



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,

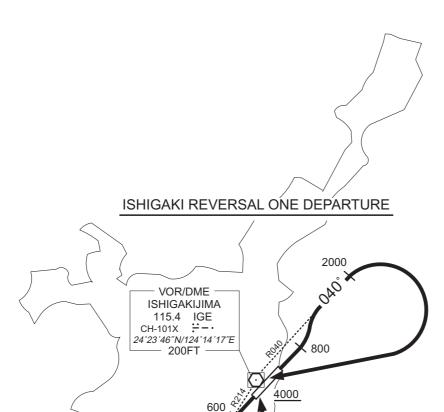
turn right, direct to IGE VOR/DME.

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.

D5.5 IGE



ROIG / NEW ISHIGAKI

SID

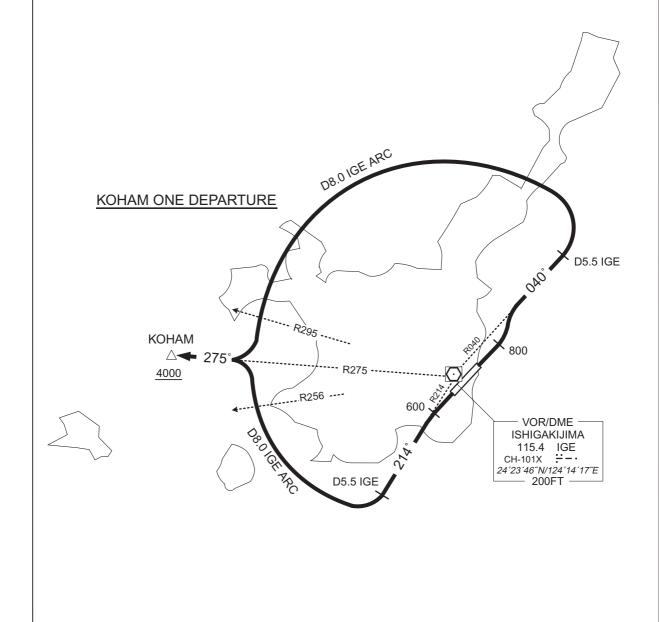
KOHAM ONE DEPARTURE

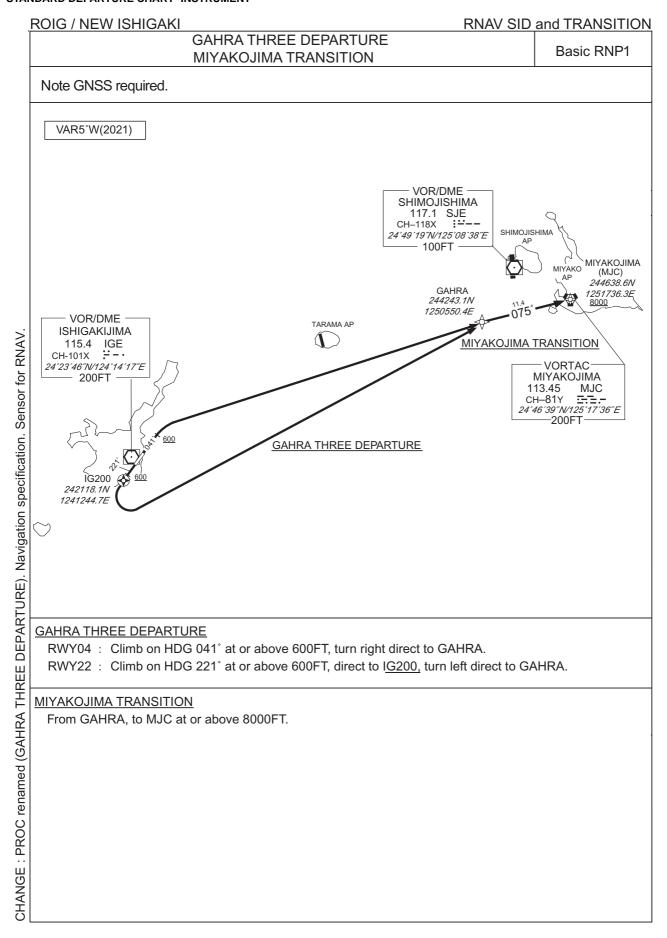
RWY04 : Climb RWY HDG to 800FT, turn left to intercept and proceed via IGE R040 to IGE R040/5.5DME, turn left, via IGE 8.0DME counterclockwise ARC,turn right to intercept and proceed via IGE R275 to KOHAM.

Cross KOHAM at or above 4000FT.

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

Cross KOHAM at or above 4000FT.





ROIG / NEW ISHIGAKI

RNAV SID and TRANSITION

GAHRA THREE DEPARTURE

RWY04

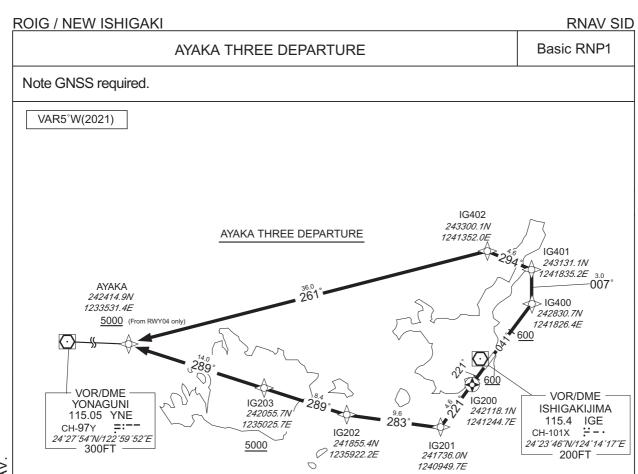
Serial Number	Path Descriptor	7.	Fly Over		Magnetic Variation		Turn Direction	Altitude (FT)	l '		Navigation Specification
001	VA	_	_	041 (035.9)	-4.9	_	_	+600	_	_	Basic RNP1
002	DF	GAHRA	_	_	-4.9	_	R	_	_	_	Basic RNP1

RWY22

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	VA	_	_	221 (215.9)	-4.9	_	1	+600	_	_	Basic RNP1
002	DF	IG200	Υ	_	-4.9	_	_	_	_	_	Basic RNP1
003	DF	GAHRA	_	_	-4.9	_	L	_	_	_	Basic RNP1

MIYAKOJIMA TRANSITION

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



AYAKA THREE DEPARTURE

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 <u>IG200</u>, to IG201, to IG202, to IG203 at or above 5000FT, to AYAKA.

NOTE RWY04 : 4.0% climb gradient required up to 2000FT.

OBST ALT 836FT at 9.53NM 021° FM end of RWY04.

ROIG / NEW ISHIGAKI

RNAV SID

AYAKA THREE DEPARTURE

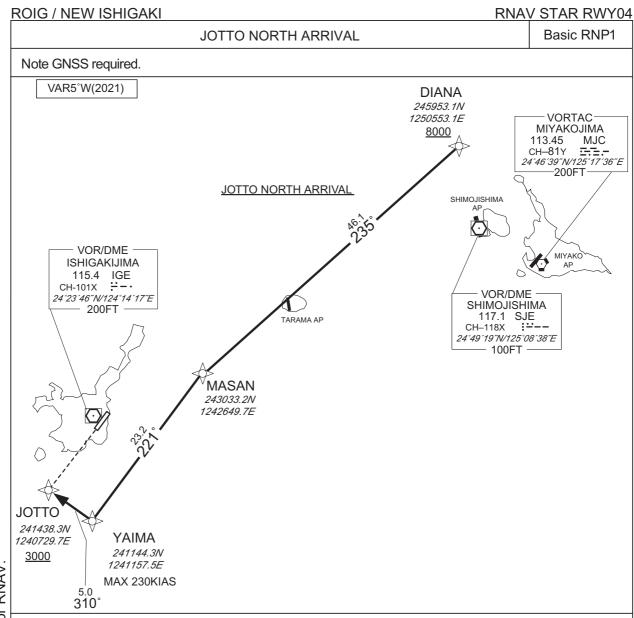
RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	_	_	041 (035.9)	-4.9	_	_	+600	_	_	Basic RNP1
002	DF	IG400	_	_	-4.9	_	_	_	_	_	Basic RNP1
003	TF	IG401	_	007 (002.6)	-4.9	3.0	_	_	_	_	Basic RNP1
004	TF	IG402	_	294 (289.1)	-4.9	4.6	_	_	_	_	Basic RNP1
005	TF	AYAKA	_	261 (256.1)	-4.9	36.0	_	+5000	_	_	Basic RNP1

RWY22

1 1 1 1 1 2											
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	VA	_	_	221 (215.9)	-4.9	_	_	+600	_	_	Basic RNP1
002	DF	IG200	Υ	_	-4.9	_	_	_	_	_	Basic RNP1
003	TF	IG201	_	221 (215.7)	-4.9	4.6	_	_	_	_	Basic RNP1
004	TF	IG202	_	283 (277.9)	-4.9	9.6	_	_	_	_	Basic RNP1
005	TF	IG203	_	289 (283.9)	-4.9	8.4	_	+5000	_	_	Basic RNP1
006	TF	AYAKA	_	289 (283.8)	-4.9	14.0	_	_	_	_	Basic RNP1

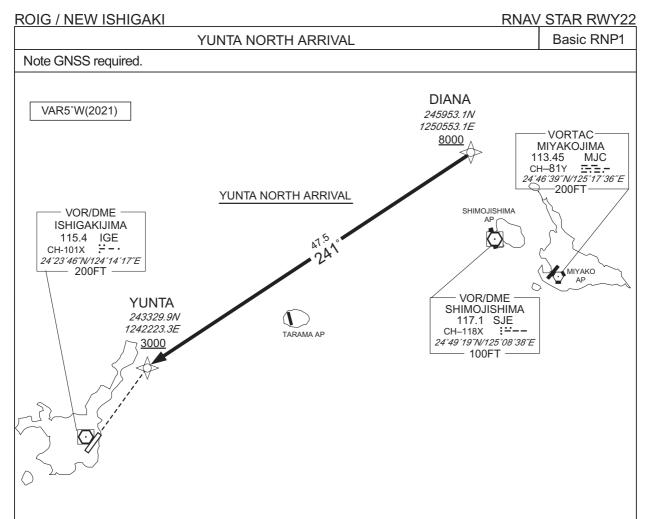
STANDARD ARRIVAL CHART-INSTRUMENT



JOTTO NORTH ARRIVAL

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

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	DIANA	_	_	-4.9	_	_	+8000	_	_	Basic RNP1
002	TF	MASAN	_	235 (230.5)	-4.9	46.1	_	_	_	_	Basic RNP1
003	TF	YAIMA	_	221 (215.8)	-4.9	23.2	_	_	-230	_	Basic RNP1
004	TF	JOTTO	_	310 (305.5)	-4.9	5.0	_	+3000	_	_	Basic RNP1



YUNTA NORTH ARRIVAL

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

Serial Number	Path Descriptor	Waypoint Identifier			Magnetic Variation		Turn Direction		•		Navigation Specification
001	IF	DIANA	_	_	-4.9	_	_	+8000	_	_	Basic RNP1
002	TF	YUNTA	_	241 (236.4)	-4.9	47.5	_	+3000	_	_	Basic RNP1

STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI RNAV STAR RWY04/RWY22 DENSA ARRIVAL / JOTTO WEST ARRIVAL Basic RNP1 Note GNSS required. **DENSA** 243626.5N 1241756.7E 3000 VAR5°W(2021) **DENSA ARRIVAL AYAKA** 242414.9N 1233531.4E 5000 (For DENSA ARRIVAL only) VOR/DME VOR/DME -YONAGUNI **BUKRO** 16.7 ISHIGAKIJIMA 115.05 YNE 241953.0N 115.4 IGE CH-97Y =:--1235006.1E 24°27′54″N/122°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

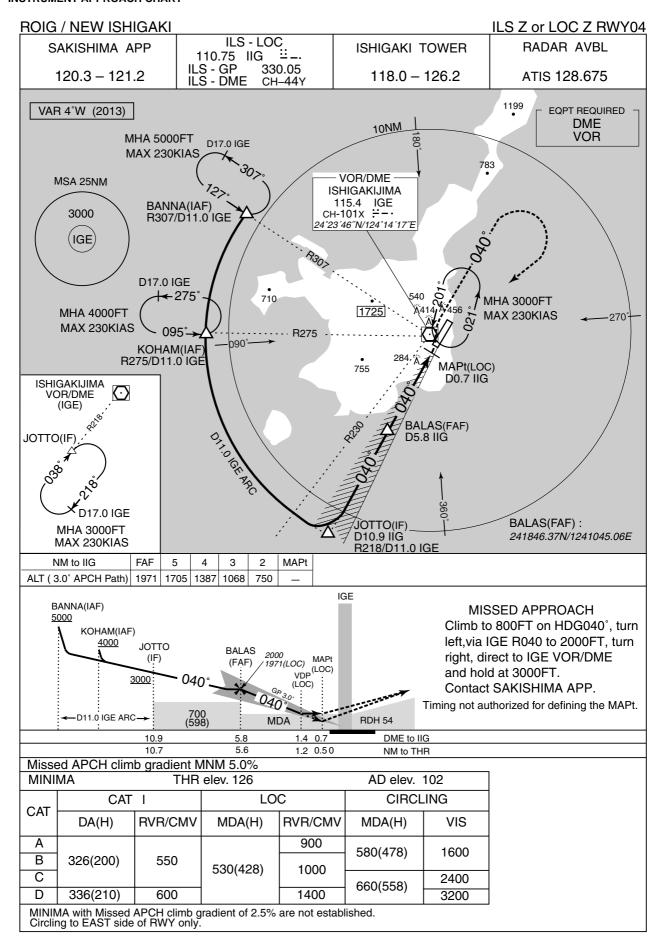
From AYAKA at or above 5000FT, to DENSA at or above 3000FT.

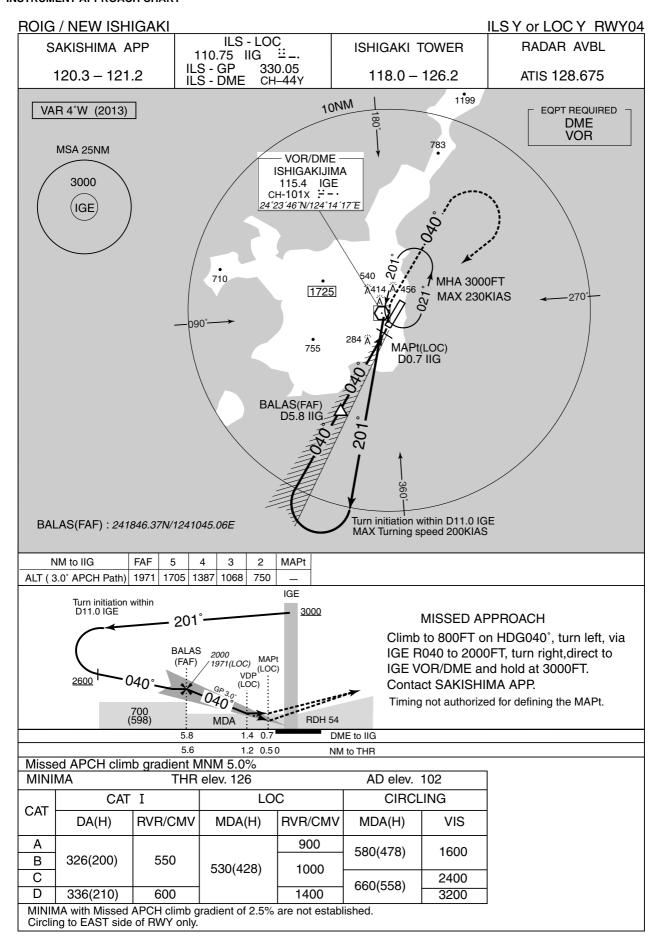
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	l '		Navigation Specification
001	IF	AYAKA	_	_	-4.9	_	_	+5000	_	_	Basic RNP1
002	TF	DENSA	_	077 (072.3)	-4.9	40.5	_	+3000	_	_	Basic RNP1

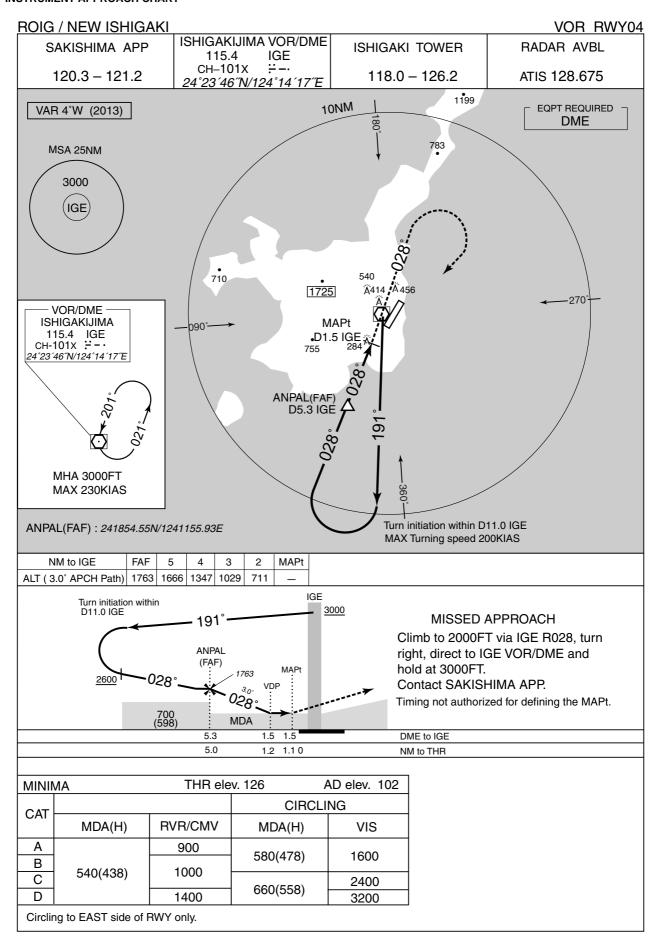
JOTTO WEST ARRIVAL

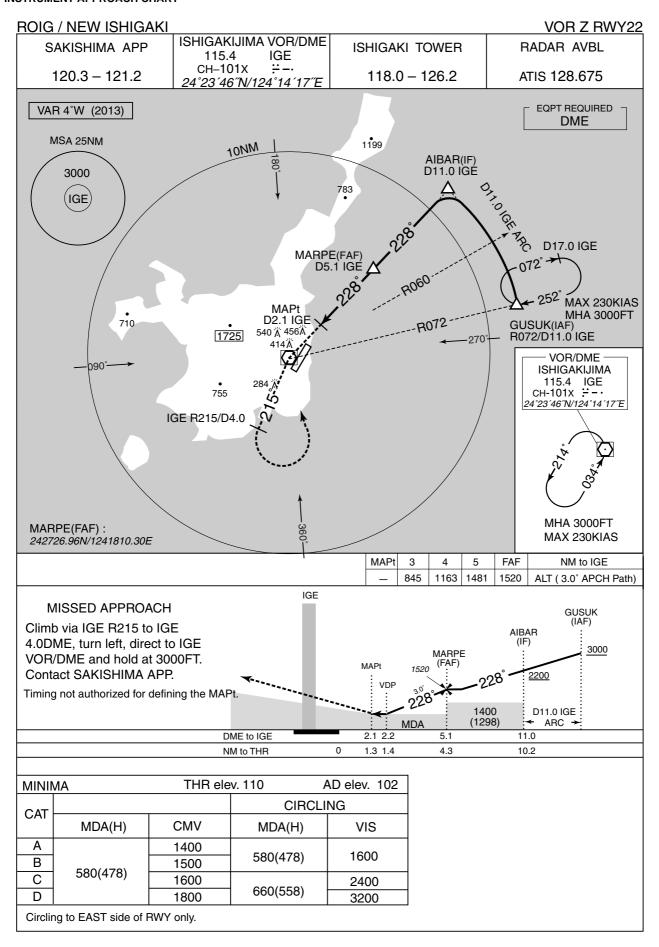
From AYAKA, to BUKRO at or above 5000FT, to JOTTO at or above 3000FT.

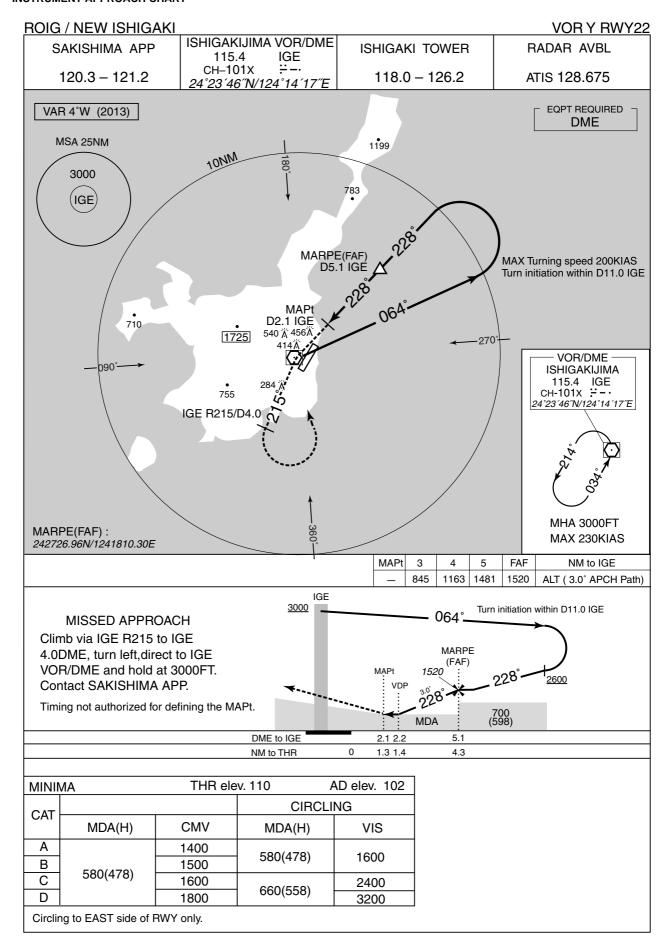
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	AYAKA	_	_	-4.9	_	_	_	_	_	Basic RNP1
002	TF	BUKRO	_	113 (108.1)	-4.9	14.0	_	+5000	_	_	Basic RNP1
003	TF	JOTTO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

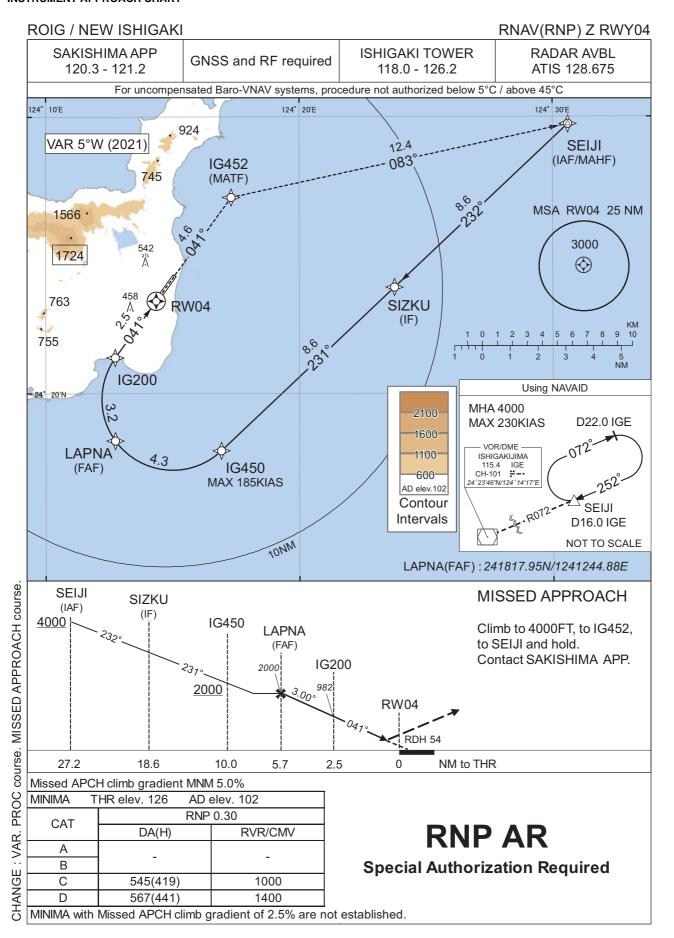












ROIG / NEW ISHIGAKI

RNAV(RNP) Z RWY04

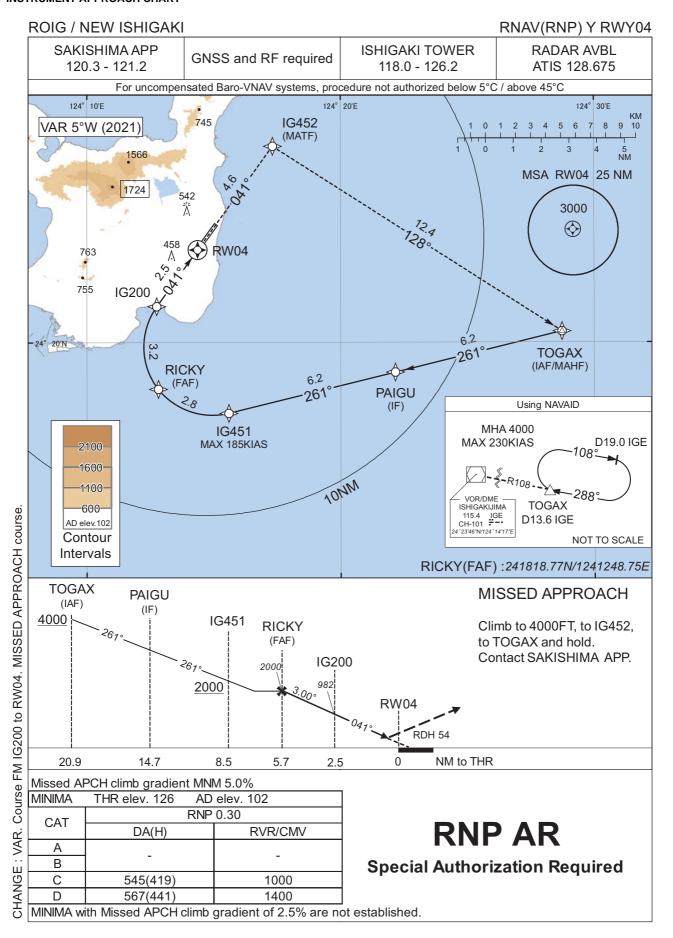
RNAV(RNP) Z RWY04

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	-	ı	-4.9	-	-	+4000	ı	-	-
002	TF	SIZKU	-	232 (226.6)	-4.9	8.6	1	ı	1	1	1.0
003	TF	IG450	1	231 (226.6)	-4.9	8.6	-	+2000	-185	-	1.0
004	RF Center: IGRF1 r=2.55NM	LAPNA	-	ı	-4.9	4.3	R	2000	1	1	1.0
005	RF Center: IGRF1 r=2.55NM	IG200	ı	1	-4.9	3.2	R	982	1	-3.00	0.3
006	TF	RW04	Υ	041 (035.7)	-4.9	2.5	1	180	1	-3.00/54	0.3
007	TF	IG452	-	041 (035.7)	-4.9	4.6	-	ı	1	-	1.0
800	TF	SEIJI	-	083 (077.6)	-4.9	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		



ROIG / NEW ISHIGAKI

RNAV(RNP) Y RWY04

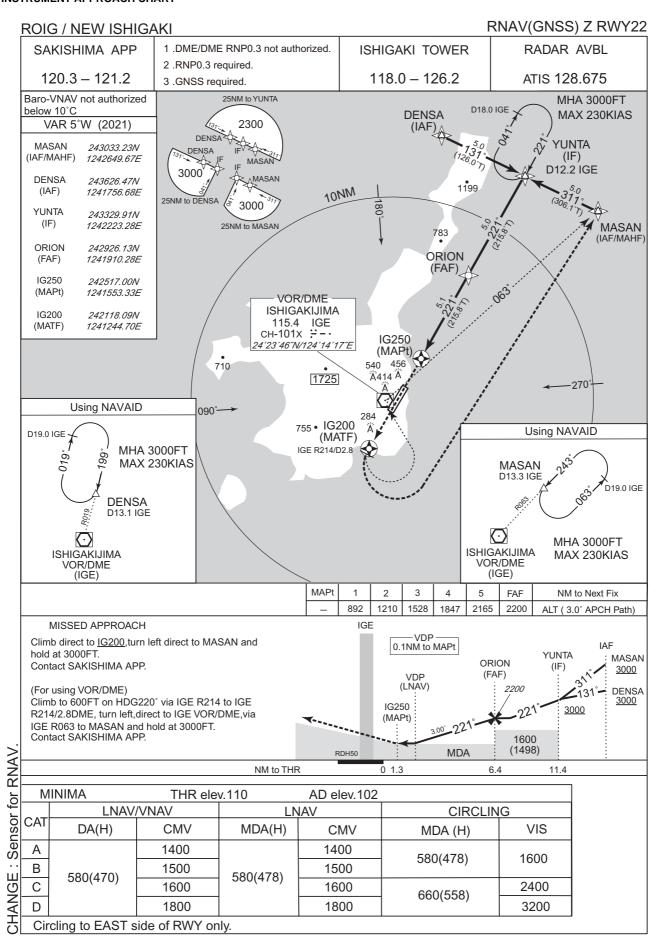
RNAV(RNP) Y RWY04

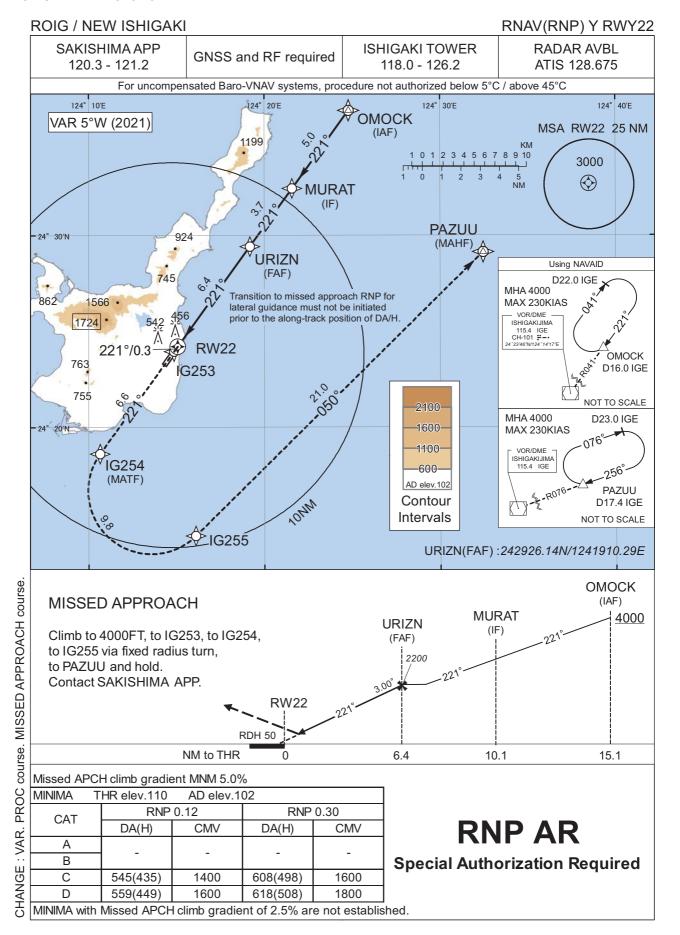
Coding Table

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	1	-	-4.9	-	-	+4000	ı	-	-
002	TF	PAIGU	1	261 (256.1)	-4.9	6.2	ı	ı	ı	ı	1.0
003	TF	IG451	1	261 (256.1)	-4.9	6.2	-	+2000	-185	-	1.0
004	RF Center: IGRF2 r=2.47NM	RICKY	1	ı	-4.9	2.8	R	2000	1	1	1.0
005	RF Center: IGRF2 r=2.47NM	IG200	ı	ı	-4.9	3.2	R	982	1	-3.00	0.3
006	TF	RW04	Υ	041 (035.7)	-4.9	2.5	ı	180	ı	-3.00/54	0.3
007	TF	IG452	-	041 (035.7)	-4.9	4.6	-	-	1	-	1.0
800	TF	TOGAX	-	128 (122.7)	-4.9	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		





ROIG / NEW ISHIGAKI

RNAV(RNP) Y RWY22

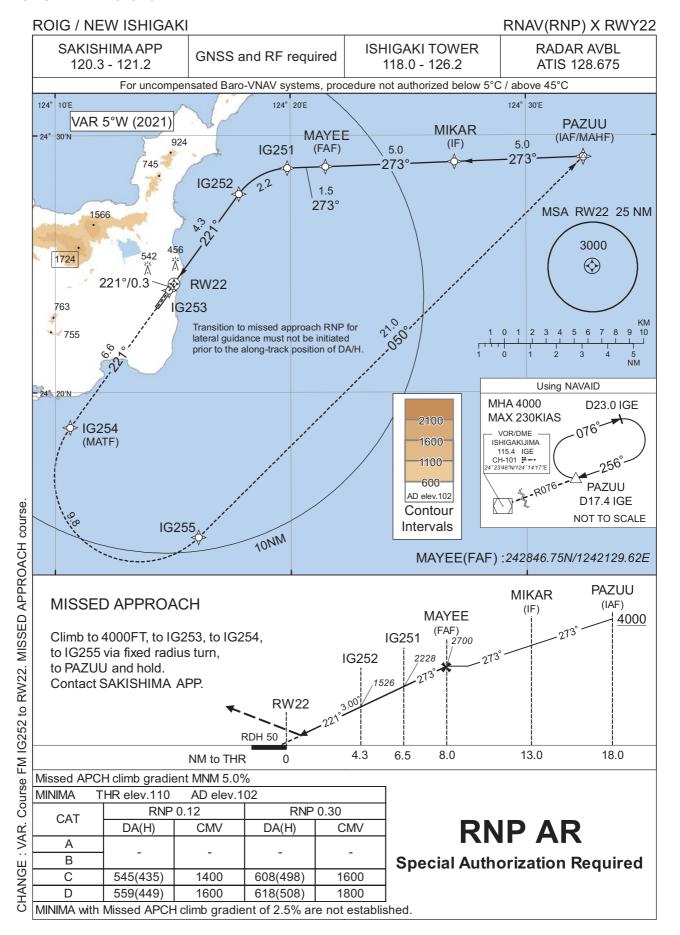
RNAV(RNP) Y RWY22

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	омоск	1	1	-4.9	1	1	+4000	-	-	-
002	TF	MURAT	1	221 (215.8)	-4.9	5.0	-	-	1	-	1.0
003	TF	URIZN	1	221 (215.8)	-4.9	3.7	-	2200	-	-	1.0
004	TF	RW22	Υ	221 (215.8)	-4.9	6.4	ı	160	1	-3.00/50	0.12 0.30
005	TF	IG253	1	221 (215.7)	-4.9	0.3	ı	ı	1	-	0.12 0.30
006	TF	IG254	1	221 (215.7)	-4.9	6.6	ı	ı	1	-	1.0
007	RF Center: IGRF3 r=3.28NM	IG255	ı	1	-4.9	9.8	L	1	ı	-	1.0
800	TF	PAZUU	•	050 (045.2)	-4.9	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			



ROIG / NEW ISHIGAKI

RNAV(RNP) X RWY22

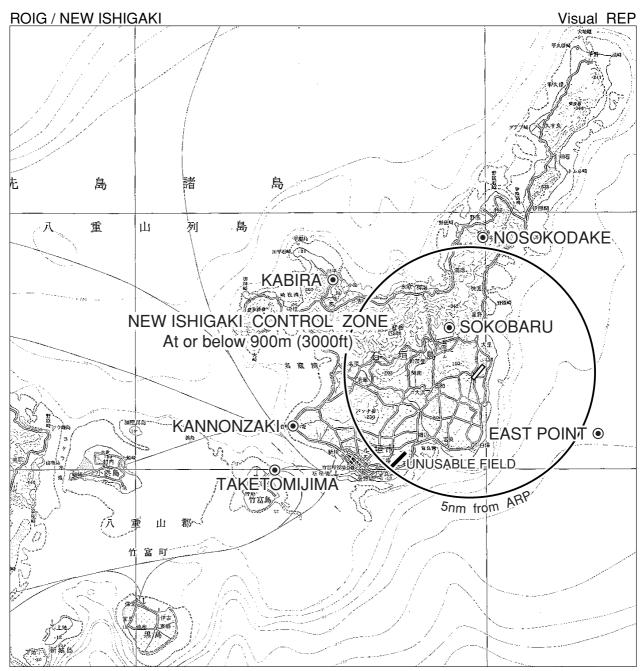
RNAV(RNP) X RWY22

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	1	1	-4.9	1	1	+4000	-	-	-
002	TF	MIKAR	-	273 (267.9)	-4.9	5.0	-		-	-	1.0
003	TF	MAYEE	1	273 (267.9)	-4.9	5.0	-	2700	-	-	1.0
004	TF	IG251	-	273 (267.8)	-4.9	1.5	-	2228	-	-3.00	0.12 0.30
005	RF Center: IGRF4 r=2.43NM	IG252	1	ı	-4.9	2.2	L	1526	ı	-3.00	0.12 0.30
006	TF	RW22	Υ	221 (215.7)	-4.9	4.3	-	160	-	-3.00/50	0.12 0.30
007	TF	IG253	1	221 (215.7)	-4.9	0.3	ı	ı	-	-	0.12 0.30
800	TF	IG254	ı	221 (215.7)	-4.9	6.6	ı	ı	-	-	1.0
009	RF Center: IGRF3 r=3.28NM	IG255	ı	-	-4.9	9.8	L	-	-	-	1.0
010	TF	PAZUU	-	050 (045.2)	-4.9	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			
		-		



Call sign	BRG / DIST from ARP	Remarks
野 底 岳 Nosokodake	006° / 5.5NM	Щ 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

