AD 2 AERODROMES

RJOM AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJOM - MATSUYAMA

RJOM AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	*334938N/1324159E* 131°/1.25km FM RWY 14 THR
2	Direction and distance from (city)	3nm WSW from Matsuyama city
3	Elevation/ Reference temperature	13ft / 31°C(2001-2008)
4	Geoid undulation at AD ELEV PSN	109ft
5	MAG VAR/ Annual change	7°W (2009) / 1.7'W
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Civil Aviation Bureau, Public AP Minamiyoshida - machi, Matsuyama, Ehime Pref. Tel: 089-972-0319 , 089-972-0393(AIS) Fax: 089-973-1056 , 089-974-8185(AIS) AFS: RJOMYFYX
7	Types of traffic permitted(IFR/VFR)	IFR/VFR
8	Remarks	Nil

RJOM AD 2.3 OPERATIONAL HOURS

1	AD Administration	2200 - 1300
2	Customs and immigration	INTL SKED FLT hours only
3	Health and sanitation	INTL SKED FLT hours only
4	AIS Briefing Office	2200 - 1300
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (KANSAI)
7	ATS	2200 - 1300
8	Fuelling	On Request(tel:089-972-1319)
9	Handling	Nil
10	Security	2200 - 1300
11	De-icing	Nil
12	Remarks	Nil

RJOM AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Institutions that deal with passenger airplanes at most B747 type
2	Fuel/ oil types	JET A-1, AVGAS100
3	Fuelling facilities/ capacity	Fuel truck
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJOM AD 2.5 PASSENGER FACILITIES

1	Hotels	In Matsuyama city.
2	Restaurants	At airport
3	Transportation	Buses and Taxis
4	Medical facilities	Hospital in Matsuyama city 2km
5	Bank and Post Office	Nil
6	Tourist Office	At airport
7	Remarks	Nil

RJOM AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 9
2	Rescue equipment	Chemical fire fighting truck x 3, Water-supply truck Lighting power supply truck, Emergency medical equipments conveyance truck
3	Capability for removal of disabled aircraft	Nil
4	Remarks	Nil

RJOM AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Ask AD administration
2	Clearance priorities	RWY14/32, TWY T1 T8 and P1-P7, APRON
3	Remarks	Seasonal availability : DEC MID - FEB MID

RJOM AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	SPOT 1-7 Surface : Cement-concrete Strength : PCN 62/R/B/X/T SPOT 8-14, B-H, J, K Surface : Asphalt-concrete Strength : PCN 61/F/B/X/T
2	Taxiway width, surface and strength	All TWY Surface : Asphalt-concrete, T1 Width : 28.5m, Strength : PCN 63/F/A/X/T T2 Width : 34m, Strength : PCN 76/F/B/X/T T3 Width : 34m, Strength : PCN 88/F/C/X/T T7 Width : 34m, Strength : PCN 121/F/D/X/T T8 Width : 28.5m, Strength : PCN 83/F/B/X/T T4 - T6 Width : 34m, Strength : PCN 83/F/B/X/T P1 Width : 23m, Strength : PCN 63/F/A/X/T P2 - P3 Width : 23m, Strength : PCN 76/F/B/X/T P4 - P7 Width : 23m, Strength : PCN 83/F/B/X/T
3	ACL and elevation	Not Available
4	VOR checkpoints	Not Available
5	INS checkpoints	Spot NR *1R: 334937.13N,1324217.01E* *1: 334939.65N,1324217.65E* *1L: 334939.76N,1324217.39E* *2: 334941.05N,1324215.75E* *3: 334942.58N,1324213.61E* *5: 334943.92N,1324211.60E* *6: 334945.26N,1324209.93E* *7: 334946.35N,1324208.49E*
6	Remarks	Nil

RJOM AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands	Aircraft stand identification signs: Spot NR1-3,5,6 Visual docking/ parking guidance system: Nil
2	RWY and TWY markings and LGT	RWY 14/32: (Marking): RWY designation, RWY CL, RWY THR, RWY middle point, Aiming point, TDZ, RWY side stripe (LGT): RCLL, REDL, RTHL, RENL, WBAR(RWY 14) TWY: All TWY (Marking): TWY CL, RWY HLDG PSN, TWY side stripe (LGT): TWY edge LGT, TWY CL LGT(T1-T8,P1-P7), Taxiing guidance sign(T1-T8), RWY guard LGT(T1-T8)
3	Stop bars	Nil
4	Remarks	(Marking): Overrun area (LGT): APN flood LGT

RJOM AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

In Area3 To be developed

RJOM AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	KANSAI
2	Hours of service MET Office outside hours	H24 (KANSAI)
3	Office responsible for TAF preparation Periods of validity	KANSAI 30 Hours
4	Trend forecast Interval of issuance	Nil
5	Briefing/ consultation provided	Briefing is available upon inquiry at KANSAI
6	Flight documentation Language(s) used	C En
7	Charts and other information available for briefing or consultation	S_6, U_{85}, U_7, U_5, U_3, U_{25}, U_2/T_r, P_s, P_5, P_3, P_{25}, P_{SWE}, P_{SWF}, P_{SWG}, P_{SWI}, P_{SWM}, P_{SW}(domestic), E, C, W_E, W_F, W_G, W_I, W, N
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	TWR, ATIS
10	Additional information(limitation of service, etc.)	Nil

RJOM AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCN) and Surface of RWY	THR coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
14	130.55°	2500×45	PCN 63/F/A/X/T Asphalt Concrete	*335004.50N* *1324121.73E*	THR ELEV:25ft TDZ ELEV:25ft
32	310.55°	2500×45	PCN 63/F/A/X/T Asphalt Concrete	*334911.75N* *1324235.61E*	THR ELEV:17FT

Slope of RWY	Strip Dimensions(M)	RESA (Overrun) Dimensions (M)	Remarks
7	10	11	14
See below figure	2620×300 2620×300	90×(MNM:205 MAX:254)* 42×300 *For detail, ask airport administrator	RWY Grooving: 2500m× 30m

RJOM AD 2.13 DECLARED DISTANCES

RWY Designa-tor	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
14	2500	2500	2500	2500	Nil
32	2500	2500	2500	2500	Nil

RJOM AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	RTHL Color WBAR	PAPI (VASIS) Angle DIST FM THR MEHT	RTZL LEN	RCLL LEN Spacing Color INTST	REDL LEN Spacing Color INTST	RENL Color WBAR	STWL LEN Color
1	2	3	4	5	6	7	8	9
14	Nil	Green Green	PAPI 3.0° / Left 415m 66ft	Nil	2500m 30m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil (*3)
32	SALS 420m (*1) LIH	Green	PAPI(*2) 3.0° / Left 461.3m 74ft	Nil	2500m 30m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil (*3)
Remarks								
10								
SALS with APCH LGT beacon(585m and 936m FM RWY 32 THR)(*1) Usable area of PAPI : WI 3.5NM FM RWY 32 THR(See below figure)(*2) Overrun area edge LGT(LEN:60m Color:Red)(*3) CGL for RWY 32 RWY THR ID LGT for RWY 14 THR(Color:White)								

PAPI

注　：　滑走路32末端側の進入角表示灯の使用範囲は，障害物（山及び樹木）のため滑走路32末端から3.5NM以内とする。

Note：　Usable area of PAPI for runway 32 is within 3.5NM from runway 32 threshold due to obstructions (mountain and trees).

RJOM AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: *334952N/1324156E*, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI:Nil Anemometer : 80m FM RWY 14/32 THR, LGTD
3	TWY edge and centerline lighting	TWY edge LGT: Blue TWY CL LGT: ALTN Green/Yellow FM RWY leaving Report point,other Green
4	Secondary power supply/ switch-over time	Within 1 sec : REDL, RENL, RTHL, WBAR, RCLL, Overrun area edge LGT Within 15 sec : Other LGT
5	Remarks	WDI LGT

RJOM AD 2.16 HELICOPTER LANDING AREA

Nil

RJOM AD 2.17 ATS AIRSPACE

Designation and lateral limits		Vertical limits (ft)	Airspace classification	ATS unit call sign Language	Remarks
1		2	3	4	6
MATSUYAMA CTR	Area within a radius of 5nm of MATSUYAMA ARP*(33°50'N 132°42'E*).	3000 or below	D	MATSUYAMA TOWER En	

RJOM AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	Matsuyama Tower	118.35MHz(1) 126.2MHz 121.5MHz(E)	2200 - 1300	(1) Primary APP SER is provided by Iwakuni APP THRU TWR
ATIS	Matsuyama Airport	126.65MHz	2200 - 1300	

RJOM AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid (VOR declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (7°W/2016)	MYE	110.65MHz	H24	*334948.37N/1324132.00E*		VOR Unusable in the following area 070°-090° beyond 30NM BLW 9,000FT. 100°-150° beyond 30NM BLW 9,000FT.
DME	MYE	1130MHz (CH-43Y)	H24	*334948.37N/1324132.00E*	46ft	DME Unusable in the following area 050°-070° beyond 30NM BLW 9,000FT. 070°-080° beyond 25NM BLW 9,000FT. 080°-200° beyond 30NM BLW 9,000FT. 200°-220° beyond 30NM BLW 6,000FT. 340°-350° beyond 30NM BLW 6,000FT.
ILS-LOC 14	IMP	109.3MHz	2200-1300	*334906.89N/1324242.41E*		LOC: 230m(755ft) away FM RWY32 THR, BRG(MAG)138°.
ILS-GP 14	-	332.0MHz	2200-1300	*334954.70N/1324127.87E*		GP:317m(1040ft) inside FM RWY14 THR, 126m(413ft) SW of RCL. GP angle 3.0° HGT of ILS REF datum 16.6m(55ft).
ILS-DME 14	IMP	991MHz (CH-30X)	2200-1300	*334954.25N/1324127.91E*	37ft	DME:326m(1070ft) inside FM RWY14 THR, 137m(449ft) SW of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

REMARKS :
1. LOC beam BRG (MAG) 138˚
2. HGT of ILS REF datum 16.6m (55ft)
3. GP Angle 3.0˚
4. ELEV of ILS-DME 11m (37ft)

RJOM AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

Aircraft operations other than scheduled flights or in an emergency.
On use of this airport, aircraft operator is required to obtain the prior permission of the airport administrator.

2. Taxiing to and from stands

2.1 Taxiing procedure

滑走路離脱後、平行誘導路（P 誘導路）を走行している航空機との間隔を確保するため、到着機は平行誘導路手前での待機を指示される場合がある。誘導路 T5, T6 及び T7 には、平行誘導路の手前で待機する場合の目安となる 2 本の白い平行線が引かれている。また誘導路 P6 上にも出発機を停止させるための同様の平行線がある。なお、上記全ての平行線に灯火は設置されていない。

After vacating RWY, aircraft may be instructed to hold short of parallel taxiway(TWY P), in order to separate from aircraft on parallel taxiway. White double-solid lines that can be used as a guidance for holding short of parallel taxiway are painted on T5 through T7. Also same lines to stop departure aircraft are installed on P6. No LGT system are installed for all of the above white double-solid lines.

Clear of RWY
Aircraft length : below 39.5m

3. Parking area for small aircraft(General aviation)

Nil

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

Wing tip clearance at the TWY intersection (REF AD1.1.6.8)
Wing tip clearance at the TWY intersection between the aircraft holding at the stop marking on the TWY and the other aircraft taxiing behind it are as follows.

When B773 holding at the stop marking on TWY T6 or T7

Wing Span (WS) of aircraft taxiing on TWY P5-P7	WS =<15.2m	15.2m <WS =<24.2m	WS >24.2m
Wing tip clearance	*A	*B	*C

Legend:
*A : wing tip clearance >= 15m
*B : 10.5m =< wing tip clearance < 15m
*C : wing tip clearance < 10.5m

7. School and training flights - technical test flights - use of runways

Nil

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Nil

RJOM AD 2.21 NOISE ABATEMENT PROCEDURES

(See AIP AD1.1.6.5)

1. 騒音軽減運航方式

すべてのジェット機に対して、空港周辺における航空機騒音軽減のため、運航の安全に支障のない範囲で、以下の方式が適用される。
ただし、これらの方式によることができない航空機は実効的にこれらと同等と認められる代替方式を実施するものとする。

a) 離陸について（滑走路 14）
急上昇方式
b) 着陸について（滑走路 32）
ディレイド･フラップ進入方式及び
低フラップ角着陸方式
c) リバース･スラストについて
なし

2. 優先滑走路方式

原則として、着陸は滑走路 14、離陸は滑走路 32 により行うこととする。ただし、航行の安全確保などに万全を期すため、以下に示す条件等にあっては、本方式は適用されない。
a) 機長が航行の安全を考慮して、反対側滑走路に離着陸することが必要であると判断した場合
b) 滑走路面の状況が適当でない場合
c) 突風を含め追風成分が 5knot を超える場合
d) 突風を含め横風成分が 15knot を超える場合
e) 秩序ある航空交通流が乱される恐れがある場合

3. 優先飛行経路

なし

1. Noise Abatement Operating Procedures

For all jet aircraft, in order to reduce aircraft noise in the vicinity of airport, the following procedures shall be applied unless compliance of the procedures adversely affects the safety of aircraft operations.
In case that the aircraft is unable to take these procedures, pilots should execute alternative procedures which are considered to be practically equivalent

a) For take-off from RWY14
Steepest Climb Procedure
b) For landing to RWY32
Delayed Flap Approach Procedure and Reduced Flap Setting Procedure
c) Reverse Thrust
Nil

2. Preferential Runways Procedures

In principle, RWY32 for take-off and RWY14 for landing are preferentially to be used strictly. However, in order to achieve maximum flight safety, this procedure is not applied under the following circumstances.
a) When a pilot- in-command determines that the use of other runway is necessary in consideration of safety of the aircraft operation.
b) When the condition of the specified runway is not suitable for landing or take-off.
c) When the tail wind component, including gusts, exceeds 5 knots.
d) When the cross wind component, including gusts, exceeds 15 knots.
e) When the possibility exists that orderly flow of traffic may be impeded.

3. Noise Preferential Routes

Nil

RJOM AD 2.22 FLIGHT PROCEDURES

1.TAKE OFF MINIMA

	RWY	ACFT CAT	REDL & RCLL		REDL or RCLL or RCL Marking		NIL (DAYTIME ONLY)	
			RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with TKOF ALTN AP FILED	14	A,B,C,D	400m	400m	400m	400m	-	500m
	32	A,B,C,D	-	400m	-	400m	-	500m
OTHER	14	A,B,C,D	AVBL LDG MINIMA					
	32							

2. Lost communication procedures for arrival aircraft under radar navigational guidance
If radio communications with Iwakuni Approach are lost for 1 minute, squawk Mode A/3 Code 7600 and ;

(I) 1. Contact Matsuyama Tower.

2. If unable, proceed in accordance with Visual Flight Rules.

3. If unable, proceed to MATSUYAMA VOR/DME at last assigned altitude or 6,000 feet whichever is higher, and execute instrument approach.

(II) Procedures other than above will be issued when situation required.

RJOM AD 2.23 ADDITIONAL INFORMATION

Helicopter landing area(SR-SS only)
Location : On PARL TWY
HELIPAD : On TWY P2

RJOM AD 2.24 CHARTS RELATED TO AN AERODROME

Figure-01 Aerodrome/Heliport Chart
Figure-07 Standard Departure Chart - Instrument (MATSUYAMA)
Figure-07 Standard Departure Chart - Instrument (IYO-RNAV)
Figure-07 Standard Departure Chart - Instrument (SAKAR-RNAV)
Figure-07 Standard Departure Chart - Instrument (MARCO-RNAV)
Figure-09 Standard Arrival Chart - Instrument (MASKU)
Figure-09 Standard Arrival Chart - Instrument (ROBIN WEST-RNAV)
Figure-09 Standard Arrival Chart - Instrument (ROBIN EAST, MADON, KIKMA-RNAV)
Figure-10 Instrument Approach Chart (ILS Z or LOC Z RWY14)
Figure-10 Instrument Approach Chart (ILS Y or LOC Y RWY14)
Figure-10 Instrument Approach Chart (VOR RWY14)
Figure-10 Instrument Approach Chart (RNAV(RNP) RWY14)
Figure-10 Instrument Approach Chart (RNAV(RNP) RWY32)
Figure-13 Other Chart (Visual REP)

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.

VAR 7° W(2016)

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)

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	—	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		
NM to THR	9.8	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 — 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.

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
KIKMA	*340027.49N/1324911.96E*
HENRO	*335408.87N/1324925.09E*
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*

RF Arc Center Identifier	Coordinates
OMRF1	*334923.23N/1324707.68E*
OMRF2	*334915.02N/1324555.54E*

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