

## AD CHART



## 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.

**SHIMIZU SIX DEPARTURE**

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, turn 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°...

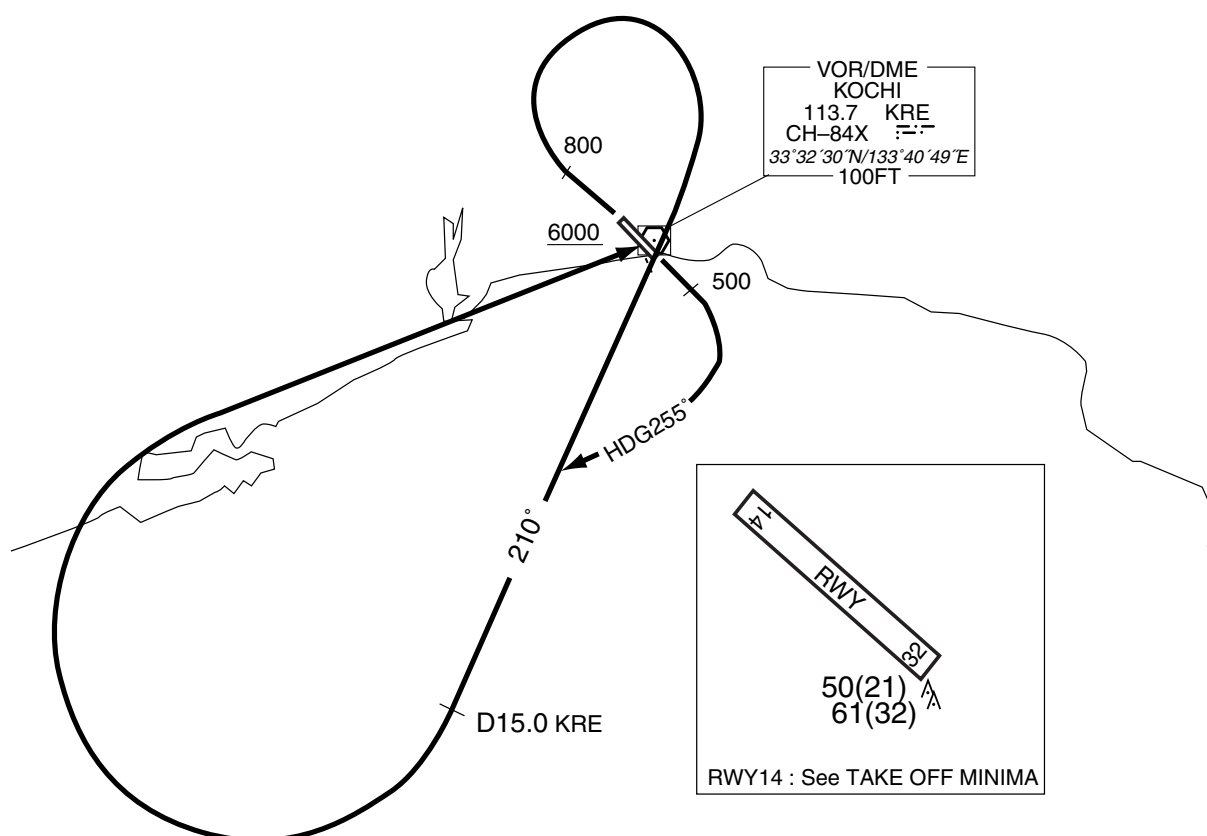
RWY 32 : Climb RWY HDG to 800FT, turn right...

...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.

※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

RWY14 : KRE 3.0NM fm DER - 7NM to KARIN  
SUC 3.0NM fm DER - 10NM to KARIN  
RWY32 : KRE 9NM to OK32C - 10NM to KARIN  
SUC 9NM to OK32C - 4NM to OK32C

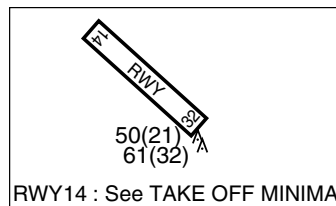
DME GAP

RWY14 : DER - 3.0NM fm DER  
RWY32 : DER - 9NM fm OK32C

Inappropriate NavAids

See AD1.1.6.10.3. Inappropriate 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 |
| 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°<br>(130.6°)       | —              | +500          | —                  | —              | RNAV1                  |
| DF                    | OK14A                  | —        | —             | —                      | R              | —             | —                  | —              | RNAV1                  |
| TF                    | OK14B                  | —        | 6.0           | 104°<br>(097.5°)       | —              | —             | —                  | —              | RNAV1                  |
| TF                    | KARIN                  | —        | 23.7          | 053°<br>(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°<br>(310.6°)       | —              | +600          | —                  | —              | RNAV1                  |
| DF                    | OK32A                  | —        | —             | —                      | R              | —             | —                  | —              | RNAV1                  |
| TF                    | OK32C                  | —        | 12.6          | 138°<br>(130.7°)       | —              | —             | —                  | —              | RNAV1                  |
| TF                    | KARIN                  | —        | 17.9          | 053°<br>(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.

※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

RWY14 : KRE 3.0NM fm DER - 23NM to KAIFU  
SUC 3.0NM fm DER - 32NM to KAIFU  
RWY32 : KRE 9NM to OK32C - 28NM to KAIFU  
SUC 9NM to OK32C - 4NM to OK32C

DME GAP

RWY14 : DER - 3.0NM fm DER  
RWY32 : DER - 9NM to OK32C

Inappropriate NavAids

See AD1.1.6.10.3. Inappropriate 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.

## 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°<br>(130.6°)       | —              | +500          | —                  | —              | RNAV1                  |
| DF                    | OK14A                  | —        | —             | —                      | R              | —             | —                  | —              | RNAV1                  |
| TF                    | OK14B                  | —        | 6.0           | 104°<br>(097.5°)       | —              | —             | —                  | —              | RNAV1                  |
| TF                    | KAIFU                  | —        | 37.0          | 077°<br>(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°<br>(310.6°)       | —              | +600          | —                  | —              | RNAV1                  |
| DF                    | OK32A                  | —        | —             | —                      | R              | —             | —                  | —              | RNAV1                  |
| TF                    | OK32C                  | —        | 12.6          | 138°<br>(130.7°)       | —              | —             | —                  | —              | RNAV1                  |
| TF                    | KAIFU                  | —        | 31.8          | 082°<br>(075.0°)       | —              | —             | —                  | —              | RNAV1                  |



## STANDARD DEPARTURE CHART -INSTRUMENT

RJOK / KOCHI

RNAV SID and TRANSITION

| MUROT ONE RNAV DEPARTURE   |                       | RNAV 1  |
|--|-----------------------|---|
| <p>Note 1 ) DME/DME/IRU or GNSS required.</p> <p>※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.</p> <p>2 ) RADAR service required.</p> | 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           |

VAR 7° W(2009)

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

(130.7°T)  
136°  
20.9

OK14A  
N33-24-50.3  
E133-43-34.2

OK14A-MUROT  
(097.6°T)  
104°  
30.9

OK32D  
N33-22-38.0  
E134-03-14.9

(For RWY32 Only)  
(097.7°T)  
105°  
14.3

MUROT  
N33-20-41.6  
E134-20-10.7

(093.3°T)  
100°  
19.0

MIYAT  
N33-19-34.3  
E134-42-50.9

(082.0°T)  
089°  
12.3

MERID  
N33-21-15.9  
E134-57-28.1

(082.2°T)  
089°  
42.3

KUSHIMOTO  
(KEC)  
N33-26-51.9  
E135-47-40.2

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 |

RWY14 : See TAKE OFF MINIMA

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.

## 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°<br>(130.6°)       | —              | +500          | —                  | —              | RNAV1                  |
| DF                    | OK14A                  | —        | —             | —                      | R              | —             | —                  | —              | RNAV1                  |
| TF                    | MUROT                  | —        | 30.9          | 104°<br>(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°<br>(310.6°)       | —              | +600          | —                  | —              | RNAV1                  |
| DF                    | OK32A                  | —        | —             | —                      | R              | —             | —                  | —              | RNAV1                  |
| TF                    | OK32D                  | —        | 20.9          | 138°<br>(130.7°)       | —              | —             | —                  | —              | RNAV1                  |
| TF                    | MUROT                  | —        | 14.3          | 105°<br>(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°<br>(093.3°)       | —              | —             | —                  | —              | RNAV1                  |
| TF                    | MERID                  | —        | 12.3          | 089°<br>(082.0°)       | —              | —             | —                  | —              | RNAV1                  |
| TF                    | KUSHIMOTO (KEC)        | —        | 42.3          | 089°<br>(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.

※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

RWY14 : KRE 16NM to YUZNO - 7NM to YUZNO  
SUC 16NM to YUZNO - 7NM to YUZNO  
RWY32 : KRE 4NM to OK32B - 25NM to YUZNO  
SUC 4NM to OK32B - 25NM to YUZNO

DME GAP

RWY14 : DER - 16NM to YUZNO  
RWY32 : DER - 4NM to OK32B  
25NM to YUZNO - 18NM to YUZNO

Inappropriate NavAids

See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 7° W(2017)



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<br>(130.6) | -7.4               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | OK14C               | —        | —              | -7.4               | —             | R              | —             | —            | —              | RNAV1                    |
| 003           | TF              | YUZNO               | —        | 320<br>(312.9) | -7.4               | 18.8          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | OMOGO               | —        | 296<br>(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<br>(310.6) | -7.4               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | OK32A               | —        | —              | -7.4               | —             | R              | —             | —            | —              | RNAV1                    |
| 003           | TF              | OK32B               | —        | 138<br>(130.7) | -7.4               | 7.0           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | OK32E               | —        | 230<br>(222.8) | -7.4               | 13.3          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | YUZNO               | —        | 320<br>(312.9) | -7.4               | 25.9          | —              | —             | —            | —              | RNAV1                    |
| 006           | TF              | OMOGO               | —        | 296<br>(288.5) | -7.4               | 4.0           | —              | —             | —            | —              | RNAV1                    |

## STANDARD ARRIVAL CHART -INSTRUMENT

RJOK / KOCHI

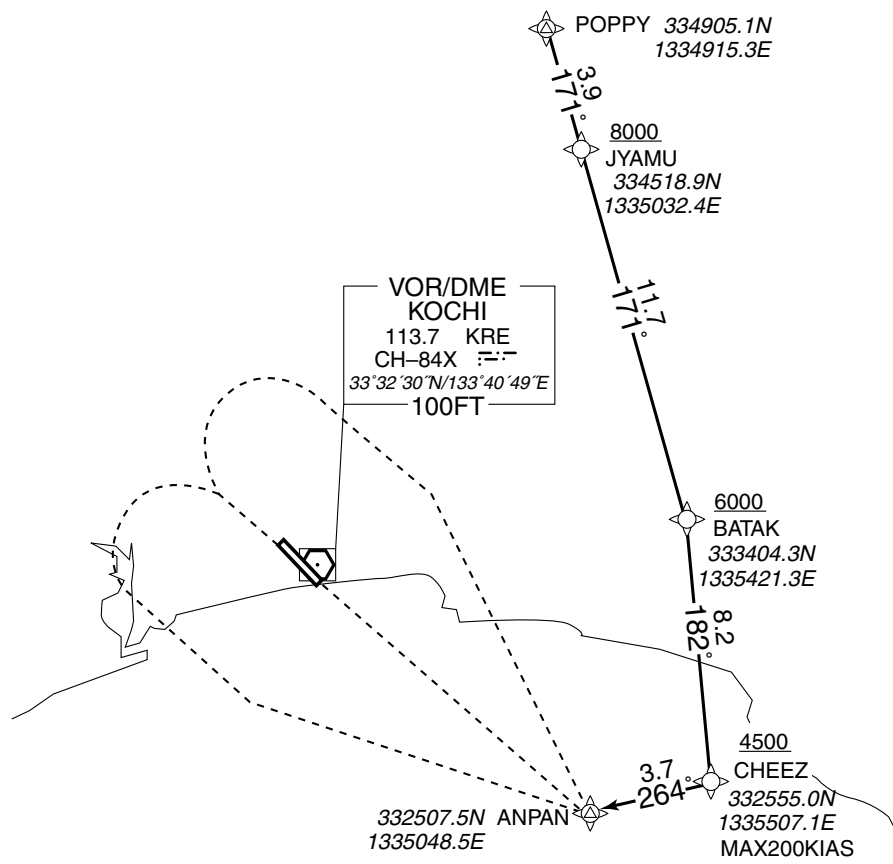
RNAV STAR

## 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           | GBD   | POPPY - 2NM to BATAK |
|                        | SUC   | 7NM to BATAK - ANPAN |
|                        | KRE   | 1NM to BATAK - ANPAN |
| DME GAP                | -   |                      |
| Inappropriate Nav aids | 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                    |

## 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 Nav aids | 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<br>(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.

VAR 7° W(2012)



From OKITU, to BIRKN, to ANPAN.

|                       |   |                       |
|-----------------------|---|-----------------------|
| Critical DME          | IWT   | OKITU - 26NM to BIRKN |
|                       | SUC   | 12NM to BIRKN - ANPAN |
|                       | KRE   | 12NM to BIRKN - ANPAN |
| DME GAP               | 26NM to BIRKN - 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                    |

## STANDARD ARRIVAL CHART -INSTRUMENT

RJOK / KOCHI

RNAV STAR

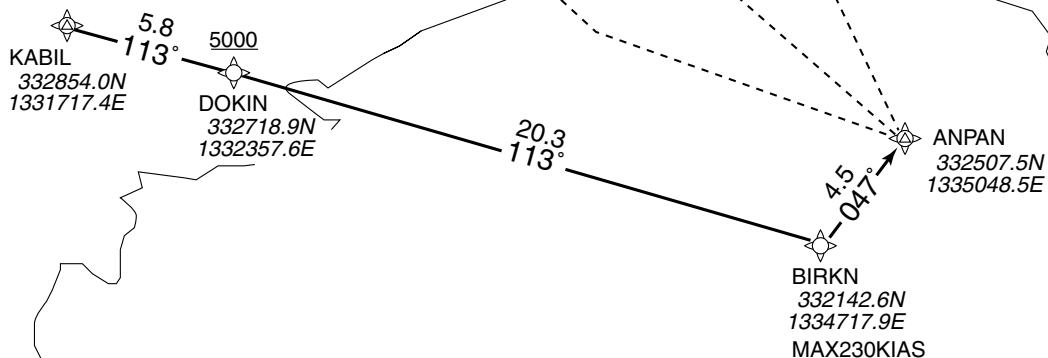
## YOSAKOI WEST ARRIVAL

RNAV 1

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

VAR 7° W(2012)

VOR/DME  
KOCHI  
113.7 KRE  
CH-84X  
33°32'30"N/133°40'49"E  
100FT



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 Nav aids | 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



## 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  |

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.

CHANGE : VAR

## RJOK / KOCHI

ILS Y or LOC Y RWY32

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



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 |

Missed APCH climb gradient MNM 5.0%

| MINIMA |           | THR elev. 18 |           | AD elev. 29 |           |      |
|--------|-----------|--------------|-----------|-------------|-----------|------|
| CAT    | CAT I     |              | LOC       |             | CIRCLING  |      |
|        | DA(H)     | RVR/<br>CMV  | MDA(H)    | RVR/<br>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.

CHANGE : VAR

## INSTRUMENT APPROACH CHART

RJOK / KOCHI

VOR RWY32



## 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.



Missed APCH climb gradient MNM 4.5%

MINIMA THR elev. 18 AD elev. 29

| CAT | MINIMA    |         | 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

RNAV(RNP) Z RWY14



## INSTRUMENT APPROACH CHART

RJOK / KOCHI

RNAV(RNP) Z RWY14

RNAV(RNP) Z RWY14Coding 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<br>(335.9) | -6.9               | 9.7           | —              | +4000         | —            | —               | 1.0          |
| 003           | TF                                 | IGENO               | —        | 318<br>(310.7) | -6.9               | 4.2           | —              | 3500          | —            | —               | 1.0          |
| 004           | TF                                 | OK451               | —        | 318<br>(310.7) | -6.9               | 1.8           | —              | 2922          | -165         | -3.00           | 0.14<br>0.30 |
| 005           | RF<br>Center:<br>OKRF1<br>r=2.07NM | OK477               | —        | —              | -6.9               | 6.5           | L              | 856           | —            | -3.00           | 0.14<br>0.30 |
| 006           | TF                                 | RW14                | Y        | 138<br>(130.6) | -6.9               | 2.4           | —              | 92            | —            | -3.00/50        | 0.14<br>0.30 |
| 007           | TF                                 | ANPAN               | —        | 138<br>(130.6) | -6.9               | 12.4          | —              | 4000          | —            | —               | 1.0          |

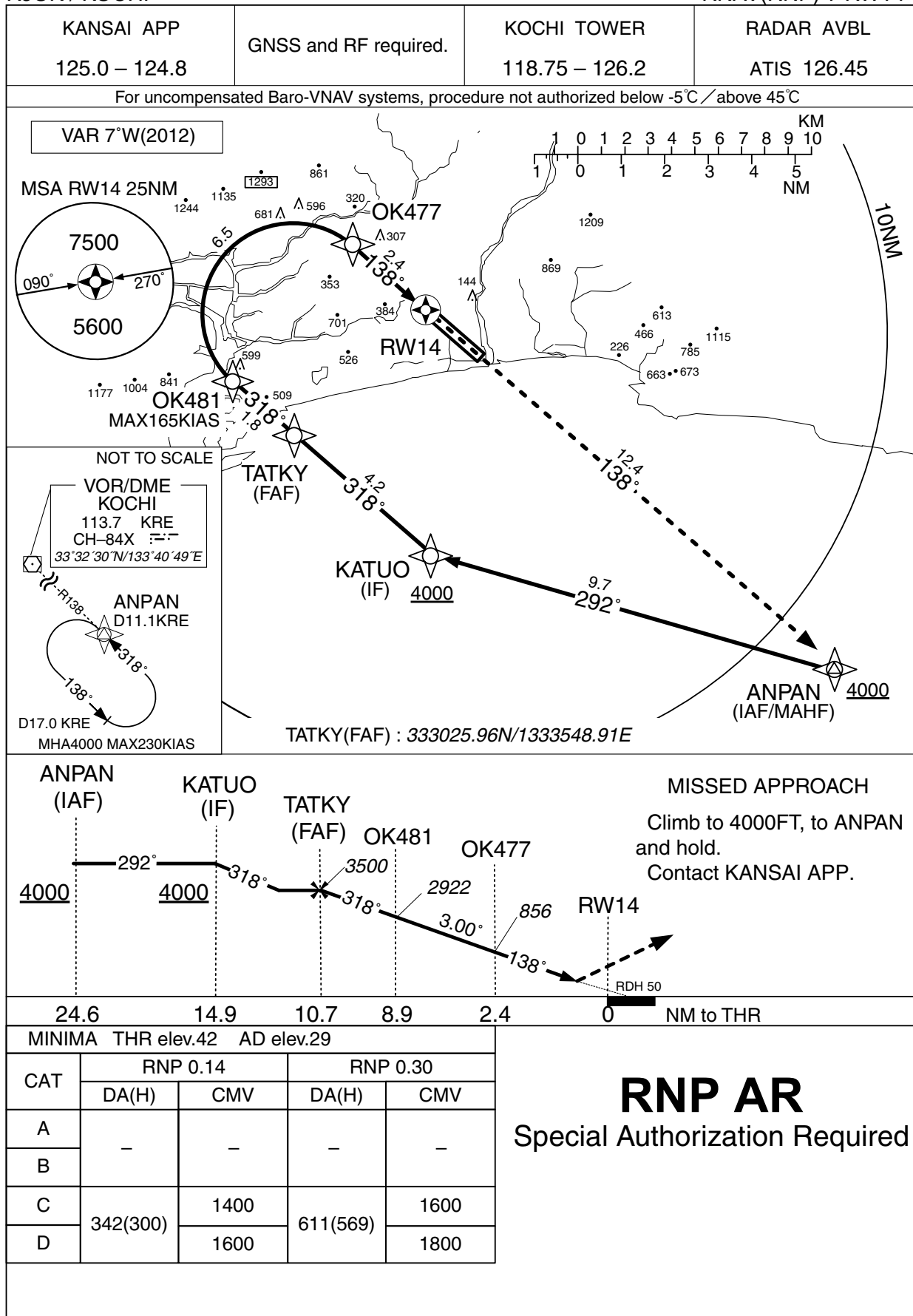
Waypoint Coordinates

| 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

RNAV(RNP) Y RWY14



## INSTRUMENT APPROACH CHART

RJOK / KOCHI

RNAV(RNP) Y RWY14

RNAV(RNP) Y RWY14Coding 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<br>(285.5) | -6.9               | 9.7           | —              | +4000         | —            | —              | 1.0          |
| 003           | TF                                 | TATKY               | —        | 318<br>(310.6) | -6.9               | 4.2           | —              | 3500          | —            | —              | 1.0          |
| 004           | TF                                 | OK481               | —        | 318<br>(310.6) | -6.9               | 1.8           | —              | 2922          | -165         | -3.00          | 0.14<br>0.30 |
| 005           | RF<br>Center:<br>OKRF2<br>r=2.07NM | OK477               | —        | —              | -6.9               | 6.5           | R              | 856           | —            | -3.00          | 0.14<br>0.30 |
| 006           | TF                                 | RW14                | Y        | 138<br>(130.6) | -6.9               | 2.4           | —              | 92            | —            | -3.00/50       | 0.14<br>0.30 |
| 007           | TF                                 | ANPAN               | —        | 138<br>(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



| Call sign           | BRG / DIST from ARP | Remarks                                  |
|---------------------|---------------------|--|
| 工 科 大<br>Koukadai   | 035°/ 5.2NM         | 高知工科大学<br>Kochi University of Technology |
| 芸 西<br>Geisei       | 113°/ 5.9NM         | 観光ホテル<br>Hotel                           |
| 桂 浜<br>Katsurahama  | 248°/ 6.0NM         | 浦戸大橋<br>Bridge                           |
| 高 知 市<br>Kochi city | 290°/ 6.5NM         | JR高知駅<br>Station                         |
| 植 野<br>Ueno         | 355°/ 5.0NM         | ゴルフ場<br>Golf course                      |
| 安 芸<br>Aki          | 110°/12.5NM         | 安芸川河口<br>River mouth                     |
| 横 浪<br>Yokonami     | 243°/12.9NM         | 国民宿舎<br>Hotel                            |





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)