

Phone : +(261) 20.22.581.13
 +(261) 20.22.581.14
 +(261) 33.23.370.01

Fax : NIL

AFTN : FMMMYNYX

E-mail : bniFMNN@asecna.org
 AntananarivoNOF@gmail.com

Web : www.ais-asecna.org



**BUREAU NOTAM INTERNATIONAL
 D'ANTANANARIVO**

**B.P. 46 Ivato Aéroport Antananarivo -
 MADAGASCAR**

**AIRAC AIP SUP
 NR 25/A/19FM
 25 APR 2019**

LA REUNION* - MADAGASCAR - MAYOTTE* - UNION DES COMORES

* The AIC, AMDT, AIP and SUP concerning these islands are published on <https://sia.aviation-civile.gouv.fr>

AIP SUP 28/A/17FM IS CANCELLED BY THIS AIP SUP

FMNM - CHARTS UPDATE

| | |
|-------------------------|--------------------|
| <i>Effective date :</i> | 20 JUN 2019 |
| <i>Validity :</i> | PERM |

Le présent supplément d'AIP met à jour trois cartes aéronautiques de l'aéroport de MAHAJANGA/Philibert TSIRANANA.

Les cartes de l'AIP ASECNA (ATLAS) concernées par la mise à jour sont :

This AIP supplement updates three aeronautical charts related to the airport of MAHAJANGA/Philibert TSIRANANA.

The charts of ASECNA AIP (ATLAS) concerned by the update are :

| <i>CHART</i> | <i>CURRENT PAGES NR</i> | <i>UPDATED PAGES NR</i> |
|--------------------|-------------------------|-------------------------|
| 'RNP - RWY 14' IAC | 805 K-1D | 805 L-1D |
| | VERSO 805 K-1D | VERSO 805 L-1D |
| 'RNP - RWY 32' IAC | 805 K-1E | 805 L-1E |
| | VERSO 805 K-1E | VERSO 805 L-1E |
| RWY 32 RNP 1 STAR | 805 D-2C | 805 E-2C |
| | 805 D-2C VERSO | VERSO 805 E-2C |

THIS AIP SUP HAS 1 PAGE AND 06 APPENDICES

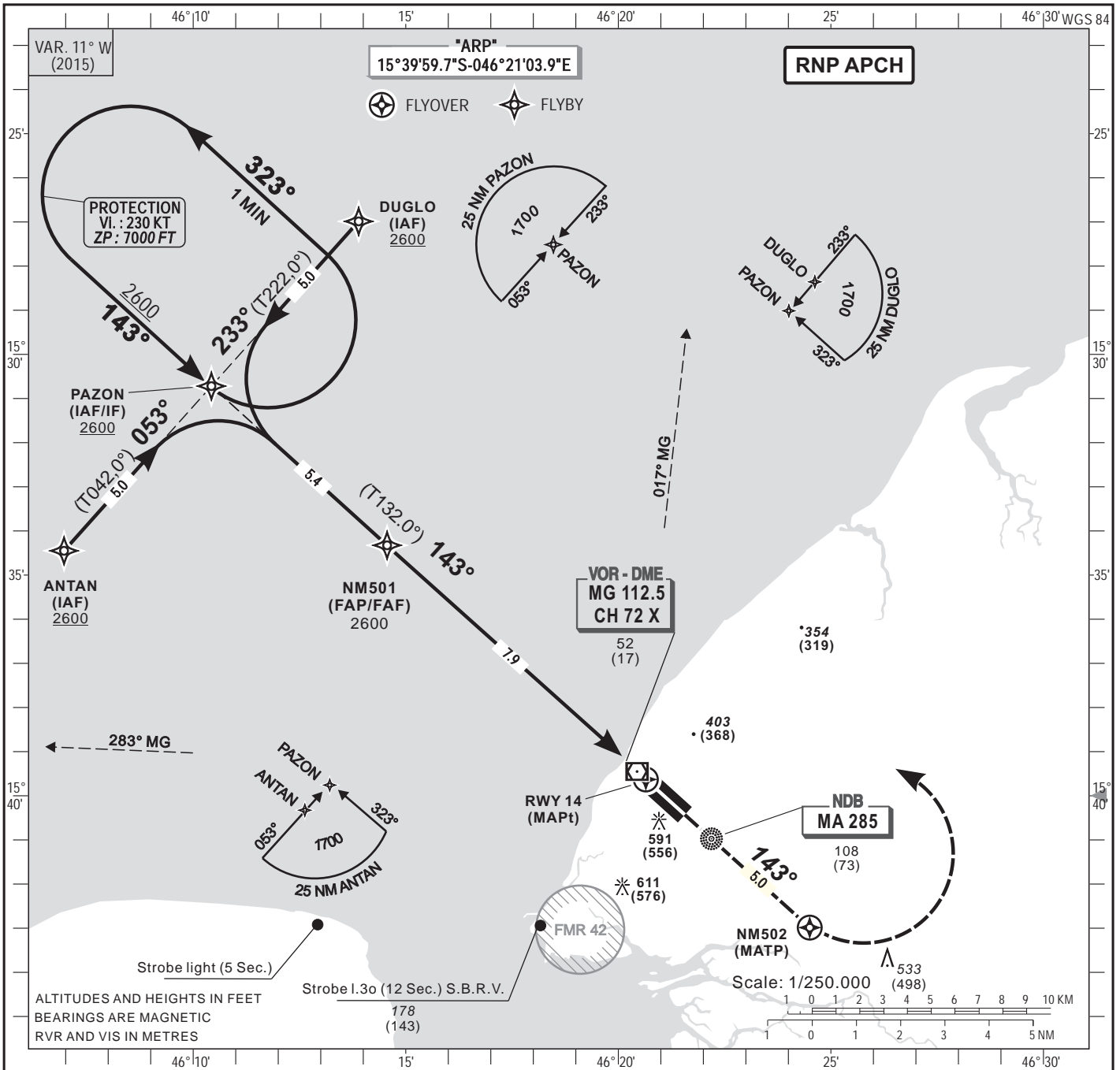
INSTRUMENT
APPROACH
CHART-ICAO

AERODROME ELEVATION - 87 FT

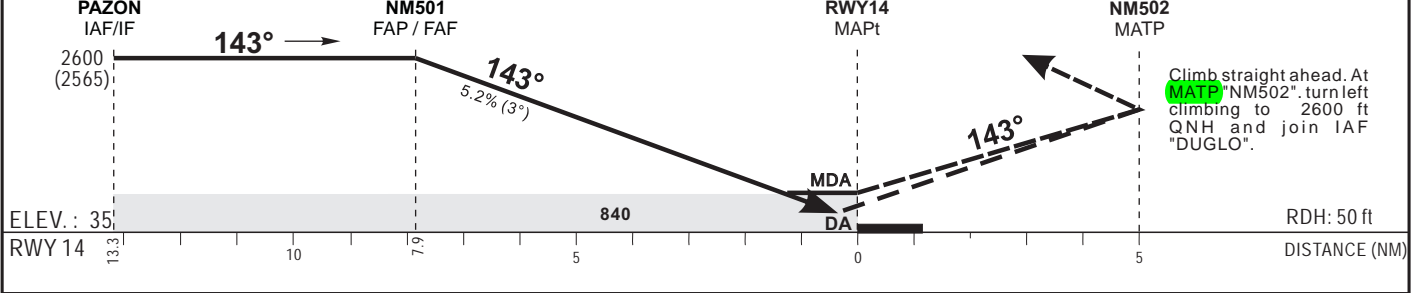
APP 119.1
TWR 119.1

MAHAJANGA - Ph. TSIRANANA (FMNM)
RNP - RWY 14
(ACFT CAT A, B, C, D)

HEIGHTS RELATED TO THR RWY14 ELEVATION - 35 FT



| | | | | | | |
|-------------------------|---------|------|------|------|------|------|
| Distance to THR 14 (NM) | FAP/FAF | 7 | 6 | 5 | 4 | 3 |
| Altitude (ft) | 2 600 | 2315 | 1995 | 1680 | 1360 | 1040 |



| CAT | LNAV/VNAV | | | LNAV | | | Circling (*) | | | | RVR for take-off CAT A - B - C : 400 CAT D : 400 |
|-----|-----------|-----------|------|-----------|-----------|------|--------------|------------|------|--|--|
| | OCA (OCH) | MDA MDH | RVR | OCA (OCH) | MDA MDH | RVR | OCA (OCH) | MDA MDH | VIS | | |
| A | 505 (470) | 510 (470) | 1500 | 837 (802) | 840 (810) | 1500 | 886 (799) | 890 (800) | 1500 | Timing FAF / THR 7.9 NM KT MIN . SEC KT MIN . SEC 100 5 Min 16 140 3 Min 23 110 4 Min 19 160 2 Min 58 120 3 Min 57 170 2 Min 47 130 3 Min 39 180 2 Min 38 | |
| B | 517 (482) | 520 (490) | 1500 | 837 (802) | 840 (810) | 1500 | 906 (819) | 910 (820) | 1600 | | |
| C | 537 (502) | 540 (510) | 2000 | 837 (802) | 840 (810) | 2000 | 1005 (918) | 1010 (920) | 2400 | | |
| D | 564 (529) | 570 (530) | 2000 | 837 (802) | 840 (810) | 2000 | 1005 (918) | 1010 (920) | 3600 | | |

Notes : - (*) Daytime only, OCH and MDH AAL.
 - Climbing sectors after take-off: Between radials 017° MG and 283° MG
 - Minimum temperature: 15°

PROCEDURE TO BE USED ACCORDING TO AIC NR 09/A/14 FM - 06 NOVEMBER 2014

CORRECTIONS : IAF Speed limitation (Verso 805 L - 1D)

INSTRUMENT
APPROACH
CHART-ICAO

AERODROME ELEVATION - 87 FT

APP 119.1
TWR 119.1

MAHAJANGA - Ph. TSIRANANA (FMNM)

RNP - RWY 14
(ACFT CAT A, B, C, D)

HEIGHTS RELATED TO THR RWY14 ELEVATION - 35 FT

TABULAR DESCRIPTION

RNP RWY 14

| Serial Number | Path Descriptor | Waypoint Identifier | Fly- Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (ft) | Speed limit (Kt) | VPA / TCH | Navigation Specification |
|---------------|-----------------|---------------------|-----------|---------------|--------------------|---------------|----------------|---------------|------------------|-----------|--------------------------|
| 10 | IF | ANTAN | - | | | | | +2600 | 230 | - | RNP APCH |
| 20 | TF | PAZON | - | 053(042.0) | | 5.0 | | +2600 | 230 | - | RNP APCH |
| 10 | IF | DUGLO | - | | | | | +2600 | 230 | - | RNP APCH |
| 20 | TF | PAZON | - | 233(222.0) | | 5.0 | | +2600 | 230 | - | RNP APCH |
| 10 | IF | PAZON | - | | | | | +2600 | 230 | - | RNP APCH |
| 20 | TF | NM501 | - | 143(132.0) | | 5.4 | | @2600 | 230 | - | RNP APCH |
| 30 | TF | RW14 | Y | 143(132.0) | +11.0 | 7.9 | | @85 | - | -3/15 | RNP APCH |
| 40 | DF | NM502 | Y | | | 5.0 | L | | | | RNP APCH |
| 50 | TF | DUGLO | - | | | | | +2600 | 230 | - | RNP APCH |

| RNP RWY 14 | | |
|---------------------|-----------------|------------------|
| Waypoint Identifier | Coordinates | |
| ANTAN | 15°34'27.0000"S | 046°06'57.7000"E |
| PAZON | 15°30'43.2000"S | 046°10'25.7000"E |
| DUGLO | 15°26'59.2000"S | 046°13'53.5000"E |
| NM501 | 15°34'19.5000"S | 046°14'33.6000"E |
| RWY14 | 15°39'37.8000"S | 046°20'38.8000"E |
| NM502 | 15°42'59.2000"S | 046°24'30.1000"E |
| | | |

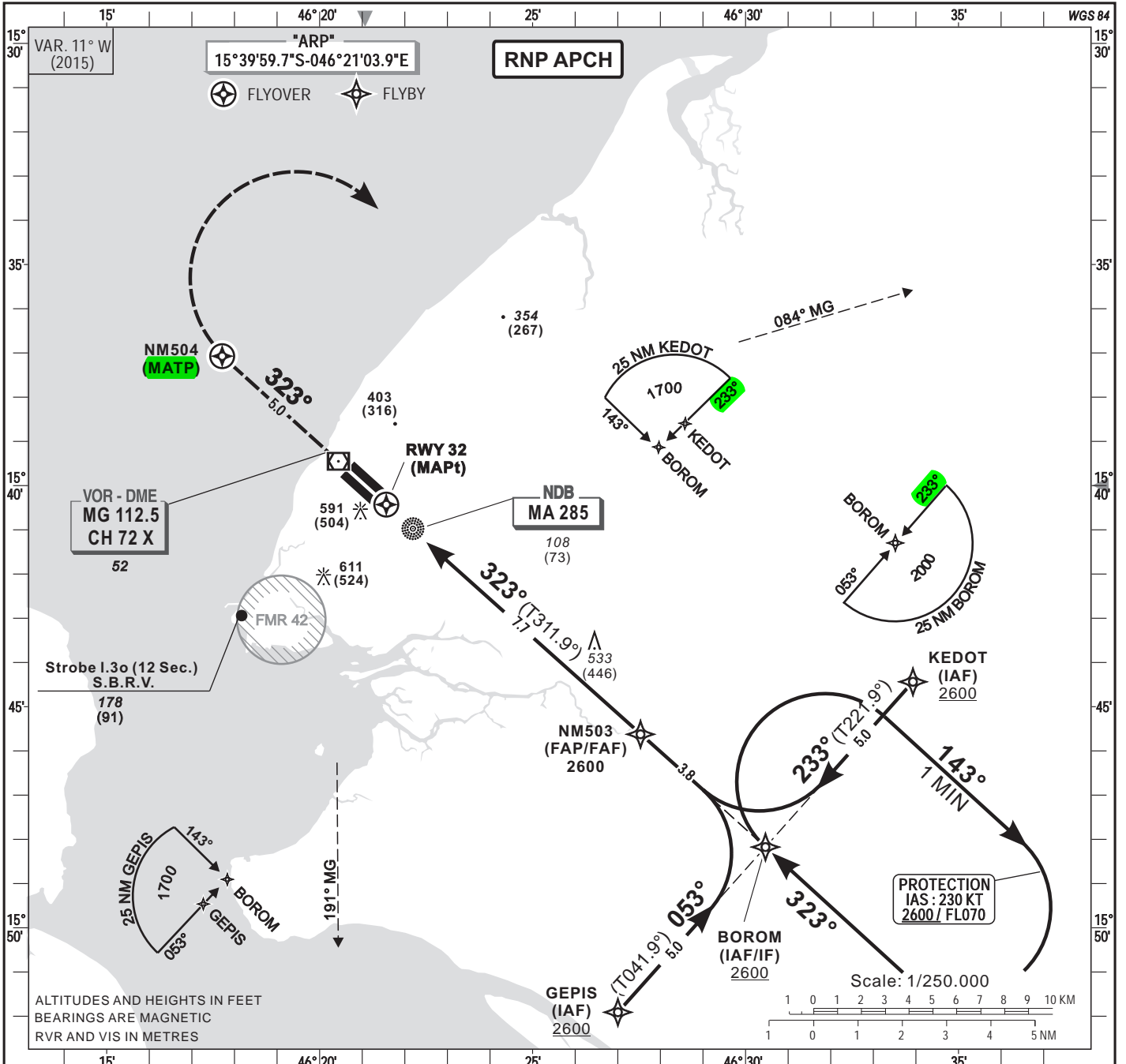
**INSTRUMENT
APPROACH
CHART-ICAO**

AERODROME ELEVATION - 87 FT

**APP 119.1
TWR 119.1**

MAHAJANGA - Ph. TSIRANANA (FMNM)
RNP - RWY 32
(ACFT CAT A, B, C, D)

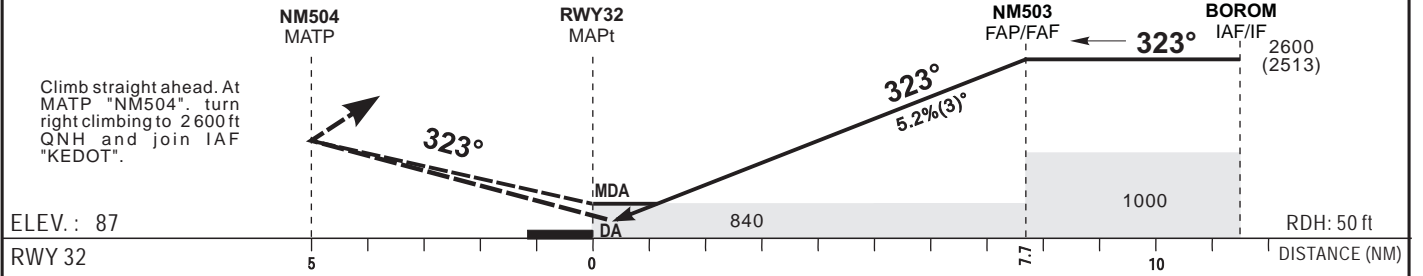
HEIGHTS RELATED TO THR RWY32 ELEVATION - 87 FT



CORRECTIONS : IAF speed limitation (Verso 805 L - 1E) - Magnetic track to join IAF/IF BOROM (TAA).

| | | | | | | |
|-------------------------|------|------|------|------|------|---------|
| Distance to THR 32 (NM) | 3 | 4 | 5 | 6 | 7 | FAP/FAF |
| Altitude (ft) | 1090 | 1410 | 1730 | 2050 | 2370 | 2600 |

TRANSITION ALTITUDE : 2600



| CAT | LNAV/VNAV | | | | LNAV | | | | Circling (3) | | | | RVR for take-off CAT A - B - C : 400 CAT D : 400 |
|-----|-----------|-----------|--------|--------|-----------|-----------|--------|--------|--------------|------------|------|---|--|
| | OCA (OCH) | MDA MDH | RVR(1) | RVR(2) | OCA (OCH) | MDA MDH | RVR(1) | RVR(2) | OCA (OCH) | MDA MDH | VIS | | |
| A | 573 (486) | 580 (490) | 1000 | 1500 | 837 (750) | 840 (750) | 1200 | 1500 | 886 (799) | 890 (800) | 1500 | Timing FAF / THR 7.7 NM KT MIN . SEC KT MIN . SEC 90 5 Min 08 140 3 Min 18 100 4 Min 37 150 3 Min 05 110 4 Min 12 160 2 Min 53 120 3 Min 51 170 2 Min 43 130 3 Min 33 180 2 Min 34 | |
| B | 585 (498) | 600 (500) | 1200 | 1500 | 837 (750) | 840 (750) | 1400 | 1500 | 906 (819) | 910 (820) | 1600 | | |
| C | 605 (518) | 610 (520) | 1200 | 2000 | 837 (750) | 840 (750) | 1400 | 2000 | 1005 (918) | 1010 (920) | 2400 | | |
| D | 631 (544) | 640 (550) | 1600 | 2000 | 837 (750) | 840 (750) | 1800 | 2000 | 1005 (918) | 1010 (920) | 3600 | | |

Notes :- (1) With approach lights - (2) without approach lights - (3) Daytime only, OCH and MDH AAL.
 - Climbing sectors after take-off: Between radials 191° MG and 084° MG
 - Minimum temperature: 15°
PROCEDURE TO BE USED ACCORDING TO AIC NR 09/A/14 FM - 06 NOVEMBER 2014

INSTRUMENT
APPROACH
CHART-ICAO

AERODROME ELEVATION - 87 FT

APP 119.1
TWR 119.1

MAHAJANGA - Ph. TSIRANANA (FMNM)

RNP - RWY 32

HEIGHTS RELATED TO THR RWY32 ELEVATION - 87 FT

(ACFT CAT A, B, C, D)

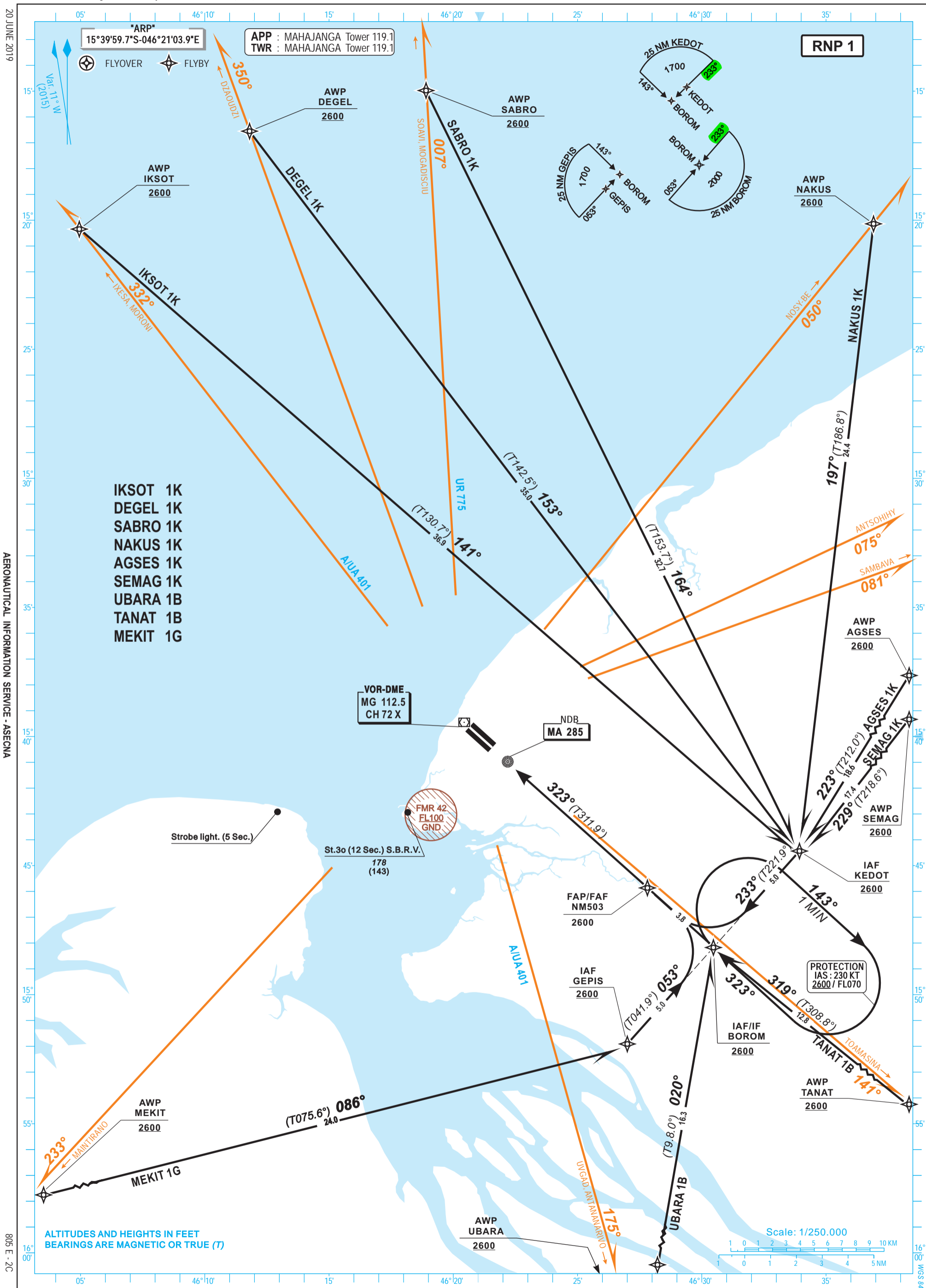
TABULAR DESCRIPTION

RNP RWY 32

| Serial Number | Path Descriptor | Waypoint Identifier | Fly- Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (ft) | Speed limit (Kt) | VPA / TCH | Navigation Specification |
|---------------|-----------------|---------------------|-----------|---------------|--------------------|---------------|----------------|---------------|------------------|-----------|--------------------------|
| 10 | IF | GEPIS | - | | | | | +2600 | 230 | - | RNP APCH |
| 20 | TF | BOROM | - | 053(041.9) | | 5.0 | | +2600 | 230 | - | RNP APCH |
| 10 | IF | KEDOT | - | | | | | +2600 | 230 | - | RNP APCH |
| 20 | TF | BOROM | - | 233(221.9) | | 5.0 | | +2600 | 230 | - | RNP APCH |
| 10 | IF | BOROM | - | | | | | +2600 | 230 | - | RNP APCH |
| 20 | TF | NM503 | - | 323(311.9) | | 3.8 | | @2600 | 230 | - | RNP APCH |
| 30 | TF | RW32 | Y | 323(311.9) | +11.0 | 7.7 | | @137 | - | -3/15 | RNP APCH |
| 40 | DF | NM504 | Y | | | 5.0 | R | | - | - | RNP APCH |
| 50 | TF | KEDOT | - | | | | | +2600 | 230 | - | RNP APCH |

| RNP RWY 32 | | |
|---------------------|-----------------|------------------|
| Waypoint Identifier | Coordinates | |
| GEPIS | 15°51'54.6000"S | 046°27'00.2000"E |
| BOROM | 15°48'10.5000"S | 046°30'28.1000"E |
| KEDOT | 15°44'26.2000"S | 046°33'55.8000"E |
| NM503 | 15°45'37.4000"S | 046°27'32.0000"E |
| RWY32 | 15°40'25.8000"S | 046°21'33.9000"E |
| NM504 | 15°37'04.4000"S | 046°17'42.7000"E |

CORRECTIONS : Magnetic track to join IAF/IF BOROM (TAA).



20 JUNE 2019

AERONAUTICAL INFORMATION SERVICE - ASECNA

805 E - 2C

ATLAS - ASECNA
MADAGASCAR
STANDARD ARRIVAL CHART - INSTRUMENT (STAR)-ICAO

TRANSITION ALTITUDE : 2600

MAHAJANGA / Philibert TIRANANA (FMNM) RWY 32





ATLAS - ASECNA

STANDARD ARRIVAL CHART - INSTRUMENT (STAR)-ICAO
DATABASE SPECIFICATIONS

MAHAJANGA / Philibert TSIRANANA (FMNM) RWY 32

| Procedure Identification | Path Terminator | Waypoint Identifier | Course °M (°T) | Distance (NM) | Altitude (FL or AMSL ft) | MAX IAS (Kt) | Navigation Specification |
|--------------------------|-----------------|---------------------|----------------|---------------|--------------------------|--------------|--------------------------|
| NAKUS 1K | | | | | | | |
| | IF | NAKUS | | | +2600 | | RNP 1 |
| | TF | KEDOT | 197 (186.8) | 24.4 | +2600 | 230 | RNP 1 |
| AGSES 1K | | | | | | | |
| | IF | AGSES | | | +2600 | | RNP 1 |
| | TF | KEDOT | 223 (212.0) | 18.6 | +2600 | 230 | RNP 1 |
| SEMAG 1K | | | | | | | |
| | IF | SEMAG | | | +2600 | | RNP 1 |
| | TF | KEDOT | 229 (218.6) | 17.4 | +2600 | 230 | RNP 1 |
| TANAT 1B | | | | | | | |
| | IF | TANAT | | | +2600 | | RNP 1 |
| | TF | BOROM | 319 (308.8) | 12.8 | +2600 | 230 | RNP 1 |
| UBARA 1B | | | | | | | |
| | IF | UBARA | | | +2600 | | RNP 1 |
| | TF | BOROM | 020 (009.8) | 16.3 | +2600 | 230 | RNP 1 |
| MEKIT 1G | | | | | | | |
| | IF | MEKIT | | | +2600 | | RNP 1 |
| | TF | GEPIS | 086 (075.6) | 24.0 | +2600 | 230 | RNP 1 |
| IKSOT 1K | | | | | | | |
| | IF | IKSOT | | | +2600 | | RNP 1 |
| | TF | KEDOT | 141 (130.7) | 36.9 | +2600 | 230 | RNP 1 |
| DEGEL 1K | | | | | | | |
| | IF | DEGEL | | | +2600 | | RNP 1 |
| | TF | KEDOT | 153 (142.5) | 35.0 | +2600 | 230 | RNP 1 |
| SABRO 1K | | | | | | | |
| | IF | SABRO | | | +2600 | | RNP 1 |
| | TF | KEDOT | 164 (153.7) | 32.7 | +2600 | 230 | RNP 1 |

| WAYPOINT LIST | | |
|---------------------|-----------------|------------------|
| Waypoint Identifier | Coordinates | |
| NAKUS | 15°20'08.4000"S | 046°36'54.7000"E |
| AGSES | 15°28'36.8000"S | 046°44'09.0000"E |
| SEMAG | 15°30'48.1000"S | 046°45'10.1000"E |
| TANAT | 15°56'14.7000"S | 046°40'49.8000"E |
| UBARA | 16°04'17.7000"S | 046°27'34.6000"E |
| MEKIT | 15°57'55.0000"S | 046°02'54.4000"E |
| IKSOT | 15°20'20.7000"S | 046°04'57.0000"E |
| DEGEL | 15°16'33.1000"S | 046°11'48.1000"E |
| SABRO | 15°14'58.6000"S | 046°18'54.3000"E |
| KEDOT | 15°44'26.2000"S | 046°33'55.8000"E |
| BOROM | 15°48'10.5000"S | 046°30'28.1000"E |
| GEPIS | 15°51'54.6000"S | 046°27'00.2000"E |