

## AD CHART

**MATSUYAMA AP**

**Runway 14/32 Dimensions:**

- ABN: 378m
- TWR: 395m
- 190m
- 461.3m
- 415m
- 420m
- 165m
- 351m

**Longitudinal Profile of Runway:**

Station	Elevation (ft)	Elevation (m)	Grade (%)
0m	25	7.658	LEVEL
240m	25	7.658	0.195%
360m	24	7.424	0.673%
500m	21	6.566	0.78%
890m	11	3.524	0.094%
1300m	13	4.011	0.118%
1500m	13	4.147	0.063%
1720m	14	4.286	0.134%
1980m	15	4.635	0.104%
2140m	15	4.739	0.026%
2300m	16	4.908	0.106%
2420m	17	5.203	0.14%
2500m	16	5.076	0.159%

**Remarks:**

- Runway Strength: PCN 63/F/A/X/T
- Runway Grooving: 2500m x 30m
- Width & Strength of TWY: PCN 63/F/A/X/T
- T-1: PCN 63/F/A/X/T
- T-2: PCN 76/F/B/X/T
- T-3: PCN 88/F/C/X/T
- T-4 thru T-6: PCN 83/F/B/X/T
- T-7: PCN 121/F/D/X/T
- T-8: PCN 83/F/B/X/T
- P-1: PCN 63/F/A/X/T
- P-2 thru P-3: PCN 76/F/B/X/T
- P-4 thru P-7: PCN 83/F/B/X/T

## STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

SID

MATSUYAMA REVERSAL FIVE DEPARTURE

RWY32 : Climb RWY HDG to 500FT, turn left HDG 270° to 3500FT, turn left...

RWY14 : Climb RWY HDG to 1300FT, turn right HDG 270° to 3500FT, turn right...

...direct to MYE VOR/DME.

Cross MYE VOR/DME at or above 6500FT.

Note RWY14 : 7.0% climb gradient required up to 3200FT.

OBST ALT 2822FT located at 7.6NM 172° FM end of RWY14.

No turn before DER.

MATSUYAMA REVERSAL  
FIVE DEPARTURE

STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV SID



## STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

➔ RNAV SID

IYO ONE DEPARTURE

## RWY14

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	—	—	138 (130.7)	-7.4	—	—	+1300	—	—	Basic RNP1
002	DF	SHONO	—	—	-7.4	—	R	+10000	—	—	Basic RNP1

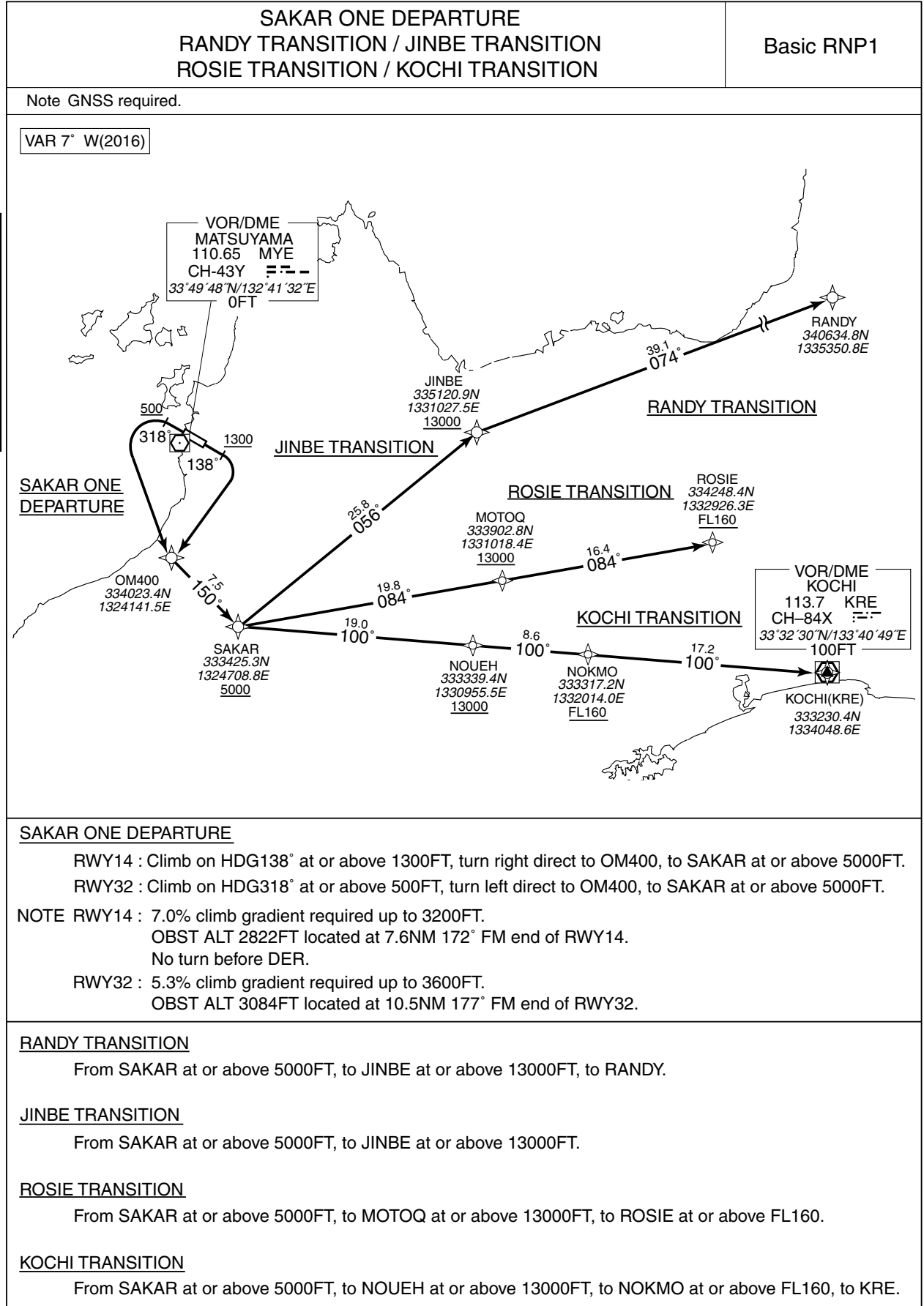
## RWY32

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	—	—	318 (310.7)	-7.4	—	—	+500	—	—	Basic RNP1
002	DF	SHONO	—	—	-7.4	—	L	+10000	—	—	Basic RNP1

STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV SID and TRANSITION



## STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

➡ RNAV SID and TRANSITION

SAKAR ONE DEPARTURE

## RWY14

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	—	—	138 (130.7)	-7.4	—	—	+1300	—	—	Basic RNP1
002	DF	OM400	—	—	-7.4	—	R	—	—	—	Basic RNP1
003	TF	SAKAR	—	150 (142.7)	-7.4	7.5	—	+5000	—	—	Basic RNP1

## RWY32

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	—	—	318 (310.7)	-7.4	—	—	+500	—	—	Basic RNP1
002	DF	OM400	—	—	-7.4	—	L	—	—	—	Basic RNP1
003	TF	SAKAR	—	150 (142.7)	-7.4	7.5	—	+5000	—	—	Basic RNP1

RANDY 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	SAKAR	—	—	-7.4	—	—	+5000	—	—	Basic RNP1
002	TF	JINBE	—	056 (048.8)	-7.4	25.8	—	+13000	—	—	Basic RNP1
003	TF	RANDY	—	074 (066.9)	-7.4	39.1	—	—	—	—	Basic RNP1

JINBE 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	SAKAR	—	—	-7.4	—	—	+5000	—	—	Basic RNP1
002	TF	JINBE	—	056 (048.8)	-7.4	25.8	—	+13000	—	—	Basic RNP1

## STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

➡ RNAV SID and TRANSITION

ROSIE 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	SAKAR	—	—	-7.4	—	—	+5000	—	—	Basic RNP1
002	TF	MOTOQ	—	084 (076.4)	-7.4	19.8	—	+13000	—	—	Basic RNP1
003	TF	ROSIE	—	084 (076.6)	-7.4	16.4	—	+FL160	—	—	Basic RNP1

KOCHI 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	SAKAR	—	—	-7.4	—	—	+5000	—	—	Basic RNP1
002	TF	NOUEH	—	100 (092.2)	-7.4	19.0	—	+13000	—	—	Basic RNP1
003	TF	NOKMO	—	100 (092.4)	-7.4	8.6	—	+FL160	—	—	Basic RNP1
004	TF	KRE	—	100 (092.5)	-7.4	17.2	—	—	—	—	Basic RNP1

## STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

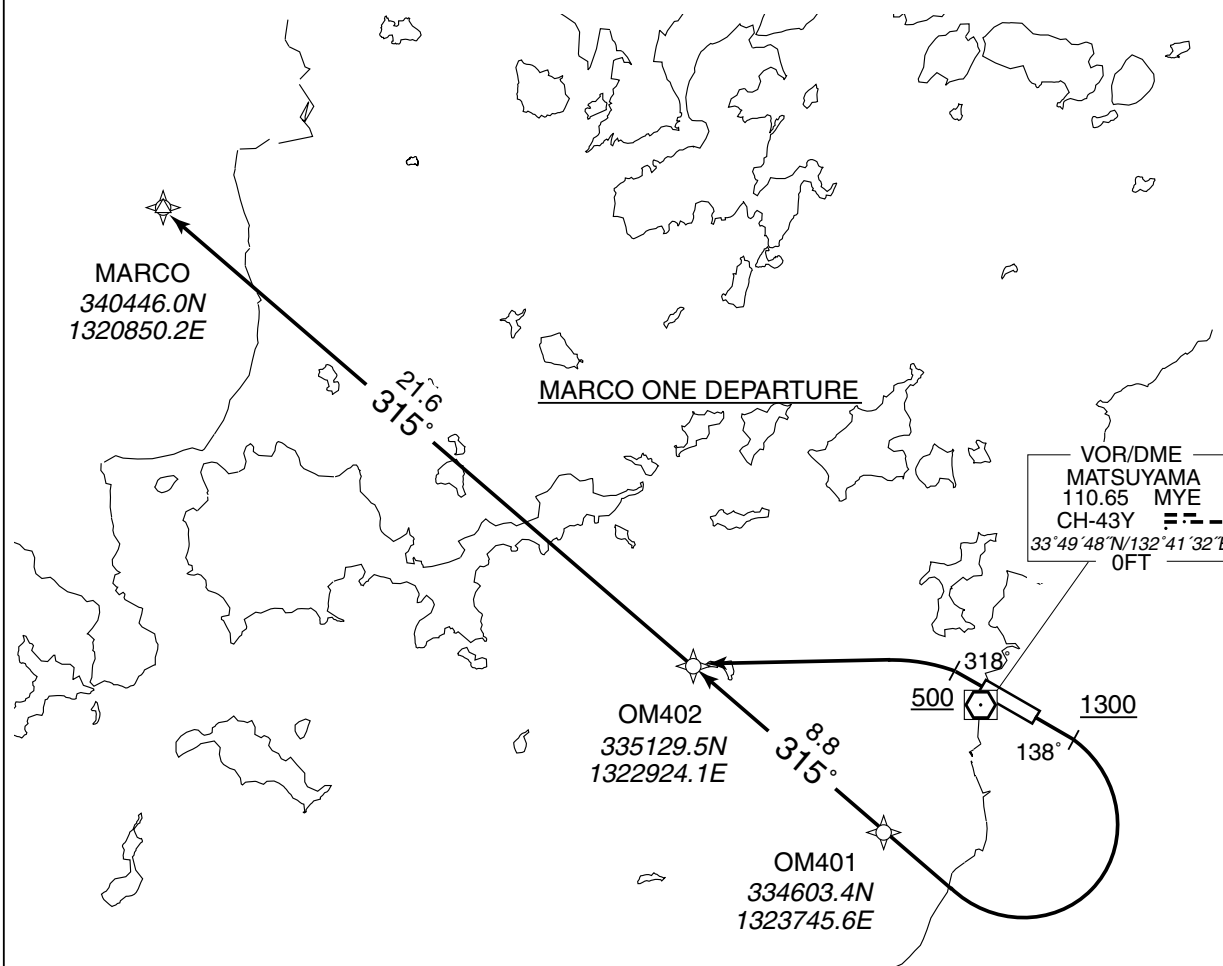
RNAV SID

## MARCO ONE DEPARTURE

Basic RNP1

Note GNSS required.

VAR 7° W(2016)

MARCO ONE DEPARTURE

RWY14 : Climb on HDG138° at or above 1300FT, turn right direct to OM401, to OM402, to MARCO.

RWY32 : Climb on HDG318° at or above 500FT, turn left direct to OM402, to MARCO.

NOTE RWY14 : 7.0% climb gradient required up to 1800FT.

OBST ALT 1464FT located at 4.3NM 154° FM end of RWY14.

No turn before DER.



## STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

➡ RNAV SID

MARCO ONE DEPARTURE

## RWY14

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	—	—	138 (130.7)	-7.4	—	—	+1300	—	—	Basic RNP1
002	DF	OM401	—	—	-7.4	—	R	—	—	—	Basic RNP1
003	TF	OM402	—	315 (308.1)	-7.4	8.8	—	—	—	—	Basic RNP1
004	TF	MARCO	—	315 (308.1)	-7.4	21.6	—	—	—	—	Basic RNP1

## RWY32

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	—	—	318 (310.7)	-7.4	—	—	+500	—	—	Basic RNP1
002	DF	OM402	—	—	-7.4	—	L	—	—	—	Basic RNP1
003	TF	MARCO	—	315 (308.1)	-7.4	21.6	—	—	—	—	Basic RNP1

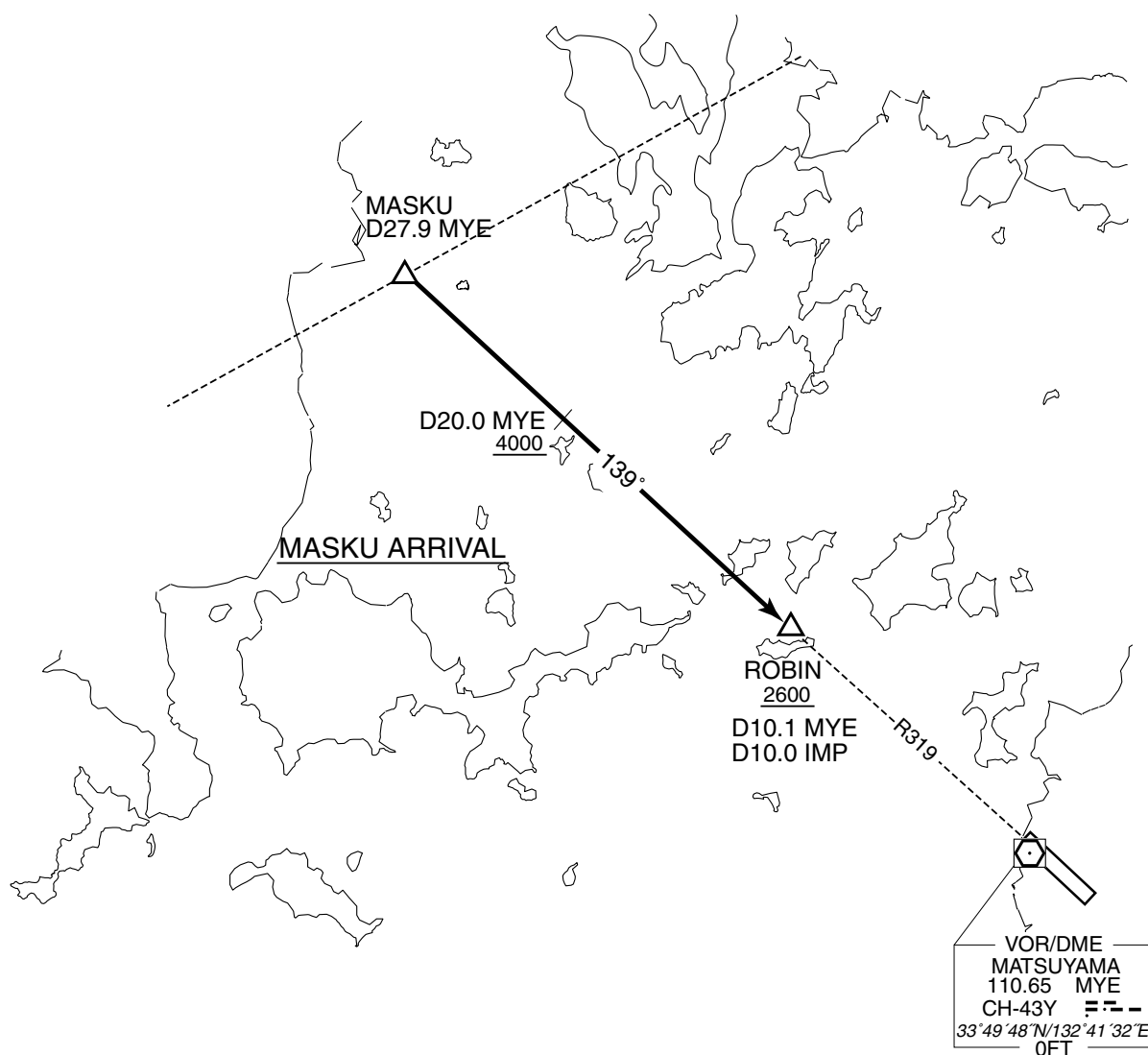
## STANDARD ARRIVAL CHART - INSTRUMENT

RJOM / MATSUYAMA

STAR

MASKU ARRIVAL

From over MASKU, via MYE R319 to ROBIN.

Cross MASKU at or above 5000FT, cross MYE R319/20.0DME at or above 4000FT,  
cross ROBIN at or above 2600FT.

STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV STAR RWY14

ROBIN WEST ARRIVAL	Basic RNP1
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Note GNSS required.

VAR 7°W (2016)



## STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV STAR RWY14

ROBIN WEST ARRIVAL

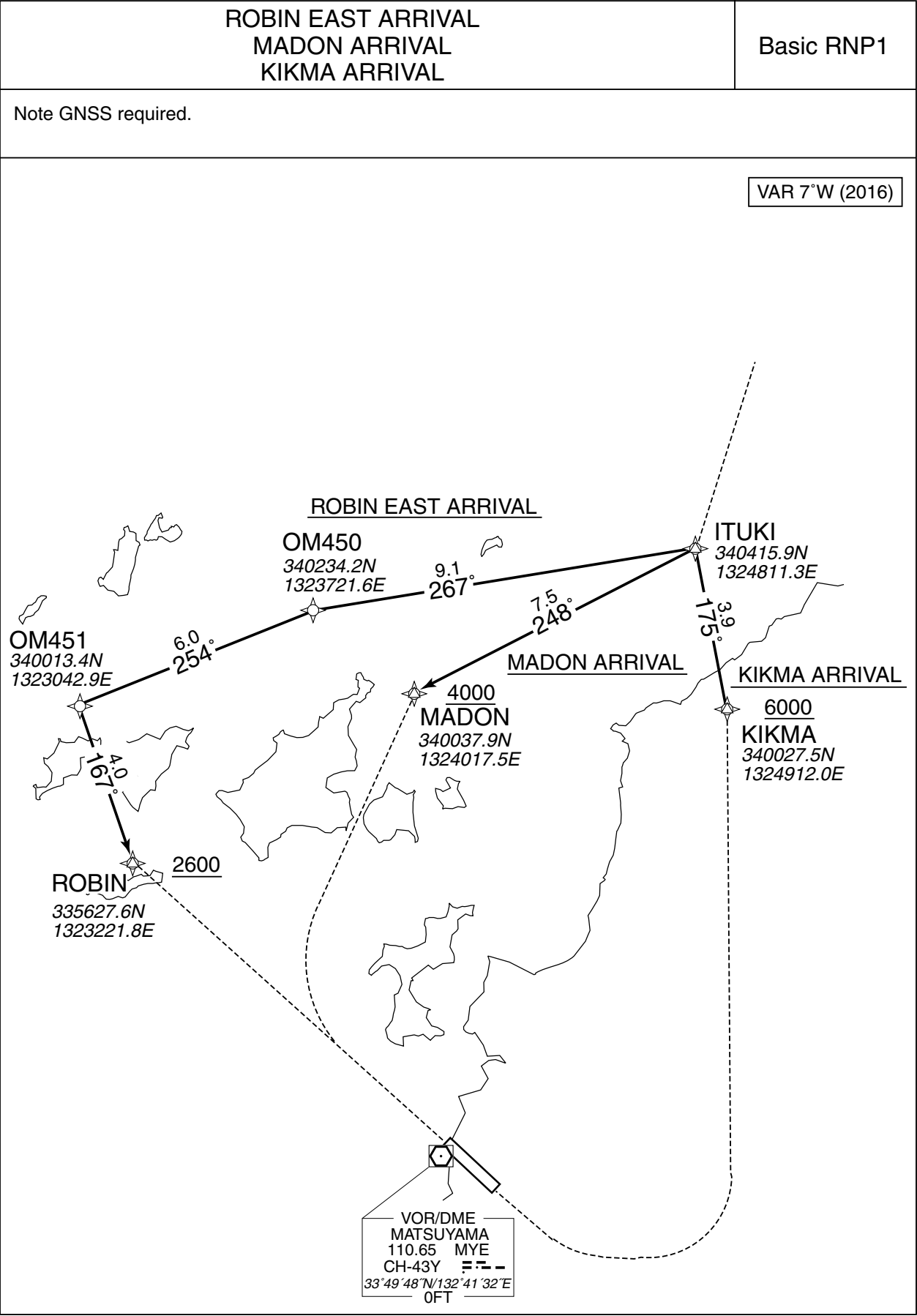
From MARCO, to ROMAN at or above 4000FT, to ROBIN at or above 2600FT.

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	MARCO	—	—	■ -7.4	—	—	—	—	—	■ Basic RNP1
002	TF	ROMAN	—	<sup>120</sup> (113.0)	■ -7.4	10.0	—	+4000	—	—	■ Basic RNP1
003	TF	ROBIN	—	<sup>120</sup> (113.1)	■ -7.4	11.2	—	+2600	—	—	■ Basic RNP1

STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV STAR RWY14/32



## STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV STAR RWY14/32

ROBIN EAST ARRIVAL

From ITUKI, to OM450, to OM451, to ROBIN at or above 2600FT.

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	ITUKI	—	—	■ -7.4	—	—	—	—	—	■ Basic RNP1
002	TF	OM450	—	■ 267 (259.4)	■ -7.4	9.1	—	—	—	—	■ Basic RNP1
003	TF	OM451	—	■ 254 (247.0)	■ -7.4	6.0	—	—	—	—	■ Basic RNP1
004	TF	ROBIN	—	■ 167 (160.0)	■ -7.4	4.0	—	+2600	—	—	■ Basic RNP1

MADON ARRIVAL

From ITUKI, to MADON at or above 4000FT.

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	ITUKI	—	—	■ -7.4	—	—	—	—	—	■ Basic RNP1
002	TF	MADON	—	■ 248 (241.0)	■ -7.4	7.5	—	+4000	—	—	■ Basic RNP1

KIKMA ARRIVAL

From ITUKI, to KIKMA at or above 6000FT.

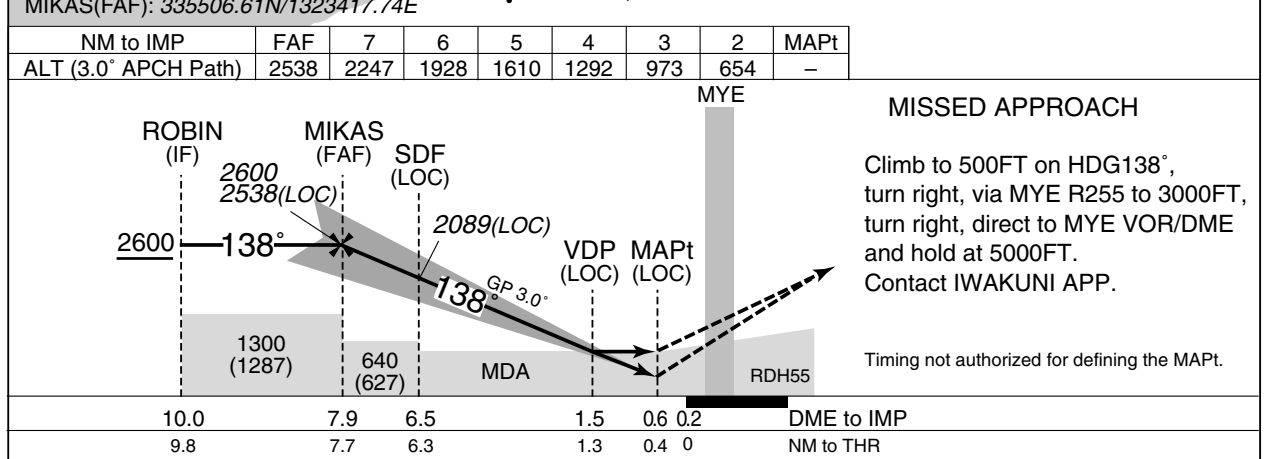
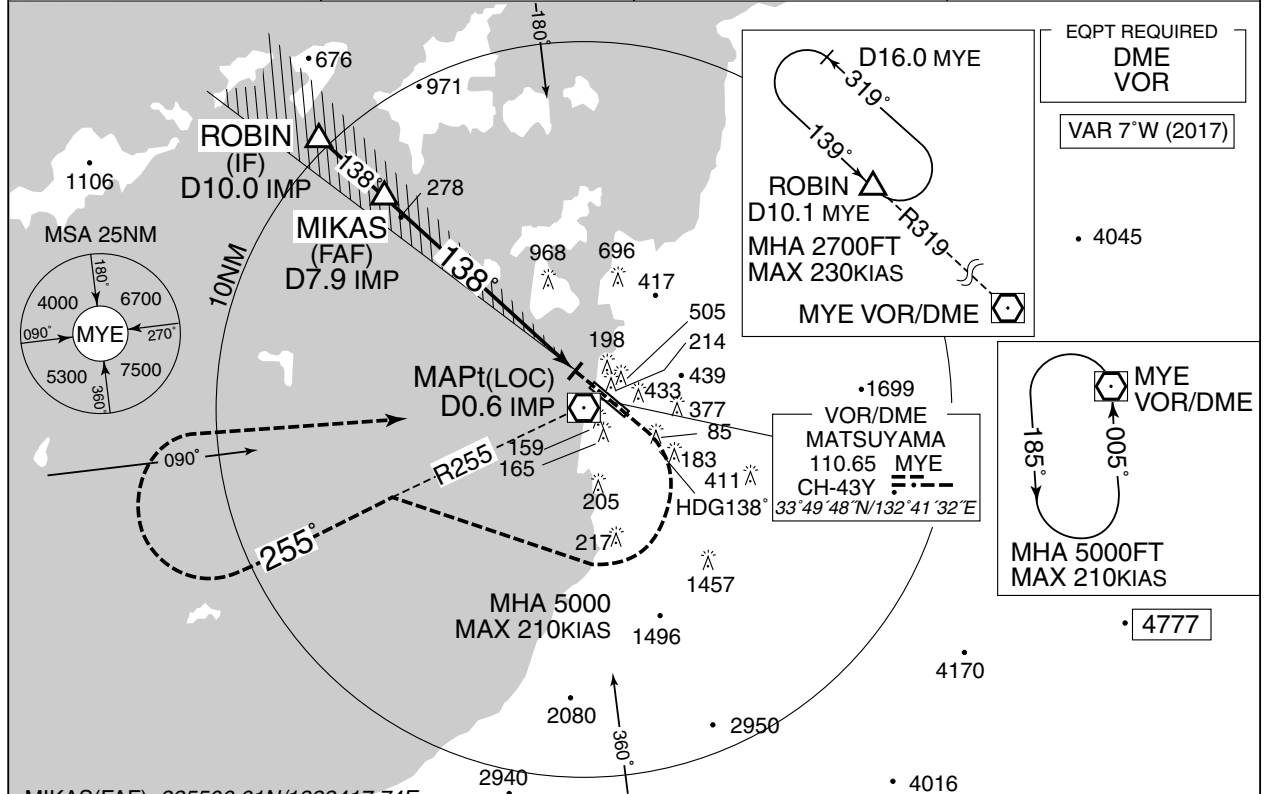
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	ITUKI	—	—	■ -7.4	—	—	—	—	—	■ Basic RNP1
002	TF	KIKMA	—	■ 175 (167.6)	■ -7.4	3.9	—	+6000	—	—	■ Basic RNP1

INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

ILS Z or LOC Z RWY14

IWAKUNI APP 128.0 - 236.2	ILS-LOC 109.3 IMP ILS-GP 332.0 ILS-DME CH-30X	MATSUYAMA TOWER 118.35 - 126.2	RADAR AVBL ATIS 126.65
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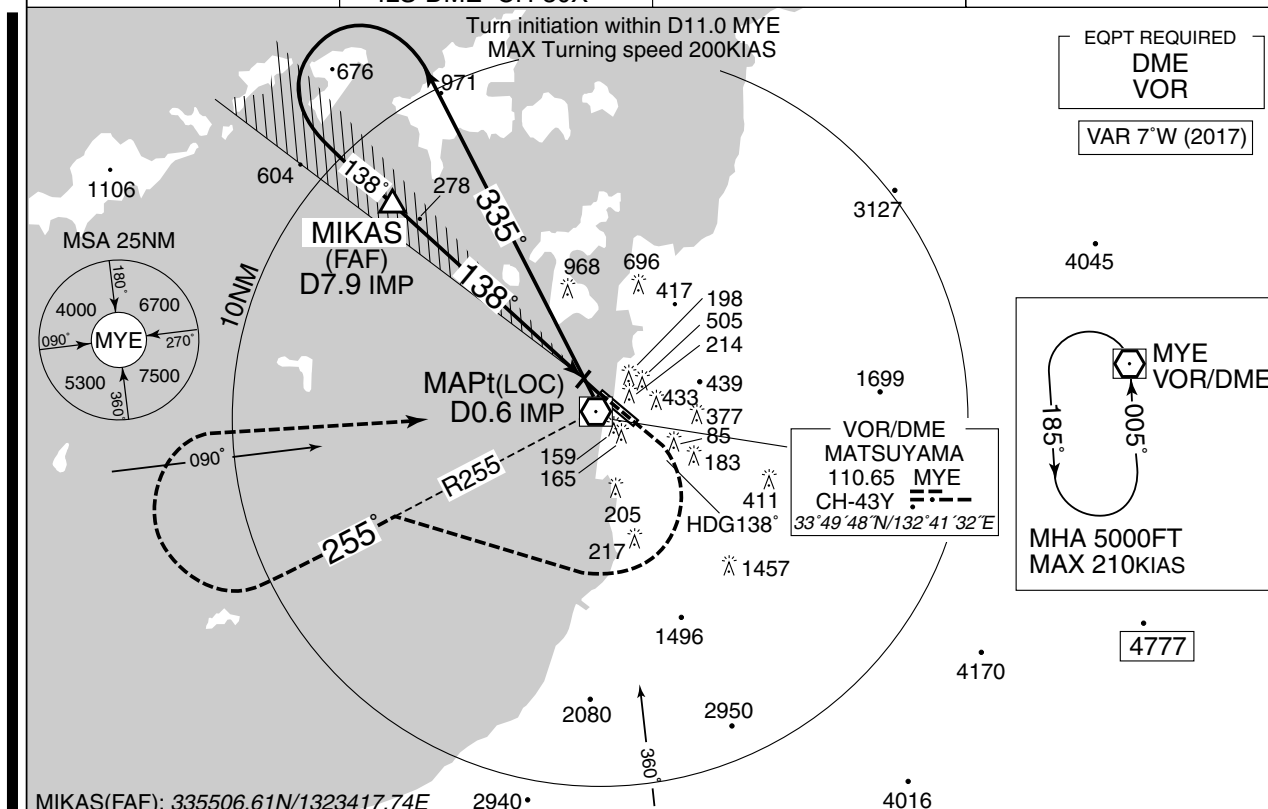


Missed APCH climb gradient MNM 4.0%.						
MINIMA		THR elev. 25		AD elev. 13		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	225 (200)	1000	470 (457)	1500	520 (507)	1600
B				2000		2400
C					570 (557)	
D						
MINIMA with Missed APCH climb gradient of 2.5% are not established. Circling to WEST side of RWY only.						

## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

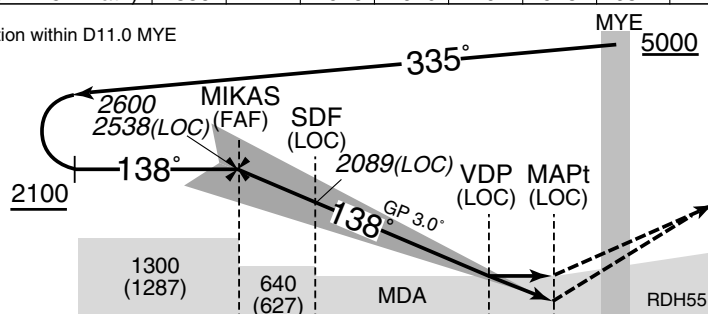
ILS Y or LOC Y RWY14

IWAKUNI APP  
128.0 - 236.2ILS-LOC  
109.3 IMP  
ILS-GP 332.0  
ILS-DME CH-30XMATSUYAMA TOWER  
118.35 - 126.2RADAR AVBL  
ATIS 126.65

MIKAS(FAF): 335506.61N/1323417.74E

NM to IMP	FAF	7	6	5	4	3	2	MAPt
ALT (3.0° APCH Path)	2538	2247	1928	1610	1292	973	654	-

Turn initiation within D11.0 MYE



## MISSED APPROACH

Climb to 5000FT on HDG138°, turn right, via MYE R255 to 3000FT, turn right, direct to MYE VOR/DME and hold at 5000FT. Contact IWAKUNI APP.

Timing not authorized for defining the MAPt.

DME to IMP	7.9	6.5	1.5	0.6	0.2
NM to THR	7.7	6.3	1.3	0.4	0

Missed APCH climb gradient MNM 4.0%.

MINIMA		THR elev. 25		AD elev. 13	
CAT	CAT I		LOC		CIRCLING
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H) VIS
A	225 (200)	1000	470 (457)	1500	520 (507) 1600
B				2000	2400
C					3200
D					

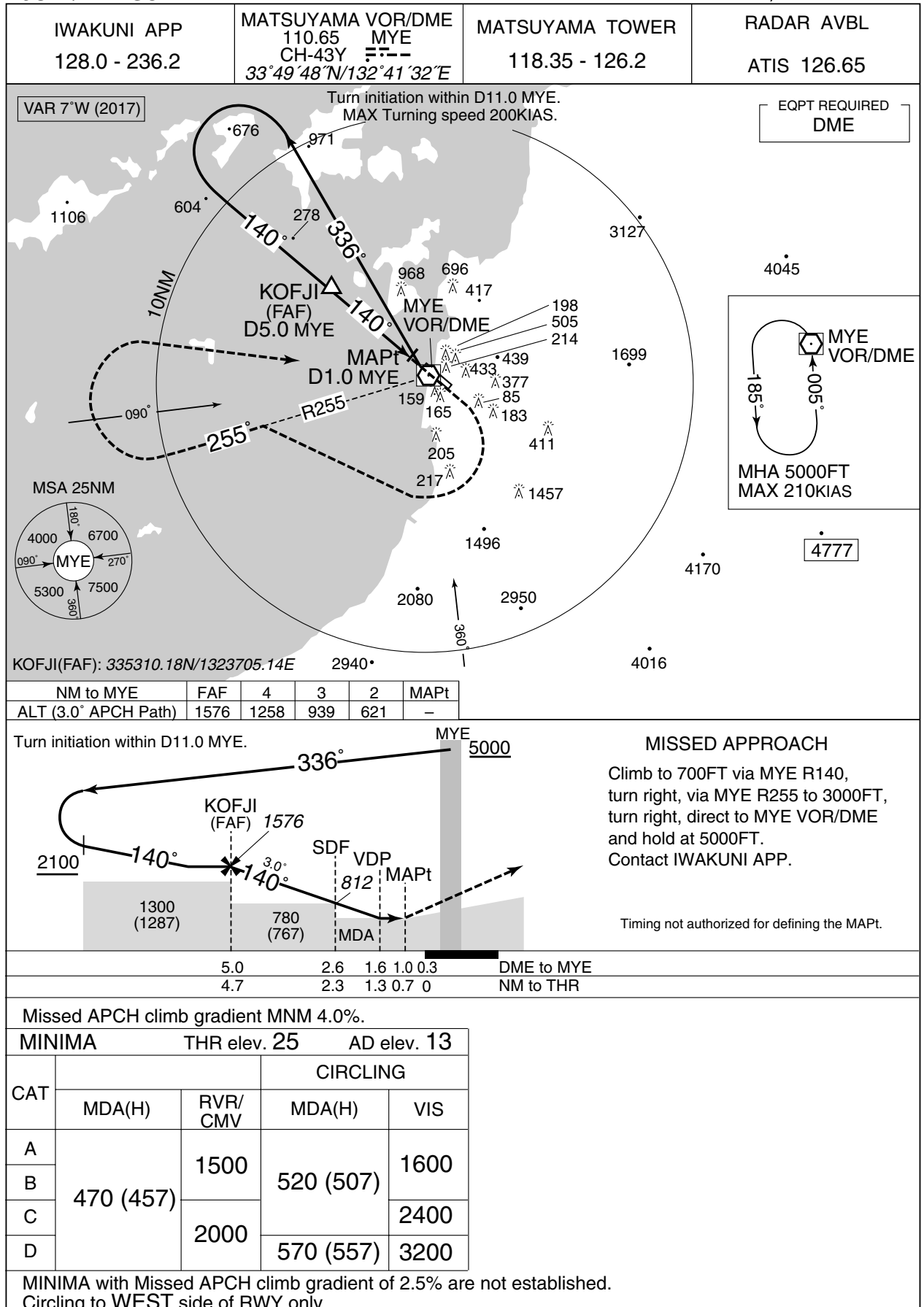
MINIMA with Missed APCH climb gradient of 2.5% are not established.  
Circling to WEST side of RWY only.



INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

➔ VOR RWY14



## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNAV(RNP) RWY14

IWAKUNI APP 128.0 - 236.2	GNSS and RF required	MATSUYAMA TOWER 118.35 - 126.2	RADAR AVBL ATIS 126.65
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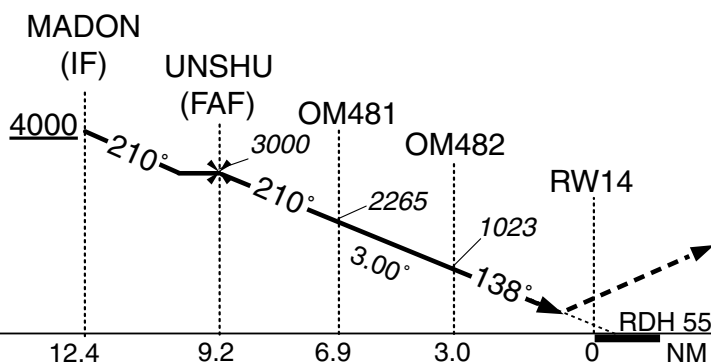
For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 50°C



UNSHU(FAF) : 335740.45N/1323845.52E

## MISSED APPROACH

From RW14 on track 138°, at or above 700FT turn right, direct to OM483, to OM484, to ROBIN and hold at 2700FT. Contact IWAKUNI APP.



Missed APCH climb gradient MNM 5.0%.

CAT	MINIMA		THR elev.25		AD elev.13	
	RNP 0.30		DA(H)		CMV	
A	—		—		—	
B	—		—		—	
C	—		—		—	
D	505(480)		2000		—	

MINIMA with Missed APCH climb gradient of 2.5% are not established.

**RNP AR**

Special Authorization Required

## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNAV(RNP) RWY14

RNAV(RNP) RWY14Coding 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	MADON	—	—	-7.1	—	—	+4000	—	—	—
002	TF	UNSHU	—	210 (203.3)	-7.1	3.2	—	3000	—	—	1.0
003	TF	OM481	—	210 (203.2)	-7.1	2.3	—	2265	—	-3.00	0.3
004	RF Center: OMRF4 r=3.06NM	OM482	—	—	-7.1	3.9	L	1023	—	-3.00	0.3
005	TF	RW14	Y	138 (130.5)	-7.1	3.0	—	80	—	-3.00/55	0.3
006	FA	—	—	138 (130.5)	-7.1	—	—	+700	—	—	1.0
007	DF	OM483	—	—	-7.1	—	R	—	—	—	1.0
008	TF	OM484	—	318 (310.5)	-7.1	7.2	—	—	—	—	1.0
009	TF	ROBIN	—	026 (018.6)	-7.1	5.4	—	2700	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
MADON	340037.92N/1324017.47E	OMRF4	335420.16N/1324102.43E
UNSHU	335740.45N/1323845.52E		
OM481	335533.13N/1323739.63E		
OM482	335159.96N/1323839.26E		
RW14	335004.50N/1324121.73E		
OM483	334643.12N/1323652.81E		
OM484	335123.09N/1323018.19E		
ROBIN	335627.62N/1323221.80E		

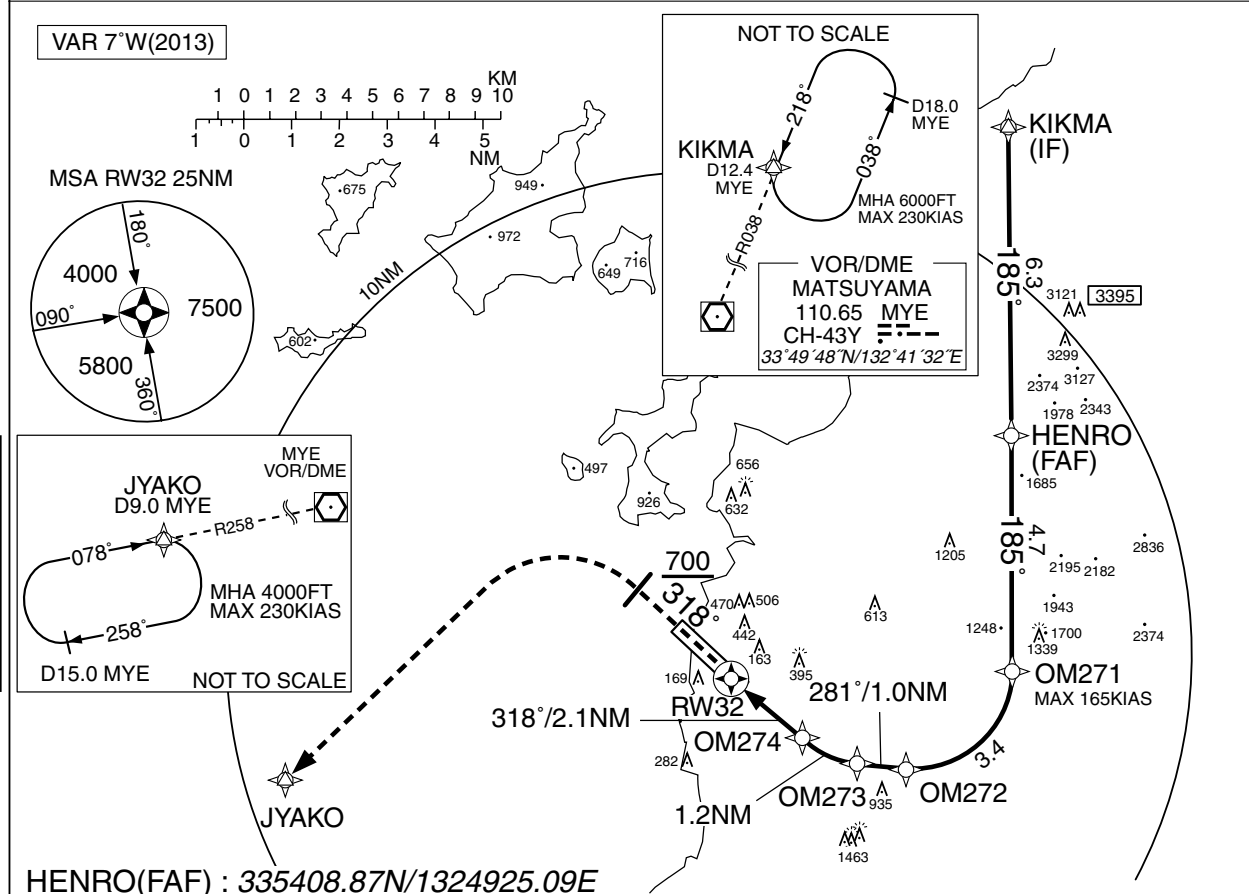
## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNAV(RNP) RWY32

IWAKUNI APP 128.0 - 236.2	GNSS and RF required	MATSUYAMA TOWER 118.35 - 126.2	RADAR AVBL ATIS 126.65
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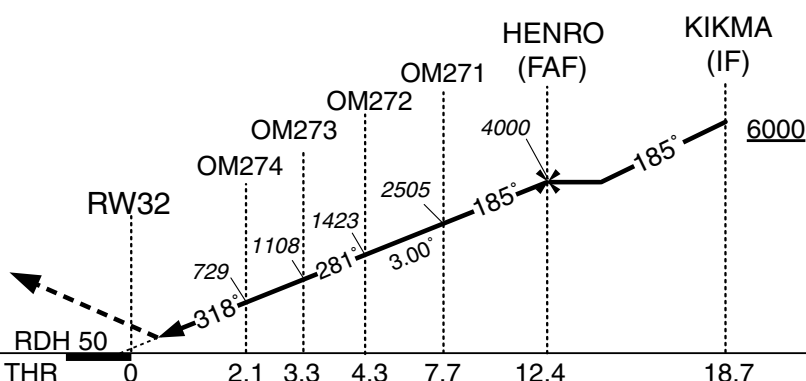
For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 50°C



## MISSED APPROACH

From RW32 on track 318°, at or above 700FT turn left, direct to JYAKO and hold at 4000FT.

Contact IWAKUNI APP.



Missed APCH climb gradient MNM 5.0%.

MINIMA THR elev.17 AD elev.13

CAT	RNP 0.30	
	DA(H)	CMV
A	—	—
B	—	—
C	484(467)	1600
D		1800

MINIMA with Missed APCH climb gradient of 2.5% are not established.

**RNP AR**

Special Authorization Required

## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNAV(RNP) RWY32

RNAV(RNP) RWY32Coding Table

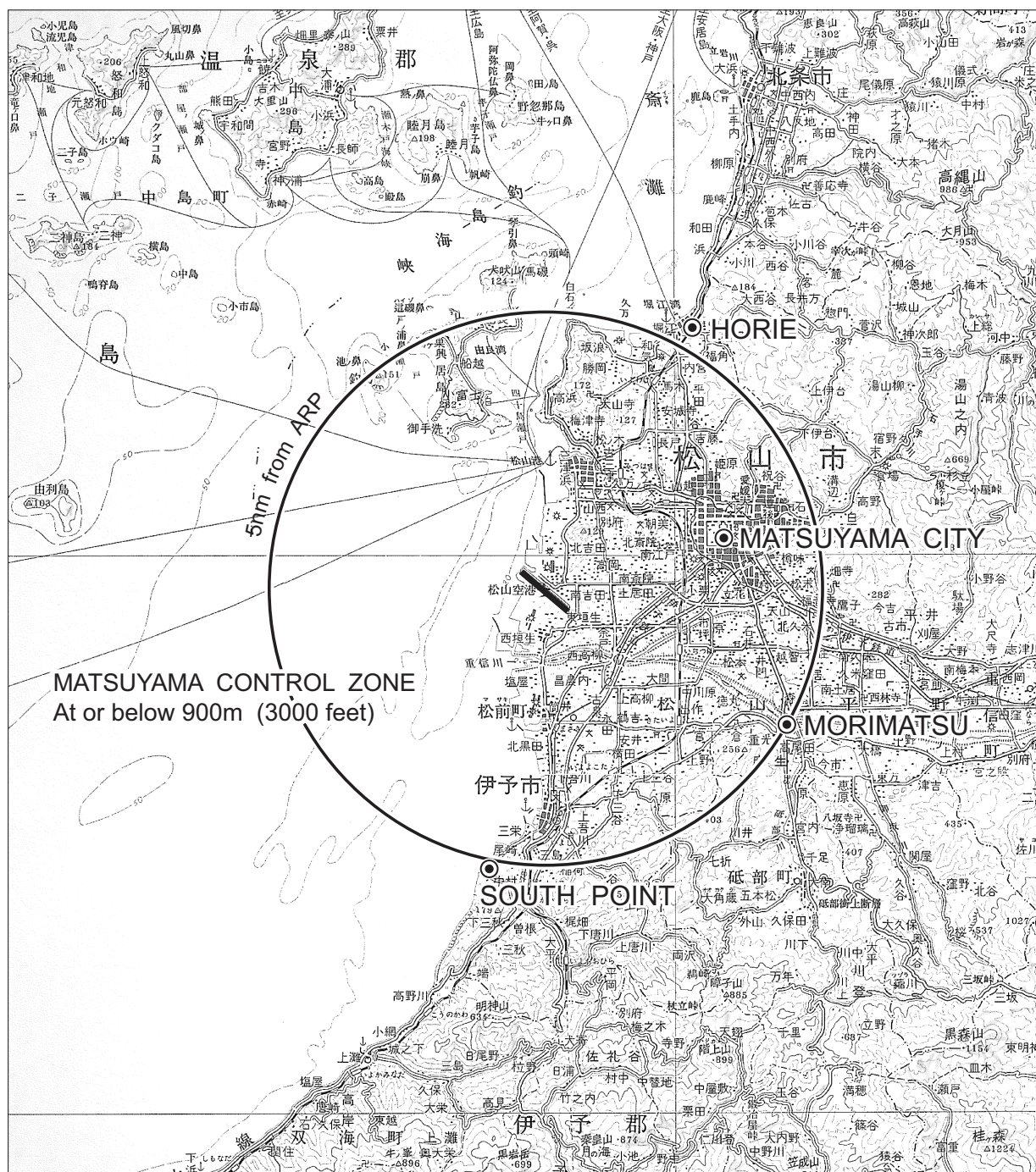
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/RDH (°/FT)	RNP Value
001	IF	KIKMA	—	—	-7.1	—	—	+6000	—	—	—
002	TF	HENRO	—	185 (178.4)	-7.1	6.3	—	4000	—	—	1.0
003	TF	OM271	—	185 (178.4)	-7.1	4.7	—	2505	-165	-3.00	0.3
004	RF Center: OMRF1 r=2.04NM	OM272	—	—	-7.1	3.4	R	1423	—	-3.00	0.3
005	TF	OM273	—	281 (273.5)	-7.1	1.0	—	1108	—	-3.00	0.3
006	RF Center: OMRF2 r=1.85NM	OM274	—	—	-7.1	1.2	R	729	—	-3.00	0.3
007	TF	RW32	Y	318 (310.7)	-7.1	2.1	—	67	—	-3.00/50	0.3
008	FA	—	—	318 (310.7)	-7.1	—	—	+700	—	—	1.0
009	DF	JYAKO	—	—	-7.1	—	L	4000	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
KIKMA	340027.49N/1324911.96E	OMRF1	334923.23N/1324707.68E
HENRO	335408.87N/1324925.09E	OMRF2	334915.02N/1324555.54E
OM271	334926.79N/1324934.83E		
OM272	334720.59N/1324658.72E		
OM273	334724.21N/1324547.47E		
OM274	334750.46N/1324429.38E		
RW32	334911.75N/1324235.61E		
JYAKO	334643.83N/1323118.89E		

## RJOM / MATSUYAMA

## Visual REP



Call sign	BRG / DIST from ARP	Remarks
堀江 Horie	033°/5.4NM	堀江港 Horie harbor
松山シティー Matsuyama City	076°/3.4NM	松山城 Matsuyama castle
森松 Morimatsu	124°/5.0NM	森松町重信橋 Shigenobu bridges in Morimatsu cho
サウスポイント South Point	199°/5.1NM	伊予市南部森川河口 Mori river-mouth in the southern part of Iyo city