

MNMG/MGA



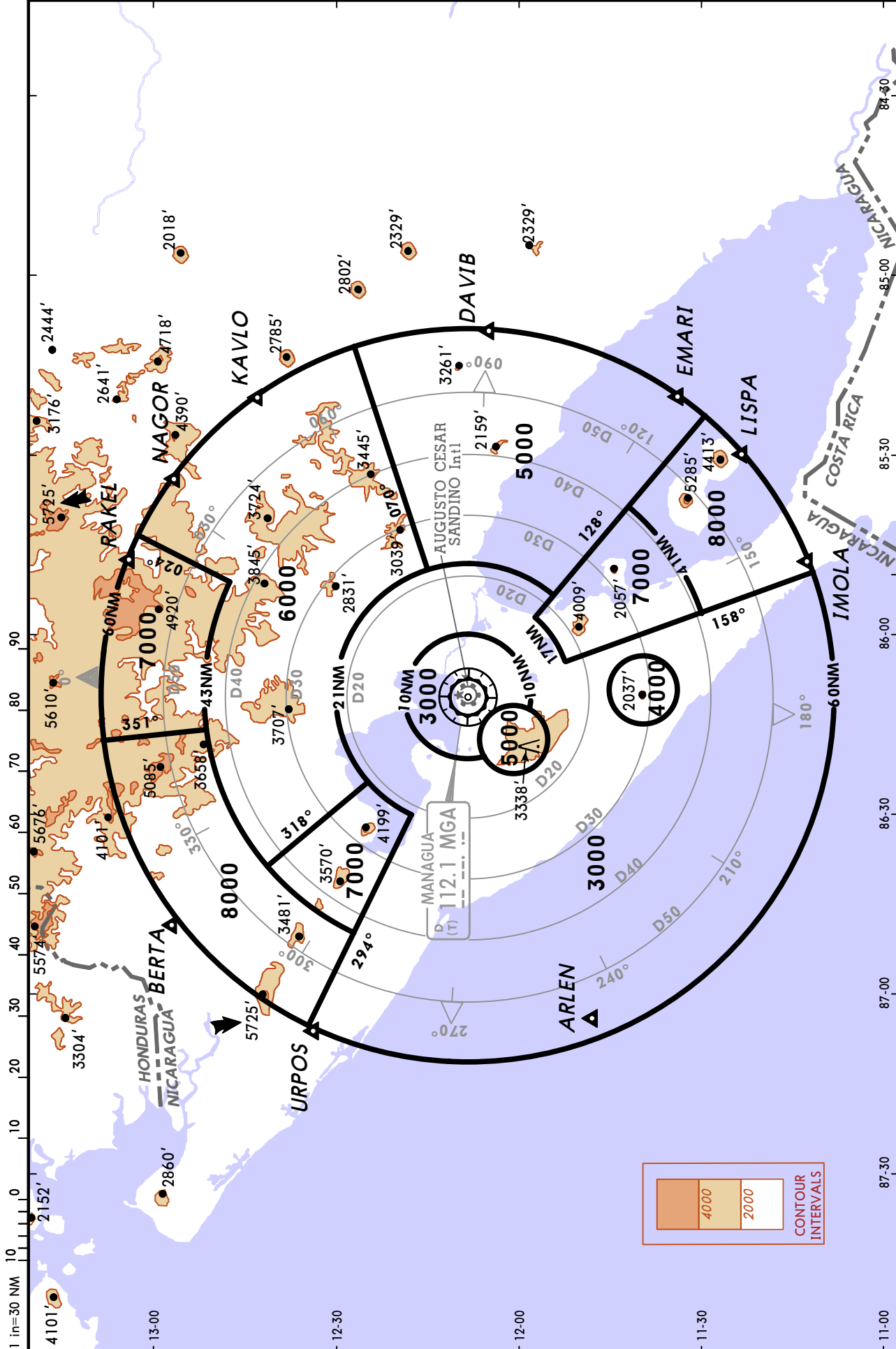
MANAGUA, NICARAGUA

AUGUSTO CESAR SANDINO INTL

10-1R 25 JAN 08

RADAR MINIMUM ALTITUDES

SANDINO Approach (R)	Apt Elev	Alt Set: MB	Trans level: FL 200	Trans alt: 19500'
119.4	194'			



CHANGES: Airport name.

MNMG/MGA
AUGUSTO CESAR SANDINO INTL

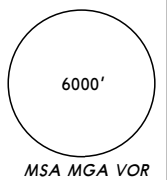
JEPPESEN
 5 OCT 07 10-2

MANAGUA, NICARAGUA
ARRIVAL

Apt Elev
 194'

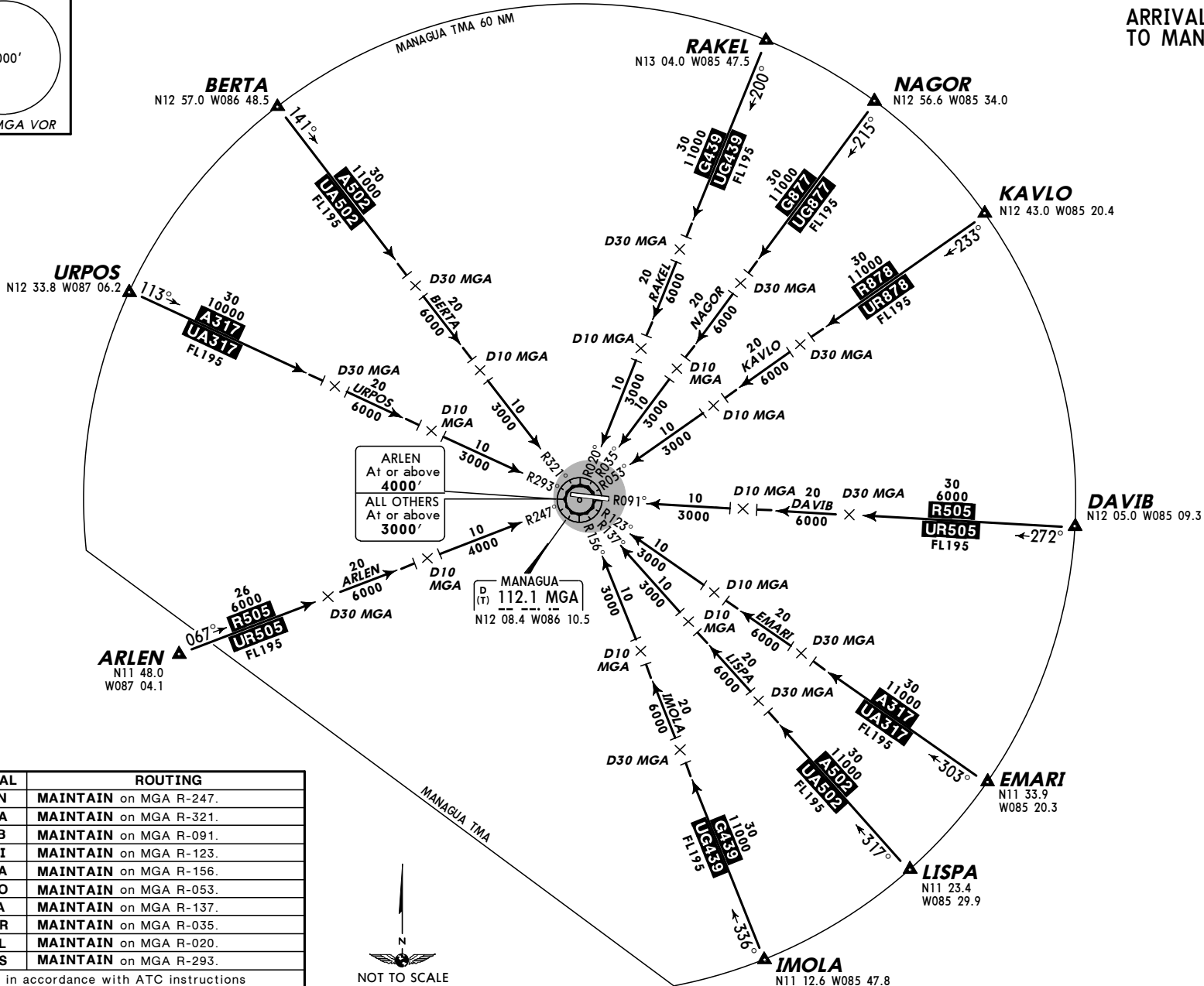
Alt Set: hPa Trans level: FL200 Trans alt: 19500'

In case of DME failure at any time during this procedure, maintain the last altitude and proceed to the station in accordance with ATC instructions.



ARRIVAL PROCEDURES TO MANAGUA (MGA)

- ARLEN,
- BERTA,
- DAVIB,
- EMARI,
- IMOLA,
- KAVLO,
- LISPA,
- NAGOR,
- RAKEL,
- URPOS



ARRIVAL	ROUTING
ARLEN	MAINTAIN on MGA R-247.
BERTA	MAINTAIN on MGA R-321.
DAVIB	MAINTAIN on MGA R-091.
EMARI	MAINTAIN on MGA R-123.
IMOLA	MAINTAIN on MGA R-156.
KAVLO	MAINTAIN on MGA R-053.
LISPA	MAINTAIN on MGA R-137.
NAGOR	MAINTAIN on MGA R-035.
RAKEL	MAINTAIN on MGA R-020.
URPOS	MAINTAIN on MGA R-293.

Descend in accordance with ATC instructions to MGA, then follow the given approach procedure in accordance with ATC instructions.

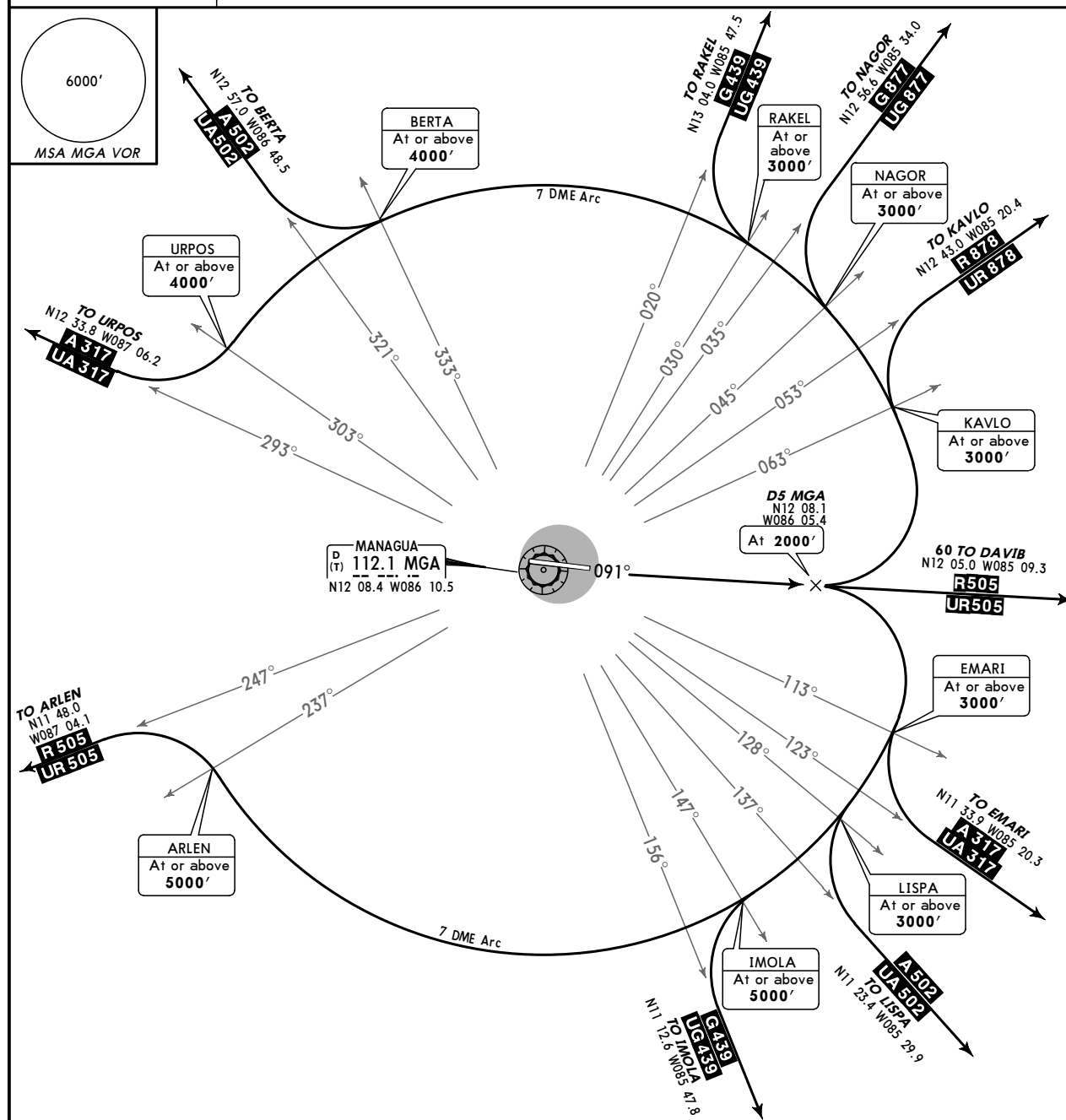
MNMG/MGA
 AUGUSTO CESAR SANDINO INTL

JEPPESEN
 5 OCT 07 **10-3**

MANAGUA, NICARAGUA
DEPARTURE

Apt Elev
 194'

Trans level: FL200 Trans alt: 19500'



VOR DME DEPARTURE PROCEDURES

(RWY 09)

- ARLEN,
- BERTA,
- DAVIB,
- EMARI,
- IMOLA,
- KAVLO,
- LISPA,
- NAGOR,
- RAKEL,
- URPOS

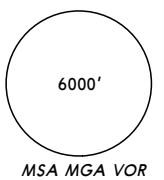


INITIAL CLIMB	
Climb on MGA R-091 to D5 at 2000' . After take-off contact Managua Apch 119.4.	
DEPARTURE	ROUTING
ARLEN	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-237, then turn LEFT and intercept MGA R-247.
BERTA	Turn LEFT on MGA 7 DME Arc. Cross MGA R-333, then turn RIGHT and intercept MGA R-321.
DAVIB	Continue on MGA R-091.
EMARI	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-113, then turn LEFT and intercept MGA R-123.
IMOLA	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-147, then turn LEFT and intercept MGA R-156.
KAVLO	Turn LEFT on MGA 7 DME Arc. Cross MGA R-063, then turn RIGHT and intercept MGA R-053.
LISPA	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-128, then turn LEFT and intercept MGA R-137.
NAGOR	Turn LEFT on MGA 7 DME Arc. Cross MGA R-045, then turn RIGHT and intercept MGA R-035.
RAKEL	Turn LEFT on MGA 7 DME Arc. Cross MGA R-030, then turn RIGHT and intercept MGA R-020.
URPOS	Turn LEFT on MGA 7 DME Arc. Cross MGA R-303, then turn RIGHT and intercept MGA R-293.

CHANGES: Departure revised, airport name changed.

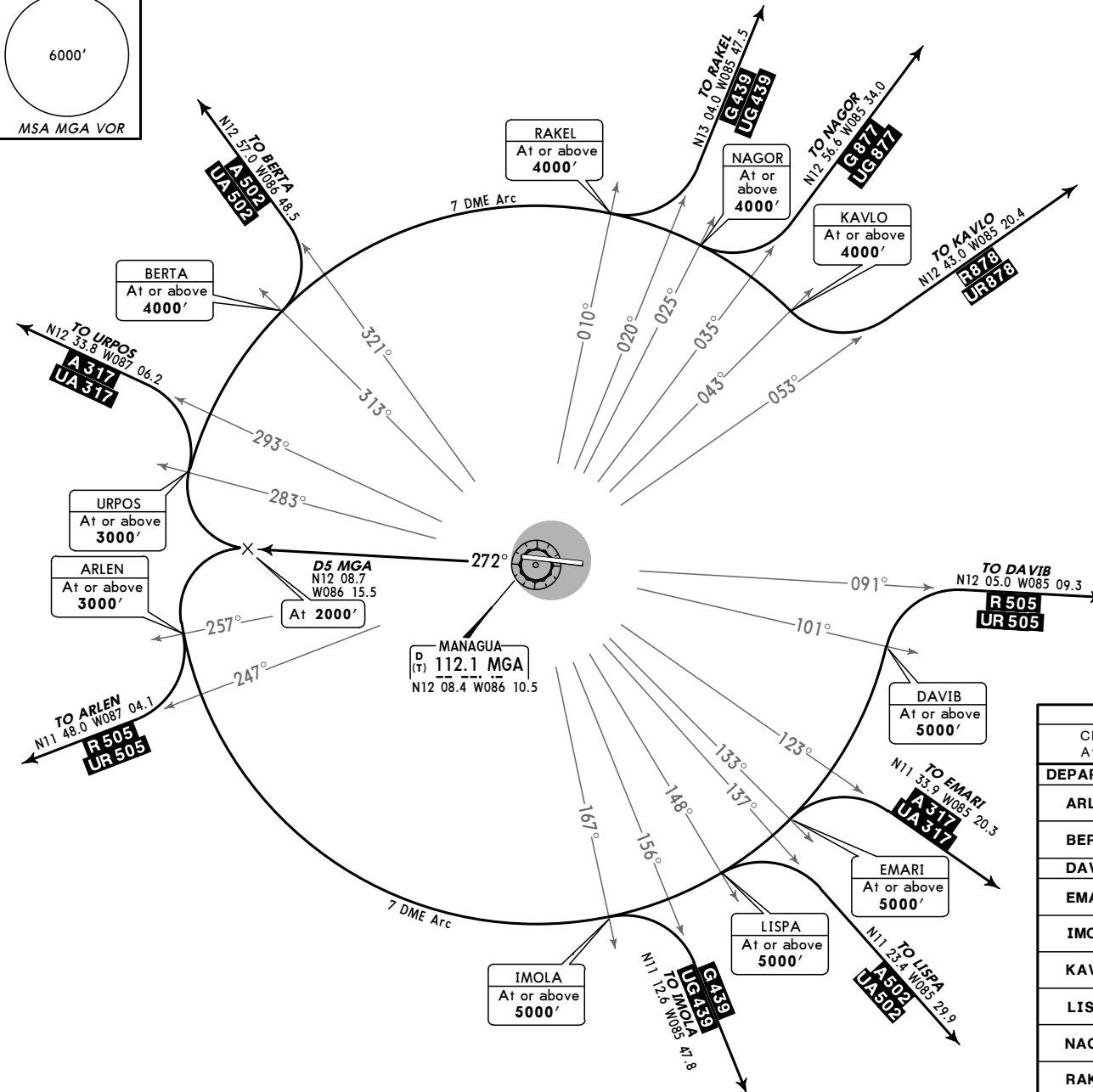
Apt Elev
 194'

Trans level: FL200 Trans alt: 19500'



VOR DME DEPARTURE PROCEDURES
 (RWY 27)

- ARLEN,
- BERTA,
- DAVIB,
- EMARI,
- IMOLA,
- KAVLO,
- LISPA,
- NAGOR,
- RAKEL,
- URPOS

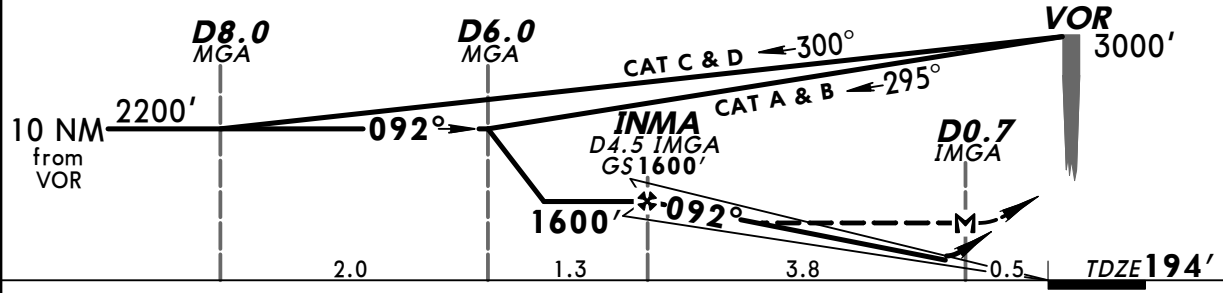
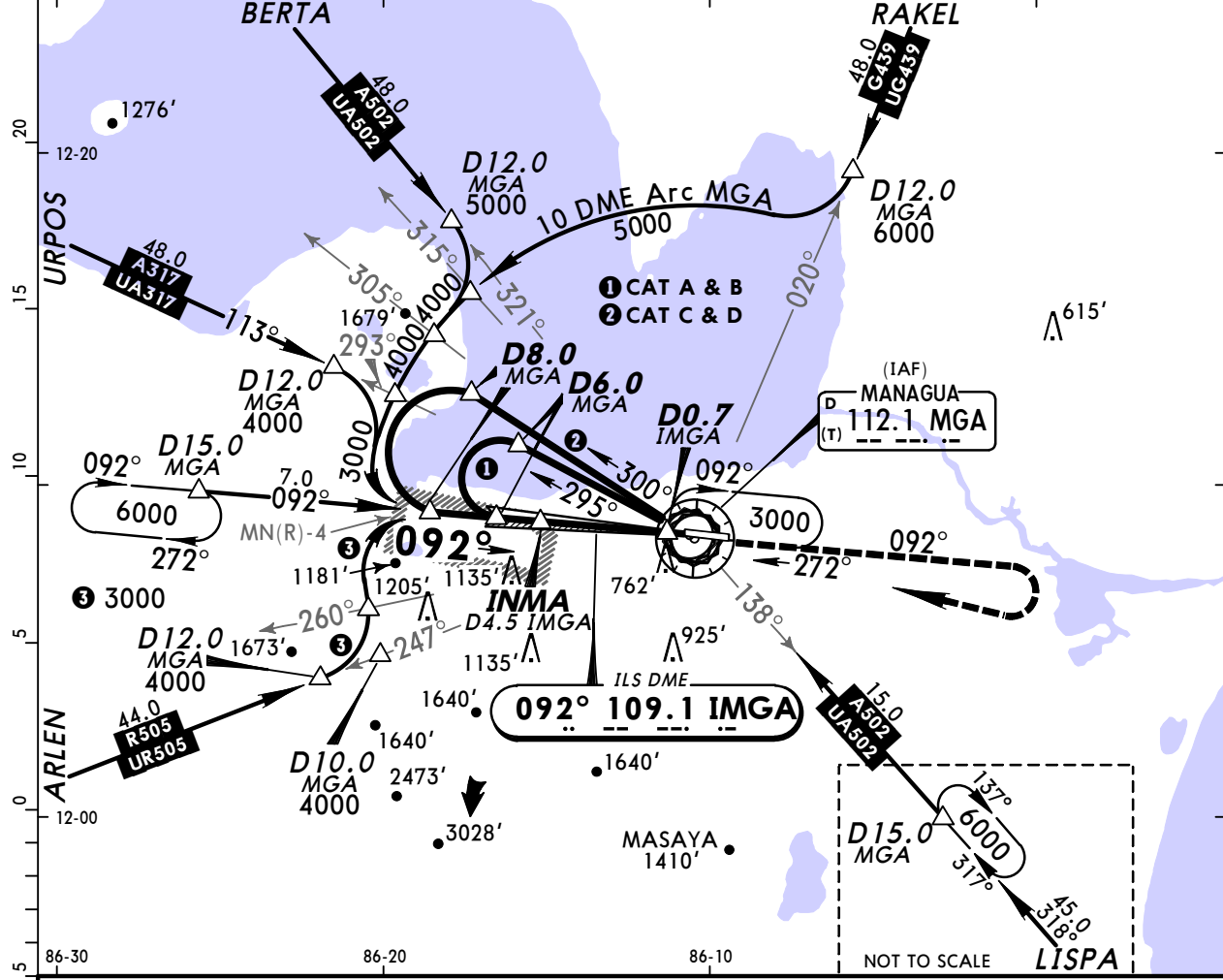


INITIAL CLIMB	
Climb on MGA R-272 to D5 at 2000'. After take-off contact Managua Apch 119.4.	
DEPARTURE	ROUTING
ARLEN	Turn LEFT on MGA 7 DME Arc. Cross MGA R-257, then turn RIGHT and intercept MGA R-247.
BERTA	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-313, then turn LEFT and intercept MGA R-321.
DAVIB	Turn LEFT on MGA 7 DME Arc and intercept MGA R-091.
EMARI	Turn LEFT on MGA 7 DME Arc. Cross MGA R-133, then turn RIGHT and intercept MGA R-123.
IMOLA	Turn LEFT on MGA 7 DME Arc. Cross MGA R-167, then turn RIGHT and intercept MGA R-156.
KAVLO	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-043, then turn LEFT and intercept MGA R-053.
LISPA	Turn LEFT on MGA 7 DME Arc. Cross MGA R-148, then turn RIGHT and intercept MGA R-137.
NAGOR	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-025, then turn LEFT and intercept MGA R-035.
RAKEL	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-010, then turn LEFT and intercept MGA R-020.
URPOS	Turn RIGHT on MGA 7 DME Arc. Cross MGA R-283, then turn LEFT and intercept MGA R-293.

CHANGES: Departure revised, airport name changed.

MNMG/MGA **JEPPESEN** **MANAGUA, NICARAGUA**
AUGUSTO CESAR SANDINO INTL (11-1) 5 OCT 07 **ILS DME VOR Rwy 09**

SANDINO Approach (R) 119.4		SANDINO Radio (FIS) 126.9		SANDINO Tower 118.1		Ground 121.9	
LOC IMGA 109.1	Final Apch Crs 092°	GS INMA 1600' (1406')	ILS DA(H) 600' (406')	Apt Elev 194' TDZE 194'		6000'	
MISSED APCH: Climb to 2500' outbound on MGA VOR R-092 then turn RIGHT to MGA VOR and follow ATC instructions.							
Alt Set: MB		TDZ Elev: 7 MB		Trans level: FL 200		Trans alt: 19500'	
							MSA MGA VOR



Gnd speed-Kts	70	90	100	120	140	160	REIL	2500'	MGA	RT	MGA
GS	3.10°	389	500	556	667	778	VASI	↑	on 112.1		112.1
MAP at D0.7 IMGA or INMA to MAP	3.8	3:15	2:32	2:17	1:54	1:38	1:26		R-092		

STRAIGHT-IN LANDING RWY 09		CEILING REQUIRED		CIRCLE-TO-LAND	
ILS DA(H) 600' (406')		LOC (GS out) MDA(H) 800' (606')		Max Kts	MDA(H) CEIL-VIS
CEILING-VISIBILITY				90	800' (606') 700' - 1600m
450' - 1200m		700' - 1600m		120	1230' (1036') 1100' - 4800m
				140	1440' (1246') 1300' - 4800m
				165	

MNMG/MGA

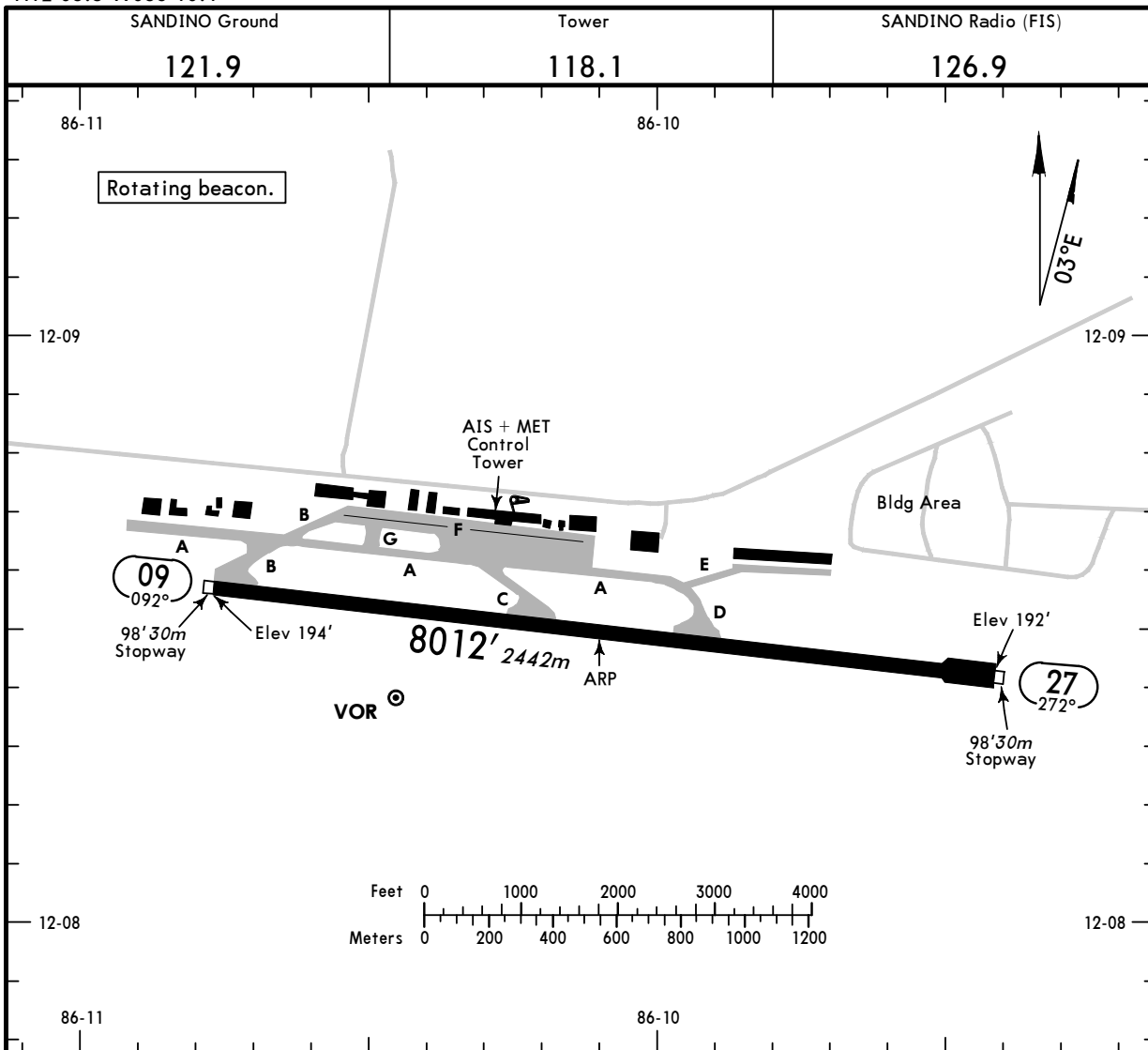
Apt Elev **194'**
 N12 08.5 W086 10.1



MANAGUA, NICARAGUA

5 OCT 07 **(11-1)**

AUGUSTO CESAR SANDINO INTL



ADDITIONAL RUNWAY INFORMATION

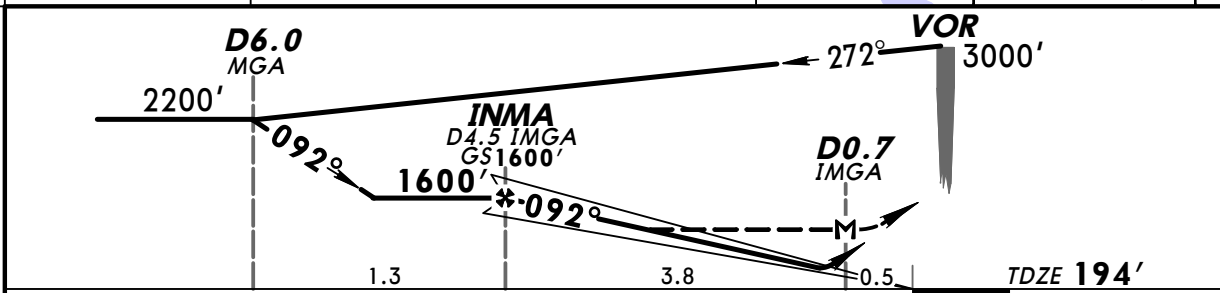
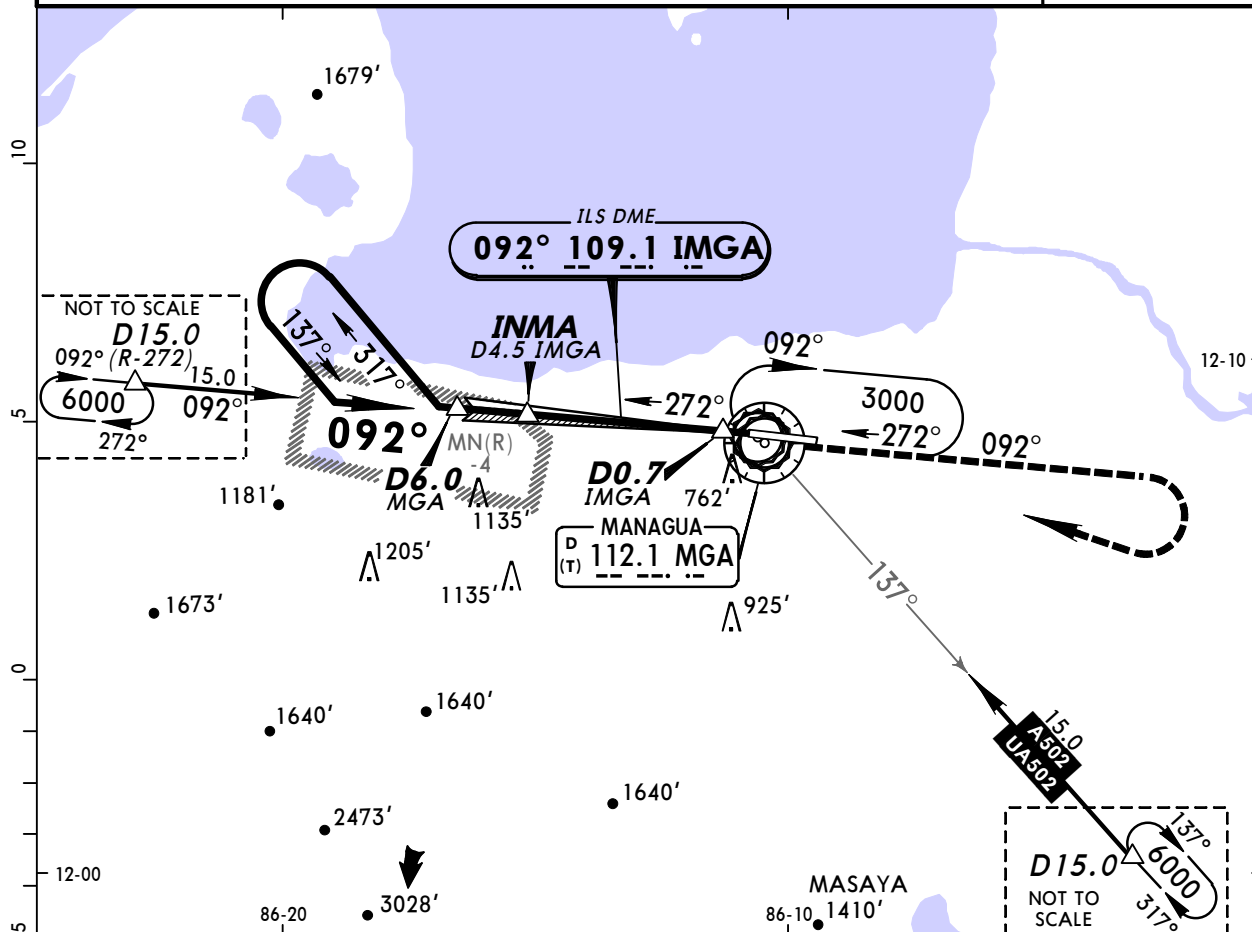
RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
09	RL REIL VASI (3-bar)		6964' 2123m		148'
27	RL REIL				45m

TAKE-OFF

	Rwy 27	Rwy 09
1 & 2 Eng	620' - 3.2 km	800' - 3.2 km
3 & 4 Eng		

MNMG/MGA **JEPPESEN** **MANAGUA, NICARAGUA**
 AUGUSTO CESAR SANDINO INTL (11-2) 5 OCT 07 **ILS DME Rwy 09**

SANDINO Approach (R)		SANDINO Radio (FIS)		SANDINO Tower		Ground	
119.4		126.9		118.1		121.9	
LOC IMGA	Final Apch Crs	GS INMA	ILS DA(H)	Apt Elev 194'		6000'	
109.1	092°	1600' (1406')	600' (406')	TDZE 194'			
MISSED APCH: Climb to 2500' on MGA VOR R-092, then RIGHT turn to MGA VOR and request ATC instructions.							
Alt Set: MB		TDZ Elev: 7 MB		Trans level: FL 200		Trans alt: 19500'	
						MSA MGA VOR	

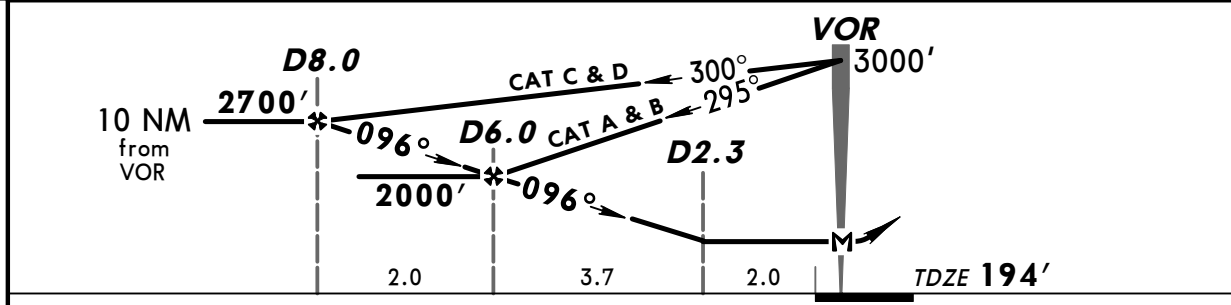
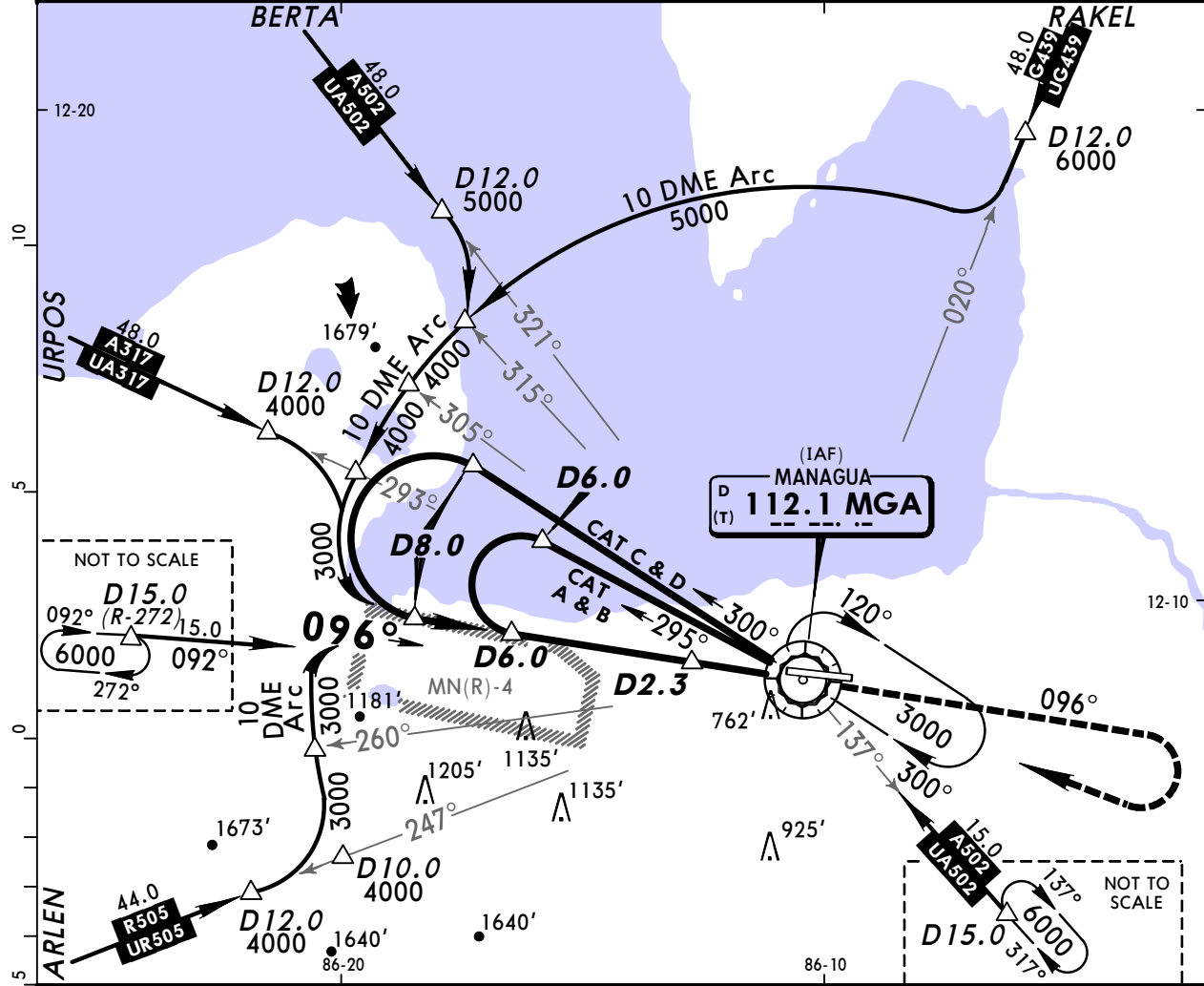


Gnd speed-Kts	70	90	100	120	140	160	REIL VASI	2500' ↑ on	MGA 112.1 R-092	RT	MGA 112.1
GS	3:10	3:15	2:32	2:17	1:54	1:38					
MAP at D0.7 IMGA or INMA to MAP	3.8	3:15	2:32	2:17	1:54	1:38					

STRAIGHT-IN LANDING RWY 09		CEILING REQUIRED		CIRCLE-TO-LAND	
ILS DA(H) 600' (406')		LOC (GS out) MDA(H) 800' (606')			
CEILING-VISIBILITY				Max Kts	MDA(H) — CEIL-VIS —
A				90	800' (606') 700' - 1600m
B				120	
C	450' - 1200m		700' - 1600m	140	1230' (1036') 1100' - 4800m
D				165	1440' (1246') 1300' - 4800m

MNMG/MGA **JEPPESEN** **MANAGUA, NICARAGUA**
AUGUSTO CESAR SANDINO INTL (13-1) 5 OCT 07 **VOR DME Rwy 09**

SANDINO Approach (R) 119.4		SANDINO Radio (FIS) 126.9		SANDINO Tower 118.1		Ground 121.9	
VOR MGA 112.1	Final Apch Crs 096°	Minimum Alt FAF Refer to Profile	MDA(H) 800' (606')	Apt Elev 194' TDZE 194'		6000'	
MISSED APCH: Climb outbound via MGA VOR R-096 to 2500', then turn RIGHT to MGA VOR and request ATC instructions.							
Alt Set: MB		TDZ Elev: 7 MB		Trans level: FL 200		Trans alt: 19500'	

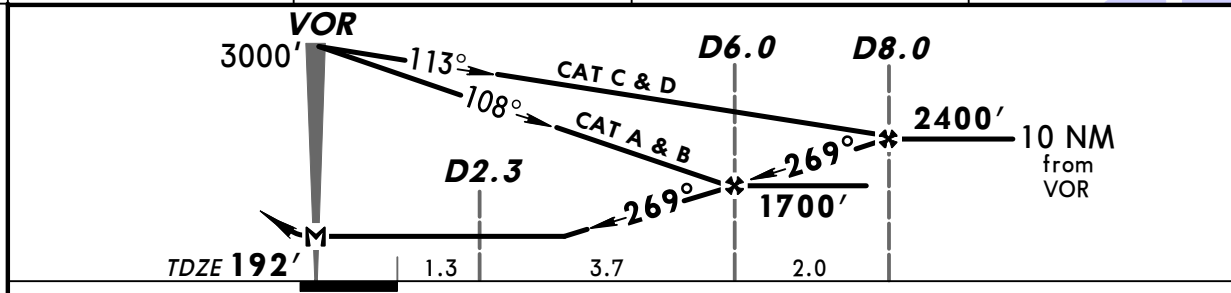


Gnd speed-Kts	70	90	100	120	140	160	REIL VASI	2500' ↑	MGA via 112.1 R-096	RT	MGA 112.1
Descent Gradient 5.2%	369	474	527	632	737	843					
MAP at VOR											

STRAIGHT-IN LANDING RWY 09		CEILING REQUIRED		CIRCLE-TO-LAND		
MDA(H) 800' (606')				Max		
CEILING-VISIBILITY				Kts	MDA(H)	CEIL-VIS
A	700' - 1600m			90	900' (706')	800' - 1600m
B	700' - 2800m			120	1230' (1036')	1100' - 4800m
C	700' - 3200m			140	1440' (1246')	1300' - 4800m

MNMG/MGA **JEPPESEN** **MANAGUA, NICARAGUA**
AUGUSTO CESAR SANDINO INTL (13-2) 5 OCT 07 **VOR DME Rwy 27**

SANDINO Approach (R)		SANDINO Radio (FIS)		SANDINO Tower		Ground	
119.4		126.9		118.1		121.9	
VOR MGA 112.1	Final Apch Crs 269°	Minimum Alt FAF Refer to Profile	MDA(H) 770' (578')	Apt Elev 194' TDZE 192'		6000'	
MISSED APCH: Climb outbound via MGA VOR R-269 to 2500', then turn RIGHT to MGA VOR and request ATC instructions.							
Alt Set: MB		TDZ Elev: 7 MB		Trans level: FL 200		Trans alt: 19500'	
						MSA MGA VOR	



Gnd speed-Kts	70	90	100	120	140	160	REIL	2500'	MGA 112.1 R-269	RT	MGA 112.1
Descent Gradient	5.2%	369	474	527	632	843					
MAP at VOR											

STRAIGHT-IN LANDING RWY 27		CEILING REQUIRED		CIRCLE-TO-LAND	
MDA(H) 770' (578')		Max Kts	MDA(H)	CEIL-VIS	
A	CEILING-VISIBILITY	90	900' (706')	800' - 1600m	
B	600' - 1600m	120	1230' (1036')	1100' - 4800m	
C	600' - 2800m	140	1440' (1246')	1300' - 4800m	
D	600' - 3200m	165			