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 | 5°W (2022) / 7' 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 | Quarantine (human): On request (0980-82-4940) Quarantine (animal, plant): INTL SKED FLT hours only | | | |
| 4 | AIS Briefing Office | Nil | | | |
| 5 | ATS Reporting Office(ARO) | Nil | | | |
| 6 | MET Briefing Office | H24 (NAHA) | | | |
| 7 | 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 dock- ing/ 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, |
| 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 | H24 (NAHA) |
| | MET Office outside hours | |
| 3 | Office responsible for TAF preparation | NAHA |
| | Periods of validity | 30 Hours |
| 4 | Trend forecast | Nil |
| | Interval of issuance | |
| 5 | Briefing/ consultation provided | Briefing is available upon inquiry at NAHA |
| 6 | Flight documentation | С |
| | Language(s) used | En |
| 7 | Charts and other information available | 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} , |
| | for briefing or consultation | P _{SWI} , P _{SWM} , P _{SW} (domestic), E, C, W _E , W _F , W _G , W _I , W, N |
| 8 | Supplementary equipment | Nil |
| | available for providing information | |
| 9 | ATS units provided with information | TWR |
| 10 | Additional information(limitation of ser- | Nil |
| | vice, etc.) | |

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) | | (Overrun) sions (M) | Remarks |
| 7 10 | | 10 | 11 | | 14 |
| See AD2.24 AD chart | | 2120×300 | 192×(MNM:165 MAX:305)* | | RWY grooving: 2000×45 |
| 2 | | 2120×300 | | ×305 airport administrator | |

ROIG AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1 | 1 2 | | 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 | | | | |
| | | | and 900m FM I olor:Red)(*2) | RWY THR)(* | 1) | | | |

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 | | | | | |
| Ī | 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

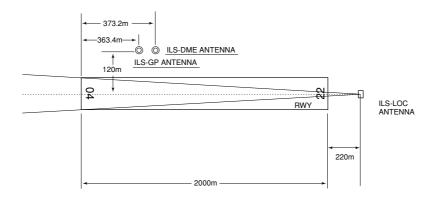
| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---------------------|----------------------|-------------|--------------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 |
| APP/ASR | Sakishima Approach/ | 120.3MHz | 2230 - 1200 | APP service provided by |
| | Sakishima Radar | 121.2MHz | | Sakishima APP. |
| | | 125.0MHz | | |
| | | 133.7MHz | | |
| | | 315.7MHz | | |
| | | 121.5MHz(E) | | |
| | | 243.0MHz(E) | | |
| TWR | Ishigaki Tower | 118.0MHz(1) | 2300 - 1200 | (1)Primary |
| | | 126.2MHz | | |
| | | 121.5MHz(E) | | |
| 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 |

ILS

NEW ISHIGAKI AP



REMARKS: 1. LOC beam BRG(MAG)

2. GP Angle
3. HGT of ILS REF datum
4. ELEV of ILS-DME

3.0° 16.5m(54ft) 38.52m(126ft)

040°

ROIG AD 2.20 LOCAL TRAFFIC REGULATIONS

| 1. Airp | port regulations |
|---------|---|
| | PPR for all transient aircraft due to Apron congestion. TEL:0980-87-0793 |
| 2. Tax | iing to and from stands |
| | Nil |
| 3. Par | king area for small aircraft(General aviation) |
| | Nil |
| 4. Par | king area for helicopters |
| | Nil |
| 5. Apr | on - taxiing during winter conditions |
| | Nil |
| 6. Tax | iing - 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. Sch | nool and training flights - technical test flights - use of runways |
| | Nil |
| 8. Hel | icopter traffic - limitation |
| | Nil |
| 9. Rer | moval 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 8 | & RCLL | _ | RCLL or Marking | NIL (DAYTIME ONLY) | | |
|---------------------------|-----|-------------|----------------|--------|-----------------|--------------------|-----------------------|------|--|
| | | | RVR | VIS | RVR | VIS | RVR | VIS | |
| Multi-Engine ACFT with | 04 | A,B,C,D | 400m | 400m | 400m | 400m | - | 500m | |
| TKOF ALTN AP FILED | 22 | A,B,C,D | • | 400m | 1 | 400m | 1 | 500m | |
| OTHER | 04 | A,B,C,D | AVELLEC MINIMA | | | | | | |
| OTTLK | 22 | Α,Β,Ο,Β | | | AVBL LDG MINIMA | | | | |

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. Trajectorized Airport Traffic Data Processing System (TAPS)

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。

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.

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。 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

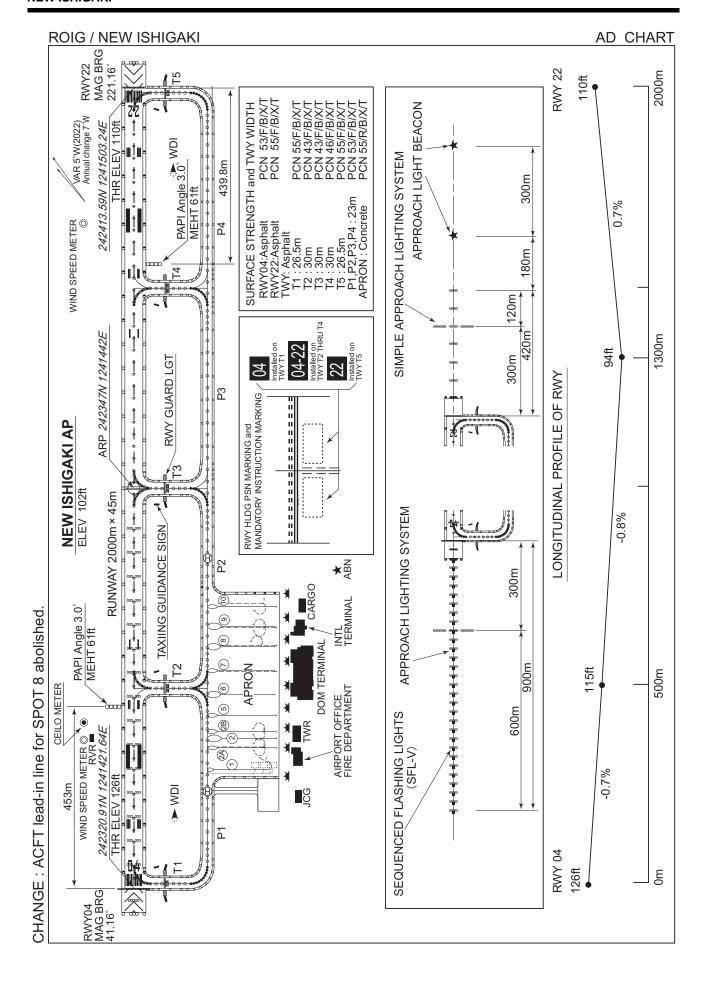
Lighting: Nill

(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 (MASAN-RNAV) Standard Arrival Chart - Instrument (YUNTA NORTH-RNAV) Standard Arrival Chart - Instrument (DENSA, JOTTO WEST-RNAV) Instrument Approach Chart (ILS Z or LOC Z RWY04) Instrument Approach Chart (ILS Y or LOC Y RWY04) Instrument Approach Chart (ILS X RWY04) Instrument Approach Chart (VOR RWY04) Instrument Approach Chart (VOR Z RWY22) Instrument Approach Chart (VOR Y RWY22) Instrument Approach Chart (RNP RWY04(AR)) Instrument Approach Chart (RNP Z RWY22) Instrument Approach Chart (RNP Y RWY22(AR)) Other Chart (VISUAL REP) Other Chart (LDG CHART) Other Chart (MVA CHART)







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.



ROIG / NEW ISHIGAKI SID

ISHIGAKI REVERSAL ONE DEPARTURE

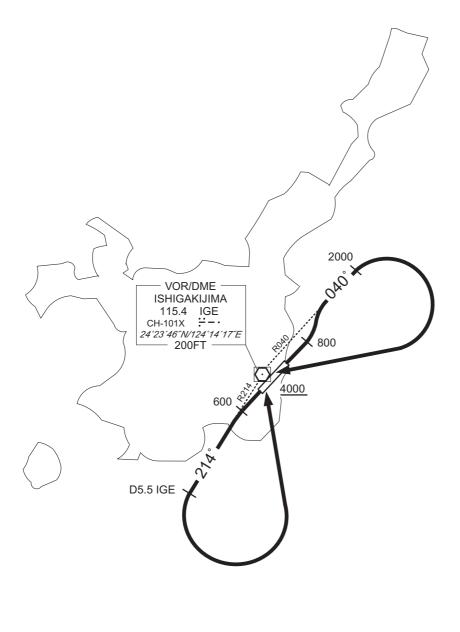
RWY04: Climb RWY HDG to 800FT, turn left to intercept and proceed via IGE R040 to 2000FT,

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.



ROIG / NEW ISHIGAKI

SID

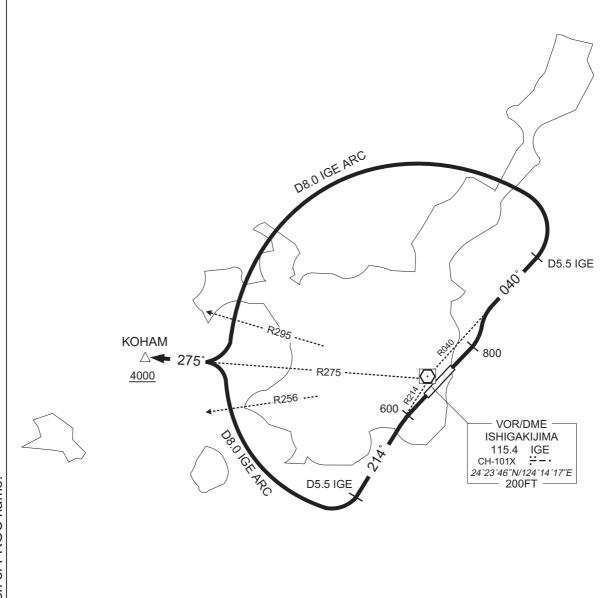
KOHAM ONE DEPARTURE

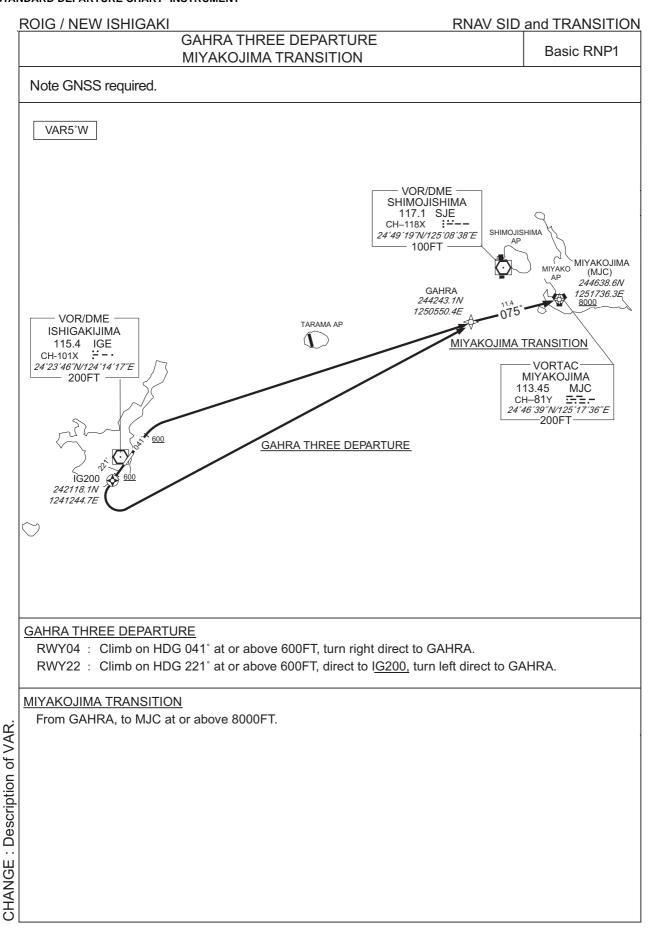
RWY04 : Climb RWY HDG to 800FT, turn left to intercept and proceed via IGE R040 to IGE R040/5.5DME, turn left, via IGE 8.0DME counterclockwise ARC, turn right to intercept and proceed via IGE R275 to KOHAM.

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.





ROIG / NEW ISHIGAKI

RNAV SID and TRANSITION

GAHRA THREE DEPARTURE

RWY04

| Serial Number | Path Descriptor | 7. | Fly Over | | Magnetic Variation | | Turn Direction | | l ' | | Navigation Specification |
|------------------|--------------------|-------|-------------|----------------|-----------------------|---|-------------------|------|-----|---|-----------------------------|
| 001 | VA | _ | _ | 041 (035.9) | -4.9 | _ | _ | +600 | _ | _ | Basic RNP1 |
| 002 | DF | GAHRA | _ | _ | -4.9 | _ | R | _ | _ | _ | Basic RNP1 |

RWY22

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|---|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001 | VA | _ | _ | 221 (215.9) | -4.9 | _ | _ | +600 | _ | _ | Basic RNP1 |
| 002 | DF | IG200 | Υ | _ | -4.9 | _ | _ | _ | _ | _ | Basic RNP1 |
| 003 | DF | GAHRA | _ | _ | -4.9 | _ | L | _ | _ | _ | Basic RNP1 |

MIYAKOJIMA TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | | Magnetic Variation | | Turn Direction | Altitude (FT) | l ' | | Navigation Specification |
|------------------|--------------------|------------------------|-------------|----------------|-----------------------|------|-------------------|------------------|-----|---|-----------------------------|
| 001 | IF | GAHRA | _ | _ | -4.9 | _ | _ | _ | _ | _ | Basic RNP1 |
| 002 | TF | MJC | _ | 075 (069.8) | -4.9 | 11.4 | _ | +8000 | _ | _ | Basic RNP1 |

ROIG / NEW ISHIGAKI **RNAV SID** Basic RNP1 AYAKA THREE DEPARTURE Note GNSS required. VAR5°W IG402 243300.1N 1241352.0E IG401 243131.1N [>]1241835.2E -_{3.0} -007° AYAKA ^{36.0}261 242414.9N - IG400 1233531.4E 242830.7N 5000 (From RWY04 only) 1241826.4E 600 VOR/DME VOR/DME -IG203 IG200 YONAGUNI ISHIGAKIJIMA 242118.1N 242055.7N 115.05 YNE 283° 115.4 IGE 1-101X ∺ - • 1241244.7E 1235025.7E CH-97Y IG202 CH-101X 24°27′54″N/122°59′52″E — 300FT — 241855.4N 24°23′46″N/124°14′17″E IG201 5000 √ 1235922.2E 241736.0N 200FT -0 1240949.7E

 $RWY04~:~Climb~on~HDG~041^{\circ}$ at or above 600FT, direct to IG400, to IG401, to IG402, to AYAKA at or

above 5000FT.

RWY22 : Climb on HDG 221 $^{\circ}$ at or above 600FT, direct to $\underline{\text{IG200}},$ 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.

ROIG / NEW ISHIGAKI

RNAV SID

AYAKA THREE 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 | _ | _ | 041 (035.9) | -4.9 | _ | _ | +600 | _ | _ | Basic RNP1 |
| 002 | DF | IG400 | _ | _ | -4.9 | _ | _ | _ | _ | _ | Basic RNP1 |
| 003 | TF | IG401 | _ | 007 (002.6) | -4.9 | 3.0 | _ | _ | _ | _ | Basic RNP1 |
| 004 | TF | IG402 | _ | 294 (289.1) | -4.9 | 4.6 | _ | _ | _ | _ | Basic RNP1 |
| 005 | TF | AYAKA | _ | 261 (256.1) | -4.9 | 36.0 | _ | +5000 | _ | _ | Basic RNP1 |

RWY22

| Serial Numbe | Path er Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|-----------------|-----------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001 | VA | _ | _ | 221 (215.9) | -4.9 | _ | _ | +600 | _ | _ | Basic RNP1 |
| 002 | DF | IG200 | Υ | _ | -4.9 | _ | _ | _ | _ | _ | Basic RNP1 |
| 003 | TF | IG201 | _ | 221 (215.7) | -4.9 | 4.6 | _ | _ | _ | _ | Basic RNP1 |
| 004 | TF | IG202 | _ | 283 (277.9) | -4.9 | 9.6 | _ | _ | _ | _ | Basic RNP1 |
| 005 | TF | IG203 | _ | 289 (283.9) | -4.9 | 8.4 | _ | +5000 | _ | _ | Basic RNP1 |
| 006 | TF | AYAKA | _ | 289 (283.8) | -4.9 | 14.0 | _ | _ | _ | _ | Basic RNP1 |

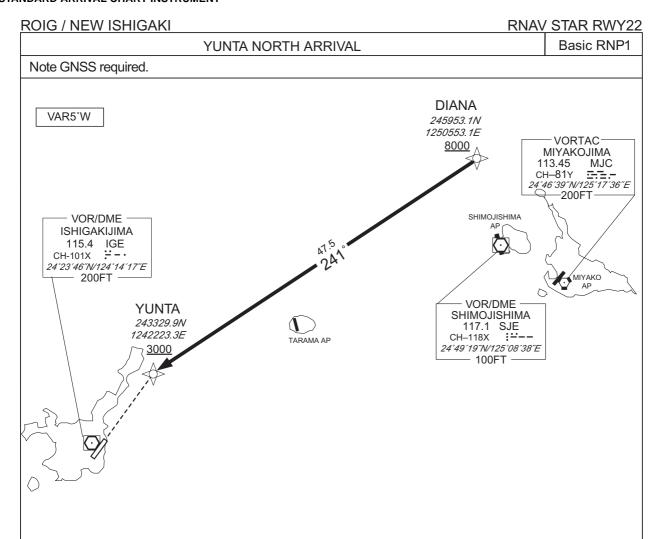
STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI RNAV STAR RWY04 / RWY22 Basic RNP1 MASAN ARRIVAL Note GNSS required. VAR5°W DIANA 245953.1N VORTAC-1250553.1E MIYAKOJIMA 8000 SHIMOJISHIMA VOR/DME -MIYAKO AP ISHIGAKIJIMA 115.4 IGE CH-101X VOR/DME 24°23′46″N/124°14′17″E SHIMOJISHIMA 200FT 117.1 SJE CH–118X :---TARAMA AP 24°49′19″N/125°08′38″E - 100FT MASAN 243033.2N 1242649.7E 3000

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

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | | Magnetic Variation | | Turn Direction | | | | Navigation Specification |
|------------------|--------------------|------------------------|-------------|----------------|-----------------------|------|-------------------|-------|---|---|-----------------------------|
| 001 | IF | DIANA | _ | _ | -5.1 | _ | _ | +8000 | _ | _ | Basic RNP1 |
| 002 | TF | MASAN | _ | 236 (230.5) | -5.1 | 46.1 | _ | +3000 | _ | _ | Basic RNP1 |

STANDARD ARRIVAL CHART-INSTRUMENT



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

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | | Turn Direction | | l ' | | Navigation Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|-------|-----|---|-----------------------------|
| 001 | IF | DIANA | _ | _ | -4.9 | _ | _ | +8000 | _ | _ | Basic RNP1 |
| 002 | TF | YUNTA | _ | 241 (236.4) | -4.9 | 47.5 | _ | +3000 | _ | _ | Basic RNP1 |

STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI RNAV STAR RWY04/RWY22 DENSA ARRIVAL / JOTTO WEST ARRIVAL Basic RNP1 Note GNSS required. **DENSA** 243626.5N VAR5°W 1241756.7E <u>3000</u> **DENSA ARRIVAL AYAKA** 40.5 242414.9N 1233531.4E 5000 (For DENSA ARRIVAL only) VOR/DME VOR/DME -16.7 YONAGUNI **BUKRO** ISHIGAKIJIMA 115.05 YNE 241953.0N 115.4 IGE CH-101X ∵ - • CH-97Y =:--1235006.1E 24°27′54″N/122°59′52″E 300FT JOTTO 24°23′46″N/124°14′17″E 5000 200FT 241438.3N 1240729.7E JOTTO WEST ARRIVAL

DENSA ARRIVAL

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

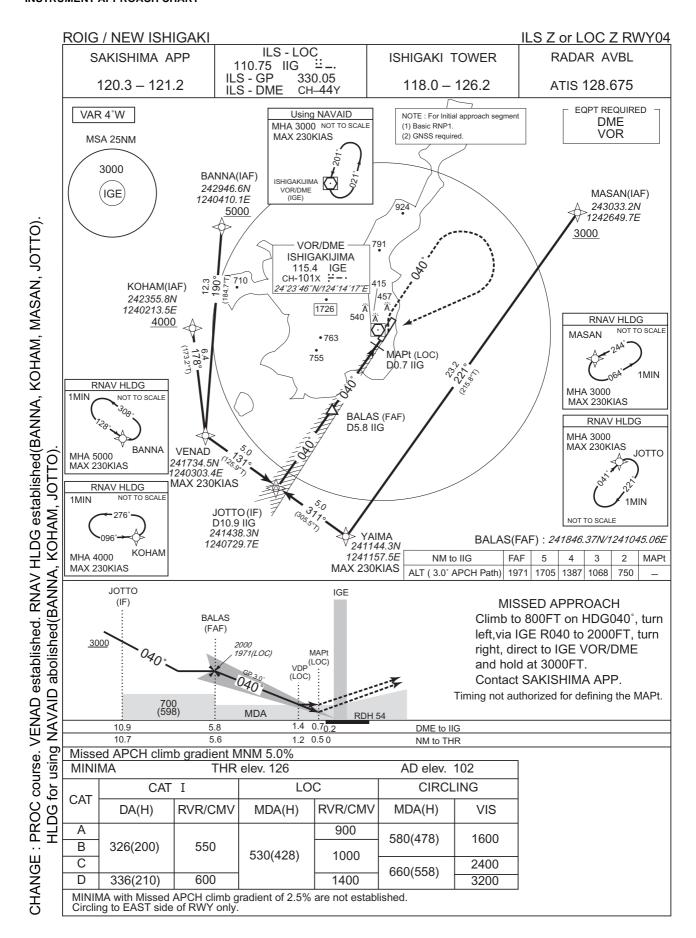
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | | Magnetic Variation | | Turn Direction | Altitude (FT) | • | | Navigation Specification |
|------------------|--------------------|------------------------|-------------|----------------|-----------------------|------|-------------------|------------------|---|---|-----------------------------|
| 001 | IF | AYAKA | _ | _ | -4.9 | _ | _ | +5000 | _ | _ | Basic RNP1 |
| 002 | TF | DENSA | _ | 077 (072.3) | -4.9 | 40.5 | _ | +3000 | _ | _ | Basic RNP1 |

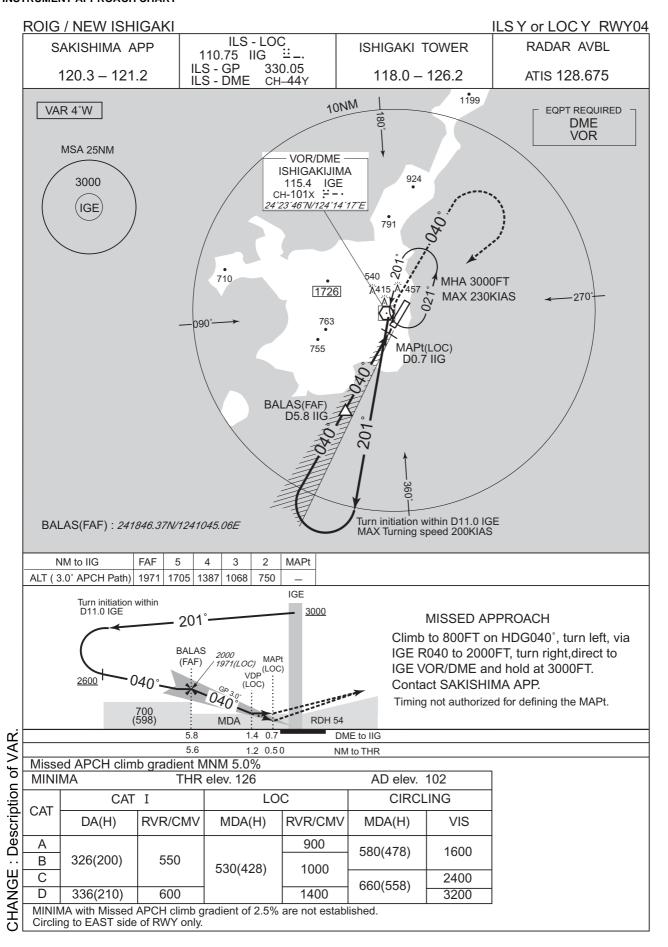
3000

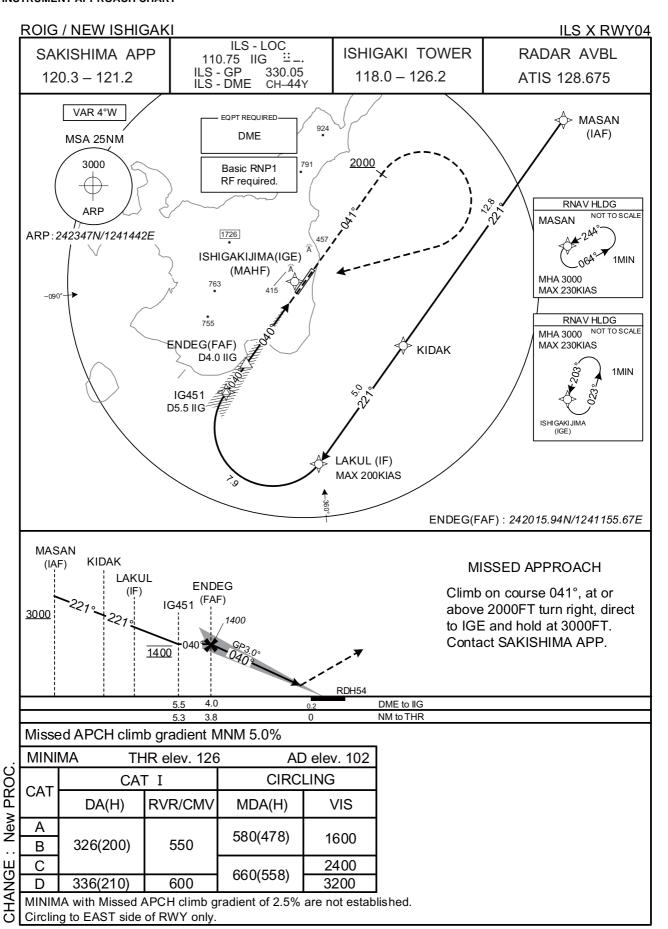
JOTTO WEST ARRIVAL

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

| Serial | Path | Waypoint | Fly | Course | Magnetic | Distance | Turn | Altitude | Speed | Vertical | Navigation |
|--------|------------|------------|------|----------------|-----------|----------|-----------|----------|--------|----------|---------------|
| Number | Descriptor | Identifier | Over | °M(°T) | Variation | (NM) | Direction | (FT) | (KIAS) | Angle | Specification |
| 001 | IF | AYAKA | _ | _ | -4.9 | _ | _ | _ | _ | _ | Basic RNP1 |
| 002 | TF | BUKRO | _ | 113 (108.1) | -4.9 | 14.0 | _ | +5000 | _ | _ | Basic RNP1 |
| 003 | TF | JOTTO | _ | 113 (108.2) | -4.9 | 16.7 | _ | +3000 | _ | _ | Basic RNP1 |







ROIG / NEW ISHIGAKI

ILS X RWY04

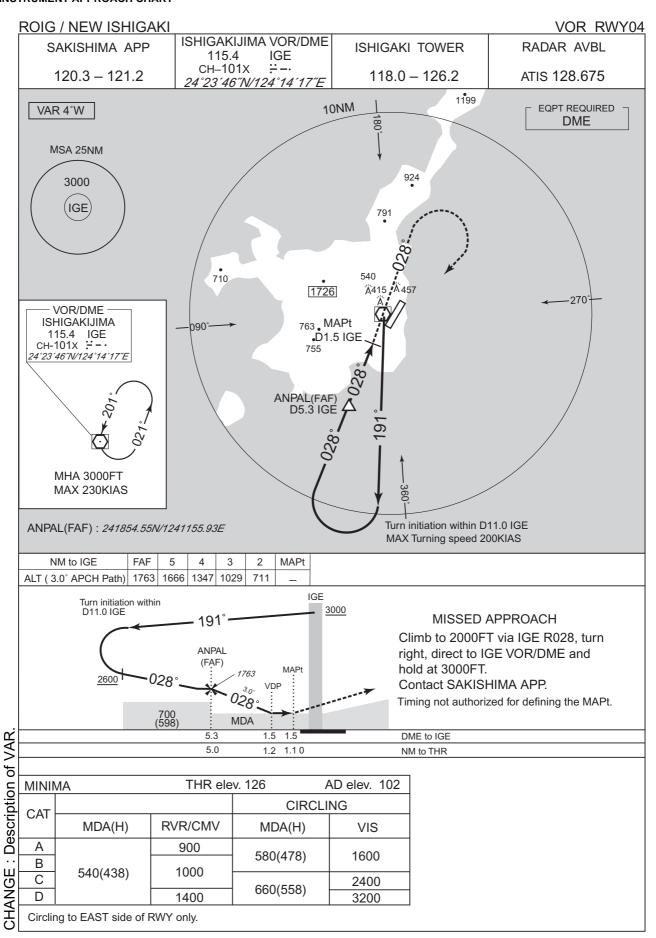
Coding Table

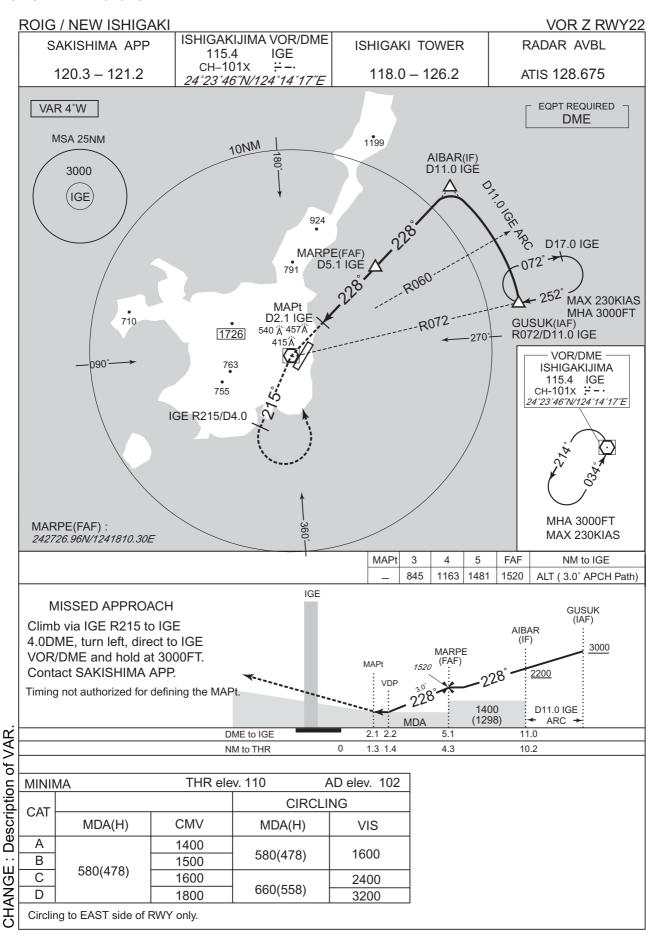
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|------------------|------------------------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001 | IF | MASAN | - | - | -5.1 | _ | - | +3000 | - | _ | Basic RNP1 |
| 002 | TF | KIDAK | _ | 221 (215.8) | -5.1 | 12.8 | _ | _ | - | _ | Basic RNP1 |
| 003 | TF | LAKUL | - | 221 (215.7) | -5.1 | 5.0 | - | _ | -200 | _ | Basic RNP1 |
| 004 | RF Center: IGRF2 r=2.50NM | IG451 | ı | I | -5.1 | 7.9 | R | 1400 | ı | I | Basic RNP1 |
| | | | | | | | | | | | |
| 001 | CA | _ | 1 | 041 (035.7) | -5.1 | _ | - | +2000 | _ | _ | Basic RNP1 |
| 002 | DF | IGE | _ | - | -5.1 | - | R | 3000 | _ | _ | Basic RNP1 |

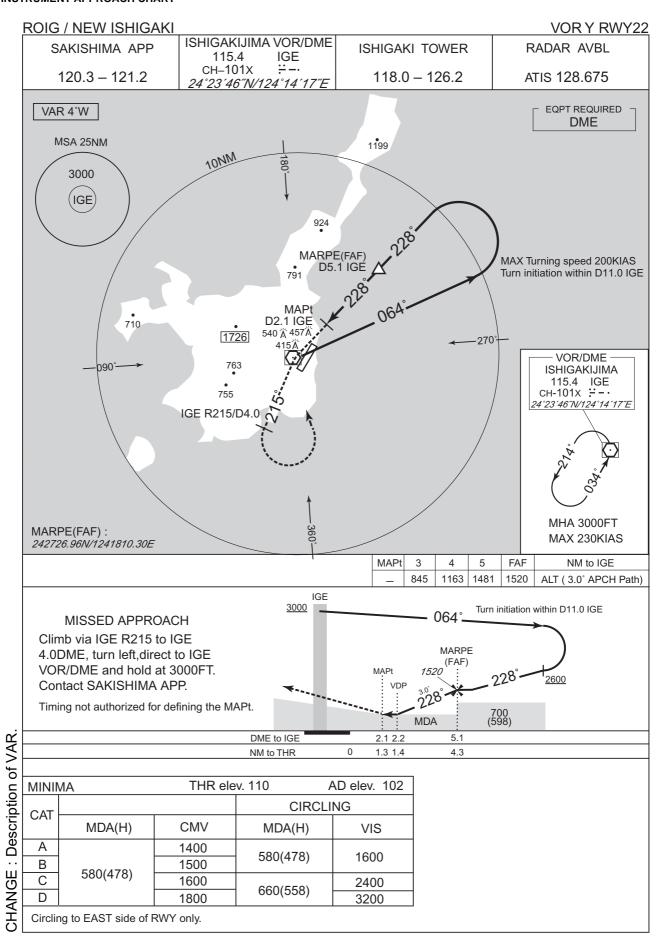
| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|------|------------------------|-----------------------------|-----------------------|---------------------------|-------------------|-----------------------------|-----------------------------|-----------------|-----------------------------|
| Hold | MASAN | 244 (239.3) | -5.1 | 1.0(-14000) | L | 3000 | FL140 | -230(-14000) | Basic RNP1 |
| Hold | IGE | 203 (197.8) | -5.1 | 1.0(-14000) | L | 3000 | FL140 | -230(-14000) | Basic RNP1 |

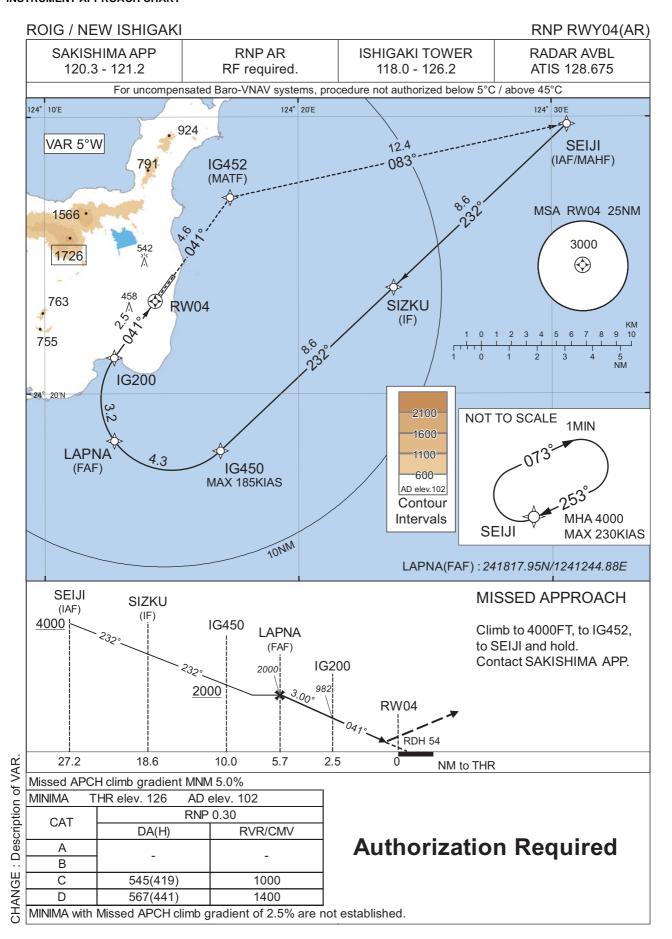
Waypoint Coordinates

| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|------------------------|--------------------------|------------------------|
| MASAN | 243033.23N/1242649.67E | IGRF2 | 241734.58N/1241311.07E |
| KIDAK | 242010.28N/1241836.67E | | |
| LAKUL | 241606.39N/1241524.14E | | |
| IG451 | 241902.74N/1241057.95E | | |
| IGE | 242345.64N/1241416.63E | | |









ROIG / NEW ISHIGAKI

RNP RWY04(AR)

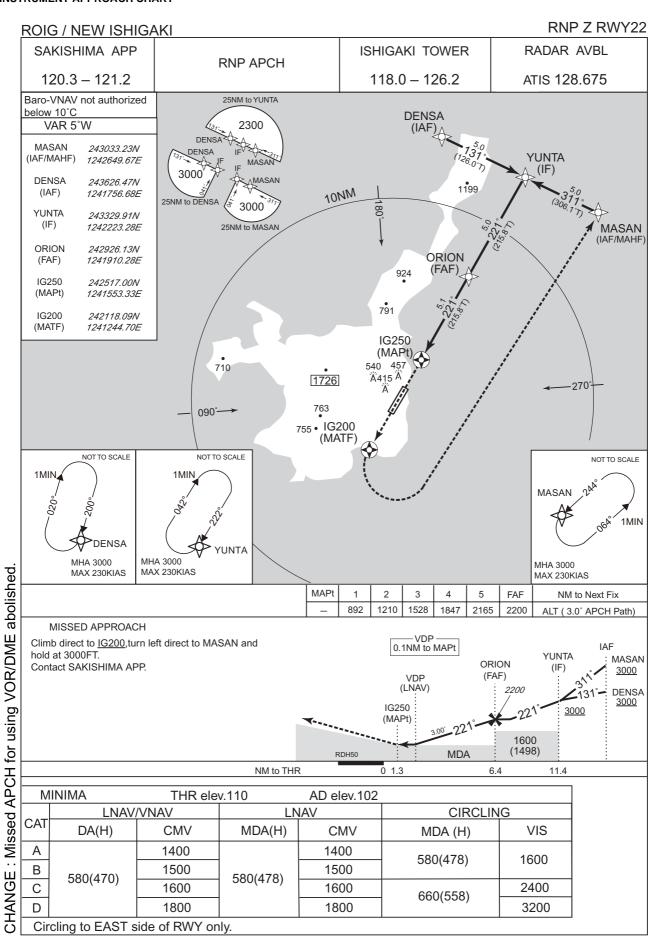
Coding Table

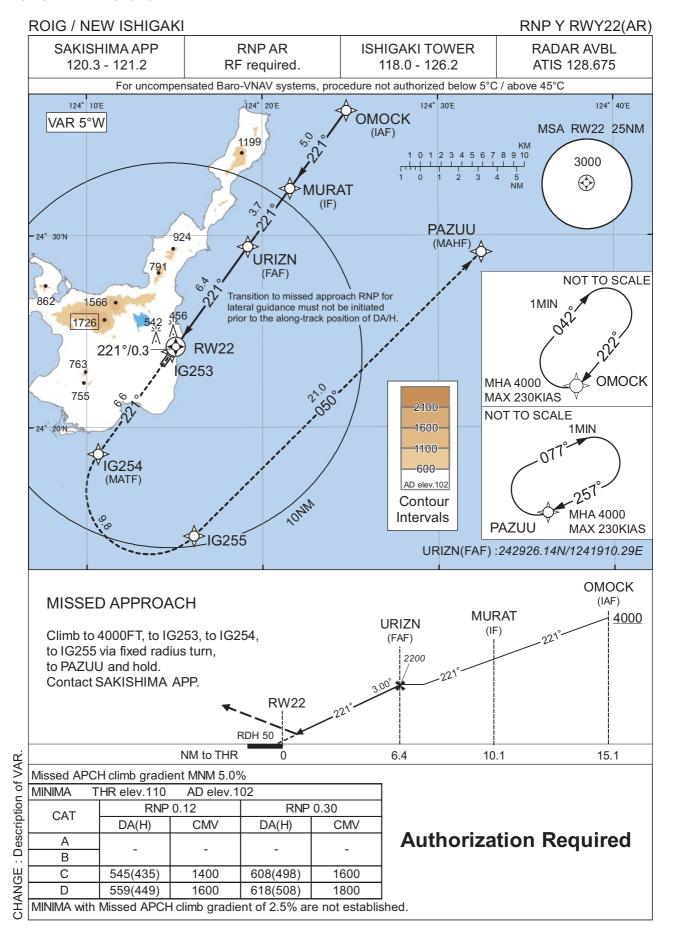
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|------------------|------------------------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-----------------------|--------------|
| 001 | IF | SEIJI | ı | - | -5.0 | - | - | +4000 | - | - | - |
| 002 | TF | SIZKU | 1 | 232 (226.6) | -5.0 | 8.6 | - | - | - | - | 1.0 |
| 003 | TF | IG450 | 1 | 232 (226.6) | -5.0 | 8.6 | - | +2000 | -185 | - | 1.0 |
| 004 | RF Center: IGRF1 r=2.55NM | LAPNA | 1 | - | -5.0 | 4.3 | R | 2000 | - | - | 1.0 |
| 005 | RF Center: IGRF1 r=2.55NM | IG200 | i | 1 | -5.0 | 3.2 | R | 982 | ı | -3.00 | 0.3 |
| 006 | TF | RW04 | Υ | 041 (035.7) | -5.0 | 2.5 | - | 180 | - | -3.00/54 | 0.3 |
| 007 | TF | IG452 | - | 041 (035.7) | -5.0 | 4.6 | - | ı | - | - | 1.0 |
| 800 | TF | SEIJI | 1 | 083 (077.6) | -5.0 | 12.4 | ı | 4000 | 1 | - | 1.0 |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | lime | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | RNP Value |
|------|------------------------|-----------------------------|-----------------------|--------------|-------------------|-----------------------------|-----------------------------|------------------|--------------|
| Hold | SEIJI | 253 (248.2) | -5.0 | 1.0 (-14000) | R | 4000 | FL140 | -230 (-14000) | 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 | | |
| 10432 | 242700.001W1241710.10E | J | |





ROIG / NEW ISHIGAKI

RNP Y RWY22(AR)

Coding 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 | ОМОСК | ı | - | -5.0 | - | 1 | +4000 | ı | - | - |
| 002 | TF | MURAT | 1 | 221 (215.8) | -5.0 | 5.0 | - | ı | - | - | 1.0 |
| 003 | TF | URIZN | - | 221 (215.8) | -5.0 | 3.7 | - | 2200 | - | - | 1.0 |
| 004 | TF | RW22 | Υ | 221 (215.8) | -5.0 | 6.4 | - | 160 | - | -3.00/50 | 0.12 0.30 |
| 005 | TF | IG253 | - | 221 (215.7) | -5.0 | 0.3 | - | - | - | - | 0.12 0.30 |
| 006 | TF | IG254 | 1 | 221 (215.7) | -5.0 | 6.6 | 1 | ı | - | - | 1.0 |
| 007 | RF Center: IGRF3 r=3.28NM | IG255 | 1 | - | -5.0 | 9.8 | L | - | - | - | 1.0 |
| 008 | TF | PAZUU | - | 050 (045.2) | -5.0 | 21.0 | - | 4000 | - | - | 1.0 |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | RNP Value |
|------|------------------------|-----------------------------|-----------------------|---------------------------|-------------------|-----------------------------|-----------------------------|------------------|--------------|
| Hold | ОМОСК | 222 (216.9) | -5.0 | 1.0 (-14000) | R | 4000 | FL140 | -230 (-14000) | 1.0 |
| Hold | PAZUU | 257 (252.1) | -5.0 | 1.0 (-14000) | R | 4000 | FL140 | -230 (-14000) | 1.0 |

Waypoint Coordinates

| Coordinates | RF Arc Center Identifier | Coordinates |
|------------------------|--|--|
| 243631.66N/1242447.35E | IGRF3 | 241641.99N/1241333.15E |
| 243227.94N/1242134.19E | | |
| 242926.14N/1241910.29E | | |
| 242413.59N/1241503.24E | | |
| 242357.98N/1241450.93E | | |
| 241837.84N/1241038.29E | | |
| 241421.38N/1241604.82E | | |
| 242908.99N/1243226.97E | | |
| | 243631.66N/1242447.35E 243227.94N/1242134.19E 242926.14N/1241910.29E 242413.59N/1241503.24E 242357.98N/1241450.93E 241837.84N/1241038.29E 241421.38N/1241604.82E | 243631.66N/1242447.35E IGRF3 243227.94N/1242134.19E 242926.14N/1241910.29E 242413.59N/1241503.24E 242357.98N/1241450.93E 241837.84N/1241038.29E 241421.38N/1241604.82E |



※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).

| 뜻 |
|-----------------|
| from / |
| BRG/DIST |
| updated. |
| : Map |
| ANGE |
| 유 |

δ.

| Call sign | BRG / DIST from ARP | Remarks | | | |
|------------------------|---------------------|--------------------------------------|--|--|--|
| 野底岳 Nosokodake | 002°T / 5.5NM | 山 Mountain | | | |
| イーストポイント East Point | 120°T / 6.0NM | 海上 Over the sea | | | |
| 竹富島 Taketomijima | 246°T / 9.0NM | 高速艇船着場 Port | | | |
| 観音崎 Kannonzaki | 256°T / 7.5NM | 灯台 Light house | | | |
| 川平 Kabira | 304°T / 6.8NM | 川平湾グラスボート乗り場 Kabira Bay Boat pier | | | |
| 底原 Sokobaru | 322°T / 2.1NM | ダム Dam | | | |

