## 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*<br>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 PSN | 120ft |
| 5 | MAG VAR/ Annual change | 7°W (2006) / 1.0'W |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Civil Aviation Bureau, Kochi Airport Office<br>Monobe, Nankoku - shi, Kochi Pref.<br>TEL: 088(863)2620, FAX: 088(863)2956<br>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<br>Customs: 088-832-6131<br>Immigration: 088-871-7030 |
| 3 | Health and sanitation | On request<br>Quarantine(human): 0877-46-4279<br>Quarantine(animal): 087-879-4654<br>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,<br>Water-supply truck x 1<br>Lighting power supply truck x 1<br>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 | Surface : Concrete, Strength : PCN 52/R/B/X/T |
| 2 | Taxiway width, surface and strength | T2 THRU T5<br>Width : 34m, Surface : Asphalt-concrete, Strength : PCN 42/F/A/X/T<br>T1, T6<br>Width : 28.5m, Surface : Asphalt-concrete, Strength : PCN 42/F/A/X/T<br>A1 THRU A5<br>Width : 23m, Surface : Asphalt-concrete, Strength : PCN 42/F/A/X/T |
| 3 | ACL and elevation | Not available |
| 4 | VOR checkpoints | Not available |
| 5 | INS checkpoints | Spot NR<br>0: *333253.60N/1334019.95E*<br>1: *333251.95N/1334021.08E*<br>2: *333251.32N/1334023.49E*<br>3: *333250.05N/1334025.25E*<br>4: *333248.79N/1334027.02E*<br>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 docking/ parking guidance system of aircraft stands | Aircraft stand ID signs: Spot NR2-4 |
| 2 | RWY and TWY markings and LGT | RWY 14/32:<br>(Marking): RWY designation, RWY CL, RWY THR, RWY middle point, Aiming point, TDZ, RWY side stripe<br>(LGT): RCLL, REDL, RENL, RTHL, RTZL(RWY32), WBAR(RWY32)<br>TWY: All TWY<br>(Marking): TWY CL, RWY HLDG PSN, TWY side stripe<br>(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<br>(LGT): Apron flood LGT |

## 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

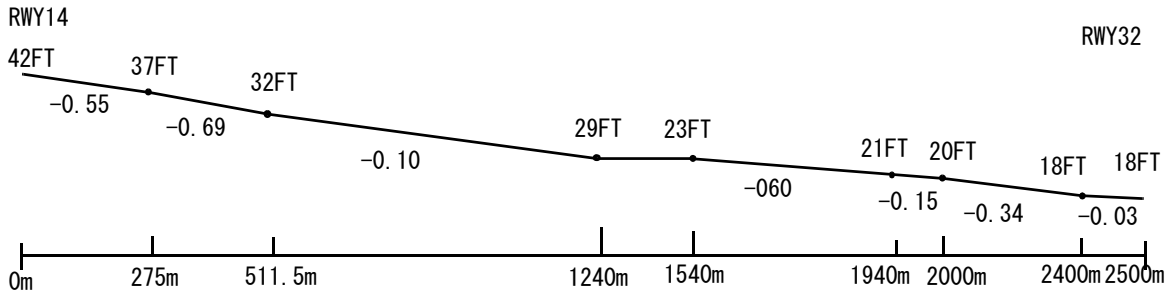
## RJOK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|---|---|---|
| 1 | Associated MET Office | KANSAI |
| 2 | Hours of service<br>MET Office outside hours | H24 (KANSAI) |
| 3 | Office responsible for TAF<br>preparation Periods of validity | KANSAI<br>30 Hours |
| 4 | Trend forecast<br>Interval of issuance | Nil |
| 5 | Briefing/ consultation provided | Briefing is available upon inquiry at KANSAI |
| 6 | Flight documentation<br>Language(s) used | C<br>En |
| 7 | Charts and other information<br>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<br>available for providing information | Nil |
| 9 | ATS units provided with<br>information | TWR, APP, ATIS |
| 10 | Additional information<br>(limitation of service, etc.) | Nil |

## RJOK 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 | 130.51° | 2500 × 45 | PCN 80/F/B/X/T<br>Asphalt Concrete | *333312.04N*<br>*1333932.98E*<br>120.4ft | THR ELEV: 42ft |
| 32 | 310.51° | 2500 × 45 | PCN 80/F/B/X/T<br>Asphalt Concrete | *333219.33N*<br>*1334046.67E*<br>120.3ft | THR ELEV: 17.8ft<br>TDZ ELEV: 23ft |

| Slope of RWY | Strip Dimensions (M) | RESA (Overrun) Dimensions(M) | Remarks |
|---|---|---|---|
| 7 | 10 | 11 | 14 |
| See below figure | 2620 × 300 | 40 × (MNM:242 MAX:300)* | RWY Grooving 2500×30m |
| | 2620 × 300 | 180 × (MNM:127 MAX:300)*<br>*For detail, ask airport administrator | |




## RJOK AD 2.13 DECLARED DISTANCES

| RWY Designator | 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 |

## 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 | | | | | | | | |
| 10 | | | | | | | | |
| SALS with APCH LGT beacon (589.358m and 952.287m FM RWY 14 THR)(*1)<br>Overrun area edge LGT(LEN:60m Color:Red) (*2)<br>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<br>Anemometer location and LGT | LDI:Nil<br>Anemometer : 430m FM RWY 14 THR, LGTD<br>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<br>Within 15 sec : Other LGT |
| 5 | Remarks | WDI LGT |

## RJOK AD 2.16 HELICOPTER LANDING AREA

Nil

## RJOK AD 2.17 ATS AIRSPACE

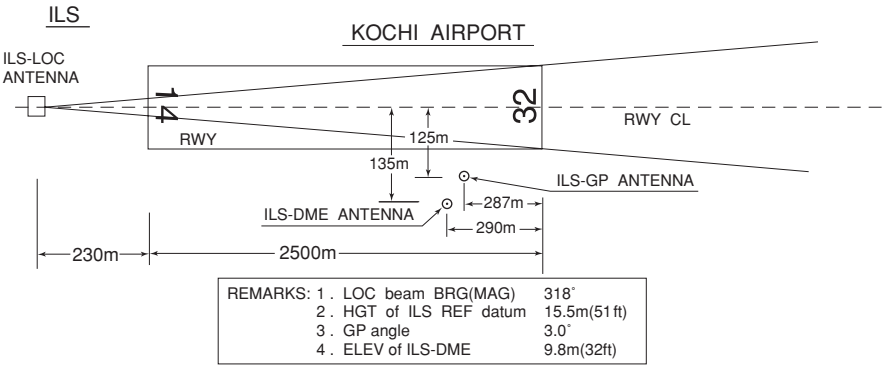
| Designation and lateral limits | | Vertical limits (ft) | Airspace classification | ATS unit call sign Language | Remarks |
|---|---|---|---|---|---|
| 1 | | 2 | 3 | 4 | 6 |
| Kochi CTR | Area within a radius of 5nm of KOCHI ARP (*33°33'N/133°40'E* ). | 3000 or below | D | Kochi TOWER En | |
| Kansai ACA | See RJBB attached chart | | E | Kansai APP<br>Kansai DEP<br>Kansai RADAR<br>En | |

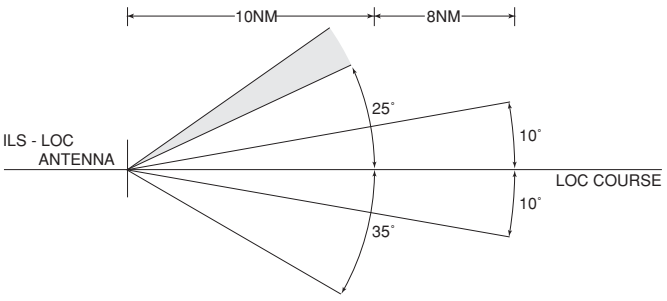
## RJOK AD 2.18 ATS COMMUNICATION FACILITIES

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

## 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. 040°-060° beyond 30nm BLW 9,000ft. 340°-010° beyond 30nm BLW 9,000ft. |
| DME | KRE | 1171MHz (CH-84X) | H24 | *333230.42N/ 1334048.57E* | 16.3m (54ft) | |
| 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 |




UNUSABLE : BEYOND 25DEG NORTH EAST(150Hz) SIDE OF COURSE DUE TO TERRAIN.

## RJOK AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

Aircraft operations other than scheduled flights or in an emergency.
Prior permission required for transient aircraft.
Call : 088-863-2620(OPS)

2. Taxiing to and from stands

Nil

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 B772 holding at the stop marking on 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 >52.4m |
|---|---|---|---|
| Wing tip clearance | *A | *B | *C |

Legend:
*A : wing tip clearance >= 15m
*B : 6.5m =< wing tip clearance < 15m
*C : wing tip clearance < 6.5m

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

## RJOK AD 2.21 NOISE ABATEMENT PROCEDURES

| | |
|---|---|
| 1. 騒音軽減運航方式<br>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。<br>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。<br><br>(1) 離陸について（滑走路 32）<br>急上昇方式<br>(2) 着陸について（滑走路 14）<br>ディレイド･フラップ進入方式及び<br>低フラップ角着陸方式<br>(3) リバース･スラストについて<br>なし<br><br>2. 優先滑走路方式<br>なし<br><br>3. 優先飛行経路<br>なし | 1. Noise Abatement Operating Procedures<br>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.<br>In case that the aircraft is unable to take these procedures, pilots should execute alternative procedures which are considered to be practically equivalent.<br>(1) For take-off from RWY32<br>Steepest Climb Procedure<br>(2) For landing to RWY14<br>Delayed Flap Approach Procedure and<br>Reduced Flap Setting Procedure<br>(3) Reverse Thrust<br>Nil<br><br>2. Preferential Runways Procedures<br>Nil<br><br>3. Noise Preferential Routes<br>Nil |

## RJOK AD 2.22 FLIGHT PROCEDURES

**1. TAKE OFF MINIMA**

| | RWY | ACFT CAT | REDL & RCLL | | REDL or RCLL or RCL Marking | | NIL (DAYTIME ONLY) | |
|---|---|---|---|---|---|---|---|---|
| | | | CEIL-RVR | CEIL-VIS | CEIL-RVR | CEIL-VIS | RVR-VIS | CEIL-VIS |
| Multi-Engine ACFT with TKOF ALTN AP FILED | 14 | A,B,C,D | - | 200′-800m | - | 200′-800m | - | 200′-800m |
| | 32 | A,B,C,D | 0′-400m | 0′-400m | 0′-400m | 0′-400m | - | 0′-500m |
| OTHER | 14 | A,B,C,D | AVBL LDG MINIMA | | | | | |
| | 32 | A,B,C,D | | | | | | |

**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

Nil

## 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) |

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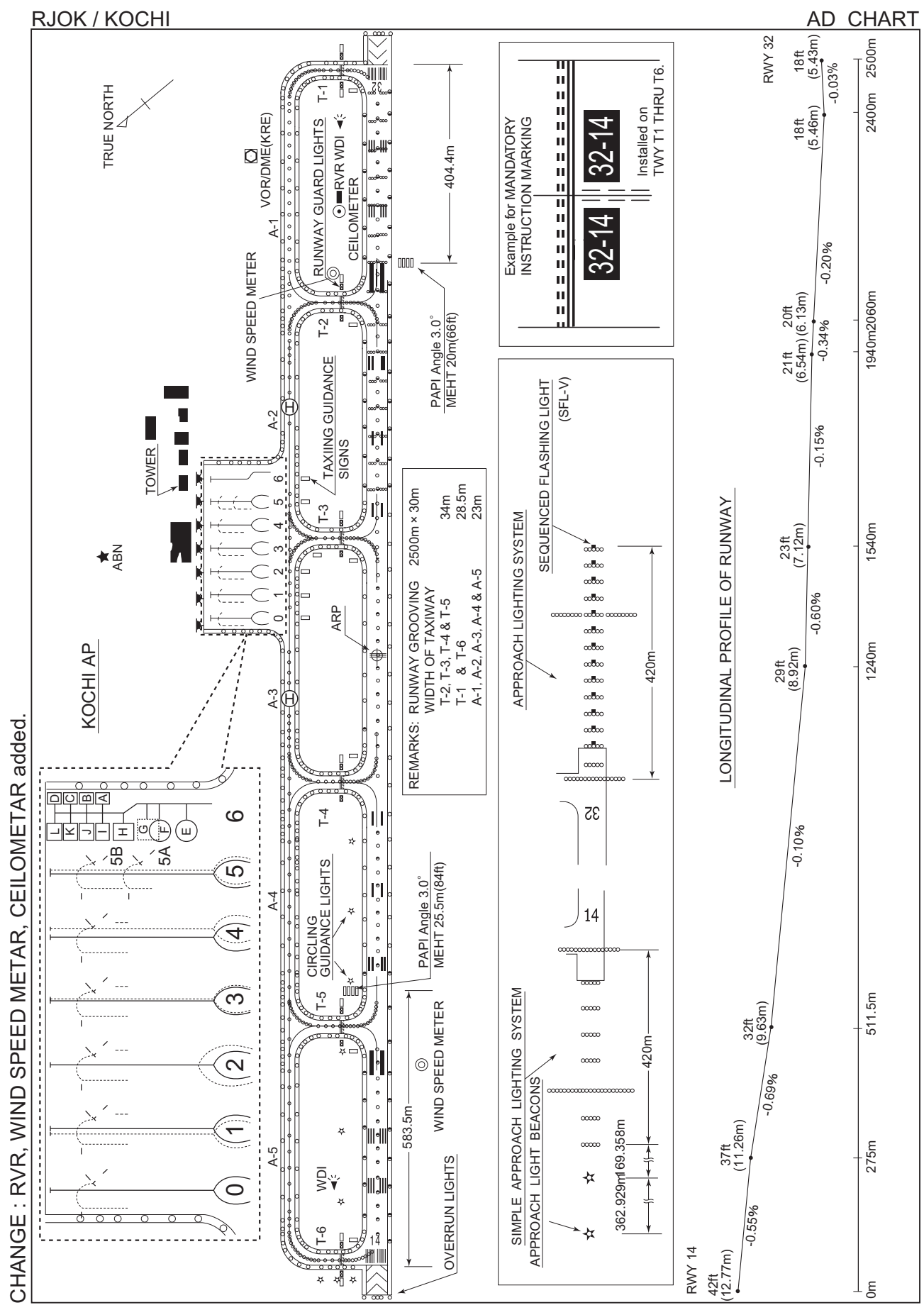

RJOK / KOCHI
AD CHART
CHANGE : RVR, WIND SPEED METAR, CEILOMETAR added.
KOCHI AP
TRUE NORTH
ABN
TOWER
VOR/DME(KRE)
WIND SPEED METER
RUNWAY GUARD LIGHTS
RVR WDI
CEILOMETER
TAXIING GUIDANCE SIGNS
ARP
PAPI Angle 3.0°
MEHT 20m(66ft)
404.4m
CIRCLING GUIDANCE LIGHTS
PAPI Angle 3.0°
MEHT 25.5m(84ft)
WDI
583.5m
WIND SPEED METER
OVERRUN LIGHTS
REMARKS: RUNWAY GROOVING 2500m × 30m
WIDTH OF TAXIWAY
T-2, T-3, T-4 & T-5 34m
T-1 & T-6 28.5m
A-1, A-2, A-3, A-4 & A-5 23m
Example for MANDATORY INSTRUCTION MARKING
32-14
Installed on TWY T1 THRU T6.
APPROACH LIGHTING SYSTEM
SEQUENCED FLASHING LIGHT (SFL-V)
SIMPLE APPROACH LIGHTING SYSTEM
APPROACH LIGHT BEACONS
362.929m
169.358m
420m
LONGITUDINAL PROFILE OF RUNWAY
RWY 14
RWY 32
42ft (12.77m)
37ft (11.26m)
32ft (9.63m)
29ft (8.92m)
23ft (7.12m)
21ft (6.54m)
20ft (6.13m)
18ft (5.46m)
18ft (5.43m)
-0.55%
-0.69%
-0.10%
-0.60%
-0.15%
-0.34%
-0.20%
-0.03%
0m
275m
511.5m
1240m
1540m
1940m
2060m
2400m
2500m

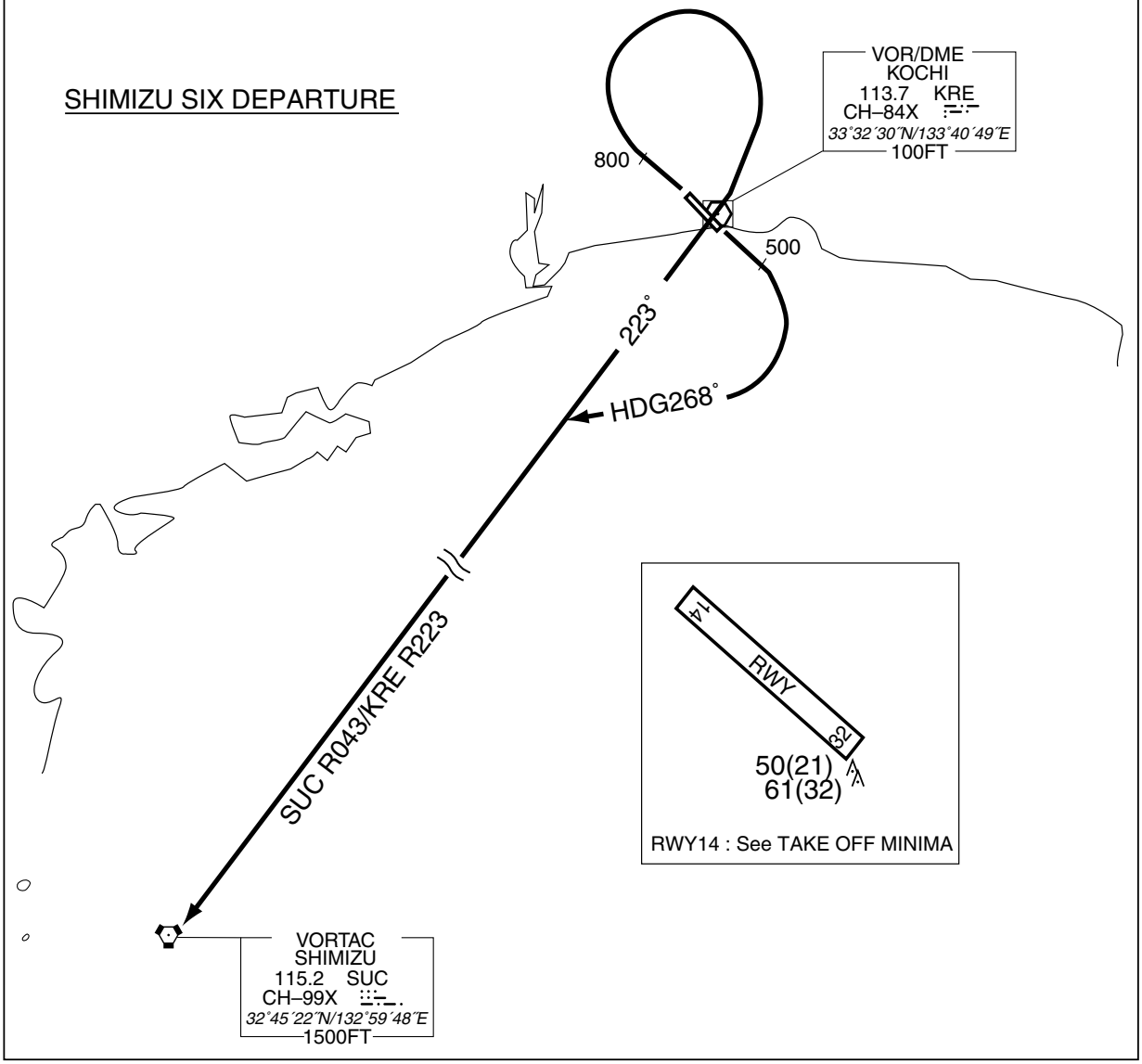
**STANDARD DEPARTURE CHART - INSTRUMENT**

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.



STANDARD DEPARTURE CHART - INSTRUMENT

RJOK / KOCHI SID

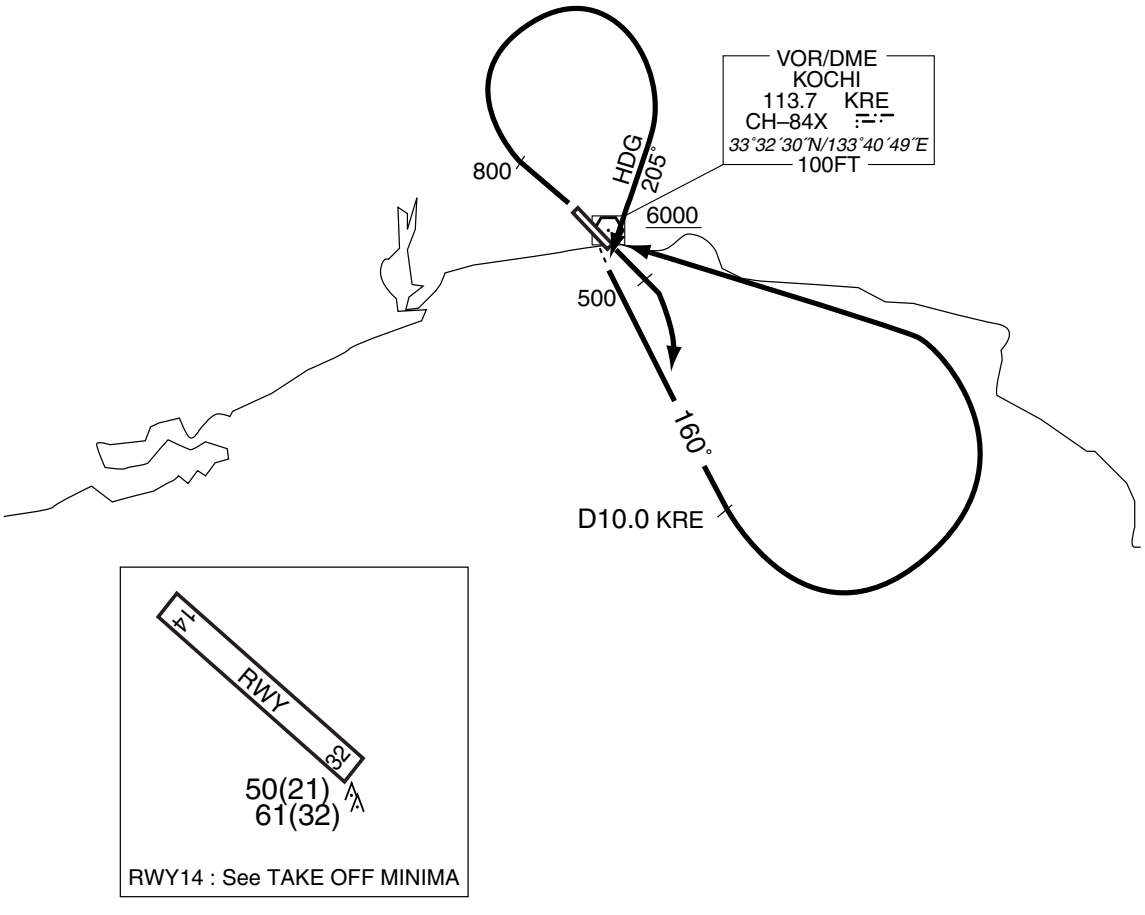
## KOCHI REVERSAL FIVE DEPARTURE

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.

KOCHI REVERSAL FIVE DEPARTURE



STANDARD DEPARTURE CHART - INSTRUMENT

RJOK / KOCHI SID

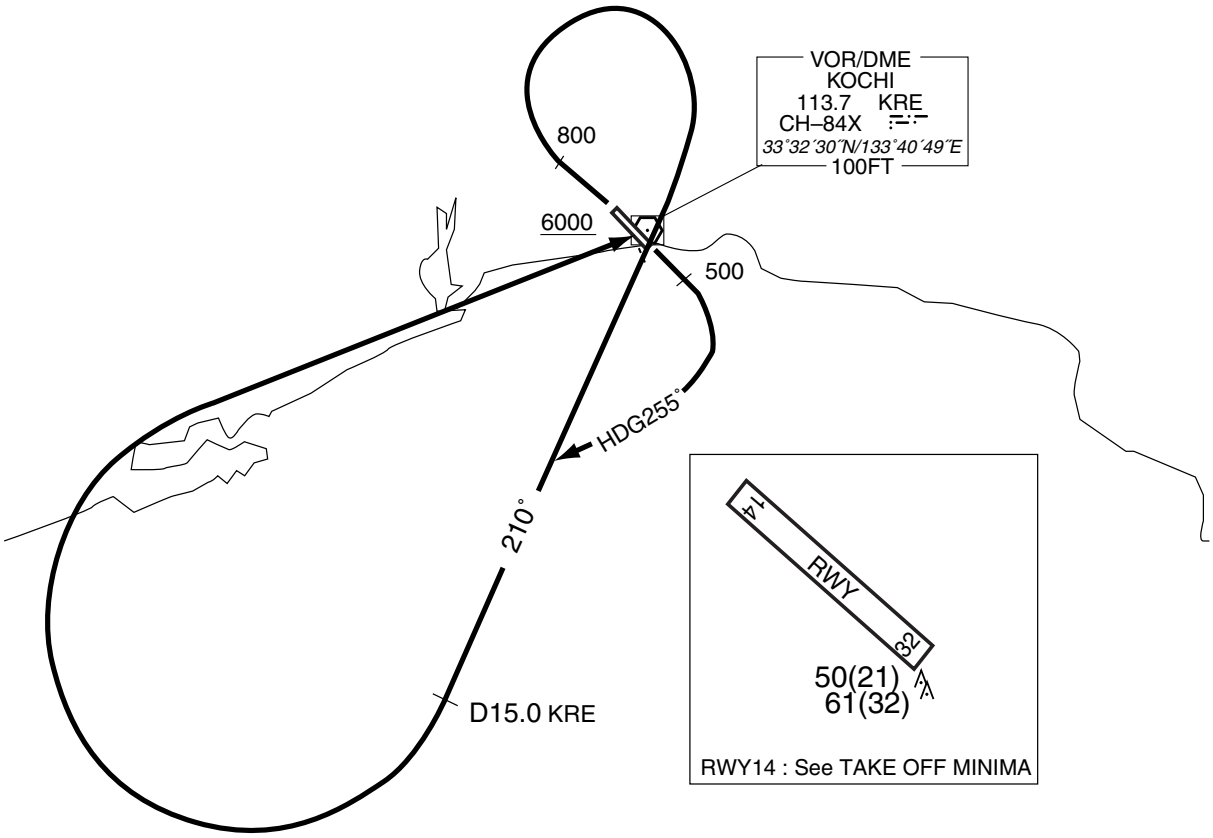
## URADO REVERSAL THREE DEPARTURE

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

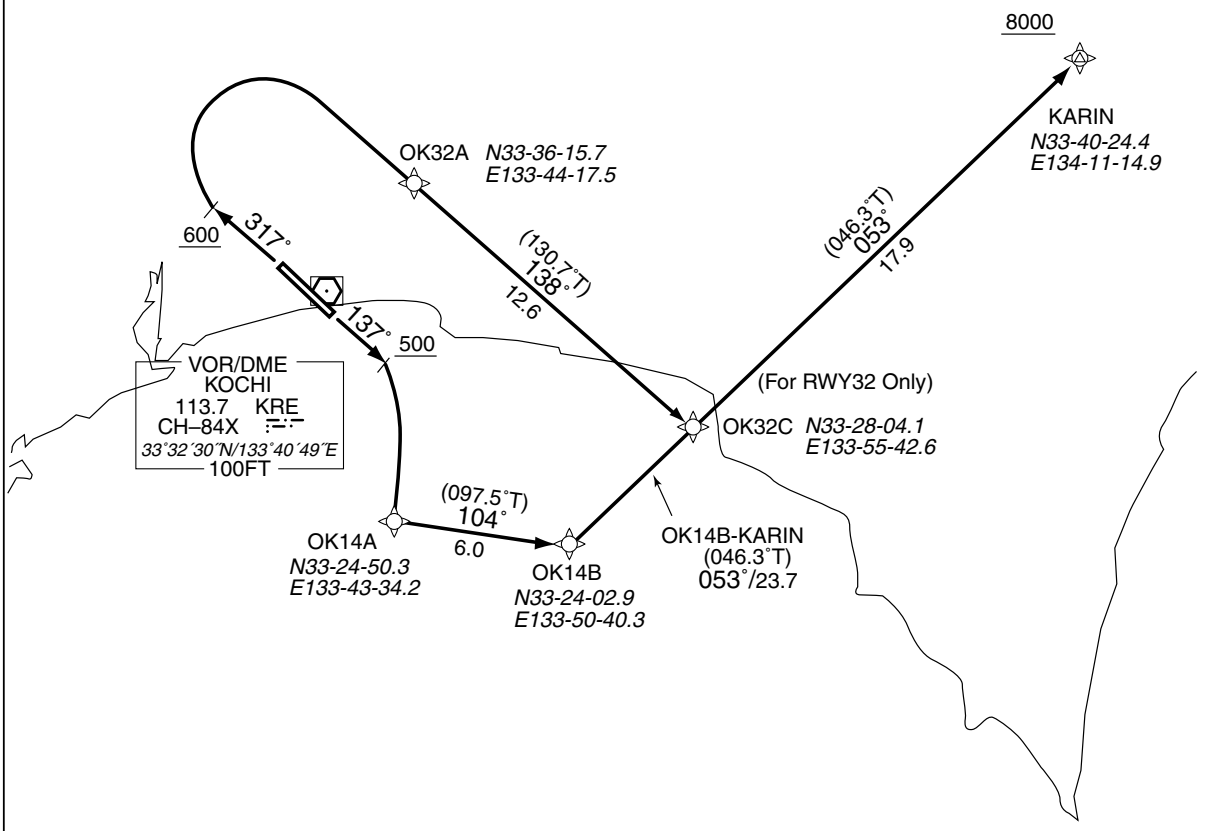


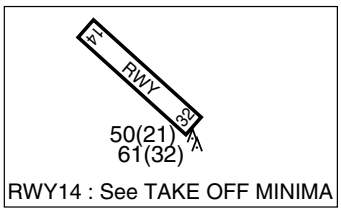
**STANDARD DEPARTURE CHART -INSTRUMENT**

RJOK / KOCHI RNAV SID

| KARIN ONE RNAV DEPARTURE | | RNAV 1 |
|---|---|---|
| Note 1 ) DME/DME/IRU or GNSS required.<br>※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.<br>2 ) RADAR service required. | Critical DME | RWY14 : KRE 3.0NM fm DER - 7NM to KARIN<br>SUC 3.0NM fm DER - 10NM to KARIN<br>RWY32 : KRE 9NM to OK32C - 10NM to KARIN<br>SUC 9NM to OK32C - 4NM to OK32C |
| | DME GAP | RWY14 : DER - 3.0NM fm DER<br>RWY32 : DER - 9NM fm OK32C |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

VAR 7˚ W(2009)




RWY14 : See TAKE OFF MINIMA

| 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* |
| KARIN | *33 40 24.4N 134 11 14.9E* |

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.

**STANDARD DEPARTURE CHART -INSTRUMENT**

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

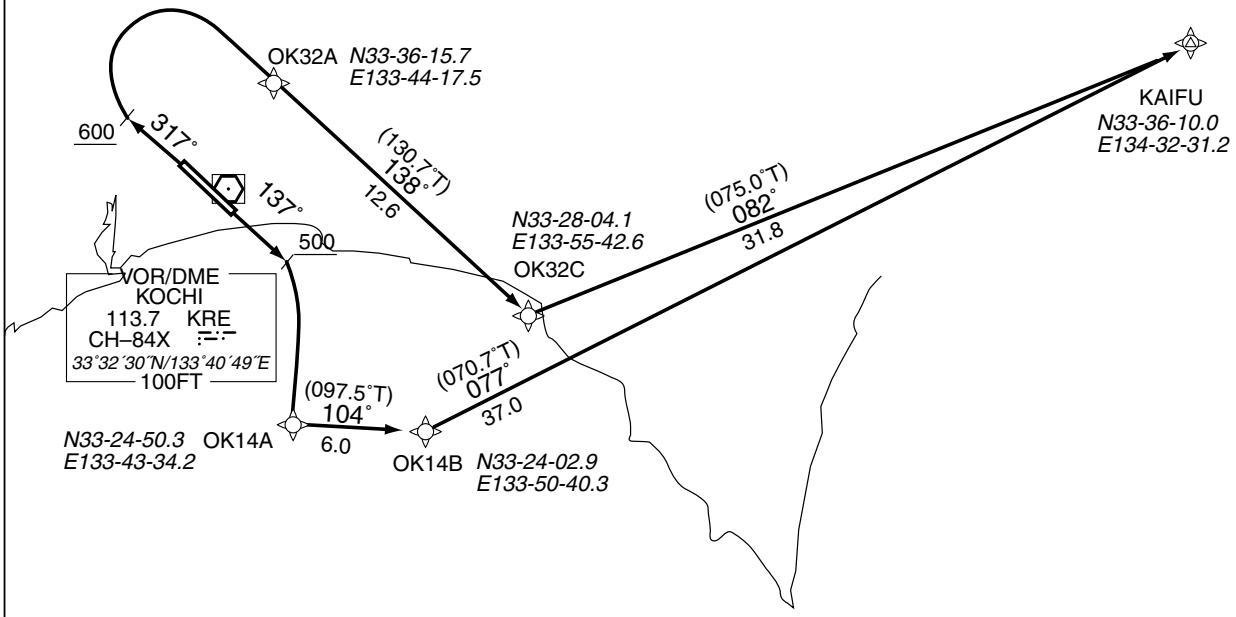
| Rcmd. Path Terminator | Fix ID (Waypoint Name) | Fly Over | Distance (NM) | MAG Track (TRUE Track) | Turn Direction | Altitude (FT) | Speed Limit (KIAS) | Vertical Angle | Navigation Performance |
|---|---|---|---|---|---|---|---|---|---|
| VA | — | — | — | 317° (310.6°) | — | +600 | — | — | RNAV1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

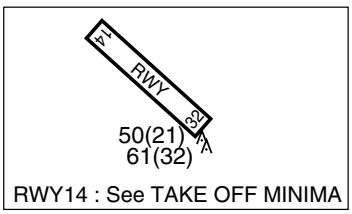
**STANDARD DEPARTURE CHART -INSTRUMENT**

RJOK / KOCHI RNAV SID

| KAIFU ONE RNAV DEPARTURE | | RNAV 1 |
|---|---|---|
| Note 1 ) DME/DME/IRU or GNSS required.<br>※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.<br>2 ) RADAR service required. | Critical DME | RWY14 : KRE 3.0NM fm DER - 23NM to KAIFU<br>SUC 3.0NM fm DER - 32NM to KAIFU<br>RWY32 : KRE 9NM to OK32C - 28NM to KAIFU<br>SUC 9NM to OK32C - 4NM to OK32C |
| | DME GAP | RWY14 : DER - 3.0NM fm DER<br>RWY32 : DER - 9NM to OK32C |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

VAR 7° W(2009)




RWY14 : See TAKE OFF MINIMA

| 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.

**STANDARD DEPARTURE CHART -INSTRUMENT**

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 | 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 | KAIFU | — | 31.8 | 082° (075.0°) | — | — | — | — | RNAV1 |

**STANDARD DEPARTURE CHART -INSTRUMENT**

RJOK / KOCHI — RNAV SID and TRANSITION

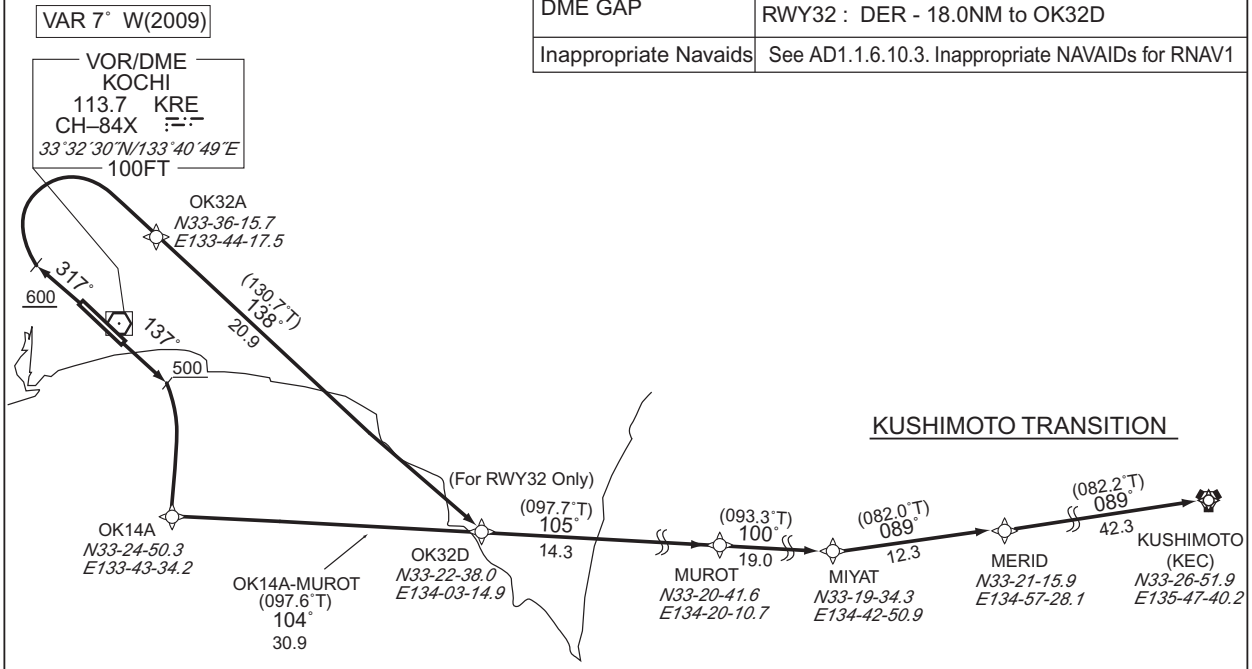
## MUROT ONE RNAV DEPARTURE — RNAV 1

Note 1 ) DME/DME/IRU or GNSS required.

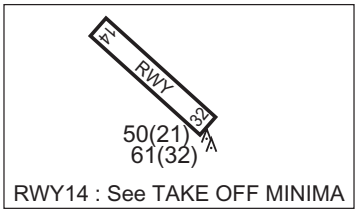
※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll.

2 ) RADAR service required.

| | |
|---|---|
| Critical DME | – |
| DME GAP | RWY14 : DER - 3.0NM fm DER<br>RWY32 : DER - 18.0NM to OK32D |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |




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 | *33 20 41.6N 134 20 10.7E* |
| MIYAT | *33 19 34.3N 134 42 50.9E* |
| MERID | *33 21 15.9N 134 57 28.1E* |
| KUSHIMOTO(KEC) | *33 26 51.9N 135 47 40.2E* |

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.

CHANGE : Correction of misdescription(Symbol of KUSHIMOTO(KEC)).

**STANDARD DEPARTURE CHART -INSTRUMENT**

RJOK / KOCHI RNAV SID and TRANSITION

## MUROT 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 | MUROT | — | 30.9 | 104° (097.6°) | — | — | — | — | 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 | OK32D | — | 20.9 | 138° (130.7°) | — | — | — | — | RNAV1 |
| TF | MUROT | — | 14.3 | 105° (097.7°) | — | — | — | — | RNAV1 |

## KUSHIMOTO TRANSITION

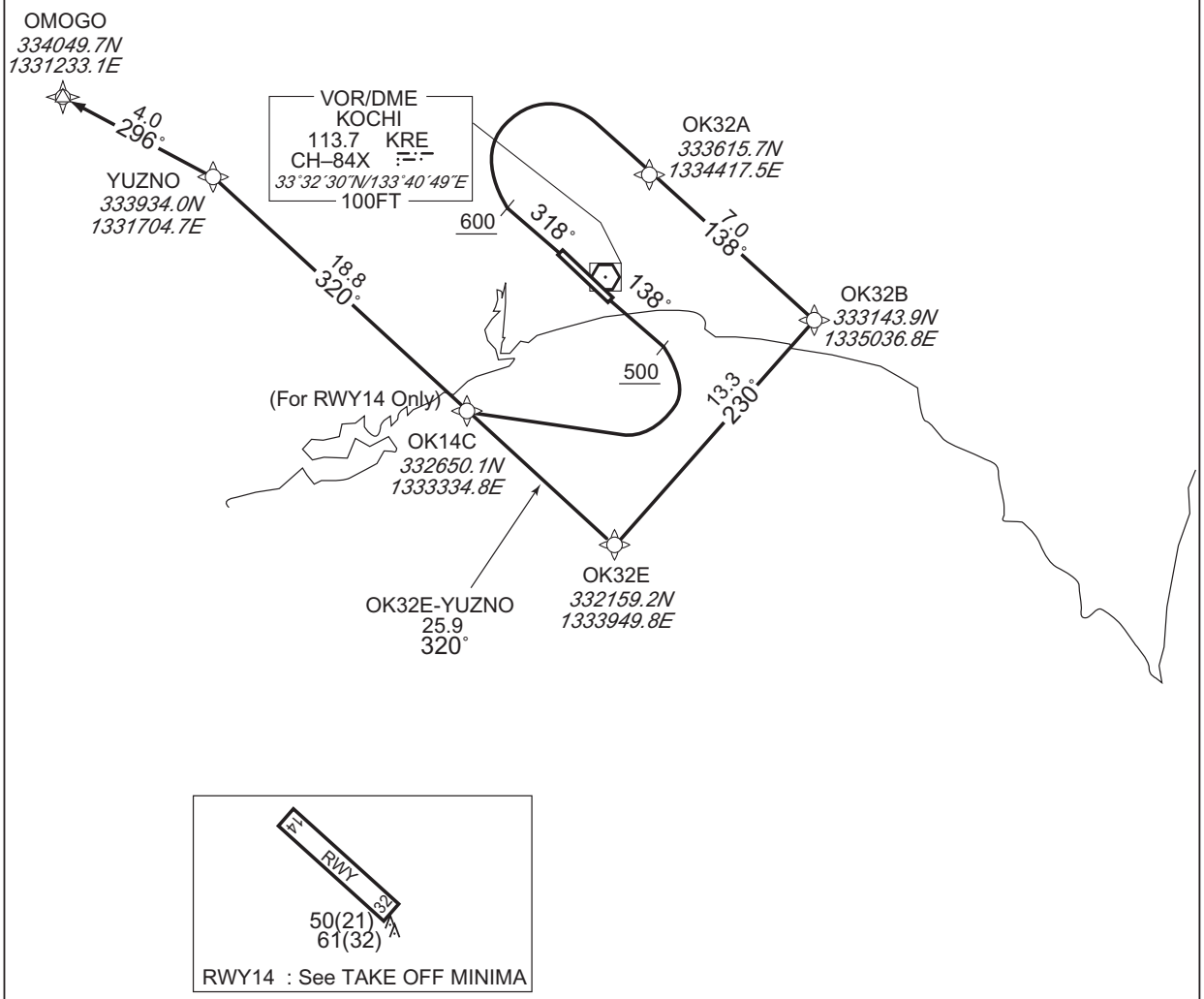
| Rcmd. Path Terminator | Fix ID (Waypoint Name) | Fly Over | Distance (NM) | MAG Track (TRUE Track) | Turn Direction | Altitude (FT) | Speed Limit (KIAS) | Vertical Angle | Navigation Performance |
|---|---|---|---|---|---|---|---|---|---|
| IF | MUROT | — | — | — | — | — | — | — | RNAV1 |
| TF | MIYAT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

**STANDARD DEPARTURE CHART -INSTRUMENT**

RJOK / KOCHI RNAV SID

| OMOGO TWO RNAV DEPARTURE | | RNAV 1 |
|---|---|---|
| Note 1 ) DME/DME/IRU or GNSS required.<br>※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.<br>2 ) RADAR service required. | Critical DME | RWY14 : KRE 16NM to YUZNO - 7NM to YUZNO<br>SUC 16NM to YUZNO - 7NM to YUZNO<br>RWY32 : KRE 4NM to OK32B - 25NM to YUZNO<br>SUC 4NM to OK32B - 25NM to YUZNO |
| | DME GAP | RWY14 : DER - 16NM to YUZNO<br>RWY32 : DER - 4NM to OK32B<br>25NM to YUZNO - 18NM to YUZNO |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

VAR 7° W(2017)







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.

**STANDARD DEPARTURE CHART -INSTRUMENT**

RJOK / KOCHI RNAV SID

## OMOGO TWO RNAV 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 (130.6) | -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 | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | – | – | 318 (310.6) | -7.4 | – | – | +600 | – | – | RNAV1 |
| 002 | DF | OK32A | – | – | -7.4 | – | R | – | – | – | RNAV1 |
| 003 | TF | OK32B | – | 138 (130.7) | -7.4 | 7.0 | – | – | – | – | RNAV1 |
| 004 | TF | OK32E | – | 230 (222.8) | -7.4 | 13.3 | – | – | – | – | RNAV1 |
| 005 | TF | YUZNO | – | 320 (312.9) | -7.4 | 25.9 | – | – | – | – | RNAV1 |
| 006 | TF | OMOGO | – | 296 (288.5) | -7.4 | 4.0 | – | – | – | – | RNAV1 |

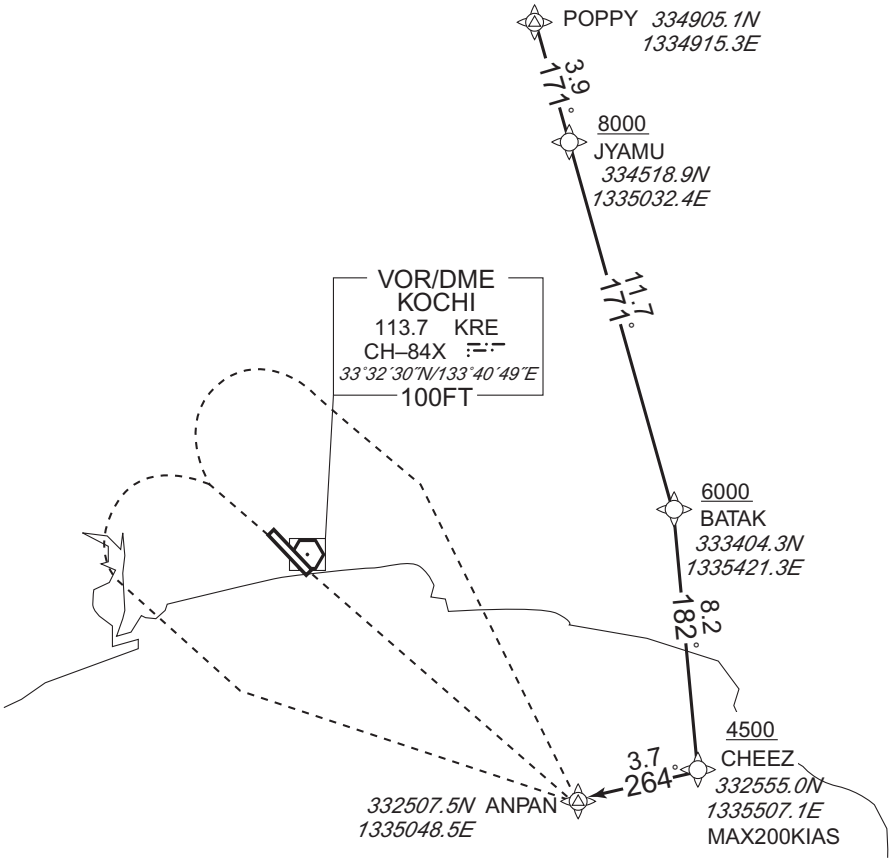
**STANDARD ARRIVAL CHART -INSTRUMENT**

RJOK / KOCHI — RNAV STAR

| YOSAKOI NORTH ARRIVAL | RNAV 1 |
|---|---|

Note 1 ) DME/DME/IRU or GNSS required.
2 ) RADAR service required.

VAR 7° W(2012)




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

| | | |
|---|---|---|
| Critical DME | SUC | BATAK - ANPAN |
| | 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 |

CHANGE : Critical DME.

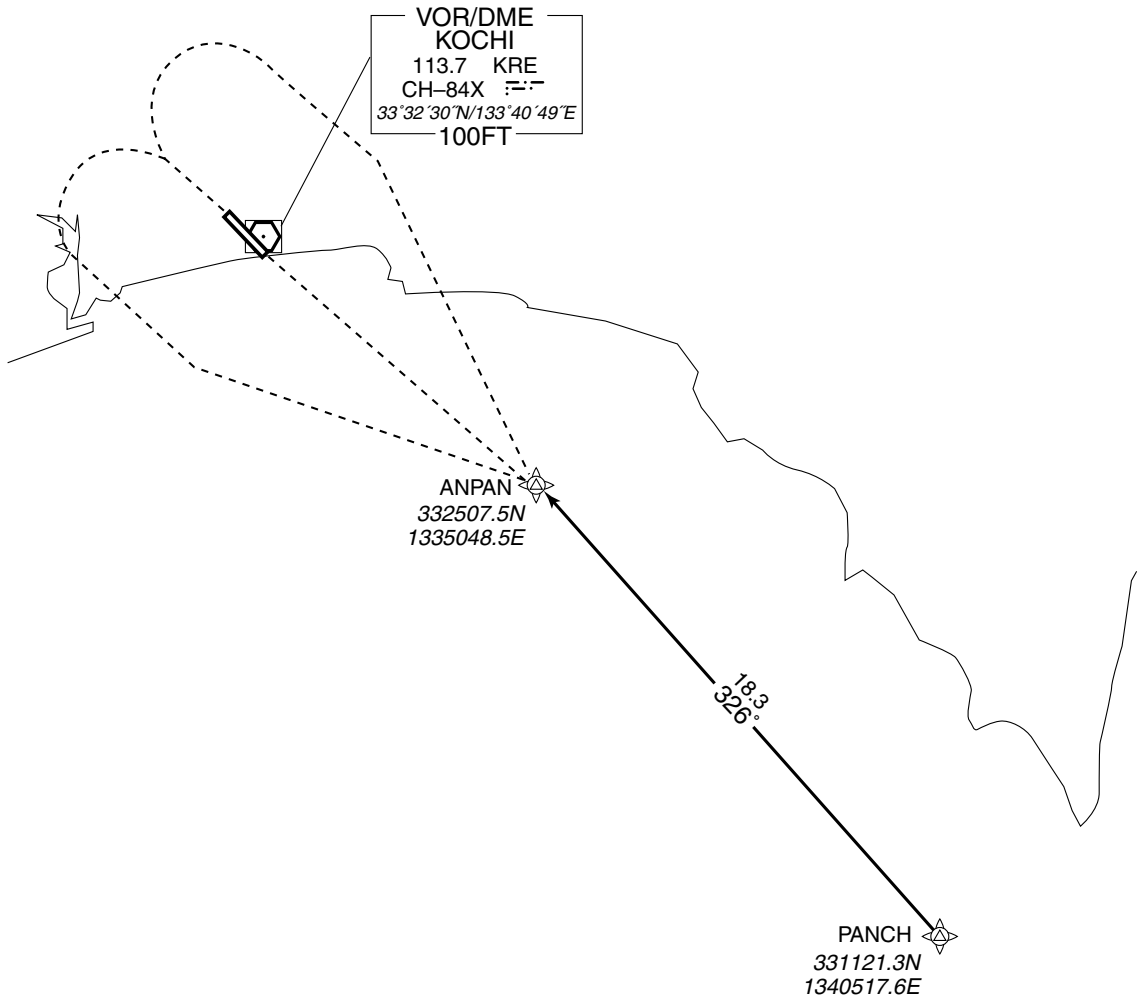
**STANDARD ARRIVAL CHART -INSTRUMENT**

RJOK / KOCHI RNAV STAR

| YOSAKOI EAST ARRIVAL | RNAV 1 |
|---|---|

Note 1 ) DME/DME/IRU or GNSS required.
2 ) RADAR service required.

VAR 7° W(2012)




From PANCH, to ANPAN.

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

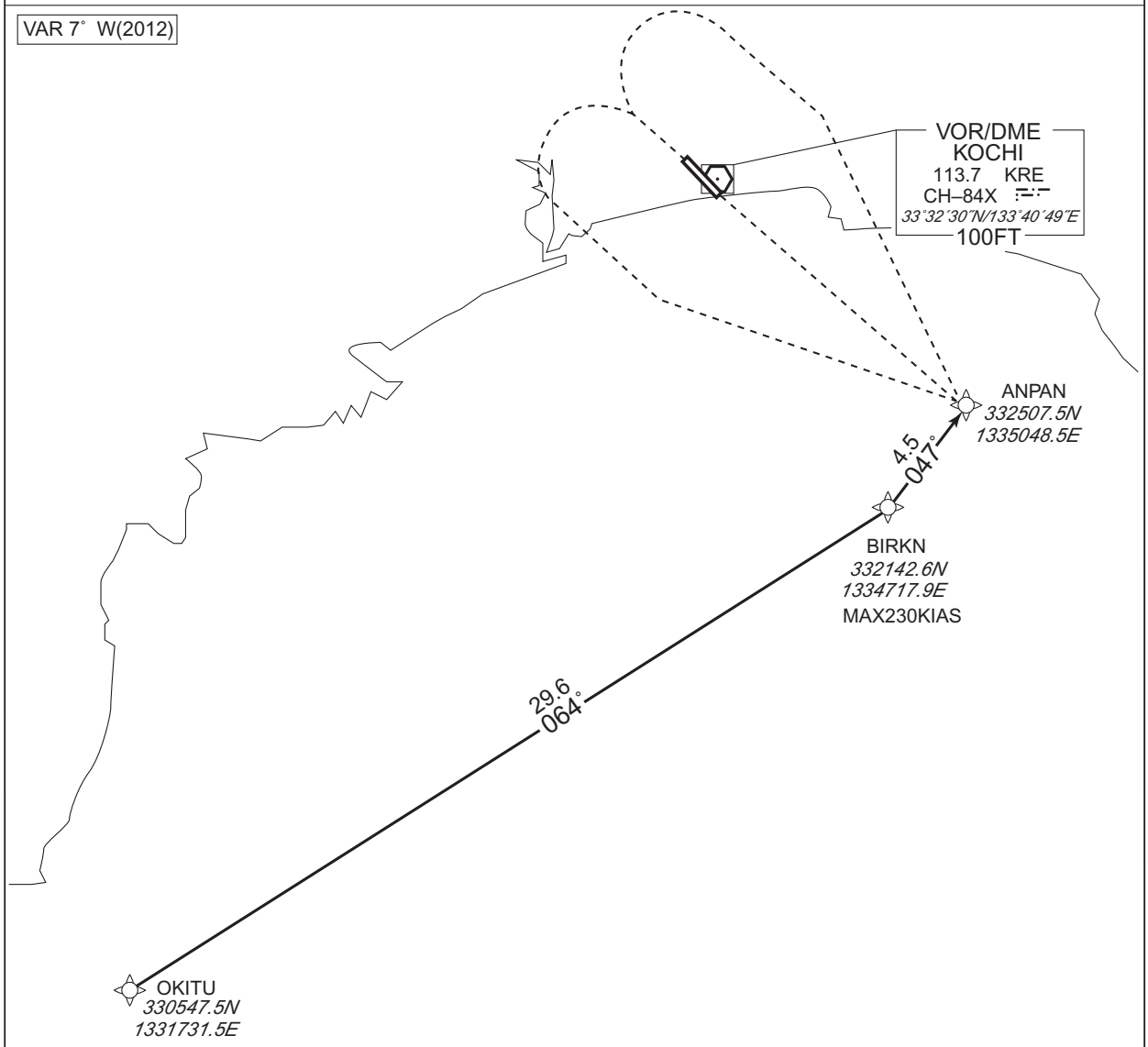
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course [°M(°T)] | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | PANCH | — | — | -6.9 |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

**STANDARD ARRIVAL CHART -INSTRUMENT**

RJOK / KOCHI — RNAV STAR

| YOSAKOI SOUTH ARRIVAL | RNAV 1 |
|---|---|

Note 1 ) DME/DME/IRU or GNSS required.
2 ) RADAR service required.




From OKITU, to BIRKN, to ANPAN.

| | | |
|---|---|---|
| Critical DME | SUC | 12NM to BIRKN - ANPAN |
| | KRE | 12NM to BIRKN - ANPAN |
| DME GAP | OKITU - 12NM 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 | OKITU | — | — | -6.9 | — | — | — | — | — | RNAV1 |
| 002 | TF | BIRKN | — | 064 (057.3) | -6.9 | 29.6 | — | — | -230 | — | RNAV1 |
| 003 | TF | ANPAN | — | 047 (040.6) | -6.9 | 4.5 | — | — | — | — | RNAV1 |

CHANGE : Critical DME(IWT) deleted. DME GAP.

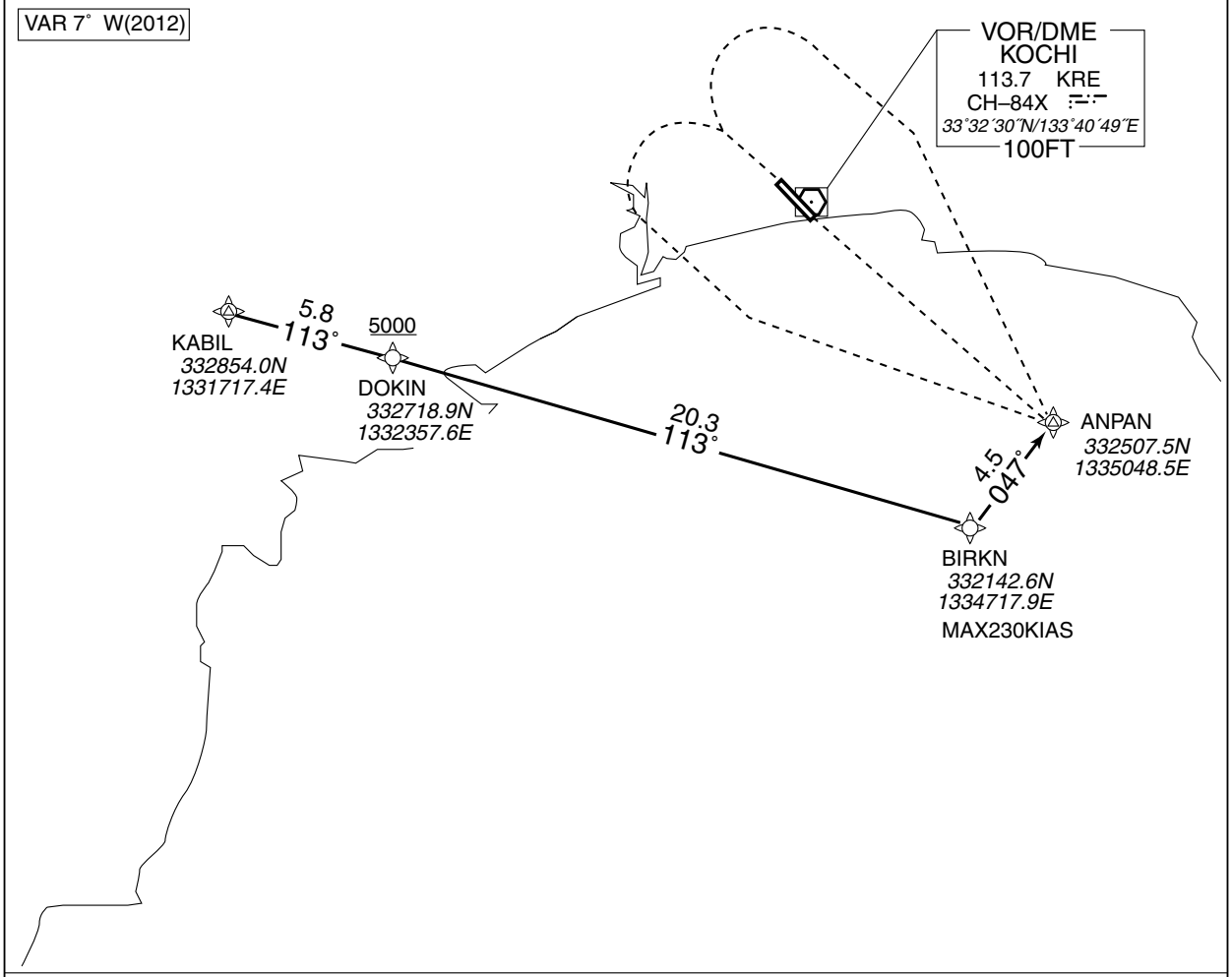
**STANDARD ARRIVAL CHART -INSTRUMENT**

RJOK / KOCHI

RNAV STAR

| YOSAKOI WEST ARRIVAL | RNAV 1 |
|---|---|

Note 1 ) DME/DME/IRU or GNSS required.
2 ) RADAR service required.




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

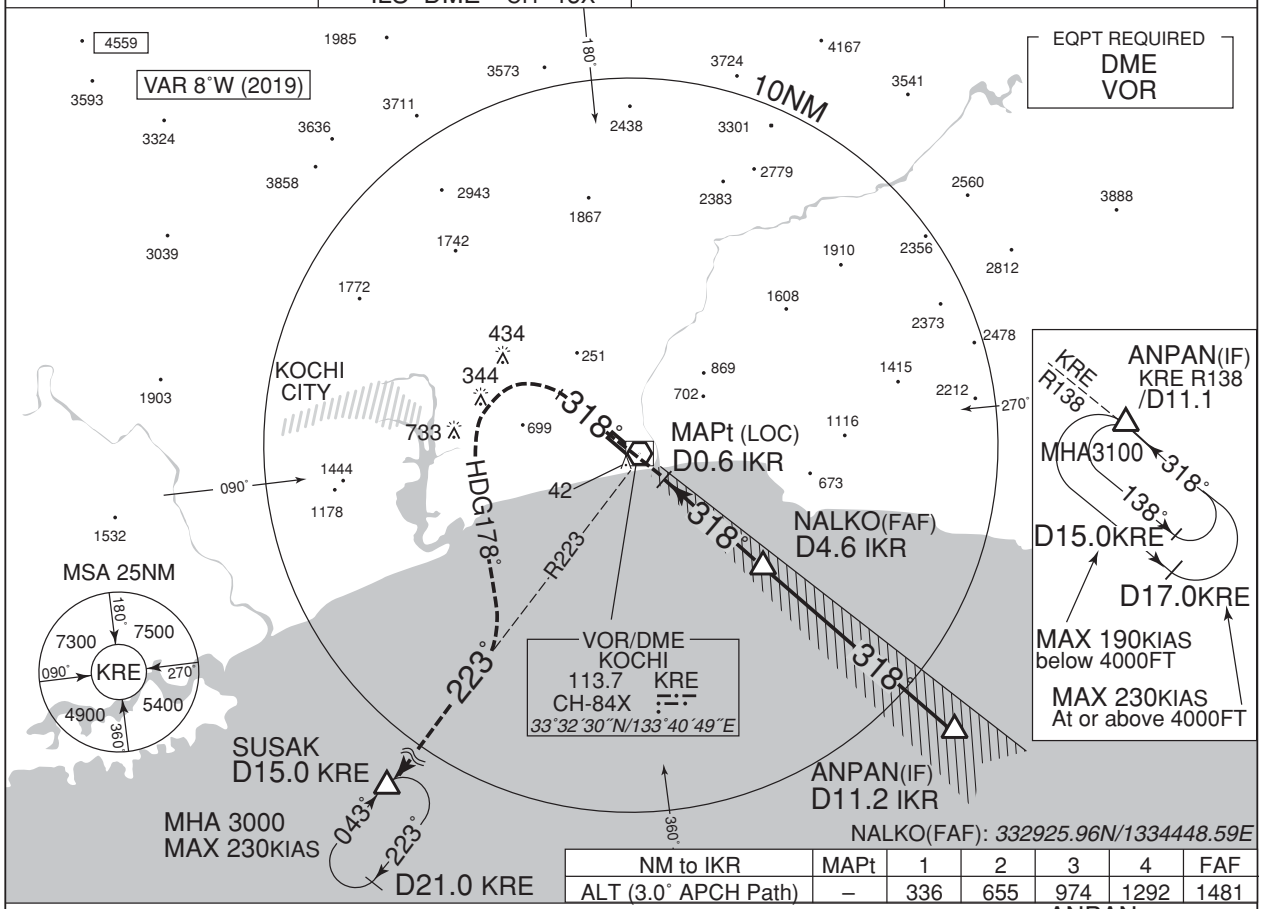
| | | |
|---|---|---|
| Critical DME | KRE | 1NM to DOKIN - 16NM to BIRKN<br>7NM to BIRKN - ANPAN |
| | SUC | 1NM to DOKIN - 16NM to BIRKN<br>7NM to BIRKN - ANPAN |
| DME GAP | 16NM to BIRKN - 7NM to BIRKN | |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 | |

| 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 |

**INSTRUMENT APPROACH CHART**

RJOK / KOCHI — ILS Z or LOC Z RWY32

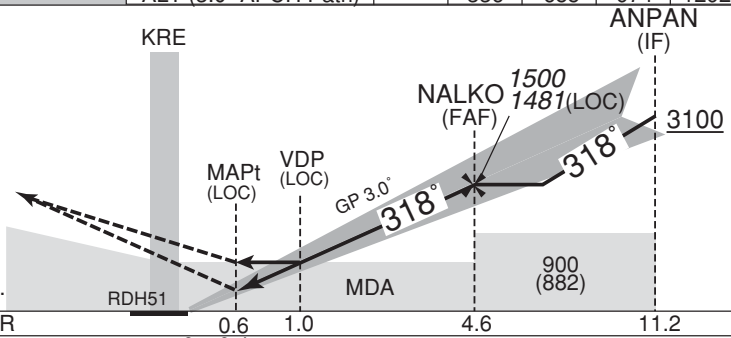
| KANSAI APP | ILS - LOC | KOCHI TOWER | RADAR AVBL |
|---|---|---|---|
| 125.0 – 124.8 | 110.9 IKR<br>ILS–GP 330.8<br>ILS–DME CH–46X | 118.75 – 126.2 | ATIS 126.45 |




| NM to IKR | MAPt | 1 | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | – | 336 | 655 | 974 | 1292 | 1481 |

MISSED APPROACH
Climb to 800FT on HDG318°, turn left HDG178° to intercept and proceed via KRE R223 to SUSAK and hold at 3000FT. Contact KANSAI APP.

Timing not authorized for defining the MAPt.




| DME to IKR | | 0.6 | 1.0 | 4.6 | 11.2 |
|---|---|---|---|---|---|
| NM to THR | 0 | 0.4 | 0.8 | 4.4 | 11.0 |

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev.18 AD elev. 29

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 218 (200) | 700 | 320 (302) | 1200 | 690 (661) | 1600 |
| B | | | | 1300 | | |
| C | | | | 1400 | 760 (731) | 2400 |
| D | | | | 1600 | 830 (801) | 3200 |

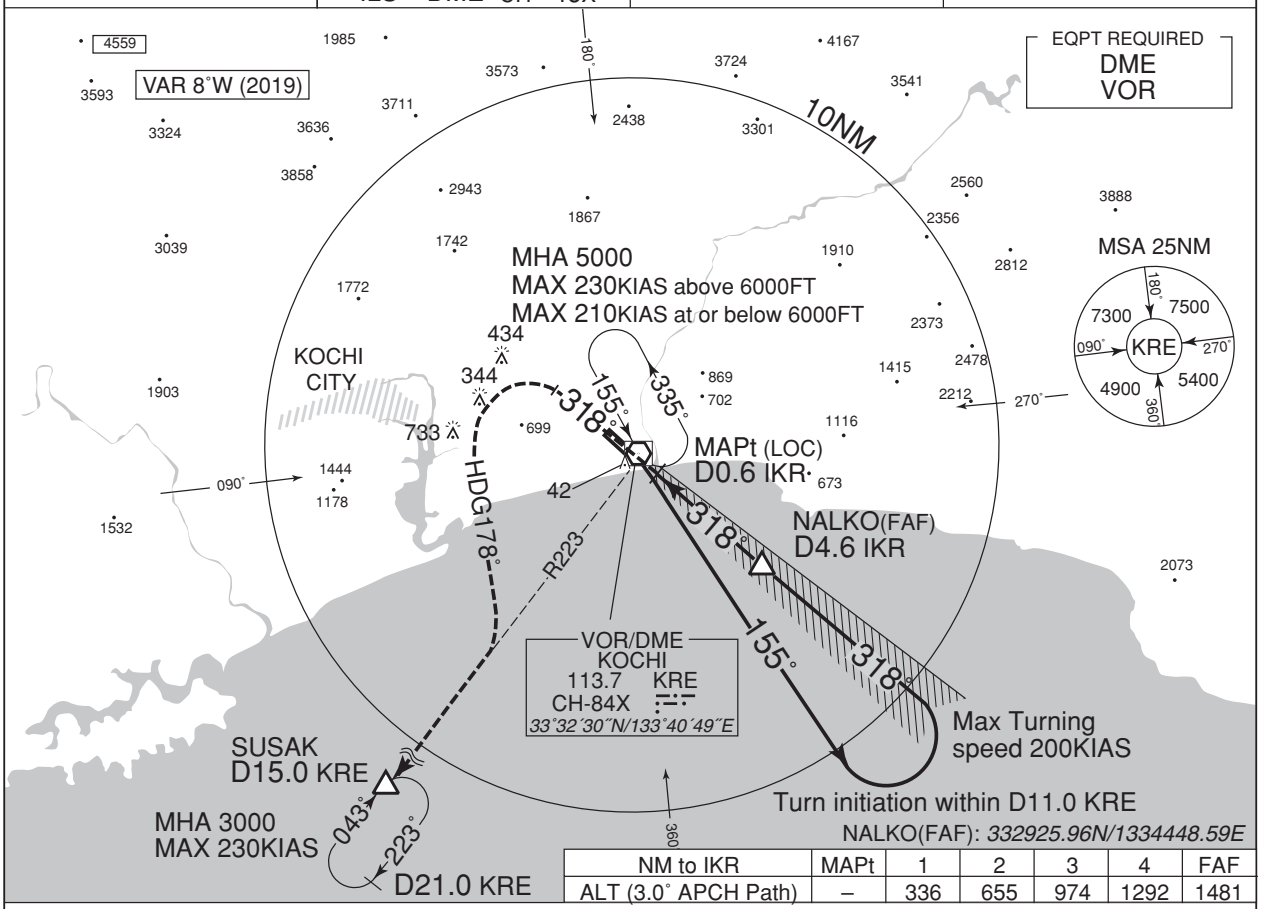
Circling to EAST side of RWY only.
MINIMA with Missed APCH climb gradient of 2.5% are not established.

**INSTRUMENT APPROACH CHART**

RJOK / KOCHI

ILS Y or LOC Y RWY32

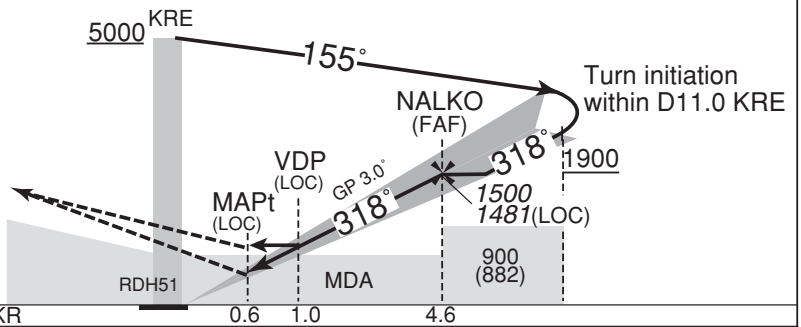
| KANSAI APP | ILS - LOC<br>110.9 IKR<br>ILS – GP 330.8<br>ILS – DME CH– 46X | KOCHI TOWER | RADAR AVBL |
|---|---|---|---|
| 125.0 – 124.8 | | 118.75 – 126.2 | ATIS 126.45 |




| NM to IKR | MAPt | 1 | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | – | 336 | 655 | 974 | 1292 | 1481 |

MISSED APPROACH
Climb to 800FT on HDG318°, turn left HDG178° to intercept and proceed via KRE R223 to SUSAK and hold at 3000FT. Contact KANSAI APP.

Timing not authorized for defining the MAPt.




| DME to IKR | | 0.6 | 1.0 | 4.6 |
|---|---|---|---|---|
| NM to THR | 0 | 0.4 | 0.8 | 4.4 |

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 18 AD elev. 29

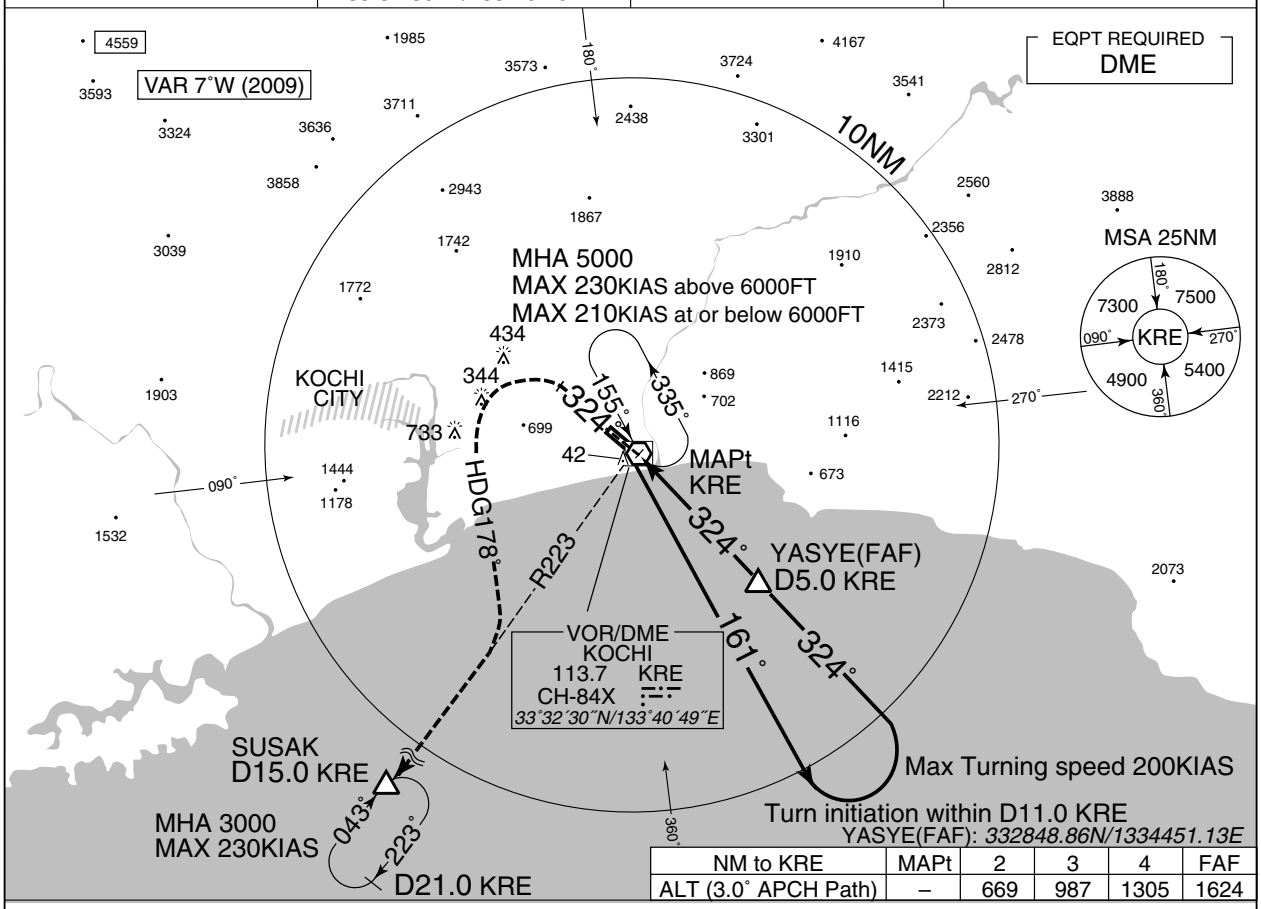
| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/ CMV | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 218 (200) | 700 | 320 (302) | 1200 | 690 (661) | 1600 |
| B | | | | 1300 | | |
| C | | | | 1400 | 760 (731) | 2400 |
| D | | | | 1600 | 830 (801) | 3200 |

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

**INSTRUMENT APPROACH CHART**

RJOK / KOCHI VOR RWY32

| KANSAI APP | KOCHI VOR/DME 113.7 KRE CH–84X 33°32′30″N/133°40′49″E | KOCHI TOWER | RADAR AVBL |
|---|---|---|---|
| 125.0 – 124.8 | | 118.75 – 126.2 | ATIS 126.45 |

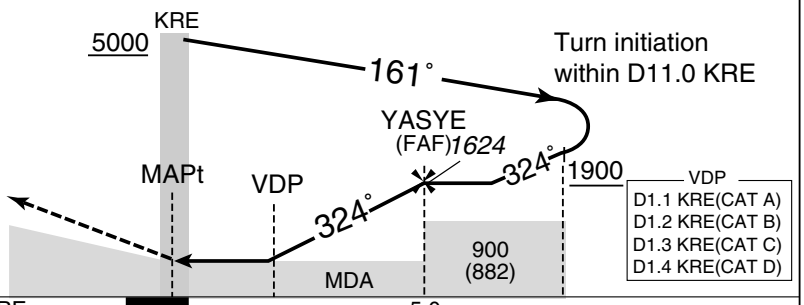



| NM to KRE | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | – | 669 | 987 | 1305 | 1624 |

## MISSED APPROACH

Climb via KRE R324 to 500FT, turn left HDG178° to intercept and proceed via KRE R223 to SUSAK and hold at 3000FT. Contact KANSAI APP.

Timing not authorized for defining the MAPt.




| | | |
|---|---|---|
| DME to KRE | 0 | 5.0 |
| NM to THR | 0 | 4.9 |

Missed APCH climb gradient MNM 4.5%

MINIMA THR elev. 18 AD elev. 29

| CAT | | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 360 (342) | 1200 | 690 (661) | 1600 |
| B | 400 (382) | 1300 | | |
| C | 430 (412) | 1400 | 760 (731) | 2400 |
| D | 450 (432) | 1600 | 830 (801) | 3200 |

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

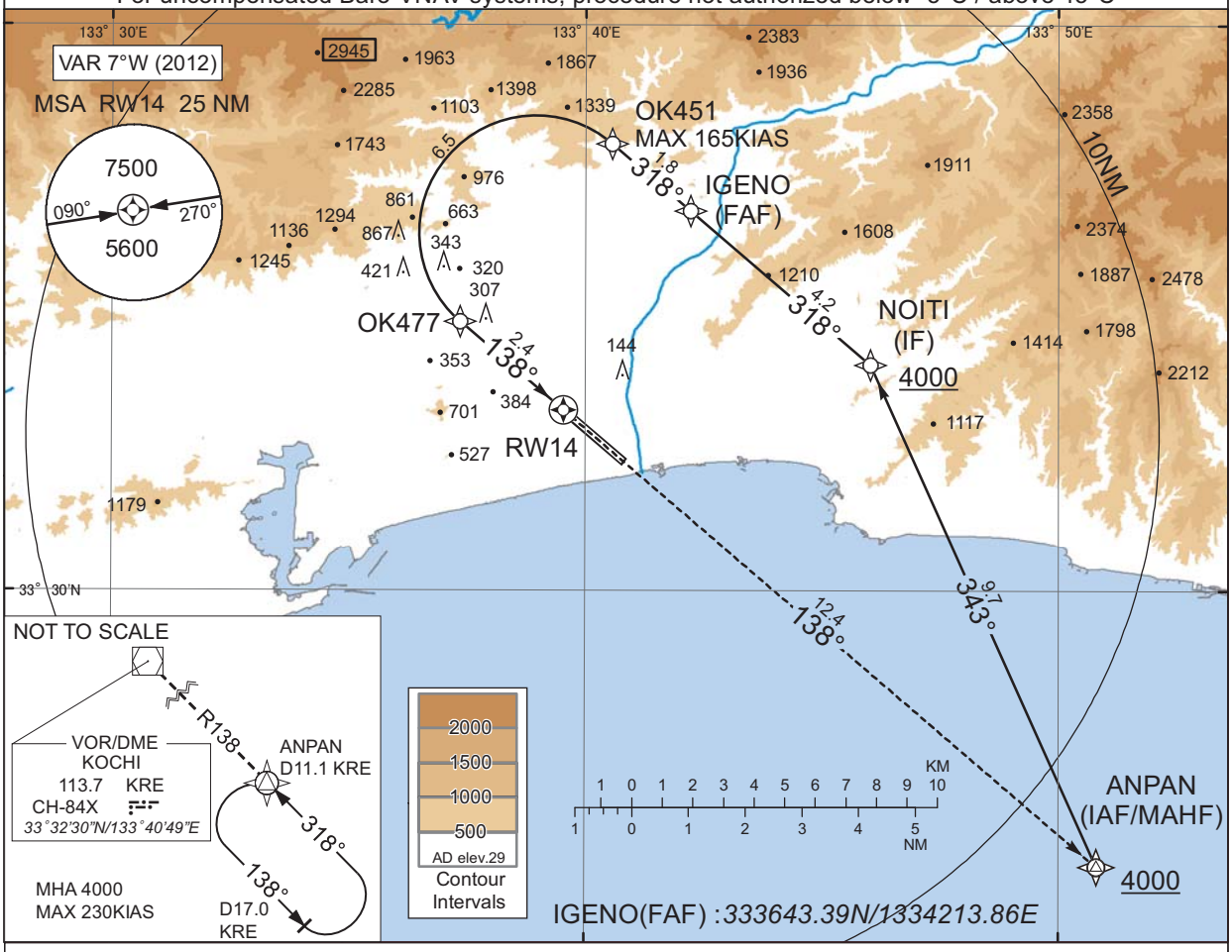
**INSTRUMENT APPROACH CHART**

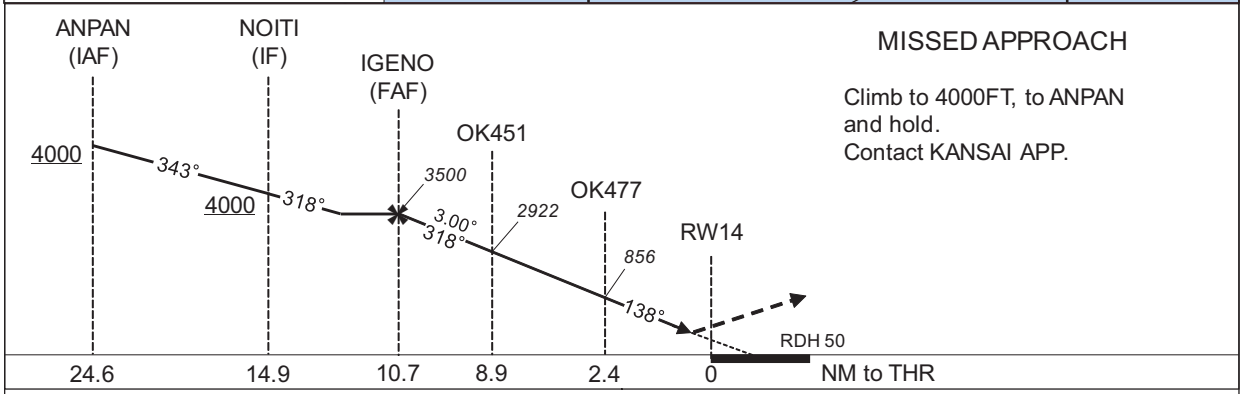
RJOK / KOCHI

RNP Z RWY14(AR)

| KANSAI APP<br>125.0 - 124.8 | RNP AR<br>RF required. | KOCHI TOWER<br>118.75 - 126.2 | RADAR AVBL<br>ATIS 126.45 |
|---|---|---|---|

For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 45°C




MISSED APPROACH

Climb to 4000FT, to ANPAN
and hold.
Contact KANSAI APP.

| MINIMA | THR elev. 42 | | AD elev. 29 | |
|---|---|---|---|---|
| CAT | RNP 0.14 | | RNP 0.30 | |
| | DA(H) | CMV | DA(H) | CMV |
| A | - | - | - | - |
| B | | | | |
| C | 342(300) | 1400 | 611(569) | 1600 |
| D | | 1600 | | 1800 |

**Authorization Required**

CHANGE : PROC renamed. Requirement for RNP.

INSTRUMENT APPROACH CHART

RJOK / KOCHI RNP Z RWY14(AR)

CHANGE : PROC renamed.

## 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 | - | - | - |
| 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 | - | - | -6.9 | 6.5 | L | 856 | - | -3.00 | 0.14 0.30 |
| 006 | TF | RW14 | Y | 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

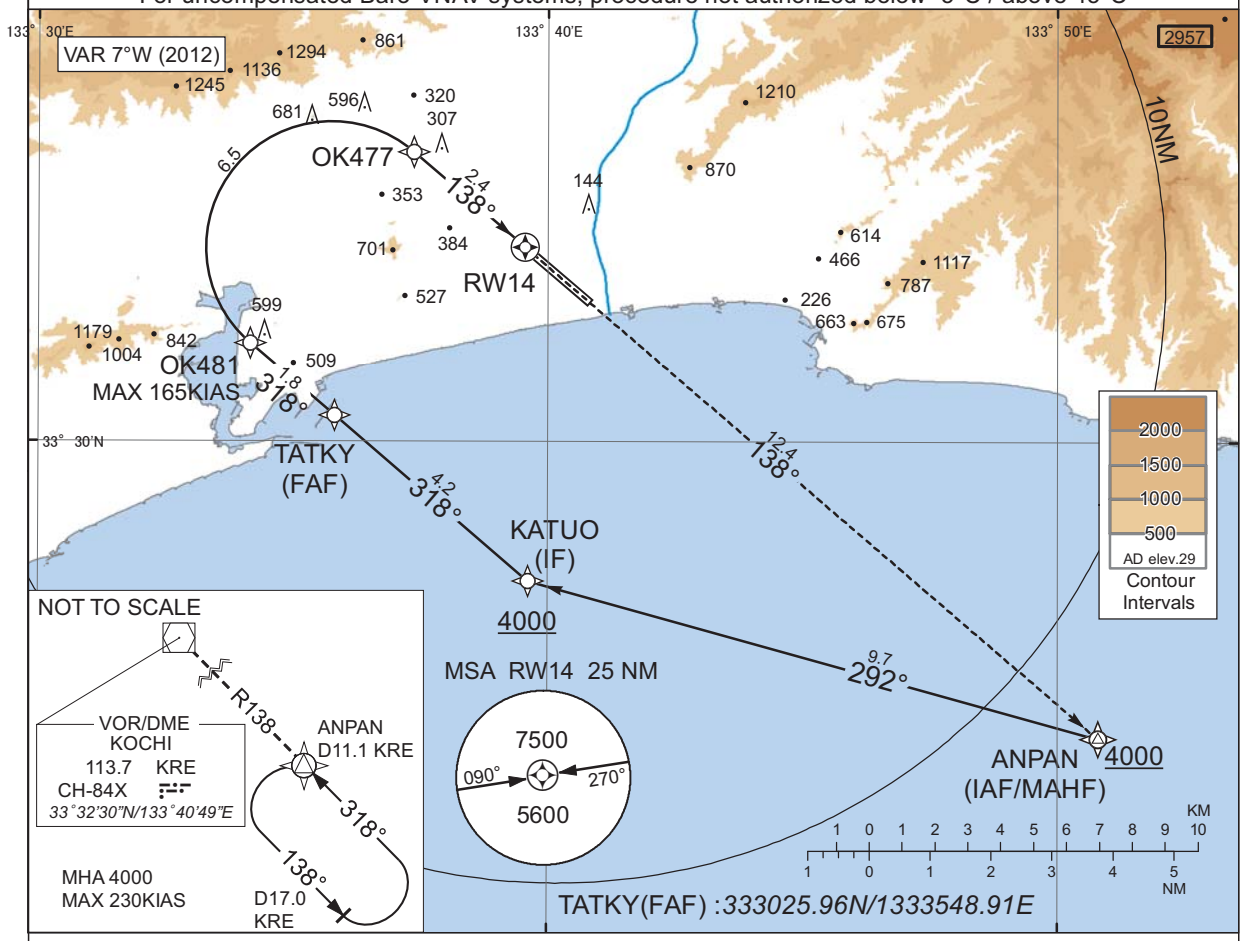
| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---|---|---|---|
| ANPAN | *332507.54N / 1335048.52E* | OKRF1 | *333620.13N / 1333858.11E* |
| NOITI | *333400.03N / 1334602.07E* | | |
| IGENO | *333643.39N / 1334213.86E* | | |
| OK451 | *333754.48N / 1334034.43E* | | |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

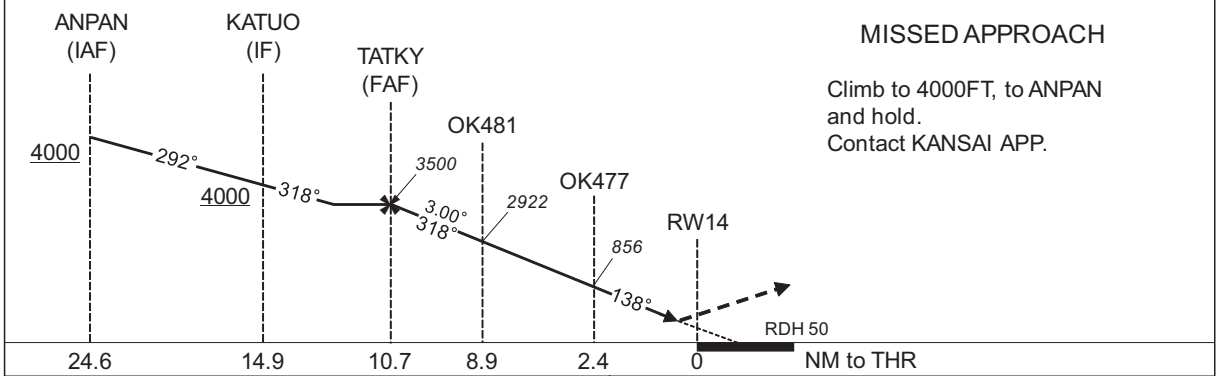
**INSTRUMENT APPROACH CHART**

RJOK / KOCHI — RNP Y RWY14(AR)

| KANSAI APP<br>125.0 - 124.8 | RNP AR<br>RF required. | KOCHI TOWER<br>118.75 - 126.2 | RADAR AVBL<br>ATIS 126.45 |
|---|---|---|---|

For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 45°C




MISSED APPROACH

Climb to 4000FT, to ANPAN
and hold.
Contact KANSAI APP.

| MINIMA | THR elev. 42 | | AD elev. 29 | |
|---|---|---|---|---|
| CAT | RNP 0.14 | | RNP 0.30 | |
| | DA(H) | CMV | DA(H) | CMV |
| A | - | - | - | - |
| B | | | | |
| C | 342(300) | 1400 | 611(569) | 1600 |
| D | | 1600 | | 1800 |

**Authorization Required**

CHANGE : PROC renamed. Requirement for RNP.

**INSTRUMENT APPROACH CHART**

RJOK / KOCHI RNP Y RWY14(AR)

CHANGE : PROC renamed.

## Coding Table

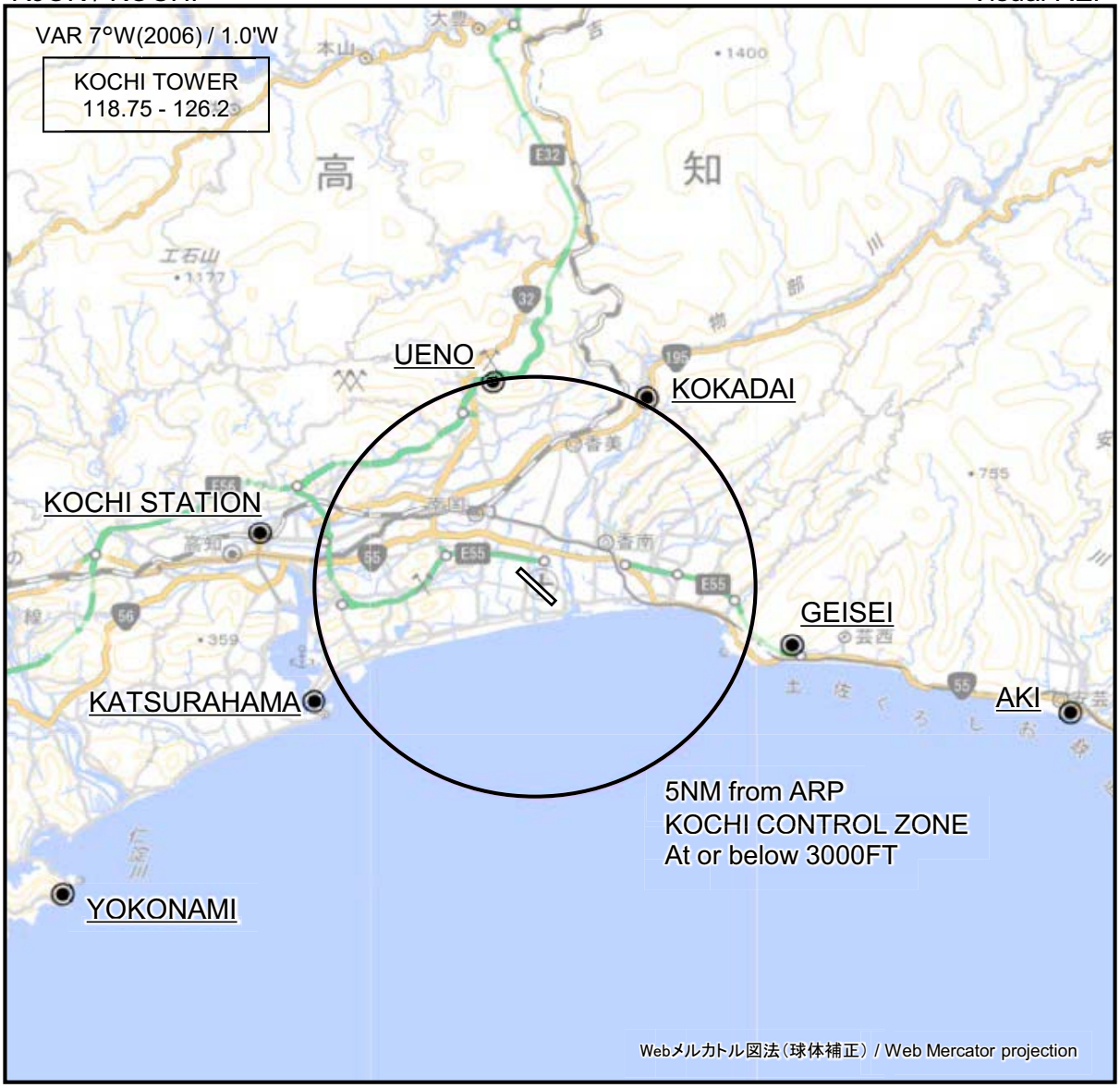
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | ANPAN | - | - | -6.9 | - | - | +4000 | - | - | - |
| 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 | - | - | -6.9 | 6.5 | R | 856 | - | -3.00 | 0.14 0.30 |
| 006 | TF | RW14 | Y | 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* | | |

RJOK / KOCHI

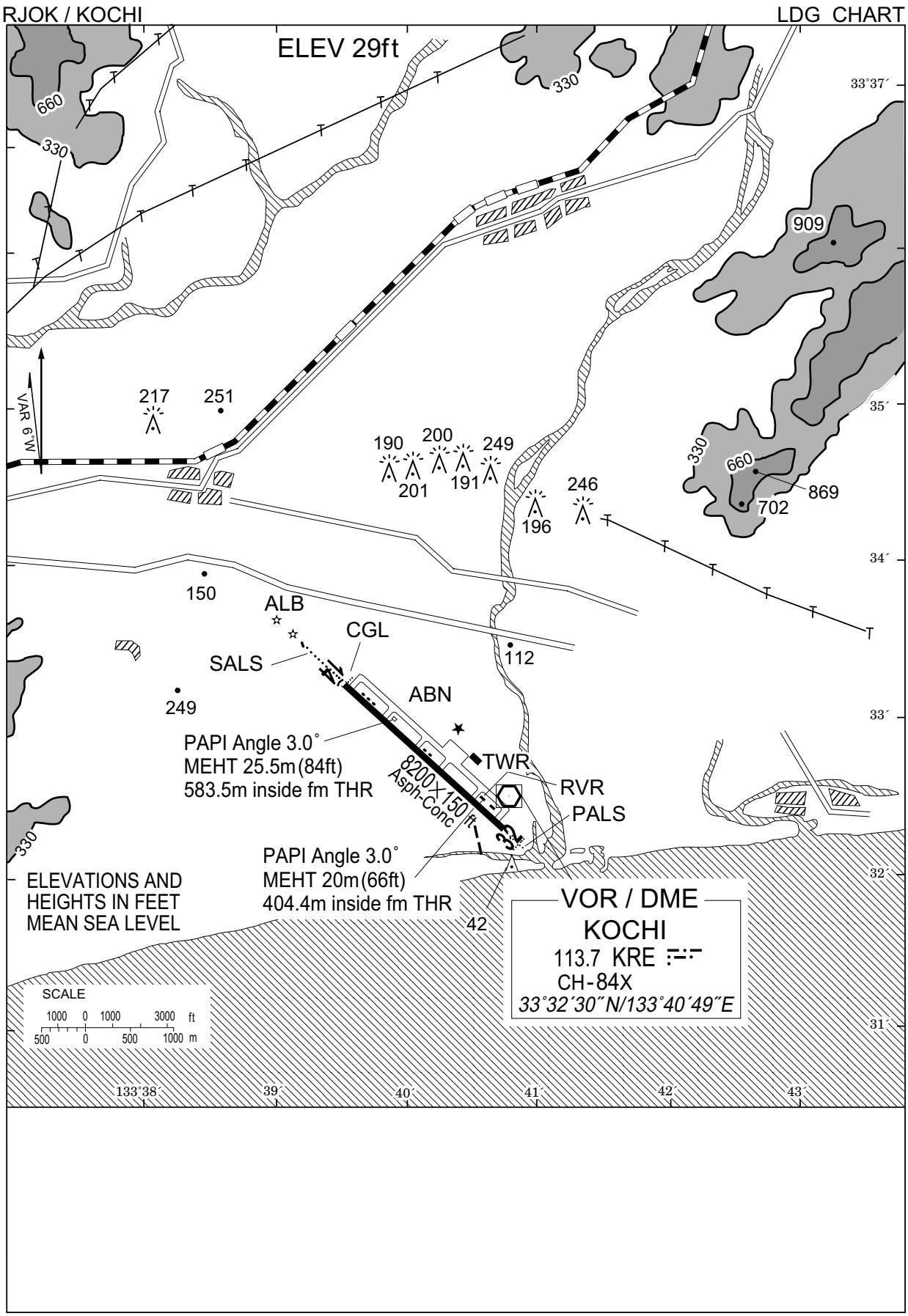
Visual REP




※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).

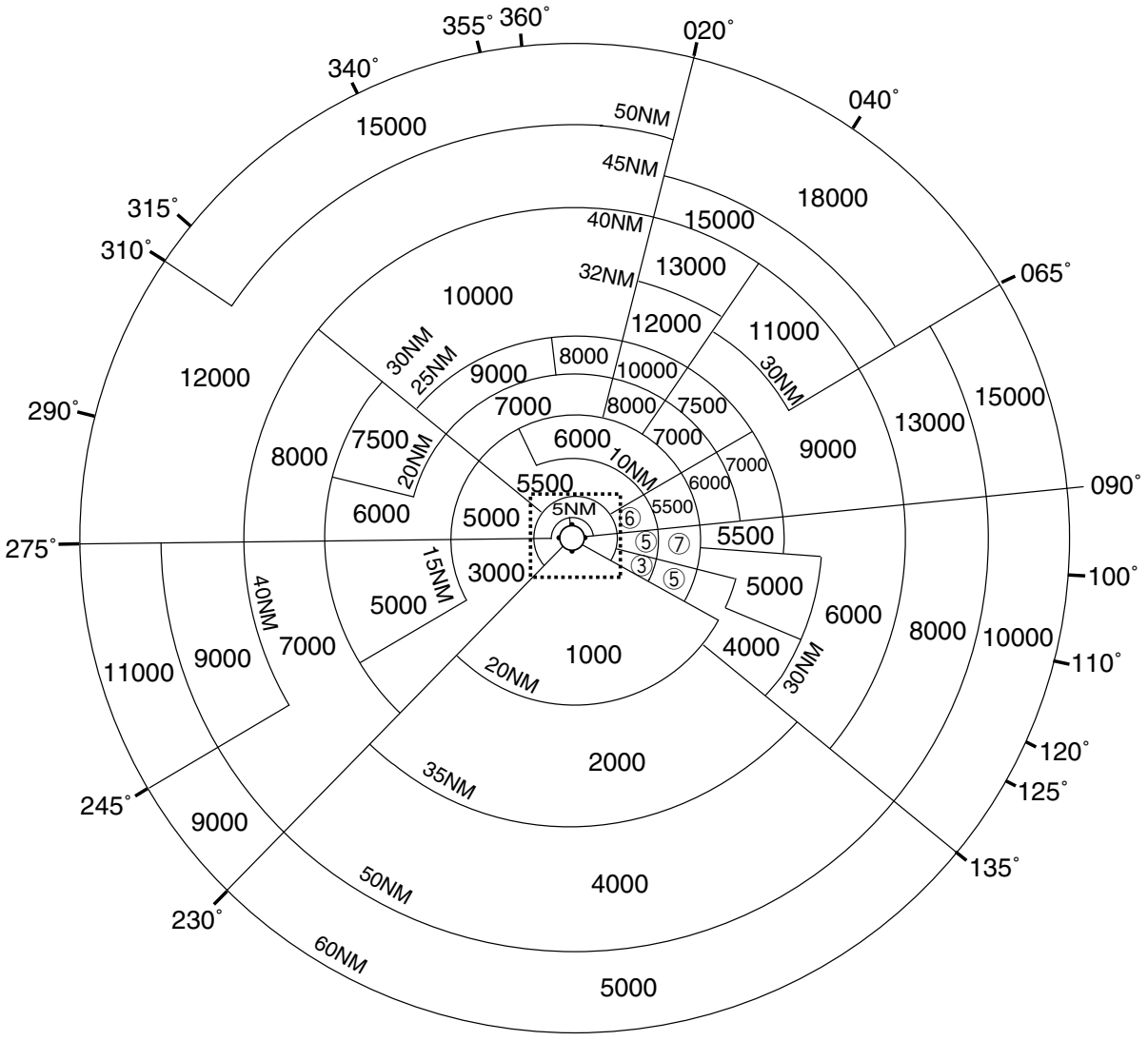
CHANGE : Map updated. BRG/DIST from ARP. Call sign(Kochi city → Kochi Station). Remarks(Geisei, Yokonami).

| Call sign | BRG / DIST from ARP | Remarks |
|---|---|---|
| 植野<br>Ueno | 349°T / 5.0NM | ゴルフ場<br>Golf Course |
| 工科大<br>Kokadai | 029°T / 5.2NM | 高知工科大学<br>Kochi University of Technology |
| 高知駅<br>Kochi Station | 281°T / 6.4NM | JR高知駅<br>Station |
| 芸西<br>Geisei | 104°T / 6.0NM | ホテル<br>Hotel |
| 桂浜<br>Katsurahama | 242°T / 5.8NM | 浦戸大橋<br>Bridge |
| 安芸<br>Aki | 104°T / 12.5NM | 安芸川河口<br>River mouth |
| 横浪<br>Yokonami | 236°T / 13.0NM | ホテル<br>Hotel |

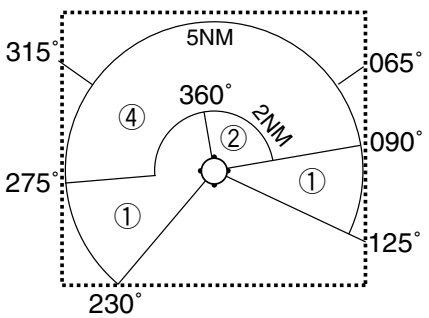

RJOK / KOCHI
LDG CHART
ELEV 29ft
660
330
330
909
33°37′
VAR 6°W
217
251
190
200
249
201
191
196
246
330
660
869
702
35′
34′
150
ALB
CGL
SALS
112
249
ABN
33′
PAPI Angle 3.0°
MEHT 25.5m(84ft)
583.5m inside fm THR
TWR
RVR
8200×150ft
Asph-Conc
PALS
PAPI Angle 3.0°
MEHT 20m(66ft)
404.4m inside fm THR
330
ELEVATIONS AND
HEIGHTS IN FEET
MEAN SEA LEVEL
42
VOR / DME
KOCHI
113.7 KRE
CH-84X
33°32′30″N/133°40′49″E
32′
SCALE
1000 0 1000 3000 ft
500 0 500 1000 m
31′
133°38′
39′
40′
41′
42′
43′

RJOK / KOCHI Minimum Vectoring Altitude CHART

VAR 7˚W (2009)




① 2000
② 2300
③ 2500
④ 3000
⑤ 3500
⑥ 4000
⑦ 4500




CENTER : *333245N/1334039E* (RADAR SITE)