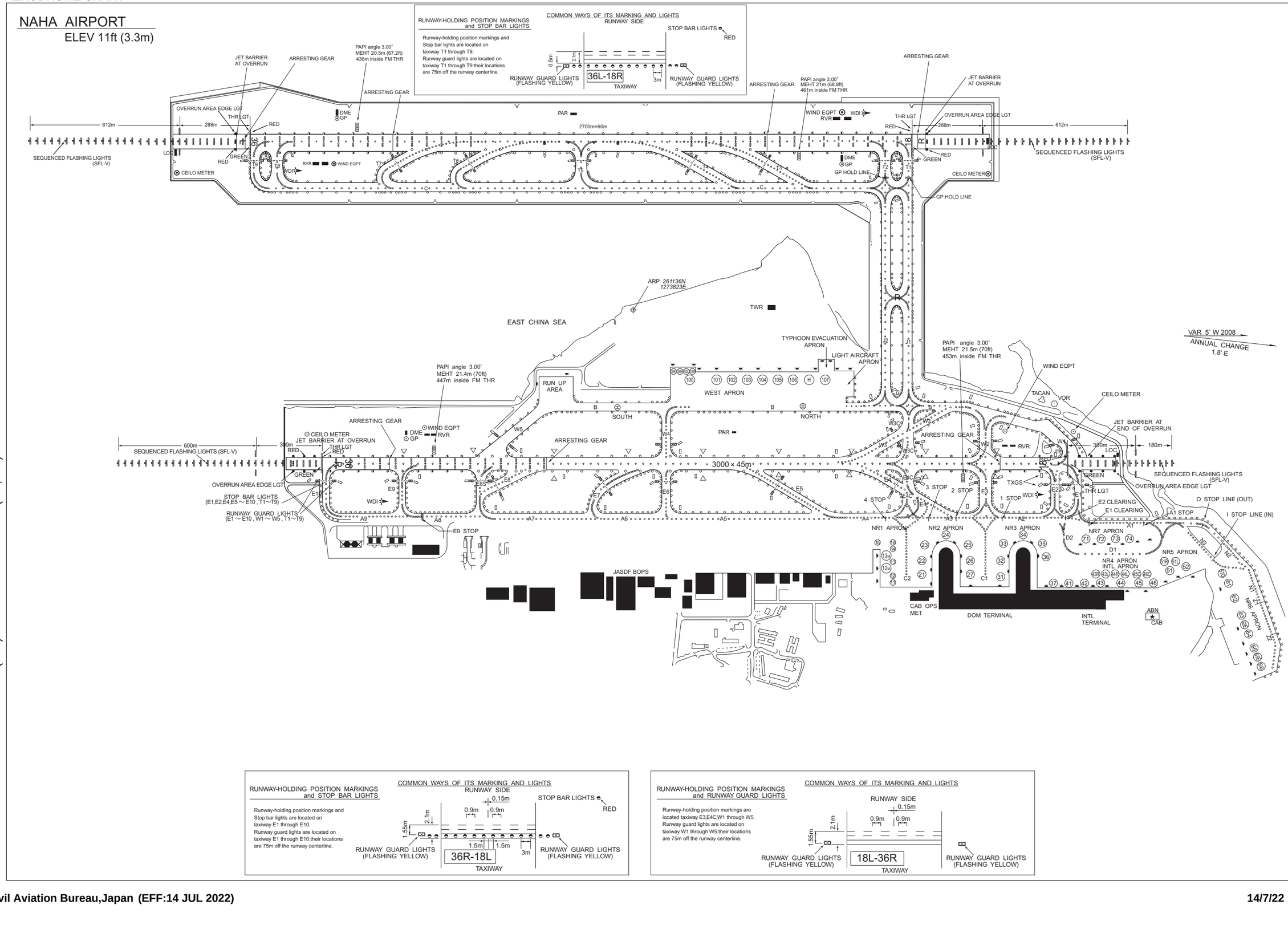
AERODROME CHART

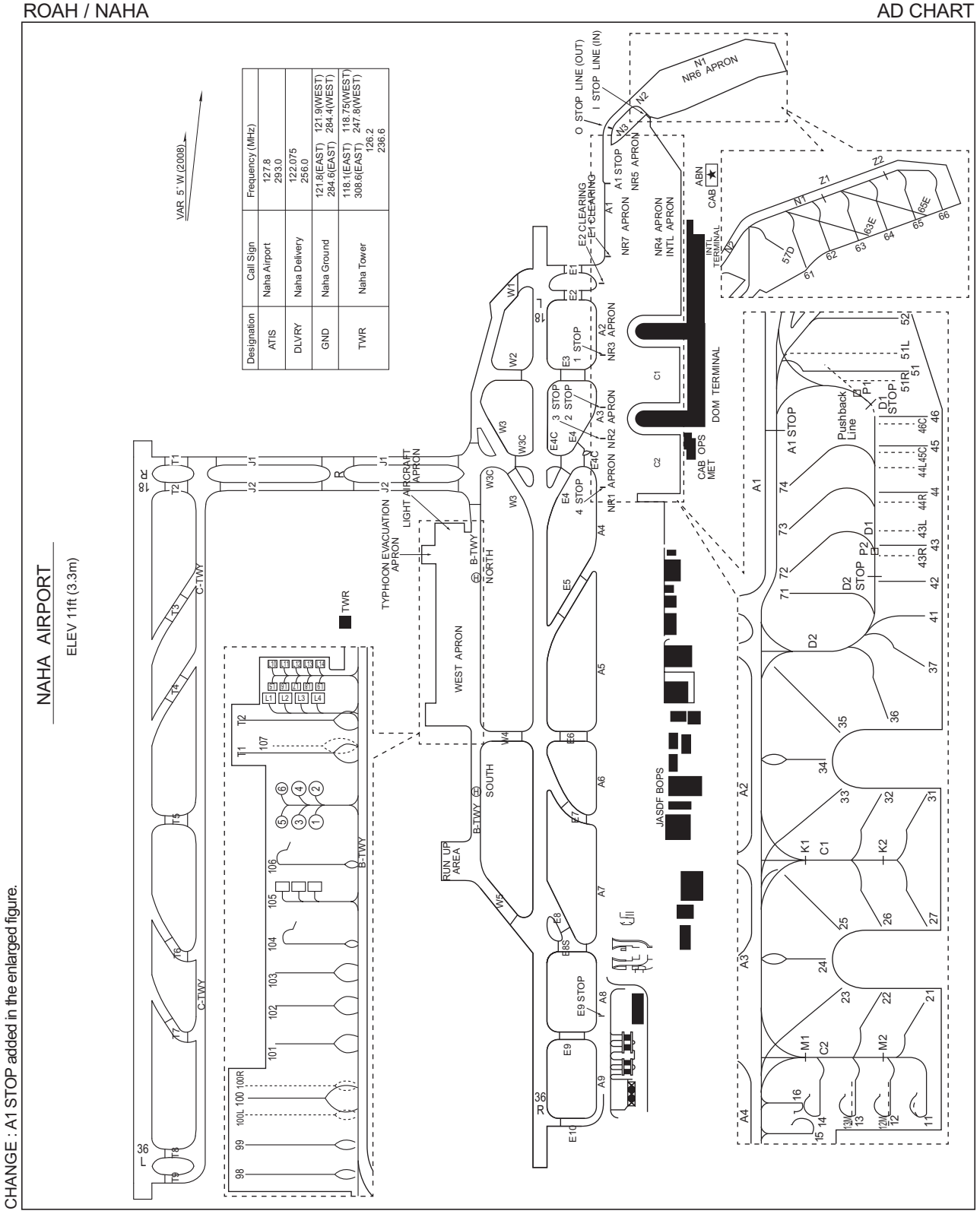
# NAHA AIRPORT

ELEV 11ft (3.3m)

CHANGE : TWY CL LGT installed(W1). TWY CL LGT added(E1, E2).



ROAH / NAHA AD CHART




CHANGE : A1 STOP added in the enlarged figure.

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# AERODROME OBSTACLE CHART-ICAO

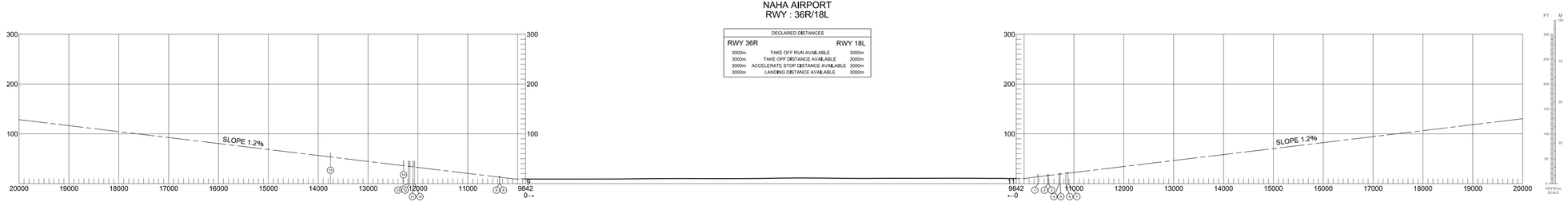
TYPE A (OPERATING LIMITATIONS)

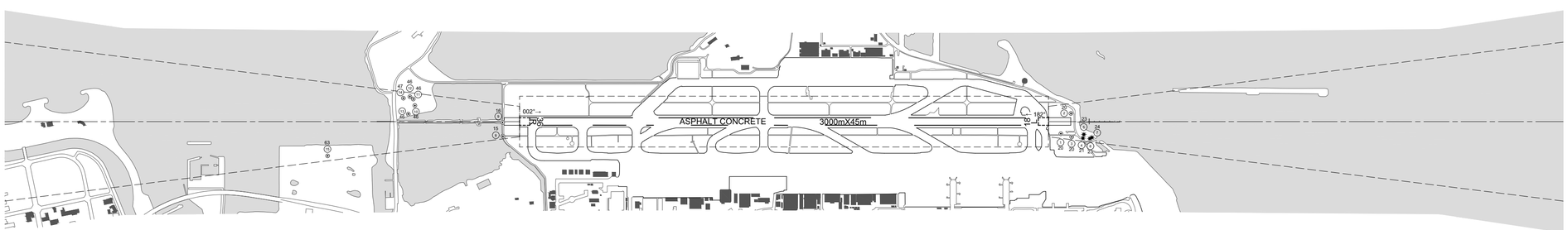
DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 5°25' W-APR 2020

NAHA AIRPORT
RWY : 36R/18L

| DECLARED DISTANCES | | |
|---|---|---|
| RWY 36R | | RWY 18L |
| 3000m | TAKE OFF RUN AVAILABLE | 3000m |
| 3000m | TAKE OFF DISTANCE AVAILABLE | 3000m |
| 3000m | ACCELERATE STOP DISTANCE AVAILABLE | 3000m |
| 3000m | LANDING DISTANCE AVAILABLE | 3000m |




HORIZONTAL SCALE

FEET

METRES

LEGEND

- IDENTIFICATION NUMBER
- POLE, TOWER, SPIRE, ANTENNA, ETC
- AERONAUTICAL GROUND LIGHT
- OBSTRUCTION LIGHT
- BUILDING OR LARGE STRUCTURE
- RAILROAD
- TRIANGULATION POINT
- TRANSMISSION LINE OR OVERHEAD CABLE
- LEVEE
- RIVER
- TREE
- LAKE
- CONTOUR(M)

| AMENDMENT RECORD | | |
|---|---|---|
| Nr | DATE | ENTERED BY |

CHANGE : RWY number

# AERODROME OBSTACLE CHART-ICAO

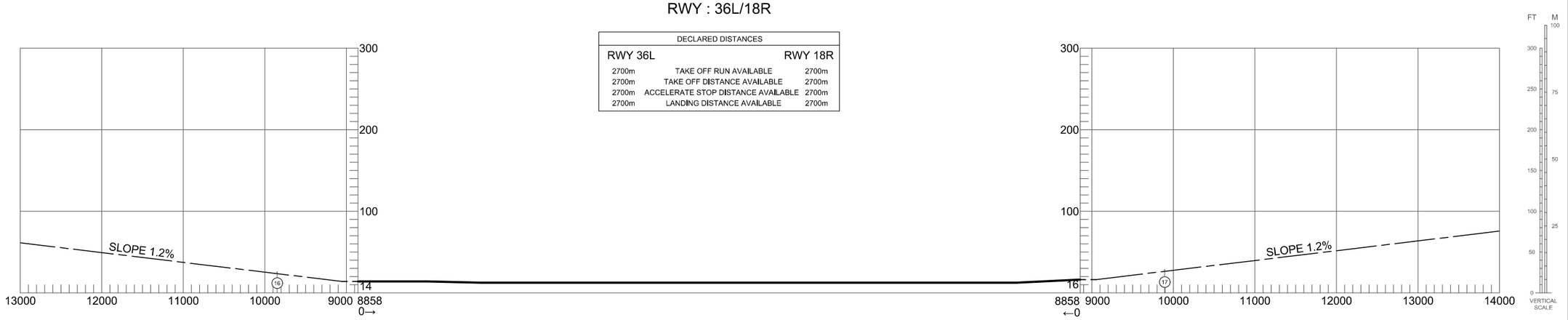
TYPE A (OPERATING LIMITATIONS)

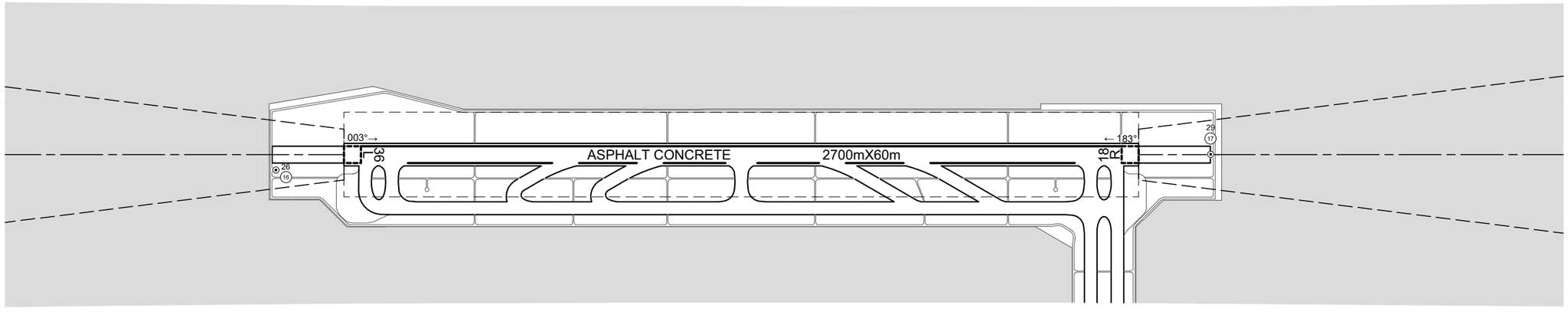
DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 5°25' W-APR 2020

NAHA AIRPORT
RWY : 36L/18R

| DECLARED DISTANCES | | |
|---|---|---|
| RWY 36L | | RWY 18R |
| 2700m | TAKE OFF RUN AVAILABLE | 2700m |
| 2700m | TAKE OFF DISTANCE AVAILABLE | 2700m |
| 2700m | ACCELERATE STOP DISTANCE AVAILABLE | 2700m |
| 2700m | LANDING DISTANCE AVAILABLE | 2700m |




HORIZONTAL SCALE

FEET
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000ft

METRES
300 0 500 1000 1500 2000 2500m

LEGEND

- IDENTIFICATION NUMBER
- POLE, TOWER, SPIRE, ANTENNA, ETC
- AERONAUTICAL GROUND LIGHT
- OBSTRUCTION LIGHT
- BUILDING OR LARGE STRUCTURE
- RAILROAD
- TRIANGULATION POINT
- TRANSMISSION LINE OR OVERHEAD CABLE
- LEVEE
- TREE
- LAKE
- RIVER
- CONTOURS(ft)

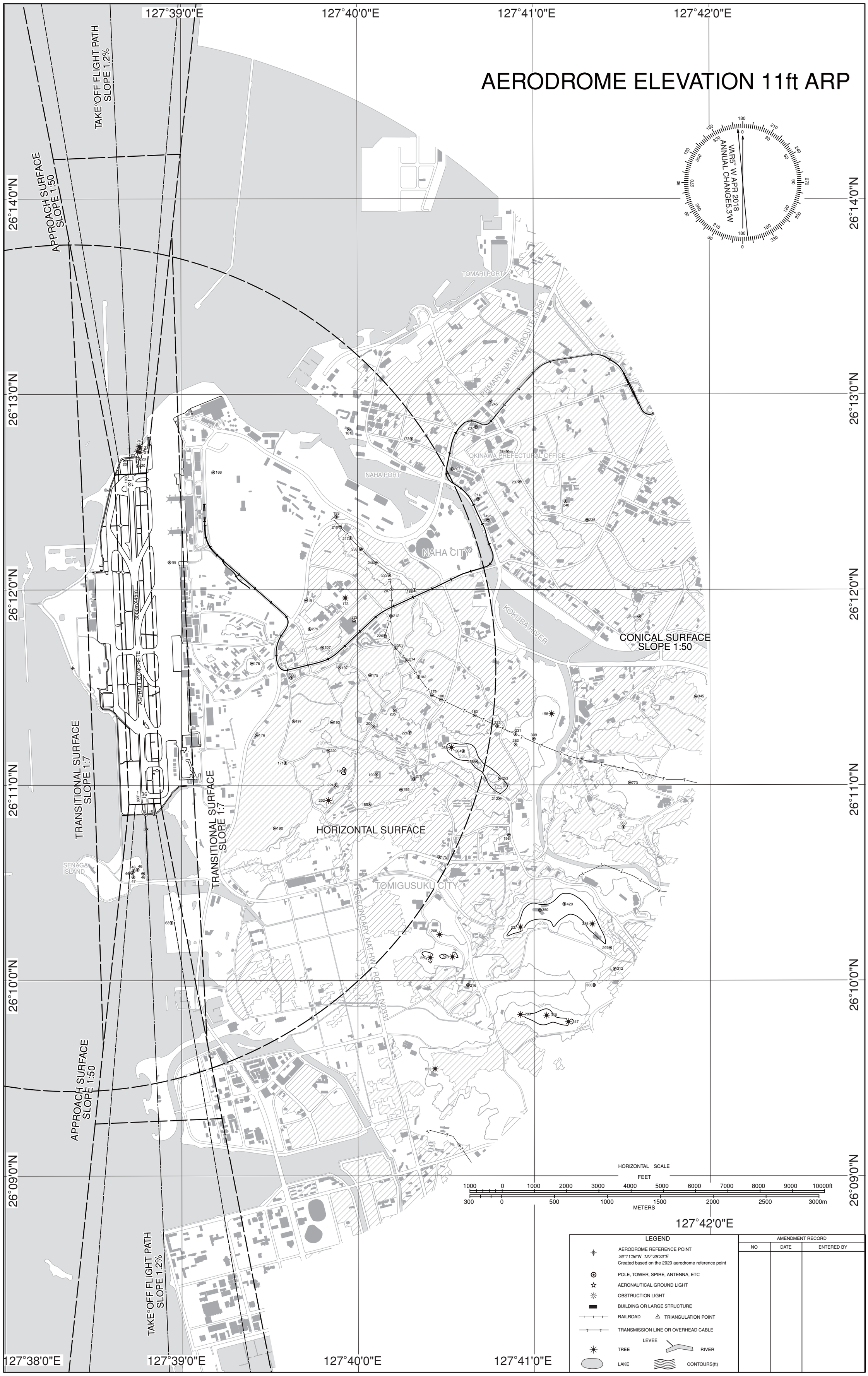
| AMENDMENT RECORD | | |
|---|---|---|
| Nr | DATE | ENTERED BY |
| | | |

CHANGE : Newly established

## AERODROME OBSTACLE CHART - ICAO

TYPE B (OPERATIONG LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



STANDARD DEPARTURE CHART-INSTRUMENT

ROAH/ NAHA SID

NAHA NORTH FOUR DEPARTURE

RWY18L/18R: (Not established)
RWY36R : Climb RWY HDG to NHC 2.4DME,...
RWY36L : Climb RWY HDG to 500FT,...
...turn left, via NHC R341 to EISAR.

Note RWY36R/36L: 5.0% climb gradient required up to 500FT.

SCUBA TRANSITION

From over EISAR, via NHC R341 to 24.1DME, turn right to intercept NHC R344 to SCUBA.
Cross SCUBA at or above 4000FT.

LAVON ONE DEPARTURE

RWY18L : Climb RWY HDG to NHC 4.7DME, turn right, via NHC R196...
RWY18R : Climb RWY HDG to 600FT, turn right, via NHC R211...
... to intercept and proceed via NHC 15.0DME clockwise ARC to LAVON.

RWY36R : Climb RWY HDG to NHC 2.4DME, turn left, via NHC R341...
RWY36L : Climb RWY HDG to 500FT, turn left, via NHC R308...
...to intercept and proceed via NHC 15.0DME counterclockwise ARC to LAVON.

Note RWY36R/36L: 5.0% climb gradient required up to 500FT.

OLVAL ONE DEPARTURE

RWY18L : Climb RWY HDG to NHC 4.7DME, turn right, via NHC R196...
RWY18R : Climb RWY HDG to 600FT, turn right, via NHC R211...
... to intercept and proceed via NHC 15.0DME clockwise ARC to OLVAL.

RWY36R : Climb RWY HDG to NHC 2.4DME, turn left, via NHC R341...
RWY36L : Climb RWY HDG to 500FT, turn left, via NHC R308...
...to intercept and proceed via NHC 15.0DME counterclockwise ARC to OLVAL.

Note RWY36R/36L: 5.0% climb gradient required up to 500FT.

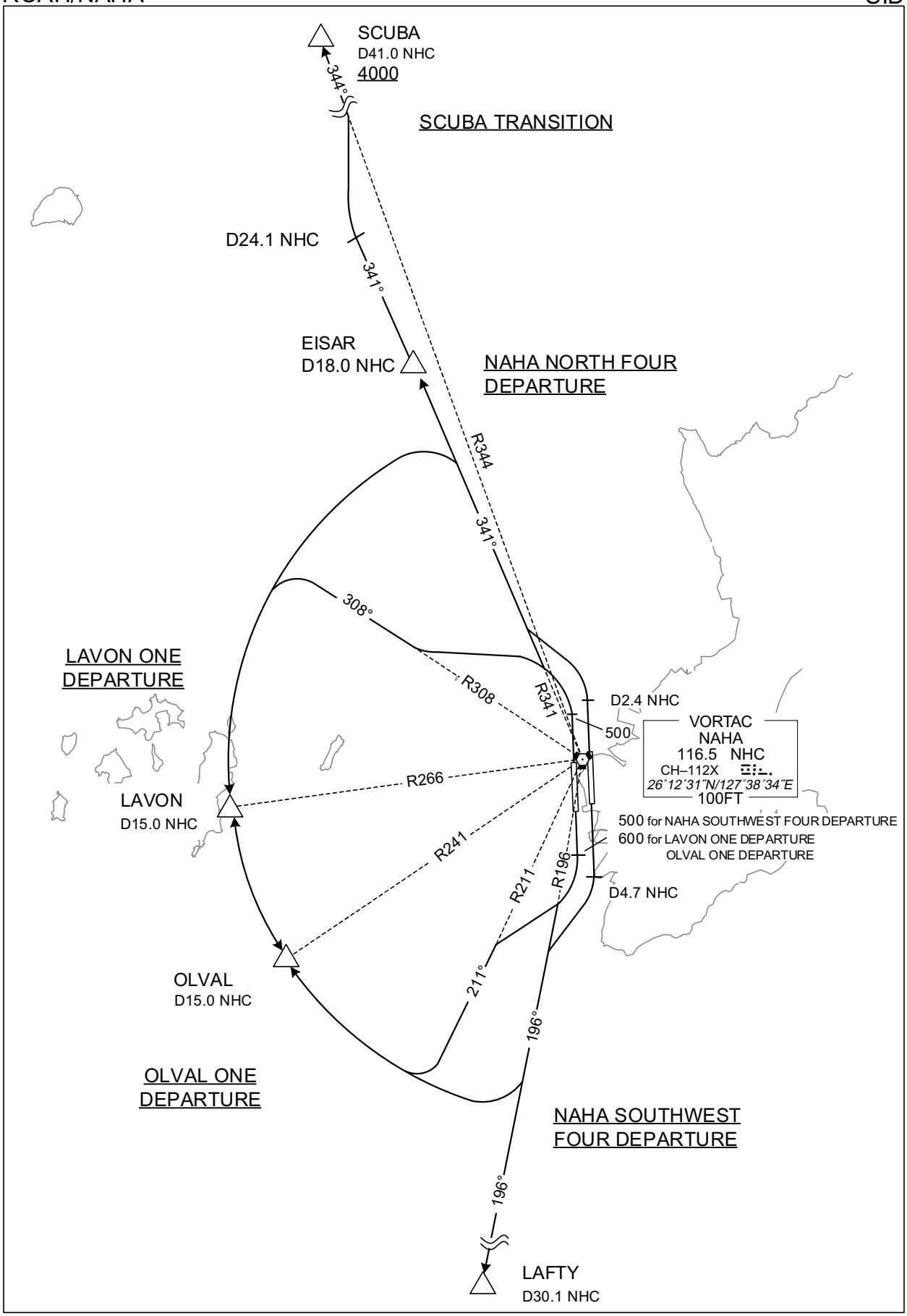
NAHA SOUTHWEST FOUR DEPARTURE

RWY18L : Climb RWY HDG to NHC 4.7DME,...
RWY18R : Climb RWY HDG to 500FT,...
... turn right, via NHC R196 to LAFTY.
RWY36R/36L: (Not established)

CHANGE:New PROC

STANDARD DEPARTURE CHART-INSTRUMENT

ROAH/NAHA SID



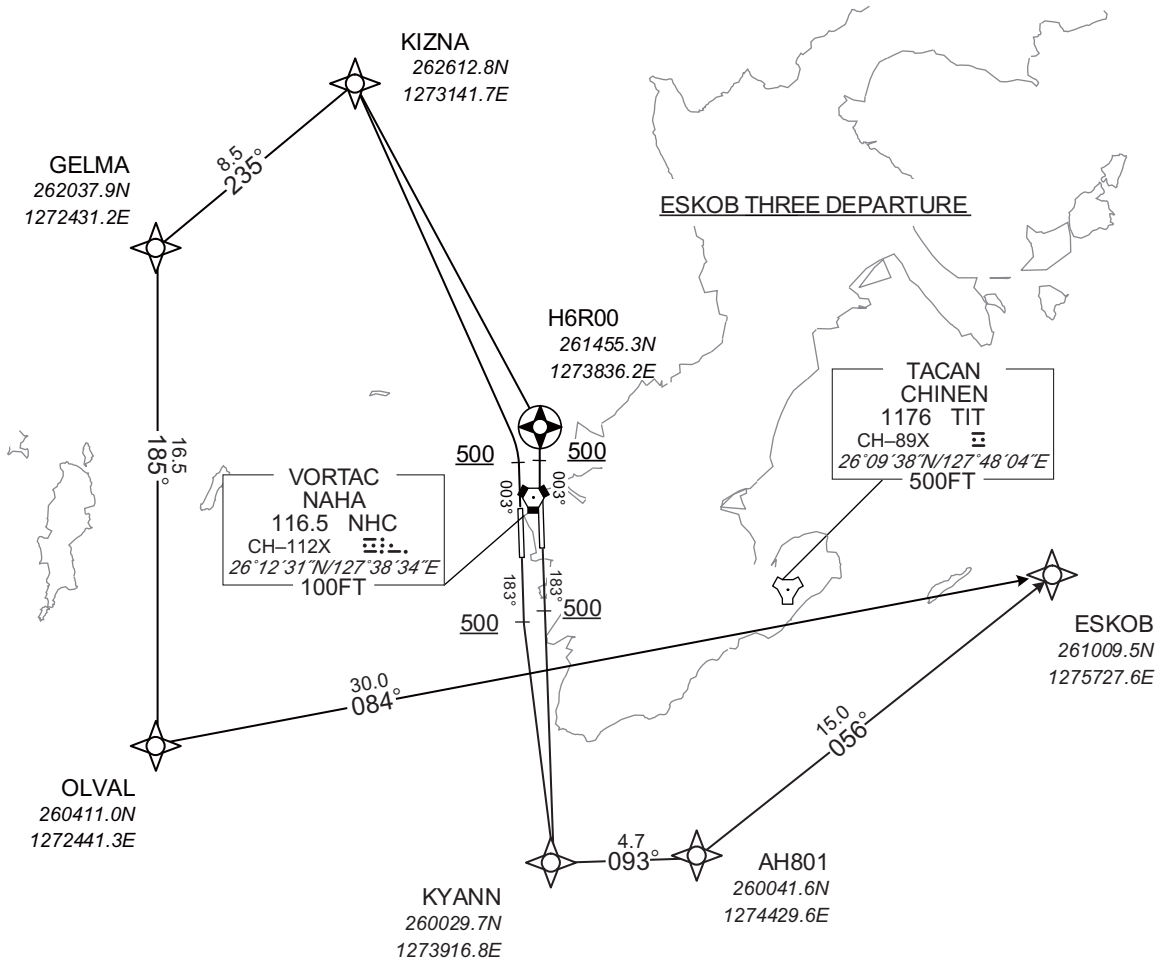
**STANDARD DEPARTURE CHART-INSTRUMENT**

ROAH/NAHA RNAV SID

| ESKOB THREE DEPARTURE | Basic RNP1 |
|---|---|

Note GNSS required.

VAR 6°W (2021)




ESKOB THREE DEPARTURE

RWY18L : Climb on HDG183° at or above 500FT, direct to KYANN, to AH801, to ESKOB.

RWY18R : Climb on HDG183° at or above 500FT, direct to KYANN, to AH801, to ESKOB.

RWY36R : Climb on HDG003° at or above 500FT, direct to H6R00, turn left direct to KIZNA, to GELMA, to OLVAL, to ESKOB.

RWY36L : Climb on HDG003° at or above 500FT, turn left direct to KIZNA, to GELMA, to OLVAL, to ESKOB.

NOTE RWY36R/36L : 5.0% climb gradient required up tp 500FT.

CHANGE : PROC renamed. Navigation specification. Sensor for RNAV.

STANDARD DEPARTURE CHART-INSTRUMENT

ROAH/NAHA RNAV SID

## ESKOB THREE DEPARTURE

### RWY18L

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 183 (177.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | KYANN | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | TF | AH801 | - | 093 (087.6) | -5.6 | 4.7 | - | - | - | - | Basic RNP1 |
| 004 | TF | ESKOB | - | 056 (050.9) | -5.6 | 15.0 | - | - | - | - | Basic RNP1 |

### RWY18R

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 183 (177.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | KYANN | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | TF | AH801 | - | 093 (087.6) | -5.6 | 4.7 | - | - | - | - | Basic RNP1 |
| 004 | TF | ESKOB | - | 056 (050.9) | -5.6 | 15.0 | - | - | - | - | Basic RNP1 |

### RWY36R

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 003 (357.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | H6R00 | Y | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |
| 004 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | - | - | - | - | Basic RNP1 |
| 005 | TF | OLVAL | - | 185 (179.5) | -5.6 | 16.5 | - | - | - | - | Basic RNP1 |
| 006 | TF | ESKOB | - | 084 (078.4) | -5.6 | 30.0 | - | - | - | - | Basic RNP1 |

### RWY36L

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 003 (357.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |
| 003 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | - | - | - | - | Basic RNP1 |
| 004 | TF | OLVAL | - | 185 (179.5) | -5.6 | 16.5 | - | - | - | - | Basic RNP1 |
| 005 | TF | ESKOB | - | 084 (078.4) | -5.6 | 30.0 | - | - | - | - | Basic RNP1 |

CHANGE : PROC renamed. Navigation specification.

**STANDARD DEPARTURE CHART-INSTRUMENT**

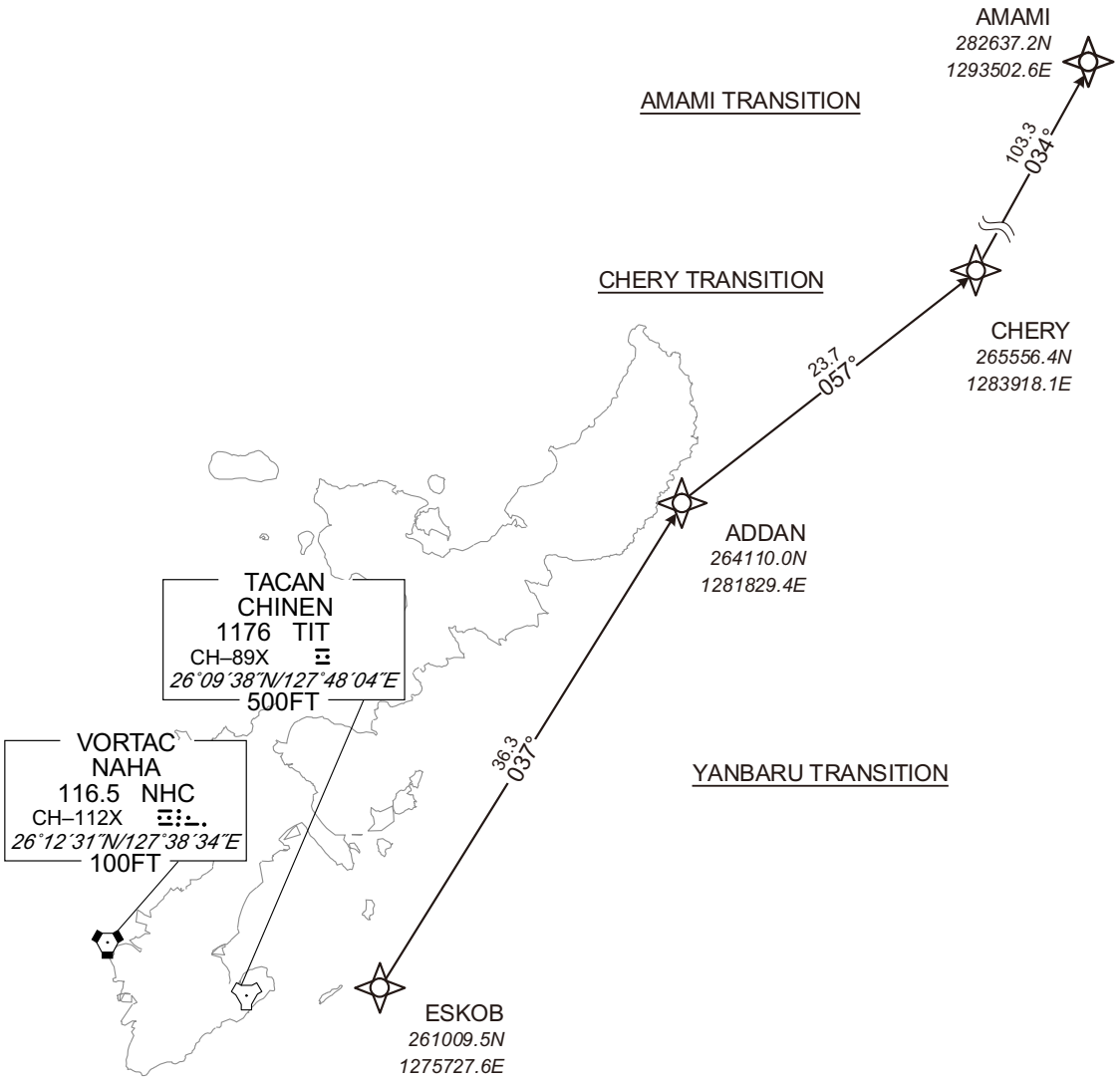
ROAH/NAHA

RNAV TRANSITION

| AMAMI TRANSITION / CHERY TRANSITION / YANBARU TRANSITION | Basic RNP1 |
|---|---|

Note GNSS required.

VAR 6°W (2021)




CHANGE : Navigation specification. Sensor for RNAV.

AMAMI TRANSITION

From ESKOB, to ADDAN, to CHERY, to AMAMI.

CHERY TRANSITION

From ESKOB, to ADDAN, to CHERY.

YANBARU TRANSITION

From ESKOB, to ADDAN.

**STANDARD DEPARTURE CHART-INSTRUMENT**

ROAH/NAHA RNAV TRANSITION

## AMAMI TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | ESKOB | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | ADDAN | - | 037 (031.2) | -5.6 | 36.3 | - | - | - | - | Basic RNP1 |
| 003 | TF | CHERY | - | 057 (051.4) | -5.6 | 23.7 | - | - | - | - | Basic RNP1 |
| 004 | TF | AMAMI | - | 034 (028.3) | -5.6 | 103.3 | - | - | - | - | Basic RNP1 |

## CHERY TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | ESKOB | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | ADDAN | - | 037 (031.2) | -5.6 | 36.3 | - | - | - | - | Basic RNP1 |
| 003 | TF | CHERY | - | 057 (051.4) | -5.6 | 23.7 | - | - | - | - | Basic RNP1 |

## YANBARU TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | ESKOB | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | ADDAN | - | 037 (031.2) | -5.6 | 36.3 | - | - | - | - | Basic RNP1 |

CHANGE : Navigation specification.

**STANDARD DEPARTURE CHART-INSTRUMENT**

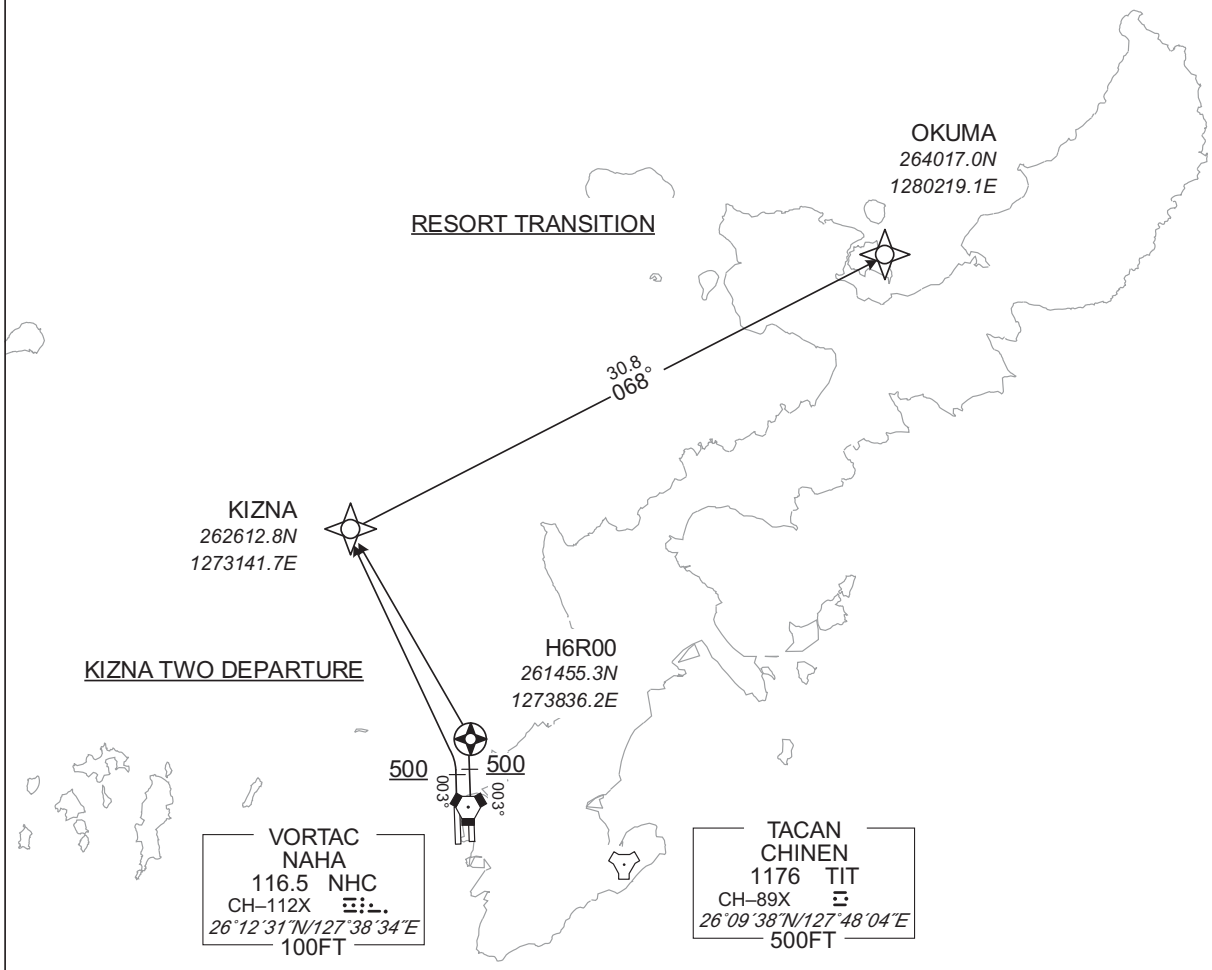
ROAH/NAHA

RNAV SID and TRANSITION

| KIZNA TWO DEPARTURE<br>RESORT TRANSITION | Basic RNP1 |
|---|---|

Note GNSS required.

VAR 6°W (2021)




KIZNA TWO DEPARTURE

RWY18L/18R: (Not established)
RWY36R：Climb on HDG003° at or above 500FT, direct to H6R00, turn left direct to KIZNA .
RWY36L：Climb on HDG003° at or above 500FT, turn left direct to KIZNA .

NOTE RWY36R/36L: 5.0% climb gradient required up to 500FT.

RESORT TRANSITION

From KIZNA, to OKUMA.

CHANGE : PROC renamed (KIZNA TWO DEPARTURE). Navigation specification. Sensor for RNAV.

**STANDARD DEPARTURE CHART-INSTRUMENT**

ROAH/NAHA

RNAV SID and TRANSITION

CHANGE : PROC renamed (KIZNA TWO DEPARTURE). Navigation specification.

## KIZNA TWO DEPARTURE

### RWY36R

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 003 (357.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | H6R00 | Y | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |

### RWY36L

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 003 (357.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |

## RESORT TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | KIZNA | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | OKUMA | - | 068 (062.7) | -5.6 | 30.8 | - | - | - | - | Basic RNP1 |

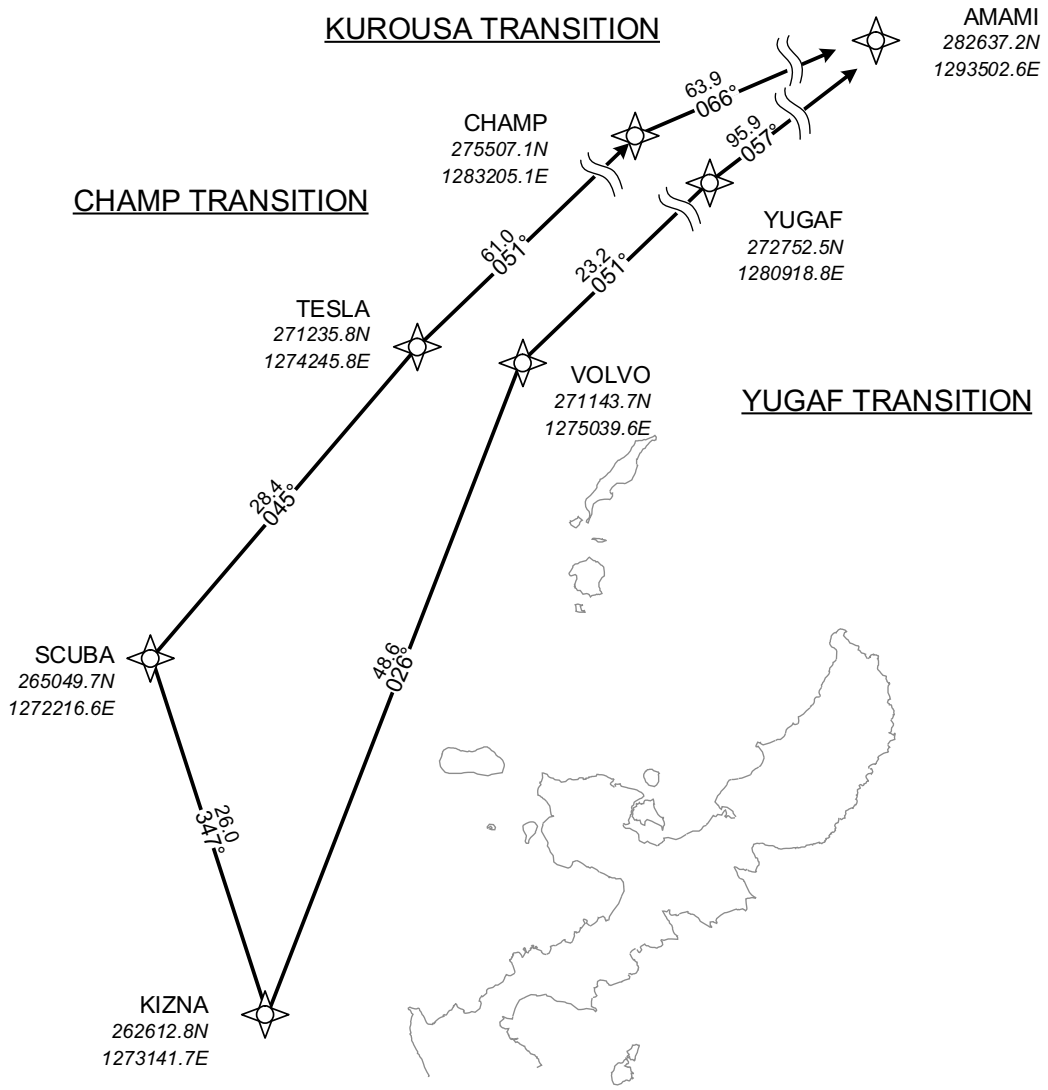
**STANDARD DEPARTURE CHART-INSTRUMENT**

ROAH/NAHA RNAV TRANSITION

| KUROUSA TRANSITION<br>CHAMP TRANSITION<br>YUGAF TRANSITION | Basic RNP1 |
|---|---|

Note GNSS required.

VAR 6°W (2021)




KUROUSA TRANSITION
From KIZNA, to SCUBA, to TESLA, to CHAMP, to AMAMI.

CHAMP TRANSITION
From KIZNA, to SCUBA, to TESLA, to CHAMP.

YUGAF TRANSITION
From KIZNA, to VOLVO, to YUGAF, to AMAMI.

CHANGE : Navigation specification. Sensor for RNAV.

STANDARD DEPARTURE CHART-INSTRUMENT

ROAH/NAHA RNAV TRANSITION

## KUROUSA TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | KIZNA | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | SCUBA | - | 347 (341.2) | -5.6 | 26.0 | - | - | - | - | Basic RNP1 |
| 003 | TF | TESLA | - | 045 (039.9) | -5.6 | 28.4 | - | - | - | - | Basic RNP1 |
| 004 | TF | CHAMP | - | 051 (045.6) | -5.6 | 61.0 | - | - | - | - | Basic RNP1 |
| 005 | TF | AMAMI | - | 066 (060.2) | -5.6 | 63.9 | - | - | - | - | Basic RNP1 |

## CHAMP TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | KIZNA | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | SCUBA | - | 347 (341.2) | -5.6 | 26.0 | - | - | - | - | Basic RNP1 |
| 003 | TF | TESLA | - | 045 (039.9) | -5.6 | 28.4 | - | - | - | - | Basic RNP1 |
| 004 | TF | CHAMP | - | 051 (045.6) | -5.6 | 61.0 | - | - | - | - | Basic RNP1 |

## YUGAF TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | KIZNA | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | VOLVO | - | 026 (020.3) | -5.6 | 48.6 | - | - | - | - | Basic RNP1 |
| 003 | TF | YUGAF | - | 051 (045.7) | -5.6 | 23.2 | - | - | - | - | Basic RNP1 |
| 004 | TF | AMAMI | - | 057 (051.9) | -5.6 | 95.9 | - | - | - | - | Basic RNP1 |

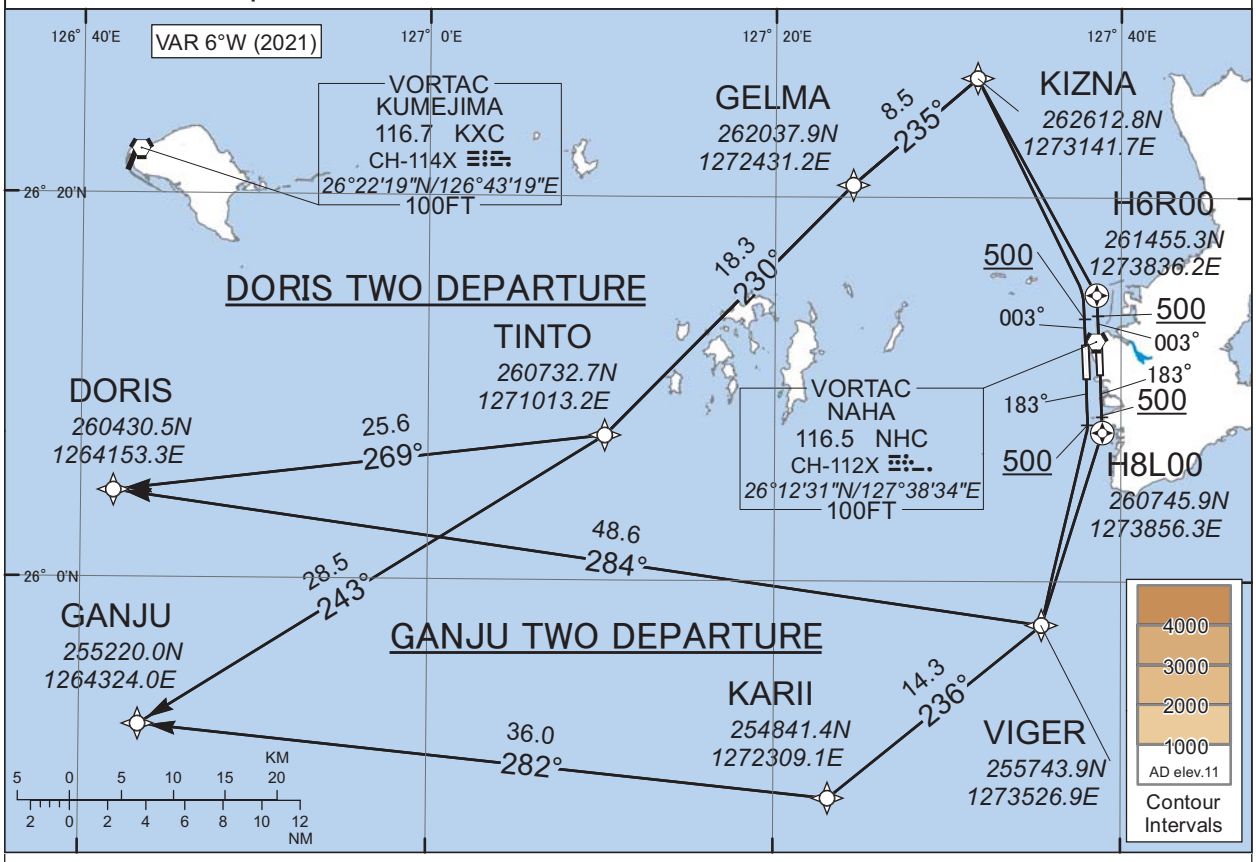
CHANGE : Navigation specification.

**STANDARD DEPARTURE CHART-INSTRUMENT**

ROAH / NAHA — RNAV SID

| DORIS TWO DEPARTURE / GANJU TWO DEPARTURE | Basic RNP1 |
|---|---|

Note GNSS required.




## DORIS TWO DEPARTURE

RWY18L : Climb on HDG183° at or above 500FT, direct to H8L00, turn right direct to VIGER, to DORIS.
RWY18R : Climb on HDG183° at or above 500FT, turn right direct to VIGER, to DORIS.
RWY36R : Climb on HDG003° at or above 500FT, direct to H6R00, turn left direct to KIZNA, to GELMA, to TINTO, to DORIS.
RWY36L : Climb on HDG003° at or above 500FT, turn left direct to KIZNA, to GELMA, to TINTO, to DORIS.

Note RWY36R/36L : 5.0% climb gradient required up to 500FT.

## GANJU TWO DEPARTURE

RWY18L : Climb on HDG183° at or above 500FT, direct to H8L00, turn right direct to VIGER, to KARII, to GANJU.
RWY18R : Climb on HDG183° at or above 500FT, turn right direct to VIGER, to KARII, to GANJU.
RWY36R : Climb on HDG003° at or above 500FT, direct to H6R00, turn left direct to KIZNA, to GELMA, to TINTO, to GANJU.
RWY36L : Climb on HDG003° at or above 500FT, turn left direct to KIZNA, to GELMA, to TINTO, to GANJU.

Note RWY36R/36L : 5.0% climb gradient required up to 500FT.

CHANGE : PROC renamed(DORIS TWO DEPARTURE, GANJU TWO DEPARTURE). Navigation specification. Sensor for RNAV.

STANDARD DEPARTURE CHART-INSTRUMENT

ROAH / NAHA RNAV SID

## DORIS TWO DEPARTURE

### RWY18L

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 183 (177.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | H8L00 | Y | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | DF | VIGER | - | - | -5.6 | - | R | - | - | - | Basic RNP1 |
| 004 | TF | DORIS | - | 284 (278.2) | -5.6 | 48.6 | - | - | - | - | Basic RNP1 |

### RWY18R

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 183 (177.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | VIGER | - | - | -5.6 | - | R | - | - | - | Basic RNP1 |
| 003 | TF | DORIS | - | 284 (278.2) | -5.6 | 48.6 | - | - | - | - | Basic RNP1 |

### RWY36R

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 003 (357.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | H6R00 | Y | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |
| 004 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | - | - | - | - | Basic RNP1 |
| 005 | TF | TINTO | - | 230 (224.5) | -5.6 | 18.3 | - | - | - | - | Basic RNP1 |
| 006 | TF | DORIS | - | 269 (263.3) | -5.6 | 25.6 | - | - | - | - | Basic RNP1 |

### RWY36L

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 003 (357.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |
| 003 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | - | - | - | - | Basic RNP1 |
| 004 | TF | TINTO | - | 230 (224.5) | -5.6 | 18.3 | - | - | - | - | Basic RNP1 |
| 005 | TF | DORIS | - | 269 (263.3) | -5.6 | 25.6 | - | - | - | - | Basic RNP1 |

CHANGE : PROC renamed. Navigation specification.

**STANDARD DEPARTURE CHART-INSTRUMENT**

ROAH / NAHA RNAV SID

## GANJU TWO DEPARTURE

### RWY18L

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 183 (177.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | H8L00 | Y | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | DF | VIGER | - | - | -5.6 | - | R | - | - | - | Basic RNP1 |
| 004 | TF | KARII | - | 236 (230.8) | -5.6 | 14.3 | - | - | - | - | Basic RNP1 |
| 005 | TF | GANJU | - | 282 (276.0) | -5.6 | 36.0 | - | - | - | - | Basic RNP1 |

### RWY18R

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 183 (177.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | VIGER | - | - | -5.6 | - | R | - | - | - | Basic RNP1 |
| 003 | TF | KARII | - | 236 (230.8) | -5.6 | 14.3 | - | - | - | - | Basic RNP1 |
| 004 | TF | GANJU | - | 282 (276.0) | -5.6 | 36.0 | - | - | - | - | Basic RNP1 |

### RWY36R

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 003 (357.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | H6R00 | Y | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |
| 004 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | - | - | - | - | Basic RNP1 |
| 005 | TF | TINTO | - | 230 (224.5) | -5.6 | 18.3 | - | - | - | - | Basic RNP1 |
| 006 | TF | GANJU | - | 243 (237.8) | -5.6 | 28.5 | - | - | - | - | Basic RNP1 |

### RWY36L

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 003 (357.6) | -5.6 | - | - | +500 | - | - | Basic RNP1 |
| 002 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |
| 003 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | - | - | - | - | Basic RNP1 |
| 004 | TF | TINTO | - | 230 (224.5) | -5.6 | 18.3 | - | - | - | - | Basic RNP1 |
| 005 | TF | GANJU | - | 243 (237.8) | -5.6 | 28.5 | - | - | - | - | Basic RNP1 |

CHANGE : PROC renamed. Navigation specification.

**STANDARD ARRIVAL CHART-INSTRUMENT**

ROAH/NAHA STAR

SCUBA ARRIVAL

From over SCUBA, via NHC R344 to 28.1 DME, turn right to intercept and proceed via NHC R341 to EISAR.
Cross NHC R344/28.1DME at or above 3000FT, cross EISAR at or above 2000FT.

LAVON ARRIVAL

From over LAVON, via NHC 15.0DME counterclockwise ARC to VIGER.
Cross VIGER at or above 2000FT.

(When using NHC TACAN only)
From over LAVON at or above 5000FT, via NHC 15.0DME counterclockwise ARC to VIGER.
Cross VIGER at or above 4400FT.

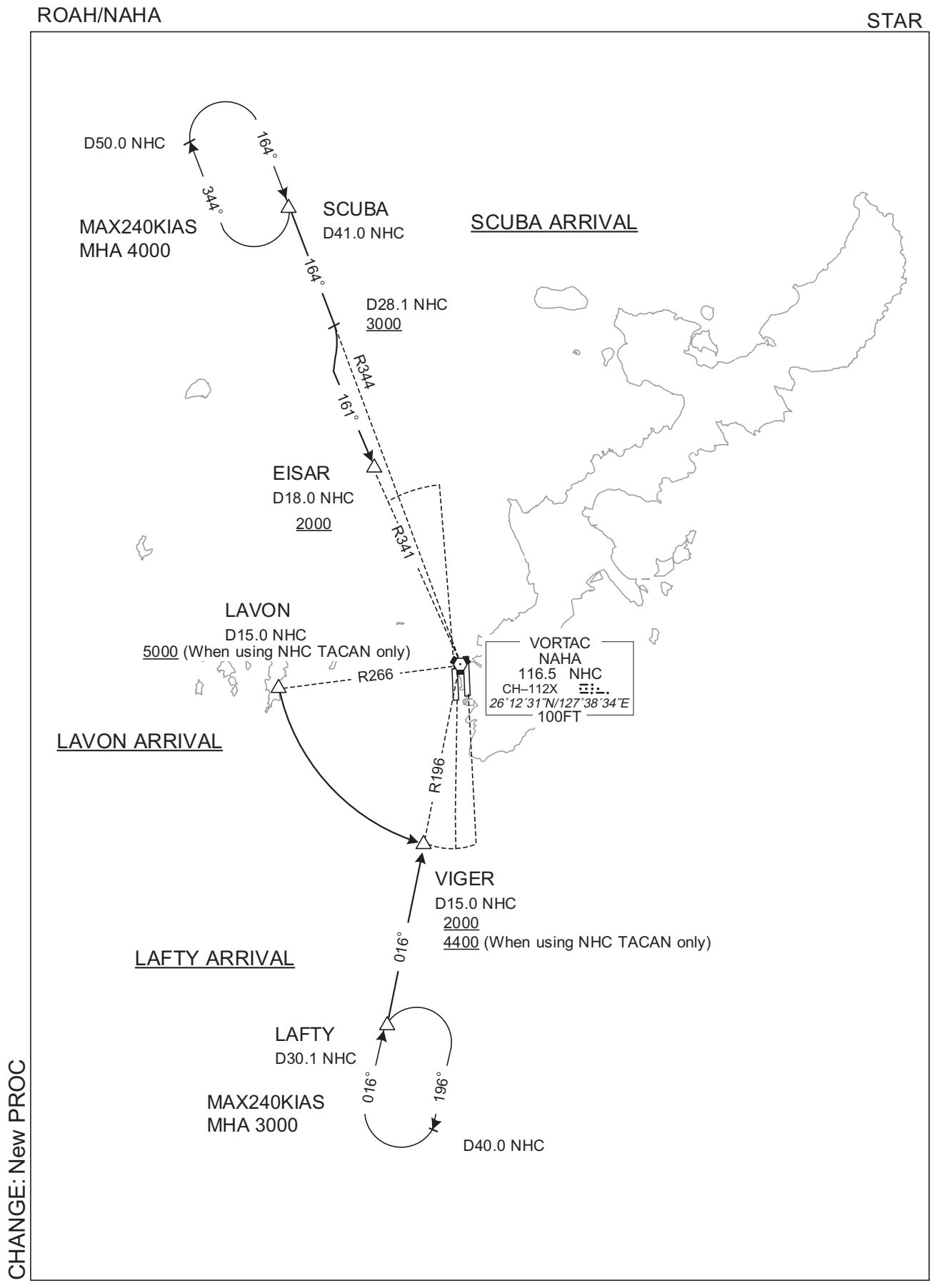
LAFTY ARRIVAL

From over LAFTY, via NHC R196 to VIGER.
Cross VIGER at or above 2000FT.

(When using NHC TACAN only)
From over LAFTY, via NHC R196 to VIGER.
Cross VIGER at or above 4400FT.

CHANGE: New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**



**STANDARD ARRIVAL CHART-INSTRUMENT**

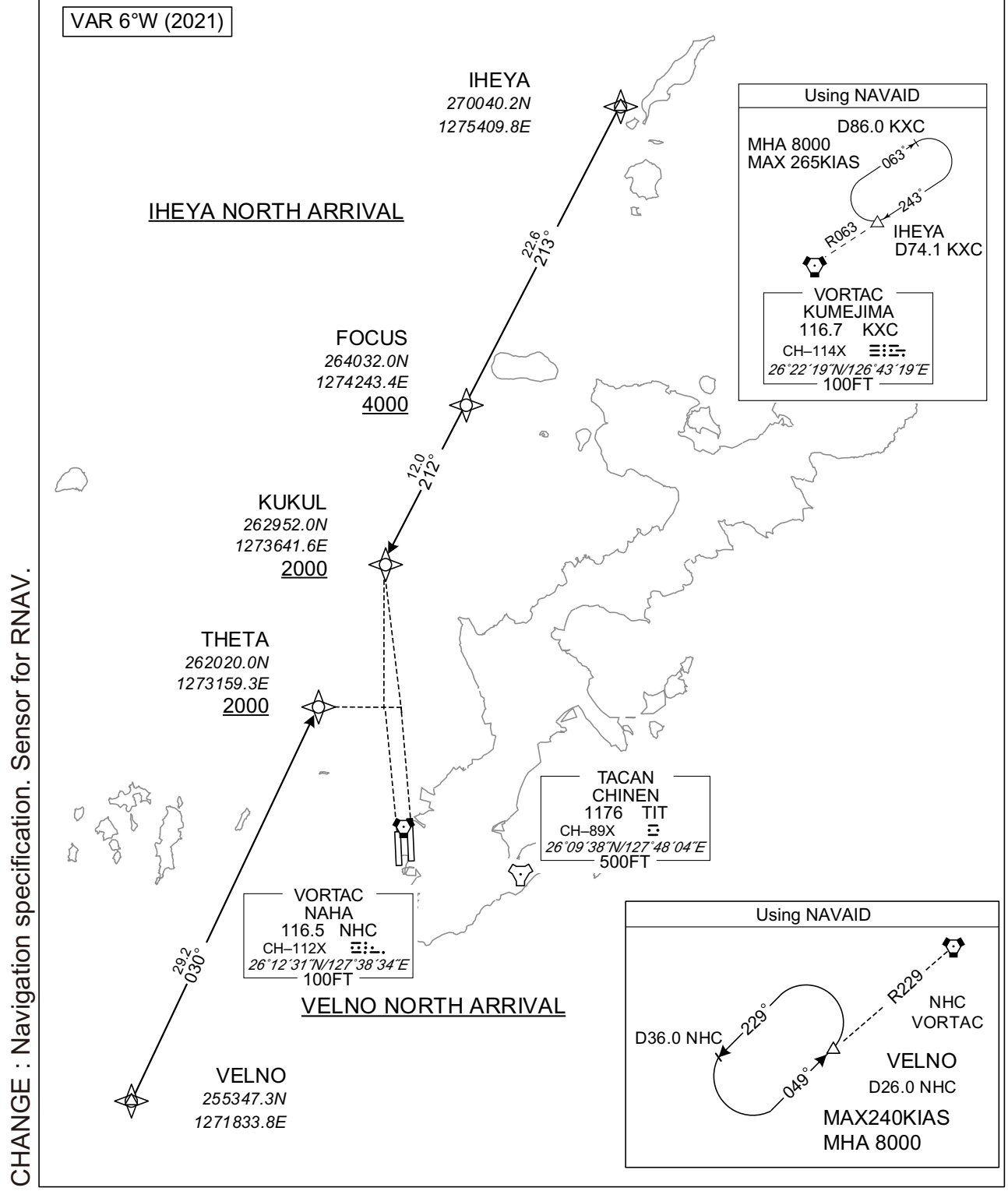
ROAH/NAHA

RNAV STAR RWY18

IHEYA NORTH ARRIVAL
VELNO NORTH ARRIVAL

Basic RNP1

Note GNSS required.




CHANGE : Navigation specification. Sensor for RNAV.

**STANDARD ARRIVAL CHART-INSTRUMENT**

ROAH / NAHA RNAV STAR RWY18

IHEYA NORTH ARRIVAL

From IHEYA, to FOCUS at or above 4000FT, to KUKUL at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | IHEYA | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | FOCUS | - | 213 (206.9) | -5.6 | 22.6 | - | +4000 | - | - | Basic RNP1 |
| 003 | TF | KUKUL | - | 212 (206.8) | -5.6 | 12.0 | - | +2000 | - | - | Basic RNP1 |

VELNO NORTH ARRIVAL

From VELNO, to THETA at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | VELNO | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | THETA | - | 030 (024.4) | -5.6 | 29.2 | - | +2000 | - | - | Basic RNP1 |

CHANGE : Navigation specification. Sensor for RNAV.

**STANDARD ARRIVAL CHART-INSTRUMENT**

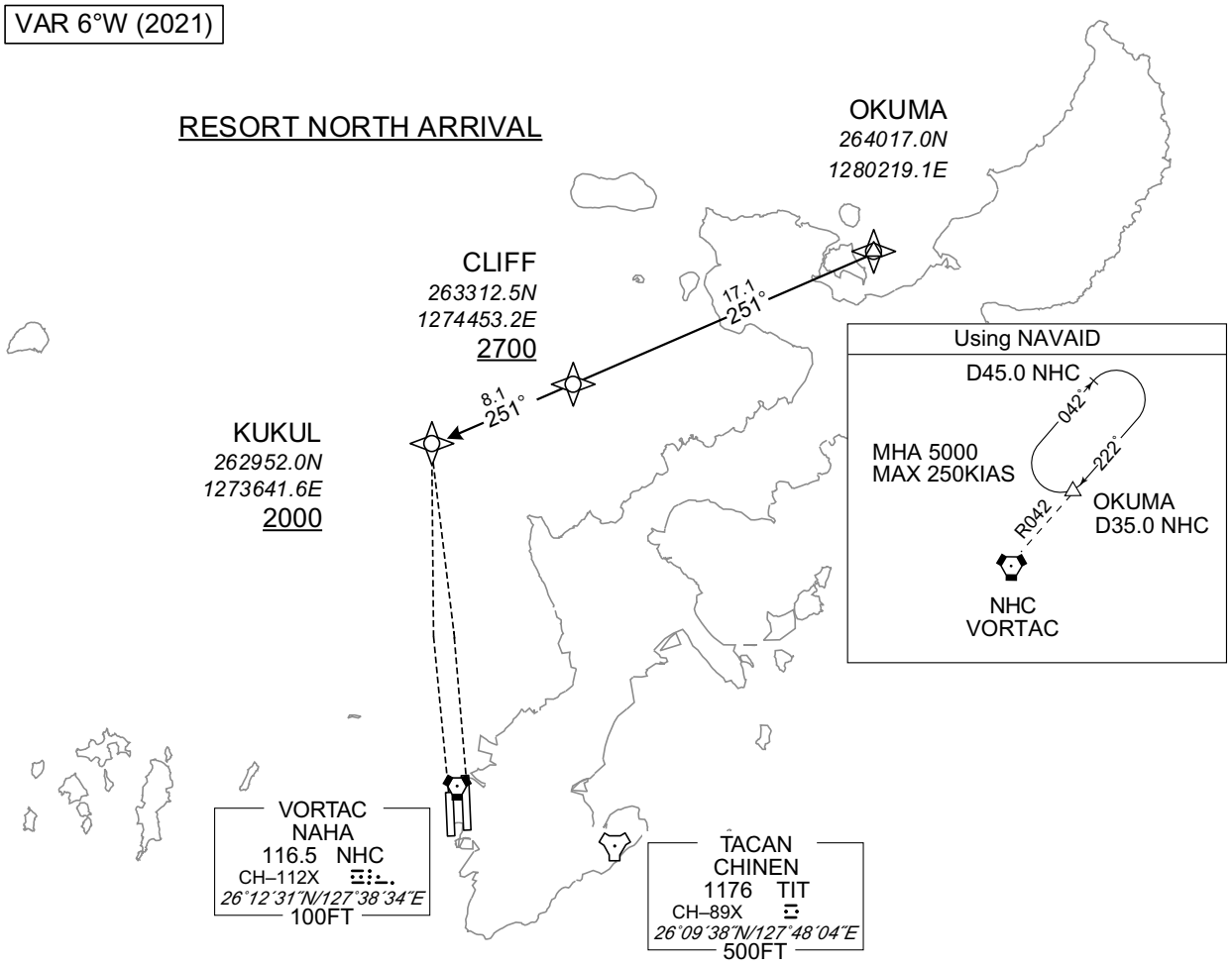
ROAH/NAHA

RNAV STAR RWY18

| RESORT NORTH ARRIVAL | Basic RNP1 |
|---|---|

Note 1) GNSS required.
2) CDO only.

VAR 6°W (2021)




RESORT NORTH ARRIVAL

From OKUMA, to CLIFF at or above 2700FT, to KUKUL at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | OKUMA | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | CLIFF | - | 251 (245.7) | -5.6 | 17.1 | - | +2700 | - | - | Basic RNP1 |
| 003 | TF | KUKUL | - | 251 (245.5) | -5.6 | 8.1 | - | +2000 | - | - | Basic RNP1 |

CHANGE : Navigation specification. Sensor for RNAV.

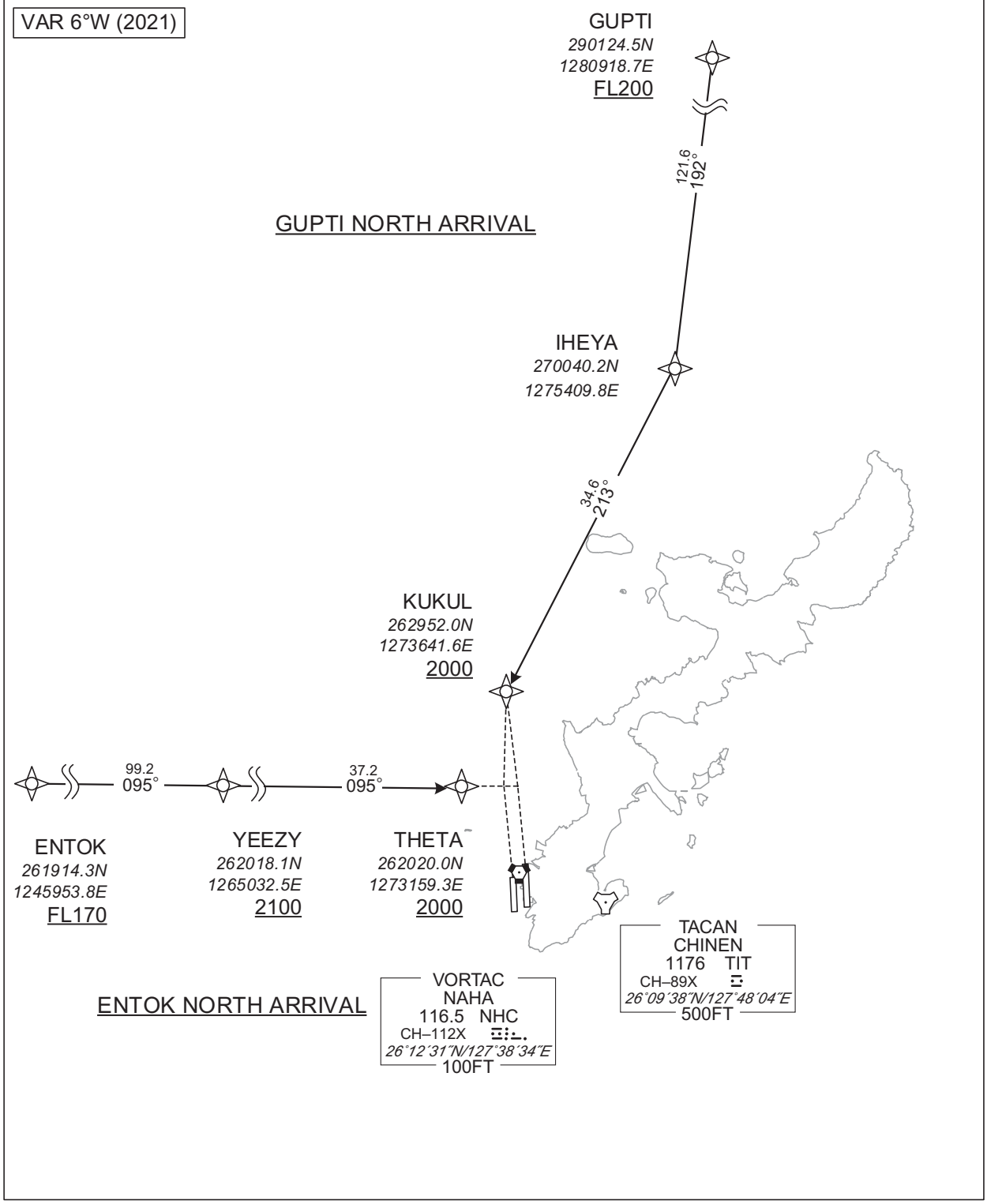
**STANDARD ARRIVAL CHART-INSTRUMENT**

ROAH/NAHA — RNAV STAR RWY18

GUPTI NORTH ARRIVAL
ENTOK NORTH ARRIVAL

Basic RNP1

Note 1) GNSS required. 2) CDO only.




CHANGE: VAR. PROC course.

**STANDARD ARRIVAL CHART-INSTRUMENT**

# ROAH / NAHA RNAV STAR RWY18

## GUPTI NORTH ARRIVAL

From GUPTI at or above FL200, to IHEYA, to KUKUL at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | GUPTI | - | - | -5.6 | - | - | +FL200 | - | - | Basic RNP1 |
| 002 | TF | IHEYA | - | 192 (186.4) | -5.6 | 121.6 | - | - | - | - | Basic RNP1 |
| 003 | TF | KUKUL | - | 213 (206.9) | -5.6 | 34.6 | - | +2000 | - | - | Basic RNP1 |

## ENTOK NORTH ARRIVAL

From ENTOK at or above FL170, to YEEZY at or above 2100FT, to THETA at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | ENTOK | - | - | -5.6 | - | - | +FL170 | - | - | Basic RNP1 |
| 002 | TF | YEEZY | - | 095 (089.0) | -5.6 | 99.2 | - | +2100 | - | - | Basic RNP1 |
| 003 | TF | THETA | - | 095 (089.8) | -5.6 | 37.2 | - | +2000 | - | - | Basic RNP1 |

CHANGE: VAR. PROC course.

STANDARD ARRIVAL CHART-INSTRUMENT

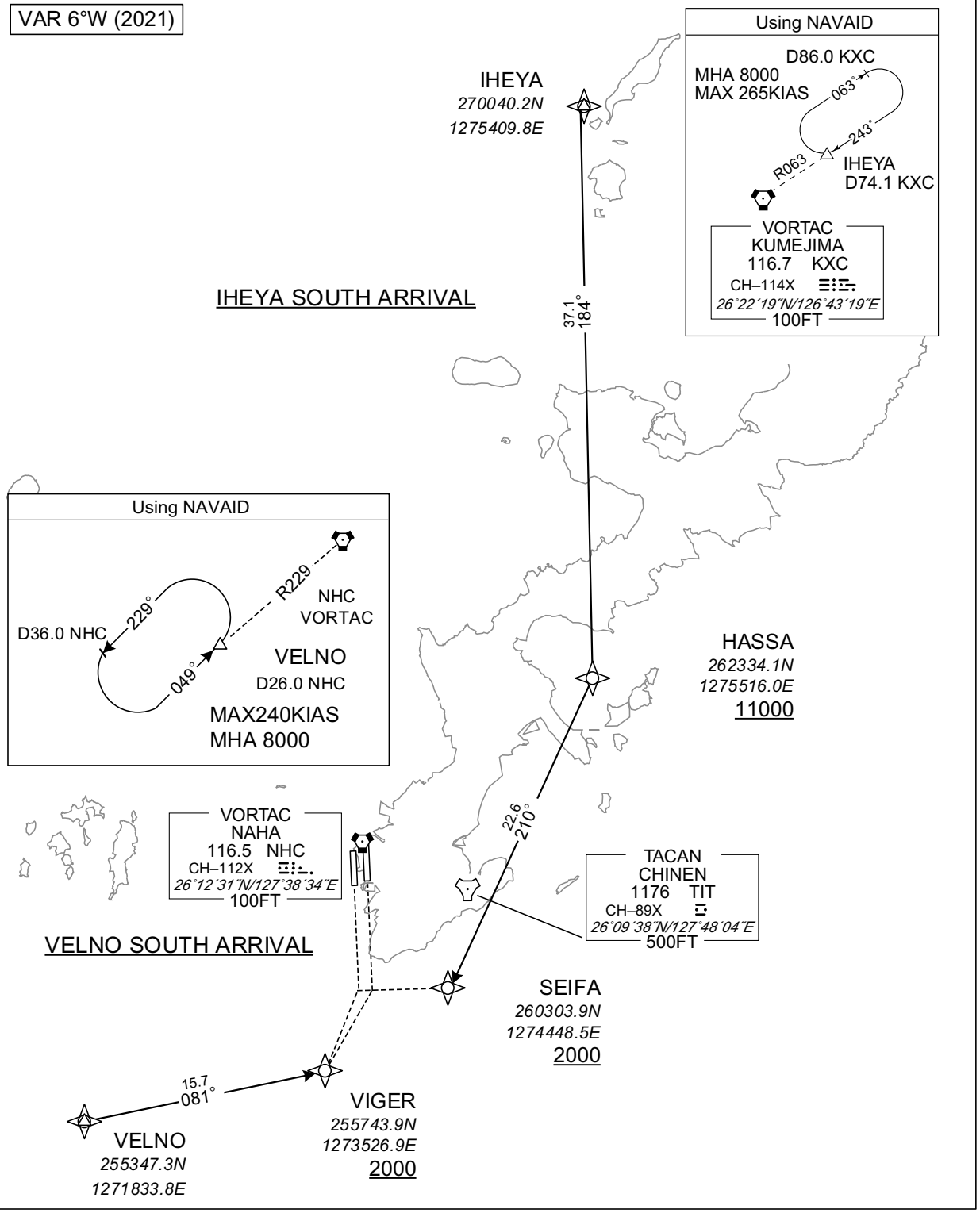
ROAH/NAHA

RNAV STAR RWY36

IHEYA SOUTH ARRIVAL
VELNO SOUTH ARRIVAL

Basic RNP1

Note GNSS required.




CHANGE : Navigation specification. Sensor for RNAV.

**STANDARD ARRIVAL CHART-INSTRUMENT**

ROAH / NAHA RNAV STAR RWY36

IHEYA SOUTH ARRIVAL

From IHEYA, to HASSA at or above 11000FT , to SEIFA at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | IHEYA | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | HASSA | - | 184 (178.5) | -5.6 | 37.1 | - | +11000 | - | - | Basic RNP1 |
| 003 | TF | SEIFA | - | 210 (204.6) | -5.6 | 22.6 | - | +2000 | - | - | Basic RNP1 |

VELNO SOUTH ARRIVAL

From VELNO, to VIGER at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | VELNO | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | VIGER | - | 081 (075.4) | -5.6 | 15.7 | - | +2000 | - | - | Basic RNP1 |

CHANGE : Navigation specification. Sensor for RNAV.

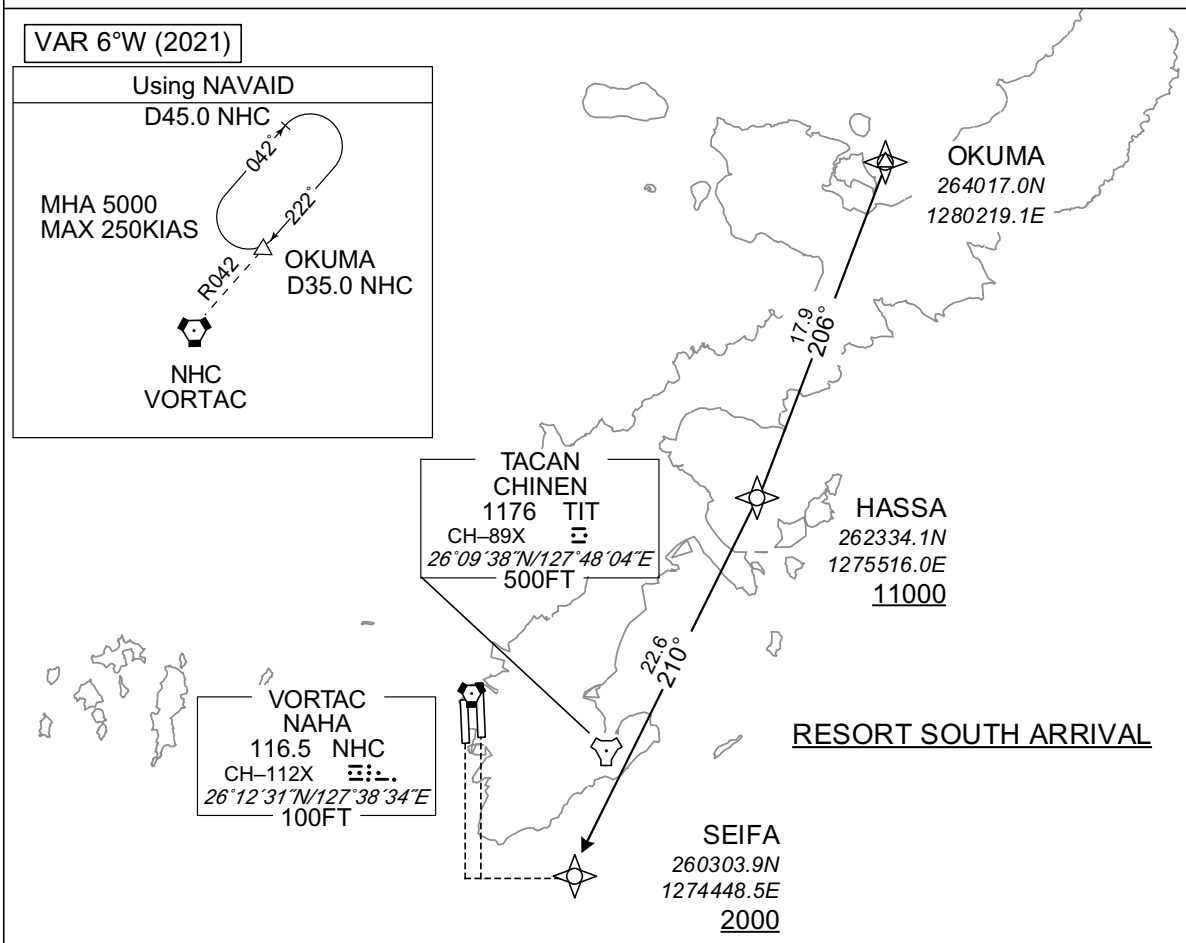
**STANDARD ARRIVAL CHART-INSTRUMENT**

ROAH/NAHA

RNAV STAR RWY36

| RESORT SOUTH ARRIVAL | Basic RNP1 |
|---|---|

Note 1) GNSS required.
2) CDO only.




RESORT SOUTH ARRIVAL

From OKUMA, to HASSA at or above 11000FT, to SEIFA at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | OKUMA | - | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 002 | TF | HASSA | - | 206 (200.7) | -5.6 | 17.9 | - | +11000 | - | - | Basic RNP1 |
| 003 | TF | SEIFA | - | 210 (204.6) | -5.6 | 22.6 | - | +2000 | - | - | Basic RNP1 |

CHANGE : Navigation specification. Sensor for RNAV.

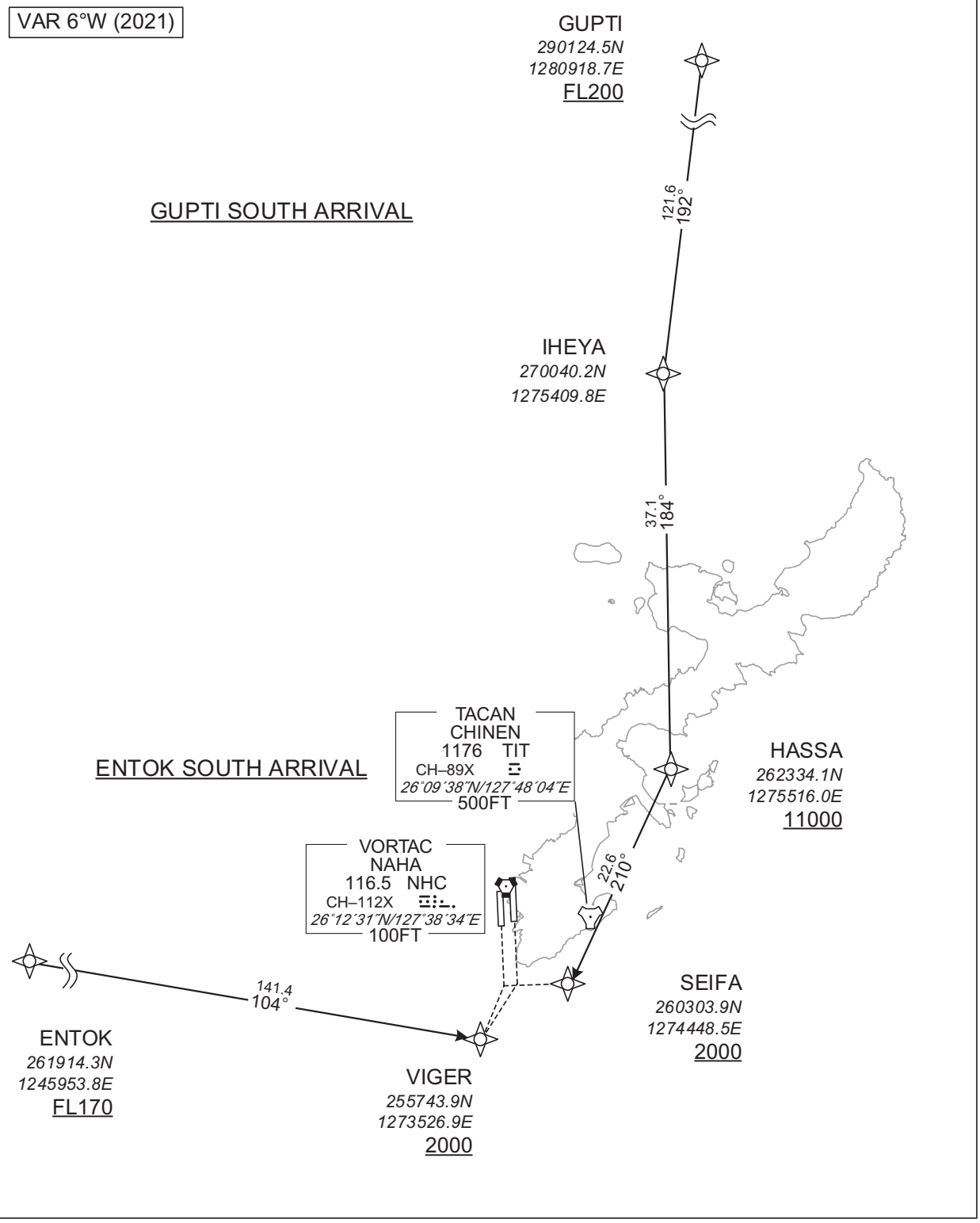
**STANDARD ARRIVAL CHART-INSTRUMENT**

ROAH/NAHA RNAV STAR RWY36

GUPTI SOUTH ARRIVAL
ENTOK SOUTH ARRIVAL

Basic RNP1

Note 1) GNSS required. 2) CDO only.



**STANDARD ARRIVAL CHART-INSTRUMENT**

ROAH / NAHA

RNAV STAR RWY36

GUPTI SOUTH ARRIVAL

From GUPTI at or above FL200, to IHEYA, to HASSA at or above 11000FT, to SEIFA at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | GUPTI | - | - | -5.6 | - | - | +FL200 | - | - | Basic RNP1 |
| 002 | TF | IHEYA | - | 192 (186.4) | -5.6 | 121.6 | - | - | - | - | Basic RNP1 |
| 003 | TF | HASSA | - | 184 (178.5) | -5.6 | 37.1 | - | +11000 | - | - | Basic RNP1 |
| 004 | TF | SEIFA | - | 210 (204.6) | -5.6 | 22.6 | - | +2000 | - | - | Basic RNP1 |

ENTOK SOUTH ARRIVAL

From ENTOK at or above FL170, to VIGER at or above 2000FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | ENTOK | - | - | -5.6 | - | - | +FL170 | - | - | Basic RNP1 |
| 002 | TF | VIGER | - | 104 (098.2) | -5.6 | 141.4 | - | +2000 | - | - | Basic RNP1 |

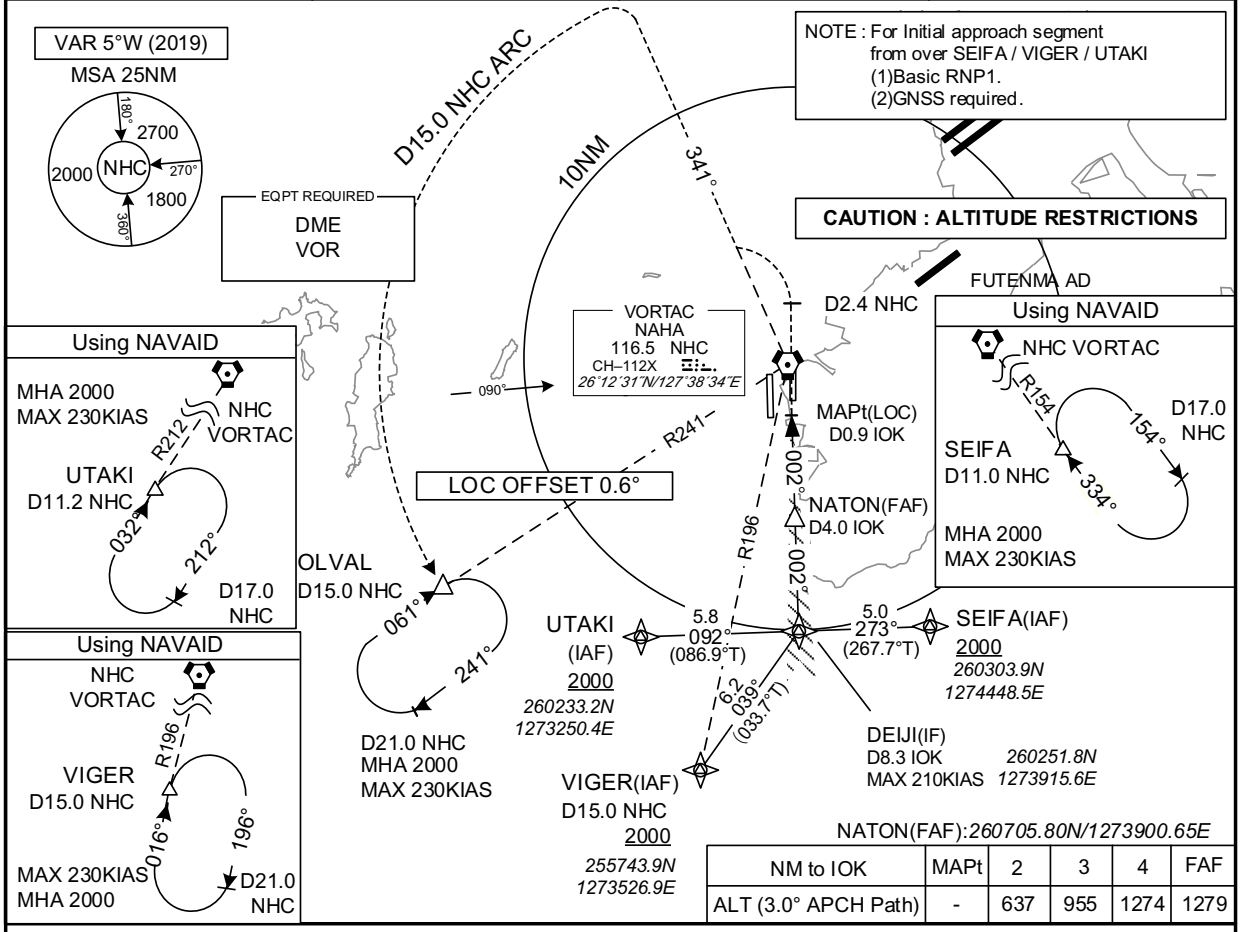
CHANGE: VAR.

**INSTRUMENT APPROACH CHART**

ROAH / NAHA

ILS Z or LOC Z RWY36R

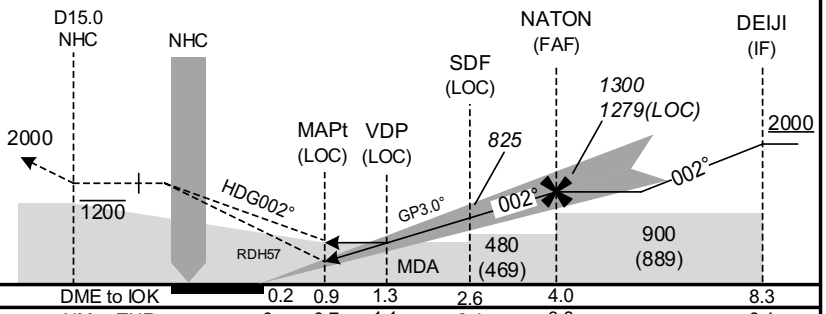
| NAHA APP | ILS-LOC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 110.3 IOK<br>ILS-GP 335.0<br>ILS-DME CH-40X | 118.1 - 126.2<br>308.6 - 236.6 | ATIS 127.8 - 293.0 |




| NM to IOK | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 637 | 955 | 1274 | 1279 |

## MISSED APPROACH

Climb to 1200FT on HDG 002° to NHC2.4DME, turn left, via NHC R341 to NHC 15.0DME, climb to 2000FT via NHC 15.0DME counterclockwise ARC to OLVAL and hold.
Contact NAHA APP.




| MINIMA | | THR elev. 9 | | AD elev. 11 | |
|---|---|---|---|---|---|
| CAT | CAT I | | LOC | | CIRCLING | |
| | DA(H) | RVR/ CMV | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 292 (283) | 650 | 410 (399) | 900 | 620 (609) | 1600 |
| B | | | | 1000 | | |
| C | | | | | | 2400 |
| D | | | | 1400 | | 3200 |

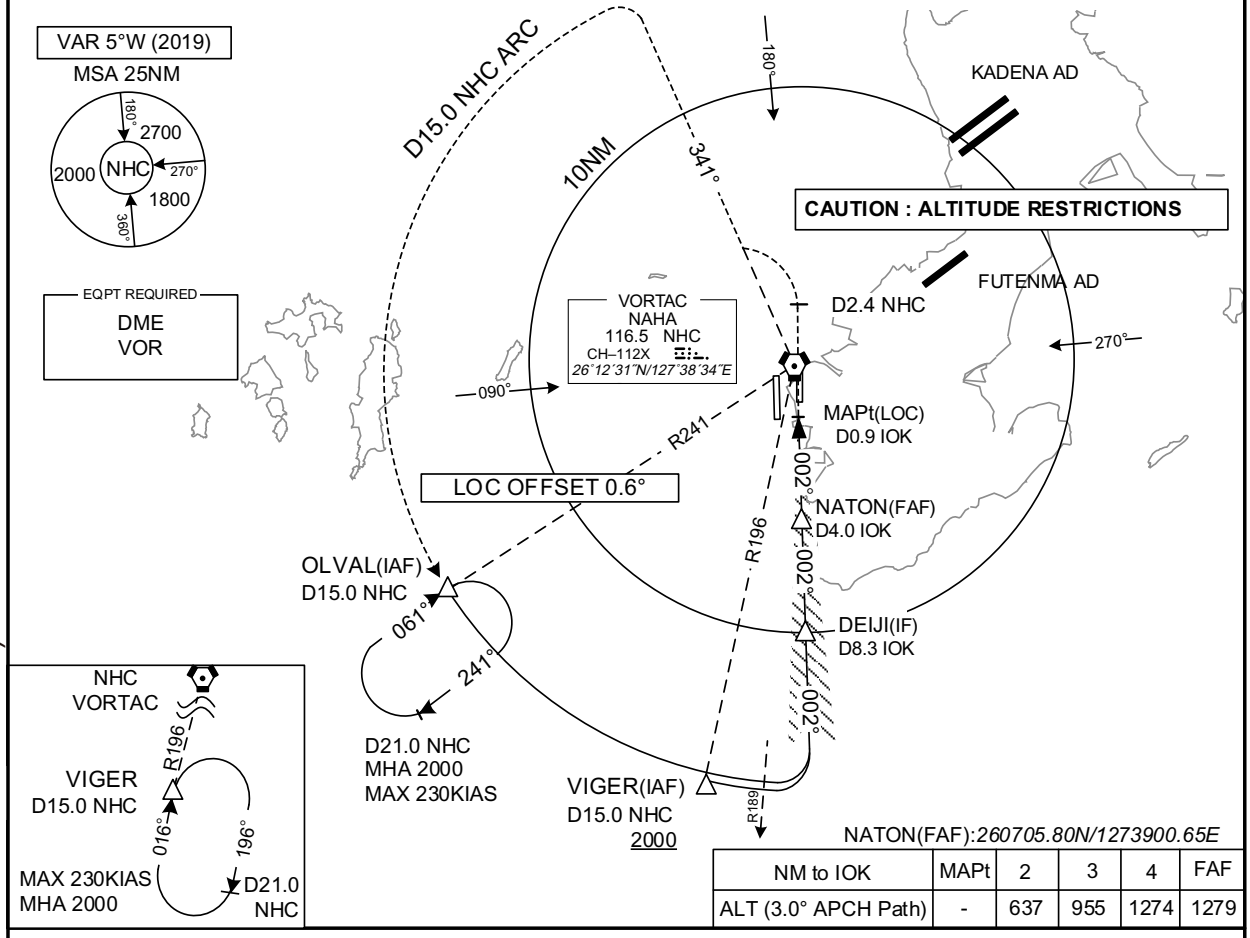
Circling to WEST side of RWY only.

CHANGE: Navigation specification. Sensor for RNAV.

**INSTRUMENT APPROACH CHART**

# ROAH / NAHA — ILS Y or LOC Y RWY36R

| NAHA APP | ILS-LOC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 110.3 IOK<br>ILS-GP 335.0<br>ILS-DME CH-40X | 118.1 - 126.2<br>308.6 - 236.6 | ATIS 127.8 - 293.0 |

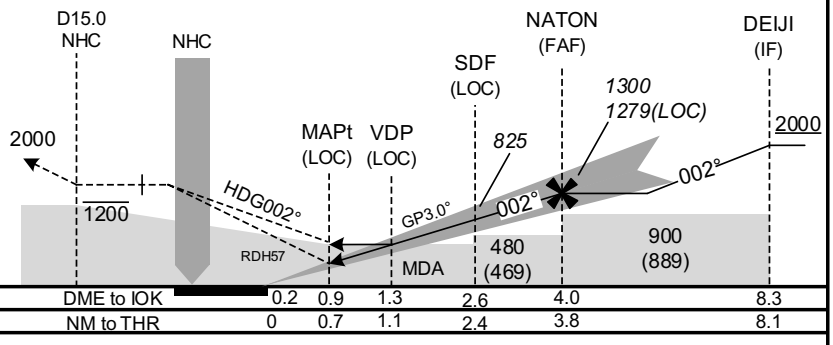



NATON(FAF):*260705.80N/1273900.65E*

| NM to IOK | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 637 | 955 | 1274 | 1279 |

## MISSED APPROACH

Climb to 1200FT on HDG 002° to NHC2.4DME, turn left, via NHC R341 to NHC 15.0DME, climb to 2000FT via NHC 15.0DME counterclockwise ARC to OLVAL and hold.
Contact NAHA APP.




| MINIMA | | THR elev. 9 | | AD elev. 11 | |
|---|---|---|---|---|---|
| CAT | CAT I | | LOC | | CIRCLING | |
| | DA(H) | RVR/ CMV | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 292 (283) | 650 | 410 (399) | 900 | 620 (609) | 1600 |
| B | | | | 1000 | | |
| C | | | | | | 2400 |
| D | | | | 1400 | | 3200 |

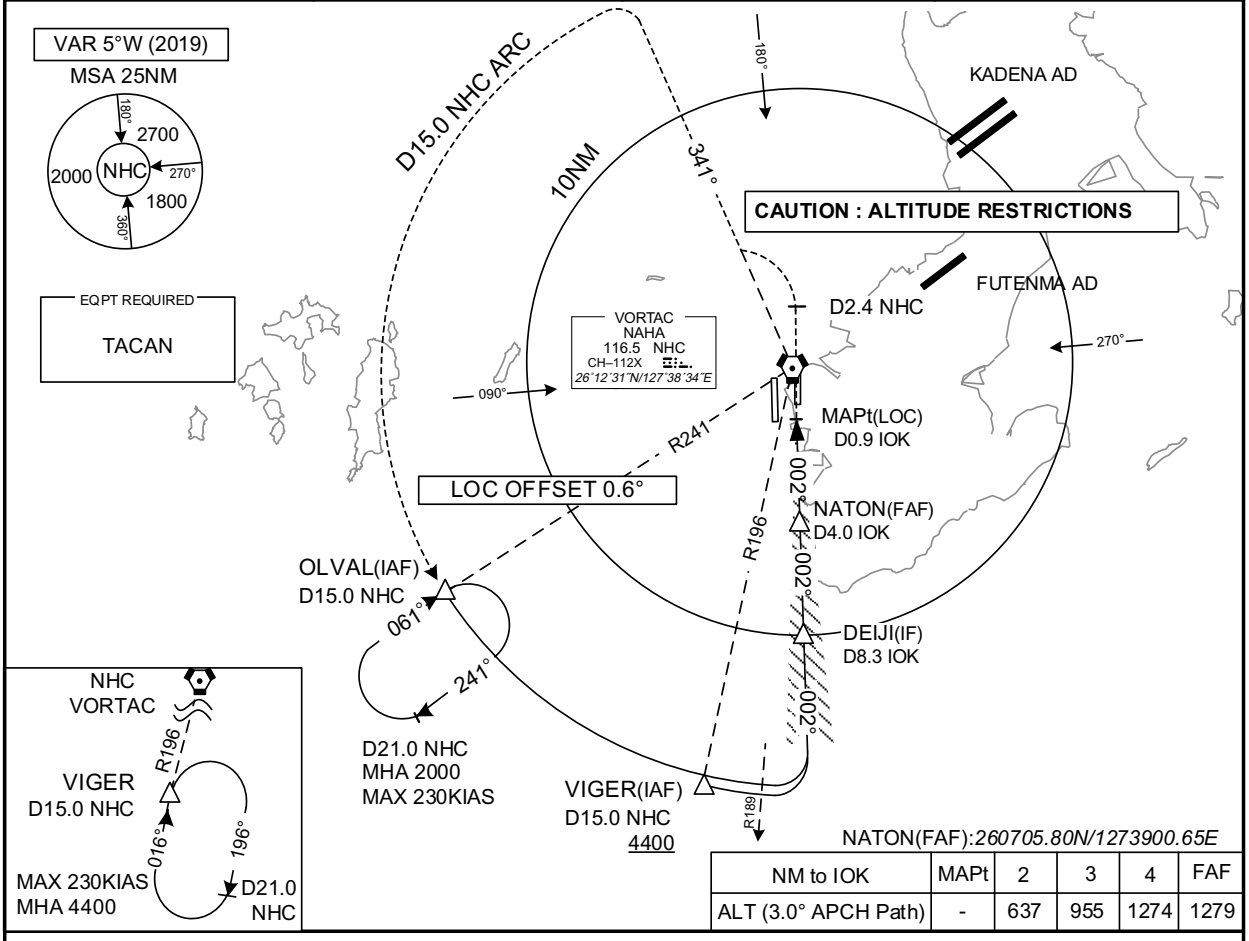
Circling to WEST side of RWY only.

CHANGE: Correction of misdescription (NM to Next IOK → NM to IOK).

**INSTRUMENT APPROACH CHART**

## ROAH / NAHA — ILS X or LOC X RWY36R

| NAHA APP | ILS-LOC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 110.3 IOK<br>ILS-GP 335.0<br>ILS-DME CH-40X | 118.1 - 126.2<br>308.6 - 236.6 | ATIS 127.8 - 293.0 |

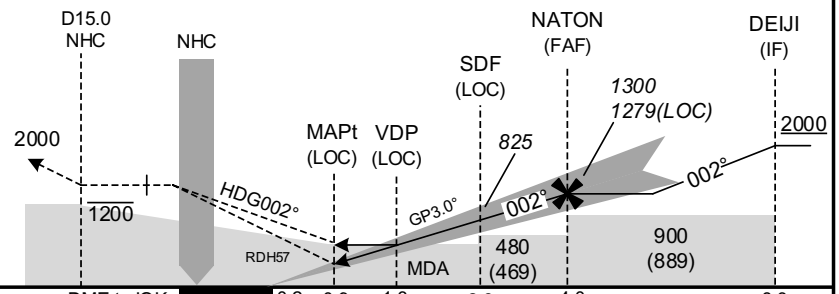



NATON(FAF):*260705.80N/1273900.65E*

| NM to IOK | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 637 | 955 | 1274 | 1279 |

### MISSED APPROACH

Climb to 1200FT on HDG 002° to NHC2.4DME, turn left, via NHC R341 to NHC 15.0DME, climb to 2000FT via NHC 15.0DME counterclockwise ARC to OLVAL and hold.
Contact NAHA APP.




MINIMA — THR elev. 9 — AD elev. 11

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/ CMV | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 292 (283) | 650 | 410 (399) | 900 | 620 (609) | 1600 |
| B | | | | 1000 | | |
| C | | | | | | 2400 |
| D | | | | 1400 | | 3200 |

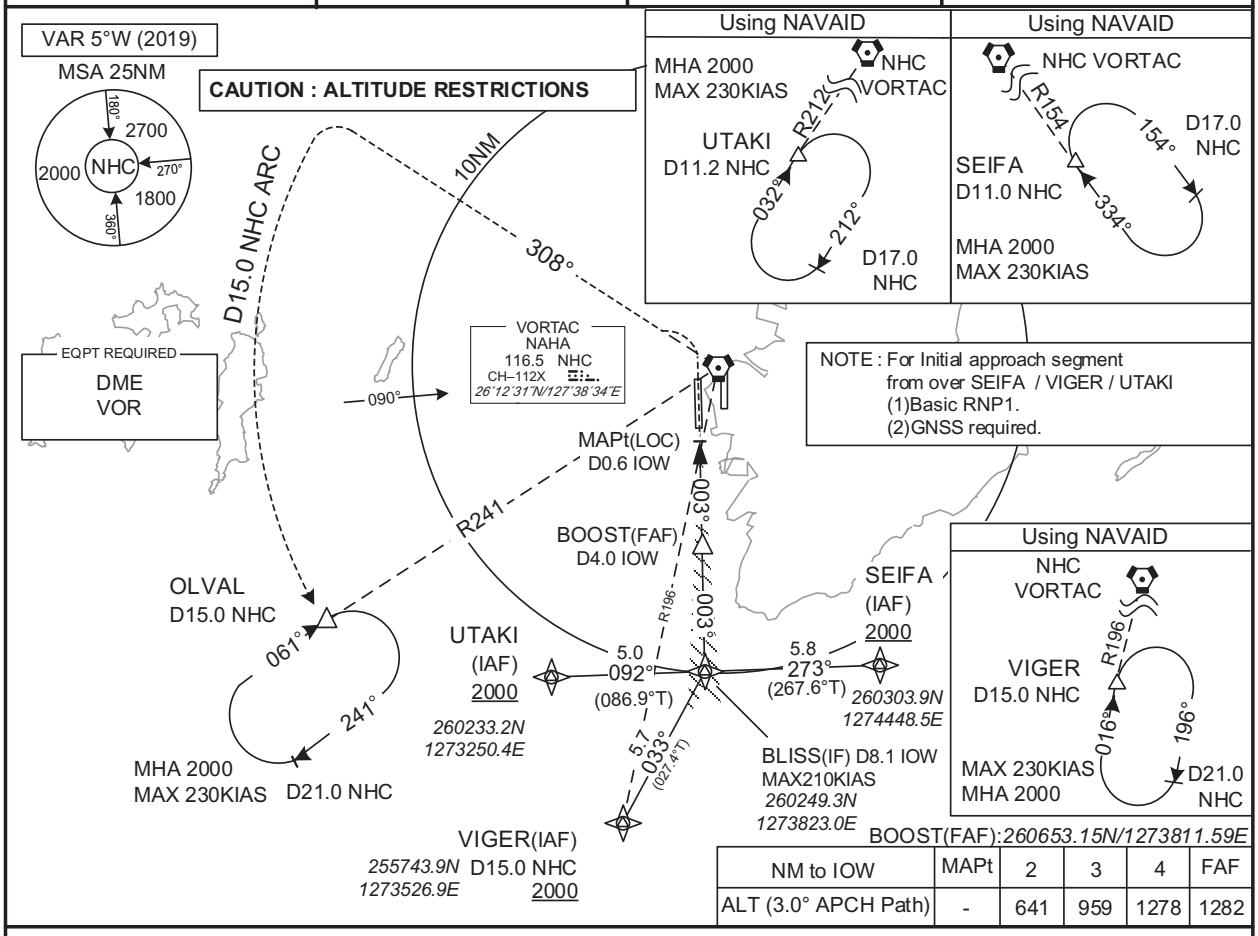
Circling to WEST side of RWY only.

CHANGE: Correction of misdescription (NM to Next IOK → NM to IOK).

**INSTRUMENT APPROACH CHART**

# ROAH / NAHA — ILS Z or LOC Z RWY36L

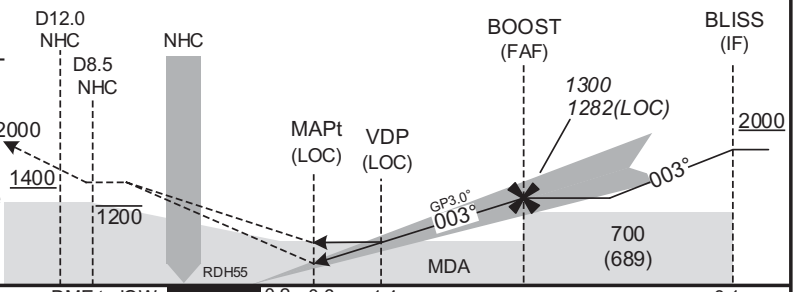
| NAHA APP | ILS-LOC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 111.7 IOW<br>ILS-GP 333.5<br>ILS-DME CH-54X | 118.75 - 126.2<br>247.8 - 236.6 | ATIS 127.8 - 293.0 |




| NM to IOW | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 641 | 959 | 1278 | 1282 |

## MISSED APPROACH

Turn left, climb to 1200FT via NHC R 308 to NHC8.5DME, climb to 2000FT via NHC R308 to NHC 15.0DME, via NHC 15.0DME counterclockwise ARC to OLVAL and hold.
Cross NHC R308/12.0DME at or above 1400FT.
Contact NAHA APP.




| MINIMA | | THR elev. 14 | | AD elev. 11 | |
|---|---|---|---|---|---|
| CAT | CAT I | | LOC | | CIRCLING | |
| | DA(H) | RVR/ CMV | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 214 (200) | 550 | 430 (419) | 900 | 620 (609) | 1600 |
| B | | | | 1000 | | |
| C | | | | | | 2400 |
| D | | | | 1400 | | 3200 |

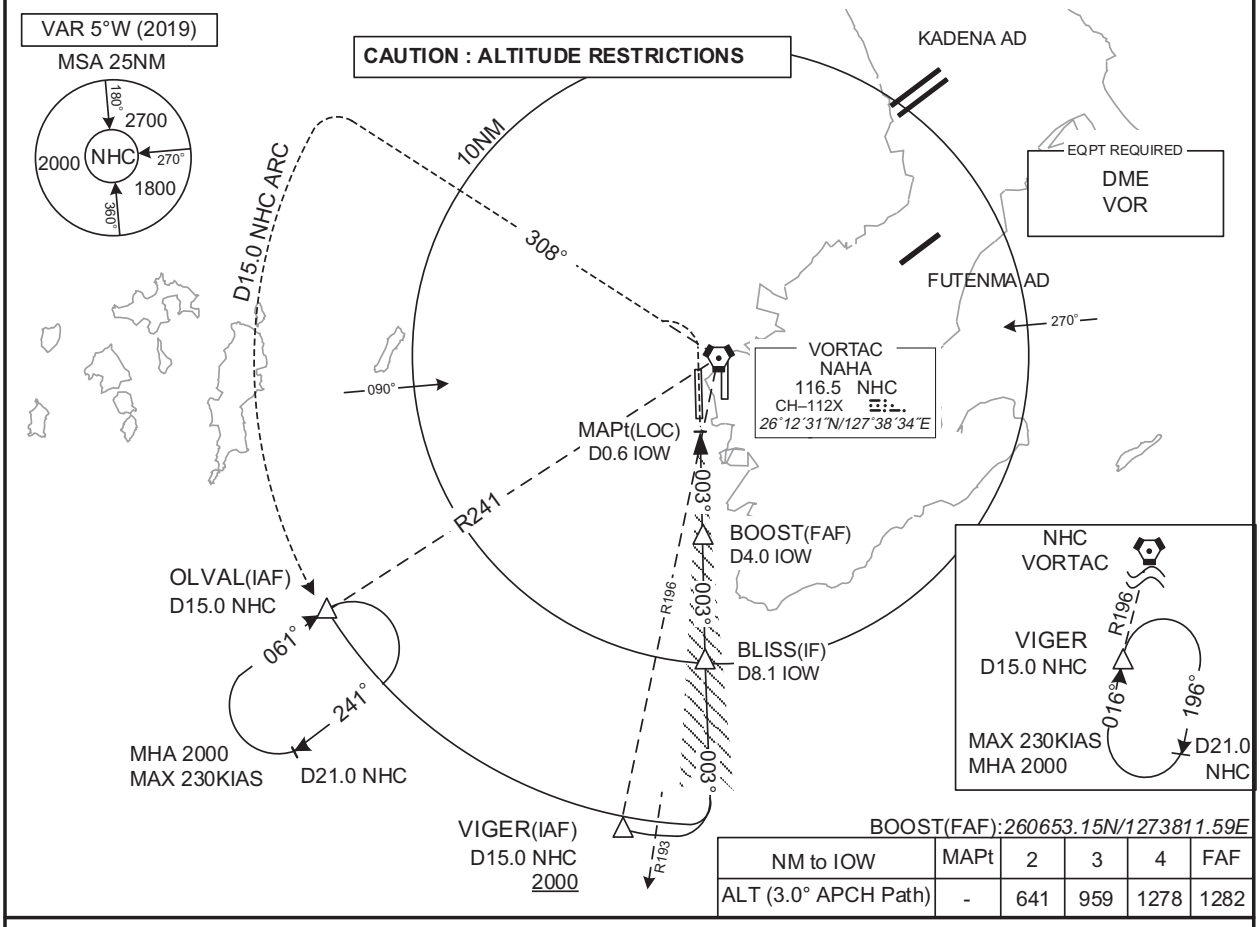
Circling to WEST side of RWY only.

CHANGE: Navigation specification. Sensor for RNAV.

**INSTRUMENT APPROACH CHART**

ROAH / NAHA — ILS Y or LOC Y RWY36L

| NAHA APP | ILS-LOC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 111.7 IOW<br>ILS-GP 333.5<br>ILS-DME CH-54X | 118.75 - 126.2<br>247.8 - 236.6 | ATIS 127.8 - 293.0 |

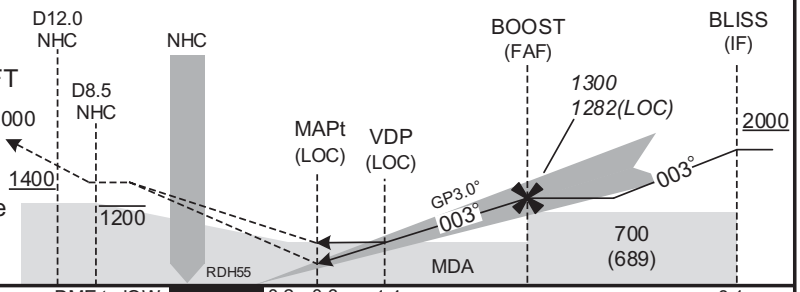



BOOST(FAF):*260653.15N/1273811.59E*

| NM to IOW | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 641 | 959 | 1278 | 1282 |

## MISSED APPROACH

Turn left, climb to 1200FT via NHC R308 to NHC8.5DME, climb to 2000FT via NHC R308 to NHC 15.0DME, via NHC 15.0DME counterclockwise ARC to OLVAL and hold.
Cross NHC R308/12.0DME at or above 1400FT.
Contact NAHA APP.




MINIMA — THR elev. 14 — AD elev. 11

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 214 (200) | 550 | 430 (419) | 900 | 620 (609) | 1600 |
| B | | | | 1000 | | |
| C | | | | | | 2400 |
| D | | | | 1400 | | 3200 |

Circling to WEST side of RWY only.

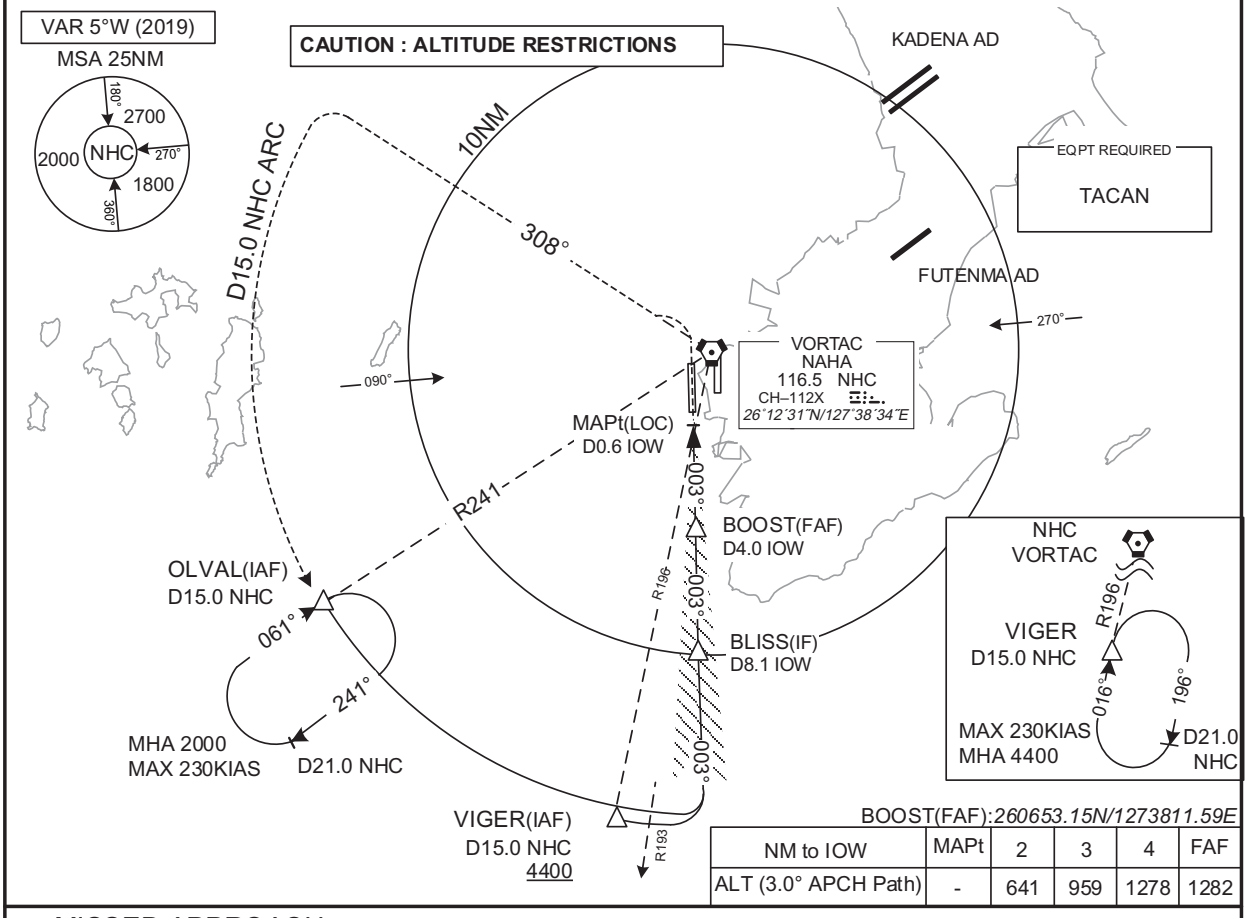
CHANGE: New PROC

**INSTRUMENT APPROACH CHART**

ROAH / NAHA

ILS X or LOC X RWY36L

| NAHA APP | ILS-LOC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 111.7 IOW<br>ILS-GP 333.5<br>ILS-DME CH-54X | 118.75 - 126.2<br>247.8 - 236.6 | ATIS 127.8 - 293.0 |

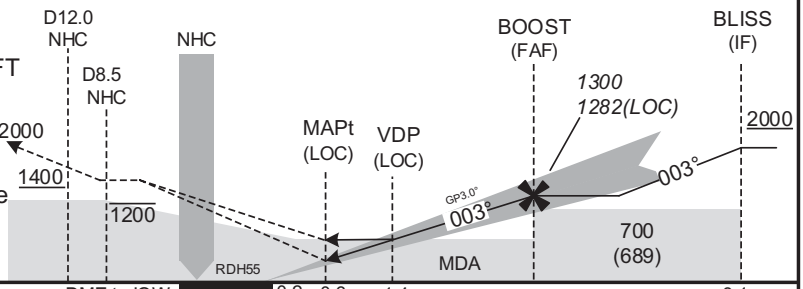



BOOST(FAF):*260653.15N/1273811.59E*

| NM to IOW | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 641 | 959 | 1278 | 1282 |

MISSED APPROACH

Turn left, climb to 1200FT via NHC R308 to NHC8.5DME, climb to 2000FT via NHC R308 to NHC 15.0DME, via NHC 15.0DME counterclockwise ARC to OLVAL and hold.
Cross NHC R308/12.0DME at or above 1400FT.
Contact NAHA APP.




MINIMA THR elev. 14 AD elev. 11

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 214 (200) | 550 | 430 (419) | 900 | 620 (609) | 1600 |
| B | | | | 1000 | | |
| C | | | | | | 2400 |
| D | | | | 1400 | | 3200 |

Circling to WEST side of RWY only.

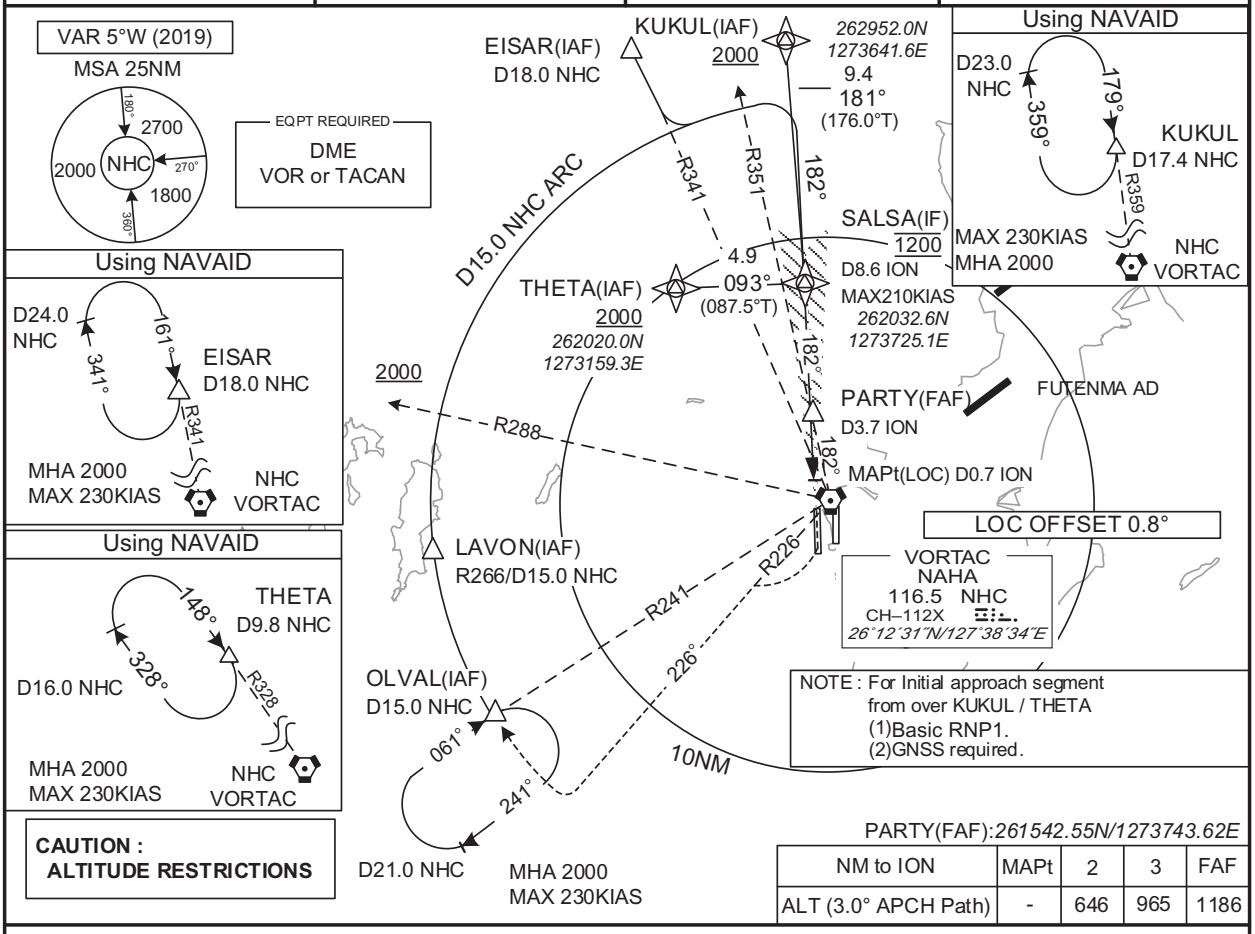
CHANGE: New PROC

**INSTRUMENT APPROACH CHART**

ROAH / NAHA

ILS or LOC RWY18R

| NAHA APP | ILS-LOC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 110.15 ION<br>ILS-GP 334.25<br>ILS-DME CH-38Y | 118.75- 126.2<br>247.8 - 236.6 | ATIS 127.8 - 293.0 |

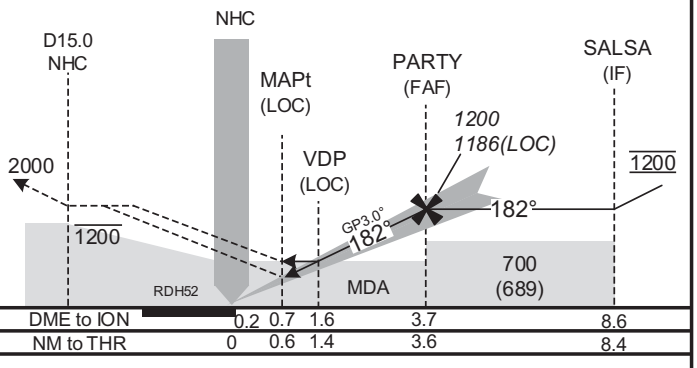



PARTY(FAF):*261542.55N/1273743.62E*

| NM to ION | MAPt | 2 | 3 | FAF |
|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 646 | 965 | 1186 |

## MISSED APPROACH

Turn right, climb to 1200FT, via NHC R226 to NHC 15.0DME, climb to 2000FT via NHC 15.0DME clockwise ARC to OLVAL and hold.
Contact NHAA APP.




MINIMA THR elev. 16 AD elev. 11

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/ CMV | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 263 (247) | 600 | 490 (479) | 1000 | 620 (609) | 1600 |
| B | | | | 1200 | | |
| C | | | | | | 2400 |
| D | | | | 1600 | | 3200 |

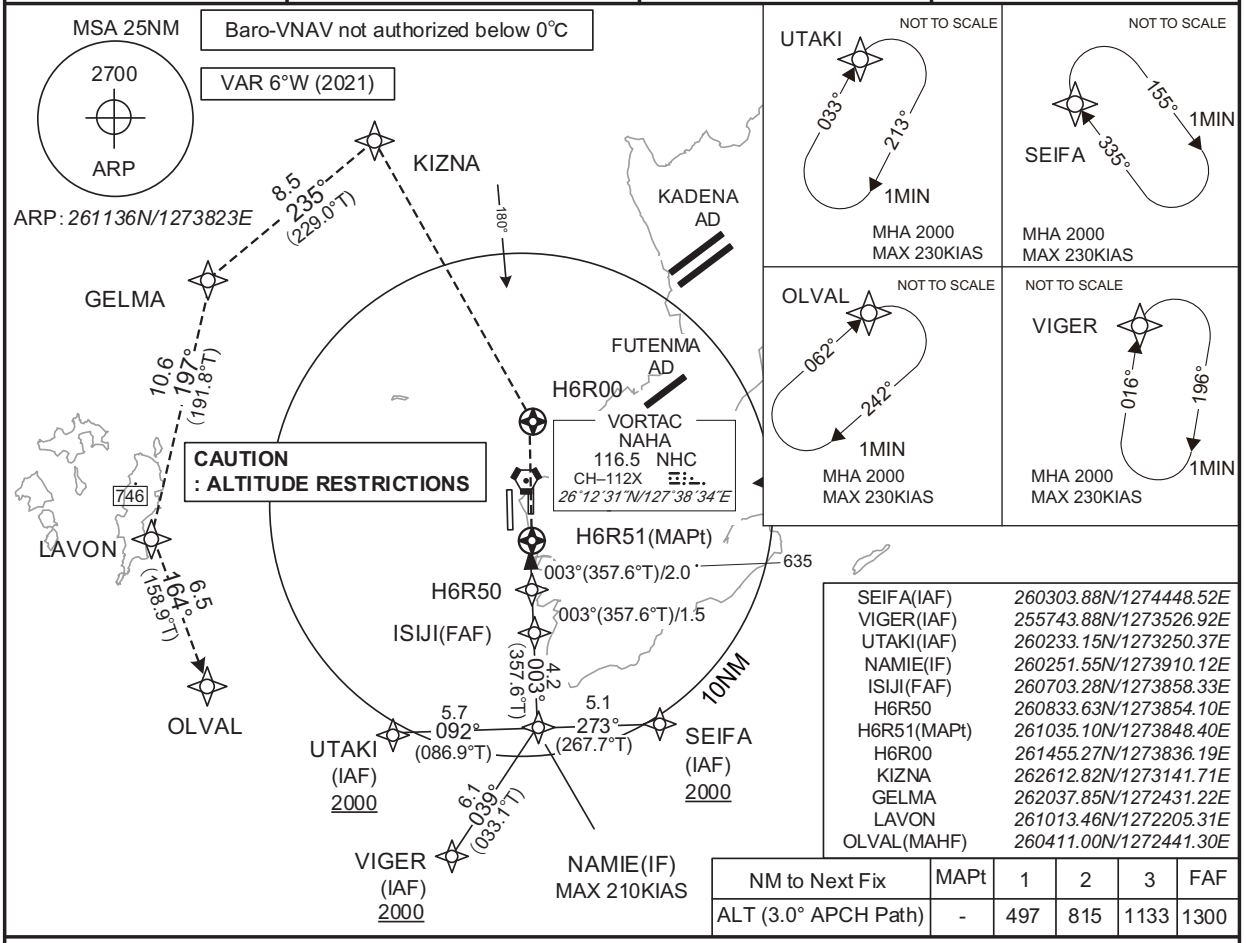
Circling to WEST side of RWY only.

CHANGE: Navigation specification. Sensor for RNAV.

**INSTRUMENT APPROACH CHART**

ROAH / NAHA — RNP RWY36R

| NAHA APP | RNP APCH | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | | 118.1 - 126.2<br>308.6 - 236.6 | ATIS 127.8 - 293.0 |



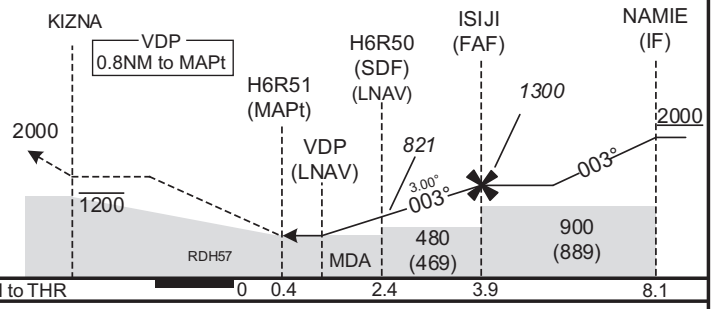

| | |
|---|---|
| SEIFA(IAF) | *260303.88N/1274448.52E* |
| VIGER(IAF) | *255743.88N/1273526.92E* |
| UTAKI(IAF) | *260233.15N/1273250.37E* |
| NAMIE(IF) | *260251.55N/1273910.12E* |
| ISIJI(FAF) | *260703.28N/1273858.33E* |
| H6R50 | *260833.63N/1273854.10E* |
| H6R51(MAPt) | *261035.10N/1273848.40E* |
| H6R00 | *261455.27N/1273836.19E* |
| KIZNA | *262612.82N/1273141.71E* |
| GELMA | *262037.85N/1272431.22E* |
| LAVON | *261013.46N/1272205.31E* |
| OLVAL(MAHF) | *260411.00N/1272441.30E* |

| NM to Next Fix | MAPt | 1 | 2 | 3 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 497 | 815 | 1133 | 1300 |

## MISSED APPROACH

Direct to H6R00, turn left direct to KIZNA at or below 1200FT, to GELMA, to LAVON, to OLVAL and hold at 2000FT.

Contact NAHA APP.




CHANGE:PROC renamed. Requirement for RNP.

MINIMA — THR elev. 9 — AD elev. 11

| CAT | LNAV/VNAV | | LNAV | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 410 (401) | 900 | 410 (399) | 900 | 620 (609) | 1600 |
| B | | 1000 | | 1000 | | |
| C | | | | | | 2400 |
| D | | 1400 | | 1400 | | 3200 |

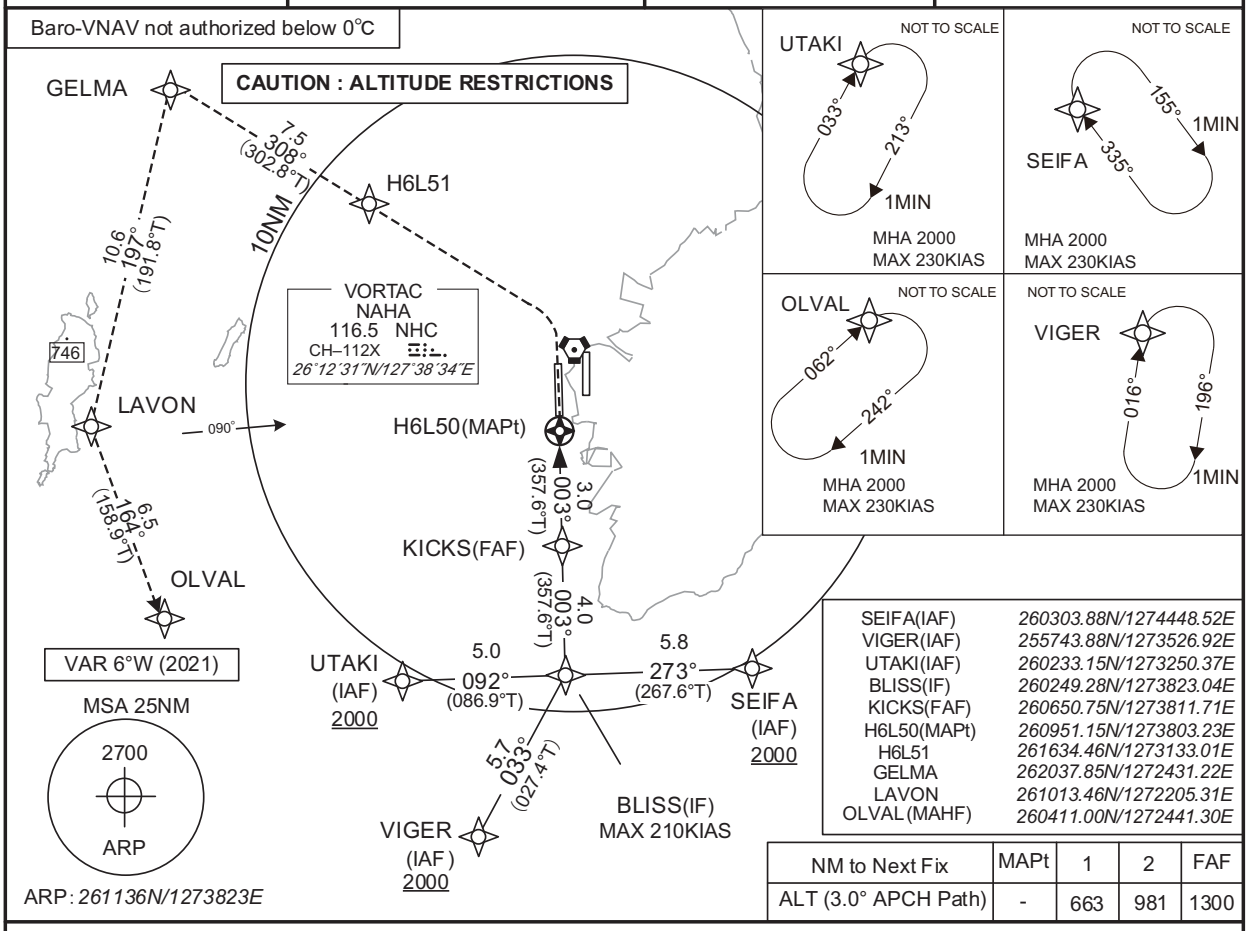
Circling to WEST side of RWY only.

**INSTRUMENT APPROACH CHART**

ROAH / NAHA

RNP RWY36L

| NAHA APP | RNP APCH | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | | 118.75 - 126.2<br>247.8 - 236.6 | ATIS 127.8 - 293.0 |



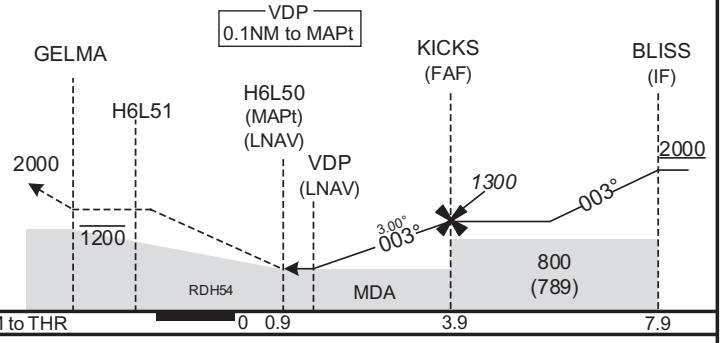

| | |
|---|---|
| SEIFA(IAF) | 260303.88N/1274448.52E |
| VIGER(IAF) | 255743.88N/1273526.92E |
| UTAKI(IAF) | 260233.15N/1273250.37E |
| BLISS(IF) | 260249.28N/1273823.04E |
| KICKS(FAF) | 260650.75N/1273811.71E |
| H6L50(MAPt) | 260951.15N/1273803.23E |
| H6L51 | 261634.46N/1273133.01E |
| GELMA | 262037.85N/1272431.22E |
| LAVON | 261013.46N/1272205.31E |
| OLVAL(MAHF) | 260411.00N/1272441.30E |

| NM to Next Fix | MAPt | 1 | 2 | FAF |
|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 663 | 981 | 1300 |

## MISSED APPROACH

Turn left direct to H6L51, to GELMA at or below 1200FT, to LAVON, to OLVAL and hold at 2000FT.

Contact NAHA APP.




MINIMA THR elev. 14 AD elev. 11

| CAT | LNAV/VNAV | | LNAV | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 370 (356) | 900 | 370 (359) | 900 | 620 (609) | 1600 |
| B | | 1000 | | 1000 | | |
| C | | | | | | 2400 |
| D | | 1400 | | 1400 | | 3200 |

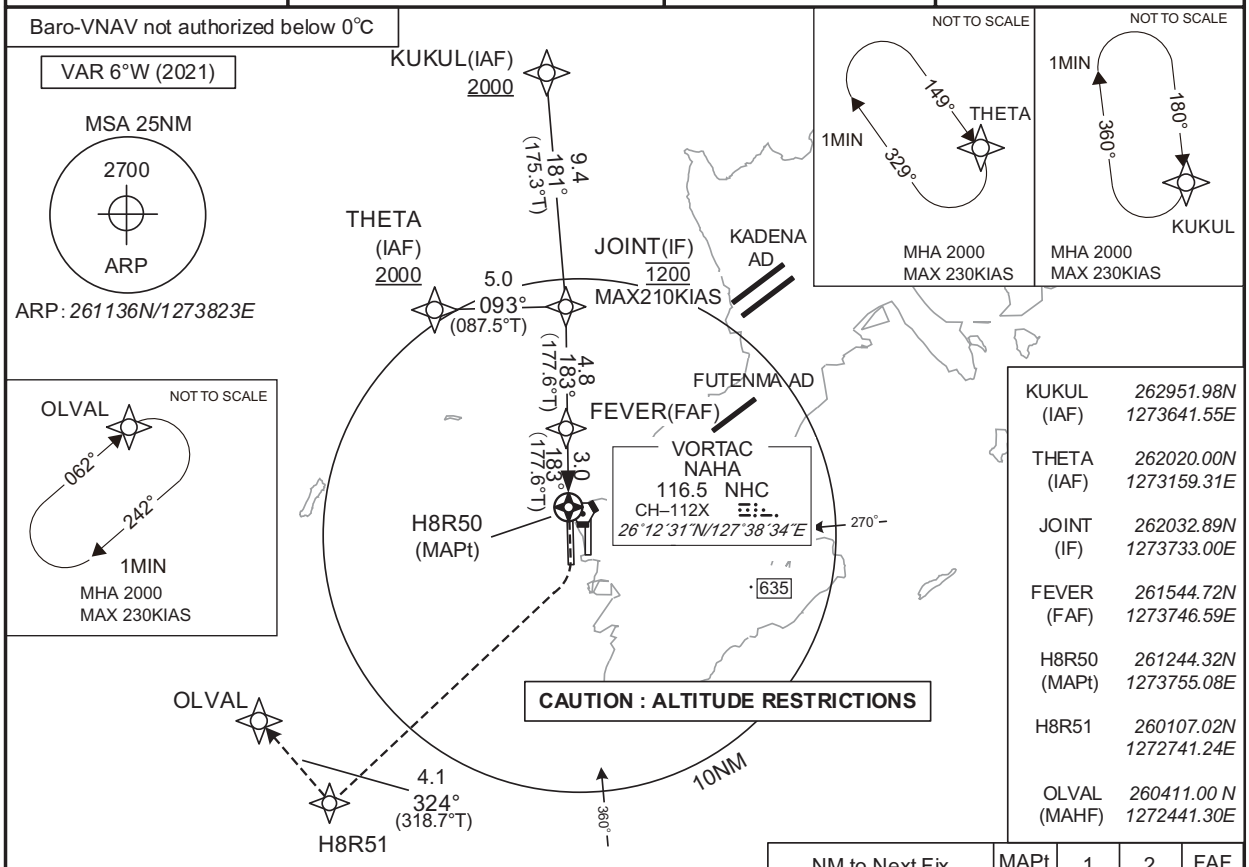
Circling to WEST side of RWY only.

CHANGE:PROC renamed. Requirement for RNP.

**INSTRUMENT APPROACH CHART**

ROAH / NAHA — RNP RWY18R

| NAHA APP | RNP APCH | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | | 118.75- 126.2<br>247.8 - 236.6 | ATIS 127.8 - 293.0 |



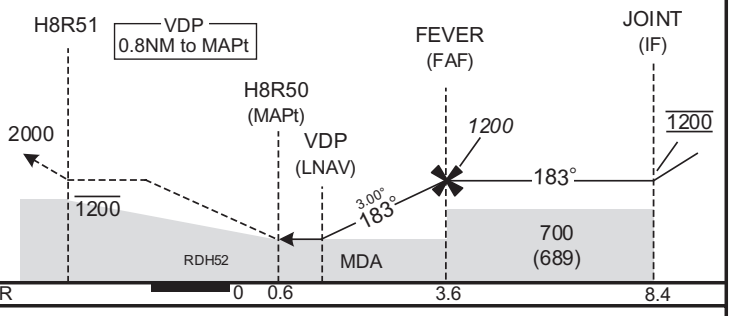

| | |
|---|---|
| KUKUL (IAF) | 262951.98N 1273641.55E |
| THETA (IAF) | 262020.00N 1273159.31E |
| JOINT (IF) | 262032.89N 1273733.00E |
| FEVER (FAF) | 261544.72N 1273746.59E |
| H8R50 (MAPt) | 261244.32N 1273755.08E |
| H8R51 | 260107.02N 1272741.24E |
| OLVAL (MAHF) | 260411.00 N 1272441.30E |

| NM to Next Fix | MAPt | 1 | 2 | FAF |
|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 563 | 881 | 1200 |

## MISSED APPROACH

Turn right direct to H8R51 at or below 1200FT, to OLVAL and hold at 2000FT.

Contact NAHA APP.




MINIMA — THR elev. 16 — AD elev. 11

| CAT | LNAV/VNAV | | LNAV | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 490 (474) | 1000 | 490 (479) | 1000 | 620 (609) | 1600 |
| B | | 1200 | | 1200 | | |
| C | | | | | | 2400 |
| D | | 1600 | | 1600 | | 3200 |

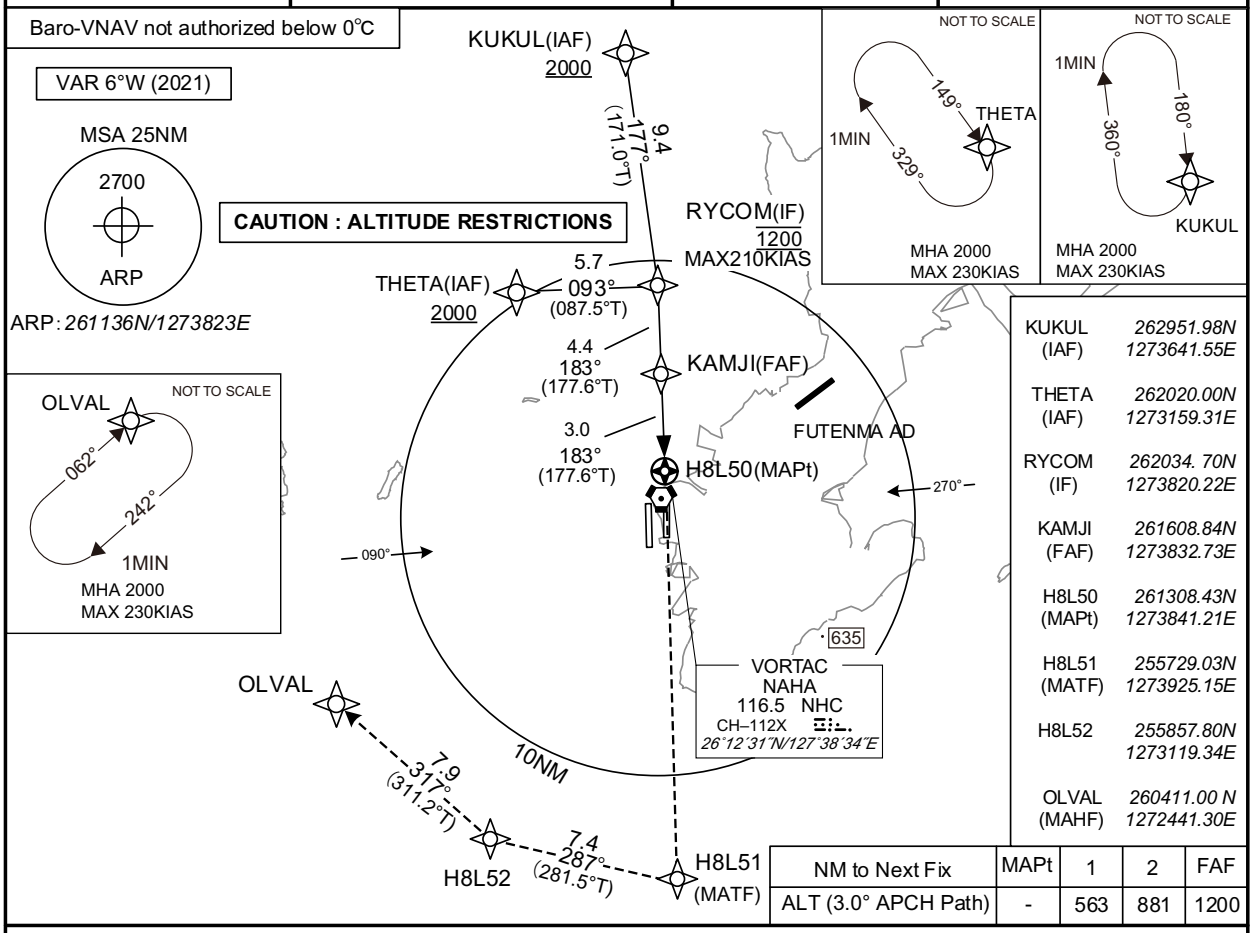
Circling to WEST side of RWY only.

CHANGE:PROC renamed. Requirement for RNP.

**INSTRUMENT APPROACH CHART**

ROAH / NAHA — RNP RWY18L

| NAHA APP | RNP APCH | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | | 118.1 - 126.2<br>308.6 - 236.6 | ATIS 127.8 - 293.0 |

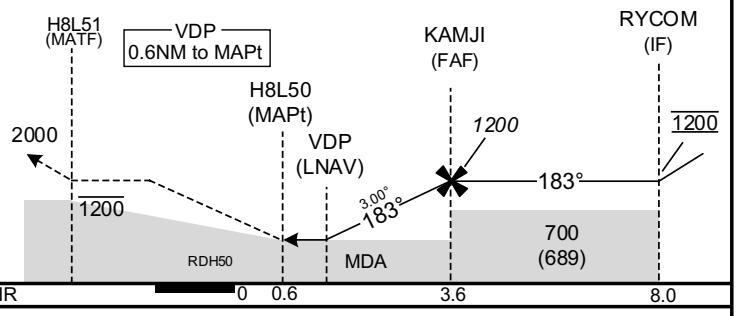



| NM to Next Fix | MAPt | 1 | 2 | FAF |
|---|---|---|---|---|
| ALT (3.0° APCH Path) | - | 563 | 881 | 1200 |

## MISSED APPROACH

Direct to H8L51 at or below 1200FT, to H8L52, to OLVAL and hold at 2000FT.

Contact NAHA APP.




CHANGE:PROC renamed. Requirement for RNP.

MINIMA THR elev. 11 AD elev. 11

| CAT | LNAV/VNAV | | LNAV | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 430 (419) | 1200 | 430 (419) | 1200 | 620 (609) | 1600 |
| B | | 1300 | | 1300 | | |
| C | | 1400 | | 1400 | | 2400 |
| D | | 1600 | | 1600 | | 3200 |

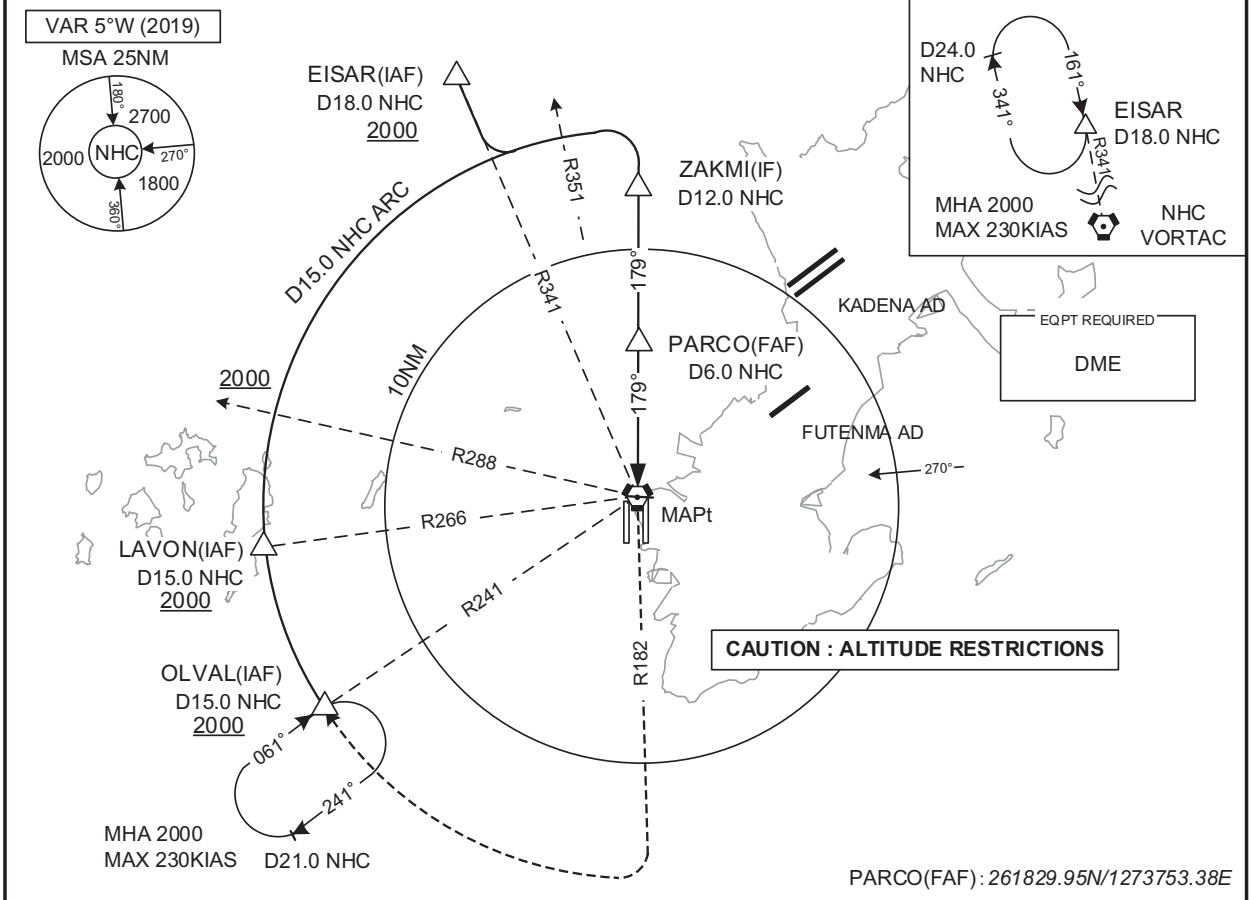
Circling to WEST side of RWY only.

**INSTRUMENT APPROACH CHART**

ROAH / NAHA

VOR A or TACAN B

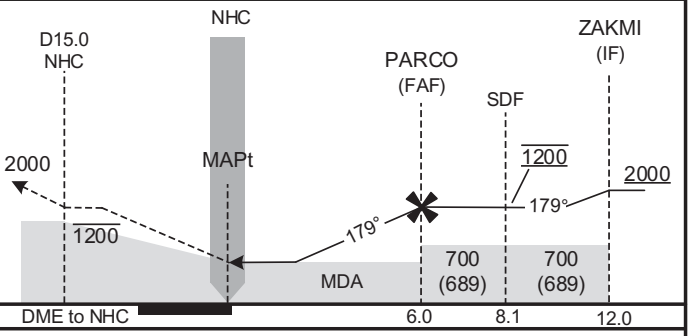
| NAHA APP | NAHA VORTAC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 116.5 NHC<br>CH–112X<br>*26°12′31″N/127°38′34″E* | 118.75 - 118.1<br>247.8 - 308.6 | ATIS 127.8 - 293.0 |




## MISSED APPROACH

Climb to 1200FT via NHC R182 to NHC 15.0DME, climb to 2000FT via NHC 15.0DME clockwise ARC to OLVAL and hold.
Contact NAHA APP.

Timing not authorized for defining the MAPt.




| MINIMA | | AD elev. 11 |
|---|---|---|
| CAT | CIRCLING | |
| | MDA(H) | VIS |
| A | 620 (609) | 1600 |
| B | | |
| C | | 2400 |
| D | | 3200 |

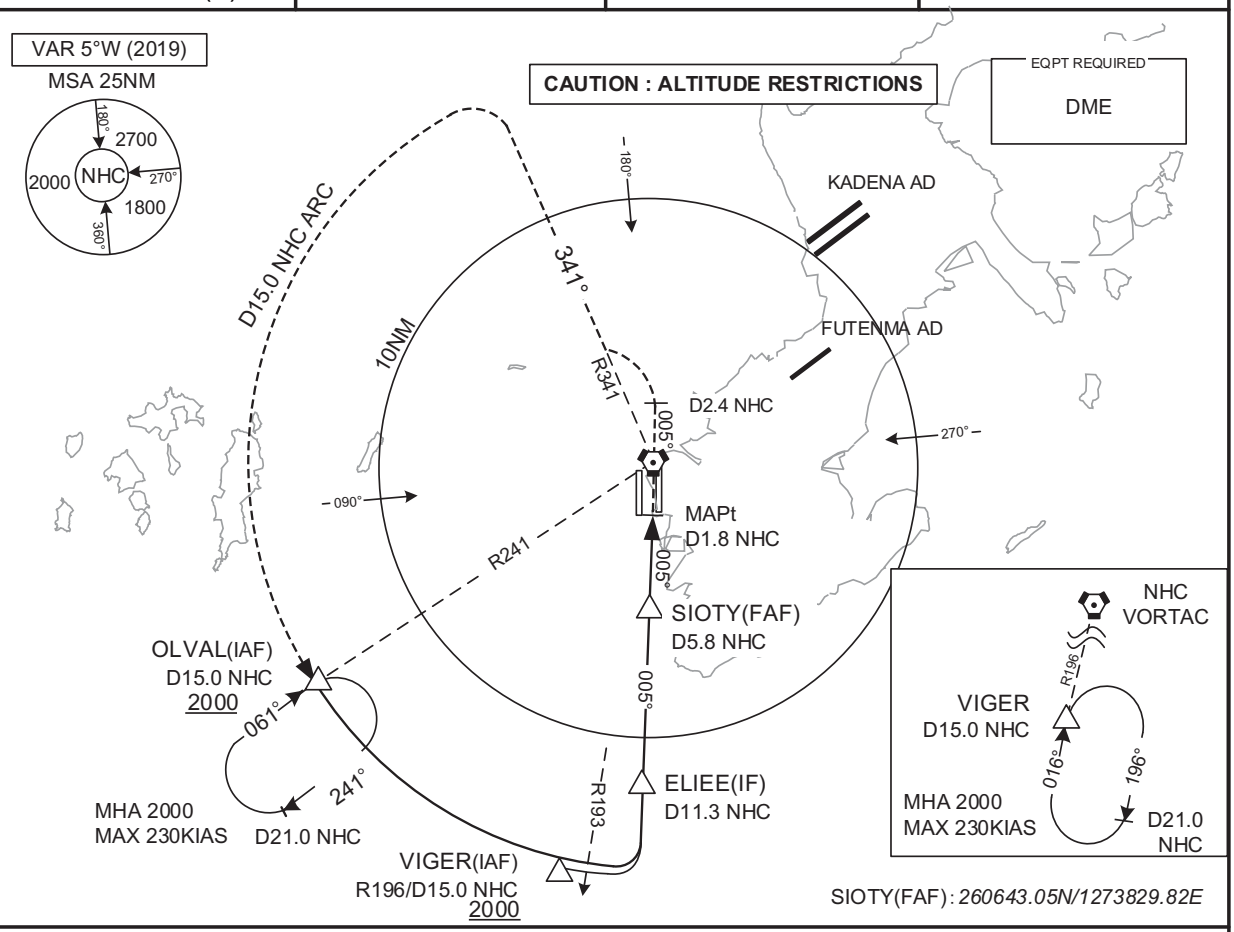
Circling to WEST side of RWY only.

CHANGE: New PROC

**INSTRUMENT APPROACH CHART**

ROAH / NAHA — VOR C

| NAHA APP | NAHA VORTAC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 116.5 NHC<br>CH–112X<br>*26°12′31″N/127°38′34″E* | 118.75 - 118.1<br>247.8 - 308.6 | ATIS 127.8 - 293.0 |

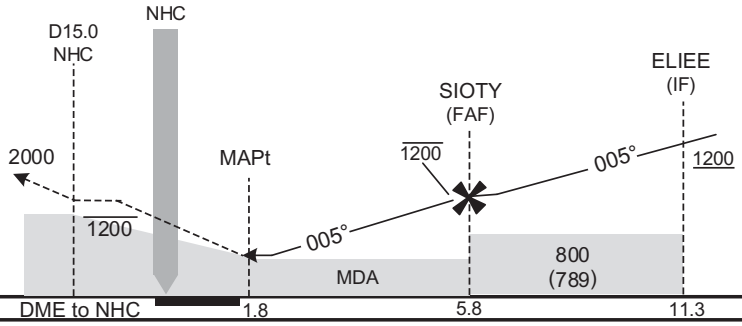



## MISSED APPROACH

Climb to 1200FT via NHC R005 to NHC 2.4DME, turn left proceed via NHC R341 to NHC 15.0DME, climb to 2000FT via NHC 15.0 DME counterclockwise ARC to OLVAL and hold.

Contact NAHA APP.

Timing not authorized for defining the MAPt.




CHANGE: New PROC

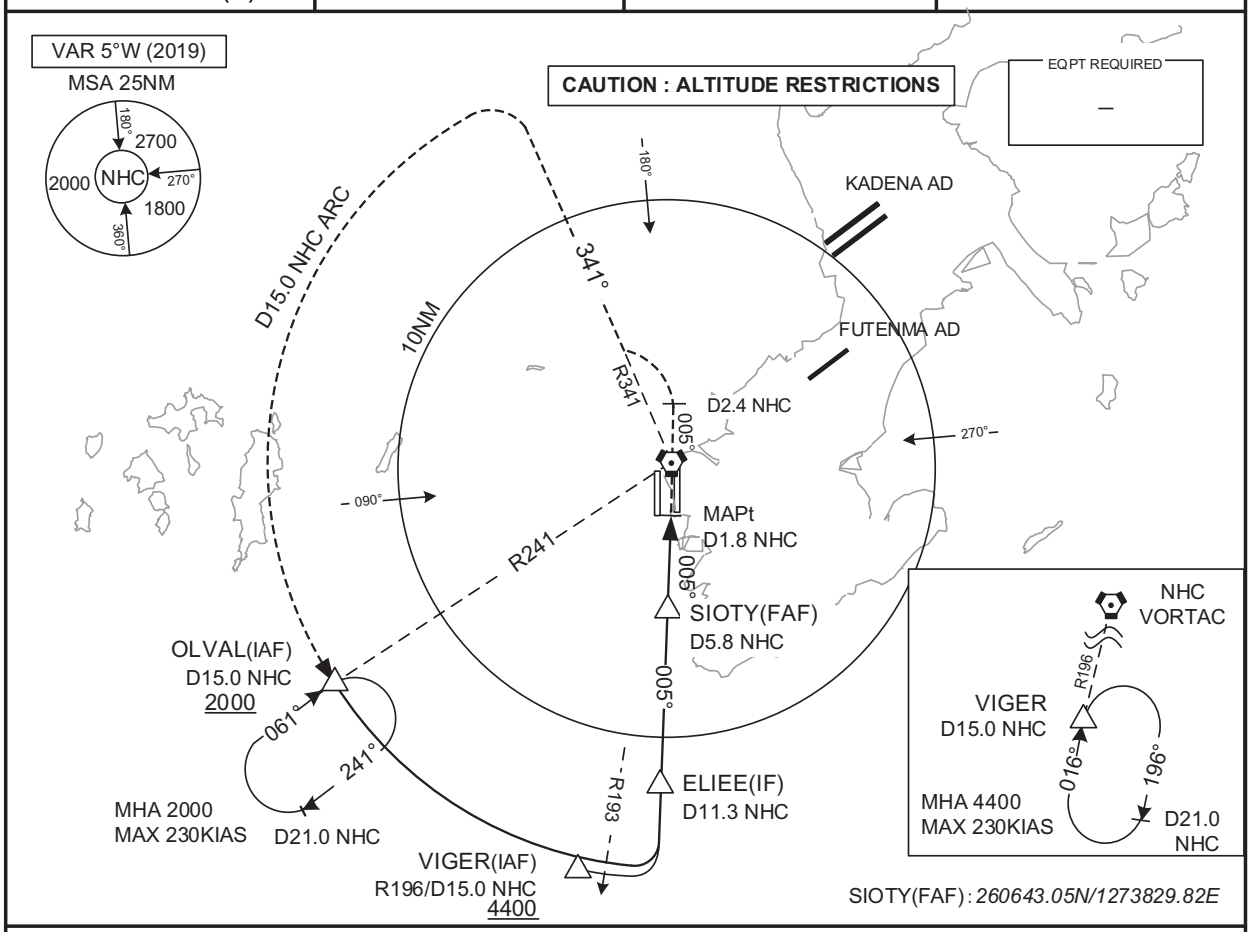
| MINIMA | | AD elev. 11 |
|---|---|---|
| CAT | CIRCLING | |
| | MDA(H) | VIS |
| A | 620 (609) | 1600 |
| B | | |
| C | | 2400 |
| D | | 3200 |

Circling to WEST side of RWY only.

**INSTRUMENT APPROACH CHART**

# ROAH / NAHA — TACAN D

| NAHA APP | NAHA VORTAC | NAHA TWR | RADAR AVBL |
|---|---|---|---|
| 119.1 - 335.8(N)<br>126.5 - 258.3(S) | 116.5 NHC<br>CH–112X<br>*26°12′31″N/127°38′34″E* | 118.75 - 118.1<br>247.8 - 308.6 | ATIS 127.8 - 293.0 |

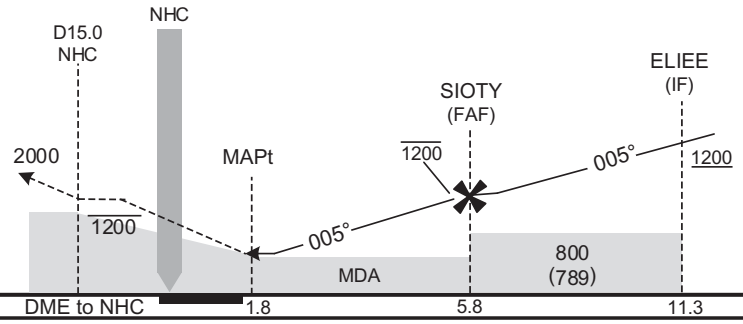



## MISSED APPROACH

Climb to 1200FT via NHC R005 to NHC 2.4DME, turn left proceed via NHC R341 to NHC 15.0DME, climb to 2000FT via NHC 15.0 DME counterclockwise ARC to OLVAL and hold.

Contact NAHA APP.

Timing not authorized for defining the MAPt.



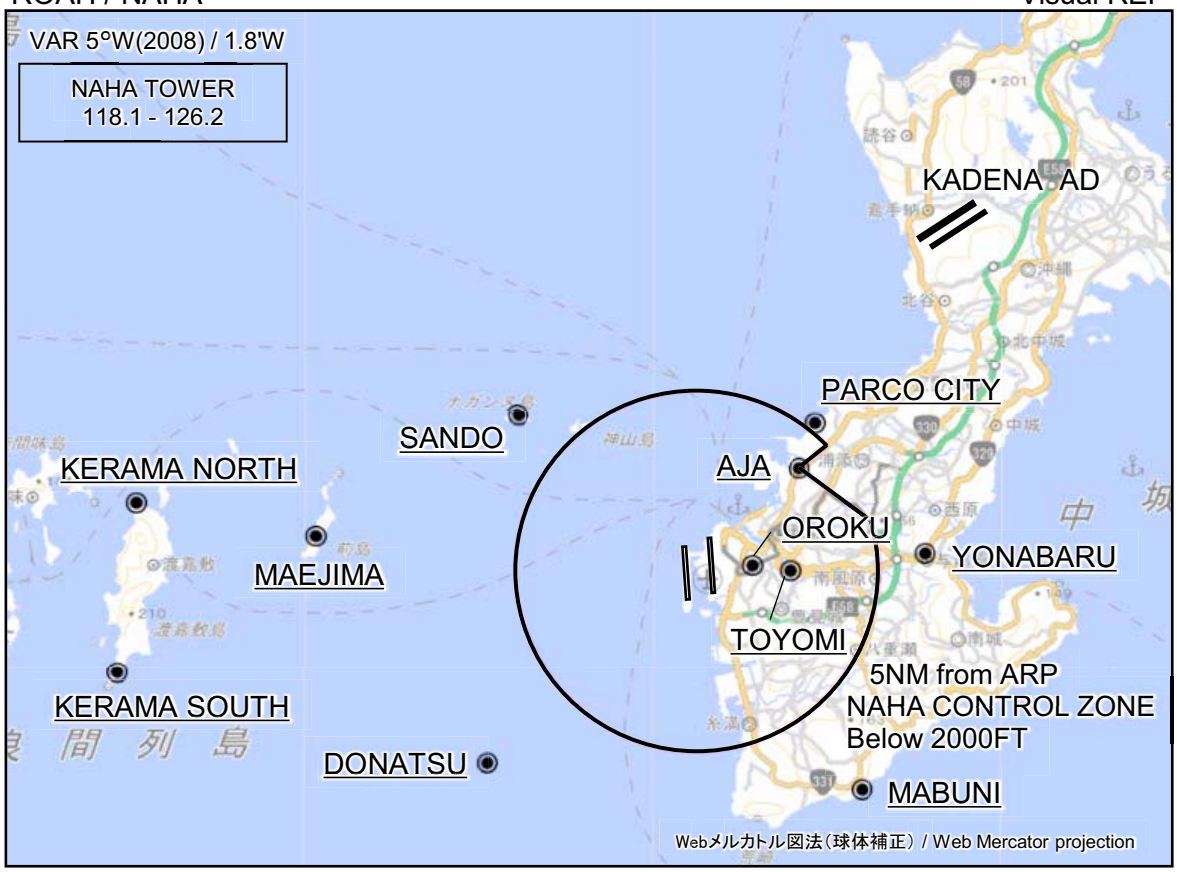

CHANGE: New PROC

| MINIMA | | AD elev. 11 |
|---|---|---|
| CAT | CIRCLING | |
| | MDA(H) | VIS |
| A | 700 (689) | 1600 |
| B | | |
| C | | 2400 |
| D | | 3200 |

Circling to WEST side of RWY only.

ROAH / NAHA

Visual REP



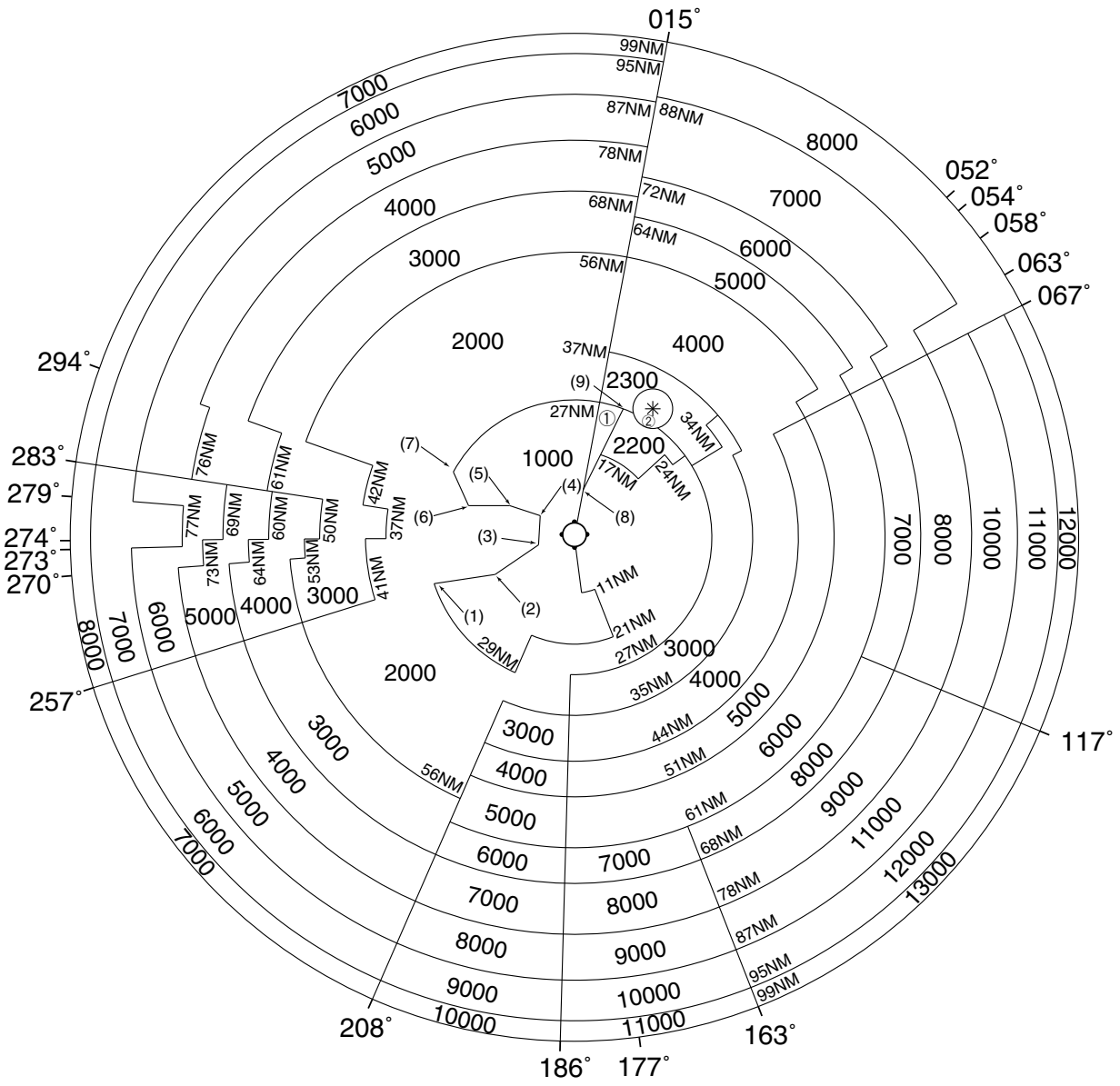

※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE : Map updated. BRG/DIST from ARP. Visual REP established(Oroku, Parco City, Toyomi).

| Call sign | BRG / DIST from ARP | Remarks |
|---|---|---|
| サンド<br>Sando | 311°T / 6.6NM | ナガンヌ島<br>Island |
| 慶良間ノース<br>Kerama North | 277°T / 15.4NM | 渡嘉敷島北端<br>North edge of island |
| 前島<br>Maejima | 276°T / 10.5NM | 前島<br>Island |
| 慶良間サウス<br>Kerama South | 260°T / 16.1NM | 渡嘉敷島南端<br>South edge of island |
| ドーナツ<br>Donatsu | 227°T / 7.8NM | ルカン礁<br>Coral reef |
| パルコシティ<br>Parco City | 037°T / 5.2NM | パルコシティ<br>Shopping mall |
| 安謝<br>Aja | 043°T / 4.0NM | 国道58号線安謝橋<br>Bridge |
| 小禄<br>Oroku | 083°T / 1.5NM | モノレール小禄駅<br>Station |
| 与那原<br>Yonabaru | 085°T / 6.2NM | 国道329号線与那原交叉点<br>Intersection |
| とよみ<br>Toyomi | 090°T / 2.5NM | とよみ大橋と爬龍橋の交点<br>Intersection |
| 摩文仁<br>Mabuni | 143°T / 7.5NM | 平和祈念公園<br>Park |

ROAH / NAHA Minimum Vectoring Altitude CHART

VAR 5˚W (2011)




① 1500
② 2600

(1) *260301N/1270807E*
(2) *260459N/1272121E*
(3) *261057N/1273045E*
(4) *261640N/1273102E*
(5) *261835N/1272422E*
(6) *261829N/1271524E*
(7) *262505N/1271157E*
(8) *262154N/1274025E*
(9) *263755N/1274900E*

CENTER: *261231N/1273834E* (NHC)
✳ : *263759N/1275528E*
RADIUS 3.9NM