

**MATSUYAMA AP**

**REMARKS :**

- RWY STRENGTH PCR 754/F/A/X/T
- RWY GROOVING 2500m x 30m
- WIDTH & STRENGTH OF TWY
- T-1, T-8 28.5m PCR 754/F/A/X/T
- T-2 thru T-7 34m PCR 754/F/A/X/T
- P-1 thru P-3 23m PCR 754/F/A/X/T
- P-4 23m PCR 925/R/B/W/T
- P-5 thru P-7 23m PCR 754/F/A/X/T

**STRENGTH OF APRON**

- SPOT 1 thru 7 PCR 925/R/B/W/T
- SPOT 10 thru 14, B thru H, J, K PCR 757/F/D/X/T
- SPOT 15 thru 18 PCR 394/F/B/X/T

**LONGITUDINAL PROFILE OF RUNWAY**

RWY 14  
25 ft (7.658m)  
LEVEL 0.195% 0.613% 0.78% 0.094% 0.118% 0.063% 0.134% 0.104% 0.026% 0.106% 0.14% 0.159%

RWY 32  
16 ft (5.076m)  
17 ft (5.203m)

**INTENTIONALLY LEFT BLANK**

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...

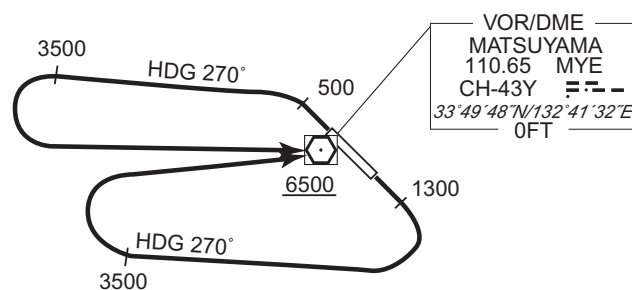
RWY14 : Climb RWY HDG to 1300FT, turn right HDG 270° to 3500FT, turn right...  
...direct to MYE VOR/DME.

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 173° FM end of RWY14.

No turn before DER.

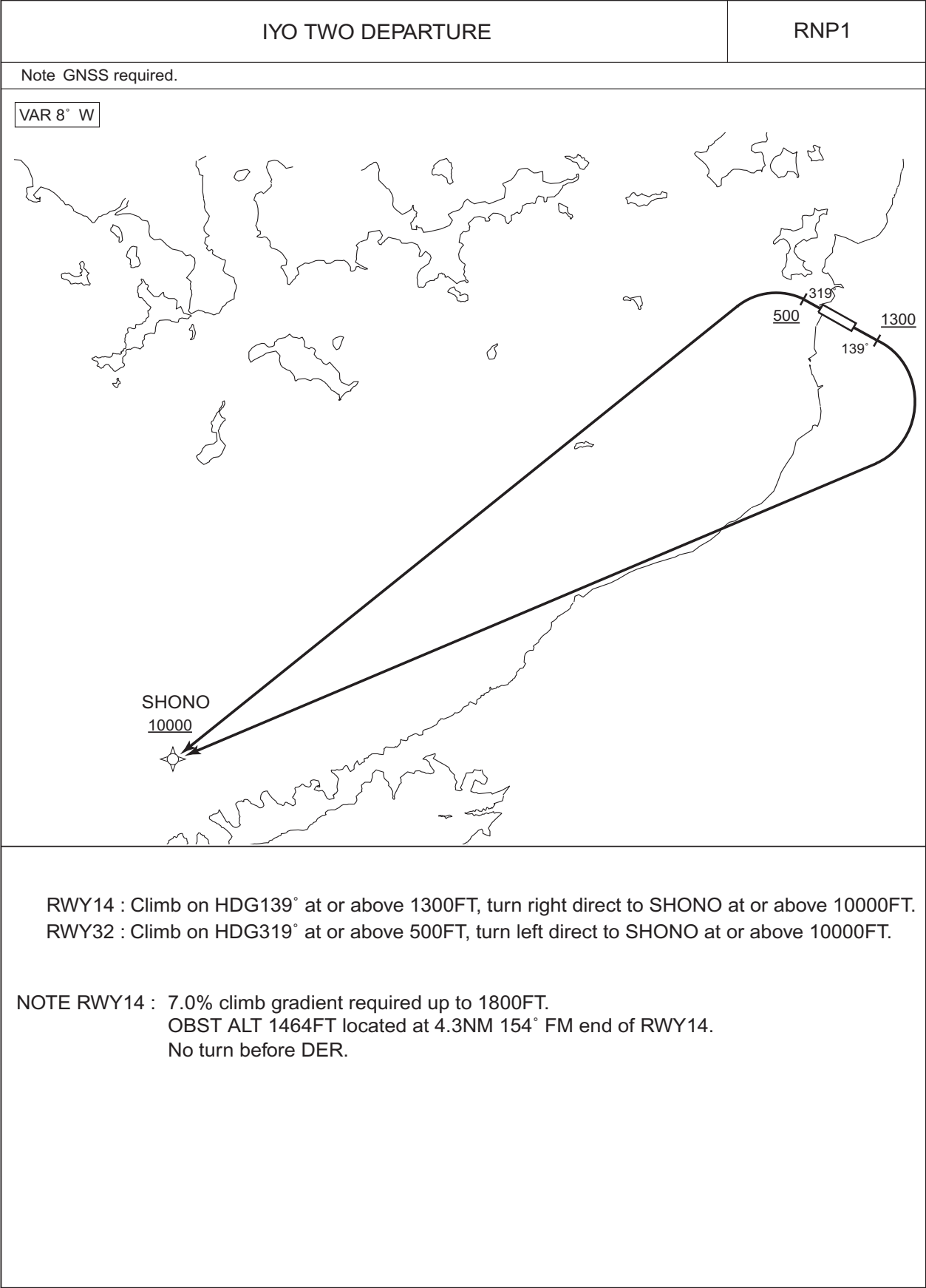


CHANGE : OBST.

STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV SID



CHANGE : PROC renamed. PROC course. VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV SID

IYO TWO 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	-	-	139 (130.7)	-8.1	-	-	+1300	-	-	RNP1
002	DF	SHONO	-	-	-8.1	-	R	+10000	-	-	RNP1

RWY32

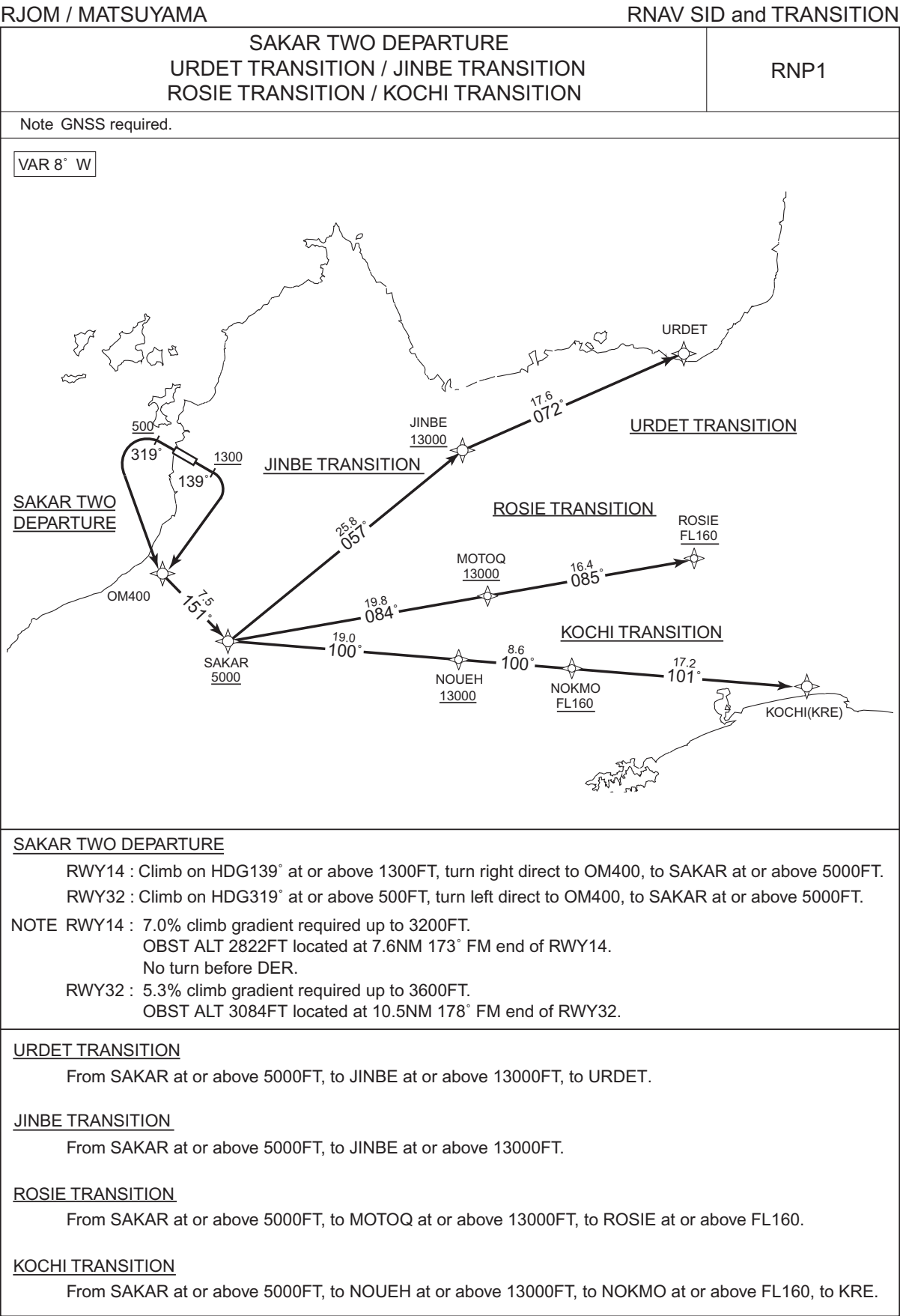
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	319 (310.7)	-8.1	-	-	+500	-	-	RNP1
002	DF	SHONO	-	-	-8.1	-	L	+10000	-	-	RNP1

Waypoint Coordinates

Waypoint Identifier	Coordinates
SHONO	332744.0N / 1320647.1E

CHANGE : PROC renamed. PROC course. VAR. Waypoint Coordinates added.

STANDARD DEPARTURE CHART -INSTRUMENT



CHANGE : PROC renamed(SAKAR TWO DEPARTURE). URDET TRANSITION, URDET established.  
RANDY TRANSITION, RANDY abolished. VAR. PROC course.

STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV SID and TRANSITION

SAKAR TWO 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	-	-	139 (130.7)	-8.1	-	-	+1300	-	-	RNP1
002	DF	OM400	-	-	-8.1	-	R	-	-	-	RNP1
003	TF	SAKAR	-	151 (142.7)	-8.1	7.5	-	+5000	-	-	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	-	-	319 (310.7)	-8.1	-	-	+500	-	-	RNP1
002	DF	OM400	-	-	-8.1	-	L	-	-	-	RNP1
003	TF	SAKAR	-	151 (142.7)	-8.1	7.5	-	+5000	-	-	RNP1

URDET 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	-	-	-8.1	-	-	+5000	-	-	RNP1
002	TF	JINBE	-	057 (048.8)	-8.1	25.8	-	+13000	-	-	RNP1
003	TF	URDET	-	072 (064.0)	-8.1	17.6	-	-	-	-	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	-	-	-8.1	-	-	+5000	-	-	RNP1
002	TF	JINBE	-	057 (048.8)	-8.1	25.8	-	+13000	-	-	RNP1

CHANGE : PROC renamed(SAKAR TWO DEP, URDET TRANSITION). URDET established. RANDY abolished. PROC course. VAR.

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	-	-	-8.1	-	-	+5000	-	-	RNP1
002	TF	MOTOQ	-	084 (076.4)	-8.1	19.8	-	+13000	-	-	RNP1
003	TF	ROSIE	-	085 (076.6)	-8.1	16.4	-	+FL160	-	-	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	-	-	-8.1	-	-	+5000	-	-	RNP1
002	TF	NOUEH	-	100 (092.2)	-8.1	19.0	-	+13000	-	-	RNP1
003	TF	NOKMO	-	100 (092.4)	-8.1	8.6	-	+FL160	-	-	RNP1
004	TF	KRE	-	101 (092.5)	-8.1	17.2	-	-	-	-	RNP1

Waypoint Coordinates

Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
OM400	334023.4N / 1324141.5E	ROSIE	334248.4N / 1332926.3E
SAKAR	333425.3N / 1324708.8E	NOUEH	333339.4N / 1330955.5E
JINBE	335120.9N / 1331027.5E	NOKMO	333317.2N / 1332014.0E
URDET	335902.5N / 1332930.9E	KRE	333230.4N / 1334048.6E
MOTOQ	333902.8N / 1331018.4E		

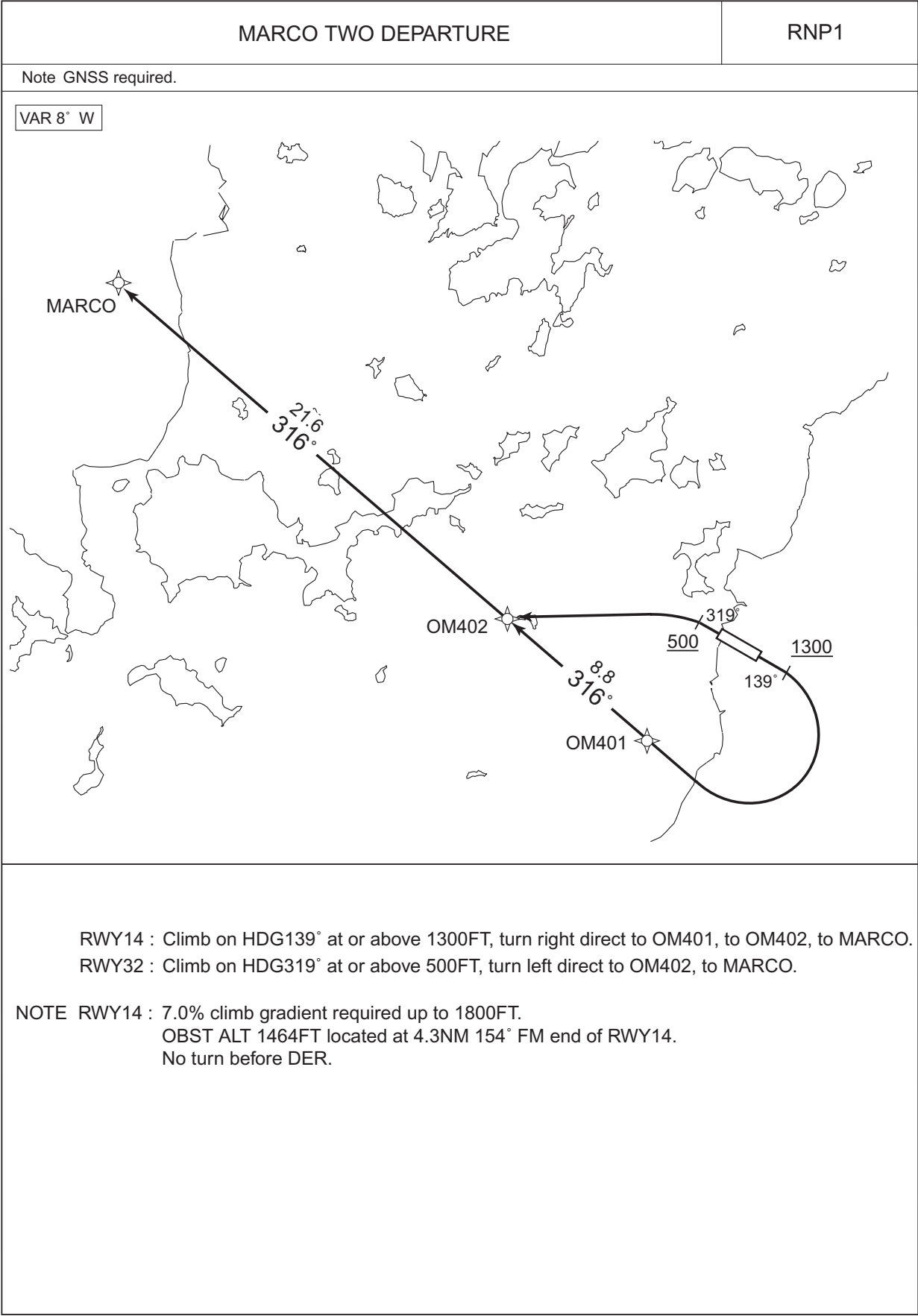
CHANGE : PROC course. VAR. Waypoint Coordinates added.



STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV SID



CHANGE : PROC renamed. VAR. PROC course.



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

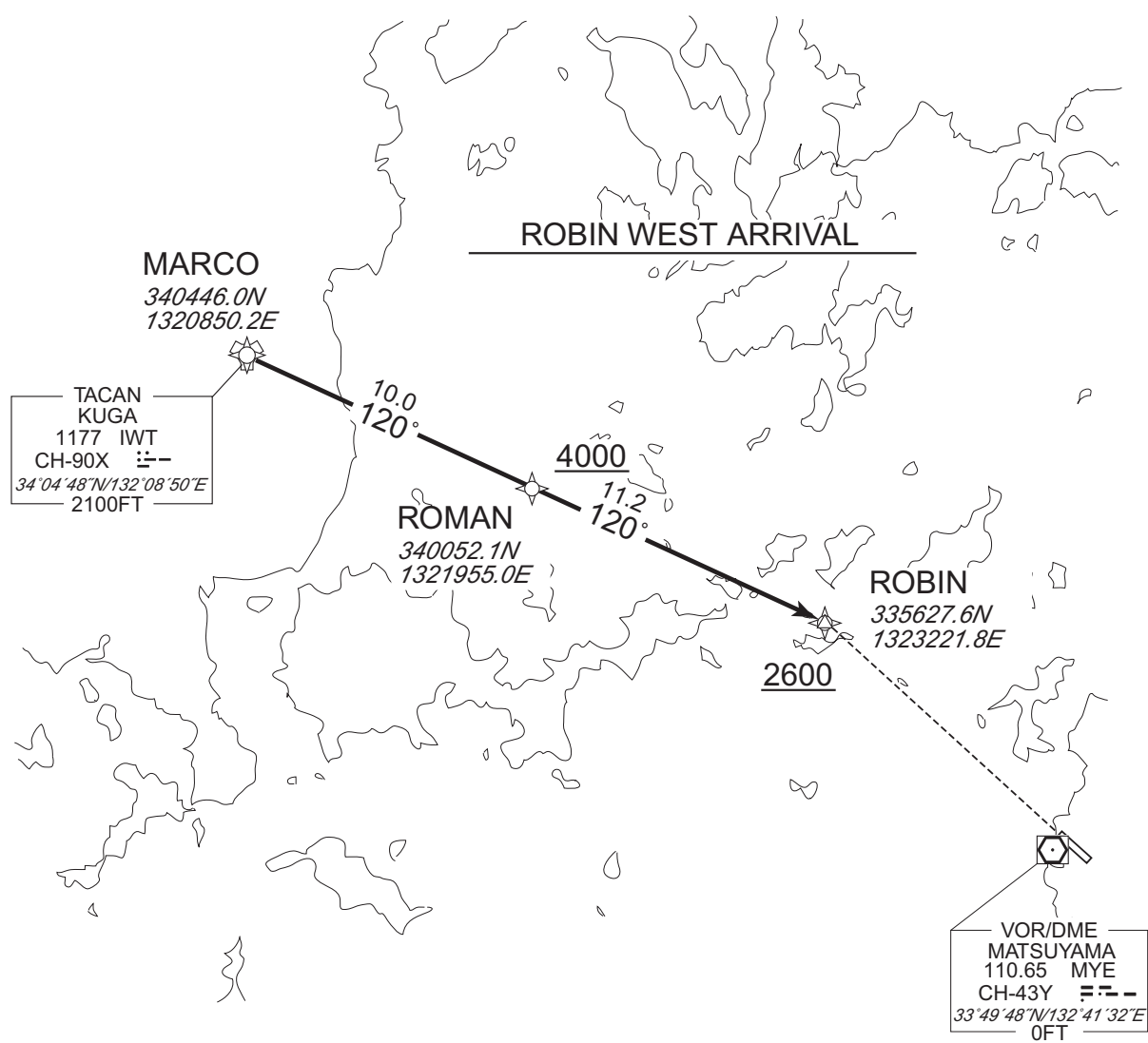
RJOM / MATSUYAMA

RNAV STAR RWY14

ROBIN WEST ARRIVAL	RNP1
--------------------	------

Note GNSS required.

VAR 7°W (2016)



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

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	-	-	-	-	-	RNP1
002	TF	ROMAN	-	120 (113.0)	-7.4	10.0	-	+4000	-	-	RNP1
003	TF	ROBIN	-	120 (113.1)	-7.4	11.2	-	+2600	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

## STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV STAR RWY14/32

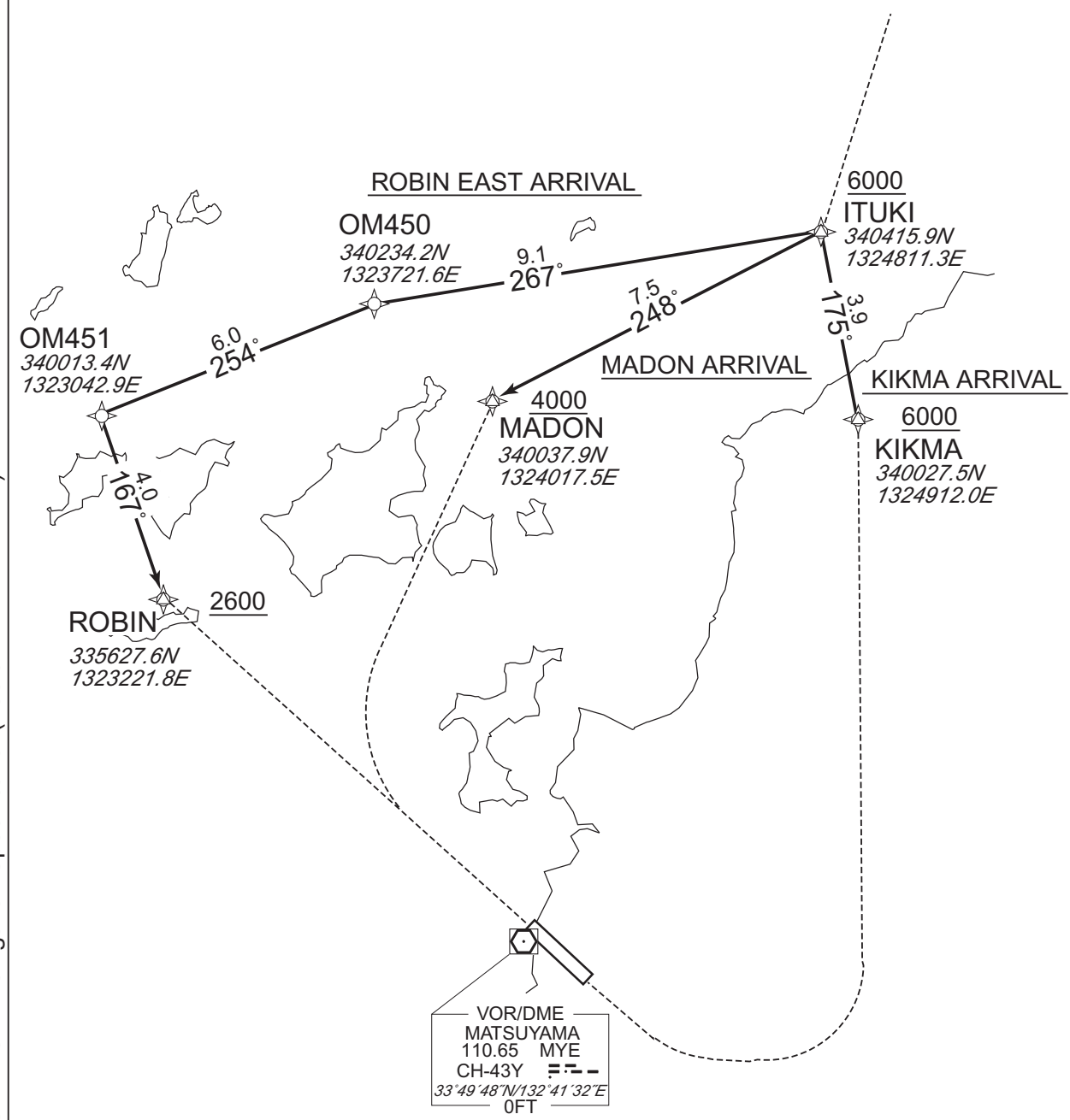
ROBIN EAST ARRIVAL  
MADON ARRIVAL  
KIKMA ARRIVAL

RNP1

Note GNSS required.

VAR 7°W (2016)

CHANGE : Navigation Specification(Basic RNP1 → RNP1).



STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV STAR RWY14/32

**ROBIN EAST ARRIVAL**  
From ITUKI at or above 6000FT, 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	-	-	+6000	-	-	RNP1
002	TF	OM450	-	267 (259.4)	-7.4	9.1	-	-	-	-	RNP1
003	TF	OM451	-	254 (247.0)	-7.4	6.0	-	-	-	-	RNP1
004	TF	ROBIN	-	167 (160.0)	-7.4	4.0	-	+2600	-	-	RNP1

**MADON ARRIVAL**  
From ITUKI at or above 6000FT, 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	-	-	+6000	-	-	RNP1
002	TF	MADON	-	248 (241.0)	-7.4	7.5	-	+4000	-	-	RNP1

**KIKMA ARRIVAL**  
From ITUKI at or above 6000FT, 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	-	-	+6000	-	-	RNP1
002	TF	KIKMA	-	175 (167.6)	-7.4	3.9	-	+6000	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

ILS Z or LOC Z RWY14



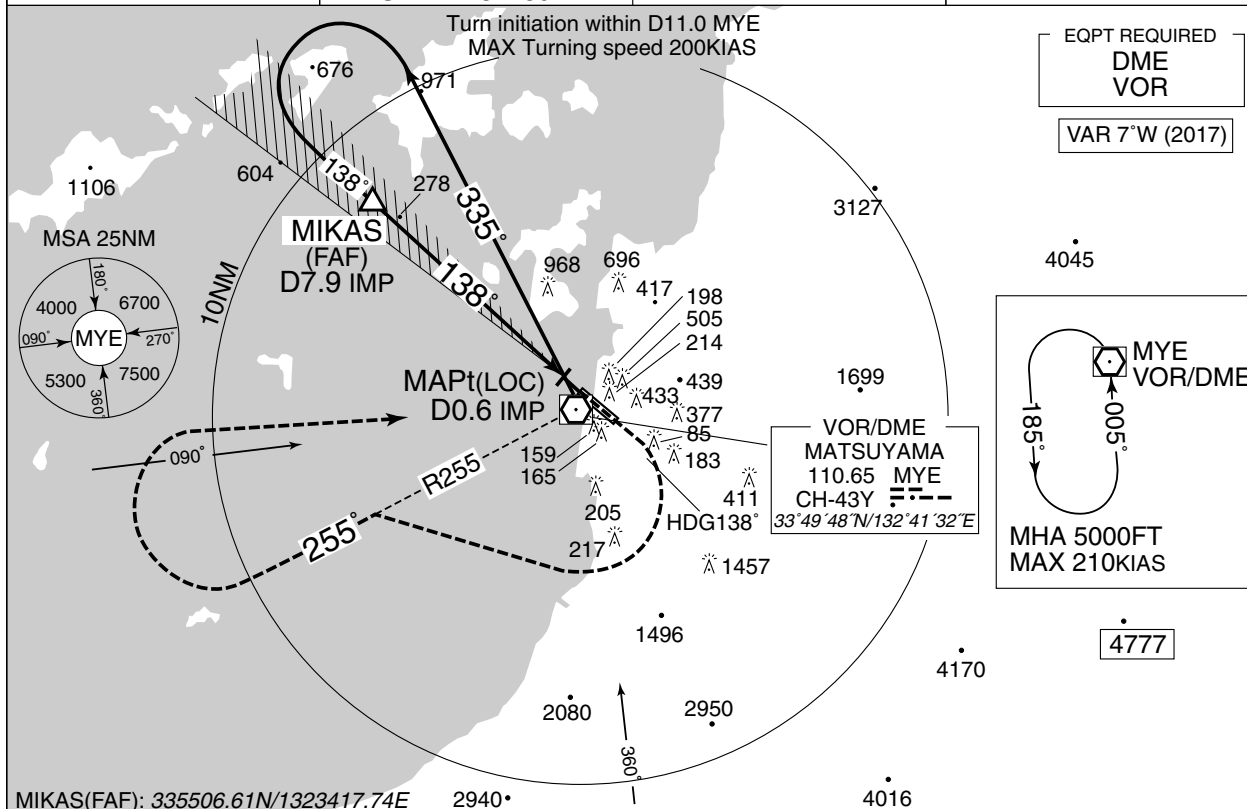


## INSTRUMENT APPROACH CHART

## RJOM / MATSUYAMA

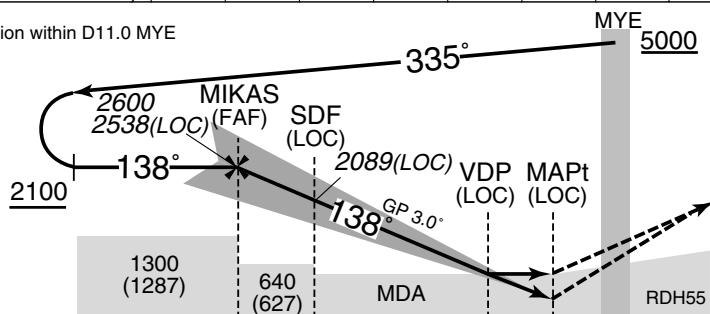
ILS Y or LOC Y RWY14

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



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 500FT 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.

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

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)	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

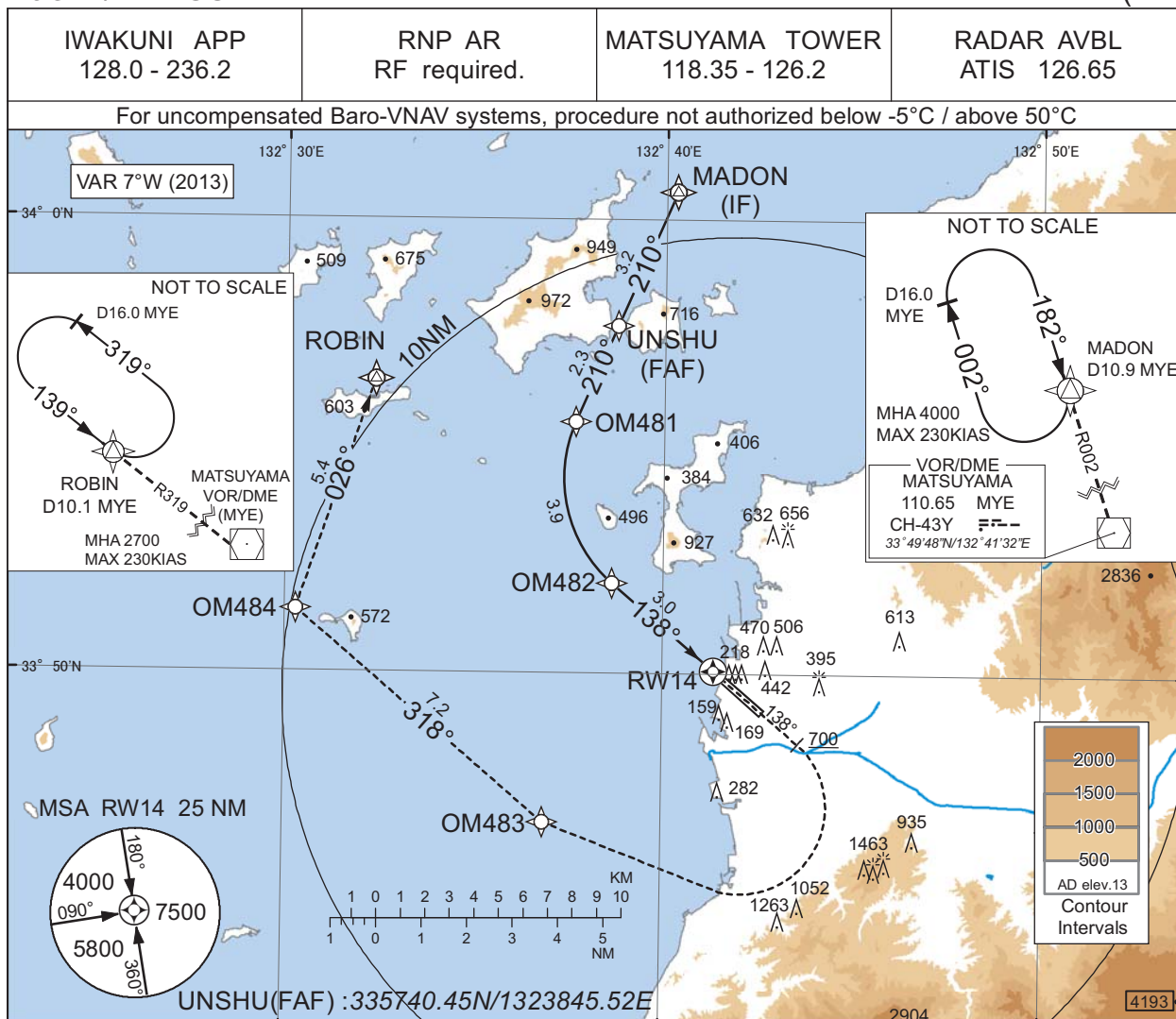
VOR RWY14



## INSTRUMENT APPROACH CHART

## RJOM / MATSUYAMA

## RNP RWY14(AR)



CHANGE : PROC renamed. Requirement for RNP.

## 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%

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

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

**Authorization Required**

## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNP RWY14(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	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		

CHANGE : PROC renamed.

## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNP RWY32(AR)

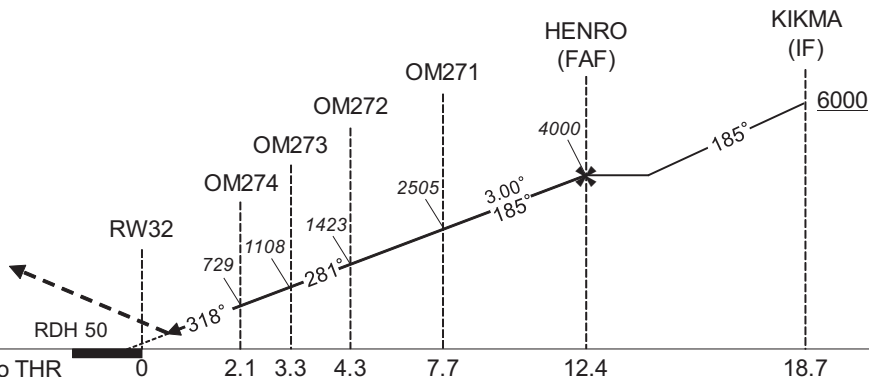
IWAKUNI APP 128.0 - 236.2	RNP AR RF required.	MATSUYAMA TOWER 118.35 - 126.2	RADAR AVBL ATIS 126.65
------------------------------	------------------------	-----------------------------------	---------------------------

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

**Authorization Required**

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

CHANGE : PROC renamed. Requirement for RNP.

## INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNP RWY32(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	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		

CHANGE : PROC renamed.



RJOM / MATSUYAMA

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).

Call sign	BRG / DIST from ARP	Remarks
堀江 Horie	027°T / 5.4NM	堀江港 Horie harbor
松山シェー Matsuyama City	072°T / 3.4NM	松山城 Matsuyama castle
7NM WEST	270°T / 7.0NM	海上 Over the sea
森松 Morimatsu	119°T / 5.0NM	重信大橋 Shigenobu-ohashi bridge
サウスポイント South Point	192°T / 5.1NM	森川河口 Mouth of Mori river
青島 Aoshima	243°T / 12.3NM	青島 Aoshima island
双海 Futami	201°T / 9.1NM	ふたみシーサイド公園 Futami seaside park

CHANGE : VAR.

注: 有視界飛行方式により松山空港に着陸しようとする航空機又は松山航空交通管制圏を通過しようとする航空機は、南方向から進入する場合は双海ポイント付近で、南西～西方向から進入する場合は青島ポイント又は7NM WEST付近で、松山タワーと通信設定すること。

NOTE : When VFR flight is going to enter the control zone for landing or passing through, the pilot should contact with the control tower before passing following points;  
FUTAMI in case of coming from south/  
AOSHIMA or 7NM WEST in case of coming from southwest to west.

**INTENTIONALLY LEFT BLANK**