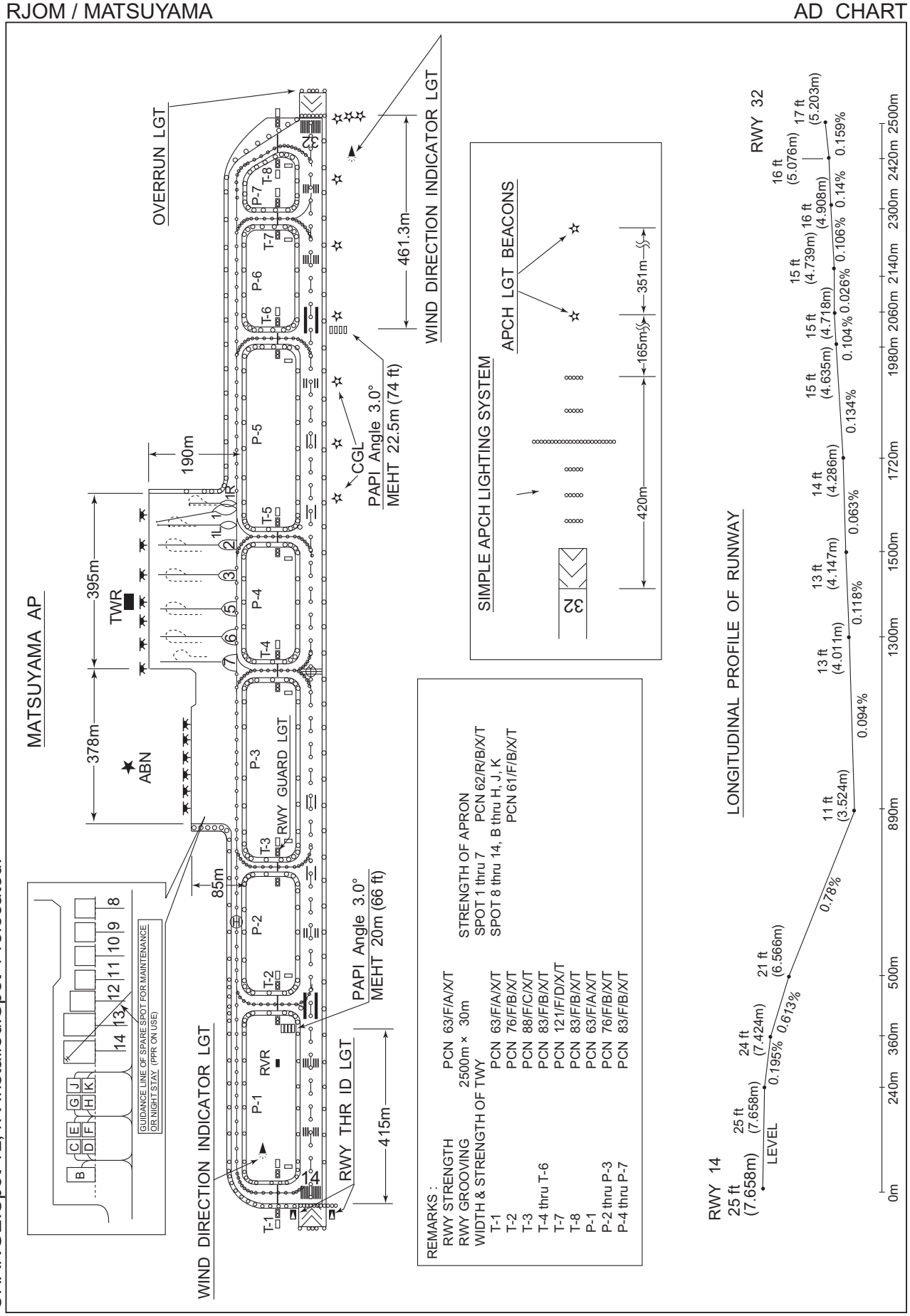
RJOM / MATSUYAMA AD CHART

CHANGE:Spot 1L,1R installed.Spot 1 relocated.



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.

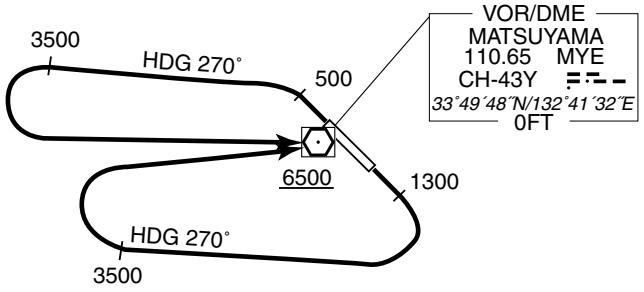
Cross MYE VOR/DME at or above 6500FT.

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

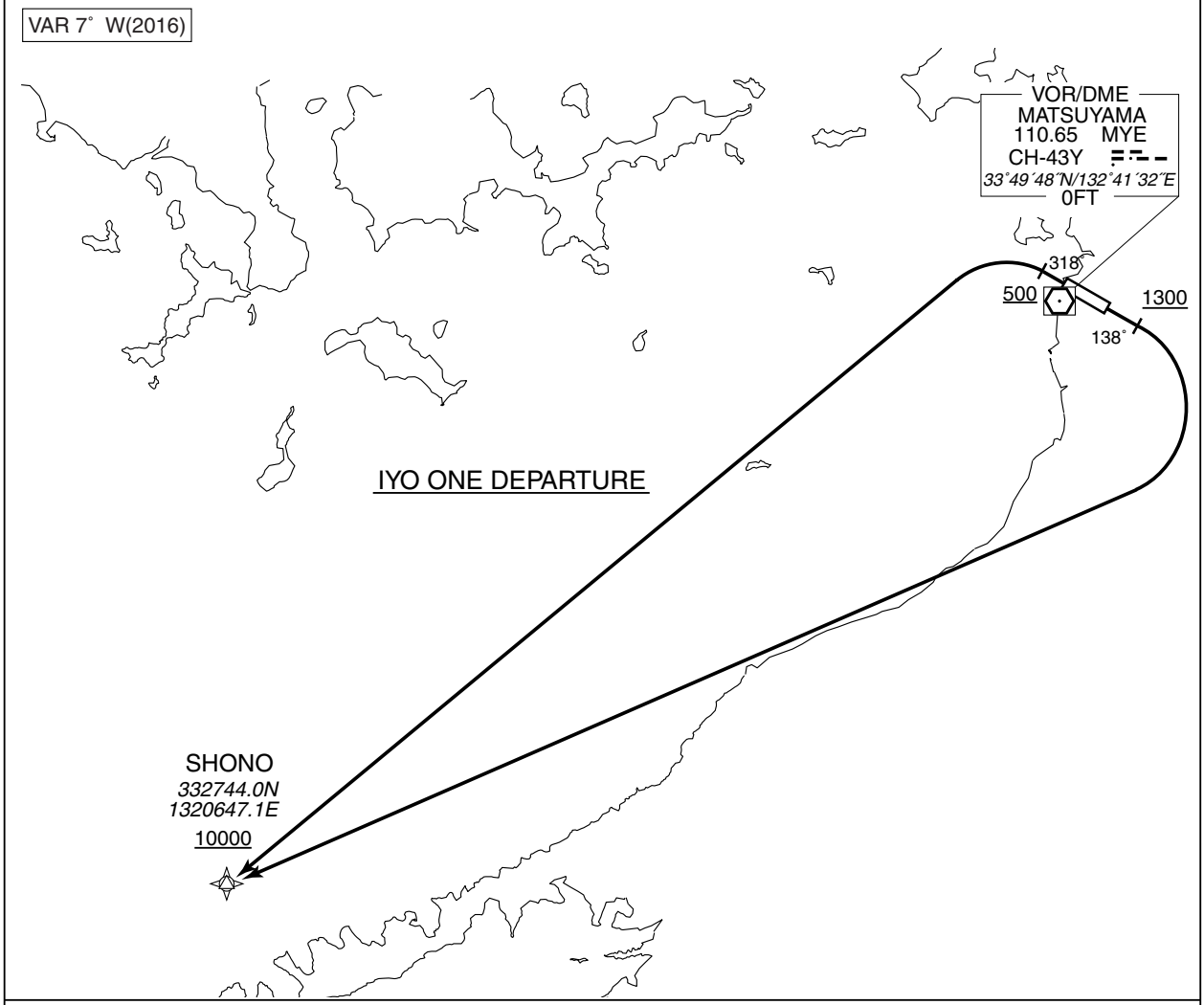


STANDARD DEPARTURE CHART -INSTRUMENT

RJOM / MATSUYAMA RNAV SID

IYO ONE DEPARTURE	Basic RNP1

Note GNSS required.



IYO ONE DEPARTURE

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.

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

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

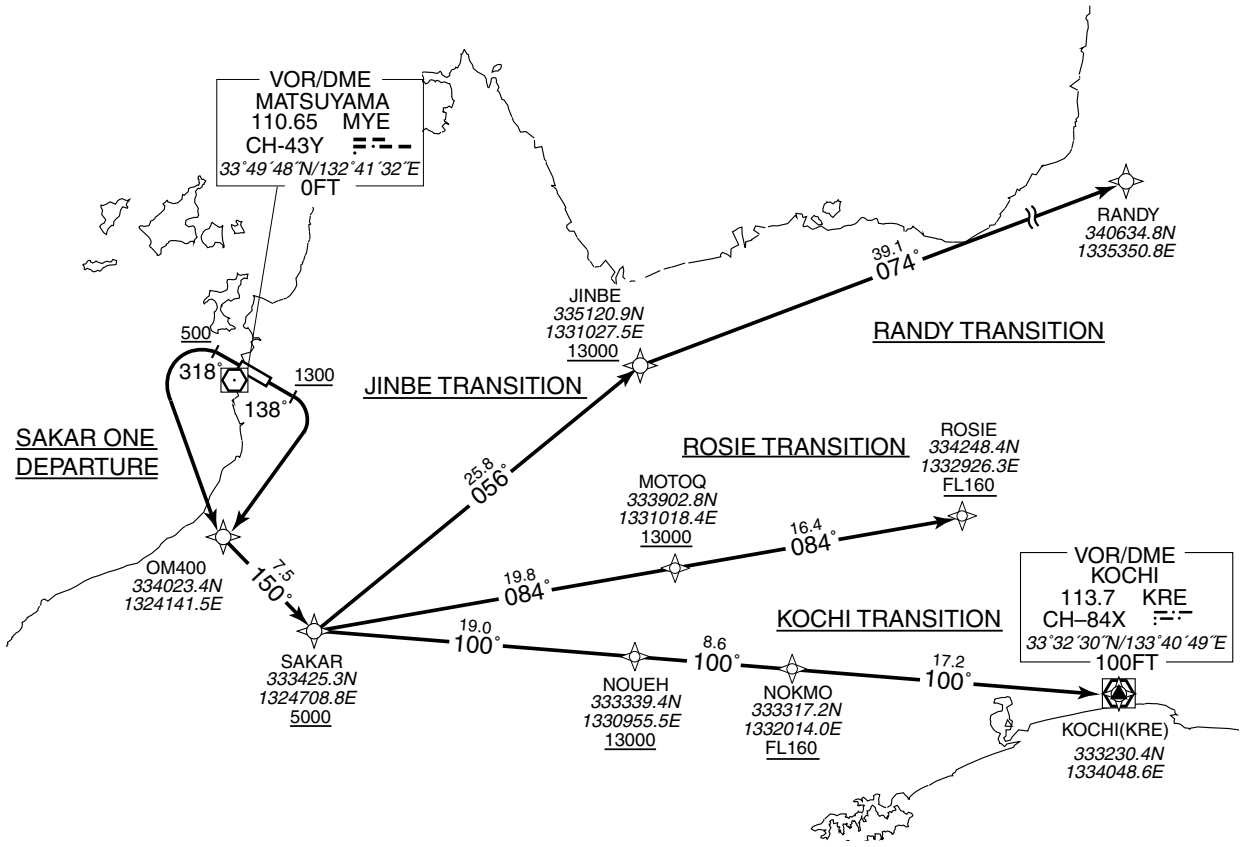
RJOM / MATSUYAMA RNAV SID and TRANSITION

SAKAR ONE DEPARTURE
RANDY TRANSITION / JINBE TRANSITION
ROSIE TRANSITION / KOCHI TRANSITION

Basic RNP1

Note GNSS required.

VAR 7° W(2016)



SAKAR ONE DEPARTURE

RWY14 : Climb on HDG138° at or above 1300FT, turn right direct to OM400, to SAKAR at or above 5000FT.

RWY32 : Climb on HDG318° at or above 500FT, turn left direct to OM400, to SAKAR at or above 5000FT.

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.

RWY32 : 5.3% climb gradient required up to 3600FT.
OBST ALT 3084FT located at 10.5NM 177° FM end of RWY32.

RANDY TRANSITION

From SAKAR at or above 5000FT, to JINBE at or above 13000FT, to RANDY.

JINBE TRANSITION

From SAKAR at or above 5000FT, to JINBE at or above 13000FT.

ROSIE TRANSITION

From SAKAR at or above 5000FT, to MOTOQ at or above 13000FT, to ROSIE at or above FL160.

KOCHI TRANSITION

From SAKAR at or above 5000FT, to NOUEH at or above 13000FT, to NOKMO at or above FL160, to KRE.

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

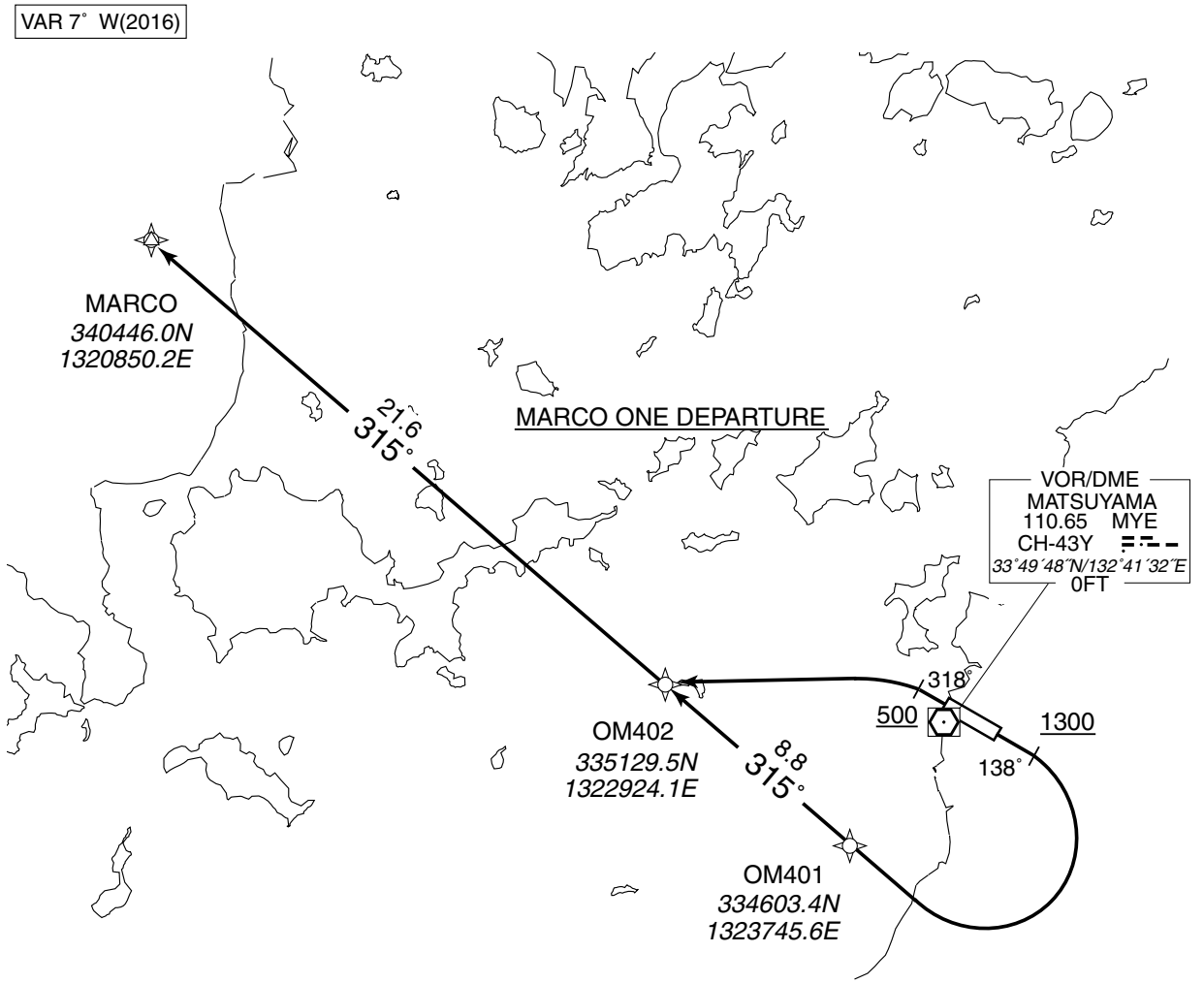
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	SAKAR	–	–	-7.4	–	–	+5000	–	–	Basic RNP1
002	TF	NOUEH	–	100 (092.2)	-7.4	19.0	–	+13000	–	–	Basic RNP1
003	TF	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.



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

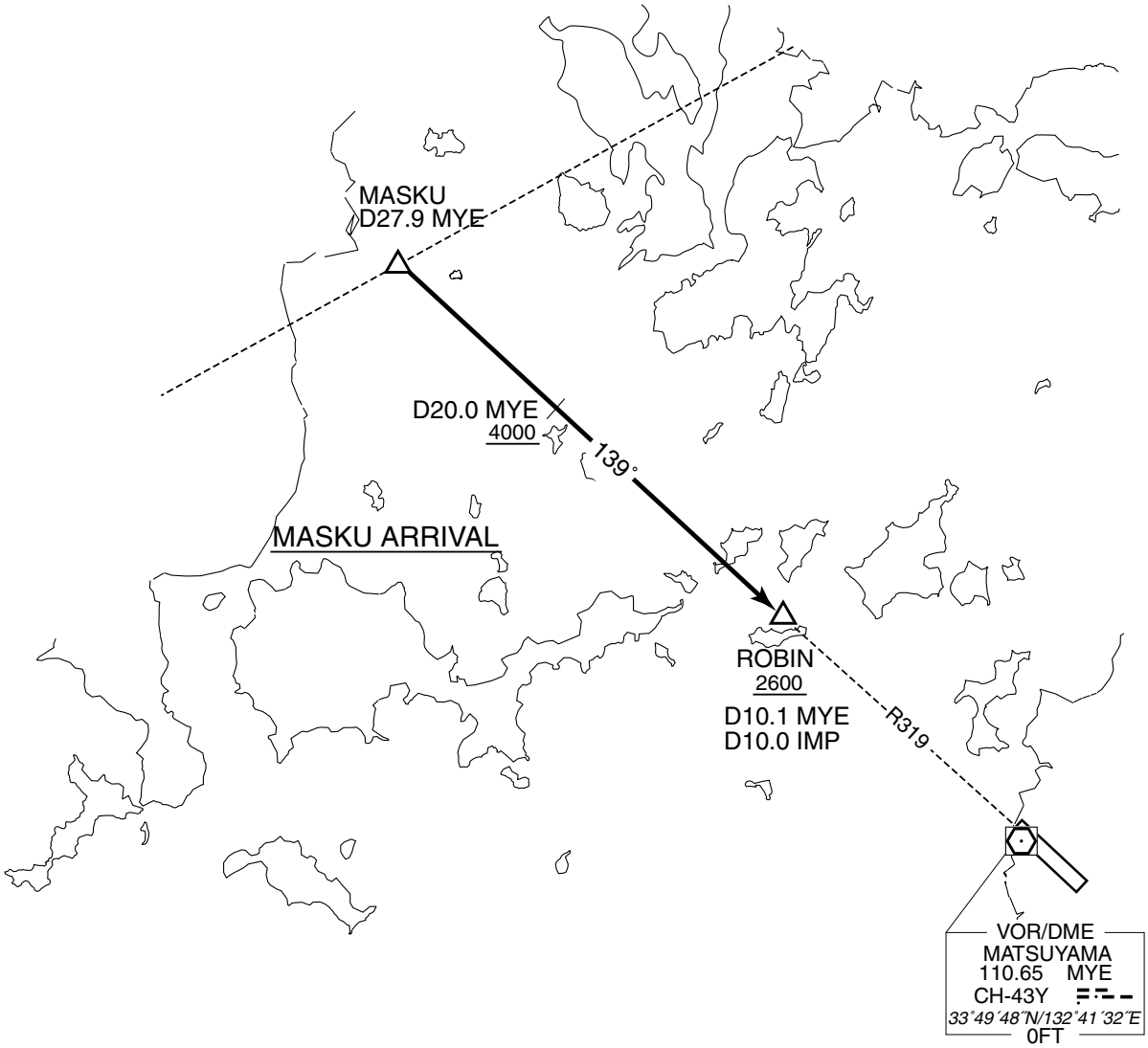
STANDARD ARRIVAL CHART - INSTRUMENT

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.



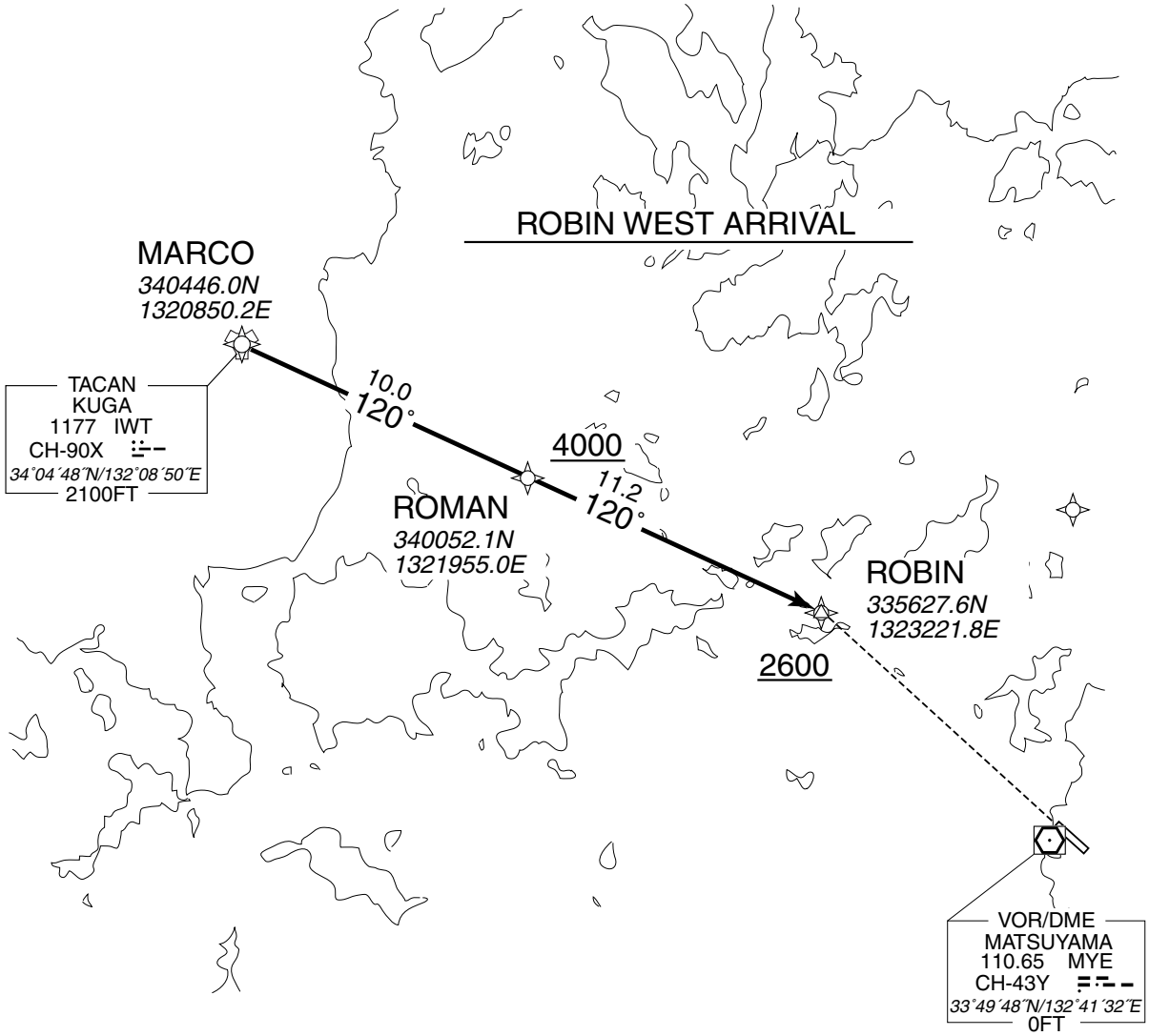
STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA RNAV STAR RWY14

ROBIN WEST ARRIVAL	Basic RNP1

Note GNSS required.

VAR 7˚W (2016)



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

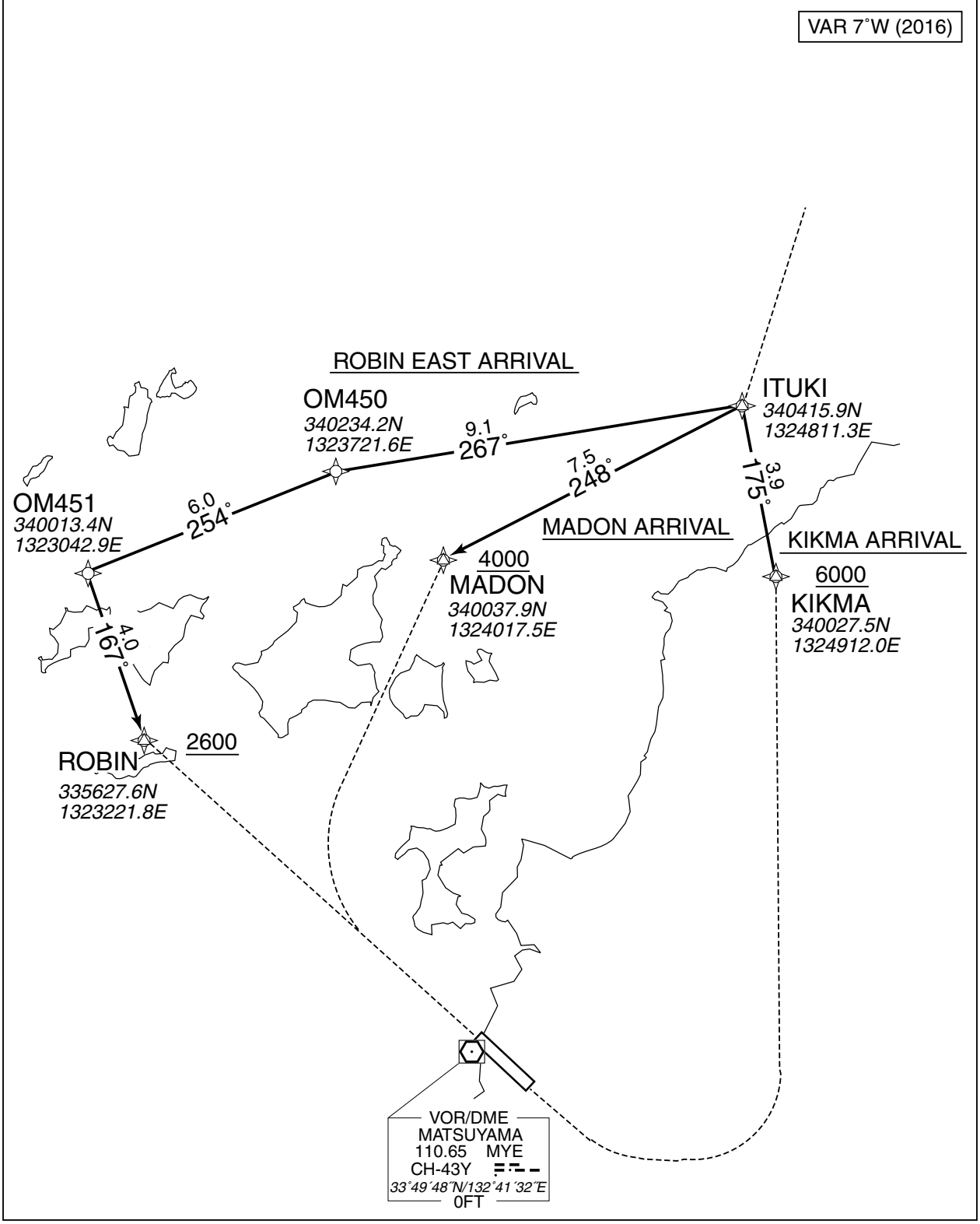
STANDARD ARRIVAL CHART -INSTRUMENT

RJOM / MATSUYAMA

RNAV STAR RWY14/32

ROBIN EAST ARRIVAL MADON ARRIVAL KIKMA ARRIVAL	Basic RNP1

Note GNSS required.



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

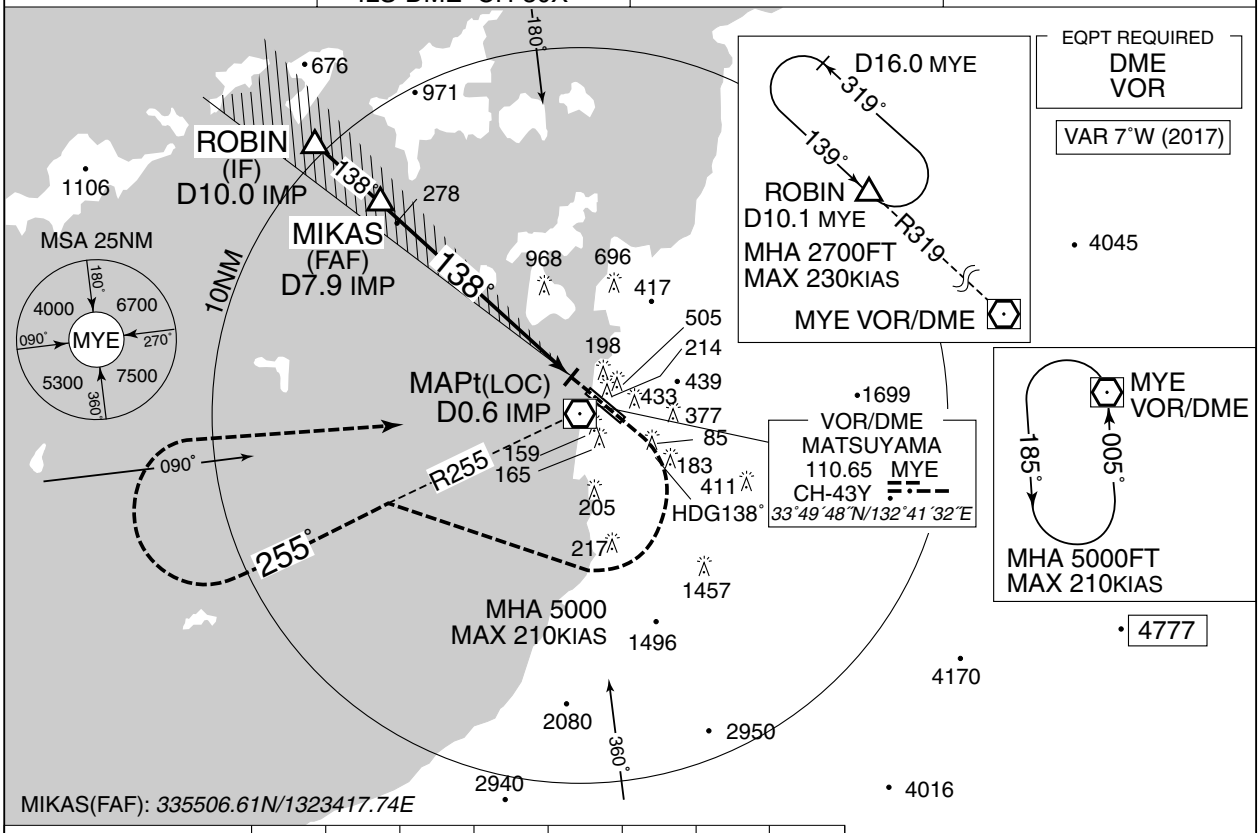
From ITUKI, to KIKMA at or above 6000FT.

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

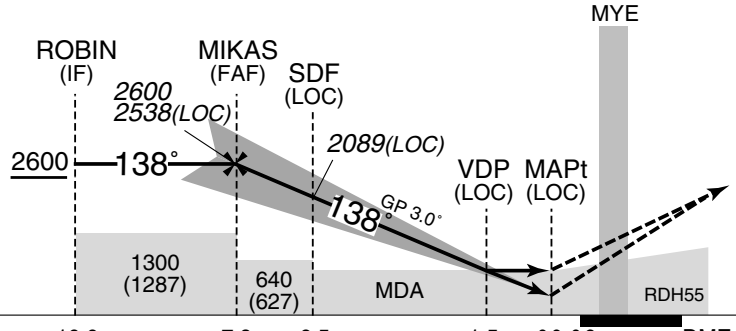
INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA — ILS Z or LOC Z RWY14

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



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.

							DME to IMP
10.0	7.9	6.5	1.5	0.6	0.2		
9.8	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

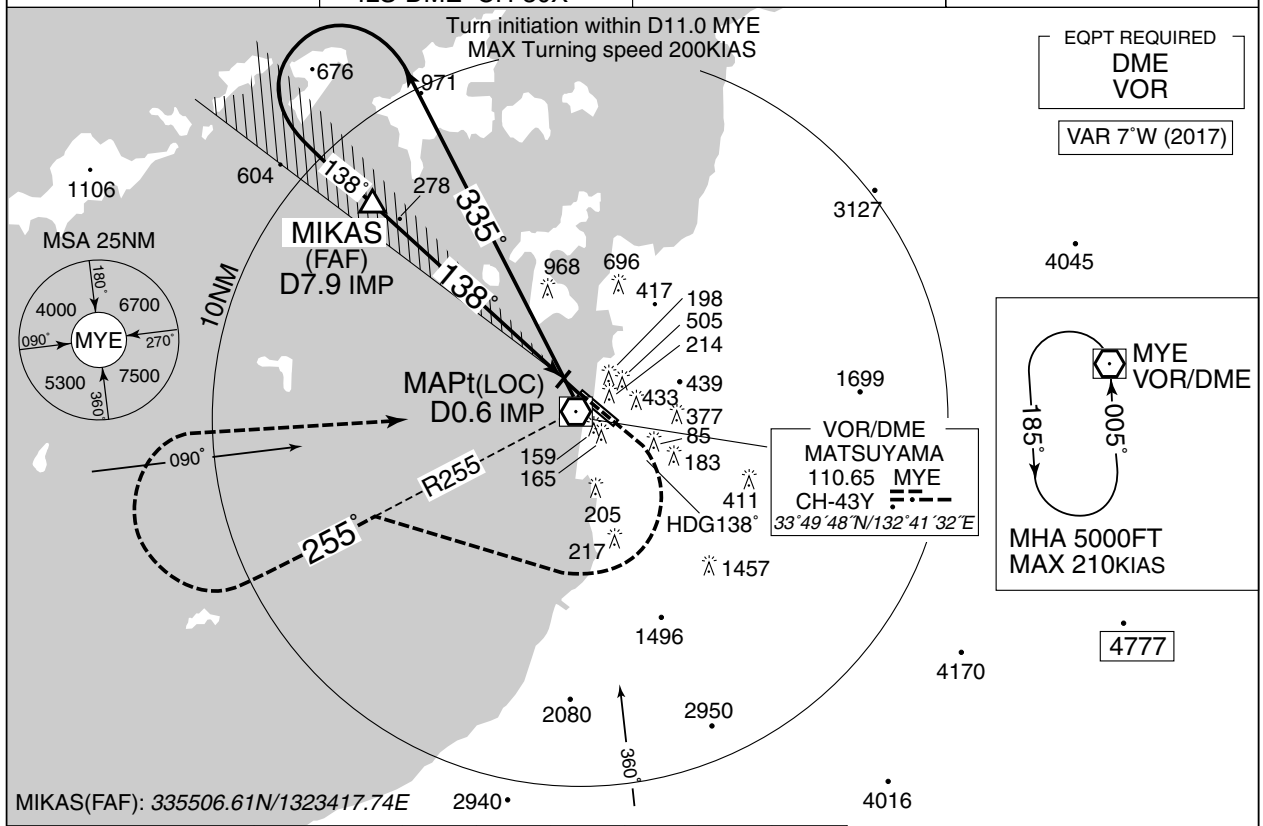
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	225 (200)	1000	470 (457)	1500	520 (507)	1600
B						
C				2000		2400
D					570 (557)	3200

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

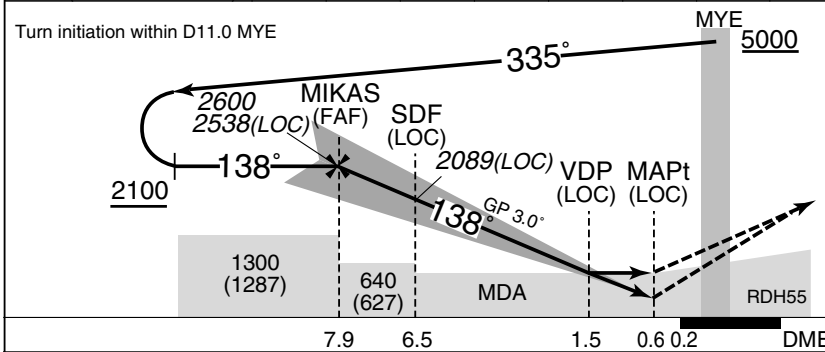
INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA — ILS Y or LOC Y RWY14

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



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.

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

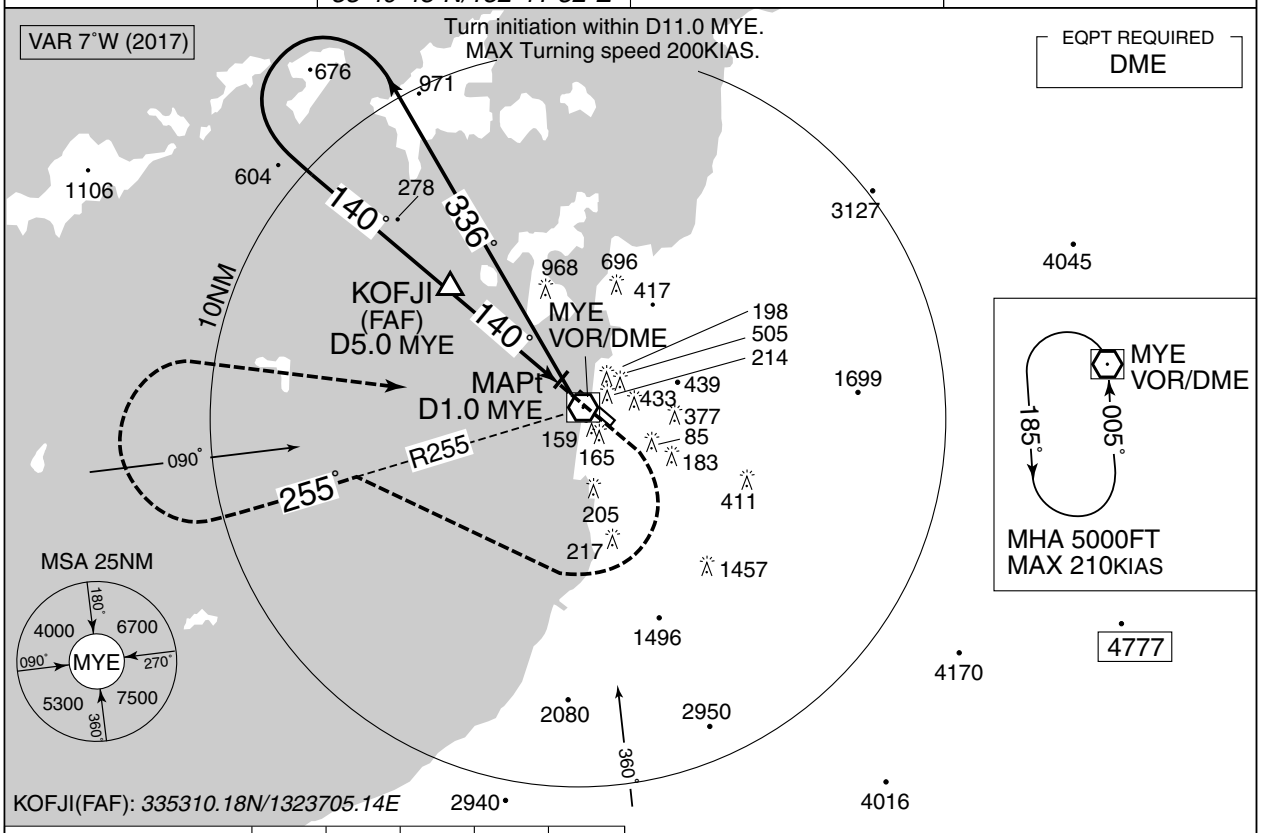
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	225 (200)	1000	470 (457)	1500	520 (507)	1600
B						
C				2000		2400
D					570 (557)	3200

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

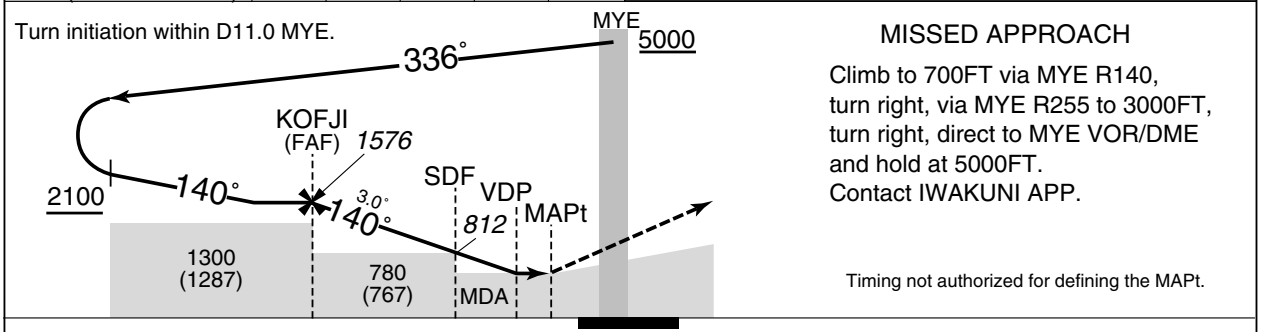
INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA ➡ VOR RWY14

IWAKUNI APP	MATSUYAMA VOR/DME	MATSUYAMA TOWER	RADAR AVBL
128.0 - 236.2	110.65 MYE CH-43Y *33°49′48″N/132°41′32″E*	118.35 - 126.2	ATIS 126.65



NM to MYE	FAF	4	3	2	MAPt
ALT (3.0° APCH Path)	1576	1258	939	621	–



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 THR elev. 25 AD elev. 13

CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	470 (457)	1500	520 (507)	1600
B				
C		2000		2400
D			570 (557)	3200

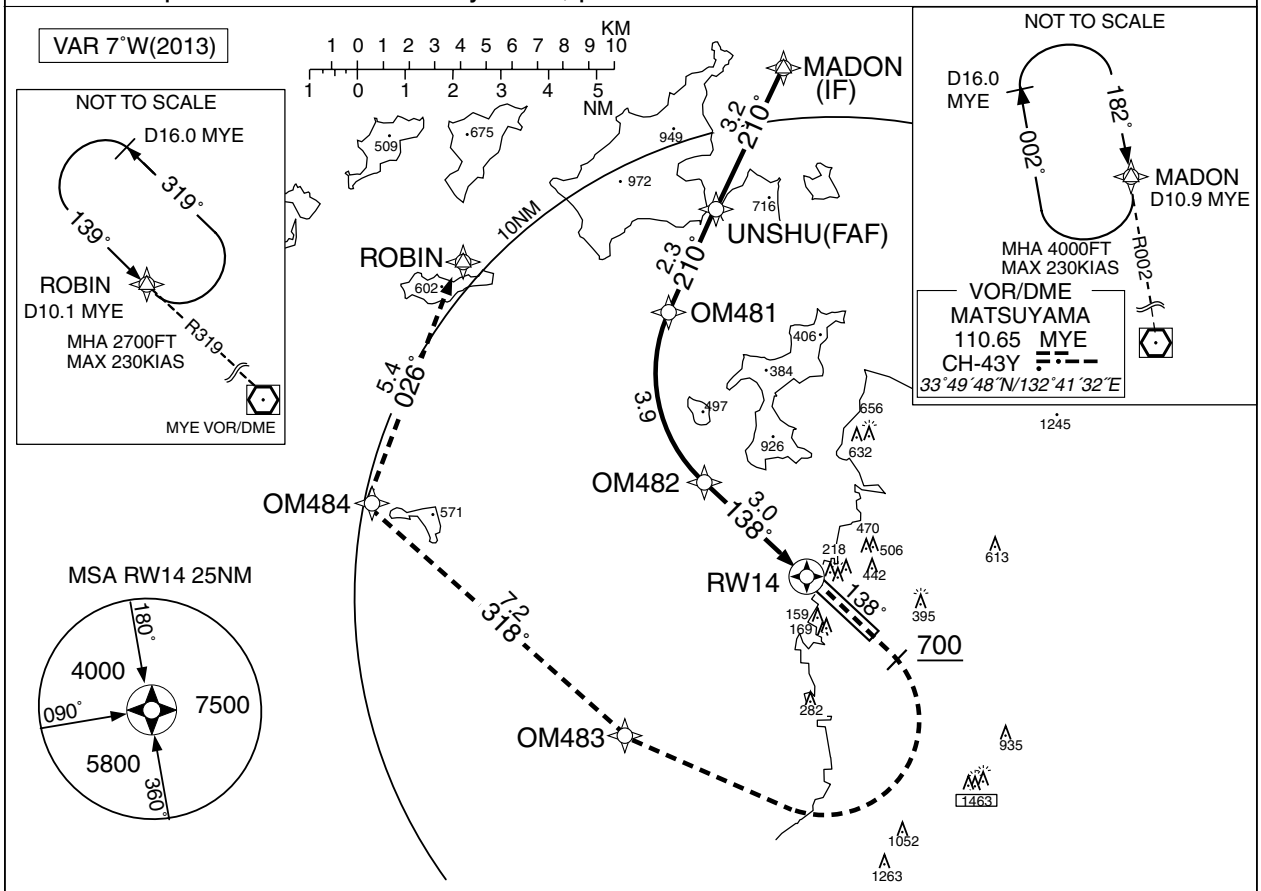
MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to WEST side of RWY only.

INSTRUMENT APPROACH CHART

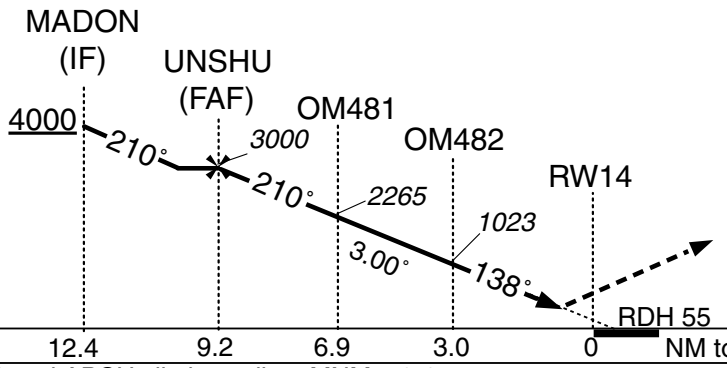
RJOM / MATSUYAMA — RNAV(RNP) RWY14

IWAKUNI APP	GNSS and RF required	MATSUYAMA TOWER	RADAR AVBL
128.0 - 236.2		118.35 - 126.2	ATIS 126.65

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%.

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

RNP AR

Special Authorization Required

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

INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA RNAV(RNP) RWY14

RNAV(RNP) RWY14

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

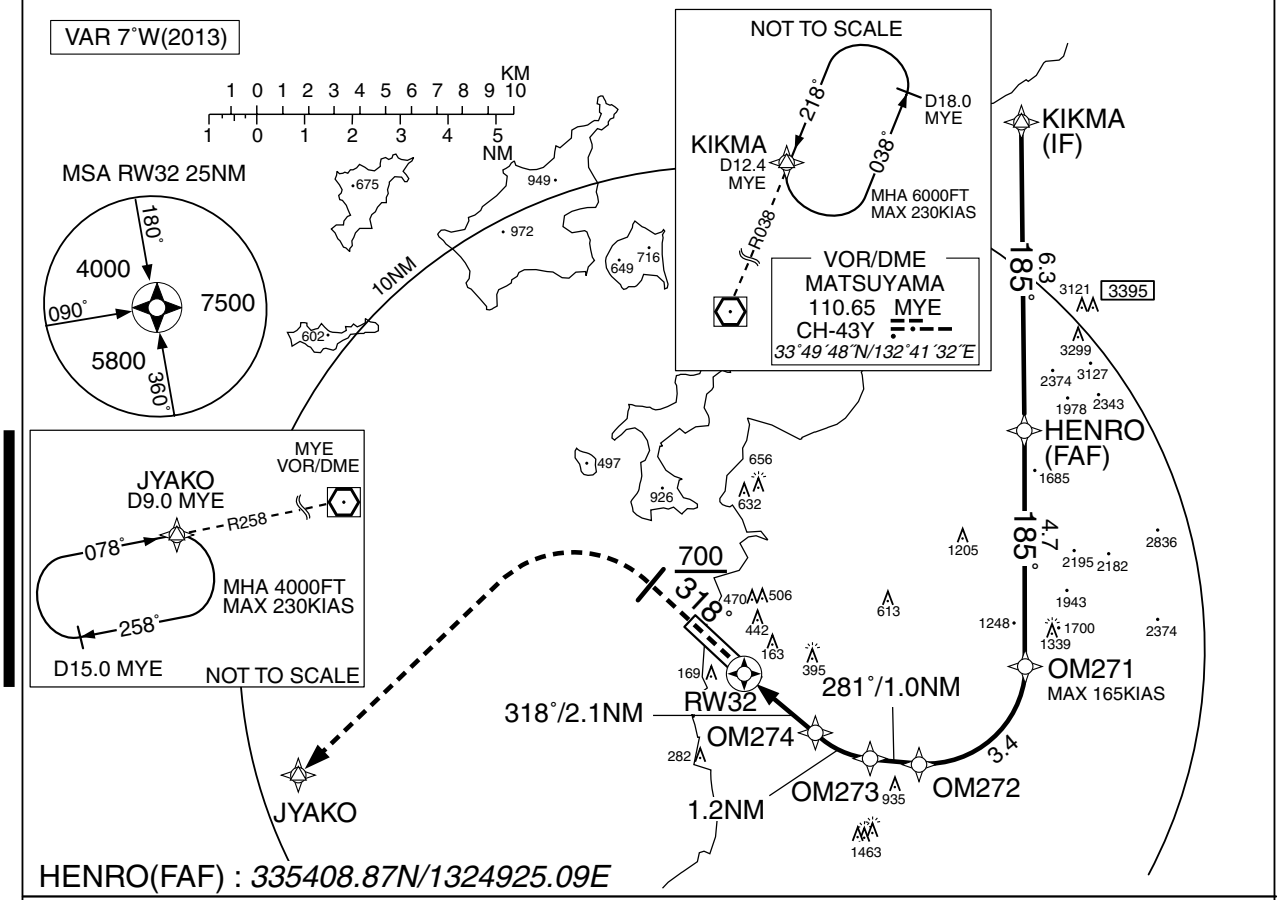
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
MADON	*340037.92N/1324017.47E*	OMRF4	*335420.16N/1324102.43E*
UNSHU	*335740.45N/1323845.52E*		
OM481	*335533.13N/1323739.63E*		
OM482	*335159.96N/1323839.26E*		
RW14	*335004.50N/1324121.73E*		
OM483	*334643.12N/1323652.81E*		
OM484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

INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA — RNAV(RNP) RWY32

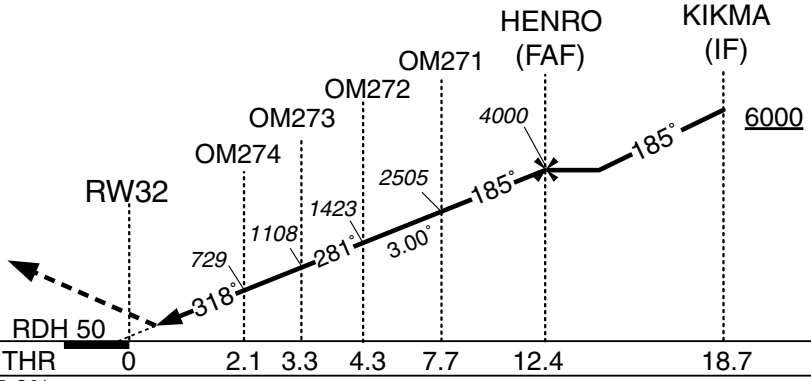
IWAKUNI APP	GNSS and RF required	MATSUYAMA TOWER	RADAR AVBL
128.0 - 236.2		118.35 - 126.2	ATIS 126.65

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

RNP AR
Special Authorization Required

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

INSTRUMENT APPROACH CHART

RJOM / MATSUYAMA RNAV(RNP) RWY32

RNAV(RNP) RWY32

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*		

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