

AD 2 AERODROMES

ROIG AD 2.1 AERODROME LOCATION INDICATOR AND NAME

ROIG - 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 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	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 PCR 830/R/B/W/T
2	Taxiway width, surface and strength	Surface: Asphalt-concrete T1 . . . Width: 26.5m Strength: PCR 734/F/C/X/T T2 . . . Width: 30m Strength: PCR 579/F/B/X/T T3 . . . Width: 30m Strength: PCR 615/F/C/X/T T4 . . . Width: 30m Strength: PCR 615/F/C/X/T T5 . . . Width: 26.5m Strength: PCR 734/F/C/X/T P1, P2, P3, P4 . . . Width: 23m Strength: PCR 701/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(PCR) 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	PCR 701/F/B/X/T Asphalt-Concrete	242320.91N 1241421.64E 88.9ft	THR ELEV: 126ft
22	215.87°	2000×45	PCR 734/F/C/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: 300m from RWY04 THR, lighted RWY22: 300m 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
Ishigaki CTR	Area within a radius of 5nm ISHIGAKI ARP	3,000 or below	D	Ishigaki TWR En	
Sakishima ACA	See ROMY attached chart		E	Sakishima APP Sakishima DEP Sakishima RADAR En	

ROIG AD 2.18 ATS COMMUNICATION FACILITIES

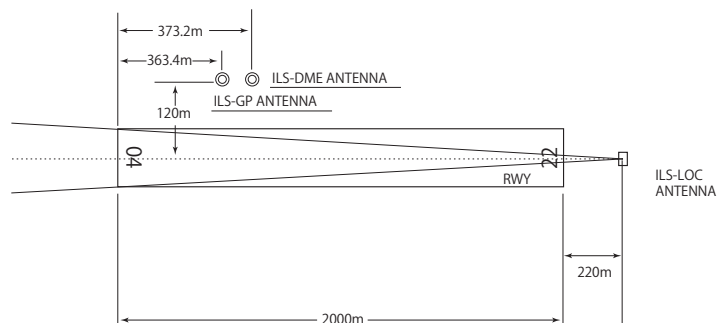
Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP/ASR	Sakishima Approach/ Sakishima Radar	120.3MHz 121.2MHz 125.0MHz 133.7MHz 315.7MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1200	APP service provided by Sakishima APP.
TWR	Ishigaki Tower	118.0MHz(1) 126.2MHz 121.5MHz(E)	2300 - 1200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

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. 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。

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

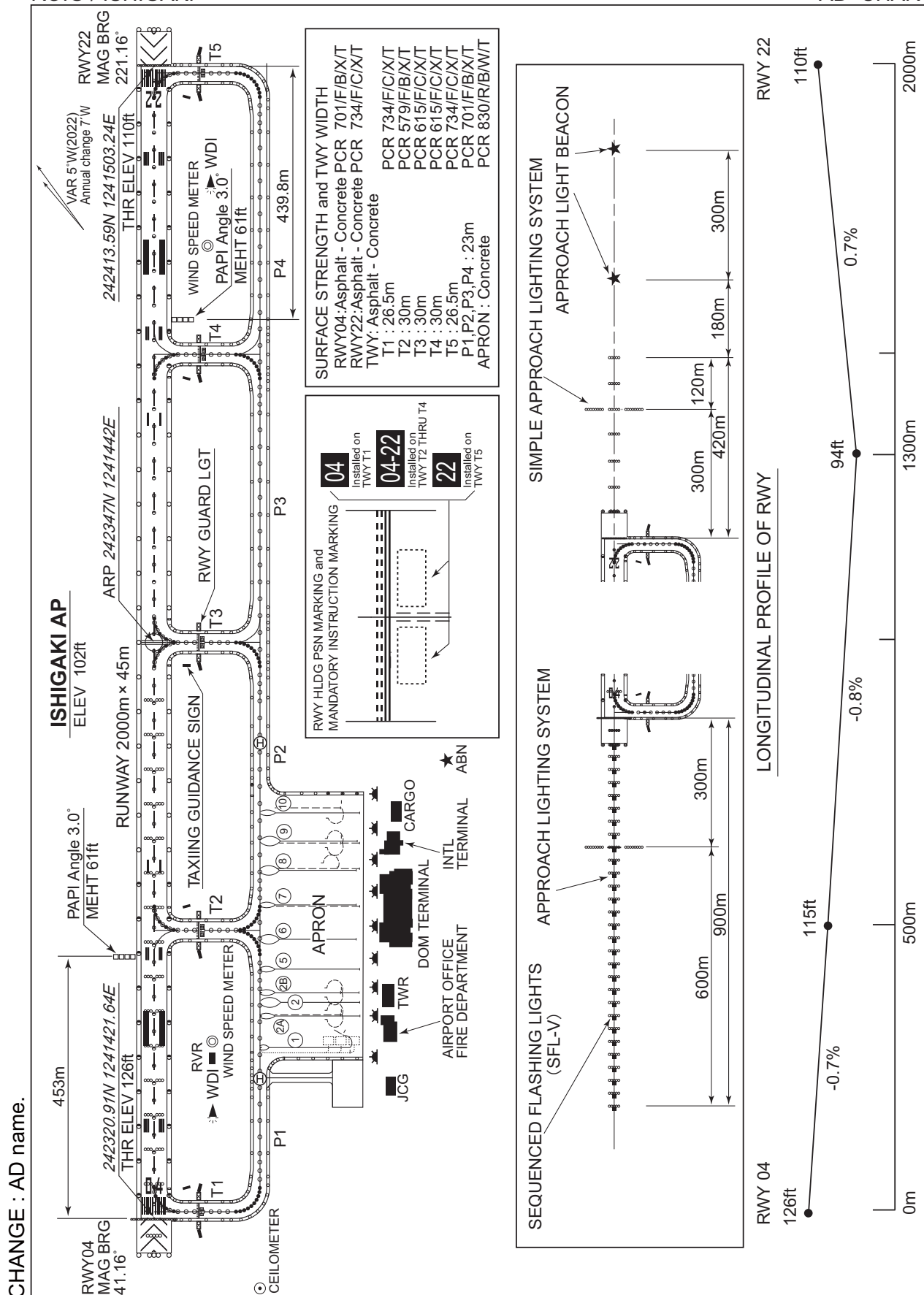
(See AD2.24 AD CHART)

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 (MASAN-RNAV)
Standard Arrival Chart - Instrument (YUNTA NORTH-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 (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)

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AD CHART



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STANDARD DEPARTURE CHART -INSTRUMENT

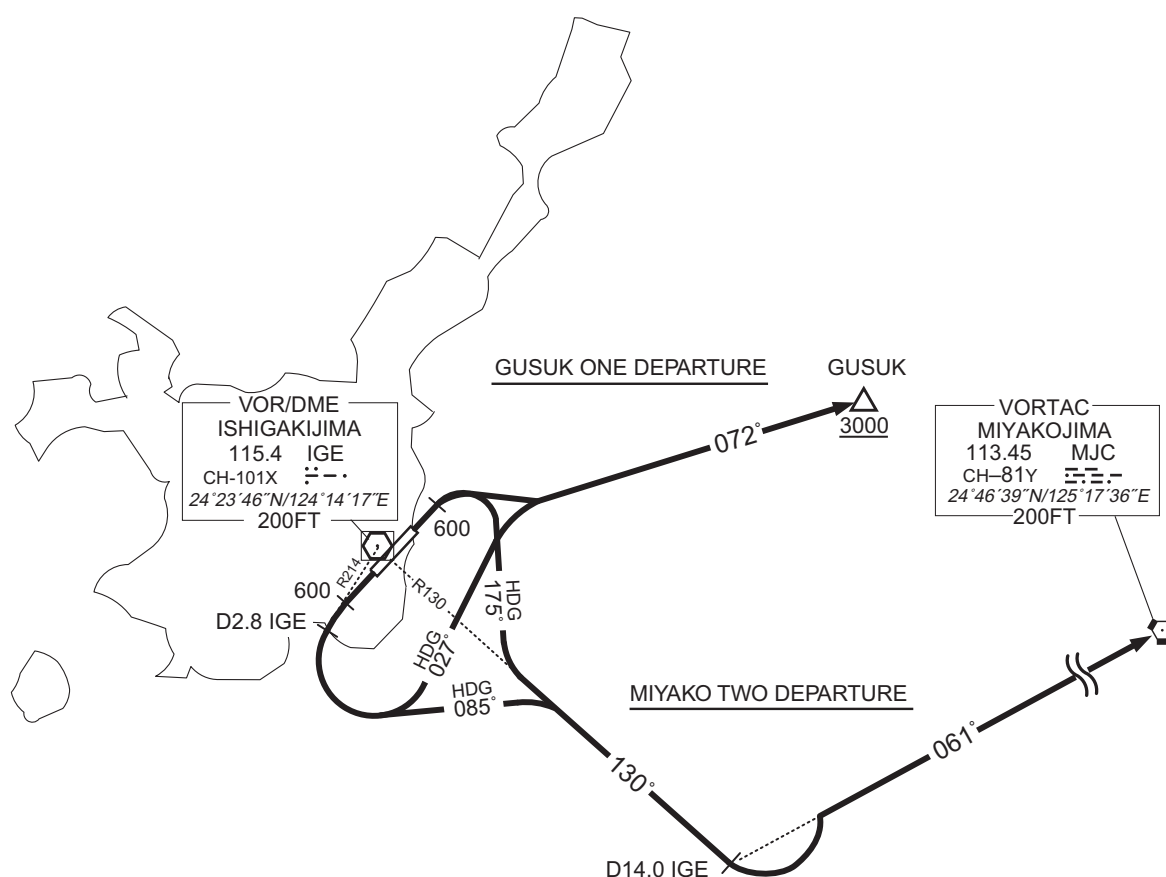
SID

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.

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.



CHANGE : AD name.

STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / ISHIGAKI

SID

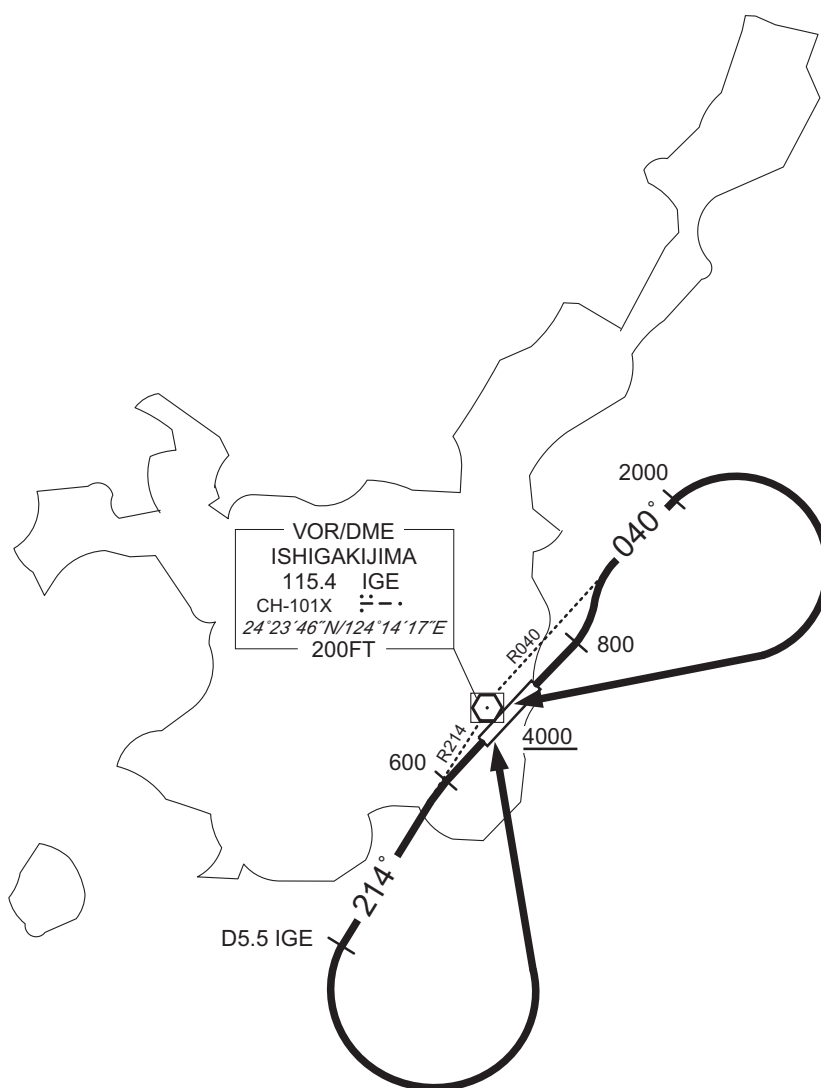
ISHIGAKI REVERSAL ONE DEPARTURE

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.



CHANGE : AD name.

STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / ISHIGAKI

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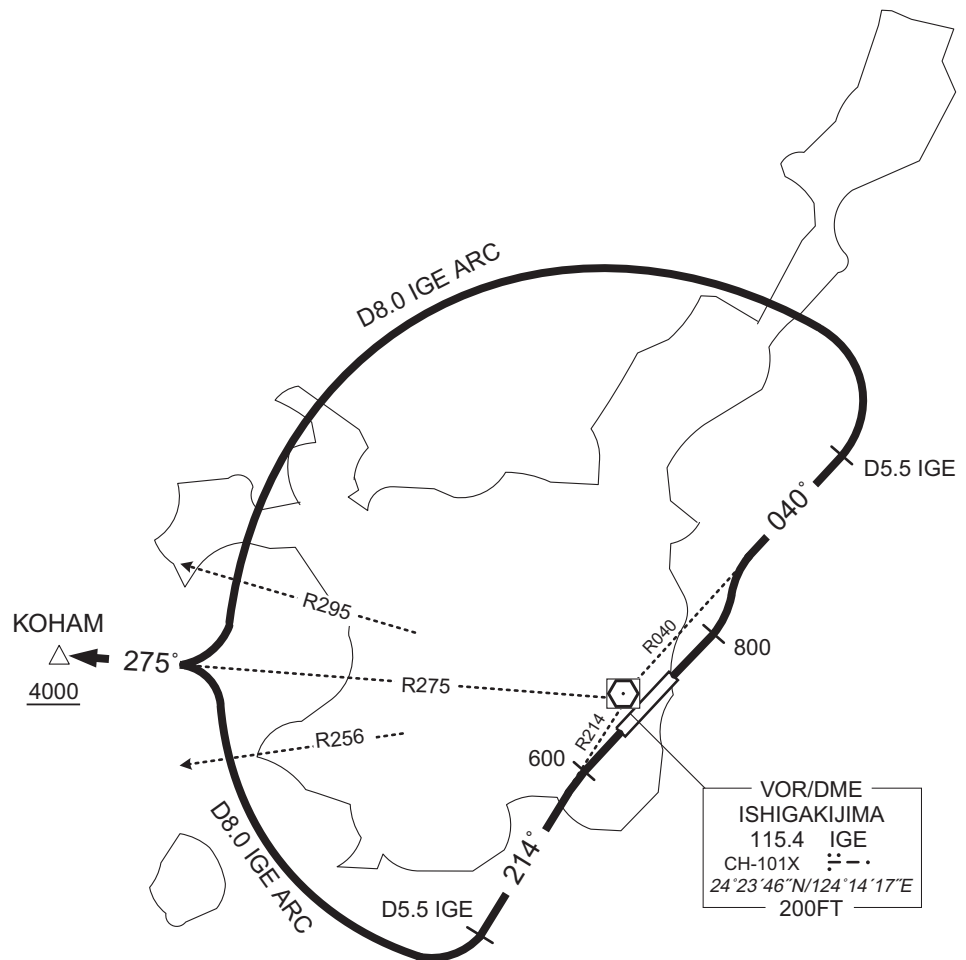
KOHAM ONE DEPARTURE

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.

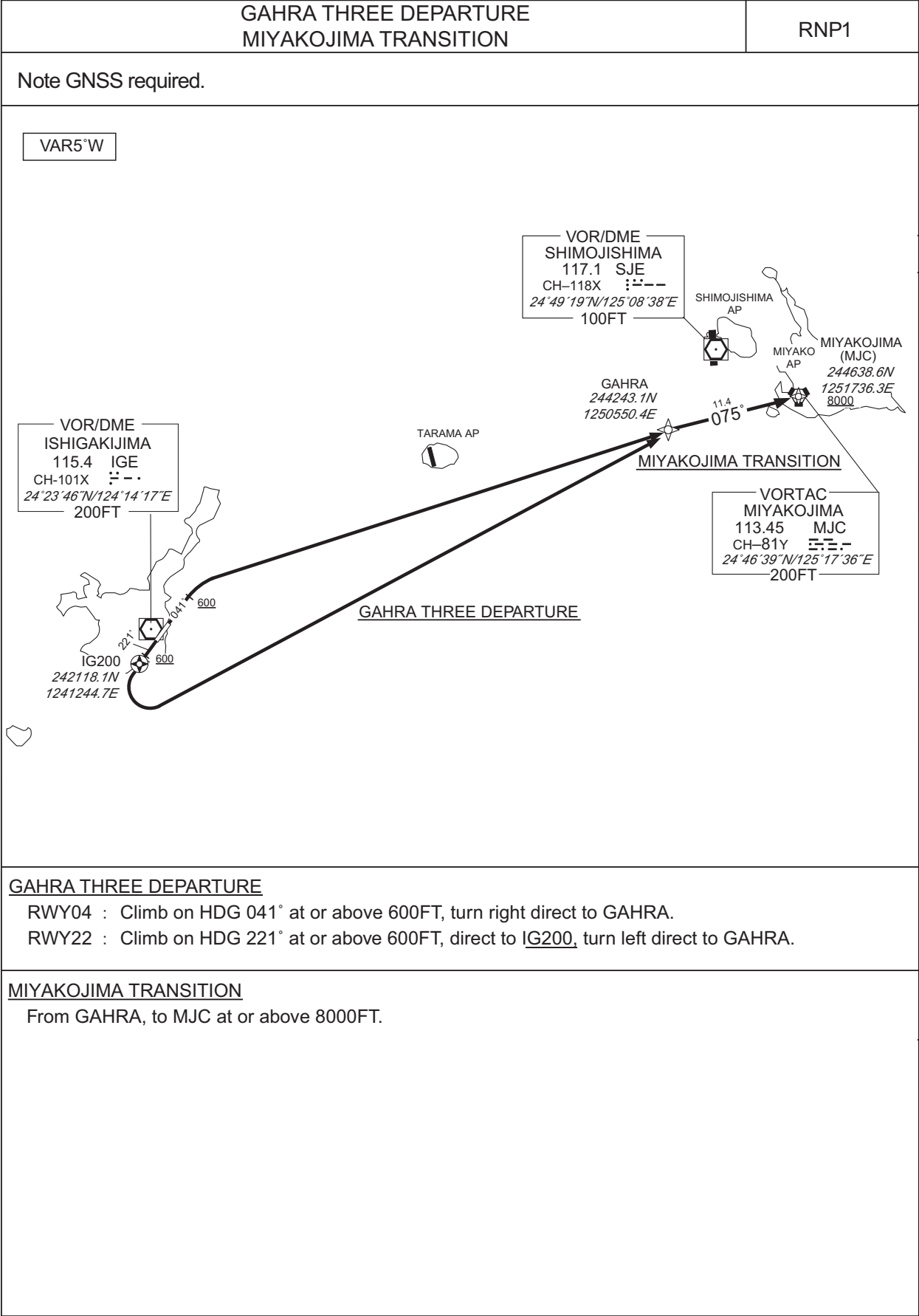


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STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / ISHIGAKI

RNAV SID and TRANSITION



CHANGE : AD name.

STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / ISHIGAKI

RNAV SID and TRANSITION

GAHRA 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	-	-	RNP1
002	DF	GAHRA	-	-	-4.9	-	R	-	-	-	RNP1
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	-	-	221 (215.9)	-4.9	-	-	+600	-	-	RNP1
002	DF	IG200	Y	-	-4.9	-	-	-	-	-	RNP1
003	DF	GAHRA	-	-	-4.9	-	L	-	-	-	RNP1
MIYAKOJIMA 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	-	-	-4.9	-	-	-	-	-	RNP1
002	TF	MJC	-	075 (069.8)	-4.9	11.4	-	+8000	-	-	RNP1

CHANGE : AD name.

STANDARD DEPARTURE CHART -INSTRUMENT

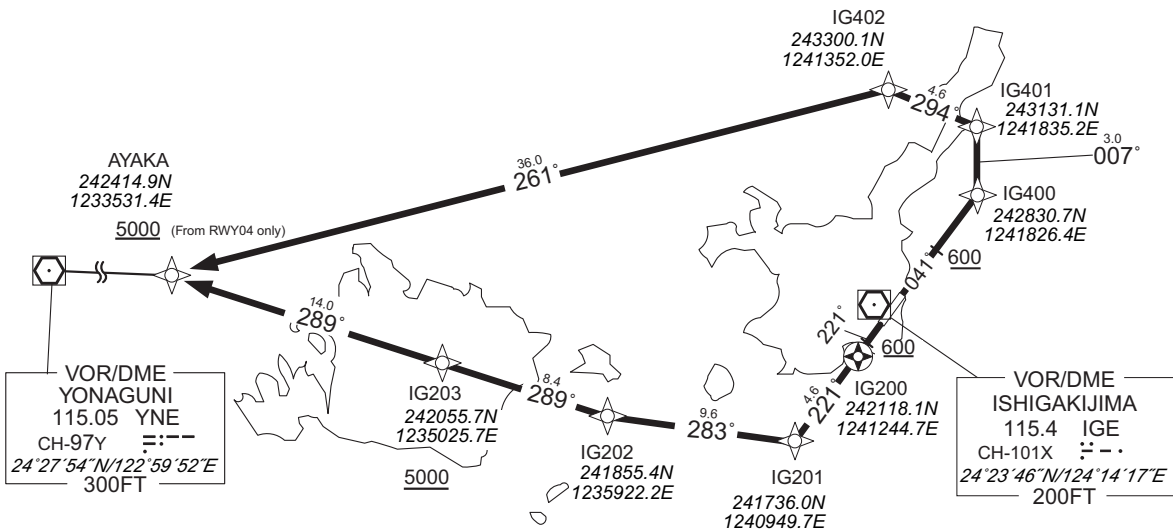
ROIG / ISHIGAKI

RNAV SID

AYAKA THREE DEPARTURE	RNP1
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Note GNSS required.

VAR5°W



RWY04 : Climb on HDG 041° at or above 600FT, direct to IG400, to IG401, to IG402, to AYAKA at or above 5000FT.

RWY22 : Climb on HDG 221° 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.

CHANGE : AD name.

STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / ISHIGAKI

RNAV SID

AYAKA THREE DEPARTURE

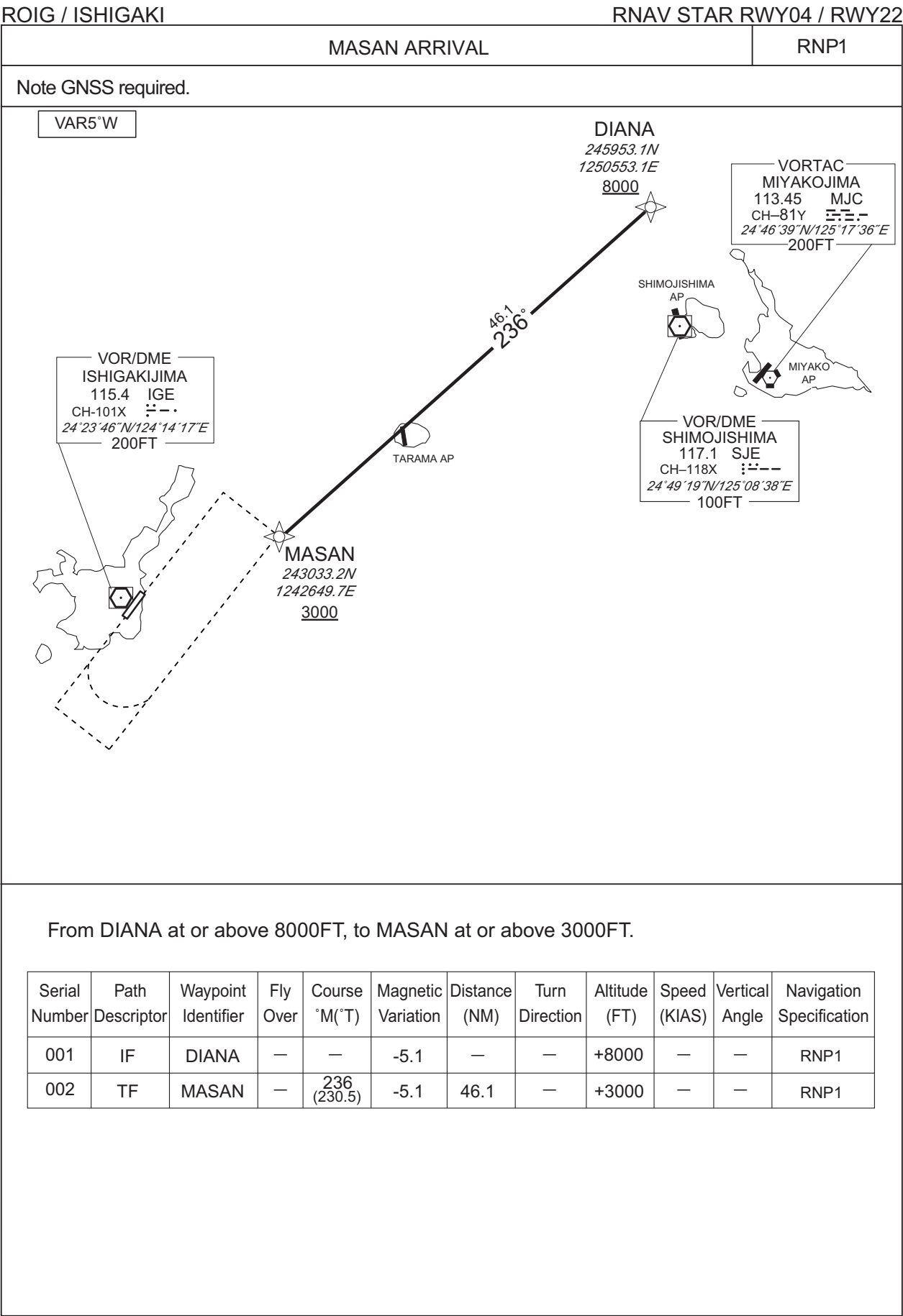
RWY04

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	-	-	RNP1
002	DF	IG400	-	-	-4.9	-	-	-	-	-	RNP1
003	TF	IG401	-	007 (002.6)	-4.9	3.0	-	-	-	-	RNP1
004	TF	IG402	-	294 (289.1)	-4.9	4.6	-	-	-	-	RNP1
005	TF	AYAKA	-	261 (256.1)	-4.9	36.0	-	+5000	-	-	RNP1

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	-	-	221 (215.9)	-4.9	-	-	+600	-	-	RNP1
002	DF	IG200	Y	-	-4.9	-	-	-	-	-	RNP1
003	TF	IG201	-	221 (215.7)	-4.9	4.6	-	-	-	-	RNP1
004	TF	IG202	-	283 (277.9)	-4.9	9.6	-	-	-	-	RNP1
005	TF	IG203	-	289 (283.9)	-4.9	8.4	-	+5000	-	-	RNP1
006	TF	AYAKA	-	289 (283.8)	-4.9	14.0	-	-	-	-	RNP1

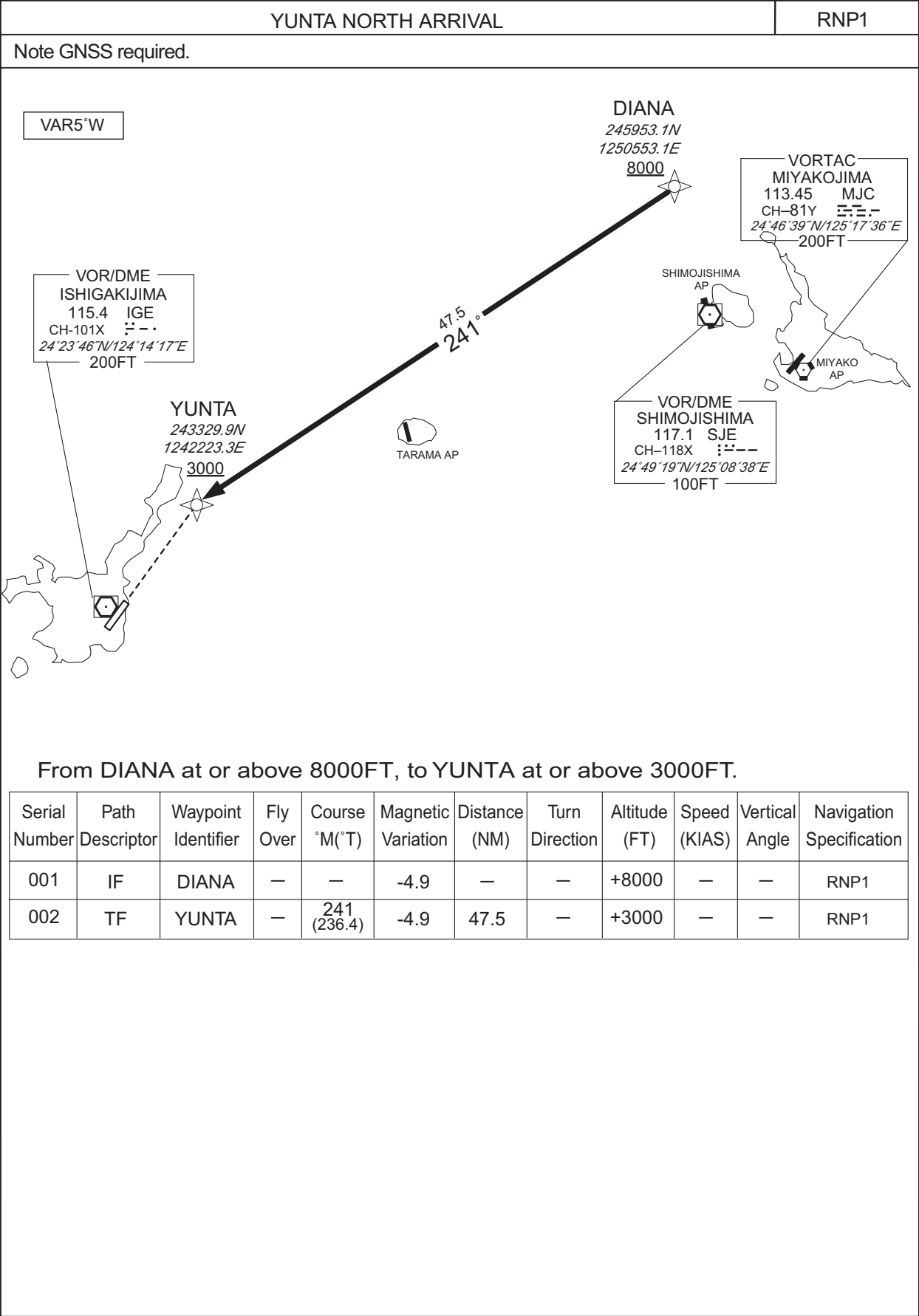
STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / ISHIGAKI

RNAV STAR RWY22



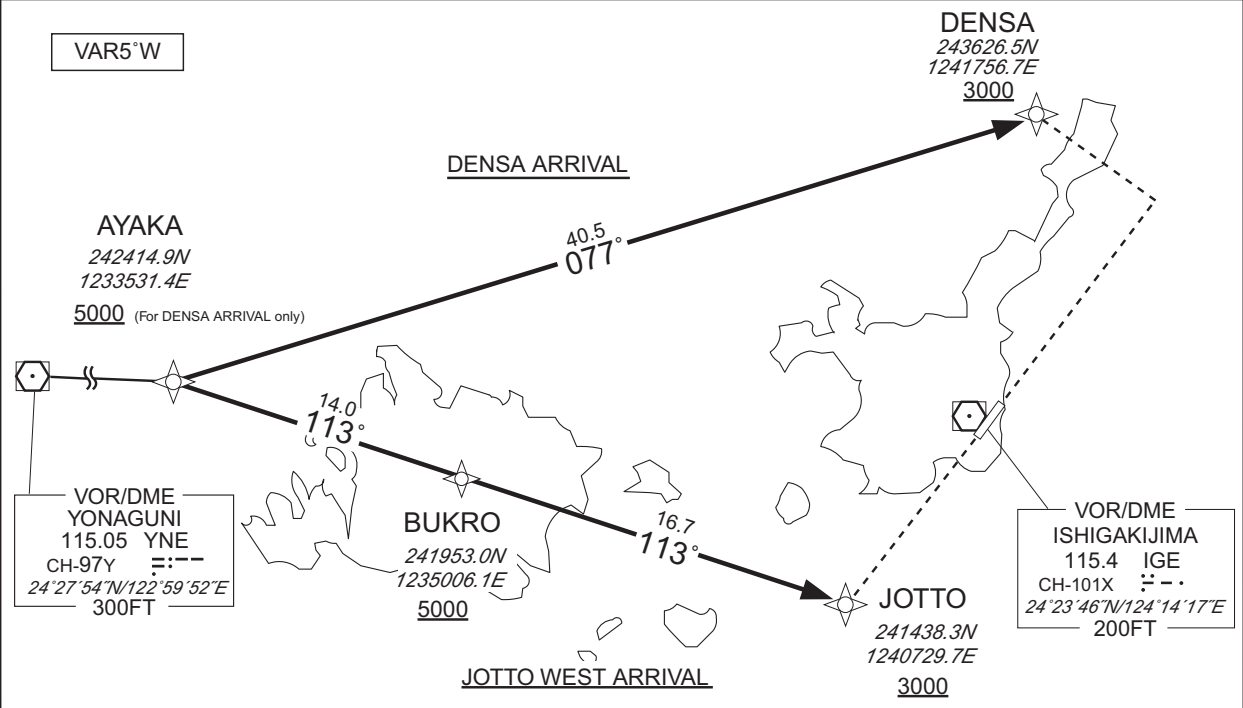
STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / ISHIGAKI

RNAV STAR RWY04/RWY22

DENSA ARRIVAL / JOTTO WEST ARRIVAL	RNP1
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Note GNSS required.



DENSA ARRIVAL

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

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	—	—	-4.9	—	—	+5000	—	—	RNP1
002	TF	DENSA	—	077 (072.3)	-4.9	40.5	—	+3000	—	—	RNP1

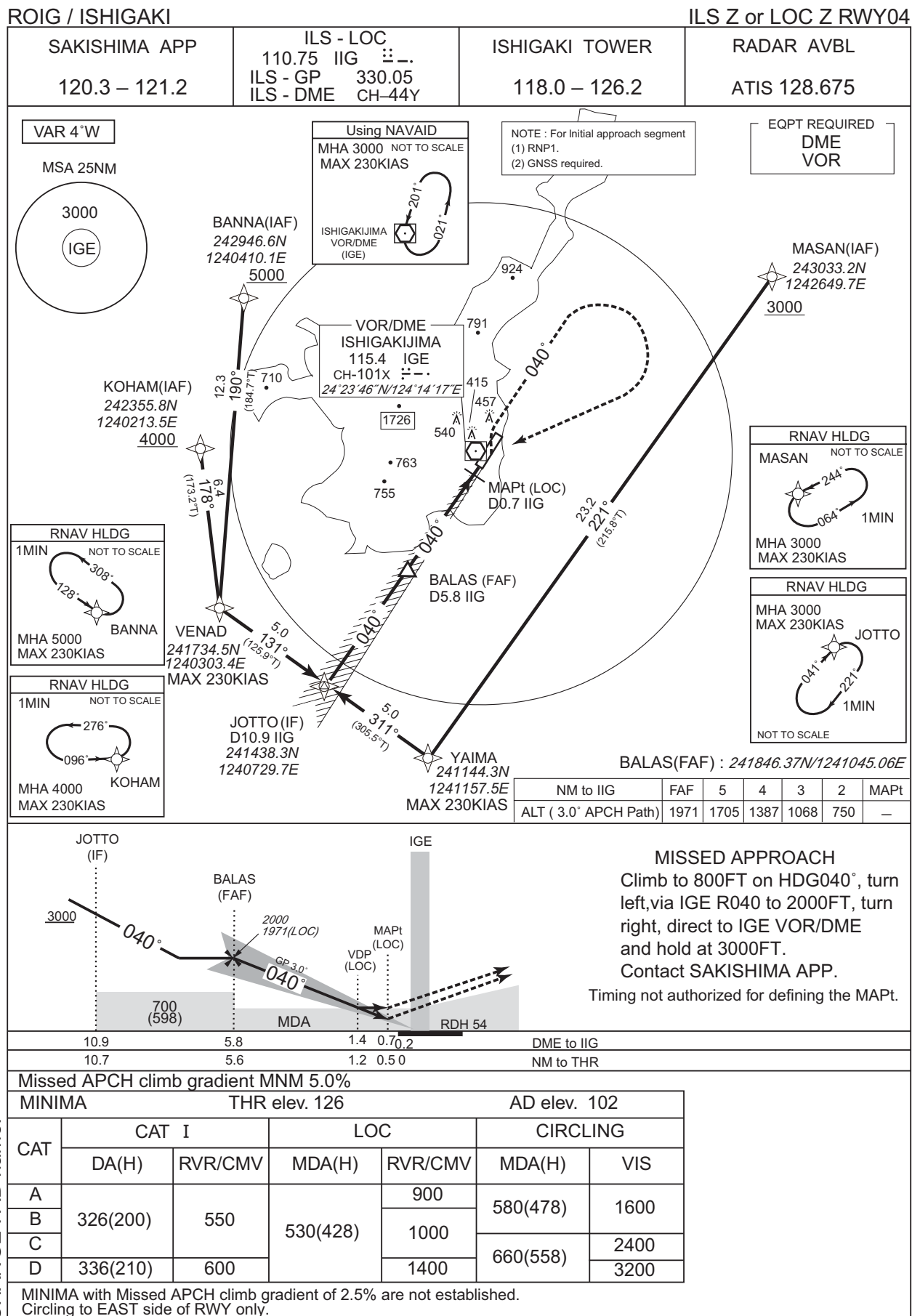
JOTTO WEST ARRIVAL

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

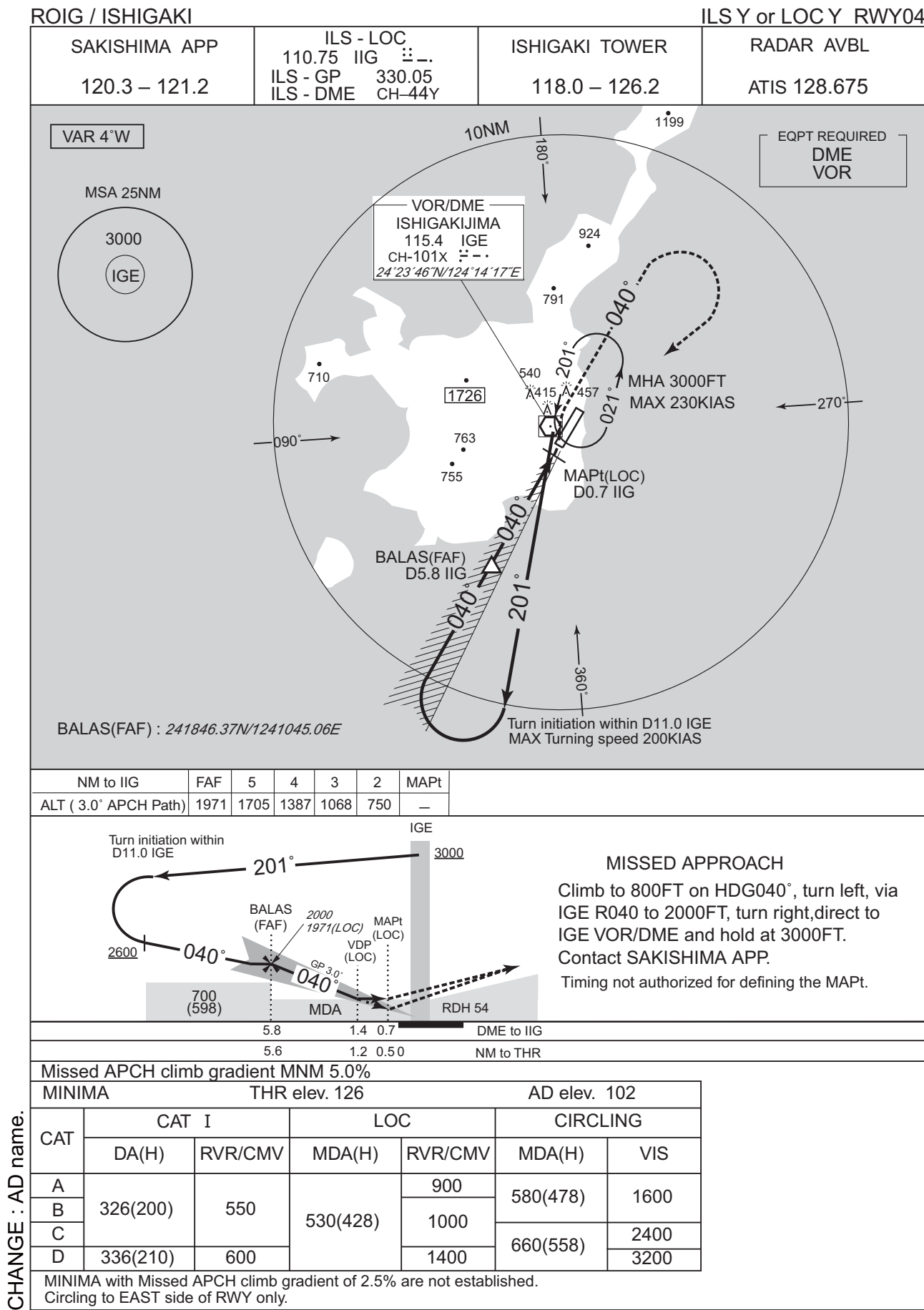
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	AYAKA	—	—	-4.9	—	—	—	—	—	RNP1
002	TF	BUKRO	—	113 (108.1)	-4.9	14.0	—	+5000	—	—	RNP1
003	TF	JOTTO	—	113 (108.2)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

CHANGE : AD name.

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

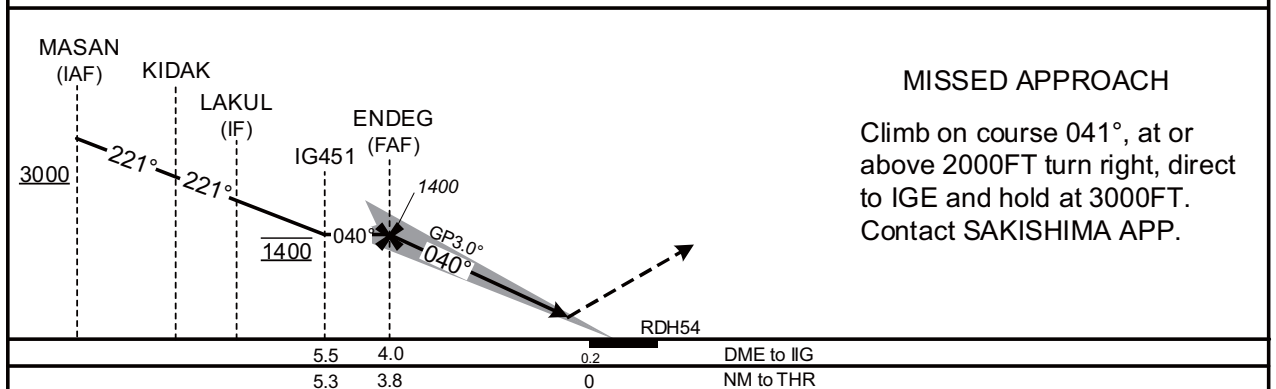
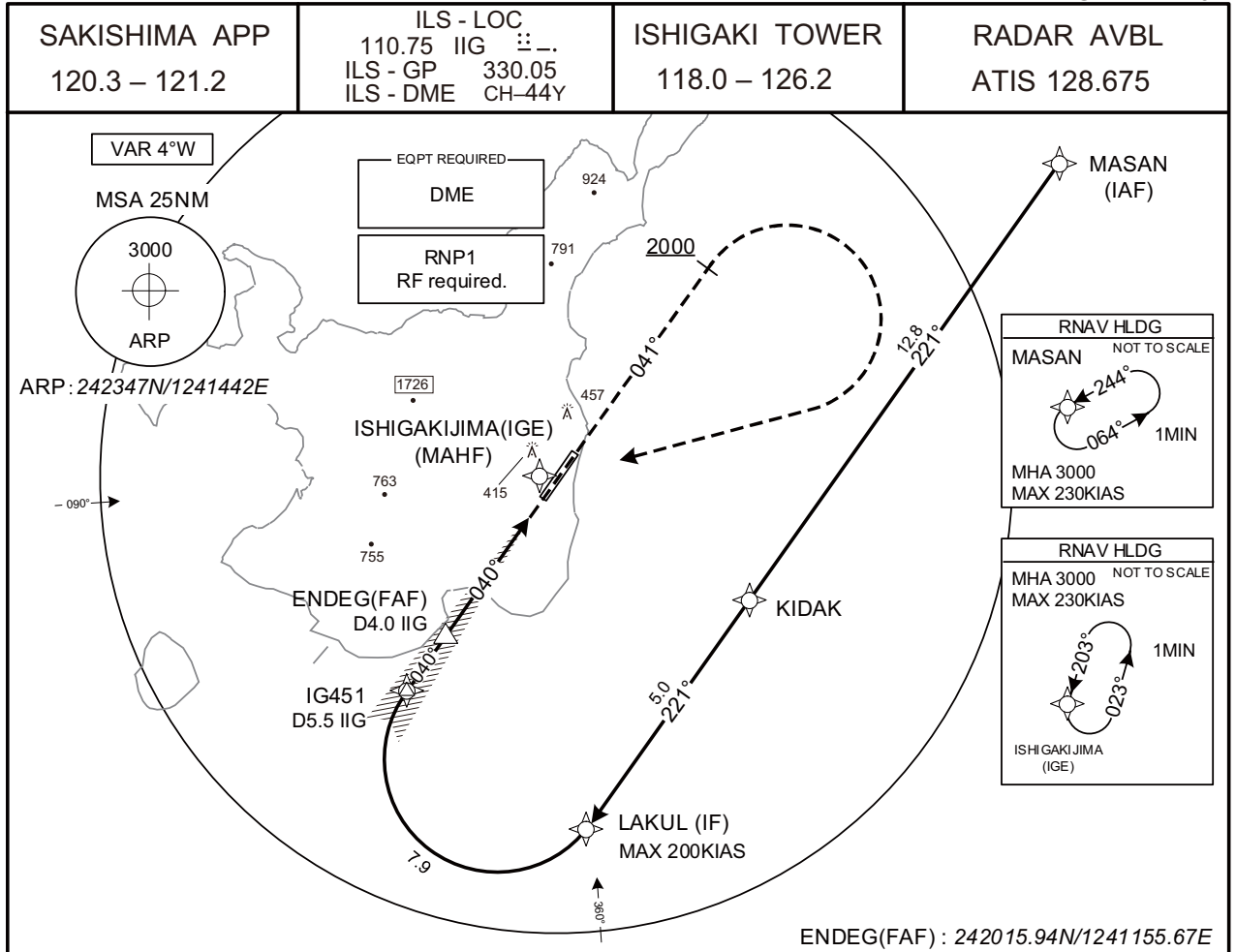


CHANGE : AD name.

INSTRUMENT APPROACH CHART

ROIG / ISHIGAKI

ILS X RWY04



CHANGE : AD name.

Missed APCH climb gradient MNM 5.0%

MINIMA		THR elev. 126		AD elev. 102	
CAT	CAT I		CIRCLING		
	DA(H)	RVR/CMV	MDA(H)	VIS	
A	326(200)	550	580(478)	1600	
B					
C				660(558)	2400
D	336(210)	600	3200		

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

INSTRUMENT APPROACH CHART

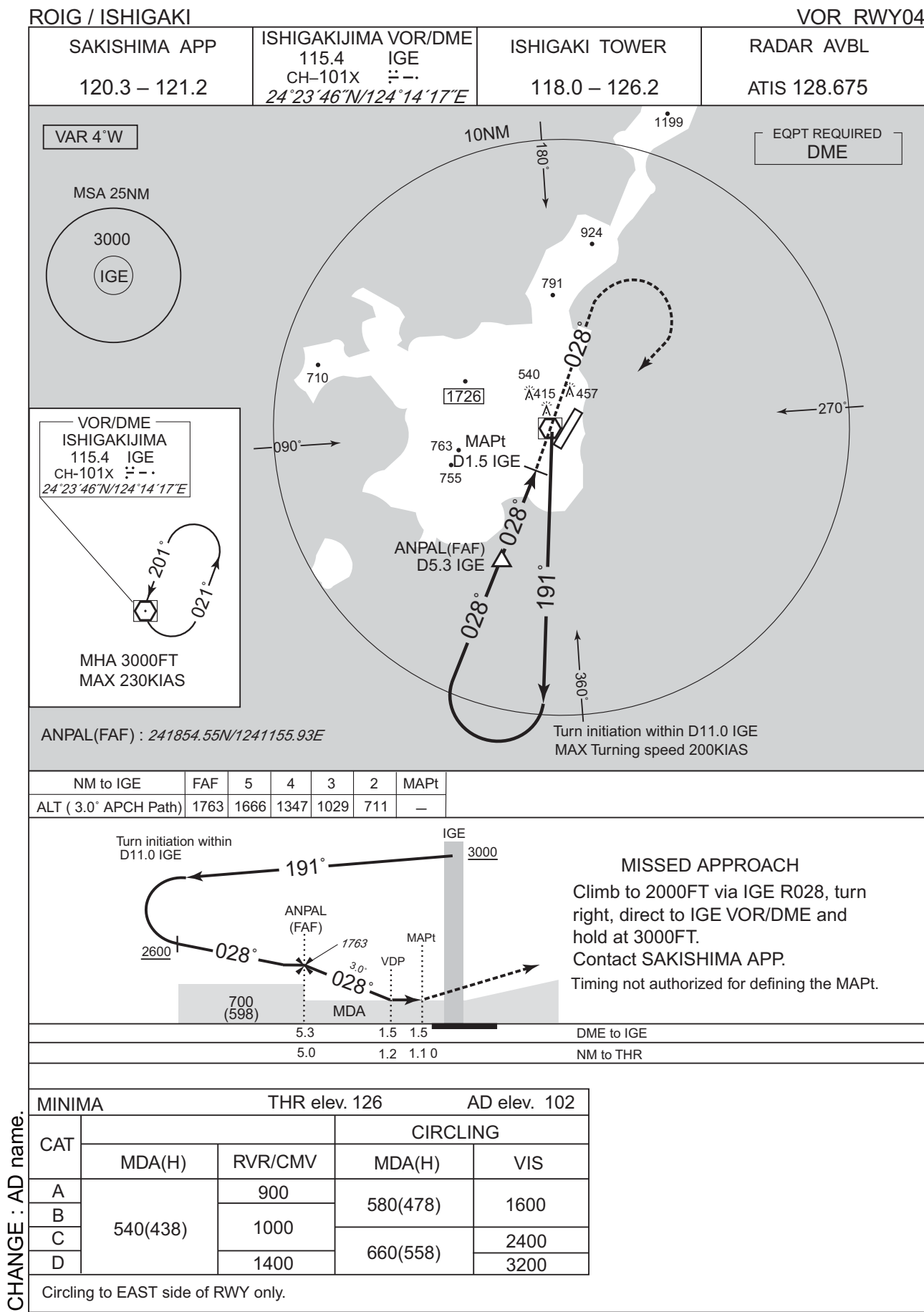
ROIG / ISHIGAKI

ILS X RWY04

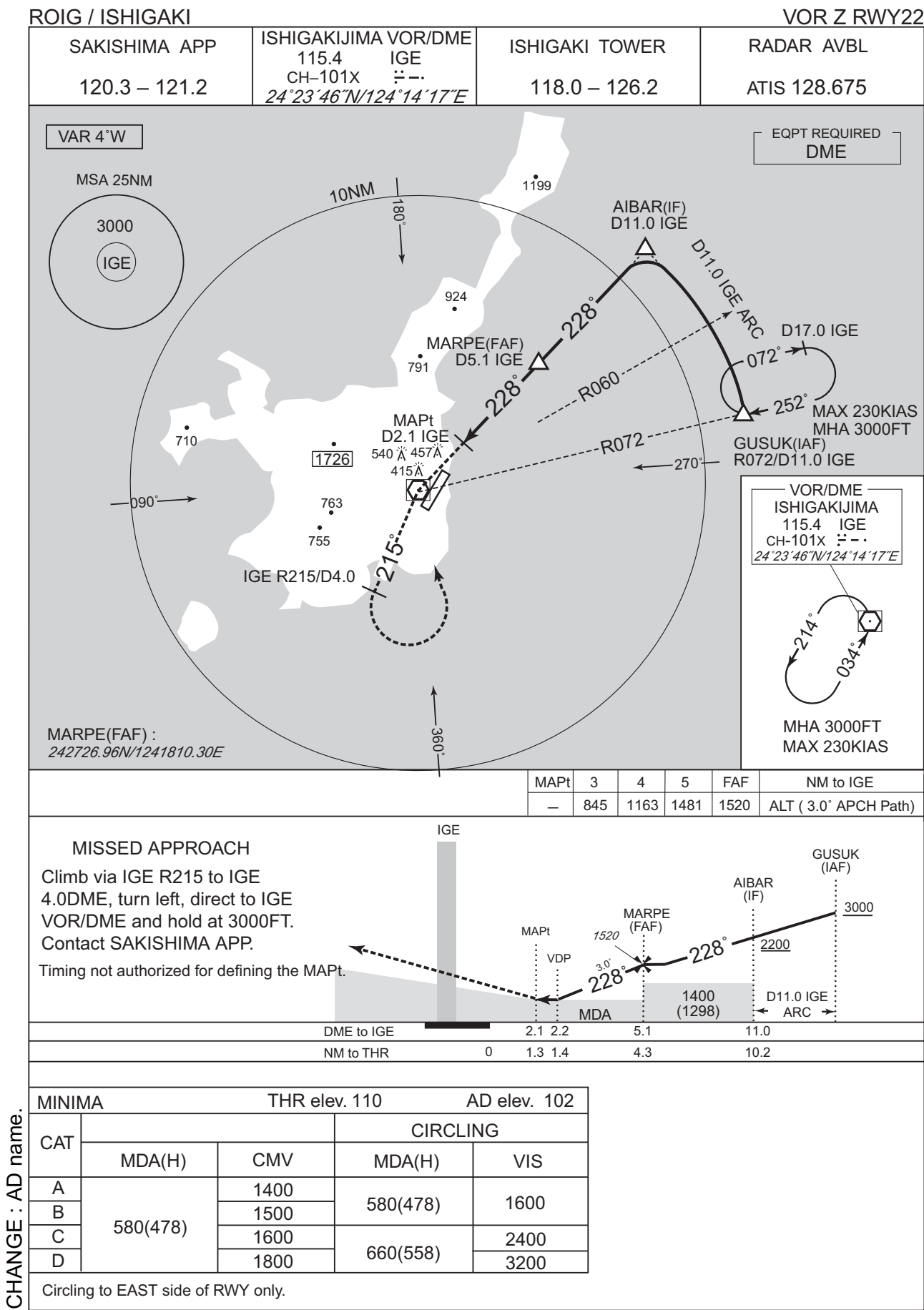
Coding Table											
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	MASAN	-	-	-5.1	-	-	+3000	-	-	RNP1
002	TF	KIDAK	-	221 (215.8)	-5.1	12.8	-	-	-	-	RNP1
003	TF	LAKUL	-	221 (215.7)	-5.1	5.0	-	-	-200	-	RNP1
004	RF Center: IGRF2 r=2.50NM	IG451	-	-	-5.1	7.9	R	1400	-	-	RNP1
001	CA	-	-	041 (035.7)	-5.1	-	-	+2000	-	-	RNP1
002	DF	IGE	-	-	-5.1	-	R	3000	-	-	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)	RNP1
Hold	IGE	203 (197.8)	-5.1		1.0 (-14000)		L	3000	FL140	-230 (-14000)	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									

CHANGE : AD name.

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



VAR 4°W

EQPT REQUIRED
DME

MSA 25NM

3000

IGE

10NM

180°

1199

924

MARPE(FAF)
D5.1 IGE

791

MAPt
D2.1 IGE

540

457

415

763

755

IGE R215/D4.0

215°

360°

090°

AIBAR(IF)
D11.0 IGE

228°

D11.0 IGE ARC

D17.0 IGE

072°

252°

MAX 230KIAS
MHA 3000FT

GUSUK(IAF)
R072/D11.0 IGE

270°

R060

R072

VOR/DME
ISHIGAKIJIMA
115.4 IGE
CH-101X
24°23'46"N/124°14'17"E

214°

034°

MHA 3000FT
MAX 230KIAS

MARPE(FAF) :

242726.96N/1241810.30E

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.

IGE

MAPt

VDP

1520

MARPE (FAF)

228°

3.0°

MDA

1400 (1298)

228°

AIBAR (IF)

2200

GUSUK (IAF)

3000

D11.0 IGE ARC

DME to IGE

2.1

2.2

5.1

11.0

NM to THR

0

1.3

1.4

4.3

10.2

CHANGE : AD name.

MINIMA

THR elev. 110

AD elev. 102

CAT

MDA(H)

CMV

MDA(H)

VIS

A

580(478)

1400

580(478)

1600

B

580(478)

1500

580(478)

1600

C

580(478)

1600

660(558)

2400

D

580(478)

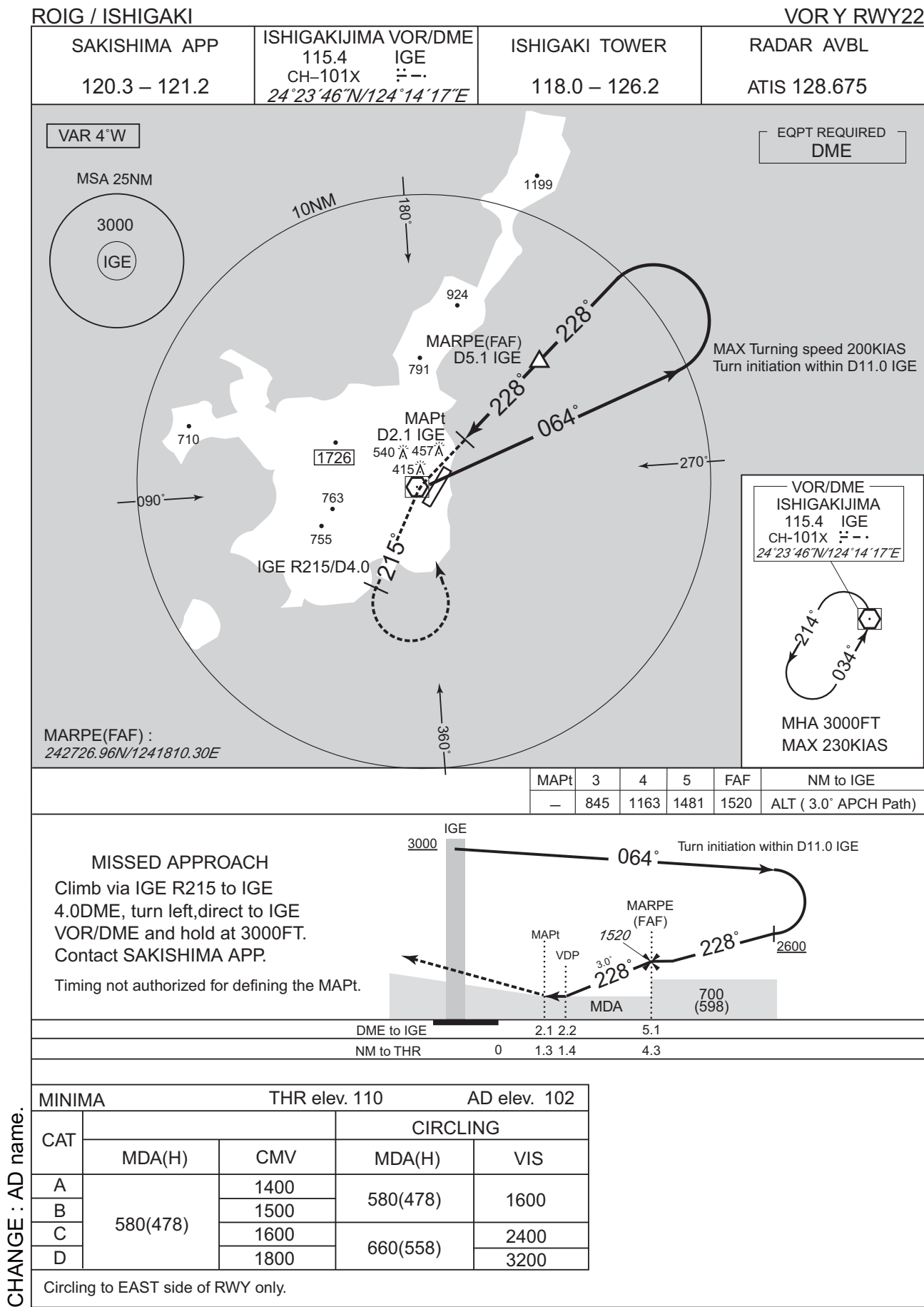
1800

660(558)

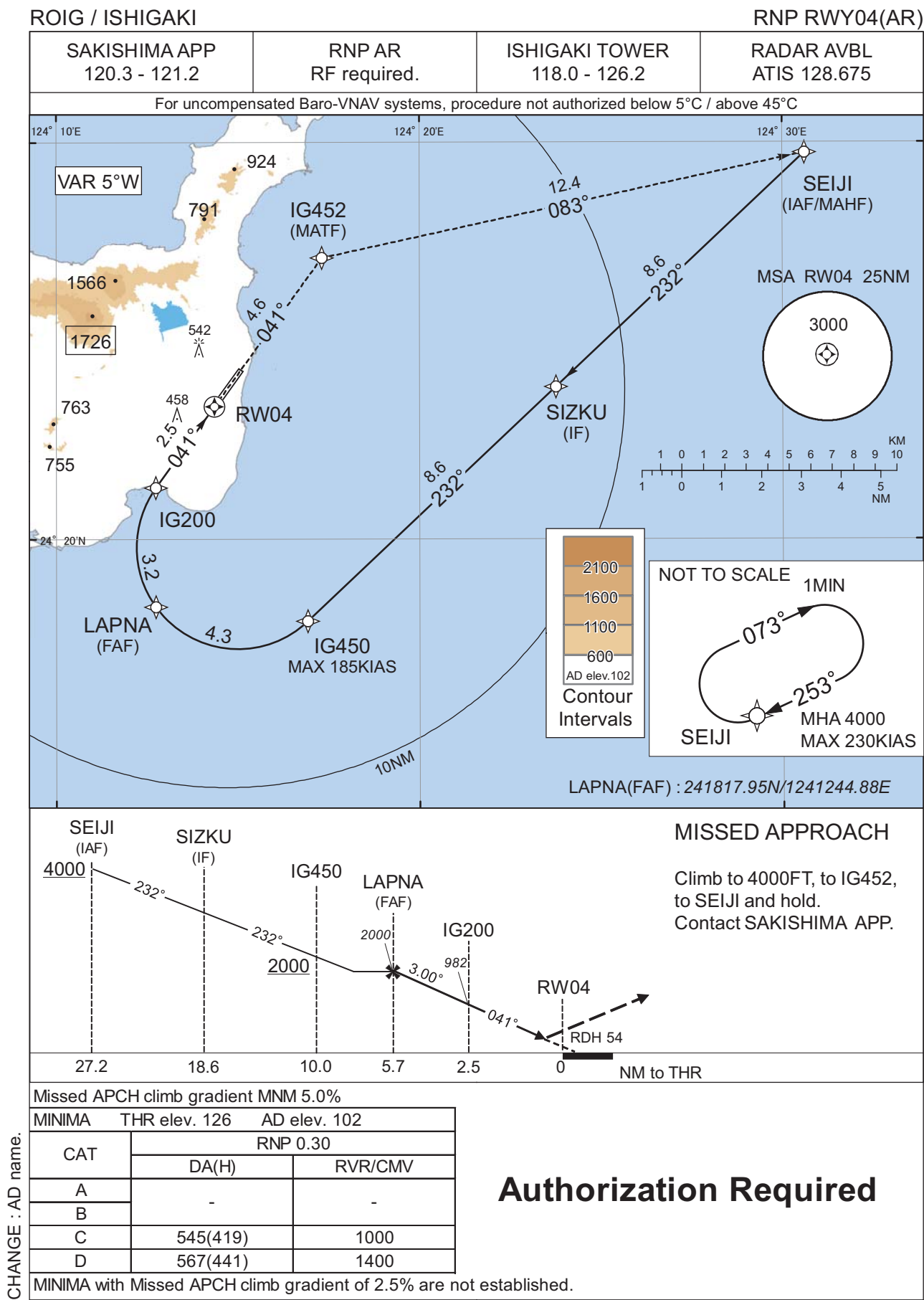
3200

Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

ROIG / 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	-	-	-5.0	-	-	+4000	-	-	-
002	TF	SIZKU	-	232 (226.6)	-5.0	8.6	-	-	-	-	1.0
003	TF	IG450	-	232 (226.6)	-5.0	8.6	-	+2000	-185	-	1.0
004	RF Center: IGRF1 r=2.55NM	LAPNA	-	-	-5.0	4.3	R	2000	-	-	1.0
005	RF Center: IGRF1 r=2.55NM	IG200	-	-	-5.0	3.2	R	982	-	-3.00	0.3
006	TF	RW04	Y	041 (035.7)	-5.0	2.5	-	180	-	-3.00/54	0.3
007	TF	IG452	-	041 (035.7)	-5.0	4.6	-	-	-	-	1.0
008	TF	SEIJI	-	083 (077.6)	-5.0	12.4	-	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	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		

CHANGE : AD name.

ROIG / ISHIGAKI

SAKISHIMA APP 120.3 – 121.2	RNP APCH	ISHIGAKI TOWER 118.0 – 126.2	RADAR AVBL ATIS 128.675
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Baro-VNAV not authorized below 10°C

VAR 5°W

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

1MIN NOT TO SCALE

1MIN NOT TO SCALE

NOT TO SCALE

	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.

MINIMA		THR elev.110		AD elev.102	
CAT	LNAV/VNAV	LNAV	CIRCLING	MDA (H)	VIS
A	580(470)	1400	580(478)	1400	580(478)
B		1500		1500	
C		1600		1600	
D		1800		1800	

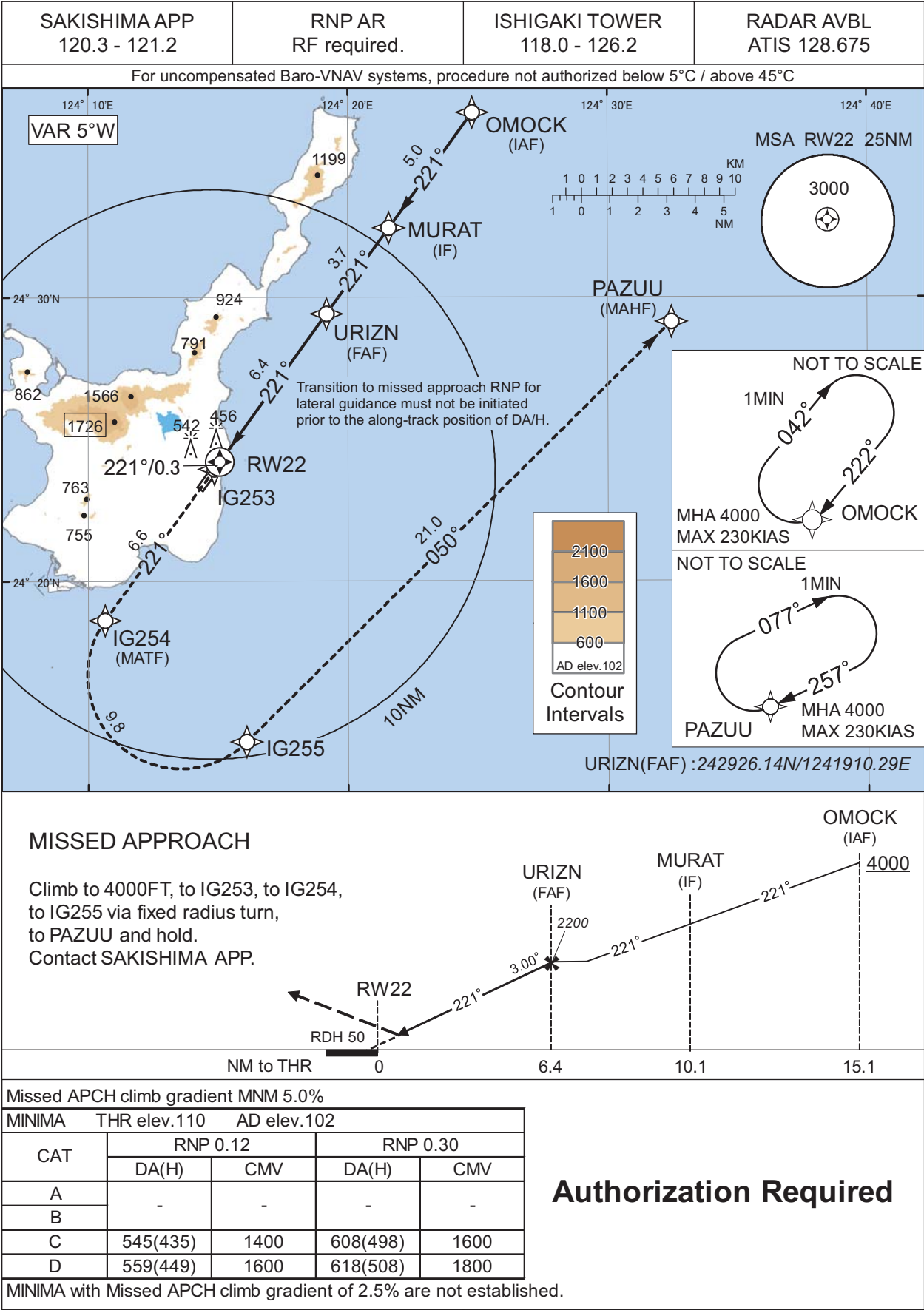
Circling to EAST side of RWY only.

CHANGE : AD name.

INSTRUMENT APPROACH CHART

ROIG / ISHIGAKI

RNP Y RWY22(AR)



INSTRUMENT APPROACH CHART

ROIG / ISHIGAKI

RNP Y RWY22(AR)

Coding Table

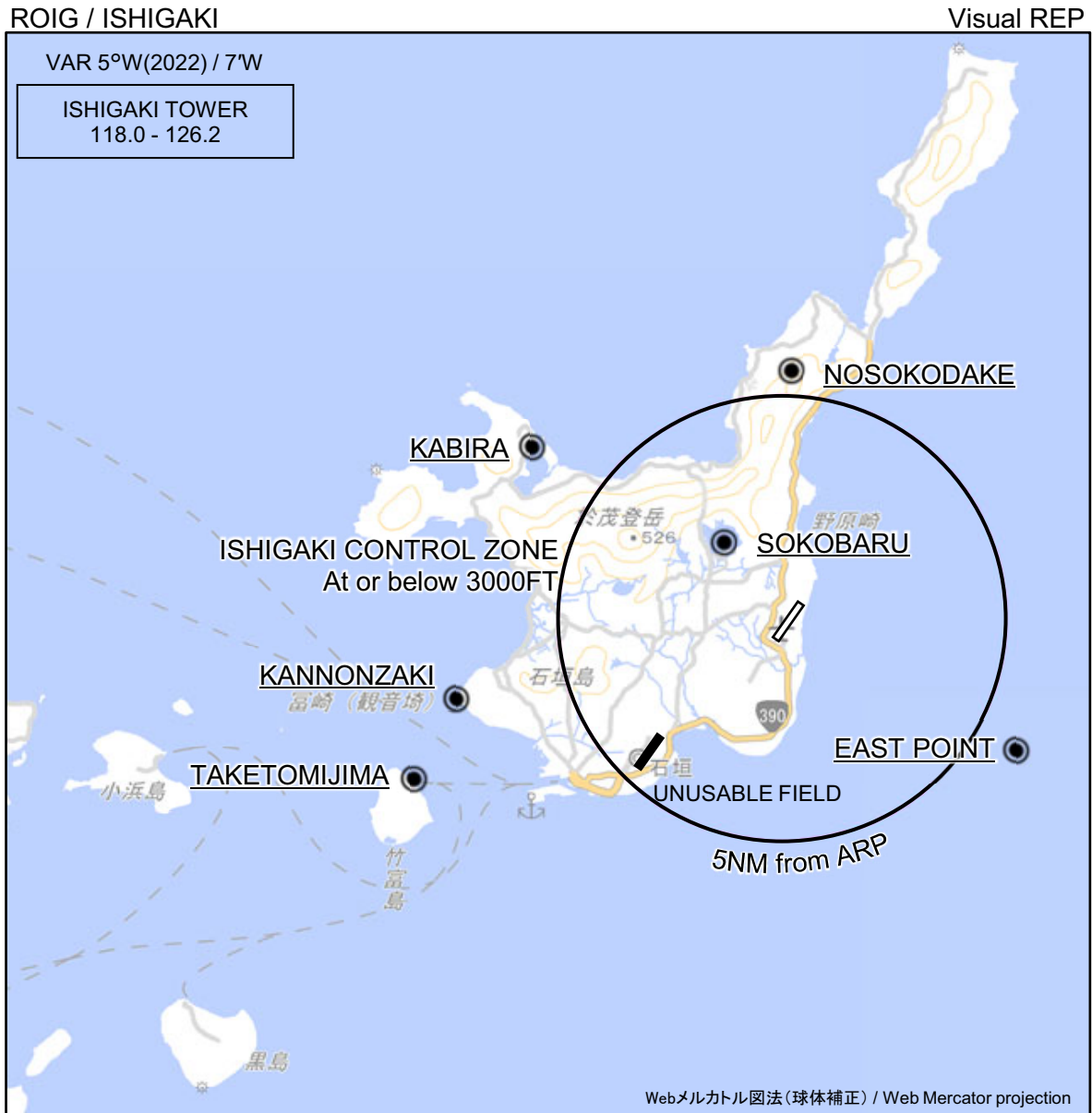
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	OMOCK	-	-	-5.0	-	-	+4000	-	-	-
002	TF	MURAT	-	221 (215.8)	-5.0	5.0	-	-	-	-	1.0
003	TF	URIZN	-	221 (215.8)	-5.0	3.7	-	2200	-	-	1.0
004	TF	RW22	Y	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	-	221 (215.7)	-5.0	6.6	-	-	-	-	1.0
007	RF Center: IGRF3 r=3.28NM	IG255	-	-	-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	OMOCK	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

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		

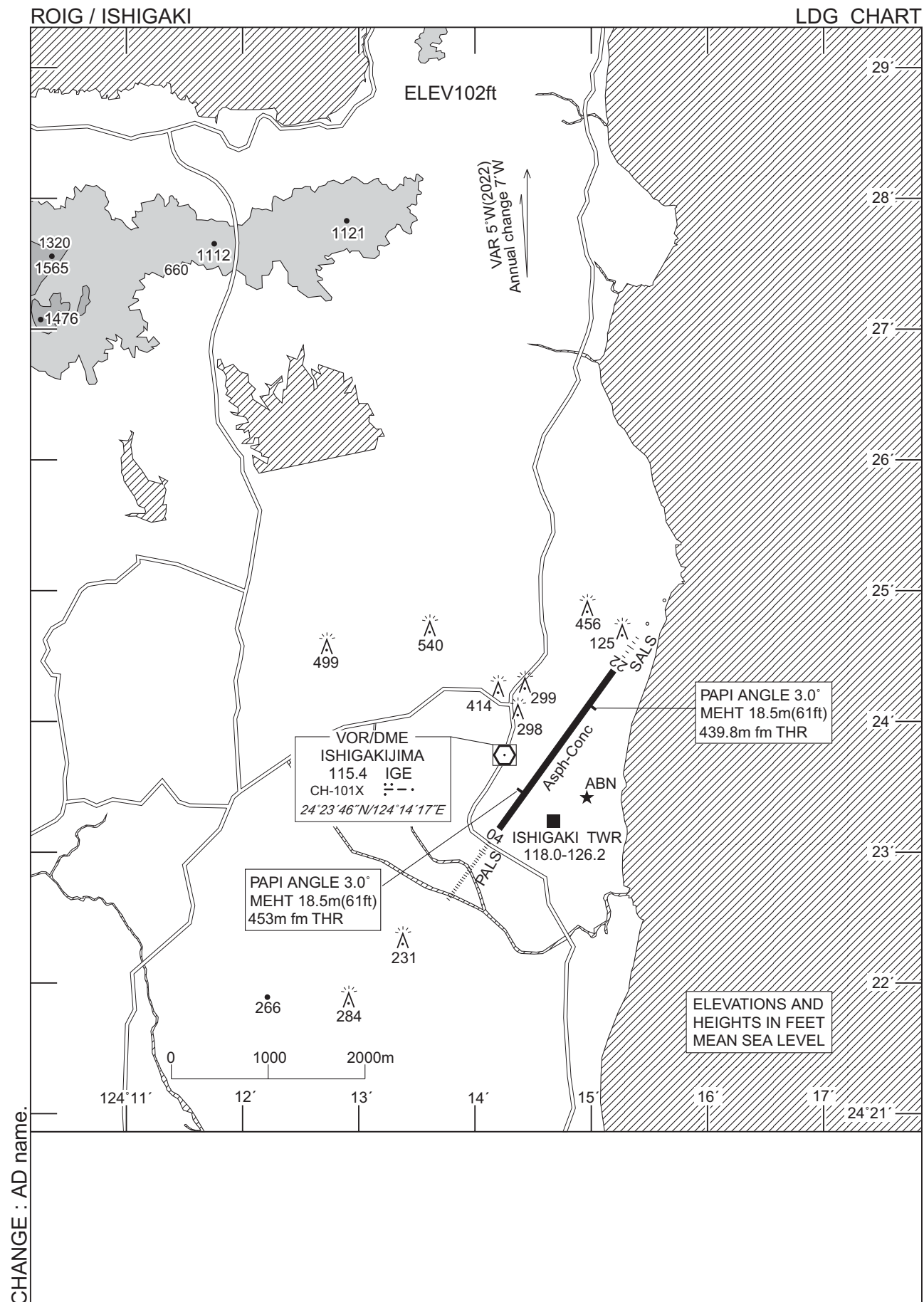
CHANGE : AD name.



※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).

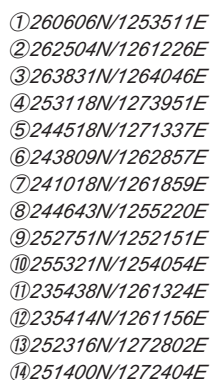
CHANGE : AD and CONTROL ZONE name.

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	川平湾グラスポート乗り場 Kabira Bay Boat pier
底原 Sokobaru	322°T / 2.1NM	ダム Dam



Minimum Vectoring Altitude CHART

CHANGE : AD name.



*1 : 244015N/1244143E RADIUS : 3NM
 *2 : 242248N/1240952E RADIUS : 3NM
 *3 : 242538N/1241100E RADIUS : 5NM
 *4 : 242850N/1260600E RADIUS : 8NM