AD 2 AERODROMES

RJOK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJOK - KOCHI

RJOK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	333246N /1334010E 266° / 560m FM TWR
2	Direction and distance from (city)	7NM E from Kochi city
3	Elevation/ Reference temperature	29ft / 31°C (2004-2008)
4	Geoid undulation at AD ELEV	120ft
	PSN	
5	MAG VAR/ Annual change	7°W (2006) / 1.0'W
6	AD Administration, address,	Civil Aviation Bureau, Kochi Airport Office
	telephone, telefax, telex, AFS,	Monobe, Nankoku - shi, Kochi Pref.
	e-mail and/or Web-site addresses	TEL: 088(863)2620, FAX: 088(863)2956
		AFS: RJOKYFYX AND RJOKZPZX
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Nil

RJOK AD 2.3 OPERATIONAL HOURS

1	AD Administration	2200 - 1200
2	Customs and immigration	On request Customs: 088-832-6131 Immigration: 088-871-7030
3	Health and sanitation	On request Quarantine(human): 0877-46-4279 Quarantine(animal): 087-879-4654 Quarantine(plant): 088-832-3690
4	AIS Briefing Office	2200 - 1200
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (KANSAI)
7	ATS	2200 - 1200
8	Fuelling	2200 - 1200
9	Handling	2200 - 1200
10	Security	2200 - 1200
11	De-icing	Nil
12	Remarks	Nil

RJOK AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	AVBL up to B777-200 ACFT
2	Fuel/ oil types	JET A-1, AVGAS 100
3	Fuelling facilities/ capacity	Fuel Truck Refueling
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJOK AD 2.5 PASSENGER FACILITIES

1	Hotels	In Nankoku City
2	Restaurants	At airport
3	Transportation	Buses and Taxi
4	Medical facilities	In Nankoku City
5	Bank and Post Office	ATM in airport
6	Tourist Office	At airport
7	Remarks	Nil

RJOK 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 x 1 Lighting power supply truck x 1 Emergency medical equipment conveyance truck x 1
3	Capability for removal of disabled aircraft	Nil
4	Remarks	Nil

RJOK AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Motor grader x 7
2	Clearance priorities	1) RWY, 2) TWY T1 T6 A1-A5, 3) TWY T2-T5 and APRON
3	Remarks	Snow removal will be commenced when the RWY and TWY are covered with snow its depth 5cm or more

RJOK AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	SPOT NR 0-5 Surface: Cement-Concrete, Strength: PCR 1132/R/B/W/T SPOT NR 6 Surface: Cement-Concrete, Strength: PCR 785/R/B/W/T		
2	Taxiway width, surface and strength	T2 THRU T5 Width: 34m, Surface: Asphalt-concrete, Strength: PCR 754/F/A/X/T T1, T6 Width: 28.5m, Surface: Asphalt-concrete, Strength: PCR 754/F/A/X/T A1 THRU A5 Width: 23m, Surface: Asphalt-concrete, Strength: PCR 754/F/A/X/T		
3	ACL and elevation	Not available		
4	VOR checkpoints	Not available		
5	INS checkpoints	Spot NR 0: 333253.60N/1334019.95E 1: 333251.95N/1334021.08E 2: 333251.32N/1334023.49E 3: 333250.05N/1334025.25E 4: 333248.79N/1334027.02E 5: 333247.49N/1334028.75E		
6	Remarks	Nil		

RJOK AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and Visual dock- ing/ parking guidance system of aircraft stands	Aircraft stand ID signs: Spot NR2-4
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, RENL, RTHL, RTZL(RWY32), WBAR(RWY32) TWY: All TWY (Marking): TWY CL, RWY HLDG PSN, TWY side stripe (LGT): TWY edge LGT, TWY CL LGT, Taxiing guidance sign(T1-T6), RWY guard LGT(T1-T6)
3	Stop bars	Nil
4	Remarks	(Marking): Overrun area (LGT): Apron flood LGT

RJOK AD2-4

AIP Japan
KOCHI

RJOK AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

Other obstacles

OBST ID/ designation	Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
RJOK1	Mountain	333401.1N/1333838.6E	182ft	-/LIM	Under APCH SFC
RJOK2	Pole	333328.3N/1333919E	62ft	-/LIL	Under APCH SFC
RJOK3	Pole	333318.3N/1333923E	53ft	-/LIL	Under APCH SFC
RJOK4	Dike	333210.1N/1334059.6E	38ft	-/LIL	Under APCH SFC
RJOK5	Tower	333257N/1333936E	104ft	-/LIL	Under transitional SFC

In Area3 To be developed

RJOK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

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

RJOK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCR) and surface of RWY	THR coordinates THR geoid undulation	or precision APP RWY	
1	2	3	4	5	6	
14	130.51°	2500 × 45	PCR 754/F/A/X/T	333312.04N	THR ELEV: 42ft	
			Asphalt Concrete	1333932.98E		
				120.4ft		
32	310.51°	2500 × 45	PCR 754/F/A/X/T	333219.33N	THR ELEV: 17.8ft	
			Asphalt Concrete	1334046.67E	TDZ ELEV: 23ft	
				120.3ft		
Slope	of RWY	Strip Dimensions (M)	RESA (O Dimensio	•	Remarks	
7	7	10	11		14	
See below figure		2620 × 300	40 × (MNM:242 MAX:300)*		RWY Grooving 2500×30m	
		2620 × 300	180 × (MNM:12 *For detail, ask airp	,		
RWY14 4 <u>2</u> FT 3	7FT 32F	T.			RWY32	
-0. 55	-0. 69	-0.10	29FT 2	060	T 20FT 18FT 18F	
			Ī	-(J. 15 –0. 34 –0. 03	

RJOK AD 2.13 DECLARED DISTANCES

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

RJOK AD2-6 AIP Japan косні

RJOK 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	SALS 420m (*1) LIH	Green -	PAPI 3.0°/Left 583.5m 84ft	-	2500m 30m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
32	PALS (CAT I) 420m LIH	Green Green	PAPI 3.0°/Left 404.4m 66ft	900m	2500m 30m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
				Remarks	3			
				10				
SALS with APCH LGT beacon (589.358m and 952.287m FM RWY 14 THR)(*1) Overrun area edge LGT(LEN:60m Color:Red) (*2) COL for RWY 14								

CGL for RWY 14

RJOK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 333255N/1334030E, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI:Nil Anemometer : 430m FM RWY 14 THR, LGTD 430m FM RWY 32 THR, LGTD
3	TWY edge and centerline lighting	TWY edge and center line lights installed, see AD2.9
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

RJOK AD 2.16 HELICOPTER LANDING AREA

Nil

RJOK 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
Kochi CTR	Area within a radius of 5nm of KOCHI ARP (33° 33'N/133° 40'E).	3000 or below	D	Kochi TOWER En	
Kansai ACA	See RJBB attached chart		E	Kansai APP Kansai DEP Kansai RADAR En	

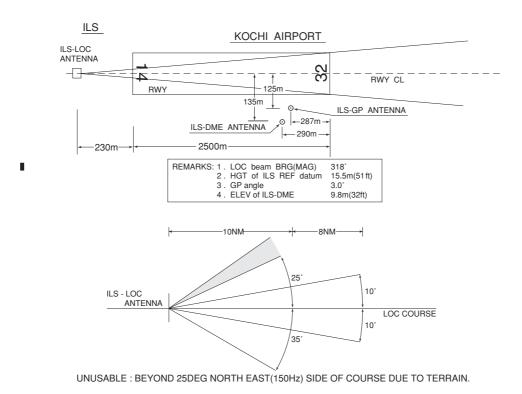
RJOK AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP/ASR	Kansai Approach / Kansai Radar	125.0 MHz 124.8 MHz	2200 - 1200	APP service provided by KANSAI APP.
		121.5 MHz(E) 243.0 MHz(E)		
DEP	Kansai Departure	124.8 MHz(1) 125.0 MHz	2200 - 1200	(1)Primary
		121.5 MHz(E) 243.0 MHz(E)		
TWR	Kochi Tower	118.75 MHz(1) 126.2 MHz	2200 - 1200	(1)Primary
		121.5 MHz(E) 243.0 MHz(E)		
ATIS	Kochi Airport	126.45MHz	2200 - 1200	

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RJOK 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 / 2008)	KRE	113.7MHz	H24	333230.42N/ 1334048.57E		VOR/DME Unusable: 010°-040° beyond 30nm BLW 8,000ft.
DME	KRE	1171MHz (CH-84X)	H24	333230.42N/ 1334048.57E	16.3m (54ft)	040°-060° beyond 30nm BLW 9,000ft. 340°-010° beyond 30nm BLW 9,000ft.
ILS-LOC 32	IKR	110.9MHz	2200 -1200	333316.90N/ 1333926.24E		LOC: 230m (755ft) away FM RWY 14 THR, BRG (MAG) 318°. Unusable : beyond 25° NE Side of course due to Terrain.
ILS-GP 32	-	330.8MHz	2200-1200	333222.28N/ 1334035.09E		GP: 287m (942ft) inside FM RWY 32 THR, 125m (410ft) SW of RCL. Angle 3.0°, HGT of ILS REF datum 15.5m(51ft).
ILS-DME 32	IKR	1007MHz	2200-1200	333222.10N/ 1334034.73E	9.8m (32ft)	DME: 290m (951ft) inside FM RWY 32 THR, 135m (443ft) SW of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based



1. Airp	ort regulations	RJOK AD 2.	20 LOCAL TRA	FFIC REGULA	TIONS				
	Aircraft operations other Prior permission requir Call : 088-863-2620(O	ed for transient aircr		ncy.					
2. Taxi	ing to and from stands								
			Nil						
3. Park	king area for small aircra	ft(General aviation)							
			Nil						
4. Park	king area for helicopters								
			Nil						
5. Apro	on - taxiing during winter	conditions							
			Nil						
6. Taxi	ing - limitations								
	Wing tip clearance at to Wing tip clearance at aircraft taxiing behind it	the TWY intersection			stop marking on the TWY and the other				
	When B772 holding a	t the stop marking o	n TWY T2 or T5						
	Wing Span (WS) of aircraft taxiing on TWY A1-A2 or A4-A5	WS =<35.4m	35.4m <ws =<52.4m</ws 	WS >52.4m	Legend: *A: wing tip clearance >= 15m *B: 6.5m =< wing tip clearance < 15m *C: wing tip clearance < 6.5m				
	Wing tip clearance	*A	*B	*C	C : wing up clearance < 6.5m				
7. Sch	ool and training flights - t	echnical test flights -	use of runways						
			Nil						
8. Heli	copter traffic - limitation								
	Nil								
9. Rem	noval of disabled aircraft	from runways							

Nil

RJOK AD 2.21 NOISE ABATEMENT PROCEDURES

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。

- (1)離陸について (滑走路 32) 急上昇方式
- (2) 着陸について (滑走路 14) 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
- (3) リバース·スラストについて なし
- 2. 優先滑走路方式 なし
- 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.

- (1) For take-off from RWY32 Steepest Climb Procedure
- (2) For landing to RWY14

 Delayed Flap Approach Procedure and
 Reduced Flap Setting Procedure
- (3) Reverse Thrust
- 2. Preferential Runways Procedures Nil
- 3. Noise Preferential Routes

RJOK AD 2.22 FLIGHT PROCEDURES

1. TAKE OFF MINIMA

	RWY	ACFT CAT	REDL 8	& RCLL		or RCLL Marking		IL IE ONLY)	
			CEIL-RVR	CEIL-VIS	CEIL-RVR	CEIL-VIS	RVR-VIS	CEIL-VIS	
Multi-Engine ACFT with	14	A,B,C,D	-	200′-800m	-	200′-800m	-	200′-800m	
TKOF ALTN AP FILED	32	A,B,C,D	0'-400m 0'-400m 0'-400m -						
OTHER	14	A,B,C,D	AVBL LDG MINIMA						
OTHER	32	A,B,C,D			AVBL LD	JIVIIIVIIVIA			

2. Lost communication procedures for arrival aircraft under radar navigational guidance

If radio communications with Kansai Approach/Radar are lost for 1 minute, squawk Mode A/3 Code 7600 and:

- 1. Contact Kochi Tower.
- 2. If unable, proceed in accordance with Visual Flight Rules.
- 3. If unable
 - A) When assigned altitude at or above 5,000 feet, proceed to KRE VOR/DME maintaining last assigned altitude and execute instrument approach.
 - B) When assigned altitude below 5,000 feet,
 - a) If established on a segment of the Instrument Approach Procedure, execute that Instrument Approach.
 - b) If not yet established on a segment of the Instrument Approach Procedure, climb and maintain 5,000 feet and proceed to KRE VOR/DME and execute instrument approach.

NOTE: Procedures other than above will be issued when situation required.

RJOK AD 2.23 ADDITIONAL INFORMATION

RJOK AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart

Standard Departure Chart-Instrument (SHIMIZU)

Standard Departure Chart-Instrument (KOCHI REVERSAL)

Standard Departure Chart-Instrument (URADO REVERSAL)

Standard Departure Chart-Instrument (KARIN-RNAV)

Standard Departure Chart-Instrument (KAIFU-RNAV)

Standard Departure Chart-Instrument (MUROT-RNAV)

Standard Departure Chart-Instrument (OMOGO-RNAV)

Standard Arrival Chart-Instrument (YOSAKOI NORTH-RNAV)

Standard Arrival Chart-Instrument (YOSAKOI EAST-RNAV)

Standard Arrival Chart-Instrument (YOSAKOI SOUTH-RNAV)

Standard Arrival Chart-Instrument (YOSAKOI WEST-RNAV)

Instrument Approach Chart (ILS Z or LOC Z RWY32)

Instrument Approach Chart (ILS Y or LOC Y RWY32)

Instrument Approach Chart (VOR RWY32)

Instrument Approach Chart (RNP Z RWY14 (AR))

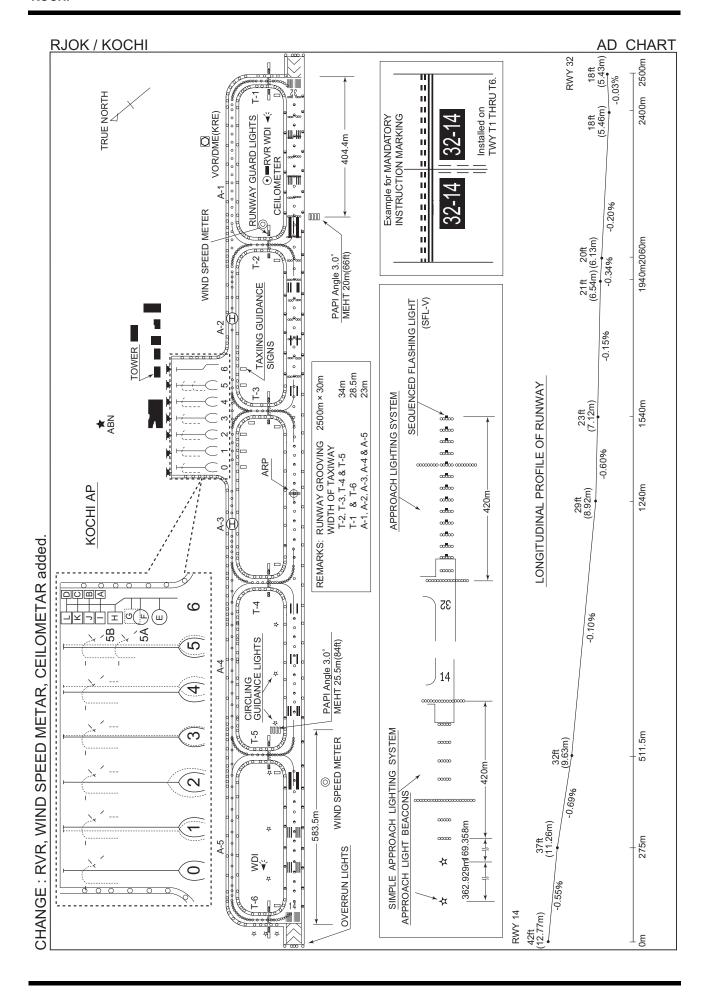
Instrument Approach Chart (RNP Y RWY14 (AR))

Other Chart (Visual REP)

Other Chart (LDG CHART)

Other Chart (MVA CHART)





RJOK / KOCHI SID

SHIMIZU SIX DEPARTURE

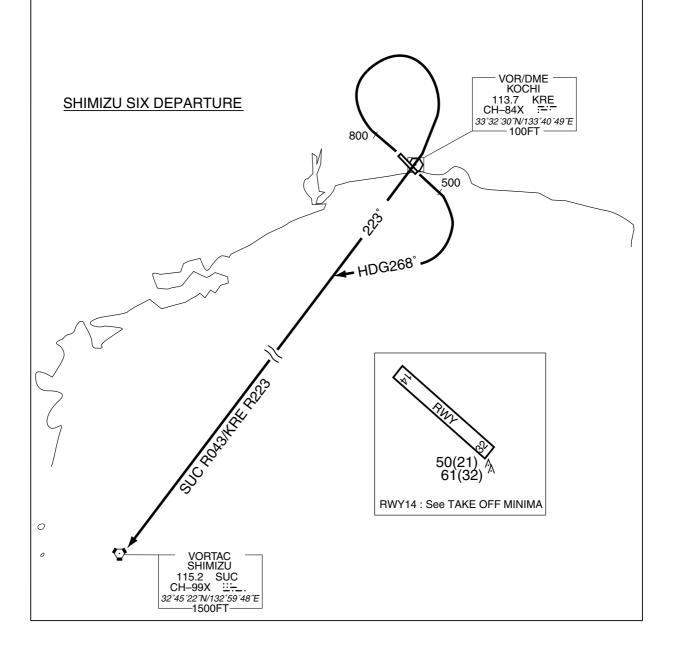
RWY 14: Climb RWY HDG to 500FT, turn right HDG 268°...

RWY 32: Climb RWY HDG to 800FT, turn right...

...to intercept and proceed via KRE R223/SUC R043 to SUC VORTAC.

Note RWY32: 6.0% climb gradient required up to 2500FT.

OBST ALT 2165FT located at 6.6NM 358° FM end of RWY32.



RJOK / KOCHI SID

KOCHI REVERSAL FIVE DEPARTURE

RWY 14: Climb RWY HDG to 500FT, turn right...

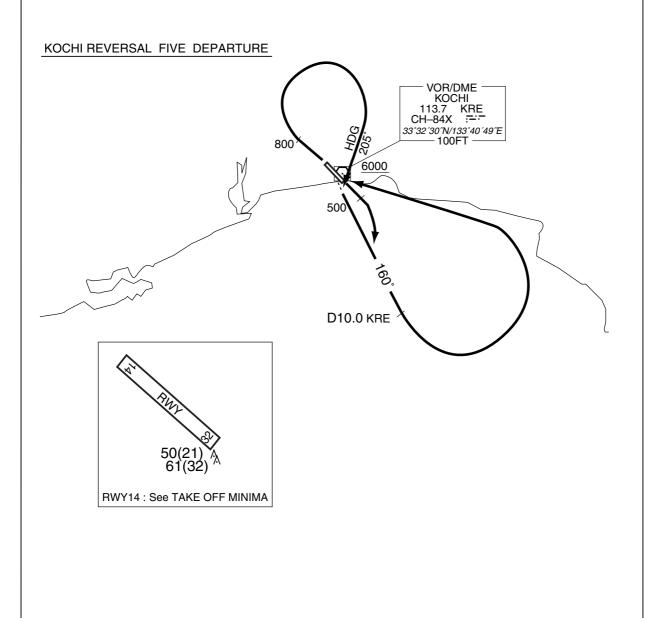
RWY 32: Climb RWY HDG to 800FT, trun right HDG 205°...

...to intercept and proceed via KRE R160 to KRE 10.0DME, then turn left proceed to KRE VOR/DME.

Cross KRE VOR/DME at or above 6000FT.

Note RWY32: 6.0% climb gradient required up to 2500FT.

OBST ALT 2165FT located at 6.6NM 358° FM end of RWY32.



RJOK / KOCHI SID

URADO REVERSAL THREE DEPARTURE

RWY 14: Climb RWY HDG to 500FT, turn right HDG 255°...

RWY 32: Climb RWY HDG to 800FT, trun right...

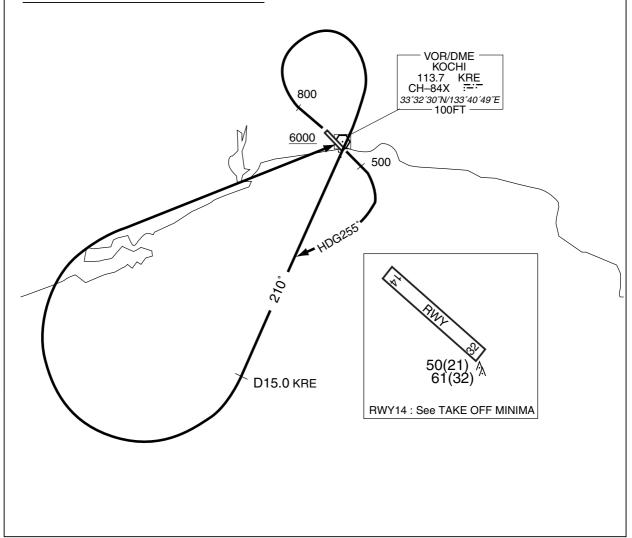
...to intercept and proceed via KRE R210 to KRE 15.0DME, then turn right proceed to KRE VOR/DME.

Cross KRE VOR/DME at or above 6000FT.

Note RWY32 : 6.0% climb gradient required up to 2500FT.

OBST ALT 2165FT located at 6.6NM 358° FM end of RWY32.

URADO REVERSAL THREE DEPARTURE



RJOK / KOCHI RNAV SID KARIN ONE RNAV DEPARTURE RNAV 1 Note 1) DME/DME/IRU or GNSS required. RWY14: KRE 3.0NM fm DER - 7NM to KARIN SUC 3.0NM fm DER - 10NM to KARIN %The aircraft equipped with only DME/DME/IRU Critical DME RWY32: KRE 9NM to OK32C - 10NM to KARIN must be able to update its position without delay SUC 9NM to OK32C - 4NM to OK32C at the starting point of take-off roll. RWY14: DER - 3.0NM fm DER 2) RADAR service required. DME GAP RWY32: DER - 9NM fm OK32C Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 7° W(2009) 8000 **KARIN** N33-40-24.4 OK32A N33-36-15.7 E134-11-14.9 E133-44-17.5 600 500 VOR/DME (For RWY32 Only) KOCHI 113.7 KRE CH-84X :=:-OK32C N33-28-04.1 E133-55-42.6 33°32′30″N/133°40′49″E ———100FT ——— (097.5°T) 104 OK14B-KARIN OK14A 6.0 (046.3°T) N33-24-50.3 OK14B 053°/23.7 E133-43-34.2 N33-24-02.9 E133-50-40.3 DESIGNATION COORDINATES OK14A 33 24 50.3N 133 43 34.2E OK14B 33 24 02.9N 133 50 40.3E OK32A 33 36 15.7N 133 44 17.5E OK32C 33 28 04.1N 133 55 42.6E RWY14 : See TAKE OFF MINIMA 33 40 24.4N 134 11 14.9E **KARIN** Note RWY32: 6.0% climb gradient required up to 2300FT.

RWY14: Climb on HDG137° at or above 500FT, turn right direct to OK14A, to OK14B,

to KARIN at or above 8000FT.

RWY32: Climb on HDG317° at or above 600FT, turn right direct to OK32A, to OK32C,

to KARIN at or above 8000FT.

Note RWY32: 6.0% climb gradient required up to 2300FT.

OBST ALT 1970FT located at 6.13NM 004° FM end of RWY32.

RJOK / KOCHI RNAV SID

KARIN ONE RNAV DEPARTURE

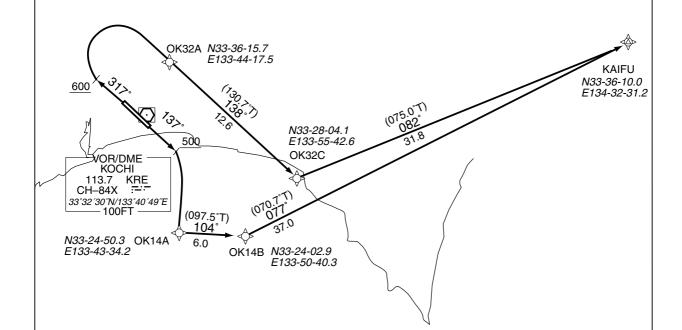
RWY14

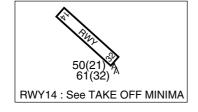
Rcmd. Path Terminator	Fix ID (Waypoint Name)	Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	_	_	_	137° (130.6°)	_	+500	_	_	RNAV1
DF	OK14A	_	_	_	R	_	_	_	RNAV1
TF	OK14B	_	6.0	104° (097.5°)	_	_	_	_	RNAV1
TF	KARIN	_	23.7	053° (046.3°)	_	+8000	_	_	RNAV1

RWY32

Rcmd. Path Terminator	Fix ID (Waypoint Name)	Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	_	_	_	317° (310.6°)	_	+600	_	_	RNAV1
DF	OK32A	_	_	_	R	_	_	_	RNAV1
TF	OK32C	_	12.6	138° (130.7°)	_	_	_	_	RNAV1
TF	KARIN	-	17.9	053° (046.3°)	_	+8000	_	_	RNAV1

RJOK / KOCHI			RNAV SID
KAIFU ONE RNA		RNAV 1	
Note 1) DME/DME/IRU or GNSS required. **The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll.	Critical DME	SUC 3.0NM RWY32 : KRE 9NM to	I fm DER - 23NM to KAIFU I fm DER - 32NM to KAIFU O OK32C - 28NM to KAIFU O OK32C - 4NM to OK32C
2) RADAR service required.	DME GAP	RWY14: DER - 3.0N/ RWY32: DER - 9NM	I
	Inappropriate Navaids	See AD1.1.6.10.3. Inapp	propriate NAVAIDs for RNAV1
VAR 7° W(2009)			_





DESIGNATION	COORDINATES
OK14A	33 24 50.3N 133 43 34.2E
OK14B	33 24 02.9N 133 50 40.3E
OK32A	33 36 15.7N 133 44 17.5E
OK32C	33 28 04.1N 133 55 42.6E
KAIFU	33 36 10.0N 134 32 31.2E

Note RWY32: 6.0% climb gradient required up to 2300FT.

RWY14: Climb on HDG137° at or above 500FT, turn right direct to OK14A, to OK14B, to KAIFU.

RWY32 : Climb on HDG317° at or above 600FT, turn right direct to OK32A, to OK32C, to KAIFU.

Note RWY32: 6.0% climb gradient required up to 2300FT.

OBST ALT 1970FT located at 6.13NM 004° FM end of RWY32.

RJOK / KOCHI RNAV SID

KAIFU ONE RNAV DEPARTURE

RWY14

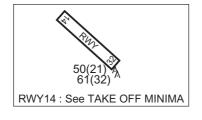
Rcmd. Path Terminator	Fix ID (Waypoint Name)	Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	_	_	_	137° (130.6°)	_	+500	_	_	RNAV1
DF	OK14A	_	_	_	R	_	_	_	RNAV1
TF	OK14B	_	6.0	104° (097.5°)	_	_	_	_	RNAV1
TF	KAIFU	_	37.0	077° (070.7°)	_	_	_	_	RNAV1

RWY32

Rcmd. Path Terminator		Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	_	_	_	317° (310.6°)	_	+600	_	_	RNAV1
DF	OK32A	_	_	_	R	_	_	_	RNAV1
TF	OK32C	_	12.6	138° (130.7°)	_	_	_	_	RNAV1
TF	KAIFU	_	31.8	082° (075.0°)	_	_	_	_	RNAV1

RJOK / KOCHI **RNAV SID and TRANSITION** MUROT ONE RNAV DEPARTURE RNAV 1 Note 1) DME/DME/IRU or GNSS required. %The aircraft equipped with only DME/DME/IRU must be able to update its position without delay Critical DME at the starting point of take-off roll. 2) RADAR service required. RWY14: DER - 3.0NM fm DER DME GAP RWY32: DER - 18.0NM to OK32D VAR 7° W(2009) Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VOR/DME KOCHI 113.7 KRE CH–84X :=: 33°32′30″N/133°40′49″E 100FT OK32A N33-36-15.7 E133-44-17.5 73× KUSHIMOTO TRANSITION (For RWY32 Only) (082.2°T) (082.0°T) (097.7°T) 105° (093.3°T) OK14A 42.3 KUSHIMOTO N33-24-50 3 OK32D 19.0 MERID (KEC) N33-26-51.9 E135-47-40.2 E133-43-34.2 N33-22-38.0 E134-03-14.9 **MUROT** MIYAT OK14A-MUROT (097.6°T) 104° N33-21-15.9 E134-57-28.1 N33-19-34.3 E134-42-50.9 N33-20-41.6 E134-20-10.7 30.9

MUROT ONE RNAV DEPARTURE



DESIGNATION	COORDINATES
OK14A	33 24 50.3N 133 43 34.2E
OK32A	33 36 15.7N 133 44 17.5E
OK32D	33 22 38.0N 134 03 14.9E
MUROT	<i>33 20 41.6N 134 20 10.7E</i>
MIYAT	<i>33 19 34.3N 134 42 50.9E</i>
MERID	33 21 15.9N 134 57 28.1E
KUSHIMOTO(KEC)	<i>33 26 51.9N 135 47 40.2E</i>

Note RWY32: 6.0% climb gradient required up to 2300FT.

MUROT ONE RNAV DEPARTURE

RWY14: Climb on HDG137° at or above 500FT, turn right direct to OK14A, to MUROT.

RWY32: Climb on HDG317° at or above 600FT, turn right direct to OK32A, to OK32D, to MUROT.

KUSHIMOTO TRANSITION

From MUROT to MIYAT, to MERID, to KUSHIMOTO(KEC).

Note RWY32: 6.0% climb gradient required up to 2300FT.

OBST ALT 1970FT located at 6.13NM 004° FM end of RWY32.

RJOK / KOCHI

RNAV SID and TRANSITION

MUROT ONE RNAV DEPARTURE

RWY14

Rcmd. Path Terminator		Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	_	_	_	137° (130.6°)	_	+500	_	_	RNAV1
DF	OK14A	_	_	_	R	_	_	_	RNAV1
TF	MUROT	_	30.9	104° (097.6°)	_	_	_	_	RNAV1

RWY32

Rcmd. Path Terminator		Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	_	_	_	317° (310.6°)	_	+600	_	_	RNAV1
DF	OK32A	_	_	_	R	_	_	_	RNAV1
TF	OK32D	_	20.9	138° (130.7°)	_	_	_	_	RNAV1
TF	MUROT	_	14.3	105° (097.7°)	_	_	_	_	RNAV1

KUSHIMOTO TRANSITION

Rcmd. Path Terminator		Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
IF	MUROT	_	_	_	_	_	_	_	RNAV1
TF	MIYAT	_	19.0	100° (093.3°)	_	_	_	_	RNAV1
TF	MERID	_	12.3	089° (082.0°)	_	_	_	_	RNAV1
TF	KUSHIMOTO (KEC)	_	42.3	089° (082.2°)	_	_	_	_	RNAV1

RJOK / KOCHI **RNAV SID** RNAV 1 OMOGO TWO RNAV DEPARTURE Note 1) DME/DME/IRU or GNSS required. RWY14: KRE 16NM to YUZNO - 7NM to YUZNO SUC 16NM to YUZNO - 7NM to YUZNO XThe aircraft equipped with only DME/DME/IRU Critical DME RWY32: KRE 4NM to OK32B - 25NM to YUZNO must be able to update its position without delay SUC 4NM to OK32B - 25NM to YUZNO at the starting point of take-off roll. RWY14: DER - 16NM to YUZNO 2) RADAR service required. RWY32: DER - 4NM to OK32B DME GAP 25NM to YUZNO - 18NM to YUZNO Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 7° W(2017) **OMOGO** 334049.7N 1331233.1E VOR/DME **KOCHI** OK32A 113.7 KRE CH-84X :---333615.7N 1334417.5E 33°32′30″N/133°40′49″E YUZNO 100FT 333934.0N 600 1331704.7E *7*₀ OK32B 333143.9N 1335036.8E 500 (For RWY14 Only) OK14C 332650.1N 1333334.8E OK32E 332159.2N OK32E-YUZNO 1333949.8E 25.9 320° RWY14: See TAKE OFF MINIMA

RWY14: Climb on HDG138° at or above 500FT, turn right direct to OK14C, to YUZNO, to OMOGO.

RWY32: Climb on HDG318° at or above 600FT, turn right direct to OK32A, to OK32B, to OK32E, to YUZNO, to OMOGO.

Note RWY32: 6.0% climb gradient required up to 2300FT.

OBST ALT 1970FT located at 6.1NM 004° FM end of RWY32.

RJOK / KOCHI RNAV SID

OMOGO TWO RNAV DEPARTURE

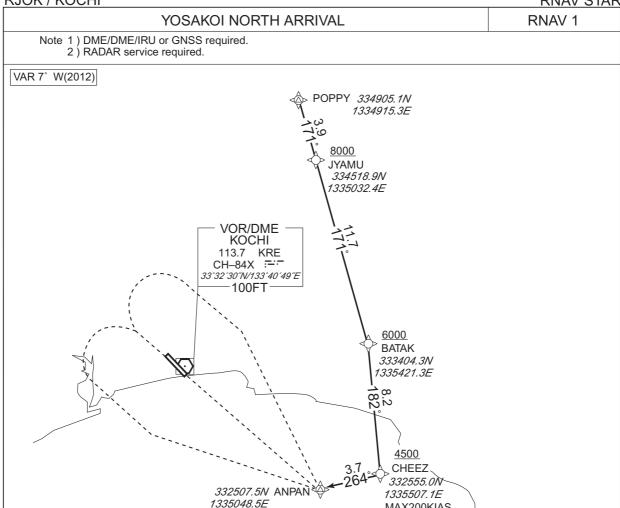
RWY14

Serial Number	Path Descriptor	Waypoint Identifier	_	Course °M(°T)	Magnetic Variation	1	Turn Direction		Speed (KIAS)		Navigation Specification
001	VA	_	_	138 (130.6)	-7.4	_	_	+500	_	_	RNAV1
002	DF	OK14C	_	_	-7.4	_	R	_	_	_	RNAV1
003	TF	YUZNO	_	320 (312.9)	-7.4	18.8	_	_	_	_	RNAV1
004	TF	OMOGO	_	296 (288.5)	-7.4	4.0	_	_	_	_	RNAV1

RWY32

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	1	318 (310.6)	-7.4	_	_	+600	_	_	RNAV1
002	DF	OK32A	-	-	-7.4	_	R	_	_	_	RNAV1
003	TF	OK32B	1	138 (130.7)	-7.4	7.0	_	_	_	_	RNAV1
004	TF	OK32E	ı	230 (222.8)	-7.4	13.3	-	_	ı	_	RNAV1
005	TF	YUZNO	ı	320 (312.9)	-7.4	25.9	ı	_	ı	_	RNAV1
006	TF	OMOGO	ı	296 (288.5)	-7.4	4.0	_	_	<u>-</u>	_	RNAV1

RJOK / KOCHI **RNAV STAR**

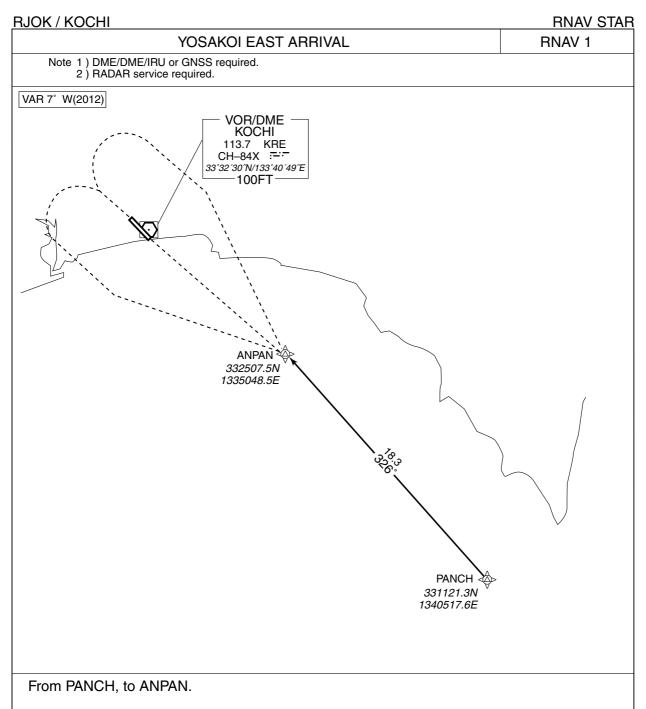


From POPPY, to JYAMU at or above 8000FT, to BATAK at or above 6000FT, to CHEEZ at or above 4500FT, to ANPAN.

MAX200KIAS

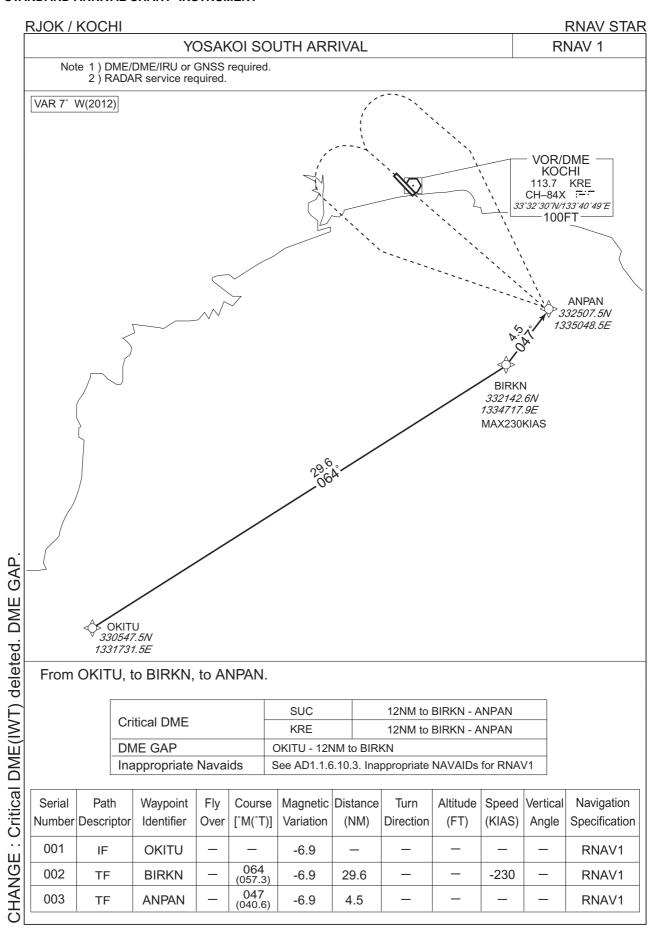
Cuitinal DME	SUC	BATAK - ANPAN				
Critical DME	KRE	BATAK - ANPAN				
DME GAP	_					
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV					

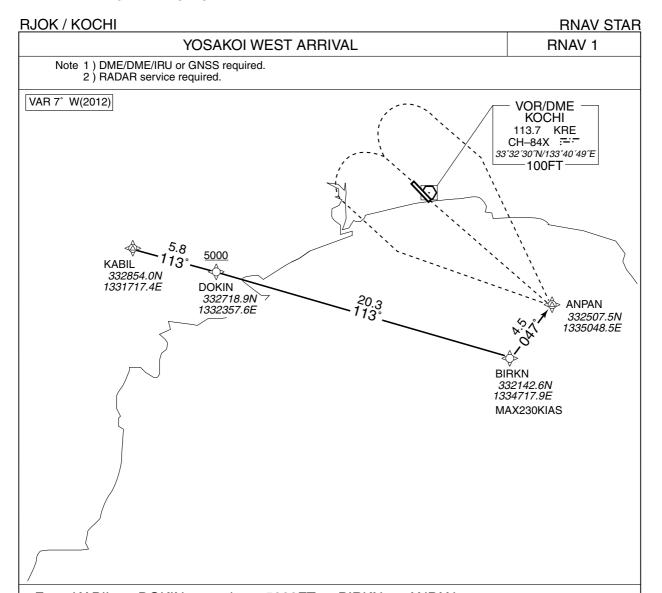
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course [°M(°T)]	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	POPPY	_	_	-6.9	_	_	_	_	_	RNAV1
002	TF	JYAMU	_	171 (164.2)	-6.9	3.9	_	+8000	_	_	RNAV1
003	TF	BATAK	_	171 (164.2)	-6.9	11.7	_	+6000		_	RNAV1
004	TF	CHEEZ		182 (175.5)	-6.9	8.2	_	+4500	-200	_	RNAV1
005	TF	ANPAN	_	264 (257.6)	-6.9	3.7	_	_	_	_	RNAV1



Critical DME	KRE	PANCH - ANPAN					
CITICAI DIVIE	SUC	8NM to ANPAN - ANPAN					
DME GAP	-						
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1						

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	[°M(°T)]	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	PANCH	_	_	-6.9	_	_	_	_	_	RNAV1
002	TF	ANPAN	_	326 (318.7)	-6.9	18.3	_	_	_	_	RNAV1

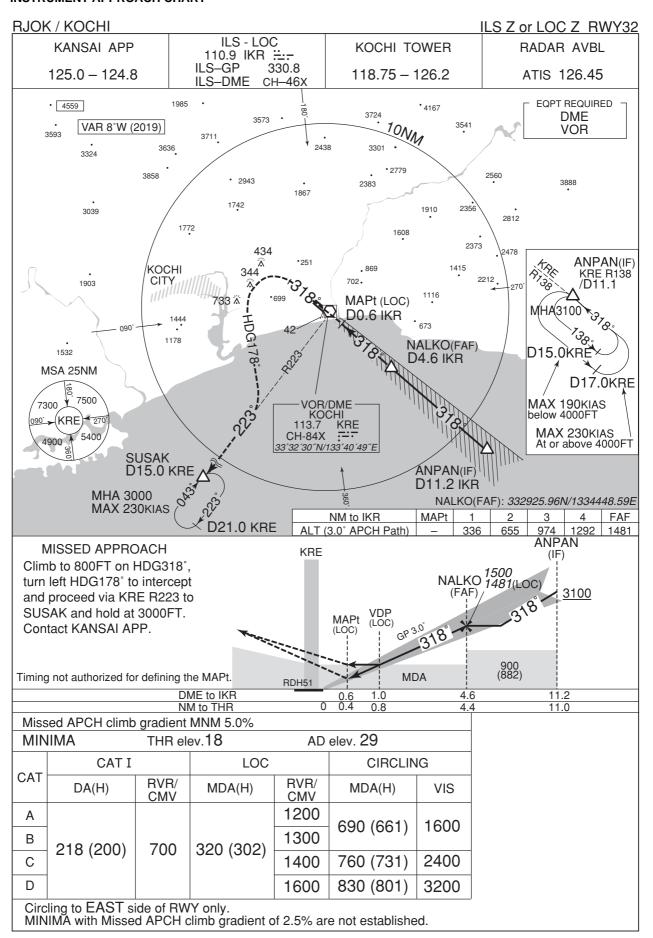


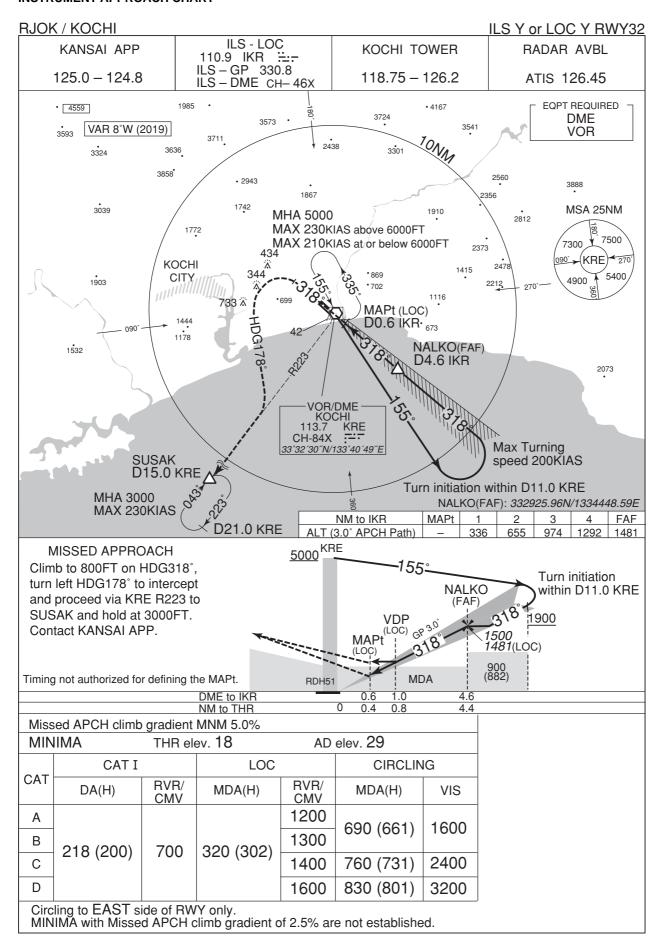


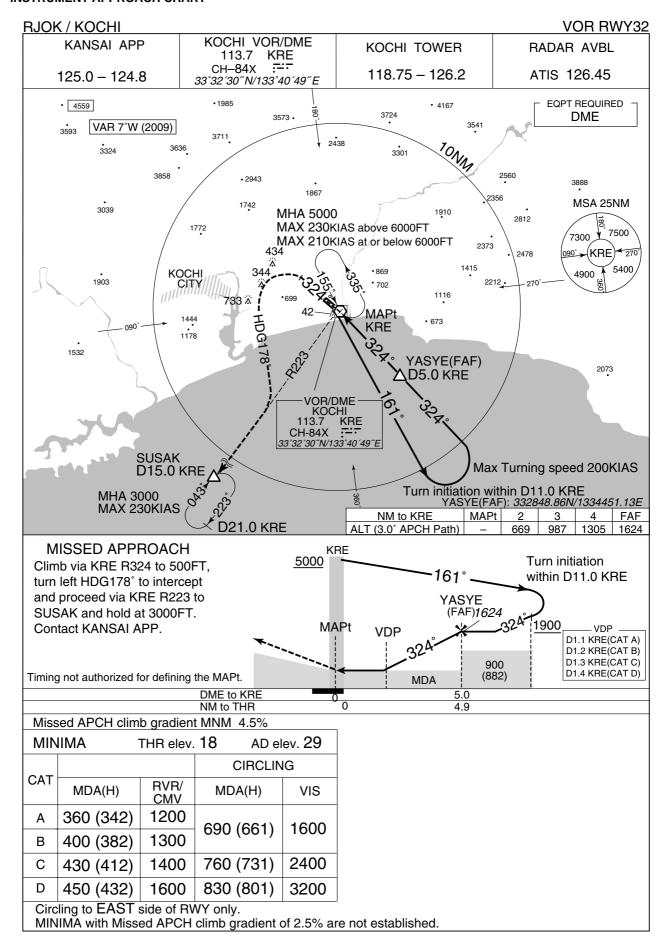
From KABIL, to DOKIN at or above 5000FT, to BIRKN, to ANPAN.

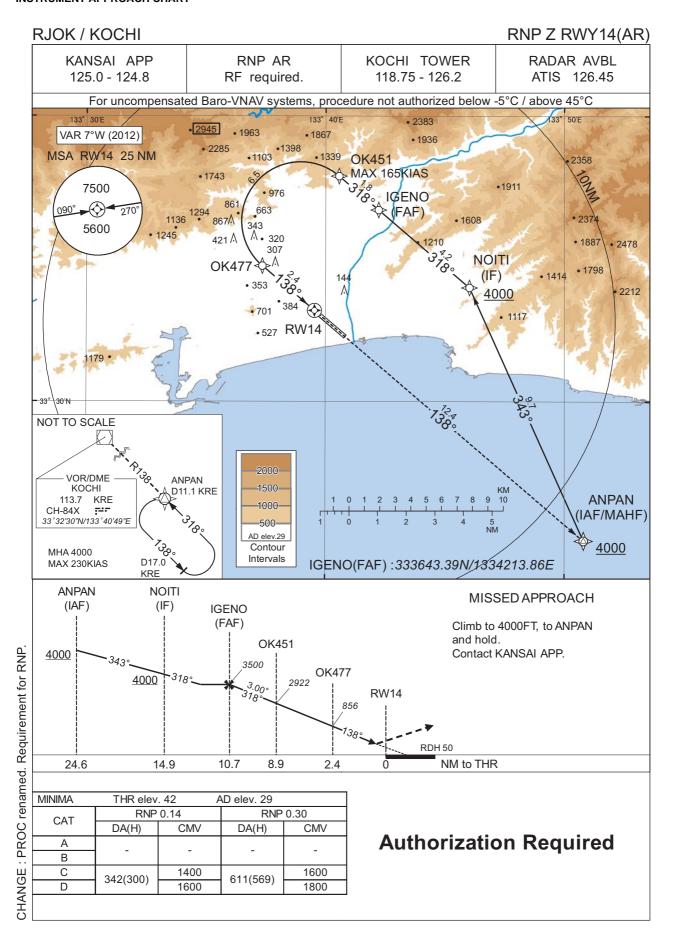
Critical DME	KRE	1NM to DOKIN - 16NM to BIRKN 7NM to BIRKN - ANPAN	
Offical Divic	SUC	1NM to DOKIN - 16NM to BIRKN 7NM to BIRKN - ANPAN	
DME GAP	16NM to BIRKN - 7NM to BIRKN		
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1		

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	KABIL	_	_	-6.9	_	_	_	_	_	RNAV1
002	TF	DOKIN	_	113 (105.9)	-6.9	5.8	_	+5000	_	_	RNAV1
003	TF	BIRKN	_	113 (105.9)	-6.9	20.3	-	-	-230	_	RNAV1
004	TF	ANPAN	_	047 (040.6)	-6.9	4.5	_	_	_	_	RNAV1









RJOK / KOCHI

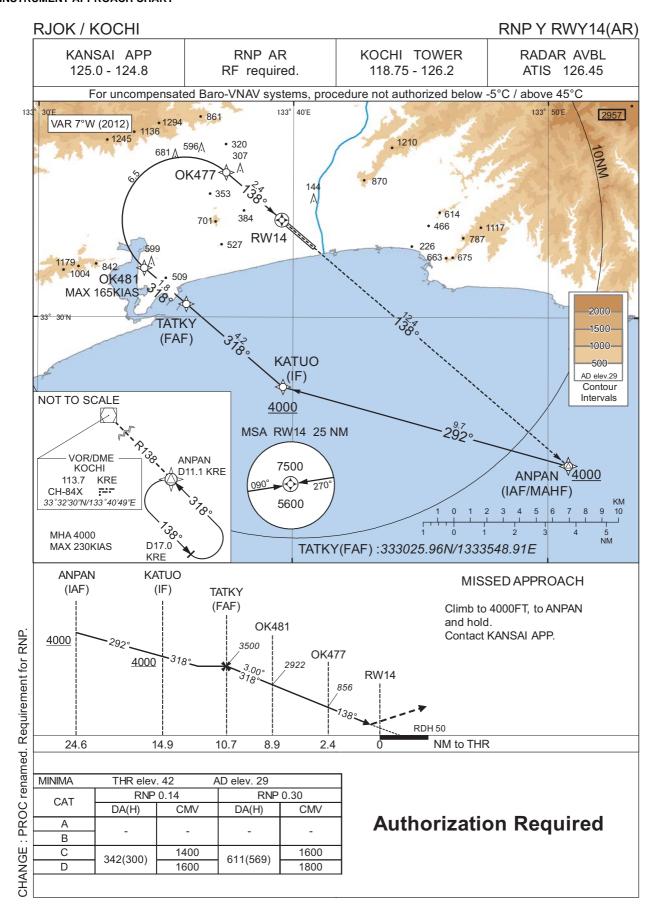
RNP Z RWY14(AR)

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	ANPAN	-	-	-6.9	-	-	+4000	1	-	-
002	TF	NOITI	-	343 (335.9)	-6.9	9.7	-	+4000	-	-	1.0
003	TF	IGENO	-	318 (310.7)	-6.9	4.2	-	3500	-	-	1.0
004	TF	OK451	,	318 (310.7)	-6.9	1.8	-	2922	-165	-3.00	0.14 0.30
005	RF Center: OKRF1 r=2.07NM	OK477	ı	ı	-6.9	6.5	L	856	1	-3.00	0.14 0.30
006	TF	RW14	Υ	138 (130.6)	-6.9	2.4	-	92	1	-3.00/50	0.14 0.30
007	TF	ANPAN	-	138 (130.6)	-6.9	12.4	-	4000	-	-	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
ANPAN	332507.54N / 1335048.52E	OKRF1	333620.13N / 1333858.11E
NOITI	333400.03N / 1334602.07E		
IGENO	333643.39N / 1334213.86E		
OK451	333754.48N / 1334034.43E		
OK477	333445.76N / 1333721.85E		
RW14	333312.04N / 1333932.98E		



RJOK / KOCHI

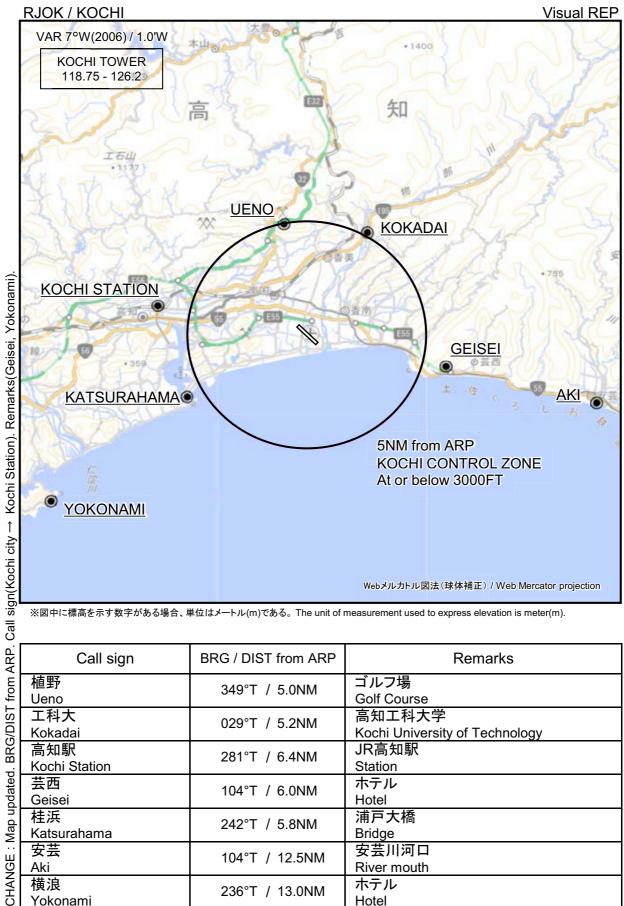
RNP Y RWY14(AR)

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	ANPAN	1	-	-6.9	-	-	+4000	1	-	-
002	TF	KATUO	-	292 (285.5)	-6.9	9.7	-	+4000	-	-	1.0
003	TF	TATKY	-	318 (310.6)	-6.9	4.2	-	3500	-	-	1.0
004	TF	OK481	-	318 (310.6)	-6.9	1.8	-	2922	-165	-3.00	0.14 0.30
005	RF Center: OKRF2 r=2.07NM	OK477	1	-	-6.9	6.5	R	856	1	-3.00	0.14 0.30
006	TF	RW14	Υ	138 (130.6)	-6.9	2.4	-	92	-	-3.00/50	0.14 0.30
007	TF	ANPAN	-	138 (130.6)	-6.9	12.4	-	4000	-	-	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
ANPAN	332507.54N / 1335048.52E	OKRF2	333311.37N / 1333545.65E
KATUO	332742.79N / 1333937.02E		
TATKY	333025.96N / 1333548.91E		
OK481	333136.96N / 1333409.51E		
OK477	333445.76N / 1333721.85E		
RW14	333312.04N / 1333932.98E		



※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
	植野 Ueno	349°T / 5.0NM	ゴルフ場 Golf Course
Map updated. BNG/DIS I	工科大 Kokadai	029°T / 5.2NM	高知工科大学 Kochi University of Technology
יים יי	高知駅 Kochi Station	281°T / 6.4NM	JR高知駅 Station
Daale	芸西 Geisei	104°T / 6.0NM	ホテル Hotel
viap u	桂浜 Katsurahama	242°T / 5.8NM	浦戸大橋 Bridge
. [安芸 Aki	104°T / 12.5NM	安芸川河口 River mouth
STANGE	横浪 Yokonami	236°T / 13.0NM	ホテル Hotel

