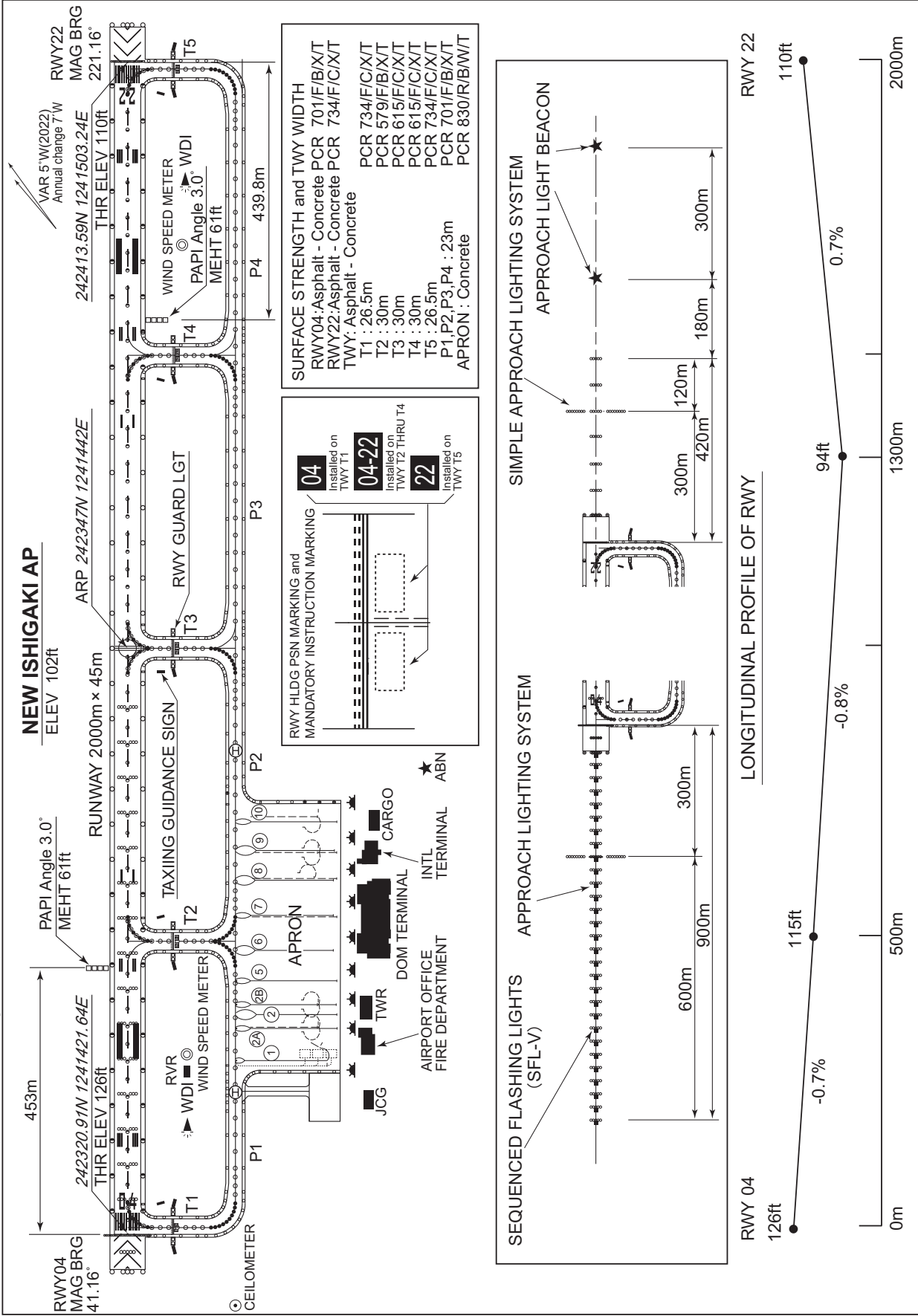


ROIG / NEW ISHIGAKI

AD CHART

CHANGE : Description of strength of pavement.



**INTENTIONALLY LEFT BLANK**

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.

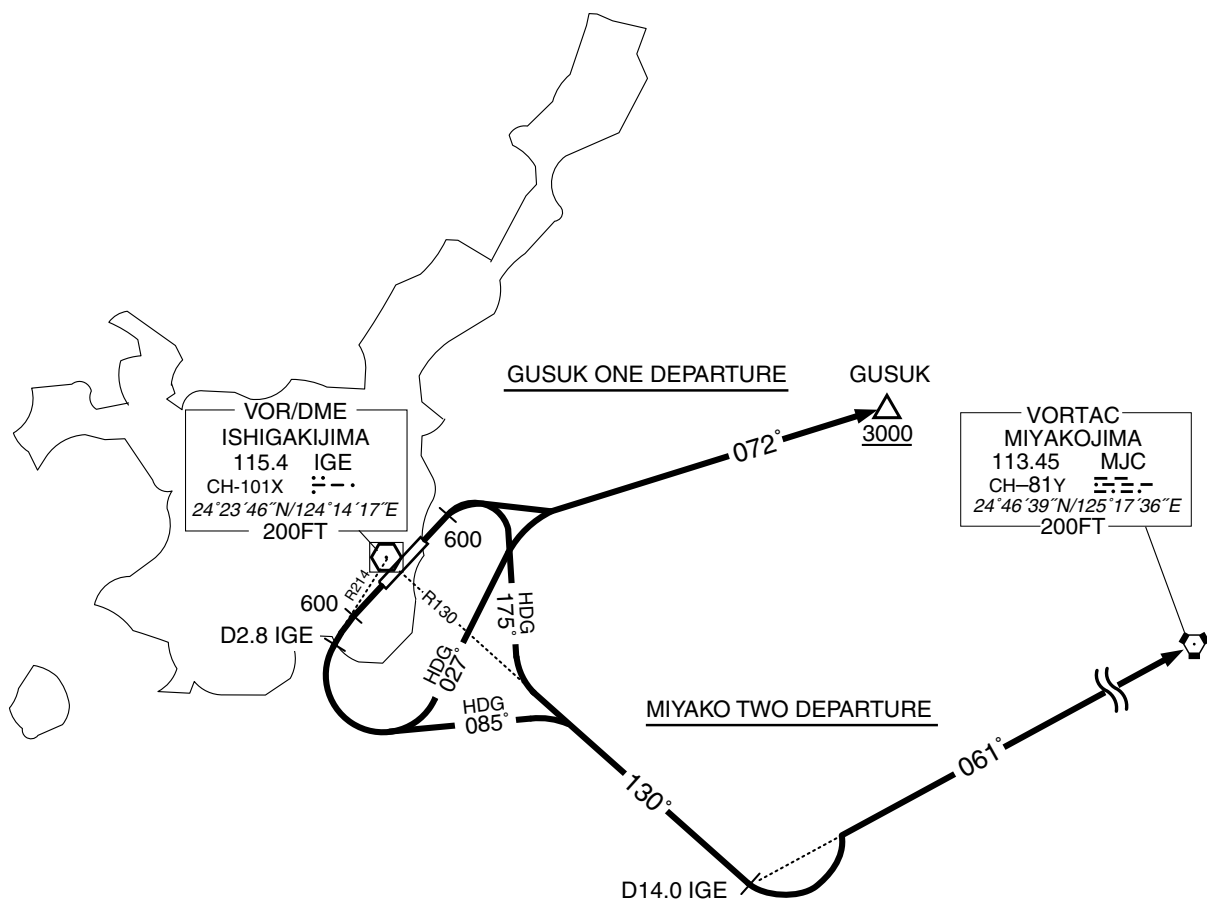
Cross GUSUK at or above 3000FT.

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

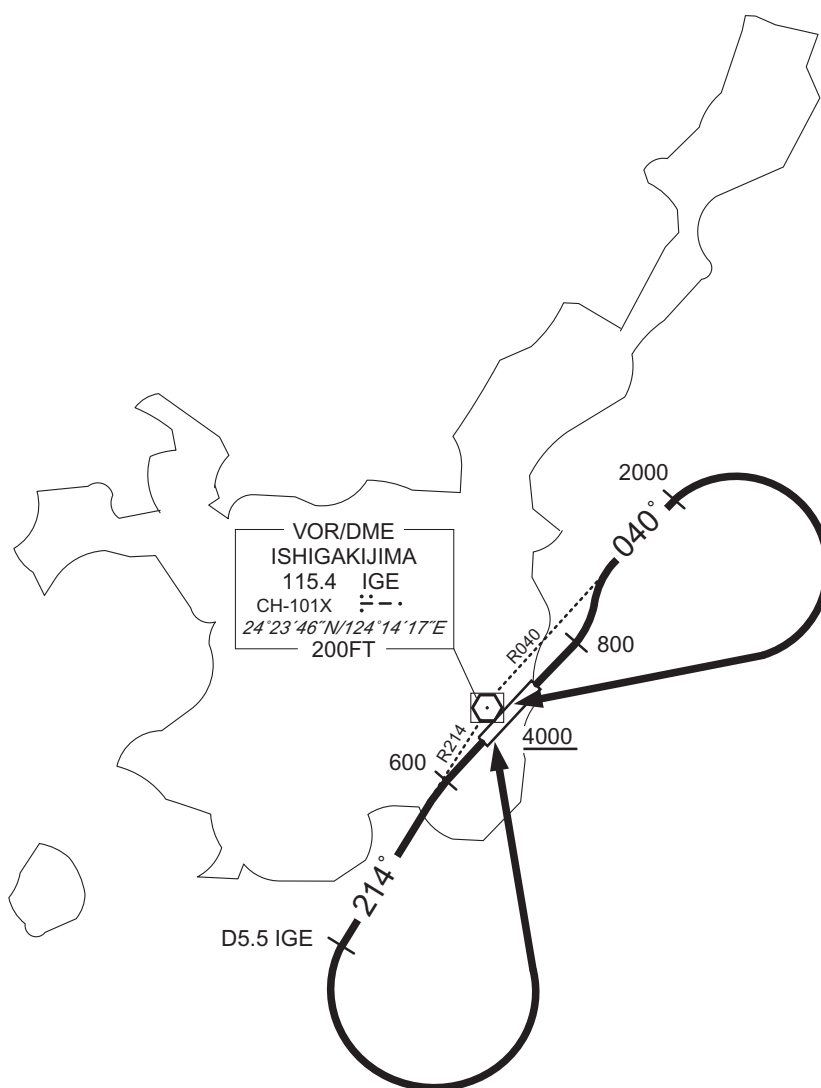
ISHIGAKI REVERSAL ONE DEPARTURE

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.



CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

SID

KOHAM ONE DEPARTURE

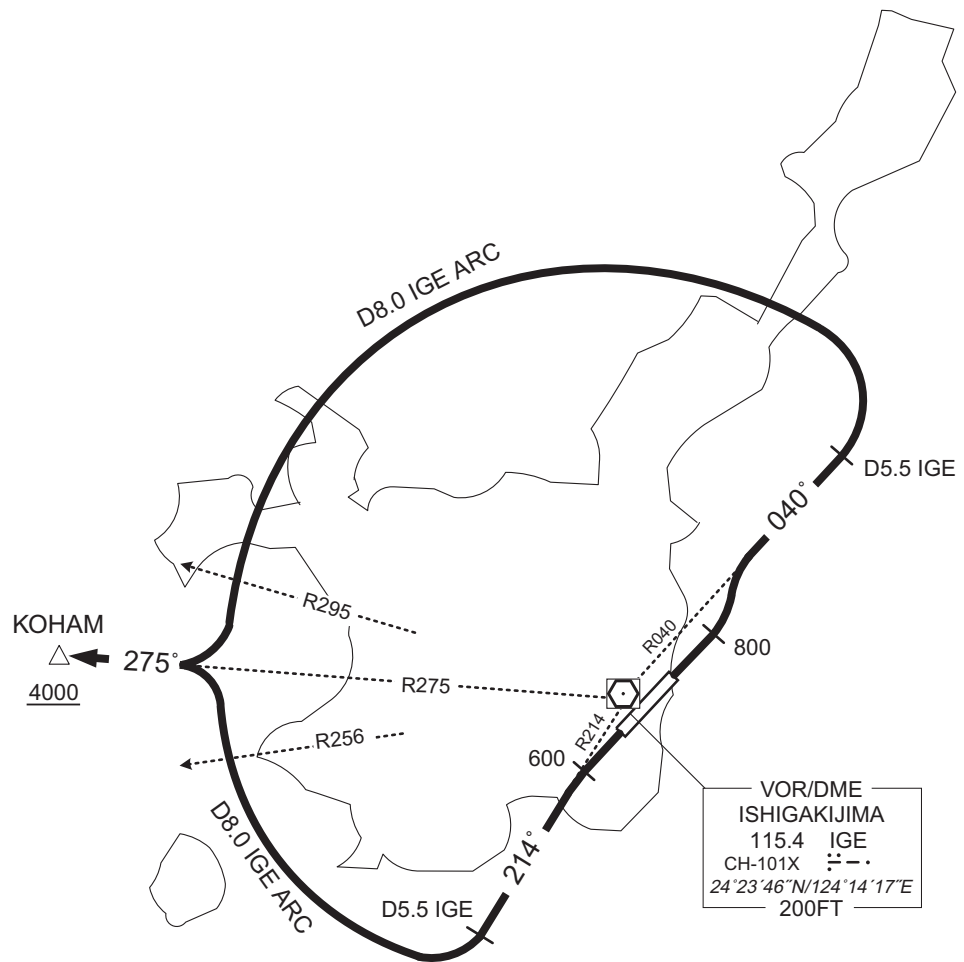
RWY04 : Climb RWY HDG to 800FT, turn left to intercept and proceed via IGE R040 to IGE R040/5.5DME, turn left, via IGE 8.0DME counterclockwise ARC,turn right to intercept and proceed via IGE R275 to KOHAM.

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.

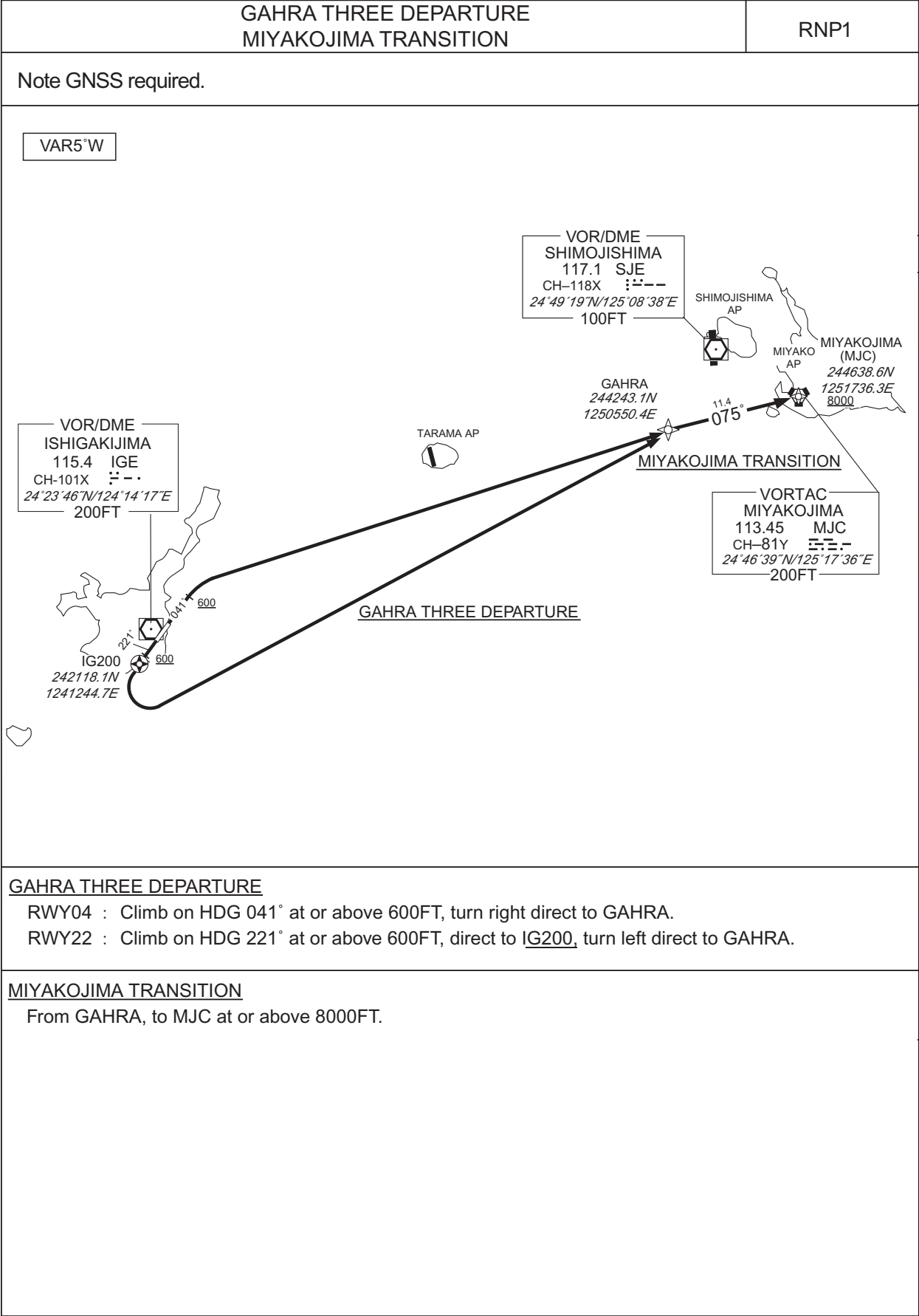
CHANGE : Description of PROC name.



STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV SID and TRANSITION



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT

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	-	-	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 : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT

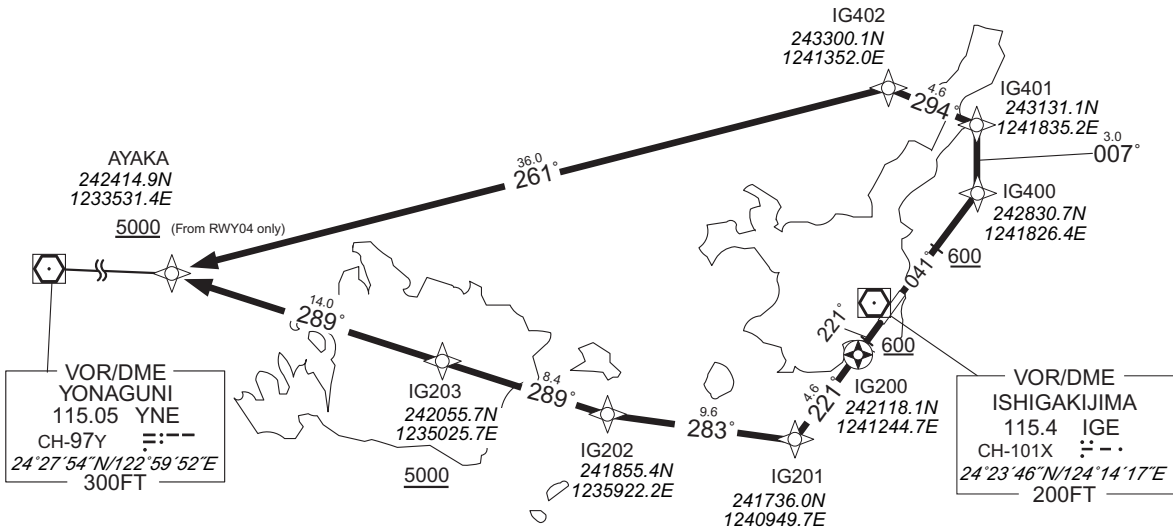
ROIG / NEW ISHIGAKI

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 : Navigation Specification(Basic RNP1 → RNP1).



STANDARD DEPARTURE CHART -INSTRUMENT

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	-	-	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

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

## STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI

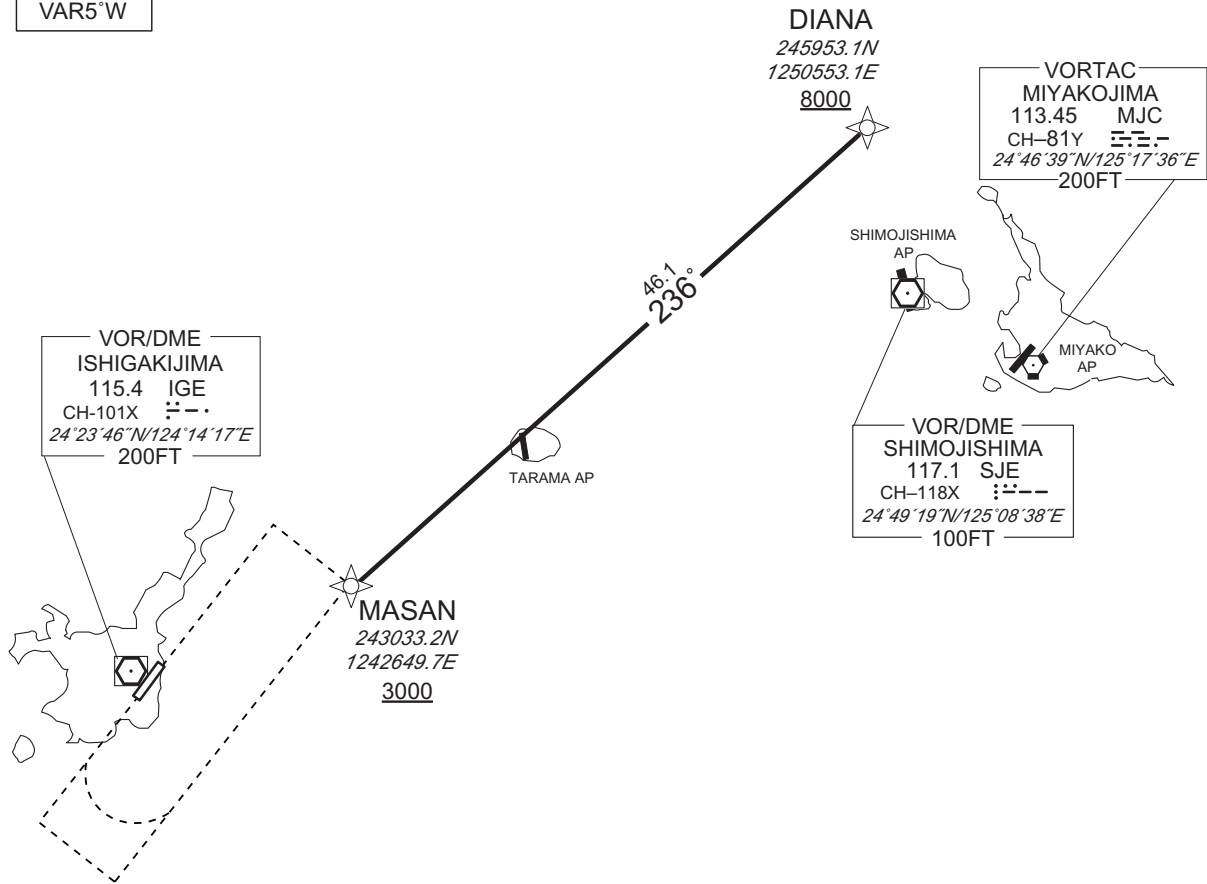
## RNAV STAR RWY04 / RWY22

## MASAN ARRIVAL

RNP1

Note GNSS required.

VAR5°W



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

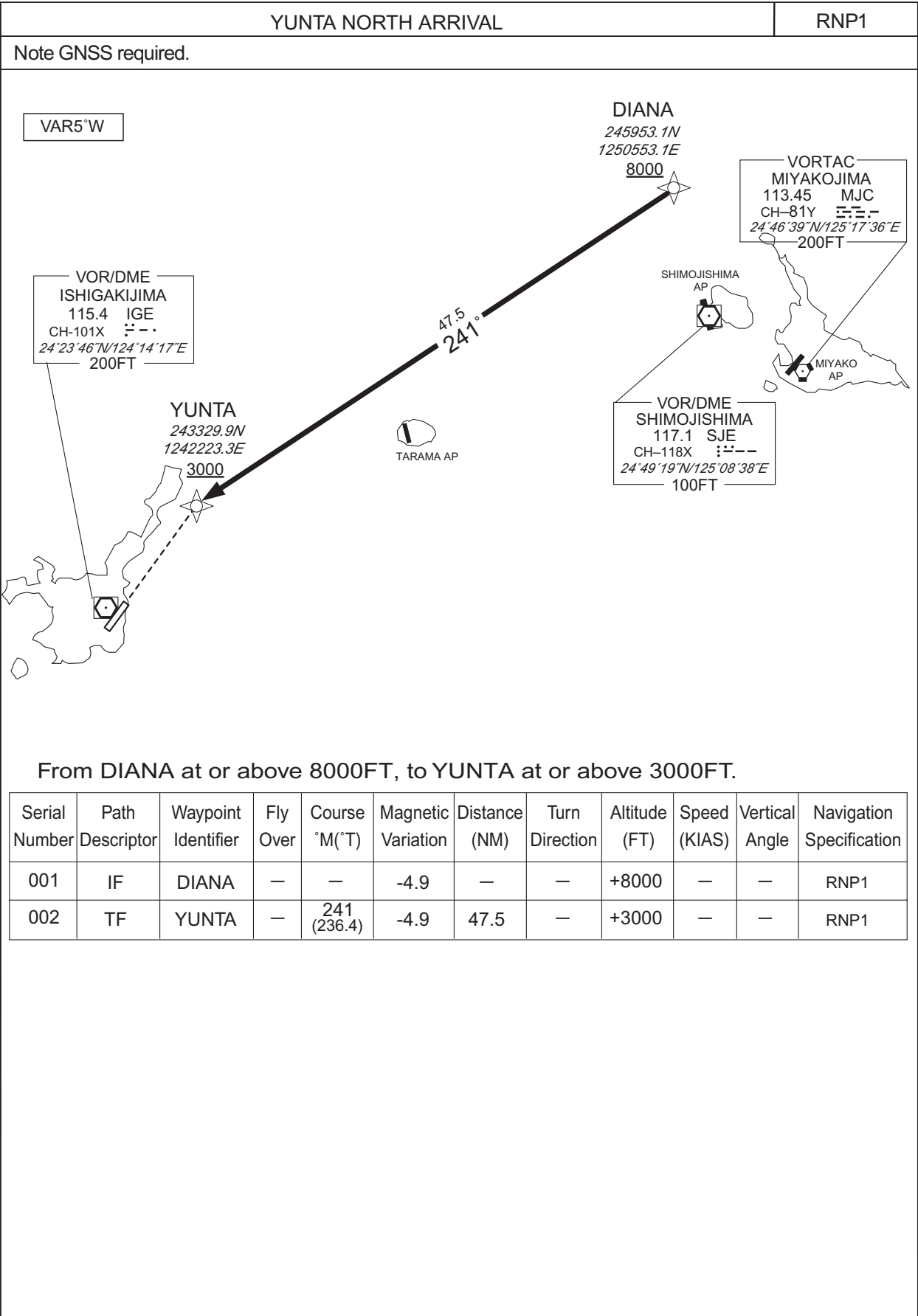
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	DIANA	—	—	-5.1	—	—	+8000	—	—	RNP1
002	TF	MASAN	—	236 (230.5)	-5.1	46.1	—	+3000	—	—	RNP1

CHANGE : Navigation Specification(Basic RNP1  $\rightarrow$  RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW ISHIGAKI

RNAV STAR RWY22



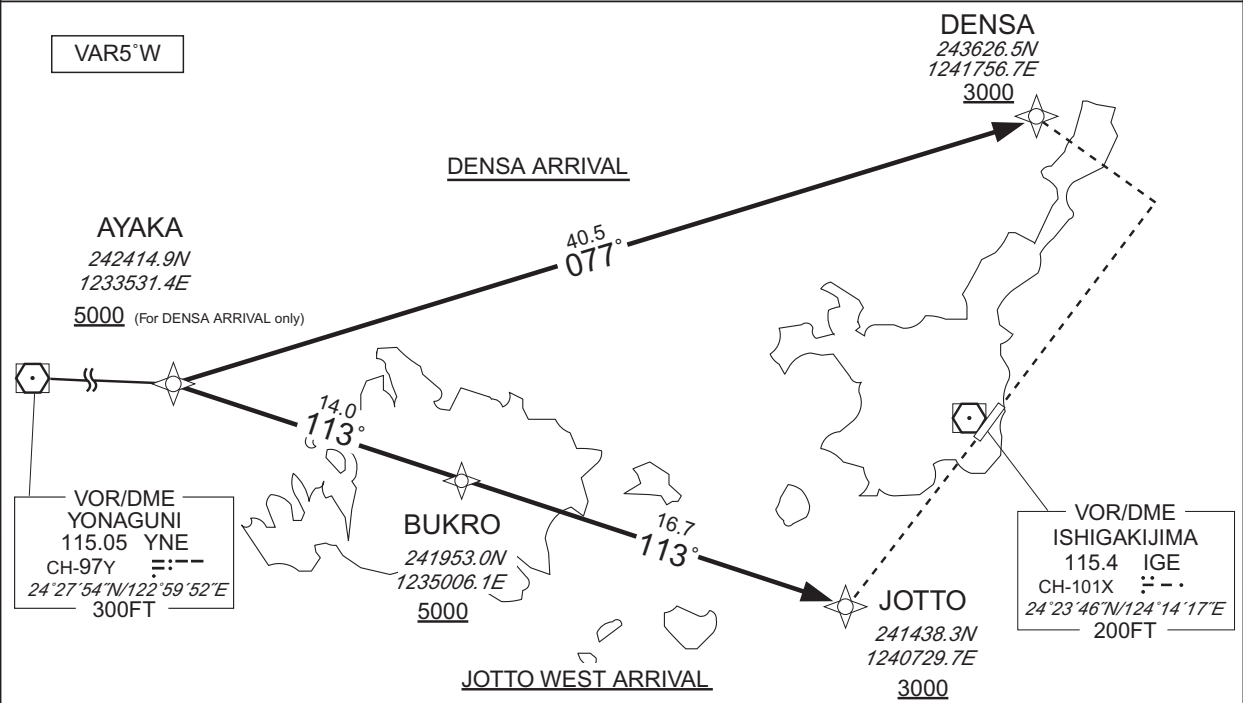
STANDARD ARRIVAL CHART-INSTRUMENT

ROIG / NEW 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

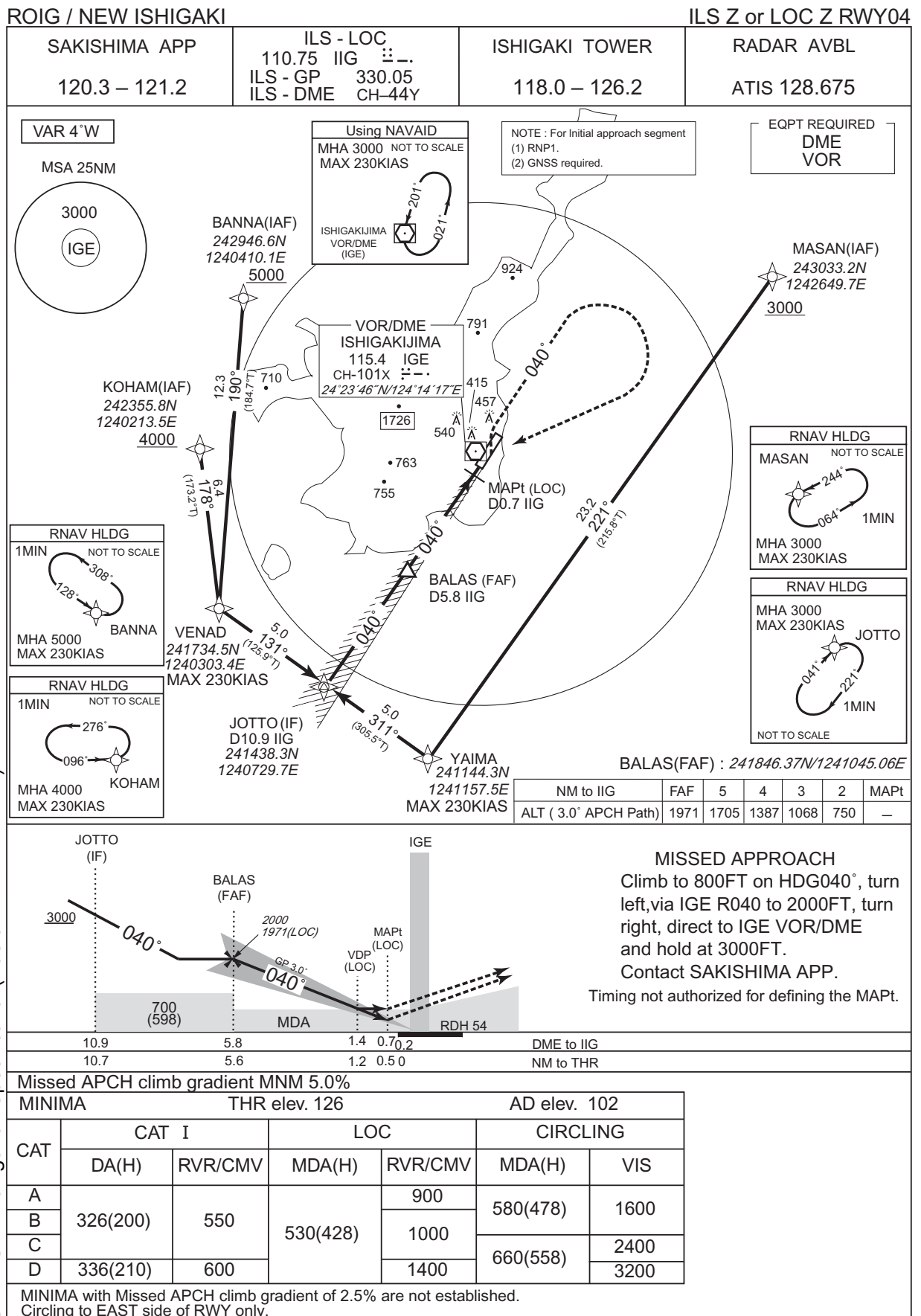
**JOTTO WEST ARRIVAL**

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 : Navigation Specification(Basic RNP1 → RNP1).

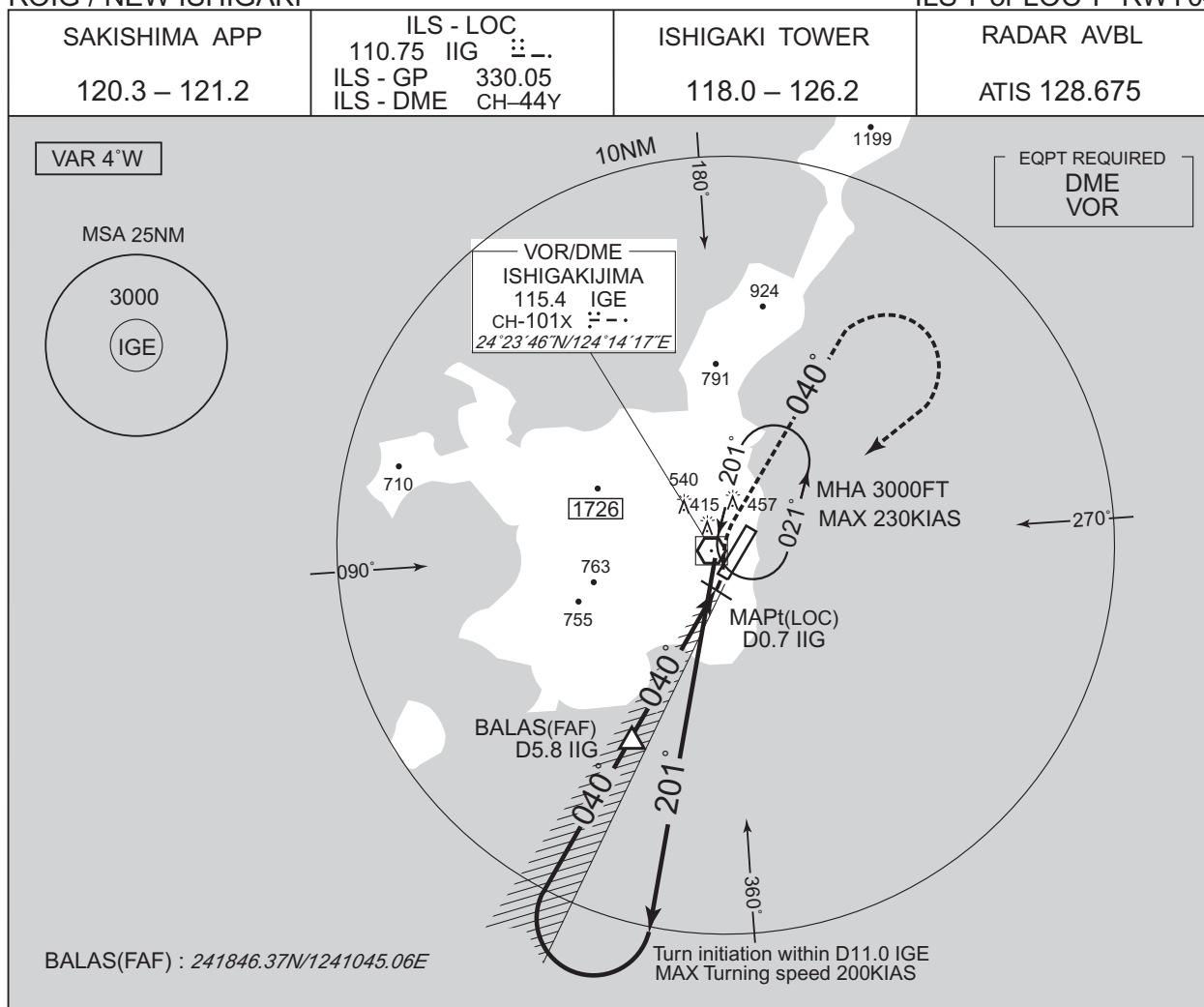
INSTRUMENT APPROACH CHART



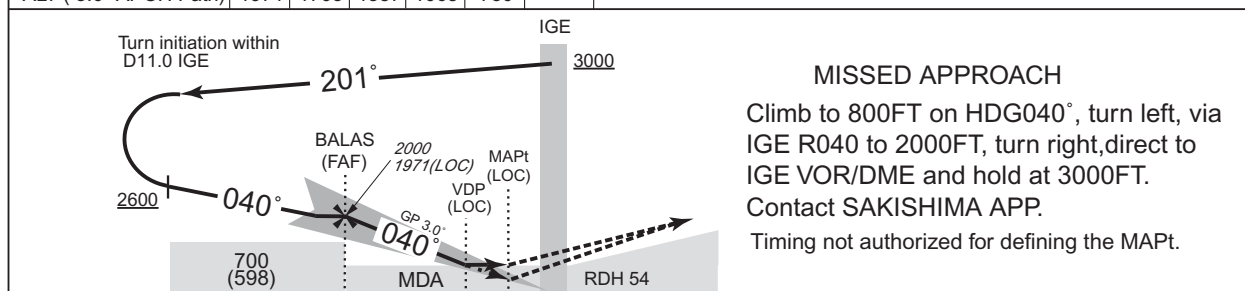
## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

ILS Y or LOC Y RWY04



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



DME to IIG	5.8	1.4	0.7
NM to THR	5.6	1.2	0.50

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				1400		
D	336(210)	600			660(558)	2400
						3200

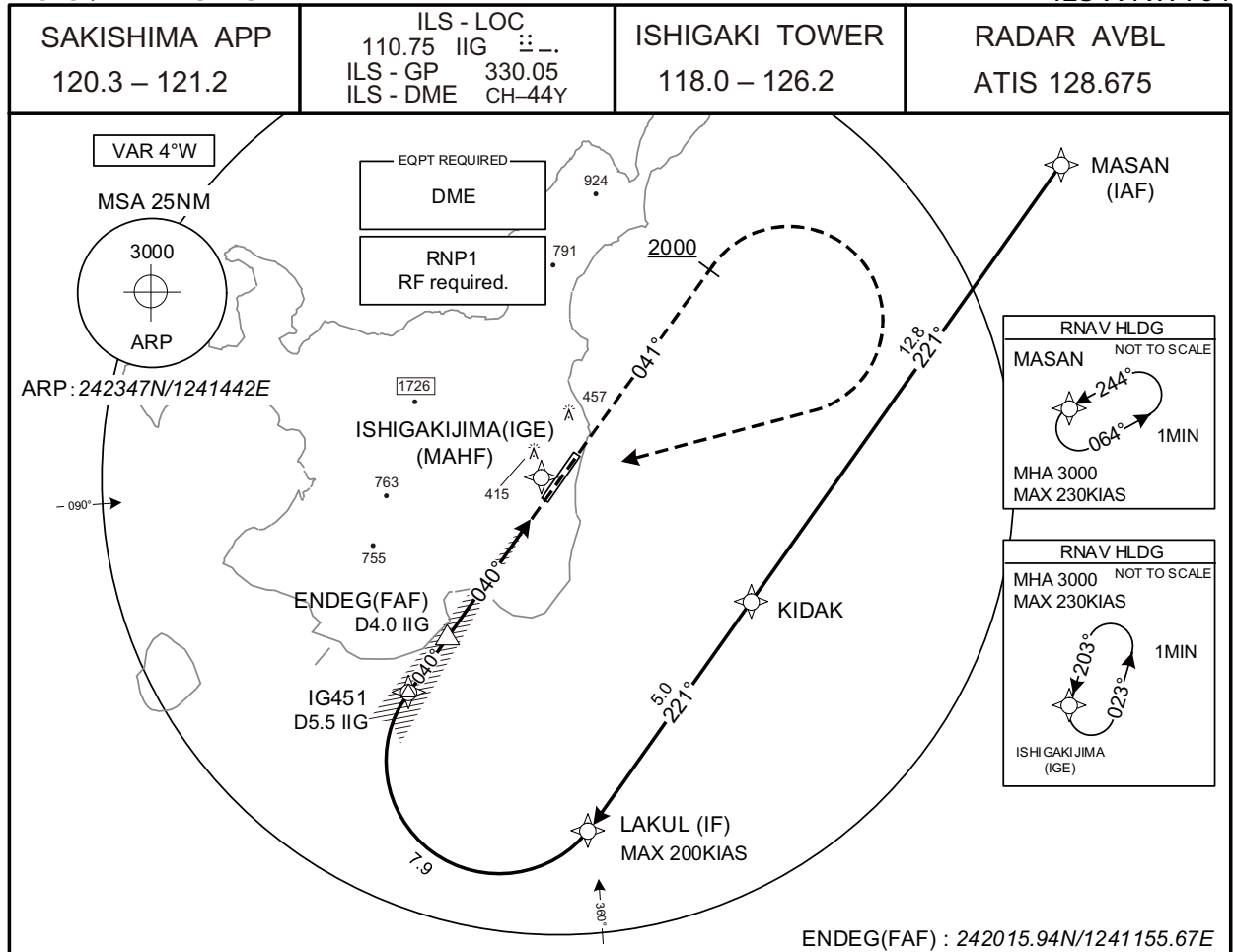
MINIMA with Missed APCH climb gradient of 2.5% are not established.  
Circling to EAST side of RWY only.

CHANGE : Description of VAR.

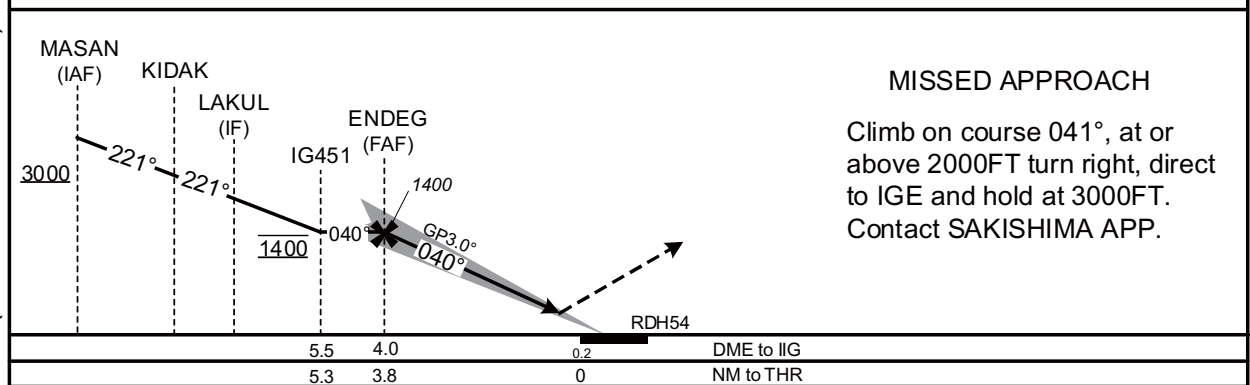
INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

ILS X RWY04



CHANGE : Navigation Specification(Basic RNP1 → RNP1).



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				2400
C				3200
D	336(210)	600	660(558)	

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 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		

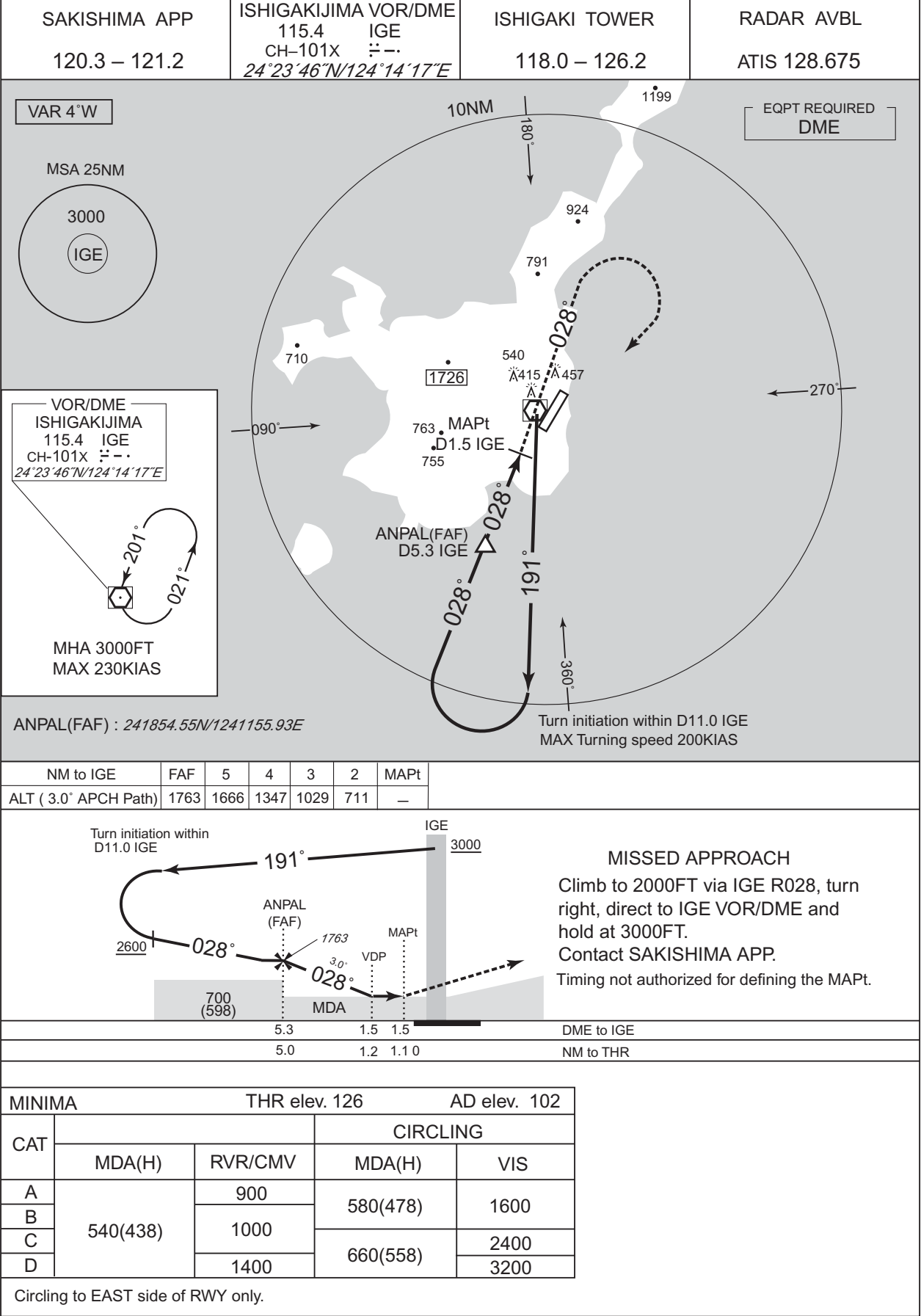
CHANGE : Navigation Specification(Basic RNP1 → RNP1).



INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

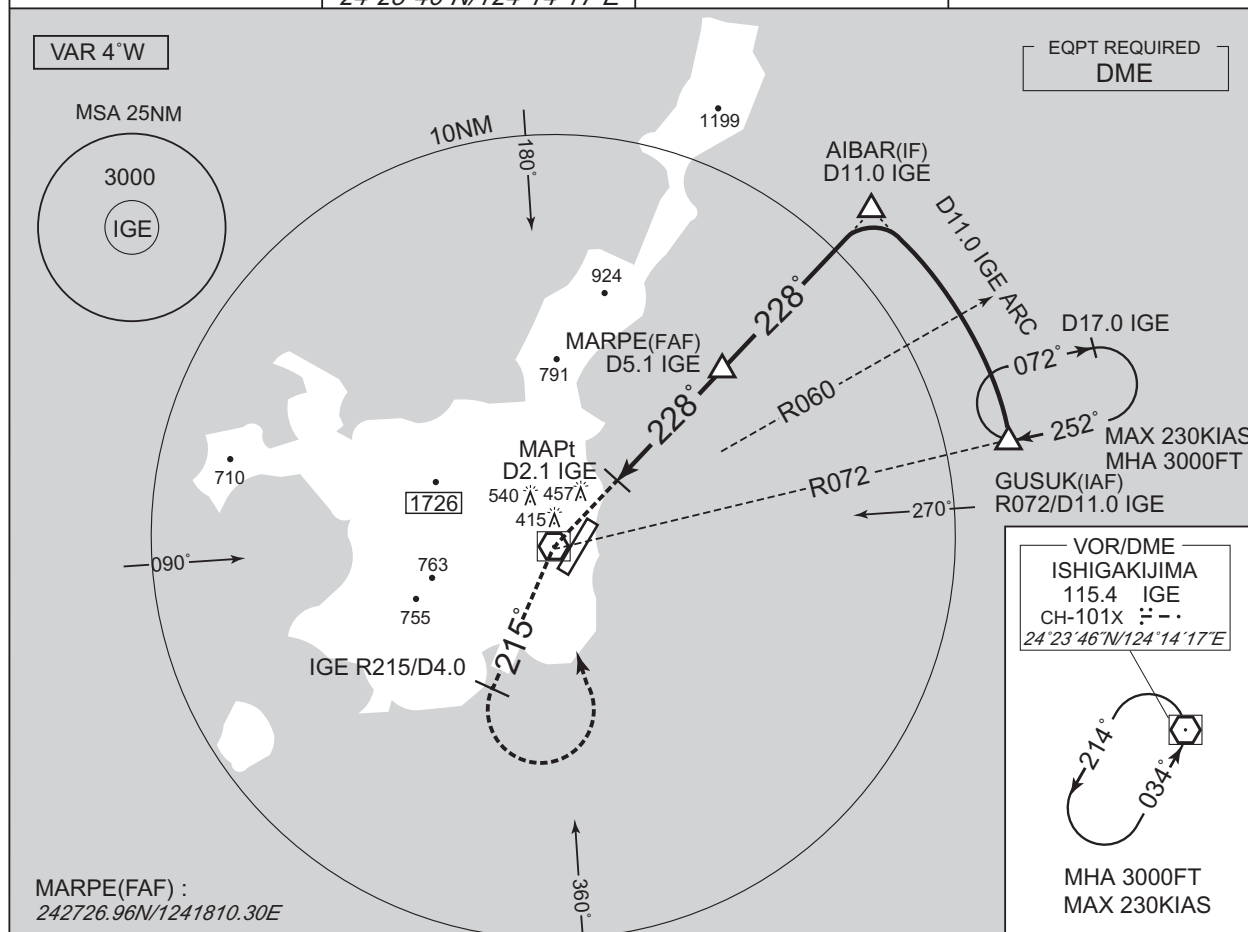
VOR RWY04



## ROIG / NEW ISHIGAKI

VOR Z RWY22

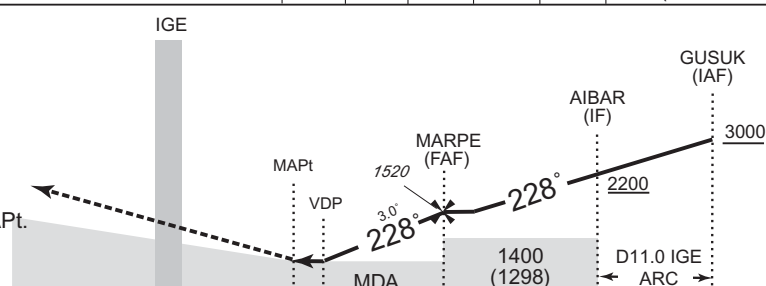
SAKISHIMA APP	ISHIGAKIJIMA VOR/DME 115.4 IGE CH-101X 卄一 24°23'46"N/124°14'17"E	ISHIGAKI TOWER  118.0 – 126.2	RADAR AVBL  ATIS 128.675
---------------	---	-------------------------------------	--------------------------------



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

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.



		MDA		(1999)		HRG
DME to IGE		2.1	2.2	5.1		11.0
NM to THR	0	1.3	1.4	4.3		10.2

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

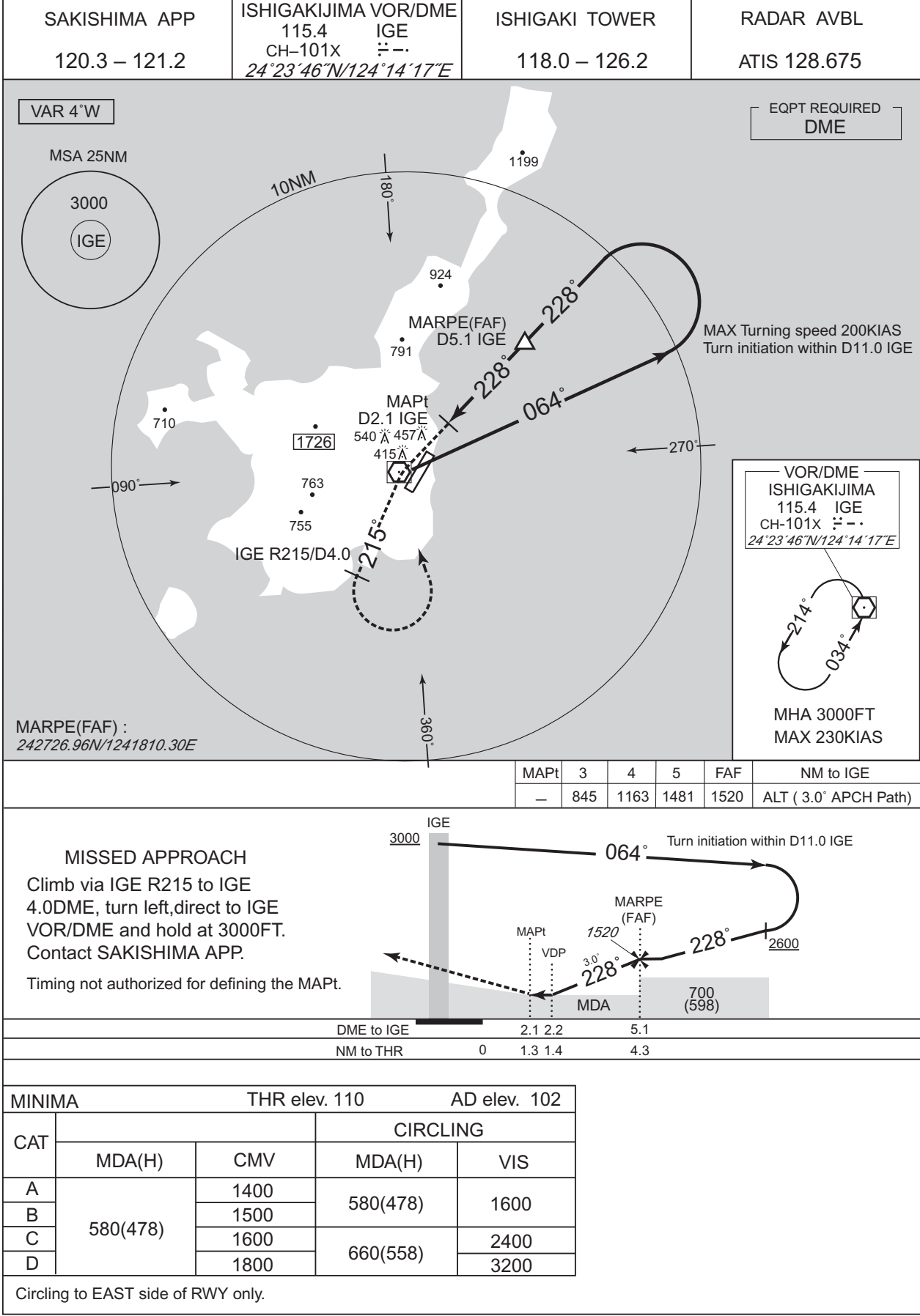
Circling to EAST side of RWY only.

CHANGE : Description of VAR.

INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

VOR Y RWY22



## ROIG / NEW ISHIGAKI

SAKISHIMA APP  
120.3 - 121.2

RNP AR  
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



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.

## Authorization Required

## INSTRUMENT APPROACH CHART

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	-	-	-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

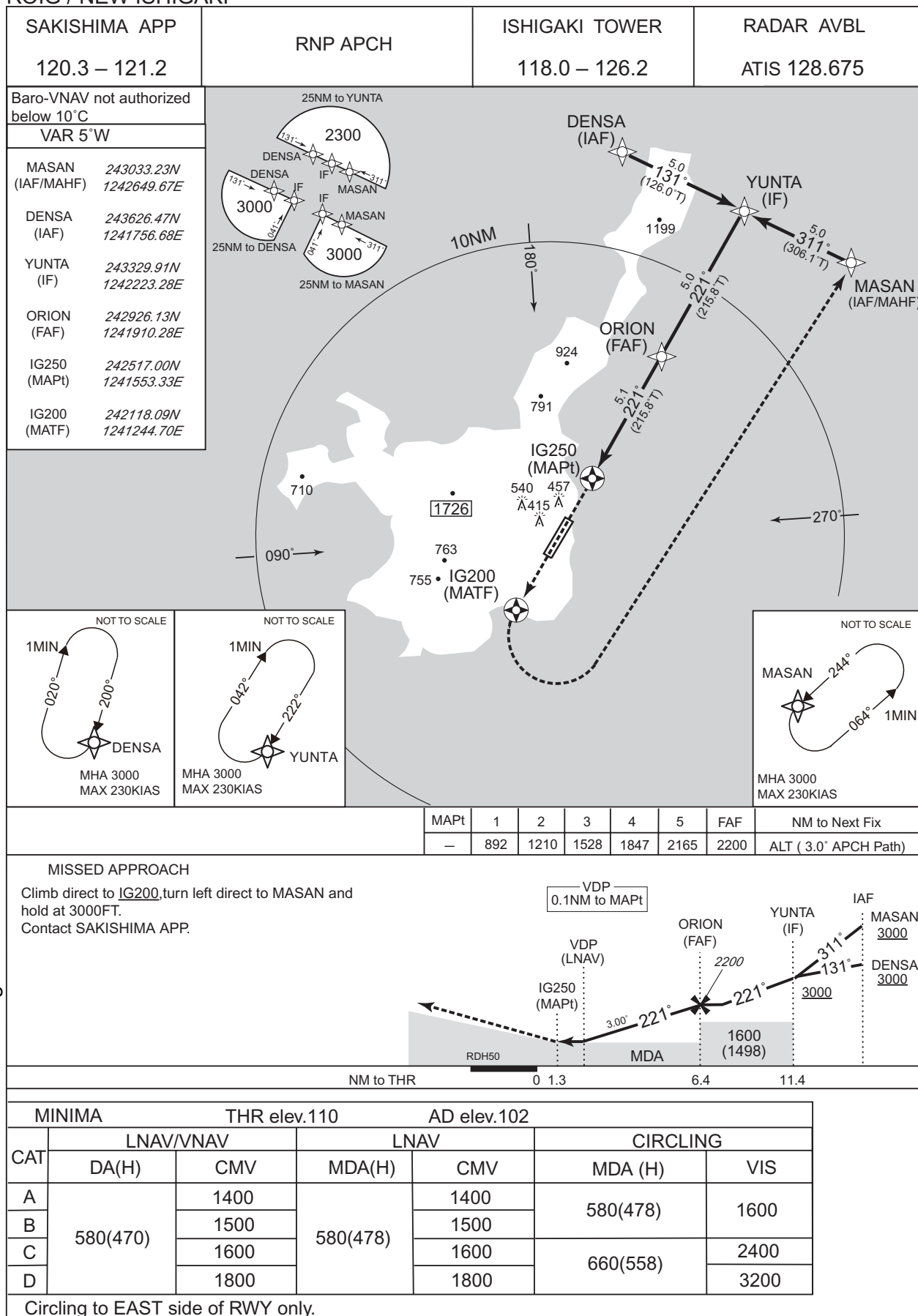
Waypoint Coordinates

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		

## INSTRUMENT APPROACH CHART

ROIG / NEW ISHIGAKI

RNP Z RWY22

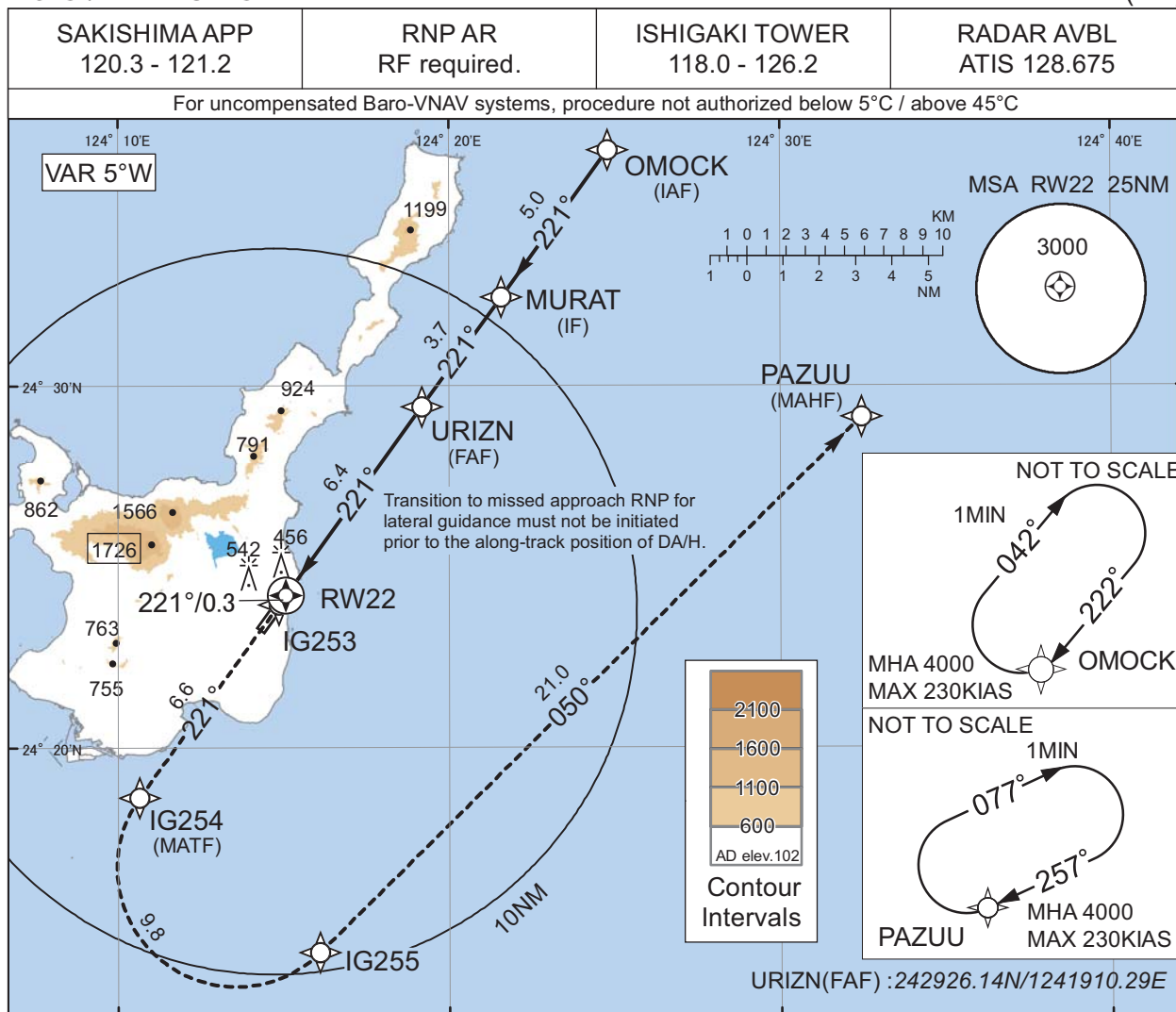


CHANGE : Missed APCH for using VOR/DME abolished.

INSTRUMENT APPROACH CHART

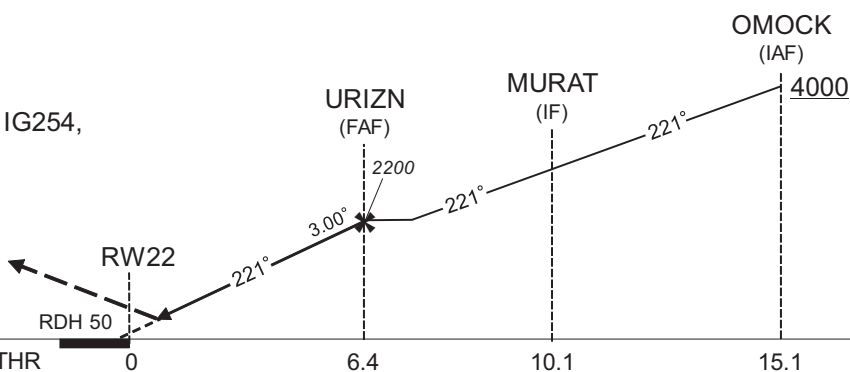
ROIG / NEW ISHIGAKI

RNP Y RWY22(AR)



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%

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.

**Authorization Required**

CHANGE : Description of VAR.

## INSTRUMENT APPROACH CHART

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	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		



ROIG / NEW ISHIGAKI

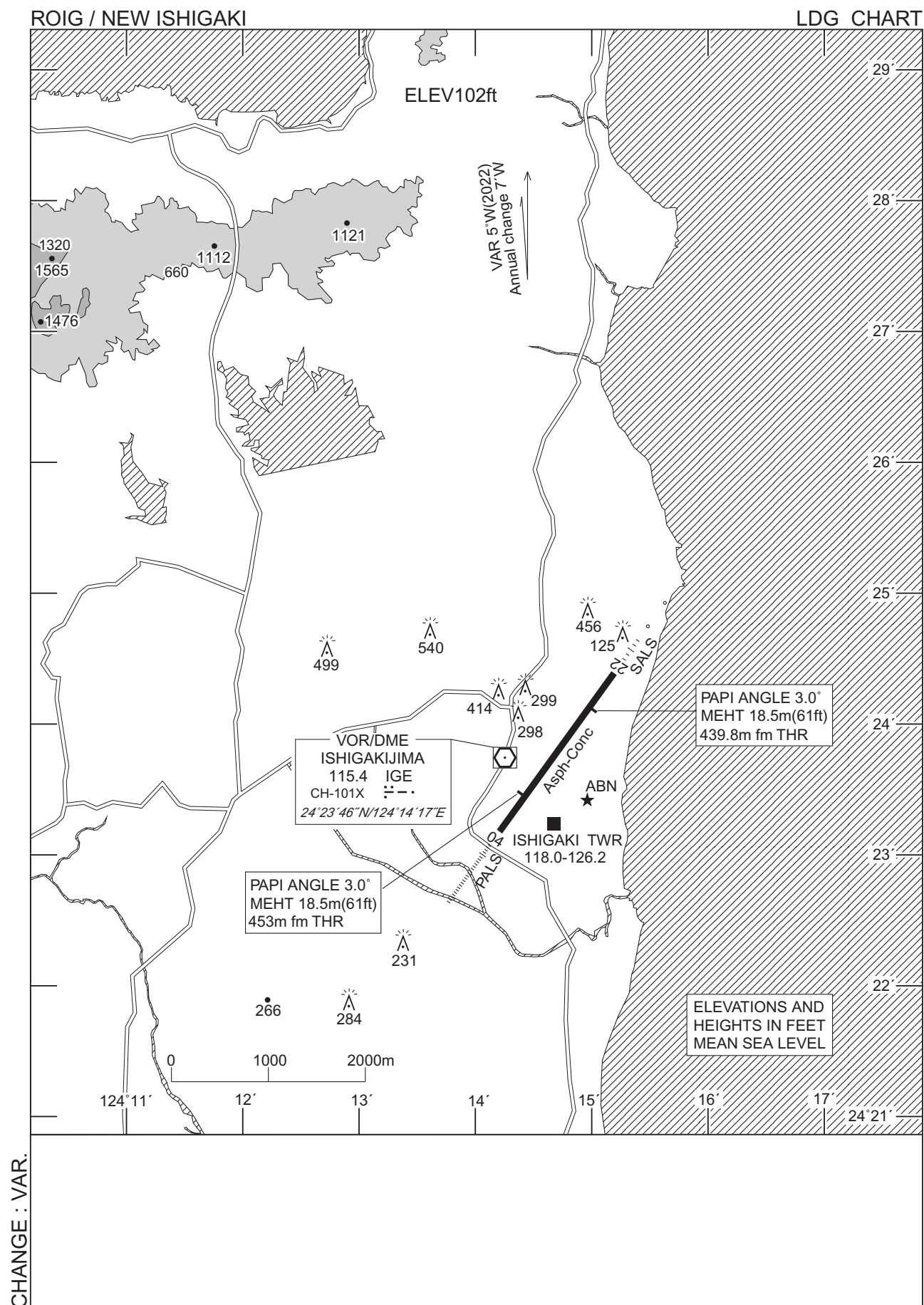
Visual REP



※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 : Map updated. BRG/DIST from ARP.

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



ROIG / NEW ISHIGAKI

Minimum Vectoring Altitude CHART

