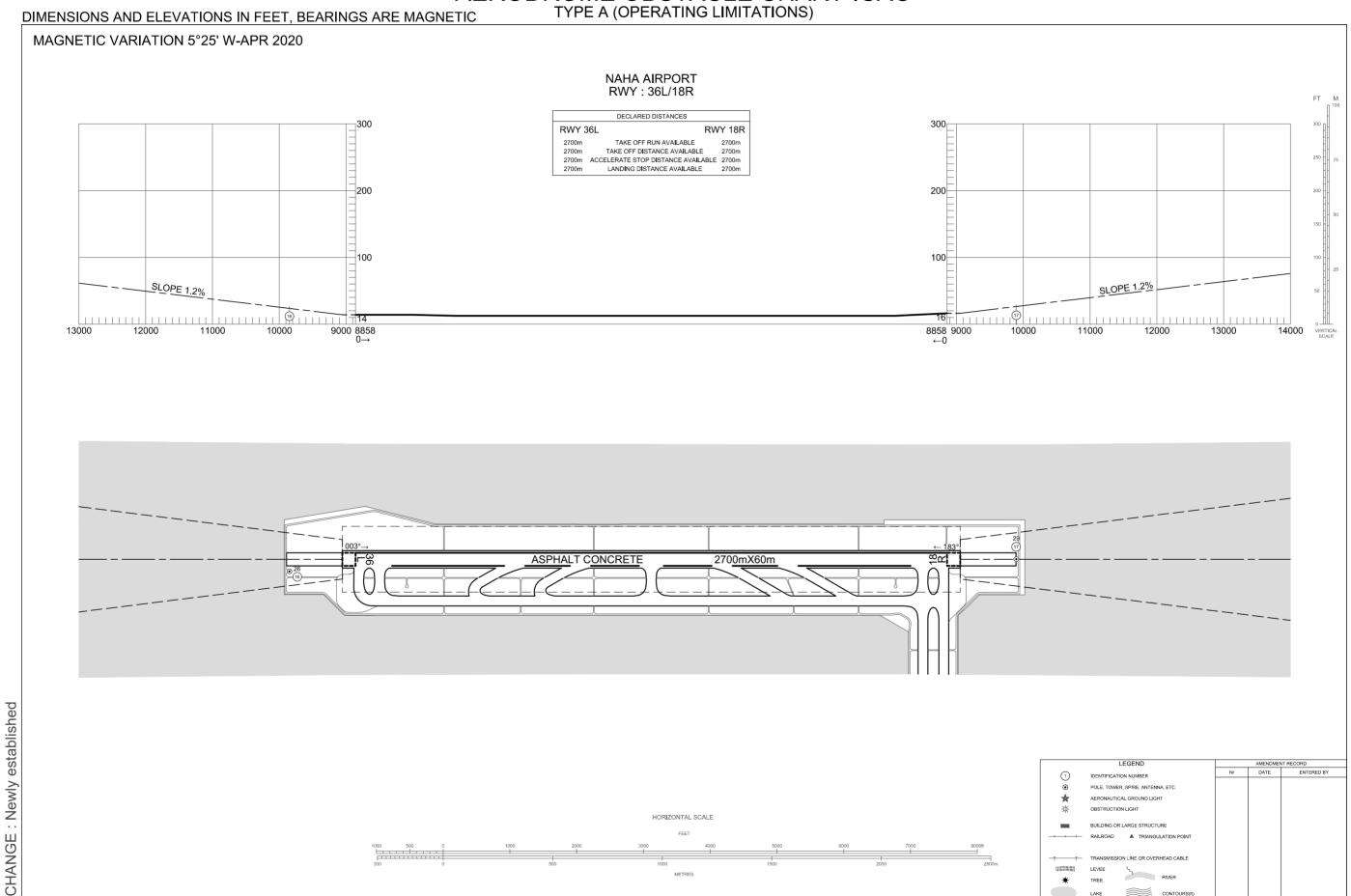


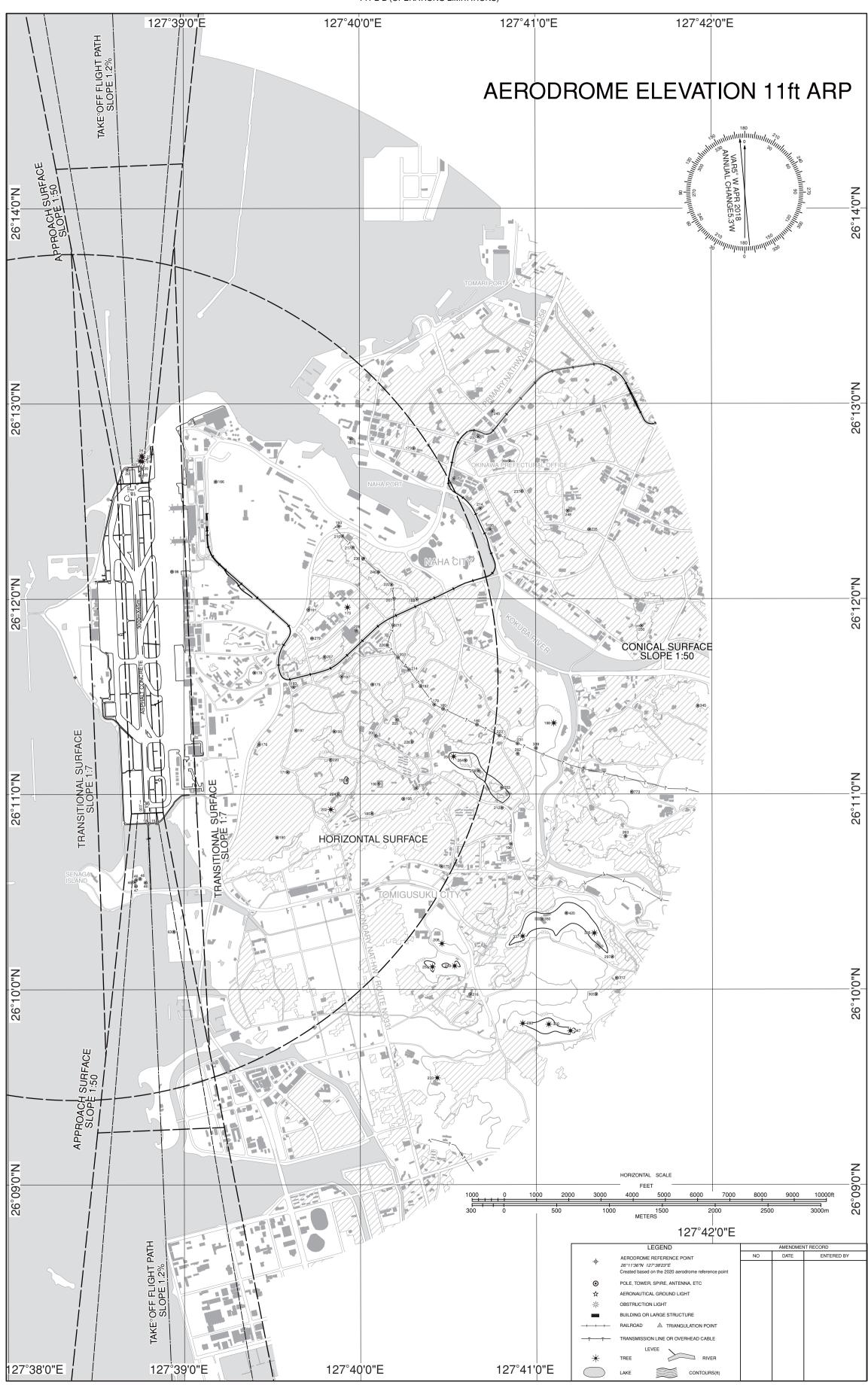
AERODROME OBSTACLE CHART-ICAO



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

AERODROME OBSTACLE CHART - ICAO

TYPE B (OPERATIONG LIMITATIONS)



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)



RNAV SID ROAH/NAHA **ESKOB THREE DEPARTURE** Basic RNP1 Note GNSS required. VAR 6°W (2021) **KIZNA** 262612.8N 1273141.7E **GELMA** 262037.9N **ESKOB THREE DEPARTURE** 1272431.2E H6R00 261455.3N 1273836.2E TACAN CHINEN 1176 TIT 16.5 <u>500</u> <u>500</u> VORTAC PROC renamed. Navigation specification. Sensor for RNAV NAHA 116.5 NHC CH-112X 26°12′31″W127°38′34″E 100FT 183 <u>500</u> 500 **ESKOB** 261009.5N 1275727.6E 30.0 OLVAL 260411.0N 1272441.3E AH801 260041.6N **KYANN** 1274429.6E 260029.7N 1273916.8E 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:

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

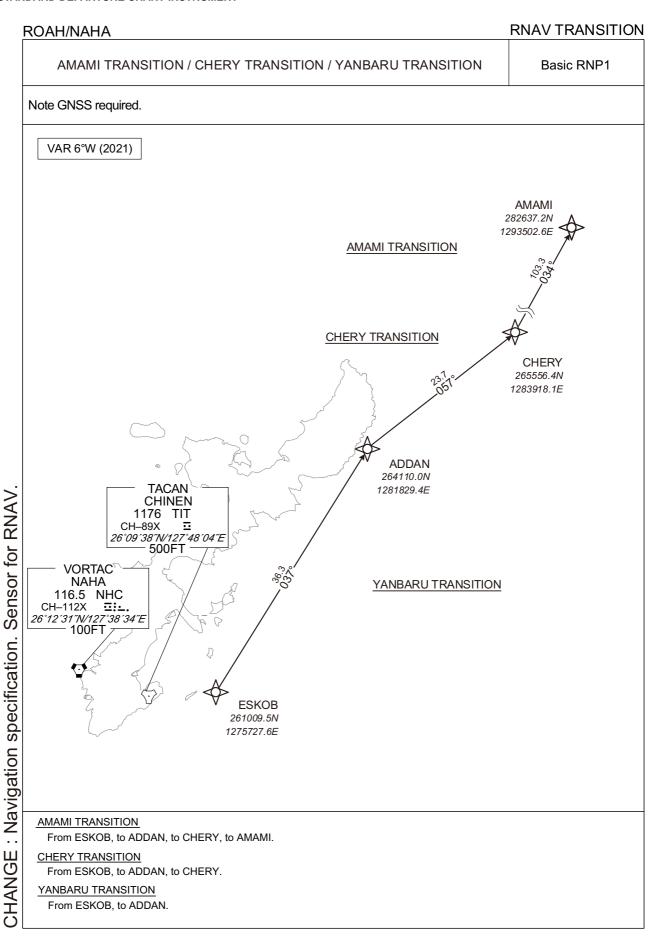
| | • | | | | | | | | | | |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| Serial Number | Path 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 | Υ | - | -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 | - | ı | -5.6 | 1 | L | ı | - | - | Basic RNP1 |
| 003 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | - | ı | - | - | 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 |



ROAH/NAHA

RNAV TRANSITION

AMAMI TRANSITION

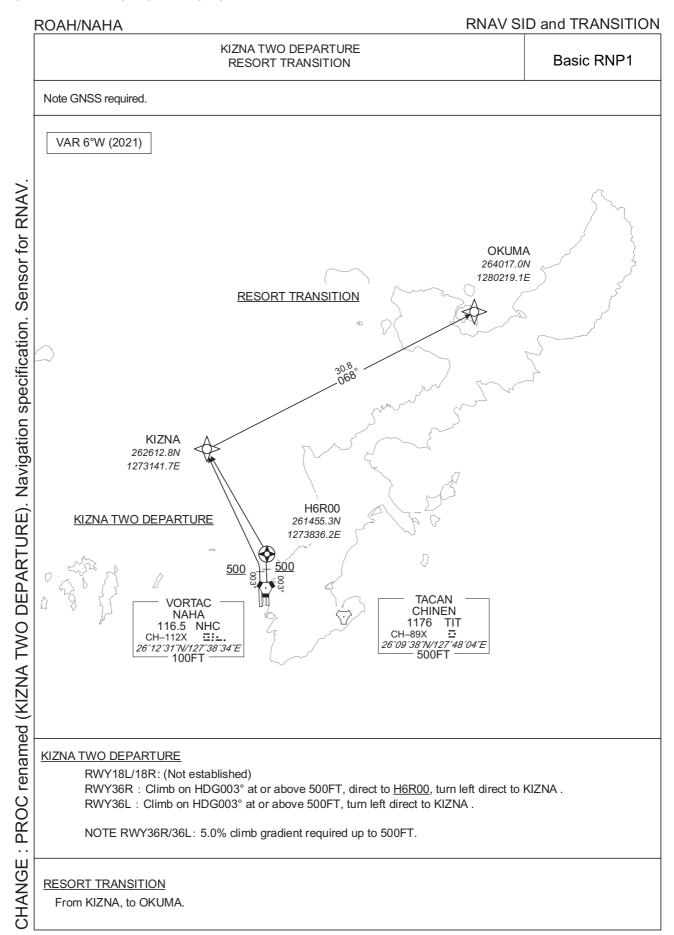
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 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 |



ROAH/NAHA

RNAV SID and TRANSITION

KIZNA TWO DEPARTURE

RWY36R

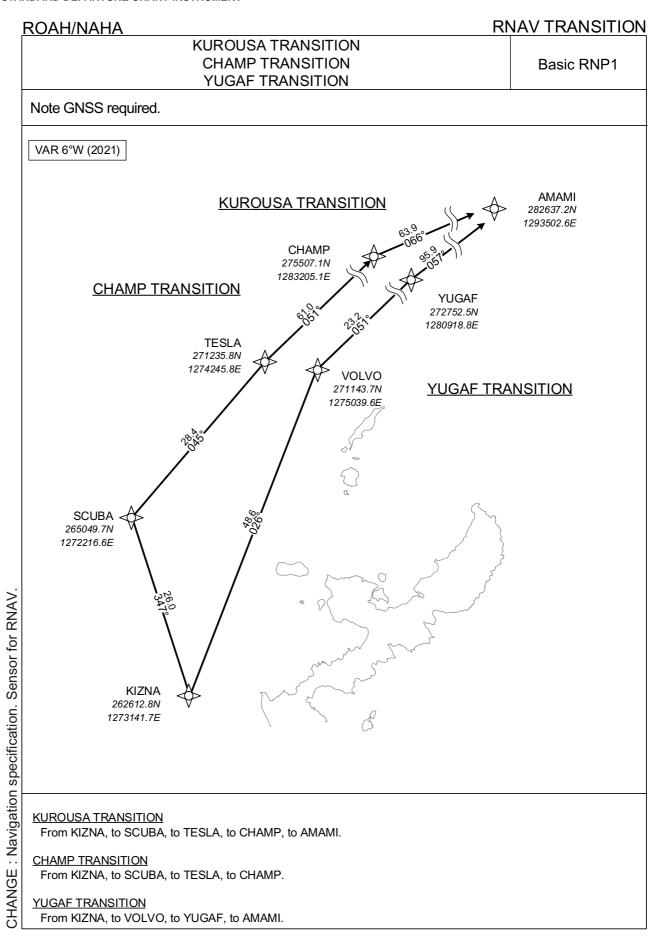
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|--------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



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 |

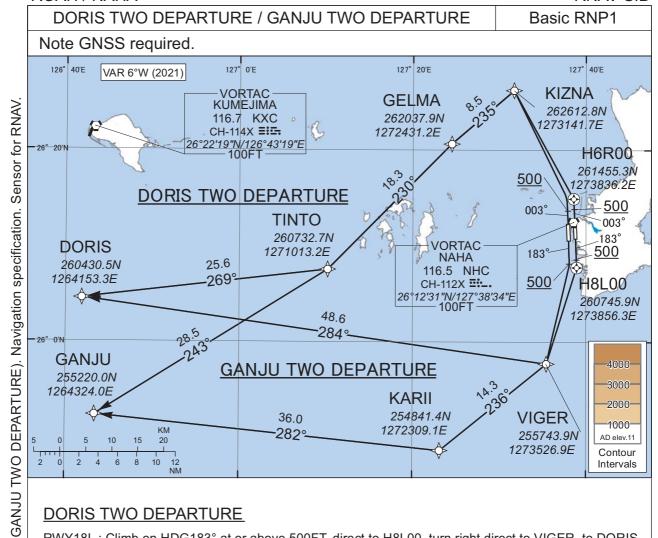
CHAMP TRANSITION

| 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 |

ROAH / NAHA RNAV SID



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.

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 | - | ı | 183 (177.6) | -5.6 | ı | ı | +500 | ı | ı | Basic RNP1 |
| 002 | DF | H8L00 | Y | - | -5.6 | ı | ı | ı | ı | ı | Basic RNP1 |
| 003 | DF | VIGER | 1 | 1 | -5.6 | 1 | R | - | - | 1 | 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 | 1 | 1 | +500 | 1 | 1 | Basic RNP1 |
| 002 | DF | VIGER | - | - | -5.6 | 1 | R | - | - | 1 | 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 | - | 1 | +500 | 1 | - | Basic RNP1 |
| 002 | DF | H6R00 | Υ | 1 | -5.6 | - | - | ı | ı | - | Basic RNP1 |
| 003 | DF | KIZNA | - | ı | -5.6 | ı | Г | - | - | ı | Basic RNP1 |
| 004 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | 1 | ı | ı | - | Basic RNP1 |
| 005 | TF | TINTO | ı | 230 (224.5) | -5.6 | 18.3 | - | - | ı | ı | Basic RNP1 |
| 006 | TF | DORIS | ı | 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 | - | ı | 003 (357.6) | -5.6 | - | - | +500 | ı | ı | Basic RNP1 |
| 002 | DF | KIZNA | ı | ı | -5.6 | ı | L | ı | ı | ı | Basic RNP1 |
| 003 | TF | GELMA | 1 | 235 (229.0) | -5.6 | 8.5 | 1 | ı | 1 | 1 | Basic RNP1 |
| 004 | TF | TINTO | ı | 230 (224.5) | -5.6 | 18.3 | - | ı | ı | ı | Basic RNP1 |
| 005 | TF | DORIS | ı | 269 (263.3) | -5.6 | 25.6 | - | ı | ı | ı | Basic RNP1 |

| ROAH / NAHA | RNAV SID |
|-------------|----------|
| | |

| ROAH | / NAHA | | | | | | | | | | RNAV SIL |
|------------------|---|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| GANJ | Serial Path Waynoint Fly Course Magnetic Distance Turn Altitude Speed Vertical Navigation | | | | | | | | | | |
| | 18L | | | | | | | | | | |
| 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 | 1 | - | Basic RNP1 |
| 002 | DF | H8L00 | Υ | - | -5.6 | - | - | - | ı | - | Basic RNP1 |
| 003 | DF | VIGER | - | - | -5.6 | - | R | - | 1 | - | 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 |
| RWY | 18R | | | | | | | | | | |
| 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 | ı | ı | 183 (177.6) | -5.6 | - | - | +500 | ı | ı | Basic RNP1 |
| 002 | DF | VIGER | - | - | -5.6 | i | R | - | ı | ı | Basic RNP1 |
| 003 | TF | KARII | - | 236 (230.8) | -5.6 | 14.3 | - | - | ı | 1 | Basic RNP1 |
| 004 | TF | GANJU | - | 282 (276.0) | -5.6 | 36.0 | - | - | ı | ı | Basic RNP1 |
| RWY | 36R | | | | | | | | | | |
| 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 | ı | - | Basic RNP1 |
| 002 | DF | H6R00 | Υ | - | -5.6 | - | - | - | - | - | Basic RNP1 |
| 003 | DF | KIZNA | - | - | -5.6 | - | L | - | - | - | Basic RNP1 |
| 004 | TF | GELMA | - | 235 (229.0) | -5.6 | 8.5 | - | - | 1 | - | Basic RNP1 |
| 005 | TF | TINTO | - | 230 (224.5) | -5.6 | 18.3 | - | - | - | ı | Basic RNP1 |
| 006 | TF | GANJU | - | 243 (237.8) | -5.6 | 28.5 | - | - | ı | ı | Basic RNP1 |
| RWY | 36L | | | | | | | | | | |
| 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.

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.

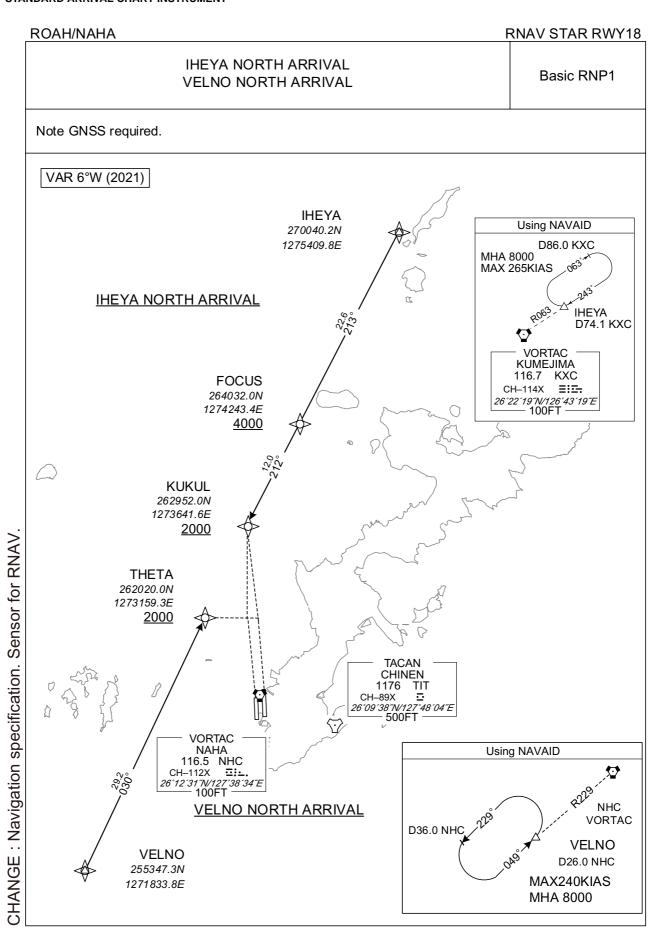
LAFTY ARRIVAL

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





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.

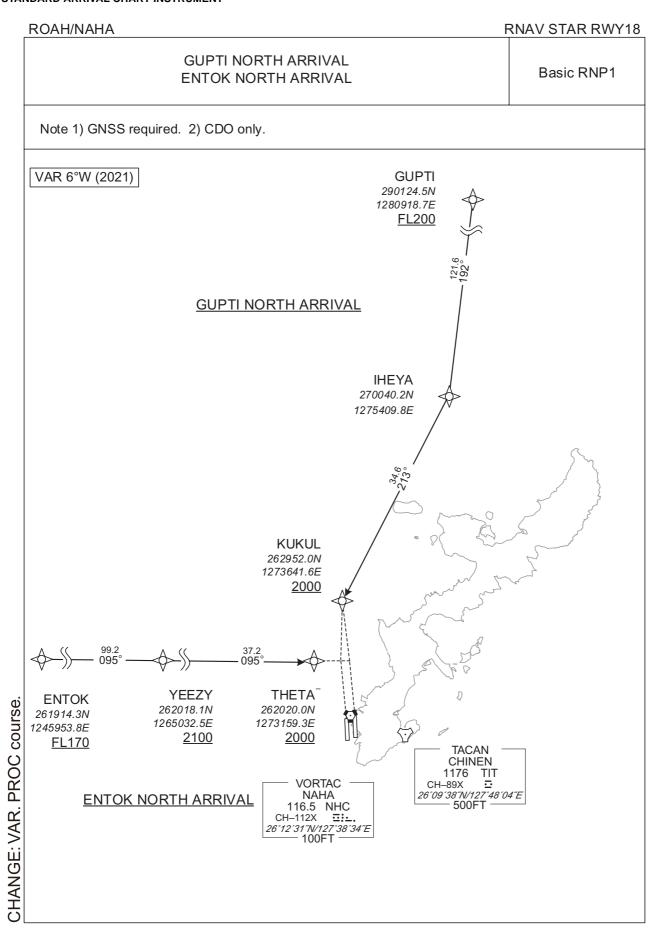
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|--------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

ROAH/NAHA **RNAV STAR RWY18** Basic RNP1 RESORT NORTH ARRIVAL Note 1) GNSS required. 2) CDO only. VAR 6°W (2021) **OKUMA RESORT NORTH ARRIVAL** 264017.0N 1280219.1E **CLIFF** 263312.5N 1274453.2E Using NAVAID 2700 D45.0 NHC **KUKUL** MHA 5000 MAX 250KIAS 262952.0N 1273641.6E OKUMA 2000 D35.0 NHC NHC VORTAC **VORTAC** NAHA **TACAN** 116.5 NHC CHINEN 1176 TIT CH-89X 26°09′38″N/127°48′04″E 500FT

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 | - | | - | - | 1 | 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 | - | 1 | Basic RNP1 |



ROAH / NAHA

RNAV STAR RWY18

GUPTI NORTH ARRIVAL

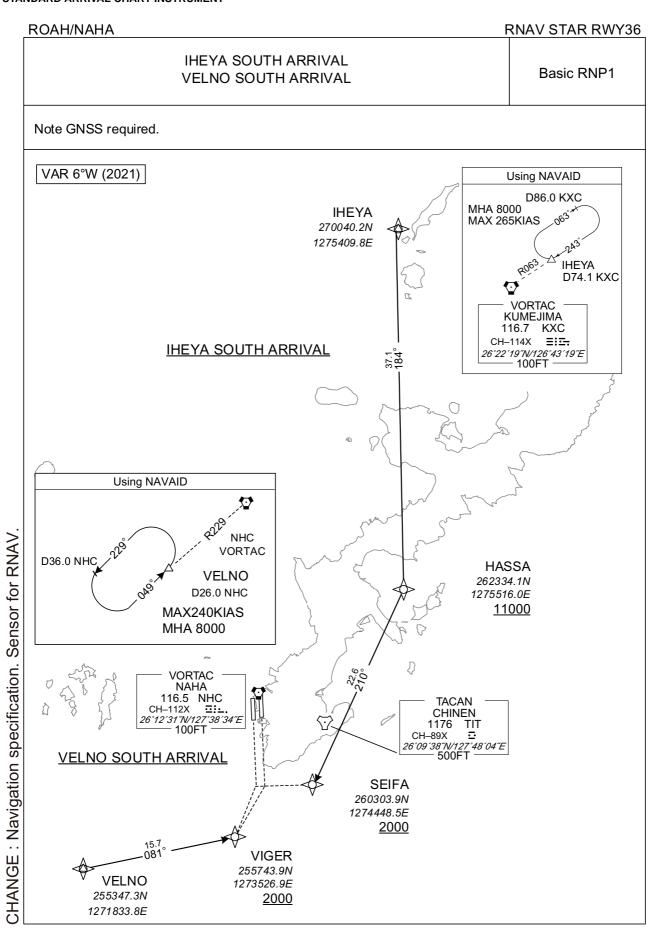
From GUPTI at or above FL200, to IHEYA, to KUKUL at or above 2000FT.

| 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.

| ı | | | | | | | | | | | | |
|---|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| | 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 |



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 |

ROAH/NAHA

RNAV STAR RWY36

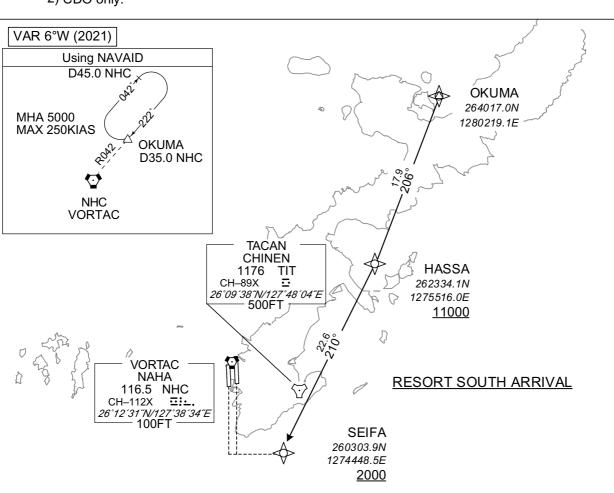
RESORT SOUTH ARRIVAL

Basic RNP1

Note 1) GNSS required.

STANDARD ARRIVAL CHART-INSTRUMENT

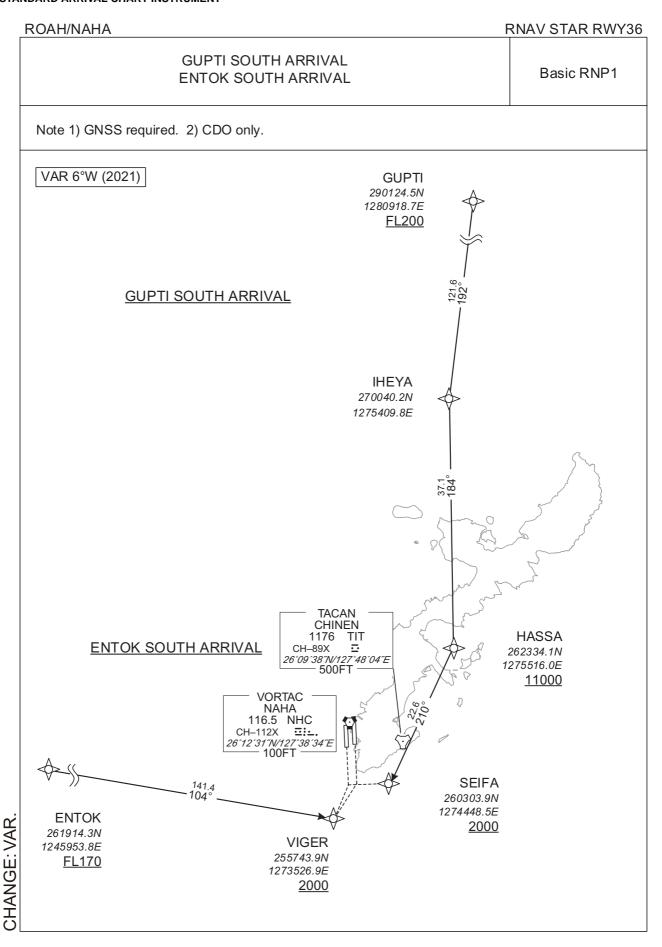
2) CDO only.



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 | 1 | 206 (200.7) | -5.6 | 17.9 | ı | +11000 | - | ı | Basic RNP1 |
| 003 | TF | SEIFA | - | 210 (204.6) | -5.6 | 22.6 | - | +2000 | - | - | Basic RNP1 |



ROAH / NAHA

RNAV STAR RWY36

GUPTI SOUTH ARRIVAL

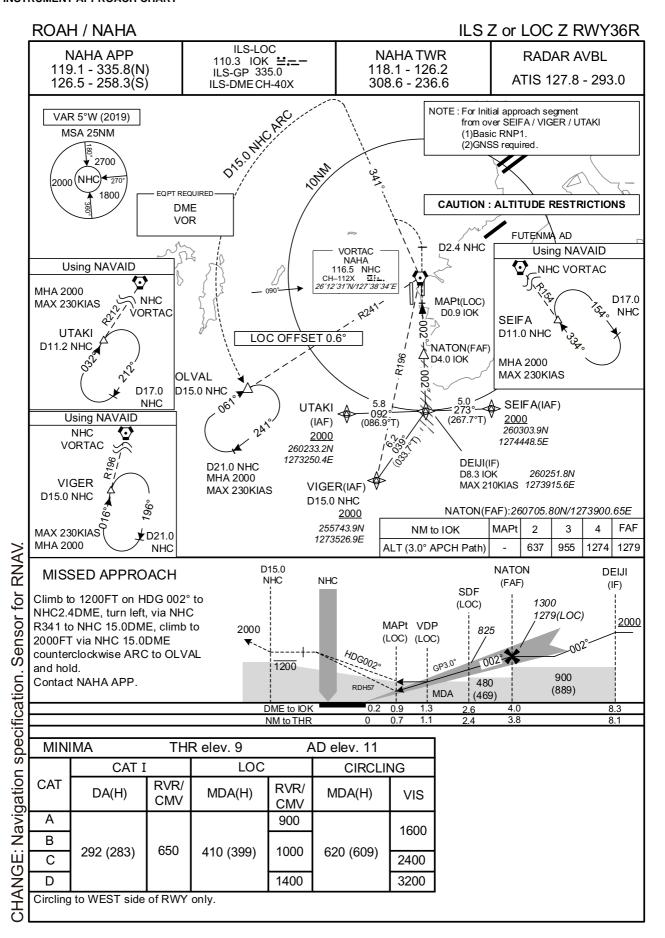
From GUPTI at or above FL200, to IHEYA, to HASSA at or above 11000FT, to SEIFA at or above 2000FT.

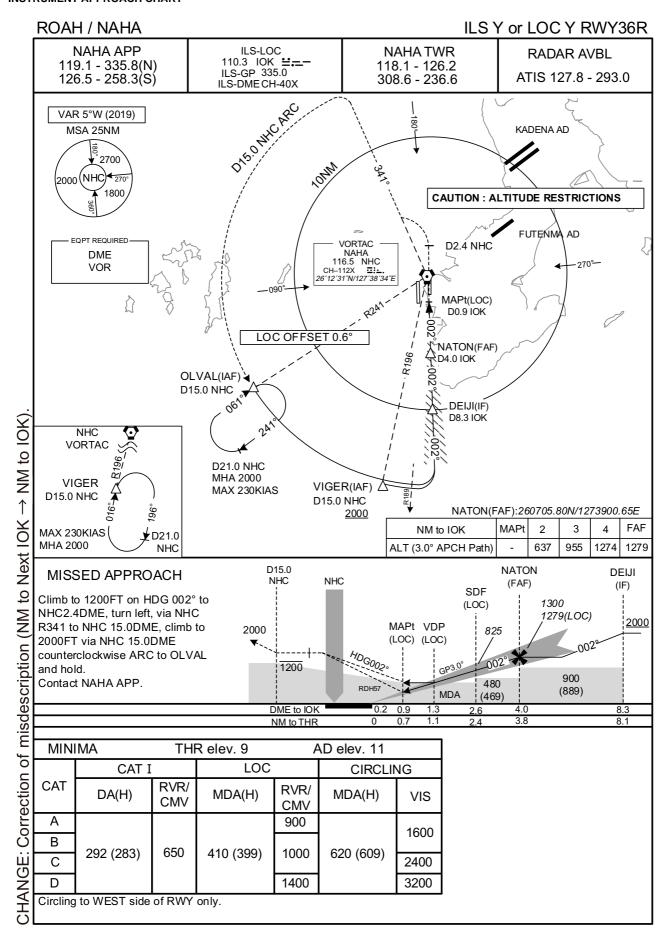
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 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 |

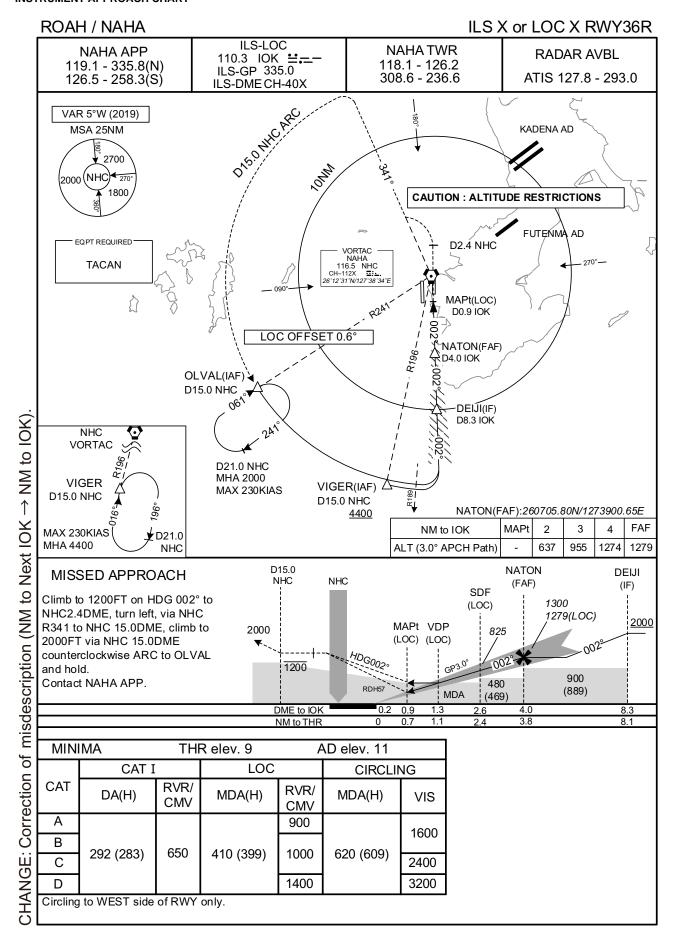
ENTOK SOUTH ARRIVAL

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 |



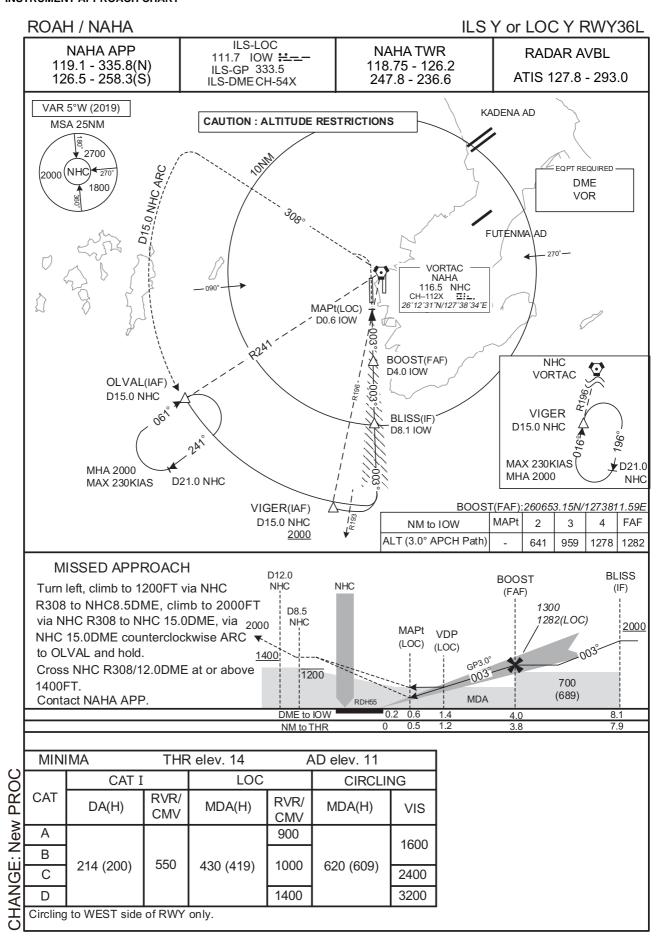




RNAV

INSTRUMENT APPROACH CHART

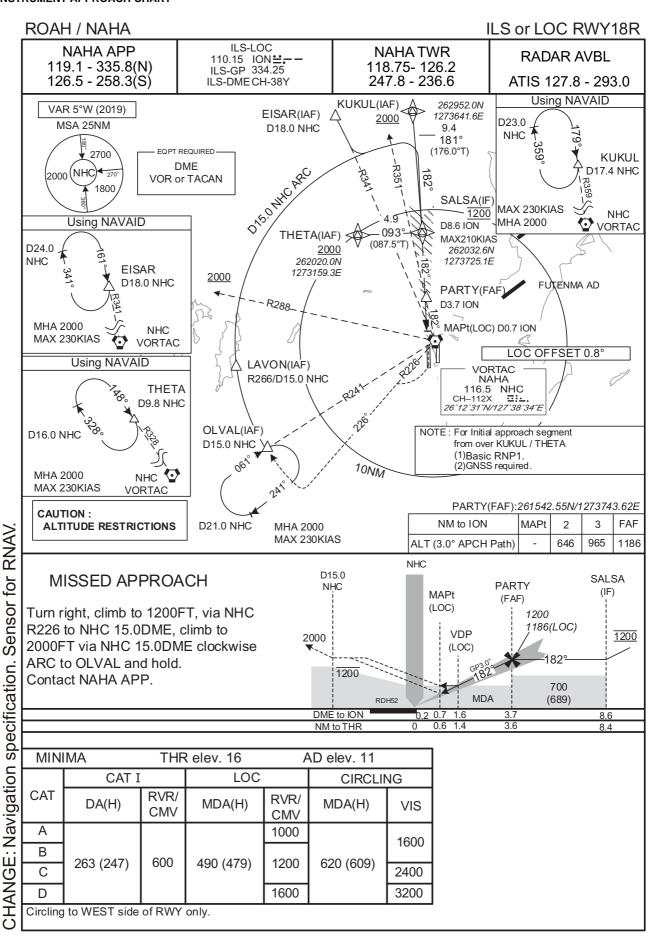
ILS Z or LOC Z RWY36L ROAH / NAHA ILS-LOC NAHA APP **NAHATWR** RADAR AVBL 111.7 IOW **∺** 119.1 - 335.8(N) 118.75 - 126.2 ILS-GP 333.5 ATIS 127.8 - 293.0 126.5 - 258.3(S) 247.8 - 236.6 ILS-DME CH-54X Using NAVAID Using NAVAID VAR 5°W (2019) NHC NHC VORTAC MHA 2000 MSA 25NM VORTAC **CAUTION: ALTITUDE RESTRICTIONS** MAX 230KIAS 3. D17.0 2700 D15.0 NHC ARC UTAKI ON NHC _{|2000} (инс D11.2 NHC **SEIFA** D11.0 NHC 1800 ³0⊗° MHA 2000 D17.0 MAX 230KIAS NHC VORTAC NAHA 116.5 NHC CH–112X ☲:-. 26°12'31'W/127'38'34'E EQPT REQUIRED NOTE: For Initial approach segment DME from over SEIFA / VIGER / UTAKI .090° (1)Basic RNP1. VOR (2) GNSS required. MAPt(LOC) D0 6 IOW R241 BOOST(FAF) Using NAVAID **D4.0 IOW** NHC **SEIFA OLVAL VORTAC** (IAF) D15.0 NHC 2000 **UTAKI** 061, 5.0 5.8 ◈ (IAF) **VIGER** 092 (267.6°T) 260303.9N 2000 D15.0 NHC (086.9°) 1274448.5E ,96_′ 260233.2N 1273250.4E BLISS(IF) D8.1 IOW MHA 2000 MAX 230KIAS D21.0 MAX210KIAS MAX 230KIAS D21.0 NHC MHA 2000 NHC 260249.3N 1273823.0E BOOST(FAF):260653.15N/127381 1.59E VIGER(IAF) 255743.9N D15.0 NHC MAPt FAF 2 4 NM to IOW 1273526 9F 2000 ALT (3.0° APCH Path) 641 959 1278 1282 MISSED APPROACH D12.0 **BLISS BOOST** Turn left, climb to 1200FT via NHC NHC NHC (IF) (FAF) D8.5 R 308 to NHC8.5DME, climb to 2000FT specification. Sensor for 1300 NHC via NHC R308 to NHC 15.0DME, via 1282(LOC) 2000 MAPt NHC 15.0DME counterclockwise ARC 2000 **VDP** (LOC) (LOC) to OLVAL and hold. 1400 Cross NHC R308/12.0DME at or above 1200 003 1400FT. 700 Contact NAHA APP. (689)MDA DME to IOW 0.6 8.1 4.0 0.5 NM to THR **MINIMA** THR elev. 14 AD elev. 11 CHANGE: Navigation CAT I LOC **CIRCLING** CAT RVR/ RVR/ DA(H) MDA(H) MDA(H) VIS CMV **CMV** Α 900 1600 В 550 1000 214 (200) 430 (419) 620 (609) C 2400 1400 3200 D Circling to WEST side of RWY only.

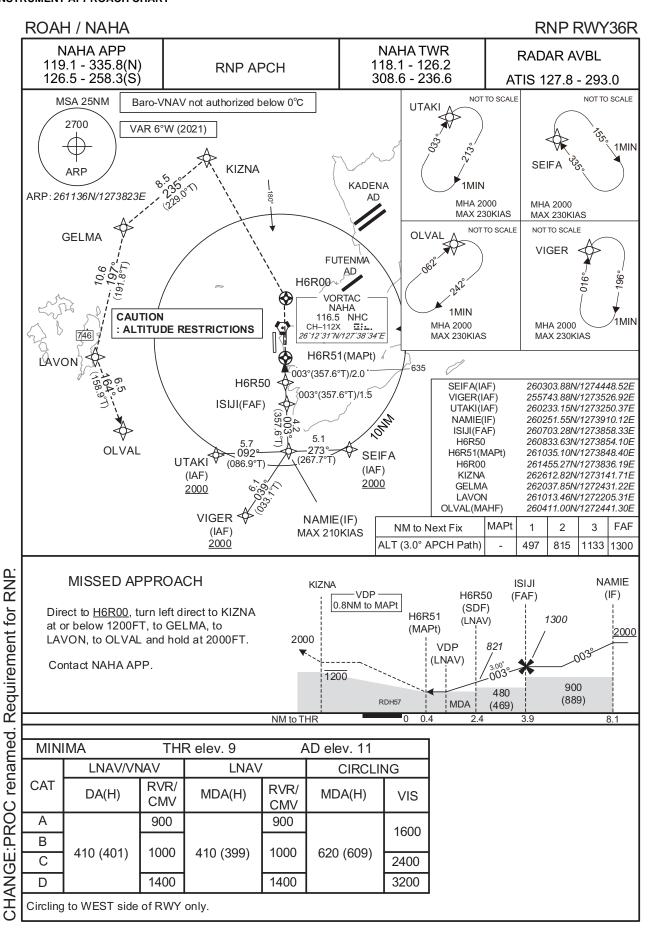


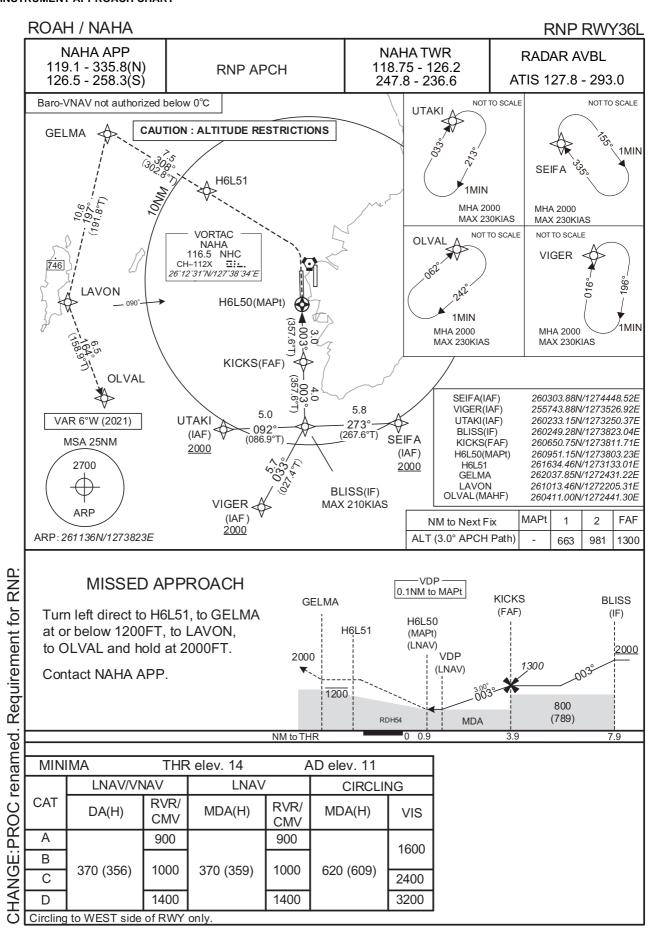
ROAH / NAHA ILS X or LOC X RWY36L ILS-LOC NAHA APP **NAHATWR** RADAR AVBL 111.7 IOW **∺** ILS-GP 333.5 119.1 - 335.8(N) 118.75 - 126.2 ATIS 127.8 - 293.0 126.5 - 258.3(S) 247.8 - 236.6 ILS-DME CH-54X VAR 5°W (2019) KADENA AD **CAUTION: ALTITUDE RESTRICTIONS** MSA 25NM D15.0 NHC ARC 2700 (₂₀₀₀ (NHC EQPT REQUIRED 1800 **TACAN** FUT/ÉNMA AD 270°-VORTAC NAHA 116.5 NHC CH–112X <u>□:</u>... 26°12'31"N/127'38'34"E MAPt(LOC) D0.6 IOW R241 BOOST(FAF) NHC D4.0 IOW VORTAC OLVAL(IAF) -003 D15.0 NHC 061, **VIGER** BLISS(IF) D15.0 NHC D8.1 IOW MAX 230KIAS D21.0 MHA 2000 MHA 4400 NHC D21.0 NHC MAX 230KIAS BOOST(FAF):260653.15N/127381 1.59E VIGER(IAF) MAPt D15.0 NHC FAF 4 NM to IOW 2 3 4400 ALT (3.0° APCH Path) 641 959 1278 1282 MISSED APPROACH D12.0 **BLISS** BOOST Turn left, climb to 1200FT via NHC NHC NHC (IF) (FAF) R308 to NHC8.5DME, climb to 2000FT D8.5 1300 via NHC R308 to NHC 15.0DME, via NHC 1282(LOC) 2000 MAPt NHC 15.0DME counterclockwise ARC 2000 VDP (LOC) (LOC) to OLVAL and hold. Cross NHC R308/12.0DME at or above -003° 1200 1400FT. 700 Contact NAHA APP. (689)MDA 0.2 0.6 DME to IOW 4.0 3.8 8.1 NM to THR MINIMA THR elev. 14 AD elev. 11 ANGE: New PROC CAT I LOC **CIRCLING** CAT RVR/ RVR/ DA(H) MDA(H) MDA(H) VIS CMV **CMV** Α 900 1600 В 550 214 (200) 430 (419) 1000 620 (609) С 2400 1400 3200 D

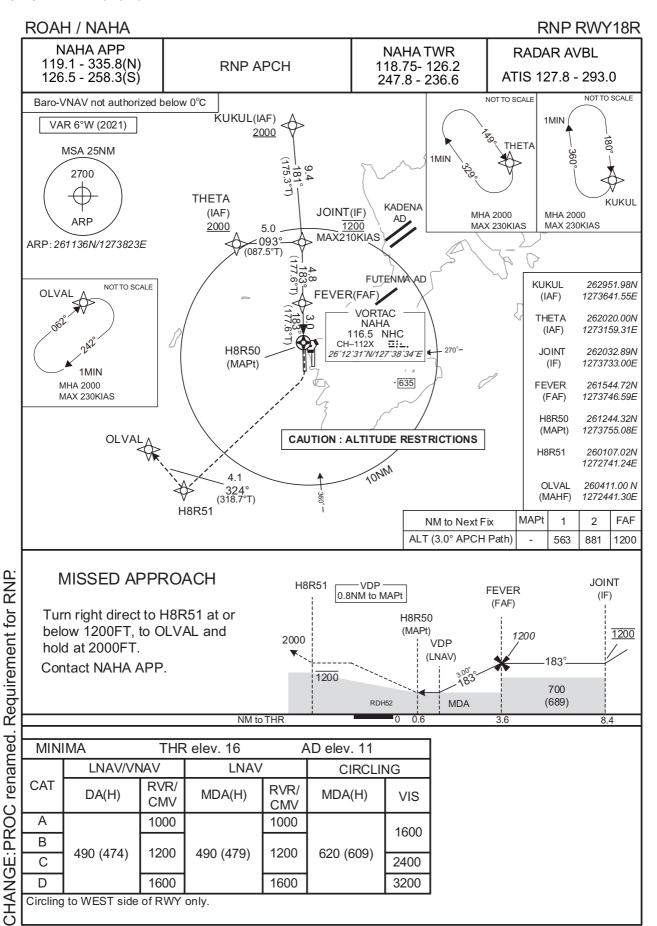
Circling to WEST side of RWY only.

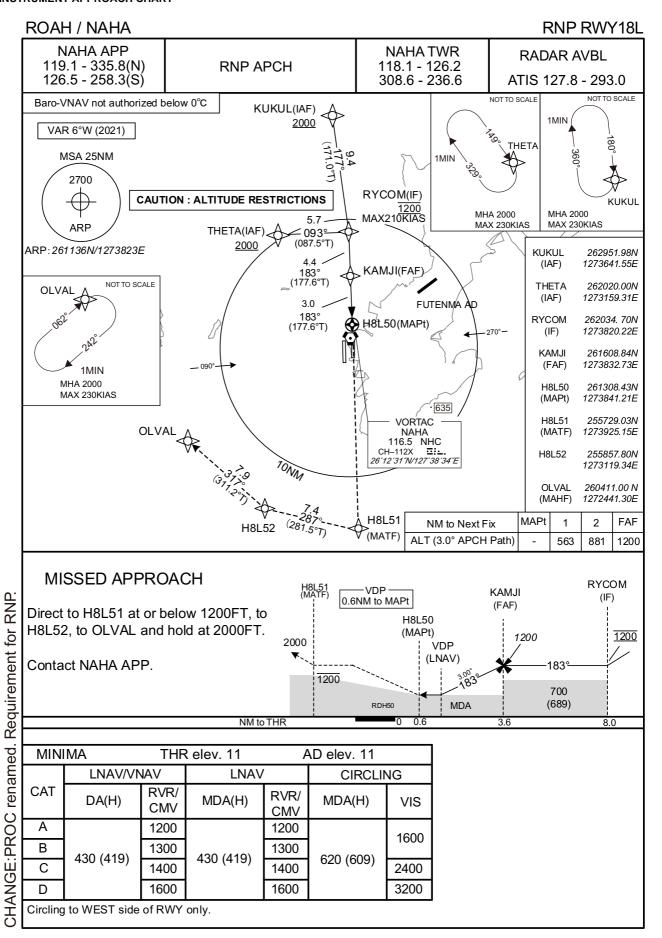
CH

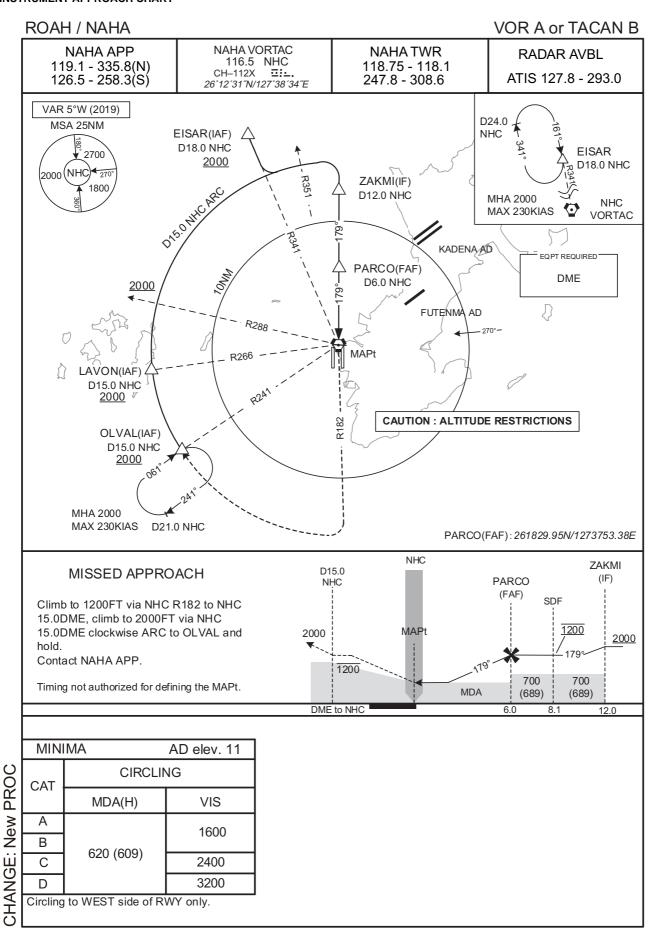


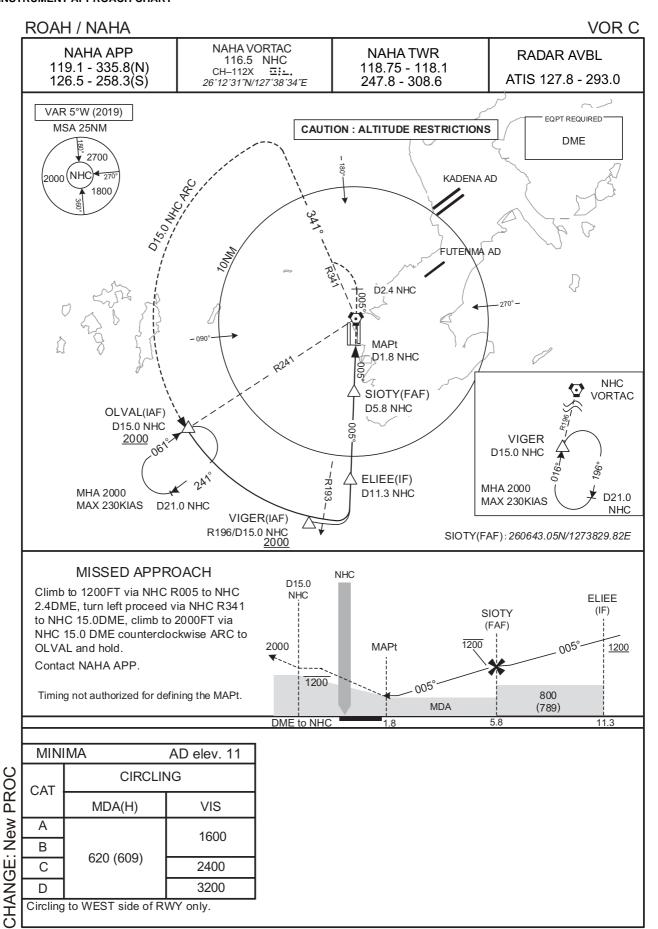


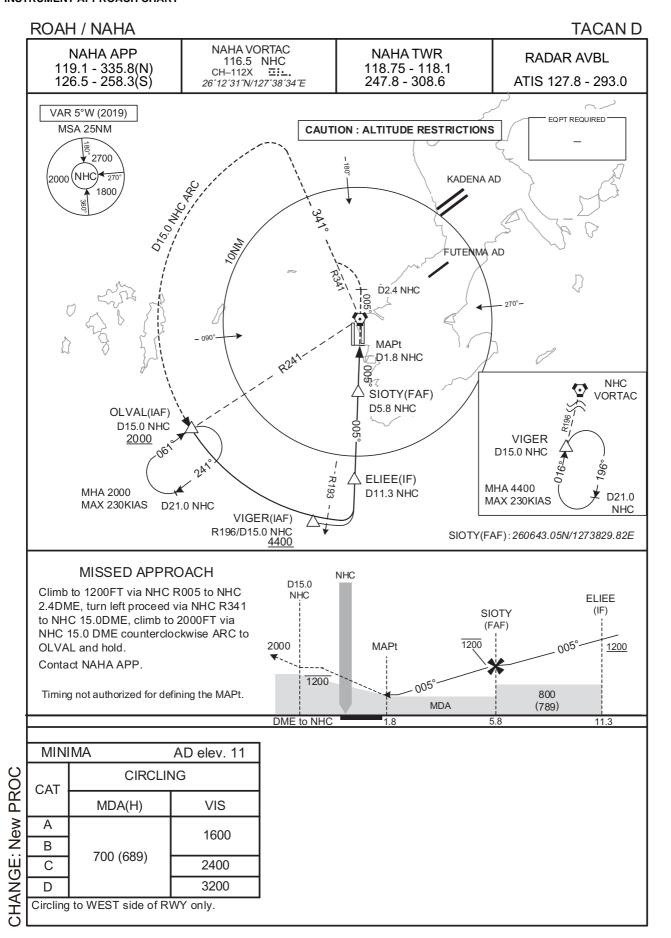














※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

| sned | Call sign | BRG / DIST from ARP | Remarks |
|---------------------------|---------------------|---------------------|--------------------------------|
| estabilished サン Sar | | 311°T / 6.6NM | ナガンヌ島 Island |
| 上 慶月 と Ker | 良間ノース rama North | 277°T / 15.4NM | 渡嘉敷島北端 North edge of island |
| | ejima | 276°T / 10.5NM | 前島 Island |
| ₹ Ker | 良間サウス rama South | 260°T / 16.1NM | 渡嘉敷島南端 South edge of island |
| 2 | ーナツ natsu | 227°T / 7.8NM | ルカン礁 Coral reef |
| o Par | ルコシティ rco City | 037°T / 5.2NM | パルコシティ Shopping mall |
| | | 043°T / 4.0NM | 国道58号線安謝橋 Bridge |
| 小和 Orco | | 083°T / 1.5NM | モノレール小禄駅 Station |
| 与 Yor | 那原 nabaru | 085°T / 6.2NM | 国道329号線与那原交叉点 Intersection |
| [] 논문 | にみ yomi | 090°T / 2.5NM | とよみ大橋と爬龍橋の交点 Intersection |
| 摩 Mal | 文仁 buni | 143°T / 7.5NM | 平和祈念公園 Park |

