

RJOK / KOCHI SID

## SHIMIZU SIX DEPARTURE

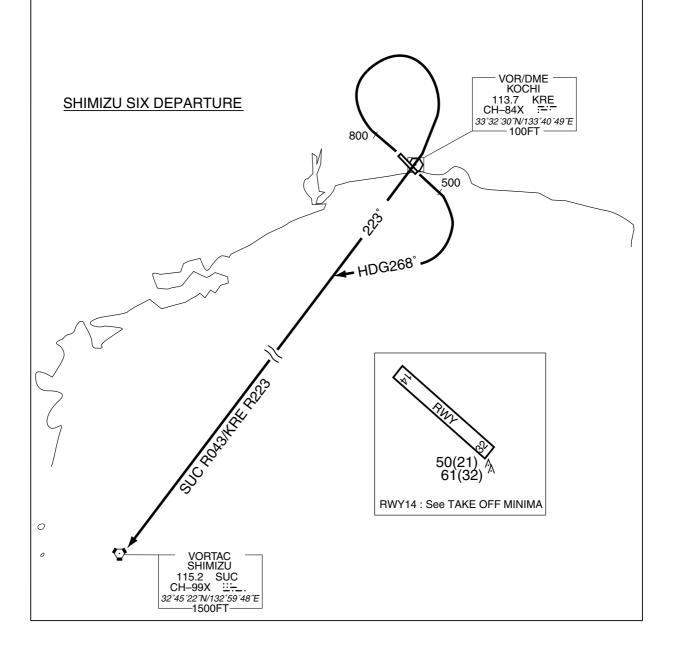
RWY 14: Climb RWY HDG to 500FT, turn right HDG 268°...

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...

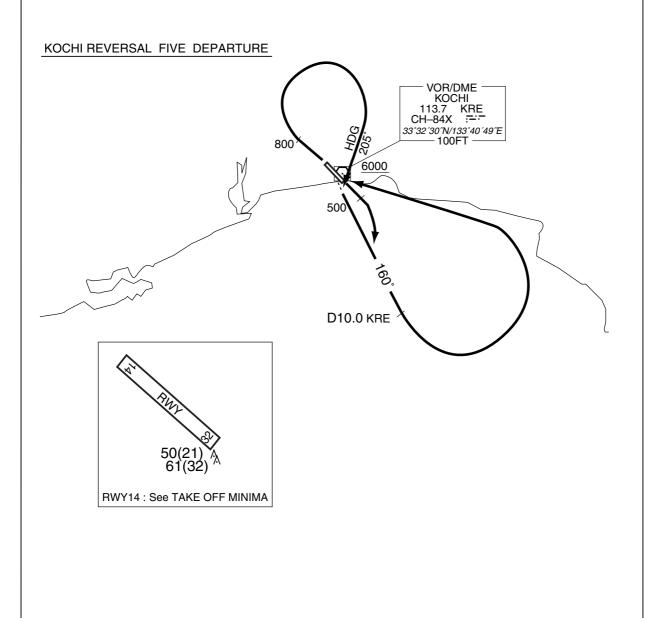
RWY 32: Climb RWY HDG to 800FT, trun right HDG 205°...

...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...

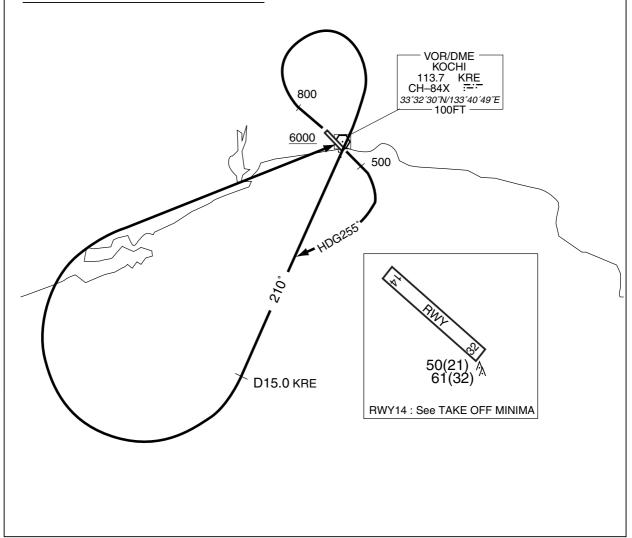
...to intercept and proceed via KRE R210 to KRE 15.0DME, then turn right proceed to KRE VOR/DME.

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

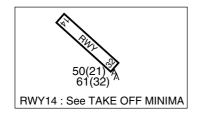
## RWY14

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		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	/ 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 at the starting point of take-off roll.	Critical DME	SUC 3.0NM RWY32 : KRE 9NM to	Ifm DER - 23NM to KAIFU Ifm DER - 32NM to KAIFU OOK32C - 28NM to KAIFU OOK32C - 4NM to OK32C
2 ) RADAR service required.	DME GAP	RWY14: DER - 3.0NN RWY32: DER - 9NM	to OK32C
	Inappropriate Navaids	See AD1.1.6.10.3. Inapp	propriate NAVAIDs for RNAV1
VOR/DME KOCHI 113.7 KRE CH-84X :=:- 100FT (097.5°T) (097.5°T) N33-24-50.3 OK14A 6.0 OK14B N33-24-50.3 OK14B N33-24-	133-55-42.6 0K32C	0,17	KAIFU N33-36-10.0 E134-32-31.2



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

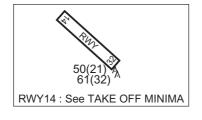
Rcmd. Path Terminator	Fix ID (Waypoint Name)	Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	_	_	_	137° (130.6°)	_	+500	_	_	RNAV1
DF	OK14A	_	_	_	R	_	_	_	RNAV1
TF	OK14B	_	6.0	104° (097.5°)	_	_	_	_	RNAV1
TF	KAIFU	_	37.0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

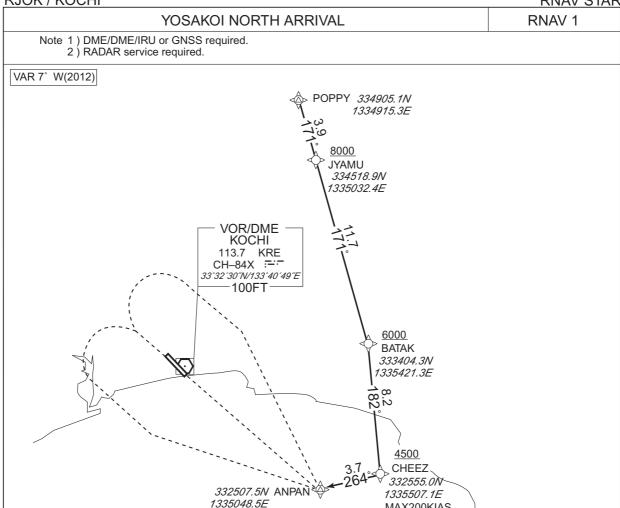
## RWY14

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** 

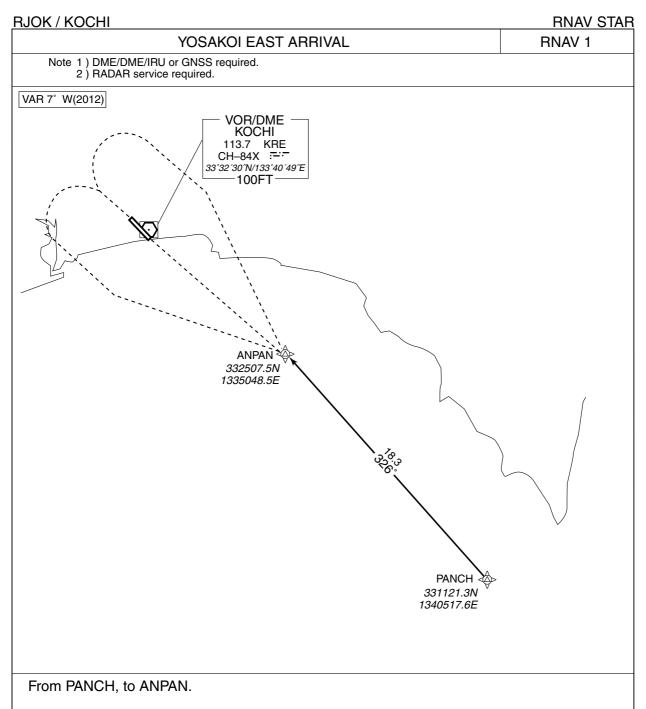


From POPPY, to JYAMU at or above 8000FT, to BATAK at or above 6000FT, to CHEEZ at or above 4500FT, to ANPAN.

MAX200KIAS

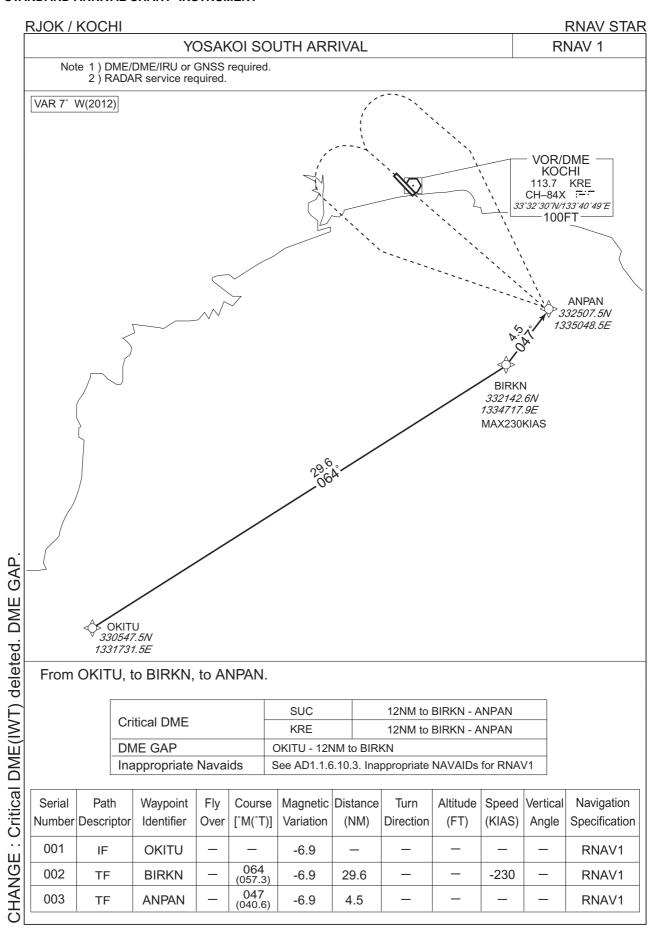
Critical DME	SUC	BATAK - ANPAN			
Critical DIVIE	KRE	BATAK - ANPAN			
DME GAP	-				
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1				

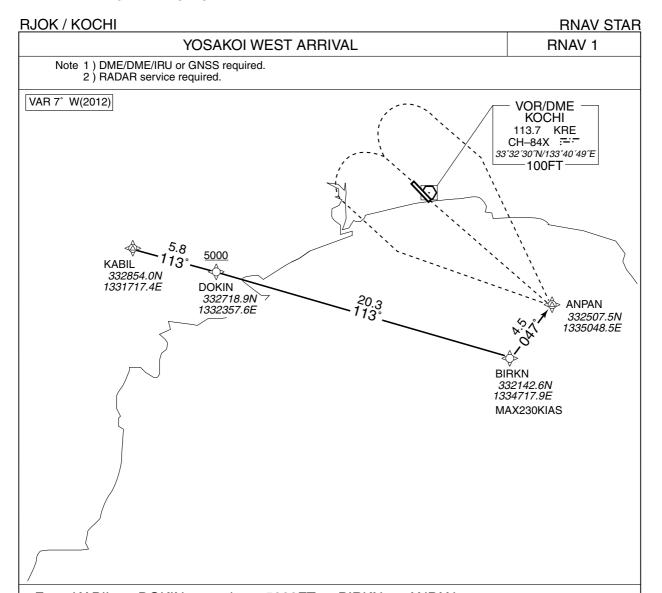
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course [°M(°T)]	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	POPPY	_	_	-6.9	_	_	_	_	_	RNAV1
002	TF	JYAMU	_	171 (164.2)	-6.9	3.9	_	+8000	_	_	RNAV1
003	TF	BATAK	_	171 (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 RNA				

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

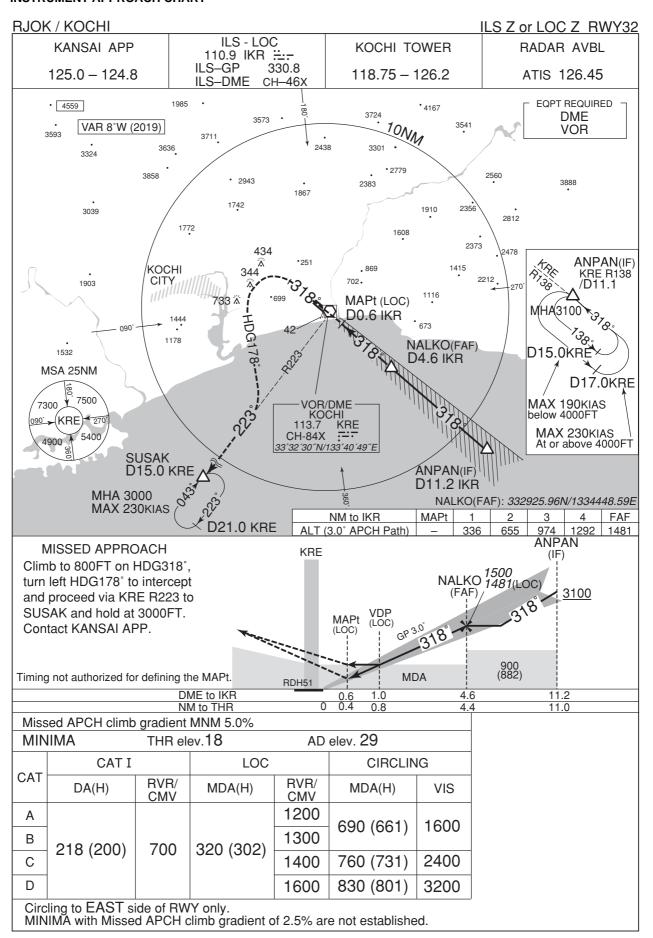


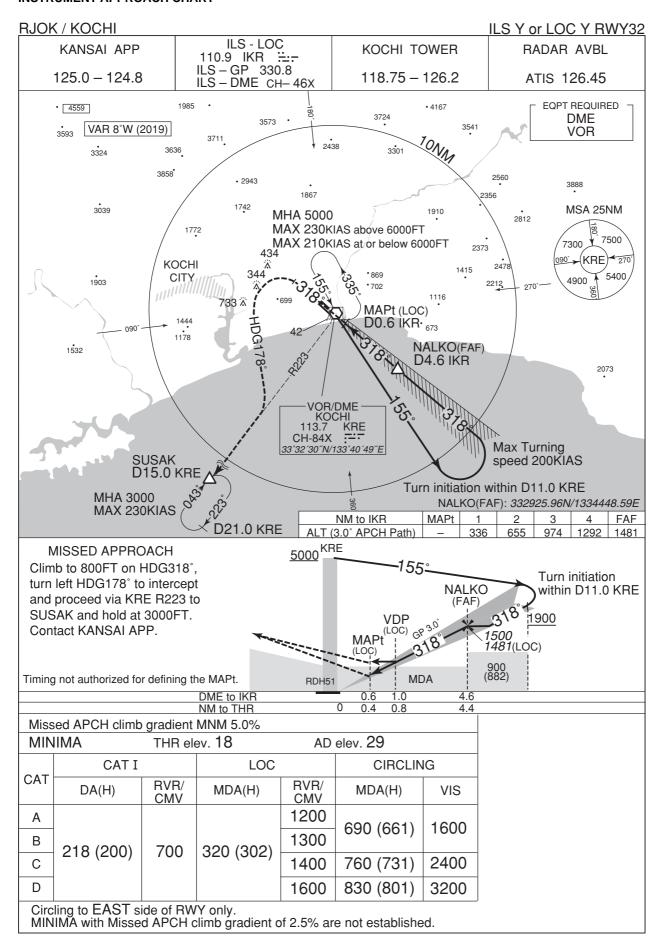


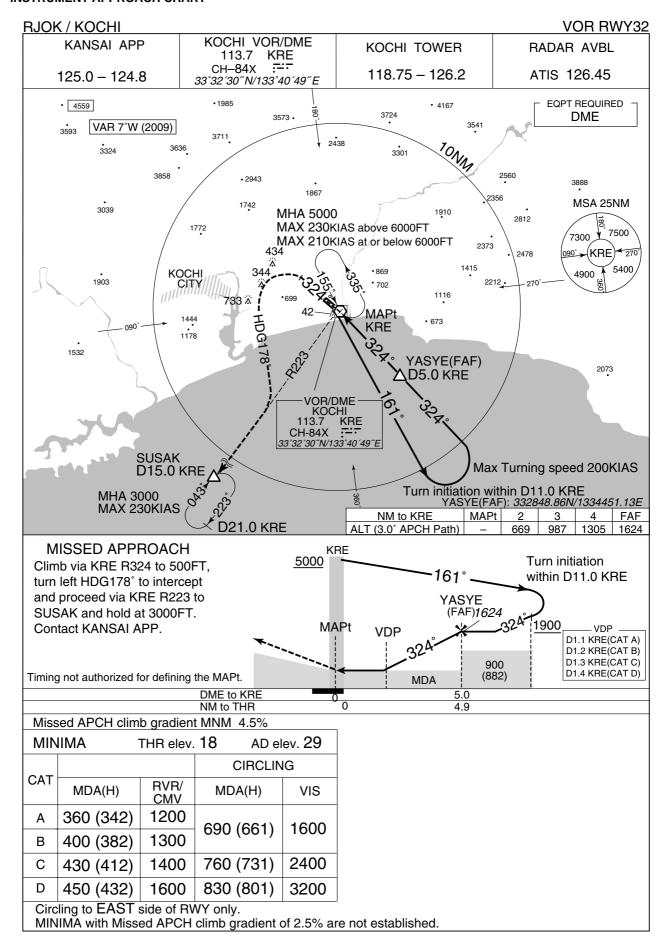
From KABIL, to DOKIN at or above 5000FT, to BIRKN, to ANPAN.

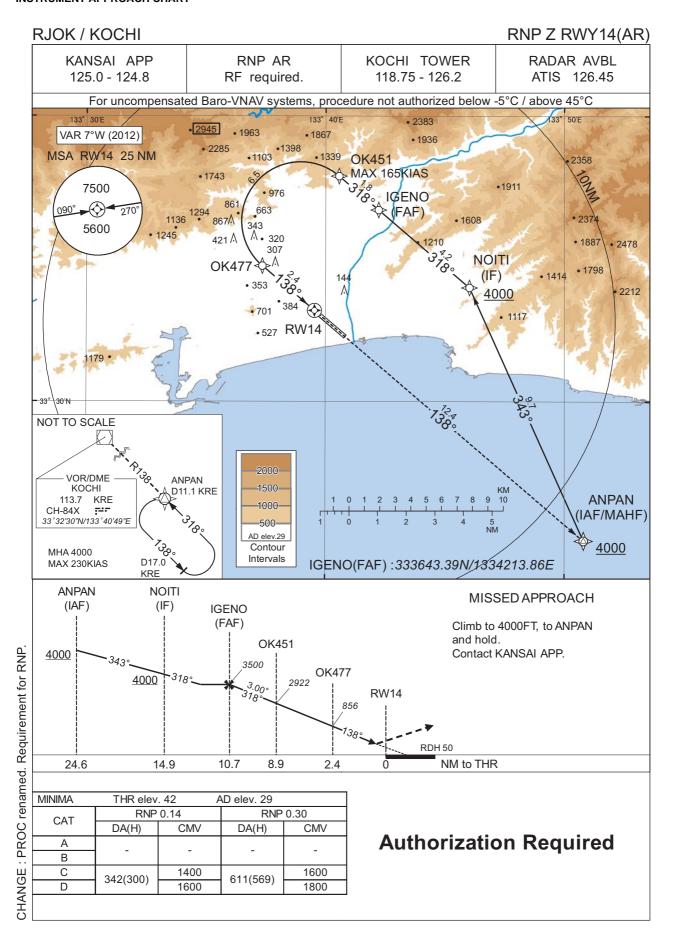
Critical DME	KRE	1NM to DOKIN - 16NM to BIRKN 7NM to BIRKN - ANPAN		
Chilical Divie	SUC	1NM to DOKIN - 16NM to BIRKN 7NM to BIRKN - ANPAN		
DME GAP	16NM to BIRKN - 7NM to BIRKN			
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNA			

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

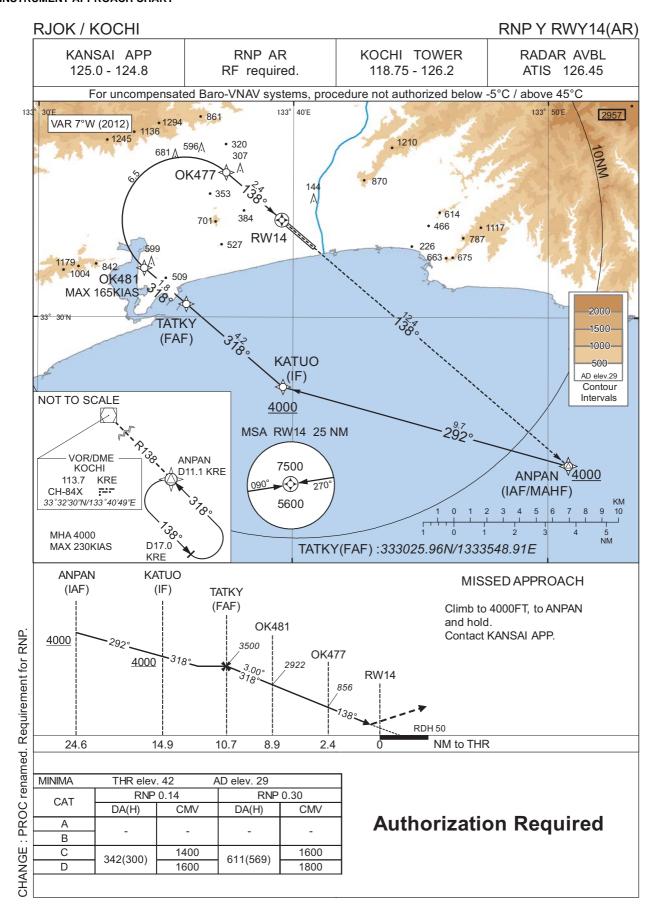
# RNP Z RWY14(AR)

## 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	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

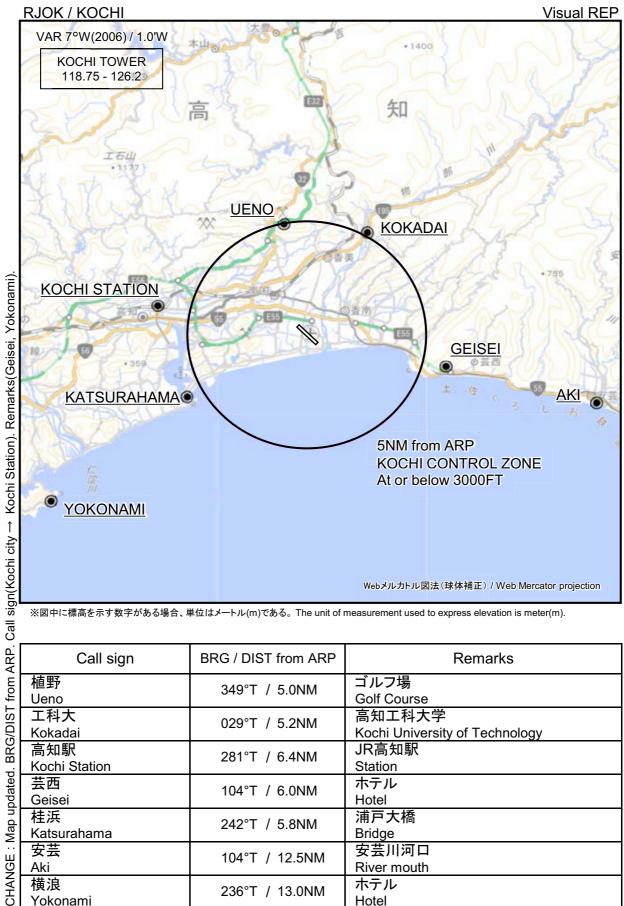
# RNP Y RWY14(AR)

## 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

