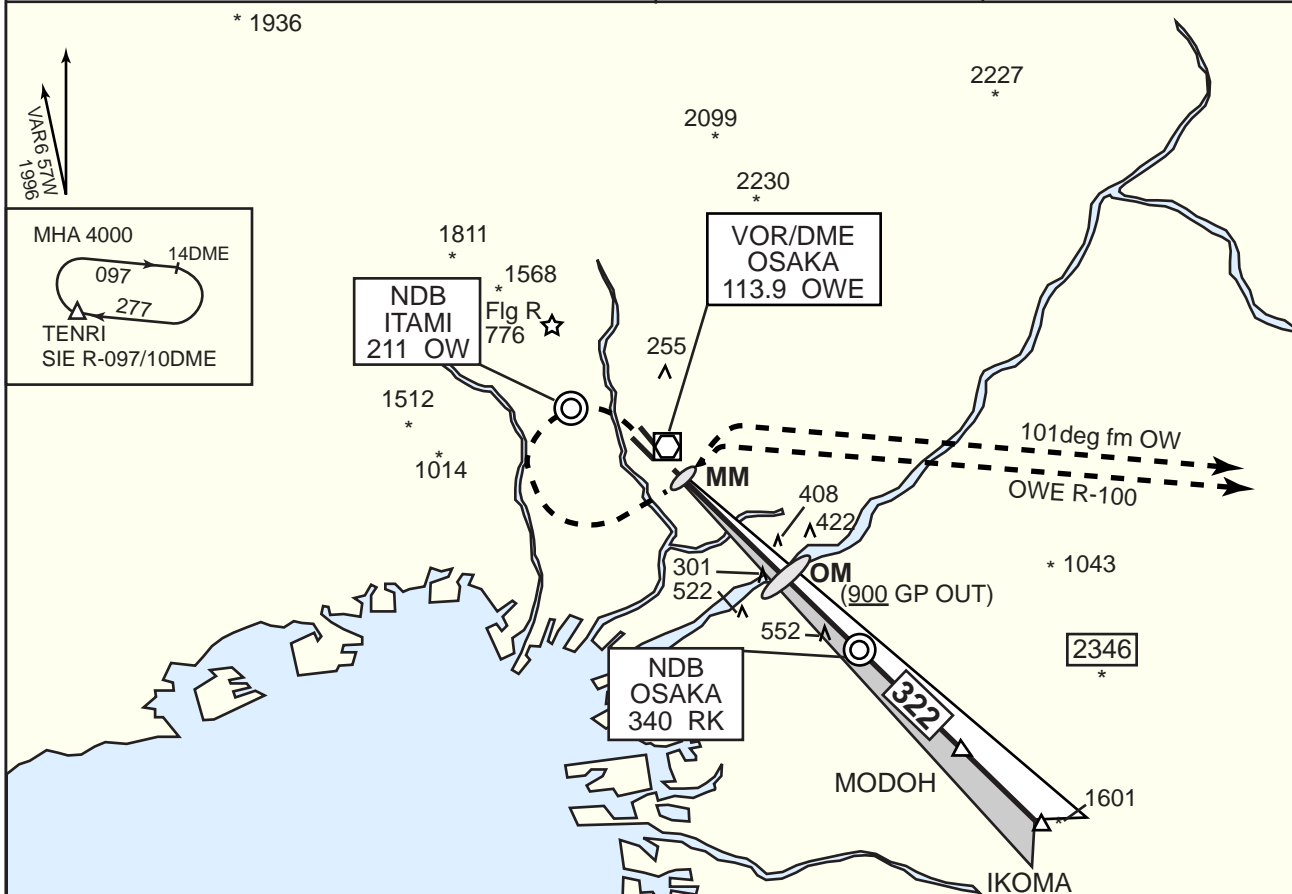


| | | | |
|-------------------------------------|--------------------------------------|--|-------------------------------|
| KANSAI APP 120.45-124.7 261.2 | ILS-LLZ 110.1 ISK ILS-GP 334.4 | OSAKA TOWER 118.1-236.8 126.2-121.7G | RADAR AVAILABLE ATIS 128.6 |
|-------------------------------------|--------------------------------------|--|-------------------------------|



ILS REFERENCE DATUM 54'

OW OWE RK MIDOH 3500 IKOMA 3500

MISSED APPROACH

At DA, make immediate climb on HDG 322° until intercepting 125° from OW NDB, then commence left turn so as to cross OW NDB at or above 1200', continue climb to 4000' on 101° from OW NDB (OWE R-100) until intercepting SIE R-039 (OWE 18DME), turn right and proceed via SIE 12DME clockwise ARC to intercept and proceed via SIE R-097 to TENRI and hold. Contact KANSAI APP.

101
100

MM

OM

322

1534 (900 GP OUT)

301 ▲
552 ▲

2393

| | | | |
|--------|--|----------------------------------|--|
| MINIMA | | FIELD ELEV 39FT TDZ ELEV 21FT | |
|--------|--|----------------------------------|--|

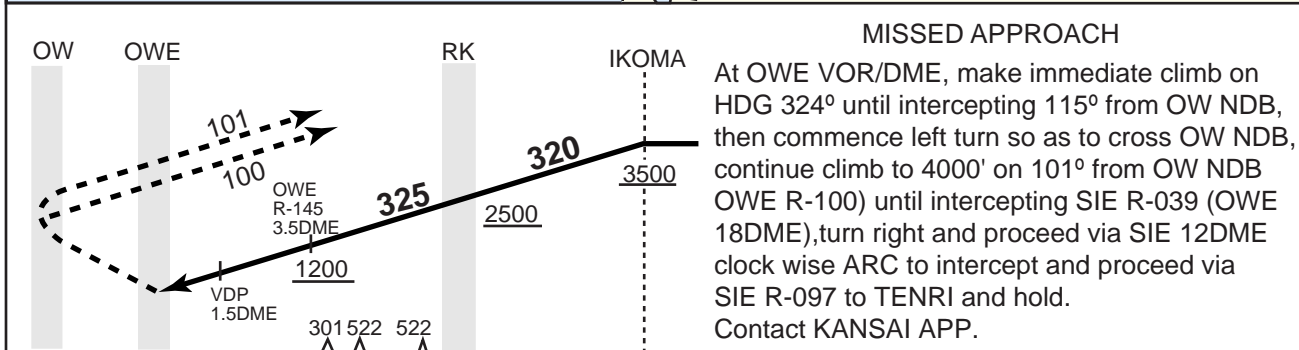
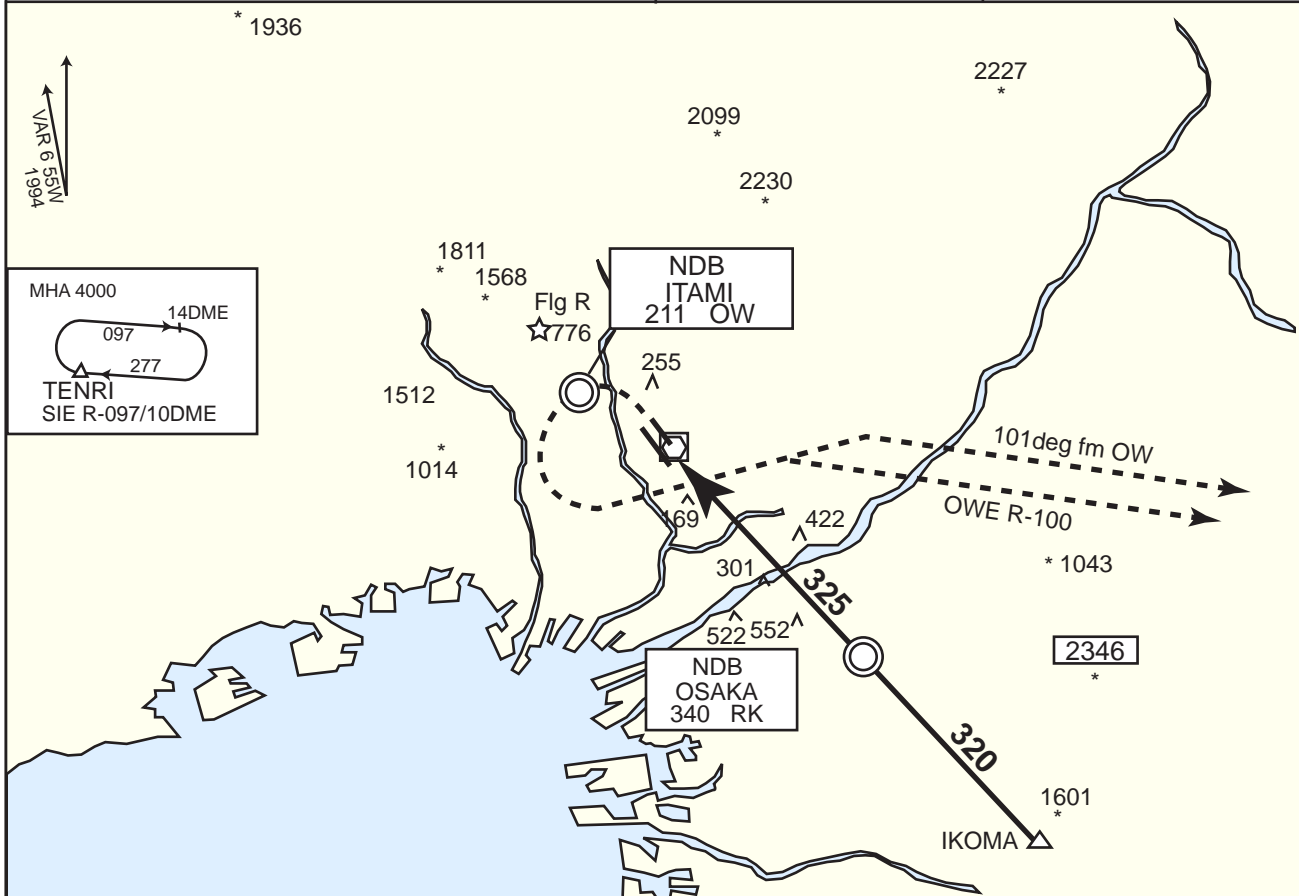
| | STA TO RWY 32L | | | | | | CIRCLING* |
|---|--------------------|------------------------|-----------|-----------|------------------------|--------------|------------|
| | DA 281' | | DA 281' | | MDA 720' | | |
| | TDZ & RCL LGT AVBL | TDZ and/or RCL LGT OUT | MM OUT | ALS OUT | GP OUT | GP & ALS OUT | |
| A | | | | | RVR 1200m VIS 1200m | VIS 1700m | 800'-1700m |
| B | RVR 1200m | RVR 1200m | RVR 1200m | RVR 1200m | RVR 1300m VIS 1300m | VIS 2100m | 800'-2100m |
| C | VIS 1200m | VIS 1200m | VIS 1200m | VIS 1200m | VIS 1900m | VIS 2700m | 800'-2700m |
| D | | | | | VIS 2900m | VIS 3700m | 800'-3700m |

* JET circling West side of RWY only.

RJOO

OSAKA ADF/VOR/DME RWY 32R

| | | | |
|--|------------------------------------|---|---------------------------------------|
| <p>KANSAI APP 120.45 - 124.7 261.2</p> | <p>OSAKA VOR/DME 113.9 OWE</p> | <p>OSAKA TOWER 118.1-236.8 126.2-121.7G</p> | <p>RADAR AVAILABLE ATIS 128.6</p> |
|--|------------------------------------|---|---------------------------------------|



| | |
|---------------|------------------------|
| <p>MINIMA</p> | <p>FIELD ELEV 39FT</p> |
|---------------|------------------------|

| <p>STA TO RWY 32R MDA 740'</p> | | <p>CIRCLING *</p> | |
|------------------------------------|------------------|-------------------|--|
| <p>ALS AVBL</p> | <p>ALS OUT</p> | <p>MDA-VIS</p> | |
| <p>A RVR 1200m</p> | <p>VIS 1800m</p> | <p>800'-1800m</p> | |
| <p>B VIS 1200m</p> | <p>VIS 2200m</p> | <p>800'-2200m</p> | |
| <p>C VIS 1800m</p> | <p>VIS 2800m</p> | <p>800'-2800m</p> | |
| <p>D VIS 2800m</p> | <p>VIS 3800m</p> | <p>800'-3800m</p> | |

*JET circling to West side of RWY only.

SHINODA ARRIVAL

From over SKE VOR/DME(SK NDB),via SKE R-065 to SKE 10DME, (066DEG from SK NDB until intercepting OWE R-152),turn left to intercept and proceed via OWE R-143 (140DEG from RK NDB) to IKOMA.

Cross SKE VOR/DME(SK NDB) at or above 4,000FT,cross IKOMA at or above 3,500FT.

YAMAT ARRIVAL

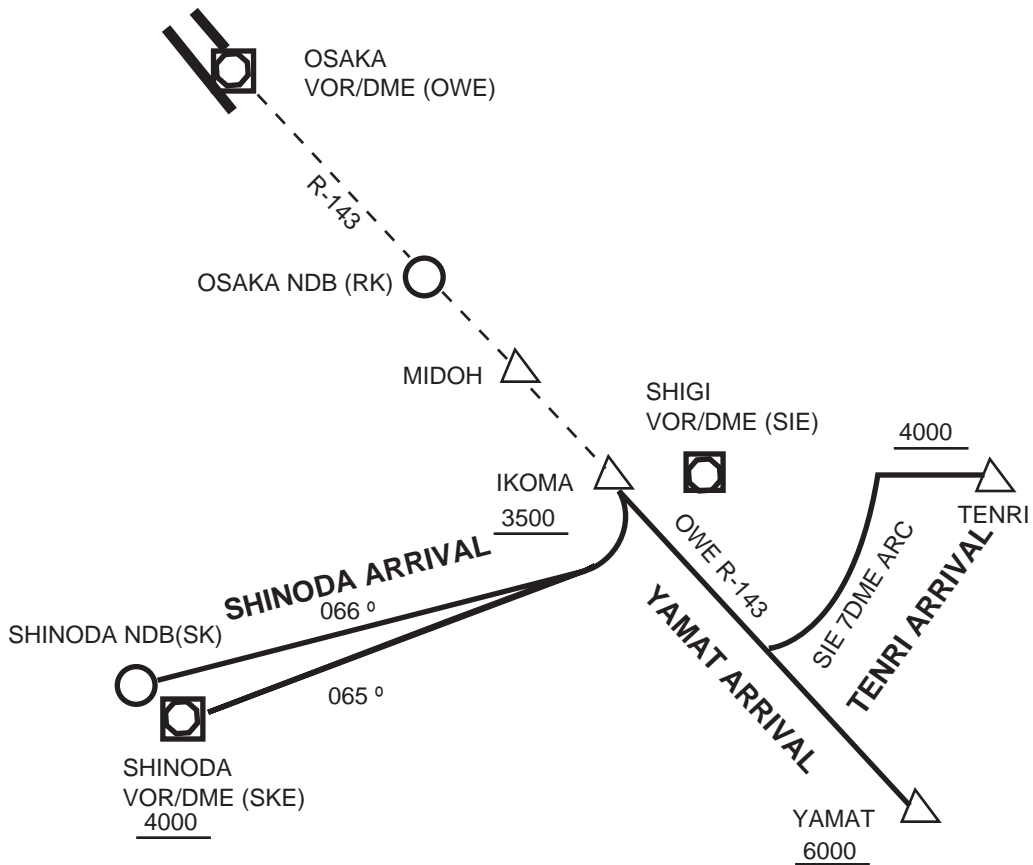
From over YAMAT, via OWE R-143 to IKOMA.

Cross YAMAT at or above 6,000FT, cross IKOMA at or above 3,500FT

TENRI ARRIVAL

From over TENRI, via SIE R-097 to intercept and proceed via SIE 7DME clockwise ARC to intercept and proceed via OWE R-143 (140DEG from RK NDB) to IKOMA.

Cross TENRI at or above 4,000FT, cross IKOMA at or above 3,500FT.



ASUKA ONE DEPARTURE

RWY 32R/32L: Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/OWE 5DME....

RWY 14R/14L: Climb RWY HDG to 500FT or above, turn left....

...climb via OWE R-098(101DEG from OW NDB) to ASUKA.

Cross ASUKA at or above 9,000FT or specified altitude.

Note: For RWY 14R/14L, following climb gradient should be maintained until 500FT.

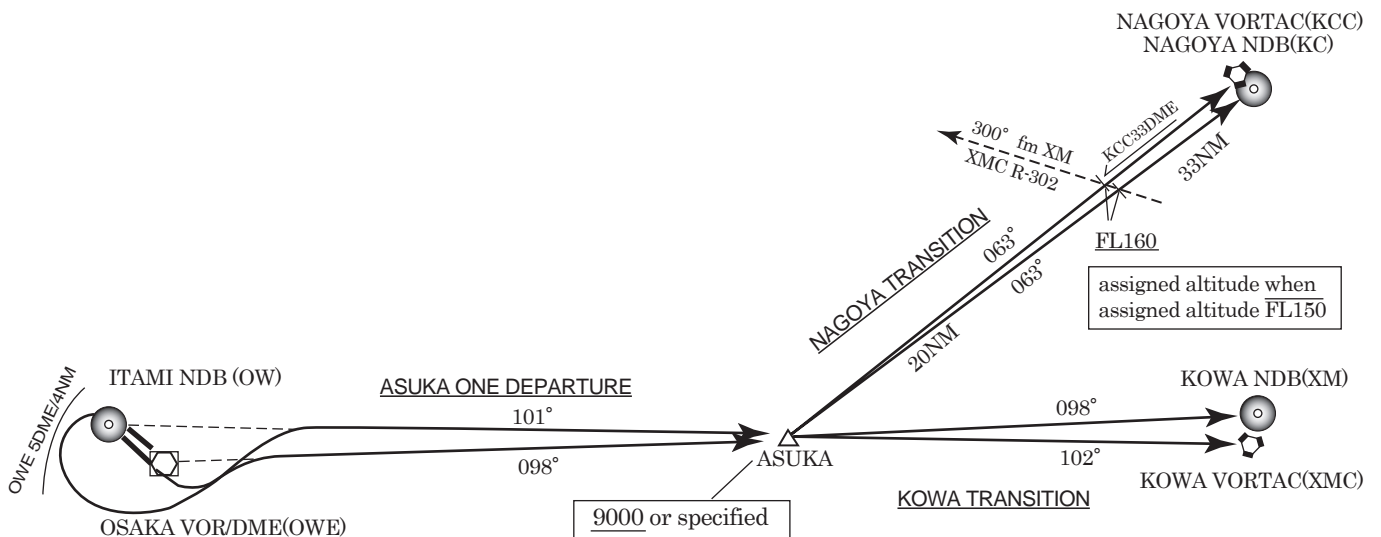
| | | | | | | |
|-----------------|-----|-----|-----|-----|-----|------|
| Speed (Knots) | 60 | 90 | 120 | 150 | 180 | 210 |
| Rate (Feet/Min) | 300 | 450 | 600 | 750 | 900 | 1050 |

KOWA TRANSITION

From Over ASUKA, proceed via XMC R-282 to XMC VORTAC(098 DEG to XM NDB).

NAGOYA TRANSITION

From over ASUKA, proceed via KCC R-243 to KCC VORTAC (063 DEG to KC NDB).
 Cross KCC R-243/33DME (XMC R-302/300DEG from XM NDB) at or above FL160 (at assigned altitude when assigned altitude at or below FL150).



OTSU TWO DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500 FT or above, turn left within 4NM (OWE 5DME)....

RWY 14R/14L : Climb RWY HDG to 500 FT or above, turn left,....

...climb via OWE R-100(101DEG from OW NDB) to intercept and proceed via CUE R-206 to CUE VOR/DME (033 DEG to CU NDB).

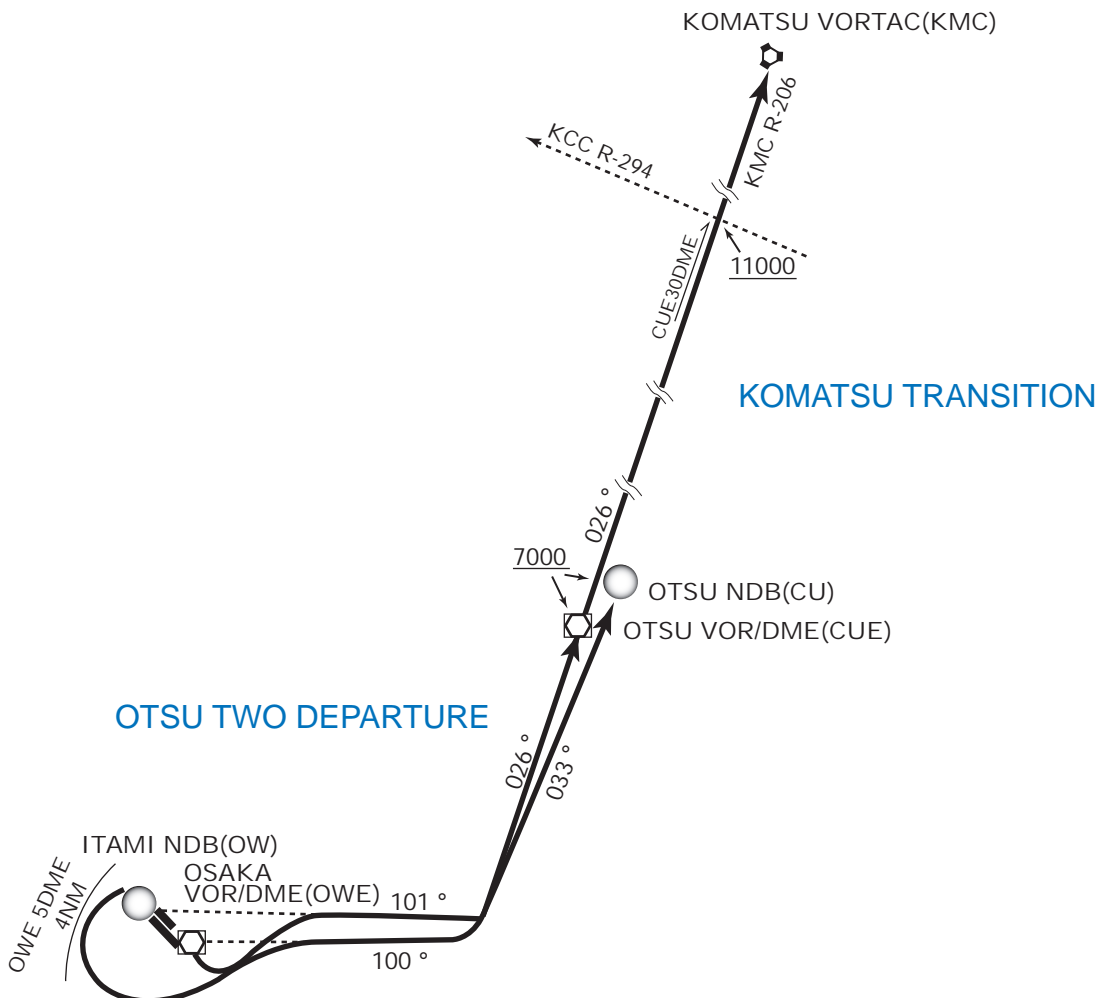
Cross CUE VOR/DME (CU NDB) at or above 7,000 FT.

Note : When take off RWY 14R/14L, following climb gradient should be maintained until 500FT.

| | | | | | | |
|-----------------|-----|-----|-----|-----|-----|------|
| Speed (Knots) | 60 | 90 | 120 | 150 | 180 | 210 |
| Rate (Feet/Min) | 300 | 450 | 600 | 750 | 900 | 1050 |

KOMATSU TRANSITION

After CUE VOR/DME, proceed via CUE R-026/KMC R-206 to KMC VORTAC
Cross CUE R-026/30DME (KCC R-294) at or above 11,000FT.



SHINODA ONE DEPARTURE

RWY 32R/L: Climb RWY HDG to 500FT or above, turn left within 4NM(OWE 5DME), climb via 201DEG from OW NDB (OWE R-220) to YODOH,.....

RWY 14R/L: Climb RWY HDG to 500FT or above, turn right, climb HDG 230 DEG to intercept and proceed via OWE R-220 (201DEG from OW NDB) to YODOH,.....

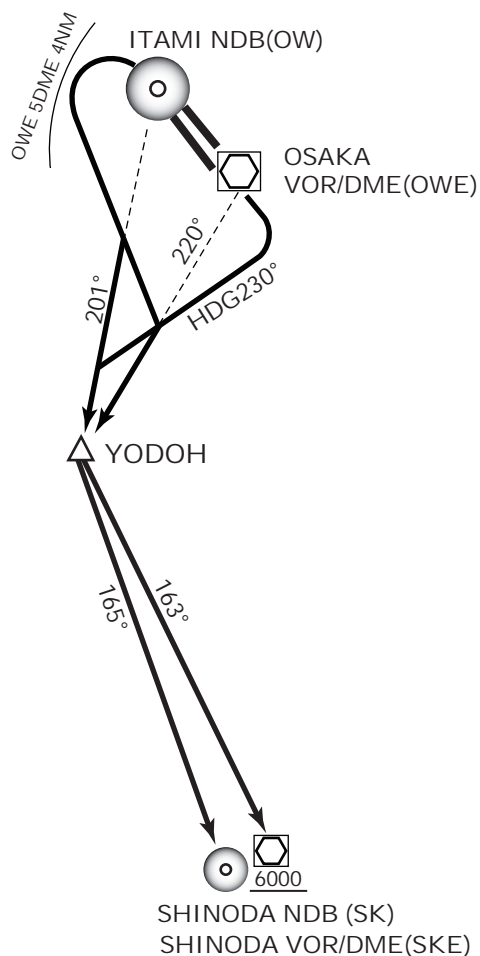
..... turn left to intercept and proceed via SKE R-343 to SKE VOR/DME(165DEG to SK NDB).

Cross SKE VOR/DME(SK NDB) at or above 6,000FT.

Note1: OWE R-220 for RWY 32R/L is to be utilized only during the outage of OW NDB.

Note2: For RWY 14R/L, following climb gradient should be maintained until 500FT.

| | | | | | | |
|-----------------|-----|-----|-----|-----|-----|------|
| Speed (Knots) | 60 | 90 | 120 | 150 | 180 | 210 |
| Rate (Feet/Min) | 300 | 450 | 600 | 750 | 900 | 1050 |



EAST REVERSAL TWO DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM (OWE 5DME),....

RWY 14R/14L : Climb RWY HDG to 500FT or above, turn left,....

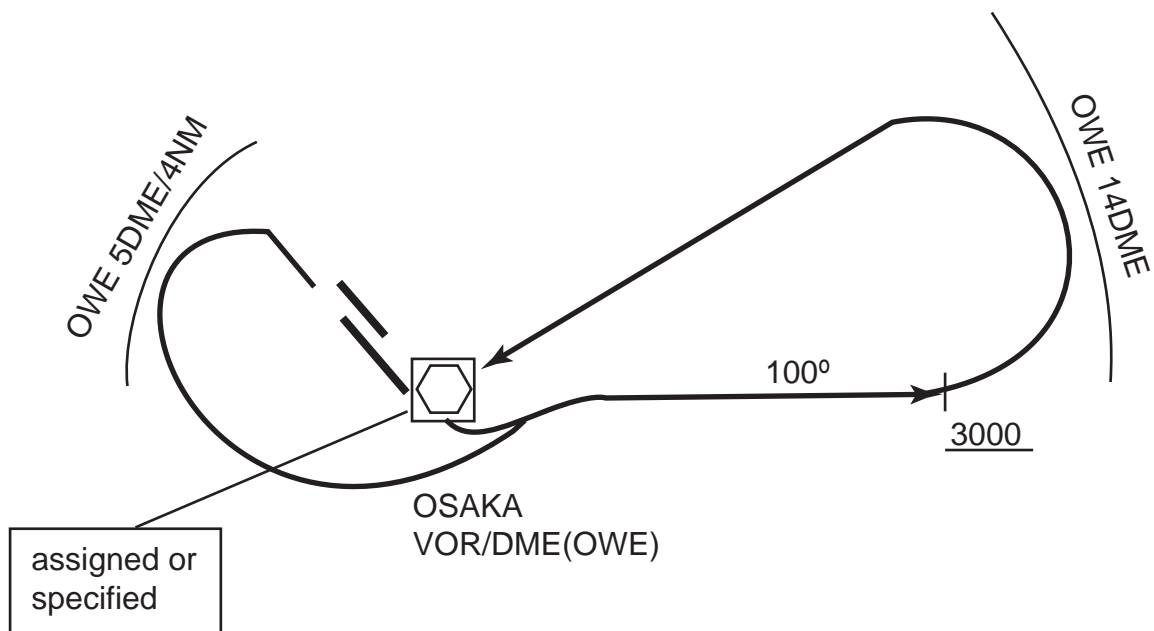
... climb via OWE R-100 to 3,000FT or above, then turn left to OWE VOR/DME within OWE 14DME.

Cross OWE VOR/DME at assigned or specified altitude.

Note : For RWY 14R/14L, following climb gradient should be maintained until 500FT.

| | | | | | | |
|-----------------|-----|-----|-----|-----|-----|------|
| Speed (Knots) | 60 | 90 | 120 | 150 | 180 | 210 |
| Rate (Feet/Min) | 300 | 450 | 600 | 750 | 900 | 1050 |

EAST REVERSAL TWO DEPARTURE



HYOGO TWO DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM (OWE 5DME), climb via 201 DEG from OW NDB (OWE R-220) to YODOH,....

RWY 14R/14L : Climb RWY HDG to 500FT or above, turn right, climb HDG 230 DEG to intercept and proceed via OWE R-220 (201 DEG from OW NDB) to YODOH,....

....turn right to intercept and proceed via SKE R-321 to HYOGO.

Cross SKE R-321/22DME at or above 6,000FT.

Note 1 : OWE R-220 for RWY 32R/32L is to be utilized only during the outage of OW NDB.

Note 2 : For RWY 14R/14L, following climb gradient should be maintained until 500FT.

| | | | | | | |
|-----------------|-----|-----|-----|-----|-----|------|
| Speed (Knots) | 60 | 90 | 120 | 150 | 180 | 210 |
| Rate (Feet/Min) | 300 | 450 | 600 | 750 | 900 | 1050 |

ASAGI TRANSITION

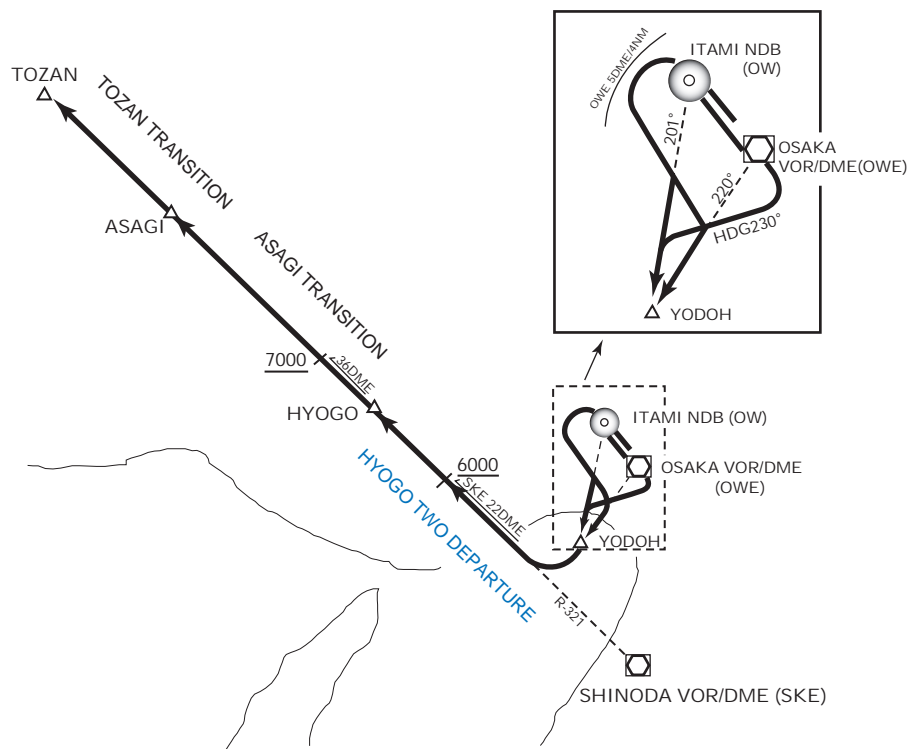
After HYOGO, proceed via SKE R-321 to ASAGI.

Cross SKE R-321/36DME at or above 7,000FT.

TOZAN TRANSITION

After HYOGO, proceed via SKE R-321 to TOZAN.

Cross SKE R-321/36DME at or above 7,000FT.



BRIDGE ONE DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500 FT or above, turn left within 4NM (OWE 5DME), via 201 DEG from OW NDB (OWE R-220) until intercepting YOE R-299.....

RWY 14R/14L : Climb RWY HDG to 500 FT or above, turn right, via HDG230 DEG until intercepting YOE R-299,....
turn right to intercept and proceed via YOE R-290, then turn left to intercept and proceed via AJE R-041 to MAIKO.

Note 1 : OWE R-220 for RWY 32R/32L is to be utilized only during the outage of OW NDB.

Note 2 : Following climb gradient should be maintained until 2,500FT.

| | | | | | | |
|-----------------|-----|-----|-----|-----|-----|------|
| Speed (Knots) | 60 | 90 | 120 | 150 | 180 | 210 |
| Rate (Feet/Min) | 300 | 450 | 600 | 750 | 900 | 1050 |

SUMAR ONE DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500 FT or above, turn left within 4NM (OWE 5DME), via 201DEG from OW NDB (OWE R-220) until intercepting YOE R-299,....

RWY 14R/14L : Climb RWY HDG to 500 FT or above, turn right, via HDG230 DEG until intercepting YOE R-299,....
turn right to intercept and proceed via YOE R-290 to SUMAR.

Note 1 : OWE R-220 for RWY32R/32L is to be utilized only during the outage of OW NDB.

Note 2 : Following climb gradient should be maintained until 2,500FT

| | | | | | | |
|-----------------|-----|-----|-----|-----|-----|------|
| Speed (Knots) | 60 | 90 | 120 | 150 | 180 | 210 |
| Rate (Feet/Min) | 300 | 450 | 600 | 750 | 900 | 1050 |

