

SIMPLE APCH LIGHTING SYSTEM

SIMPLE APCH LIGHTING SYSTEM

APCH LGT BEACONS

Diagram illustrating the layout of the 100m race track. The track is a rectangle with a total length of 420m and a total width of 351m. The width is divided into three sections: 165m for the two straightaways, and two 93m sections for the two curves.

LONGITUDINAL PROFILE OF RUNWAY

Station (m)	Station (ft)	Grade (%)
0	0	LEVEL
240	25 ft (7.658m)	0.195%
360	24 ft (7.424m)	0.613%
500	21 ft (6.566m)	0.78%
890	11 ft (3.524m)	0.094%
1300	13 ft (4.011m)	0.118%
1500	13 ft (4.147m)	0.063%
1720	14 ft (4.286m)	0.134%
1980	15 ft (4.635m)	0.106%
2140	15 ft (4.739m)	0.159%
2300	16 ft (4.908m)	
2500	17 ft (5.203m)	

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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

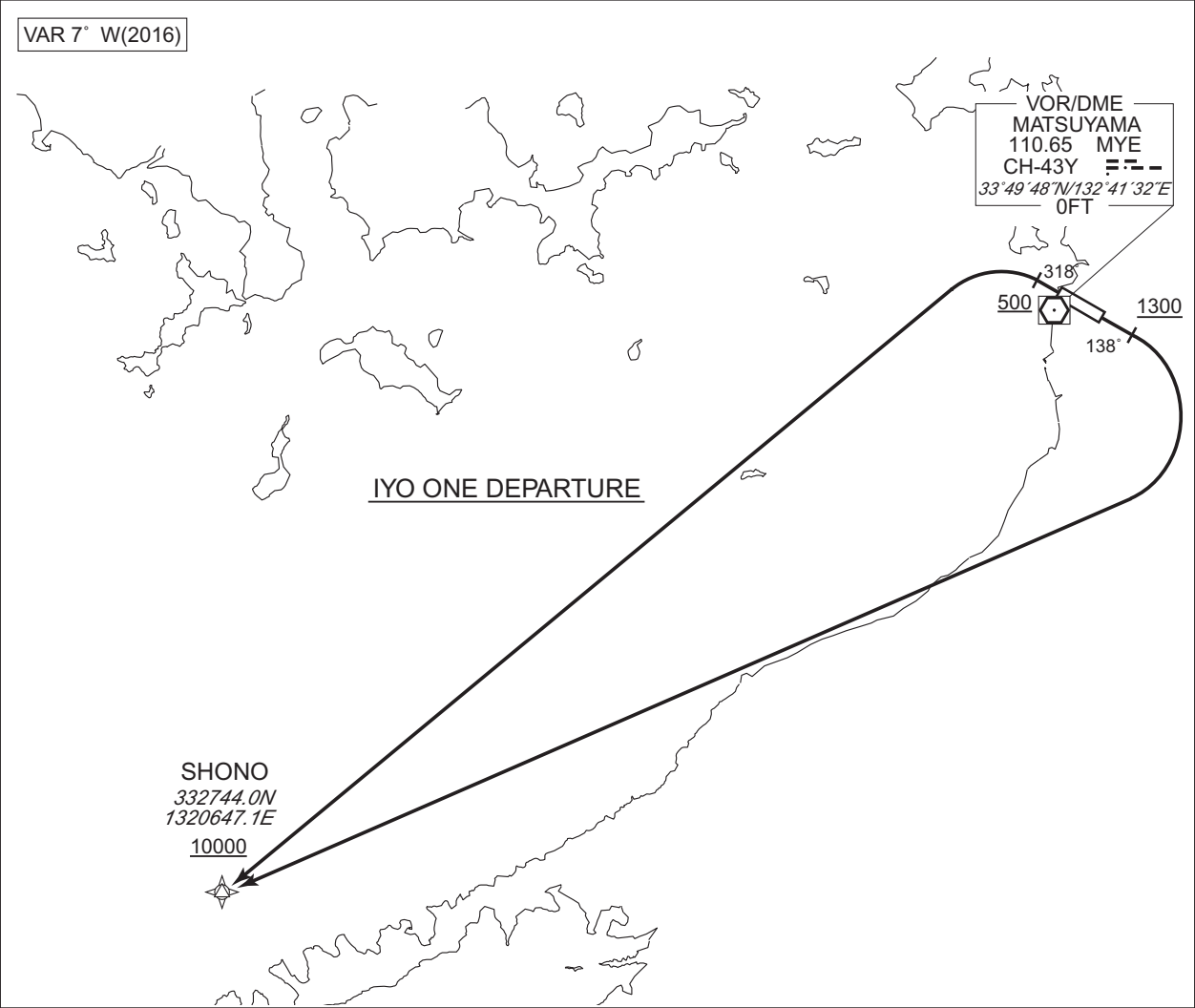
RJOM / MATSUYAMA

RNAV SID

IYO ONE DEPARTURE	RNP1
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Note GNSS required.

VAR 7° W(2016)



<p><u>IYO ONE DEPARTURE</u></p> <p>RWY14 : Climb on HDG138° at or above 1300FT, turn right direct to SHONO at or above 10000FT. RWY32 : Climb on HDG318° at or above 500FT, turn left direct to SHONO at or above 10000FT.</p> <p>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.</p>
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CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV SID

IYO ONE DEPARTURE

RWY14

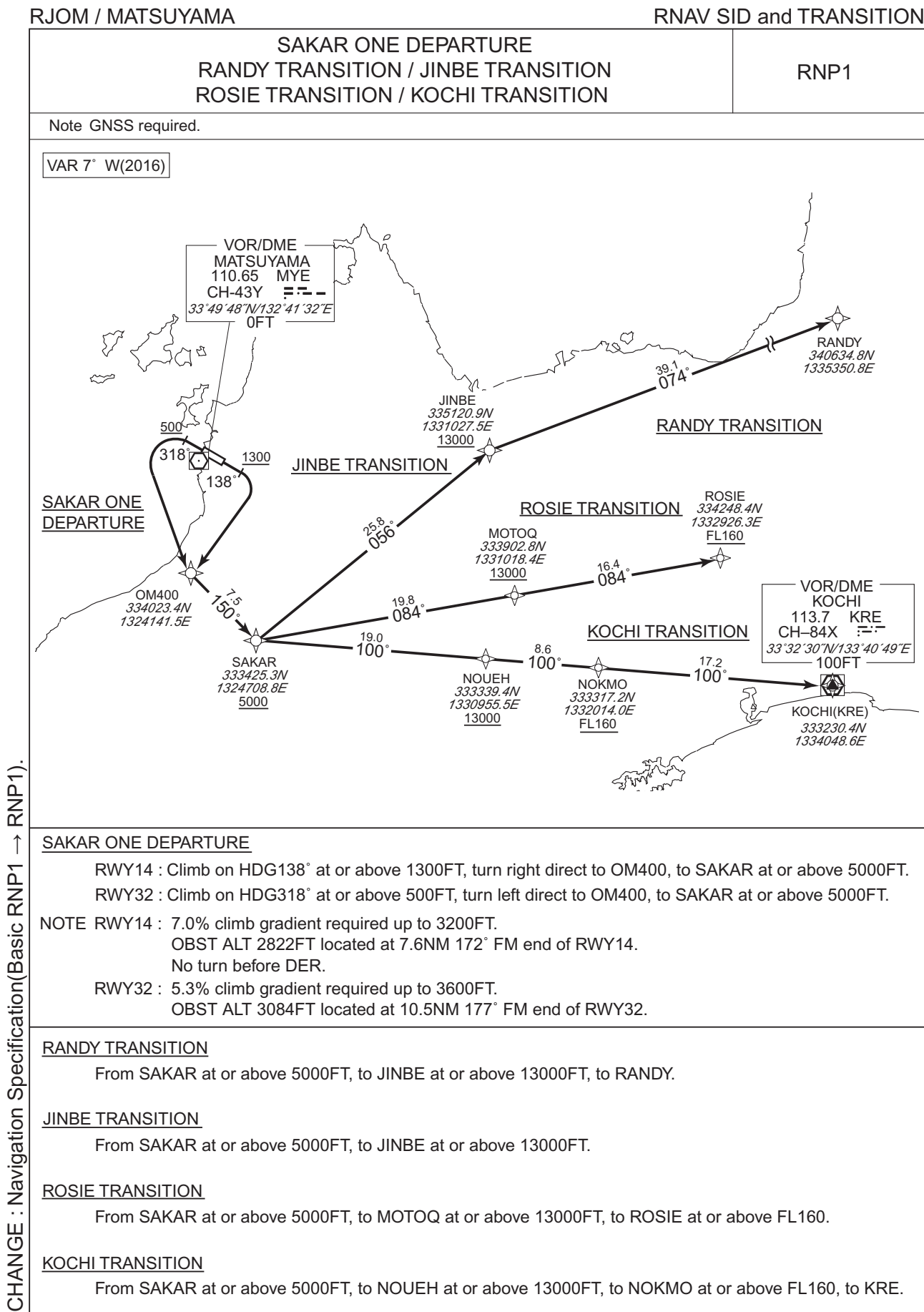
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	138 (130.7)	-7.4	-	-	+1300	-	-	RNP1
002	DF	SHONO	-	-	-7.4	-	R	+10000	-	-	RNP1

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

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

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	-	-	RNP1
002	DF	OM400	-	-	-7.4	-	R	-	-	-	RNP1
003	TF	SAKAR	-	150 (142.7)	-7.4	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	-	-	318 (310.7)	-7.4	-	-	+500	-	-	RNP1
002	DF	OM400	-	-	-7.4	-	L	-	-	-	RNP1
003	TF	SAKAR	-	150 (142.7)	-7.4	7.5	-	+5000	-	-	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	-	-	RNP1
002	TF	JINBE	-	056 (048.8)	-7.4	25.8	-	+13000	-	-	RNP1
003	TF	RANDY	-	074 (066.9)	-7.4	39.1	-	-	-	-	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	-	-	RNP1
002	TF	JINBE	-	056 (048.8)	-7.4	25.8	-	+13000	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT

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RNAV SID and TRANSITION

ROSIE TRANSITION

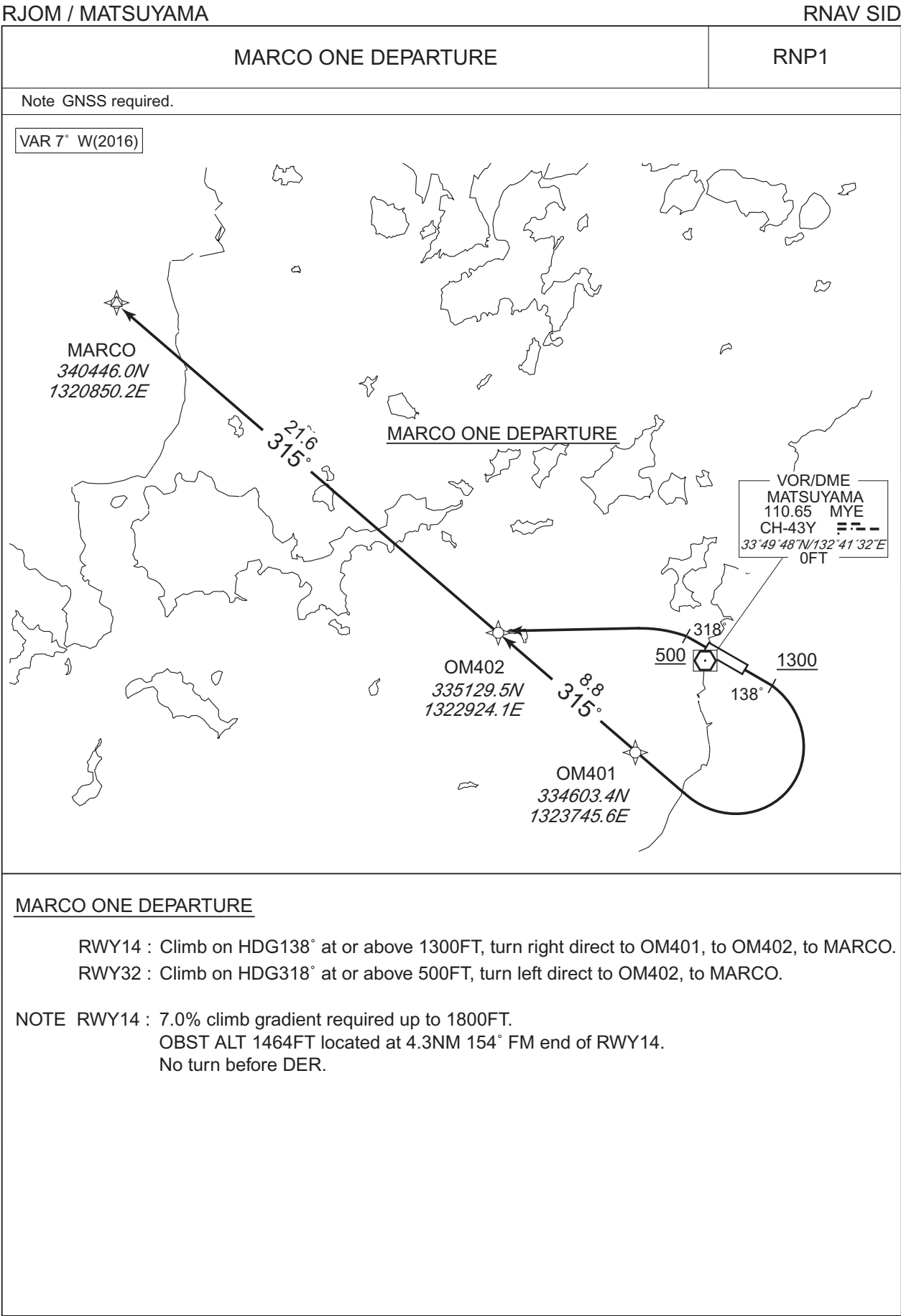
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	SAKAR	-	-	-7.4	-	-	+5000	-	-	RNP1
002	TF	MOTOQ	-	084 (076.4)	-7.4	19.8	-	+13000	-	-	RNP1
003	TF	ROSIE	-	084 (076.6)	-7.4	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	-	-	-7.4	-	-	+5000	-	-	RNP1
002	TF	NOUEH	-	100 (092.2)	-7.4	19.0	-	+13000	-	-	RNP1
003	TF	NOKMO	-	100 (092.4)	-7.4	8.6	-	+FL160	-	-	RNP1
004	TF	KRE	-	100 (092.5)	-7.4	17.2	-	-	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

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	-	-	RNP1
002	DF	OM401	-	-	-7.4	-	R	-	-	-	RNP1
003	TF	OM402	-	315 (308.1)	-7.4	8.8	-	-	-	-	RNP1
004	TF	MARCO	-	315 (308.1)	-7.4	21.6	-	-	-	-	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	-	-	RNP1
002	DF	OM402	-	-	-7.4	-	L	-	-	-	RNP1
003	TF	MARCO	-	315 (308.1)	-7.4	21.6	-	-	-	-	RNP1
CHANGE : Navigation Specification(Basic RNP1 → 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.



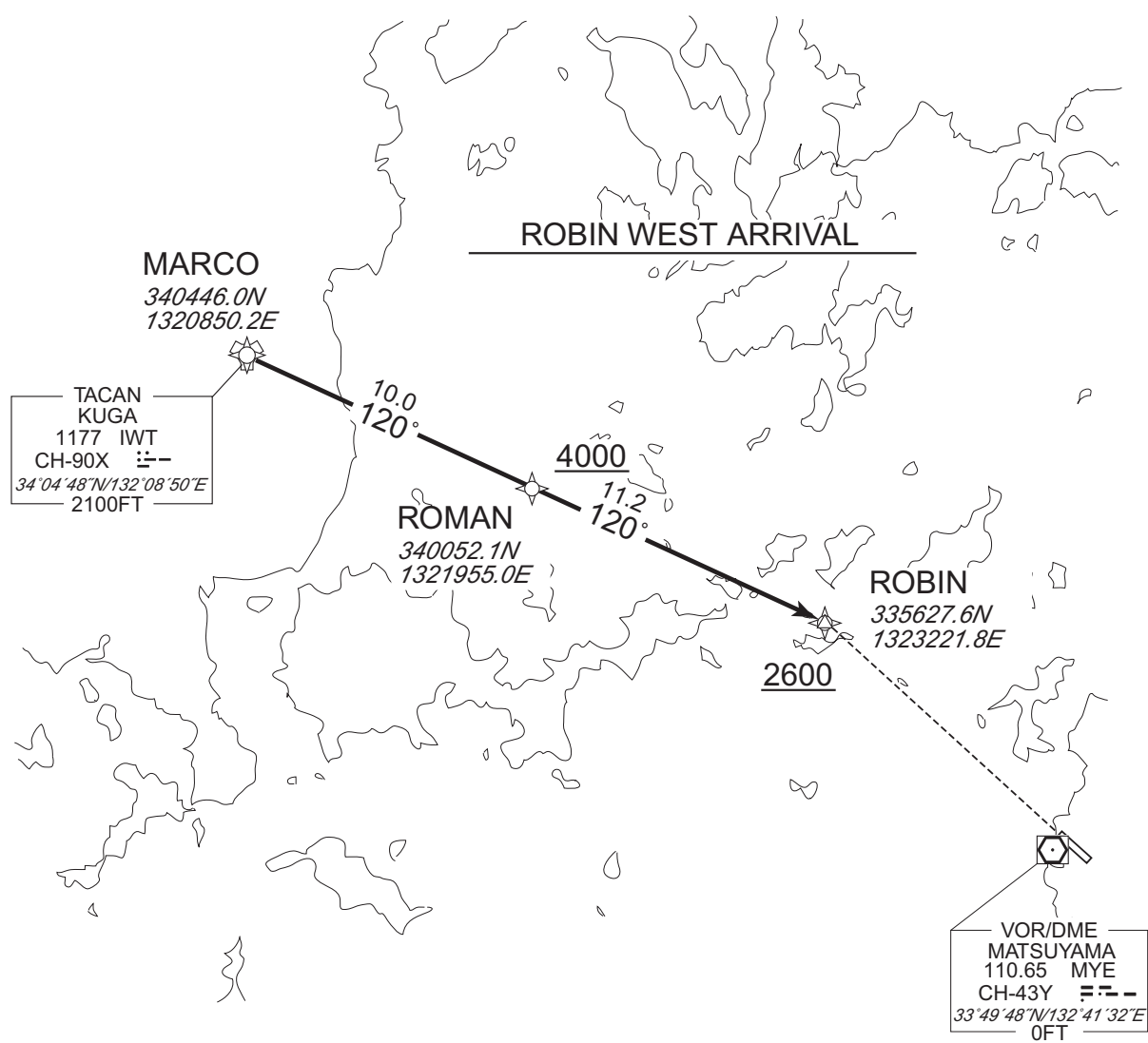
STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA RNAV STAR RWY14

ROBIN WEST ARRIVAL	RNP1
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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

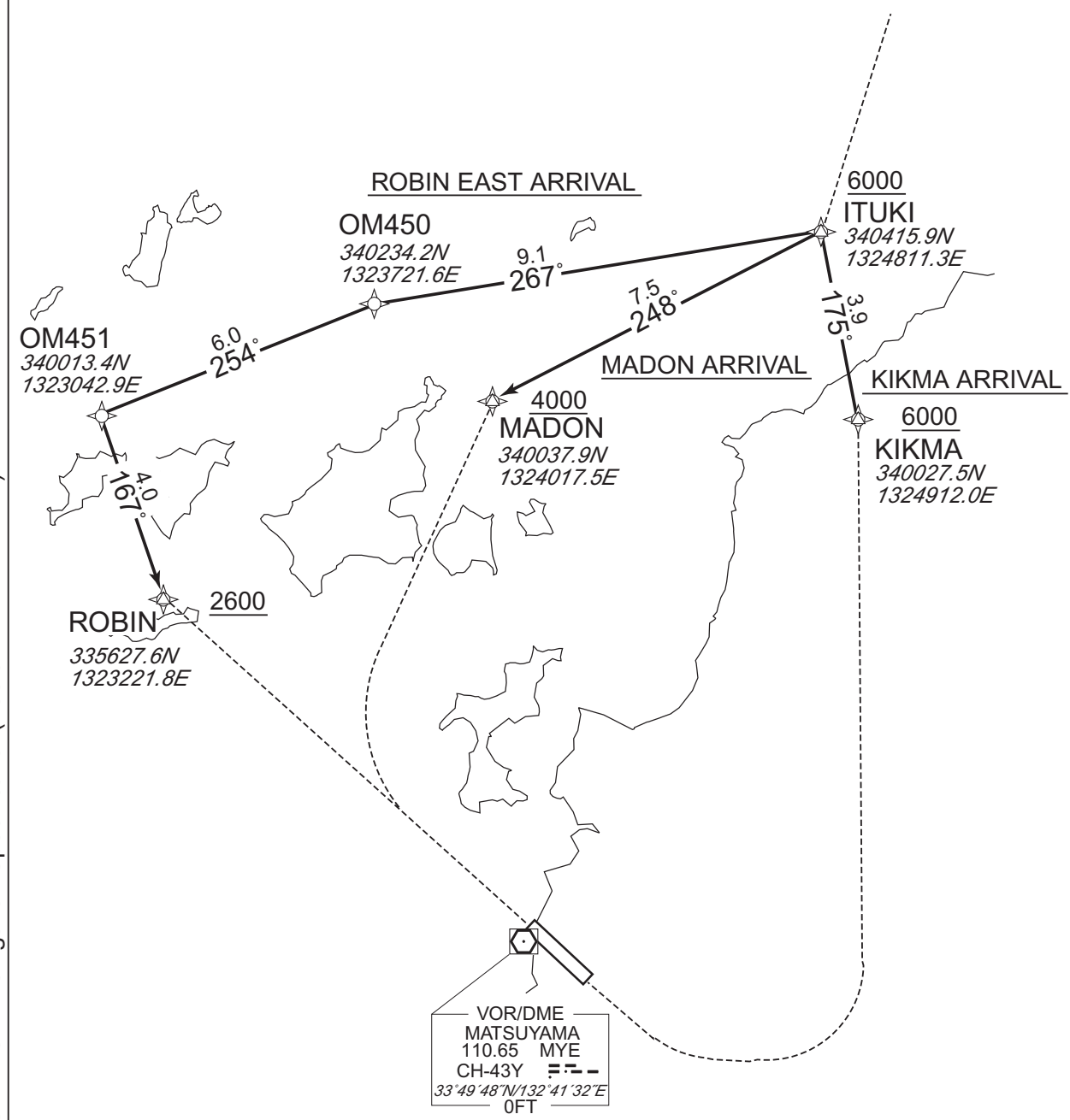
ROBIN EAST ARRIVAL
MADON ARRIVAL
KIKMA ARRIVAL

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



RJOM / MATSUYAMA

VOR RWY14

Turn initiation within D11.0 MYE.

336°

MYE 5000

KOFJ (FAF) 1576

2100

140°

3.0°

140°

SDF

VDP

MAPt

812

1300 (1287)

780 (767)

MDA

MISSED APPROACH

Climb to 700FT via MYE R140, 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.

Missed APCH climb gradient MNM 4.0%.

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

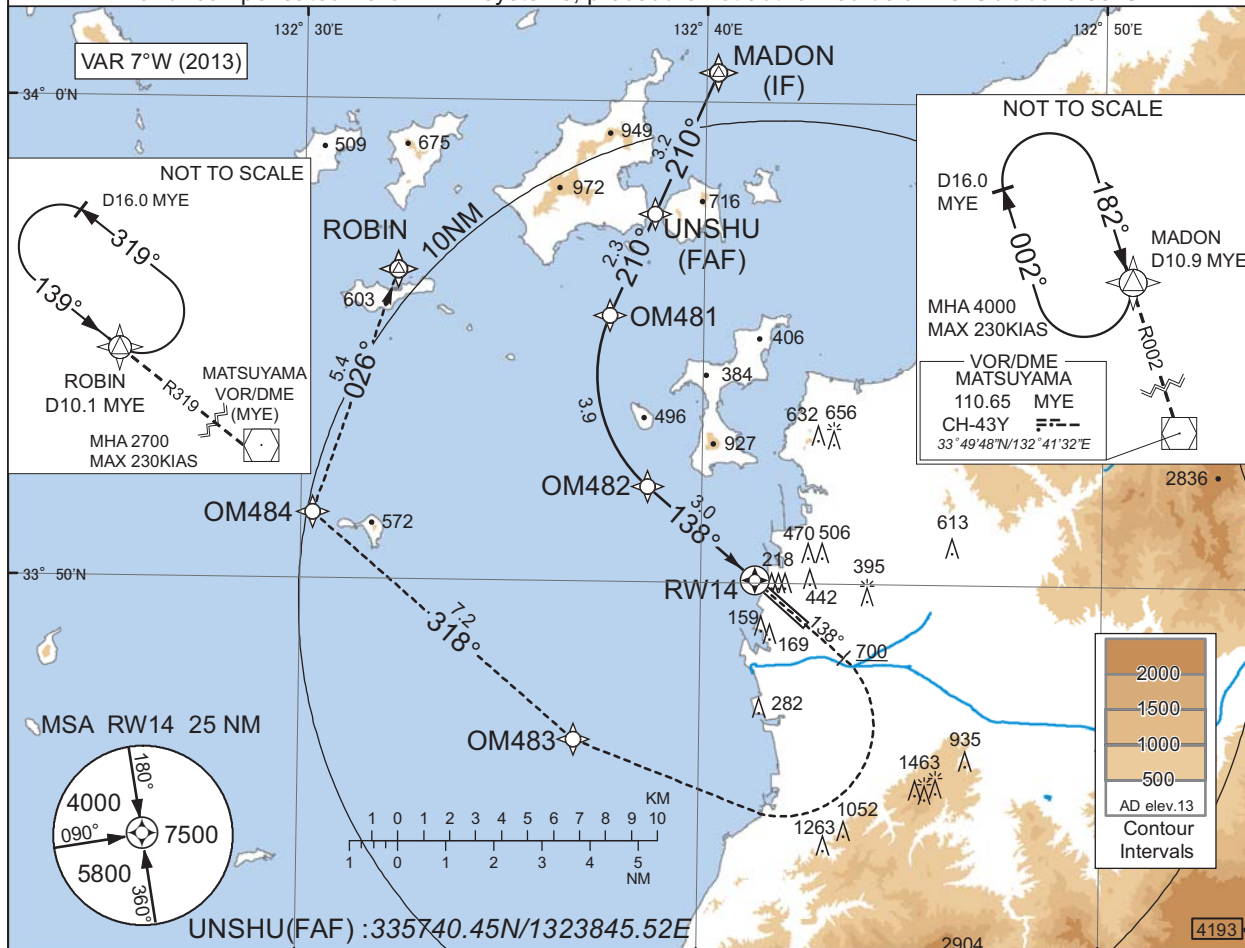
INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNP RWY14(AR)

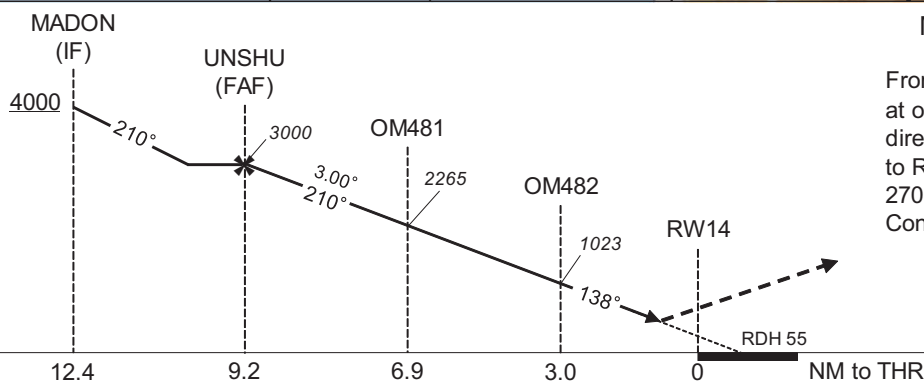
IWAKUNI APP 128.0 - 236.2	RNP AR RF required.	MATSUYAMA TOWER 118.35 - 126.2	RADAR AVBL ATIS 126.65
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For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 50°C



MISSED APPROACH

From 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.

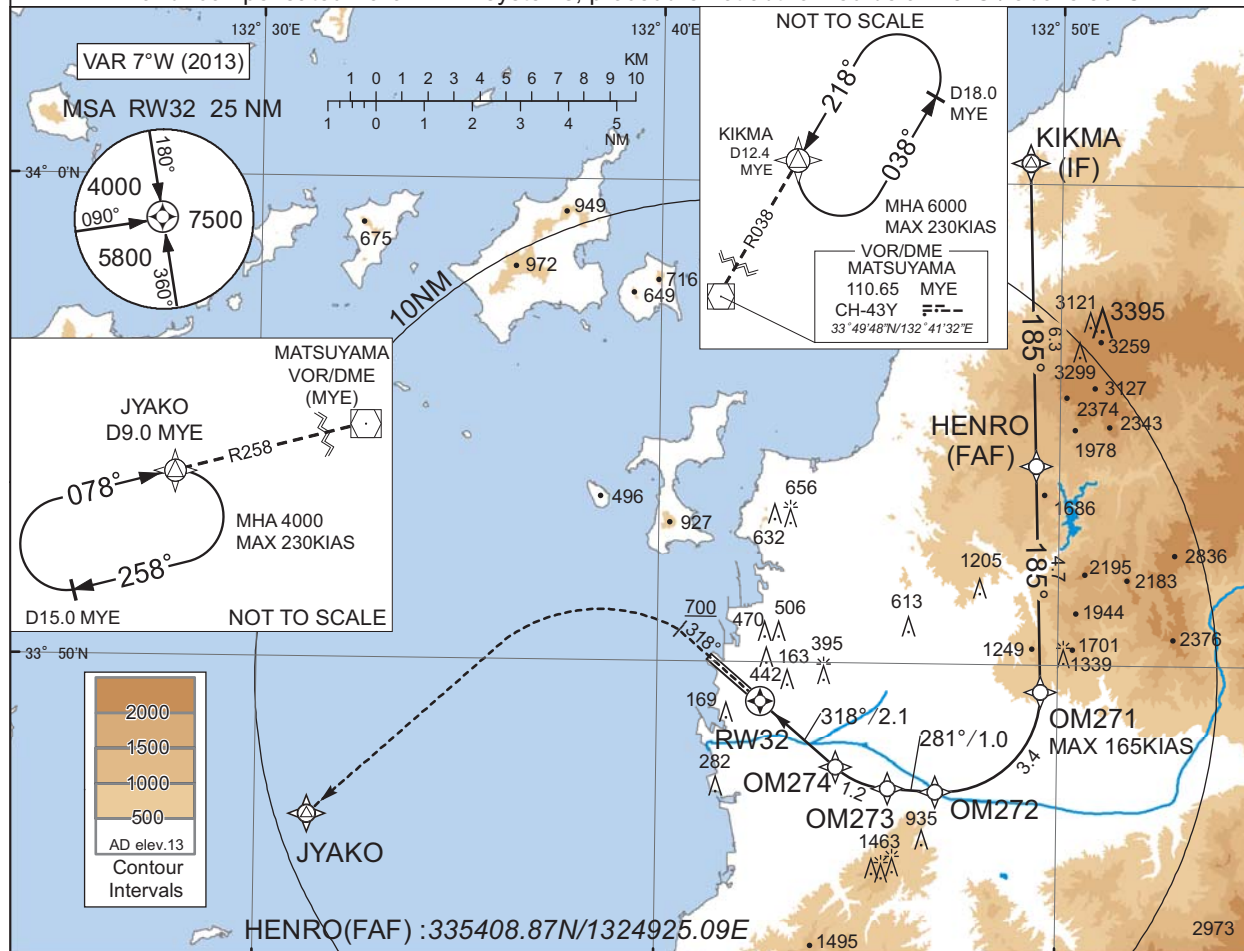
INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA

RNP RWY32(AR)

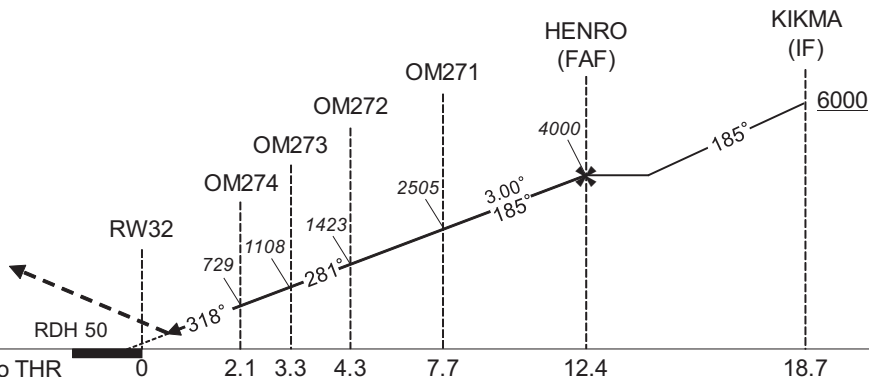
IWAKUNI APP 128.0 - 236.2	RNP AR RF required.	MATSUYAMA TOWER 118.35 - 126.2	RADAR AVBL ATIS 126.65
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For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 50°C



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

Authorization Required

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

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

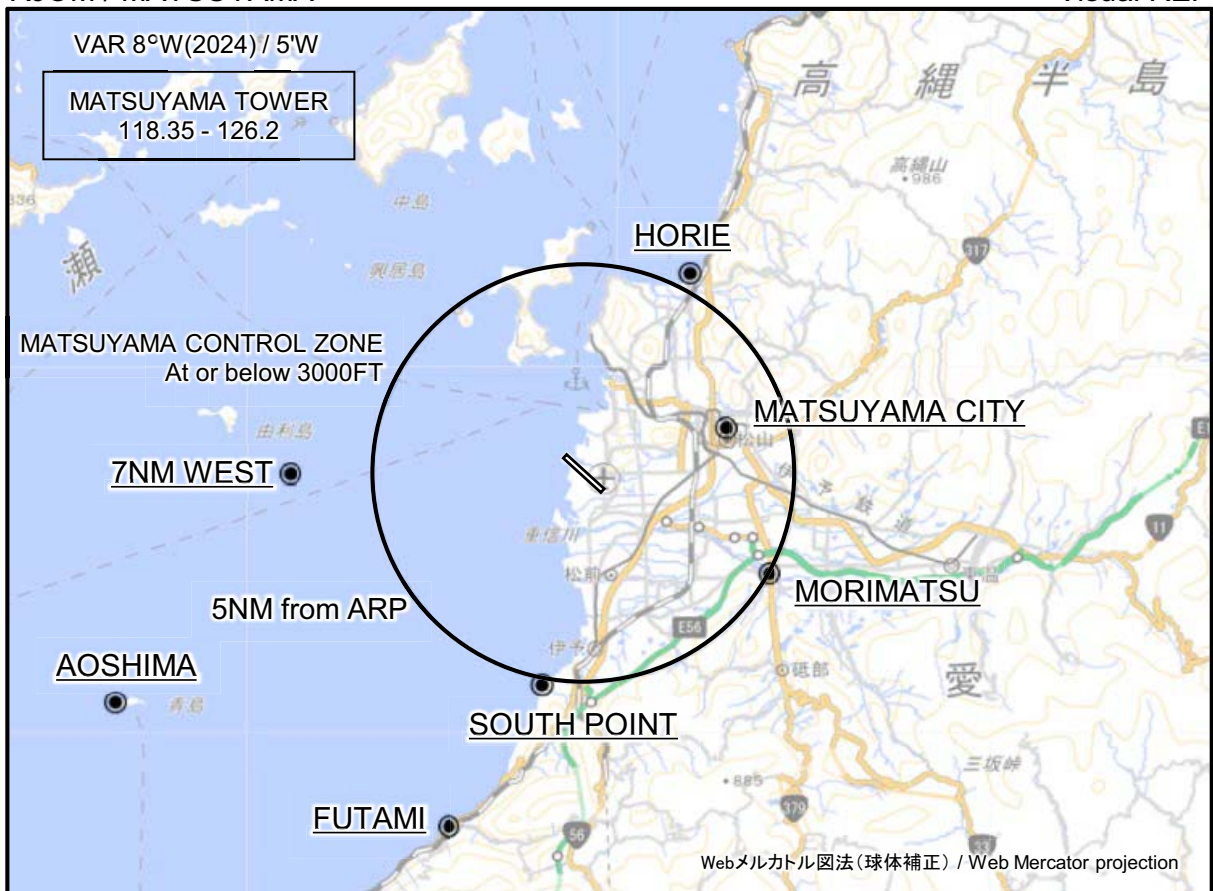
Waypoint Coordinates

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.

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