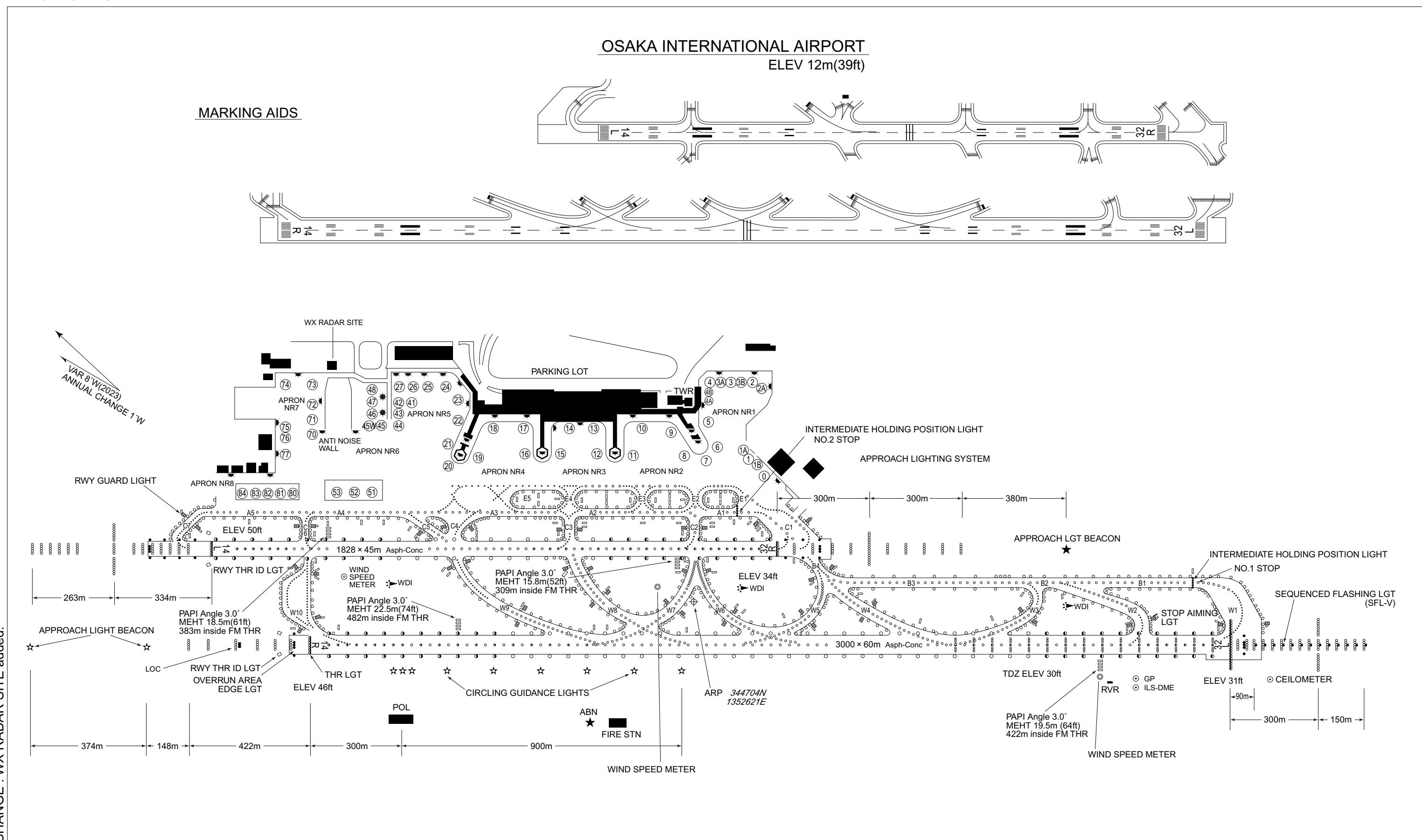
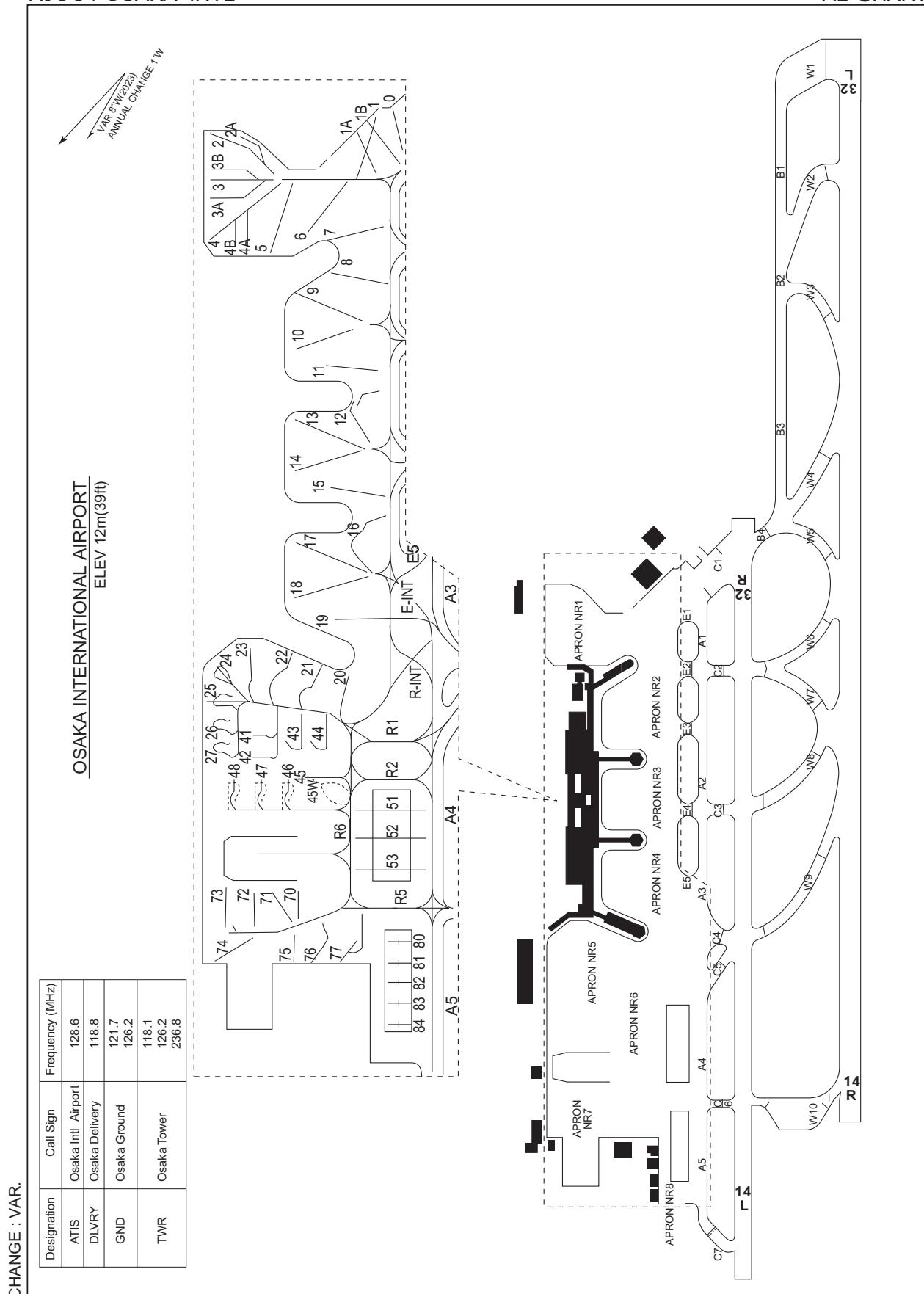


## AERODROME CHART



RJOO / OSAKA INTL

AD CHART

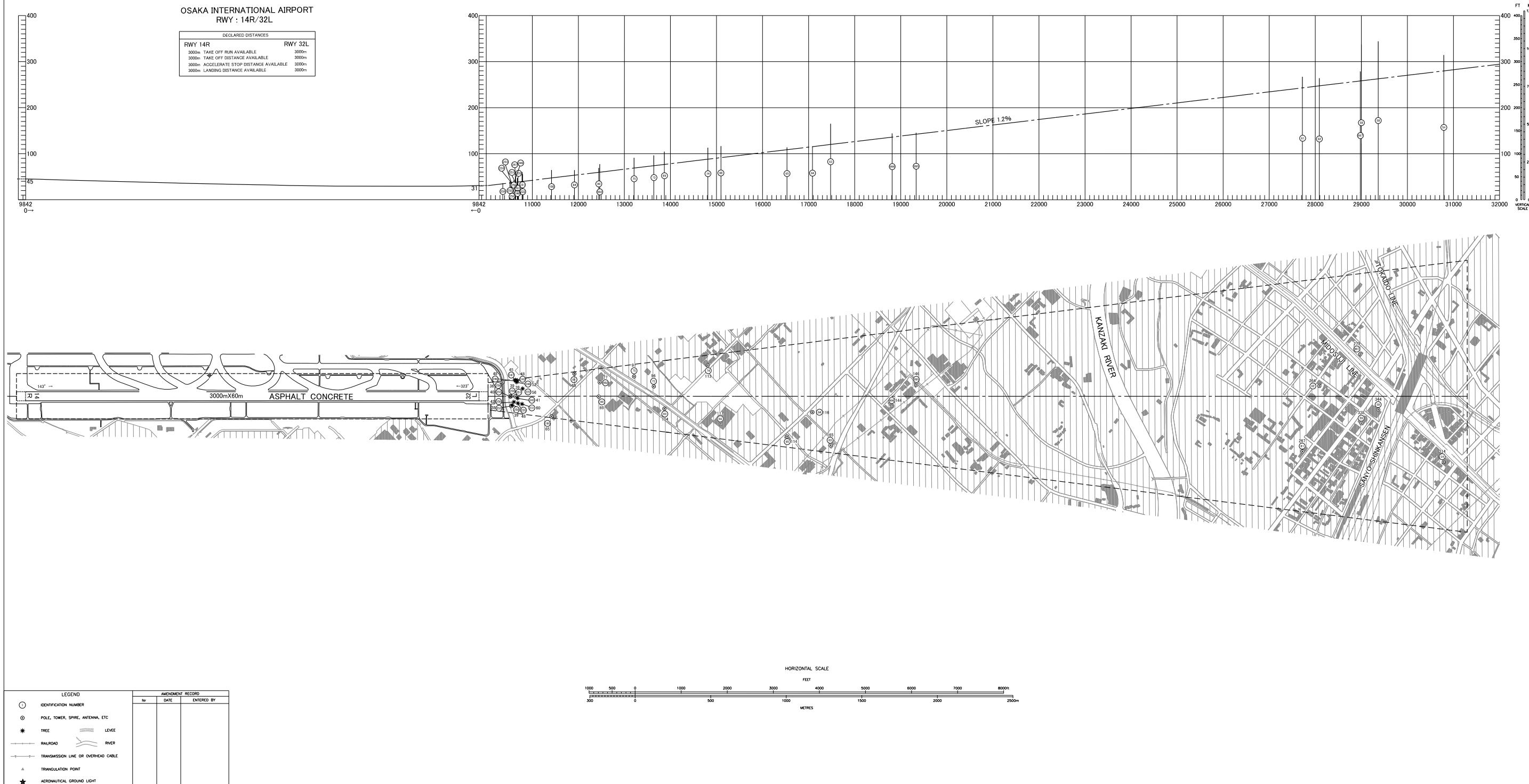


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DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 8° W-FEB 2022

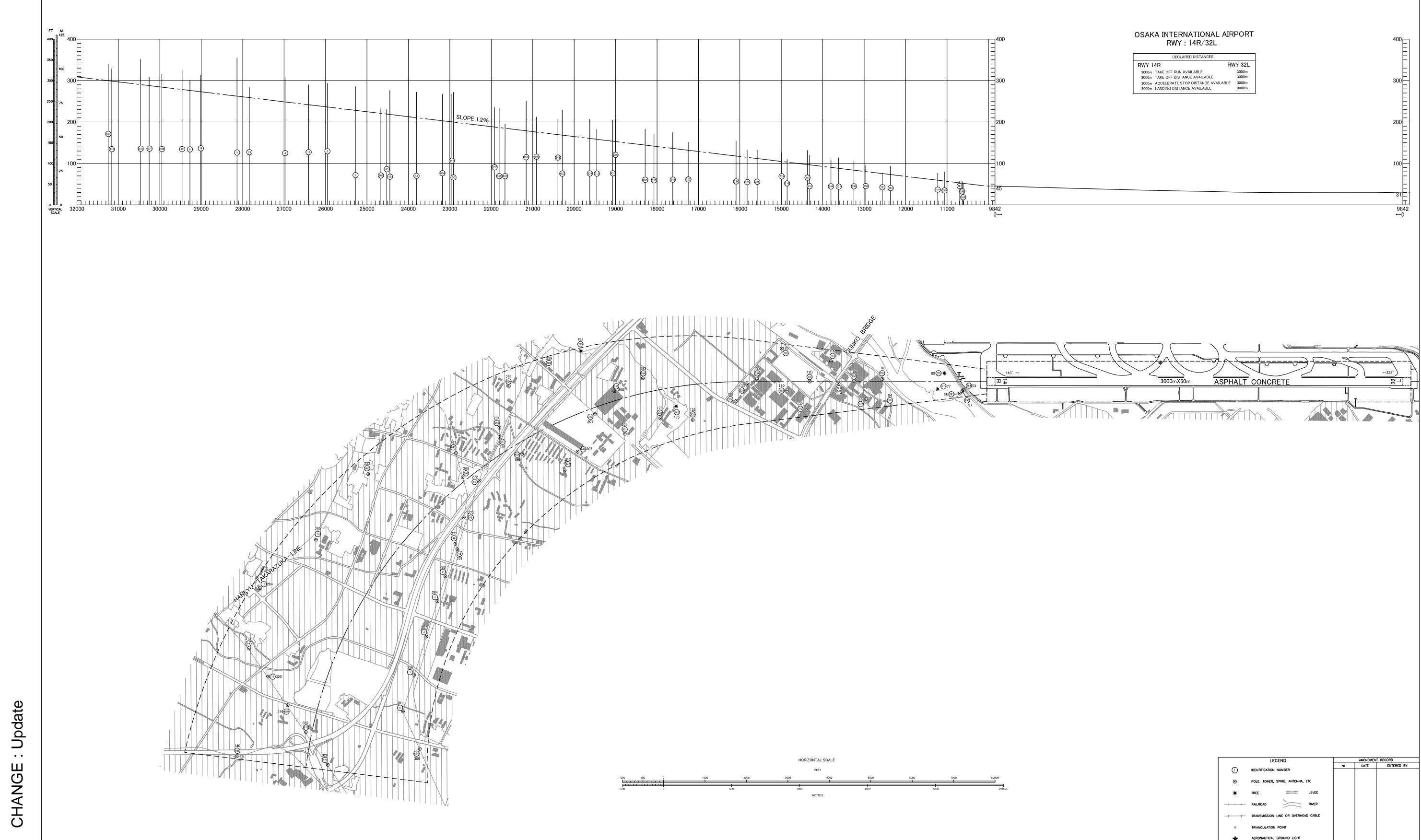
AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

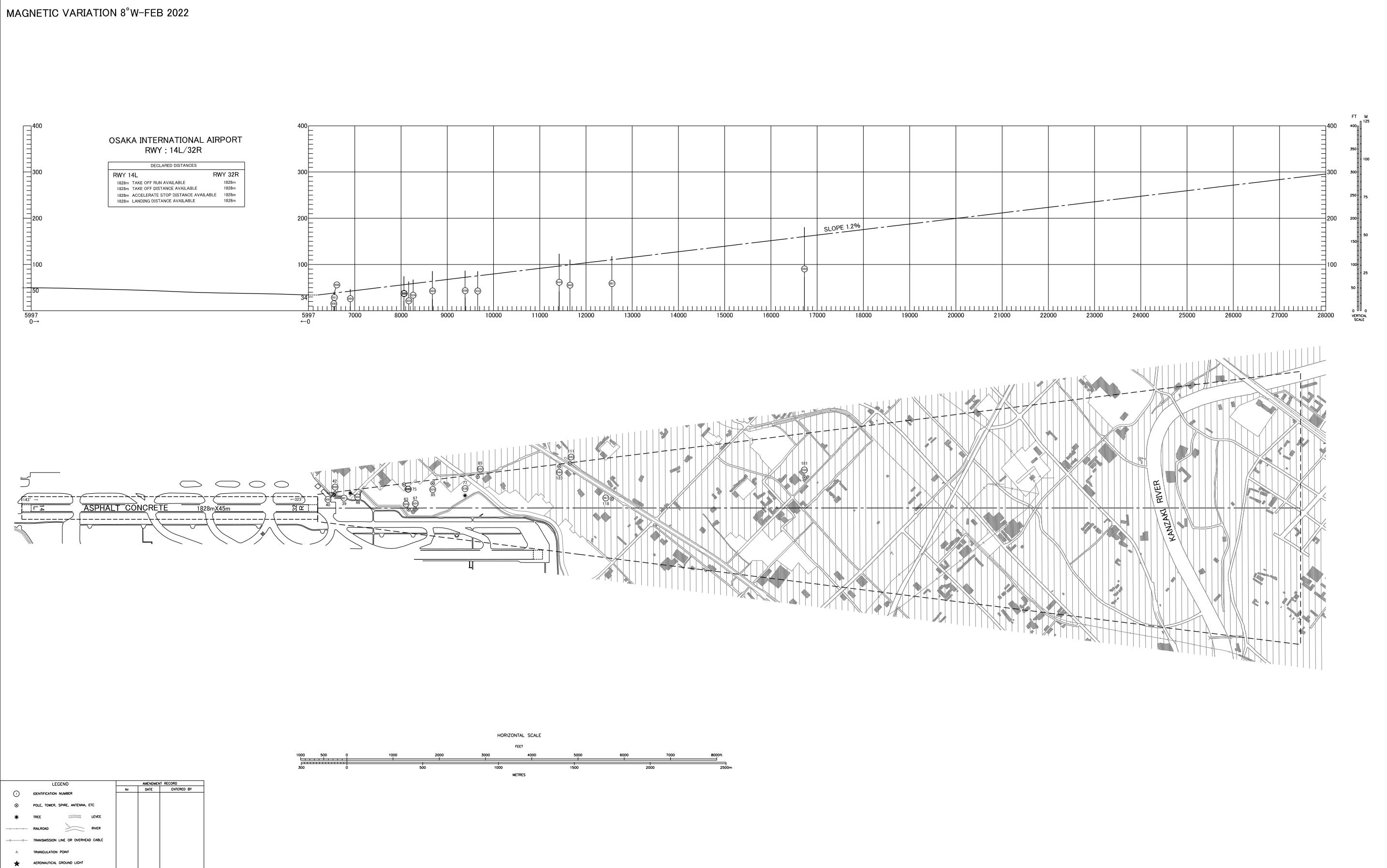
AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

MAGNETIC VARIATION 8°W-FEB 2022



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

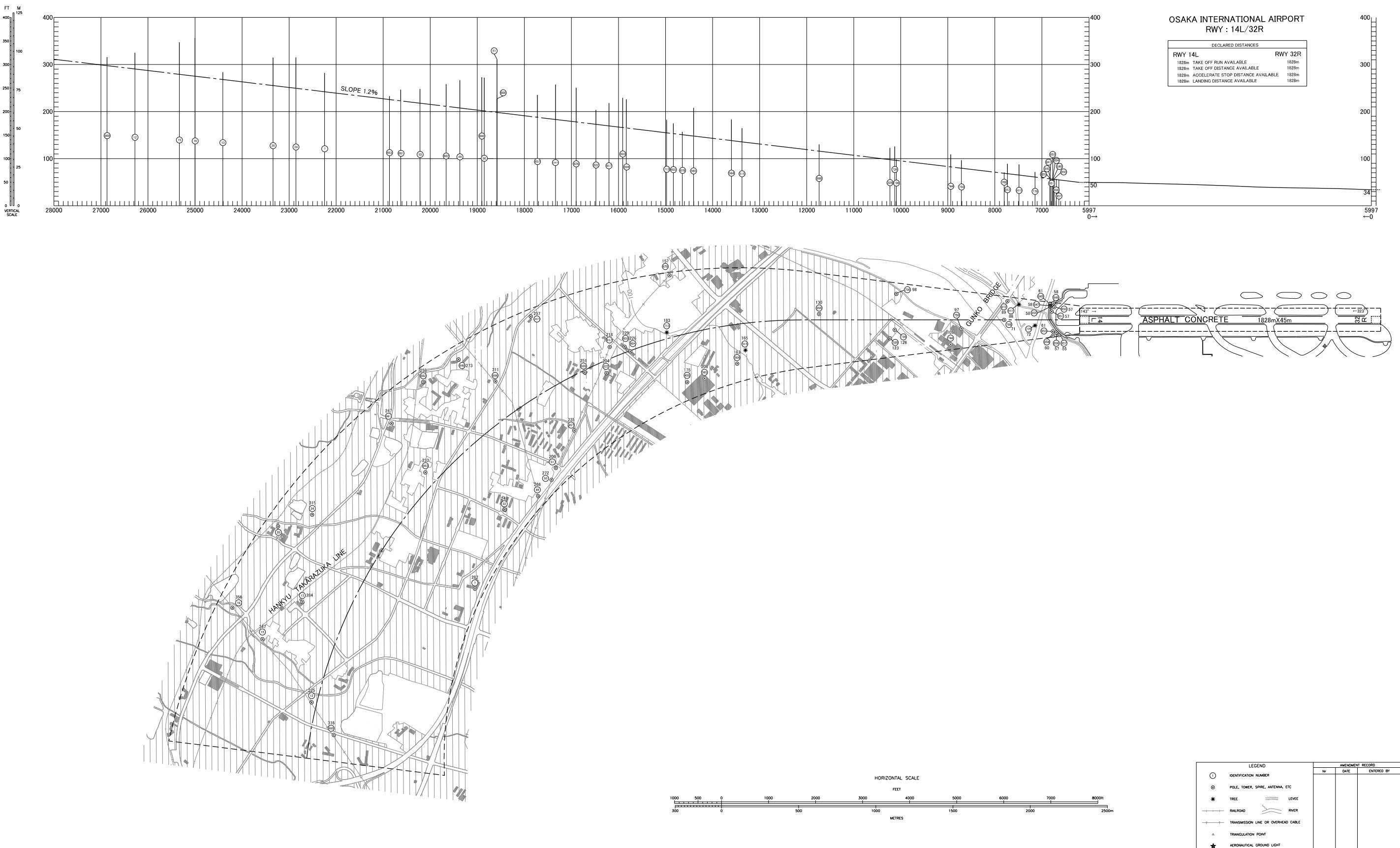
AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

MAGNETIC VARIATION 8° W-FEB 2022



# AERODROME OBSTACLE CHART-ICAO TYPE B

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



CHANGE : Update

## STANDARD DEPARTURE CHART -INSTRUMENT

RJOO / OSAKA INTL

SID

ASUKA FOUR DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/ITE 2.1DME,...

RWY 14R/14L : Climb RWY HDG to 500FT or above, turn left,...  
...via ITE R101 to ASUKA.

Cross ASUKA at or above 5000FT.

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 |

PANAS ONE DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/ITE 2.1DME,...

RWY 14R/14L : Climb RWY HDG to 500FT or above, turn left,...  
...via ITE R101 to PANAS.

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 |

CHANGE: New PROC(PANAS ONE DEPARTURE).



## STANDARD DEPARTURE CHART -INSTRUMENT



CHANGE : Description of VAR and PROC name.

| 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              | PANAS               | -        | -             | -8.0               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | BYODO               | -        | 027 (018.6)   | -8.0               | 9.0           | -              | +6000         | -            | -              | RNAV1                    |
| 003           | TF              | REVOL               | -        | 027 (018.6)   | -8.0               | 33.6          | -              | +11000        | -            | -              | RNAV1                    |
| 004           | TF              | KMC                 | -        | 027 (018.7)   | -8.0               | 59.5          | -              | -             | -            | -              | RNAV1                    |

## STANDARD DEPARTURE CHART -INSTRUMENT

RJOO / OSAKA INTL

SID

IZUMI ONE DEPARTURE

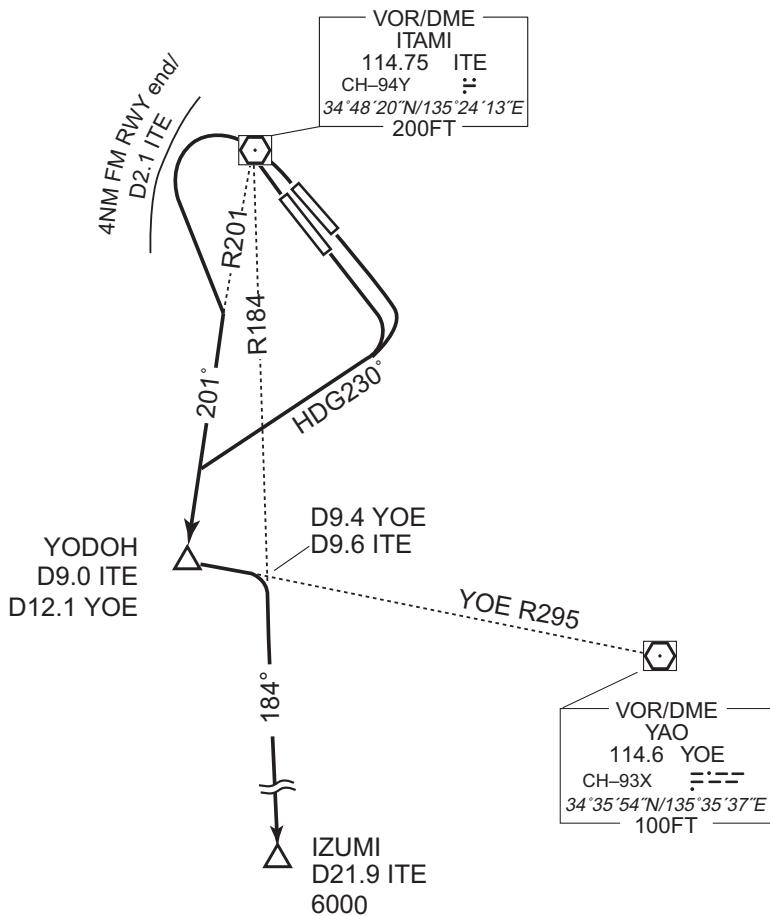
RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/ITE 2.1DME, via ITE R201 to YODOH,...

RWY 14R/14L : Climb RWY HDG to 500FT or above, turn right HDG230° to intercept and proceed via ITE R201 to YODOH,...  
...turn left, via YOE R295 to intercept and proceed via ITE R184 to IZUMI.  
Cross IZUMI at or above 6000FT.

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 |

CHANGE : Description of PROC name.



## STANDARD DEPARTURE CHART -INSTRUMENT

RJOO / OSAKA INTL

SID

EAST REVERSAL FOUR DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/ITE 2.1DME,...

RWY 14R/14L : Climb RWY HDG to 500FT or above, turn left,...  
...via ITE R101 to 3000FT or above, turn left direct to ITE VOR/DME within ITE 14.0DME.

Cross ITE VOR/DME at assigned altitude.

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 |

CHANGE : Description of PROC name.



STANDARD DEPARTURE CHART -INSTRUMENT

AIP JAPAN  
RJOO / OSAKA INTL

SID

**TIGER TWO DEPARTURE**

**RWY 32R/32L :** Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/ITE 2.1DME, via ITE R201 until crossing YOE R301...

**RWY 14R/14L :** Climb RWY HDG to 500FT or above, turn right HDG230° until crossing YOE R301...

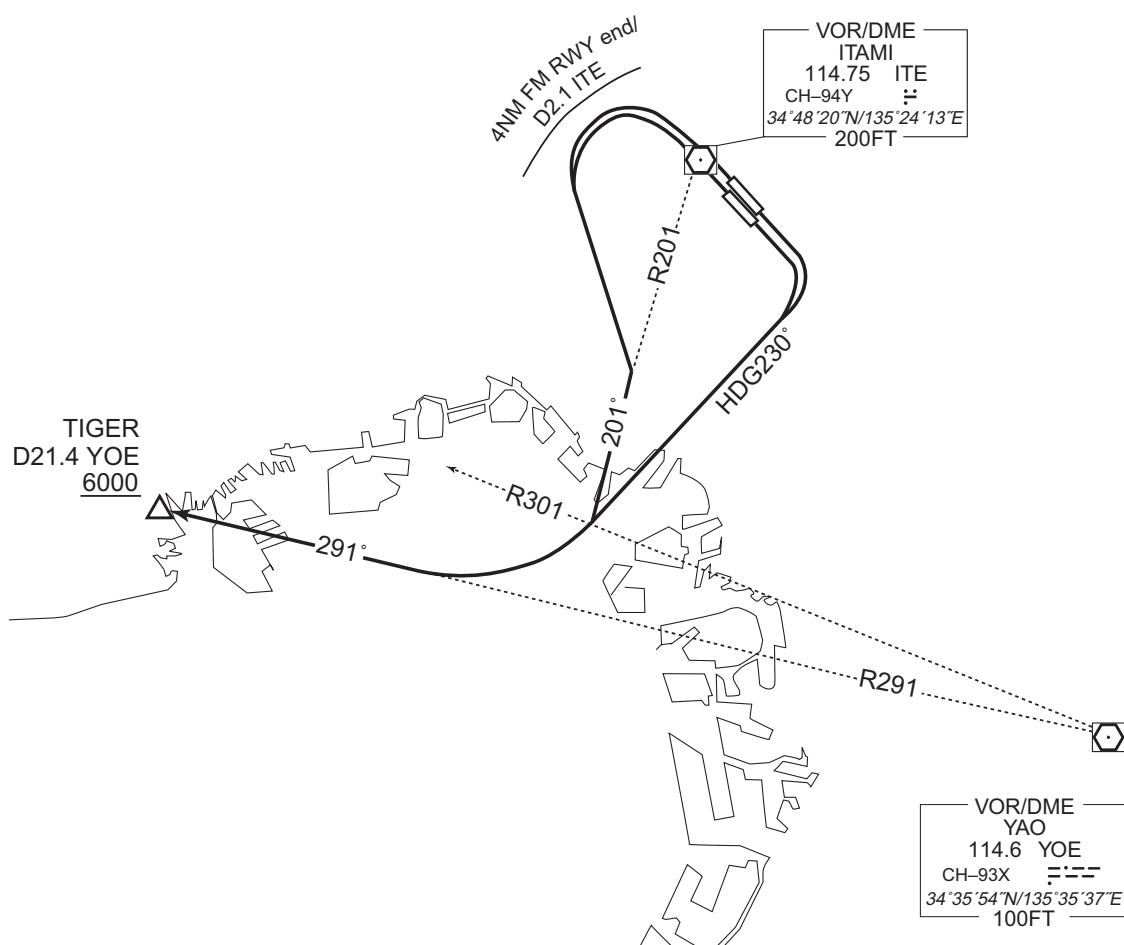
...turn right to intercept and proceed via YOE R291 to TIGER.

Cross TIGER at or above 6000FT.

Note : Following climb gradient should be maintained until 2500FT.

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

CHANGE : Description of PROC name.



## STANDARD DEPARTURE CHART -INSTRUMENT

RJOO / OSAKA INTL

TRANSITION

KAGAWA TRANSITION

From over TIGER, via YOE R291 to SUMAR, via ITE R260 to intercept and proceed via KTE R057 to KTE VOR/DME.

Cross SUMAR at or above 9000FT, cross ITE R260/43.1DME at or above FL180.



CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART -INSTRUMENT

RJOO / OSAKA INTL

TRANSITION

ASAGI TRANSITION

From over TIGER, via KCE R324 to ASAGI.  
Cross KCE R324/22.4DME at or above 7000FT.

TOZAN TRANSITION

From over TIGER, via KCE R324 to TOZAN, via ASAGI.  
Cross KCE R324/22.4DME at or above 7000FT, cross KCE R324/47.0DME at or above 10000FT.

BUMER TRANSITION

From over TIGER, via YOE R291 to intercept and proceed via KCE R311 to BUMER.

CHANGE : TOZAN TRANSITION. Radial FM KCE.



## STANDARD DEPARTURE CHART-INSTRUMENT

RJOO / OSAKA INTL

SID and TRANSITION

MINAC FOUR DEPARTURE

RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/ITE 2.1DME,...

RWY 14R/14L : Climb RWY HDG to 500FT or above, turn left,...  
...via ITE R101 to intercept and proceed via KCE R077 to MINAC.

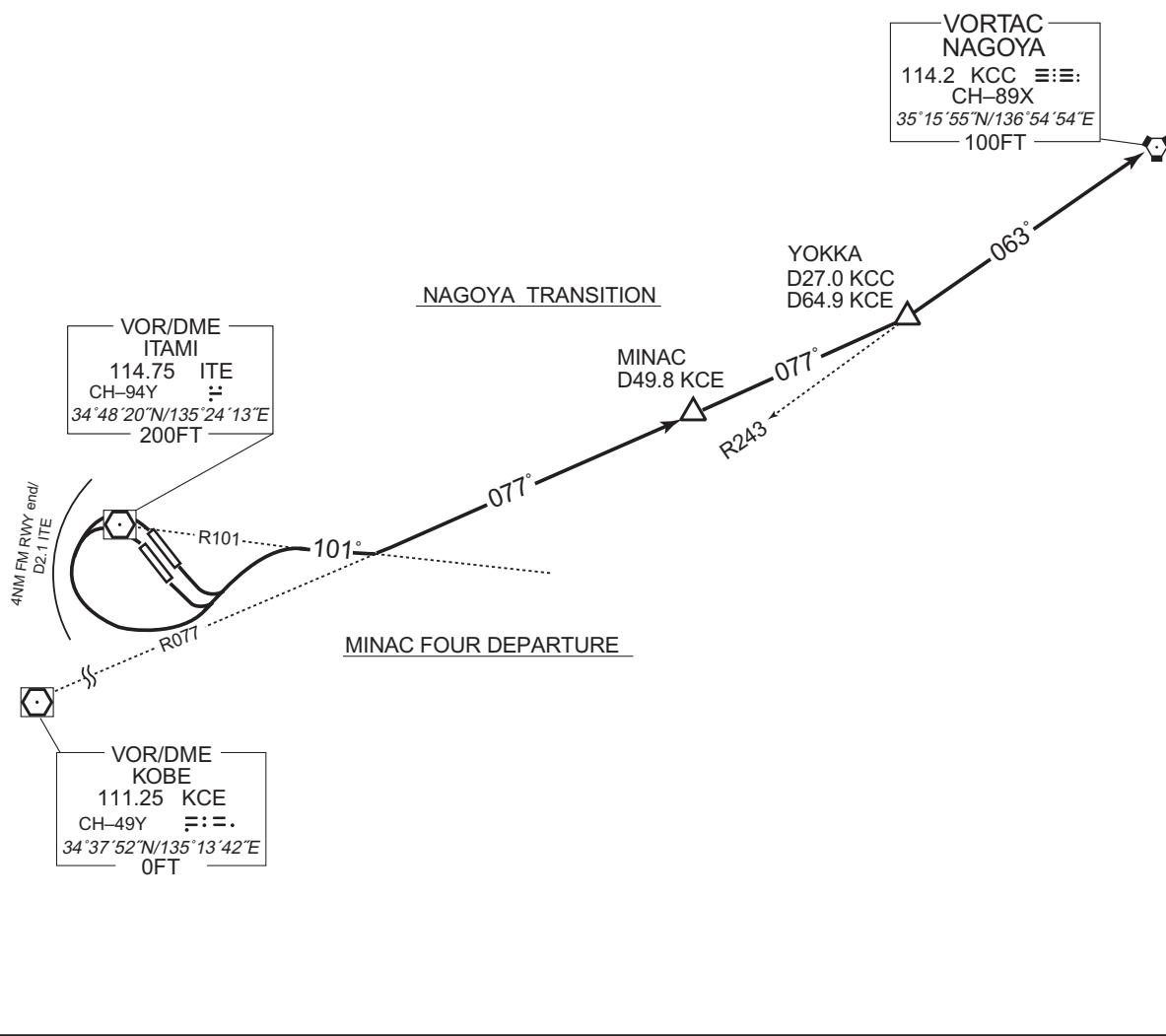
Note: When take off RWY14R/14L, following climb gradient should be maintained until 500FT.

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

NAGOYA TRANSITION

From over MINAC, via KCE R077 to YOKKA, via KCC R243 to KCC VORTAC.

CHANGE : PROC renamed. Radial FM KCE.

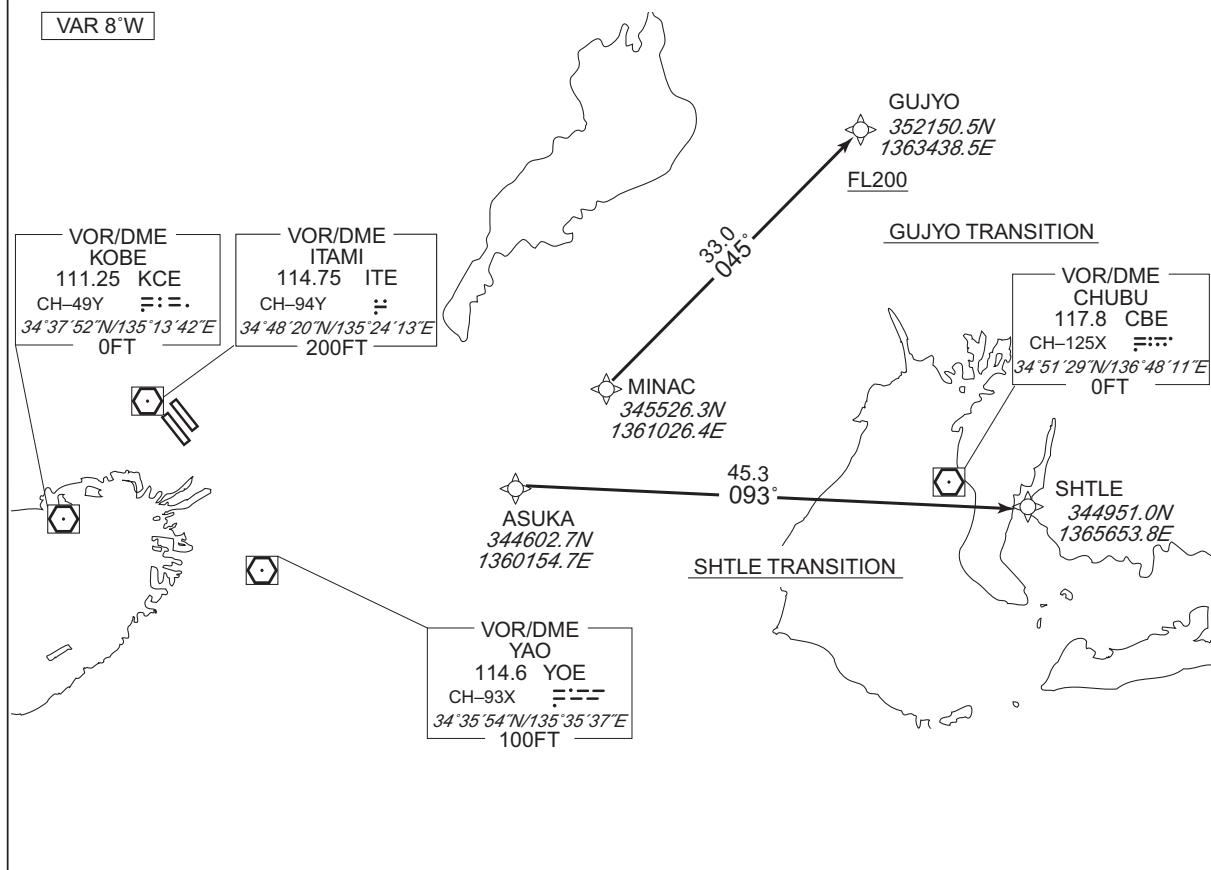


STANDARD DEPARTURE CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV TRANSITION

| GUJYO TRANSITION / SHTLE TRANSITION                                   |                       | RNAV1  |
|---|-----------------------|--|
| NOTE 1 ) DME/DME/IRU or GNSS required.<br>2 ) RADAR service required. | Critical DME          | -  |
|   | DME GAP               | -  |
|   | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVADs for RNAV1 |



GUJYO TRANSITION

From MINAC, to GUJYO at or above FL200.

| 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              | MINAC               | —        | —             | -8.0               | —             | —              | —             | —            | —              | RNAV1                    |
| 002           | TF              | GUJYO               | —        | 045 (036.7)   | -8.0               | 33.0          | —              | +FL200        | —            | —              | RNAV1                    |

SHTLE TRANSITION

From ASUKA, to SHTLE.

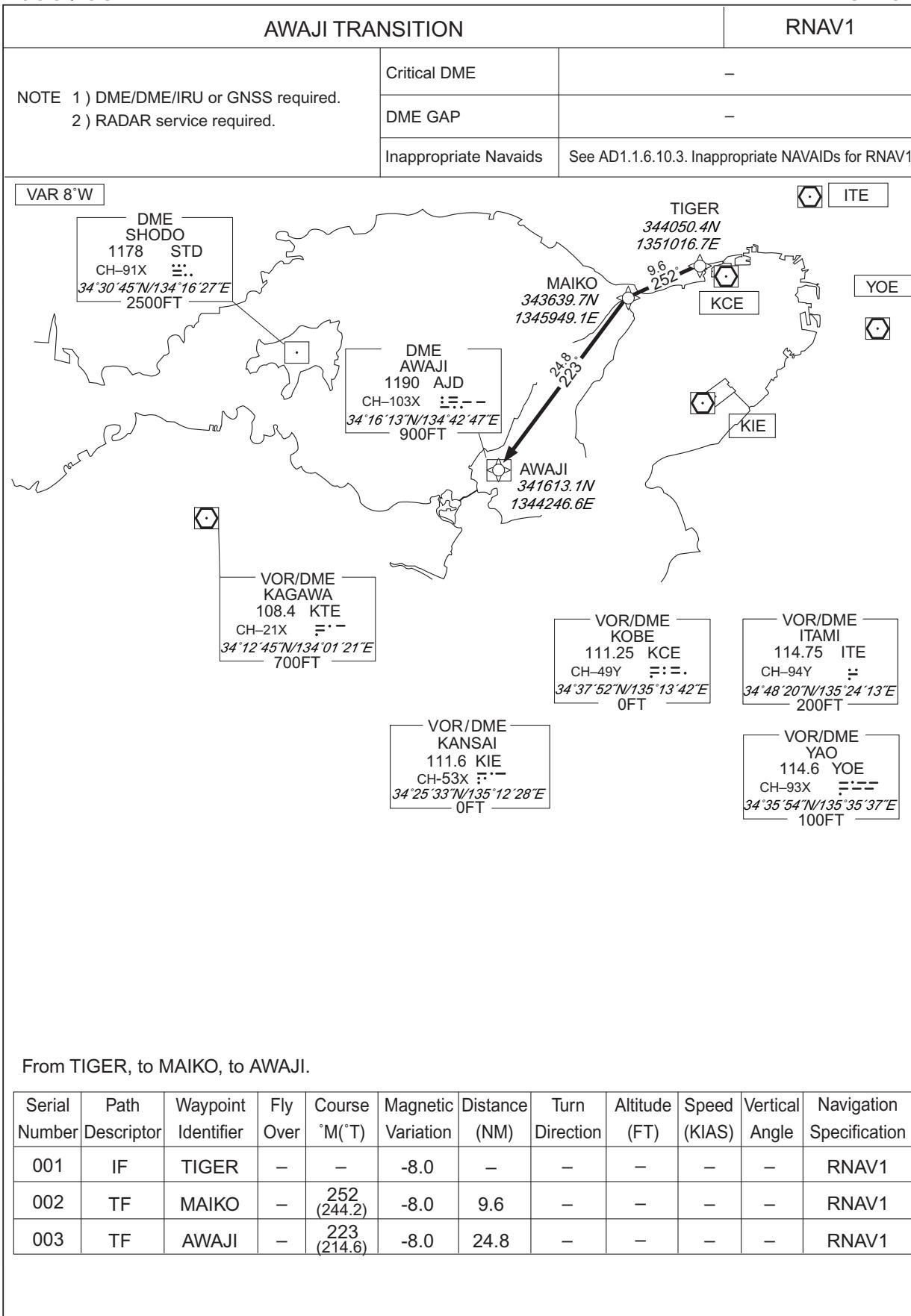
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001           | IF              | ASUKA               | —        | —             | -8.0               | —             | —              | —             | —            | —              | RNAV1                    |
| 002           | TF              | SHTLE               | —        | 093 (084.9)   | -8.0               | 45.3          | —              | —             | —            | —              | RNAV1                    |

CHANGE : Description of VAR.

## STANDARD DEPARTURE CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV TRANSITION

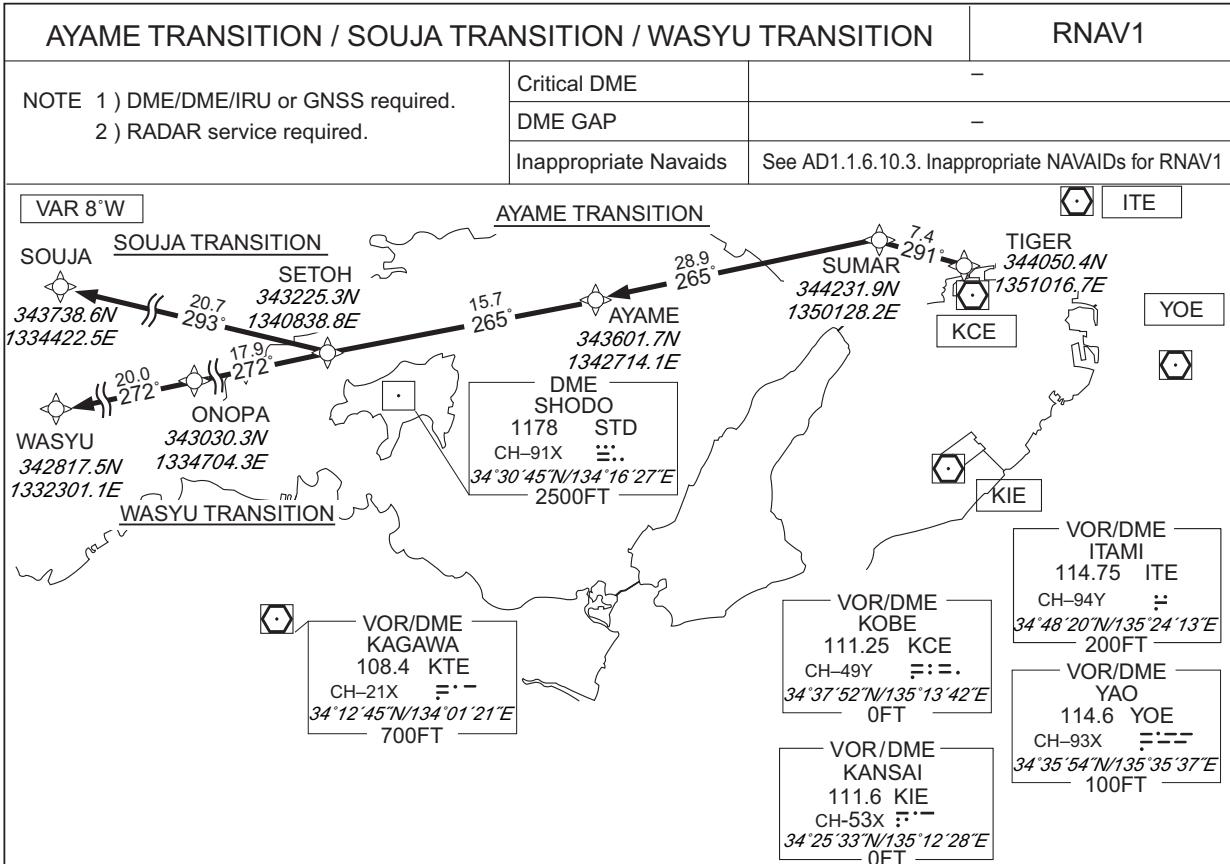


CHANGE : TAKAMATSU TACAN abolished.

STANDARD DEPARTURE CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV TRANSITION



AYAME TRANSITION

From TIGER, to SUMAR, to AYAME.

| 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              | TIGER               | -        | -                | -8.1               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | SUMAR               | -        | (291)<br>(283.2) | -8.1               | 7.4           | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | AYAME               | -        | (265)<br>(257.2) | -8.1               | 28.9          | -              | -             | -            | -              | RNAV1                    |

CHANGE : TAKAMATSU TACAN abolished.

SOUJA TRANSITION

From TIGER, to SUMAR, to AYAME, to SETOH, to SOUJA.

| 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              | TIGER               | -        | -                | -8.1               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | SUMAR               | -        | (291)<br>(283.2) | -8.1               | 7.4           | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | AYAME               | -        | (265)<br>(257.2) | -8.1               | 28.9          | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | SETOH               | -        | (265)<br>(256.8) | -8.1               | 15.7          | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | SOUJA               | -        | (293)<br>(284.8) | -8.1               | 20.7          | -              | -             | -            | -              | RNAV1                    |

## STANDARD DEPARTURE CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV TRANSITION

## WASYU TRANSITION

From TIGER, to SUMAR, to AYAME, to SETOH, to ONOPA, to WASYU.

| 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              | TIGER               | —        | —              | -8.1               | —             | —              | —             | —            | —              | RNAV1                    |
| 002           | TF              | SUMAR               | —        | 291<br>(283.2) | -8.1               | 7.4           | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | AYAME               | —        | 265<br>(257.2) | -8.1               | 28.9          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | SETOH               | —        | 265<br>(256.8) | -8.1               | 15.7          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | ONOPA               | —        | 272<br>(263.9) | -8.1               | 17.9          | —              | —             | —            | —              | RNAV1                    |
| 006           | TF              | WASYU               | —        | 272<br>(263.7) | -8.1               | 20.0          | —              | —             | —            | —              | RNAV1                    |

CHANGE : VAR. PROC course. ONOPA established.

STANDARD ARRIVAL CHART-INSTRUMENT

RJOO / OSAKA INTL

STAR

IZUMI ARRIVAL

From over IZUMI, via ITE 21.9DME counter-clockwise ARC to intercept and proceed via ITE R141 to IKOMA.

Cross ITE R141/19.0DME at or above 4000FT, cross IKOMA at or above 3500FT.

AGPUK ARRIVAL

From over AGPUK, via YOE R113 to intercept and proceed via ITE R141 to IKOMA.

Cross AGPUK at or above 9000FT, cross YOE R113/21.0DME at or above 4700FT, cross ITE R141/19.0DME at or above 4000FT, cross IKOMA at or above 3500FT.

CHANGE : AGPUK ARRIVAL established.



## STANDARD ARRIVAL CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV STAR RWY32L/32R

IKOMA EAST ARRIVAL / IKOMA NORTH ARRIVAL

RNAV1

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

VAR 8°W

ROKKO  
350700.6N  
1351800.9E  
7000

VOR/DME  
ITAMI  
114.75 ITE  
CH-94Y  
34°48'20"N/135°24'13"E  
200FT

KAMEO  
345702.7N  
1352804.2E  
7000

VOR/DME  
KOB  
111.25 KCE  
CH-49Y  
34°37'52"N/135°13'42"E  
0FT

IKOMA NORTH ARRIVAL22.8°  
148°MAX 210KIAS for  
IKOMA NORTH  
ARRIVAL

IKOMA  
343616.7N  
1353914.8E  
3500

VOR/DME  
KANSAI  
111.6 KIE  
CH-53X  
34°25'33"N/135°12'28"E  
0FT

ABENO  
343532.4N  
1354155.6E  
2.3  
296°  
5.0  
226°  
10.5  
297°

MAX 210KIAS for  
IKOMA NORTH  
ARRIVALIKOMA EAST ARRIVAL

MIRAI  
343212.6N  
1355358.1E  
6000  
9.5  
297°  
AGPUK  
342908.3N  
1360451.3E

Using NAVAID

MIRAI  
D34.9 KIE  
R087  
KANSAI  
VOR/DME  
(KIE)  
MHA 6000  
MAX 230KIAS  
D41.0 KIE

Using NAVAID

D28.0 YOE  
351°  
KAMEO  
D22.0 YOE  
R351  
YAO  
VOR/DME  
(YOE)

CHANGE : Description of VAR.

Using NAVAID

ITAMI  
VOR/DME  
(ITE)  
R141  
IKOMA  
D17.3 ITE  
327°  
147°  
D22.0  
ITE

Using NAVAID

ITAMI  
VOR/DME  
(ITE)  
R138  
ABENO  
D19.4 ITE  
378°  
138°  
D24.0  
ITE

STANDARD ARRIVAL CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV STAR RWY32L/32R

IKOMA EAST ARRIVAL

From AGPUK, to MIRAI at or above 6000FT, to ABENO, to IKOMA at or above 3500FT.

|                       |   |
|-----------------------|---|
| Critical DME          | KCC : AGPUK – MIRAI                               |
| 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              | AGPUK               | –        | –             | -8.0               | –             | –              | –             | –            | –              | RNAV1                    |
| 002           | TF              | MIRAI               | –        | 297 (288.7)   | -8.0               | 9.5           | –              | +6000         | –            | –              | RNAV1                    |
| 003           | TF              | ABENO               | –        | 297 (288.6)   | -8.0               | 10.5          | –              | –             | –            | –              | RNAV1                    |
| 004           | TF              | IKOMA               | –        | 296 (288.5)   | -8.0               | 2.3           | –              | +3500         | –            | –              | RNAV1                    |

IKOMA NORTH ARRIVAL

From ROKKO at or above 7000FT, to KAMEO at or above 7000FT, to OTABE, to ABENO, to IKOMA at or above 3500FT.

|                       |   |
|-----------------------|---|
| Critical DME          | ITE : 9.9NM to KAMEO – KAMEO<br>YME : 19.7NM to OTABE – 13.7NM to OTABE |
| 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              | ROKKO               | –        | –             | -8.0               | –             | –              | +7000         | –            | –              | RNAV1                    |
| 002           | TF              | KAMEO               | –        | 148 (140.4)   | -8.0               | 12.9          | –              | +7000         | –            | –              | RNAV1                    |
| 003           | TF              | OTABE               | –        | 148 (140.5)   | -8.0               | 22.8          | –              | –             | –            | –              | RNAV1                    |
| 004           | TF              | ABENO               | –        | 226 (218.0)   | -8.0               | 5.0           | –              | –             | -210         | –              | RNAV1                    |
| 005           | TF              | IKOMA               | –        | 296 (288.5)   | -8.0               | 2.3           | –              | +3500         | -210         | –              | RNAV1                    |

CHANGE : VAR. KODAI abolished. AGPUK established. PROC course.

## STANDARD ARRIVAL CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV STAR RWY32L/32R

## HABIK ARRIVAL

## RNAV1

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

VAR 8°W

VOR/DME  
ITAMI  
114.75 ITE  
CH-94Y  
 $34^{\circ}48'20''N/135^{\circ}24'13''E$   
200FT



VOR/DME  
KOBÉ  
111.25 KCE  
CH-49Y  
 $34^{\circ}37'52''N/135^{\circ}13'42''E$   
0FT

VOR/DME  
YAO  
114.6 YOE  
CH-93X  
 $34^{\circ}35'54''N/135^{\circ}35'37''E$   
100FT

IKOMA  
 $34^{\circ}36'16.7''N$   
 $135^{\circ}39'14.8''E$   
3500

VOR/DME  
KANSAI  
111.6 KIE  
CH-53X  
 $34^{\circ}25'33''N/135^{\circ}12'28''E$   
0FT

IZUMI  
 $34^{\circ}26'28.5''N$   
 $135^{\circ}23'1.3''E$

HABIK  
 $34^{\circ}32'46.8''N$   
 $135^{\circ}39'14.2''E$

Using NAVAID

IZUMI D12.6 YOE R229°  
YAO VOR/DME (YOE)  
D19.0 YOE  
MHA 4200 MAX 230KIAS

Using NAVAID

ITAMI VOR/DME (ITE) R141°  
IKOMA D17.3 ITE 141°  
D22.0 ITE 327°

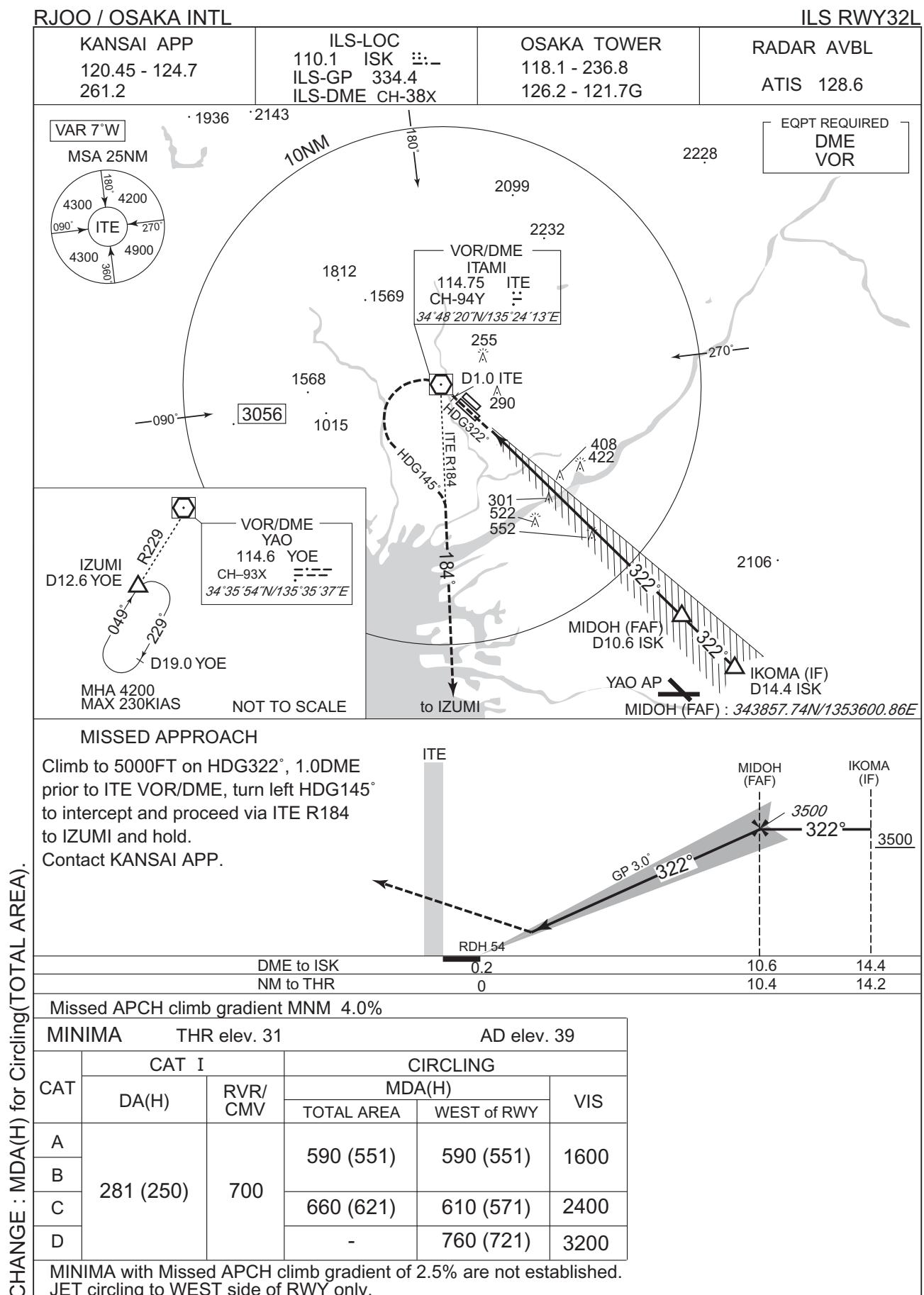
From IZUMI, to HABIK, to IKOMA at or above 3500FT.

|                       |   |
|-----------------------|---|
| Critical DME          | -   |
| DME GAP               | -   |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

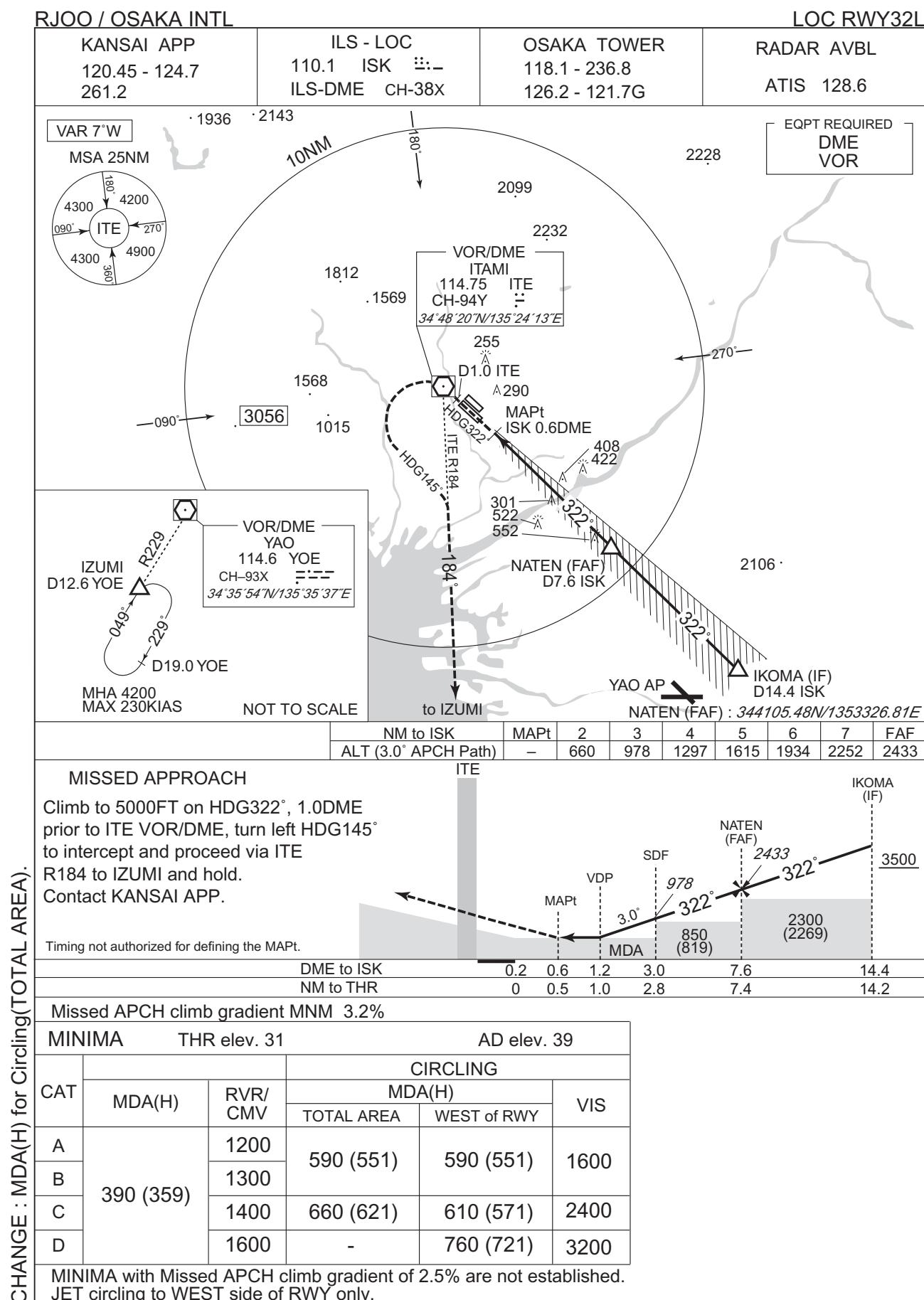
CHANGE : Description of VAR and PROC name.

| 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              | IZUMI               | -        | -                | -8.0               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | HABIK               | -        | (069)<br>(060.8) | -8.0               | 13.0          | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | IKOMA               | -        | (008)<br>(000.1) | -8.0               | 3.5           | -              | +3500         | -            | -              | RNAV1                    |

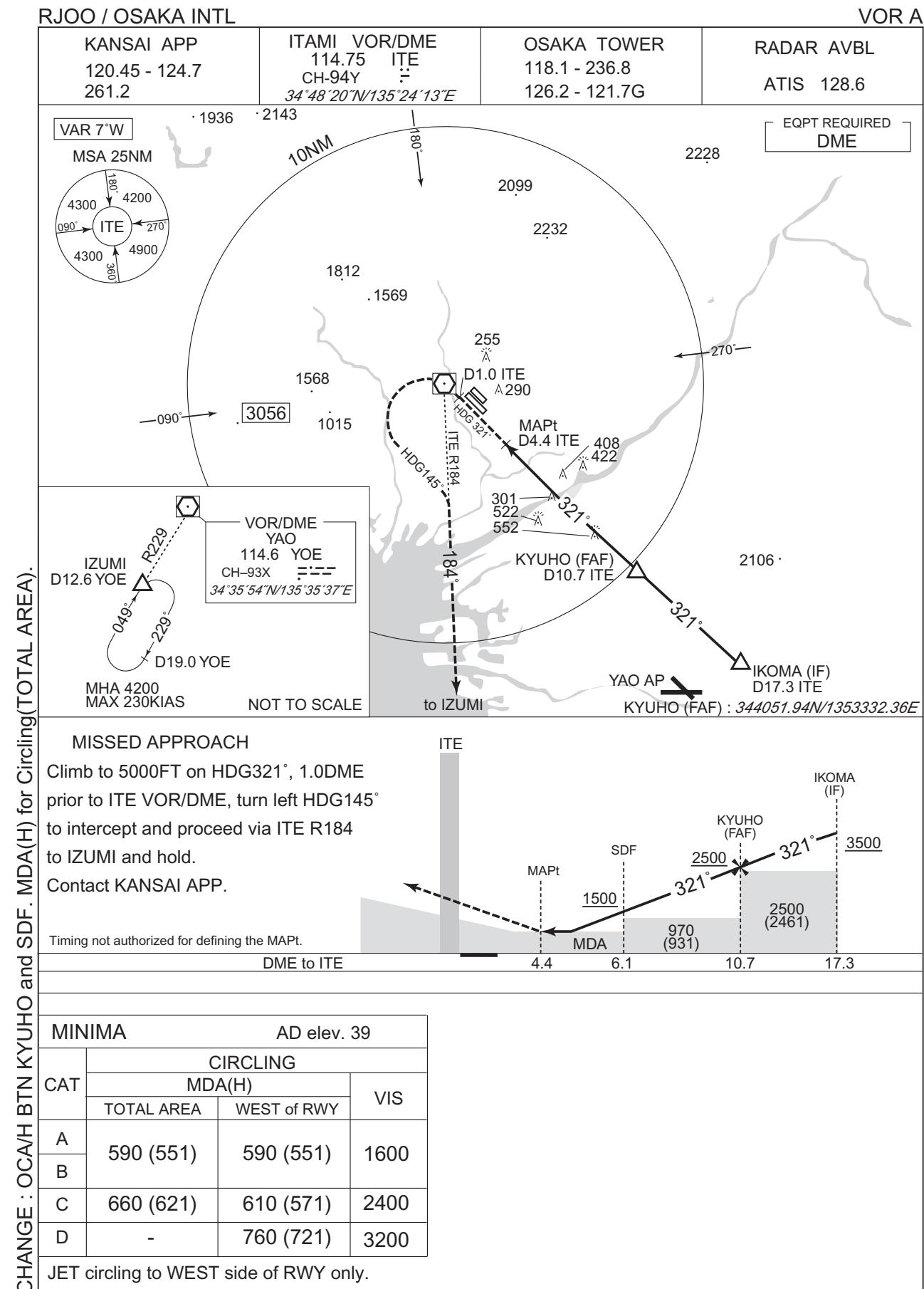
INSTRUMENT APPROACH CHART



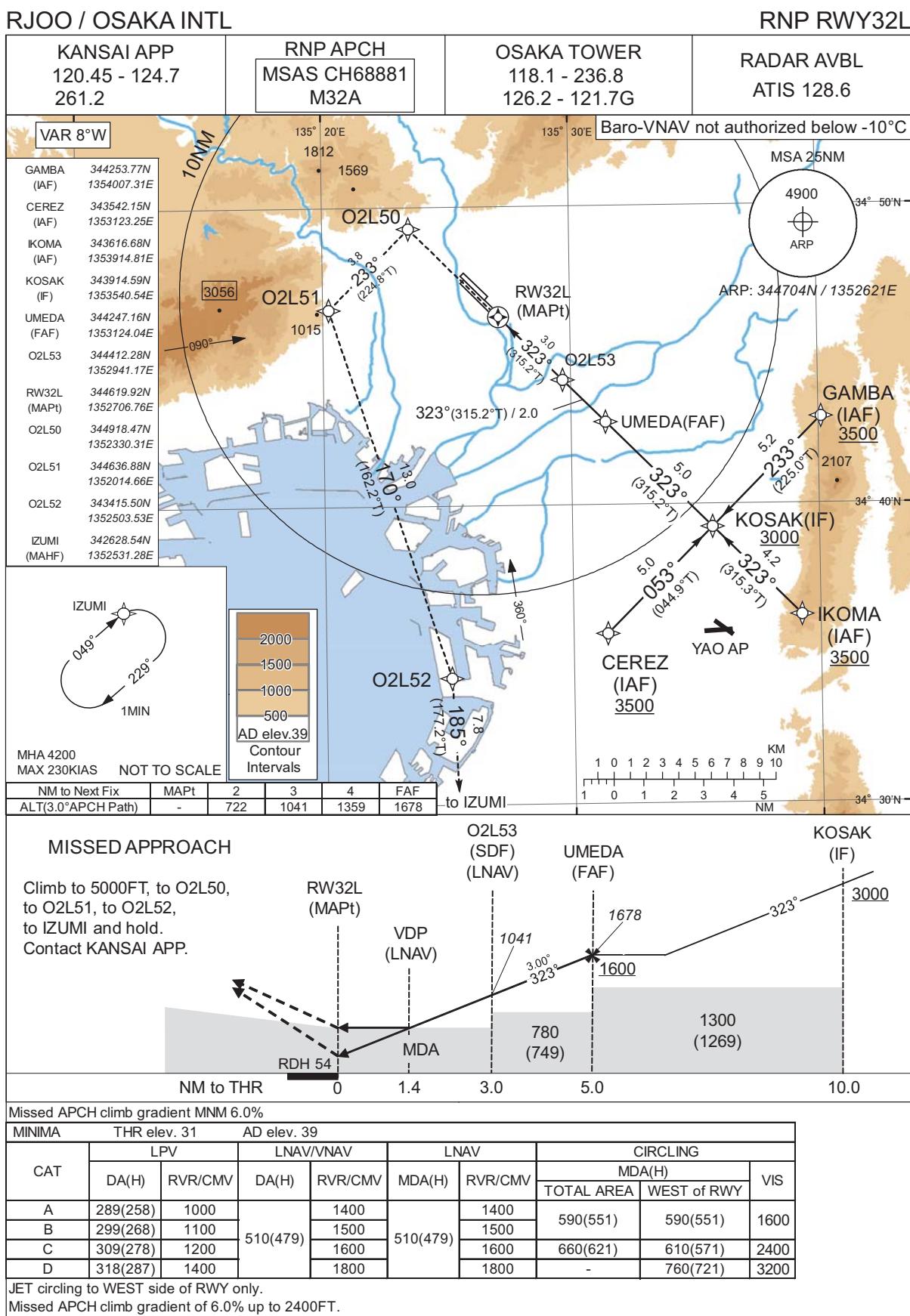
## INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJOO / OSAKA INTL

RNP RWY32L

**FAS DATA BLOCK**

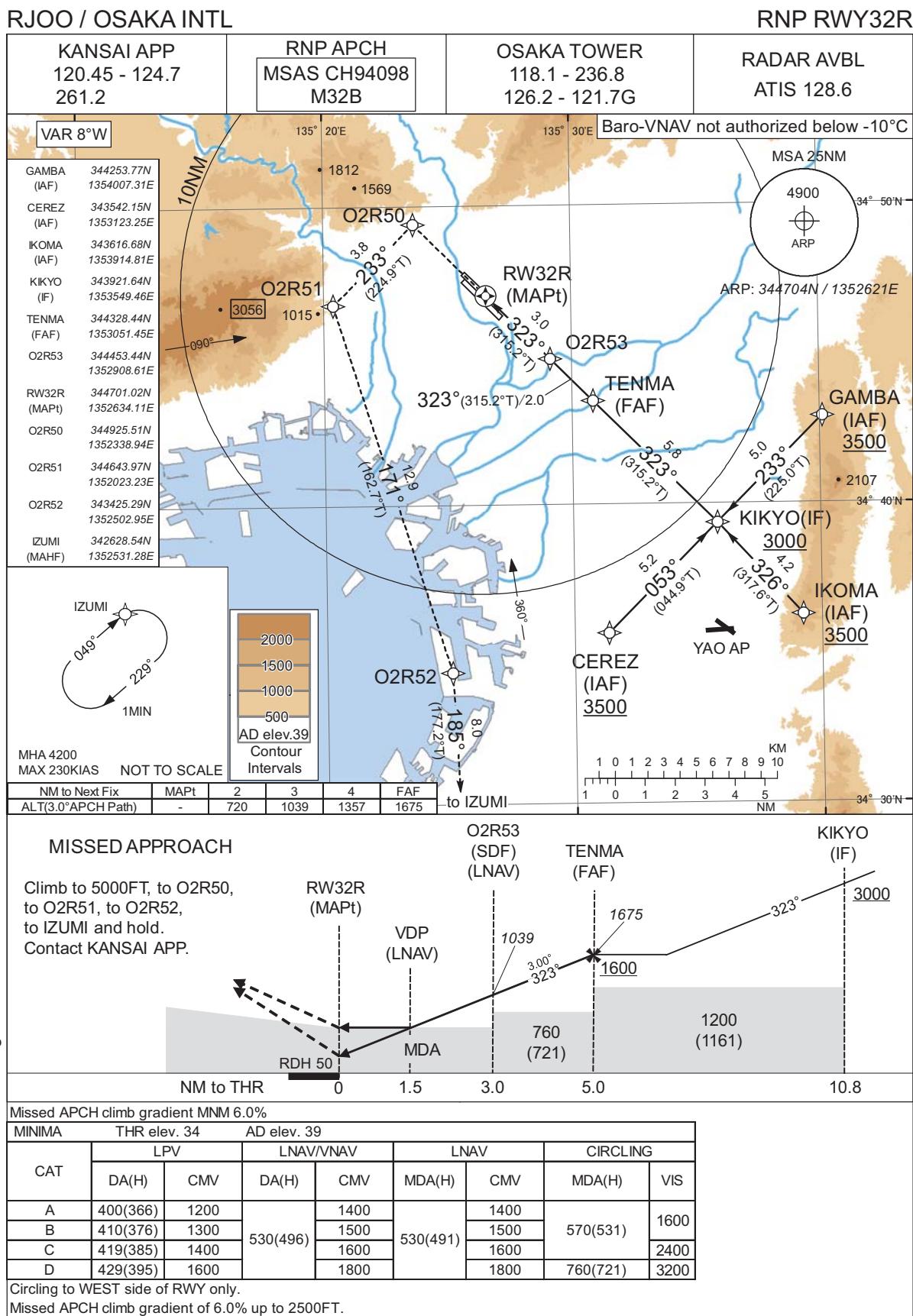
|                                  |               |                            |               |
|----------------------------------|---------------|----------------------------|---------------|
| Operation type                   | 0             | LTP/FTP ellipsoidal height | +00469        |
| SBAS service provider identifier | 2             | FPAP latitude              | 344728.7535N  |
| Airport identifier               | RJOO          | FPAP longitude             | 1352543.3300E |
| Runway                           | 323           | Threshold crossing height  | 00016.5       |
| Approach performance designator  | 0             | TCH units selector         | 1             |
| Route indicator                  |               | Glide path angle           | 03.00         |
| Reference path data selector     | 0             | Course width at threshold  | 105.00        |
| Reference path ID                | M32A          | △ length offset            | 0000          |
| LTP/FTP latitude                 | 344619.8985N  | HAL                        | 40.0          |
| LTP/FTP longitude                | 1352706.7455E | VAL                        | 50.0          |
| CRC remainder                    | D799CA35      |                            |               |

**Required additional data**

|                            |     |
|----------------------------|-----|
| LTP/FTP orthometric height | 9.6 |
|----------------------------|-----|

CHANGE : FAS DATA BLOCK, Required additional data established.

## INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJOO / OSAKA INTL

RNP RWY32R

**FAS DATA BLOCK**

|                                  |               |                            |               |
|----------------------------------|---------------|----------------------------|---------------|
| Operation type                   | 0             | LTP/FTP ellipsoidal height | +00478        |
| SBAS service provider identifier | 2             | FPAP latitude              | 344742.9515N  |
| Airport identifier               | RJOO          | FPAP longitude             | 1352543.2590E |
| Runway                           | 321           | Threshold crossing height  | 00015.0       |
| Approach performance designator  | 0             | TCH units selector         | 1             |
| Route indicator                  |               | Glide path angle           | 03.00         |
| Reference path data selector     | 0             | Course width at threshold  | 105.00        |
| Reference path ID                | M32B          | △ length offset            | 0000          |
| LTP/FTP latitude                 | 344700.9970N  | HAL                        | 40.0          |
| LTP/FTP longitude                | 1352634.0960E | VAL                        | 50.0          |
| CRC remainder                    | 49D4256C      |                            |               |

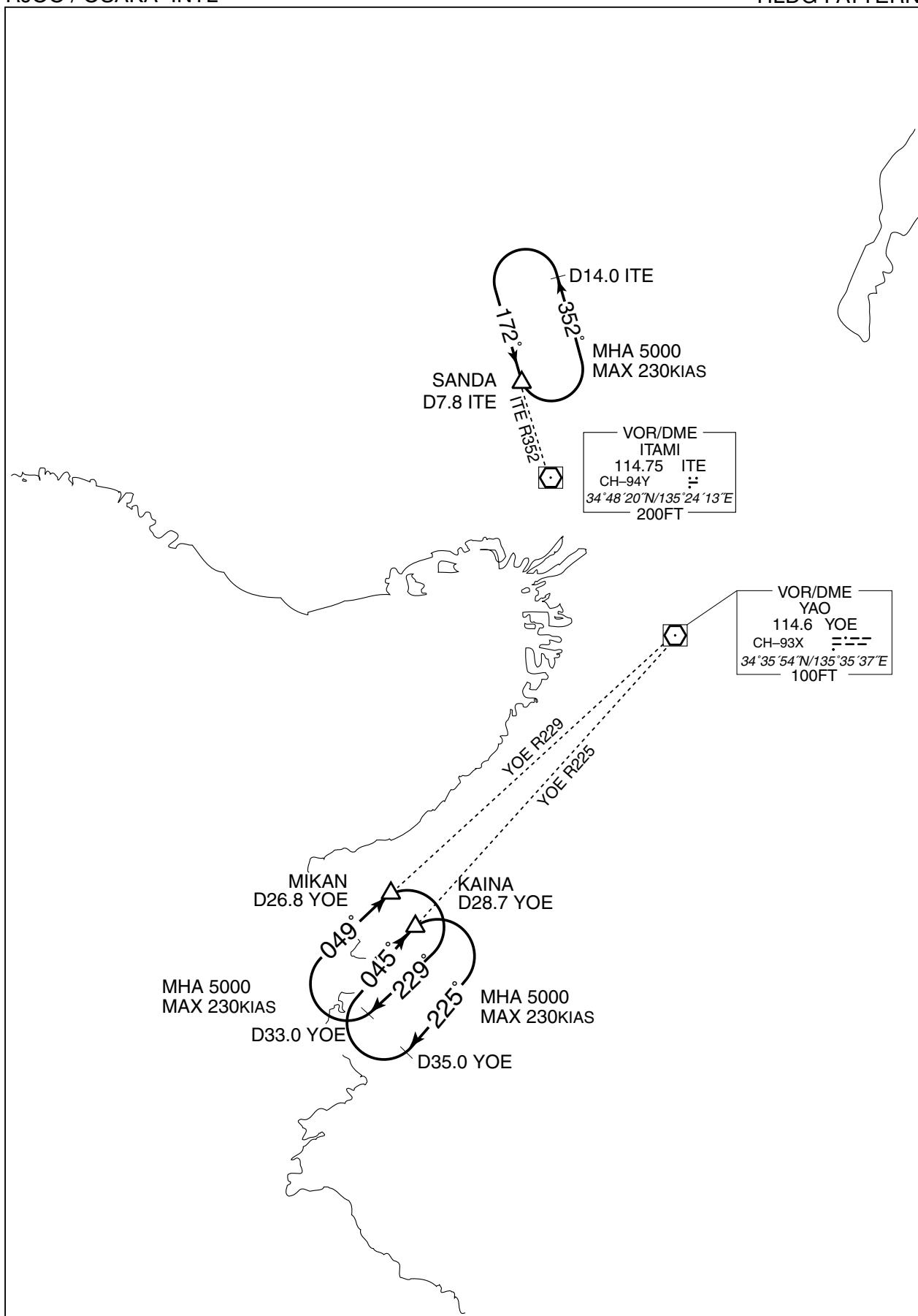
**Required additional data**

|                            |      |
|----------------------------|------|
| LTP/FTP orthometric height | 10.6 |
|----------------------------|------|

CHANGE : FAS DATA BLOCK, Required additional data established.

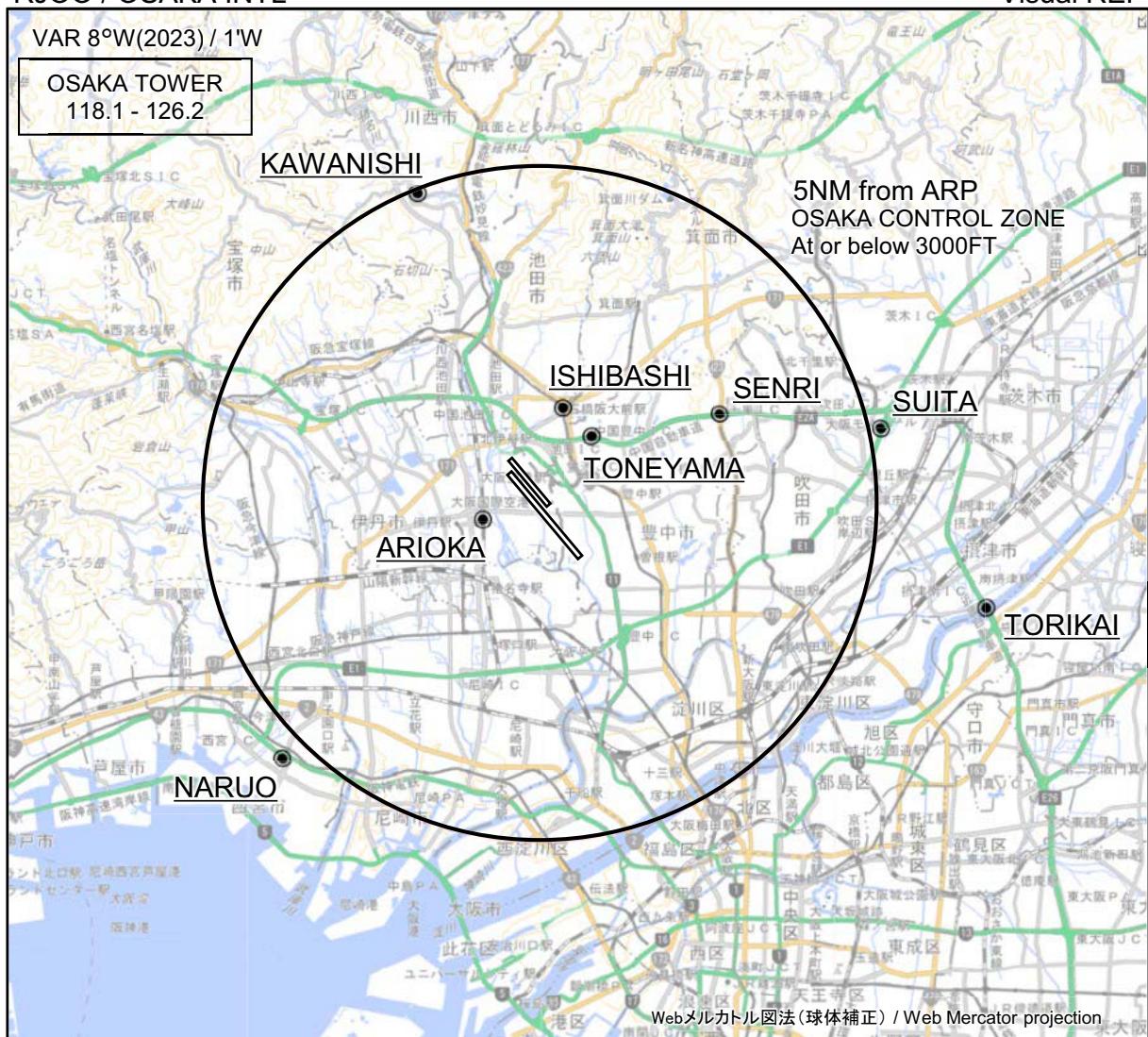
RJOO / OSAKA INTL

HLDG PATTERN



## RJOO / OSAKA INTL

## 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).

| Call sign       | BRG / DIST from ARP | Remarks                     |
|-----------------|---------------------|-----------------------------|
| 川西<br>Kawanishi | 339°T / 4.9NM       | 多田神社<br>Shrine              |
| 石橋<br>Ishibashi | 013°T / 1.5NM       | 阪急石橋阪大前駅<br>Station         |
| 千里<br>Senri     | 063°T / 3.0NM       | 千里インターチェンジ<br>Interchange   |
| 吹田<br>Suita     | 077°T / 5.2NM       | 吹田ジャンクション<br>Junction       |
| 刀根山<br>Toneyama | 037°T / 1.2NM       | 中国豊中インターチェンジ<br>Interchange |
| 有岡<br>Arioka    | 255°T / 0.9NM       | JR伊丹駅<br>Station            |
| 鳥飼<br>Torikai   | 103°T / 6.8NM       | 鳥飼大橋<br>Bridge              |
| 鳴尾<br>Naruo     | 225°T / 5.4NM       | 甲子園球場<br>Baseball ground    |

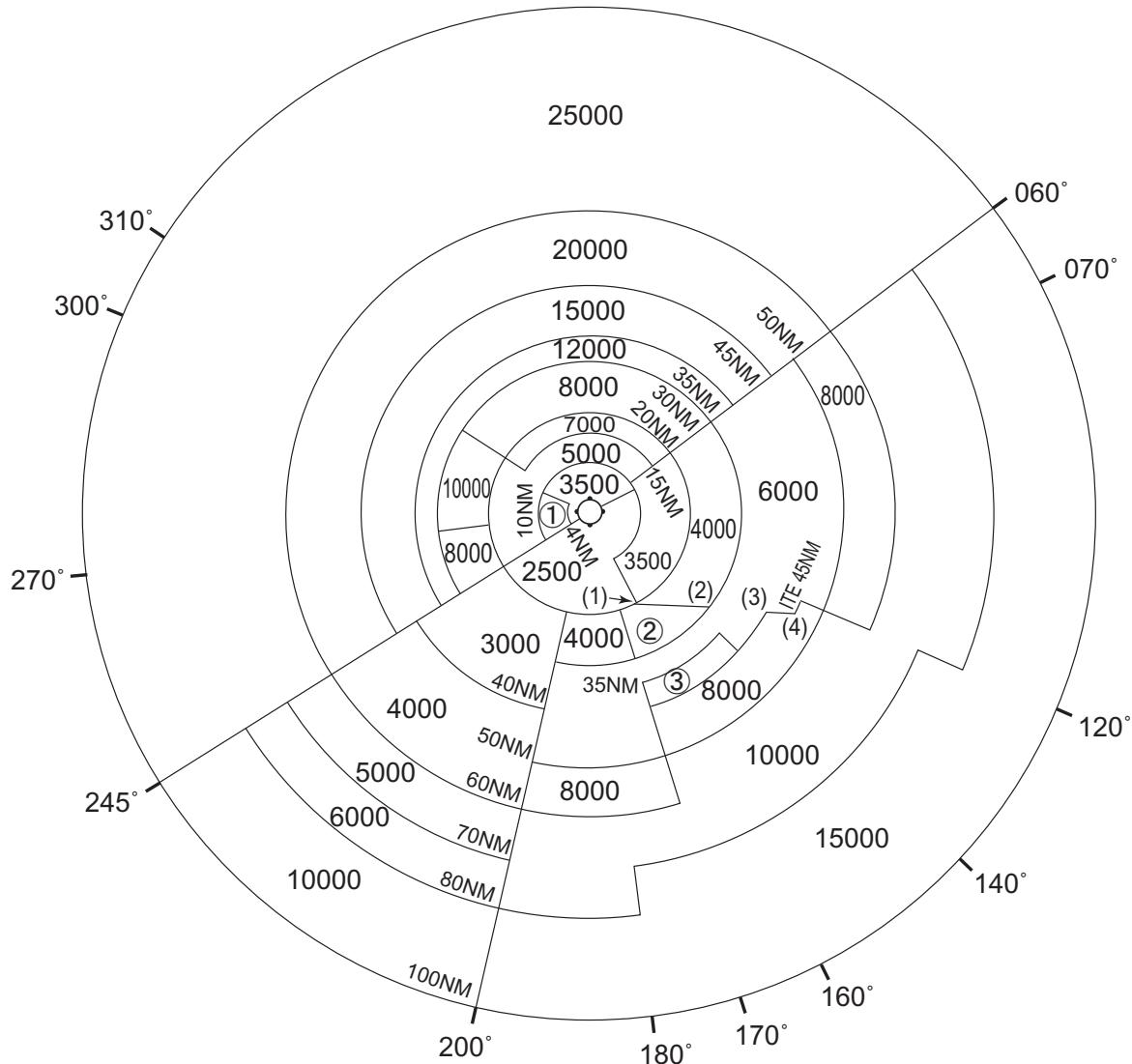
CHANGE: VAR.



RJOO / OSAKA INTL

Minimum Vectoring Altitude CHART

VAR 8°W (2023)



- ① 4500
- ② 5000
- ③ 7000

- (1) 342930N/1353527E
- (2) 342925N/1355432E
- (3) 342918N/1360849E
- (4) 342924N/1361335E

CENTER: 344752N/1352550E (No.1 RADAR SITE)  
 CENTER: 344659N/1352600E (No.2 RADAR SITE)

CHANGE : VAR.