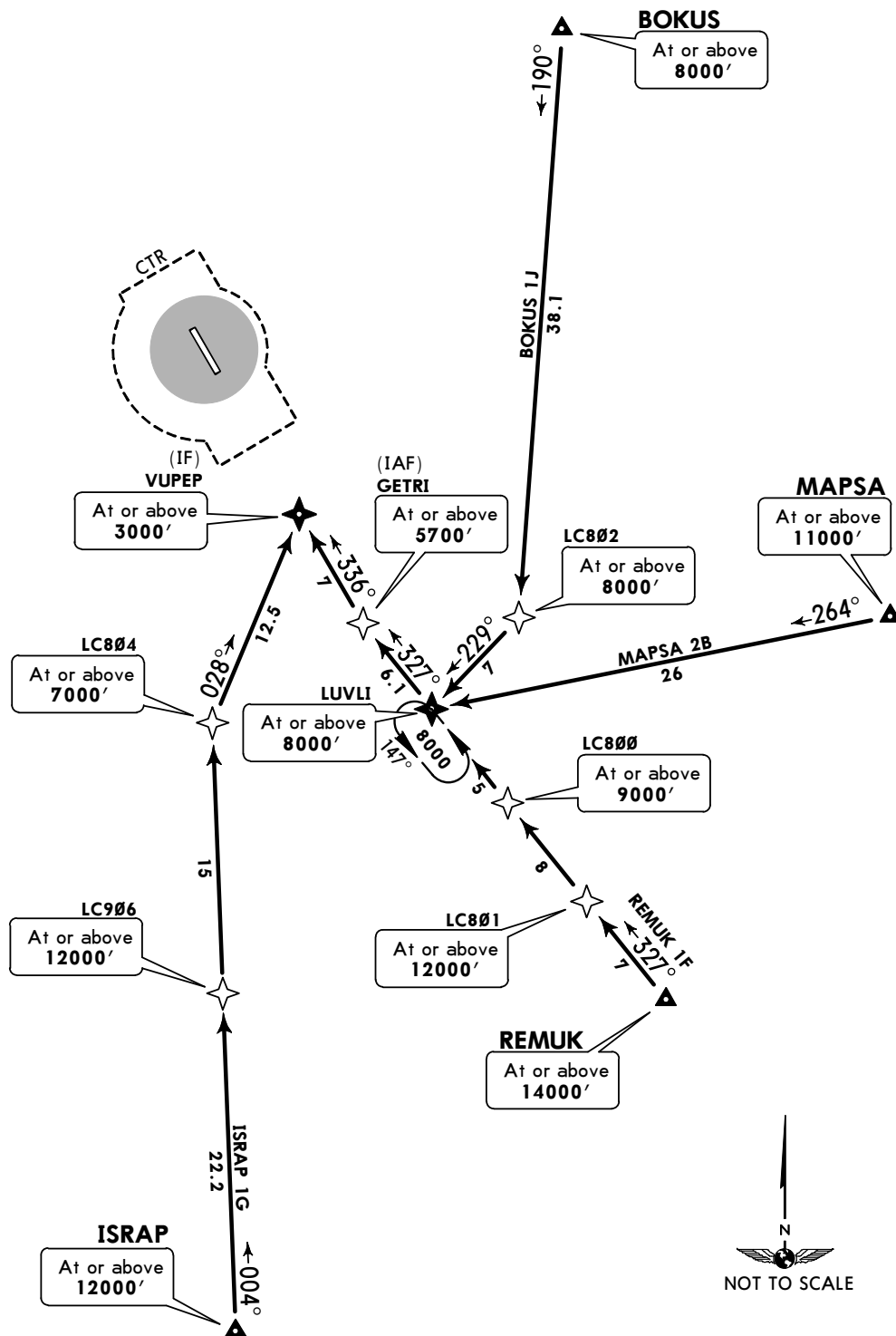


Apt Elev
52'

Alt Set: IN (hPa on req) Trans level: FL190 Trans alt: 18000'
1. RNP 1 or RNAV 1 certification required.
2. GNSS required.

**BOKUS 1J [BOKU1J], ISRAP 1G [ISRA1G]
MAPSA 2B [MAPS2B], REMUK 1F [REMU1F]
RNAV (GNSS) ARRIVALS
(RWY 33)**

CAT A, B & C

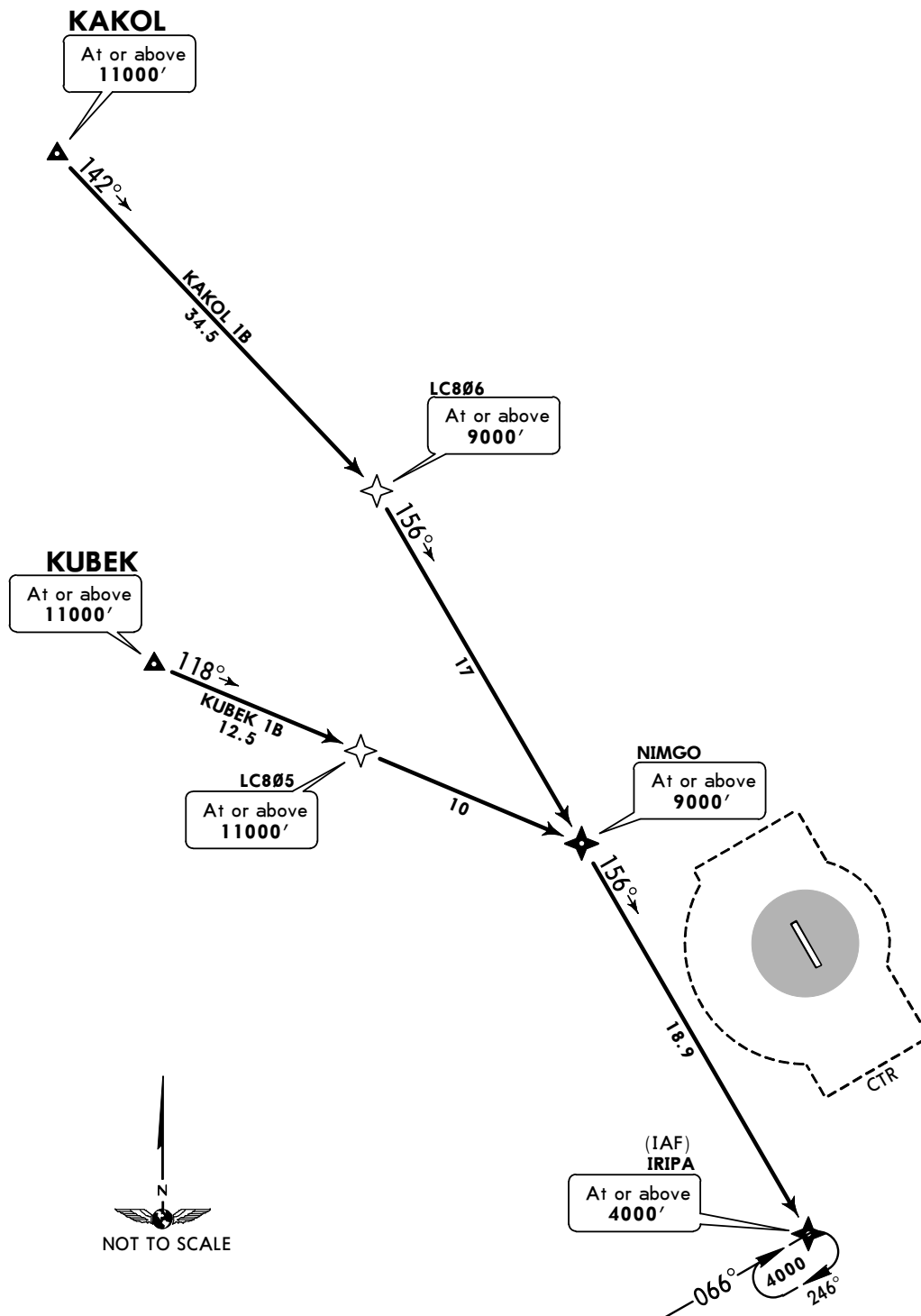


Apt Elev
52'

Alt Set: IN (hPa on req) Trans level: FL190 Trans alt: 18000'
1. RNP 1 or RNAV 1 certification required.
2. GNSS required.

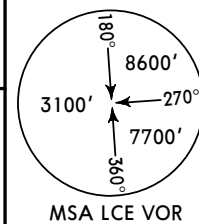
KAKOL 1B [KAKO1B], KUBEK 1B [KUBE1B] RNAV (GNSS) ARRIVALS (RWY 33)

CAT A, B & C



Apt Elev
52'

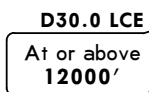
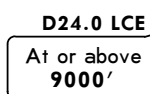
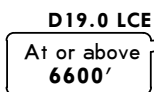
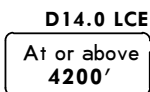
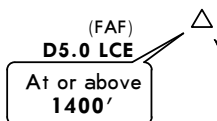
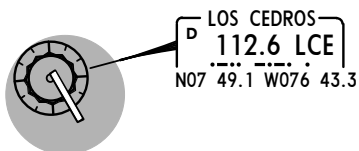
Alt Set: IN (hPa on req) Trans level: FL190 Trans alt: 18000'



REMUK 2A (REMUK 2A) ARRIVAL

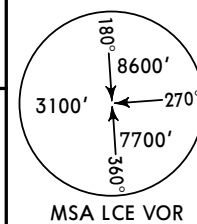
[REMU2A]
(RWY 33)

CAT A, B & C



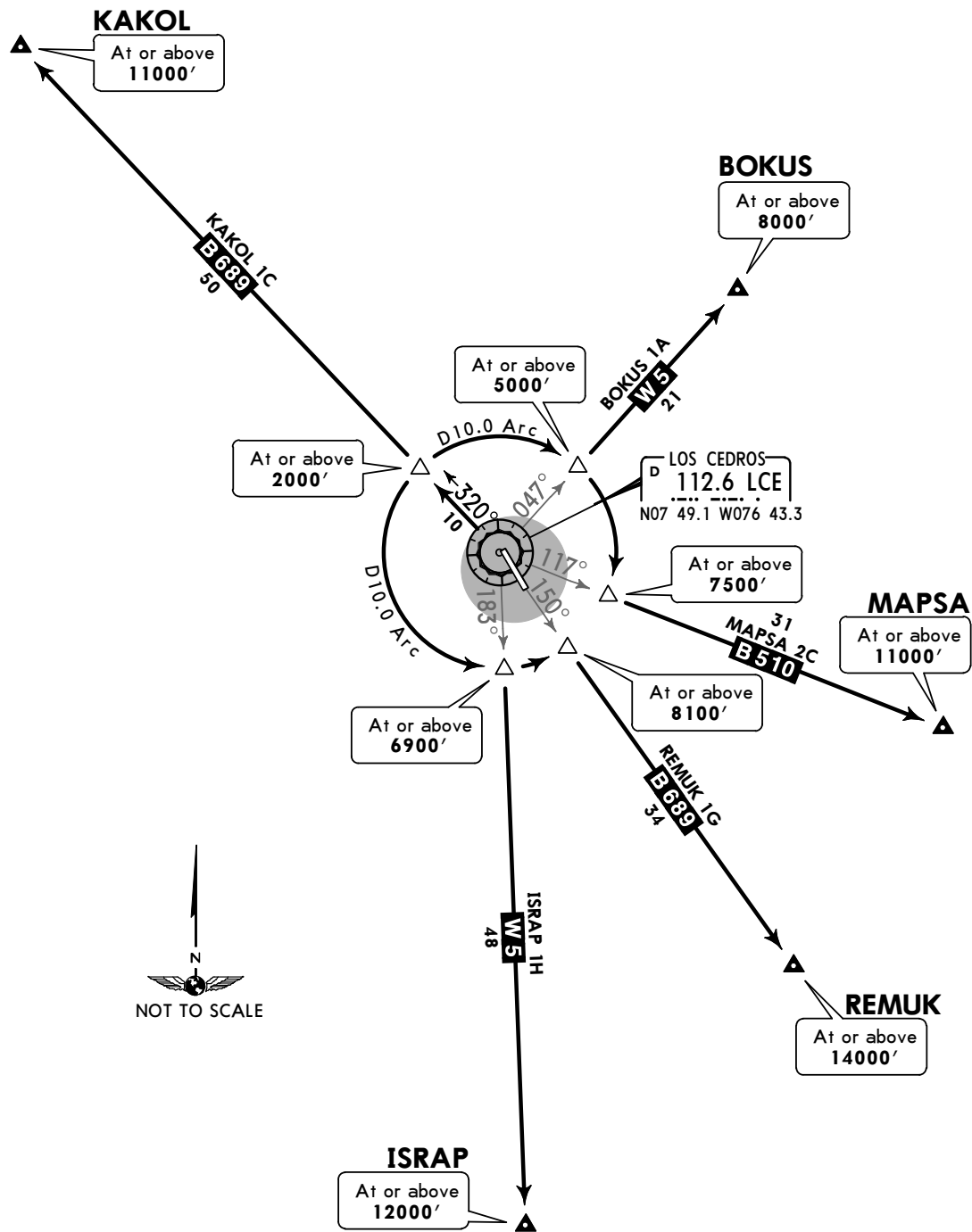
Apt Elev
52'

Trans level: FL190 Trans alt: 18000'



**BOKUS 1A [BOKU1A], ISRAP 1H [ISRA1H]
KAKOL 1C [KAKO1C], MAPSA 2C [MAPS2C]
REMUK 1G [REMU1G] DEPARTURES
(RWY 33)**

CAT A, B & C

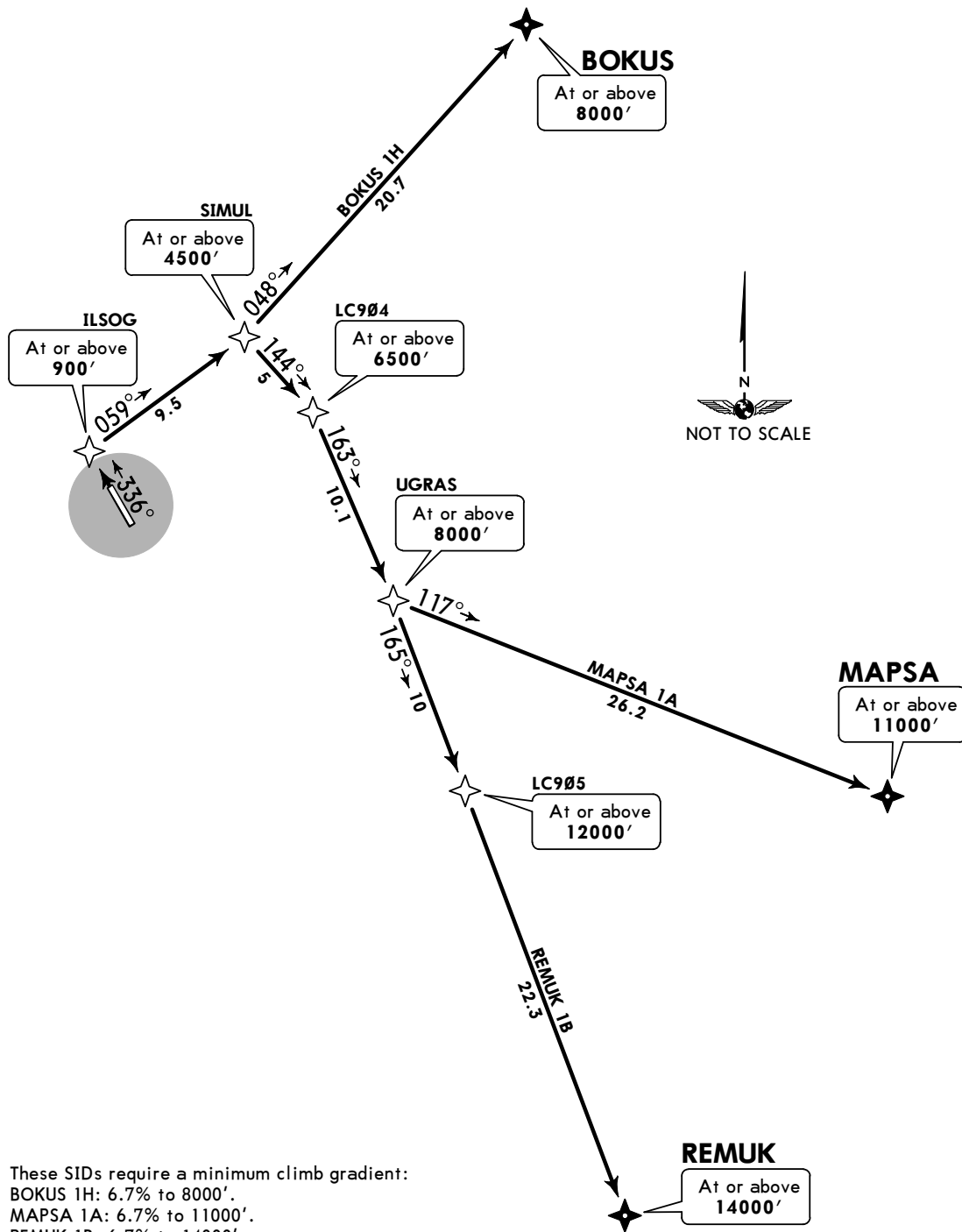


Apt Elev
52'

Trans level: FL190 Trans alt: 18000'
1. RNP 1 or RNAV 1 certification required.
2. GNSS required.

**BOKUS 1H [BOKU1H], MAPSA 1A [MAPS1A]
REMUK 1B [REMU1B]
RNAV (GNSS) DEPARTURES
(RWY 33)**

CAT A, B & C

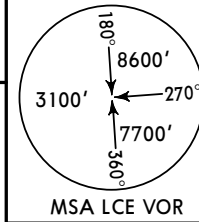


These SIDs require a minimum climb gradient:
BOKUS 1H: 6.7% to 8000'.
MAPSA 1A: 6.7% to 11000'.
REMUK 1B: 6.7% to 14000'.

Gnd speed-KT	75	100	150	200	250	300
6.7% V/V (fpm)	509	678	1018	1357	1696	2035

Apt Elev
52'

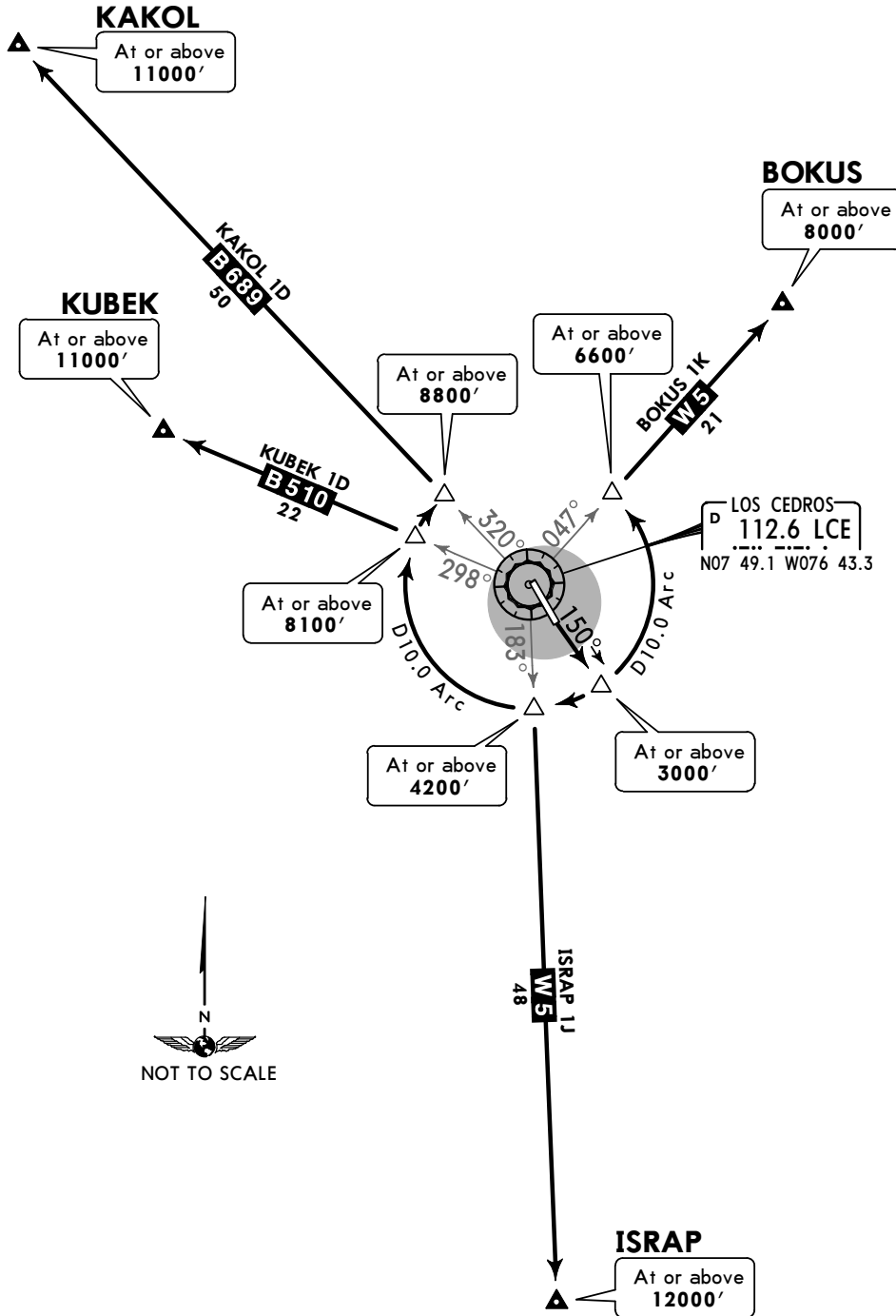
Trans level: FL190 Trans alt: 18000'



BOKUS 1K [BOKU1K], ISRAP 1J [ISRA1J]
KAKOL 1D [KAKO1D], KUBEK 1D [KUBE1D]

DEPARTURES
(RWY 15)

CAT A, B & C



MAINTAIN minimum 5.5% climb gradient to 3000'.

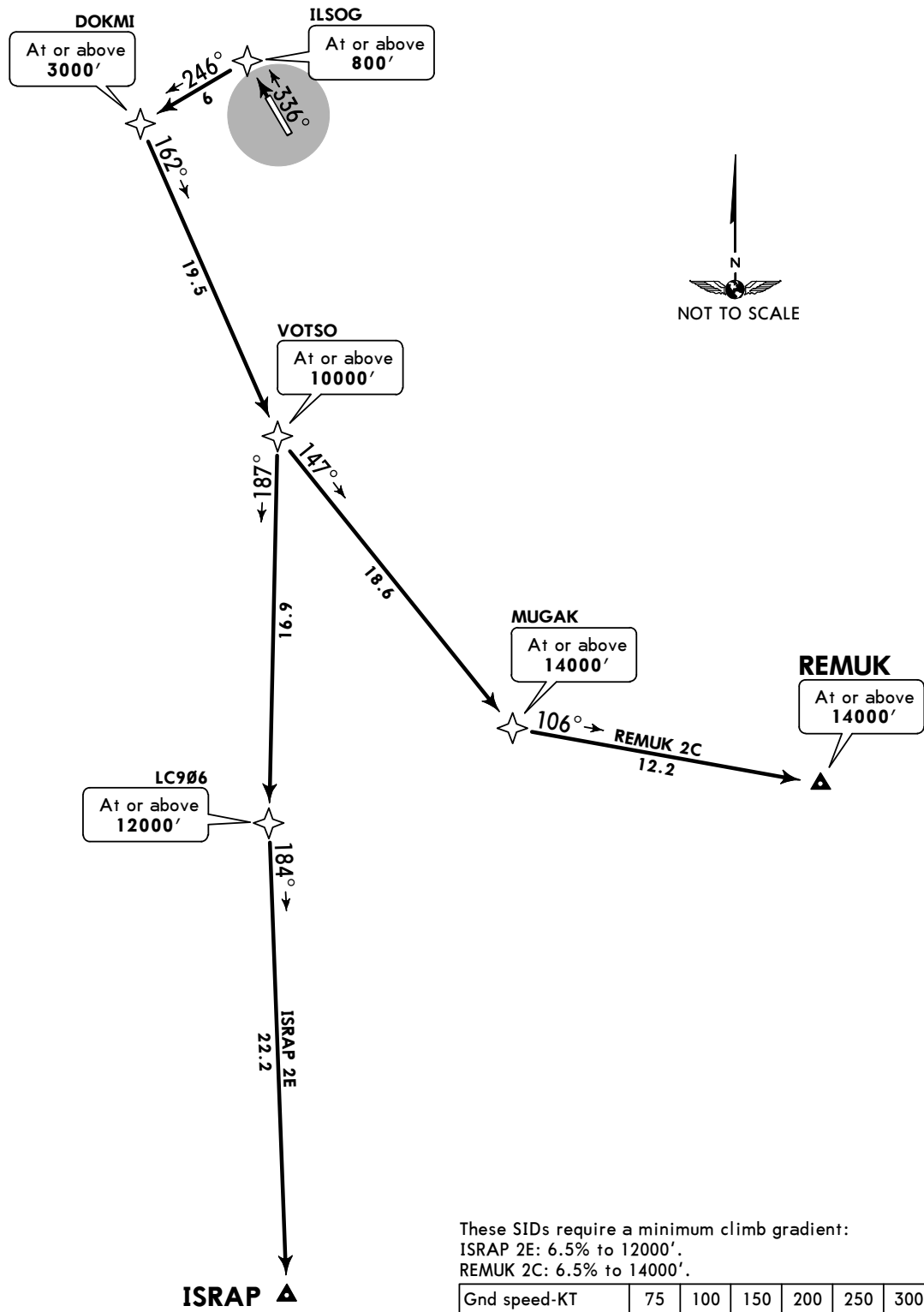
Gnd speed-KT	75	100	150	200	250	300
5.5% V/V (fpm)	418	557	835	1114	1392	1671

Apt Elev
52'

Trans level: FL190 Trans alt: 18000'
1. RNP 1 or RNAV 1.
2. GNSS required.

ISRAP 2E [ISRA2E], REMUK 2C [REMU2C]
RNAV (GNSS) DEPARTURES
(RWY 33)

CAT A, B & C



These SIDs require a minimum climb gradient:
ISRAP 2E: 6.5% to 12000'.
REMUK 2C: 6.5% to 14000'.

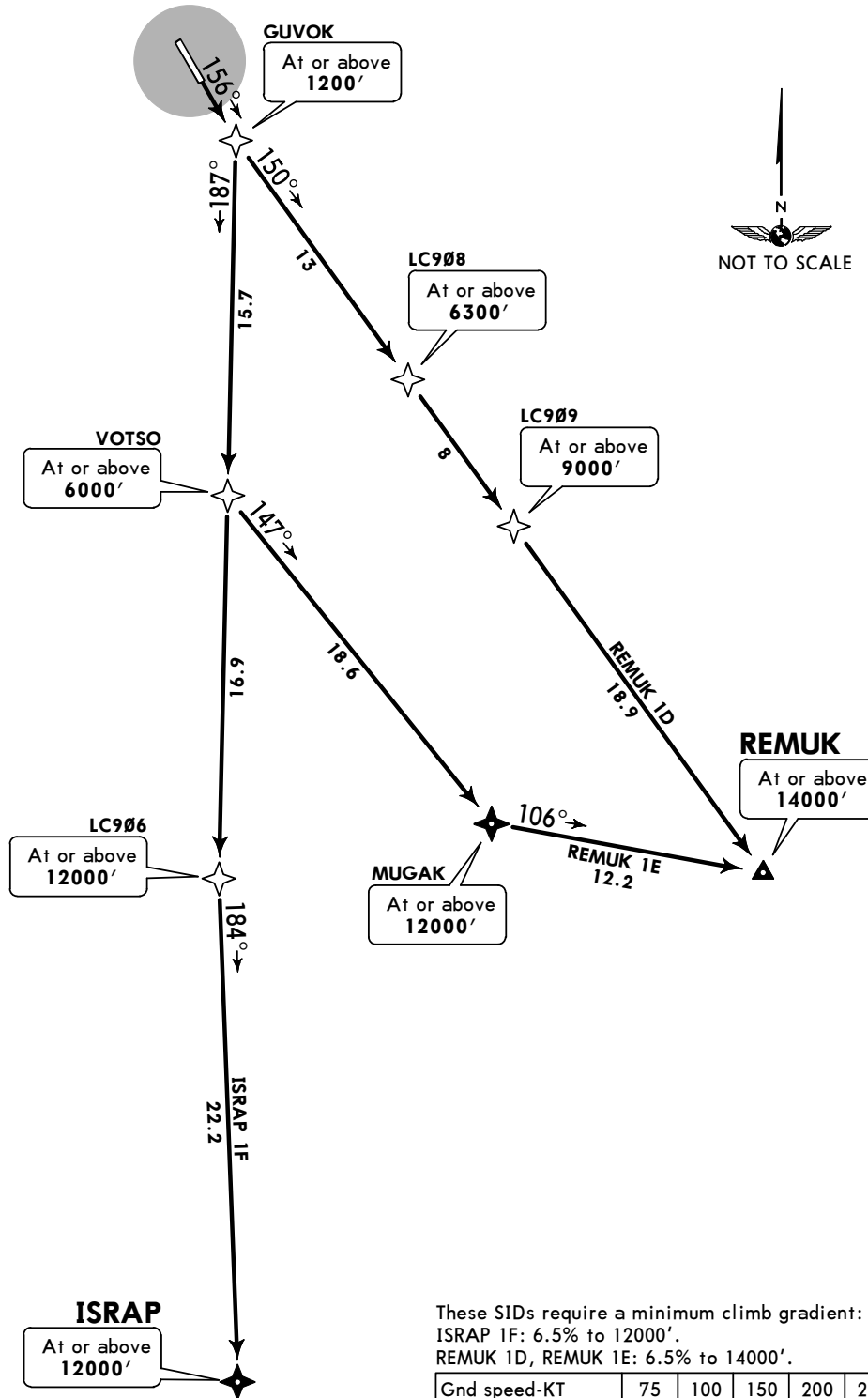
Gnd speed-KT	75	100	150	200	250	300
6.5% V/V (fpm)	494	658	987	1316	1646	1975

Apt Elev
52'

Trans level: FL190 Trans alt: 18000'
1. RNP 1 or RNAV 1 certification required.
2. GNSS required.

ISRAP 1F [ISRA1F], REMUK 1D [REMU1D]
REMUK 1E [REMU1E]
RNAV (GNSS) DEPARTURES
(RWY 15)

CAT A, B & C



These SIDs require a minimum climb gradient:
ISRAP 1F: 6.5% to 12000'.
REMUK 1D, REMUK 1E: 6.5% to 14000'.

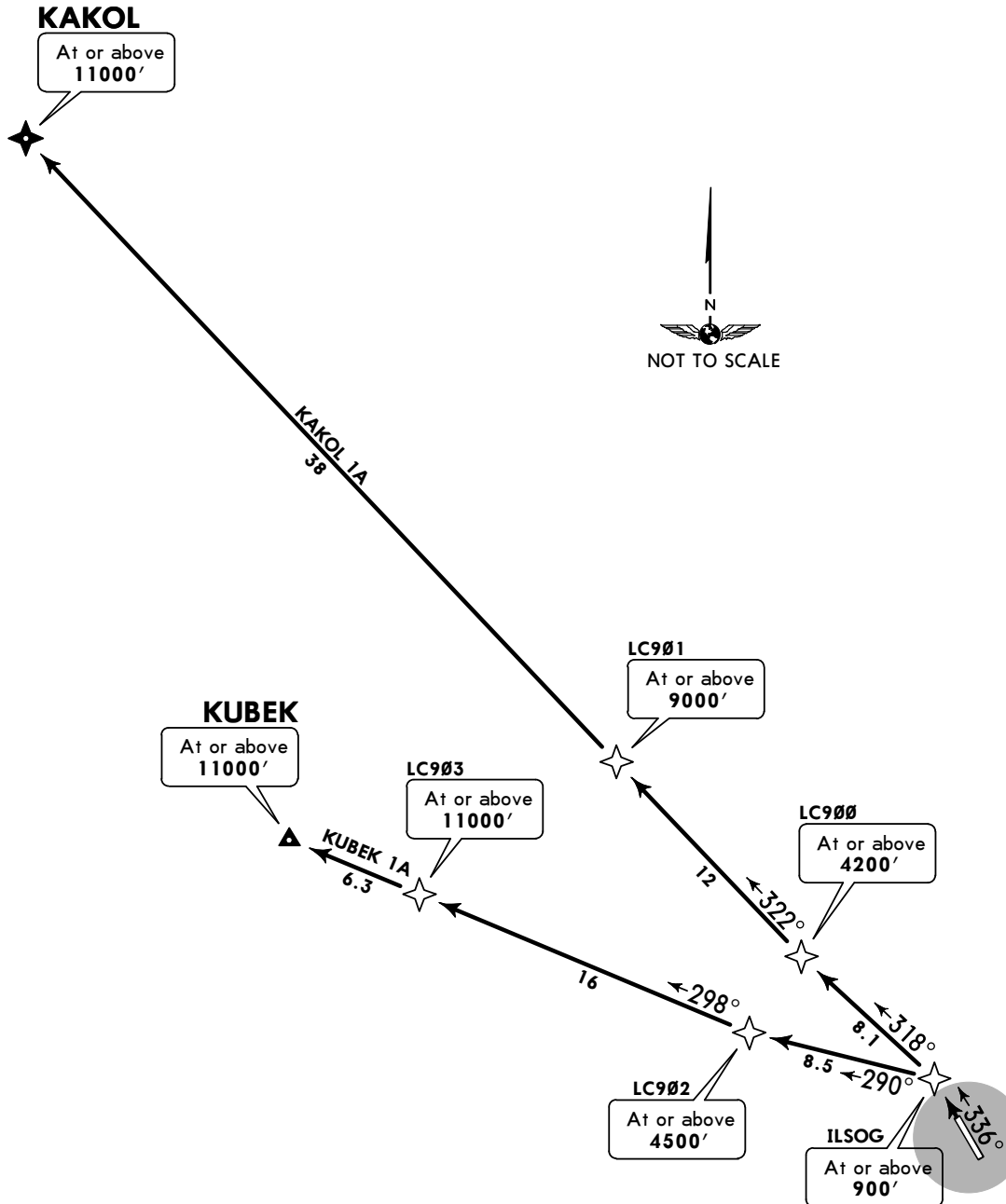
Gnd speed-KT	75	100	150	200	250	300
6.5% V/V (fpm)	494	658	987	1316	1646	1975

Apt Elev
52'

Trans level: FL190 Trans alt: 18000'
1. RNP 1 or RNAV 1 certification required.
2. GNSS required.

KAKOL 1A [KAKO1A], KUBEK 1A [KUBE1A]
RNAV (GNSS) DEPARTURES
(RWY 33)

CAT A, B & C

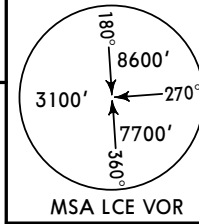


These SIDs require a minimum climb gradient of 6.7% to 11000'.

Gnd speed-KT	75	100	150	200	250	300
6.7% V/V (fpm)	509	678	1018	1357	1696	2035

Apt Elev
52'

Trans level: FL190 Trans alt: 18000'



KUBEK 1C DEPARTURE

[KUBE1C]
(RWY 33)

CAT A, B & C

KUBEK

At or above
11000'



B510
22

At or above
4700'

D10.0 Arc

At or above
3100'

298°

336°

LOS CEDROS
D 112.6 LCE
N07 49.1 W076 43.3

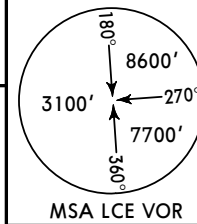


MAINTAIN minimum 5.1% climb gradient until reaching MEA.

Gnd speed-KT	75	100	150	200	250	300
5.1% V/V (fpm)	387	516	775	1033	1291	1549

Apt Elev
52'

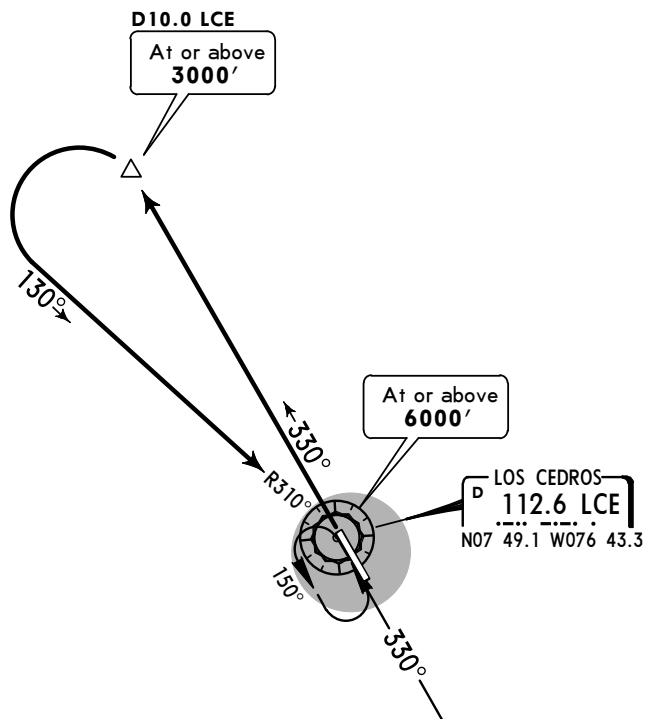
Trans level: FL190 Trans alt: 18000'



LOS CEDROS 1A DEPARTURE

[LCE1A]
(RWY 33)

CAT A, B & C



MAINTAIN minimum 5.0% climb gradient to LCE VOR.

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

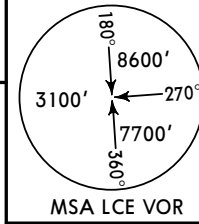


INITIAL CLIMB

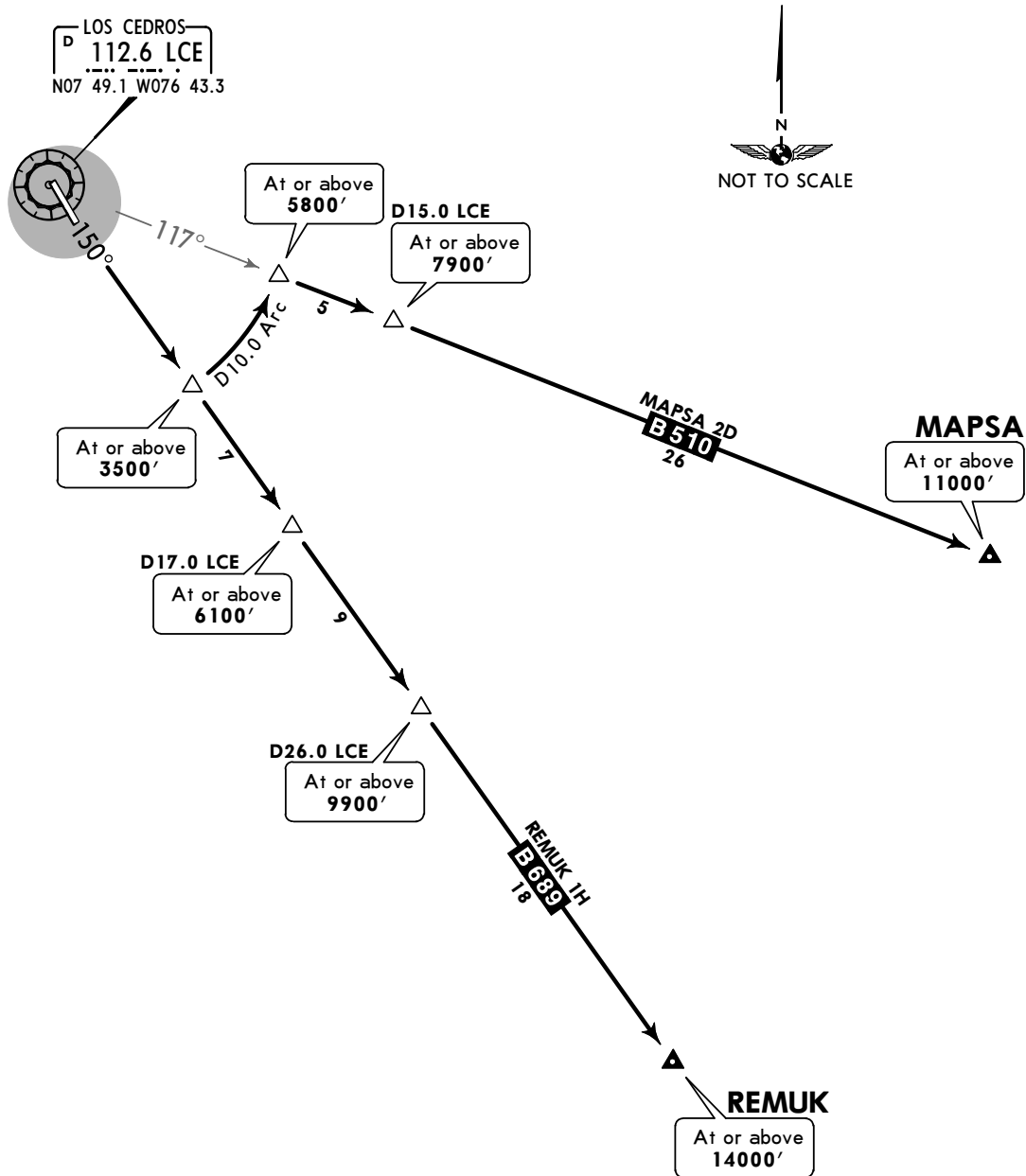
Climb over LCE VOR to MEA of assigned route.

Apt Elev
52'

Trans level: FL190 Trans alt: 18000'

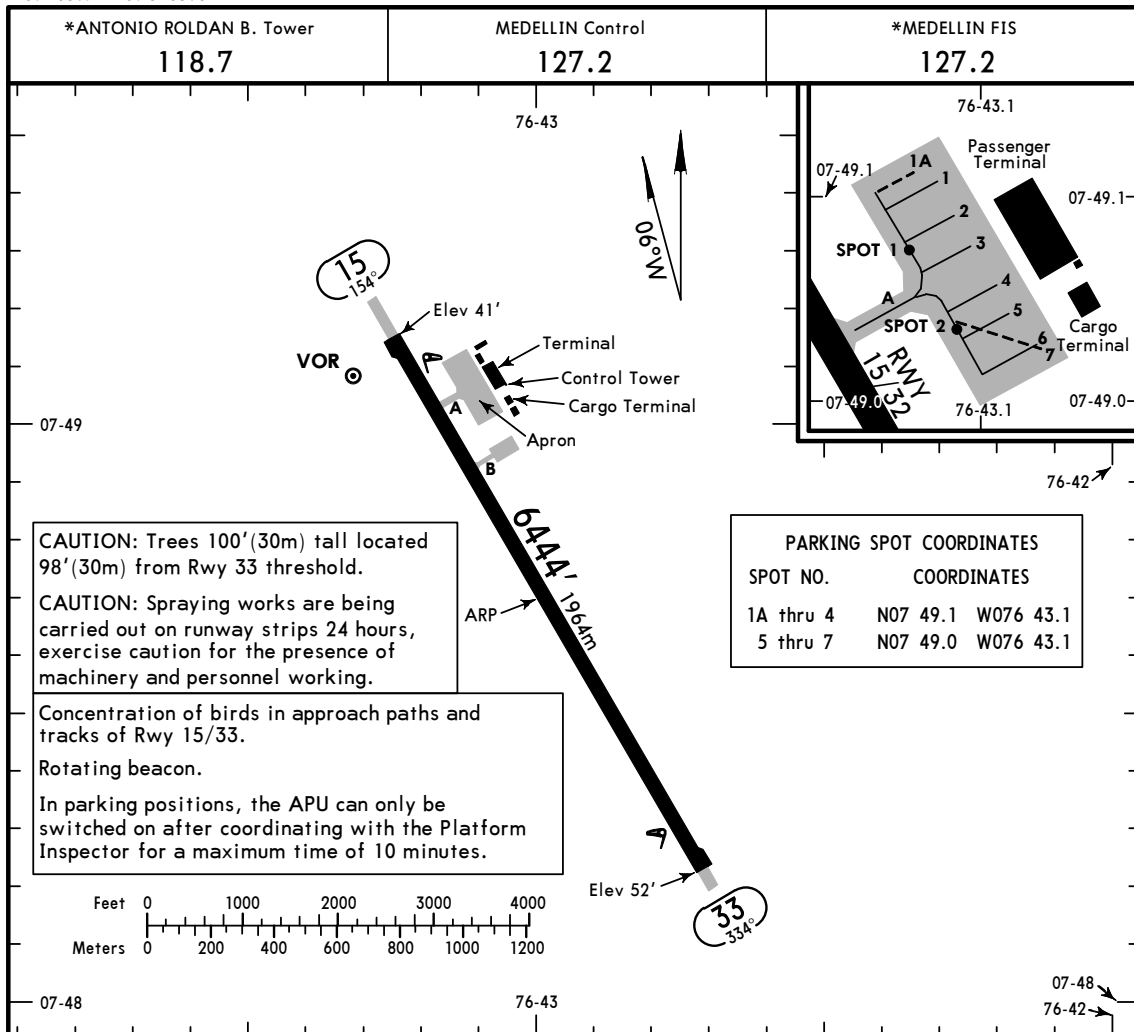


**MAPSA 2D [MAPS2D], REMUK 1H [REMU1H]
DEPARTURES
(RWY 15)
CAT A, B & C**



MAINTAIN minimum 6.5% climb gradient until reaching MEA.

Gnd speed-KT	75	100	150	200	250	300
6.5% V/V (fpm)	494	658	987	1316	1646	1975



ADDITIONAL RUNWAY INFORMATION

RWY	LANDING BEYOND	USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
15	RL				148'
33	RL PAPI-L (angle 3.00°)				45m

TAKE-OFF

All Rwys

Standard

1 & 2 Eng

3 & 4 Eng

1600m

800m

SKLC
ANTONIO ROLDAN
BETANCOURT



CAREPA, COLOMBIA

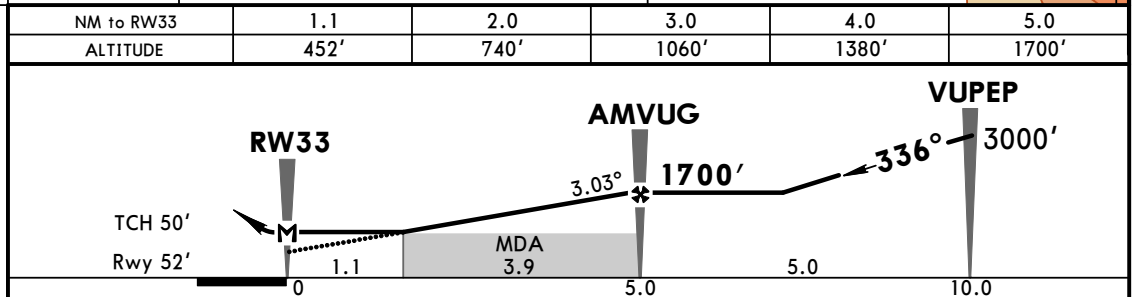
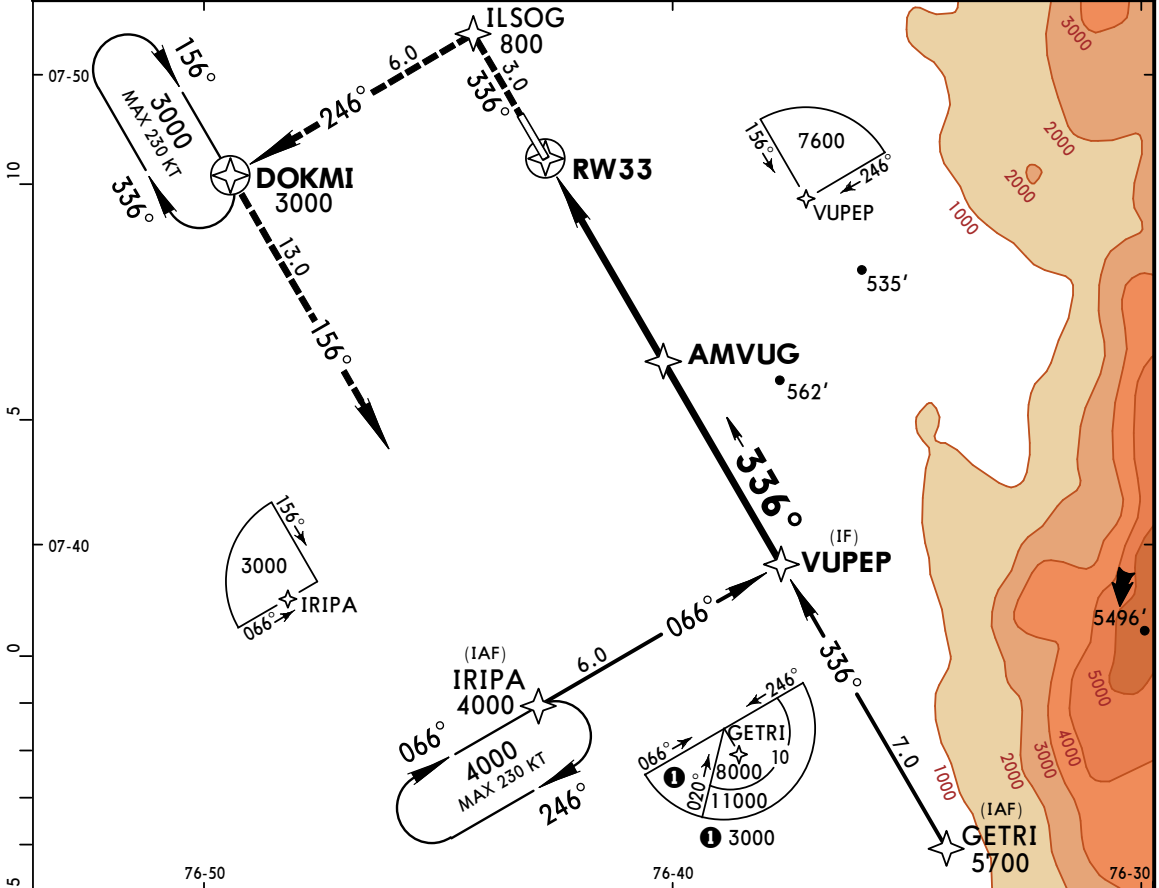
30 DEC 16
Eff 5 Jan

(12-1)

CAT A, B & C

RNAV (GNSS) Rwy 33

MEDELLIN Approach 126.1	*ANTONIO ROLDAN B. Tower 118.7	MEDELLIN Control 127.2	*FIS 127.2		
RNAV	Final Apch Crs 336°	Minimum Alt AMVUG 1700' (1648')	RNAV MDA(H) 452' (400')	Apt Elev 52' Rwy 52'	TAA 25 NM GETRI, IRIPA, VUPEP
MISSED APCH: Runway heading until ILSOG, then LEFT turn to DOKMI holding pattern climbing to 3000'.					
Alt Set: IN (hPa on req) Trans level: FL 190 Trans alt: 18000'					
1. RNP approach certification. 2. Holding at IRIPA and DOKMI simultaneously at the same altitude is prohibited.					



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L	↑	ILSOG	3000'	LT	DOKMI
Descent Angle 3.03°	375	482	536	643	750	858						
MAP at RW33 or AMVUG to MAP	5.0	4:17	3:20	3:00	2:30	2:09						

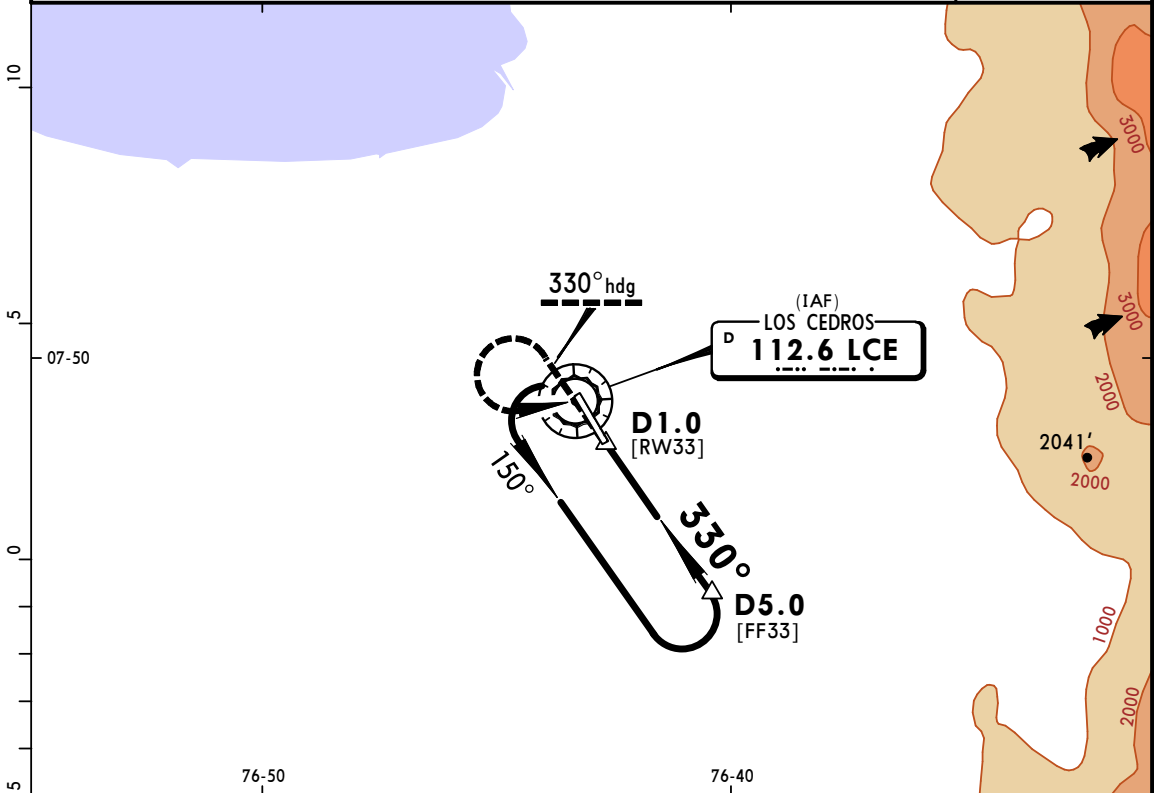
STRAIGHT-IN LANDING RWY 33				CIRCLE-TO-LAND			
RNAV MDA(H) 452' (400')				Max Kts			
A	2000m			100	552' (500') - 2000m		
B	2200m			135	652' (600') - 2400m		
C	NOT APPLICABLE			180	NOT APPLICABLE		
D	NOT APPLICABLE			D	NOT APPLICABLE		

PANS OPS

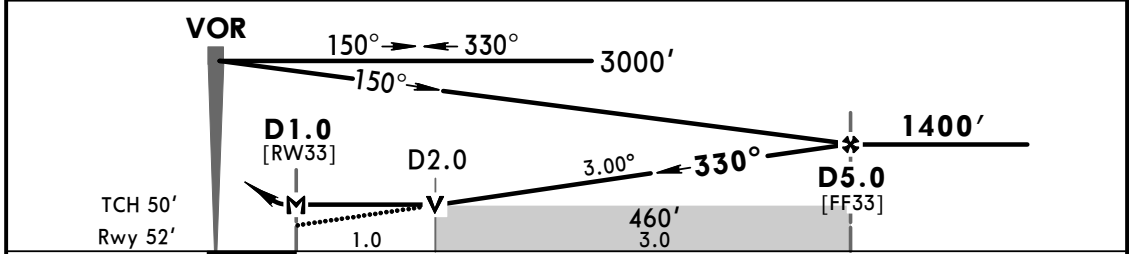
CHANGES: New procedure.

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MEDELLIN Approach 126.1		*ANTONIO ROLDAN B. Tower 118.7		MEDELLIN Control 127.2		*FIS 127.2	
VOR LCE 112.6	Final Apch Crs 330°	Minimum Alt D5.0 1400' (1348')	MDA(H) 460' (408')	Apt Elev 52' Rwy 52'			
MISSED APCH: Maintain 330° heading to LCE VOR, then LEFT turn to holding pattern climbing to 3000'.						MSA LCE VOR	
Alt Set: IN (hPa on req)		Trans level: FL 190		Trans alt: 18000'			
1. LCE DME required.							



LCE DME	2.0	3.0	4.0	5.0
ALTITUDE	460'	760'	1080'	1400'



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L	330° hdg	LCE 112.6	3000' LT	LCE 112.6
Descent Angle 3.00°	372	478	531	637	743	849					
MAP at D1.0 or FAF to MAP	4.0	3:26	2:40	2:24	2:00	1:43					

STRAIGHT-IN LANDING RWY 33						CIRCLE-TO-LAND					
MDA(H) 460' (408')						MDA(H) _____					
A	2000m					Max Kts	_____				
B	2000m					100	560' (508') - 2000m				
C	2200m					135	660' (608') - 2400m				
D	NOT APPLICABLE					180	660' (608') - 2400m				
	NOT APPLICABLE					D	NOT APPLICABLE				