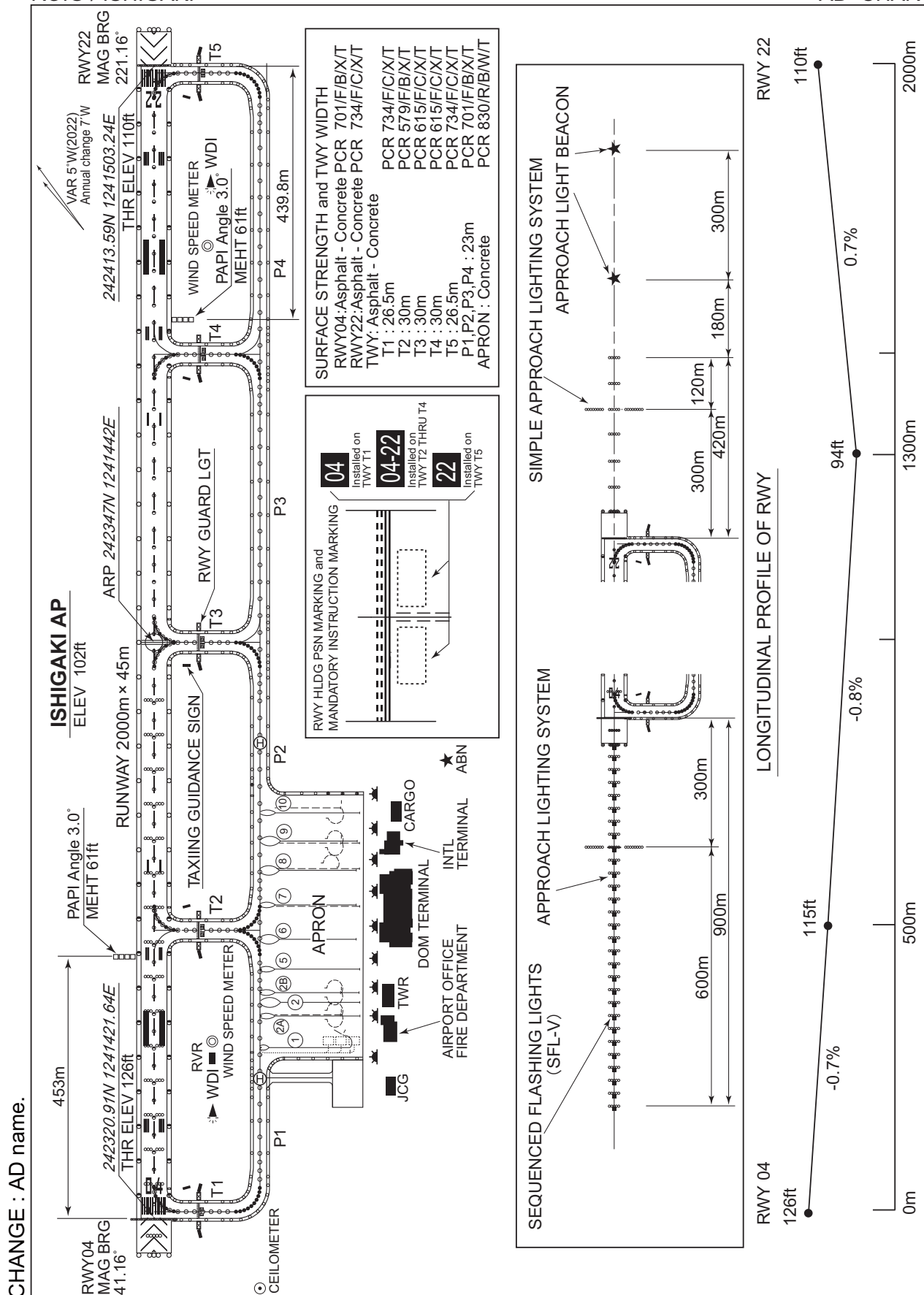


AD CHART



INTENTIONALLY LEFT BLANK

ROIG / ISHIGAKI

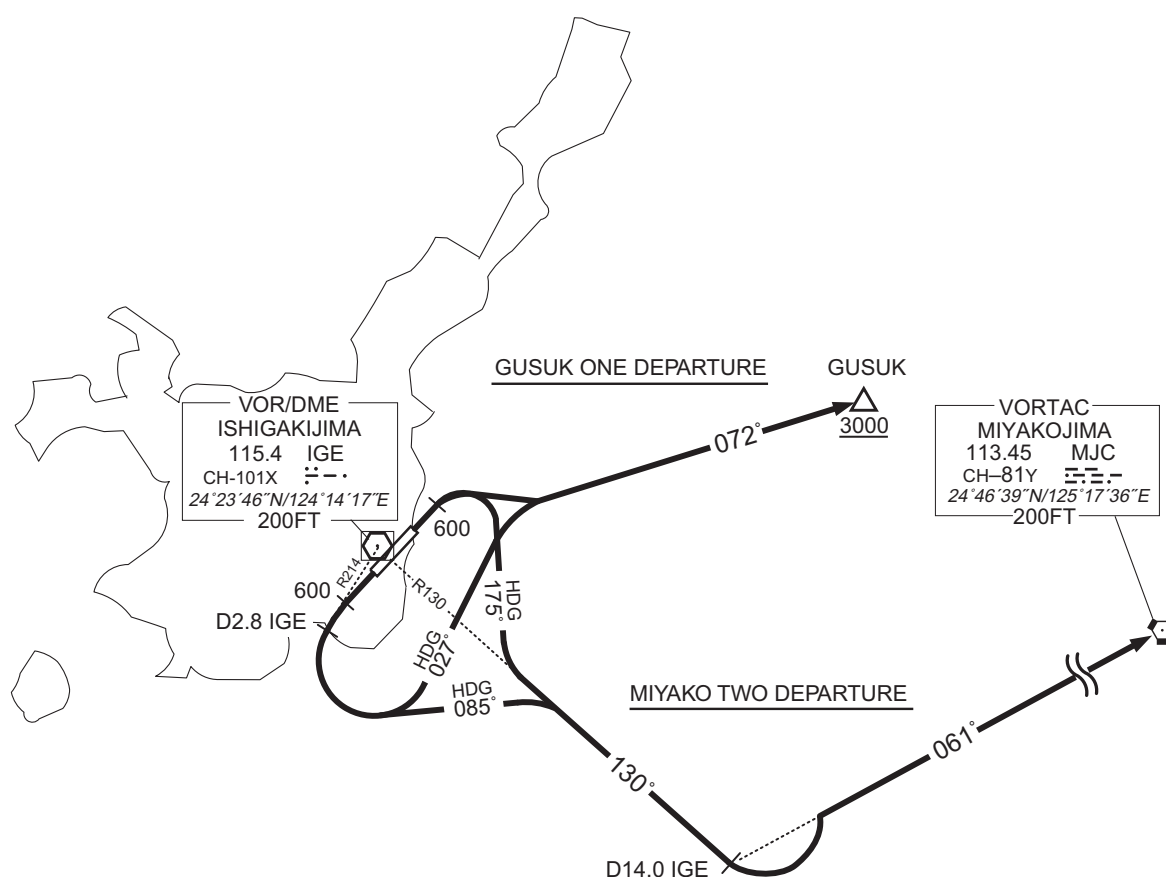
SID

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

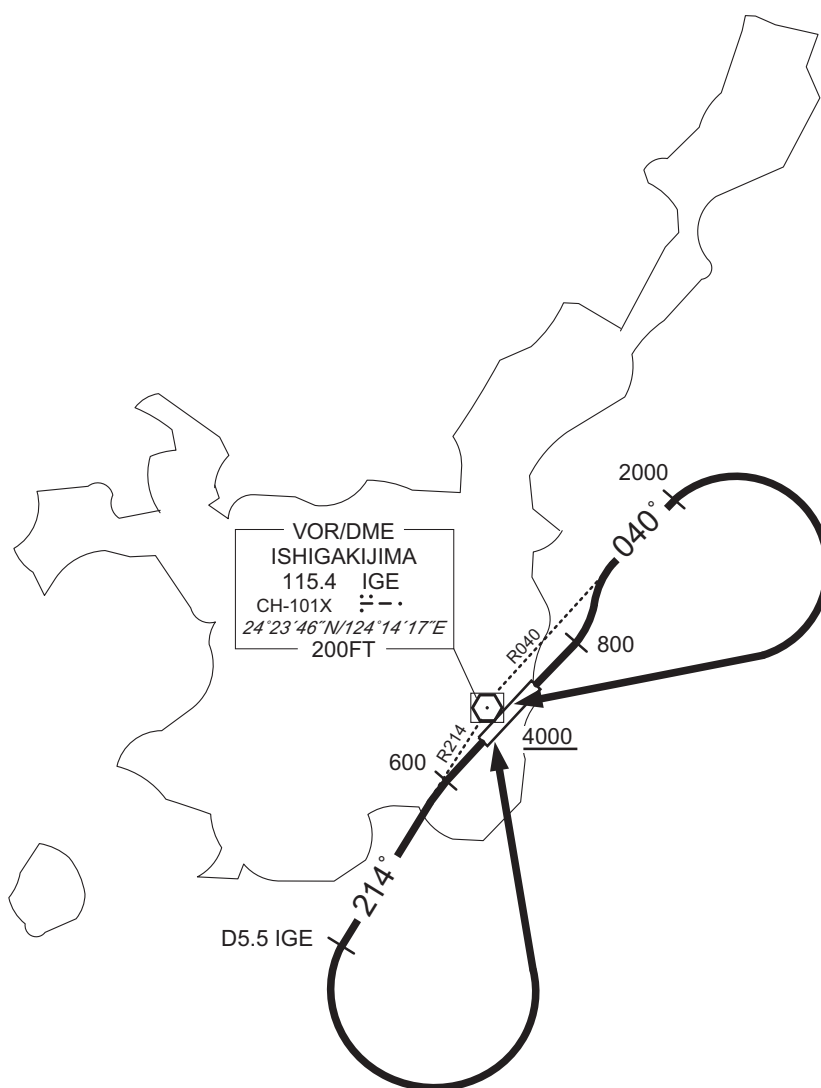
ISHIGAKI REVERSAL ONE DEPARTURE

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

SID

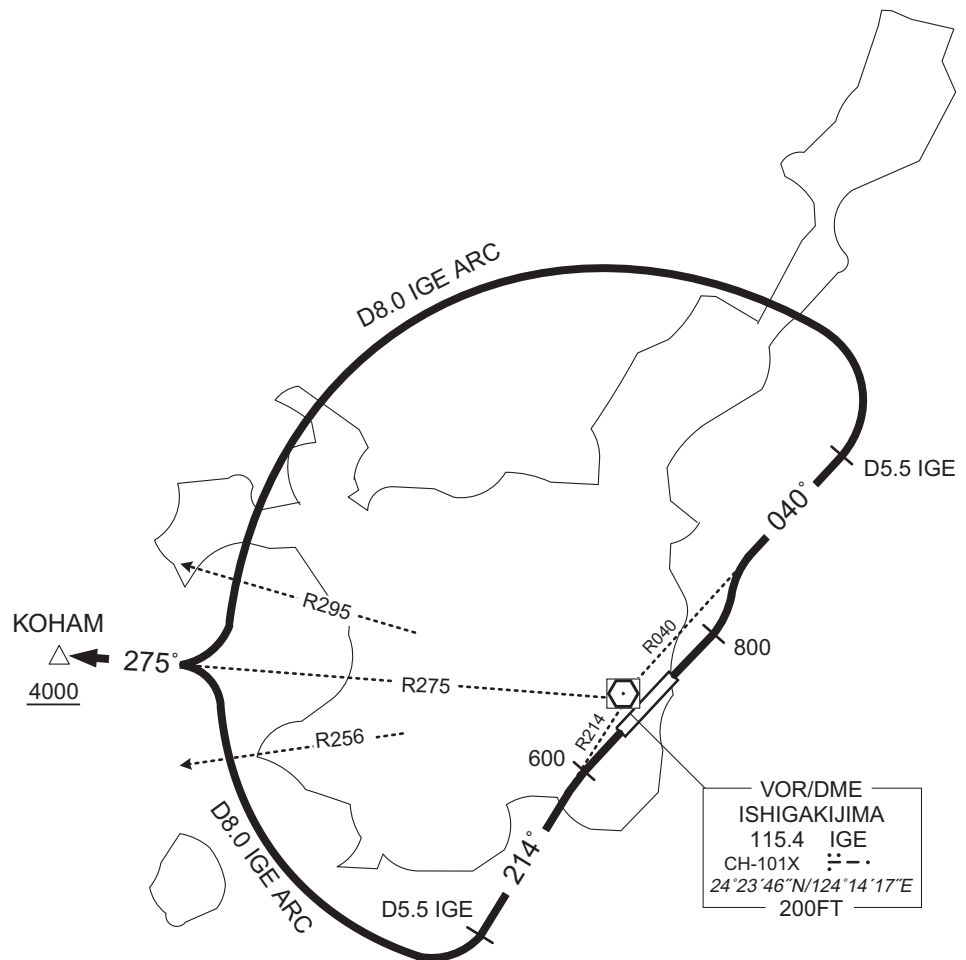
KOHAM ONE DEPARTURE

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 : AD name.

STANDARD DEPARTURE CHART -INSTRUMENT

ROIG / ISHIGAKI

RNAV SID and TRANSITION

GAHRA THREE DEPARTURE MIYAKOJIMA TRANSITION		RNP1
Note GNSS required.		
<div><div>VAR5°W</div><div><div><div><div>VOR/DME ISHIGAKIJIMA 115.4 IGE CH-101X 24°23'46"N/124°14'17"E 200FT</div><div>VOR/DME SHIMOJISHIMA 117.1 SJE CH-118X 24°49'19"N/125°08'38"E 100FT</div><div>VORTAC MIYAKOJIMA 113.45 MJC CH-81Y 24°46'39"N/125°17'36"E 200FT</div></div><div><div>GAHRA 244243.1N 1250550.4E</div><div>MIYAKOJIMA (MJC) 244638.6N 1251736.3E 8000</div></div><div><div>IG200 242118.1N 1241244.7E</div><div>TARAMA AP</div></div><div><div>221°</div><div>075°</div></div><div><div>600</div><div>8000</div></div><div><div>GAHRA THREE DEPARTURE</div><div>MIYAKOJIMA TRANSITION</div></div></div></div></div>		
<div><div>GAHRA THREE DEPARTURE</div><div>RWY04 : Climb on HDG 041° at or above 600FT, turn right direct to GAHRA. RWY22 : Climb on HDG 221° at or above 600FT, direct to IG200, turn left direct to GAHRA.</div></div>		
<div><div>MIYAKOJIMA TRANSITION</div><div>From GAHRA, to MJC at or above 8000FT.</div></div>		

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

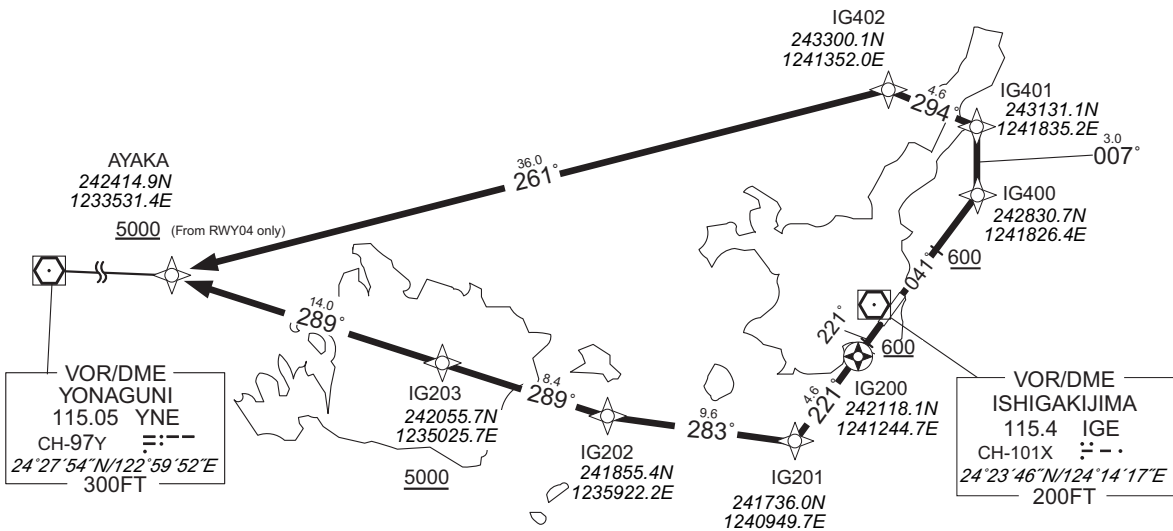
ROIG / ISHIGAKI

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

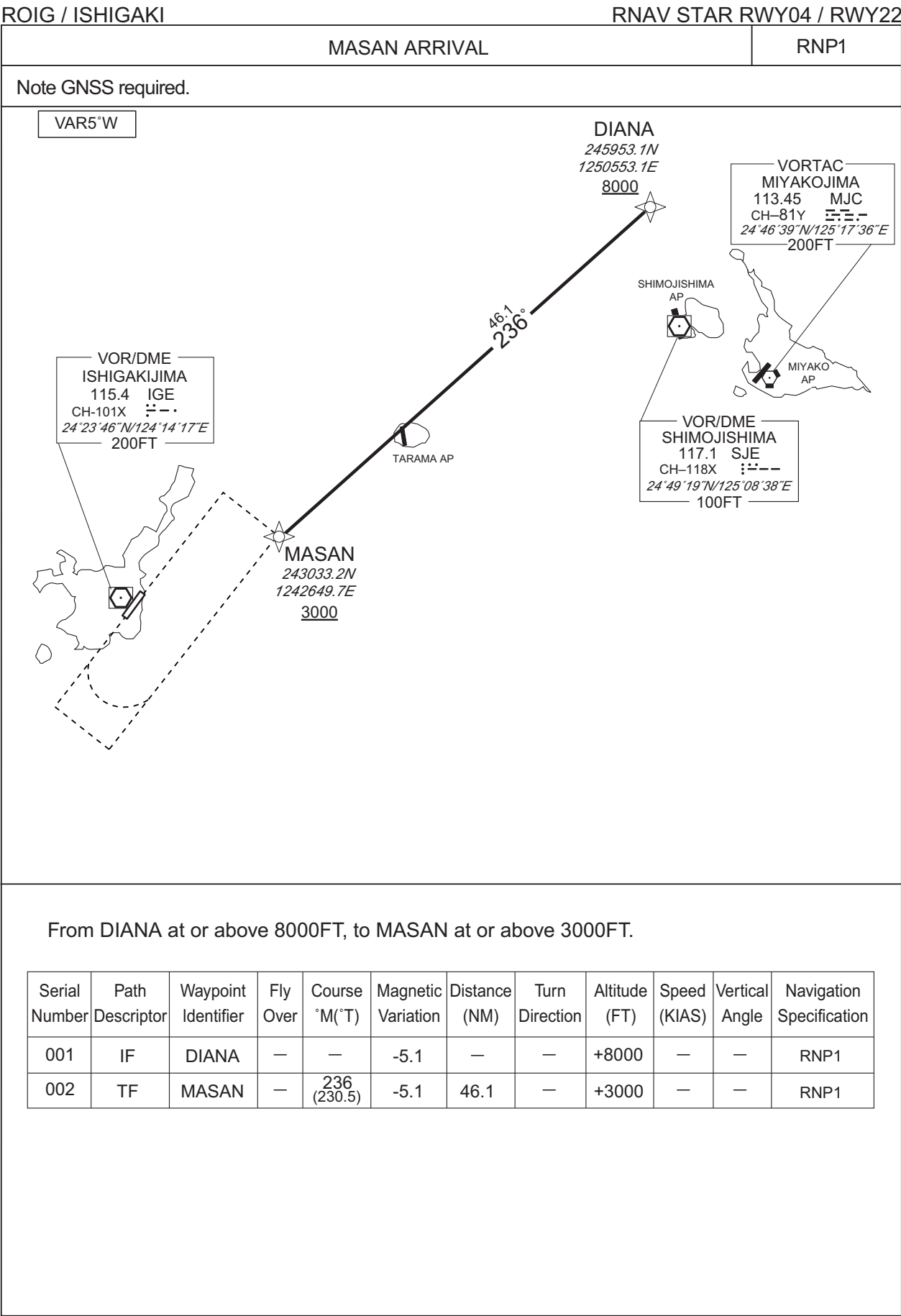
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	041 (035.9)	-4.9	-	-	+600	-	-	RNP1
002	DF	IG400	-	-	-4.9	-	-	-	-	-	RNP1
003	TF	IG401	-	007 (002.6)	-4.9	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

CHANGE : AD name.

STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

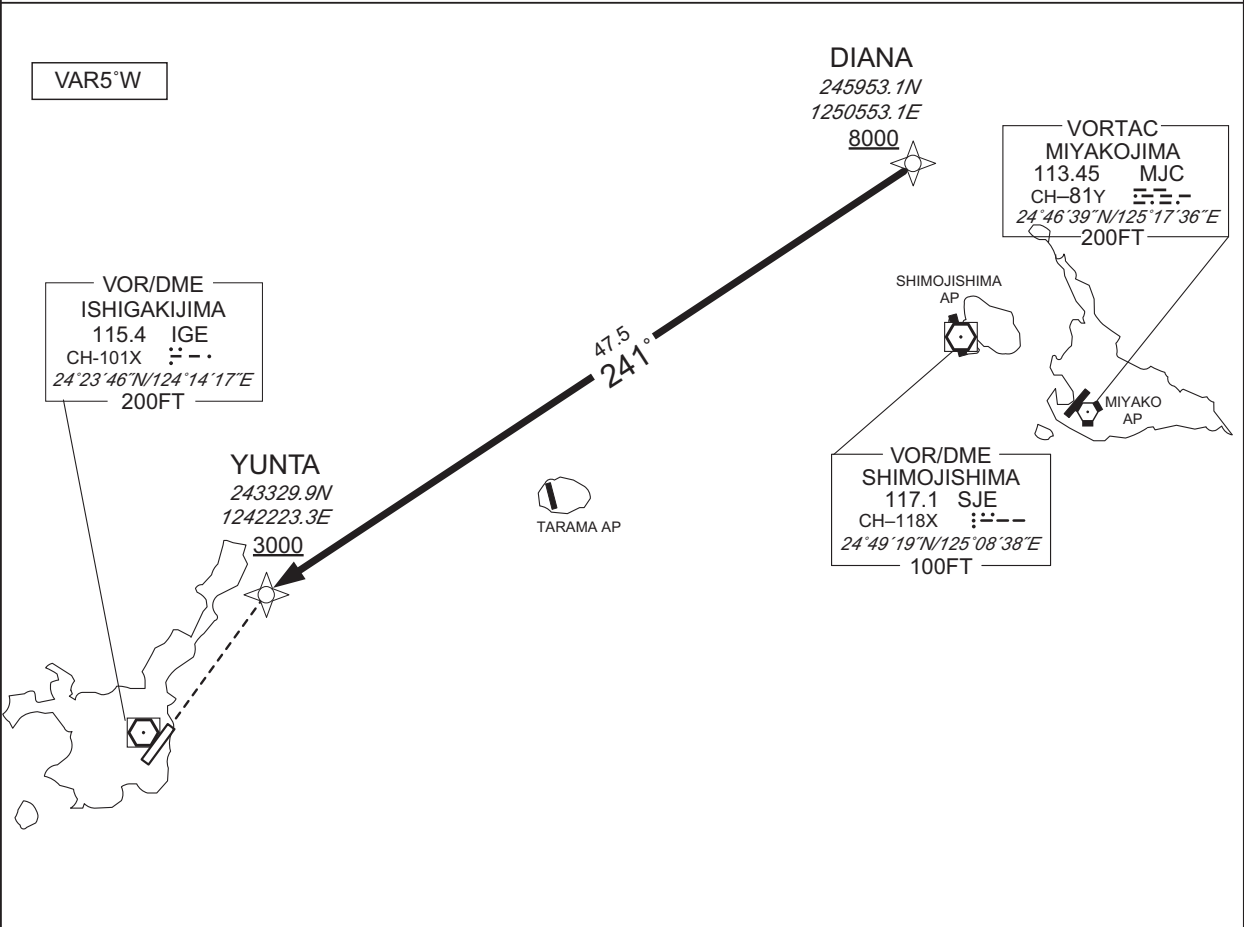
ROIG / ISHIGAKI

RNAV STAR RWY22

YUNTA NORTH ARRIVAL

RNP1

Note GNSS required.



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	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	DIANA	—	—	-4.9	—	—	+8000	—	—	RNP1
002	TF	YUNTA	—	241 (236.4)	-4.9	47.5	—	+3000	—	—	RNP1

CHANGE : AD name.

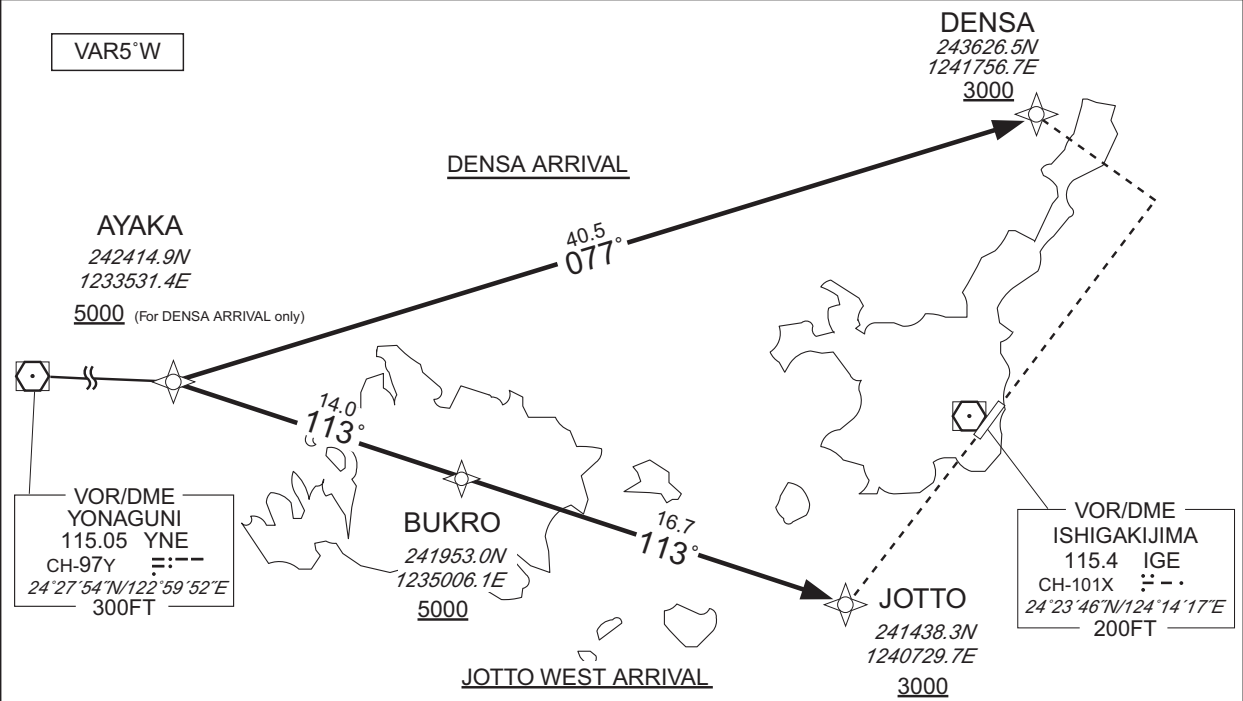
STANDARD ARRIVAL CHART-INSTRUMENT

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

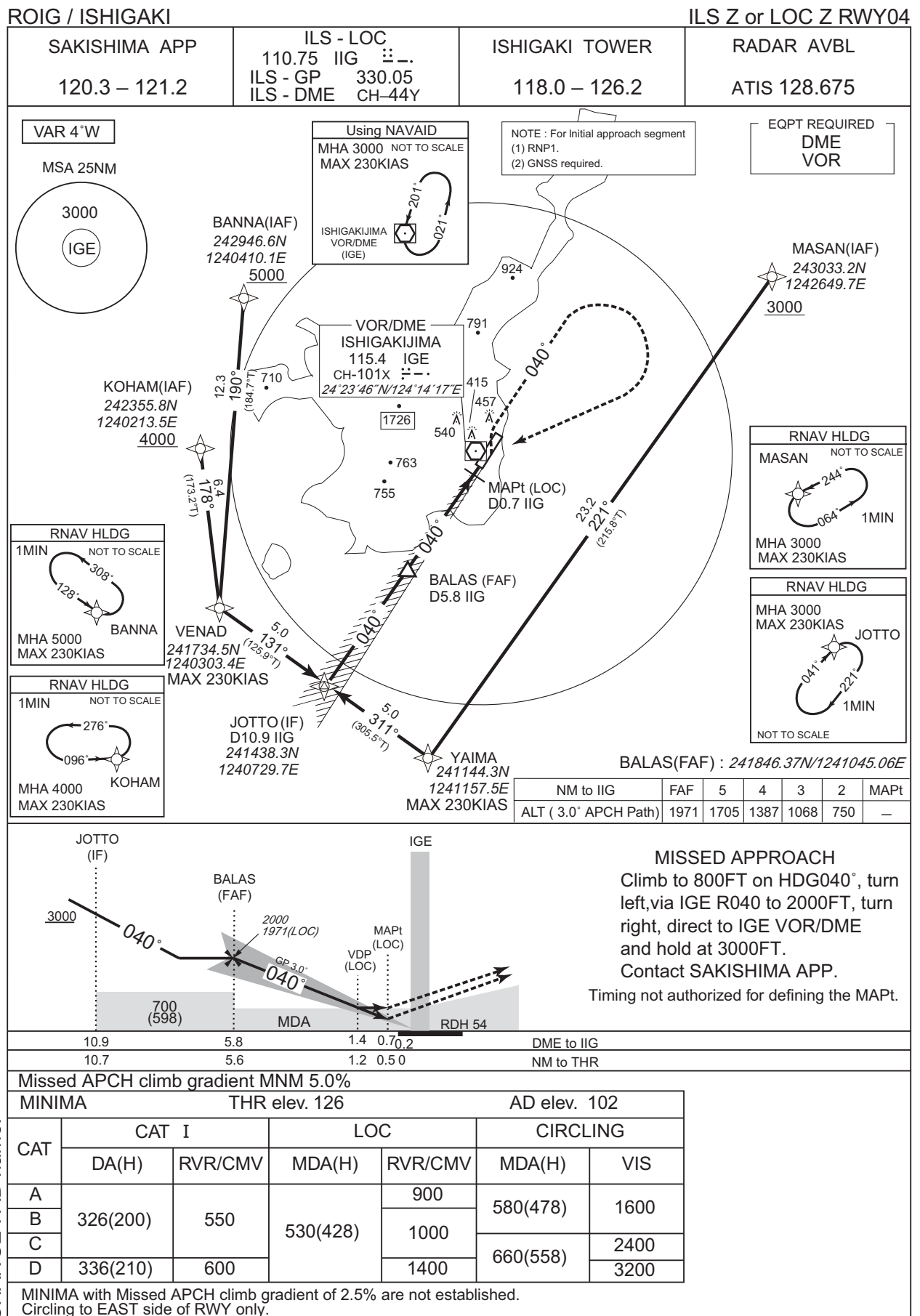
JOTTO WEST ARRIVAL

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

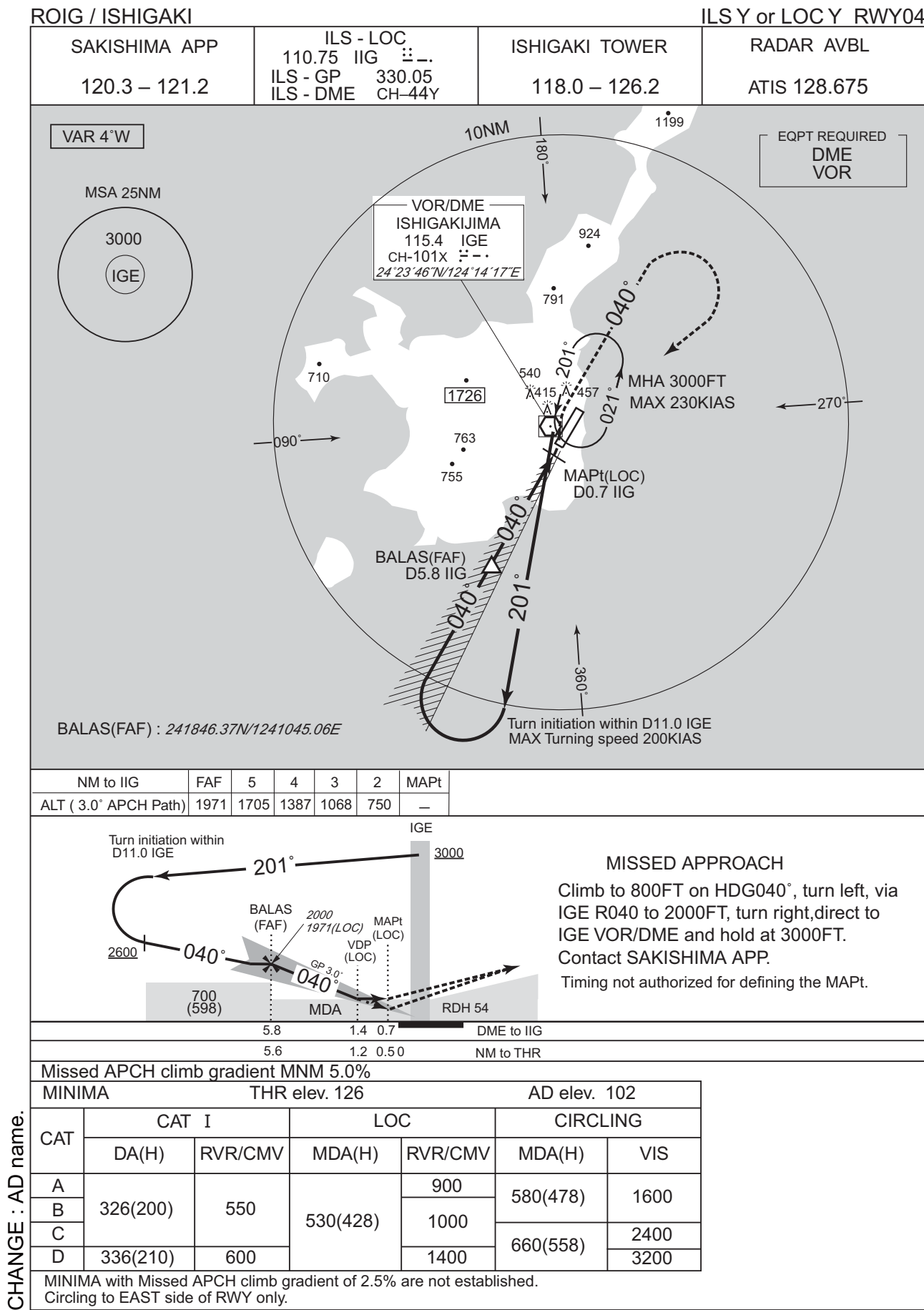
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	AYAKA	—	—	-4.9	—	—	—	—	—	RNP1
002	TF	BUKRO	—	113 (108.1)	-4.9	14.0	—	+5000	—	—	RNP1
003	TF	JOTTO	—	113 (108.2)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

CHANGE : AD name.

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

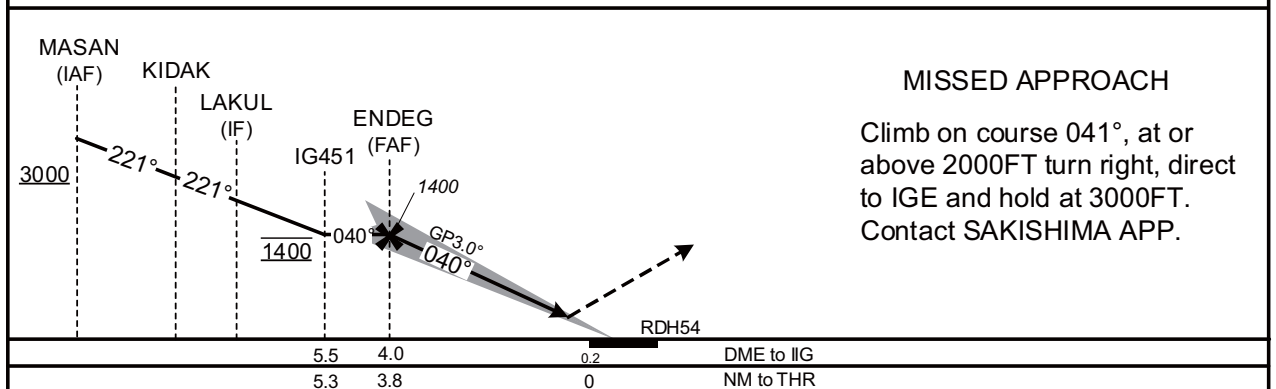
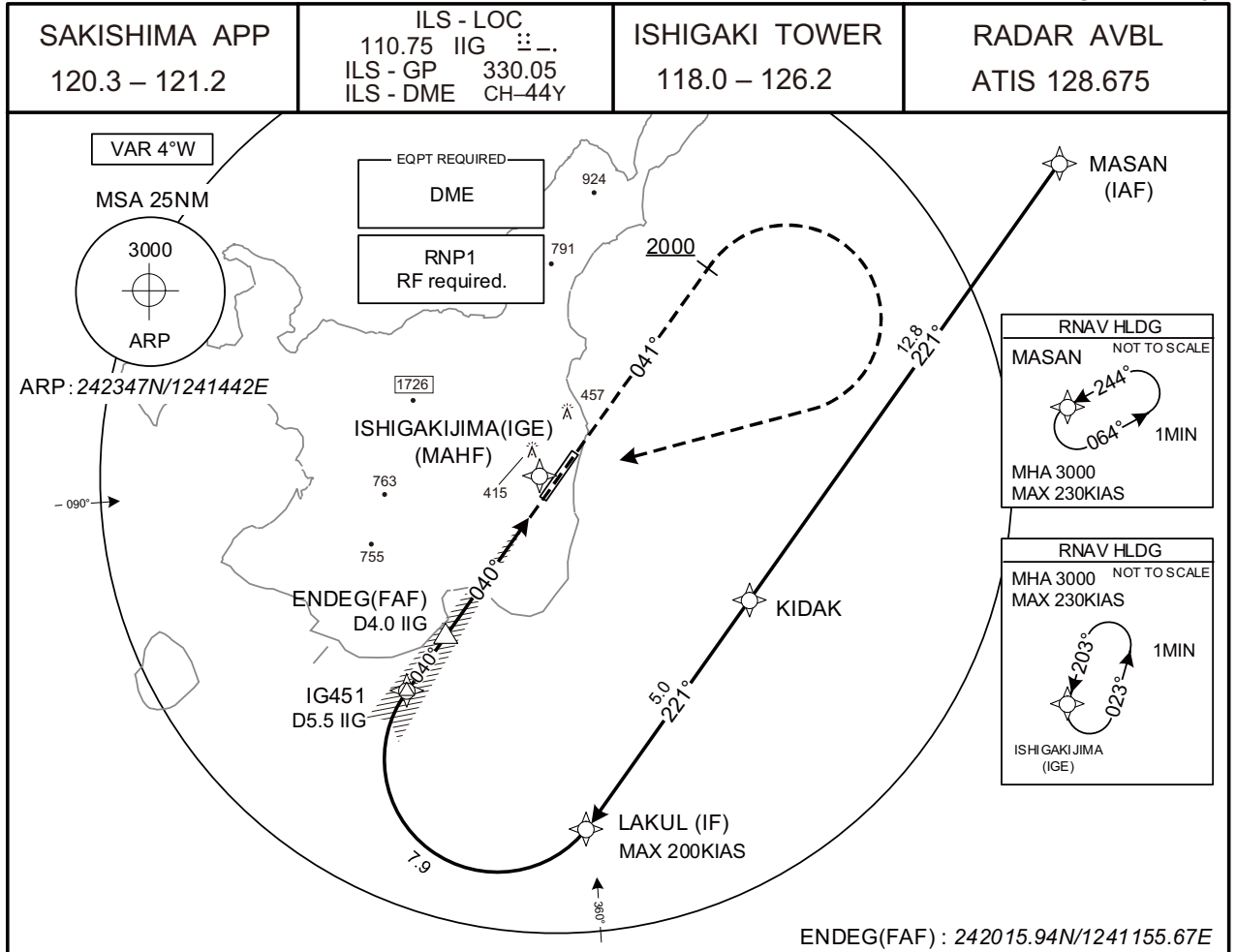


CHANGE : AD name.

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)
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

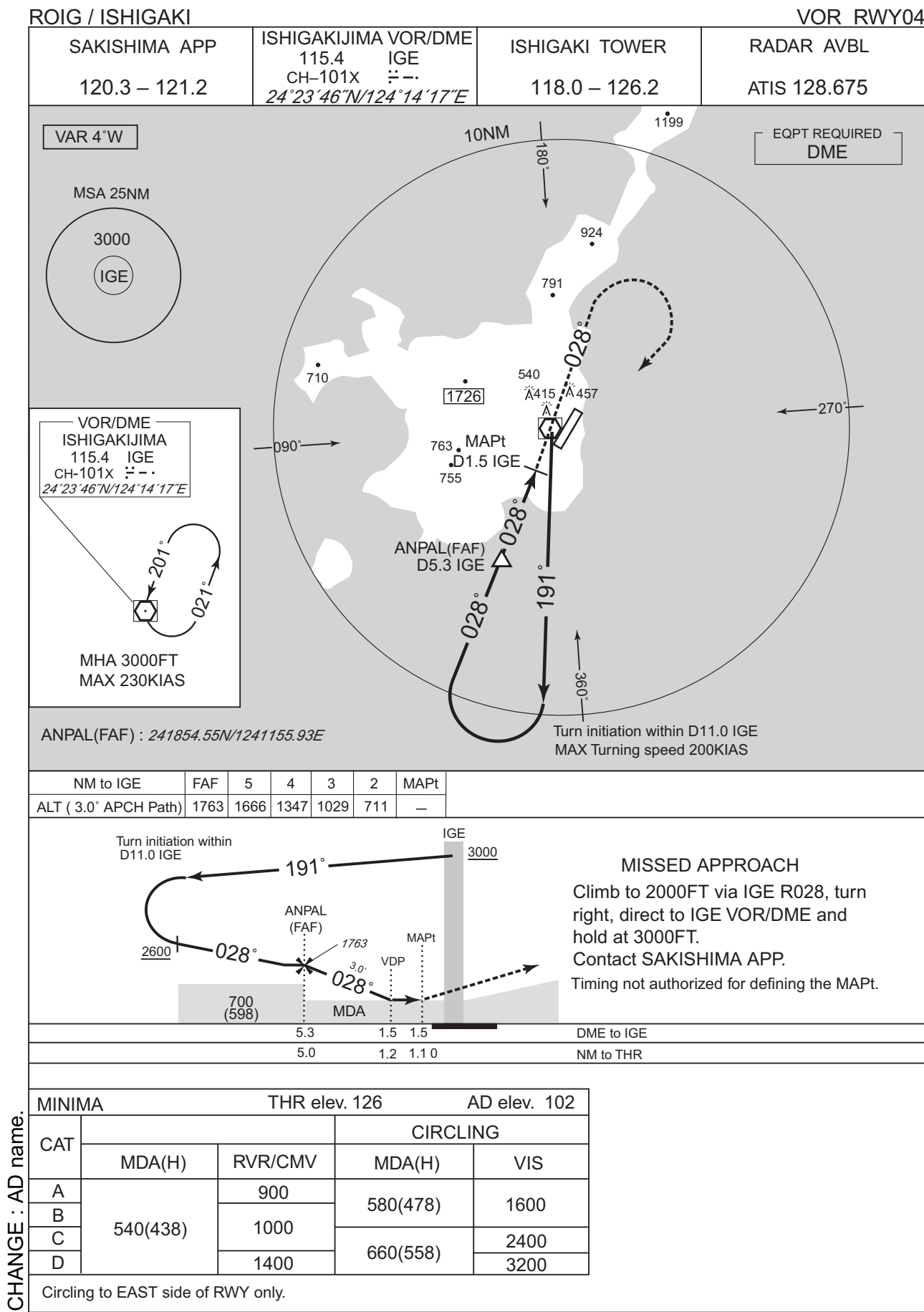
ROIG / ISHIGAKI

ILS X RWY04

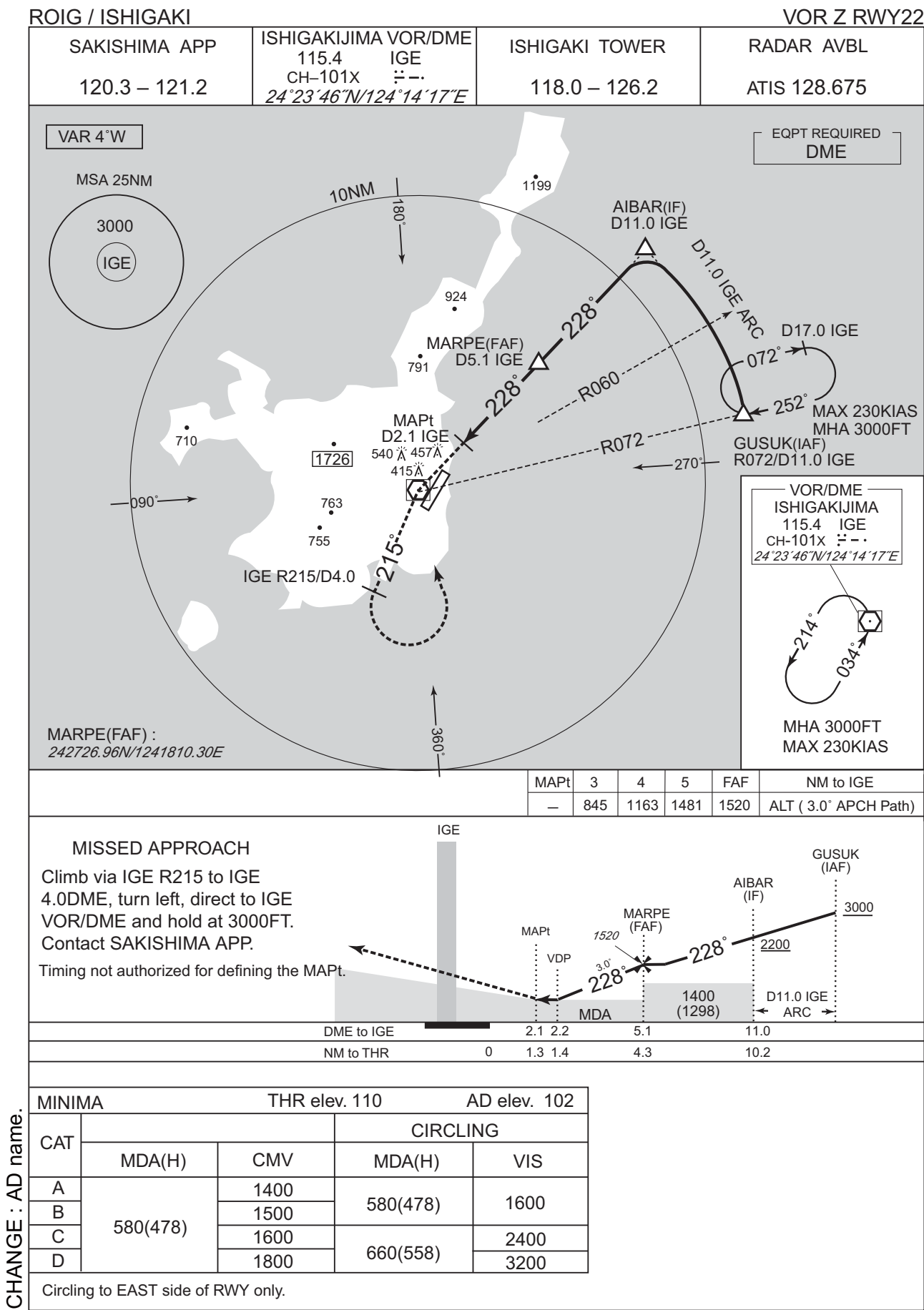
Coding Table											
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	MASAN	-	-	-5.1	-	-	+3000	-	-	RNP1
002	TF	KIDAK	-	221 (215.8)	-5.1	12.8	-	-	-	-	RNP1
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.

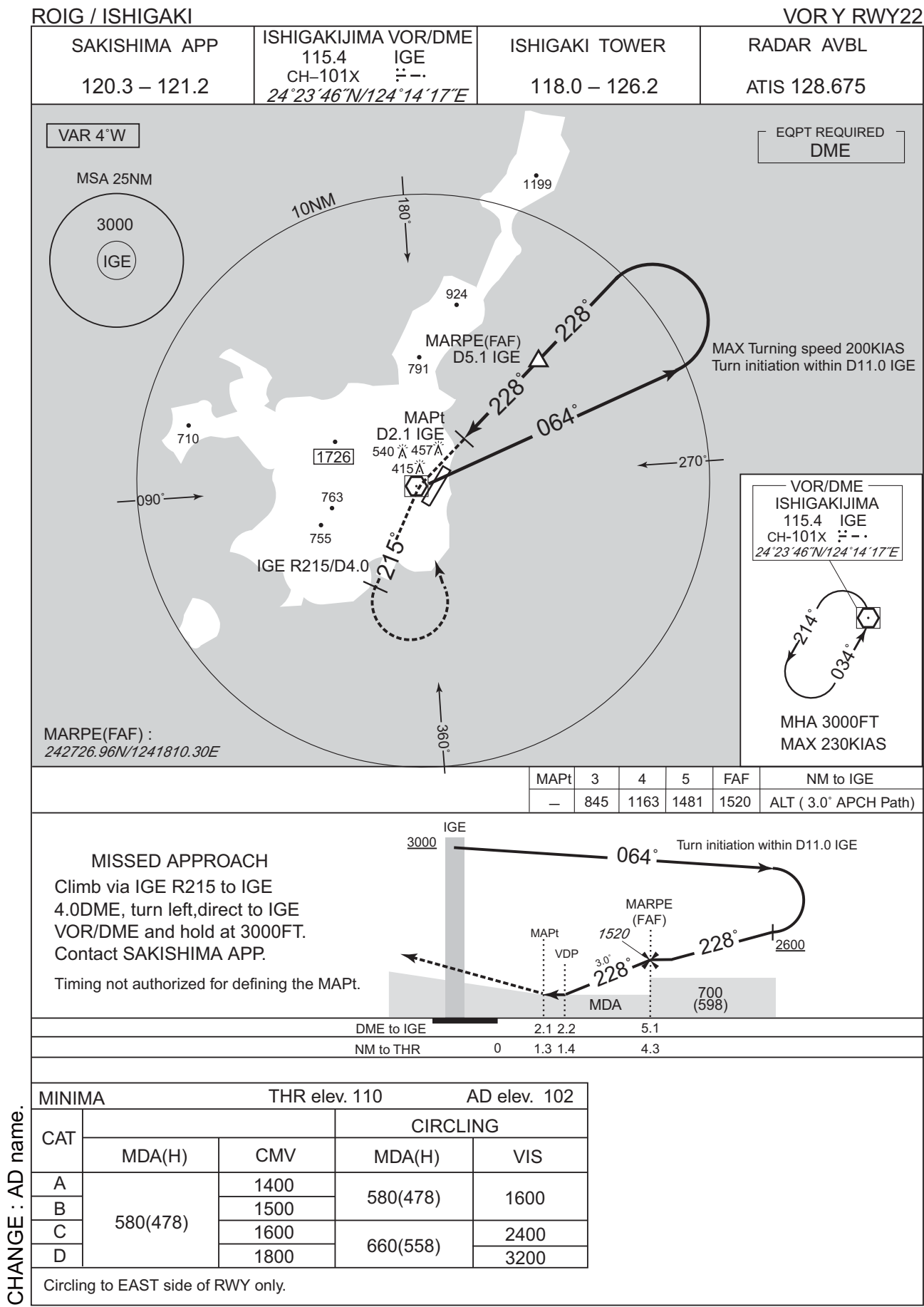
INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



ROIG / ISHIGAKI

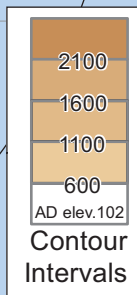
SAKISHIMA APP
120.3 - 121.2

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



NOT TO SCALE

1 MIN

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053-

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25

MHA 4000

SEIJI

MAX 230K

02101

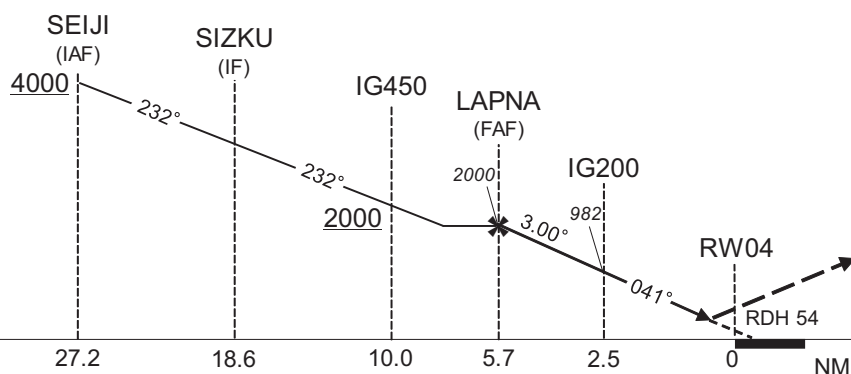
MAX 250K

: 24181

241244.88F

INTRODUCTION

REFERENCES



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 / 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.

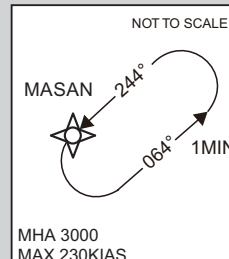
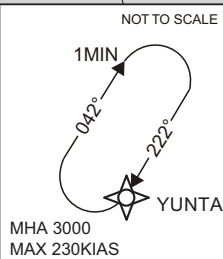
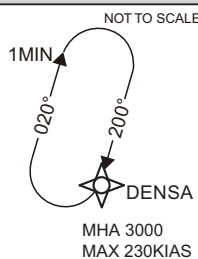
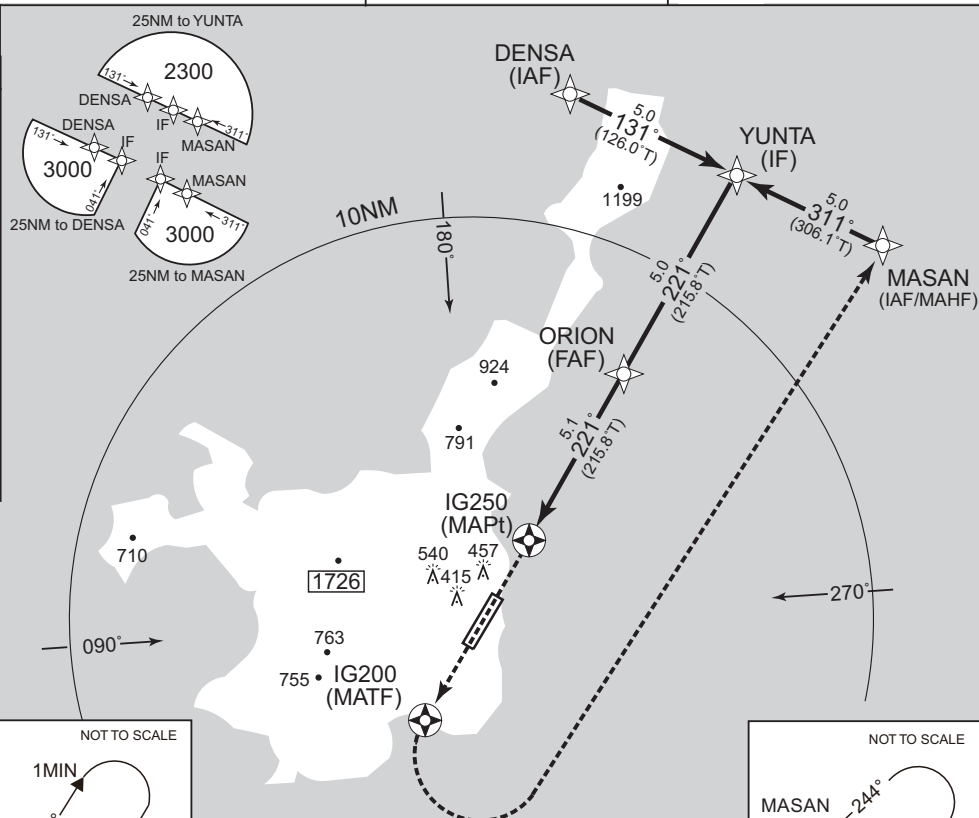
ROIG / ISHIGAKI

RNP Z RWY22

SAKISHIMA APP	RNP APCH	ISHIGAKI TOWER	RADAR AVBL
120.3 – 121.2		118.0 – 126.2	ATIS 128.675

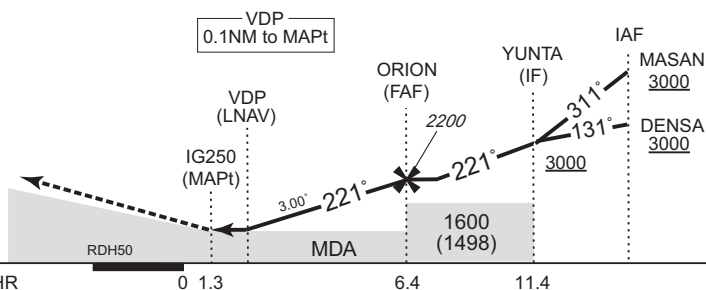
VAR 5°W

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



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

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

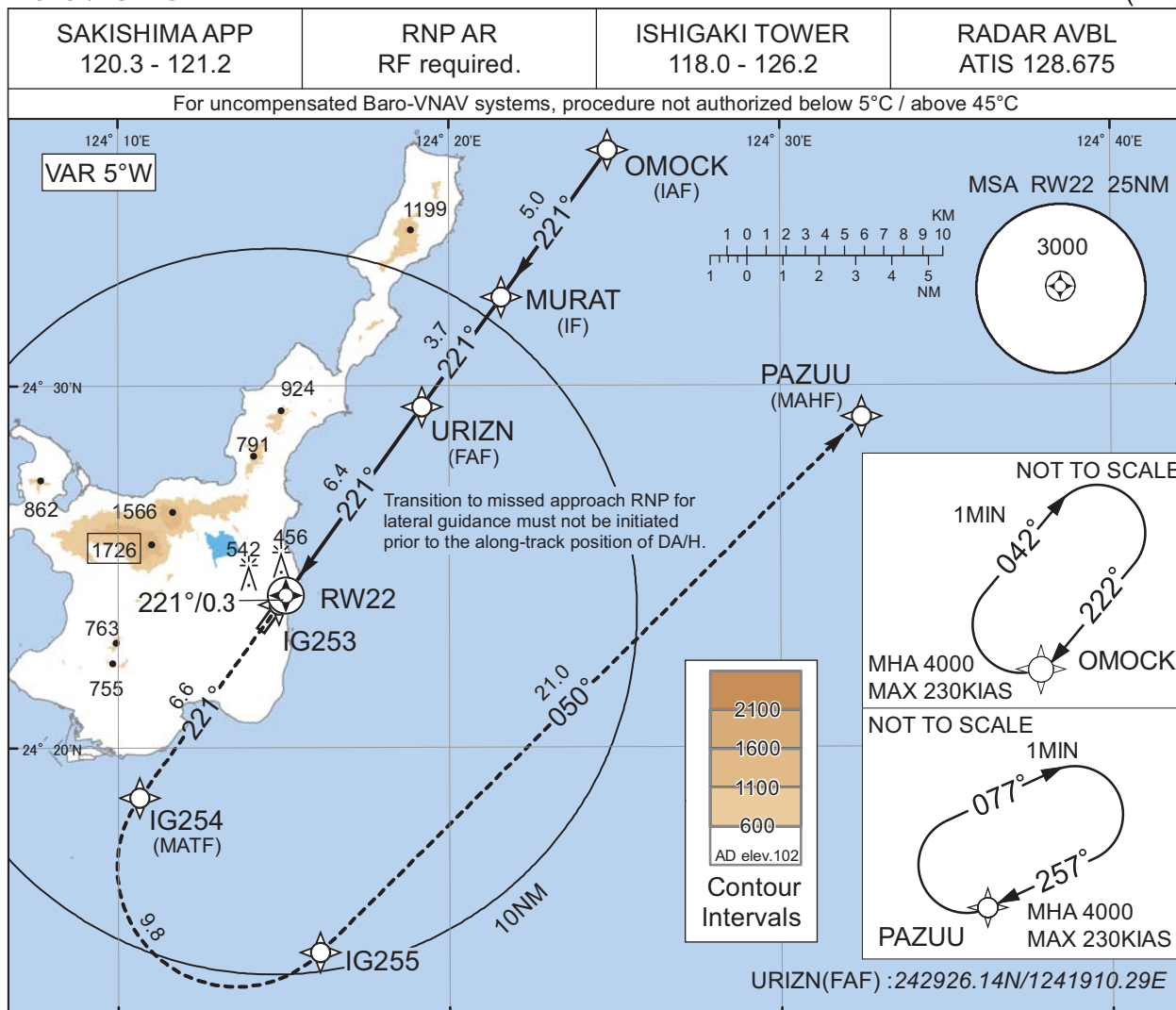
Circling to EAST side of RWY only.

CHANGE : AD name.

INSTRUMENT APPROACH CHART

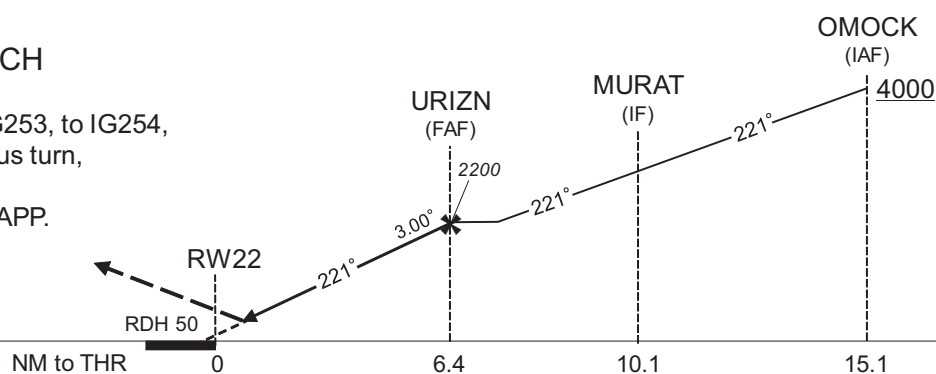
ROIG / ISHIGAKI

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%

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.

Authorization Required

INSTRUMENT APPROACH CHART

ROIG / ISHIGAKI

RNP Y RWY22(AR)

Coding Table

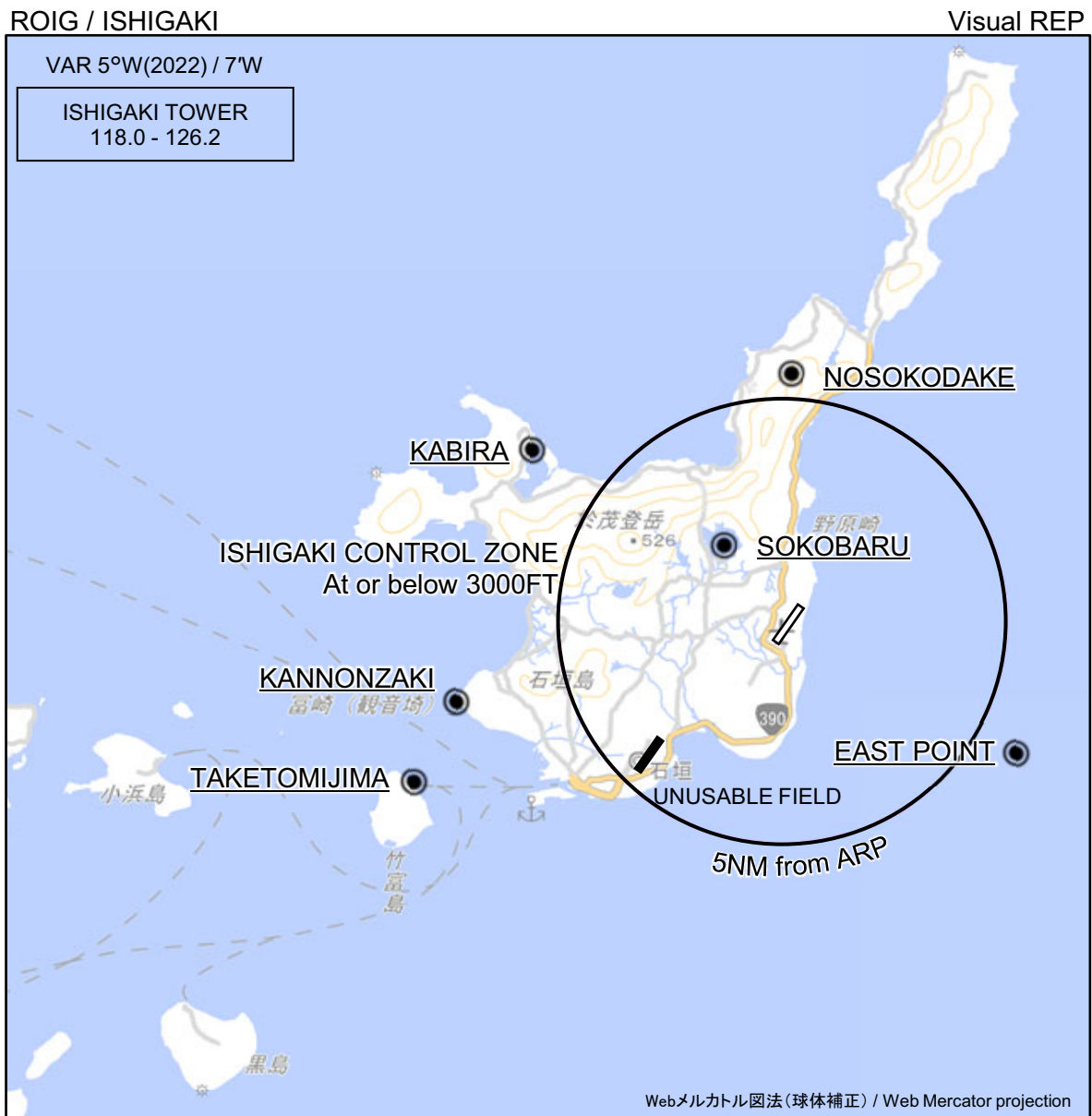
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	OMOCK	-	-	-5.0	-	-	+4000	-	-	-
002	TF	MURAT	-	221 (215.8)	-5.0	5.0	-	-	-	-	1.0
003	TF	URIZN	-	221 (215.8)	-5.0	3.7	-	2200	-	-	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		

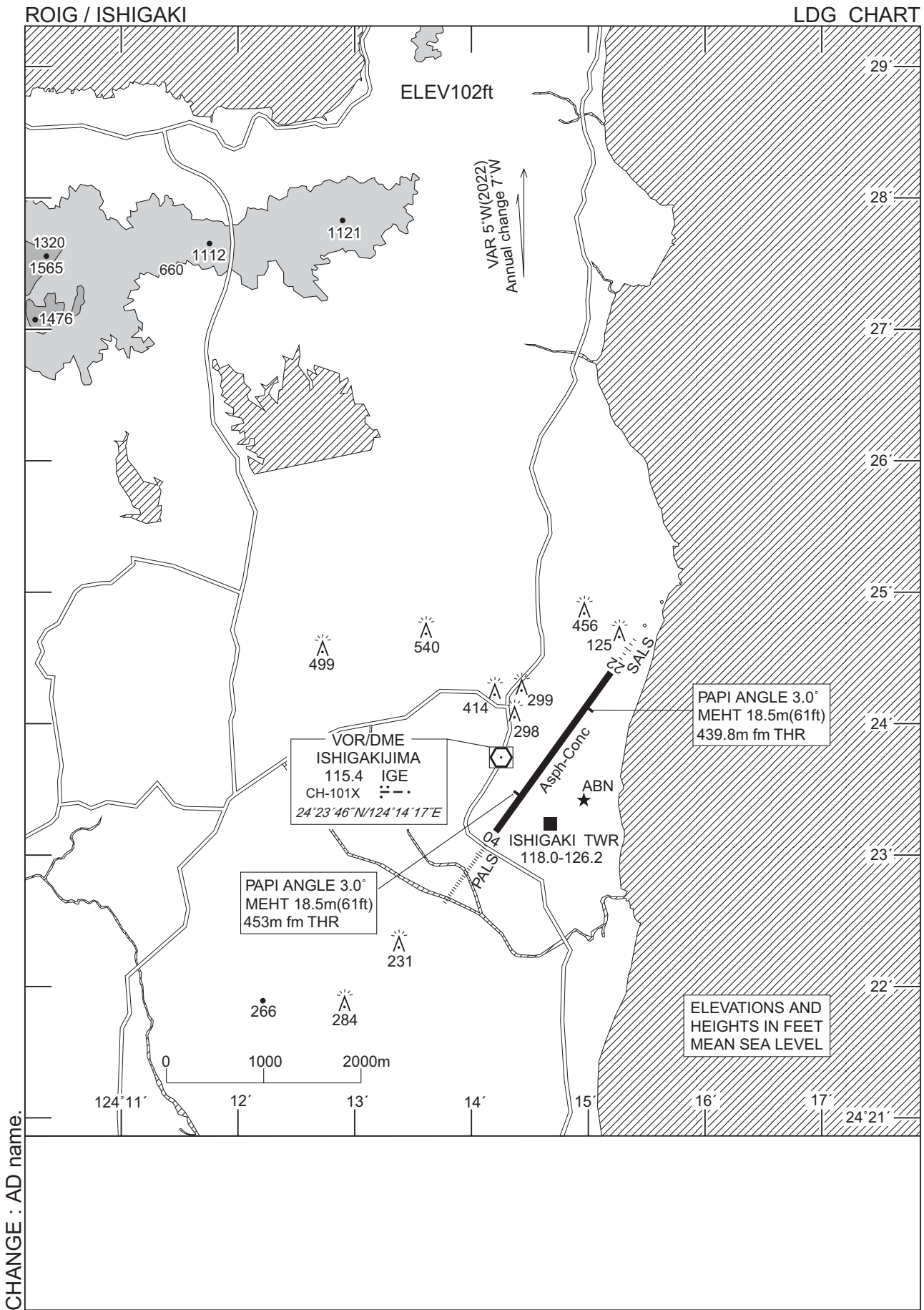
CHANGE : AD name.



※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).

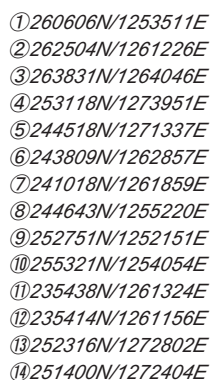
CHANGE : AD and CONTROL ZONE name.

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