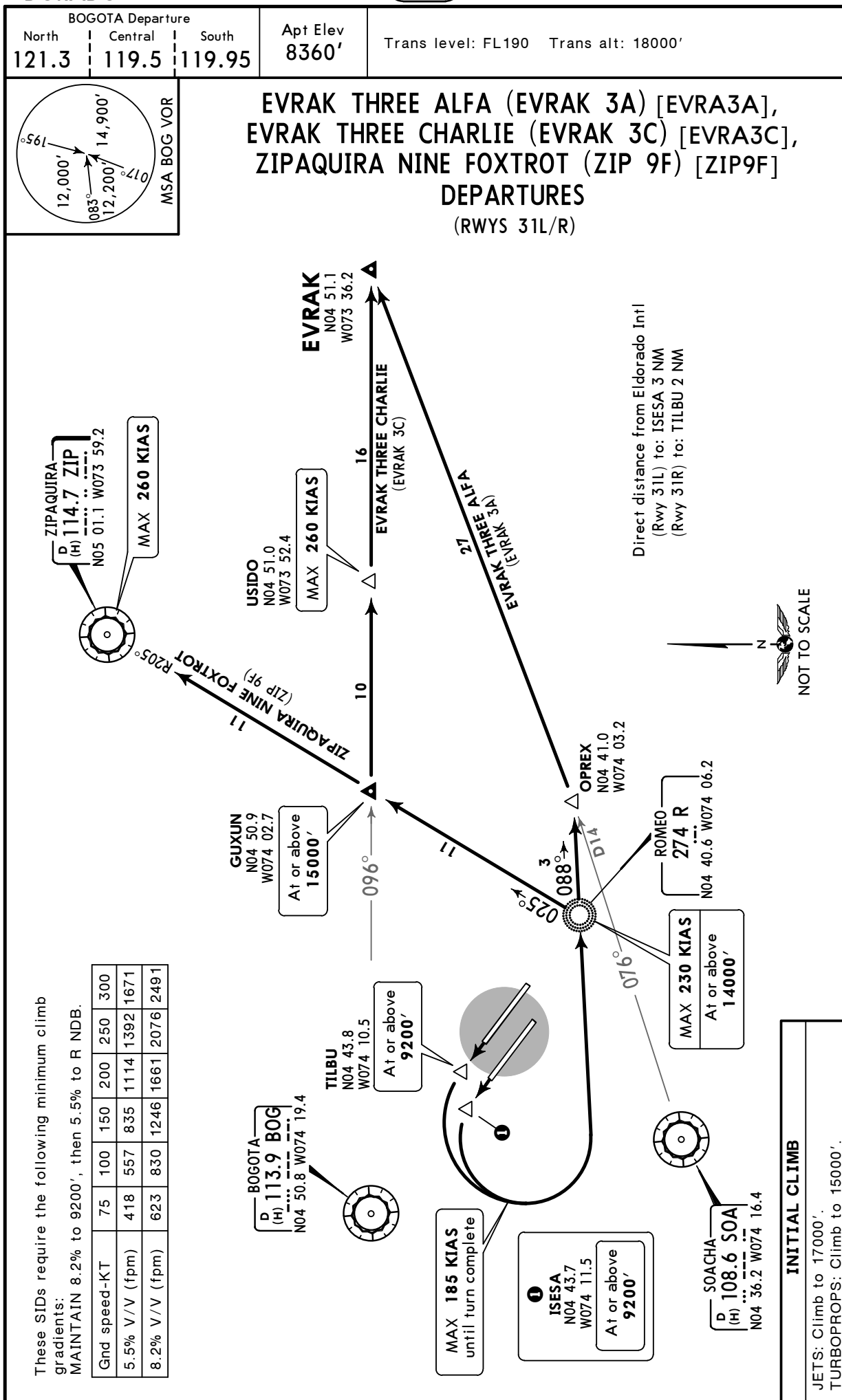
SID	INITIAL CLIMB
BOGUS FIVE BRAVO KAMIS FIVE BRAVO	JETS: Climb to 18000'. TURBOPROPS: Climb to 16000'.
MAKTO THREE BRAVO	JETS: Climb to 16000'. TURBOPROPS: Climb to 16000'.
ZIAPAQUIRA FIVE JULIET	JETS: Climb to 17000'. TURBOPROPS: Climb to 15000'.

SKBO/BOG
ELDORADO INTL

JEPPESSEN
6 NOV 15 **10-3G** **Eff 12 Nov**

BOGOTA, COLOMBIA

SID

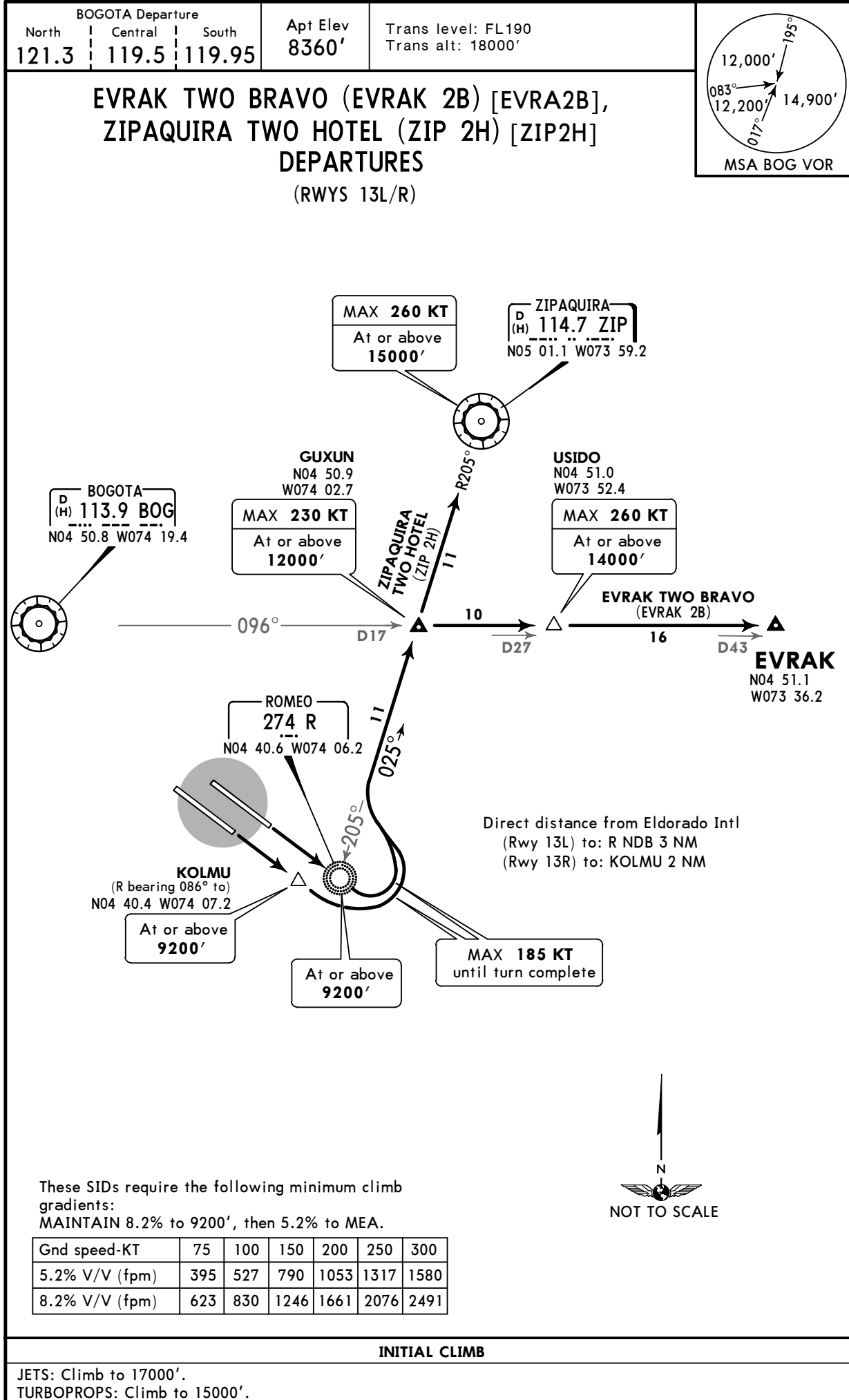


SKBO/BOG
ELDORADO INTL

JEPPESEN
30 DEC 16 **(10-3H)** Eff 5 Jan

BOGOTA, COLOMBIA

SID

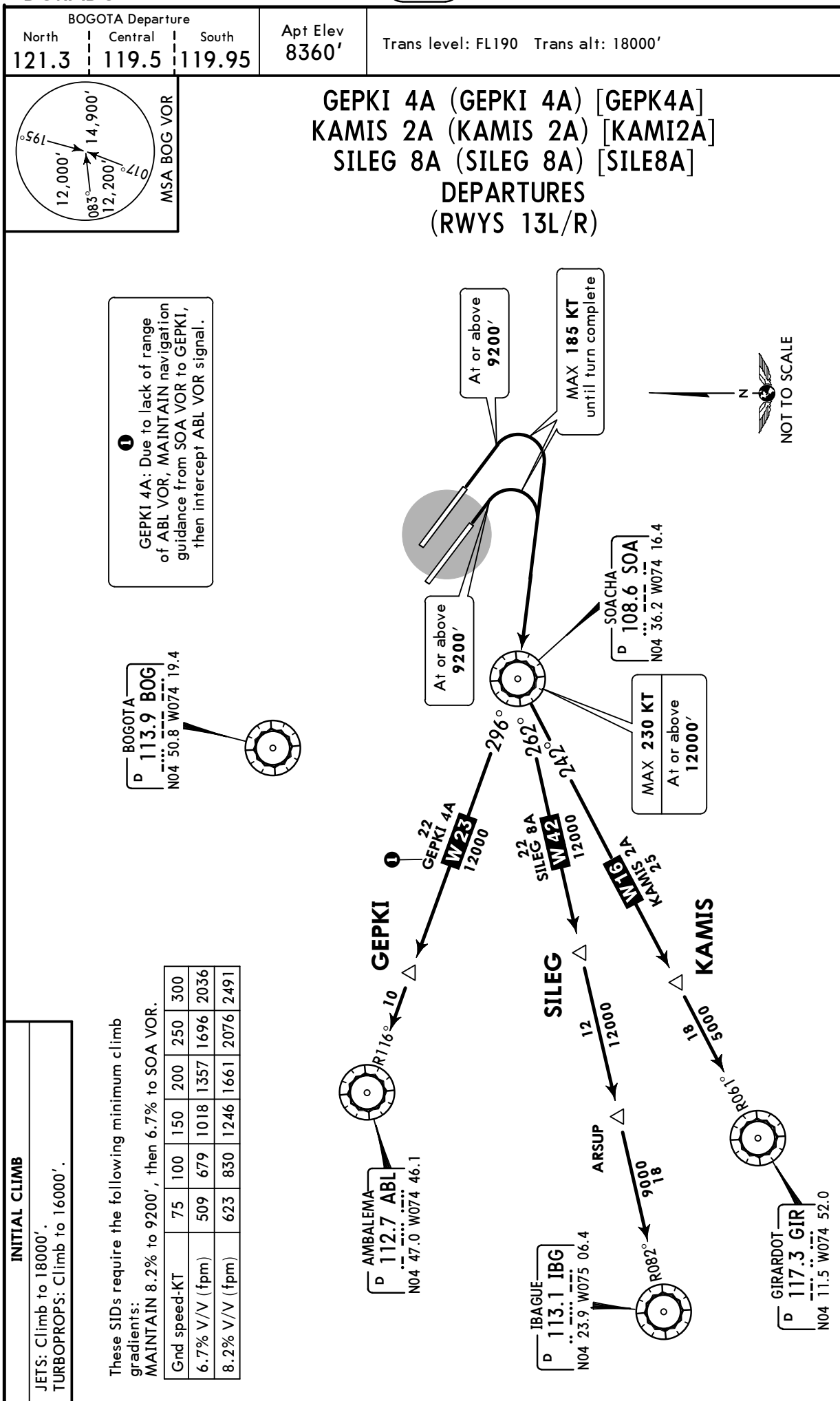


SKBO/BOG
ELDORADO INTL

JEPPESEN
30 DEC 16 **(10-3J)** Eff 5 Jan

BOGOTA, COLOMBIA

SID

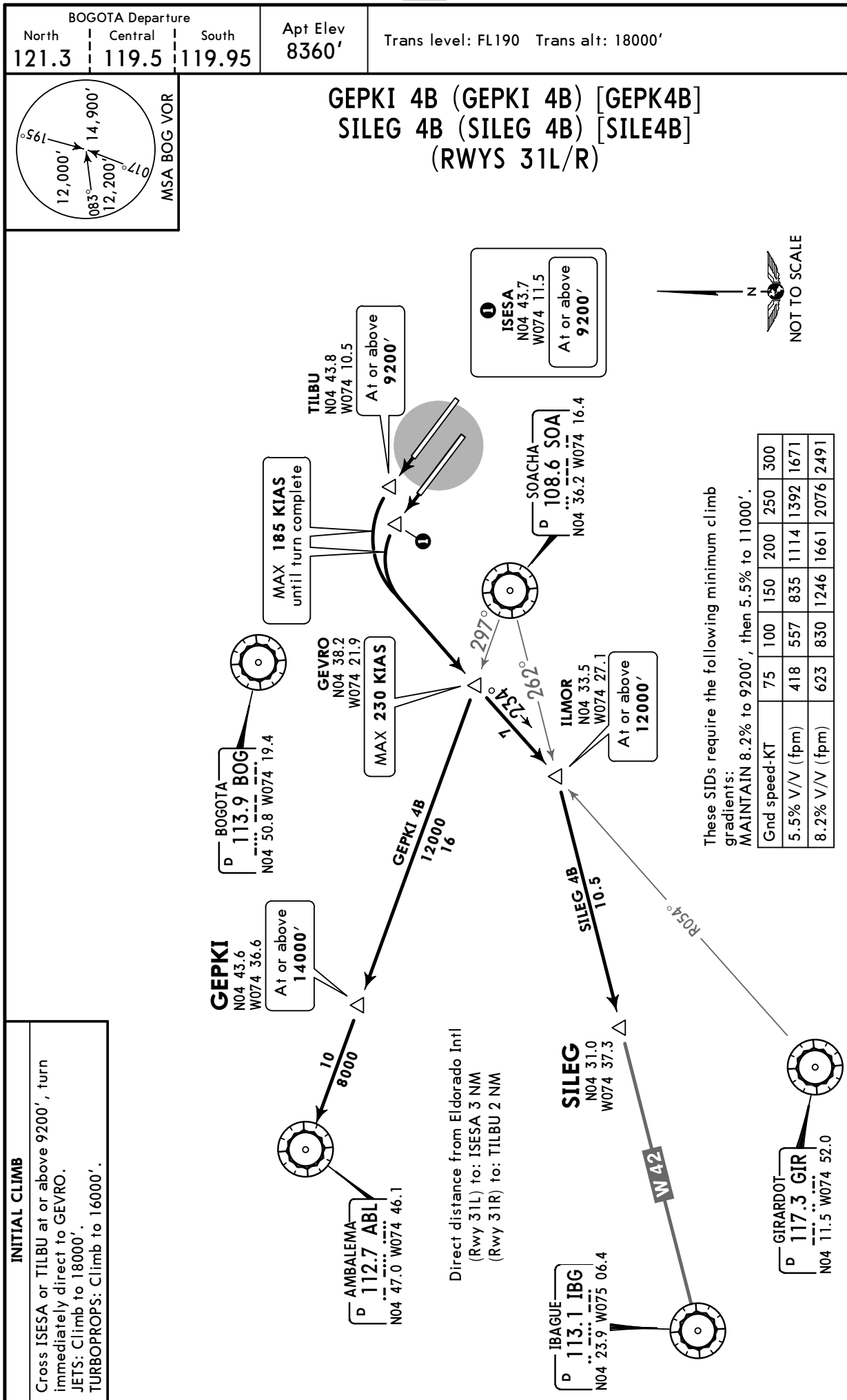


SKBO/BOG
ELDORADO INTL

JEPPESSEN
22 APR 16 **10-3K** Eff 28 Apr

BOGOTA, COLOMBIA

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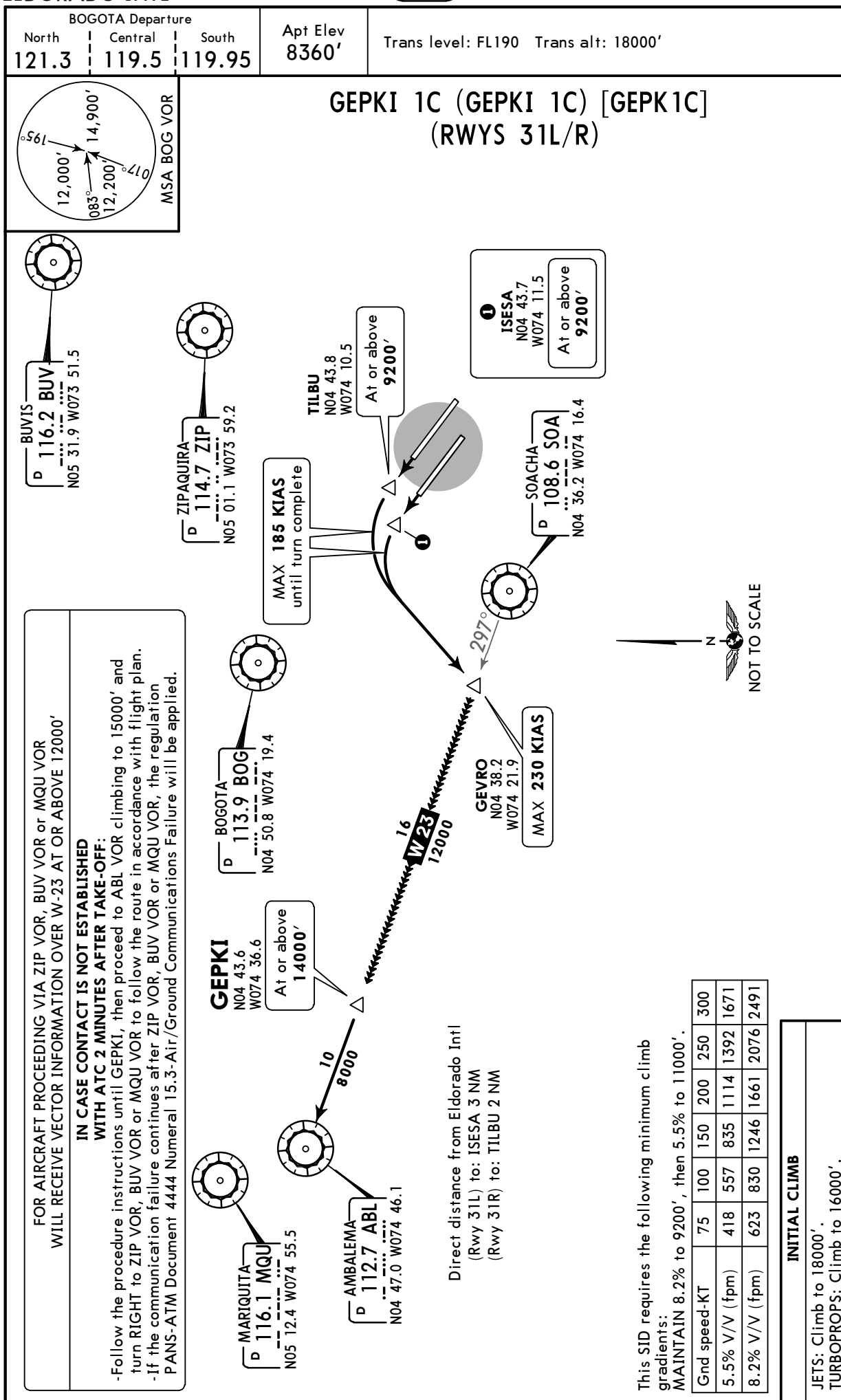


SKBO/BOG
ELDORADO INTL

JEPPESEN
22 APR 16 10-3L Eff 28 Apr

BOGOTA, COLOMBIA

SID

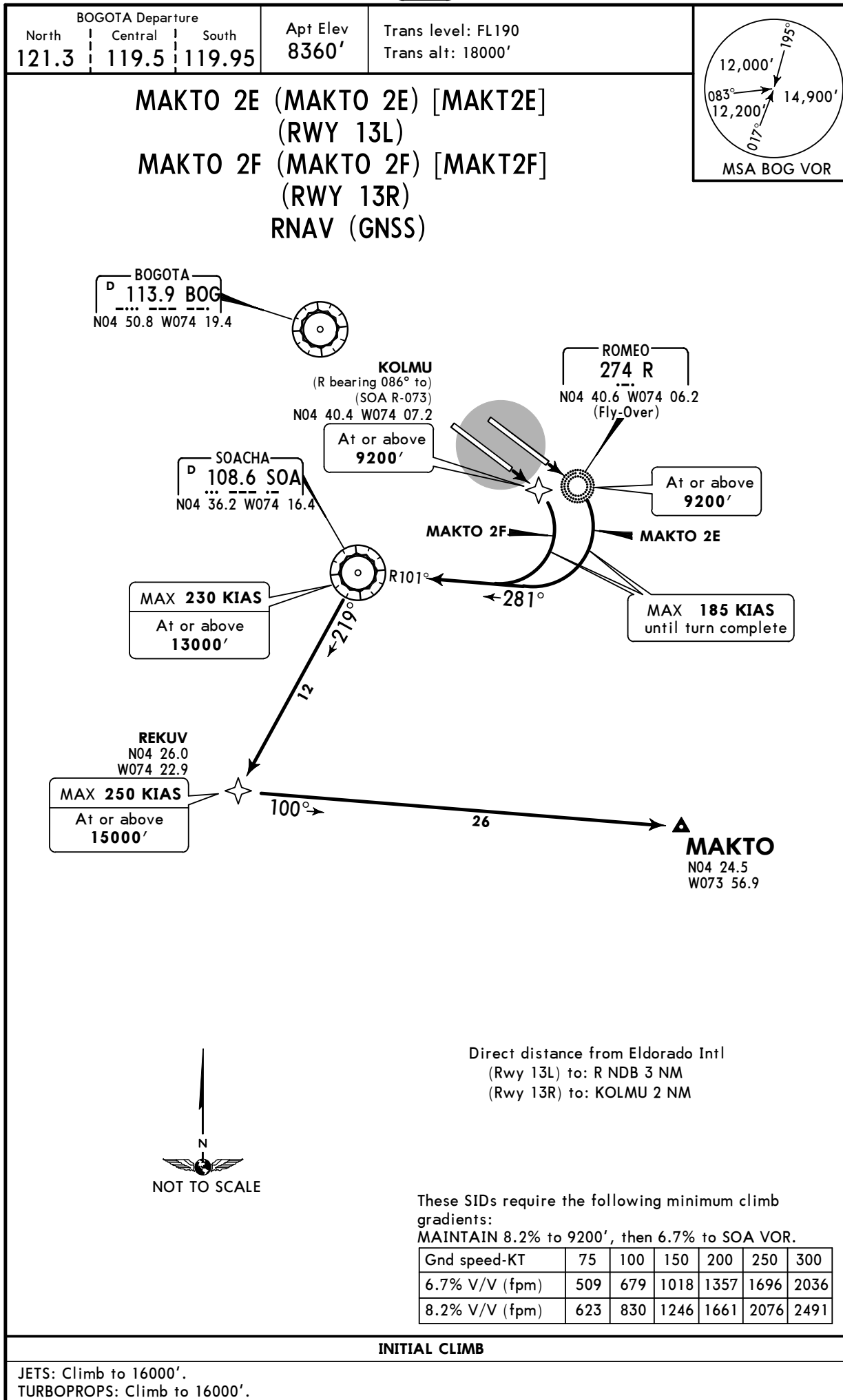


SKBO/BOG
ELDORADO INTL

JEPPESEN
22 APR 16 **(10-3M)** Eff 28 Apr

BOGOTA, COLOMBIA

RNAV SID

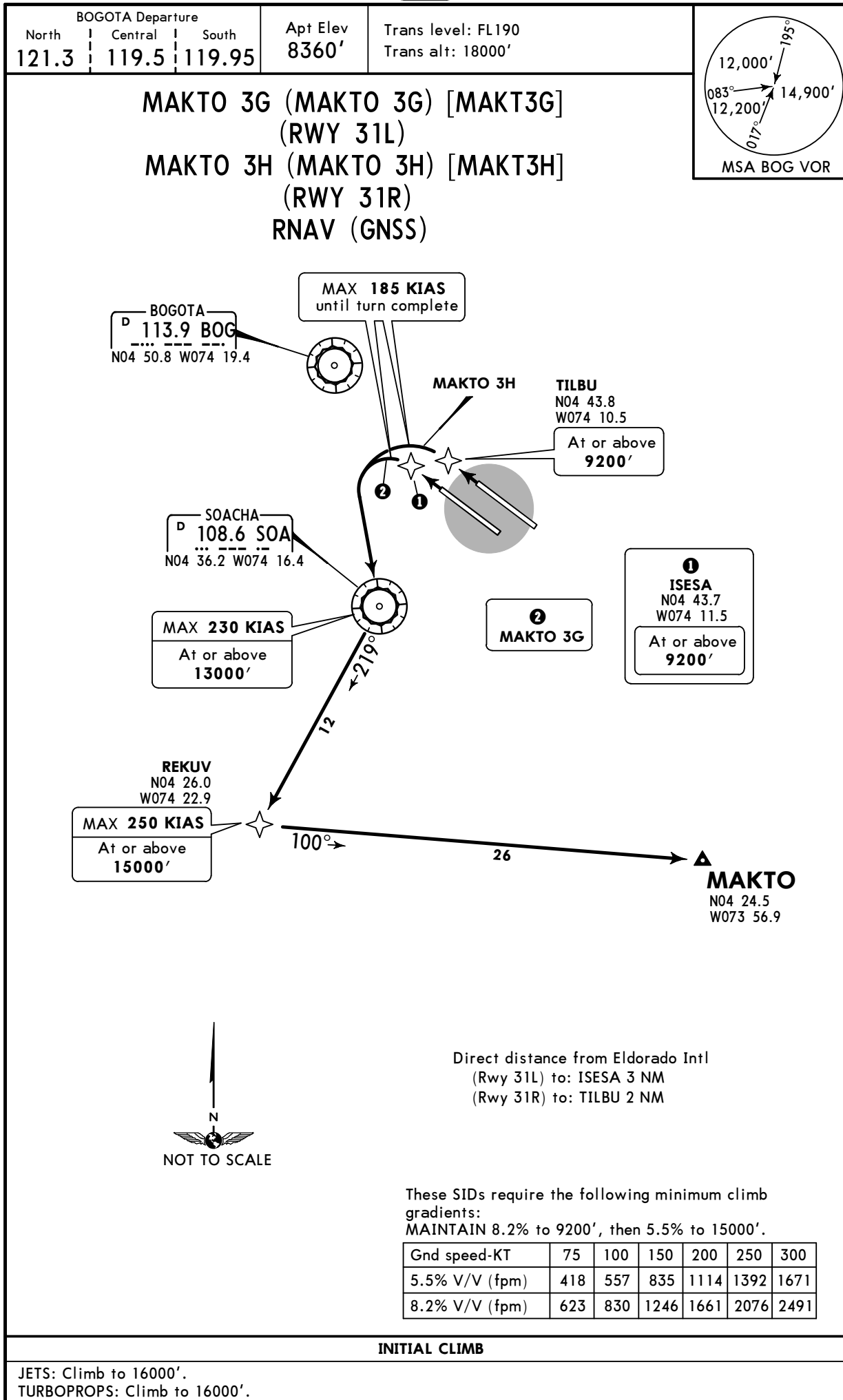


SKBO/BOG
ELDORADO INTL

JEPPESEN
22 APR 16 **(10-3N)** Eff 28 Apr

BOGOTA, COLOMBIA

RNAV SID



SKBO/BOG
ELDORADO INTL

JEPPESEN

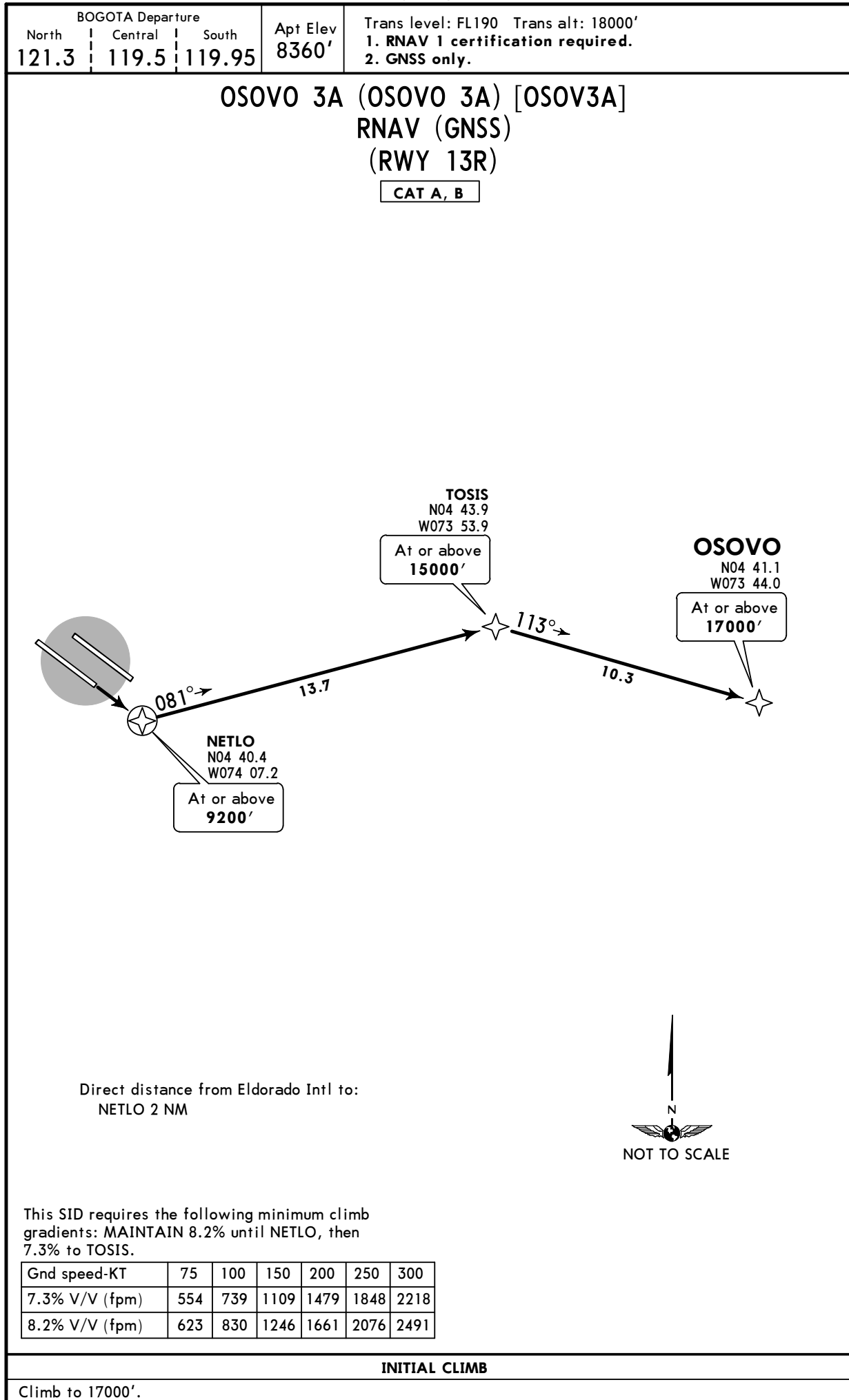
22 APR 16

(10-3P)

Eff 28 Apr

BOGOTA, COLOMBIA

RNAV SID



SKBO/BOG
ELDORADO INTL

JEPPESEN
22 APR 16 **(10-3Q)** **Eff 28 Apr**

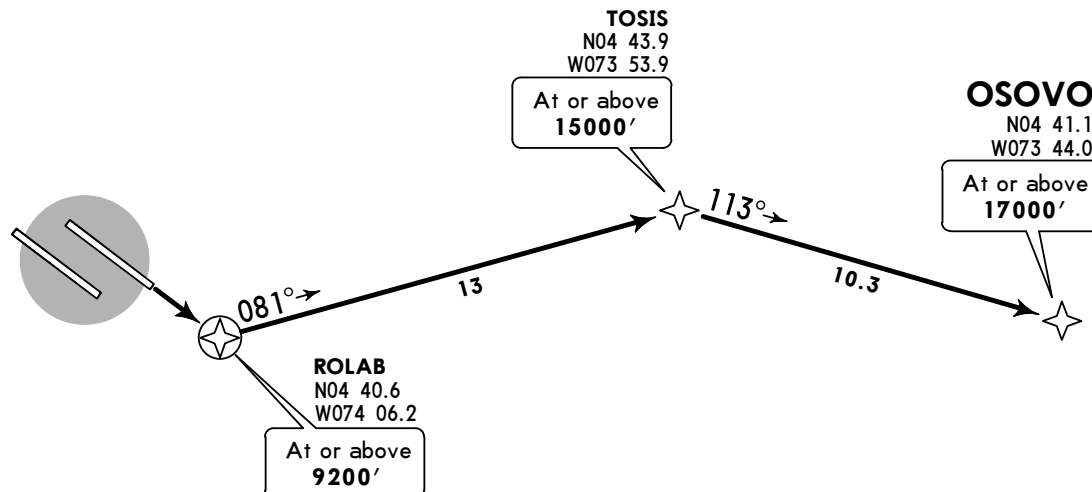
BOGOTA, COLOMBIA
RNAV SID

BOGOTA Departure			Apt Elev 8360'	Trans level: FL190 Trans alt: 18000' 1. RNAV 1 certification required. 2. GNSS only.
North	Central	South		
121.3	119.5	119.95		

OSOVO THREE BRAVO (OSOVO 3B)[OSOV3B]
RNAV (GNSS) DEPARTURE

(RWY 13L)

CAT A, B



Direct distance from Eldorado Intl to:
ROLAB 3 NM



This SID requires the following minimum climb gradients: MAINTAIN 8.2% until ROLAB, then 7.4% until reaching 15000'.

Gnd speed-KT	75	100	150	200	250	300
7.4% V/V (fpm)	562	749	1124	1499	1873	2248
8.2% V/V (fpm)	623	830	1246	1661	2076	2491

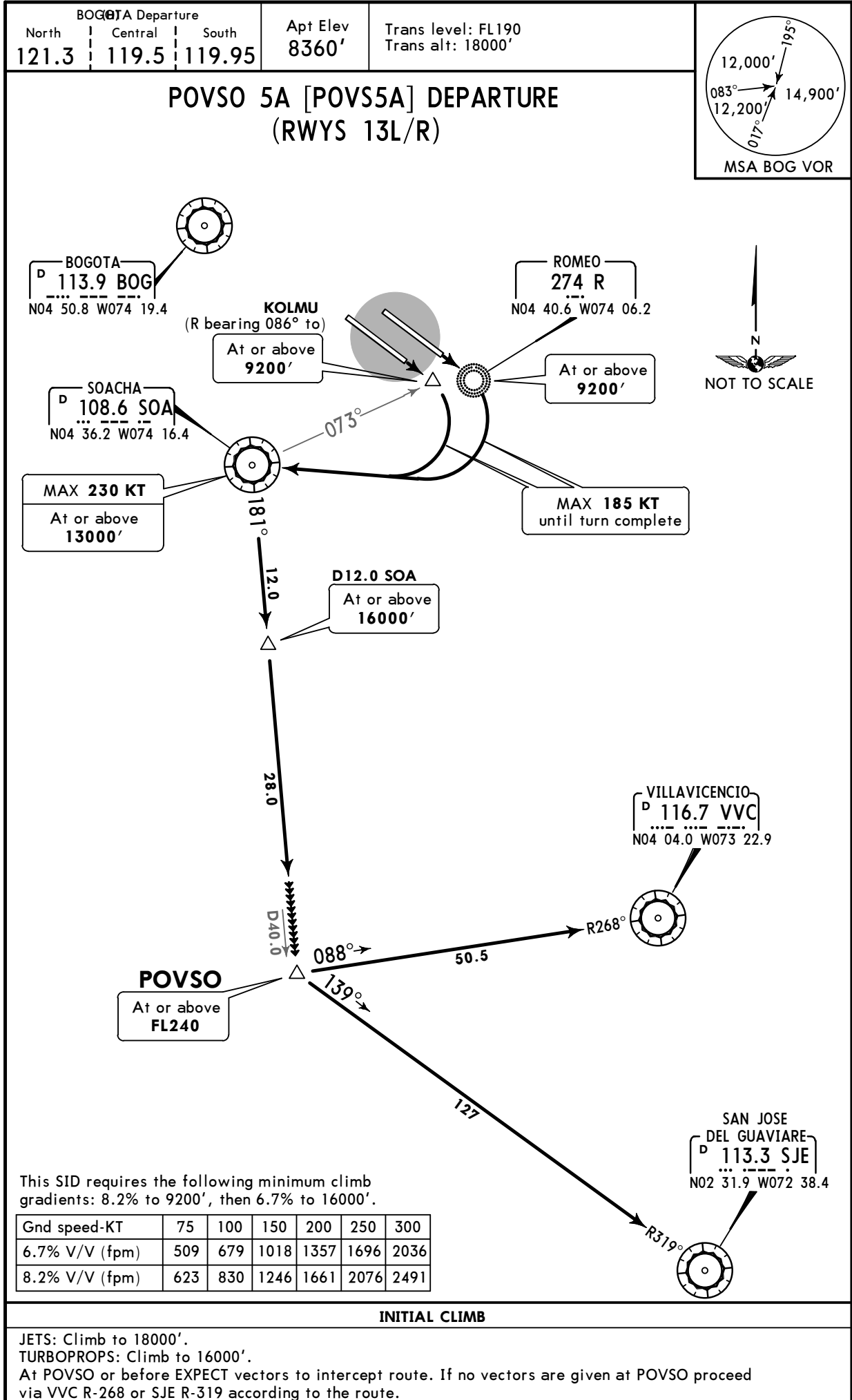
INITIAL CLIMB

Climb to 17000'.

SKBO/BOG
ELDORADO INTL

JEPPESEN
24 MAR 17 **(10-3S)**

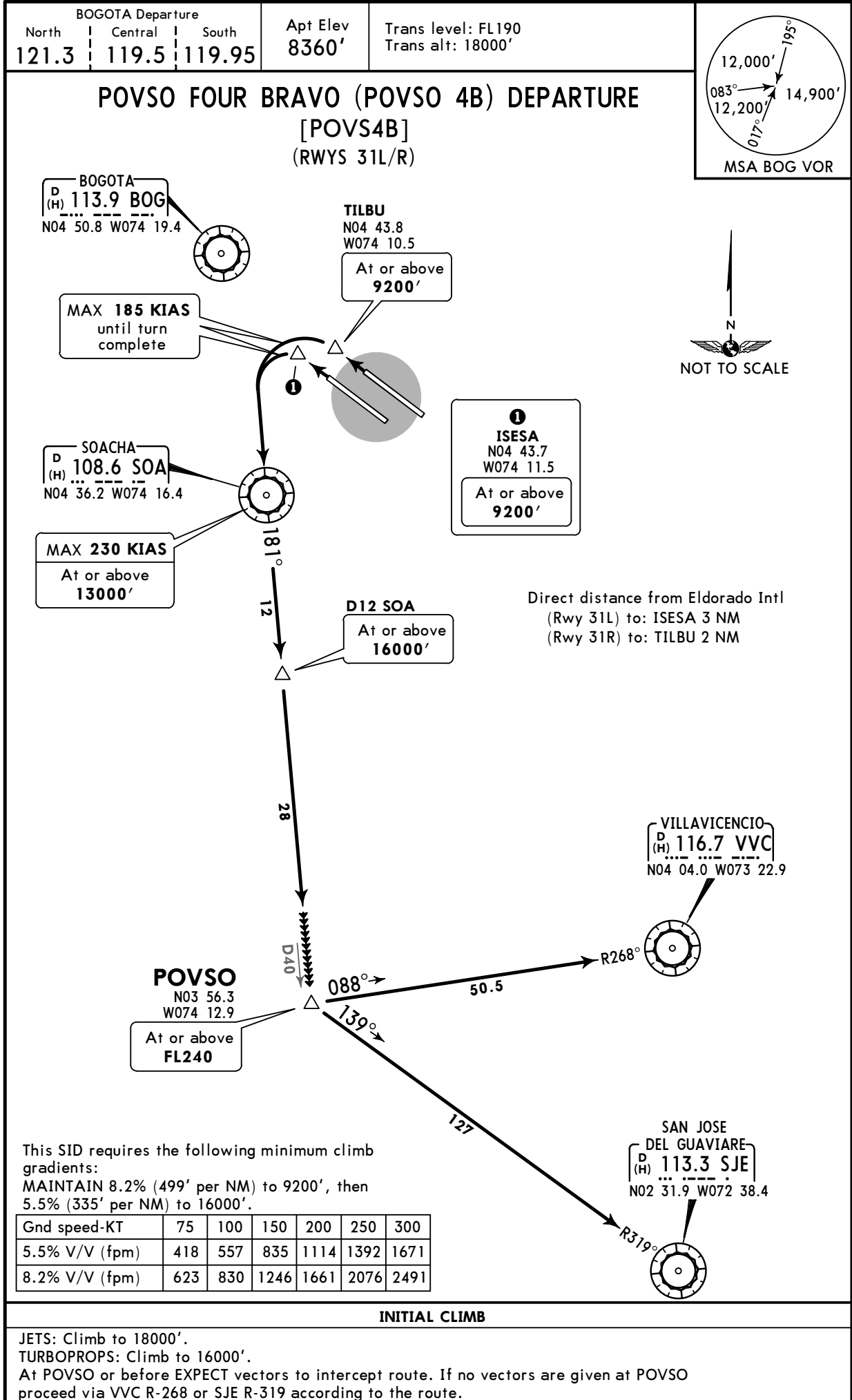
BOGOTA, COLOMBIA
SID



SKBO/BOG
ELDORADO INTL

JEPPesen
24 MAR 17 **(10-3T)**

BOGOTA, COLOMBIA
SID



SKBO/BOG
ELDORADO INTL

JEPPESEN

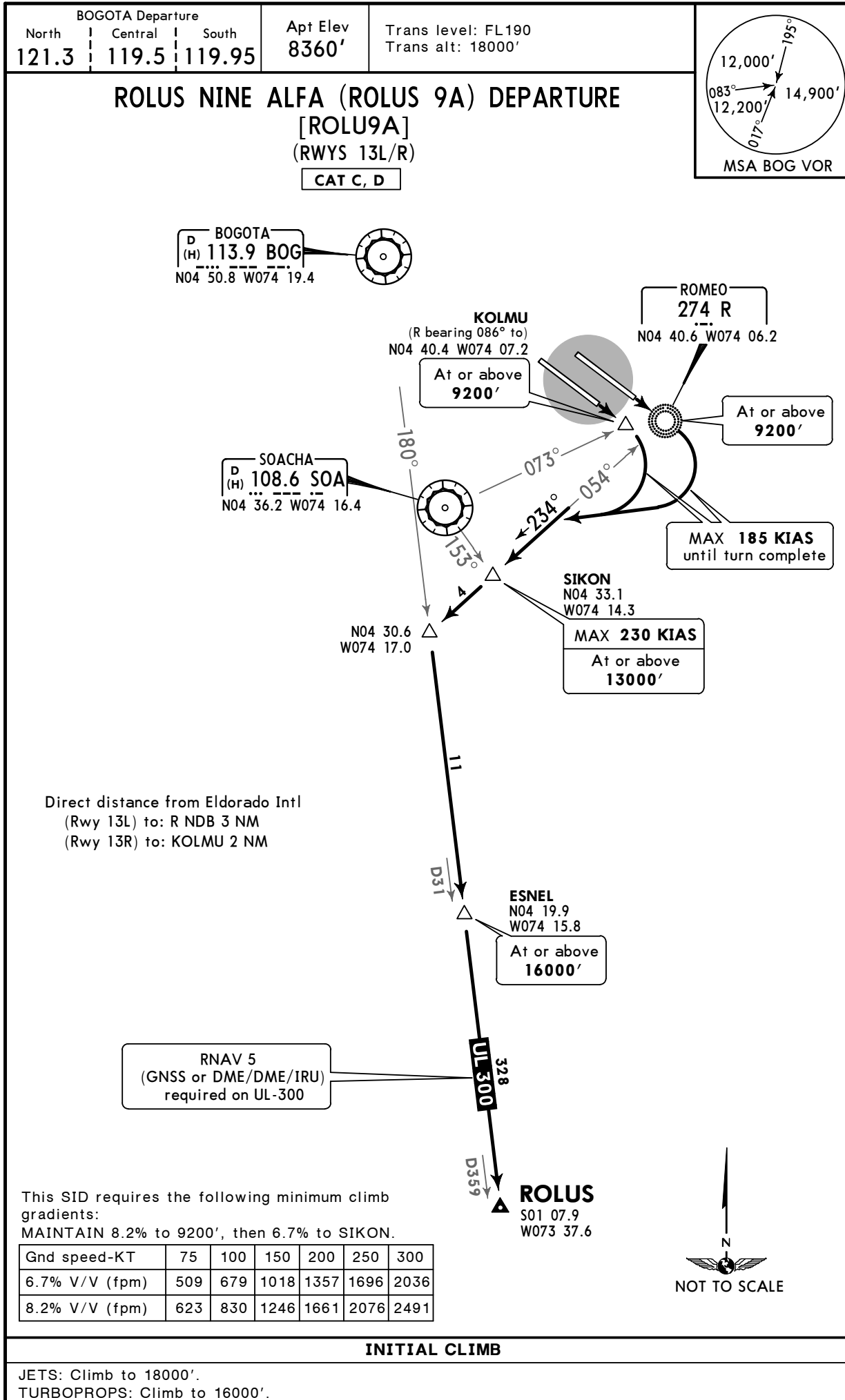
22 APR 16

10-3U

Eff 28 Apr

BOGOTA, COLOMBIA

SID



SKBO/BOG
ELDORADO INTL

JEPPESEN

22 APR 16

(10-3V)

Eff 28 Apr

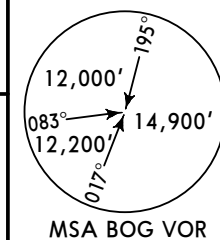
BOGOTA, COLOMBIA

SID

BOGOTA Departure		
North	Central	South
121.3	119.5	119.95

Apt Elev
8360'

Trans level: FL190
Trans alt: 18000'

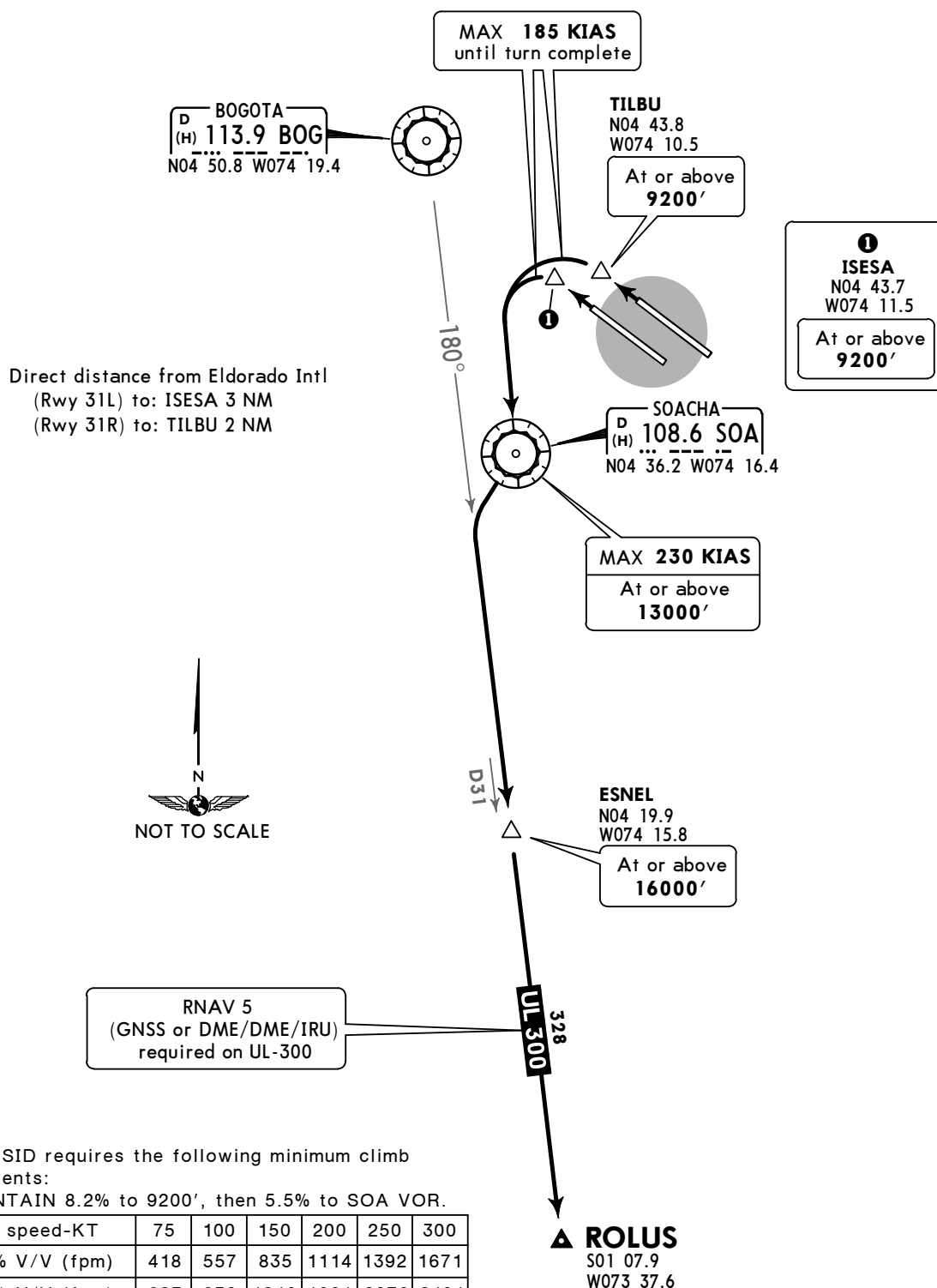


ROLUS NINE BRAVO (ROLUS 9B) DEPARTURE

[ROLU9B]

(RWYS 31L/R)

CAT C, D



This SID requires the following minimum climb gradients:
MAINTAIN 8.2% to 9200', then 5.5% to SOA VOR.

Gnd speed-KT	75	100	150	200	250	300
5.5% V/V (fpm)	418	557	835	1114	1392	1671
8.2% V/V (fpm)	623	830	1246	1661	2076	2491

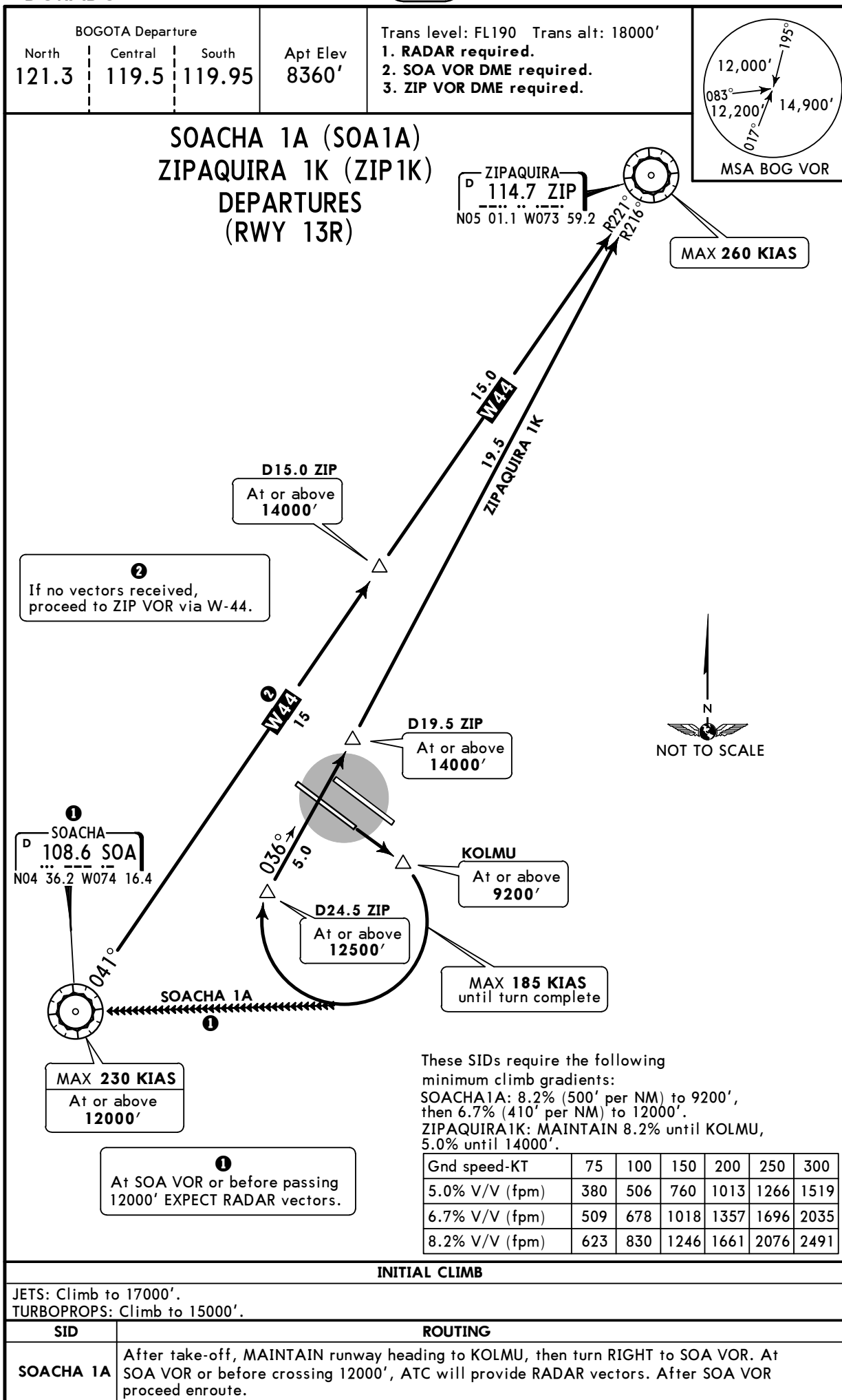
INITIAL CLIMB

JETS: Climb to 18000'.
TURBOPROPS: Climb to 16000'.

SKBO/BOG
ELDORADO INTL

JEPPesen
10 FEB 17 **(10-3W)**

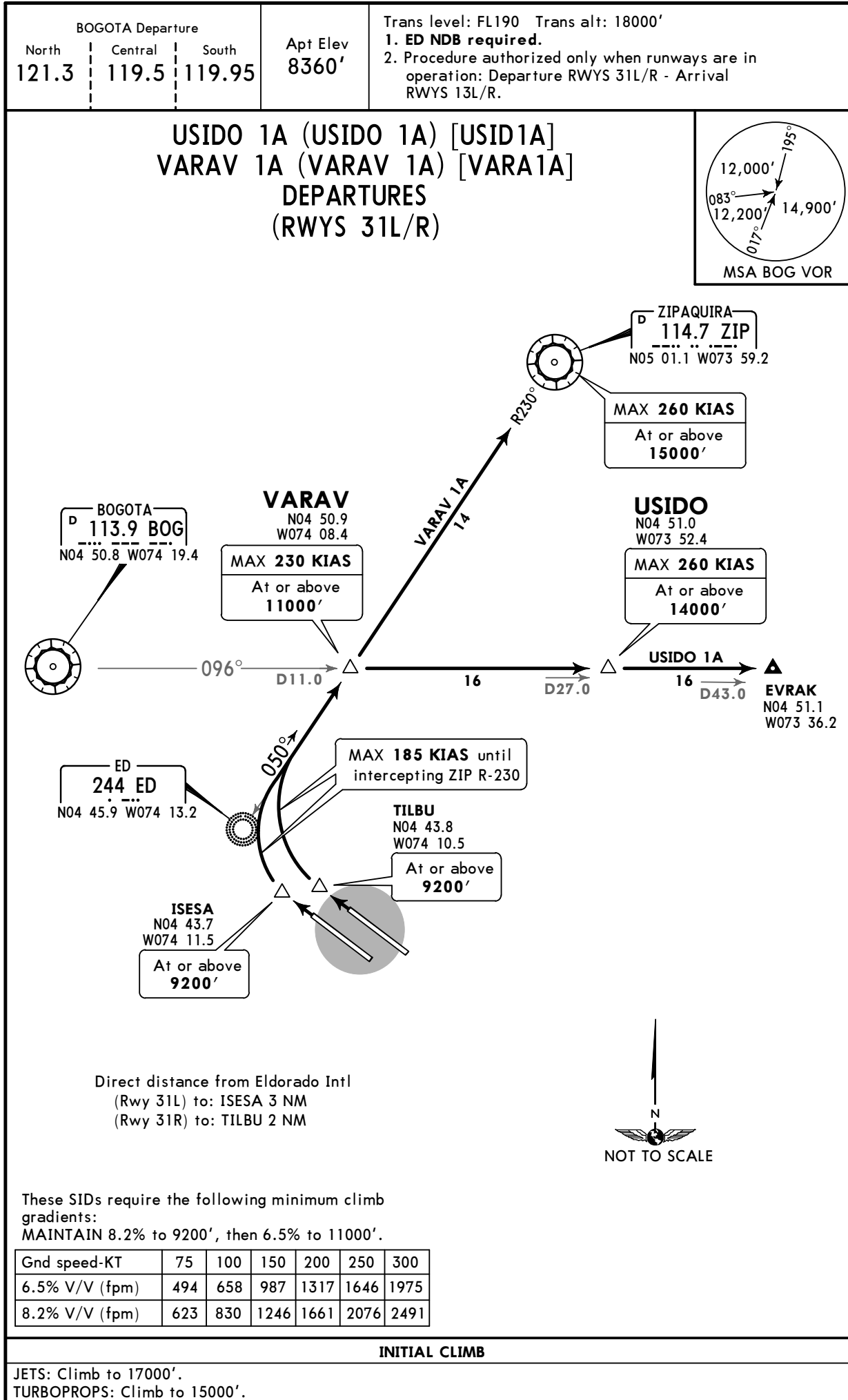
BOGOTA, COLOMBIA
SID



SKBO/BOG
ELDORADO INTL

JEPPESEN
10 FEB 17 **(10-3X)**

BOGOTA, COLOMBIA
SID



SKBO/BOG
JEPPESSEN
 27 MAR 15 (10-4)

BOGOTA, COLOMBIA
ELDORADO INTL
NOISE ABATEMENT PROCEDURES
STANDARD: LT plus 5 hours = UTC
RUNWAY 13 L/R

This procedure implies a reduction of power at a prescribed minimum altitude and delay the flaps/slats retraction until a maximum prescribed altitude is reached. At the prescribed altitude, accelerate and retract flaps/slats maintaining a positive rate of climb and completing the transition to enroute normal climbing procedures.

- The climb speed until noise abatement starting point will be not less than $V_2 + 10$ Kts.
- **Take-off Rwy 13L:** Maintain Rwy heading until R NDB and start turn. Reaching 800' AGL adjust and maintain engine power according to the noise reduction program approved in the operational manual. Maintain a climbing speed of $V_2 + 10$ kts with flaps and slats in take-off configuration.
- **Take-off Rwy 13R:** Maintain Rwy heading until KOLMU and start turn. Reaching 800' AGL adjust and maintain engine power according to the noise reduction program approved in the operational manual. Maintain a climbing speed of $V_2 + 10$ kts with flaps and slats in take-off configuration.
- At 11,000', maintaining a positive rate of climb, accelerate and retract flaps/slats.
- At 12,500', accelerate to enroute climb speed.

NOTE 1: Maintain maximum climb gradient in the initial take-off phase.

NOTE 2: For DC-10 aircraft the criteria will be $V_2 + 20$ Kts.

NOTE 3: Reduced take-off power procedure is recommended in accordance with the operational manual.

In addition, the following criteria should be taken into account:

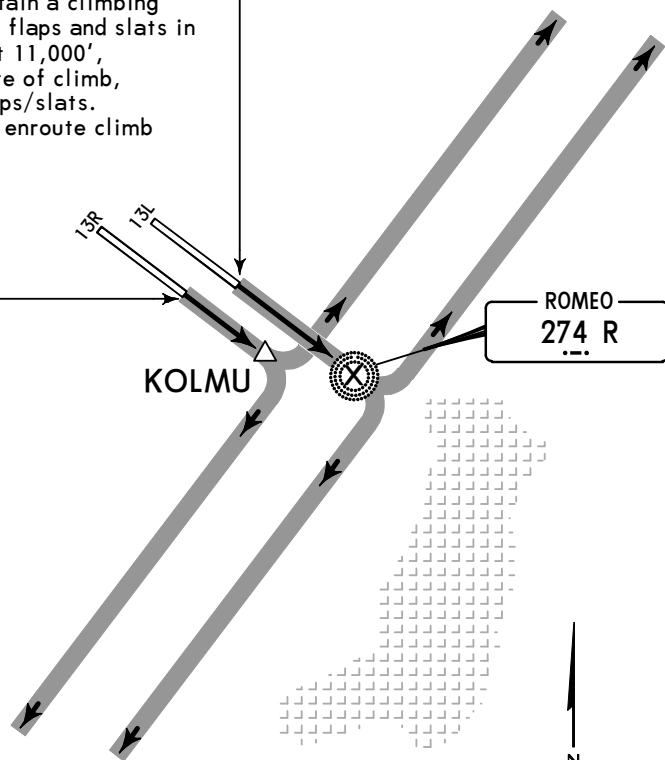
1. The power rules to be applied after the failure or loss of one engine, or any other apparent loss of performance, at any stage of take-off or climb during the noise abatement procedure, will be at pilot in command discretion, and noise abatement considerations will no longer apply.
2. The maximum acceptable angle for each kind of fuselage will not be exceeded.

Take-off Rwy 13L

Maintain Rwy hdg until R NDB and start turn. Reaching 800' AGL adjust and maintain engine power according to the noise reduction program approved in the operational manual. Maintain a climbing speed of $V_2 + 10$ kts with flaps and slats in take-off configuration. At 11,000', maintaining a positive rate of climb, accelerate and retract flaps/slats. At 12,500', accelerate to enroute climb speed.

Take-off Rwy 13R

Maintain Rwy hdg until KOLMU and start turn. Reaching 800' AGL adjust and maintain engine power according to the noise reduction program approved in the operational manual. Maintain a climbing speed of $V_2 + 10$ kts with flaps and slats in take-off configuration. At 11,000', maintaining a positive rate of climb, accelerate and retract flaps/slats. At 12,500', accelerate to enroute climb speed.



NOT TO SCALE

SKBO/BOG**JEPPesen**
27 MAR 15 (10-4A)**BOGOTA, COLOMBIA**
ELDORADO INTL**NOISE ABATEMENT PROCEDURES****STANDARD: LT plus 5 hours = UTC****RUNWAY 31 L/R**

This procedure implies a reduction of power at a prescribed minimum altitude and delay the flaps/slats retraction until a maximum prescribed altitude is reached. At the prescribed altitude, accelerate and retract flaps/slats maintaining a positive rate of climb and completing the transition to enroute normal climbing procedures.

- The climb speed until noise abatement starting point will not be less than $V_2 + 10$ Kts.
- Reaching 800' AGL start turn, adjust and maintain climb engine power.
Maintain a climbing speed of $V_2 + 10$ Kts with flaps and slats in take-off configuration.
- At 11,000', maintaining a positive rate of climb, accelerate and retract flaps/slats.
- At 12,500', accelerate to enroute climb speed.

NOTE 1: Maintain maximum climb gradient in the initial take-off phase.

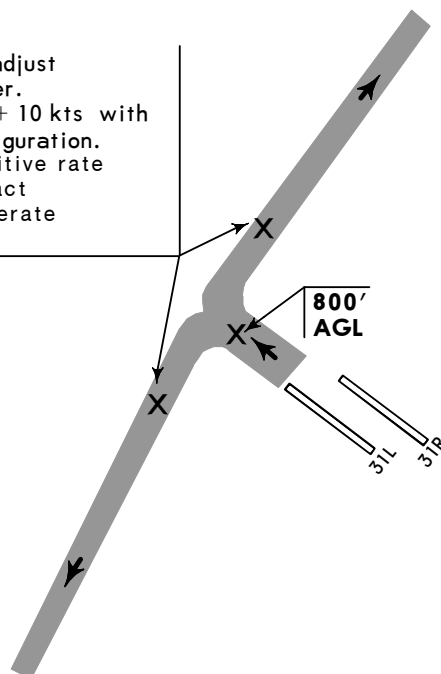
NOTE 2: For DC-10 aircraft the criteria will be $V_2 + 20$ Kts.

NOTE 3: Reduced take-off power procedure is recommended in accordance with the operational manual.

In addition, the following criteria should be taken into account:

1. The power rules to be applied after the failure or loss of one engine, or any other apparent loss of performance, at any stage of take-off or climb during the noise abatement procedure, will be at pilot in command discretion, and noise abatement considerations will no longer apply.
2. The maximum acceptable angle for each kind of fuselage will not be exceeded.

Reaching 800' AGL start turn, adjust and maintain climb engine power. Maintain climbing speed of $V_2 + 10$ kts with flaps and slats in take-off configuration. At 11,000', maintaining a positive rate of climb, accelerate and retract flaps/slats. At 12,500', accelerate to enroute climb speed.



SKBO

JEPPESEN

1 FEB 02

10-6

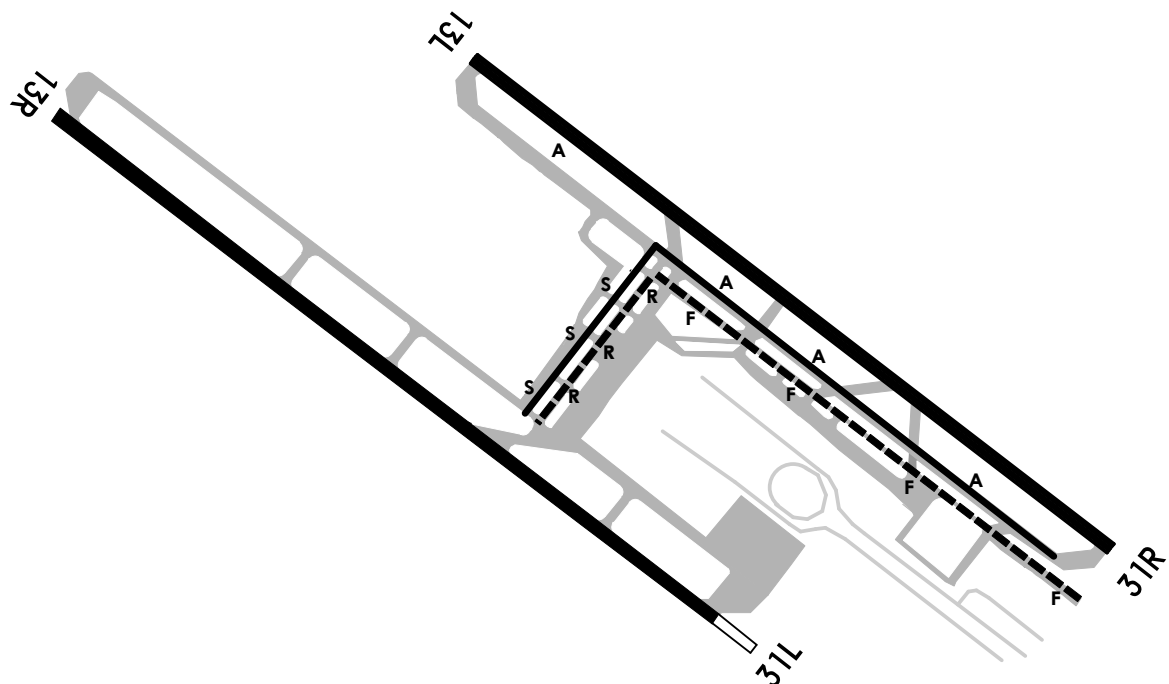
TAXI
BOGOTA, COLOMBIA
ÉLDORADO INTL
Coded Taxi Routes

PREFERRED TAXI ROUTES FOR DEPARTURES/ARRIVALS

Preferred routes will be issued by Ground Control. Route will indicate that the aircraft is to proceed via Taxiway Alfa, Sierra or Foxtrot, Romeo and taxi circuit 1 or 2.

To Runways 13R/13L	
Route Ident	Routing via
CIRCUIT 1	Alfa - Sierra
CIRCUIT 2	Foxtrot - Romeo

To Runways 31L/31R	
Route Ident	Routing via
CIRCUIT 1	Alfa - Sierra
CIRCUIT 2	Foxtrot - Romeo



———— CIRCUIT 1 TAXIWAYS ALFA & SIERRA

----- CIRCUIT 2 TAXIWAYS FOXTROT & ROMEO

SKBO/BOG

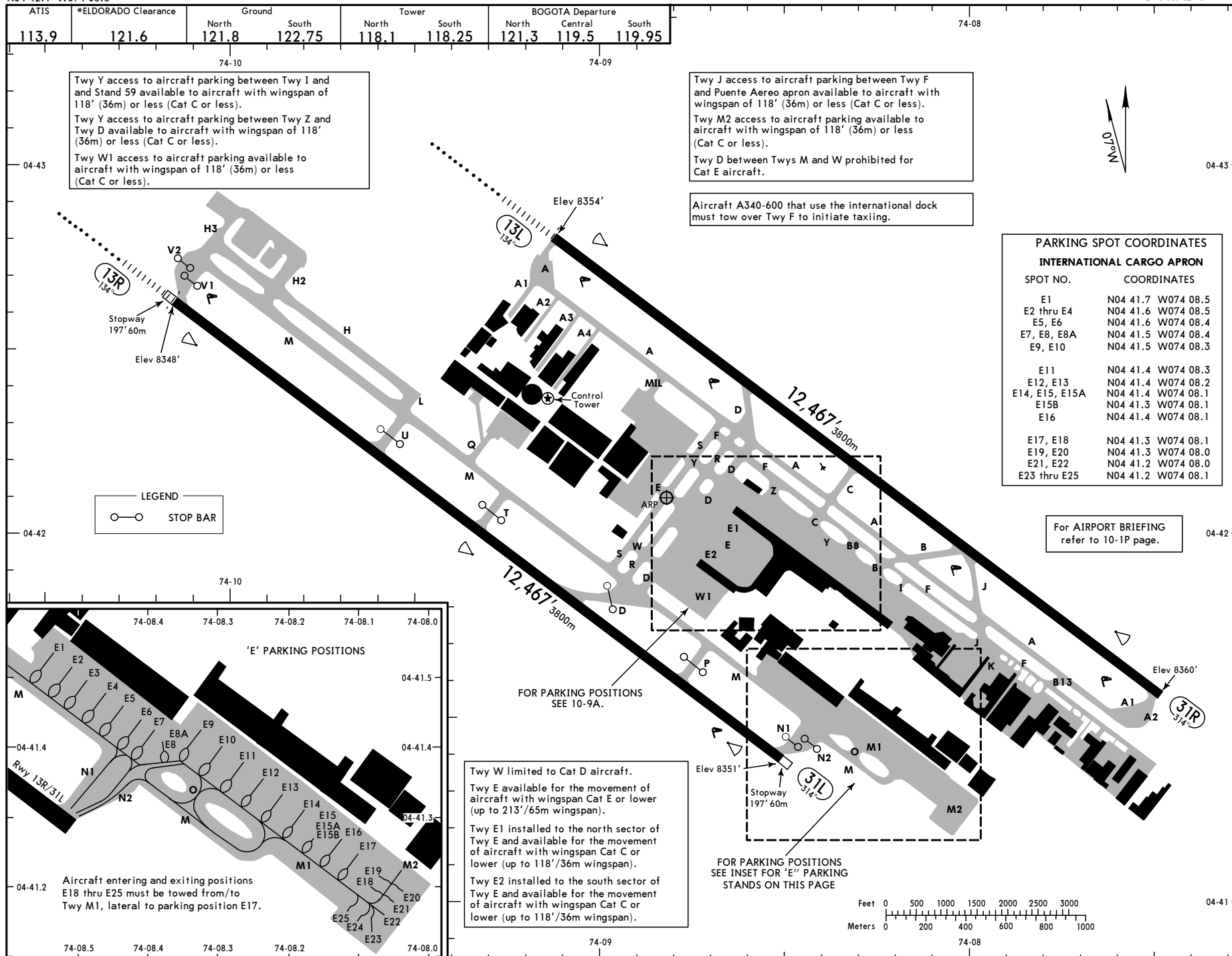
Apt Elev **8360'**

N04 42.1 W074 08.8

JEPPESEN BOGOTA, COLOMBIA

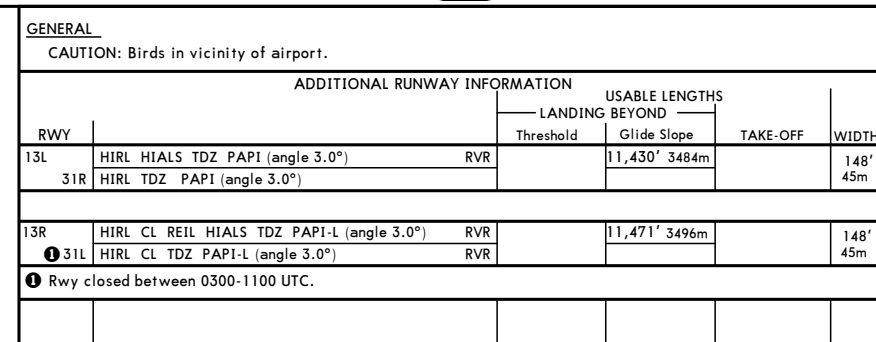
7 APR 17 **(10-9)**

ELDORADO INTL



JEPPESEN
7 APR 17 10-9A

ELDORADO INTL



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TAKE-OFF				
Rwy 13R/31L				
1 Take-off Alternate Airport Filed				Standard
RL & CL & RCLM		RL & CL or RCLM	RL & CL or RCLM	
Stop Barrier or Runway Protection Lights				
1 Eng	570' - 3000m			1600m
2 Eng	1 hour alternate (1 Eng inop)			
	RVR 350m	500m	550m	
3 & 4 Eng	2 hour alternate (1 Eng inop)			800m
	RVR 350m	500m	550m	
Rwy 13L/31R				
1 Take-off Alternate Airport Filed				Standard
RL & CL or RCLM				
1 Eng	570' - 3000m			1600m
2 Eng	1 hour alternate (1 Eng inop)			
	550m			
3 & 4 Eng	2 hour alternate (1 Eng inop)			800m
	550m			

1 With appropriate approval.

CHANGES: Apron, terminal extended, parking stands 11-13, 71-73 added, stands 51A, 108, 109 removed, notes.

SKBO/BOG **JEPPESEN****SMGCS**

10 OCT 14

(10-9B)**Eff 16 Oct****BOGOTA, COLOMBIA**
ELDORADO INTL**LOW VISIBILITY PROCEDURES**

The purpose of this document is to provide safe operation at the airport while operating in Low Visibility Conditions (LVP).

The following related information, complements all the procedures established in the SMGCS Manual of El Dorado airport, and apply to all aerodrome traffic that circulates the maneuvering area thereof, including vehicles and persons, while low visibility conditions remain.

1. FACILITIES DESCRIPTION

1.1 Runway 13R is equipped with ILS and is approved for CAT II operations as well as LVTO Level I and II. Runway 31L is approved for LVTO Level I and II. Runway 13L is equipped with ILS and is approved for CAT I operations as well as LVTO Level I and II (with taxi restrictions). Runway 31R is approved for LVTO operations Level I and II (with taxi restrictions).

1.2 SIGNAL AND GUIDANCE TAXI SYSTEMS:

- a. TAXI GUIDANCE SYSTEM: Illuminated position indicators, NO ENTRY labels, mandatory instructions and information labels, taxi holding points, stop bars and runway protection lights are provided.
- b. RUNWAY SIGNALING: Threshold, centerline, touchdown zone, and aiming point markings.
- c. TAXIWAY SIGNALING: Center and edge.

2. CRITERIA FOR STARTING, IN FORCE AND ENDING PHASES OF LVP PROCEDURES

- 2.1 Preparation phase of LVP procedures will begin by the emission of the LVP PRELIMINARY WARNING advice, which will be released when the El Dorado airport current forecast (TAF), expected for formation and/or presence of mist or fog.
- 2.2 Given that it may take several hours between the time the preliminary warning is made based on the interpretation of the TAF, until the time that the enforcement of the LVP, a notice that PRELIMINARY WARNING CONFIRMED will be issued.
 - a. The reported visibility from the IDEAM (Colombian Institute of Hydrology, Meteorology and Environmental Studies) observer, in the SPECI/METAR is equal to or lower than 2000m.
 - b. The TDZ RVR indicator for Runway 13R/13L or 31L/31R indicates a 1000m value with a decreasing trend.
 - c. The IDEAM meteorological observer, crew, or electronic equipment reports cloud ceiling that are equal to or less than 300 ft.
- 2.3 The operation phase of the LVP procedures will begin by the emission of LVP PROCEDURES ARE IN FORCE advice when:
 - a. TDZ RVR indicator of any runway 13R, 13L, 31R, 31L, indicates a value of 550m or less.
 - b. When the IDEAM observer report a meteorological visibility of lower than 800m.
 - c. LVP procedures will be initiated based on which of the above conditions happen first.
- 2.4 The suspension phase of LVP procedures will be carried out by issuing notice of suspension of the LVP procedures which will be issued when:
 - a. The LVP procedures are affected by a technical issue. A NOTAM will inform of the failure and duration.
 - b. It is known or suspected, that an aircraft is under bomb threat or being hijacked at the El Dorado airport.
 - c. Landings or take-offs are not expected for two (2) or more hours.
 - d. Disorientation or doubt exists about the position of an aircraft or vehicle at the airport. In this situation, take-off, approach and taxi procedures will be able to resume ONLY when there is certainty of the aircraft or missing vehicle position.

SKBO/BOG **JEPPESSEN****SMGCS**

10 OCT 14

(10-9C)**Eff 16 Oct****BOGOTA, COLOMBIA**
ELDORADO INTL**LOW VISIBILITY PROCEDURES**

- e. When the IDEAM observer reports a visibility or RVR values that are less than CAT II and Take-off level II operations, all take-off and approach operations will be suspended at the airport.
- 2.5 The ending phase of the LVP procedures will begin by issuing the announcement that LVP procedures are CANCELLED. This will be emitted when:
 - a. The TDZ RVR indicator of Runway 13R indicates a value of U1000m (3000 ft) or more and a reduction of the same TDZ RVR value is not expected in the next thirty (30) minutes.
 - b. When the IDEAM observer reported meteorological visibility is greater than 2000m (6000 ft).
 - c. When the equipment supporting LVP, is affected by any degradation and there is no possibility of a prompt solution.
 - d. Despite having equal or lower RVR values for the prescribed LVP procedure minimums, the visibility conditions of the other runway, as well as that of the different taxiways, allows the visualization of traffic from the control tower, and according the aerodrome controller criteria, the cancellation of such procedures does not affect the SAFETY of the operations.

3. RUNWAY EXIT DETAILS

- 3.1 The exits for Runways 13R and 31L are equipped with GREEN/YELLOW lights.
- 3.2 except as otherwise authorized by ATC, aircraft which have landed must exit Runway 13R by taxiway D or N.
- 3.3 Pilot in command shall notify "free runway" when exiting the runway and all lights of the taxiway ahead are GREEN.
- 3.4 Aircraft exiting runway 13R via taxiway DELTA, shall continue taxiing via taxiway ROMEO, stopping at marked position R1.
- 3.5 Aircraft exiting runway 13R via taxiway NOVEMBER, shall continue taxiing via taxiway MIKE, stopping at marked position M5, unless control reports to stop when entering taxiway MIKE, and then follow the taxi instructions of the FOLLOW ME.

4. HOLDING POINTS USAGE AND MOVEMENT RESTRICTIONS

- 4.1 Has established a system of geographic position markings painted on the taxiways, to determine the aircraft positions.
- 4.2 During Low Visibility Procedures with a reported threshold RVR value of the runway in use below 550m and up to 350m shall be mandatory the usage of the geographic marks and runway the holding points, as indicated below:
 - For the departing traffic, will only use the geographical position marks of EVEN numbering (F2, S4, M6, A8, and A10) and the holding positions V1 of runway 13R, and N1 of runway 31L.
 - For the arriving traffic, will only use the geographical position marks of ODD numbering (M5, R1, R3 and A7).
- 4.3 The ground controller SHALL NOT authorize an aircraft to the next intermediate holding point until the preceding aircraft has been authorized to continue beyond the assigned geographical position mark and it has reported done.
- 4.4. During LVP Procedures with a reported threshold RVR value used for take-off equal or greater than 500, only will be able to operate those operations authorized by the UAEAC through the operation specifications may carry out take-off LEVEL I, LEVEL II or when the standard take-off minimums are present, remaining under the absolute responsibility of the crew to inform whether they are authorized or not for this type of operation and to adjust to the minimum necessary for the take-off.
- 4.5. During LVP procedures with a reported RVR value at the threshold of the departure runway below 500m (1500 ft) up to 350m (1150 ft), only aircraft operators authorized by UAEAC through OPSPECS have approval to carry out CAT II approaches.
- 4.6. Taxiing to the threshold of the runway in use for departures shall not be authorized if the reported RVR value at the threshold is below 350m (1150 ft).

SKBO/BOG **JEPPESEN****SMGCS**

10 OCT 14

10-9D**Eff 16 Oct****BOGOTA, COLOMBIA**
ELDORADO INTL**LOW VISIBILITY PROCEDURES**

- 4.7. During the enforcement, towing of aircraft between different aprons shall not be authorized.
- 4.8. During the enforcement of the LVP the movement of rotary wing aircraft is restricted; State aircraft with the status of HEAD or STATE are expected, providing that the necessary conductive measures have been taken to guarantee the safety of other aircraft.
- 4.9. Ground control will update the RVR values to taxiing aircraft.
- 5. LVP PROCEDURES DESCRIPTION**
- 5.1 Crews and airlines will be informed about LVP operations by means of:
- 5.1.1 ATIS information, through manual recordings updated every 30 minutes and automatic recordings every 10 minutes.
- 5.1.2 Aeronautical frequencies.
- 5.1.3 A message emitted through the Automatic Message Handling System (AMHS).
- 5.2 ATC will guarantee a minimum separation of **15 NM** for aircraft approaching Runway 13R. ATC will do this in order to allow preceding aircraft time to exit the sensitive and critical areas of the Runway 13R localizer (LSA). This separation might be reduced to **12 NM** providing that there is no traffic for take-off at the holding point of Runway 13R.
- 5.3 Intercept the localizer no less than **10 NM** from the touchdown point on the runway.
- 5.4 For CAT II approach operations only TDZ RVR value will be required (control RVR), and with a value of 350m or above, MID and ROLL OUT RVRs will be only informative.
- 5.5 If an aircraft reports that it has started the approach to Runway 13R and the TDZ RVR reports a value lower than 350m, the control tower will inform the pilot of the new value and he/she will decide whether to continue the approach or start the missed approach procedure.
- 5.6 Regardless of any ATC authorization, no crew may initiate an approach or take-off when the reported meteorological conditions are lower than those prescribed in the operation certifications.
- 5.7 ATC will transmit to the aircraft, as soon as possible, any technical failure related to the RVR equipment, radio, electrical or visual aids that are used for the purpose of approach, landing or take-off.
- 5.8 ATC will have to provide landing clearance further than:
- 1 NM** from the threshold in case of ILS CAT I precision approach.
 - 2 NM** from the threshold in case of ILS CAT II precision approach.
 - 3 NM** from the threshold in case there is no radar service available.
- 5.9 ATC will declare DETRESFA's phase if:
- More than 2 minutes have passed since cleared to take-off and the aircraft is not in radar contact and does not respond to ATC calls.
 - More than 2 minutes have passed since the aircraft notified crossing 4 NM from Runway 13L or 31R TDZ, landing confirmation or missed approach procedure intentions have been communicated, and the aircraft does not respond to ATC calls.
- 5.10 Because Runway 13L/13R has no runway guard lights and stop bars, under visibility condition two (2) or three (3) taxiing to the threshold of runway in use for take-off (13L or 31R) will be restricted to one movement at the time.
- 5.11 The crews will:
- Always listed to the corresponding aeronautical frequency.
 - Request control clearance (El Dorado clearance), only when the RVR values given by ATC are equal to or greater than the take-off minimums for which they are certified.
 - Request push back and start up to ATC when RVR values are equal to or greater than the take-off minimums for which they are certified.
 - Adjust their taxi to comply with the regulation or SLOT (EOBT) assigned by ATC.
 - Refrain from crossing an activated stop bar unless the corresponding confirmation from the Control Tower is received.
 - If runway light guidance (confirmation segment) turns off once the stop bar has been crossed, the crew will stop the aircraft immediately and request additional instructions.

SKBO/BOG **JEPPESEN****SMGCS**

10 OCT 14

(10-9E)**Eff 16 Oct****BOGOTA, COLOMBIA**
ELDORADO INTL**LOW VISIBILITY PROCEDURES**

- g. Establish contact with the Control Tower further than 5 NM from the threshold, even if they have not been transferred by Approach Control.
- h. Ask ATC for 'FOLLOW ME' vehicle assistance when the visibility conditions do not allow for a safe taxi.
- i. The crews shall report when:
 - Notify when airborne.
 - Notify once the missed approach procedure is initiated.
 - Notify when the final approach point (FAP) is crossed.
 - Notify once landed.
 - Notify once the runway has been cleared.
 - Notify if any issue exists, technical or otherwise, that may affect LVP safety.
 - Notify when taxiing through an intermediate taxi holding point, where previously has been requested to stop.
 - Immediately stop taxiing and turn on all exterior lights if in doubt or disorientation exists in regard to the aircraft position.
 - Immediately stop taxiing and turn on all exterior lights if unable to see the 'FOLLOW ME' vehicle.
 - Notify ATC about the irregular movement of any vehicle or aircraft into the maneuvering area that may be a risk to the LVP operations.
 - Notify ATC if there is any discrepancy between the RVR values reported by the Control Tower and the visual range from the pilot's cockpit.

6. COMMUNICATIONS FAILURE

An aircraft or vehicle operating in the maneuvering area experiencing a communications failure will proceed as follows:

- a. If the aircraft is going to take-off, it will continue following the assigned route until the clearance limit is reached, using EXTREME CAUTION to avoid deviations. Once the clearance limit is reached, the aircraft will hold position and wait the arrival of the 'FOLLOW ME' vehicle, which will guide it to the assigned parking gate or position.
- b. If the aircraft is landing: it will hold position at the geographic position (R1 or M5) and wait for guidance of the 'FOLLOW ME' vehicle to the assigned gate or parking position.
- c. Vehicles experiencing communications failure will hold position and wait for the 'FOLLOW ME' vehicle assistance.

7. AFTM MEASURES

All Air Traffic Management measures will be taken from Bogota Control Center FMU, taking into account the following in force regulations:

RVR 1000m to 550m

Fifteen (15) or less arrivals/Fifteen (15) or less departures (per hour), for each runway used.

RVR LOWER THAN 550m DEPARTURES - LVTO AND CAT II ARRIVALS

Eight (8) or less arrivals/Eight (8) or less departures (per hour), for each runway used.

RVR LOWER THAN 550m ONLY DEPARTURES - LVTO

Twelve (12) or less (per hour), if there are no arrivals operations.

Taxi operations on Runways 13L or 13R with reported RVR values lower than 550m, either for take-off or landing, will be restricted to just one movement at a time when any of the following visibility conditions are present:

- a. **VISIBILITY CONDITION TWO (2)**

Enough visibility so the pilot can taxi and avoid collisions visually in taxiways and intersections, BUT insufficient visibility for ATC personnel to control traffic by visual surveillance.

Note: Visibility Condition (2) will be in operation at the El Dorado Airport when visibility conditions are lower than 3000m but greater than RVR 400m.

- b. **VISIBILITY CONDITION THREE (3)**

Enough visibility so the pilot can taxi, BUT insufficient to avoid collision with other traffic in taxiways and intersections. It is also insufficient for ATC personnel to control traffic by visual surveillance with this condition. For taxiing purposes these visibilities will normally be equivalent to an RVR value of 400m, but greater than 75m.

SKBO/BOG **JEPPESSEN****SMGCS**7 APR 17 **(10-9F)****BOGOTA, COLOMBIA**
ELDORADO INTL**LOW VISIBILITY PROCEDURES****8. AIRCRAFT OPERATORS****8.1.1 CLEARANCE FOR OPERATION DURING LOW VISIBILITY PROCEDURES**

- a. In an airport where LVP conditions are established, any operation under such conditions is subject to be carried out in accordance with the respective crew and aircraft certifications.
- b. Regardless of the aircraft classification (twin or multi [three or more engines] engine), CAT II operations and/or take-off minimums below standards must be certified by the Air Safety Office of the Colombian Civil Aviation. Operators are responsible for having trained crews to carry out above mentioned operations.
- c. Aircraft must have an instrument departure procedure (UAEAC approved) in case of engine failure.
- d. Take-off alternate airport visibility requirements at the time of departure must not be lower than those needed for landing according to the weather forecast.
- e. Twin engine: Have filed an alternate aerodrome at no more than one (1) hour flight time from El Dorado airport at normal cruising speed in calm air with one (1) engine inoperative.
- f. Multi-engine (3 engines or more): Have filed an alternate aerodrome at no more than one hour flight time from El Dorado Airport at normal cruising speed in calm air with one (1) engine inoperative.

9. LOW VISIBILITY PROCEDURES IN THE MANEUVERING AREA, EXCLUDING THE PARKING AREAS

To comply with the El Dorado Surface Movement Guidance Control System (SMGCS), it is necessary to regulate the taxiing, towing and parking maneuvers of the aircraft safely when the visibility conditions have a value lower than RVR 550m (800m) and above RVR 350m, with a reported cloud ceiling below 200 ft and above 100 ft.

9.1 MOVING OF AIRCRAFT AND VEHICLES IN THE MOVEMENT AREA IN LOW VISIBILITY CONDITIONS**9.1.1 Moving of vehicles**

When the low visibility procedures are in force, movement of vehicles in the maneuvering area are subject to the following rules:

- a. The 'FOLLOW ME', IP, IM and SEI vehicles, can only enter the maneuvering area (runways and taxiways) with the corresponding ATC (Ground Control or Control Tower) authorization, received via radiotelephone (aeronautical frequency).
- b. Maximum speed of the vehicles at all times within the airport is 10 km/hour.
- c. Ground support vehicles will only tow three (3) carts at once.
- d. The Platform Inspector that is in charge of the parking areas will monitor that vehicles circulating through those areas follow the rules stated in Section 6.3 of the Surface Movement Guidance Control System Manual of El Dorado airport and other complimentary rules.

9.1.2 Towing maneuvers

When the low visibility procedures are in force, towing maneuvers will be subject to the following rules:

- a. Will not be authorized the transfer of aircraft, towed or by their own means, among the different aprons.
- b. For towing purposes between parking positions, the platforms: Domestic (positions identified with the letter B) and International (positions identified with the letter C and D) are considered a single platform.
- c. For the transfers of aircraft, towed or by their own means, between the parking positions stated in paragraph (b), it requires the guidance of a 'FOLLOW ME' and prior authorization by the Ground Controller.
- d. Except as provided by the service units that manage the platforms, at the Shuttle and CATAM platforms, simultaneous towing will not be authorized for positions in the same pier or platform.
- e. To start up engines for taxiing, all turbofan aircraft (Category C or higher) parked at the different parking positions and platforms across the El Dorado International airport must be towed to exit its parking position to the assigned SPOT on the taxiway guiding line.
- f. Aircraft towing at the International cargo apron must be assisted by a Platform Inspector (IP), who will guide the towing maneuvers of the exiting aircraft and at the same time provide guidance to any other aircraft that eventually exits the runway through the taxiway NOVEMBER (N).

9.1.3 Departure taxi maneuvers

When the low visibility procedures are in force, departure taxi maneuvers will be subject to the following rules:

- a. Taxi maneuvers will follow the LVP routes and its marked positions as published on the El Dorado Airport SMGCS chart and ATC instructions.

SKBO/BOG7 APR 17 **10-9G****SMGCS**
BOGOTA, COLOMBIA
ELDORADO INTL**LOW VISIBILITY PROCEDURES**

- b. All taxiing aircraft will report their position when reaching a marking on the assigned taxiway and wait for new clearance to continue, thus ensuring a safe operation.
- c. All propeller aircraft exiting from an apron other than the Domestic, International or International and Domestic cargo aprons, will be allowed to exit self-propelled and it is the operator's responsibility to avoid any collision with other aircraft, vehicles or obstacles present in different aprons.
- d. The Platform Inspector responsible for the taxiways prior request from the El Dorado ground controller will proceed to the cargo apron to provide towing guidance to those aircraft exiting the International cargo apron and in turn guide those aircraft eventually exiting the runway through taxiway NOVEMBER.
- e. Taxi to the runway in use for take-off will not be authorized if the RVR value is below LEVEL II minimums (350m).
- f. During LVP procedures, with RVR value below 550m up to 350m reported at the runway in use for take-off, or in Visibility Condition 2, it will be mandatory to use the marking positions and runway holding points.

9.1.4 Arrival taxi maneuvers

When the low visibility procedures are in force, arrival taxi maneuvers will be subject to the following rules:

- a. Landed aircraft must proceed according to paragraph 3 "Runway Exit Details".
- b. All arrival taxi maneuvers will follow LVP approved routes and its intermediate holding points as published on El Dorado Airport SMGCS chart and strictly following ATC instructions.
- c. During LVP procedures, with RVR value below 550m up to 350m reported at the runway in use for take-off, or in visibility conditions 2, will be mandatory to use the marking positions and runway holding points.
- d. All taxiing aircraft will report their position when reaching a marking on the assigned taxiway and wait for new clearance to continue, thus ensuring a safe operation.
- e. All aircraft arriving to the Domestic and International apron, will wait for the presence of a 'FOLLOW ME' vehicle at marked position closest to the assigned parking position.
- f. Upon request from the Ground Controller, the IP (Platform Inspector) managing the apron will proceed to Taxiway DELTA (holding position 1) or MIKE (holding position 5) to provide guidance to the aircraft entering the apron as stated in paragraph (g).
- g. Any aircraft arriving to the Shuttle and CATAM apron, may enter self-propelled and will coordinate the maneuver in the assigned frequency to the service unit managing the apron.
- h. Any aircraft arriving to a different apron, other than Domestic or International passenger aprons, may enter self-propelled and will be the operator's responsibility to avoid any collision with other aircraft, vehicles or obstacles present in the different aprons.
- i. Once the aircraft is parked, will be the operator's responsibility to place the beacons on the wing tips, nose and tail of the aircraft.

9.1.5 Service Units responsible

- a. The application of the LVP procedures in the maneuvering area is responsibility of the Control Tower, which functions and competencies are indicated in the El Dorado International airport LVP Manual.
- b. It is competency of the Direction of Operations (Operations Coordinator) of the airport operator OPAIN S.A. to enforce the LVP procedures and specifically the head of the apron through the CCO and Apron Inspectors.
- c. Crews are responsible to verify at all times the aircraft position, especially at intersections, making sure that taxi is carried out safely.
- d. Vehicle drivers are responsible to verify at all times their position, especially in those areas where vehicle routes pass behind the aircraft parking positions, making sure that driving through is carried out safely.
- e. The lighting system in the maneuvering area as well as Runway 13L/31R and 13R/31L operations are the responsibility of CODAD.

9.1.6 ILS CAT II precision approach and automatic landings training at El Dorado International airport

No CAT II precision approach and automatic landing will be authorized when the visibility is below 3000m and /or the clouds base is below 800 ft, and/or any meteorological phenomena like (DZ, RA, FU, FG, BR) is present.

Aircraft crews wishing to carry out CAT II precision approach and automatic landings training, should request the corresponding authorization to the Bogota Control Center, which in turn shall coordinate with El Dorado control Tower.

If the critical and/or sensitive areas of the ILS/GPDME were not protected, aircraft crew shall be notified, as well as any other situation concerning the approach and landing practice.

SKBO/BOG

24 MAR 17

10-9H

SMGCS**BOGOTA, COLOMBIA**
ELDORADO INTL**LOW VISIBILITY PROCEDURES****23. ADDITIONAL INFORMATION**

CAUTION: Antenna located at the following coordinates (N 04:51:36 W 074:15:72) without illumination.

CAUTION: Bird concentration in the vicinity of the aerodrome. Implemented by the National Program of Control and Prevention of Bird Strike.

CAUTION: Movement of flocks of birds during take-off and landing operations:

North-South direction between 1030-1200.

South-North direction between 2200-2330.

CAUTION: Increase of migratory birds in aerodrome and vicinity between the months of October and April.

Tower, exercise CAUTION due to low visibility towards:

-Threshold Runway 13R.

-Taxiway M between Taxiway T and Taxiway V.

-Taxiway M between International Cargo Ramp and Taxiway P.

-Taxiway K and holding point Runway 31R.

-Taxiway A and F, between Taxiway C and Runway 31R.

SKBO/BOG
ELDORADO INTL

24 MAR 17

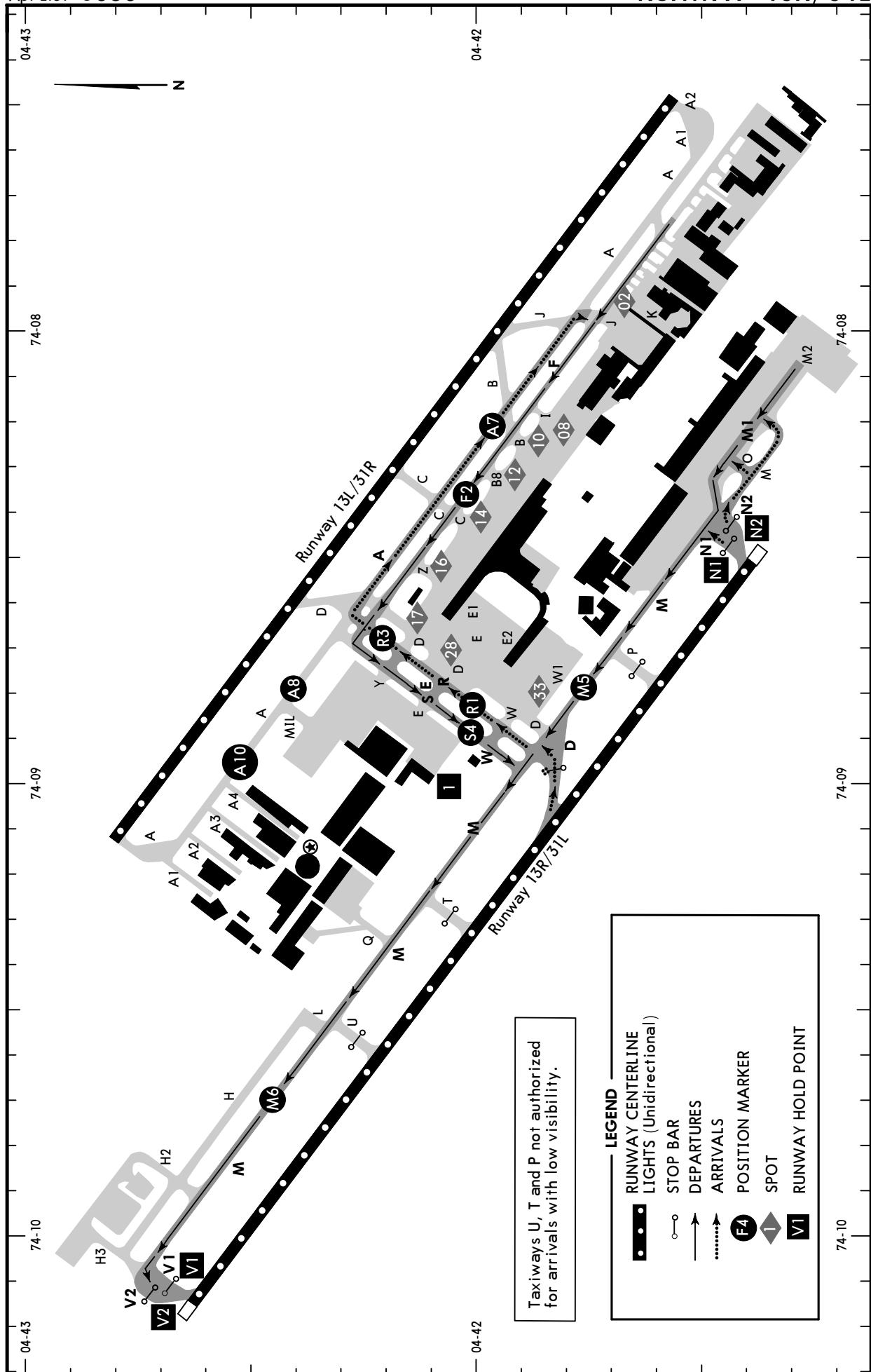
(10-9J)

SMGCS

LESS THAN RVR 550m TO 350m

BOGOTA, COLOMBIA
LOW VISIBILITY TAXI CHART
RUNWAY 13R/31L

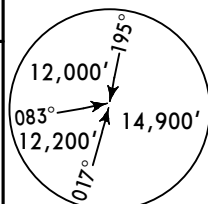
Apt Elev **8360'**

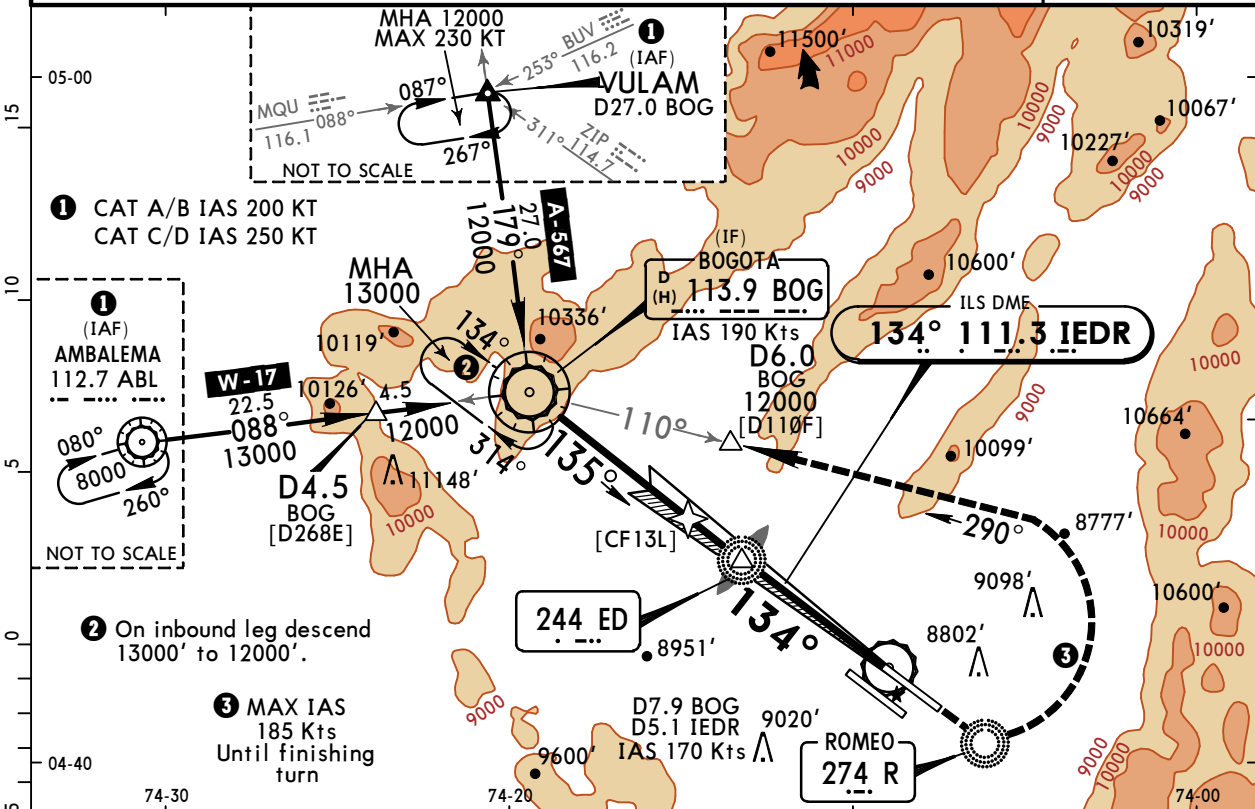


SKBO/BOG ELDORADO INTL

JEPPesen
30 DEC 16
Eff 5 Jan (11-1)

BOGOTA, COLOMBIA
MISSED APCH CLIMB
GRADIENT MIM 3.0% ILS Rwy 13L

ATIS		BOGOTA Approach		ELDORADO Tower		Ground	
North	113.9	North	121.3	North	118.1	North	121.8
Central		Central	119.5	South	118.25	South	122.75
South		South	119.65	South		South	
LOC IEDR	111.3	Final Apch Crs	134°	GS LOM	10000' (1648')	ILS DA(H)	8552' (200')
						Apt Elev 8360'	Rwy 8352'
MISSED APCH: Climb on rwy heading to R NDB, turn LEFT (Max IAS 185 Kts until end of the turn) climbing to intercept BOG VOR R-110 at 10000' or above. Proceed to BOG VOR and enter holding pattern at 13000'. Cross D6.0 BOG at 12000' or above. Radar vectors may be provided before arriving at BOG VOR. Minimum climb gradient 3.0%.							
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000' 1. BOG VOR required. 2. BOG DME or IEDR DME required. 3. Exercise caution to the east/southeast due to mountainous terrain 9800' or higher 20 NM from BOG VOR.							MSA BOG VOR



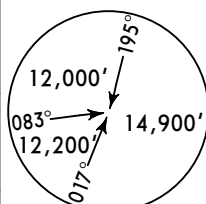
IEDR DME	4.0	3.0	2.0	1.0
ALTITUDE	9680'	9370'	9050'	8732'
BOG VOR 12000' 135° 5.9 13.0				
LOM D7.9 BOG D5.1 IEDR GS 10000' 10000' 134° 2.0 5.1				
STRAIGHT-IN LANDING RWY 13L Missed Apch climb gradient mim 3.0% ILS DA(H) 8552' (200') FULL HIALS out RVR 550m VIS 800m				
CIRCLE-TO-LAND Refer to VOR CHARLIE				
PANS OPS A RVR 550m B VIS 800m C 1200m D Refer to LOC Rwy 13L				

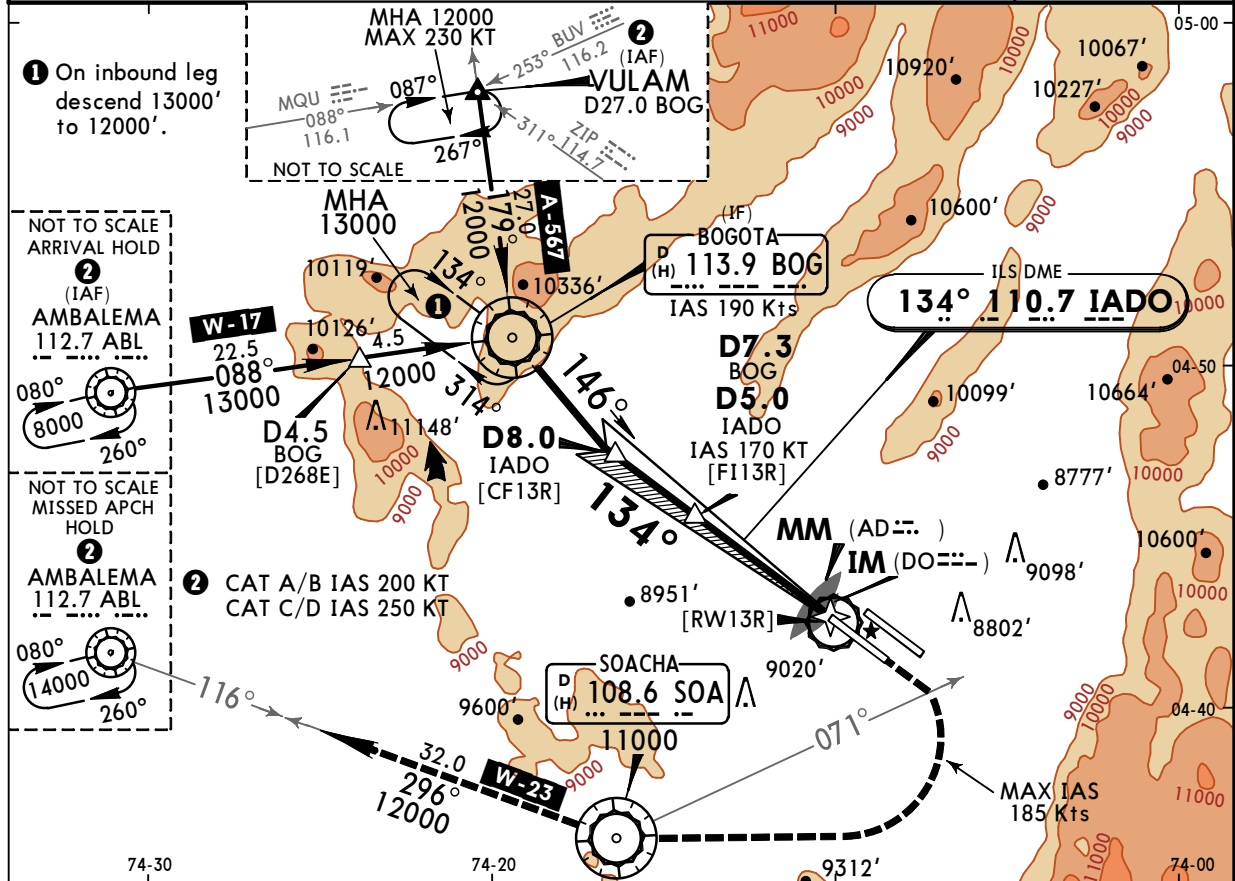
SKBO/BOG
ELDORADO INTL

JEPPesen
30 DEC 16 **(11-3)** Eff 5 Jan

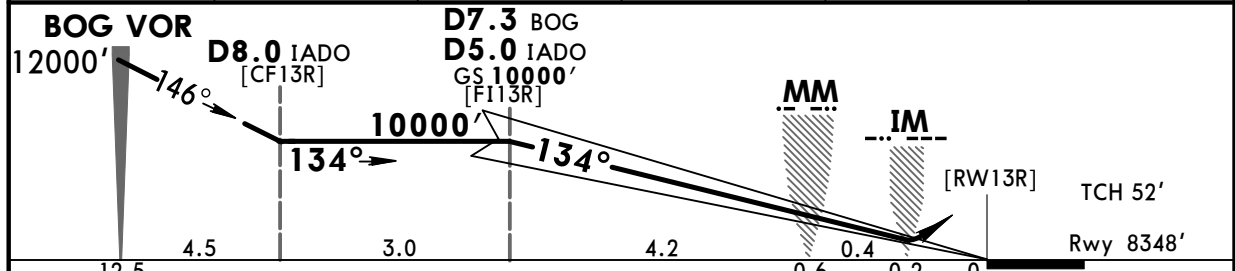
BOGOTA, COLOMBIA
ILS Rwy 13R

BRIEFING STRIP

ATIS		BOGOTA Approach		ELDORADO Tower		Ground		
North 113.9		North 121.3	Central 119.5	South 119.65	North 118.1	South 118.25	North 121.8	South 122.75
LOC IADO 110.7	Final Apch Crs 134°	GS D7.3 BOG D5.0 IADO 10000' (1652')	ILS DA(H) 8550' (202')	Apt Elev 8360' Rwy 8348'				
MISSED APCH: Climb on runway heading until SOA VOR R-071. Then RIGHT climbing turn to SOA VOR, and intercept W-23 to ABL VOR holding at 14000'.								
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000'								
1. BOG VOR required. 2. BOG DME or IADO DME required. 3. Exercise caution to the east/southeast due to mountainous terrain 9800' or higher 20 NM from BOG VOR.								



IADO DME	5.0	4.0	3.0	2.0	1.0
ALTITUDE	10000'	9670'	9360'	9040'	8720'



Gnd speed-Kts	70	90	100	120	140	160
GS	3.00°	372	478	531	637	849
FAF to IM	4.8	4:07	3:12	2:53	2:24	2:03

STRAIGHT-IN LANDING RWY13R			CIRCLE-TO-LAND	
ILS		LOC (GS out)		
DA(H) 8550' (202')				
FULL	HIALS out			
A	RVR 550m VIS 800m	1200m	Refer to LOC Rwy 13R	Refer to VOR CHARLIE
B				
C				
D				

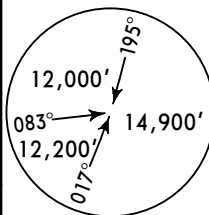
PANS OPS

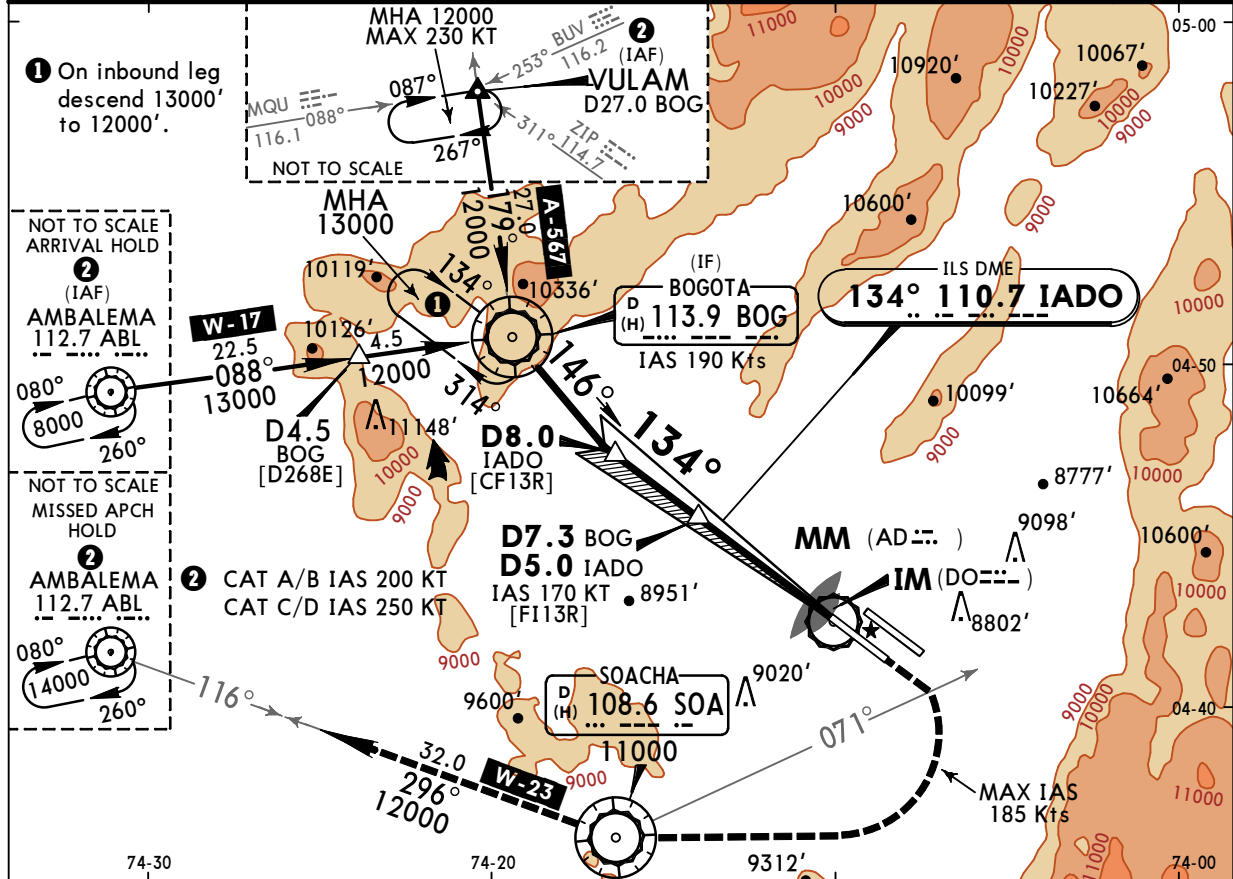
SKBO/BOG
ELDORADO INTL

JEPPesen
30 DEC 16 **(11-3A) Eff 5 Jan**

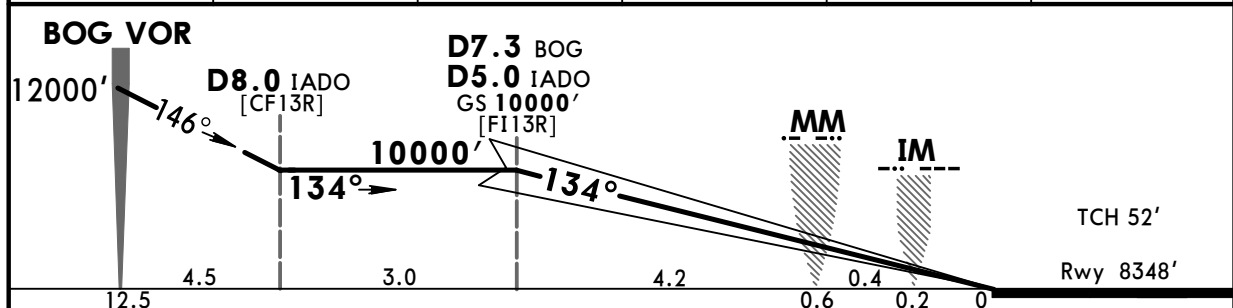
BOGOTA, COLOMBIA
ILS Rwy 13R CAT II

BRIEFING STRIP

ATIS		BOGOTA Approach			ELDORADO Tower		Ground			
North		Central		South	North		South	North	South	
113.9		121.3		119.5	119.65	118.1		118.25	121.8	122.75
LOC IADO		Final Apch Crs		GS D7.3 BOG D5.0 IADO		CAT II ILS Refer to Minimums		Apt Elev 8360' Rwy 8348'		
110.7		134°		10000' (1652')						
MISSED APCH: Climb on rwy heading until SOA VOR R-071. Then RIGHT climbing turn to SOA VOR, and intercept W-23 to ABL VOR holding at 14000'.										
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000'										
1. Special Aircrew & Acft Certification Required. 2. BOG VOR required. 3. BOG DME or IADO DME required. 4. Exercise caution to the east/southeast due to terrain 9800' or higher 20 NM from BOG VOR.										



IADO DME	5.0	4.0	3.0	2.0	1.0
ALTITUDE	10000'	9670'	9360'	9040'	8720'



Gnd speed-Kts	70	90	100	120	140	160
GS	3.00°	372	478	531	637	849

STRAIGHT-IN LANDING RWY 13R		CAT II ILS	
RA 100'		RA 150'	
DA(H) 8450' (102')		DA(H) 8500' (152')	

1 RVR 350m	2 RVR 500m
-------------------	-------------------

1 2 RVR required, TDZ and MID or Roll Out. **2** Only TDZ RVR required.

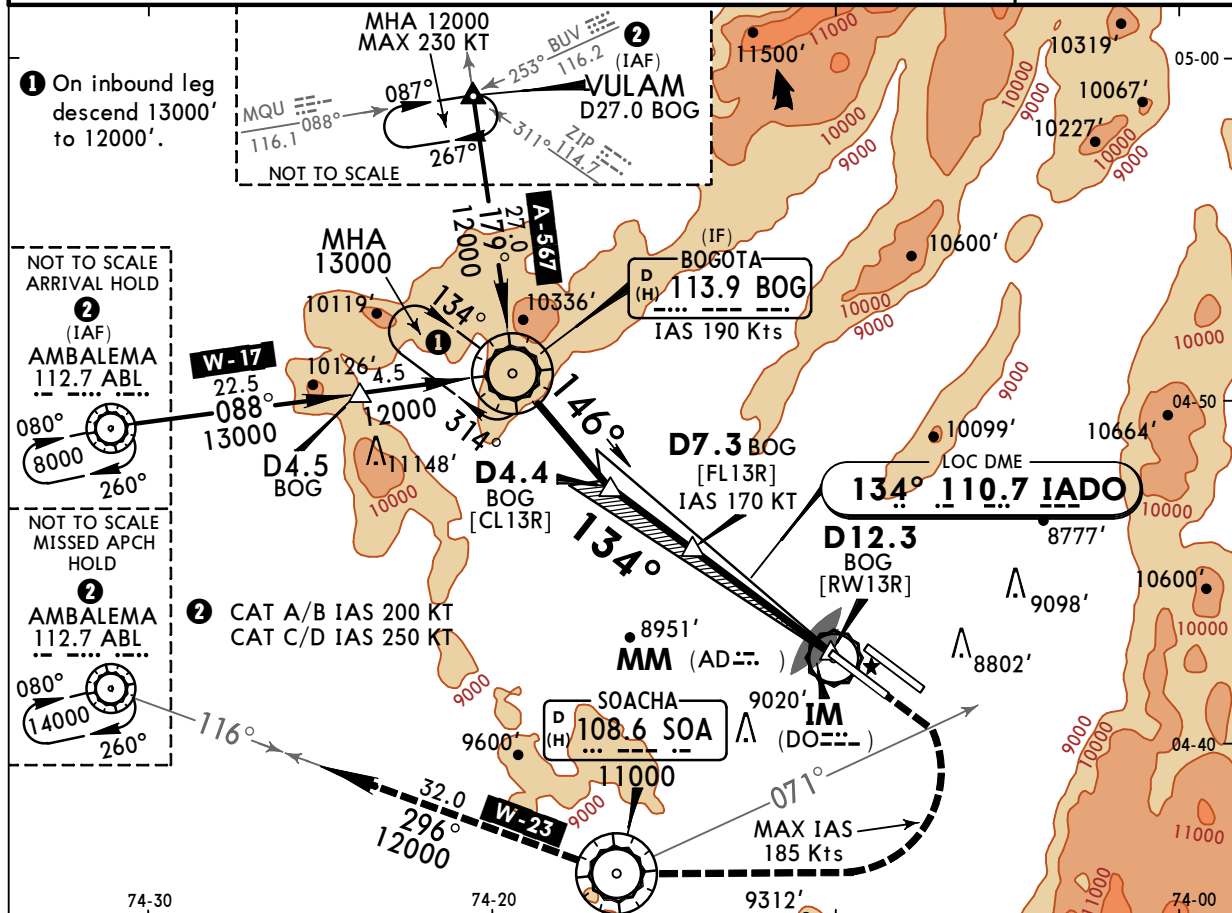
SKBO/BOG
ELDORADO INTL

JEPPesen
30 DEC 16 **(11-4)** **Eff 5 Jan**

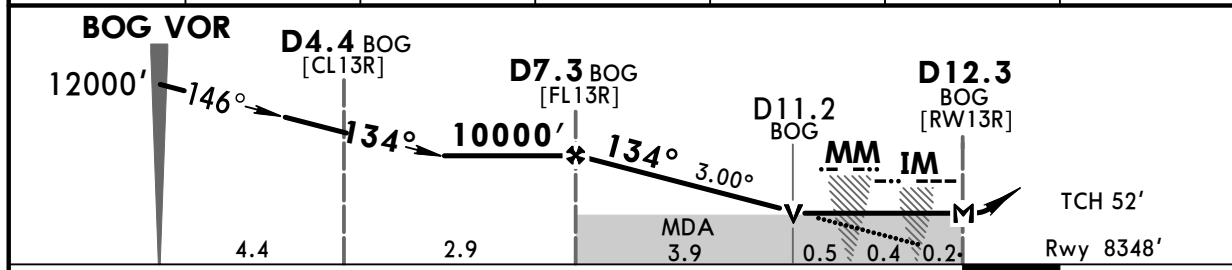
BOGOTA, COLOMBIA
LOC Rwy 13R

BRIEFING STRIP

ATIS		BOGOTA Approach			ELDORADO Tower		Ground	
113.9		North 121.3	Central 119.5	South 119.65	North 118.1	South 118.25	North 121.8	South 122.75
LOC IADO 110.7	Final Apch Crs 134°	Minimum Alt D7.3 BOG 10000' (1652')		MDA(H) 8910' (562')		Apt Elev 8360' Rwy 8348'		
MISSED APCH: Climb on rwy heading until SOA VOR R-071. Then RIGHT climbing turn to SOA VOR, and intercept W-23 to ABL VOR holding at 14000'.								
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000'								
1. BOG VOR/DME required. 2. Exercise caution to the east/southeast due to mountainous terrain 9800' or higher 20 NM from BOG VOR.								



BOG DME	5.0	6.0	7.0	8.0	9.0	10.0
ALTITUDE	10714'	10396'	10078'	9760'	9442'	9124'



Gnd speed-Kts	70	90	100	120	140	160
Descent Angle 3.00°	372	478	531	637	743	849
MAP at D12.3 BOG or FAF to MAP 5.0	4:17	3:20	3:00	2:30	2:09	1:53

HIALS

REIL
PAPI

STRAIGHT-IN LANDING RWY 13R		CIRCLE-TO-LAND	
MDA(H) 8910' (562')		HIALS out	
A	2100m	Refer to VOR CHARLIE	
B			
C	2300m		
D			

PANS OPS

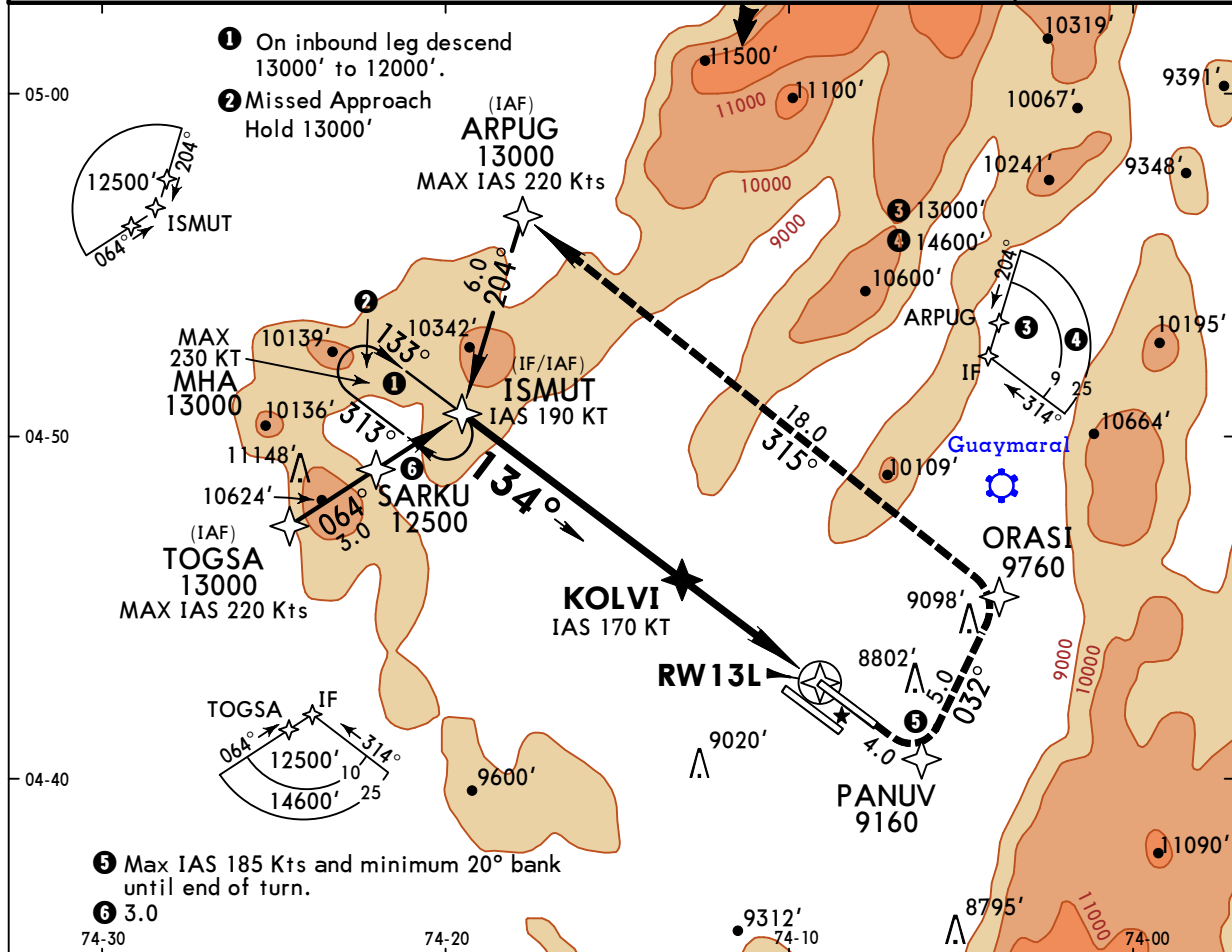
SKBO/BOG
ELDORADO INTL

JEPPesen
22 APR 16 (12-1) Eff 28 Apr

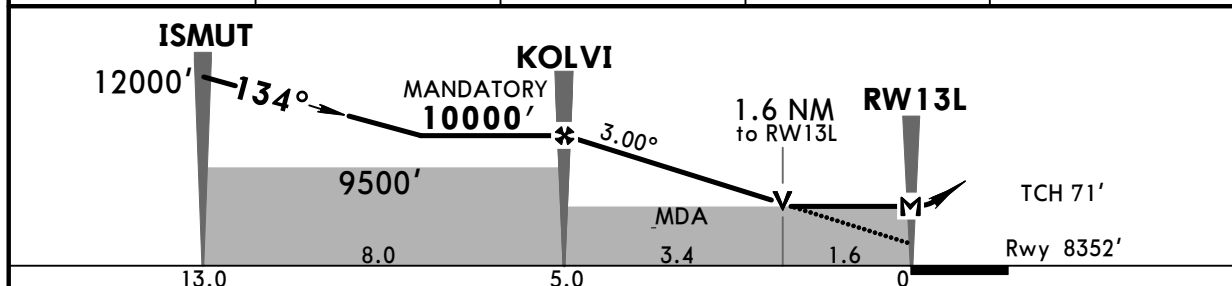
BOGOTA, COLOMBIA
RNAV (GNSS) Rwy 13L

BRIEFING STRIP

ATIS		BOGOTA Approach			ELDORADO Tower		Ground	
113.9		North 121.3	Central 119.5	South 119.65	North 118.1	South 118.25	North 121.8	South 122.75
RNAV	Final Apch Crs 134°	Procedure Alt KOLVI 10000' (1648')		LNAB MDA(H) 8910' (558')	Apt Elev 8360' Rwy 8352'		TAA 25 NM IAF	
MISSED APCH: Proceed to fly by PANUV, turn LEFT via ORASI to ARPUG (Max IAS 185 Kts and 20° bank until end of turns). Fly by ARPUG, turn LEFT (Max IAS 220 Kts) to ISMUT holding pattern climbing to 13000'.								
Alt Set: INCHES (hPa on req)		Trans level: FL 190			Trans alt: 18000'			
1. GNSS only.								



DIST to THR	5.0	4.0	3.0	2.0
ALTITUDE	10000'	9678'	9359'	9041'



Gnd speed-Kts	70	90	100	120	140	160
Descent Angle 3.00°	372	478	531	637	743	849
MAP at RW13L						

STRAIGHT-IN LANDING RWY13L		CIRCLE-TO-LAND	
LNAM MDA(H) 8910' (558')		HIALS out	
A	2000m	Refer to VOR CHARLIE	
B			
C	2200m		
D			

PANS OPS

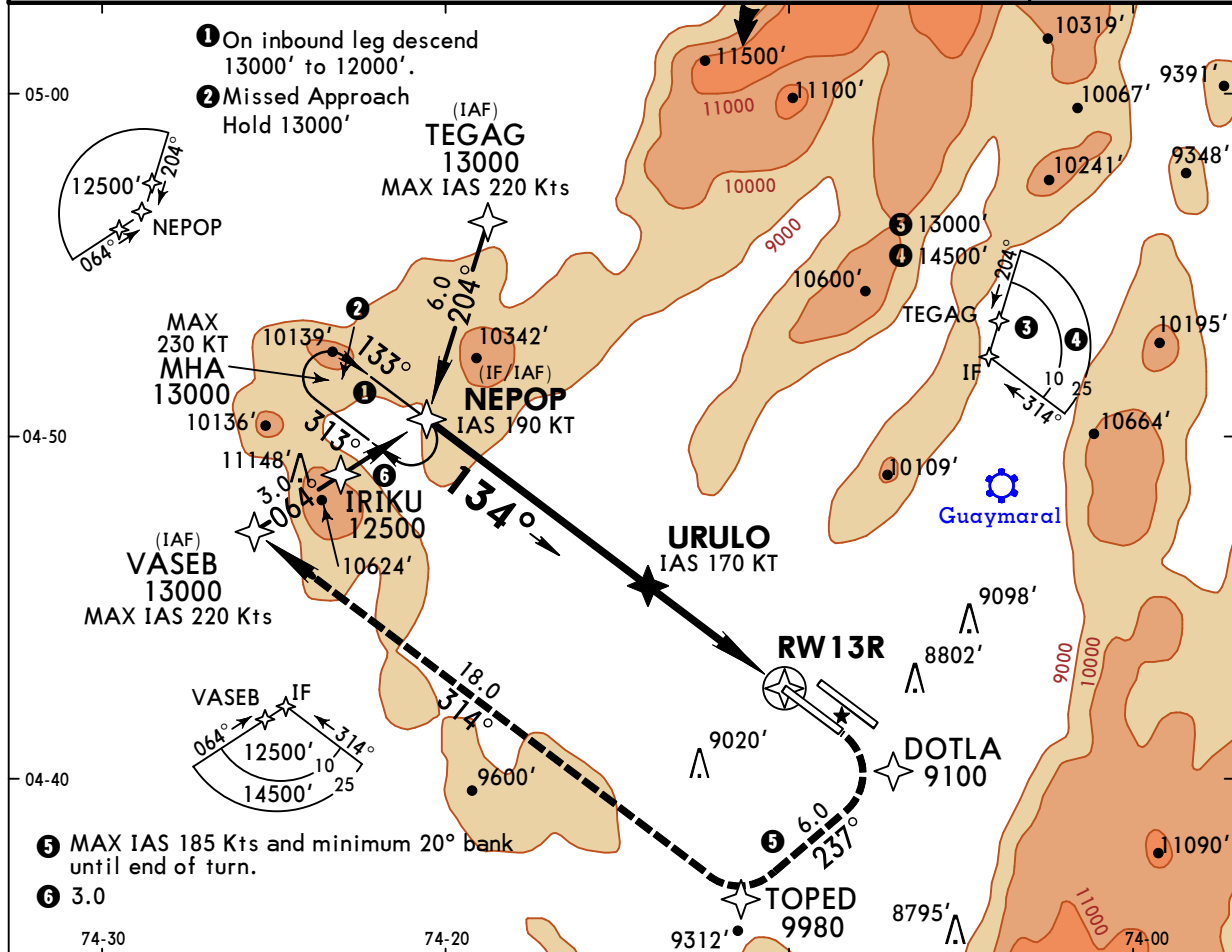
SKBO/BOG
ELDORADO INTL

JEPPesen
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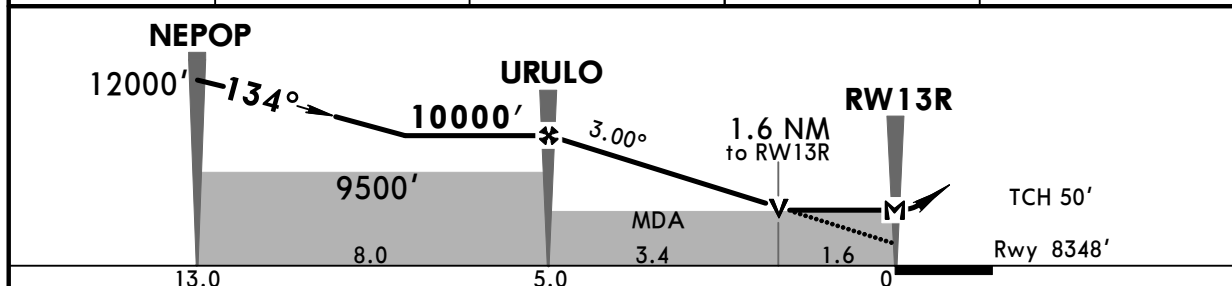
BOGOTA, COLOMBIA
RNAV (GNSS) Rwy 13R

BRIEFING STRIP

ATIS		BOGOTA Approach				ELDORADO Tower		Ground	
113.9		North 121.3	Central 119.5	South 119.65	North 118.1	South 118.25	North 121.8	South 122.75	
RNAV	Final Apch Crs 134°	Procedure Alt URULO 10000' (1652')		LNAV MDA(H) 8910' (562')		Apt Elev 8360' Rwy 8348'		TAA 25 NM IAF	
MISSED APCH: Proceed to fly by DOTLA, turn RIGHT via TOPED to VASEB (Max IAS 185 Kts and 20° bank until end of turns). Fly by VASEB, turn RIGHT (Max IAS 220 Kts) to NEPOP holding pattern climbing to 13000'.									
Alt Set: INCHES (hPa on req)				Trans level: FL 190		Trans alt: 18000'			
1. GNSS only.									



DIST to THR	5.0	4.0	3.0	2.0
ALTITUDE	10000'	9674'	9355'	9037'



Gnd speed-Kts	70	90	100	120	140	160	<div><div>HIALS</div><div>REIL PAPI</div><div><div>9100'</div><div>↑</div></div><div>to DOTLA</div></div>
Descent Angle 3.00°	372	478	531	637	743	849	
MAP at RW13R							

STRAIGHT-IN LANDING RWY13R			CIRCLE-TO-LAND				
LNNAV							
MDA(H) 8910' (562')							
			HIALS out				
A	2100m		Refer to VOR CHARLIE				
B						2800m	
C	2300m					3000m	
D							

PANS OPS

SKBO/BOG
ELDORADO INTL

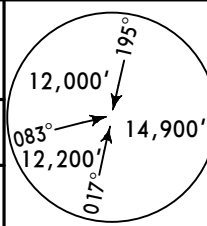
JEPPesen
4 DEC 15
Eff 10 Dec

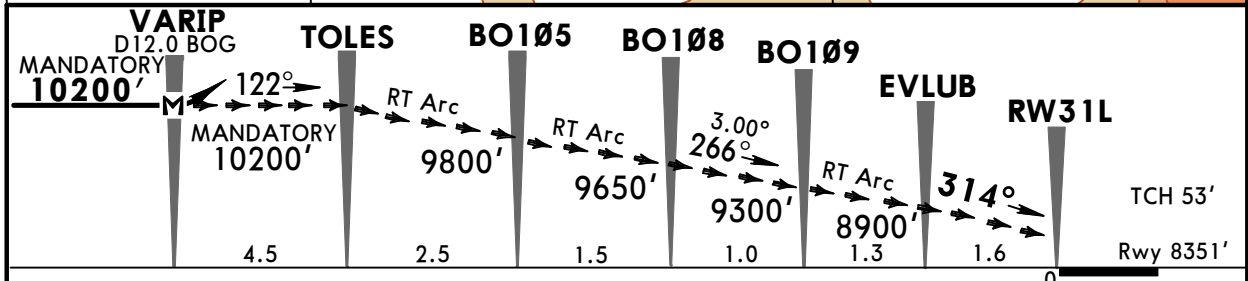
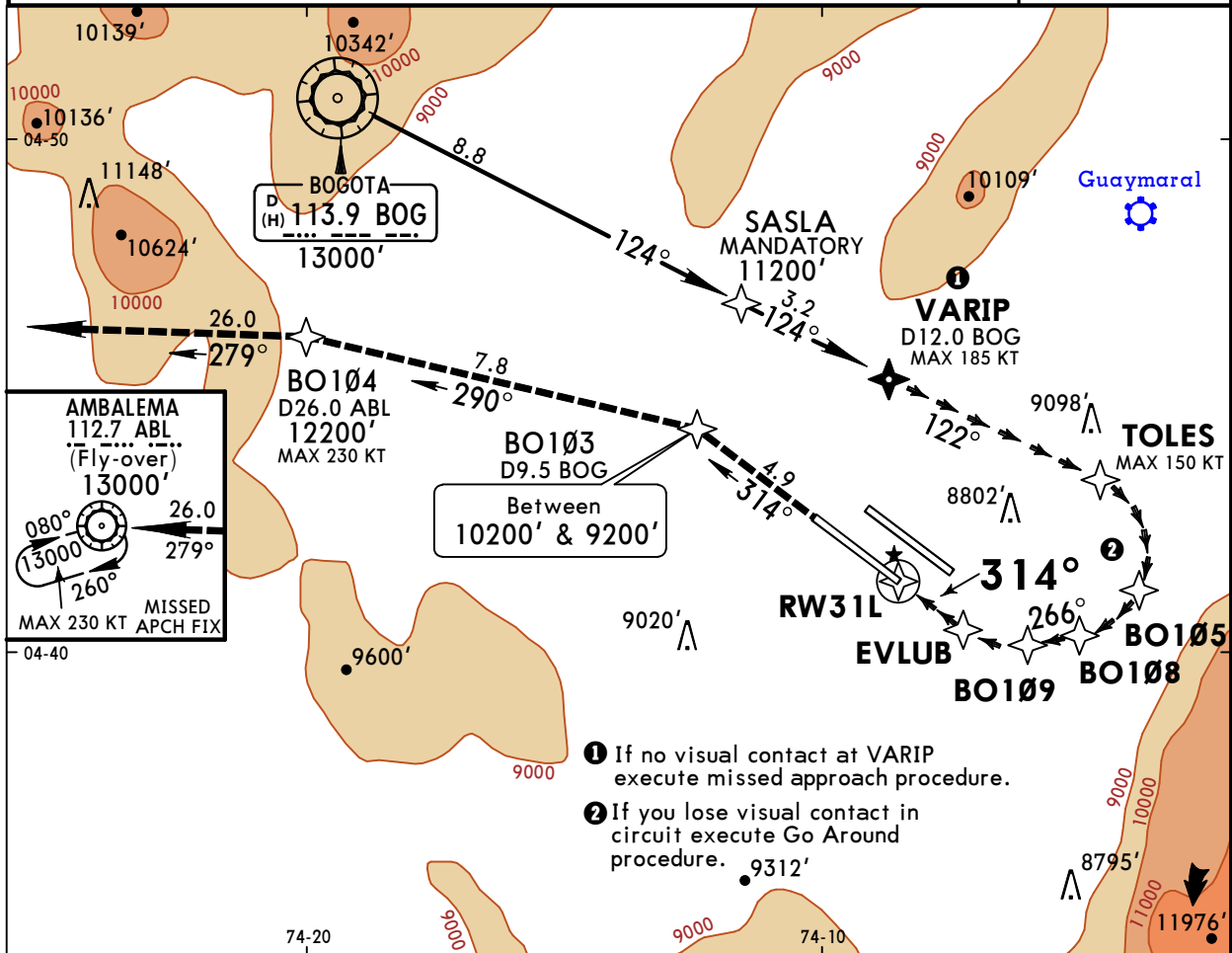
(12-3)

RNAV VISUAL FLIGHT PROCEDURE
(GNSS) V Rwy 31L

BOGOTA, COLOMBIA

BRIEFING STRIP

ATIS 113.9		BOGOTA Approach North 121.3 Central 119.5 South 119.65		ELDORADO Tower North 118.1 South 118.25		Ground North 121.8 South 122.75	
RNAV	Final Apch Crs 314°	Mandatory Alt VARIP 10200'(1849')		MDA(H) 10200'(1849')		Apt Elev 8360' Rwy 8351'	
MISSED APCH: Maintain RVFP track, climbing to 13000' to ABL VOR and hold. Expect ATC instructions.							
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000' 1. RNP Approach and RF required. 2. CAUTION: Mountainous terrain in E and SE sectors at 9800' and above within 20 NM of BOG VOR. 3. In case of Go Around procedure, maintain RFVP track, climbing to 13000' to ABL VOR and hold. Expect ATC instructions.							
 MSA BOG VOR							



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

STRAIGHT-IN LANDING RWY31L

MDA(H) **10200'**(1849')

PANS OPS

A	
B	
C	
D	6000m

SKBO/BOG
ELDORADO INTL

4 DEC 15

Eff 10 Dec

12-4

JEPPESEN

BOGOTA, COLOMBIA

RNAV VISUAL FLIGHT PROCEDURE

(GNSS) S Rwy 31L

CAT C & D

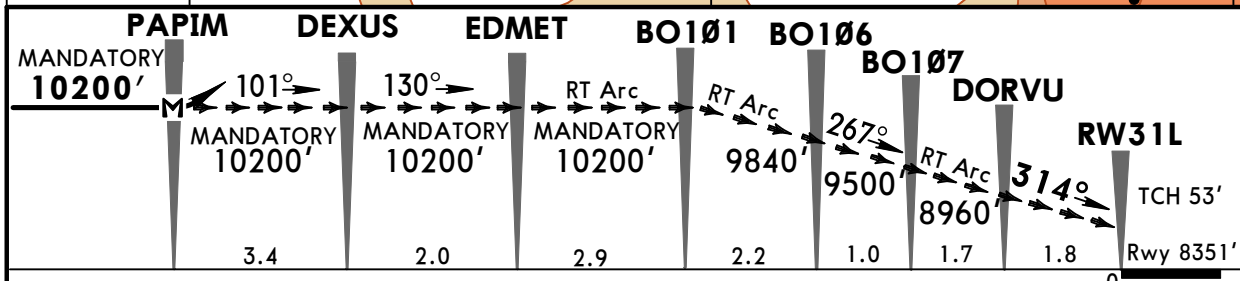
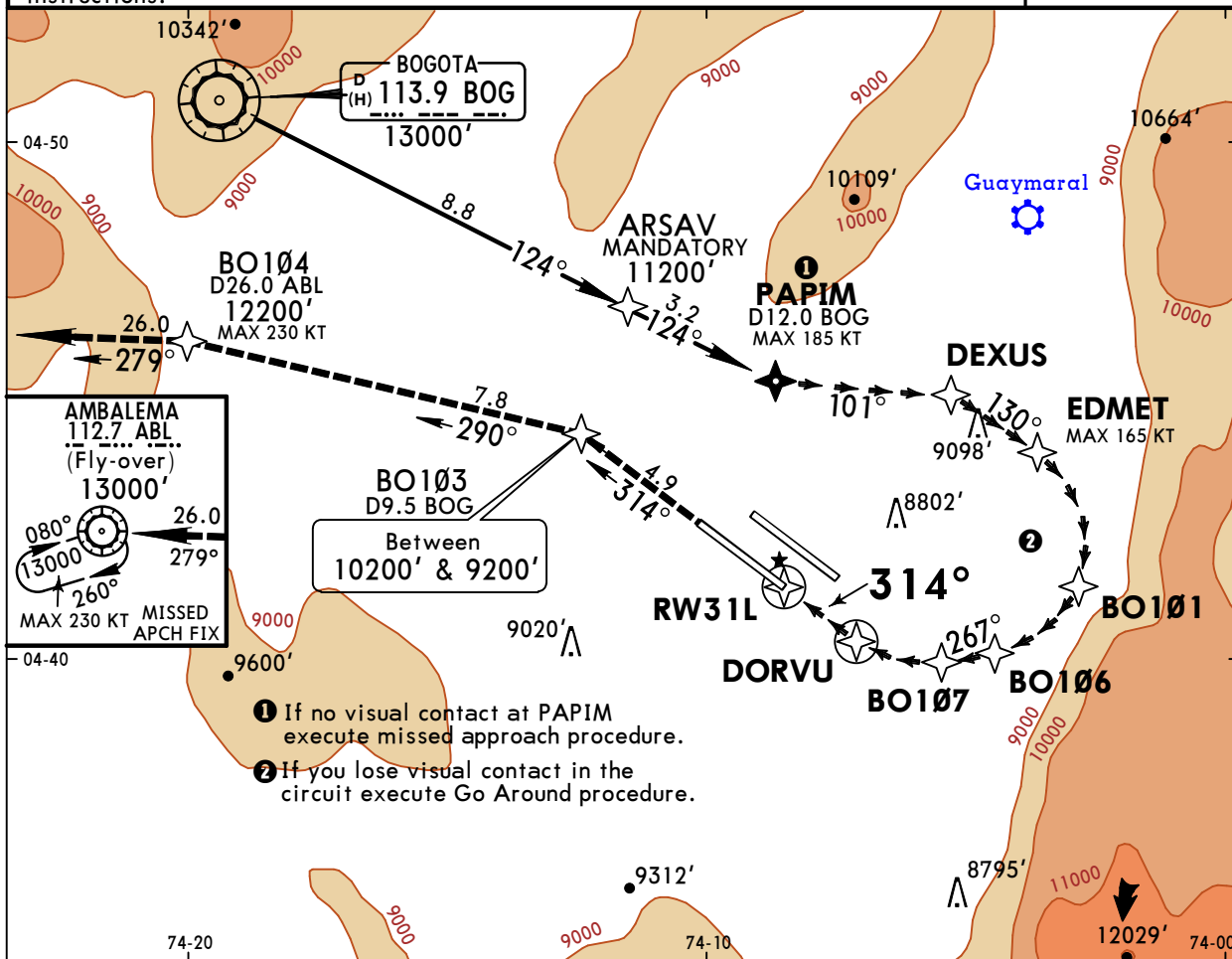
ATIS 113.9		BOGOTA Approach North 121.3 Central 119.5 South 119.65		ELDORADO Tower North 118.1 South 118.25		Ground North 121.8 South 122.75	
RNAV	Final Apch Crs 314°	Mandatory Alt PAPIM 10200' (1849')	MDA(H) 10200' (1849')	Apt Elev 8360' Rwy 8351'			

MISSED APCH: Maintain RVFP track, climbing to 13000' to ABL VOR and hold. Expect ATC instructions.

Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000'

1. **RNP Approach and RF required.** 2. **CAUTION:** Mountainous terrain in E and SE sectors at 9800' and above within 20 NM of BOG VOR. 3. In case of Go Around procedure maintain RVFP track, climbing to 13000' to ABL VOR and hold. Expect ATC instructions.

MSA BOG VOR



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L	<div> <div>13000</div> <div>↑</div> <div>via</div> </div>	<div> <div>RVFP</div> <div>track</div> </div>	<div> <div>ABL</div> <div>112.7</div> </div>
Descent Angle 3.00°	372	478	531	637	743	849				
MAP at PAPIM										

STRAIGHT-IN LANDING RWY31L

MDA(H) **10200'** (1849')

PANS OPS	A
	B
	C
	D

NOT APPLICABLE

6000m

CHANGES: New procedure.

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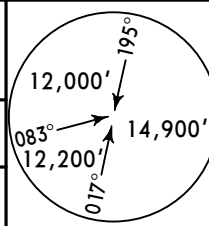
SKBO/BOG
ELDORADO INTL

JEPPesen
4 DEC 15
Eff 10 Dec (12-5)

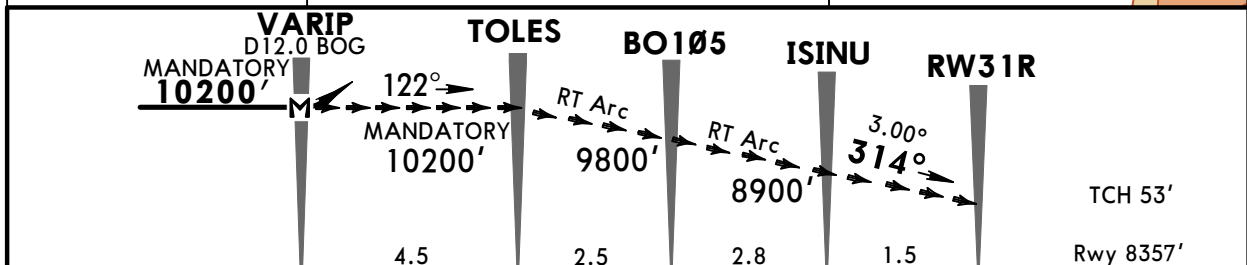
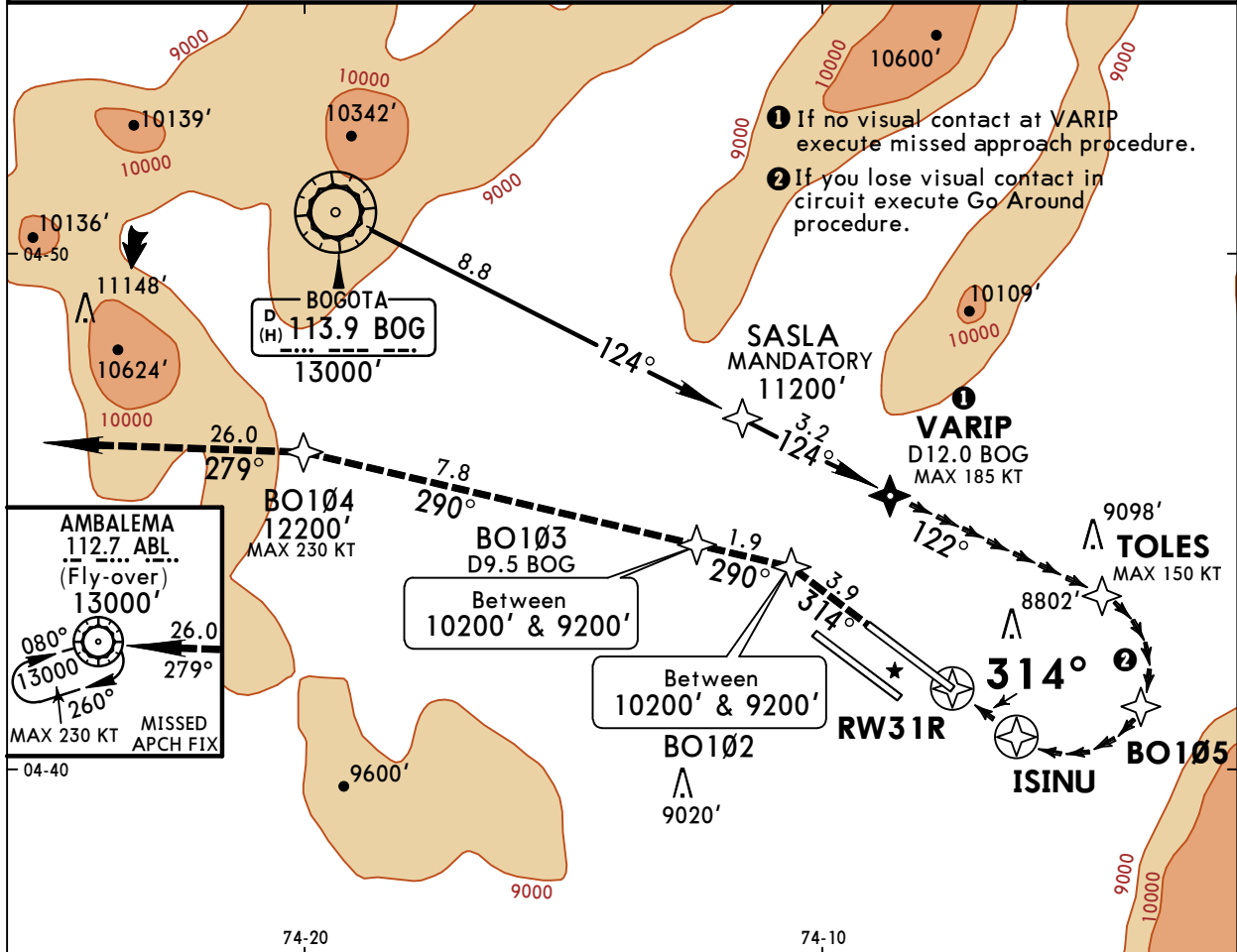
BOGOTA, COLOMBIA
RNAV VISUAL FLIGHT
PROCEDURE (GNSS) V Rwy 31R

BRIEFING STRIP

ATIS 113.9		BOGOTA Approach North 121.3 Central 119.5 South 119.65		ELDORADO Tower North 118.1 South 118.25		Ground North 121.8 South 122.75	
RNAV	Final Apch Crs 314°	Mandatory Alt VARIP 10200' (1843')		MDA(H) 10200' (1843')		Apt Elev 8360' Rwy 8357'	
MISSED APCH: Maintain RVFP track, climbing to 13000' to ABL VOR and hold. Expect ATC instructions.							
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000' 1. RNP Approach and RF required. 2. CAUTION: Mountainous terrain in E and SE sectors at 9800' and above within 20 NM of BOG VOR. 3. In case of Go Around procedure maintain RVFP track, climbing to 13000' to ABL VOR and hold. Expect ATC instructions.							



MSA BOG VOR



							0					
Gnd speed-Kts	70	90	100	120	140	160	PAPI	13000'	↑	via	RVFP track	ABL 112.7
Descent Angle 3.00°	372	478	531	637	743	849						
MAP at VARIP												

STRAIGHT-IN LANDING RWY31R

MDA(H) **10200'** (1843')

PANS OPS

A	6000m
B	
C	
D	

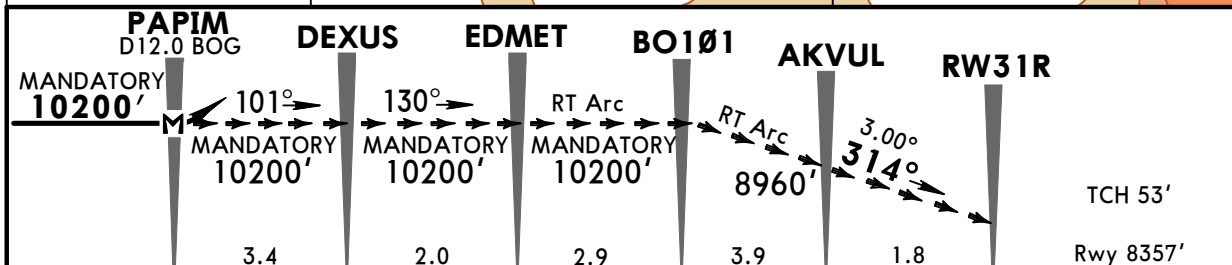
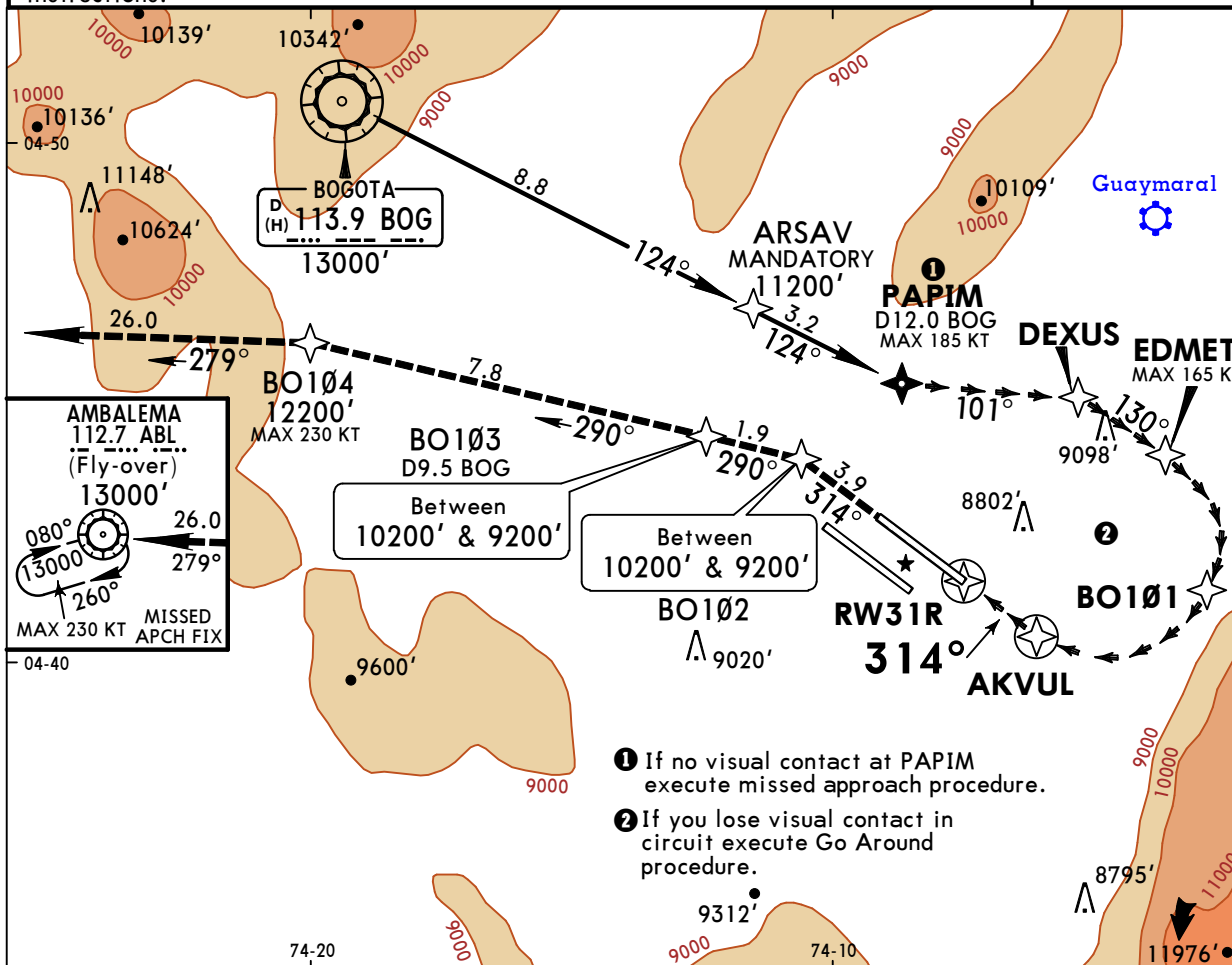
SKBO/BOG
ELDORADO INTL

JEPPESEN
4 DEC 15 (12-6) RN
Eff 10 Dec

EN BOGOTA, COLOMBIA
RNAV VISUAL FLIGHT PROCEDURE
CAT C & D (GNSS) S Rwy 31R

BRIEFING STRIP TM

ATIS 113.9		BOGOTA Approach North 121.3 Central 119.5 South 119.65		ELDORADO Tower North 118.1 South 118.25		Ground North 121.8 South 122.75	
RNAV	Final Apch Crs 314°	Mandatory Alt PAPIM 10200' (1843')	MDA(H) 10200' (1843')		Apt Elev 8360' Rwy 8357'		<p>MSA BOG VOR</p>
MISSED APCH: Maintain RVFP track, climbing to 13000' to ABL VOR and hold. Expect ATC instructions.							
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000' 1. RNP Approach and RF required. 2. CAUTION: Mountainous terrain in E and SE sectors at 9800' and above within 20 NM of BOG VOR. 3. In case of Go Around procedure, maintain RVFP track climbing to 13000' to ABL VOR and hold. Expect ATC instructions.							



Gnd speed-Kts	70	90	100	120	140	160	PAPI	<div> <div>13000</div> <div>↑</div> <div>via</div> </div>	<div> <div>RFVP</div> <div>track</div> </div>	<div> <div>ABL</div> <div>112.7</div> </div>
Descent Angle 3.00°	372	478	531	637	743	849				
MAP at PAPIM										

STRAIGHT-IN LANDING RWY31R

MDA(H) **10200'** (1843')

PANS OPS

A	NOT APPLICABLE
B	
C	6000m
D	

CHANGES: New procedure.

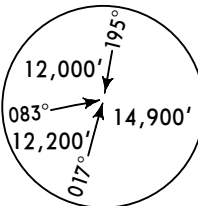
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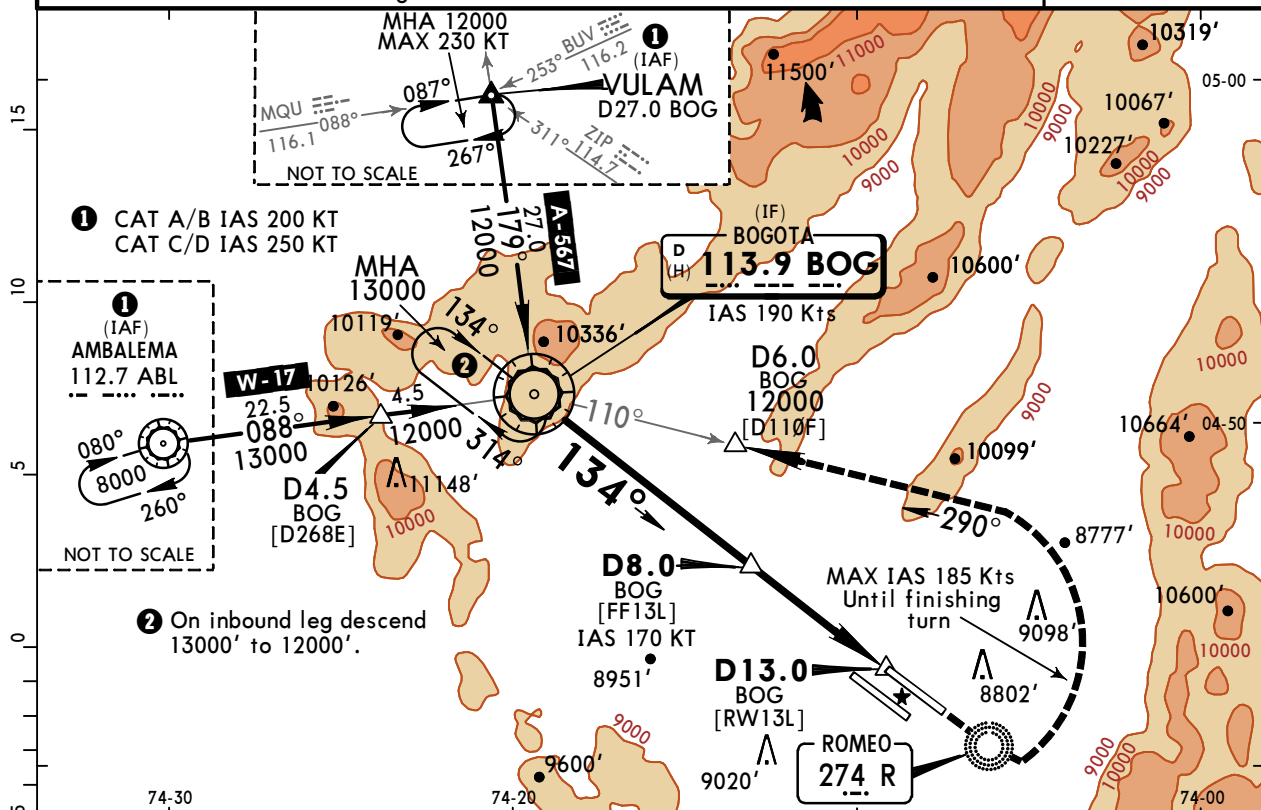
SKBO/BOG ELDORADO INTL

JEPPesen
30 DEC 16
Eff 5 Jan (13-1)

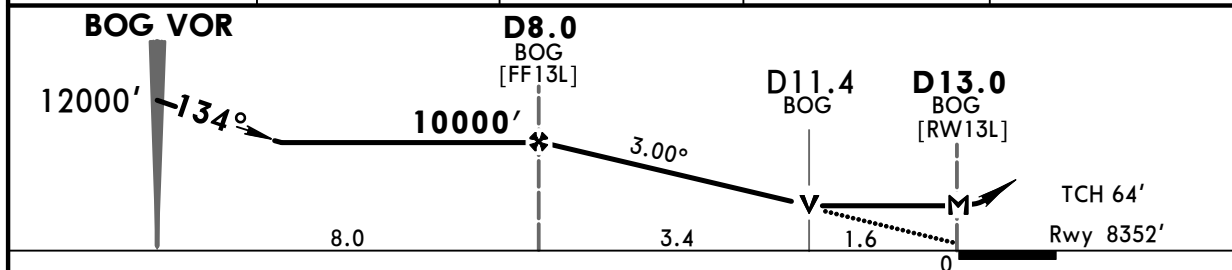
BOGOTA, COLOMBIA
MISSED APCH CLIMB GRADIENT MIN 3.0%
VOR Rwy 13L

BRIEFING STRIP

ATIS		BOGOTA Approach			ELDORADO Tower		Ground	
	North	Central	South		North	South	North	South
	113.9	121.3	119.5	119.65	118.1	118.25	121.8	122.75
VOR BOG 113.9	Final Apch Crs 134°	Minimum Alt D8.0 BOG 10000' (1648')	MDA(H) 8910' (558')		Apt Elev 8360' Rwy 8352'			
MISSED APCH: Climb on rwy heading to R NDB, turn LEFT (Max IAS 185 Kts until end of the turn) climbing to intercept BOG VOR R-110 at 10000' or above. Proceed to BOG VOR and enter holding pattern at 13000'. Cross D6.0 BOG at 12000' or above. Radar vectors may be provided before arriving at BOG VOR. Minimum climb gradient 3.0%.								
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000'								
1. BOG VOR/DME required. 2. Exercise caution to the east/southeast due to mountainous terrain 9800' or higher 20 NM from BOG VOR.								



BOG DME	8.0	9.0	10.0	11.0
ALTITUDE	10000'	9690'	9370'	9060'



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI PAPI	Rwy hdg	R 274
Descent Angle	3.00°	372	478	531	637	743			
MAP at D13.0 BOG or FAF to MAP	5.0	4:17	3:20	3:00	2:30	2:09			

STRAIGHT-IN LANDING RWY13L			CIRCLE-TO-LAND
MDA(H) 8910' (558')			
Missed approach climb gradient minimum 3.0%			
		HIALS out	
A	2000m	2700m	Refer to VOR CHARLIE
B			
C	2200m	2900m	
D			

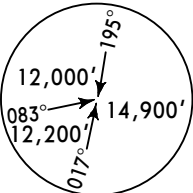
PANS OPS

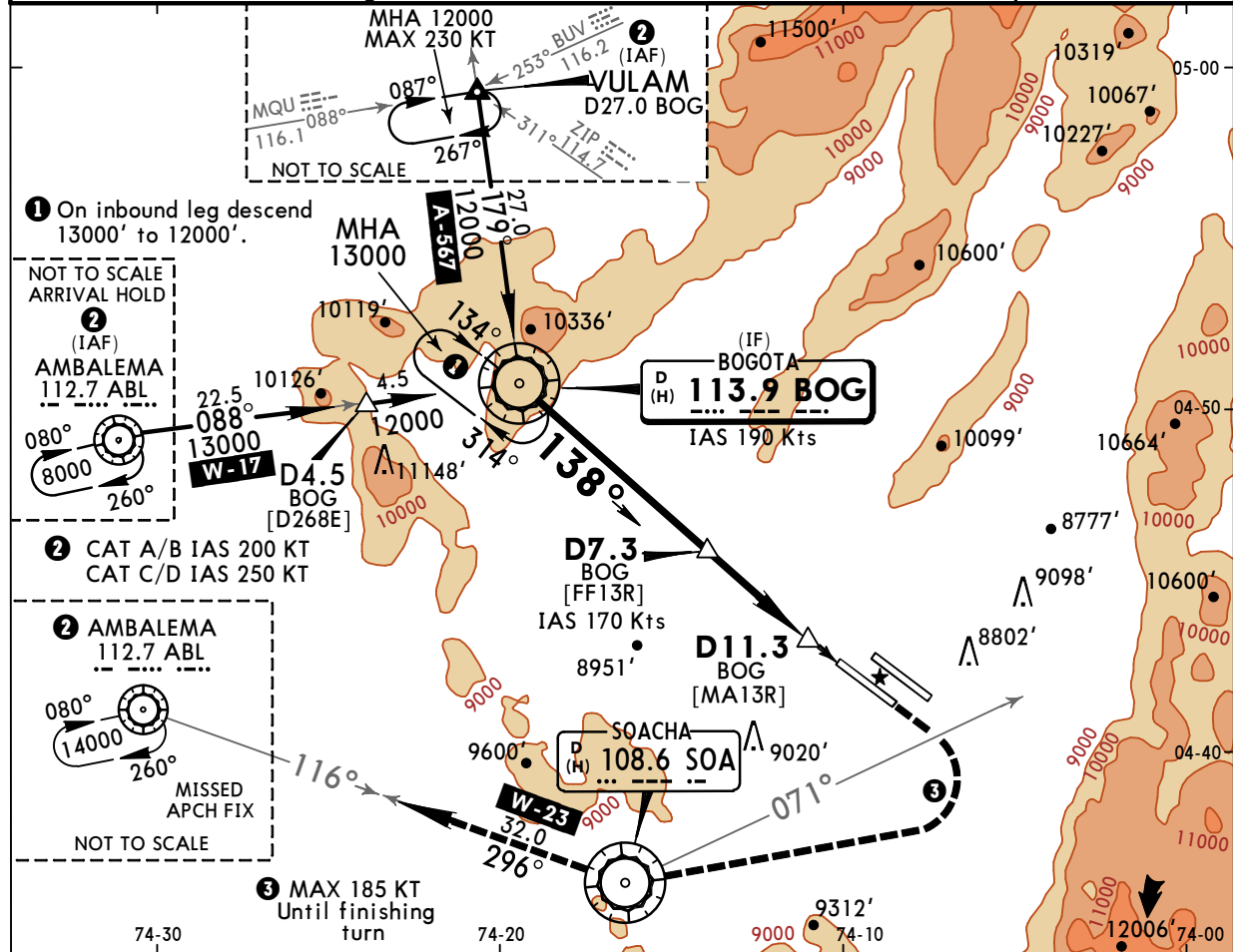
SKBO/BOG
ELDORADO INTL

JEPPESSEN
21 APR 17 **(13-2)**

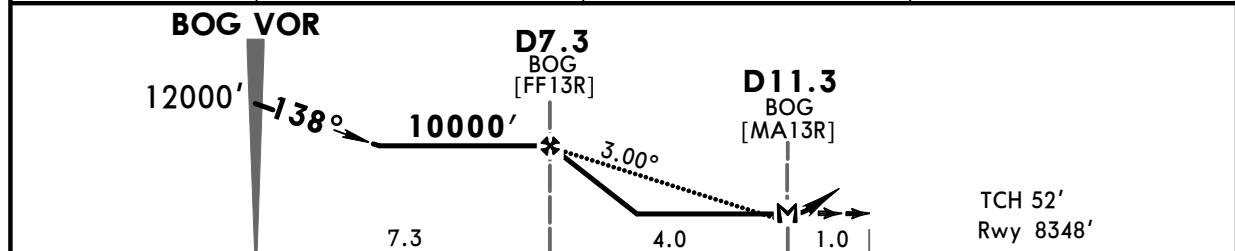
BOGOTA, COLOMBIA
VOR Rwy 13R

BRIEFING STRIP™

ATIS		BOGOTA Approach			ELDORADO Tower		Ground		
North		Central	South		North	South	North	South	
113.9		121.3	119.5	119.65	118.1	118.25	121.8	122.75	
VOR BOG 113.9	Final Apch Crs 138°	Minimum Alt D7.3 BOG 10000' (1652')		MDA(H) 8910' (562')		Apt Elev 8360' Rwy 8348'			
MISSED APCH: Climb on rwy heading until SOA VOR R-071. Then RIGHT climbing turn to SOA VOR and intercept W-23 to ABL VOR holding at 14000'.									
Alt Set: INCHES (hPa on req) Trans level: FL 190 Trans alt: 18000' 1. BOG VOR/DME required. 2. Exercise caution to the east/southeast due to mountainous terrain 9800' or higher 20 NM from BOG VOR.									



BOG DME	8.0	9.0	10.0
ALTITUDE	9842'	9526'	9210'



Gnd speed-Kts	70	90	100	120	140	160
Descent Angle 3.00°	372	478	531	637	743	849
MAP at D11.3 BOG or FAF to MAP	4.0	3:26	2:40	2:24	2:00	1:43
		1:30				

STRAIGHT-IN LANDING RWY 13R			CIRCLE-TO-LAND	
MDA(H) 8910' (562')				
		HIALS out		
A	2100m	2800m	Refer to VOR CHARLIE	
B				
C	2300m	3000m		
D				

PANS OPS

SKBO / BOG

JEPPESEN

BOGOTA, COLOMBIA
VOR CHARLIE (VOR-C)
Rwy 31R/31L

ELDORADO INTL

21 APR 17

13-3

**MISSED APCH CLIMB
GRADIENT MIN 4.0%**

ATIS	BOGOTA Approach			ELDORADO Tower		Ground	
113.9	North 121.3	Central 119.5	South 119.65	North 118.1	South 118.25	North 121.8	South 122.75
VOR BOG 113.9	Final Apch Crs 124°	No FAF	MDA(H) Refer to Minimums	Apt Elev 8360'			

MISSED APCH: Turn LEFT to intercept ZIP VOR R-208 and climb to 14000'. Cross 12000' or above, 11 NM before ZIP VOR with minimum climb gradient of 4%. Join hold at ZIP VOR and expect ATC instructions.

Go around procedure: Expect to follow ATC instructions, otherwise proceed to R NDB then intercept and follow BOG VOR R-136 to D9.5 BOG VOR at or above 9200', turn LEFT to intercept ABL VOR R-099 inbound, or bearing 279° outbound from ED NDB to cross D26.0 ABL VOR at 12200' or above. Proceed to ABL VOR and hold at 13000'. Expect final ATC instructions.

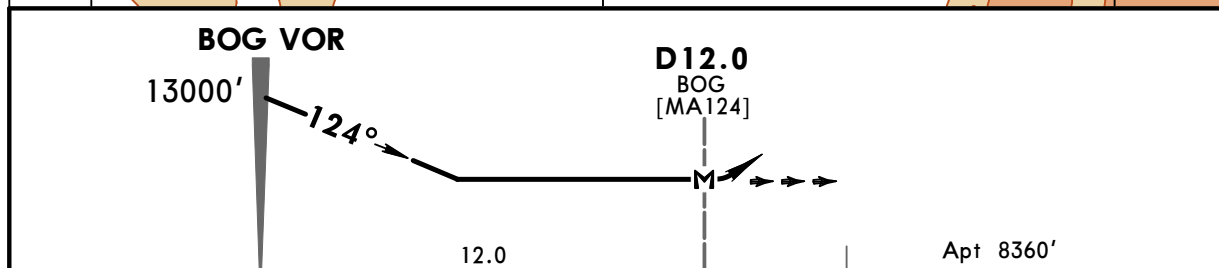
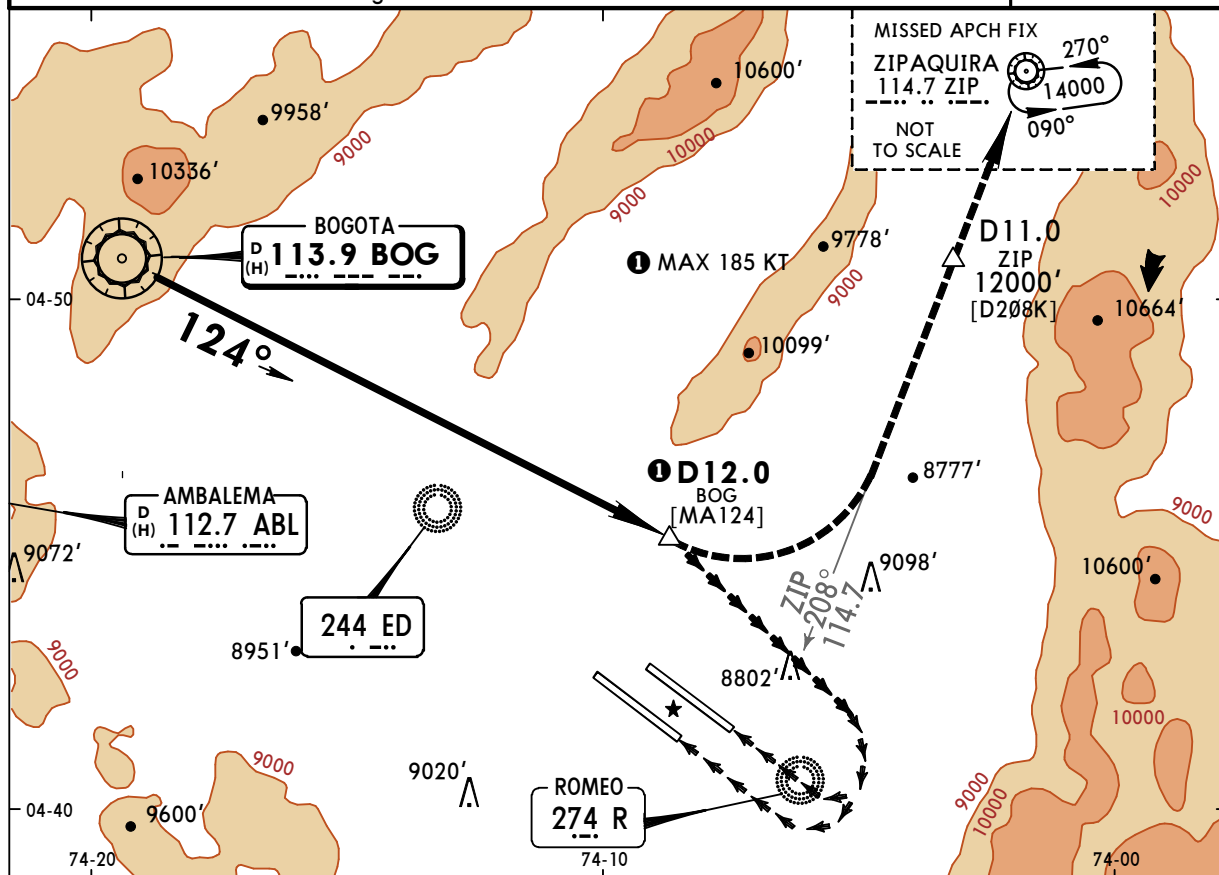
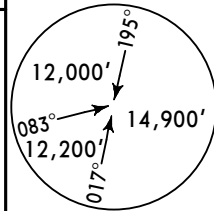
Alt Set: INCHES (hPa on req)

Trans level: FL 190

Trans alt: 18000'

1. BOG and ZIP VOR/DME required. 2. Exercise caution to the east/southeast due to mountainous terrain 9800' or higher 20 NM from BOG VOR.

MSA BOG VOR

[illegible]

CIRCLE-TO-LAND
Missed apch climb gradient min 4.0%
MDA(H)

	Max Kts.
A	100
B	135
C	180
D	205

10200' (1840') - 6000m

CHANGES: Final approach course.

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