



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  $^{\circ}$  to 3500FT, turn right...

...direct to MYE VOR/DME.

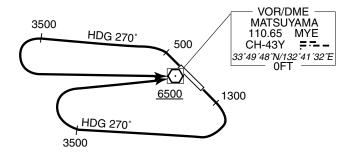
Cross MYE VOR/DME at or above 6500FT.

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



RNAV SID

IYO ONE DEPARTURE

RNP1

Note GNSS required.

VAR 7' W(2016)

VOR/DME

MATSUYAMA

110.65 MYE

CH-43Y ::::33 49 48 VI :::37 49 48 VI :::1300

IYO ONE DEPARTURE

#### IYO ONE DEPARTURE

SHONO 332744.0N 1320647.1E 10000

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.

#### RJOM / MATSUYAMA

**RNAV SID** 

# **IYO ONE DEPARTURE**

# RWY14

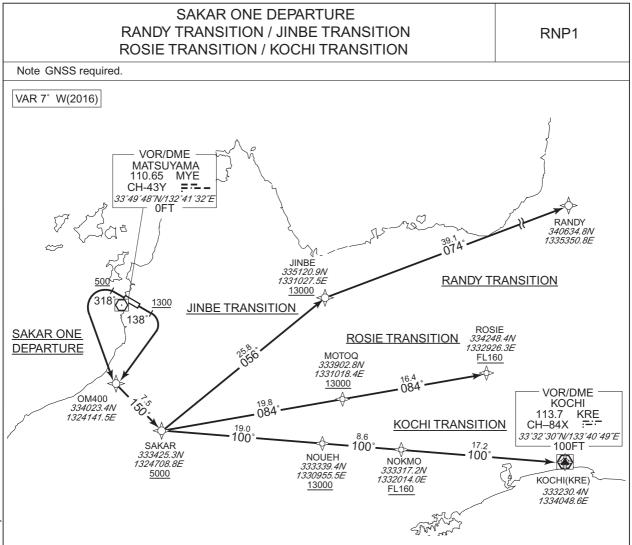
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	ı	1	138 (130.7)	-7.4	-	1	+1300	1	1	RNP1
002	DF	SHONO	1	-	-7.4	-	R	+10000	-	-	RNP1

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

# CHANGE: Navigation Specification(Basic RNP1 → RNP1).

#### RJOM / MATSUYAMA RNAV SID and TRANSITION



#### 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 500FT.

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.

#### 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	1	-	138 (130.7)	-7.4	ı	ı	+1300	1	-	RNP1
002	DF	OM400	-	-	-7.4	-	R	-	-	1	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	-	ı	318 (310.7)	-7.4	-	-	+500	ı	-	RNP1
002	DF	OM400	1	1	-7.4	-	L	1	1	-	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	-	ı	+5000	-	1	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	1	-	-7.4	-	-	+5000	1	-	RNP1
002	TF	JINBE	-	056 (048.8)	-7.4	25.8	-	+13000	1	-	RNP1

#### RJOM / MATSUYAMA

#### RNAV SID and TRANSITION

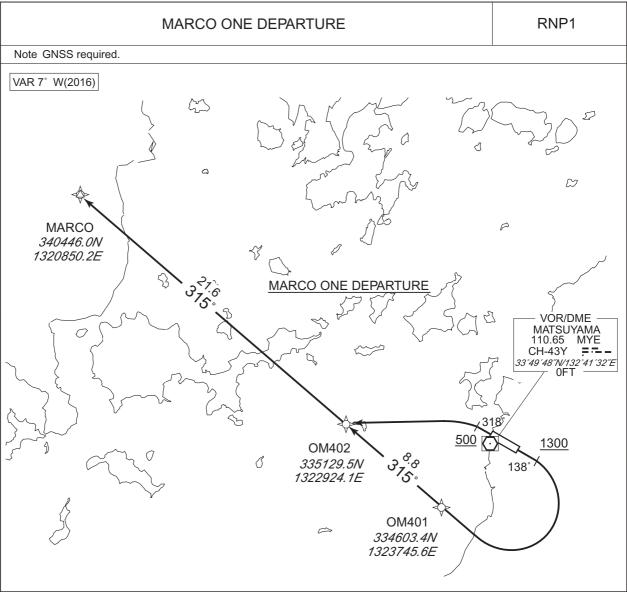
# **ROSIE TRANSITION**

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	1	-	-7.4	1	1	+5000	-	,	RNP1
002	TF	MOTOQ	1	084 (076.4)	-7.4	19.8	1	+13000	1	-	RNP1
003	TF	ROSIE	1	084 (076.6)	-7.4	16.4	1	+FL160	-	1	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	1	-	+5000	-	,	RNP1
002	TF	NOUEH	-	100 (092.2)	-7.4	19.0	-	+13000	-	1	RNP1
003	TF	NOKMO	-	100 (092.4)	-7.4	8.6	-	+FL160	-	-	RNP1
004	TF	KRE	-	100 (092.5)	-7.4	17.2	-	-	-	-	RNP1

RJOM / MATSUYAMA RNAV SID



#### 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.

#### 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	-	1	138 (130.7)	-7.4	-	1	+1300	1	1	RNP1
002	DF	OM401	1	1	-7.4	1	R	ı	1	1	RNP1
003	TF	OM402	1	315 (308.1)	-7.4	8.8	-	-	-	1	RNP1
004	TF	MARCO	-	315 (308.1)	-7.4	21.6	-	-	-	-	RNP1

#### RWY32

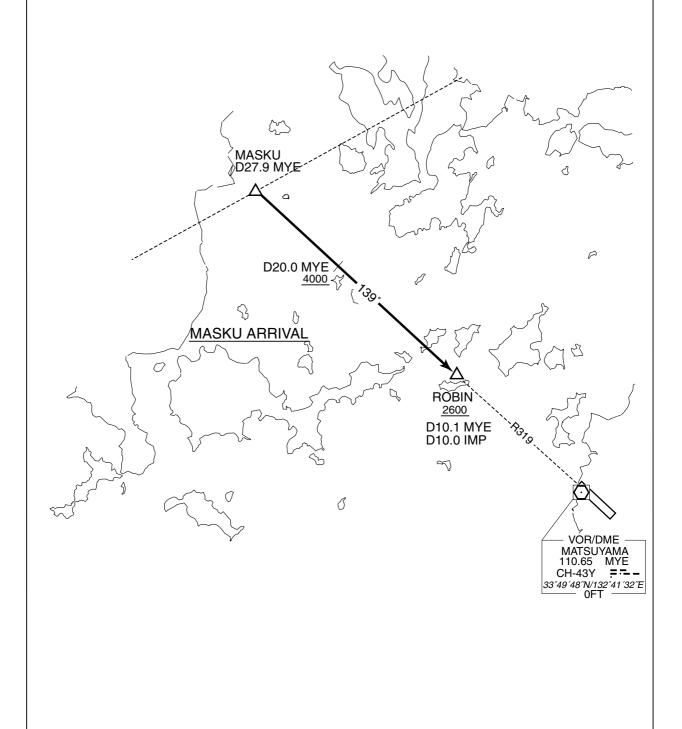
	_										
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	1	-	318 (310.7)	-7.4	-	1	+500	1	-	RNP1
002	DF	OM402	-	-	-7.4	-	L	1	1	1	RNP1
003	TF	MARCO	-	315 (308.1)	-7.4	21.6	-	-	-	-	RNP1

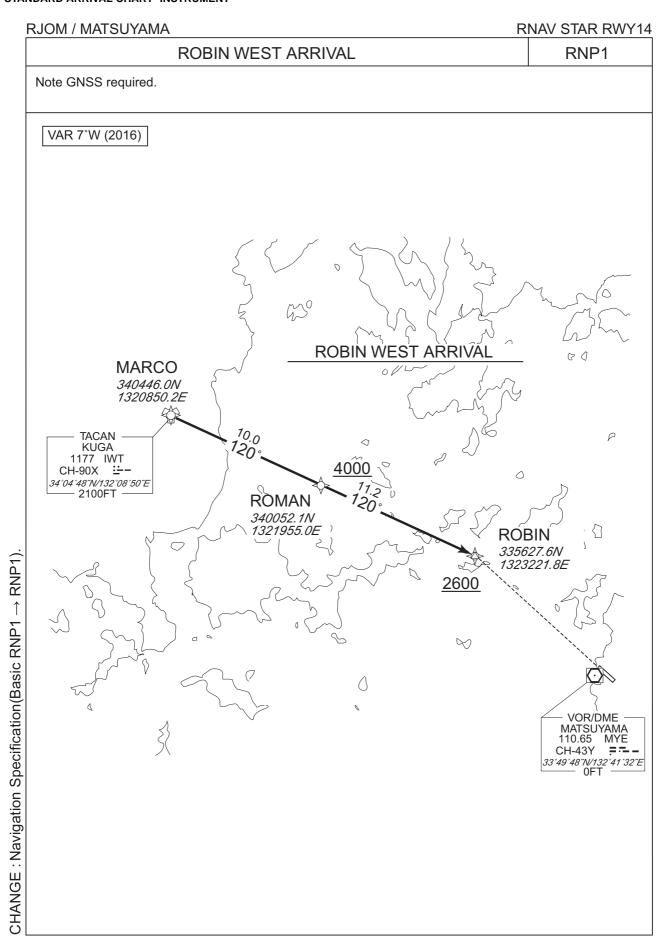
RJOM / MATSUYAMA STAR

#### 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.





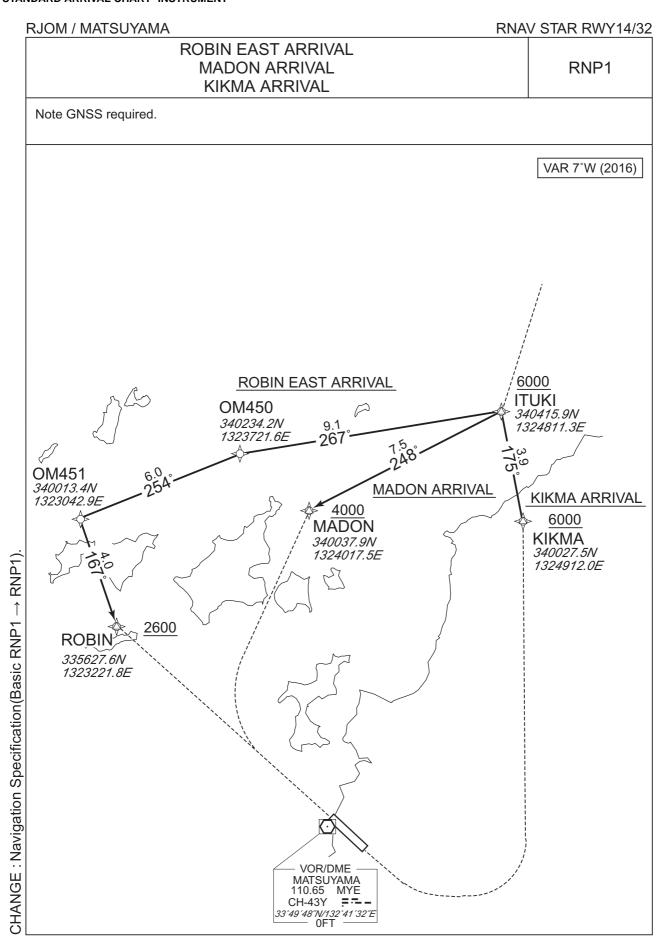
#### RJOM / MATSUYAMA

#### **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	1	1	-7.4	-	-	-	-	1	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



#### 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	1	1	-7.4	1	ı	+6000	-	1	RNP1
002	TF	OM450	1	267 (259.4)	-7.4	9.1	-	-	-	1	RNP1
003	TF	OM451	ı	254 (247.0)	-7.4	6.0	-	-	-	-	RNP1
004	TF	ROBIN	1	167 (160.0)	-7.4	4.0	ı	+2600	1	1	RNP1

# MADON ARRIVAL

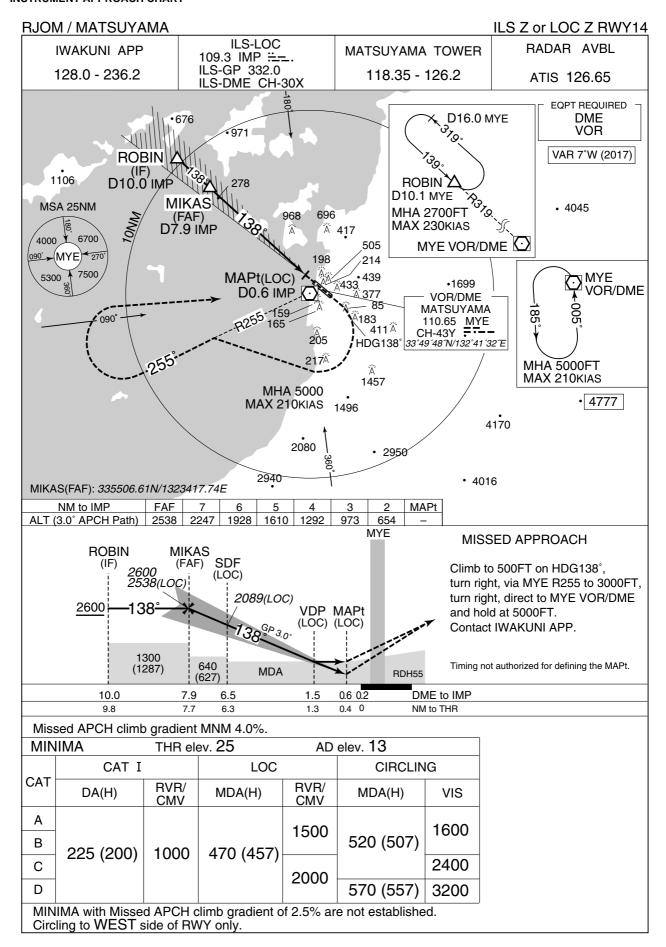
From ITUKI at or above 6000FT, to MADON at or above 4000FT.

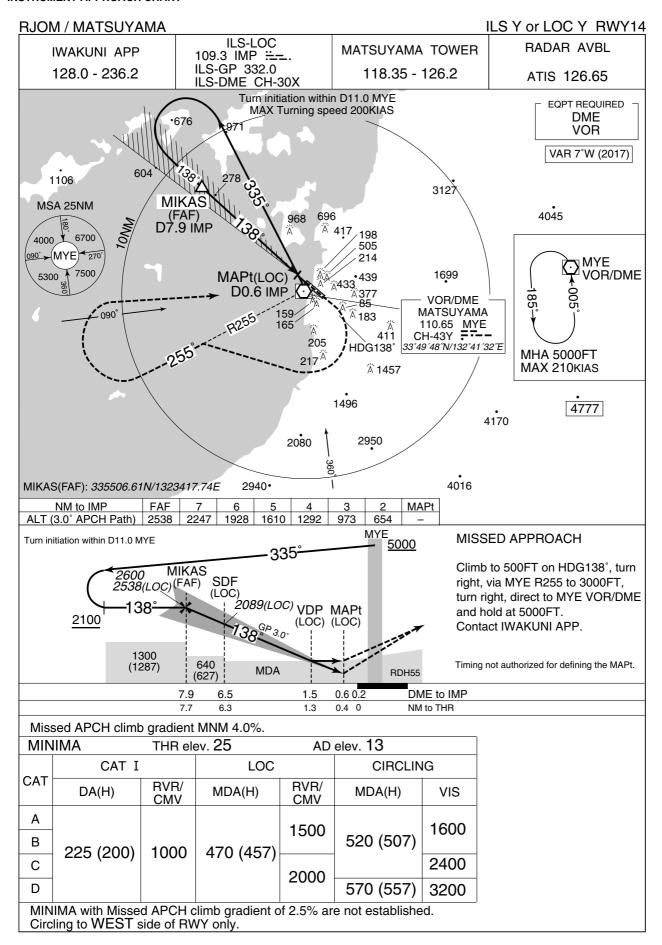
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	ITUKI	-	-	-7.4	-	1	+6000	-	1	RNP1
002	TF	MADON	-	248 (241.0)	-7.4	7.5	-	+4000	-	-	RNP1

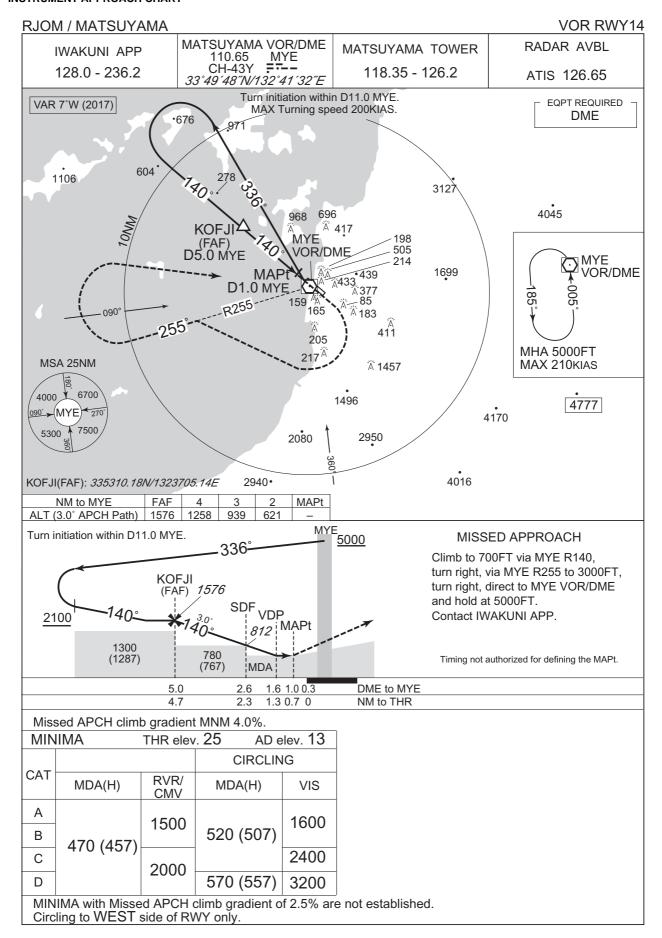
#### KIKMA ARRIVAL

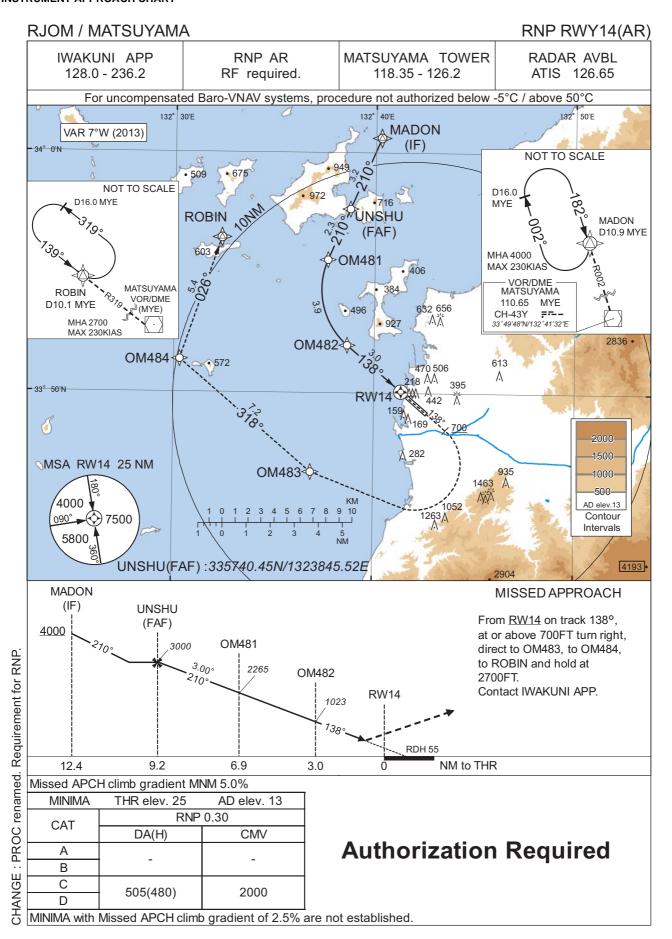
From ITUKI at or above 6000FT, to KIKMA at or above 6000FT.

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	-	1	-7.4	-	ı	+6000	-	1	RNP1
002	TF	KIKMA	-	175 (167.6)	-7.4	3.9	-	+6000	-	-	RNP1









# RJOM / MATSUYAMA

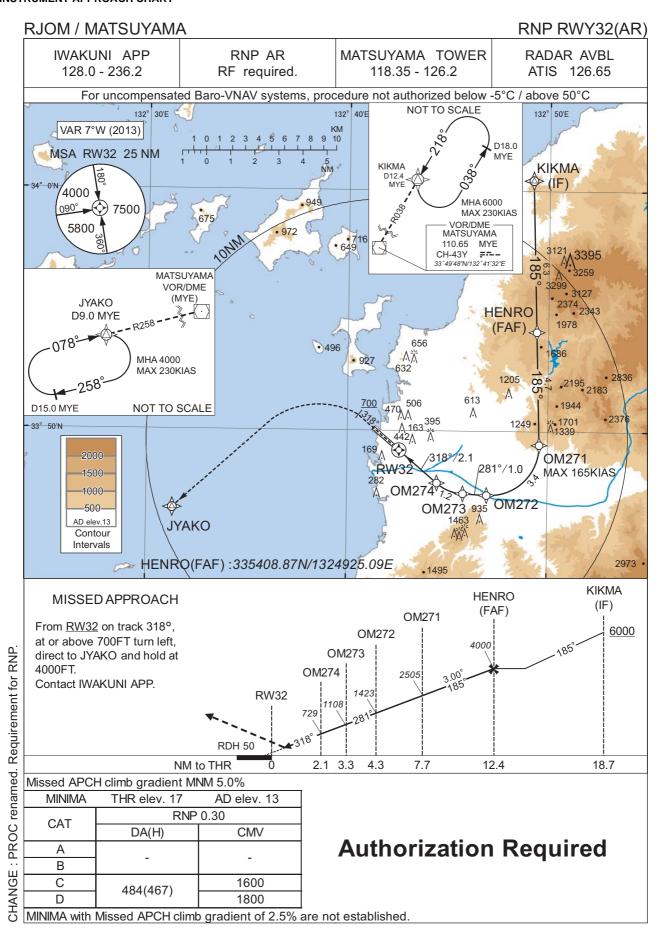
# RNP RWY14(AR)

#### 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	1	ı	-7.1	ı	-	+4000	ı	ı	-
002	TF	UNSHU	1	210 (203.3)	-7.1	3.2	-	3000	ı	ı	1.0
003	TF	OM481	1	210 (203.2)	-7.1	2.3	ı	2265	ı	-3.00	0.3
004	RF Center: OMRF4 r=3.06NM	OM482	ı	1	-7.1	3.9	L	1023	ı	-3.00	0.3
005	TF	RW14	Υ	138 (130.5)	-7.1	3.0	-	80	ı	-3.00/55	0.3
006	FA	1	1	138 (130.5)	-7.1	1	-	+700	ı	-	1.0
007	DF	OM483	1	ı	-7.1	ı	R	ı	ı	ı	1.0
008	TF	OM484	1	318 (310.5)	-7.1	7.2	-	-	ı	-	1.0
009	TF	ROBIN	-	026 (018.6)	-7.1	5.4	-	2700	ı	-	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			
	-	-		



# RJOM / MATSUYAMA

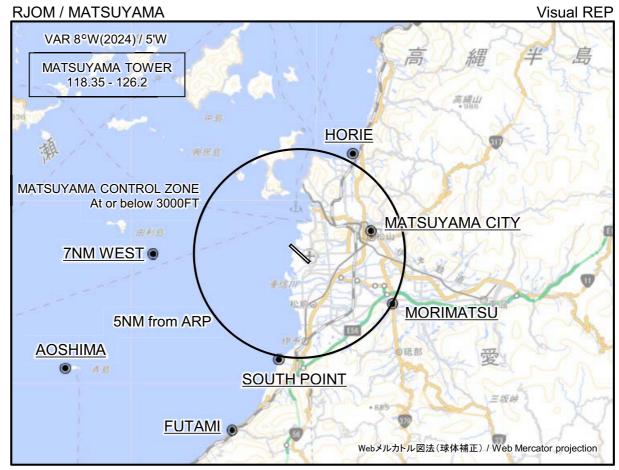
# RNP RWY32(AR)

# 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	1	-	-7.1	-	-	+6000	1	-	-
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	1	ı	-7.1	3.4	R	1423	1	-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	ı	-	-7.1	1.2	R	729	,	-3.00	0.3
007	TF	RW32	Υ	318 (310.7)	-7.1	2.1	-	67	ı	-3.00/50	0.3
800	FA	-	-	318 (310.7)	-7.1	-	-	+700	-	-	1.0
009	DF	JYAKO	-	-	-7.1	-	L	4000	-	-	1.0

# Waypoint Coordinates

Waypoint Identifier	Waypoint Identifier Coordinates F		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			



※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		
	松山シティー 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		
VAR.	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		
CHANGE	双海 Futami	201°T / 9.1NM	ふたみシーサイド公園 Futami seaside park		

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.

