



## **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

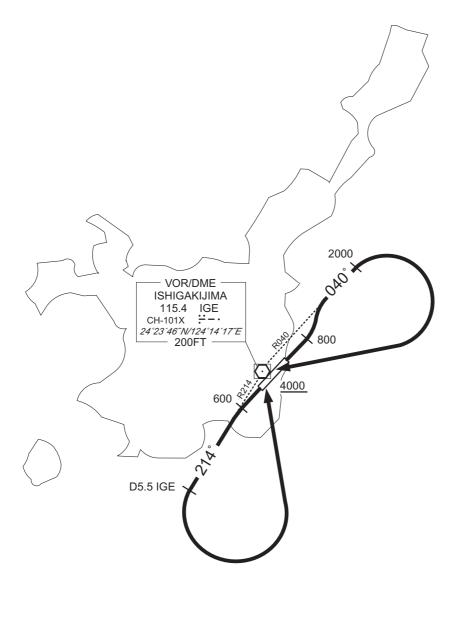
RWY04 : Climb RWY HDG to 800FT, turn left to intercept and proceed via IGE R040 to 2000FT,

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

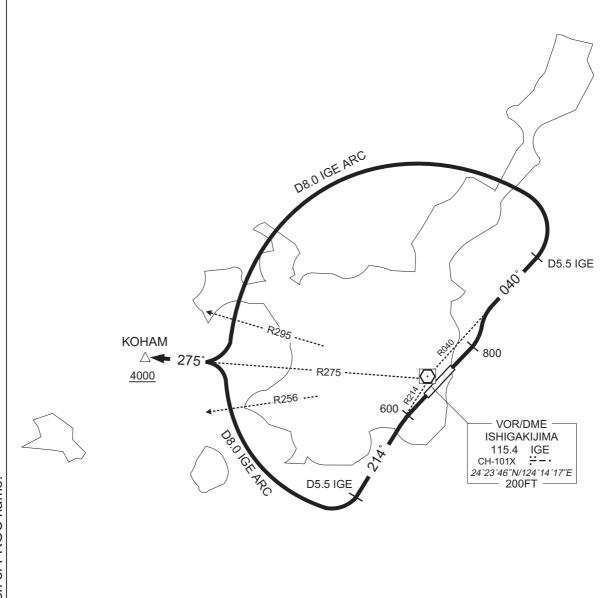
## KOHAM ONE DEPARTURE

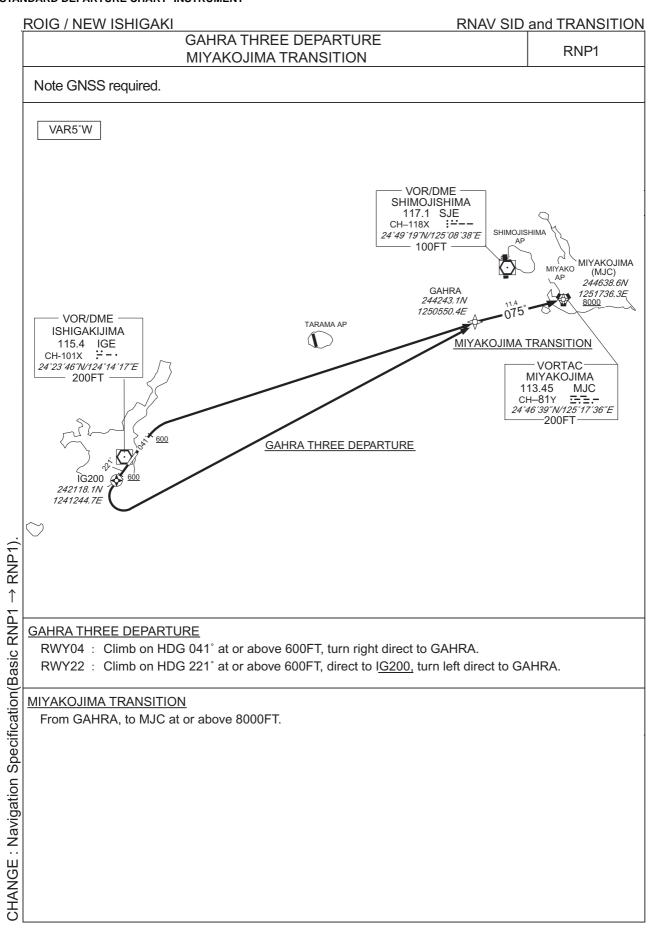
RWY04 : Climb RWY HDG to 800FT, turn left to intercept and proceed via IGE R040 to IGE R040/5.5DME, turn left, via IGE 8.0DME counterclockwise ARC, turn right to intercept and proceed via IGE R275 to KOHAM.

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

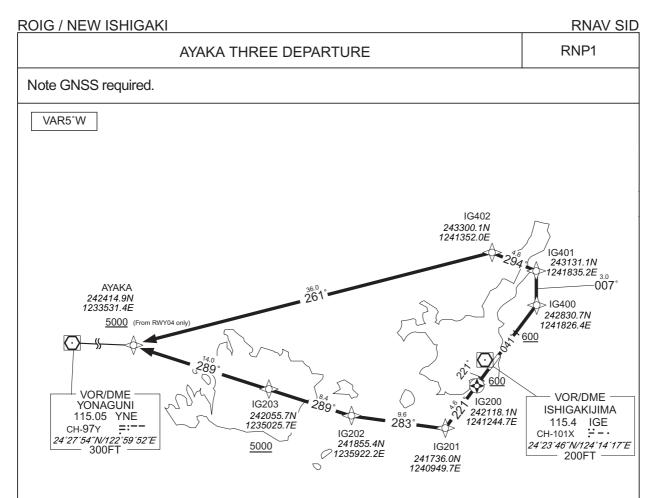
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	ı	1	041 (035.9)	-4.9	ı	ı	+600	1	1	RNP1
002	DF	GAHRA	-	-	-4.9	-	R	-	1	-	RNP1

## 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	ı	ı	221 (215.9)	-4.9	-	1	+600	-	1	RNP1
002	DF	IG200	Υ	ı	-4.9	-	ı	ı	-	1	RNP1
003	DF	GAHRA	-	1	-4.9	-	L	-	-	1	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	1	-	-4.9	1	-	-	-	1	RNP1
Ī	002	TF	MJC	1	075 (069.8)	-4.9	11.4	-	+8000	-	-	RNP1



 $RWY04\,:\,$  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° 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.

## ROIG / NEW ISHIGAKI

**RNAV SID** 

# AYAKA THREE DEPARTURE

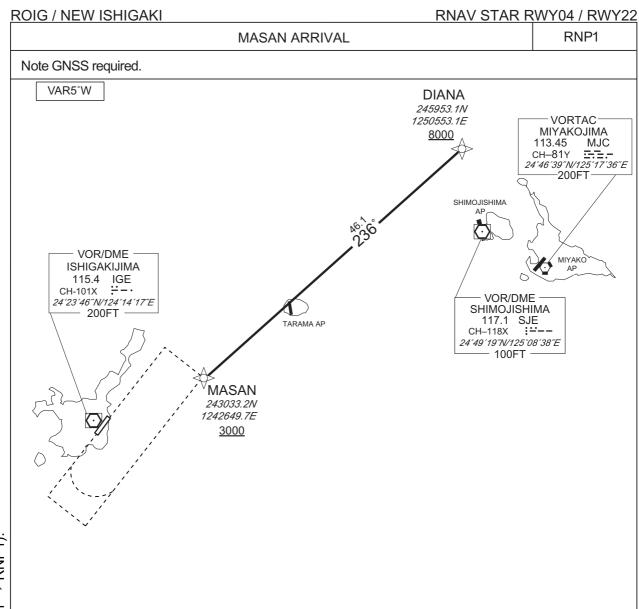
## RWY04

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	-	ı	041 (035.9)	-4.9	-	ı	+600	1	1	RNP1
002	DF	IG400	1	ı	-4.9	ı	ı	ı	1	1	RNP1
003	TF	IG401	1	007 (002.6)	-4.9	3.0	ı	ı	1	1	RNP1
004	TF	IG402	1	294 (289.1)	-4.9	4.6	ı	ı	1	1	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	ı	-	221 (215.9)	-4.9	-	ı	+600	ı	-	RNP1
002	DF	IG200	Y	ı	-4.9	ı	ı	ı	ı	ı	RNP1
003	TF	IG201	1	221 (215.7)	-4.9	4.6	ı	ı	1	ı	RNP1
004	TF	IG202	1	283 (277.9)	-4.9	9.6	ı	ı	1	ı	RNP1
005	TF	IG203	ı	289 (283.9)	-4.9	8.4		+5000		-	RNP1
006	TF	AYAKA	-	289 (283.8)	-4.9	14.0	-		-	-	RNP1

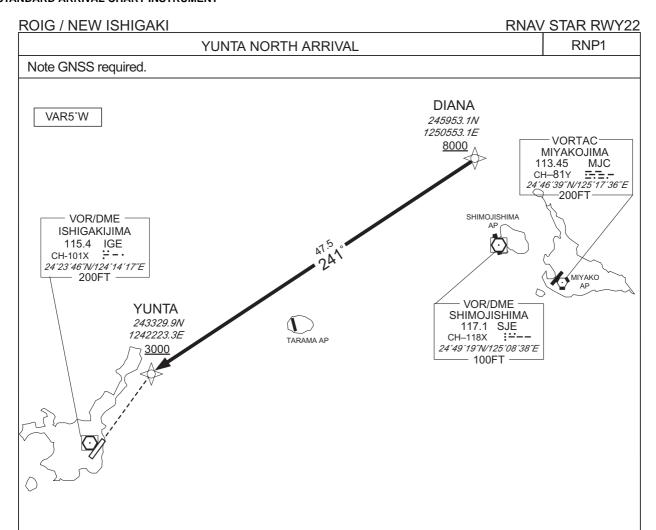
#### STANDARD ARRIVAL CHART-INSTRUMENT



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	_	_	RNP1
002	TF	MASAN	_	236 (230.5)	-5.1	46.1	_	+3000	_	_	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	_	_	RNP1
002	TF	YUNTA	_	241 (236.4)	-4.9	47.5	_	+3000	_	_	RNP1

#### STANDARD ARRIVAL CHART-INSTRUMENT

#### ROIG / NEW ISHIGAKI RNAV STAR RWY04/RWY22 DENSA ARRIVAL / JOTTO WEST ARRIVAL RNP1 Note GNSS required. **DENSA** 243626.5N 1241756.7E 3000 VAR5°W **DENSA ARRIVAL AYAKA** 40.5 242414.9N 1233531.4E 5000 (For DENSA ARRIVAL only) 713 VOR/DME VOR/DME -YONAGUNI **BUKRO** 16.7 ISHIGAKIJIMA 115.05 YNE 241953.0N 115.4 IGE CH-97Y =:--1235006.1E 24°27′54″W122°59′52″E — 300FT CH-101X JOTTO 24°23′46″N/124°14′17″E 5000 200FT 241438.3N 1240729.7E JOTTO WEST ARRIVAL 3000

## DENSA ARRIVAL

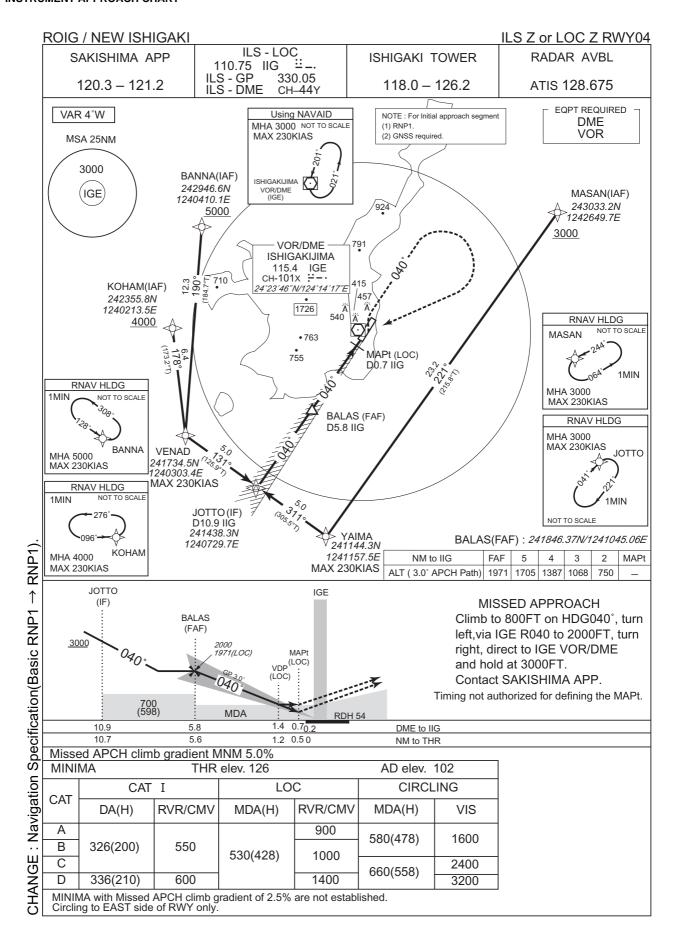
From AYAKA at or above 5000FT, to DENSA at or above 3000FT.

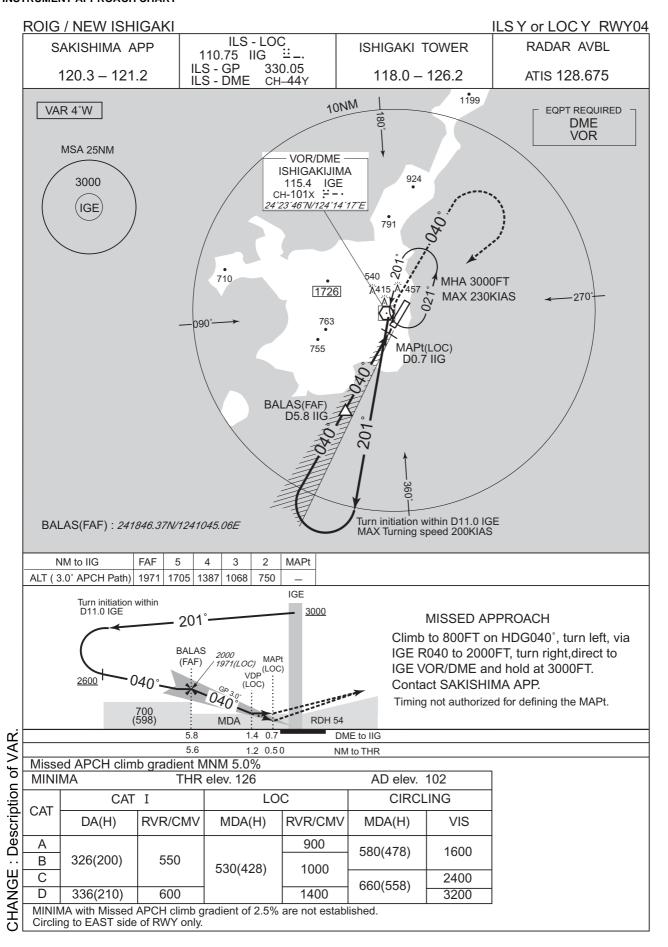
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction		•		Navigation Specification
001	IF	AYAKA	_	_	-4.9	_	_	+5000	_	_	RNP1
002	TF	DENSA	_	077 (072.3)	-4.9	40.5	_	+3000	_	_	RNP1

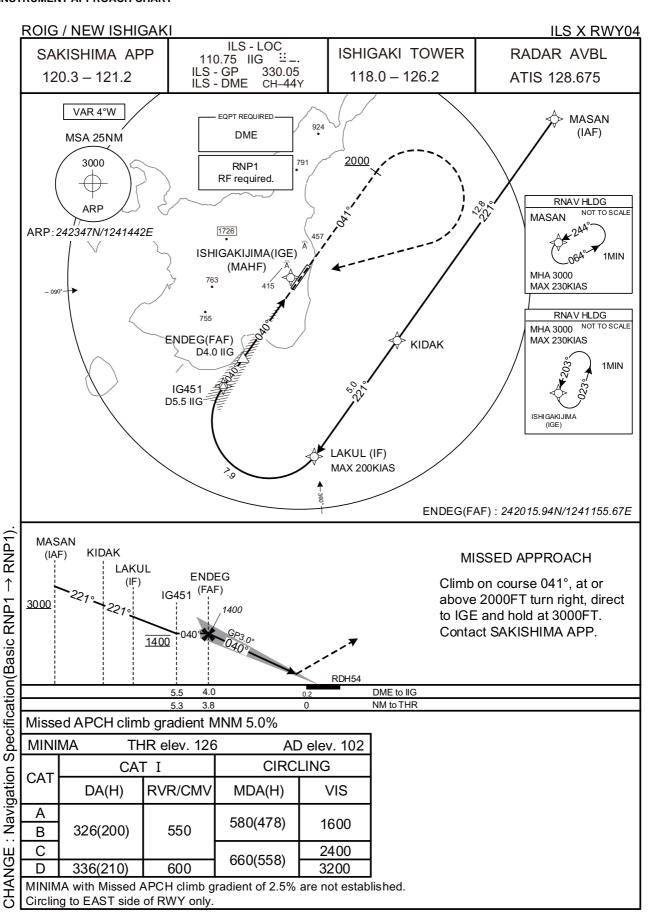
## JOTTO WEST ARRIVAL

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

Serial	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	_	_	_	_	_	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: Navigation Specification(Basic RNP1 → RNP1).

## **INSTRUMENT APPROACH CHART**

# ROIG / NEW ISHIGAKI

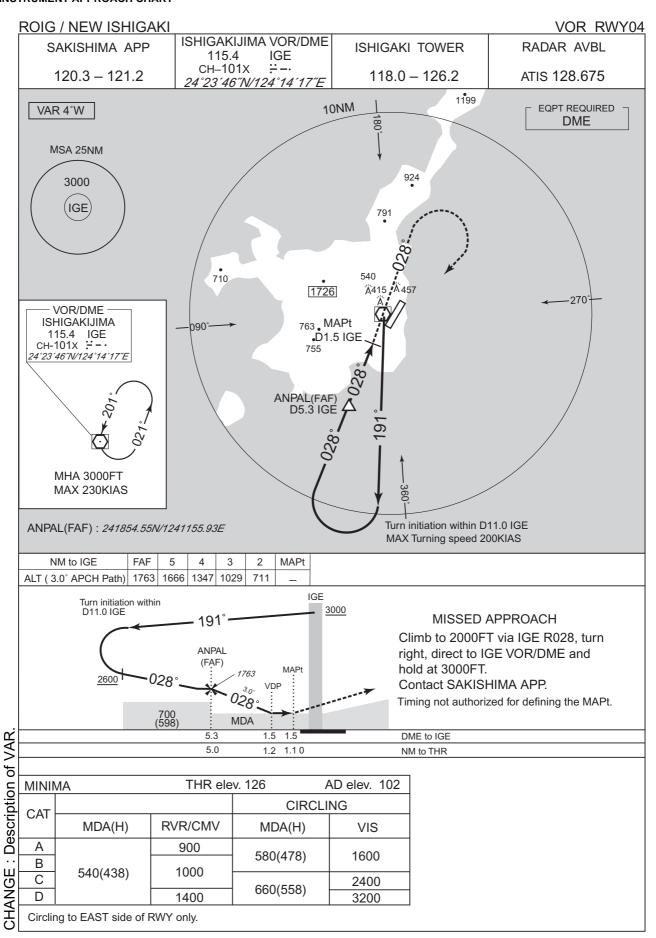
ILS X RWY04

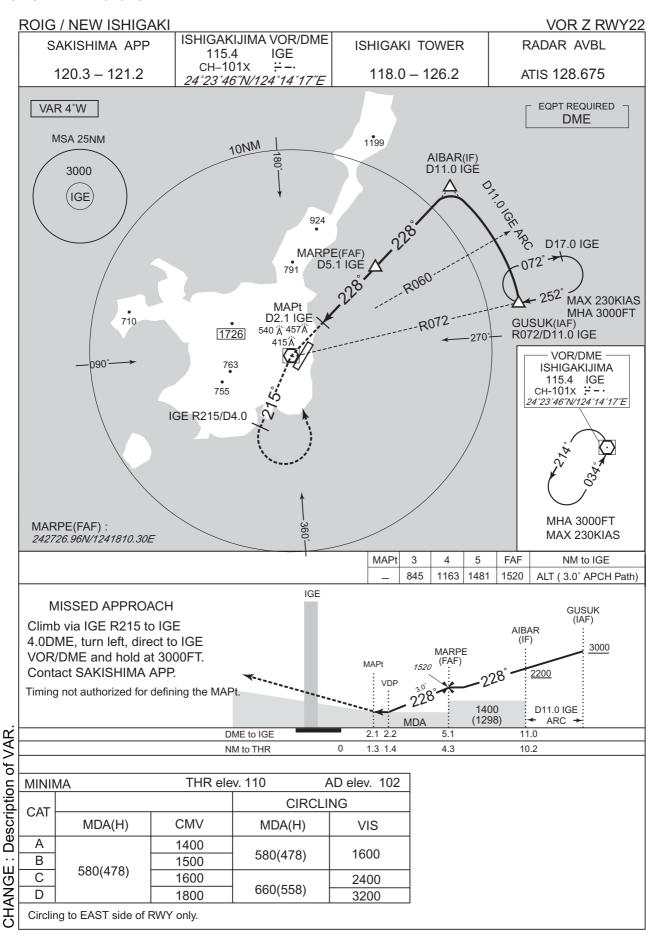
					<u>Codi</u>	ng Table	<u>)</u>				
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	MASAN	-	-	-5.1	-	-	+3000	-	-	RNP1
002	TF	KIDAK	-	221 (215.8)	-5.1	12.8	-	-	-	1	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
					1	•	•	•			
001	CA	-	-	041 (035.7)	-5.1	-	-	+2000	-	-	RNP1
002	DF	IGE	-	-	-5.1	-	R	3000	-	-	RNP1
		Inbour	-d	Τ	Outb	ound	I	Minimum	N 4		
D "	Waypoint	IIIDOUI	iu	Magnetic	Outb		Turn	Minimum	Maximum	Speed	Navigation

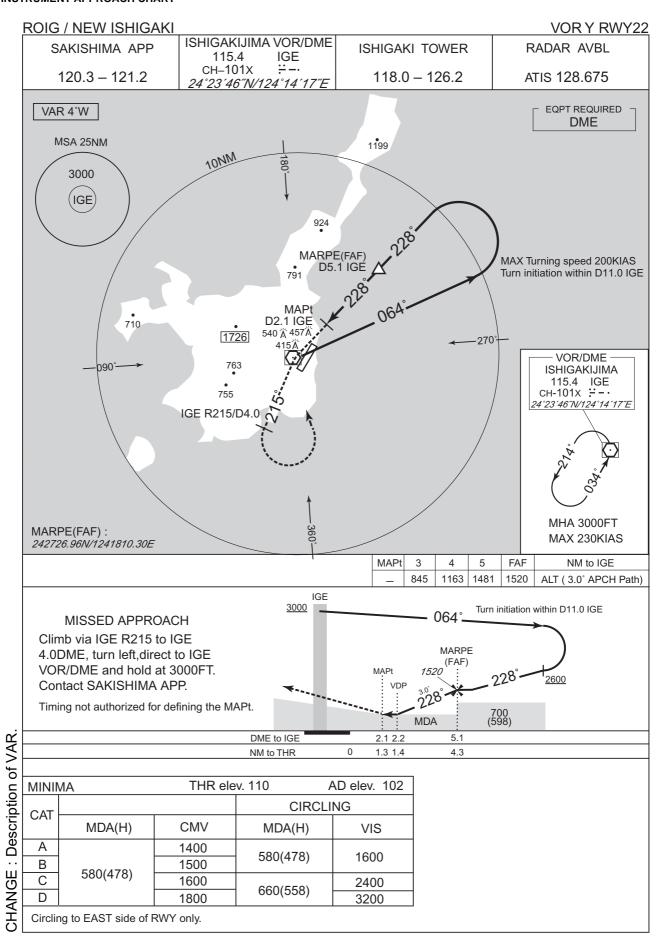
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	MASAN	244 (239.3)	-5.1	1.0 (-14000)	L	3000	FL140	-230 (-14000)	RNP1
Hold	IGE	203 (197.8)	-5.1	1.0 (-14000)	L	3000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

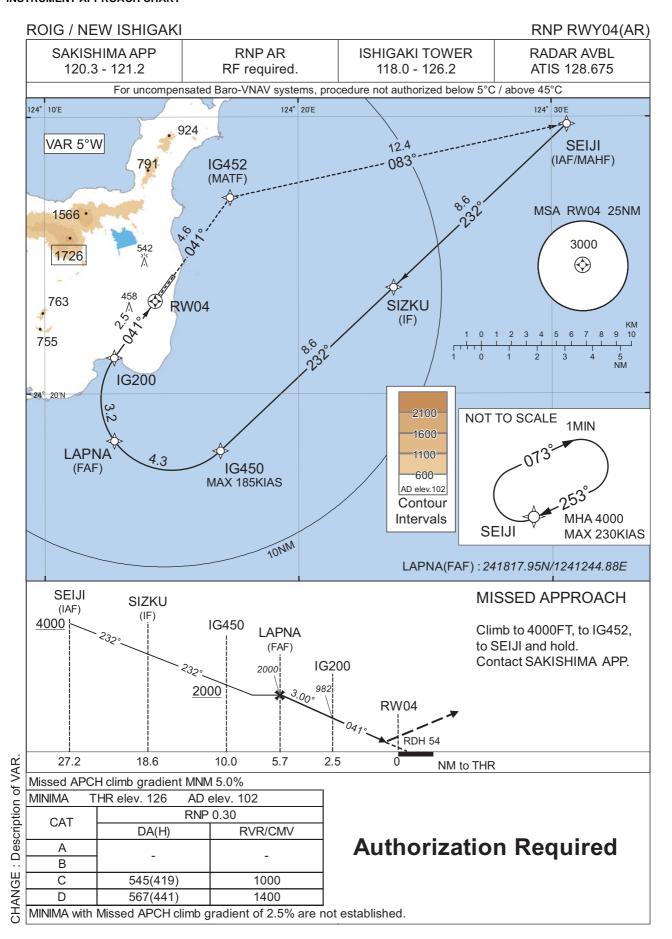
## Waypoint Coordinates

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		









# ROIG / NEW ISHIGAKI

RNP RWY04(AR)

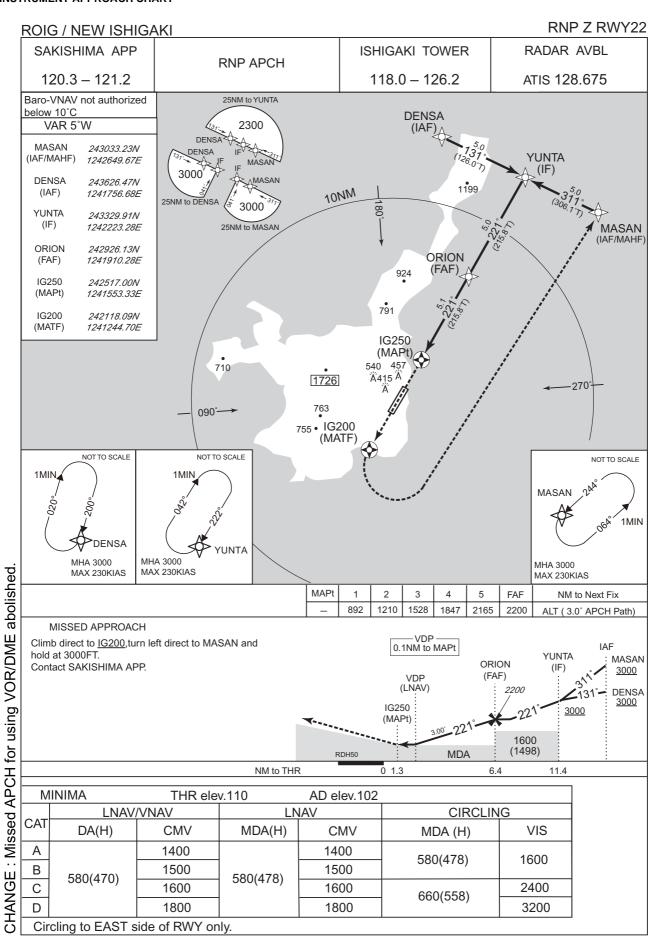
# Coding Table

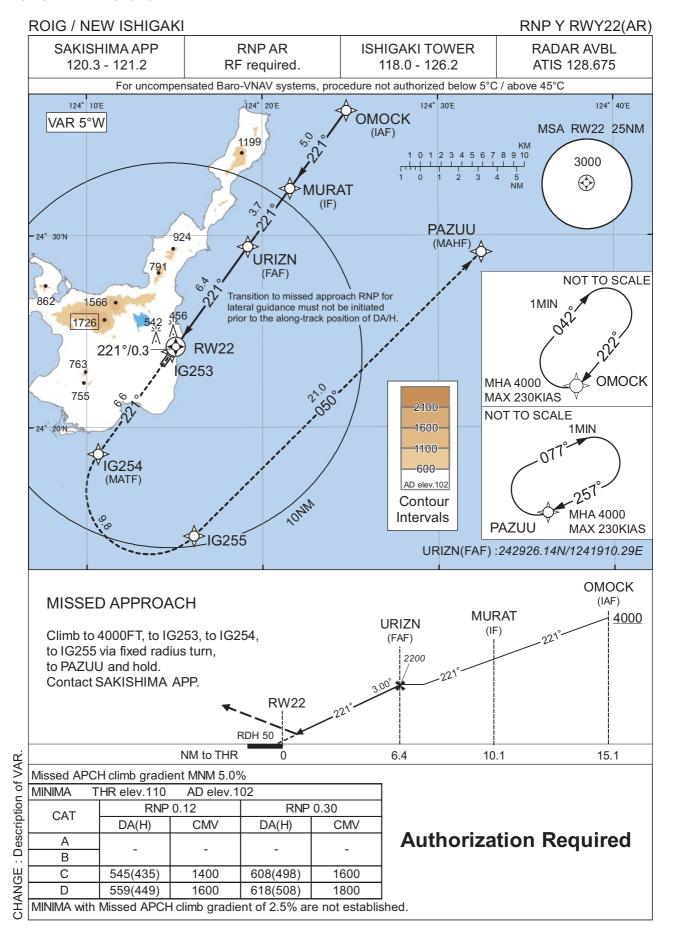
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	SEIJI	ı	-	-5.0	-	-	+4000	-	-	-
002	TF	SIZKU	1	232 (226.6)	-5.0	8.6	-	-	-	-	1.0
003	TF	IG450	1	232 (226.6)	-5.0	8.6	-	+2000	-185	-	1.0
004	RF Center: IGRF1 r=2.55NM	LAPNA	1	-	-5.0	4.3	R	2000	1	-	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		
10402	242700.0010 1241710.102	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	-	-	+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	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	-	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	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 /
<b>BRG/DIST</b>
updated.
: Map
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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

