

AD 2 AERODROMES

ROIG AD 2.1 AERODROME LOCATION INDICATOR AND NAME

ROIG - NEW ISHIGAKI

ROIG AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| | | |
|---|--|--|
| 1 | ARP coordinates and site at AD | 242347N/1241442E 0.7km 2° of TWR |
| 2 | Direction and distance from (city) | 11km NE from Ishigaki City office |
| 3 | Elevation/ Reference temperature | 102ft / 31°C (2006-2010) |
| 4 | Geoid undulation at AD ELEV PSN | 89ft |
| 5 | MAG VAR/ Annual change | 4°W (2010) / 2' W |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | OKINAWA PREF. Public AP NEW ISHIGAKI AD Administration 222-75 Moriyama, Ishigaki, Okinawa Tel: 0980-87-0793 Fax: 0980-86-7601 |
| 7 | Types of traffic permitted(IFR/ VFR) | IFR/VFR |
| 8 | Remarks | ISHIGAKI Airport Branch(CAB) 222-72 Moriyama, Ishigaki, Okinawa Tel: 0980-84-4300 Fax: 0980-84-4306 |

ROIG AD 2.3 OPERATIONAL HOURS

| | | |
|----|---------------------------|--------------------------|
| 1 | AD Administration | 2300 - 1200 |
| 2 | Customs and immigration | INTL SKED FLT hours only |
| 3 | Health and sanitation | INTL SKED FLT hours only |
| 4 | AIS Briefing Office | Nil |
| 5 | ATS Reporting Office(ARO) | Nil |
| 6 | MET Briefing Office | H24 (NAHA) |
| 7 | ATS | 2300 - 1200 |
| 8 | Fuelling | 2300 - 1200 |
| 9 | Handling | 2230 - 1130 |
| 10 | Security | 2200 - 1100 |
| 11 | De-icing | Nil |
| 12 | Remarks | Nil |

ROIG AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|--------------------------------------|
| 1 | Cargo-handling facilities | Conveyer belt, Lift for loading etc. |
| 2 | Fuel/ oil types | Fuel Grades: JET A-1 |
| 3 | Fuelling facilities/ capacity | Fuel truck refueling |
| 4 | De-icing facilities | Nil |
| 5 | Hangar space for visiting aircraft | Nil |
| 6 | Repair facilities for visiting aircraft | Nil |
| 7 | Remarks | Nil |

ROIG AD 2.5 PASSENGER FACILITIES

| | | |
|---|----------------------|---|
| 1 | Hotels | Hotels in Ishigaki City |
| 2 | Restaurants | Available, Not continuous, during scheduled flight hours only |
| 3 | Transportation | Busses and Taxis to Ishigaki City |
| 4 | Medical facilities | Hospital in Ishigaki City 14km |
| 5 | Bank and Post Office | Bank ATM at airport |
| 6 | Tourist Office | At airport |
| 7 | Remarks | Nil |

ROIG AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

| | | |
|---|---|---|
| 1 | AD category for fire fighting | CAT 9 |
| 2 | Rescue equipment | Chemical fire fighting truck (6,100-Liter Class) × 1 Chemical fire fighting truck (10,500-Liter Class) × 2 Emergency medical equipment conveyance truck (125 type) ×1 |
| 3 | Capability for removal of disabled aircraft | Nil |
| 4 | Remarks | Nil |

ROIG AD 2.7 SEASONAL AVAILABILITY-CLEARING

| | | |
|---|-----------------------------|-----|
| 1 | Types of clearing equipment | Nil |
| 2 | Clearance priorities | Nil |
| 3 | Remarks | Nil |

ROIG AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

| | | |
|---|-------------------------------------|--|
| 1 | Apron surface and strength | Surface: Concrete Strength: Spot 1-2B, 5-10 PCN 55/R/B/X/T |
| 2 | Taxiway width, surface and strength | Surface: Asphalt T1 . . . Width: 26.5m Strength: PCN 55/F/B/X/T T2 . . . Width: 30m Strength: PCN 43/F/B/X/T T3 . . . Width: 30m Strength: PCN 43/F/B/X/T T4 . . . Width: 30m Strength: PCN 46/F/B/X/T T5 . . . Width: 26.5m Strength: PCN 55/F/B/X/T P1, P2, P3, P4 . . . Width: 23m Strength: PCN 53/F/B/X/T |
| 3 | ACL and elevation | Not available |
| 4 | VOR checkpoints | Not available |
| 5 | INS checkpoints | Spot NR 1: 242323.10N 1241437.71E 2A: 242323.39N 1241439.23E 2: 242323.93N 1241439.64E 2B: 242324.45N 1241440.08E 5: 242325.71N 1241440.62E 6: 242327.12N 1241442.00E 7: 242329.74N 1241443.09E 8: 242330.10N 1241444.14E 9: 242331.67N 1241445.38E 10: 242332.86N 1241446.71E |
| 6 | Remarks | Nil |

ROIG AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

| | | |
|---|--|---|
| 1 | Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands | Aircraft stand identification signs: Spot 5-9 |
| 2 | RWY and TWY markings and LGT | RWY: 04/22 (Marking) RWY designation, RWY CL, RWY THR, RWY middle point, Aiming point, TDZ, RWY side stripe (LGT) RCLL, REDL, RTHL, WBAR(RWY04), RTZL(RWY04) TWY: T1-T5 (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction marking (LGT) TWY edge LGT, TWY CL LGT, Taxiing guidance sign, RWY guard LGT TWY: P1-P4 (Marking) TWY CL, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT |
| 3 | Stop bars | Nil |
| 4 | Remarks | (Marking) Overrun area (LGT) Apron flood LGT |

ROIG AD 2.10 AERODROME OBSTACLES

In approach/TKOF areas

| RWY/Area affected | Obstacle type | Coordinates | Elevation | Markings/ LGT | Remarks |
|-------------------|---------------|------------------------|-----------|------------------|------------------------|
| RWY04 | Utility Pole | 242239.57N 1241343.63E | 231ft | -/LIL | under approach surface |
| RWY04 | Utility Pole | 242221.82N 1241320.95E | 284ft | -/LIL | under approach surface |
| RWY22 | Utility Pole | 242424.58N 1241506.91E | 125ft | -/LIL | under approach surface |

In circling area and at AD

| Obstacle type | Coordinates | Elevation | Markings/ LGT | Remarks |
|---------------|------------------------|-----------|---------------|--------------------------|
| Utility Pole | 242402.58N 1241420.19E | 251ft | -/- | above horizontal surface |
| Utility Pole | 242403.47N 1241418.91E | 250ft | -/- | above horizontal surface |
| Utility Pole | 242409.14N 1241429.40E | 251ft | -/- | above horizontal surface |
| Utility Pole | 242407.38N 1241427.50E | 251ft | -/- | above horizontal surface |
| Utility Pole | 242406.37N 1241426.78E | 253ft | -/- | above horizontal surface |
| Utility Pole | 242405.28N 1241426.27E | 253ft | -/- | above horizontal surface |
| Utility Pole | 242403.83N 1241425.92E | 252ft | -/- | above horizontal surface |
| Utility Pole | 242402.94N 1241425.90E | 250ft | -/- | above horizontal surface |
| Steel Tower | 242420.00N 1241315.00E | 499ft | -/LIL | above horizontal surface |
| Hill | 242426.33N 1241356.34E | 540ft | -/LIL | above horizontal surface |
| Hill | 242405.52N 1241422.01E | 414ft | -/LIL | above horizontal surface |
| Hill | 242432.66N 1241454.98E | 456ft | -/LIL | above horizontal surface |
| Steel Tower | 242400.08N 1241427.99E | 298ft | -/LIL | above horizontal surface |
| Steel Tower | 242408.00N 1241429.00E | 299ft | -/LIL | above horizontal surface |

ROIG AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|----|--|--|
| 1 | Associated MET Office | NAHA |
| 2 | Hours of service MET Office outside hours | H24 (NAHA) |
| 3 | Office responsible for TAF preparation Periods of validity | NAHA 30 Hours |
| 4 | Trend forecast Interval of issuance | Nil |
| 5 | Briefing/ consultation provided | Briefing is available upon inquiry at NAHA |
| 6 | Flight documentation Language(s) used | C En |
| 7 | Charts and other information available for briefing or consultation | S ₆ , U ₈₅ , U ₇ , U ₅ , U ₃ , U ₂₅ , U ₂ /T _r , P _S , P ₅ , P ₃ , P ₂₅ , P _{SWE} , P _{SWF} , P _{SWG} , P _{SWI} , P _{SWM} , P _{SW} (domestic), E, C, W _E , W _F , W _G , W _I , W, N |
| 8 | Supplementary equipment available for providing information | Nil |
| 9 | ATS units provided with information | TWR |
| 10 | Additional information(limitation of service, etc.) | Nil |

ROIG AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations RWY NR | TRUE BRG | Dimensions of RWY(M) | Strength(PCN) and surface of RWY | THR coordinates THR geoid undulation | THR elevation and highest elevation of TDZ of precision APP RWY |
|--|-------------|-------------------------|-------------------------------------|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 04 | 035.87° | 2000×45 | PCN 53/F/B/X/T Asphalt-Concrete | 242320.91N 1241421.64E 88.9ft | THR ELEV: 126ft |
| 22 | 215.87° | 2000×45 | PCN 55/F/B/X/T Asphalt-Concrete | 242413.59N 1241503.24E 89.4ft | THR ELEV: 110ft |
| | | | | | |
| Slope of RWY | | Strip Dimensions(M) | RESA (Overrun) Dimensions (M) | | Remarks |
| 7 | 10 | | 11 | | 14 |
| See AD2.24 AD chart | | 2120×300 | 192×(MNM:165 MAX:305)* | | RWY grooving: 2000×45 |
| | | 2120×300 | 92×305 | | |
| *For detail, ask airport administrator | | | | | |

ROIG AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 04 | 2000 | 2000 | 2000 | 2000 | Nil |
| 22 | 2000 | 2000 | 2000 | 2000 | Nil |

ROIG AD 2.14 APPROACH AND RUNWAY LIGHTING

| RWY Designator | APCH LGT type LEN INTST | RTHL Color WBAR | PAPI (VASIS) Angle DIST FM THR MEHT | RTZL LEN | RCLL LEN Spacing Color INTST | REDL LEN Spacing Color INTST | RENL Color WBAR | STWL LEN Color |
|---|-------------------------------------|-----------------------|--|-------------|---|--|-----------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 04 | PALS (CAT I) 900m LIH | Green Green | PAPI 3°/Left 453m 61ft | 900m | 2000m 30m Coded color (White/Red) LIH | 2000m 60m Coded color (White/Yellow) LIH | Red | Nil (*2) |
| 22 | SALS (*1) 420m LIH | Green - | PAPI 3°/Left 439.8m 61ft | - | 2000m 30m Coded color (White/Red) LIH | 2000m 60m Coded color (White/Yellow) LIH | Red | Nil (*2) |
| Remarks | | | | | | | | |
| 10 | | | | | | | | |
| SALS with APCH LGT beacon(600m and 900m FM RWY THR)(*1) Overrun area edge LGT(LEN:60m Color:Red)(*2) | | | | | | | | |

ROIG AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

| | | |
|---|--|--|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 242331N/1241453E, White/Green EV4.3sec, HO |
| 2 | LDI location and LGT Anemometer location and LGT | LDI: Nil Anemometer: RWY04: 370m from RWY04 THR, lighted RWY22: 363m from RWY22 THR, lighted |
| 3 | TWY edge and center line lighting | TWY edge and center line lights installed, see AD2.9 |
| 4 | Secondary power supply/ switch-over time | Within 1 sec: REDL, RTHL, WBAR, RCLL, Overrun area edge LGT Within 15 sec: Other LGT |
| 5 | Remarks | WDI LGT |

ROIG AD 2.16 HELICOPTER LANDING AREA

| |
|-----|
| Nil |
|-----|

ROIG AD 2.17 ATS AIRSPACE

| Designation and lateral limits | | Vertical limits (ft) | Airspace classification | ATS unit call sign Language | Remarks |
|--------------------------------|--|----------------------|-------------------------|---|---------|
| 1 | | 2 | 3 | 4 | 6 |
| New Ishigaki CTR | Area within a radius of 5nm NEW ISHIGAKI ARP | 3,000 or below | D | Ishigaki TWR En | |
| Sakishima ACA | See ROMY attaced chart | | E | Sakishima APP Sakishima DEP Sakishima RADAR En | |

ROIG AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---------------------|--|--|--------------------|---|
| 1 | 2 | 3 | 4 | 5 |
| APP/ASR | Sakishima Approach/ Sakishima Radar | 120.3MHz 121.2MHz 125.0MHz 121.5MHz(E) 243.0MHz(E) | 2230 - 1200 | APP service provided by Sakishima APP. |
| TWR | Ishigaki Tower | 118.0MHz(1) 126.2MHz 121.5MHz(E) | 2300 - 1200 | (1)Primary |
| ATIS | New Ishigaki Airport | 128.675MHz | 2300 - 1200 | |

ROIG AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aid (VOR declina- tion) | ID | Frequency | Hours of operation | Position of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|---------------------------------------|-----|----------------------|-----------------------|---|--|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| VOR (4°W/2012) | IGE | 115.4MHz | H24 | 242345.64N/ 1241416.63E | | VOR Unusable: 000°-020° beyond 20NM BLW 4,000ft 290°-325° beyond 15NM BLW 4,000ft 325°-360° beyond 20NM BLW 4,000ft |
| DME | IGE | 1188MHz (CH-101X) | H24 | 242345.64N/ 1241416.63E | 208.3ft | DME Unusable: 000°-020° beyond 20NM BLW 4,000ft 290°-335° beyond 20NM BLW 4,000ft 335°-345° beyond 15NM BLW 4,000ft 345°-360° beyond 20NM BLW 4,000ft |
| ILS-LOC 04 | IIG | 110.75MHz | 2300-1200 | 242419.38N/ 1241507.81E | | LOC: 220m(722ft) away FM RWY22 THR, BRG(MAG) 40°. |
| ILS-GP 04 | - | 330.05MHz | 2300-1200 | 242332.77N/ 1241425.74E | | GP: 363.4m(1192ft) inside FM RWY04 THR. 120m(394ft)W of RCL. HGT of ILS Ref datum 16.5m(54ft). GP angle 3.0°. |
| ILS-DME 04 | IIG | 1131MHz (CH-44Y) | 2300-1200 | 242333.04N/ 1241425.94E | 126.4ft | DME: 373.2m(1224ft) inside FM RWY04 THR. 120m(394ft)W of RCL. |
| MSAS | | 1575.42MHz | H24 | | | Transmitting antennas are satellite based |

ILSNEW ISHIGAKI AP

REMARKS : 1. LOC beam BRG(MAG) 040°
 2. GP Angle 3.0°
 3. HGT of ILS REF datum 16.5m(54ft)
 4. ELEV of ILS-DME 38.52m(126ft)

ROIG AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

PPR for all transient aircraft due to Apron congestion. TEL:0980-87-0793

2. Taxiing to and from stands

Nil

3. Parking area for small aircraft(General aviation)

Nil

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

Safety measures

In order to keep clearance from other aircraft and obstacles, aircraft with wing span of 47-56m shall reduce taxiing speed and follow the taxiway center line strictly on TWY P1 and P2.

全幅が 47m 以上 56m 以下の航空機は、他の航空機又は障害物とのクリアランスを確保するため、誘導路 P1 及び P2 を走行する場合は十分に減速し、誘導路中心線を確保した走行を行うこと。

7. School and training flights - technical test flights - use of runways

Nil

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Ask AD administration

ROIG AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

ROIG AD 2.22 FLIGHT PROCEDURES

1. TAKE OFF MINIMA

| | RWY | ACFT CAT | REDL & RCLL | | REDL or RCLL or RCL Marking | | NIL (DAYTIME ONLY) | |
|--|-----|-------------|-----------------|------|--------------------------------|------|-----------------------|------|
| | | | RVR | VIS | RVR | VIS | RVR | VIS |
| Multi-Engine ACFT with TKOF ALTN AP FILED | 04 | A,B,C,D | 400m | 400m | 400m | 400m | - | 500m |
| | 22 | A,B,C,D | - | 400m | - | 400m | - | 500m |
| OTHER | 04 | A,B,C,D | AVBL LDG MINIMA | | | | | |
| | 22 | | | | | | | |

2. Lost Communication Procedures for Arrival Aircraft under radar navigational guidance

If radio communications with Sakishima Approach/Radar are lost for one minute, squawk Mode A/3 Code 7600 and ;

1. Contact Ishigaki Tower.
2. If unable, proceed in accordance with visual flight rules.
3. If unable, proceed to Ishigakijima VOR at the last assigned altitude, or 3,000 feet which is higher, and execute instrument approach.

Note: Procedures other than above will be issued when situation requires.

3. Terminal Radar Alphanumeric Display System (TRAD)

先島アプローチの指示のもとに、当該進入管制区を飛行する航空機は、モード A/3 の二次レーダー個別コード及びモード C による応答を指示される。

二次レーダー個別コードを搭載していない航空機が当該コードによる応答を指示された場合は、管制官に対しその旨通報すること。

Aircraft flying under control of Sakishima approach control in the approach control area will be instructed to reply with discrete code on Mode A/3 and Mode C.

If an aircraft with non-discrete code capability be instructed to reply with the discrete code, it shall report a controller accordingly.

ROIG AD 2.23 ADDITIONAL INFORMATION

1. Helicopter Landing Area

Location:

North HELIPAD: On PARL TWY P2

South HELIPAD: On PARL TWY P1

Lighting: Nil

(See AD2.24 AD CHART)

ROIG AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Standard Departure Chart - Instrument (GUSUK, MIYAKO)
Standard Departure Chart - Instrument (ISHIGAKI REVERSAL)
Standard Departure Chart - Instrument (KOHAM)
Standard Departure Chart - Instrument (GAHRA-RNAV)
Standard Departure Chart - Instrument (AYAKA-RNAV)
Standard Arrival Chart - Instrument (JOTTO NORTH, JOTTO SOUTH-RNAV)
Standard Arrival Chart - Instrument (YUNTA NORTH, YUNTA SOUTH-RNAV)
Standard Arrival Chart - Instrument (DENSEA, JOTTO WEST-RNAV)
Instrument Approach Chart (ILS Z or LOC Z RWY04)
Instrument Approach Chart (ILS Y or LOC Y RWY04)
Instrument Approach Chart (VOR RWY04)
Instrument Approach Chart (VOR Z RWY22)
Instrument Approach Chart (VOR Y RWY22)
Instrument Approach Chart (RNAV(RNP) Z RWY04)
Instrument Approach Chart (RNAV(RNP) Y RWY04)
Instrument Approach Chart (RNAV(GNSS) Z RWY22)
Instrument Approach Chart (RNAV(RNP) Y RWY22)
Instrument Approach Chart (RNAV(RNP) X RWY22)
Other Chart (VISUAL REP)
Other Chart (LDG CHART)
Other Chart (MVA CHART)

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



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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.

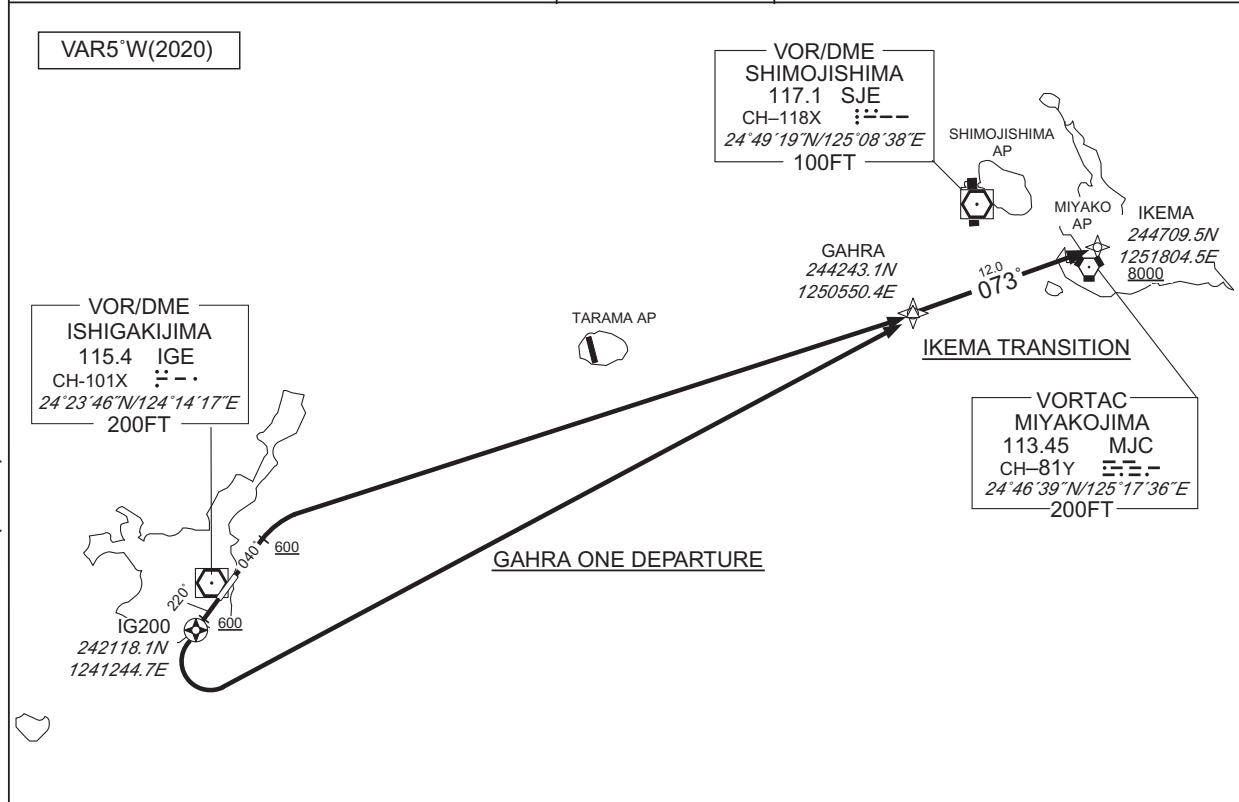


STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV SID and TRANSITION

| GAHRA ONE DEPARTURE IKEMA TRANSITION | | RNAV1 |
|---|-----------------------|--|
| NOTE 1) DME/DME/IRU or GNSS required. ※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. 2) RADAR service required. | Critical DME | RWY22 : IGE : 52NM to GAHRA - 47NM to GAHRA MJC : 52NM to GAHRA - 50NM to GAHRA |
| | DME GAP | RWY04 : DER - GAHRA RWY22 : DER - IG200 IG200 - 52NM to GAHRA 47NM to GAHRA - GAHRA IKEMA TRANSITION : GAHRA - IKEMA |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |



CHANGE : VAR. Course FM GAHRA to IKEMA. TARAMA VOR/DME(RME) abolished.

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 (035.9) | -4.8 | — | — | +600 | — | — | RNAV1 |
| 002 | DF | GAHRA | — | — | -4.8 | — | 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 (215.9) | -4.8 | — | — | +600 | — | — | RNAV1 |
| 002 | DF | IG200 | Y | — | -4.8 | — | — | — | — | — | RNAV1 |
| 003 | DF | GAHRA | — | — | -4.8 | — | 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 | — | — | -4.8 | — | — | — | — | — | RNAV1 |
| 002 | TF | IKEMA | — | 073 (068.2) | -4.8 | 12.0 | — | +8000 | — | — | RNAV1 |

CHANGE : VAR. Course FM GAHRA to IKEMA.

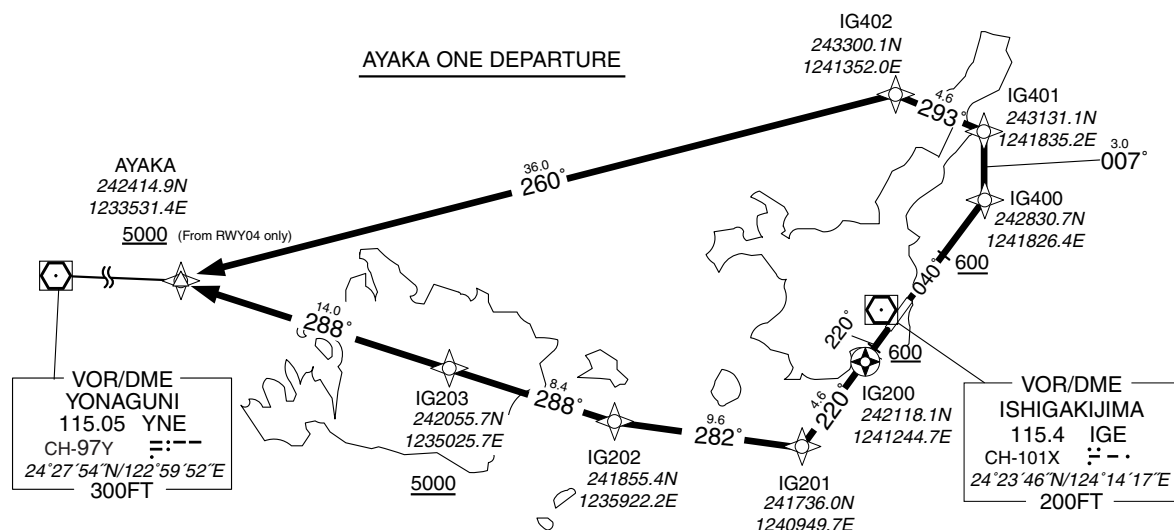
STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV SID

| AYAKA ONE DEPARTURE | | RNAV1 |
|--|------------------------|--|
| NOTE 1) DME/DME/IRU or GNSS required. ※ 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. 2) RADAR service required. | Critical DME | RWY04 : IGE : 1NM to IG400 - 19NM to AYAKA YNE : 1NM to IG400 - IG401 MJC : 24NM to AYAKA - 19NM to AYAKA RWY22 : YNE : 6NM to IG202 - 5NM to IG203 MJC : IG202 - 5NM to IG203 |
| | DME GAP | RWY04 : DER - 1NM to IG400 18NM to AYAKA - AYAKA RWY22 : DER - 6NM to IG202 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

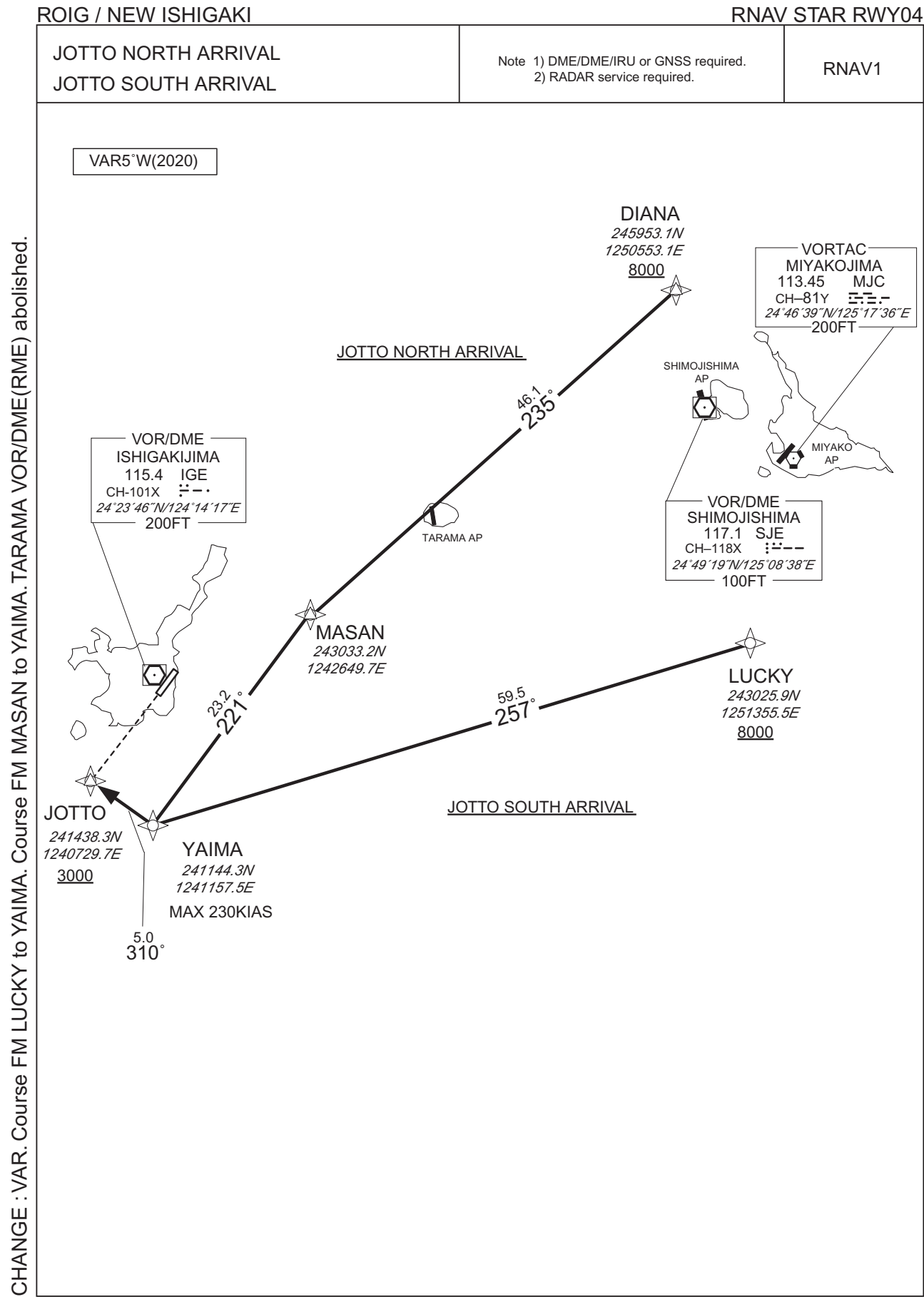
RWY04

| 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 (035.9) | -4.1 | — | — | +600 | — | — | RNAV1 |
| 002 | DF | IG400 | — | — | -4.1 | — | — | — | — | — | RNAV1 |
| 003 | TF | IG401 | — | 007 (002.6) | -4.1 | 3.0 | — | — | — | — | RNAV1 |
| 004 | TF | IG402 | — | 293 (289.1) | -4.1 | 4.6 | — | — | — | — | RNAV1 |
| 005 | TF | AYAKA | — | 260 (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 (215.9) | -4.1 | — | — | +600 | — | — | RNAV1 |
| 002 | DF | IG200 | Y | — | -4.1 | — | — | — | — | — | RNAV1 |
| 003 | TF | IG201 | — | 220 (215.7) | -4.1 | 4.6 | — | — | — | — | RNAV1 |
| 004 | TF | IG202 | — | 282 (277.9) | -4.1 | 9.6 | — | — | — | — | RNAV1 |
| 005 | TF | IG203 | — | 288 (283.9) | -4.1 | 8.4 | — | +5000 | — | — | RNAV1 |
| 006 | TF | AYAKA | — | 288 (283.8) | -4.1 | 14.0 | — | — | — | — | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT



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 14NM to YAIMA - 10NM to YAIMA IGE : 36NM to MASAN - 21NM to MASAN 14NM to YAIMA - 13NM to YAIMA |
| DME GAP | 21NM to MASAN - 14NM to YAIMA |
| Inappropriate NavAids | 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 | — | — | -4.8 | — | — | +8000 | — | — | RNAV1 |
| 002 | TF | MASAN | — | 235 (230.5) | -4.8 | 46.1 | — | — | — | — | RNAV1 |
| 003 | TF | YAIMA | — | 221 (215.8) | -4.8 | 23.2 | — | — | -230 | — | RNAV1 |
| 004 | TF | JOTTO | — | 310 (305.5) | -4.8 | 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 IGE : 53NM to YAIMA - 6NM to YAIMA |
| DME GAP | — |
| Inappropriate NavAids | 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 | — | — | -4.8 | — | — | +8000 | — | — | RNAV1 |
| 002 | TF | YAIMA | — | 257 (251.9) | -4.8 | 59.5 | — | — | -230 | — | RNAV1 |
| 003 | TF | JOTTO | — | 310 (305.5) | -4.8 | 5.0 | — | +3000 | — | — | RNAV1 |

CHANGE : VAR. Course FM MASAN to YAIMA. Course FM LUCKY to YAIMA.

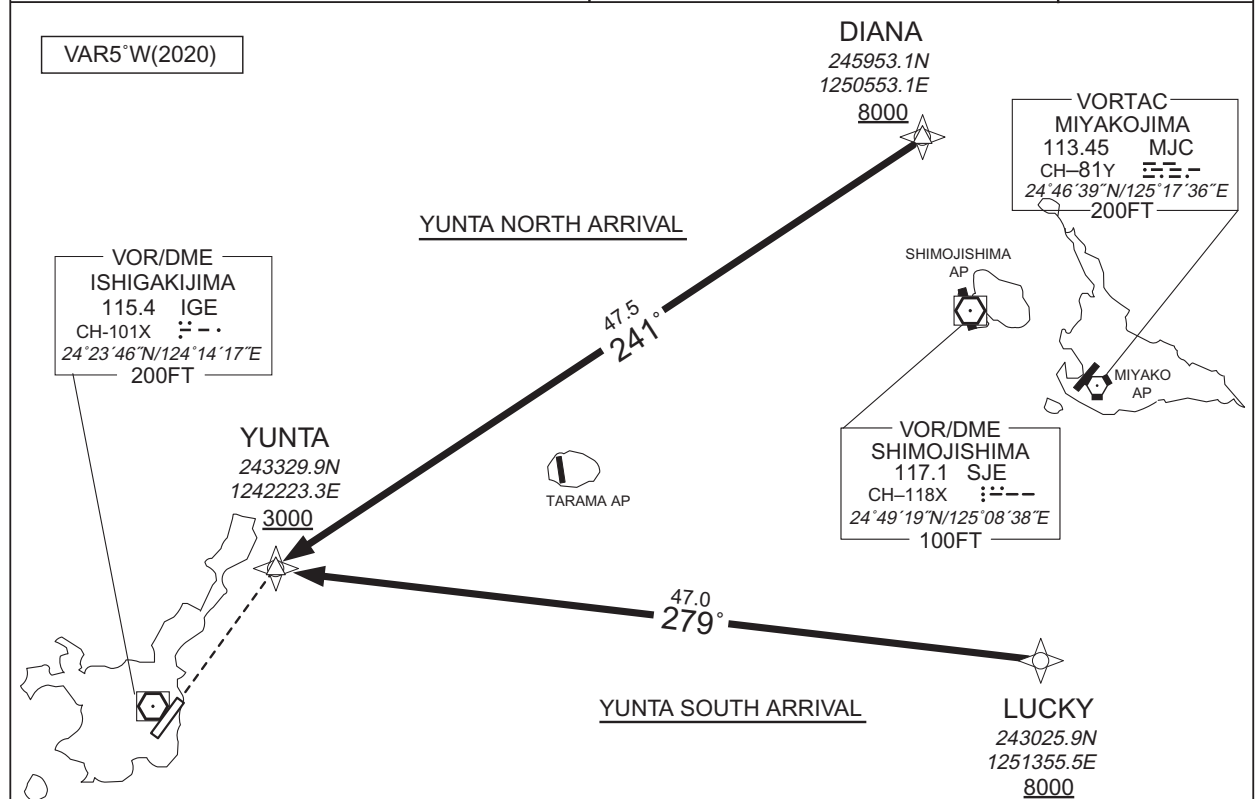
STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV STAR RWY22

YUNTA NORTH ARRIVAL
YUNTA SOUTH ARRIVALNote 1) DME/DME/IRU or GNSS required.
2) RADAR service required.

RNAV1

YUNTA NORTH ARRIVAL

From DIANA at or above 8000FT, to YUNTA at or above 3000FT.

| | |
|------------------------|--|
| Critical DME | MJC : DIANA - 21NM to YUNTA IGE : 35NM to YUNTA - YUNTA |
| 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 | DIANA | — | — | -4.8 | — | — | +8000 | — | — | RNAV1 |
| 002 | TF | YUNTA | — | 241 (236.4) | -4.8 | 47.5 | — | +3000 | — | — | RNAV1 |

YUNTA SOUTH ARRIVAL

From LUCKY at or above 8000FT, to YUNTA at or above 3000FT.

| | |
|------------------------|--|
| Critical DME | MJC : LUCKY - 32NM to YUNTA IGE : 33NM to YUNTA - 32NM to YUNTA YNE,IGE : 6NM to YUNTA - YUNTA |
| DME GAP | 32NM to YUNTA - 6NM to YUNTA |
| 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 | — | — | -4.8 | — | — | +8000 | — | — | RNAV1 |
| 002 | TF | YUNTA | — | 279 (273.9) | -4.8 | 47.0 | — | +3000 | — | — | RNAV1 |

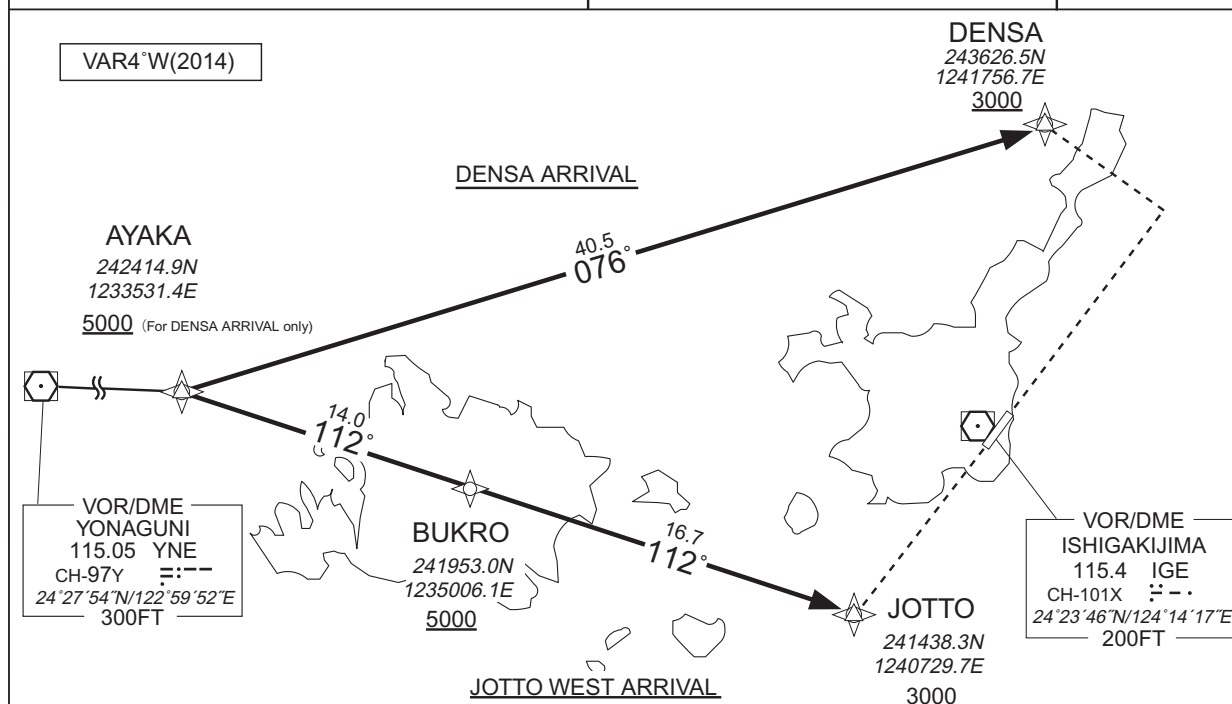
CHANGE : VAR. Course FM LUCKY to YUNTA.

STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV STAR RWY04/RWY22

| | | |
|-------------------------------------|---|-------|
| DENSA ARRIVAL JOTTO WEST ARRIVAL | Note 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 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 (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 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 (108.1) | -4.1 | 14.0 | — | +5000 | — | — | RNAV1 |
| 003 | TF | JOTTO | — | 112 (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

IGE 3000

BALAS (FAF) 2000

MAPt (LOC) 1971(LOC)

VDP (LOC) 1705

GP 3.0°

MDA 530(428)

RDH 54

700 (598)

2600

201°

040°

040°

5.8 1.4 0.7 DME to IIG

5.6 1.2 0.5 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

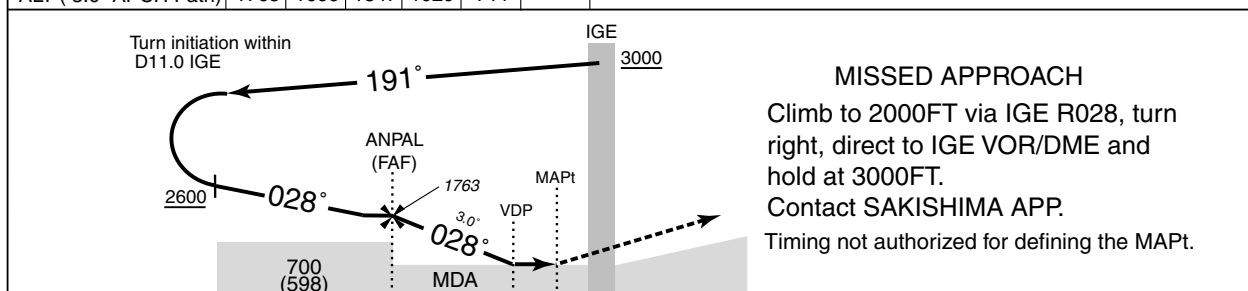
ROIG / NEW ISHIGAKI

VOR RWY04

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

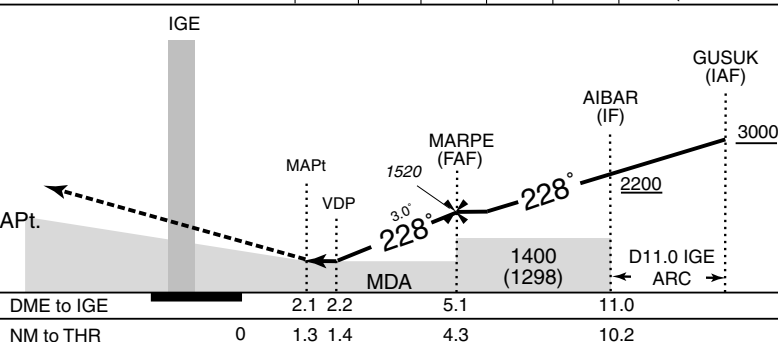
| | | | |
|--------------------------------|--|---------------------------------|----------------------------|
| SAKISHIMA APP 120.3 – 121.2 | ISHIGAKIJIMA VOR/DME 115.4 IGE CH-101X 24°23'46"N/124°14'17"E | ISHIGAKI TOWER 118.0 – 126.2 | RADAR AVBL ATIS 128.675 |
|--------------------------------|--|---------------------------------|----------------------------|



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 |

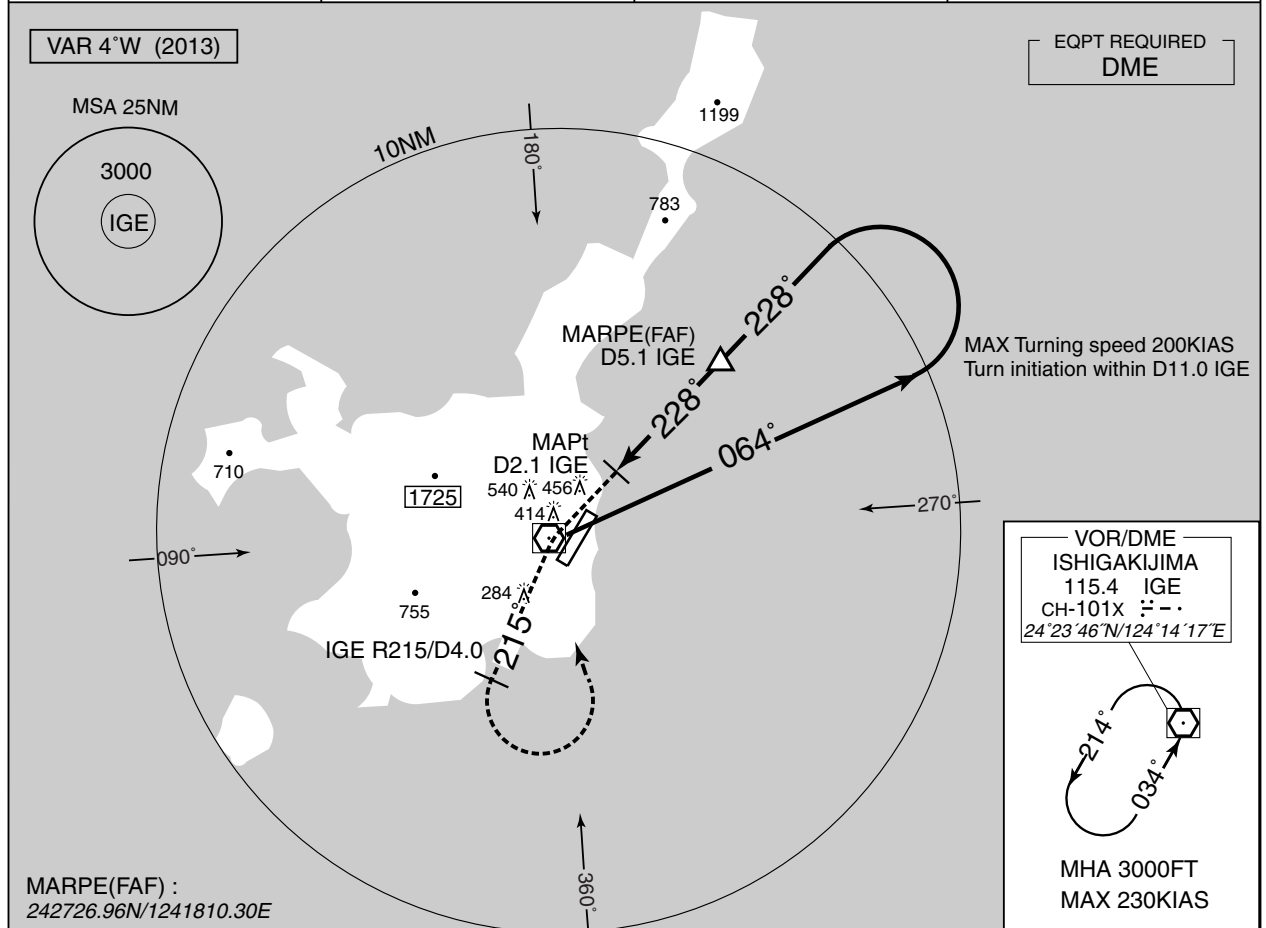
Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART

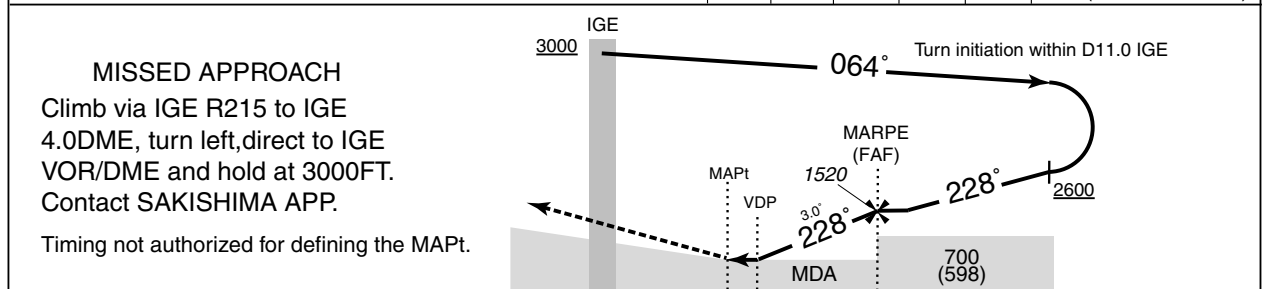
ROIG / NEW ISHIGAKI

VOR Y RWY22

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



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



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

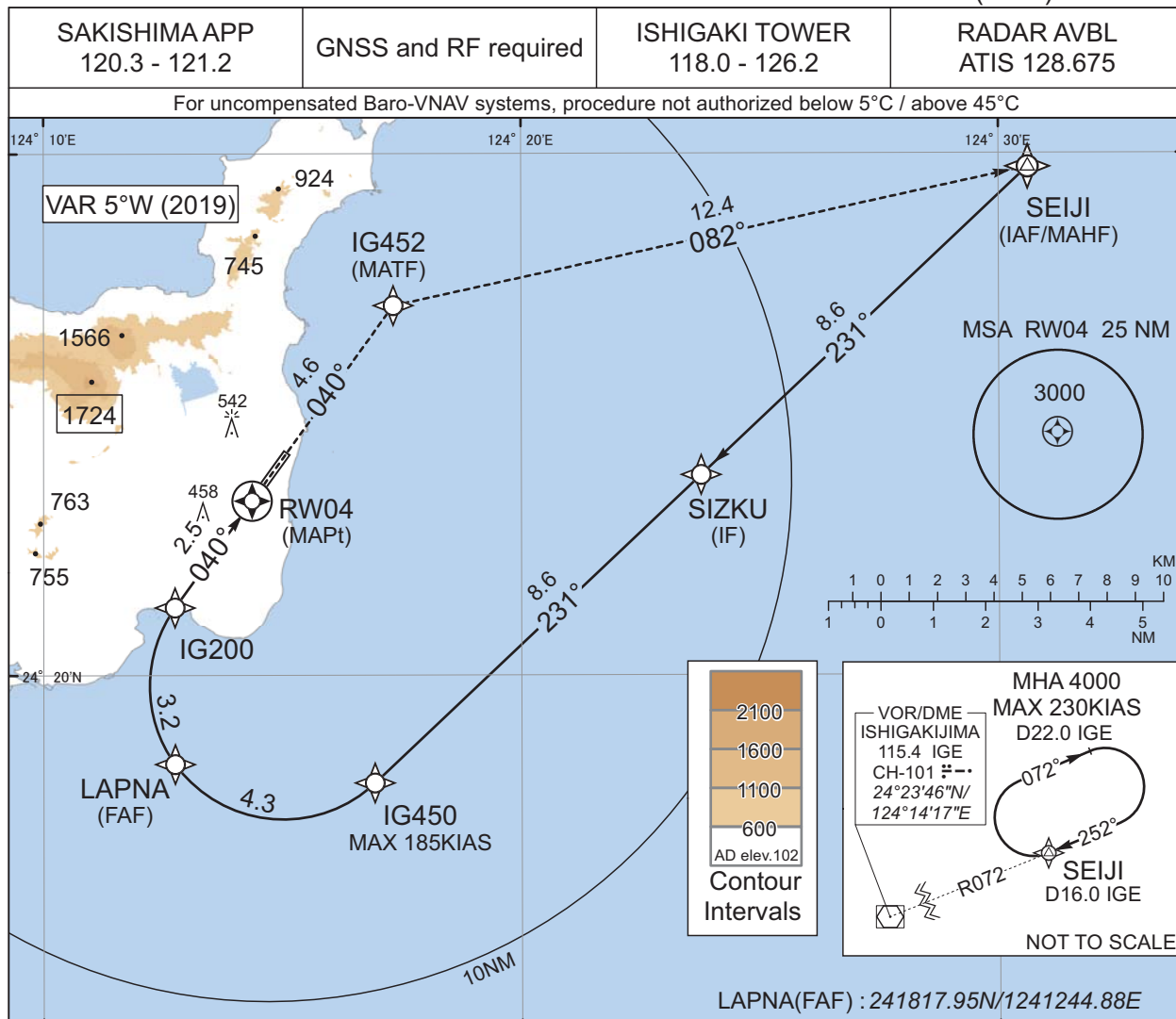
| MINIMA | | THR elev. 110 | | AD elev. 102 | |
|--------|----------|---------------|----------|--------------|--|
| CAT | | | CIRCLING | | |
| | MDA(H) | CMV | MDA(H) | VIS | |
| A | 580(478) | 1400 | 580(478) | 1600 | |
| B | | 1500 | | | |
| C | | 1600 | 660(558) | 2400 | |
| D | | 1800 | | | |

Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNAV(RNP) Z RWY04



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**

CHANGE : New PROC

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 (226.6) | -4.7 | 8.6 | - | - | - | - | 1.0 |
| 003 | TF | IG450 | - | 231 (226.6) | -4.7 | 8.6 | - | +2000 | -185 | - | 1.0 |
| 004 | RF Center: IGRF1 r=2.55NM | LAPNA | - | - | -4.7 | 4.3 | R | 2000 | - | - | 1.0 |
| 005 | RF Center: IGRF1 r=2.55NM | IG200 | - | - | -4.7 | 3.2 | R | 982 | - | -3.00 | 0.3 |
| 006 | TF | RW04 | Y | 040 (035.7) | -4.7 | 2.5 | - | 180 | - | -3.00/54 | 0.3 |
| 007 | TF | IG452 | - | 040 (035.7) | -4.7 | 4.6 | - | - | - | - | 1.0 |
| 008 | TF | SEIJI | - | 082 (077.6) | -4.7 | 12.4 | - | 4000 | - | - | 1.0 |

Waypoint Coordinates

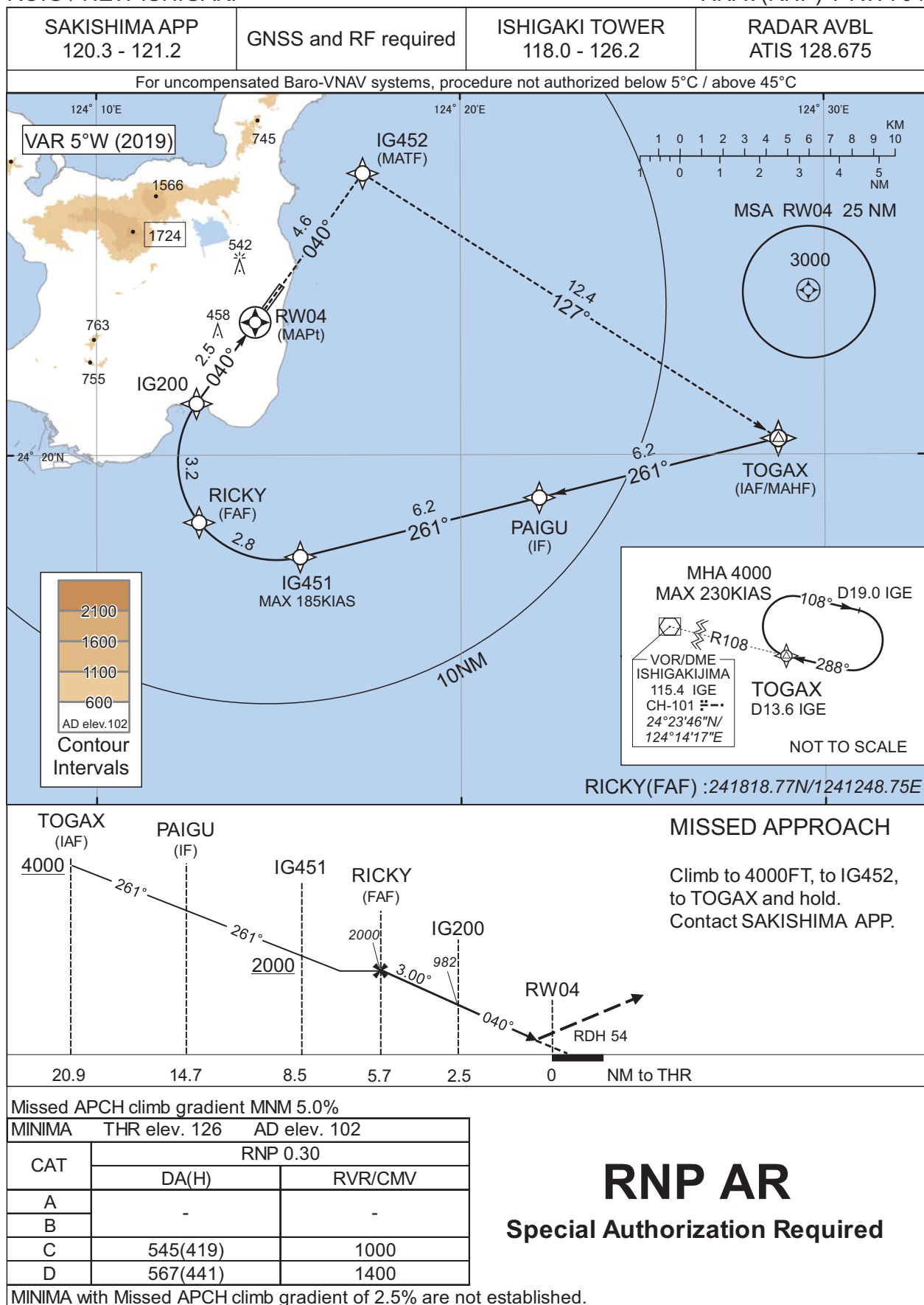
| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|------------------------|--------------------------|------------------------|
| SEIJI | 242944.43N/1243036.57E | IGRF1 | 241948.12N/1241500.55E |
| SIZKU | 242350.59N/1242345.74E | | |
| IG450 | 241756.41N/1241655.55E | | |
| 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 (256.1) | -4.7 | 6.2 | - | - | - | - | 1.0 |
| 003 | TF | IG451 | - | 261 (256.1) | -4.7 | 6.2 | - | +2000 | -185 | - | 1.0 |
| 004 | RF Center: IGRF2 r=2.47NM | RICKY | - | - | -4.7 | 2.8 | R | 2000 | - | - | 1.0 |
| 005 | RF Center: IGRF2 r=2.47NM | IG200 | - | - | -4.7 | 3.2 | R | 982 | - | -3.00 | 0.3 |
| 006 | TF | RW04 | Y | 040 (035.7) | -4.7 | 2.5 | - | 180 | - | -3.00/54 | 0.3 |
| 007 | TF | IG452 | - | 040 (035.7) | -4.7 | 4.6 | - | - | - | - | 1.0 |
| 008 | TF | TOGAX | - | 127 (122.7) | -4.7 | 12.4 | - | 4000 | - | - | 1.0 |

Waypoint Coordinates

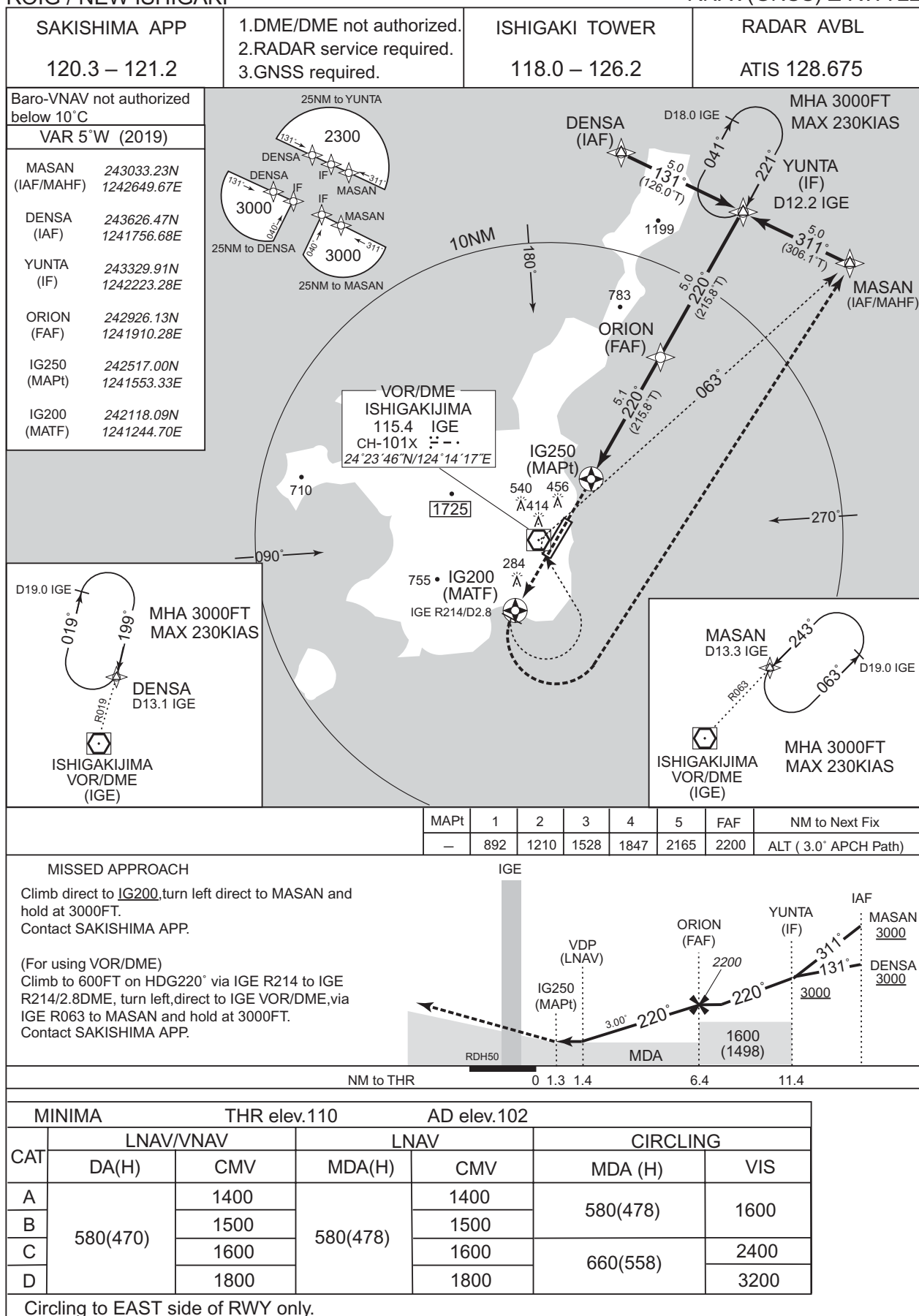
| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|------------------------|--------------------------|------------------------|
| TOGAX | 242024.18N/1242843.66E | IGRF2 | 241950.87N/1241456.35E |
| PAIGU | 241855.41N/1242209.38E | | |
| IG451 | 241726.37N/1241535.30E | | |
| 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

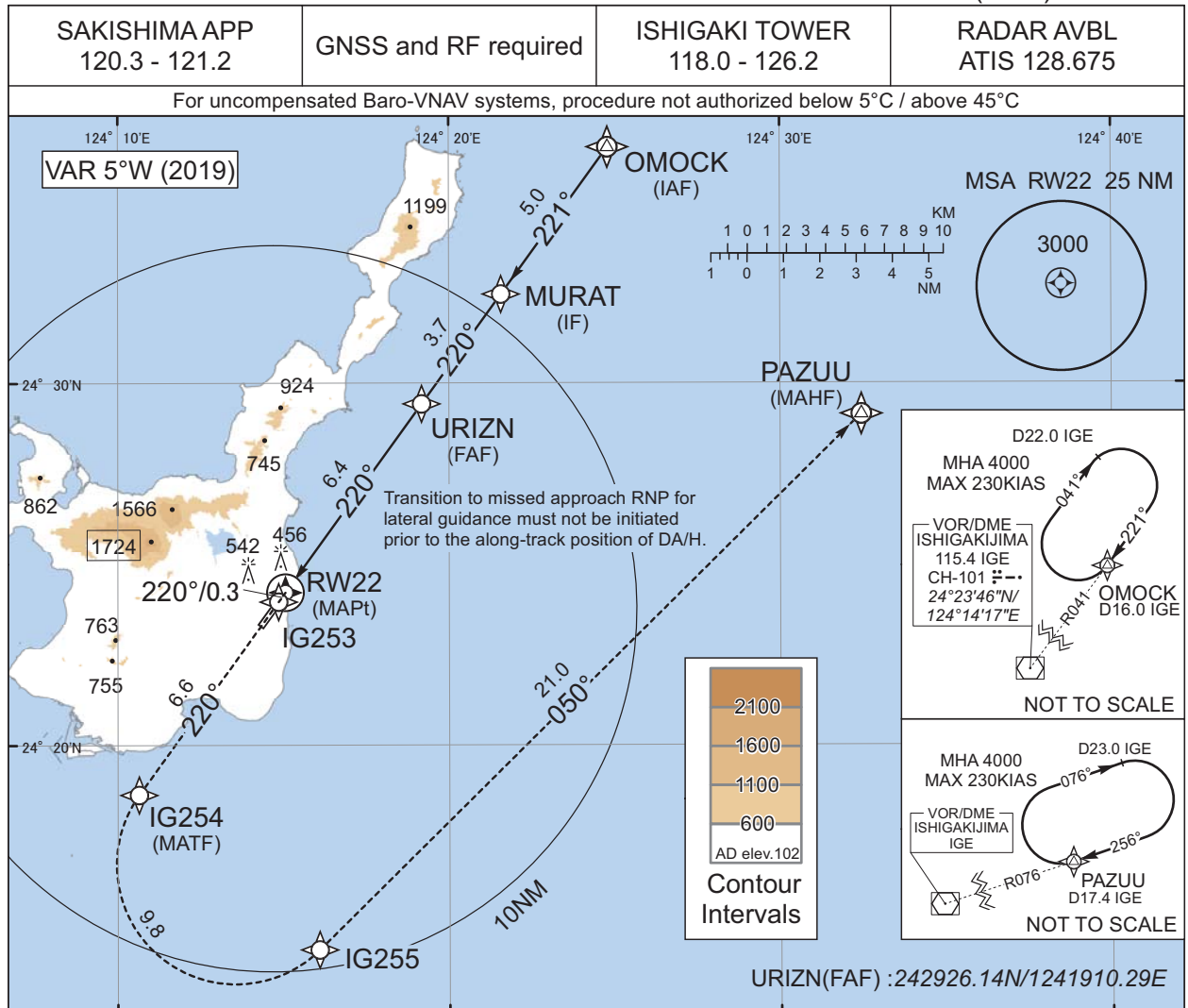


CHANGE : VAR. Course FM DENSA TO YUNTA. Course FM MASAN TO YUNTA. PROC renamed.

INSTRUMENT APPROACH CHART

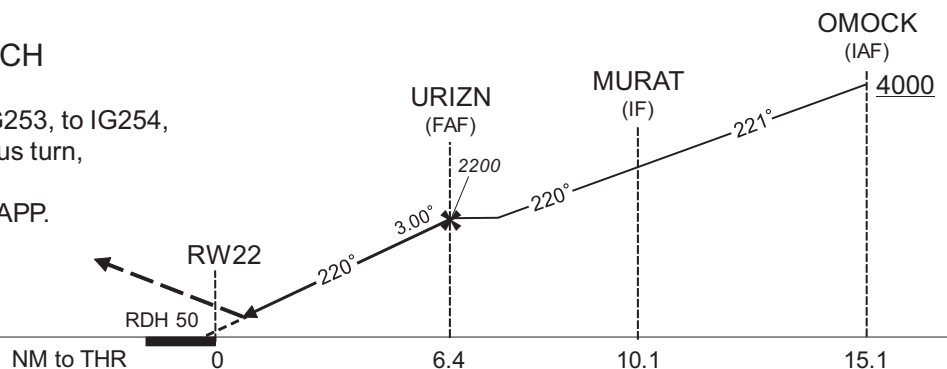
ROIG / NEW ISHIGAKI

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 0.30 |
| 005 | TF | IG253 | - | 220 (215.7) | -4.7 | 0.3 | - | - | - | - | 0.12 0.30 |
| 006 | TF | IG254 | - | 220 (215.7) | -4.7 | 6.6 | - | - | - | - | 1.0 |
| 007 | RF Center: IGRF3 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

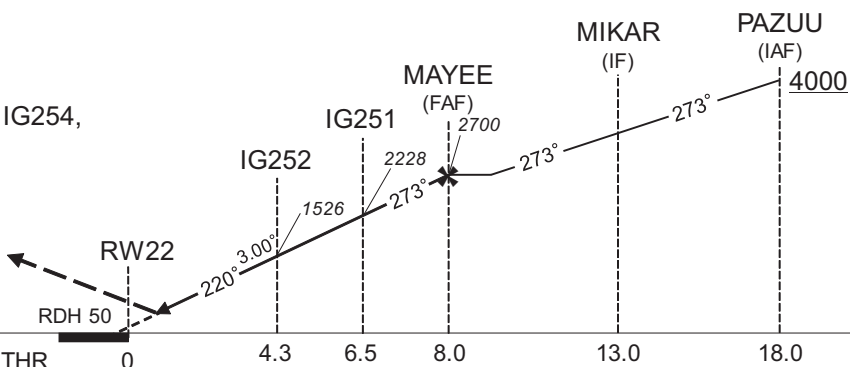
| | | | |
|--------------------------------|----------------------|---------------------------------|----------------------------|
| SAKISHIMA APP 120.3 - 121.2 | GNSS and RF required | ISHIGAKI TOWER 118.0 - 126.2 | RADAR AVBL ATIS 128.675 |
|--------------------------------|----------------------|---------------------------------|----------------------------|

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

CHANGE : New PROC

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 (267.9) | -4.7 | 5.0 | - | | - | - | 1.0 |
| 003 | TF | MAYEE | - | 273 (267.9) | -4.7 | 5.0 | - | 2700 | - | - | 1.0 |
| 004 | TF | IG251 | - | 273 (267.8) | -4.7 | 1.5 | - | 2228 | - | -3.00 | 0.12 0.30 |
| 005 | RF Center: IGRF4 r=2.43NM | IG252 | - | - | -4.7 | 2.2 | L | 1526 | - | -3.00 | 0.12 0.30 |
| 006 | TF | RW22 | Y | 220 (215.7) | -4.7 | 4.3 | - | 160 | - | -3.00/50 | 0.12 0.30 |
| 007 | TF | IG253 | - | 220 (215.7) | -4.7 | 0.3 | - | - | - | - | 0.12 0.30 |
| 008 | TF | IG254 | - | 220 (215.7) | -4.7 | 6.6 | - | - | - | - | 1.0 |
| 009 | RF Center: IGRF3 r=3.28NM | IG255 | - | - | -4.7 | 9.8 | L | - | - | - | 1.0 |
| 010 | TF | PAZUU | - | 050 (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 Nosokodake | 006° / 5.5NM | 山 Mountain |
| EAST POINT | 120° / 6.0NM | 海上 Over the sea |
| 竹富島 Taketomijima | 250° / 9.0NM | 高速艇船着場 Port |
| 観音崎 Kannonzaki | 259° / 7.5NM | 灯台 Light house |
| 川平 Kabira | 309° / 6.8NM | 川平湾グラスボート乗り場 Kabira Bay Boat pier |
| 底原 Sokobaru | 325° / 2.1NM | ダム Dam |



Minimum Vectoring Altitude CHART

