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 equipmemt 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

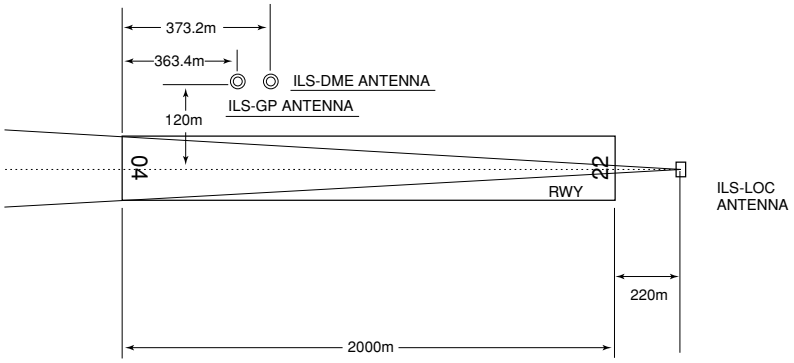
Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP/ASR	Sakishima Approach/ Sakishima Radar	120.3MHz 121.2MHz 125.0MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1200	APP service provided by Sakishima APP.
TWR	Ishigaki Tower	118.0MHz(1) 126.2MHz 121.5MHz(E)	2300 - 1200	(1)Primary
ATIS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

ROIG AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid (VOR declination)	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) 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。

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 (JOTTO NORTH, JOTTO SOUTH-RNAV)
Standard Arrival Chart - Instrument (YUNTA NORTH, YUNTA SOUTH-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 (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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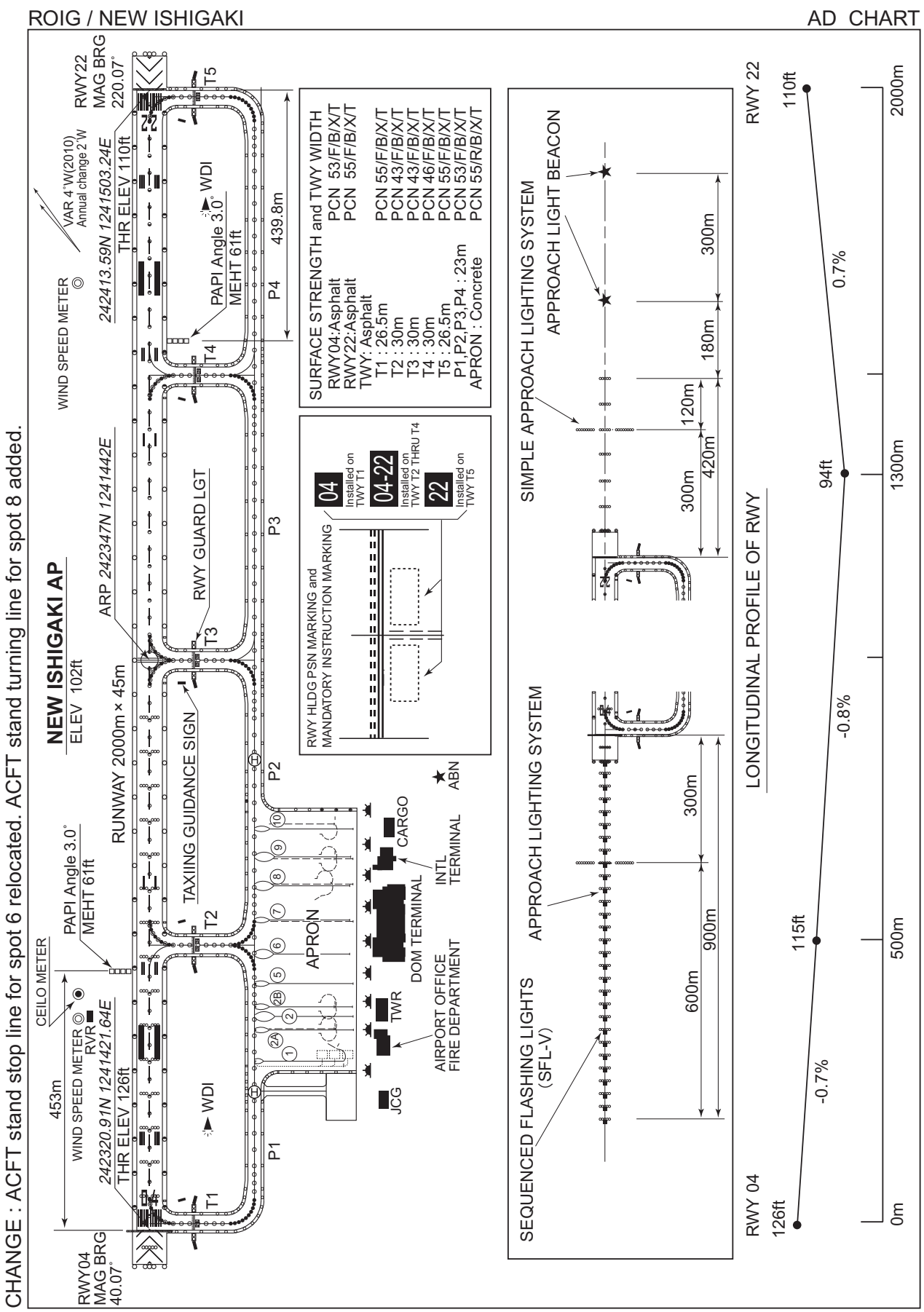
ROIG / NEW ISHIGAKI
AD CHART
CHANGE : ACFT stand stop line for spot 6 relocated. ACFT stand turning line for spot 8 added.
NEW ISHIGAKI AP
ELEV 102ft
ARP 242347N 1241442E
242413.59N 1241503.24E
THR ELEV 110ft
RWY22
MAG BRG
220.07°
VAR 4°W(2010)
Annual change 2'W
WIND SPEED METER
RUNWAY 2000m × 45m
RWY GUARD LGT
TAXIING GUIDANCE SIGN
PAPI Angle 3.0°
MEHT 61ft
WDI
T1
T2
T3
T4
T5
P1
P2
P3
P4
439.8m
APRON
DOM TERMINAL
INTL TERMINAL
CARGO
TWR
JCG
AIRPORT OFFICE
FIRE DEPARTMENT
ABN
CEILO METER
453m
242320.91N 1241421.64E
THR ELEV 126ft
RWY04
MAG BRG
40.07°
SURFACE STRENGTH and TWY WIDTH
RWY04:Asphalt PCN 53/F/B/X/T
RWY22:Asphalt PCN 55/F/B/X/T
TWY: Asphalt
T1 : 26.5m PCN 55/F/B/X/T
T2 : 30m PCN 43/F/B/X/T
T3 : 30m PCN 43/F/B/X/T
T4 : 30m PCN 46/F/B/X/T
T5 : 26.5m PCN 55/F/B/X/T
P1,P2,P3,P4 : 23m PCN 53/F/B/X/T
APRON : Concrete PCN 55/R/B/X/T
RWY HLDG PSN MARKING and MANDATORY INSTRUCTION MARKING
04
Installed on TWY T1
04-22
Installed on TWY T2 THRU T4
22
Installed on TWY T5
SIMPLE APPROACH LIGHTING SYSTEM
APPROACH LIGHT BEACON
SEQUENCED FLASHING LIGHTS (SFL-V)
APPROACH LIGHTING SYSTEM
600m
900m
300m
300m
120m
180m
300m
420m
LONGITUDINAL PROFILE OF RWY
RWY 04
RWY 22
126ft
115ft
94ft
110ft
-0.7%
-0.8%
0.7%
0m
500m
1300m
2000m

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STANDARD DEPARTURE CHART -INSTRUMENT

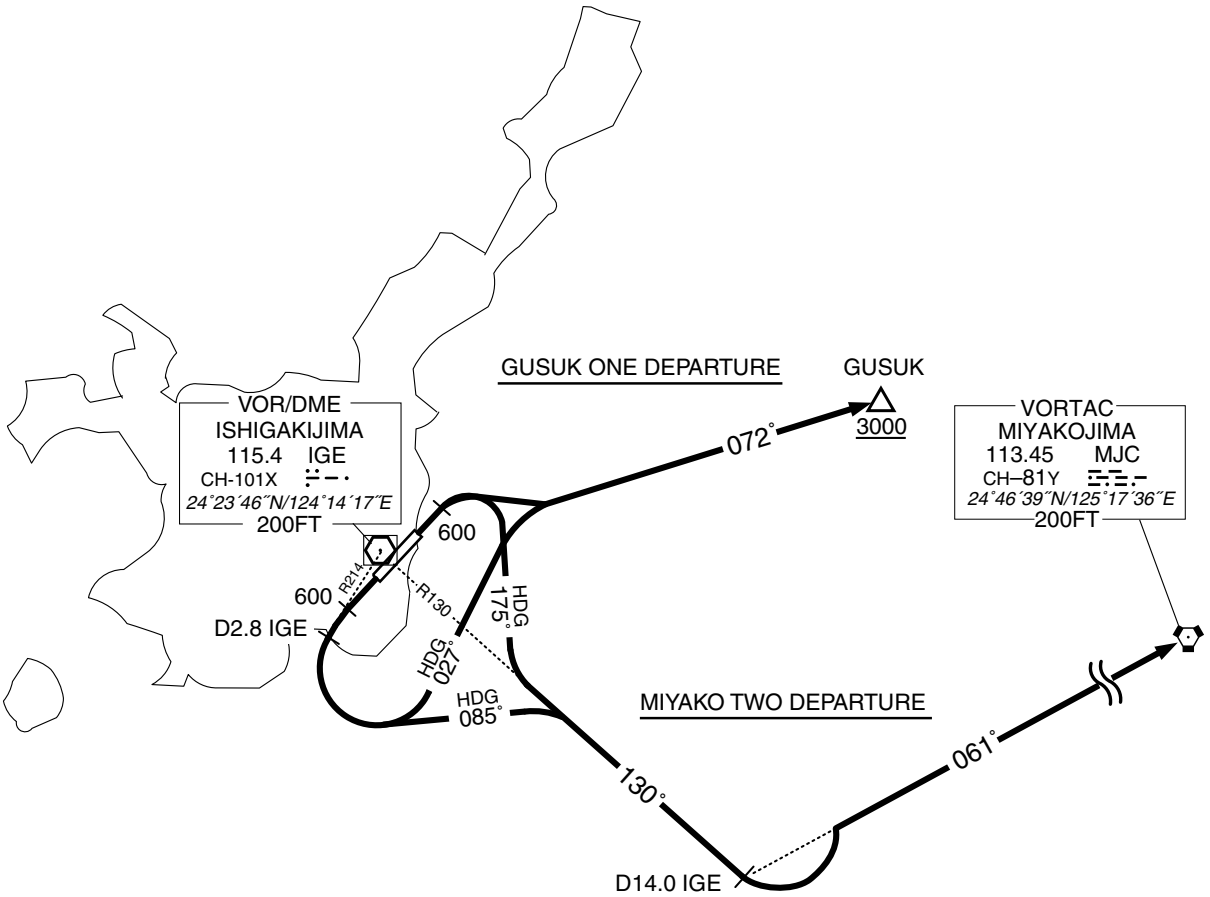
ROIG / NEW ISHIGAKI SID

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.



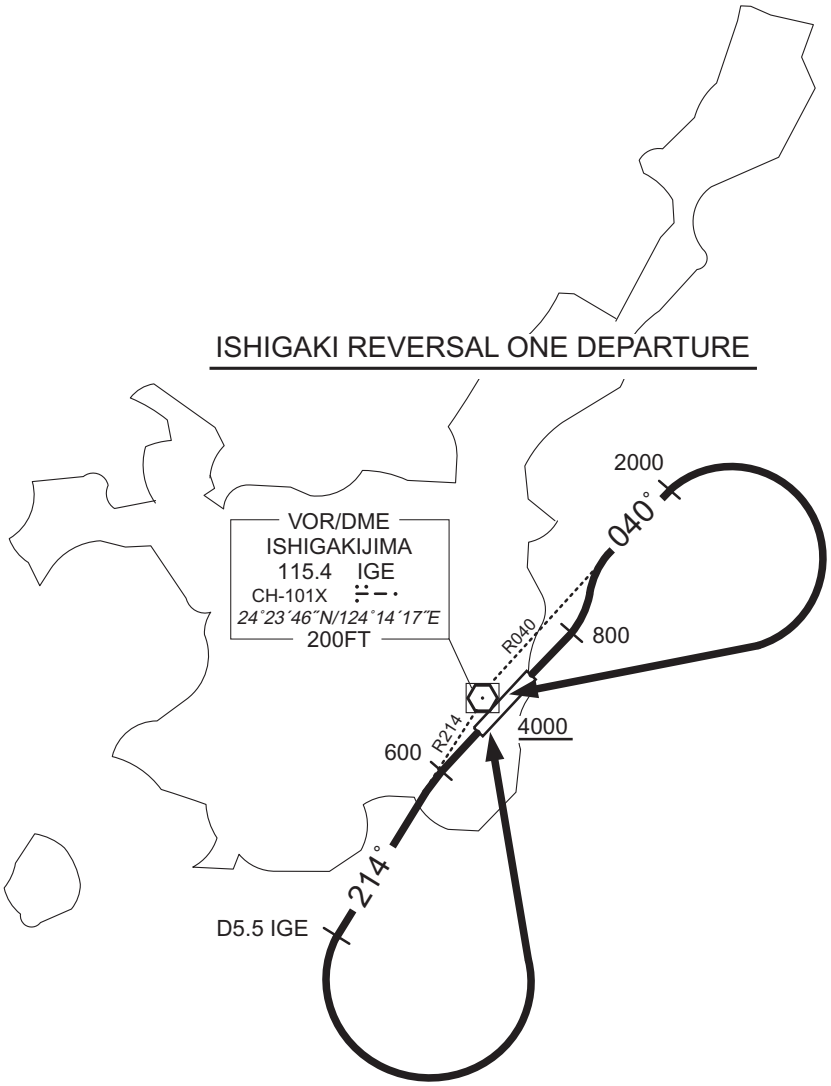
STANDARD DEPARTURE CHART -INSTRUMENT

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.



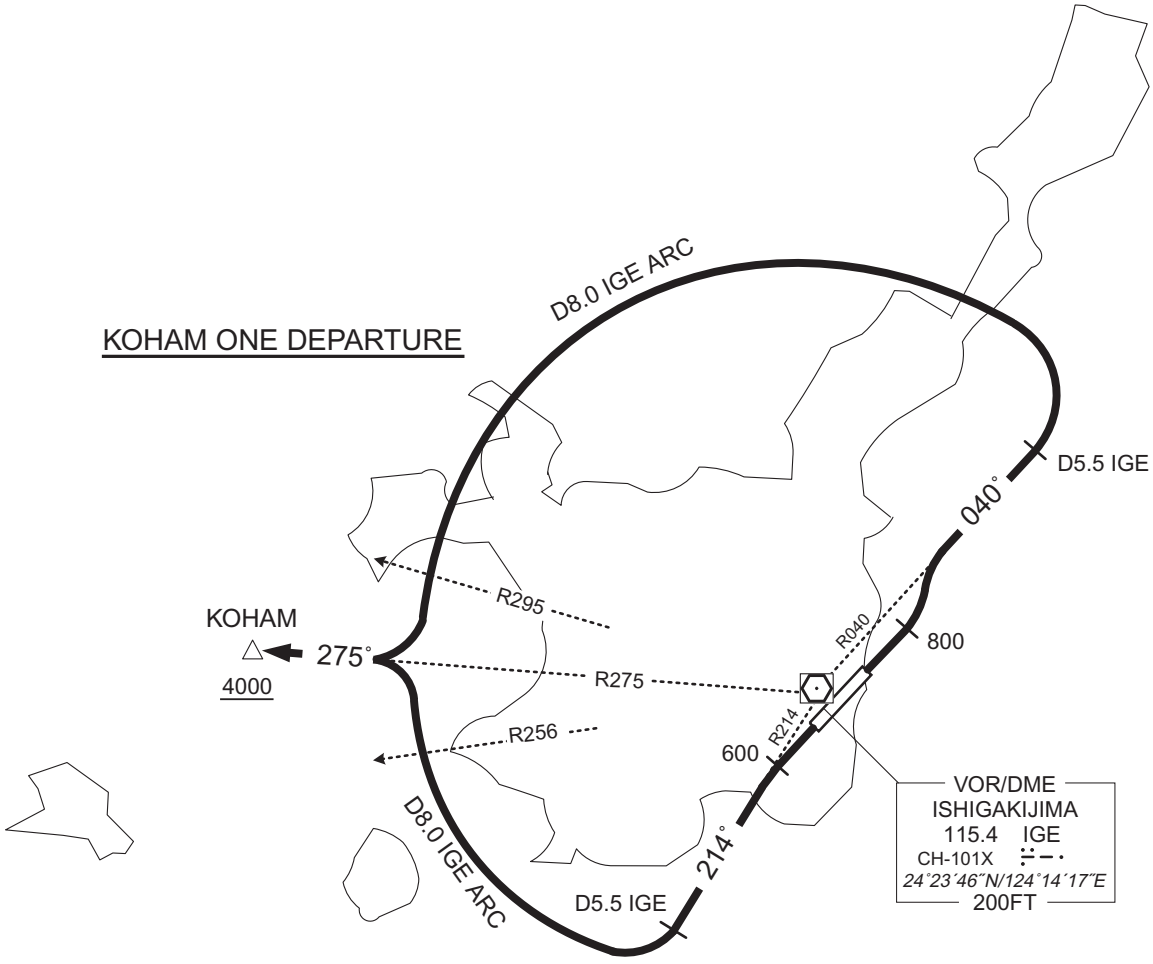
STANDARD DEPARTURE CHART -INSTRUMENT

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.

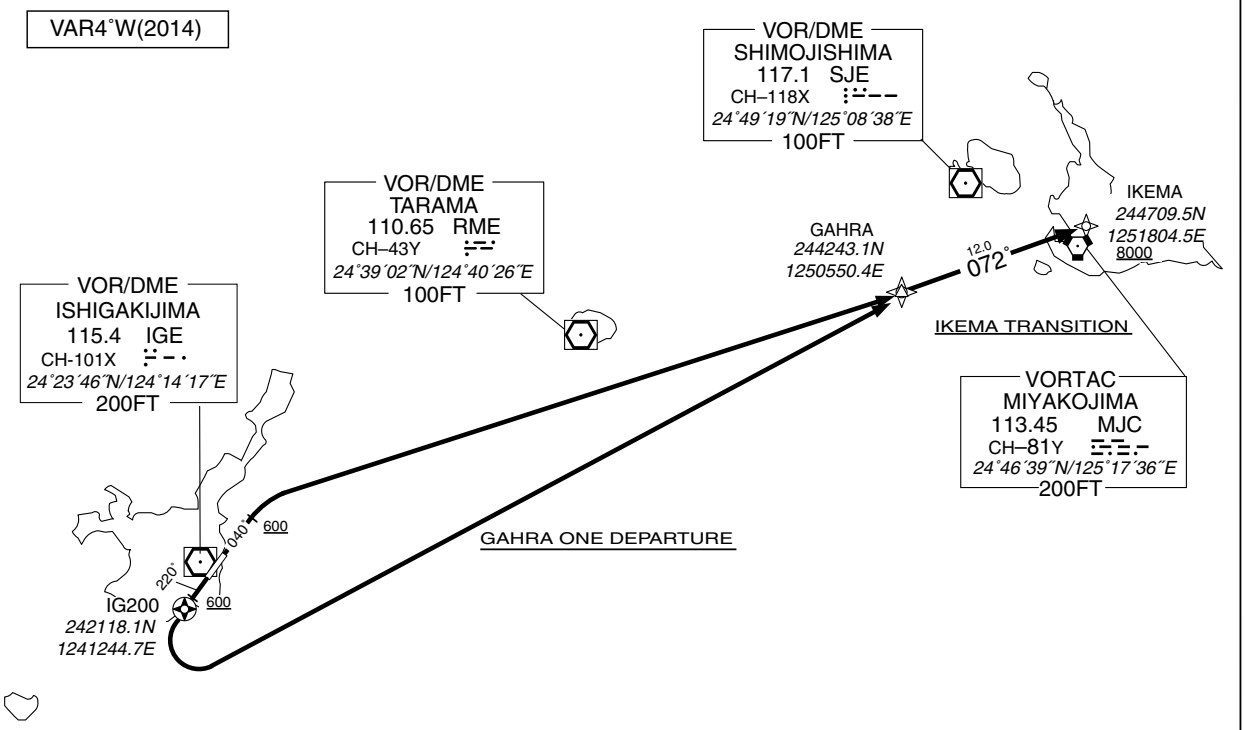
RWY22 : Climb RWY HDG to 600FT,via IGE R214 to IGE R214/5.5DME,turn right, via IGE 8.0DME clockwise ARC,turn left to intercept and proceed via IGE R275 to KOHAM.
Cross KOHAM at or above 4000FT.



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



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 (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 (215.9)	-4.1	—	—	+600	—	—	RNAV1
002	DF	IG200	Y	—	-4.1	—	—	—	—	—	RNAV1
003	DF	GAHRA	—	—	-4.1	—	L	—	—	—	RNAV1

IKEMA TRANSITION

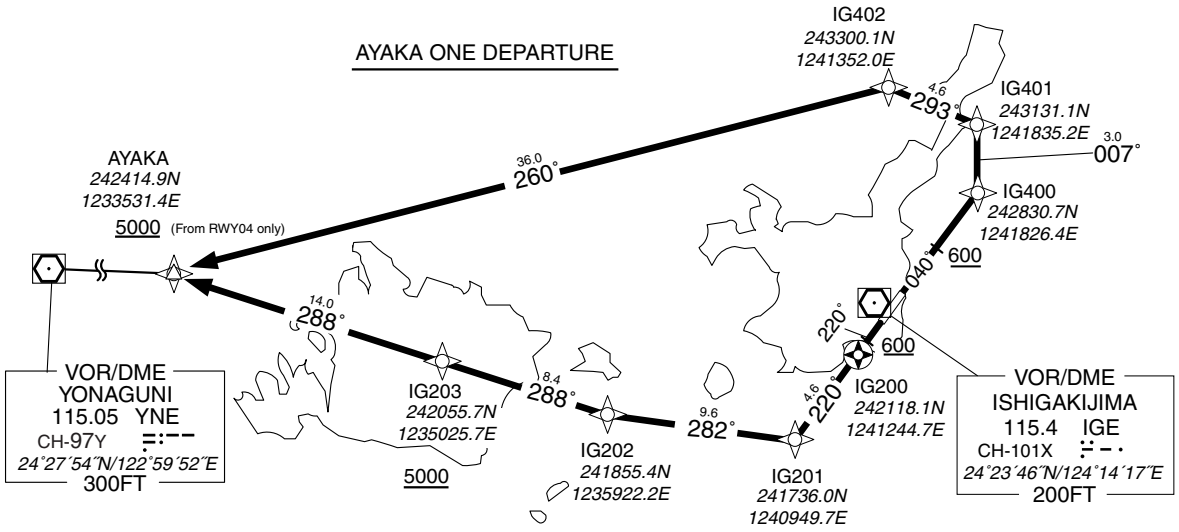
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	GAHRA	—	—	-4.1	—	—	—	—	—	RNAV1
002	TF	IKEMA	—	072 (068.2)	-4.1	12.0	—	+8000	—	—	RNAV1

STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI RNAV SID

AYAKA ONE DEPARTURE		RNAV1
NOTE 1) DME/DME/IRU or GNSS required. ※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 Navaids	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

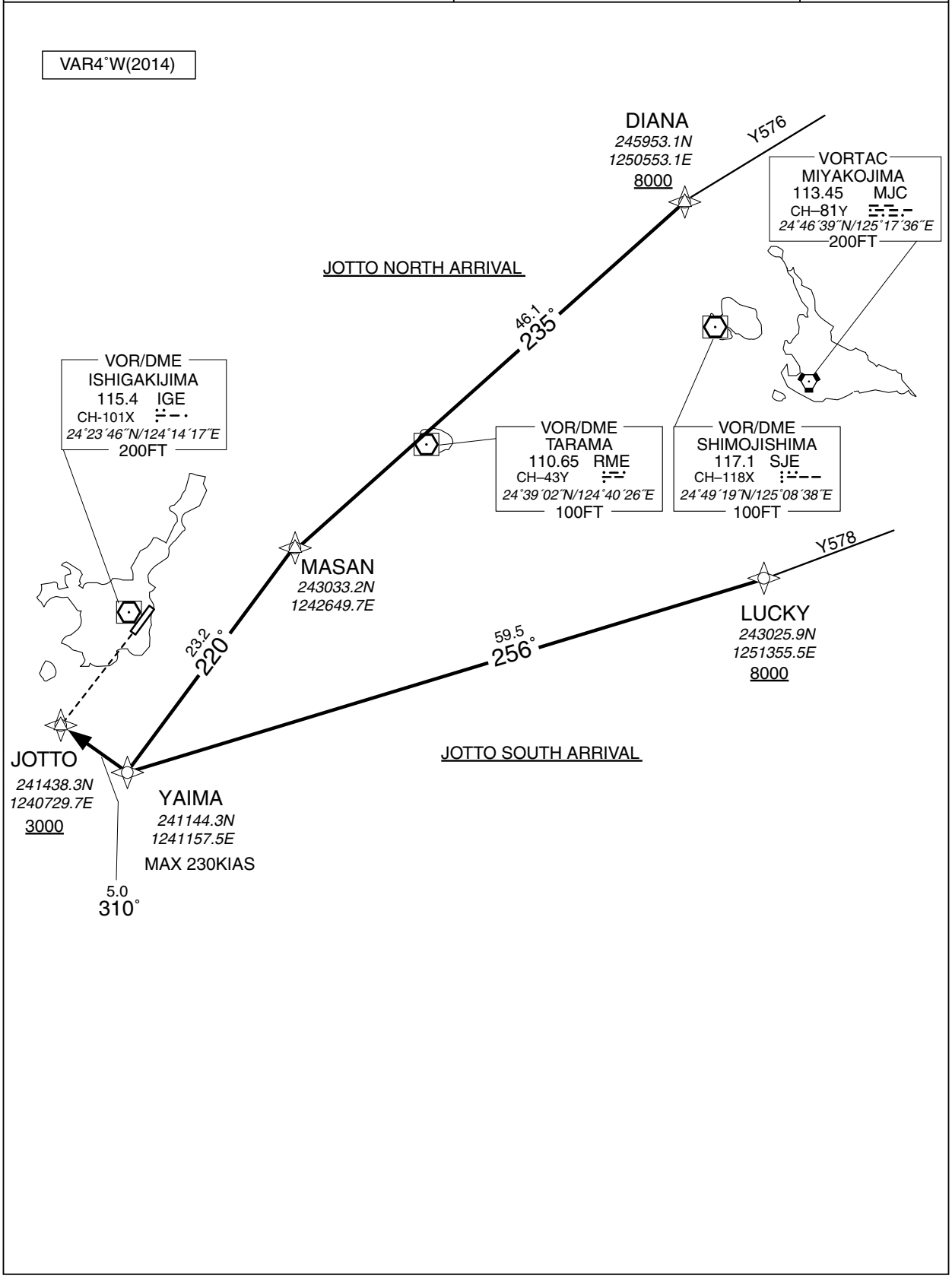
RWY22

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

ROIG / NEW ISHIGAKI RNAV STAR RWY04

JOTTO NORTH ARRIVAL JOTTO SOUTH ARRIVAL	Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required.	RNAV1



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	—	—	-4.1	—	—	+8000	—	—	RNAV1
002	TF	MASAN	—	235 (230.5)	-4.1	46.1	—	—	—	—	RNAV1
003	TF	YAIMA	—	220 (215.8)	-4.1	23.2	—	—	-230	—	RNAV1
004	TF	JOTTO	—	310 (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.

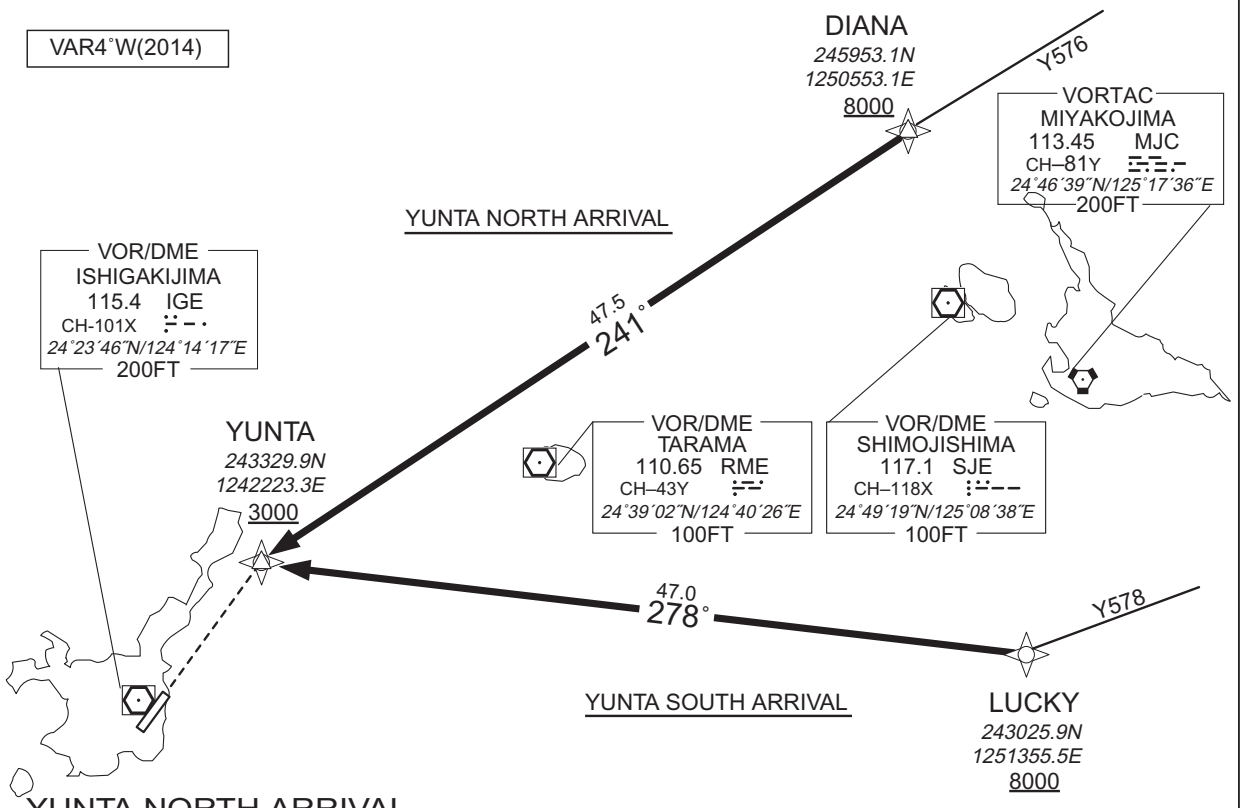
Critical DME	MJC : LUCKY - 6NM to YAIMA IGE : 53NM to YAIMA - 6NM to YAIMA
DME GAP	–
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

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

STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI — RNAV STAR RWY22

YUNTA NORTH ARRIVAL YUNTA SOUTH ARRIVAL	Note 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 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	—	—	-4.1	—	—	+8000	—	—	RNAV1
002	TF	YUNTA	—	241 (236.4)	-4.1	47.5	—	+3000	—	—	RNAV1

YUNTA SOUTH ARRIVAL

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

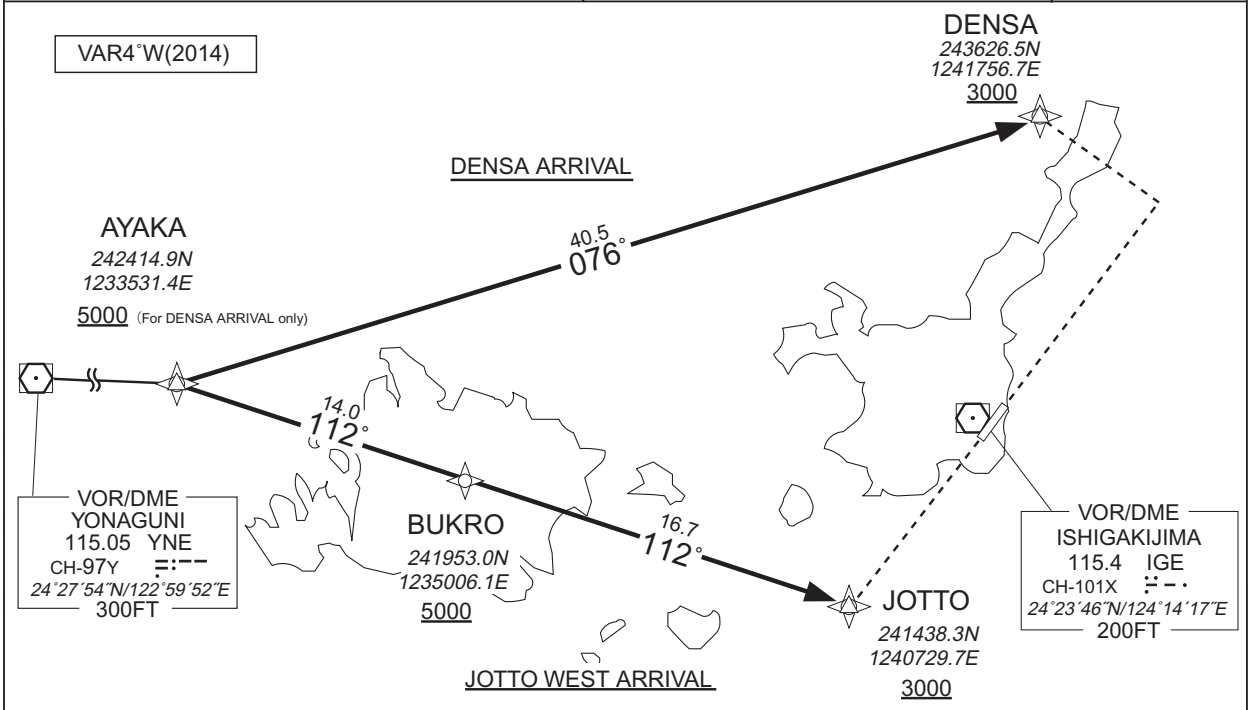
Critical DME	MJC : LUCKY - 32NM to YUNTA IGE : 33NM to YUNTA - 32NM to YUNTA YNE,IGE : 6NM to YUNTA -YUNTA
DME GAP	32NM to YUNTA - 6NM to YUNTA
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

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	—	—	-4.1	—	—	+8000	—	—	RNAV1
002	TF	YUNTA	—	278 (273.9)	-4.1	47.0	—	+3000	—	—	RNAV1

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 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	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.

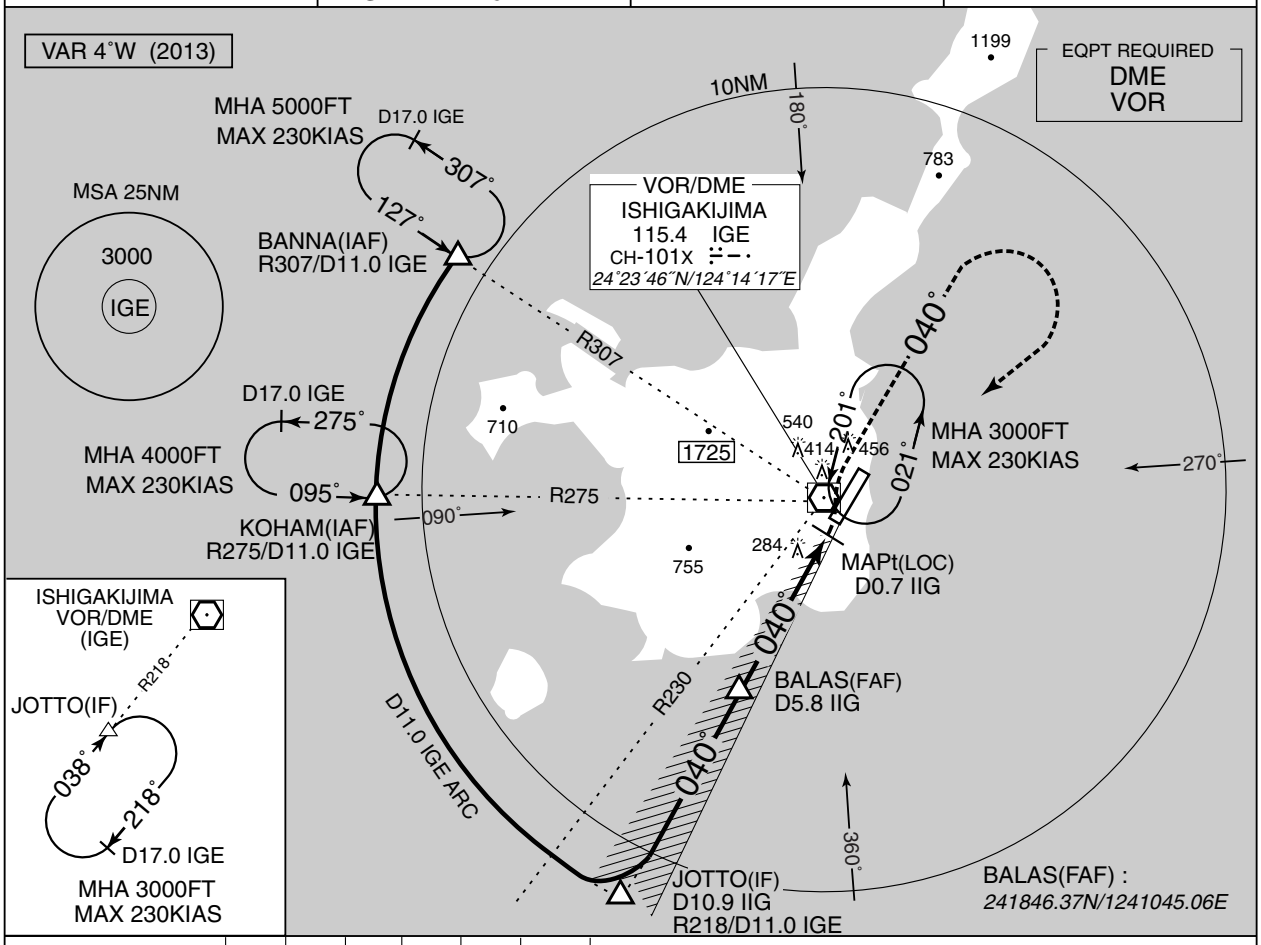
Critical DME	MJC : 14NM to JOTTO - 10NM to JOTTO YNE : 14NM to JOTTO - JOTTO
DME GAP	AYAKA - 14NM to JOTTO
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

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	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

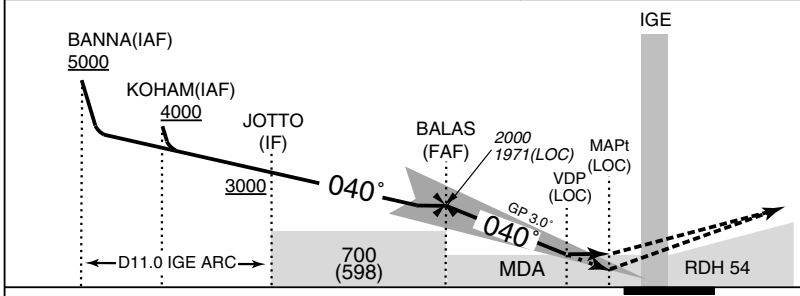
INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI — ILS Z or LOC Z RWY04

SAKISHIMA APP	ILS - LOC 110.75 IIG ILS - GP 330.05 ILS - DME CH–44Y	ISHIGAKI TOWER	RADAR AVBL
120.3 – 121.2		118.0 – 126.2	ATIS 128.675



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



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.

					DME to IIG
10.9	5.8	1.4	0.7		
10.7	5.6	1.2	0.5	0	NM to THR

Missed APCH climb gradient MNM 5.0%

MINIMA — THR elev. 126 — AD elev. 102

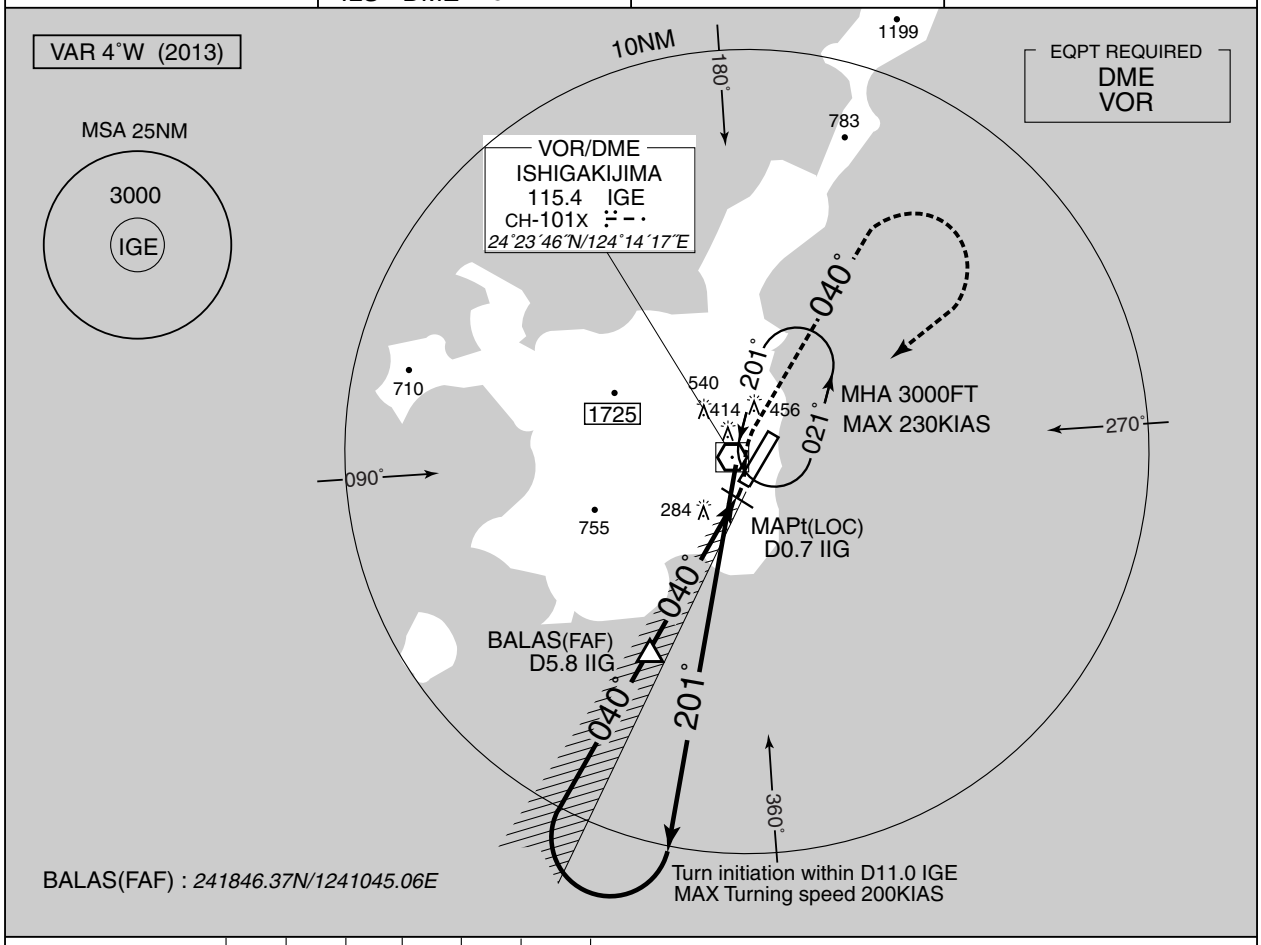
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	326(200)	550	530(428)	900	580(478)	1600
B				1000		
C					660(558)	2400
D	336(210)	600		1400		3200

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

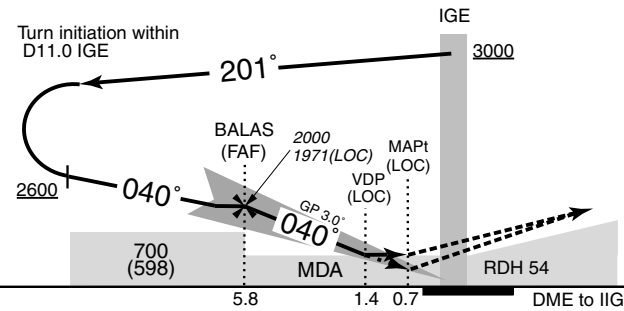
INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI — ILS Y or LOC Y RWY04

SAKISHIMA APP	ILS - LOC 110.75 IIG ⠭⠤. ILS - GP 330.05 ILS - DME CH–44Y	ISHIGAKI TOWER	RADAR AVBL
120.3 – 121.2		118.0 – 126.2	ATIS 128.675



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



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

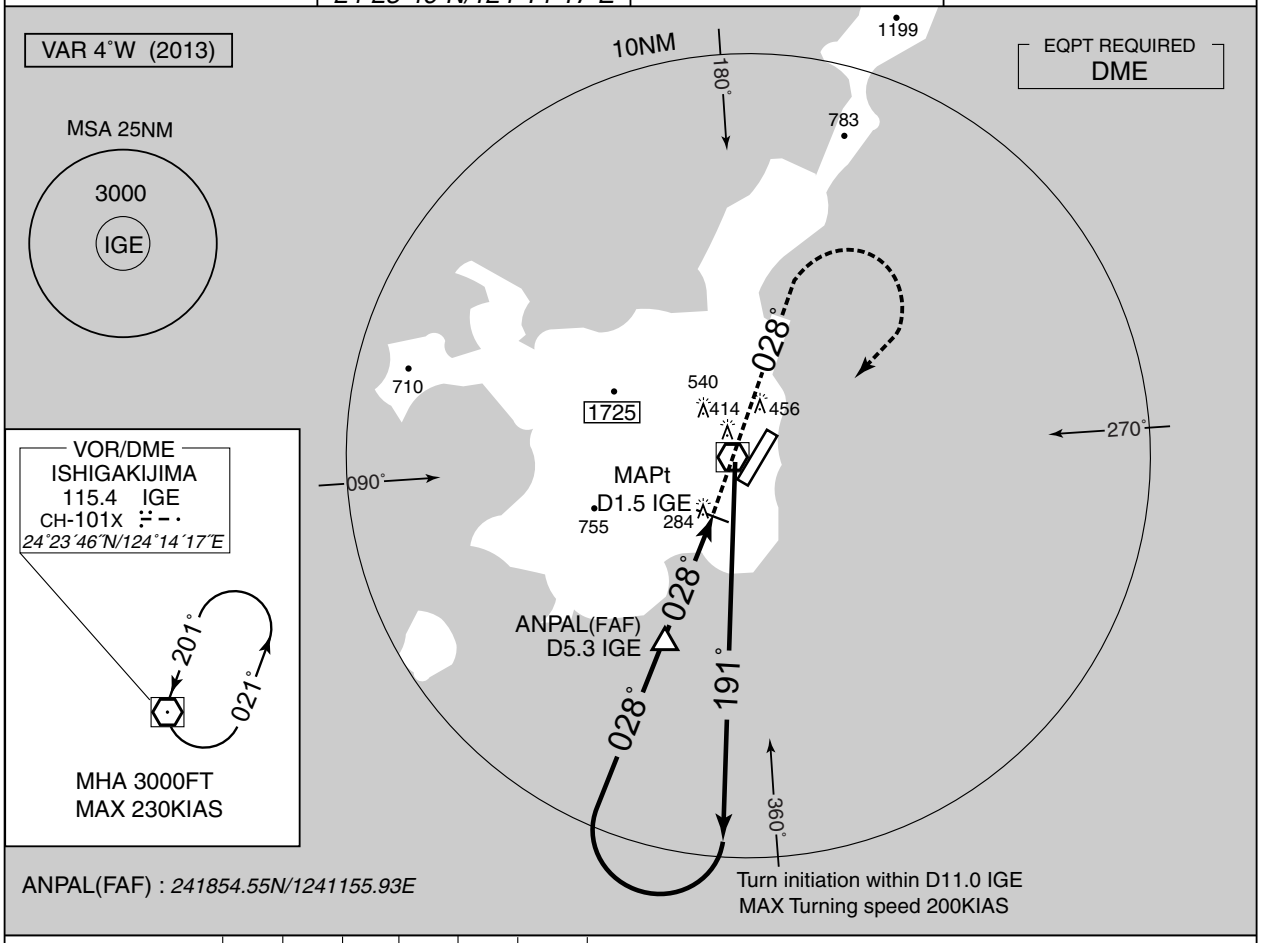
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	326(200)	550	530(428)	900	580(478)	1600
B				1000		
C					660(558)	2400
D	336(210)	600		1400		3200

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

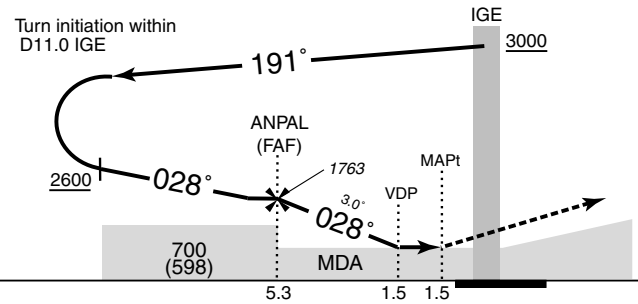
INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI VOR RWY04

SAKISHIMA APP	ISHIGAKIJIMA VOR/DME 115.4 IGE CH–101X *24˚23´46˝N/124˚14´17˝E*	ISHIGAKI TOWER	RADAR AVBL
120.3 – 121.2		118.0 – 126.2	ATIS 128.675



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



MISSED APPROACH

Climb to 2000FT via IGE R028, turn right, direct to IGE VOR/DME and hold at 3000FT.
Contact SAKISHIMA APP.

Timing not authorized for defining the MAPt.

DME to IGE

NM to THR

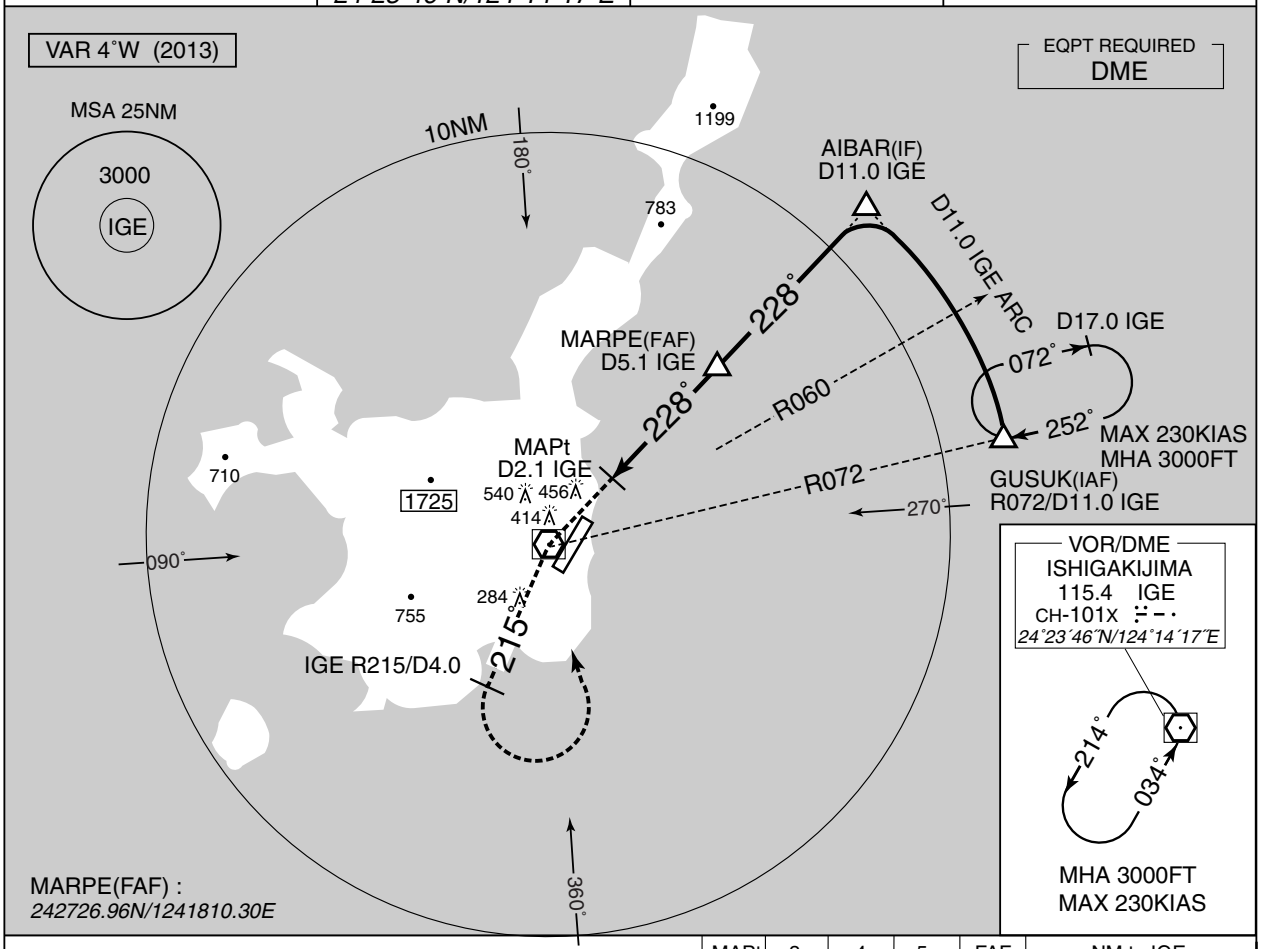
MINIMA	THR elev. 126		AD elev. 102	
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	540(438)	900	580(478)	1600
B		1000		
C			660(558)	2400
D		1400		3200

Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI VOR Z RWY22

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

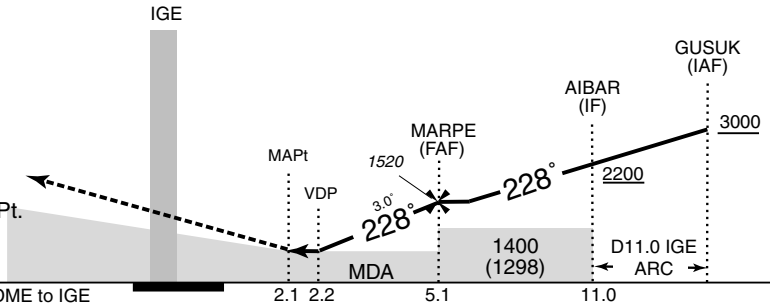


MAPt	3	4	5	FAF	NM to IGE
—	845	1163	1481	1520	ALT (3.0° APCH Path)

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.



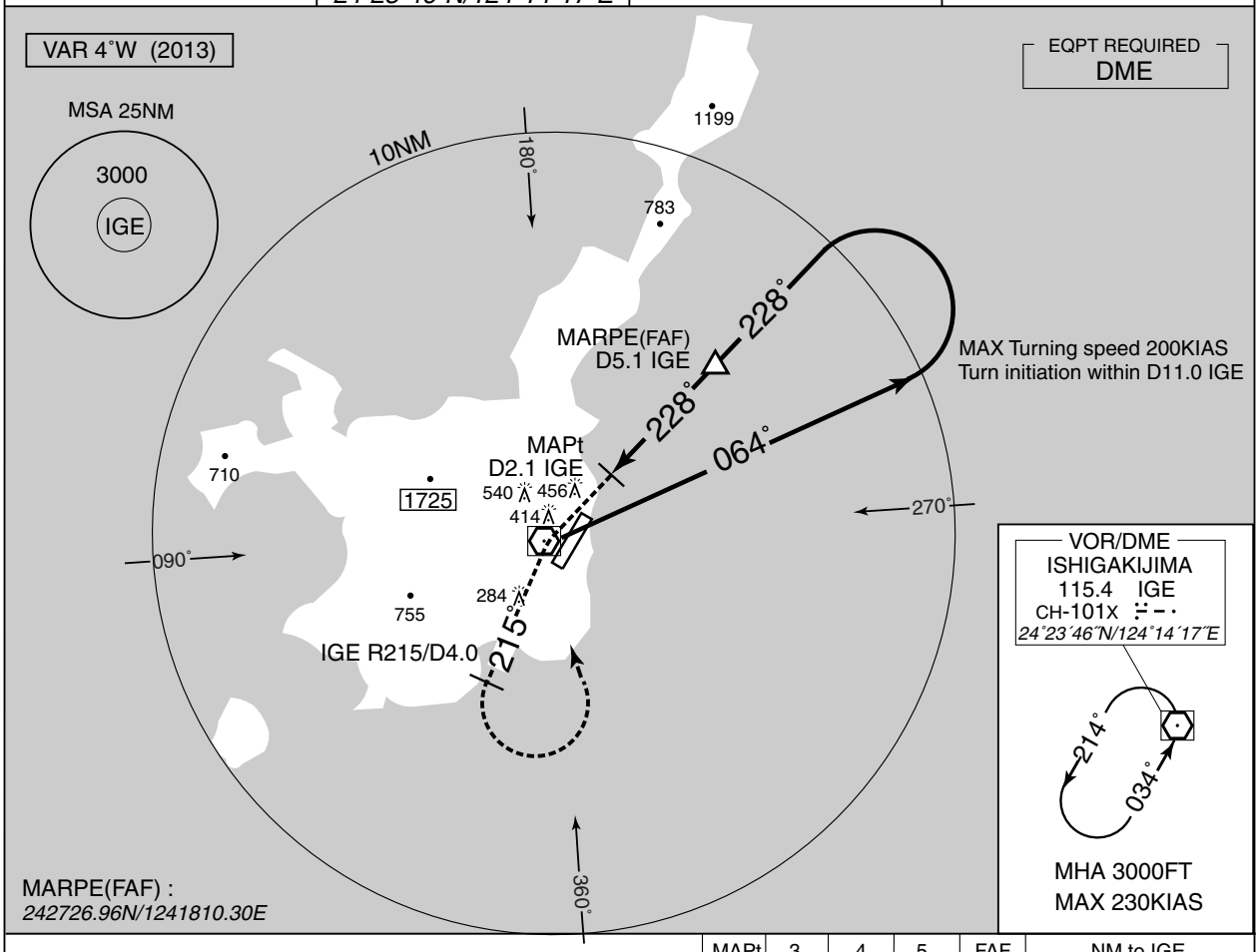
MINIMA		THR elev. 110	AD elev. 102	
CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	580(478)	1400	580(478)	1600
B		1500		
C		1600	660(558)	2400
D		1800		3200

Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI VOR Y RWY22

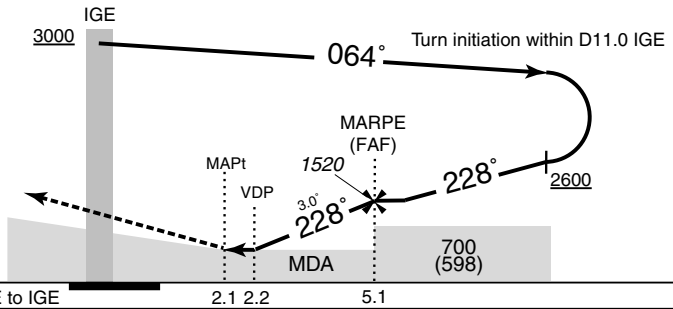
SAKISHIMA APP	ISHIGAKIJIMA VOR/DME IGE	ISHIGAKI TOWER	RADAR AVBL
120.3 – 121.2	115.4 CH–101X *24°23′46″N/124°14′17″E*	118.0 – 126.2	ATIS 128.675



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

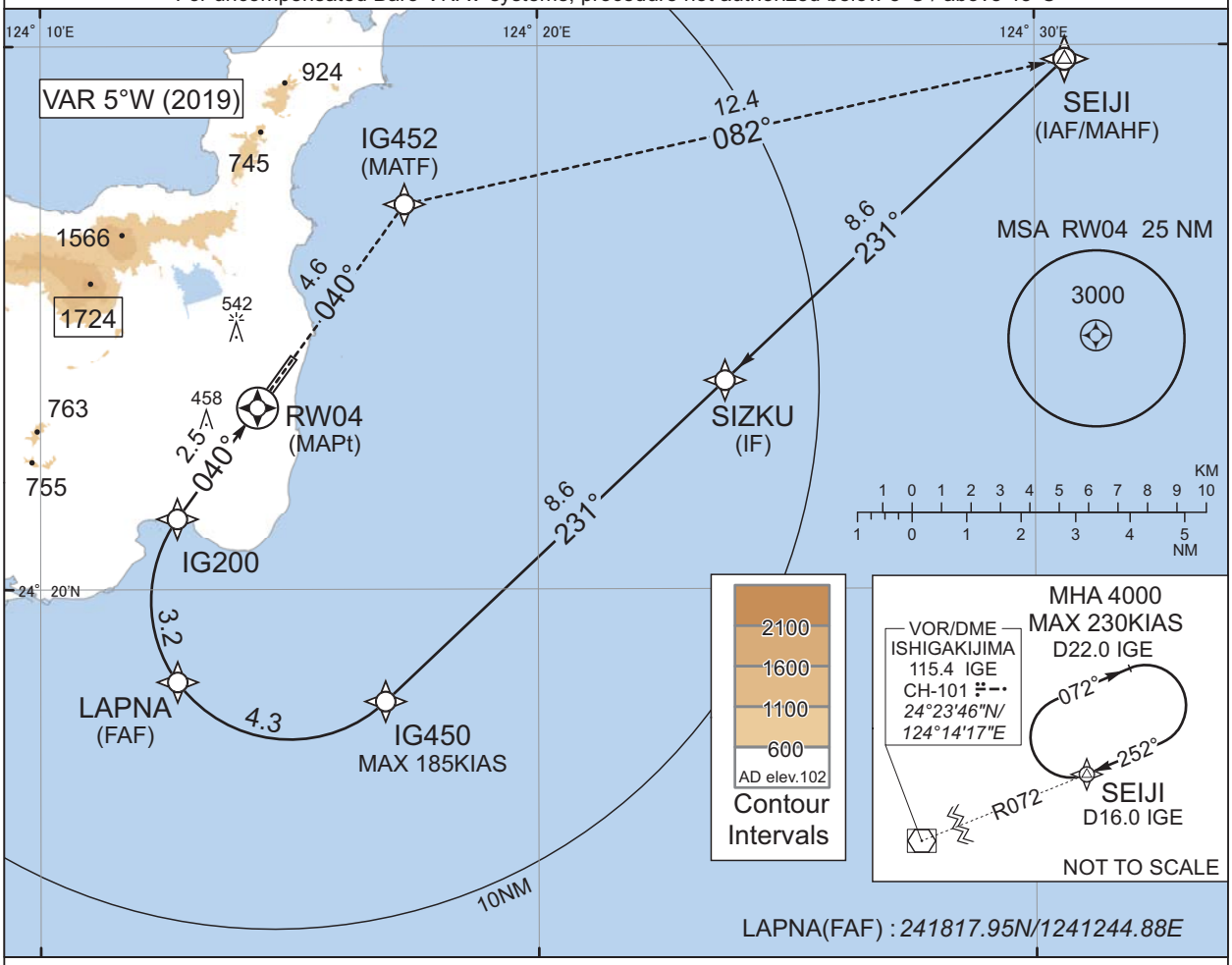
Circling to EAST side of RWY only.

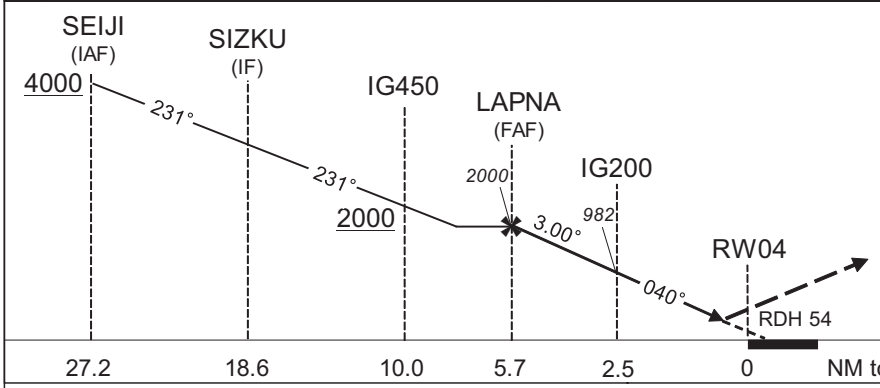
INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI — RNAV(RNP) Z RWY04

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 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

CHANGE : New PROC

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI RNAV(RNP) Z RWY04

RNAV(RNP) Z RWY04

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	-	-	-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*		

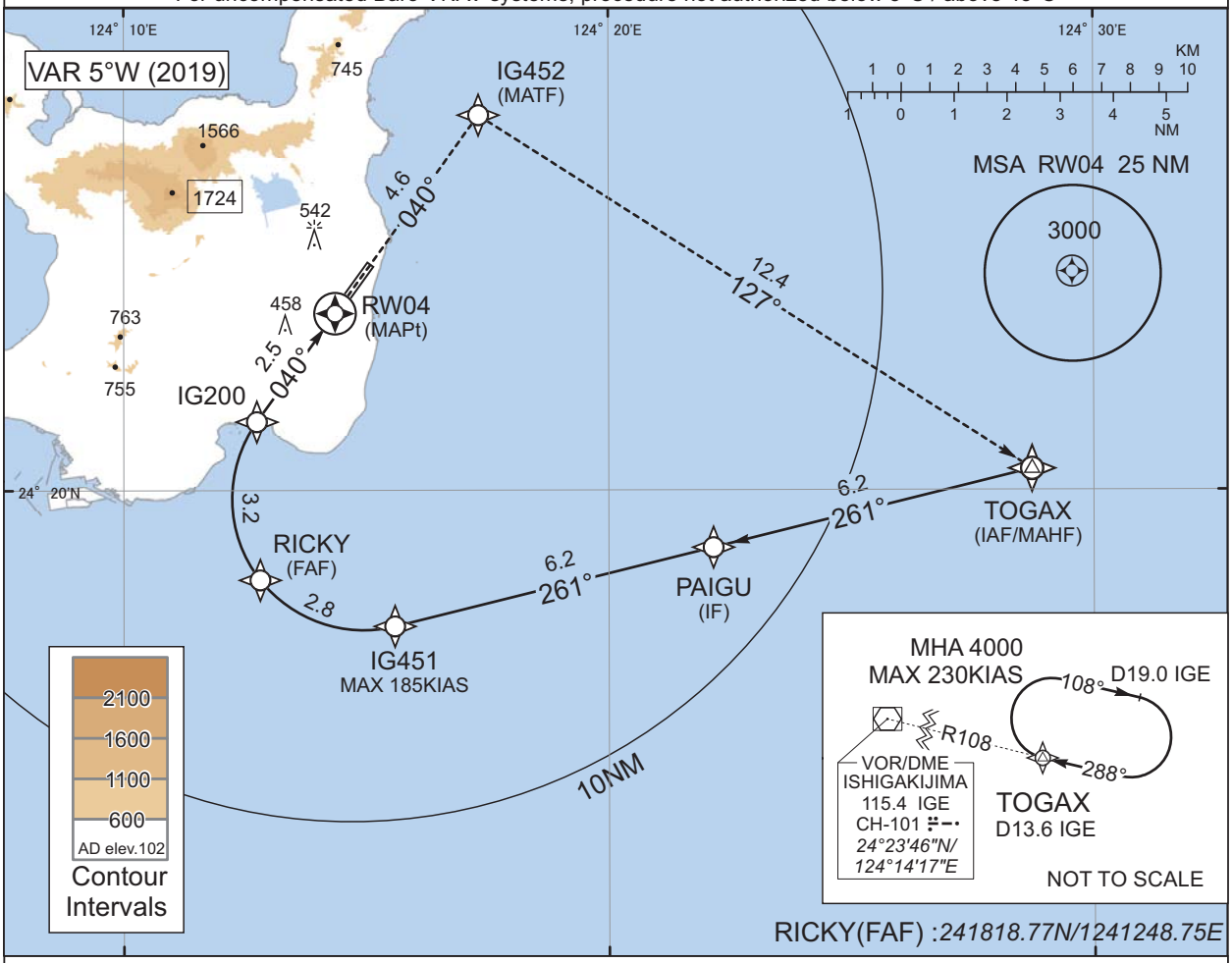
CHANGE : New PROC

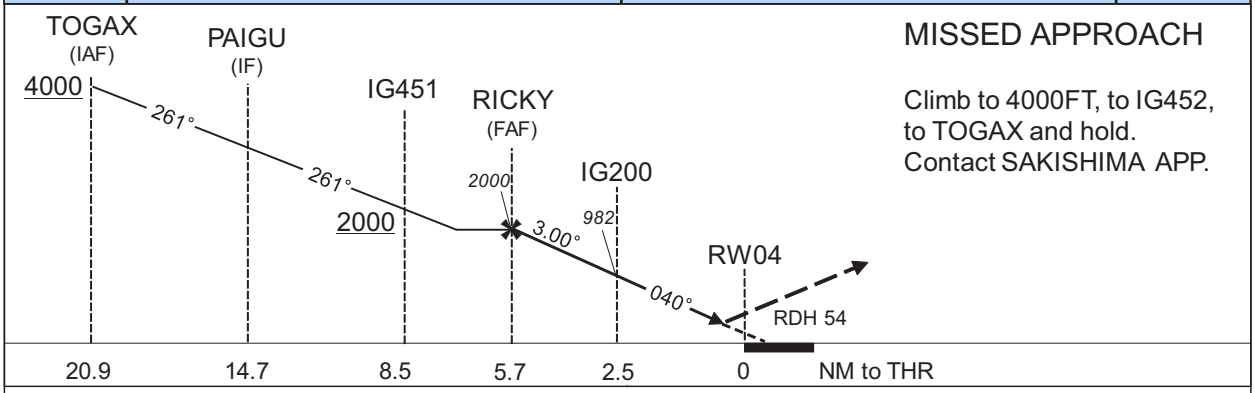
INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI — RNAV(RNP) Y RWY04

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 IG452,
to TOGAX 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

CHANGE : New PROC

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI RNAV(RNP) Y RWY04

RNAV(RNP) Y RWY04

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	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

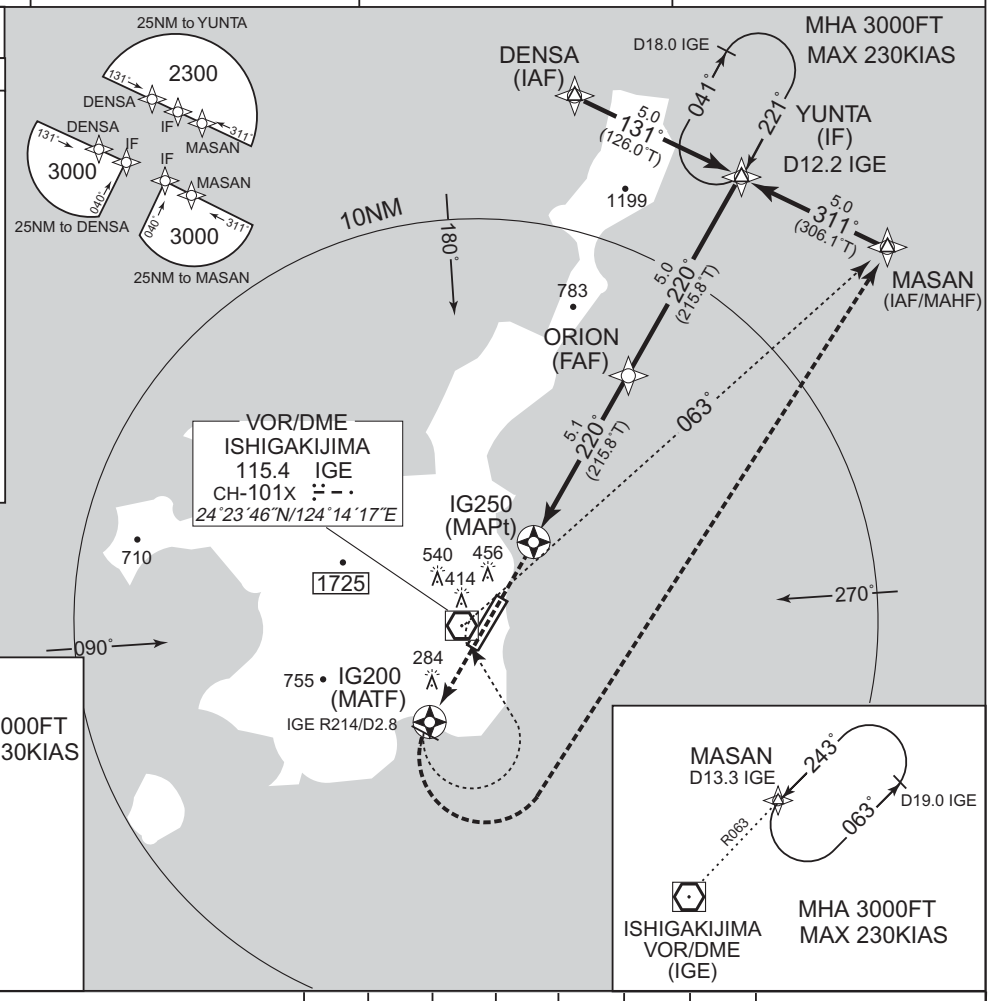
ROIG / NEW ISHIGAKI — RNAV(GNSS) Z RWY22

SAKISHIMA APP	1.DME/DME not authorized. 2.RADAR service required. 3.GNSS required.	ISHIGAKI TOWER	RADAR AVBL
120.3 – 121.2		118.0 – 126.2	ATIS 128.675

Baro-VNAV not authorized below 10˚C

VAR 5˚W (2019)

MASAN (IAF/MAHF)	243033.23N 1242649.67E
DENSA (IAF)	243626.47N 1241756.68E
YUNTA (IF)	243329.91N 1242223.28E
ORION (FAF)	242926.13N 1241910.28E
IG250 (MAPt)	242517.00N 1241553.33E
IG200 (MATF)	242118.09N 1241244.70E

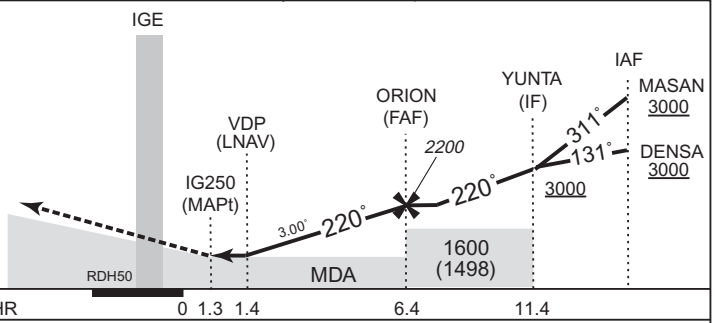


MAPt	1	2	3	4	5	FAF	NM to Next Fix
—	892	1210	1528	1847	2165	2200	ALT (3.0˚ APCH Path)

MISSED APPROACH

Climb direct to IG200,turn left direct to MASAN and hold at 3000FT.
Contact SAKISHIMA APP.

(For using VOR/DME)
Climb to 600FT on HDG220˚ via IGE R214 to IGE R214/2.8DME, turn left,direct to IGE VOR/DME,via IGE R063 to MASAN and hold at 3000FT.
Contact SAKISHIMA APP.



MINIMA — THR elev.110 — AD elev.102

CAT	LNAV/VNAV DA(H)	LNAV/VNAV CMV	LNAV MDA(H)	LNAV CMV	CIRCLING MDA (H)	CIRCLING VIS
A	580(470)	1400	580(478)	1400	580(478)	1600
B		1500		1500		
C		1600		1600	660(558)	2400
D		1800		1800		3200

Circling to EAST side of RWY only.

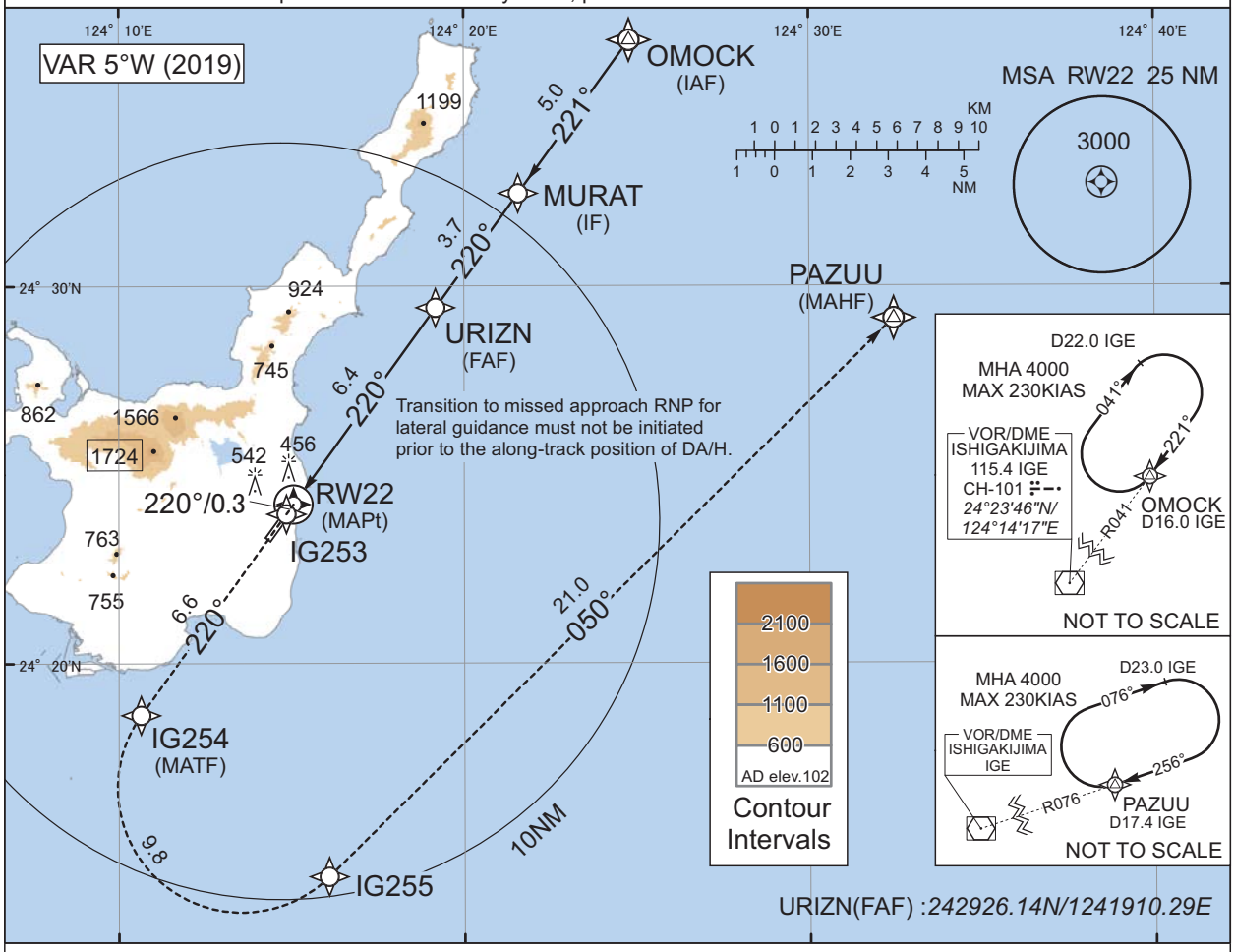
CHANGE : VAR. Course FM DENSA TO YUNTA. Course FM MASAN TO YUNTA. PROC renamed.

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI — RNAV(RNP) Y RWY22

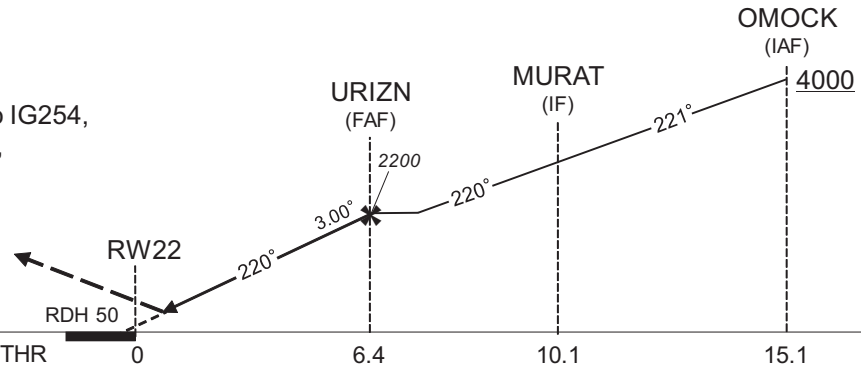
SAKISHIMA APP 120.3 - 121.2	GNSS and RF required	ISHIGAKI TOWER 118.0 - 126.2	RADAR AVBL ATIS 128.675

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

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.

CHANGE : New PROC

RNP AR

Special Authorization Required

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI RNAV(RNP) Y RWY22

RNAV(RNP) Y RWY22

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	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*		

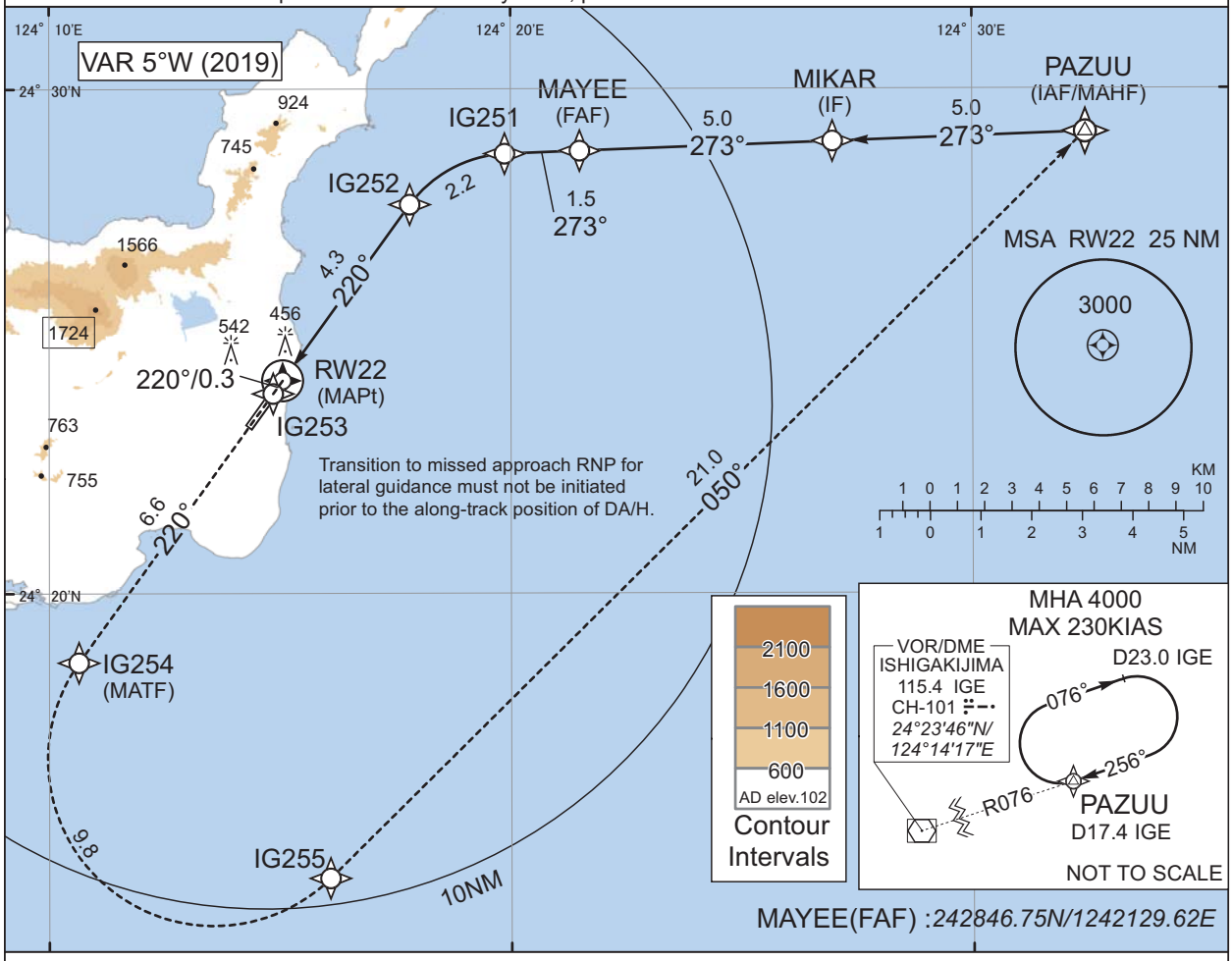
CHANGE : New PROC

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI — RNAV(RNP) X RWY22

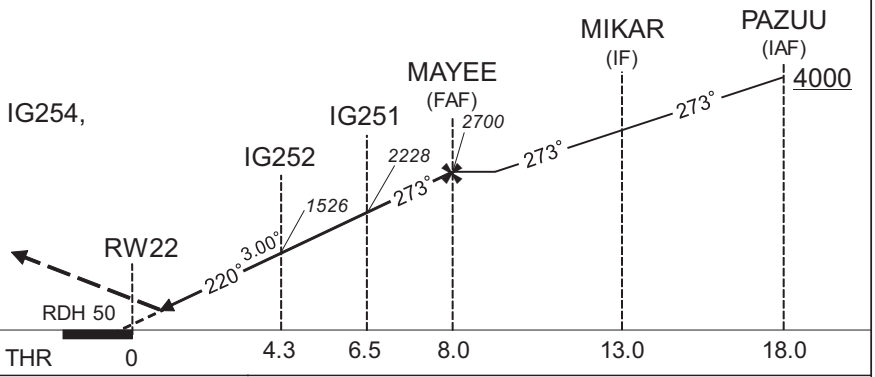
SAKISHIMA APP 120.3 - 121.2	GNSS and RF required	ISHIGAKI TOWER 118.0 - 126.2	RADAR AVBL ATIS 128.675

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

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.

CHANGE : New PROC

RNP AR

Special Authorization Required

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI RNAV(RNP) X RWY22

RNAV(RNP) X RWY22

Coding Table

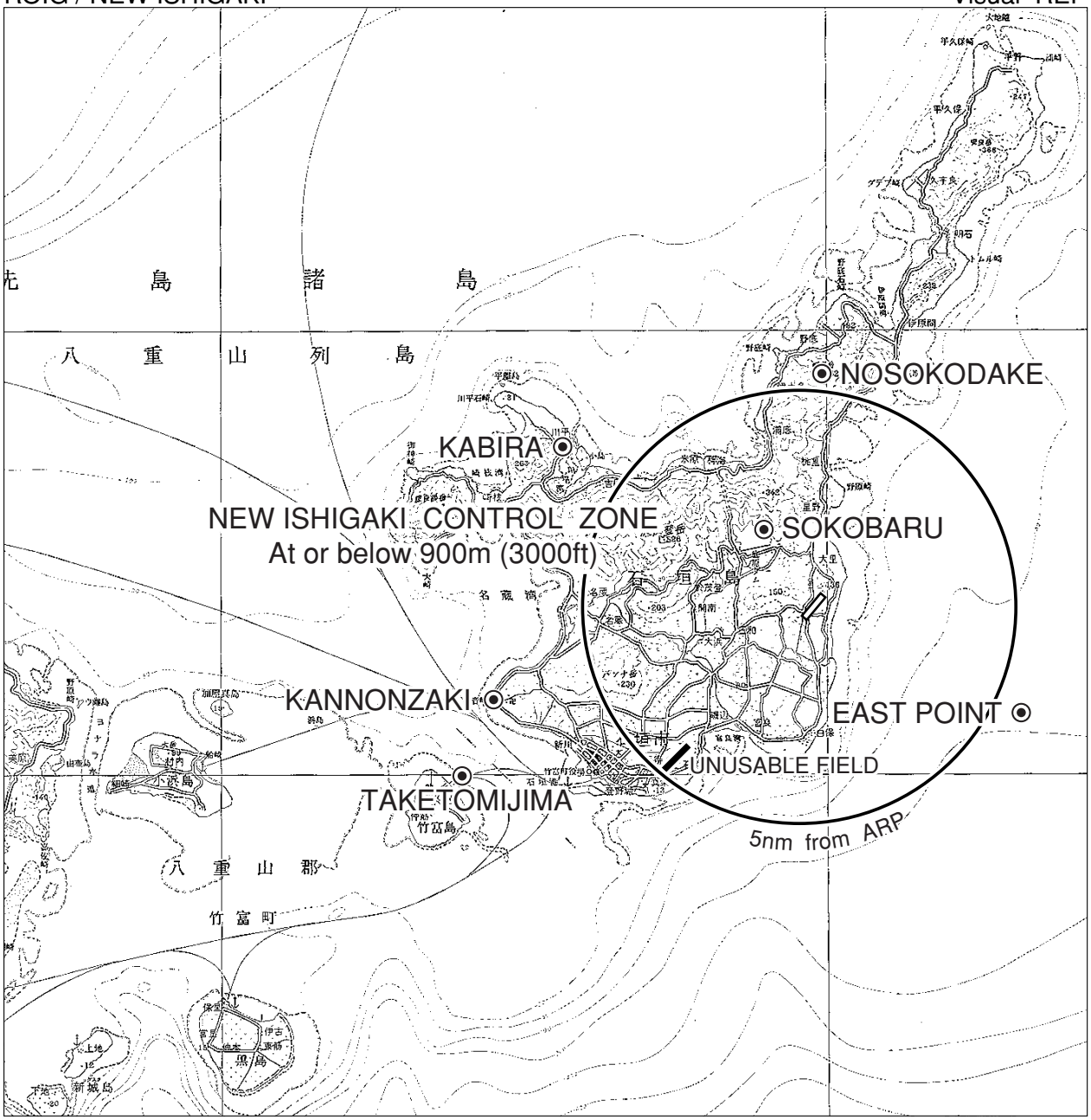
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	PAZUU	-	-	-4.7	-	-	+4000	-	-	-
002	TF	MIKAR	-	273 (267.9)	-4.7	5.0	-		-	-	1.0
003	TF	MAYEE	-	273 (267.9)	-4.7	5.0	-	2700	-	-	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*		

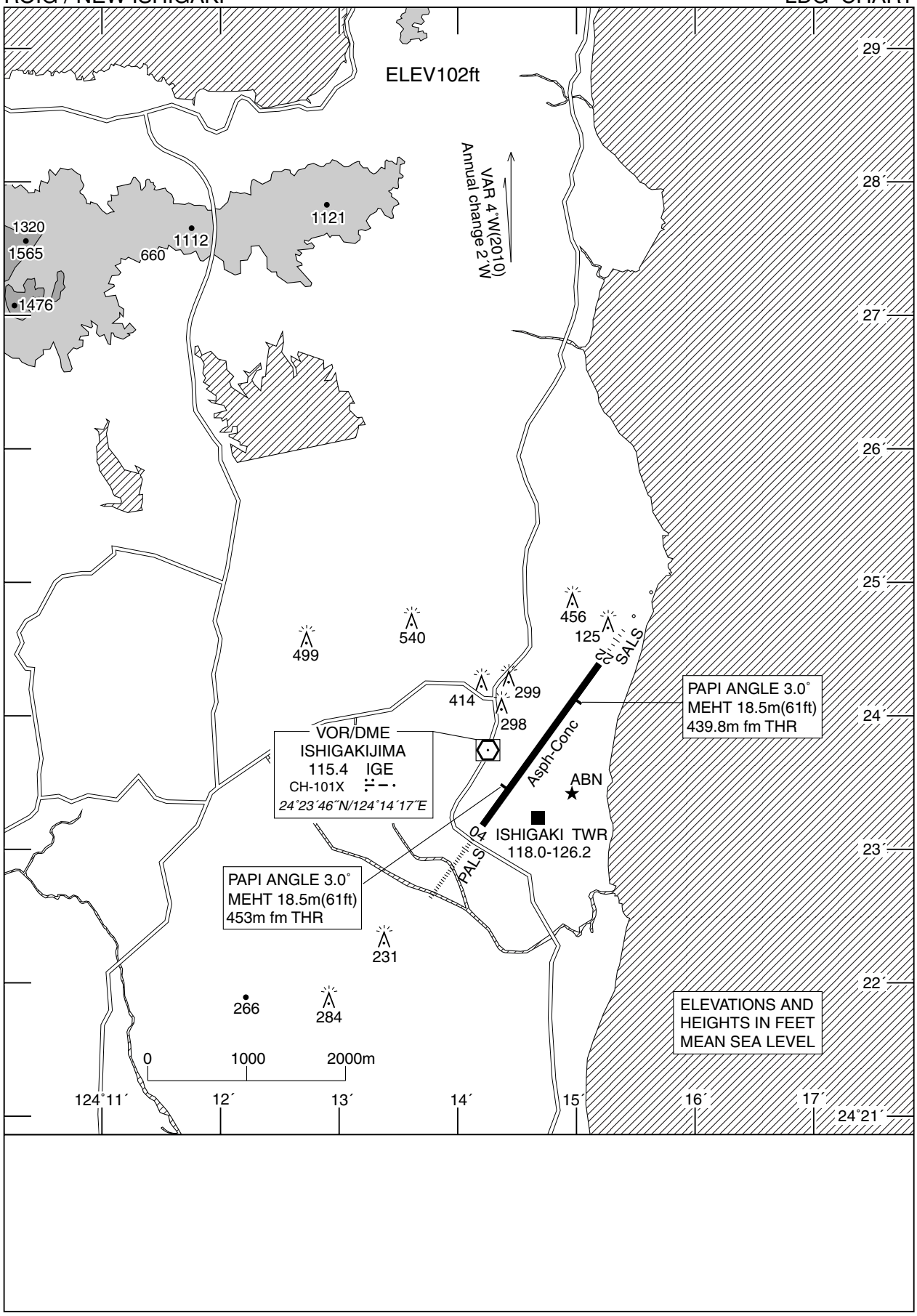
CHANGE : New PROC

ROIG / NEW ISHIGAKI Visual REP



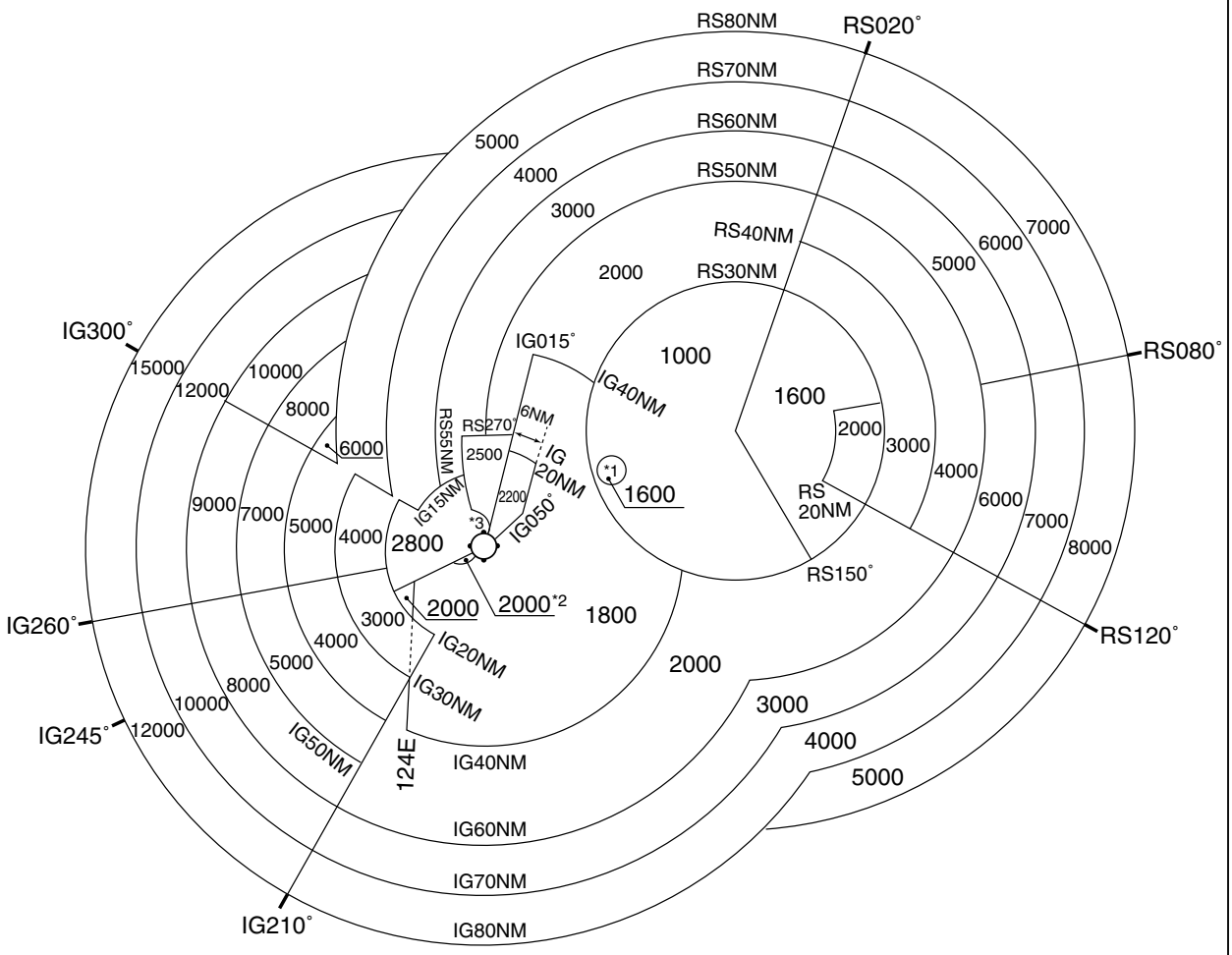
Call sign	BRG / DIST from ARP	Remarks
野底岳 Nosokodake	006˚ / 5.5NM	山 Mountain
EAST POINT	120˚ / 6.0NM	海上 Over the sea
竹富島 Taketomijima	250˚ / 9.0NM	高速艇船着場 Port
観音崎 Kannonzaki	259˚ / 7.5NM	灯台 Light house
川平 Kabira	309˚ / 6.8NM	川平湾グラスボート乗り場 Kabira Bay Boat pier
底原 Sokobaru	325˚ / 2.1NM	ダム Dam

ROIG / NEW ISHIGAKI LDG CHART



ROIG / NEW ISHIGAKI Minimum Vectoring Altitude CHART

VAR 4˚W (2013)



CENTER：*244938N/1250827E* (RORS RADAR SITE)
CENTER：*242310N/1241441E* (ROIG RADAR SITE)

*1：*244015N/1244143E* RADIUS：3NM
*2：*242248N/1240952E* RADIUS：3NM
*3：*242538N/1241100E* RADIUS：5NM