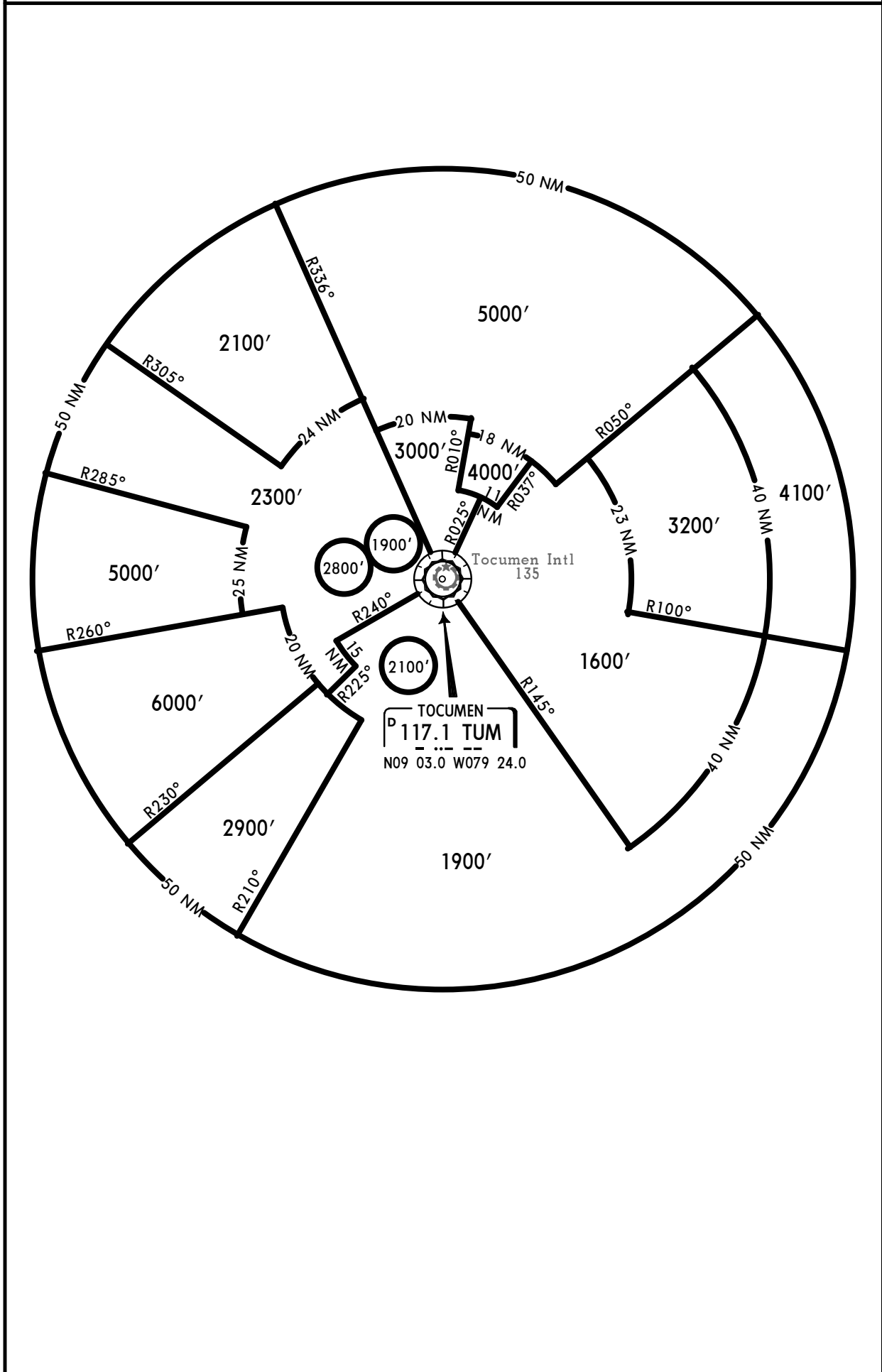


### IFR MINIMUM VECTOR ALTITUDE CLEARANCE

(Does not raise Airway MEA)



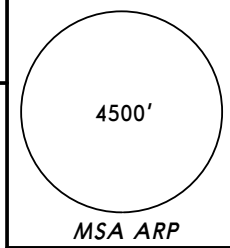
**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN**  
 28 DEC 07 **10-2**

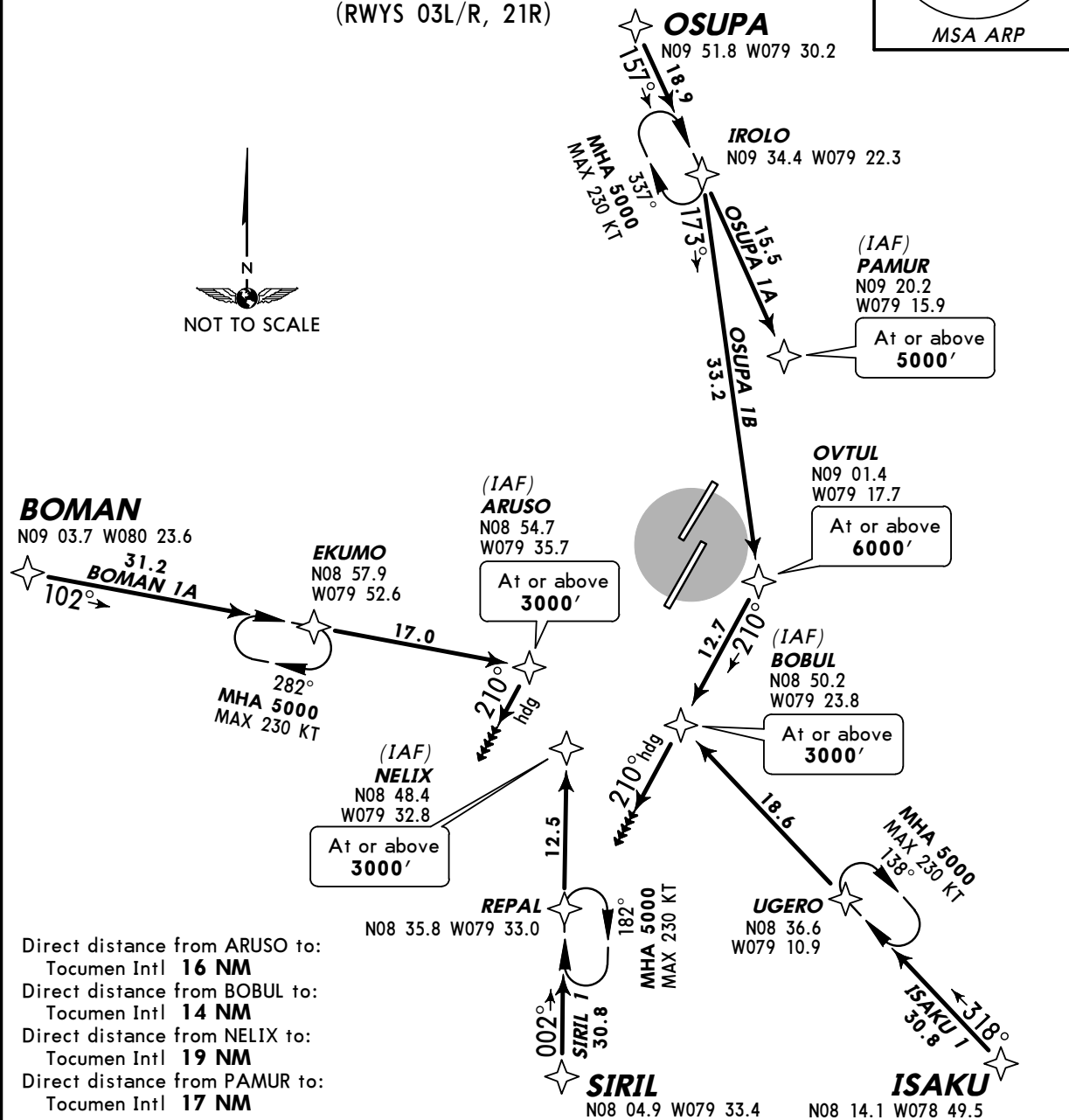
**PANAMA CITY, PANAMA**

**RNAV STAR**

ATIS <b>127.7</b>	Apt Elev <b>135'</b>	Alt Set: hPa Trans level: FL180 Trans alt: 18000' Aircraft must be multi-sensor equipped.
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**BOMAN 1A, OSUPA 1A, OSUPA 1B, ISAKU 1, SIRIL 1 RNAV (GNSS) ARRIVALS**  
 (RWYS 03L/R, 21R)



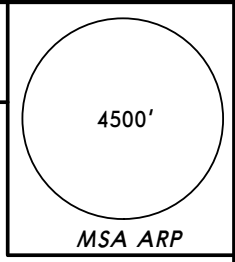
STAR	ROUTING	ALTITUDE
<b>BOMAN 1A</b>	From BOMAN track 102° to ARUSO. Execute RNAV (GNSS) RWY 03L or RNAV (GNSS) ILS TRANSITION RWY 03R procedure. If approach clearance is not received prior to ARUSO, <b>MAINTAIN</b> last altitude then turn RIGHT heading 210° and EXPECT RADAR vectors.	<b>MAINTAIN</b> at or above <b>3000'</b>
<b>OSUPA 1A</b>	From OSUPA track 157° to PAMUR. Execute RNAV (GNSS) RWY 21R procedure.	<b>MAINTAIN</b> at or above <b>5000'</b>
<b>OSUPA 1B</b>	From OSUPA track 157° to IROLO then turn RIGHT track 173° to OVTUL, then turn RIGHT track 210° to BOBUL. <b>MAINTAIN</b> at or above <b>3000'</b> . Execute RNAV (GNSS) RWY 03L or RNAV (GNSS) ILS TRANSITION RWY 03R procedure. If approach clearance is not received prior to BOBUL, <b>MAINTAIN</b> last altitude and heading 210° and EXPECT RADAR vectors.	
<b>ISAKU 1</b>	From ISAKU track 318° to BOBUL. Execute RNAV (GNSS) RWY 03L or RNAV (GNSS) ILS TRANSITION RWY 03R procedure. If approach clearance is not received prior to BOBUL, <b>MAINTAIN</b> last altitude and heading 210° and EXPECT RADAR vectors.	<b>MAINTAIN</b> at or above <b>3000'</b>
<b>SIRIL 1</b>	From SIRIL track 002° to NELIX. Execute RNAV (GNSS) RWY 03L or RNAV (GNSS) ILS TRANSITION RWY 03R procedure.	

**MPTO/PTY**  
**TOCUMEN INTL**

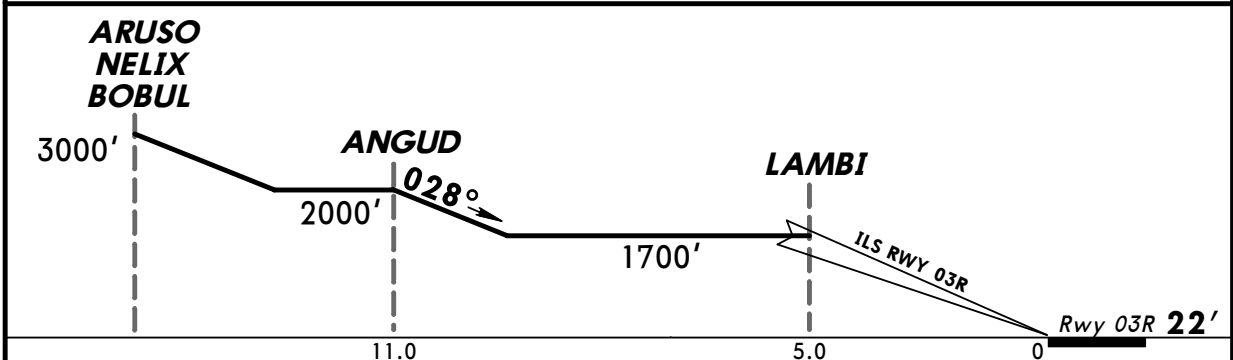
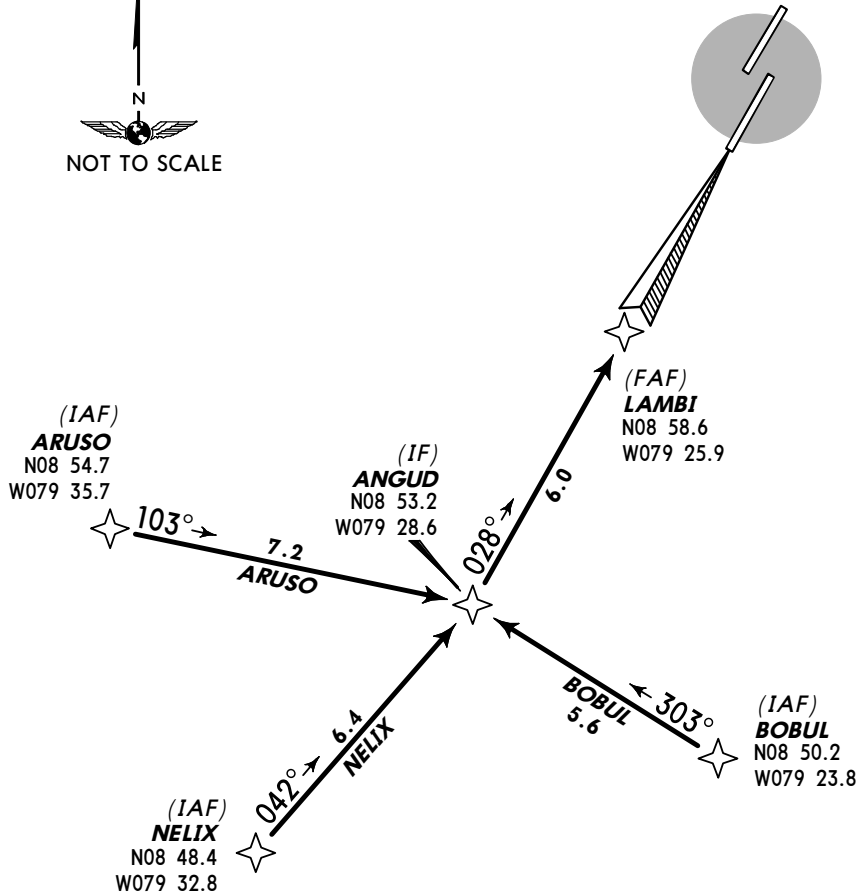
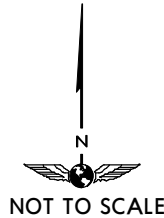
**JEPPESEN**  
 28 DEC 07 **(10-2A)**

**PANAMA CITY, PANAMA**  
**RNAV STAR**

<b>ATIS</b> <b>127.7</b>	<i>Apt Elev</i> <b>135'</b>	Alt Set: hPa Trans level: FL180 Trans alt: 18000' Aircraft must be multi-sensor equipped.
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**RNAV (GNSS) / ILS TRANSITION RWY 03R**



ROUTE DESIGNATOR	ROUTING
ARUSO	Track 103° until ANGUD. Proceed on track 028° direct to LAMBI. Continue ILS 03R approach.
BOBUL	Track 303° until ANGUD. Proceed on track 028° direct to LAMBI. Continue ILS 03R approach.
NELIX	Track 042° until ANGUD. Proceed on track 028° direct to LAMBI. Continue ILS 03R approach.

**MPTO/PTY**  
**TOCUMEN INTL**

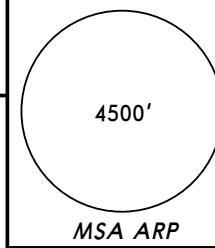
**JEPPESEN**  
21 SEP 07 **10-3**

**PANAMA CITY, PANAMA**

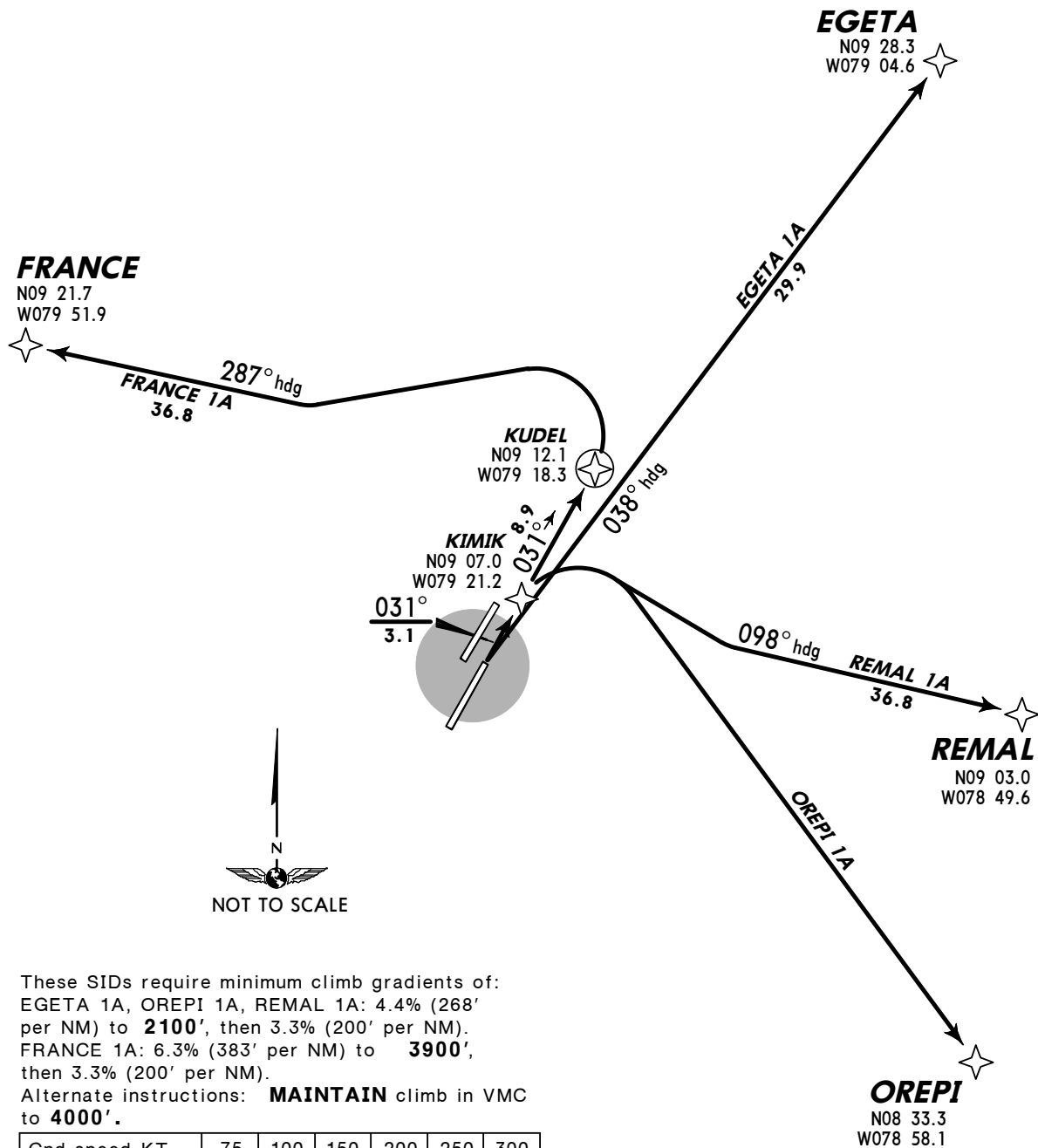
**RNAV SID**

Apt Elev  
**135'**

Trans level: FL180 Trans alt: 18000'  
Aircraft must be multi-sensor equipped.



**EGETA 1A, FRANCE 1A, OREPI 1A,  
REMAL 1A RNAV (GNSS) DEPARTURES  
(RWY 03R)**



These SIDs require minimum climb gradients of:  
EGETA 1A, OREPI 1A, REMAL 1A: 4.4% (268' per NM) to **2100'**, then 3.3% (200' per NM).  
FRANCE 1A: 6.3% (383' per NM) to **3900'**, then 3.3% (200' per NM).  
Alternate instructions: **MAINTAIN** climb in VMC to **4000'**.

Gnd speed-KT	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
4.4% V/V (fpm)	334	446	668	891	1114	1337
6.3% V/V (fpm)	479	638	957	1276	1595	1914

SID	INITIAL CLIMB	ALTITUDE
<b>EGETA 1A</b>	Heading 038° to EGETA.	Climb and <b>MAINTAIN 5000'</b> until instructed by ATC
<b>FRANCE 1A</b>	Direct to KUDEL, then turn LEFT heading 287° to FRANCE.	
<b>OREPI 1A</b>	Direct to KIMIK, then turn RIGHT to OREPI.	
<b>REMAL 1A</b>	Direct to KIMIK, then turn RIGHT heading 098° to REMAL.	

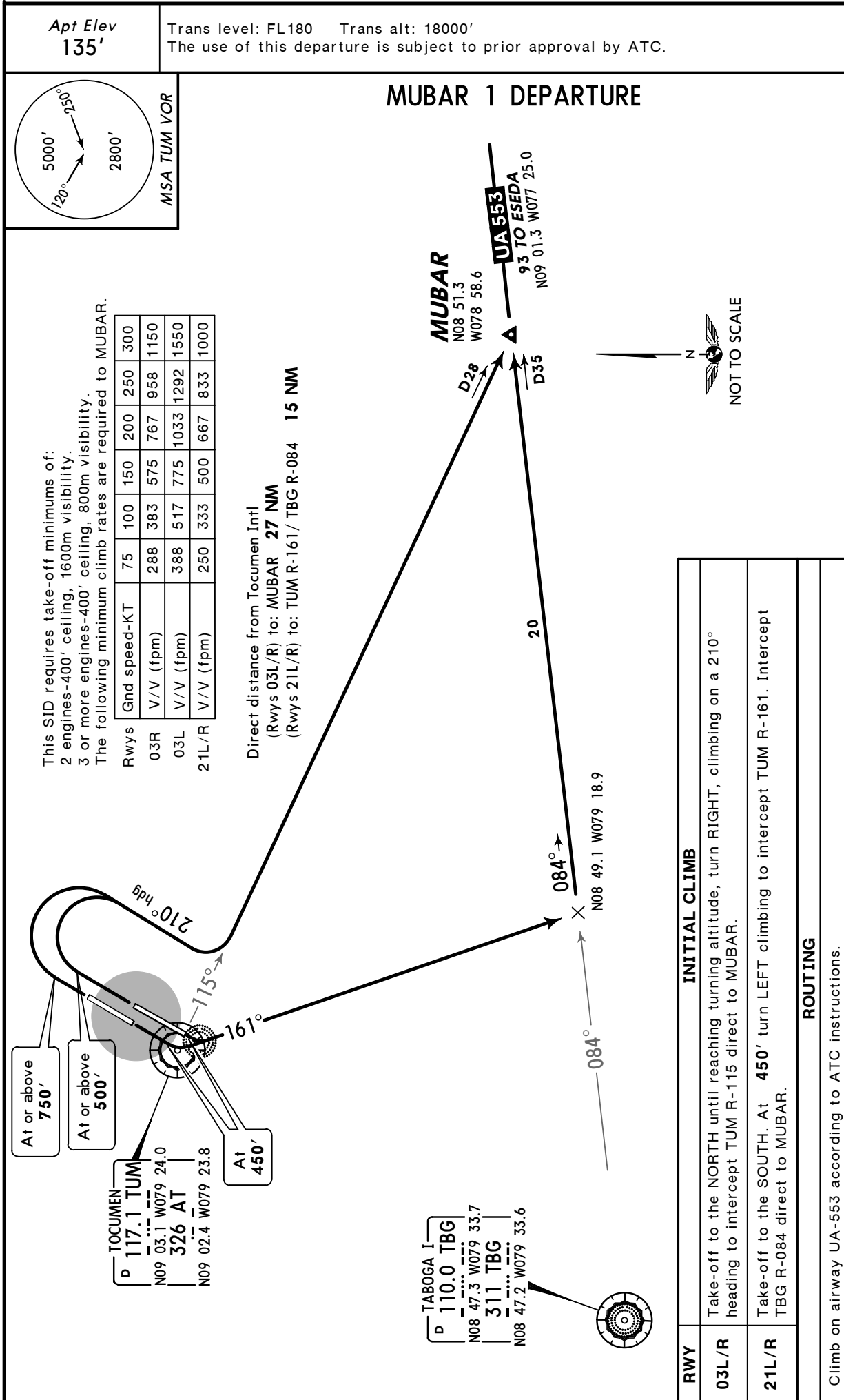


**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPesen** 21 SEP 07 **10-3B**

**PANAMA CITY, PANAMA**

**SID**

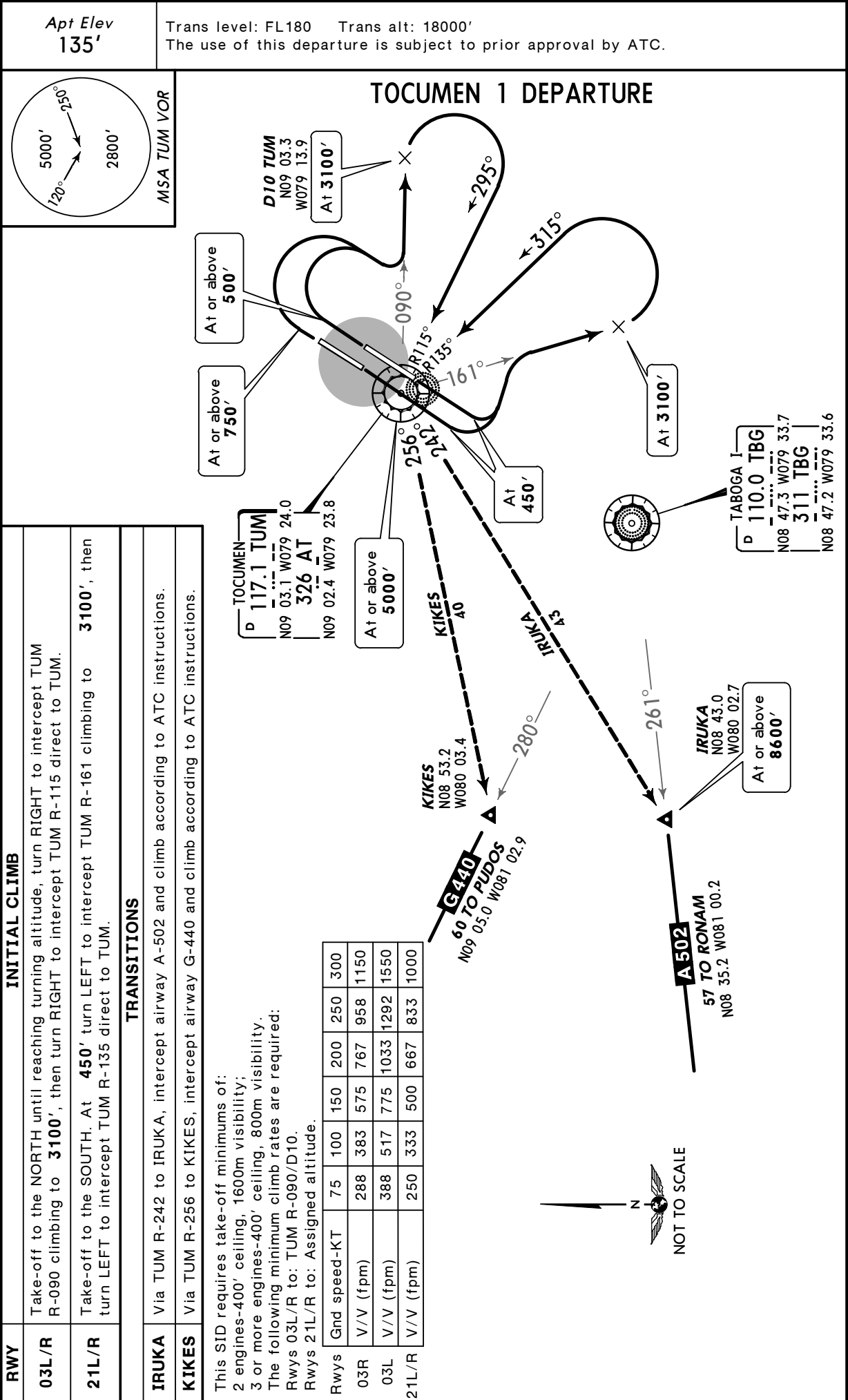


**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESSEN**  
 21 SEP 07 **10-3C**

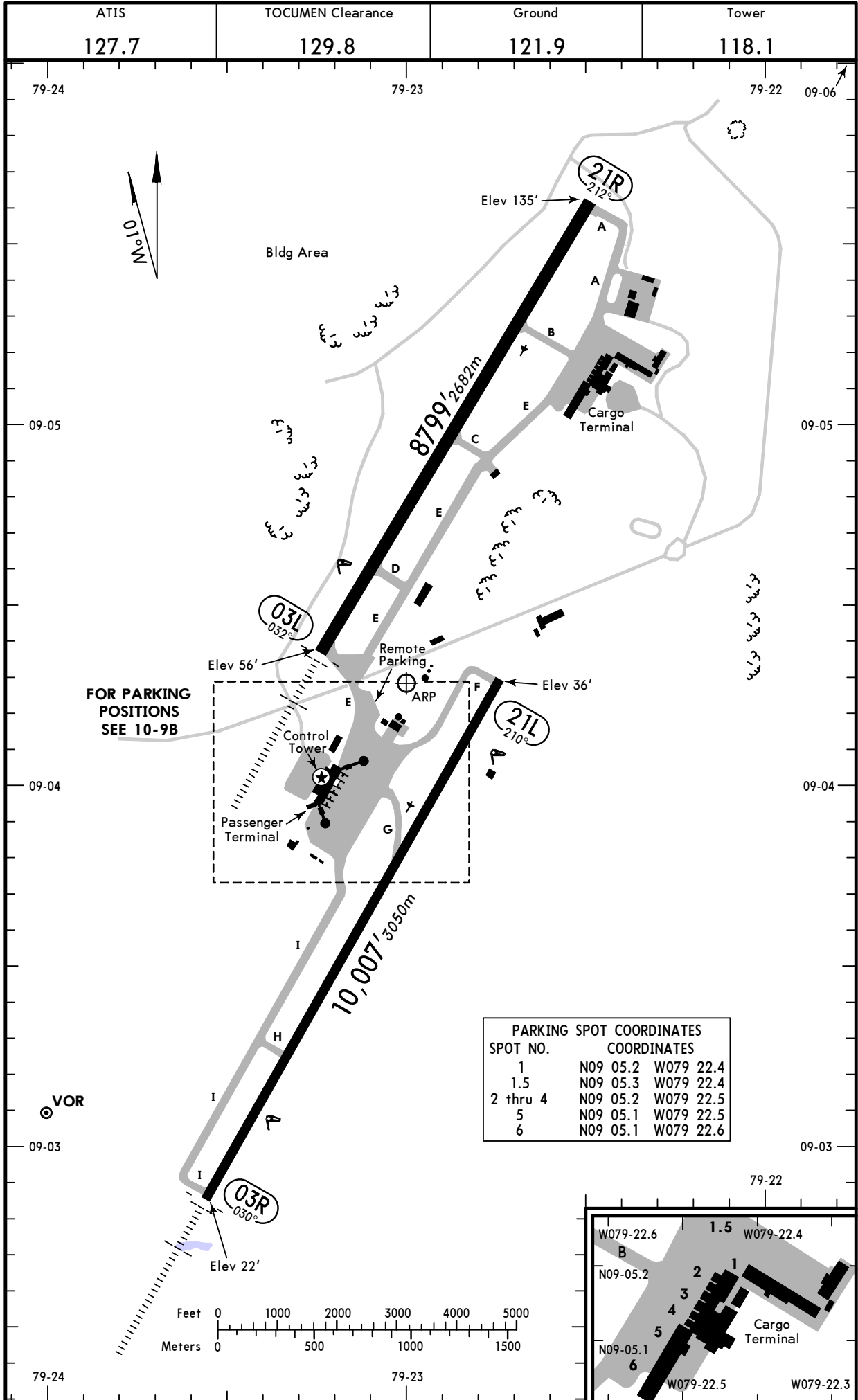
**PANAMA CITY, PANAMA**

**SID**



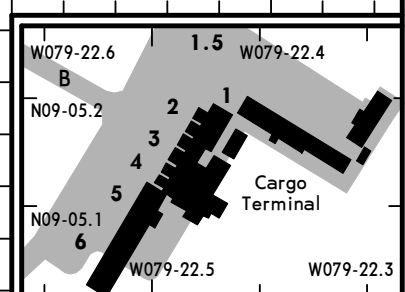
**MPTO/PTY**  
 Apt Elev **135'**  
 N09 04.3 W079 23.0

**JEPPESEN PANAMA CITY, PANAMA**  
 8 FEB 08 **(10-9)**  
**TOCUMEN INTL**



FOR PARKING POSITIONS SEE 10-9B

PARKING SPOT COORDINATES		
SPOT NO.	COORDINATES	
1	N09 05.2	W079 22.4
1.5	N09 05.3	W079 22.4
2 thru 4	N09 05.2	W079 22.5
5	N09 05.1	W079 22.5
6	N09 05.1	W079 22.6





**MPTO/PTY**

**JEPPESEN PANAMA CITY, PANAMA**

8 FEB 08

**10-9A**

**TOCUMEN INTL**

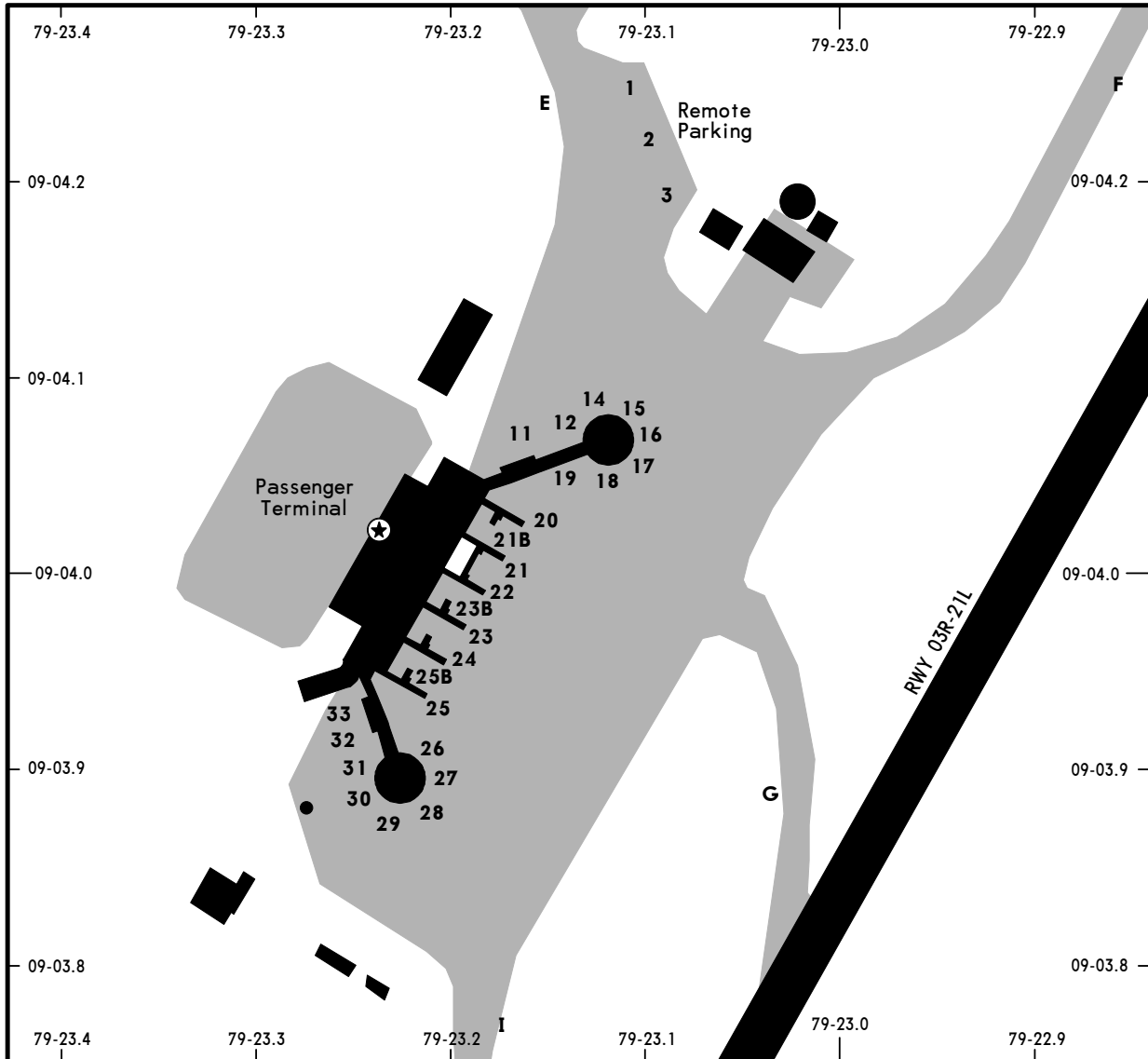
GENERAL						
Visual circling Northwest of Rwy 03-21 not authorized. Birds in vicinity of airport.						
ADDITIONAL RUNWAY INFORMATION						
RWY				USABLE LENGTHS		WIDTH
	LANDING BEYOND			TAKE-OFF		
	Threshold	Glide Slope				
03R	HIRL ALSF-I PAPI-L (angle 3.0°)		8855' 2699m		148'	
21L	HIRL PAPI (angle 2.90°)				45m	
03L	MIRL ① HIALS PAPI-L (angle 3.07°)				197'	
21R	MIRL				60m	
① ALSF-I with no flashers.						
TAKE-OFF						
	All Rwys					
2 Eng	400' - 1600m					
3 & 4 Eng	400' - 800m					

MPTO/PTY

**JEPPESEN PANAMA CITY, PANAMA**

29 DEC 06 (10-9B)

TOCUMEN INTL



**PARKING SPOT COORDINATES**

SPOT No.	COORDINATES
<b>PASSENGER TERMINAL</b>	
11	N09 04.1 W079 23.2
12 thru 19	N09 04.1 W079 23.1
20	N09 04.0 W079 23.1
21 thru 24	N09 04.0 W079 23.2
25	N09 03.9 W079 23.2
25B	N09 04.0 W079 23.2
26 thru 31	N09 03.9 W079 23.2
32, 33	N09 03.9 W079 23.3
<b>REMOTE PARKING</b>	
1 thru 3	N09 04.2 W079 23.1

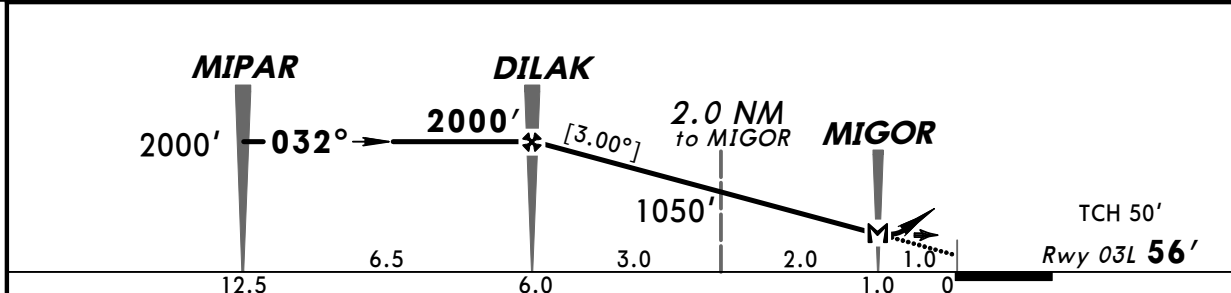
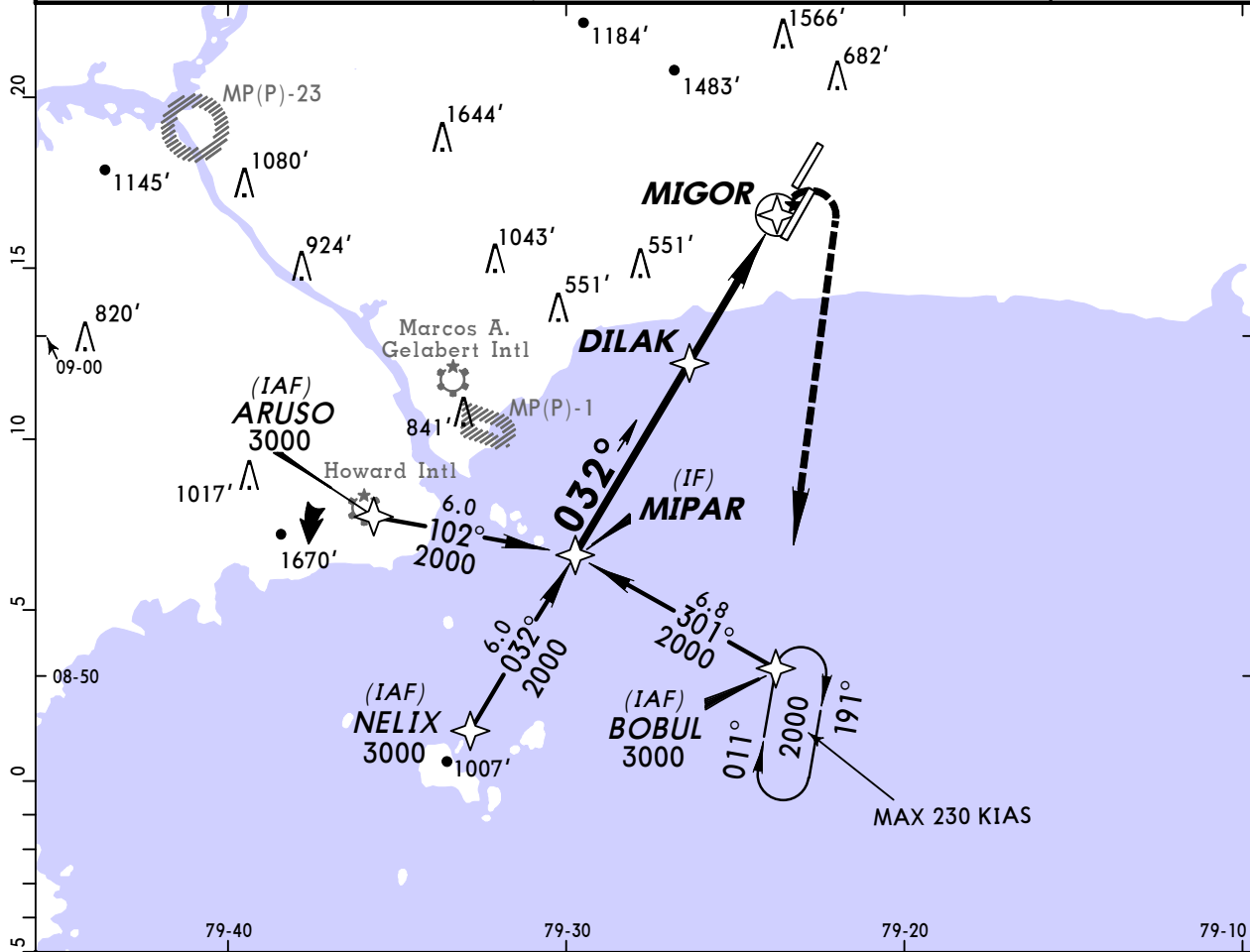


**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN**  
 30 NOV 07 (12-1)

**PANAMA CITY, PANAMA**  
**RNAV (GNSS) Rwy 03L**

ATIS 127.7		PANAMA Approach (R) 119.7 121.2		TOCUMEN Tower 118.1	Ground 121.9
RNAV	Final Apch Crs <b>032°</b>	Minimum Alt <b>DILAK</b> 2000' (1944')	LNAV MDA(H) 390' (334')	Apt Elev 135' Rwy 03L 56'	4500'
<b>MISSED APCH: Turn RIGHT direct to BOBUL and hold at 2000'</b> or as directed by ATC.					
Alt Set: hPa		Rwy Elev: 2 hPa	Trans level: FL 180	Trans alt: 18000'	MSA ARP



Gnd speed-Kts	60	80	100	120	140	160	HIALS	PAPI	RT	D	BOBUL
Descent angle	[3.00°]	319	425	531	637	743					
MAP at MIGOR											

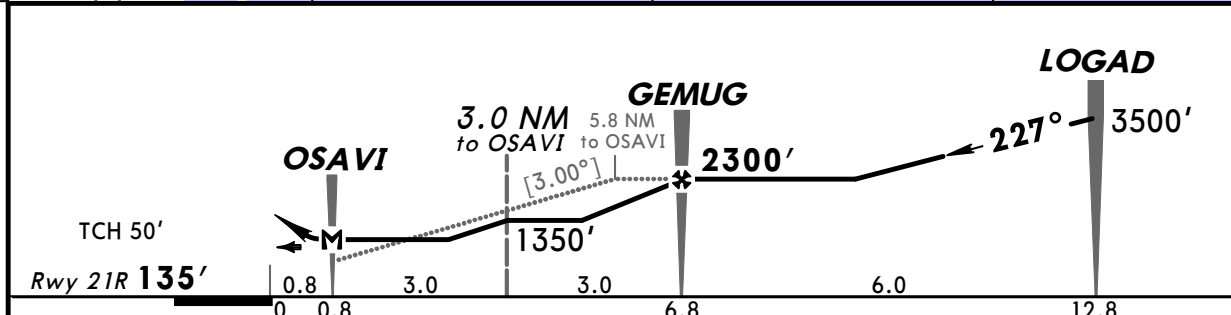
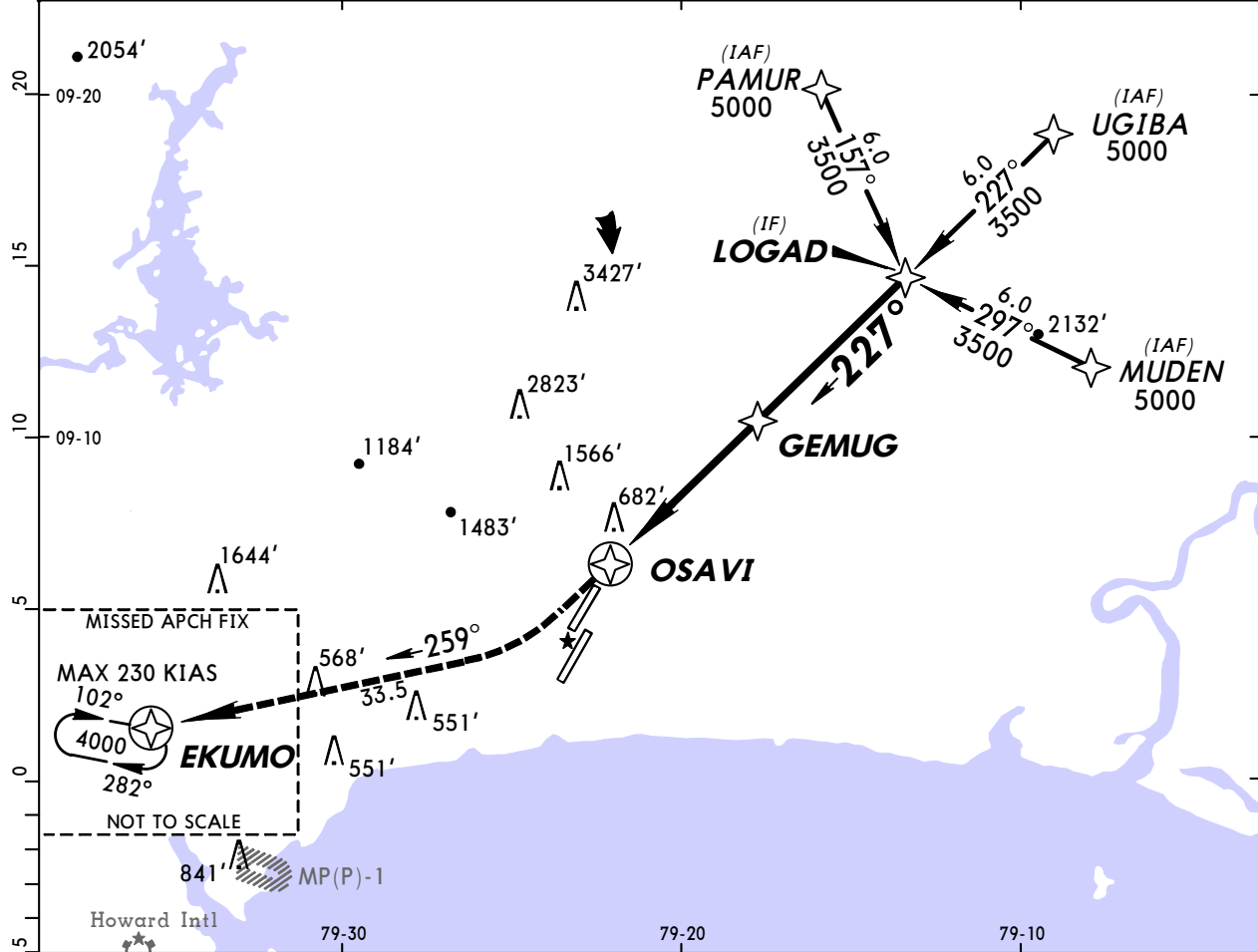
STRAIGHT-IN LANDING RWY 03L				CIRCLE-TO-LAND			
LNAV/VNAV		LNAV		LNAV		CIRCLE-TO-LAND	
DA(H) 400' (344')		MDA(H) 390' (334')		MDA(H) 390' (334')		NA	
ALS out		ALS out		ALS out		ALS out	
A							
B	1200m		800m		1600m		
C		2000m					
D	1600m		1200m		2000m		

**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN**  
 30 NOV 07 (12-2)

**PANAMA CITY, PANAMA**  
**RNAV (GNSS) Rwy 21R**

ATIS 127.7		PANAMA Approach (R) 119.7 121.2		TOCUMEN Tower 118.1	Ground 121.9
RNAV	Final Apch Crs <b>227°</b>	Minimum Alt <b>GEMUG</b> <b>2300'</b> (2165')	LNAV MDA(H) <b>1140'</b> (1005')	Apt Elev 135' Rwy 21R <b>135'</b>	4500'
<b>MISSED APCH:</b> As soon as possible, turn <b>RIGHT</b> track <b>259°</b> to <b>EKUMO</b> and hold at <b>4000'</b> or as directed by ATC.					
Alt Set: hPa		Rwy Elev: 5 hPa	Trans level: FL 180	Trans alt: 18000'	MSA ARP



Gnd speed-Kts	60	80	100	120	140	160	259° RT EKUMO
Descent angle	[3.00°]	319	425	531	637	743	
MAP at OSAVI							

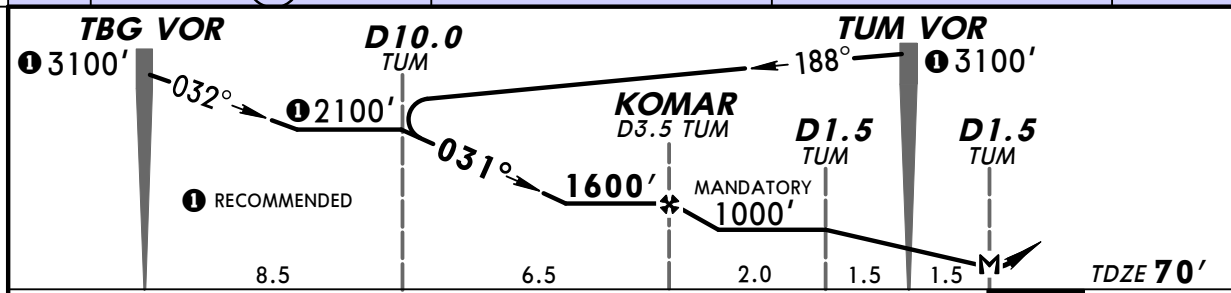
STRAIGHT-IN LANDING RWY21R		CIRCLE-TO-LAND	
LNAV			
MDA(H) <b>1140'</b> (1005')			
A	2000m	A	NA
B	2400m	B	
C		C	
D	4800m	D	

CHANGES: Missed approach

**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN PANAMA CITY, PANAMA**  
 23 FEB 07 (13-1)  
**VOR DMÉ Rwy 03L**

ATIS 127.7		PANAMA Approach (R) 119.7 121.2		TOCUMEN Tower 118.1	Ground 121.9
VOR TUM <b>117.1</b>	Final Apch Crs <b>031°</b>	Minimum Alt <b>KOMAR</b> 1600' (1530')	MDA(H) 420' (350')	Apt Elev 135' TDZE 70'	
<b>MISSED APCH: Turn RIGHT climbing to 3100' outbound on TUM VOR R-090, turn RIGHT inbound on TUM VOR R-112, return to TUM VOR and hold.</b>					
Alt Set: hPa		TDZ Elev: 3 hPa	Trans level: FL 180	Trans alt: 18000'	MSA TUM VOR
1. CAUTION: High terrain to the North and West of airport.					



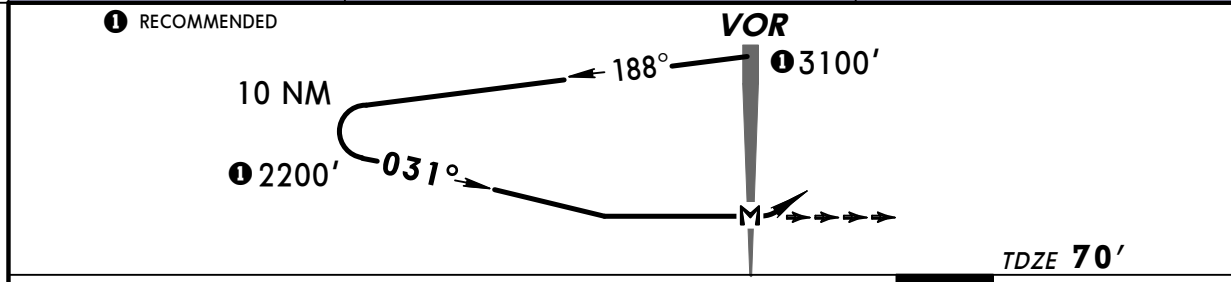
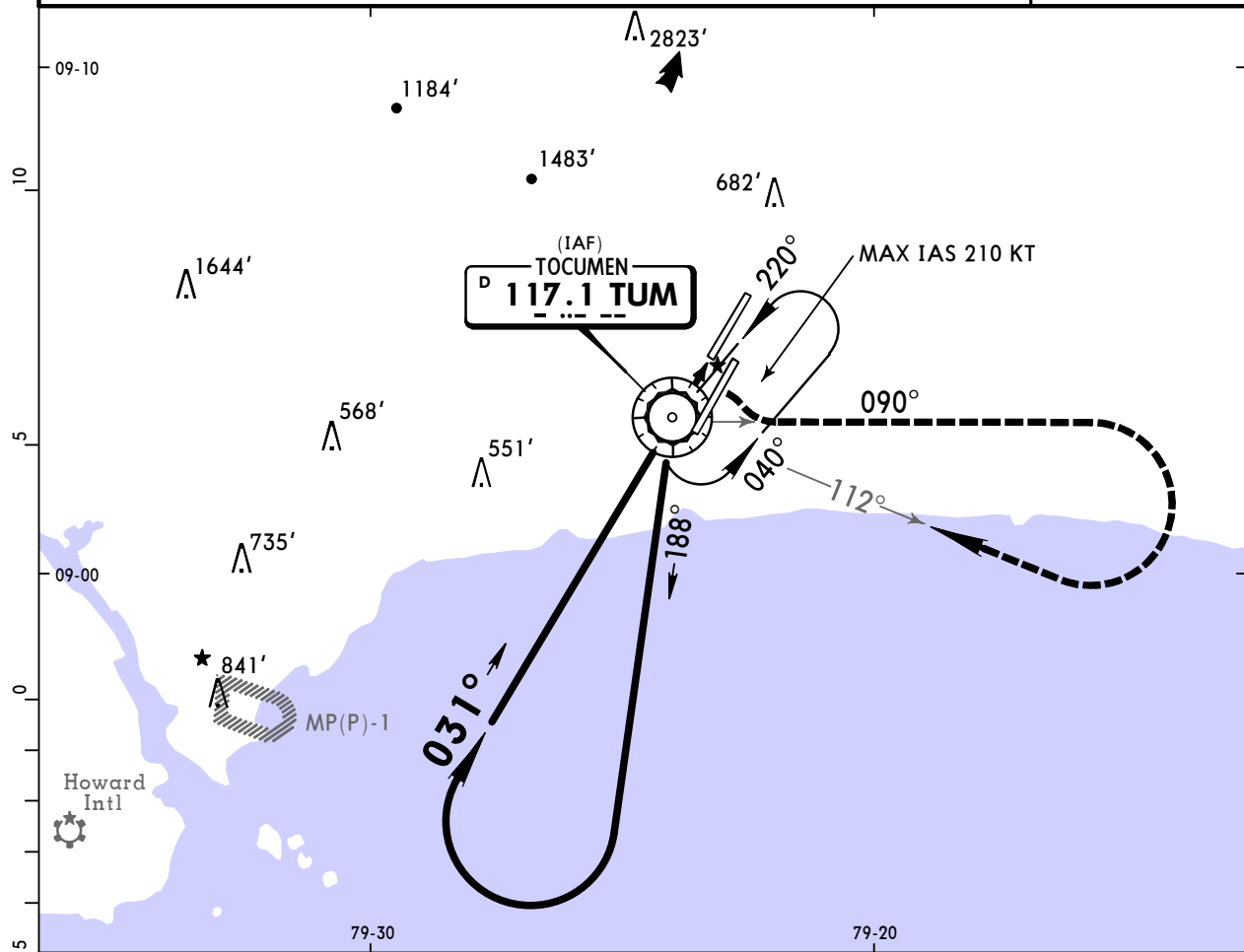
Gnd speed-Kts	60	80	100	120	140	160	HIALS PAPI 
Rate of descent on final (feet/min)	350	450	550	650	750	850	
MAP at D1.5 TUM or KOMAR to MAP	5.0	5:00	3:45	3:00	2:30	2:09	

STRAIGHT-IN LANDING RWY03L		<b>CEILING REQUIRED</b>	CIRCLE-TO-LAND	
MDA(H) <b>420' (350')</b>			Not Authorized Northwest of Rwy 03L-21R	
	CEILING-VISIBILITY	ALS out	Max Kts	MDA(H) CEIL-VIS
A			90	540' (405') 500' - 1600m
B	300' - 1200m	300' - 1600m	120	600' (465') 500' - 1600m
C			140	600' (465') 500' - 2400m
D	300' - 1600m	300' - 2000m	165	760' (625') 700' - 3200m

**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN PANAMA CITY, PANAMA**  
 23 FEB 07 **(13-2)**  
**VOR Rwy 03L**

ATIS <b>127.7</b>		PANAMA Approach (R) <b>119.7 121.2</b>		TOCUMEN Tower <b>118.1</b>	Ground <b>121.9</b>
VOR TUM <b>117.1</b>	Final Apch Crs <b>031°</b>	No FAF		MDA(H) <b>680' (610')</b>	Apt Elev <b>135'</b> TDZE <b>70'</b>
<b>MISSED APCH: Turn RIGHT climbing to 3100' outbound on TUM VOR R-090, turn RIGHT inbound on TUM VOR R-112, return to TUM VOR and hold.</b>					
Alt Set: hPa	TDZ Elev: 3 hPa	Trans level: FL 180	Trans alt: 18000'	MSA TUM VOR	



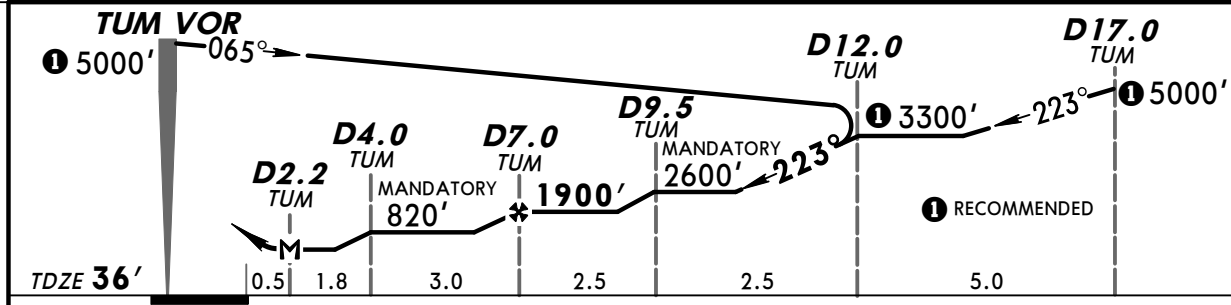
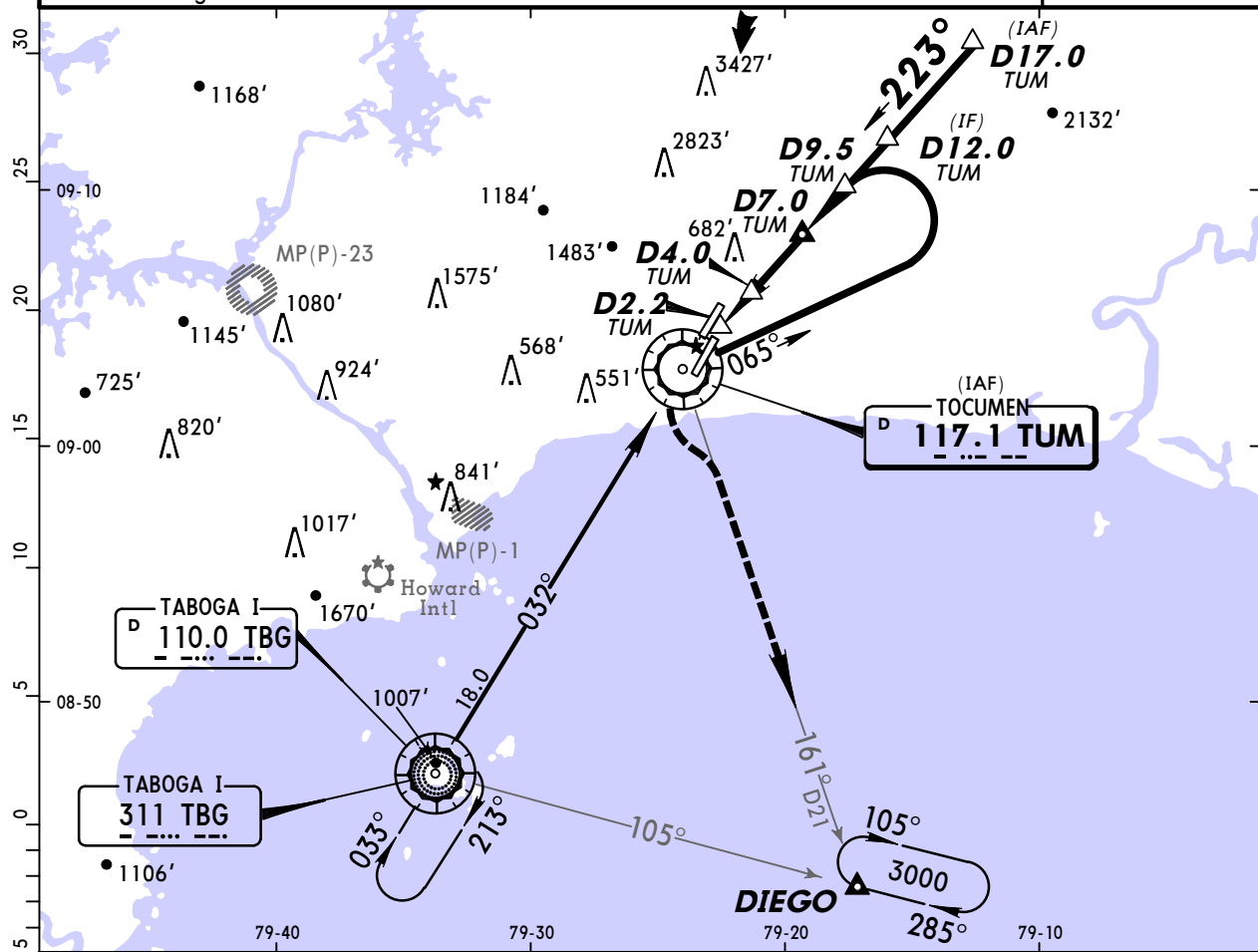
<i>Gnd speed-Kts</i>	60	80	100	120	140	160	HIALS PAPI 	<b>3100'</b> TUM on <b>117.1</b> RT <b>R-090</b>
<i>Rate of descent on final (feet/min)</i>	600					750		
<i>MAP at VOR</i>								

STRAIGHT-IN LANDING RWY03L		<b>CEILING REQUIRED</b>	CIRCLE-TO-LAND	
MDA(H) <b>680' (610')</b>		Not Authorized Northwest of Rwy 03L-21R		
CEILING-VISIBILITY		Max Kts	MDA(H)	CEIL-VIS
A		90		
B	600'-2800m	120	<b>680' (545')</b>	600'-2800m
C		140		
D	600'-3200m	165	<b>760' (625')</b>	700'-3200m

**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN PANAMA CITY, PANAMA**  
 8 FEB 08 (13-3)  
**VOR DMÉ Rwy 21L**

ATIS 127.7		PANAMA Approach (R) 119.7 121.2		TOCUMEN Tower 118.1	Ground 121.9
VOR TUM <b>117.1</b>	Final Apch Crs <b>223°</b>	Minimum Alt <b>D7.0 TUM</b> 1900' (1864')	MDA(H) <b>480' (444')</b>	Apt Elev 135' TDZE <b>36'</b>	
<b>MISSED APCH: Direct to TUM VOR climbing to 800', then outbound via TUM VOR R-161 to DIEGO climbing to 3000' and hold.</b>					
Alt Set: hPa		TDZ Elev: 1 hPa	Trans level: FL 180	Trans alt: 18000'	
1. Max holding IAS - 210 kts.					



Gnd speed-Kts	60	80	100	120	140	160	PAPI	D → to TUM 117.1	800' ↑
Rate of descent on final (feet/min)	400	500	600	750	850	1000			
MAP at D2.2 TUM or FAF to MAP	4.8	4:48	3:36	2:53	2:24	2:03			

STRAIGHT-IN LANDING RWY 21L		CEILING REQUIRED	CIRCLE-TO-LAND	
MDA(H) <b>480' (444')</b>			Not Authorized Northwest of Rwy 03L-21R	
	CEILING-VISIBILITY	Max Kts	MDA(H)	CEIL-VIS
A	400' - 1600m	90	540' (405')	500' - 1600m
B	400' - 2000m	120	600' (465')	500' - 1600m
C	400' - 2400m	140	600' (465')	500' - 2400m
D	400' - 2400m	165	760' (625')	700' - 3200m

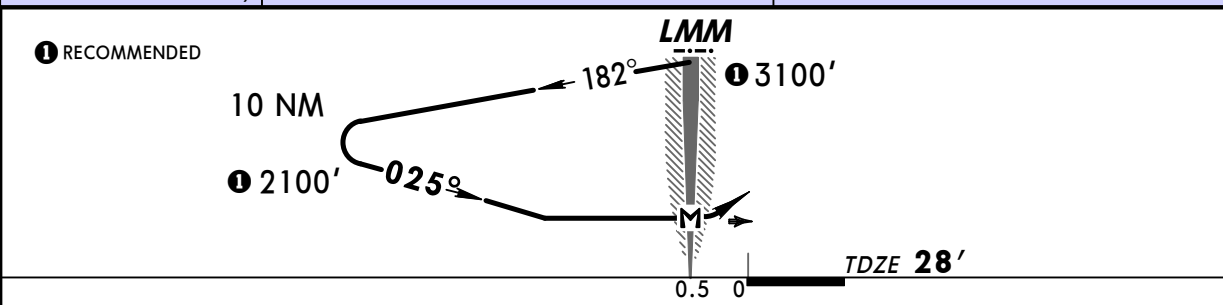
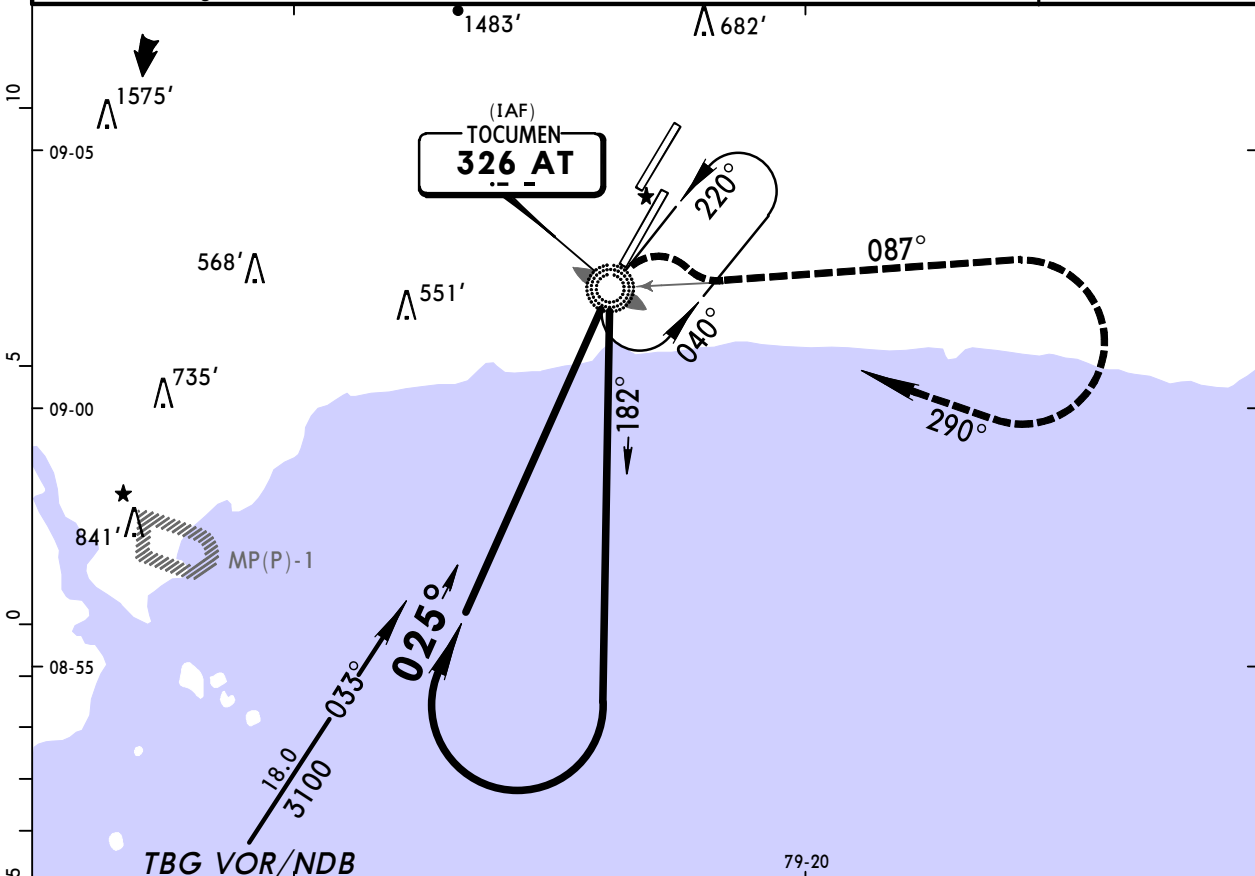
CHANGES: Lighting.



**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN PANAMA CITY, PANAMA**  
 8 FEB 08 (16-1)  
**NDB Rwy 03R**

ATIS 127.7		PANAMA Approach (R) 119.7 121.2		TOCUMEN Tower 118.1	Ground 121.9
LMM AT <b>326</b>	Final Apch Crs <b>025°</b>	No FAF		MDA(H) <b>540' (512')</b>	Apt Elev 135' TDZE <b>28'</b>
<b>MISSED APCH: Climbing RIGHT turn to 3100' on 087° bearing from AT LMM, turn RIGHT and return to AT LMM on a 290° bearing and hold.</b>					
Alt Set: hPa    TDZ Elev: 1 hPa    Trans level: FL 180    Trans alt: 18000' 1. CAUTION: High terrain to the North and West of airport. 2. Max holding IAS - 210 kts.					




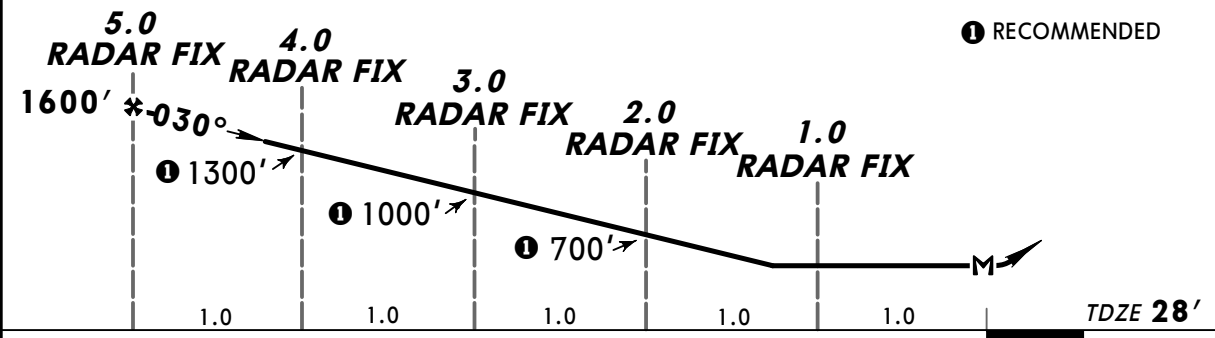
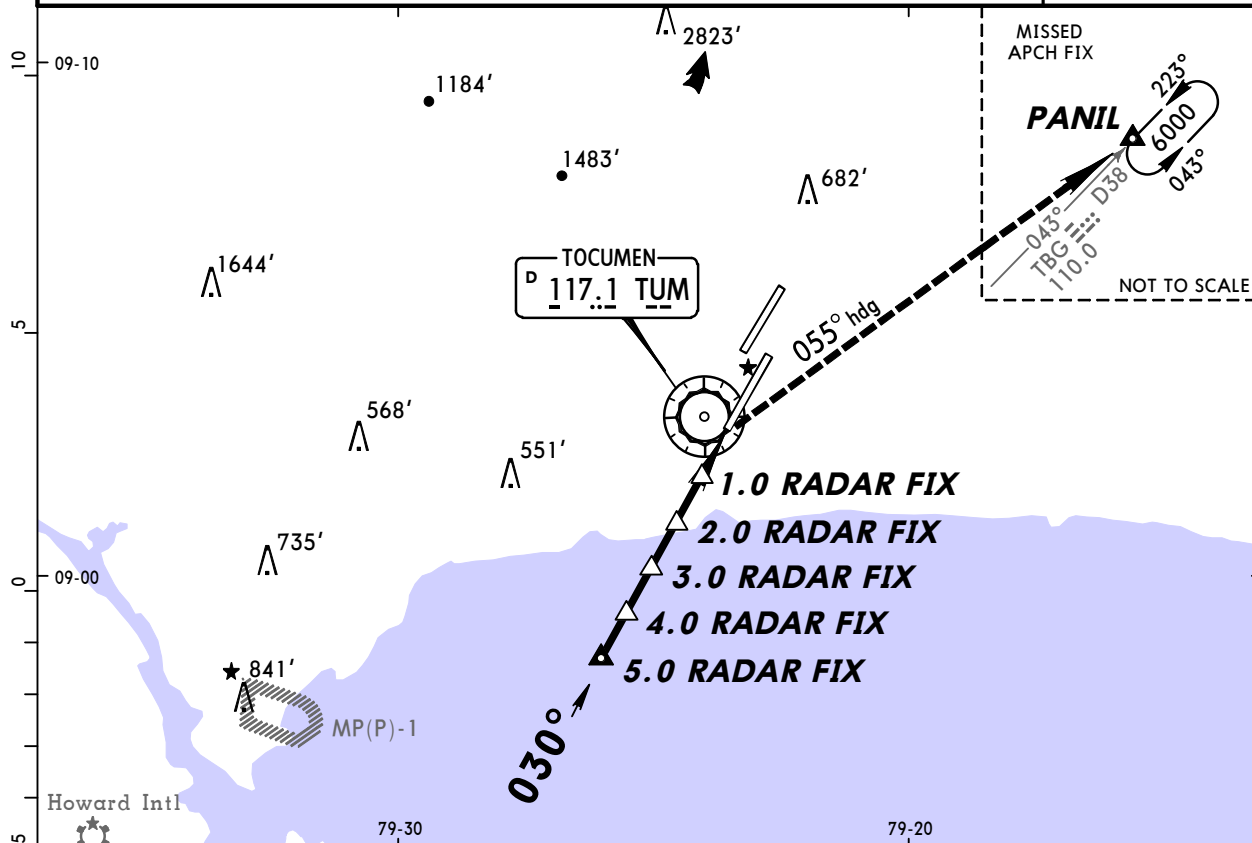
Gnd speed-Kts	60	80	100	120	140	160	ALSF-I PAPI 3100' AT on 326 RT 087°
Rate of descent on final (feet/min)	600					750	
MAP at LMM							

STRAIGHT-IN LANDING RWY03R		CEILING REQUIRED	CIRCLE-TO-LAND		
MDA(H) <b>540' (512')</b>			Not Authorized Northwest of Rwy 03L-21R		
CEILING-VISIBILITY		ALS out	Max Kts	MDA(H)	CEIL-VIS
A	500' - 1200m	500' - 1600m	90	540' (405')	500' - 1600m
B	500' - 1600m	500' - 2400m	120	600' (465')	500' - 1600m
C	500' - 1600m	500' - 2400m	140	600' (465')	500' - 2400m
D	500' - 2400m	500' - 2800m	165	760' (625')	700' - 3200m

**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN PANAMA CITY, PANAMA**  
 23 FEB 07 (18-1) **RADAR ASR Rwy 03R**

ATIS 127.7		PANAMA Approach (R) 119.7 121.2		TOCUMEN Tower 118.1	Ground 121.9
RADAR	Final Apch Crs <b>030°</b>	Minimum Alt <b>5.0 RADAR FIX</b> 1600' (1572')	MDA(H) <b>460' (432')</b>	Apt Elev 135' TDZE <b>28'</b>	
<b>MISSED APCH: RIGHT turn heading 055° climbing to 6000' direct PANIL INT and hold.</b>					
Alt Set: hPa TDZ Elev: 1 hPa Trans level: FL 180 Trans alt: 18000' 1. COMMUNICATIONS FAILURE: If no communications are received during 1 minute on the pattern or 15 seconds on final approach, call TWR 118.1 and proceed VMC. If not possible make a regular approach (non-radar) as assigned by ATC. 2. Holding PANIL INT: Maximum IAS 210 kts.					




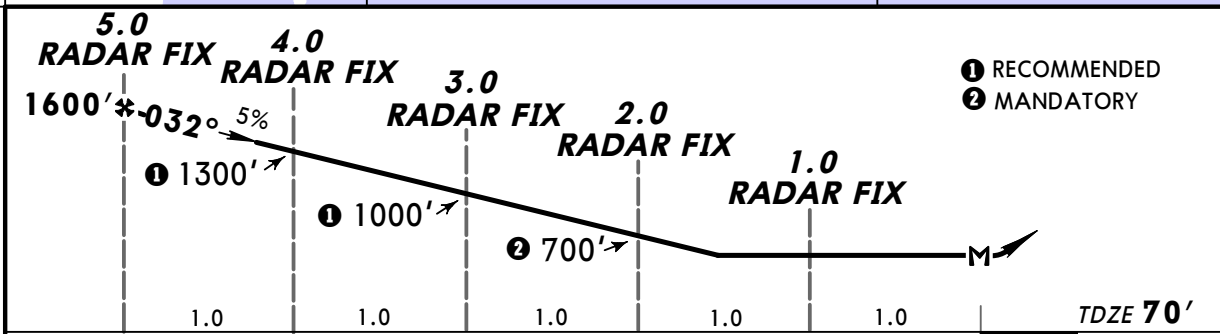
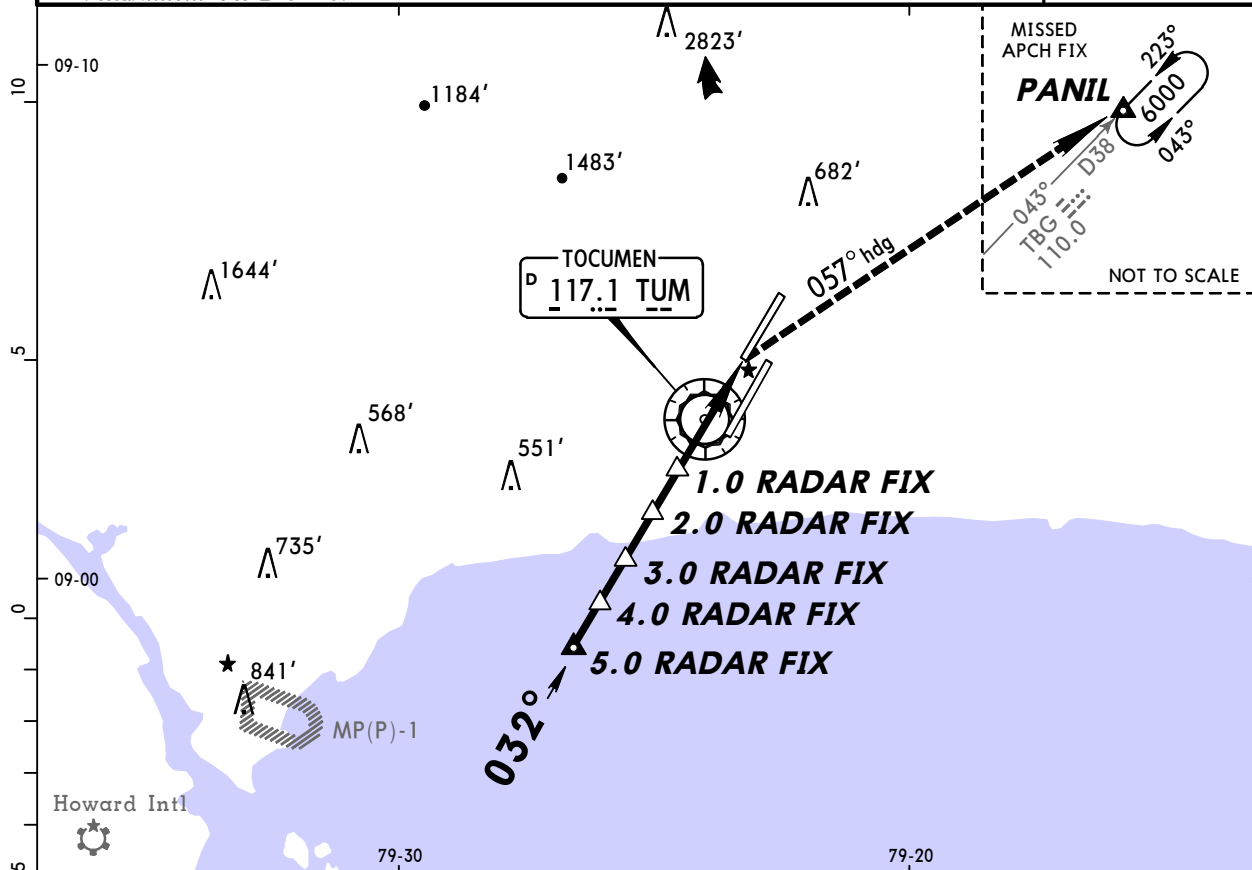
Gnd speed-Kts	60	80	100	120	140	160	ALSF-I PAPI RT 055° hdg 6000'
Rate of descent on final (feet/min)	320	420	540	640	740	840	
FAF to MAP	5.0	5:00	3:45	3:00	2:30	2:09	

STRAIGHT-IN LANDING		CEILING REQUIRED		CIRCLE-TO-LAND	
<b>ASR 03R</b> MDA(H) <b>460' (432')</b>				Not Authorized Northwest of Rwy 03L-21R	
	CEILING-VISIBILITY	ALS out	Max Kts	MDA(H)	CEIL-VIS
A	400' - 800m	400' - 1600m	90	540' (405')	500' - 1600m
B	400' - 800m	400' - 1600m	120	600' (465')	500' - 1600m
C	400' - 1200m	400' - 2000m	140	600' (465')	500' - 2400m
D	400' - 1600m	400' - 2400m	165	700' (565')	600' - 3200m

**MPTO/PTY**  
**TOCUMEN INTL**

**JEPPESEN PANAMA CITY, PANAMA**  
 23 FEB 07 (18-2) **RADAR ASR Rwy 03L**

ATIS <b>127.7</b>		PANAMA Approach (R) <b>119.7 121.2</b>		TOCUMEN Tower <b>118.1</b>	Ground <b>121.9</b>
RADAR	Final Apch Crs <b>032°</b>	Minimum Alt <b>5.0 RADAR FIX 1600' (1530')</b>	MDA(H) <b>560' (490')</b>	Apt Elev <b>135'</b>	TDZE <b>70'</b>
<b>MISSED APCH: RIGHT turn heading 057° climbing to 6000' direct PANIL INT and hold.</b>					
Alt Set: hPa TDZ Elev: 3 hPa Trans level: FL 180 Trans alt: 18000' 1. COMMUNICATIONS FAILURE: If no communications are received during 1 minute on the pattern or 15 seconds on final approach, call TWR 118.1 and proceed VMC. If not possible make a regular approach (non-radar) as assigned by ATC. 2. Holding PANIL INT: Maximum IAS 210 kts.					



Gnd speed-Kts	60	80	100	120	140	160	HIALS PAPI	RT hdg <b>057°</b>	6000' ↑
Rate of descent on final (feet/min)	320	420	520	620	720	820			
FAF to MAP	5.0	5:00	3:45	3:00	2:30	2:09	1:53		

STRAIGHT-IN LANDING			CEILING REQUIRED		CIRCLE-TO-LAND	
ASR 03L MDA(H) <b>560' (490')</b>			Not Authorized Northwest of Rwy 03L-21R			
	CEILING-VISIBILITY	ALS out	Max Kts	MDA(H)	CEIL-VIS	
A			90	<b>560' (425')</b>	500' - 1600m	
B	500' - 800m	500' - 1600m	120	<b>600' (465')</b>	500' - 1600m	
C	500' - 1200m	500' - 2000m	140	<b>600' (465')</b>	500' - 2400m	
D	500' - 1600m	500' - 2400m	165	<b>700' (565')</b>	600' - 3200m	