

CHANGE : ACFT stand stop line for spot 6 relocated. ACFT stand turning line for spot 8 added.



**INTENTIONALLY LEFT BLANK**

STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

SID

GUSUK ONE DEPARTURE

RWY04 : Climb RWY HDG to 600FT, turn right,...

RWY22 : Climb RWY HDG to 600FT, via IGE R214 to IGE R214/2.8DME,turn left HDG027° ...

... to intercept and proceed via IGE R072 to GUSUK.

Cross GUSUK at or above 3000FT.

MIYAKO TWO DEPARTURE

RWY04 : Climb RWY HDG to 600FT, turn right HDG175° ...

RWY22 : Climb RWY HDG to 600FT, via IGE R214 to IGE R214/2.8DME,turn left HDG085° ...

... to intercept and proceed via IGE R130 to IGE 14.0DME, turn left, via MJC R241 to MJC VORTAC.



## STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

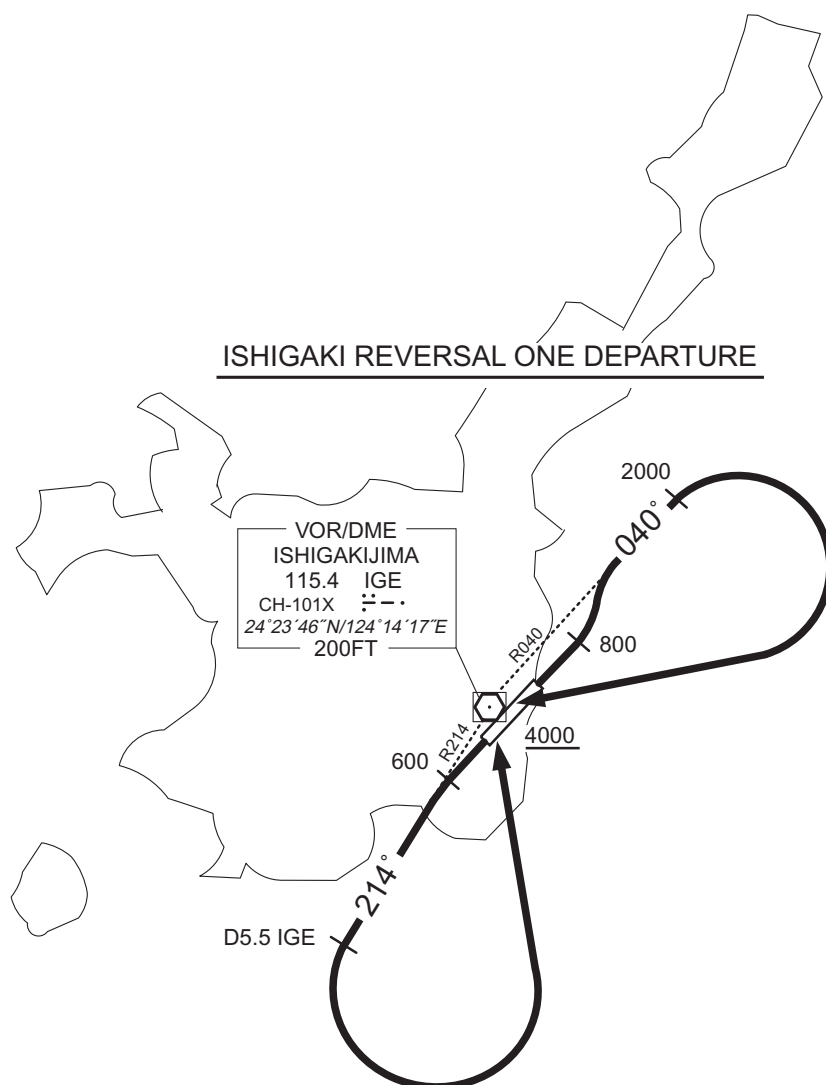
SID

ISHIGAKI REVERSAL ONE DEPARTURE

RWY04 : Climb RWY HDG to 800FT, turn left to intercept and proceed via IGE R040 to 2000FT,  
turn right,direct to IGE VOR/DME.

Cross IGE VOR/DME at or above 4000FT.

RWY22 : Climb RWY HDG to 600FT, via IGE R214 to IGE R214/5.5DME, turn left, direct to IGE VOR/DME.  
Cross IGE VOR/DME at or above 4000FT.



STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

SID

KOHAM ONE DEPARTURE

RWY04 : Climb RWY HDG to 800FT, turn left to intercept and proceed via IGE R040 to IGE R040/5.5DME, turn left, via IGE 8.0DME counterclockwise ARC,turn right to intercept and proceed via IGE R275 to KOHAM.

Cross KOHAM at or above 4000FT.

RWY22 : Climb RWY HDG to 600FT,via IGE R214 to IGE R214/5.5DME,turn right, via IGE 8.0DME clockwise ARC,turn left to intercept and proceed via IGE R275 to KOHAM.

Cross KOHAM at or above 4000FT.

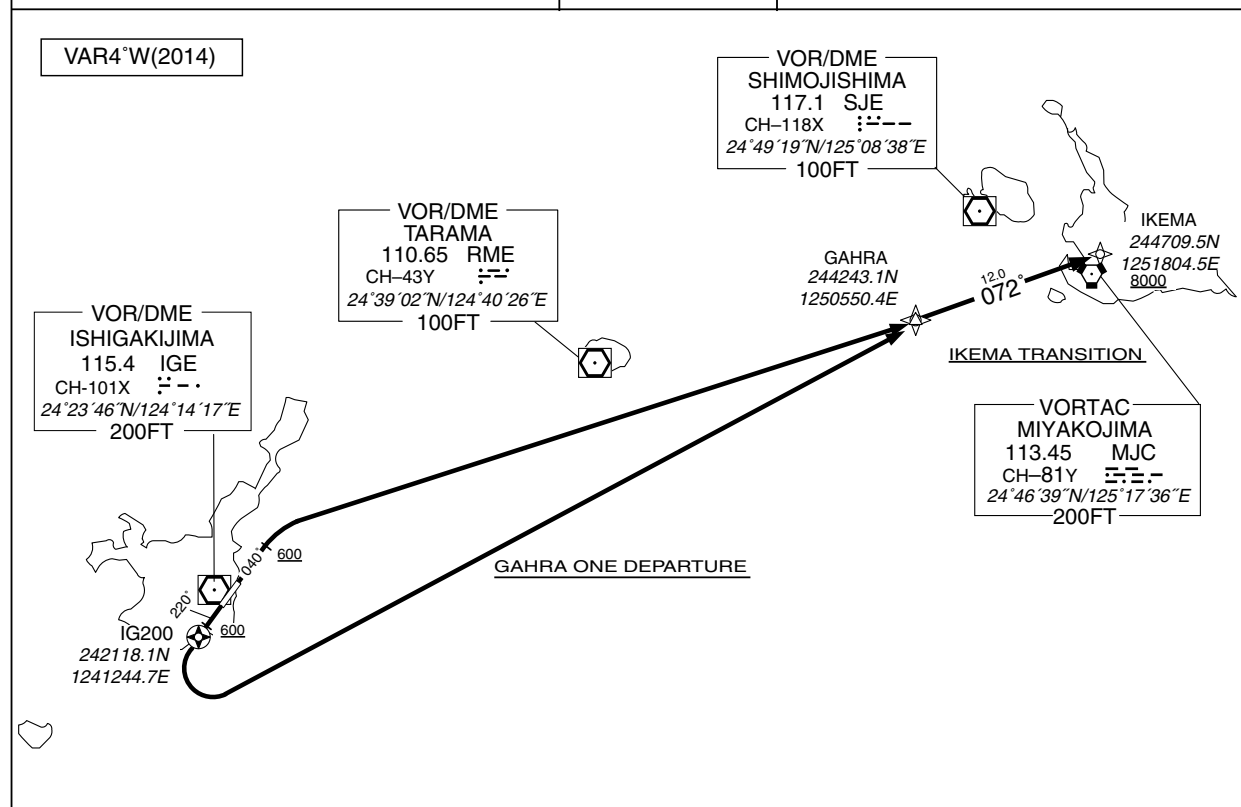


## STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV SID and TRANSITION

| GAHRA ONE DEPARTURE<br>IKEMA TRANSITION   |                       | RNAV1  |
|---|-----------------------|--|
| NOTE 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll.<br><br>2) RADAR service required. | Critical DME          | RWY22 : IGE : 52NM to GAHRA - 47NM to GAHRA<br>MJC : 52NM to GAHRA - 50NM to GAHRA   |
|   | DME GAP               | RWY04 : DER - GAHRA<br>RWY22 : DER - IG200<br>IG200 - 52NM to GAHRA<br>47NM to GAHRA - GAHRA<br>IKEMA TRANSITION : GAHRA - IKEMA |
|   | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1  |

GAHRA ONE DEPARTURE

RWY04 : Climb on HDG 040° at or above 600FT, turn right direct to GAHRA.

RWY22 : Climb on HDG 220° at or above 600FT, direct to IG200, turn left direct to GAHRA.IKEMA TRANSITION

From GAHRA, to IKEMA at or above 8000FT.

## STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV SID and TRANSITION

GAHRA ONE DEPARTURE

## RWY04

| 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              | —                   | —        | 040<br>(035.9) | -4.1               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | GAHRA               | —        | —              | -4.1               | —             | R              | —             | —            | —              | RNAV1                    |

## RWY22

| 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              | —                   | —        | 220<br>(215.9) | -4.1               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | IG200               | Y        | —              | -4.1               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | DF              | GAHRA               | —        | —              | -4.1               | —             | L              | —             | —            | —              | RNAV1                    |

IKEMA 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              | GAHRA               | —        | —              | -4.1               | —             | —              | —             | —            | —              | RNAV1                    |
| 002           | TF              | IKEMA               | —        | 072<br>(068.2) | -4.1               | 12.0          | —              | +8000         | —            | —              | RNAV1                    |

## STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV SID

| AYAKA ONE DEPARTURE  |                        | RNAV1  |
|--|------------------------|--|
| NOTE 1) DME/DME/IRU or GNSS required.<br>※ The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll.<br><br>2) RADAR service required. | Critical DME           | RWY04 : IGE : 1NM to IG400 - 19NM to AYAKA<br>YNE : 1NM to IG400 - IG401<br>MJC : 24NM to AYAKA - 19NM to AYAKA<br>RWY22 : YNE : 6NM to IG202 - 5NM to IG203<br>MJC : IG202 - 5NM to IG203 |
|  | DME GAP                | RWY04 : DER - 1NM to IG400<br>18NM to AYAKA - AYAKA<br>RWY22 : DER - 6NM to IG202<br>5NM to IG203 - AYAKA  |
|  | Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1  |

VAR4°W(2014)

AYAKA ONE DEPARTURE

RWY04 : Climb on HDG 040° at or above 600FT, direct to IG400, to IG401, to IG402, to AYAKA at or above 5000FT.

RWY22 : Climb on HDG 220° at or above 600FT, direct to IG200, to IG201, to IG202, to IG203 at or above 5000FT, to AYAKA.

NOTE RWY04 : 4.0% climb gradient required up to 2000FT.

OBST ALT 836FT at 9.53NM 021° FM end of RWY04.



## STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV SID

AYAKA ONE DEPARTURE

## RWY04

| 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              | —                   | —        | 040<br>(035.9) | -4.1               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | IG400               | —        | —              | -4.1               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | IG401               | —        | 007<br>(002.6) | -4.1               | 3.0           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | IG402               | —        | 293<br>(289.1) | -4.1               | 4.6           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | AYAKA               | —        | 260<br>(256.1) | -4.1               | 36.0          | —              | +5000         | —            | —              | RNAV1                    |

## RWY22

| 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              | —                   | —        | 220<br>(215.9) | -4.1               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | IG200               | Y        | —              | -4.1               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | IG201               | —        | 220<br>(215.7) | -4.1               | 4.6           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | IG202               | —        | 282<br>(277.9) | -4.1               | 9.6           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | IG203               | —        | 288<br>(283.9) | -4.1               | 8.4           | —              | +5000         | —            | —              | RNAV1                    |
| 006           | TF              | AYAKA               | —        | 288<br>(283.8) | -4.1               | 14.0          | —              | —             | —            | —              | RNAV1                    |

STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV STAR RWY04



## STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV STAR RWY04

JOTTO NORTH ARRIVAL

From DIANA at or above 8000FT, to MASAN, to YAIMA, to JOTTO at or above 3000FT.

|                        |  |
|------------------------|--|
| Critical DME           | MJC : DIANA - 21NM to MASAN<br>14NM to YAIMA - 10NM to YAIMA<br>IGE : 36NM to MASAN - 21NM to MASAN<br>14NM to YAIMA - 13NM to YAIMA |
| DME GAP                | 21NM to MASAN - 14NM to YAIMA  |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1  |

| 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              | DIANA               | —        | —              | -4.1               | —             | —              | +8000         | —            | —              | RNAV1                    |
| 002           | TF              | MASAN               | —        | 235<br>(230.5) | -4.1               | 46.1          | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | YAIMA               | —        | 220<br>(215.8) | -4.1               | 23.2          | —              | —             | -230         | —              | RNAV1                    |
| 004           | TF              | JOTTO               | —        | 310<br>(305.5) | -4.1               | 5.0           | —              | +3000         | —            | —              | RNAV1                    |

JOTTO SOUTH ARRIVAL

From LUCKY at or above 8000FT, to YAIMA, to JOTTO at or above 3000FT.

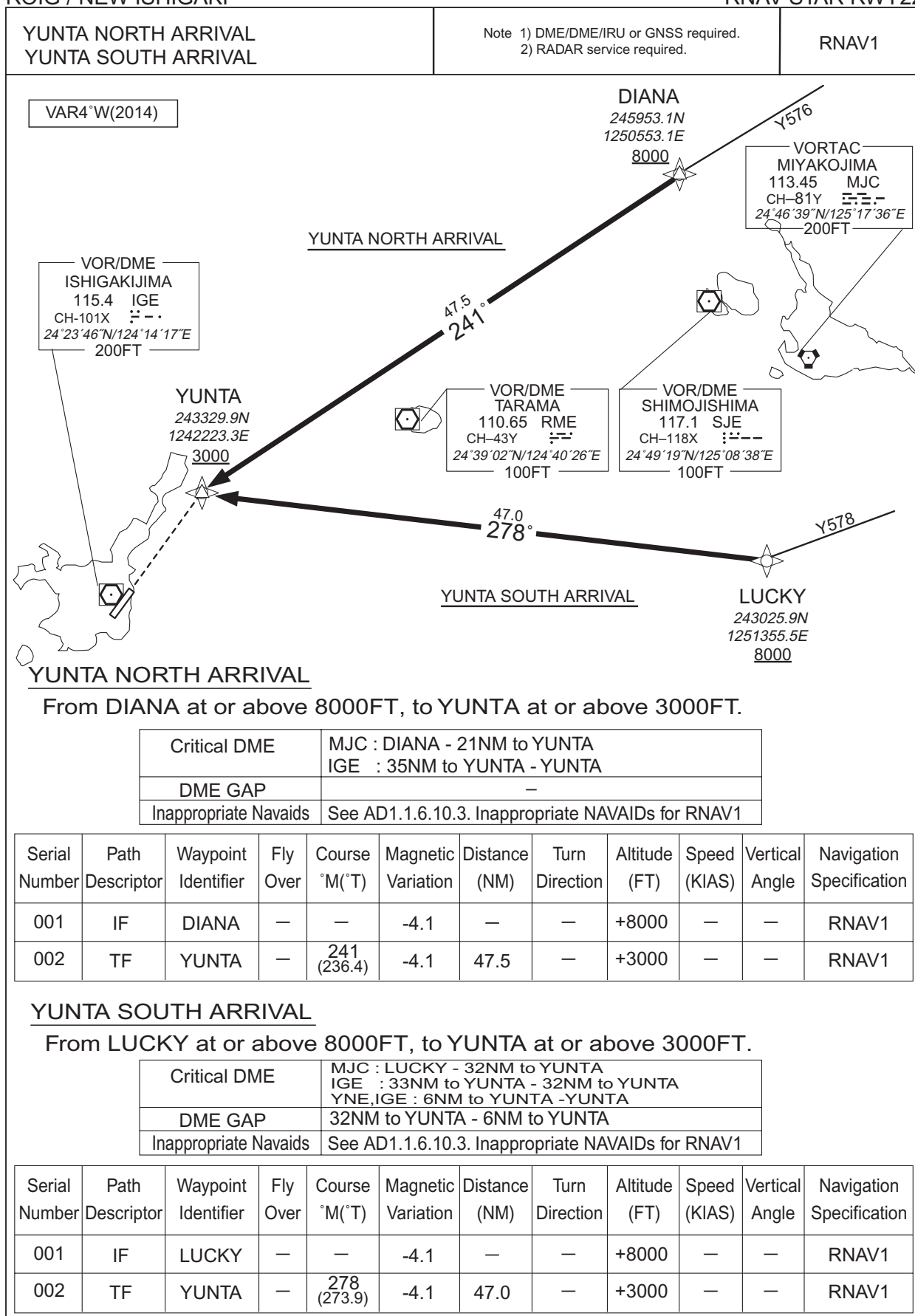
|                        |  |
|------------------------|--|
| Critical DME           | MJC : LUCKY - 6NM to YAIMA<br>IGE : 53NM to YAIMA - 6NM to YAIMA |
| DME GAP                | —  |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1                |

| 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              | LUCKY               | —        | —              | -4.1               | —             | —              | +8000         | —            | —              | RNAV1                    |
| 002           | TF              | YAIMA               | —        | 256<br>(251.9) | -4.1               | 59.5          | —              | —             | -230         | —              | RNAV1                    |
| 003           | TF              | JOTTO               | —        | 310<br>(305.5) | -4.1               | 5.0           | —              | +3000         | —            | —              | RNAV1                    |

## STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV STAR RWY22



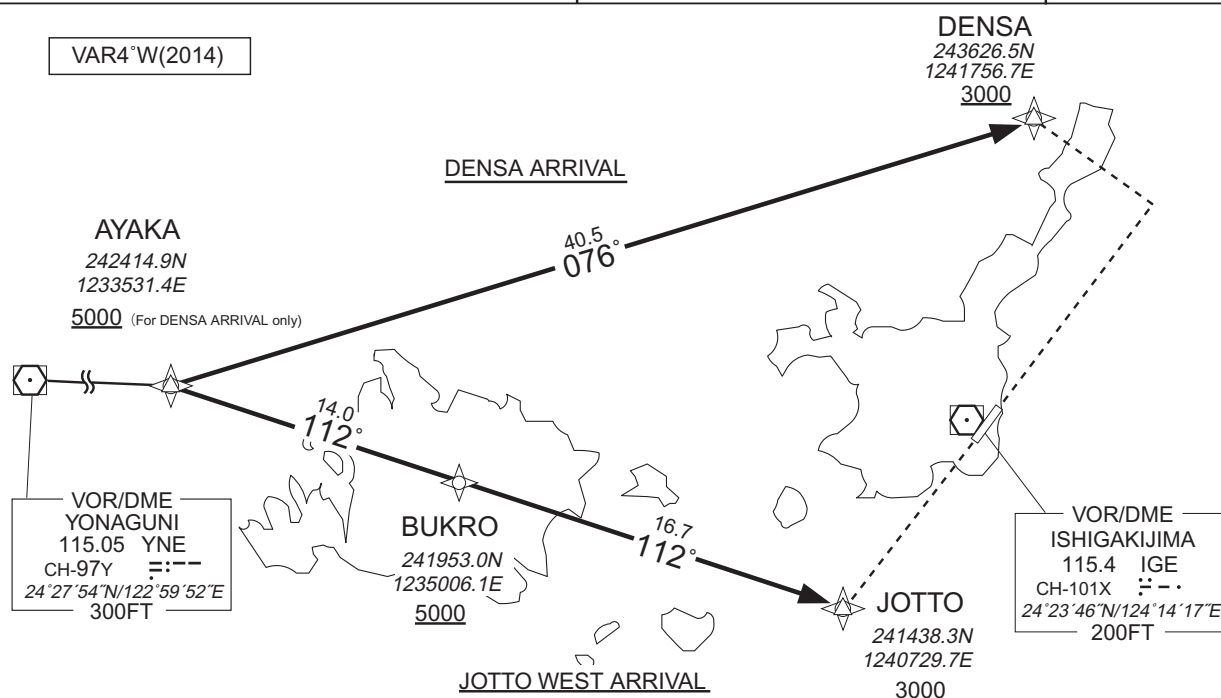
## STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV STAR RWY04/RWY22

DENSA ARRIVAL  
JOTTO WEST ARRIVALNote 1) DME/DME/IRU or GNSS required.  
2) RADAR service required.

RNAV1

**DENSA ARRIVAL**

From AYAKA at or above 5000FT, to DENSA at or above 3000FT.

|                        |  |
|------------------------|--|
| Critical DME           | IGE : 23NM to DENSA - DENSA<br>MJC : 23NM to DENSA - 18NM to DENSA |
| DME GAP                | AYAKA - 23NM to DENSA  |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1                  |

| 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              | AYAKA               | —        | —              | -4.1               | —             | —              | +5000         | —            | —              | RNAV1                    |
| 002           | TF              | DENSA               | —        | 076<br>(072.3) | -4.1               | 40.5          | —              | +3000         | —            | —              | RNAV1                    |

**JOTTO WEST ARRIVAL**

From AYAKA, to BUKRO at or above 5000FT, to JOTTO at or above 3000FT.

|                        |  |
|------------------------|--|
| Critical DME           | MJC : 14NM to JOTTO - 10NM to JOTTO<br>YNE : 14NM to JOTTO - JOTTO |
| DME GAP                | AYAKA - 14NM to JOTTO  |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1                  |

| 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              | AYAKA               | —        | —              | -4.1               | —             | —              | —             | —            | —              | RNAV1                    |
| 002           | TF              | BUKRO               | —        | 112<br>(108.1) | -4.1               | 14.0          | —              | +5000         | —            | —              | RNAV1                    |
| 003           | TF              | JOTTO               | —        | 112<br>(108.2) | -4.1               | 16.7          | —              | +3000         | —            | —              | RNAV1                    |



## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

ILS Y or LOC Y RWY04



|                       |      |      |      |      |     |      |
|-----------------------|------|------|------|------|-----|------|
| NM to IIG             | FAF  | 5    | 4    | 3    | 2   | MAPt |
| ALT ( 3.0° APCH Path) | 1971 | 1705 | 1387 | 1068 | 750 | —    |

Turn initiation within D11.0 IGE

201°

040°

2600

2000

1971(LOC)

BALAS (FAF)

GP 3.0°

MDA

RDH 54

700 (598)

5.8

1.4

0.7

DME to IIG

5.6

1.2

0.50

NM to THR

**MISSED APPROACH**

Climb to 800FT on HDG040°, turn left, via IGE R040 to 2000FT, turn right, direct to IGE VOR/DME and hold at 3000FT. Contact SAKISHIMA APP.

Timing not authorized for defining the MAPt.

|                                     |          |               |          |              |                    |
|-------------------------------------|----------|---------------|----------|--------------|--------------------|
| Missed APCH climb gradient MNM 5.0% |          |               |          |              |                    |
| MINIMA                              |          | THR elev. 126 |          | AD elev. 102 |                    |
| CAT                                 | CAT I    |               | LOC      |              | CIRCLING           |
|                                     | DA(H)    | RVR/CMV       | MDA(H)   | RVR/CMV      | MDA(H) VIS         |
| A                                   | 326(200) | 550           | 530(428) | 900          | 580(478) 1600      |
| B                                   |          |               |          | 1000         |                    |
| C                                   |          |               |          | 1400         |                    |
| D                                   | 336(210) | 600           |          |              | 660(558) 2400 3200 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.  
Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART

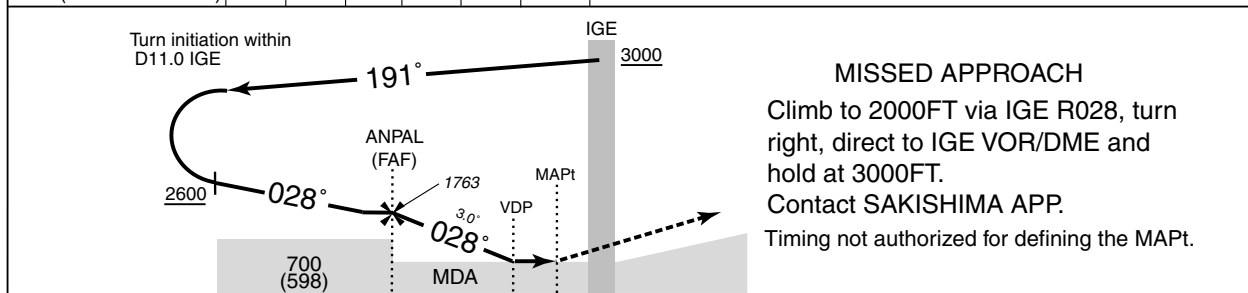
ROIG / NEW ISHIGAKI

VOR RWY04

|                                |   |                                 |                            |
|--------------------------------|---|---------------------------------|----------------------------|
| SAKISHIMA APP<br>120.3 – 121.2 | ISHIGAKIJIMA VOR/DME<br>115.4 IGE<br>CH-101X 24°23'46"N/124°14'17"E | ISHIGAKI TOWER<br>118.0 – 126.2 | RADAR AVBL<br>ATIS 128.675 |
|--------------------------------|---|---------------------------------|----------------------------|



|                       |      |      |      |      |     |      |
|-----------------------|------|------|------|------|-----|------|
| NM to IGE             | FAF  | 5    | 4    | 3    | 2   | MAPt |
| ALT ( 3.0° APCH Path) | 1763 | 1666 | 1347 | 1029 | 711 | —    |



|     |     |       |            |
|-----|-----|-------|------------|
| 5.3 | 1.5 | 1.5   | DME to IGE |
| 5.0 | 1.2 | 1.1 0 | NM to THR  |

| MINIMA |          | THR elev. 126 | AD elev. 102 |
|--------|----------|---------------|--------------|
| CAT    | MDA(H)   | RVR/CMV       | CIRCLING     |
| A      | 540(438) | 900           | 580(478)     |
| B      |          | 1000          | 1600         |
| C      |          | 1400          | 2400         |
| D      |          |               | 3200         |

Circling to EAST side of RWY only.



## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

VOR Z RWY22

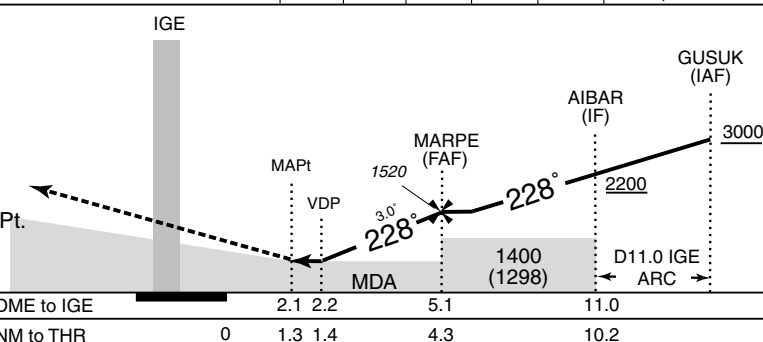
|                                |  |                                 |                            |
|--------------------------------|--|---------------------------------|----------------------------|
| SAKISHIMA APP<br>120.3 – 121.2 | ISHIGAKIJIMA VOR/DME<br>115.4 IGE<br>CH-101X<br>24°23'46"N/124°14'17"E | ISHIGAKI TOWER<br>118.0 – 126.2 | RADAR AVBL<br>ATIS 128.675 |
|--------------------------------|--|---------------------------------|----------------------------|



## MISSED APPROACH

Climb via IGE R215 to IGE  
4.0DME, turn left, direct to IGE  
VOR/DME and hold at 3000FT.  
Contact SAKISHIMA APP.

Timing not authorized for defining the MAPt.



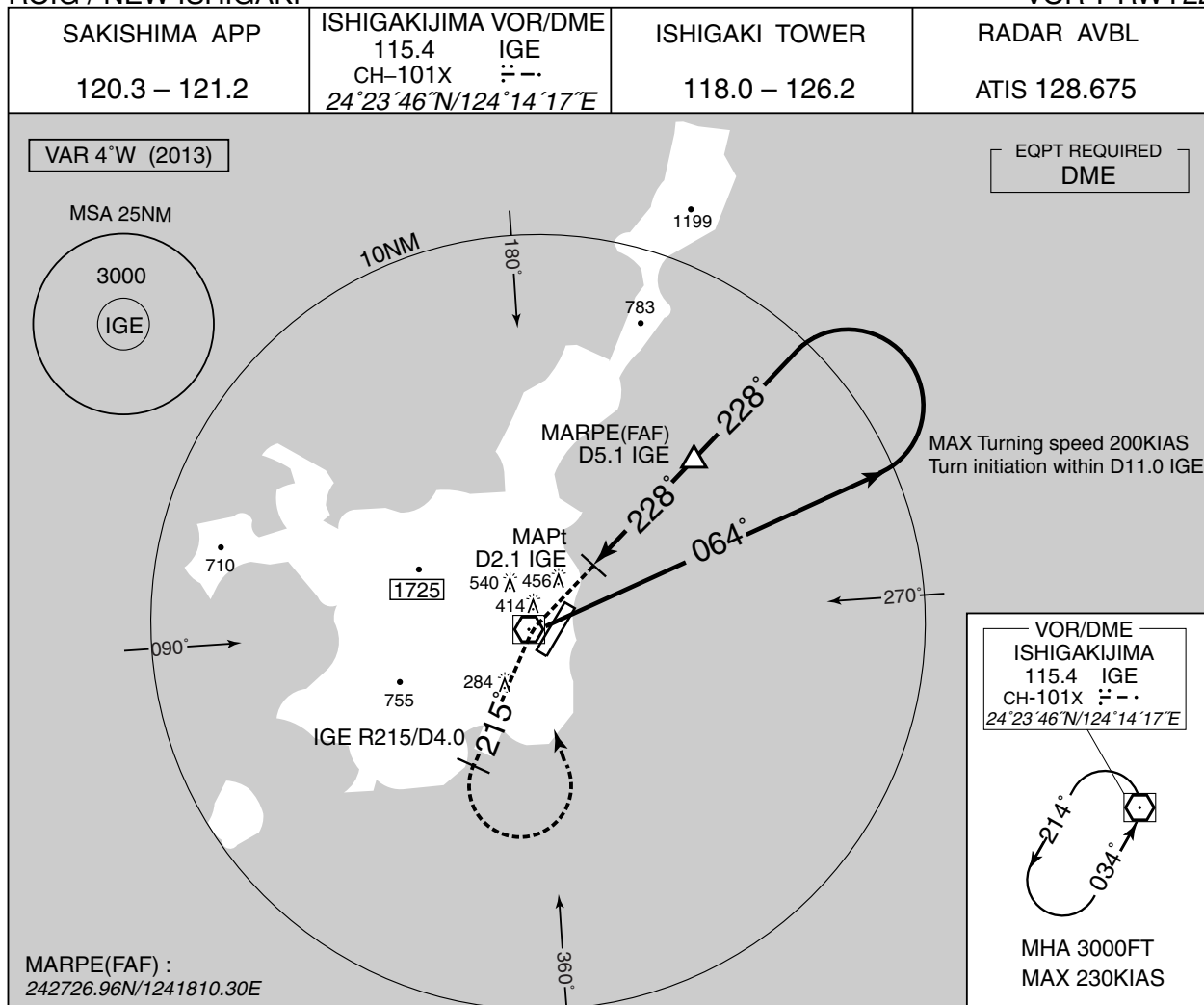
| MINIMA |          | THR elev. 110 |          | AD elev. 102 |  |
|--------|----------|---------------|----------|--------------|--|
| CAT    |          |               | CIRCLING |              |  |
|        | MDA(H)   | CMV           | MDA(H)   | VIS          |  |
| A      | 580(478) | 1400          | 580(478) | 1600         |  |
| B      |          | 1500          |          |              |  |
| C      |          | 1600          | 660(558) | 2400         |  |
| D      |          | 1800          |          |              |  |
|        |          |               |          | 3200         |  |

Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART

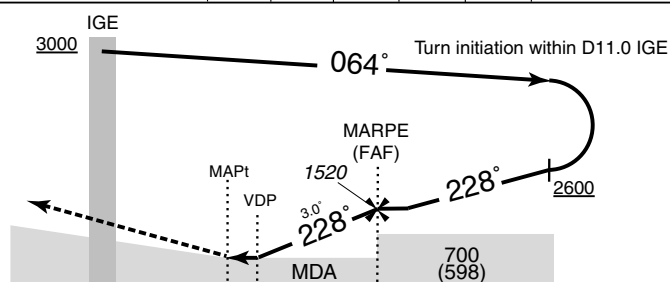
ROIG / NEW ISHIGAKI

VOR Y RWY22



| MAPt | 3   | 4    | 5    | FAF  | NM to IGE             |
|------|-----|------|------|------|-----------------------|
| —    | 845 | 1163 | 1481 | 1520 | ALT ( 3.0° APCH Path) |

**MISSED APPROACH**  
 Climb via IGE R215 to IGE  
 4.0DME, turn left, direct to IGE  
 VOR/DME and hold at 3000FT.  
 Contact SAKISHIMA APP.  
 Timing not authorized for defining the MAPt.



|            |     |     |     |     |
|------------|-----|-----|-----|-----|
| DME to IGE | 2.1 | 2.2 | 5.1 |     |
| NM to THR  | 0   | 1.3 | 1.4 | 4.3 |

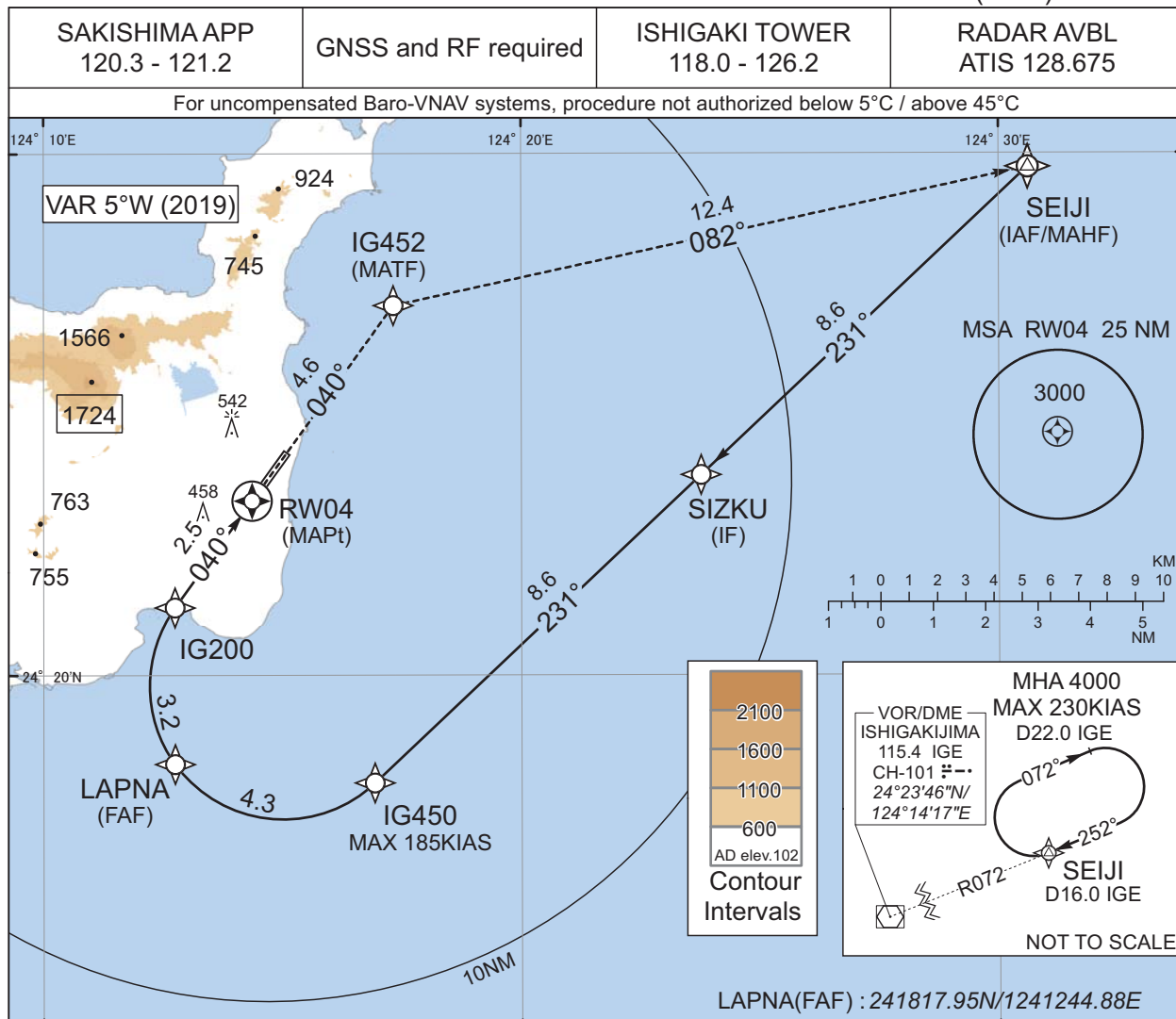
| MINIMA |          | THR elev. 110 |          | AD elev. 102 |      |
|--------|----------|---------------|----------|--------------|------|
| CAT    |          |               | CIRCLING |              |      |
|        | MDA(H)   | CMV           | MDA(H)   | VIS          |      |
| A      | 580(478) | 1400          | 580(478) | 1600         |      |
| B      |          | 1500          |          |              |      |
| C      |          | 1600          | 660(558) | 2400         |      |
| D      |          | 1800          |          |              | 3200 |

Circling to EAST side of RWY only.

## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(RNP) Z RWY04



## MISSED APPROACH

Climb to 4000FT, to IG452,  
to SEIJI and hold.  
Contact SAKISHIMA APP.

Missed APCH climb gradient MNM 5.0%

| MINIMA | THR elev. 126 | AD elev. 102 |
|--------|---------------|--------------|
| CAT    | RNP 0.30      |              |
|        | DA(H)         | RVR/CMV      |
| A      | -             | -            |
| B      | -             | -            |
| C      | 545(419)      | 1000         |
| D      | 567(441)      | 1400         |

MINIMA with Missed APCH climb gradient of 2.5% are not established.

**RNP AR****Special Authorization Required**

## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(RNP) Z RWY04

RNAV(RNP) Z RWY04Coding Table

| Serial Number | Path Descriptor                    | Waypoint Identifier | Fly Over | Course °M(°T)  | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|---------------|------------------------------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|-----------------|-----------|
| 001           | IF                                 | SEIJI               | -        | -              | -4.7               | -             | -              | +4000         | -            | -               | -         |
| 002           | TF                                 | SIZKU               | -        | 231<br>(226.6) | -4.7               | 8.6           | -              | -             | -            | -               | 1.0       |
| 003           | TF                                 | IG450               | -        | 231<br>(226.6) | -4.7               | 8.6           | -              | +2000         | -185         | -               | 1.0       |
| 004           | RF<br>Center:<br>IGRF1<br>r=2.55NM | LAPNA               | -        | -              | -4.7               | 4.3           | R              | 2000          | -            | -               | 1.0       |
| 005           | RF<br>Center:<br>IGRF1<br>r=2.55NM | IG200               | -        | -              | -4.7               | 3.2           | R              | 982           | -            | -3.00           | 0.3       |
| 006           | TF                                 | RW04                | Y        | 040<br>(035.7) | -4.7               | 2.5           | -              | 180           | -            | -3.00/54        | 0.3       |
| 007           | TF                                 | IG452               | -        | 040<br>(035.7) | -4.7               | 4.6           | -              | -             | -            | -               | 1.0       |
| 008           | TF                                 | SEIJI               | -        | 082<br>(077.6) | -4.7               | 12.4          | -              | 4000          | -            | -               | 1.0       |

Waypoint Coordinates

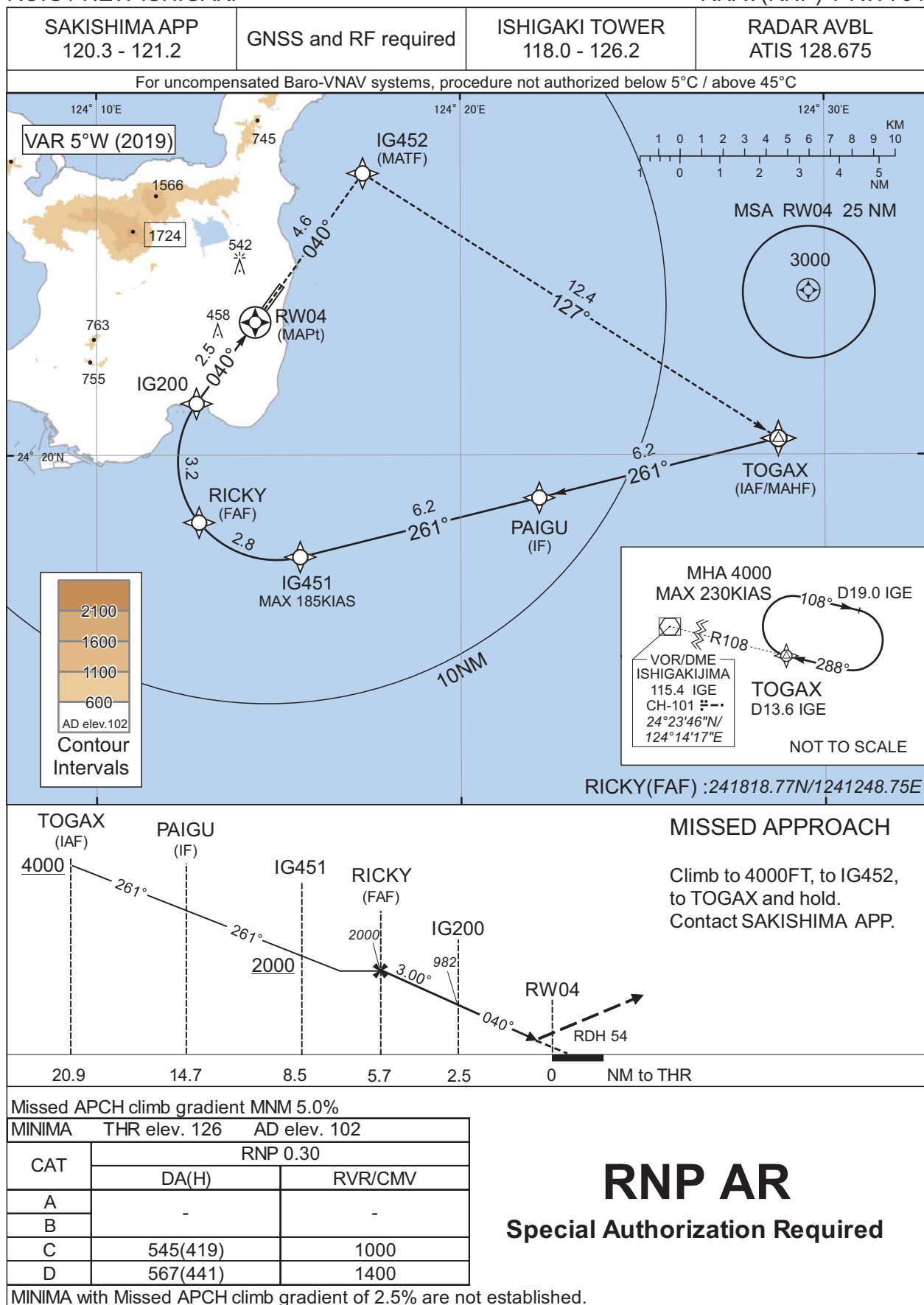
| Waypoint Identifier | Coordinates            | RF Arc Center Identifier | Coordinates            |
|---------------------|------------------------|--------------------------|------------------------|
| SEIJI               | 242944.43N/1243036.57E | IGRF1                    | 241948.12N/1241500.55E |
| SIZKU               | 242350.59N/1242345.74E |                          |                        |
| IG450               | 241756.41N/1241655.55E |                          |                        |
| LAPNA               | 241817.95N/1241244.88E |                          |                        |
| IG200               | 242118.09N/1241244.70E |                          |                        |
| RW04                | 242320.91N/1241421.64E |                          |                        |
| IG452               | 242705.63N/1241719.18E |                          |                        |

CHANGE : New PROC

## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(RNP) Y RWY04



## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(RNP) Y RWY04

RNAV(RNP) Y RWY04Coding Table

| Serial Number | Path Descriptor                    | Waypoint Identifier | Fly Over | Course °M(°T)  | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|---------------|------------------------------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|-----------------|-----------|
| 001           | IF                                 | TOGAX               | -        | -              | -4.7               | -             | -              | +4000         | -            | -               | -         |
| 002           | TF                                 | PAIGU               | -        | 261<br>(256.1) | -4.7               | 6.2           | -              | -             | -            | -               | 1.0       |
| 003           | TF                                 | IG451               | -        | 261<br>(256.1) | -4.7               | 6.2           | -              | +2000         | -185         | -               | 1.0       |
| 004           | RF<br>Center:<br>IGRF2<br>r=2.47NM | RICKY               | -        | -              | -4.7               | 2.8           | R              | 2000          | -            | -               | 1.0       |
| 005           | RF<br>Center:<br>IGRF2<br>r=2.47NM | IG200               | -        | -              | -4.7               | 3.2           | R              | 982           | -            | -3.00           | 0.3       |
| 006           | TF                                 | RW04                | Y        | 040<br>(035.7) | -4.7               | 2.5           | -              | 180           | -            | -3.00/54        | 0.3       |
| 007           | TF                                 | IG452               | -        | 040<br>(035.7) | -4.7               | 4.6           | -              | -             | -            | -               | 1.0       |
| 008           | TF                                 | TOGAX               | -        | 127<br>(122.7) | -4.7               | 12.4          | -              | 4000          | -            | -               | 1.0       |

Waypoint Coordinates

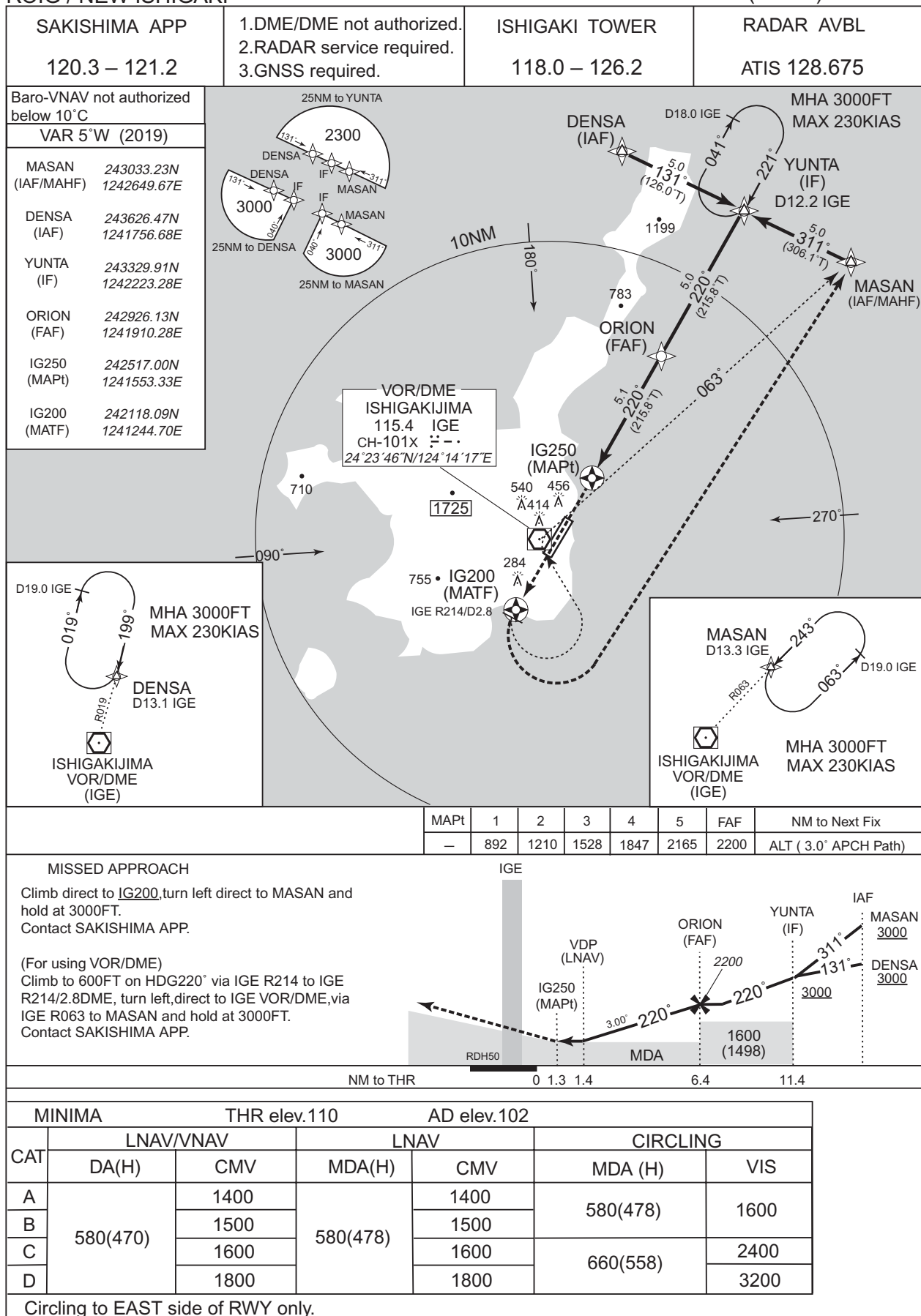
| Waypoint Identifier | Coordinates            | RF Arc Center Identifier | Coordinates            |
|---------------------|------------------------|--------------------------|------------------------|
| TOGAX               | 242024.18N/1242843.66E | IGRF2                    | 241950.87N/1241456.35E |
| PAIGU               | 241855.41N/1242209.38E |                          |                        |
| IG451               | 241726.37N/1241535.30E |                          |                        |
| RICKY               | 241818.77N/1241248.75E |                          |                        |
| IG200               | 242118.09N/1241244.70E |                          |                        |
| RW04                | 242320.91N/1241421.64E |                          |                        |
| IG452               | 242705.63N/1241719.18E |                          |                        |

CHANGE : New PROC

## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(GNSS) Z RWY22

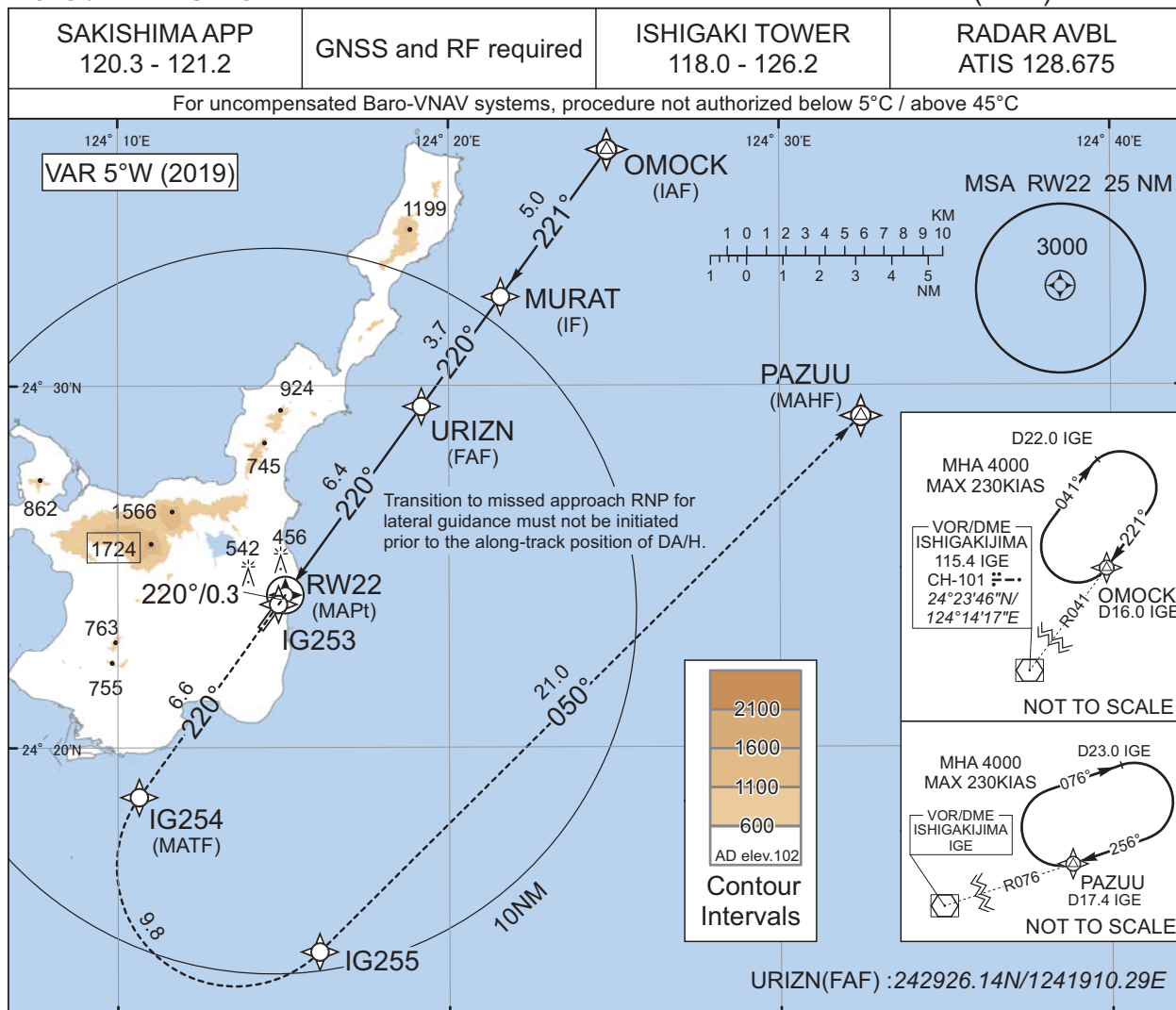


CHANGE : VAR. Course FM DENSA TO YUNTA. Course FM MASAN TO YUNTA. PROC renamed.

INSTRUMENT APPROACH CHART

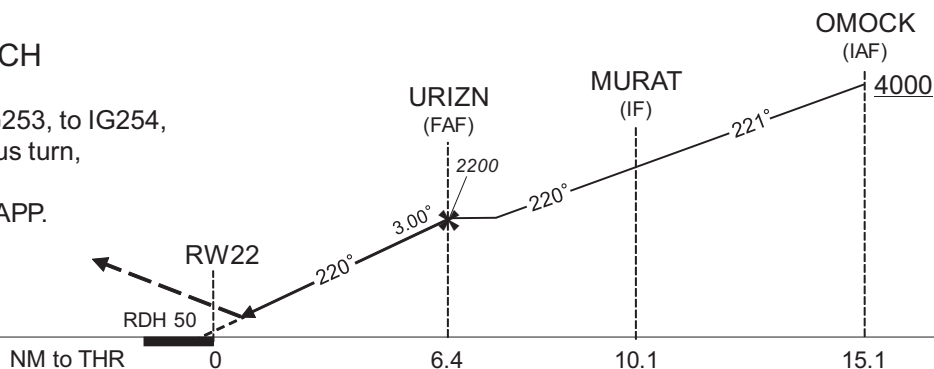
ROIG / NEW ISHIGAKI

RNAV(RNP) Y RWY22



MISSED APPROACH

Climb to 4000FT, to IG253, to IG254, to IG255 via fixed radius turn, to PAZUU and hold.  
Contact SAKISHIMA APP.



Missed APCH climb gradient MNM 5.0%

| CAT | RNP 0.12 |      | RNP 0.30 |      |
|-----|----------|------|----------|------|
|     | DA(H)    | CMV  | DA(H)    | CMV  |
| A   | -        | -    | -        | -    |
| B   | -        | -    | -        | -    |
| C   | 545(435) | 1400 | 608(498) | 1600 |
| D   | 559(449) | 1600 | 618(508) | 1800 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.

**RNP AR**

Special Authorization Required

CHANGE : New PROC



## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(RNP) Y RWY22

RNAV(RNP) Y RWY22Coding Table

| Serial Number | Path Descriptor                    | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value    |
|---------------|------------------------------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|-----------------|--------------|
| 001           | IF                                 | OMOCK               | -        | -             | -4.7               | -             | -              | +4000         | -            | -               | -            |
| 002           | TF                                 | MURAT               | -        | 221 (215.8)   | -4.7               | 5.0           | -              | -             | -            | -               | 1.0          |
| 003           | TF                                 | URIZN               | -        | 220 (215.8)   | -4.7               | 3.7           | -              | 2200          | -            | -               | 1.0          |
| 004           | TF                                 | RW22                | Y        | 220 (215.8)   | -4.7               | 6.4           | -              | 160           | -            | -3.00/50        | 0.12<br>0.30 |
| 005           | TF                                 | IG253               | -        | 220 (215.7)   | -4.7               | 0.3           | -              | -             | -            | -               | 0.12<br>0.30 |
| 006           | TF                                 | IG254               | -        | 220 (215.7)   | -4.7               | 6.6           | -              | -             | -            | -               | 1.0          |
| 007           | RF<br>Center:<br>IGRF3<br>r=3.28NM | IG255               | -        | -             | -4.7               | 9.8           | L              | -             | -            | -               | 1.0          |
| 008           | TF                                 | PAZUU               | -        | 050 (045.2)   | -4.7               | 21.0          | -              | 4000          | -            | -               | 1.0          |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | RF Arc Center Identifier | Coordinates            |
|---------------------|------------------------|--------------------------|------------------------|
| OMOCK               | 243631.66N/1242447.35E | IGRF3                    | 241641.99N/1241333.15E |
| MURAT               | 243227.94N/1242134.19E |                          |                        |
| URIZN               | 242926.14N/1241910.29E |                          |                        |
| RW22                | 242413.59N/1241503.24E |                          |                        |
| IG253               | 242357.98N/1241450.93E |                          |                        |
| IG254               | 241837.84N/1241038.29E |                          |                        |
| IG255               | 241421.38N/1241604.82E |                          |                        |
| PAZUU               | 242908.99N/1243226.97E |                          |                        |

CHANGE : New PROC

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(RNP) X RWY22

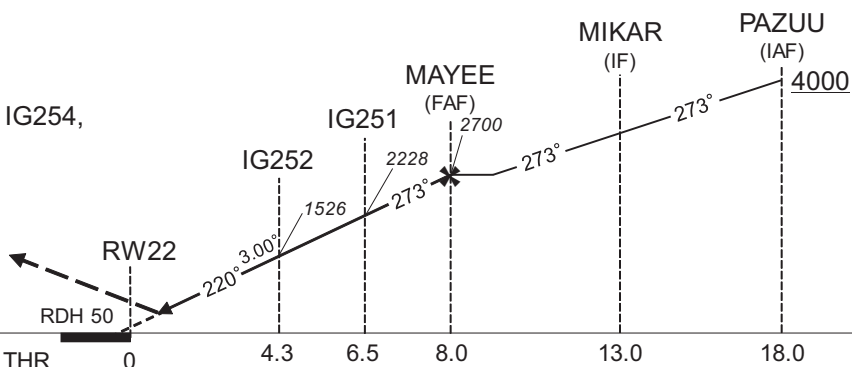
|                                |                      |                                 |                            |
|--------------------------------|----------------------|---------------------------------|----------------------------|
| SAKISHIMA APP<br>120.3 - 121.2 | GNSS and RF required | ISHIGAKI TOWER<br>118.0 - 126.2 | RADAR AVBL<br>ATIS 128.675 |
|--------------------------------|----------------------|---------------------------------|----------------------------|

For uncompensated Baro-VNAV systems, procedure not authorized below 5°C / above 45°C



MISSED APPROACH

Climb to 4000FT, to IG253, to IG254, to IG255 via fixed radius turn, to PAZUU and hold. Contact SAKISHIMA APP.



Missed APCH climb gradient MNM 5.0%

| MINIMA | THR elev.110 | AD elev.102 | RNP 0.12 |      | RNP 0.30 |      |
|--------|--------------|-------------|----------|------|----------|------|
| CAT    | DA(H)        | CMV         | DA(H)    | CMV  | DA(H)    | CMV  |
| A      | -            | -           | -        | -    | -        | -    |
| B      | -            | -           | -        | -    | -        | -    |
| C      | 545(435)     | 1400        | 608(498) | 1600 | 618(508) | 1800 |
| D      | 559(449)     | 1600        | 618(508) | 1800 | 618(508) | 1800 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.

**RNP AR**

Special Authorization Required

## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(RNP) X RWY22

RNAV(RNP) X RWY22Coding Table

| Serial Number | Path Descriptor                    | Waypoint Identifier | Fly Over | Course °M(°T)  | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value    |
|---------------|------------------------------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|-----------------|--------------|
| 001           | IF                                 | PAZUU               | -        | -              | -4.7               | -             | -              | +4000         | -            | -               | -            |
| 002           | TF                                 | MIKAR               | -        | 273<br>(267.9) | -4.7               | 5.0           | -              |               | -            | -               | 1.0          |
| 003           | TF                                 | MAYEE               | -        | 273<br>(267.9) | -4.7               | 5.0           | -              | 2700          | -            | -               | 1.0          |
| 004           | TF                                 | IG251               | -        | 273<br>(267.8) | -4.7               | 1.5           | -              | 2228          | -            | -3.00           | 0.12<br>0.30 |
| 005           | RF<br>Center:<br>IGRF4<br>r=2.43NM | IG252               | -        | -              | -4.7               | 2.2           | L              | 1526          | -            | -3.00           | 0.12<br>0.30 |
| 006           | TF                                 | RW22                | Y        | 220<br>(215.7) | -4.7               | 4.3           | -              | 160           | -            | -3.00/50        | 0.12<br>0.30 |
| 007           | TF                                 | IG253               | -        | 220<br>(215.7) | -4.7               | 0.3           | -              | -             | -            | -               | 0.12<br>0.30 |
| 008           | TF                                 | IG254               | -        | 220<br>(215.7) | -4.7               | 6.6           | -              | -             | -            | -               | 1.0          |
| 009           | RF<br>Center:<br>IGRF3<br>r=3.28NM | IG255               | -        | -              | -4.7               | 9.8           | L              | -             | -            | -               | 1.0          |
| 010           | TF                                 | PAZUU               | -        | 050<br>(045.2) | -4.7               | 21.0          | -              | 4000          | -            | -               | 1.0          |

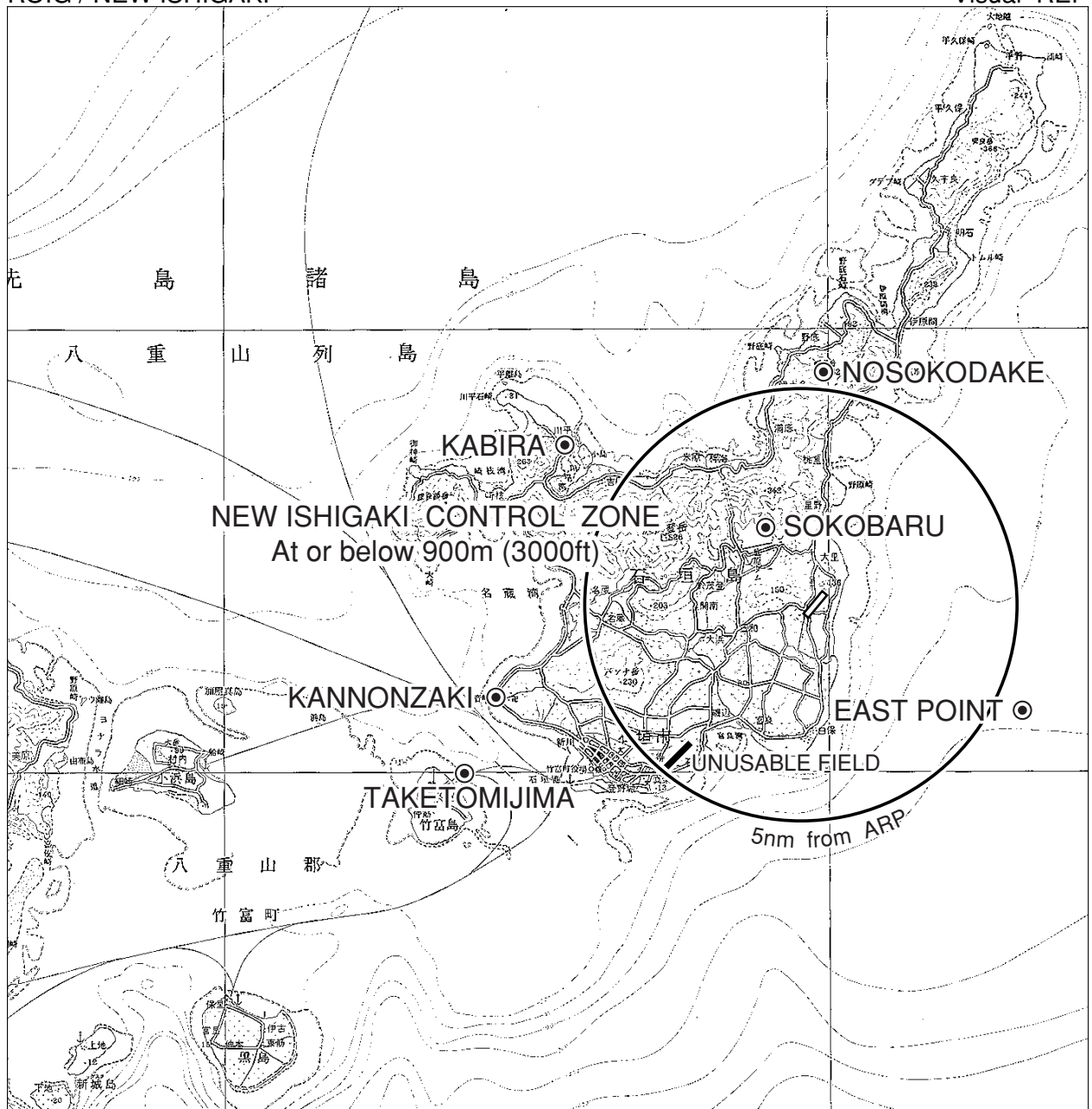
Waypoint Coordinates

| Waypoint Identifier | Coordinates            | RF Arc Center Identifier | Coordinates            |
|---------------------|------------------------|--------------------------|------------------------|
| PAZUU               | 242908.99N/1243226.97E | IGRF4                    | 242617.16N/1241958.19E |
| MIKAR               | 242857.97N/1242658.29E | IGRF3                    | 241641.99N/1241333.15E |
| MAYEE               | 242846.75N/1242129.62E |                          |                        |
| IG251               | 242843.38N/1241952.14E |                          |                        |
| IG252               | 242742.97N/1241748.71E |                          |                        |
| RW22                | 242413.59N/1241503.24E |                          |                        |
| IG253               | 242357.98N/1241450.93E |                          |                        |
| IG254               | 241837.84N/1241038.29E |                          |                        |
| IG255               | 241421.38N/1241604.82E |                          |                        |

CHANGE : New PROC

ROIG / NEW ISHIGAKI

Visual REP



| Call sign           | BRG / DIST from ARP | Remarks                              |
|---------------------|---------------------|--------------------------------------|
| 野底岳<br>Nosokodake   | 006° / 5.5NM        | 山<br>Mountain                        |
| EAST POINT          | 120° / 6.0NM        | 海上<br>Over the sea                   |
| 竹富島<br>Taketomijima | 250° / 9.0NM        | 高速艇船着場<br>Port                       |
| 観音崎<br>Kannonzaki   | 259° / 7.5NM        | 灯台<br>Light house                    |
| 川平<br>Kabira        | 309° / 6.8NM        | 川平湾グラスボート乗り場<br>Kabira Bay Boat pier |
| 底原<br>Sokobaru      | 325° / 2.1NM        | ダム<br>Dam                            |



ROIG / NEW ISHIGAKI

Minimum Vectoring Altitude CHART

