

## Airport information:

Country: Madagascar

City: ANTANANARIVO

Coordinates: S 18 47.8, E047 28.6

Elevation: 4196

Customs: Customs

Fuel: 100LL, Jet A1

RFF: CAT 8

hours: H24.

## Runways:

Runway 11

Takeoff length: 3100, Landing length: 3100

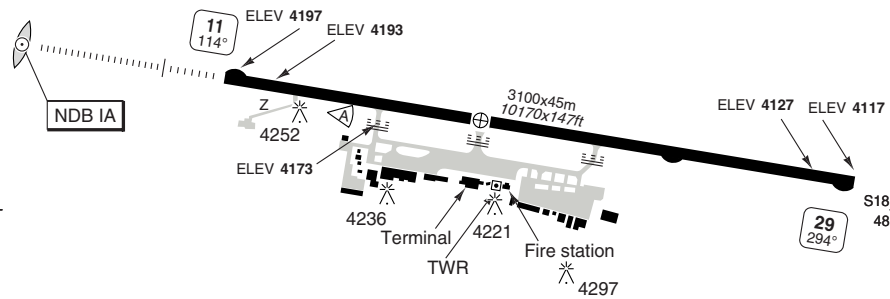
Runway 29

Takeoff length: 3100, Landing length: 3100

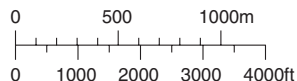
# AERODROME

10 - 1

Ivato TWR <b>120.1</b>	Antananarivo INFO <b>128.9</b>	CTL <b>126.7</b> <b>128.9</b>	
AD Elev <b>4198</b>	ARP: S18 47.8 E047 28.6	RFF: CAT 8	AD HR: H24



THR Coordinates		
RWY 11	S18 47.7	E047 27.9
RWY 29	S18 47.9	E047 29.6



S18 49

RWY	Slope	TORA m/ft	LDA m/ft	ALS	REDL	Additional
11	- 0.8	3100 / 10170	3100 / 10170	H-D	H	-
29	+0.8	3100 / 10170	3100 / 10170	-	H	P 3°

EU OPS TAKE OFF MINIMA		
RWY	Facilities	RVR
		A B C D
11/29	RCL (day only) or RCL + REDL	400m
	NIL (day only)	500m

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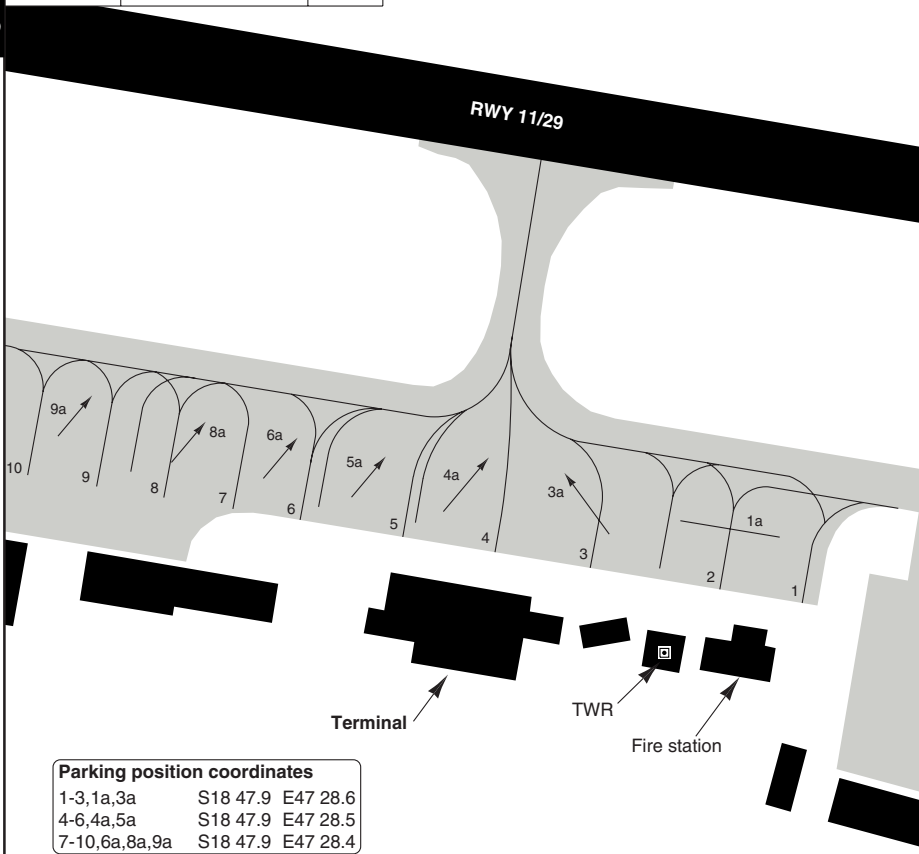
Change: New spec.

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# AERODROME

10 - 2

Ivato TWR 120.1	Antananarivo INFO 128.9	CTL 126.7 128.9
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Parking position coordinates		
1-3, 1a, 3a	S18 47.9	E47 28.6
4-6, 4a, 5a	S18 47.9	E47 28.5
7-10, 6a, 8a, 9a	S18 47.9	E47 28.4

## GENERAL INFORMATION

### 1. TRAFFIC NOTES

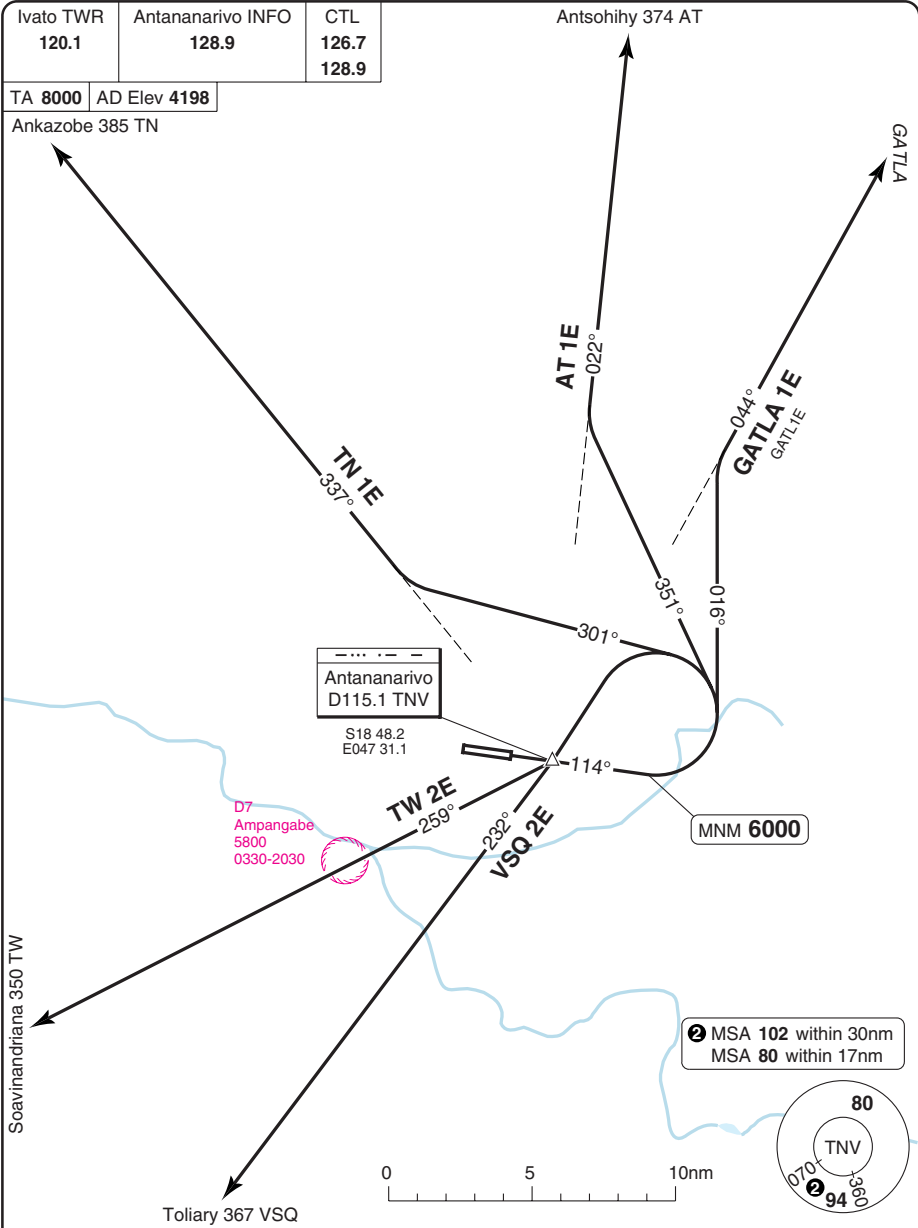
- 1.1 Overflying Antananarivo city prohibited.  
ACFT exceeding 40T AUV to make U-turns on turning pads only.
- 1.2 Use of TWY Z prohibited while ILS in use.

### 2. TWY RESTRICTION

- 2.1 West width 15m.
- 2.2 Wide body ACFT have to use Central TWY.

SID RWY 11 North, West

Ivato ANTANANARIVO



30 - 1

SID	Routeing
AT 1E	Climb on 114° to MNM 6000 - turn left - 351° - intcp R022 TNV - AT.
GATLA 1E	Climb on 114° to MNM 6000 - turn left - 016° - intcp R044 TNV - GATLA.
TN 1E	Climb on 114° to MNM 6000 - turn left - 301° - intcp R337 TNV - TN.
TW 2E	Climb on 114° to MNM 6000 - turn left - intcp R259 TNV - TW.
VSQ 2E	Climb on 114° to MNM 6000 - turn left - intcp R232 TNV - VSQ.

Change: New spec.

**SID RWY 11** East, South

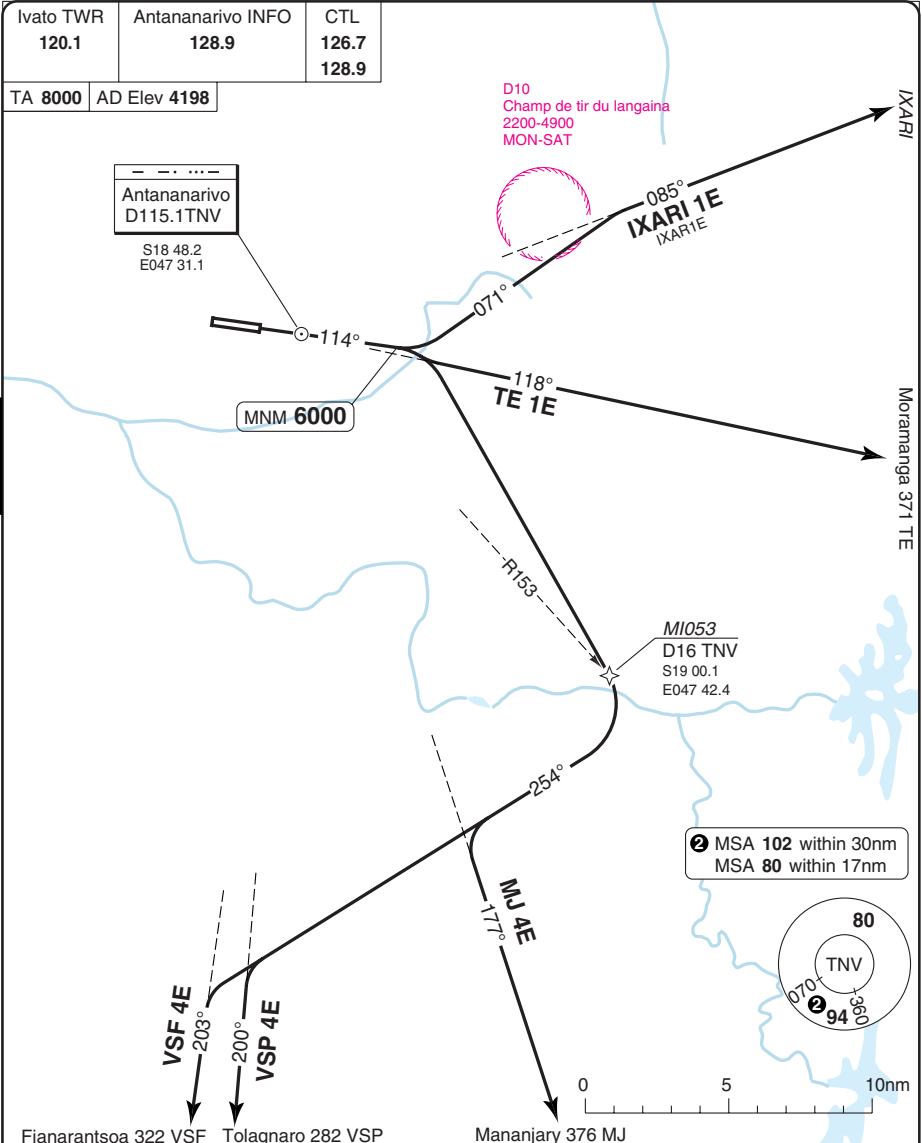
Ivato TWR <b>120.1</b>	Antananarivo INFO <b>128.9</b>	CTL <b>126.7</b> <b>128.9</b>
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TA **8000** AD Elev **4198**

Antananarivo  
D115.1TNV  
S18 48.2  
E047 31.1

D10  
Champ de tir du langaina  
2200-4900  
MON-SAT

30 - 2



Fianarantsoa 322 VSF    Tolagnaro 282 VSP    Mananjary 376 MJ

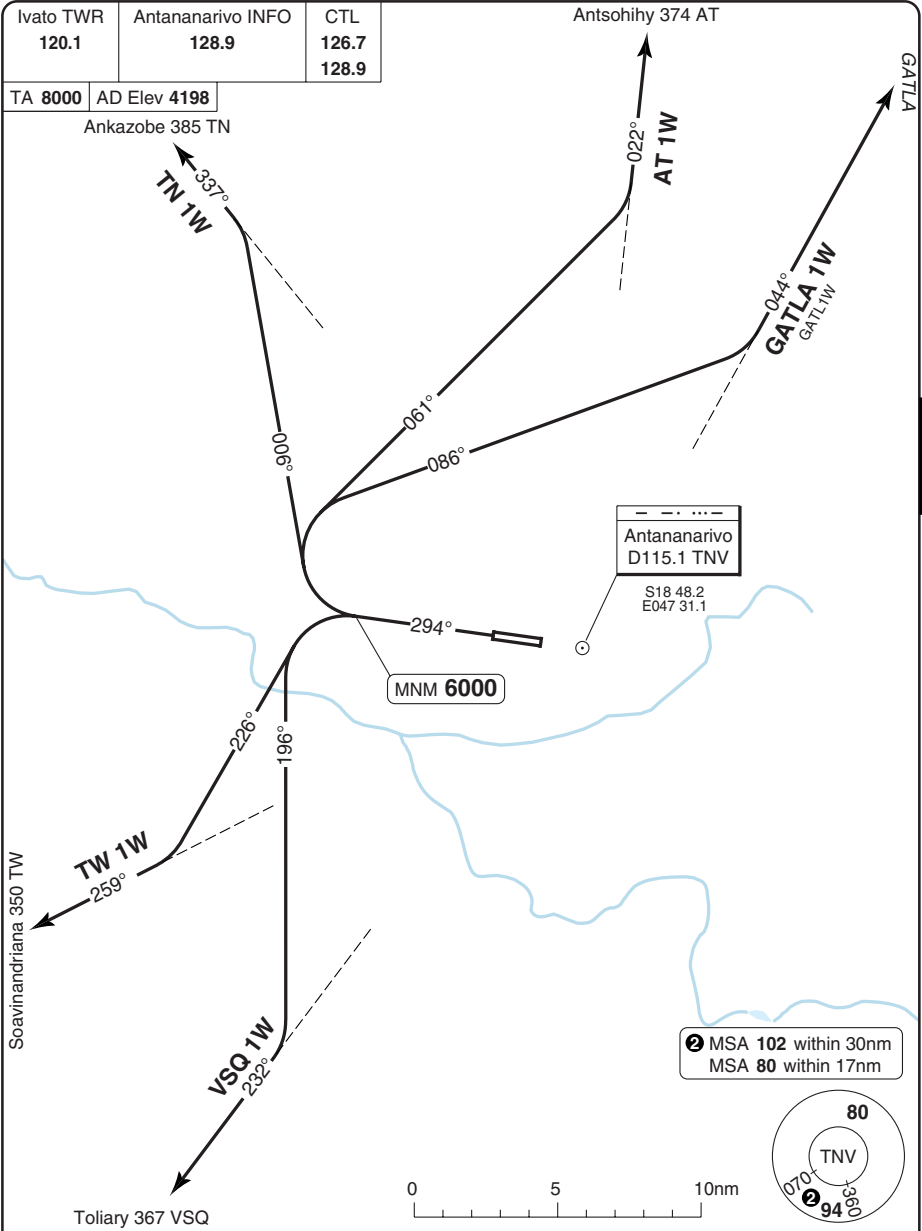
SID	Routeing
<b>IXARI 1E</b>	Climb on 114° to MNM 6000 - turn left - 071° - intcp R085 TNV - IXARI.
<b>MJ 4E</b>	Climb on 114° to MNM 6000 - turn right - intcp R153 TNV - turn right - 254° - intcp R177 TNV - MJ.
<b>TE 1E</b>	Climb on 114° to MNM 6000 - turn right to intcp R118 TNV - TE.
<b>VSF 4E</b>	Climb on 114° to MNM 6000 - turn right - intcp R153 TNV - turn right - 254° - intcp R203 TNV - VSF.
<b>VSP 4E</b>	Climb on 114° to MNM 6000 - turn right - intcp R153 TNV - turn right - 254° - intcp R200 TNV - VSP.

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Change: New spec.

SID RWY 29 North, West

Ivato ANTANANARIVO



SID	Routeing
AT 1W	Climb on 294° to MNM 6000 - turn right - 061° - intcp R022 TNV - AT.
GATLA 1W	Climb on 294° to MNM 6000 - turn right - 086° - intcp R044 TNV - GATLA.
TN 1W	Climb on 294° to MNM 6000 - turn right - 006° - intcp R337 TNV - TN.
TW 1W	Climb on 294° to MNM 6000 - turn left - 226° - intcp R259 TNV - TW.
VSQ 1W	Climb on 294° to MNM 6000 - turn left - 196° - intcp R232 TNV - VSQ.

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Change: New spec.

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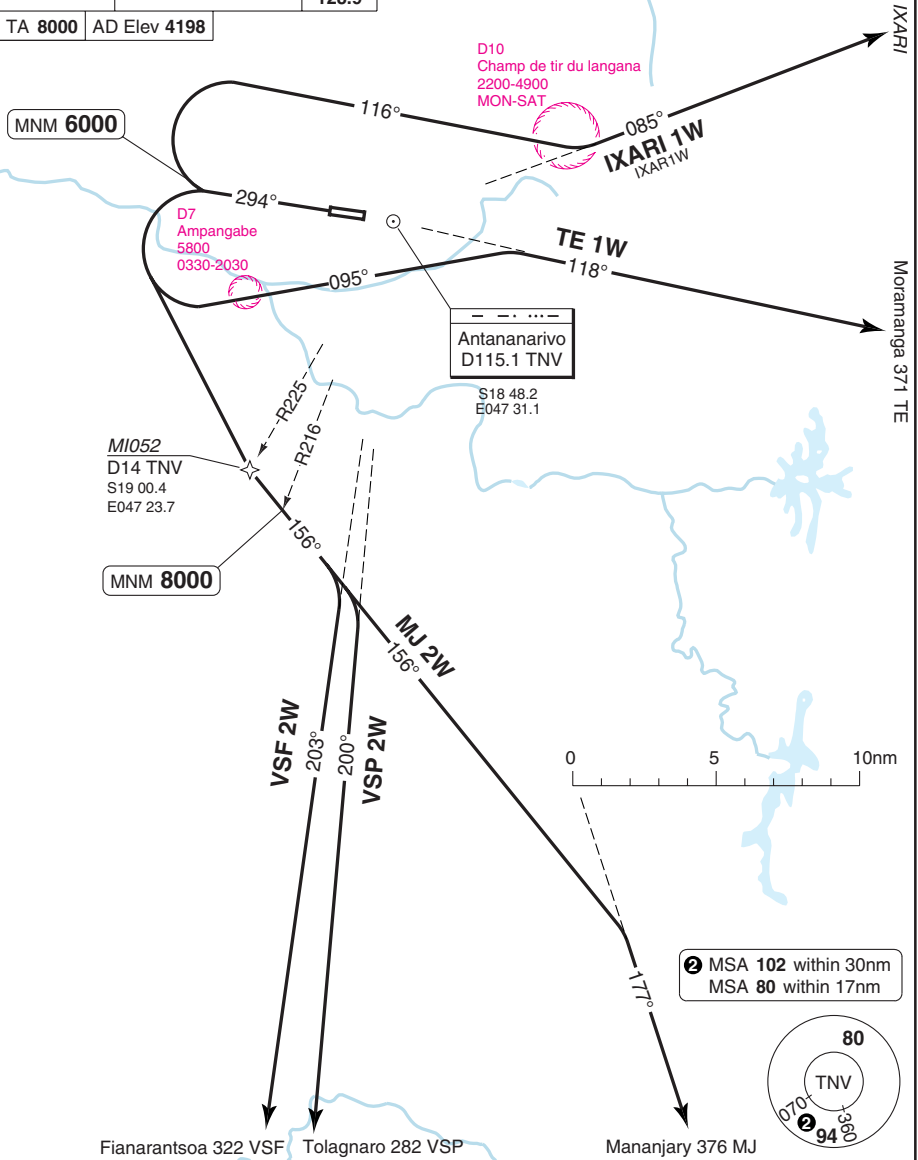
30 - 3

**SID RWY 29** East, South

Ivato TWR <b>120.1</b>	Antananarivo INFO <b>128.9</b>	CTL <b>126.7</b> <b>128.9</b>
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TA **8000** AD Elev **4198**

**30 - 4**



SID	Routing
<b>IXARI 1W</b>	Climb on 294° to MNM 6000 - turn right - 116° - intcp R085 TNV - IXARI.
<b>MJ 2W</b>	Climb on 294° to MNM 6000 - turn left - intcp R225 TNV - 156° - intcp R177 TNV - MJ.
<b>TE 1W</b>	Climb on 294° to MNM 6000 - turn left - 095° - intcp R118 TNV - TE.
<b>VSF 2W</b>	Climb on 294° to MNM 6000 - turn left - intcp R225 TNV - 156° - intcp R203 TNV - VSF.
<b>VSP 2W</b>	Climb on 294° to MNM 6000 - turn left - intcp R225 TNV - 156° - intcp R200 TNV - VSP.

Change: New spec.

# STAR RWY 11 **RNAV** GNSS from South, West

# Ivato **ANTANANARIVO**

Antananarivo CTL	Ivato TWR	Antananarivo INFO
126.7	120.1	128.9
128.9		

TL ATC AD Elev 4198

**1** IF **BALBY**  
MNM **7000**  
D17 TNV

IF **BALBY**  
MNM **7000**  
R294/D17 TNV  
S18 45.5  
E047 13.4

IAF **MI002**  
MNM **8000**  
D19.2 TNV  
S18 50.0  
E047 10.9

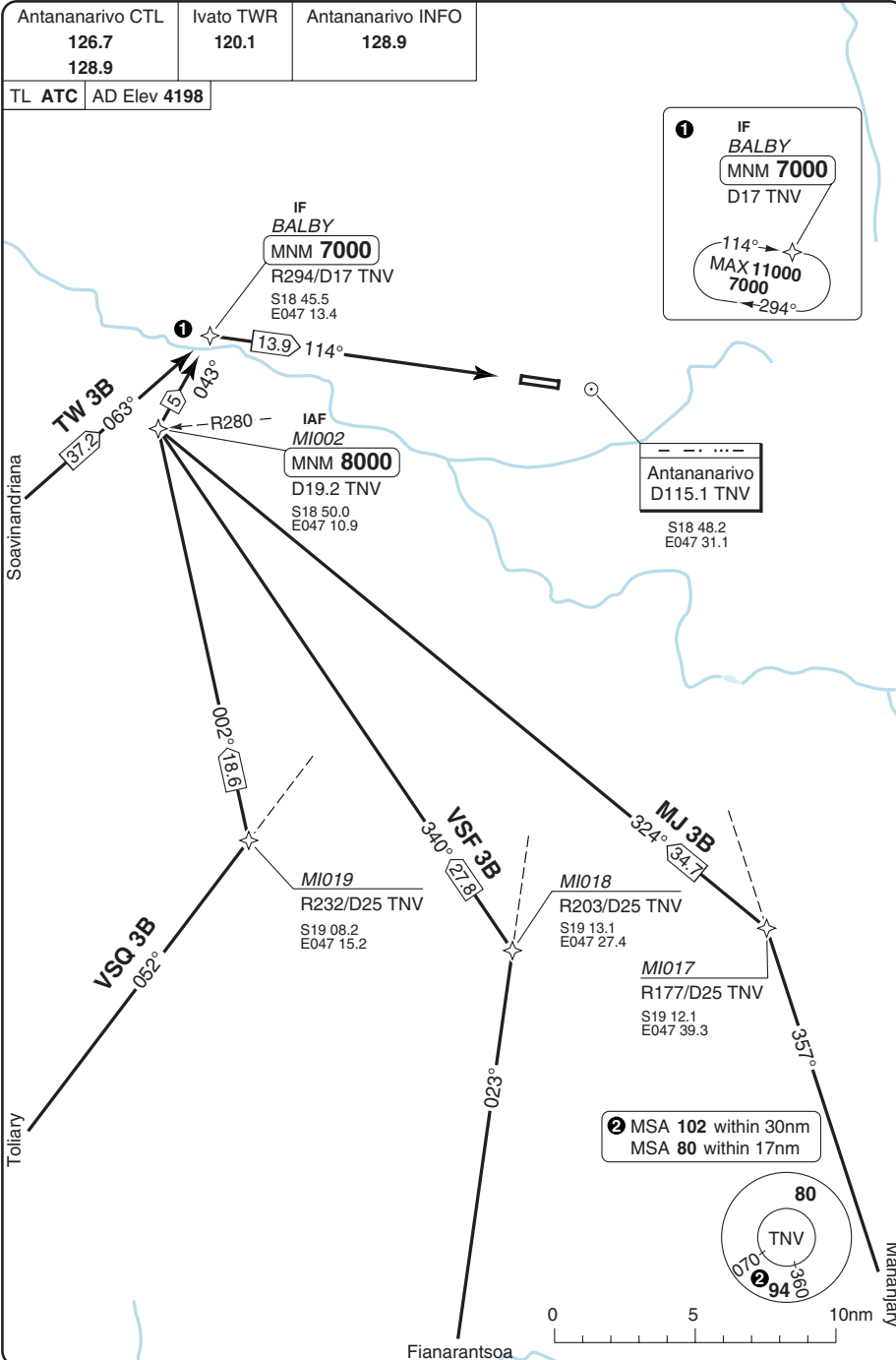
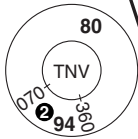
Antananarivo  
D115.1 TNV  
S18 48.2  
E047 31.1

**MI019**  
R232/D25 TNV  
S19 08.2  
E047 15.2

**MI018**  
R203/D25 TNV  
S19 13.1  
E047 27.4

**MI017**  
R177/D25 TNV  
S19 12.1  
E047 39.3

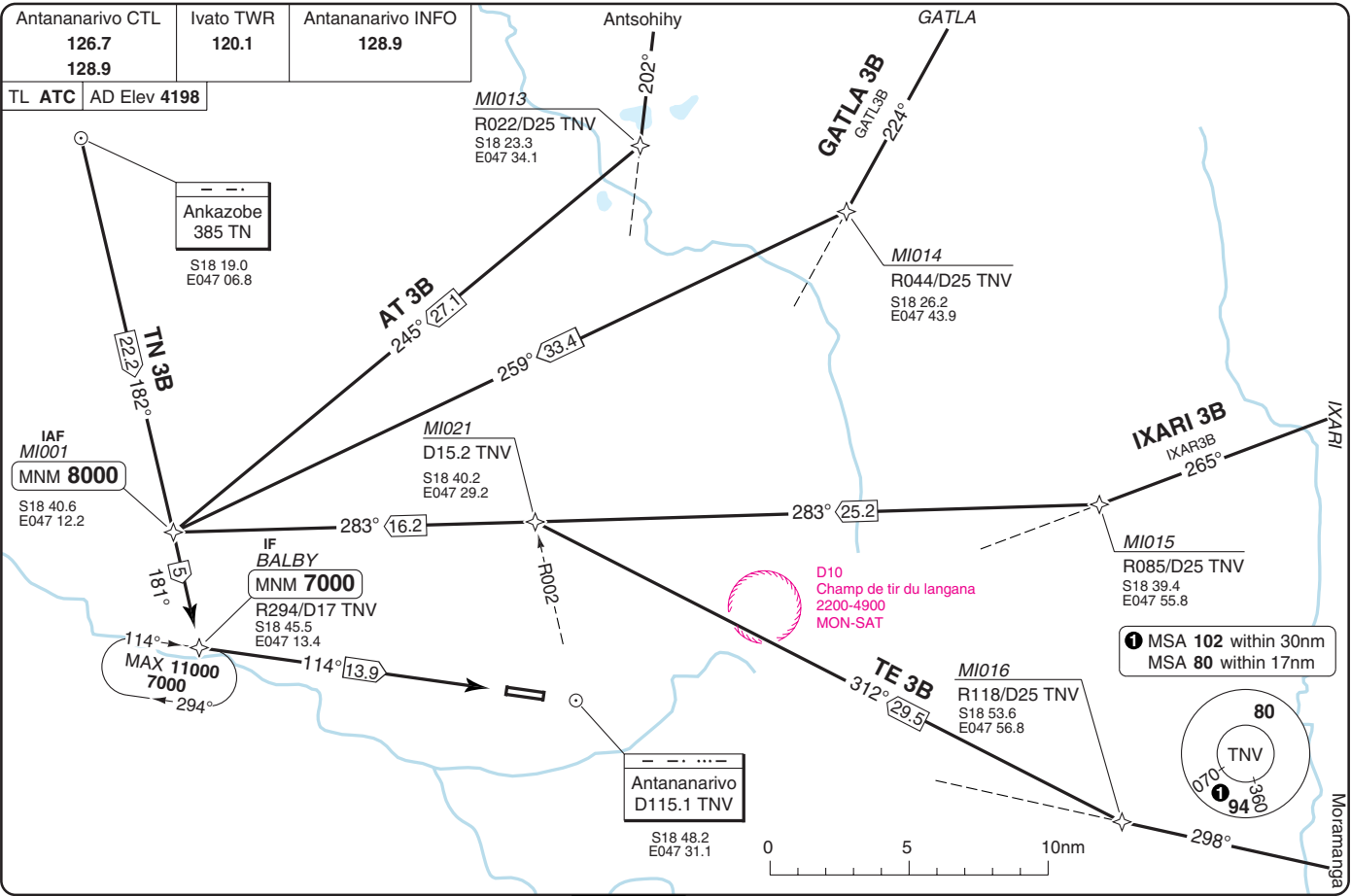
**2** MSA 102 within 30nm  
MSA 80 within 17nm



40 - 1

Antananarivo CTL 126.7 128.9	Ivato TWR 120.1	Antananarivo INFO 128.9
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TL ATC AD Elev 4198





Antananarivo CTL 126.7 128.9	Ivato TWR 120.1	Antananarivo INFO 128.9
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TL ATC | AD Elev 4198

Antananarivo  
D115.1 TNV  
S18 48.2  
E047 31.1

IF  
ANOSI  
MNM 7000  
R114/D13 TNV  
S18 50.2  
E047 44.7

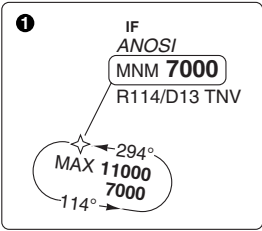
IAF  
MI008  
MNM 8000  
R131/D15.5 TNV  
S18 55.1  
E047 45.7

MI020  
D16 TNV  
S19 03.0  
E047 37.7

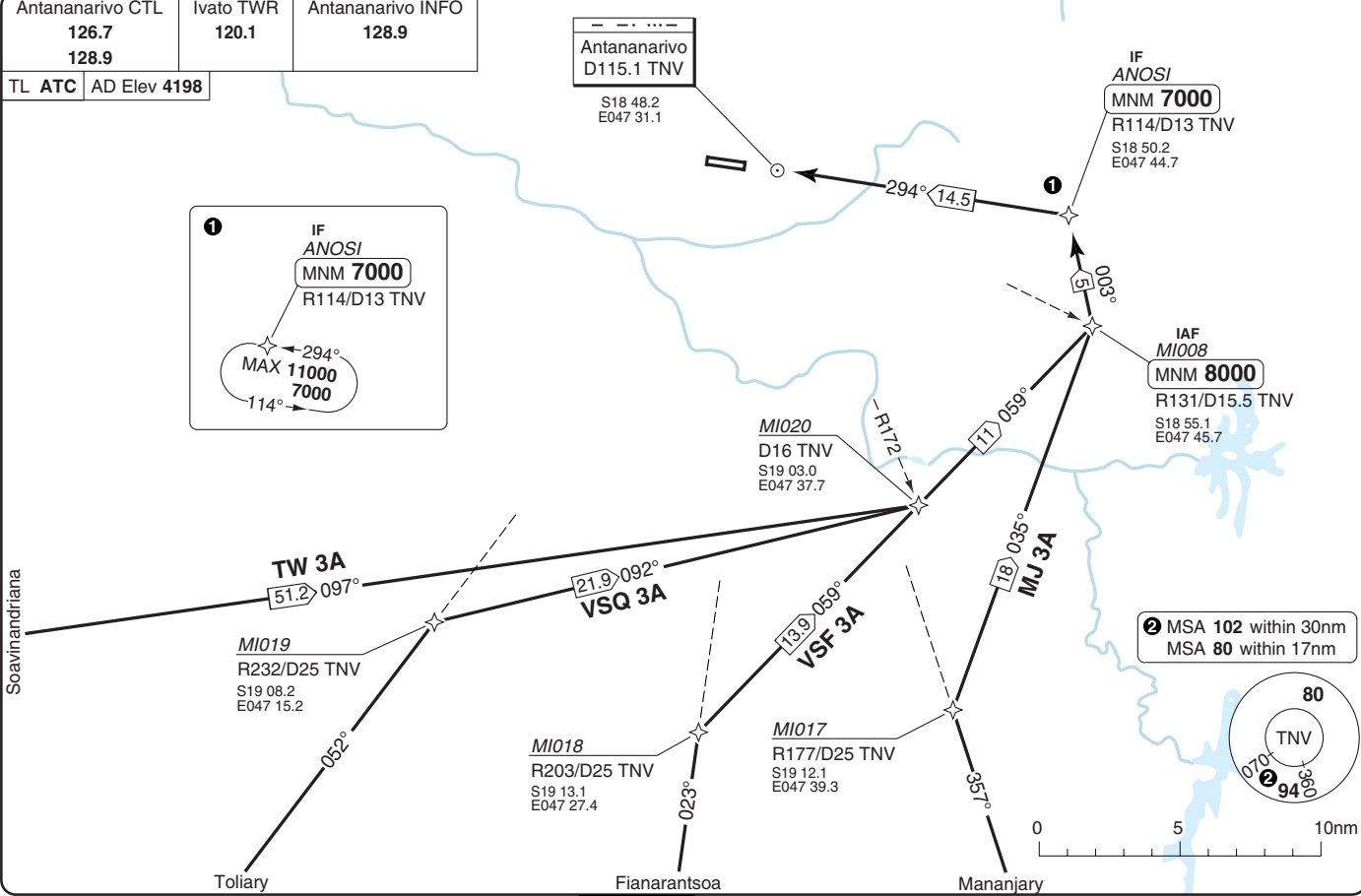
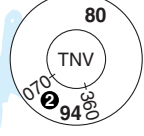
MI019  
R232/D25 TNV  
S19 08.2  
E047 15.2

MI018  
R203/D25 TNV  
S19 13.1  
E047 27.4

MI017  
R177/D25 TNV  
S19 12.1  
E047 39.3

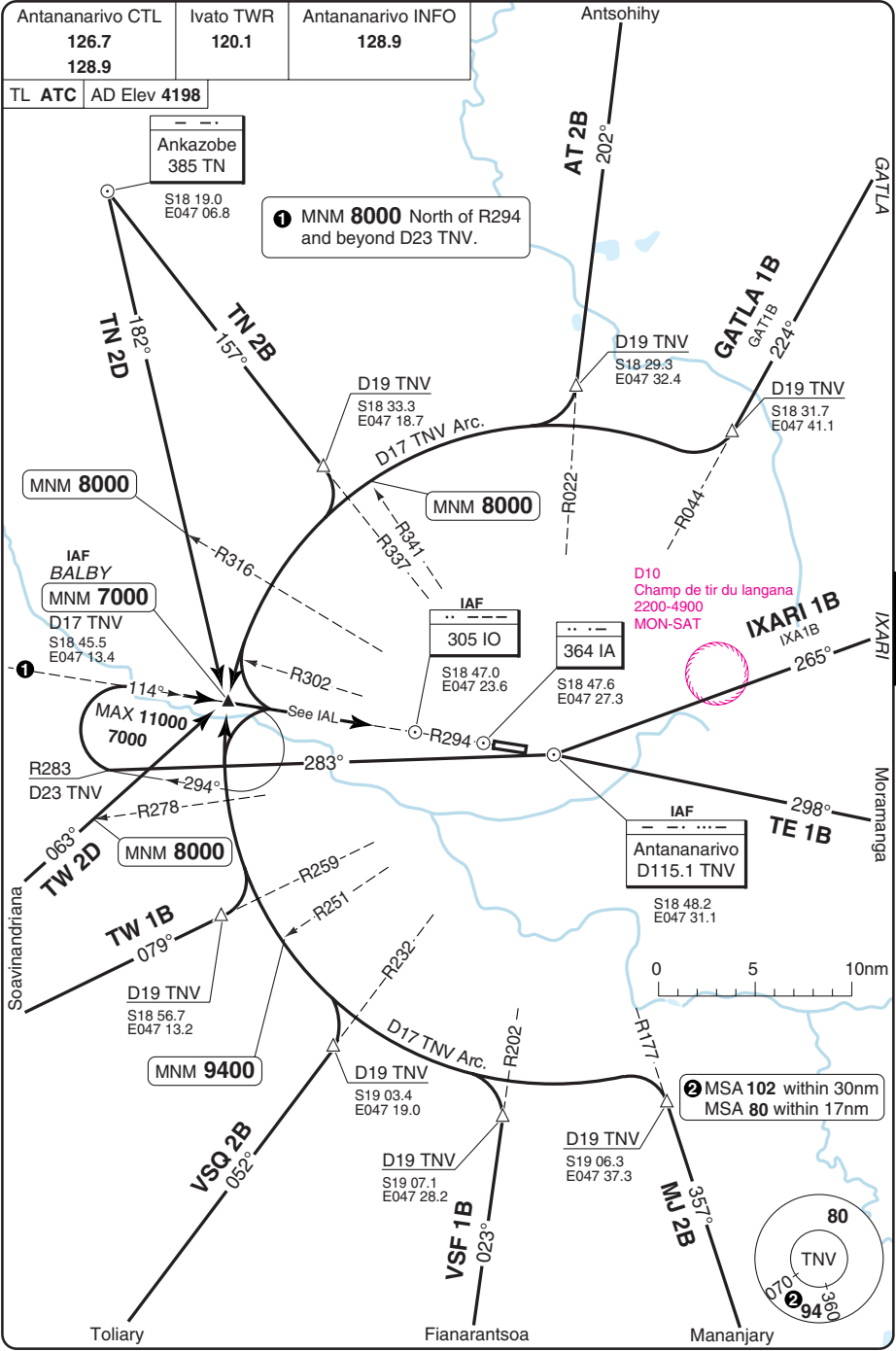


② MSA 102 within 30nm  
MSA 80 within 17nm



# STAR RWY 11 VOR/DME

# Ivato ANTANANARIVO

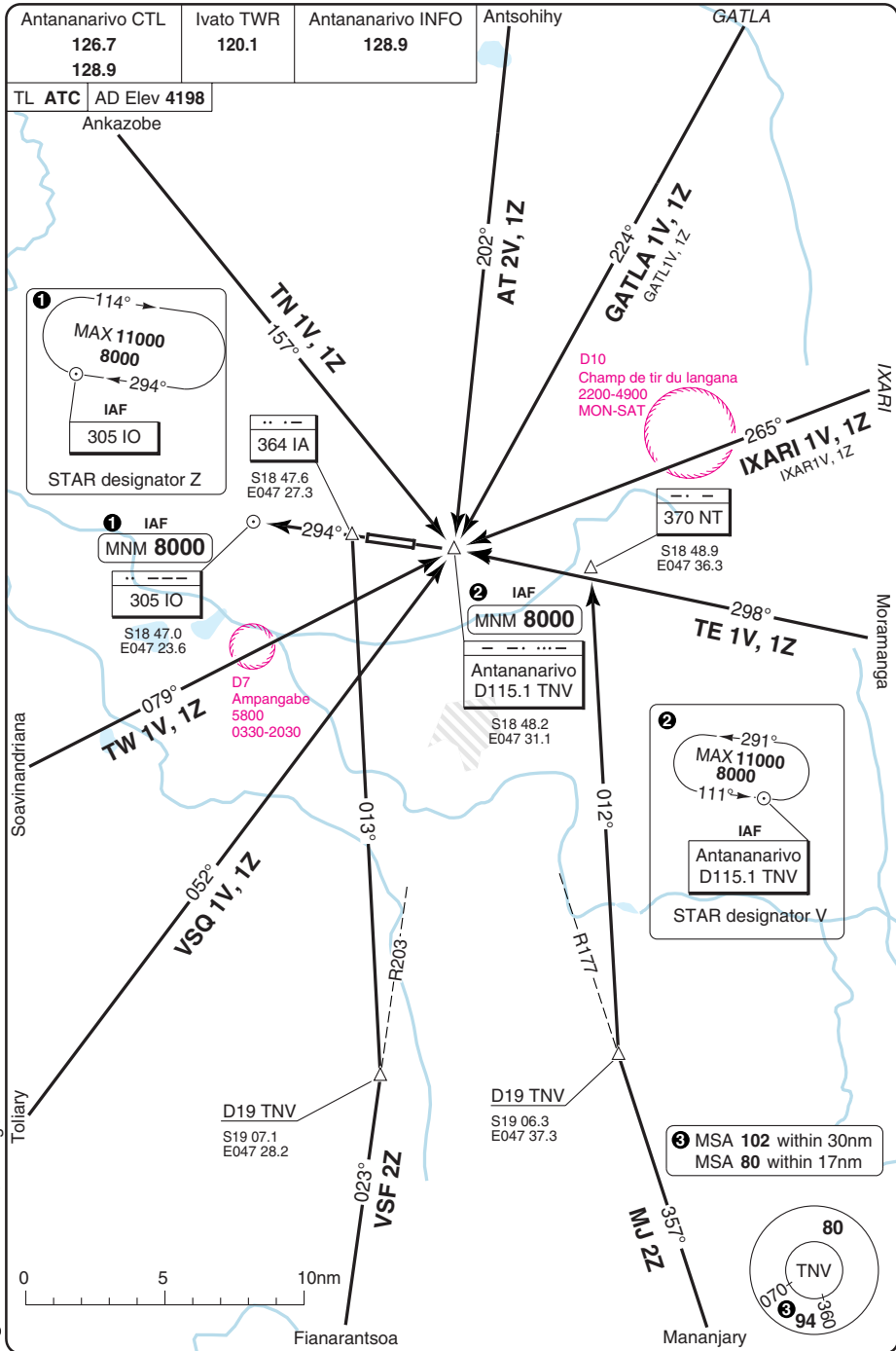


Change: New spec.

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# STAR RWY 11/29 VOR

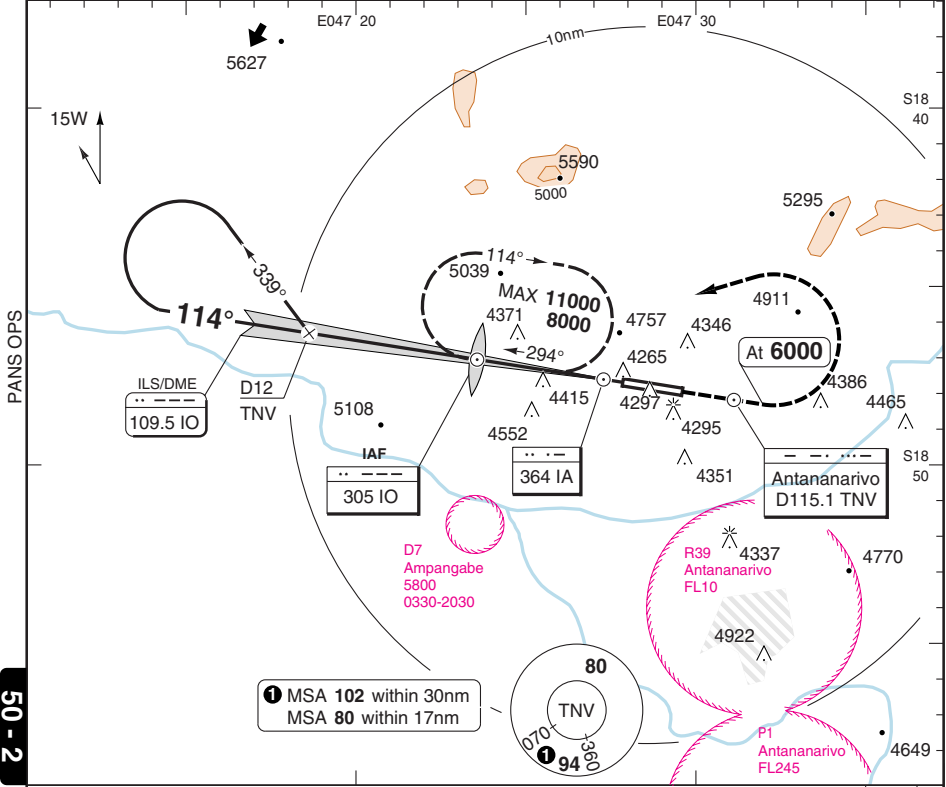




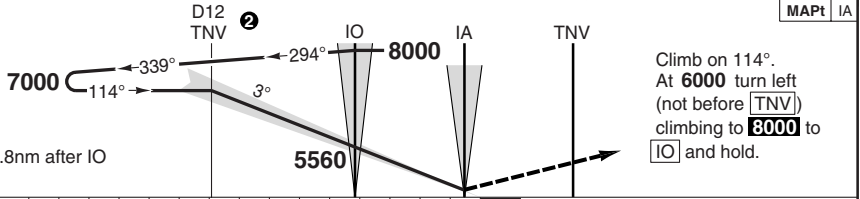
**ILS RWY 11 ILS/NDB**

Antananarivo CTL <b>126.7</b> <b>128.9</b>	Ivato TWR <b>120.1</b>	Antananarivo INFO <b>128.9</b>
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ILS/DME <b>109.5 IO</b>	FAT <b>114°</b>	THR Elev <b>4197</b>	AD Elev <b>4198</b>	TL ATC	TA <b>8000</b>
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**50 - 2**



nm	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
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ACFT	ILS+NDB 3%	LOC+NDB 3%	Circling <sup>a</sup>	GS	80	100	120	140	160	LDA 3100x45 10170x147ft
A	4400 (200) 550m	4670 (470) 1500m	5060 (860) 1.5km	ROD 3.0°	430	540	650	750	860	
B	4410 (210) 600m		5060 (860) 1.6km	OM +20s	5420	5390	5350	5310	5280	
C	4420 (220) 600m	5310 (1110) 2.4km	+40s	5280	5210	5140	5070	4990		
D	4430 (230) 600m	5440 (1240) 3.6km	+60s	5140	5030	4920	4820	4710		
			OM- 4670	2:05	1:40	1:23	1:11	1:02		

<sup>a</sup> N of AD only, Day OPS only.

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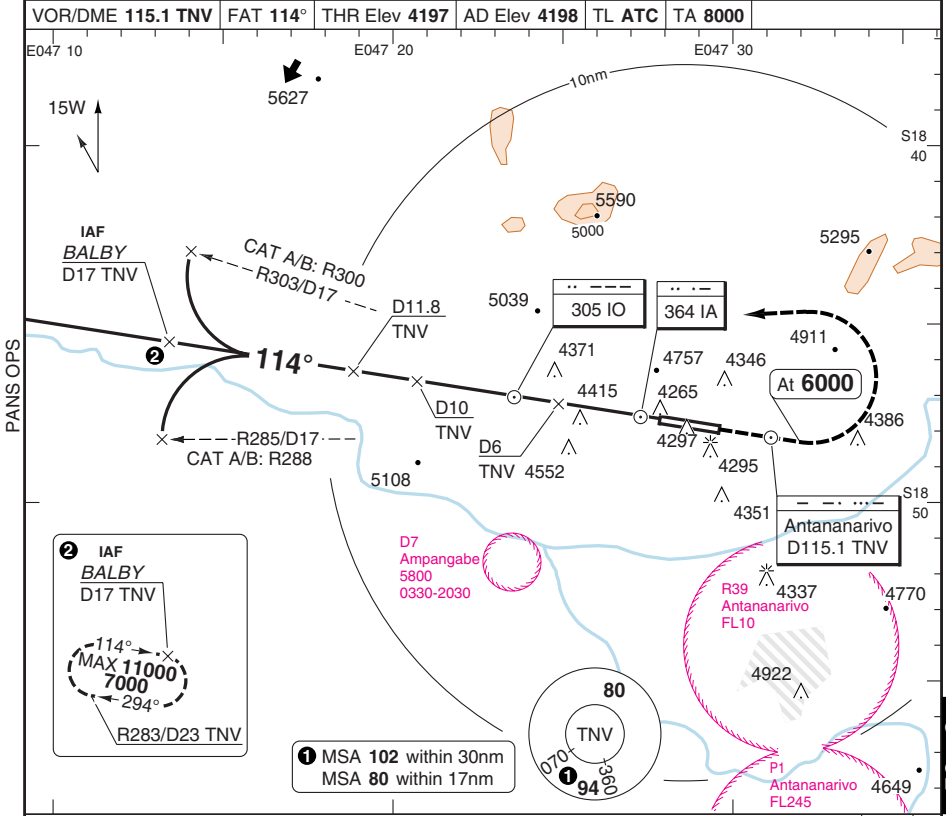
FALS

Change: New spec.

VOR RWY 11 VOR/DME

Ivato ANTANANARIVO

Antananarivo CTL 126.7 128.9	Ivato TWR 120.1	Antananarivo INFO 128.9
VOR/DME 115.1 TNV	FAT 114°	THR Elev 4197
AD Elev 4198	TL ATC	TA 8000



**2** IAF BALBY D17 TNV

MAX 11000 7000

114°

294°

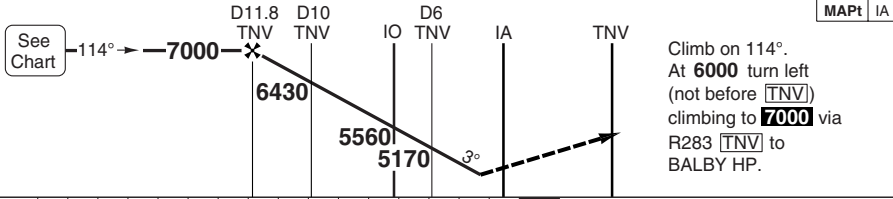
R283/D23 TNV

**1** MSA 102 within 30nm  
MSA 80 within 17nm

80 TNV

070 130 190

94



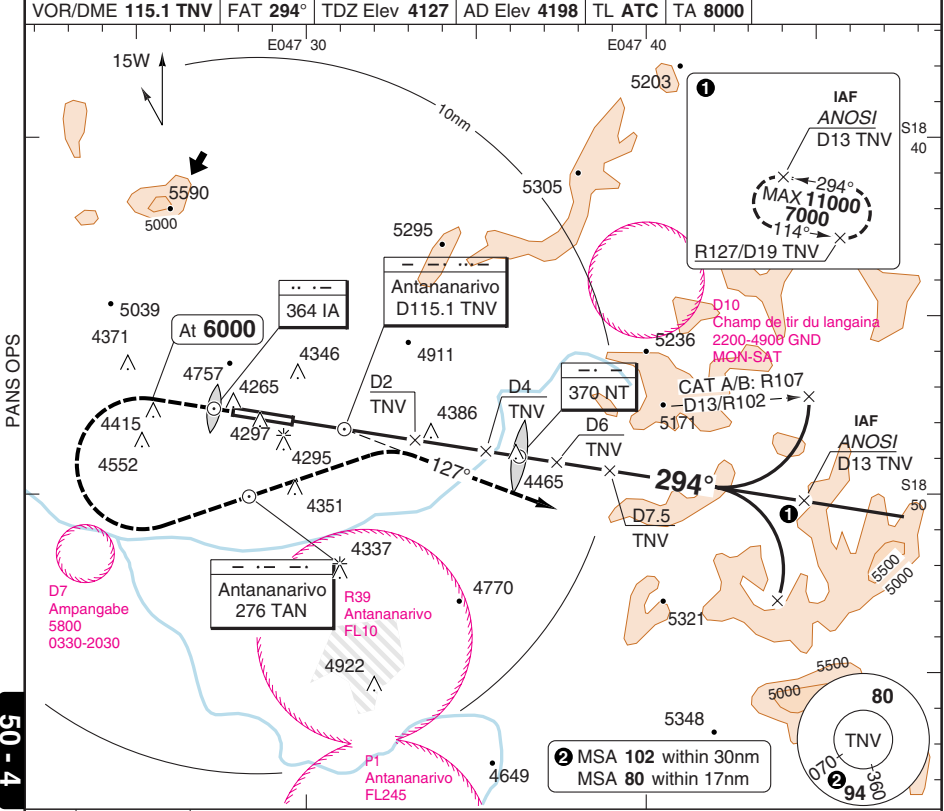
nm	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
ACFT	VOR+DME 3%		Circling <b>a</b>		<b>a</b> N of AD only, Day OPS only.												
A	4670 (470)		5060 (860) 1.5km														
B	1500m		5060 (860) 1.6km														
C			5310 (1110) 2.4km														
D	4670 (470) 1600m		5440 (1240) 3.6km														
GS	80	100	120	140	160												
ROD 3.0°	430	540	650	750	860												
DME TNV	3.0° ALT	LDA 3100x45 10170x147ft															
11.7	7000																
10	6460																
9	6140																
8	5820																
7	5500																
6	5180																
5	4860																
4.4	4670																

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50 - 3

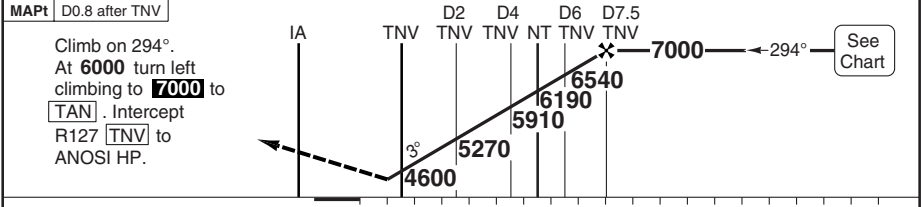
**VOR RWY 29** VOR/DME

Antananarivo CTL <b>126.7</b> <b>128.9</b>	Ivato TWR <b>120.1</b>	Antananarivo INFO <b>128.9</b>
VOR/DME <b>115.1 TNV</b>	FAT <b>294°</b>	TDZ Elev <b>4127</b>
AD Elev <b>4198</b>	TL <b>ATC</b>	TA <b>8000</b>



PANS OPS

50 - 4



ACFT	VOR+DME	Circling <sup>a</sup>
A	<b>4400</b> (280) 1500m	<b>5060</b> (940) 1.5km
B		<b>5060</b> (940) 1.6km
C	<b>4400</b> (280) 1600m	<b>5310</b> (1190) 2.4km
D	<b>4400</b> (280) 1800m	<b>5440</b> (1320) 3.6km

<sup>a</sup> N of AD only, Day OPS only.

DME TNV	3.0° ALT	LDA 3100x45 10170x147ft P 3°
7.5	<b>7000</b>	
6	<b>6550</b>	
5	<b>6230</b>	
4	<b>5920</b>	
3	<b>5600</b>	
2	<b>5290</b>	
0	<b>4650</b>	
0.8	<b>4400</b>	

GS	80	100	120	140	160
ROD 3.0°	430	530	640	740	850

Change: New spec.

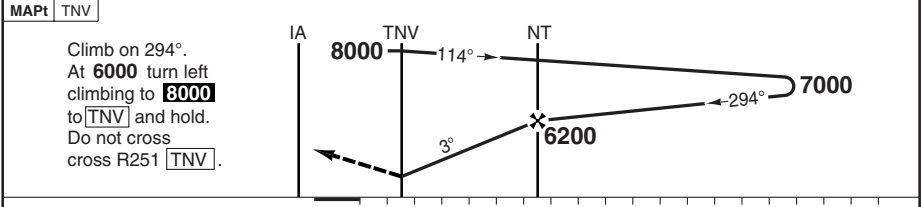
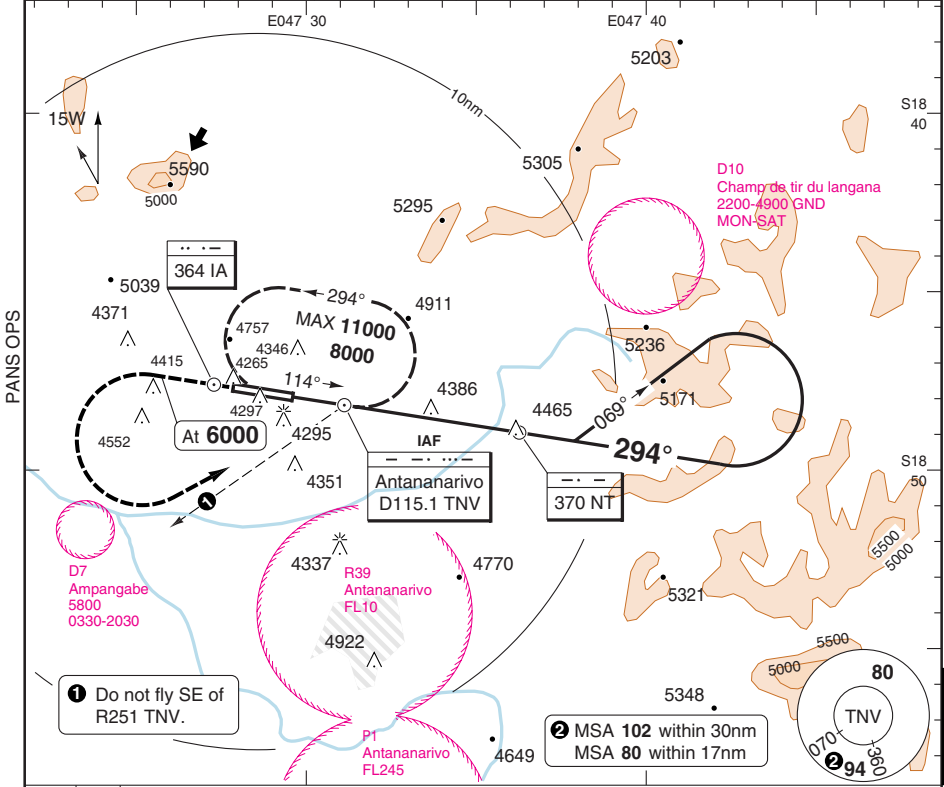
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NALS

**VOR RWY 29** VOR/NDB

Antananarivo CTL <b>126.7</b> <b>128.9</b>	Ivato TWR <b>120.1</b>	Antananarivo INFO <b>128.9</b>
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VOR/DME <b>115.1 TNV</b>	FAT <b>294°</b>	TDZ Elev <b>4127</b>	AD Elev <b>4198</b>	TL <b>ATC</b>	TA <b>8000</b>
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Climb on 294°.  
At 6000 turn left climbing to **8000**  
to [TNV] and hold.  
Do not cross  
cross R251 [TNV].

ACFT	<b>VOR+NDB</b>	<b>Circling</b> <sup>a</sup>	<sup>a</sup> N of AD only, Day OPS only.	GS	80	100	120	140	160	LDA 3100x45 10170x147ft P 3°
A	<b>4640</b> (520) 1500m	<b>5060</b> (940) 1.5km		ROD 3.0°	430	530	640	740	850	
B		<b>5060</b> (940) 1.6km		FAF +20s	<b>6060</b>	<b>6030</b>	<b>5990</b>	<b>5960</b>	<b>5920</b>	
C	<b>4640</b> (520) 2400m	<b>5310</b> (1190) 2.4km		+40s	<b>5920</b>	<b>5850</b>	<b>5780</b>	<b>5710</b>	<b>5640</b>	
D		<b>5440</b> (1320) 3.6km		+60s	<b>5780</b>	<b>5680</b>	<b>5570</b>	<b>5470</b>	<b>5360</b>	
				FAF- <b>4640</b>	3:41	2:57	2:28	2:07	1:50	

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50 - 5

MALS

Change: New spec.

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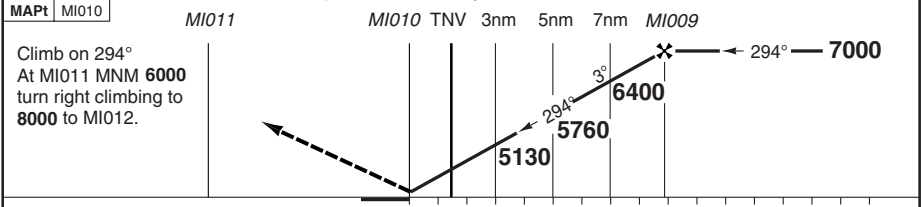
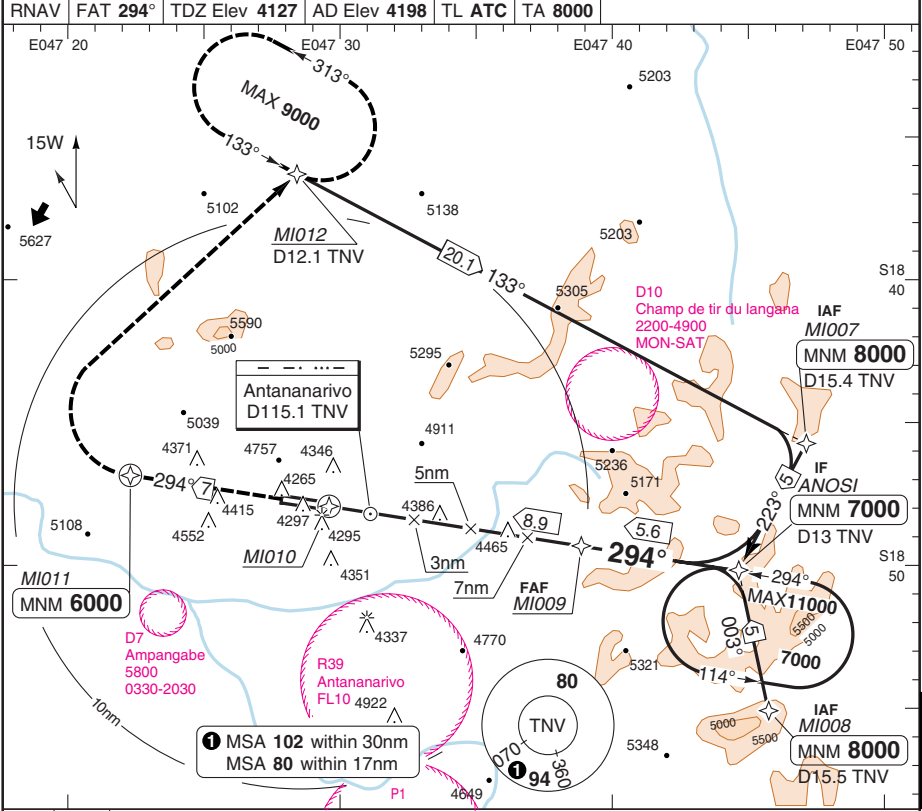






**RNAV (GNSS) RWY 29**

Antananarivo CTL <b>126.7</b> <b>128.9</b>	Ivato TWR <b>120.1</b>	Antananarivo INFO <b>128.9</b>			
RNAV	FAT <b>294°</b>	TDZ Elev <b>4127</b>	AD Elev <b>4198</b>	TL <b>ATC</b>	TA <b>8000</b>



ACFT	<b>LNAV</b>	<b>Circling a</b>	<b>a</b> N of AD only, Day OPS only.	THR	3.0°	LDA 3100x45
A	<b>4550</b> (430)	<b>5060</b> (940) 1.5km		29	ALT	10170x147ft
B	1500m	<b>5060</b> (940) 1.6km		8.9	<b>7000</b>	P 3°
C	<b>4550</b> (430)	<b>5310</b> (1190) 2.4km		7	<b>6410</b>	
D	2000m	<b>5440</b> (1320) 3.6km		6	<b>6090</b>	
				5	<b>5770</b>	
				4	<b>5450</b>	
				3	<b>5130</b>	
				2	<b>4820</b>	
				1.2	<b>4550</b>	
GS	80	100	120	140	160	
ROD 3.0°	430	540	640	750	850	

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Change: New spec.

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50 - 9

NALS  
Reverse side blank

## JAR-OPS Landing Minima

Ivato **ANTANANARIVO**

The following Minima is for Public Transport aircraft and conforms to JAR-OPS1 regulations.

STRAIGHT-IN APPROACH		C				D			
R/W	Procedure	DA/ MDA QNH ft	DH/ MDH QFE ft	RVR m	RVR No ALS m	DA/ MDA QNH ft	DH/ MDH QFE ft	RVR m	RVR No ALS m
11	ILS (M/App 3%)	<b>4420</b>	220	600	1000	<b>4430</b>	230	600	1000
11	LOC (M/App 3%)	<b>4670</b>	470	1200	2000	<b>4670</b>	470	1600	2000
11	VOR/DME (M/App 3%)	<b>4670</b>	470	1200	2000	<b>4670</b>	470	1600	2000
11	NDB (M/App 3%)	<b>4720</b>	520	1200	2000	<b>4720</b>	520	1600	2000
11	RNAV (GNSS)	<b>4670</b>	470	1200	2000	<b>4670</b>	470	1600	2000
29	VOR/DME	<b>4400</b>	280	1600	N/A	<b>4400</b>	280	1800	N/A
29	VOR + NDB	<b>4640</b>	520	2000	N/A	<b>4640</b>	520	2000	N/A
29	NDB	<b>4640</b>	520	2000	N/A	<b>4640</b>	520	2000	N/A
29	RNAV (GNSS)	<b>4550</b>	430	1800	N/A	<b>4550</b>	430	2000	N/A

Notes:

CIRCLING		C			D		
R/W	Procedure	MDA QNH ft	MDH QFE ft	Vis m	MDA QNH ft	MDH QFE ft	Vis m
11	All procs (1)	<b>5310</b>	1110	2400	<b>5440</b>	1240	3600
29	All procs (1)	<b>5390</b>	1190	2400	<b>5520</b>	1320	3600

Notes:

(1) North of aerodrome only, HJ only.

TAKE-OFF		C		D	
Runway	Facilities	RVR	Vis	RVR	Vis
All	-	250	-	300	-

Notes:

## JAR-OPS Landing Minima

Ivato **ANTANANARIVO**

The following Minima is for Public Transport aircraft and conforms to JAR-OPS1 regulations.

STRAIGHT-IN APPROACH		A				B			
R/W	Procedure	DA/ MDA QNH ft	DH/ MDH QFE ft	RVR m	RVR No ALS m	DA/ MDA QNH ft	DH/ MDH QFE ft	RVR m	RVR No ALS m
11	ILS (M/App 3%)	<b>4400</b>	200	550	1000	<b>4410</b>	210	600	1000
11	LOC (M/App 3%)	<b>4670</b>	470	1000	1500	<b>4670</b>	470	1200	1500
11	VOR/DME (M/App 3%)	<b>4670</b>	470	1000	1500	<b>4670</b>	470	1200	1500
11	NDB (M/App 3%)	<b>4720</b>	520	1000	1500	<b>4720</b>	520	1200	1500
11	RNAV (GNSS)	<b>4670</b>	470	1000	1500	<b>4670</b>	470	1200	1500
29	VOR/DME	<b>4400</b>	280	1500	N/A	<b>4400</b>	280	1500	N/A
29	VOR + NDB	<b>4640</b>	520	1500	N/A	<b>4640</b>	520	1500	N/A
29	NDB	<b>4640</b>	520	1500	N/A	<b>4640</b>	520	1500	N/A
29	RNAV (GNSS)	<b>4550</b>	430	1500	N/A	<b>4550</b>	430	1500	N/A

Notes:

CIRCLING		A			B		
R/W	Procedure	MDA QNH ft	MDH QFE ft	Vis m	MDA QNH ft	MDH QFE ft	Vis m
11	All procs (1)	<b>5060</b>	860	1500	<b>5060</b>	860	1600
29	All procs (1)	<b>5140</b>	940	1500	<b>5140</b>	940	1600

Notes:

(1) North of aerodrome only, HJ only.

TAKE-OFF		A		B	
Runway	Facilities	RVR	Vis	RVR	Vis
All	-	250	-	250	-

Notes: