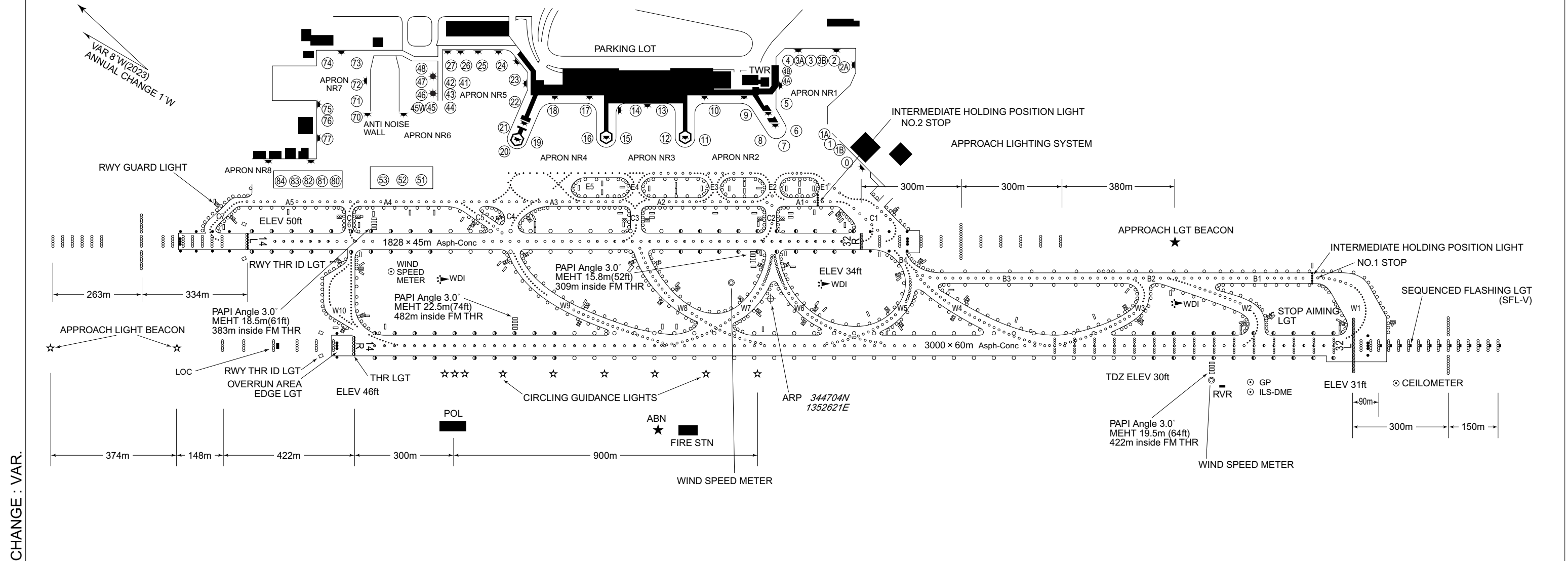
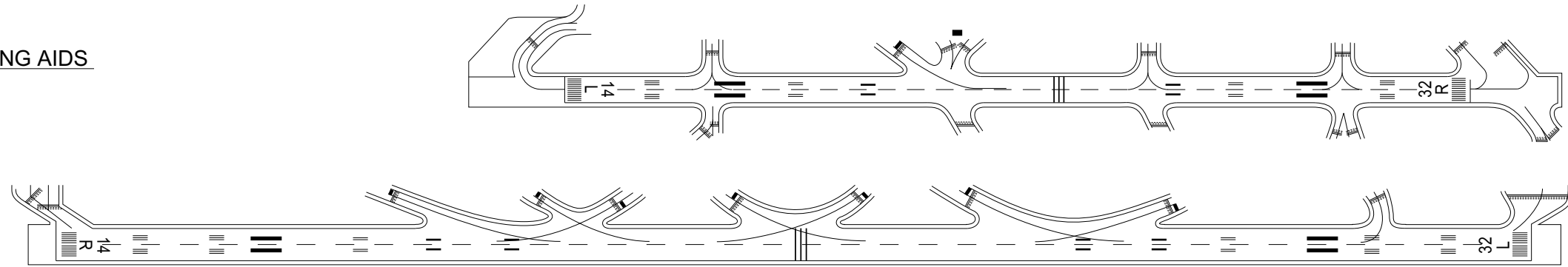


AERODROME CHART

OSAKA INTERNATIONAL AIRPORT  
ELEV 12m(39ft)

MARKING AIDS



CHANGE : VAR.

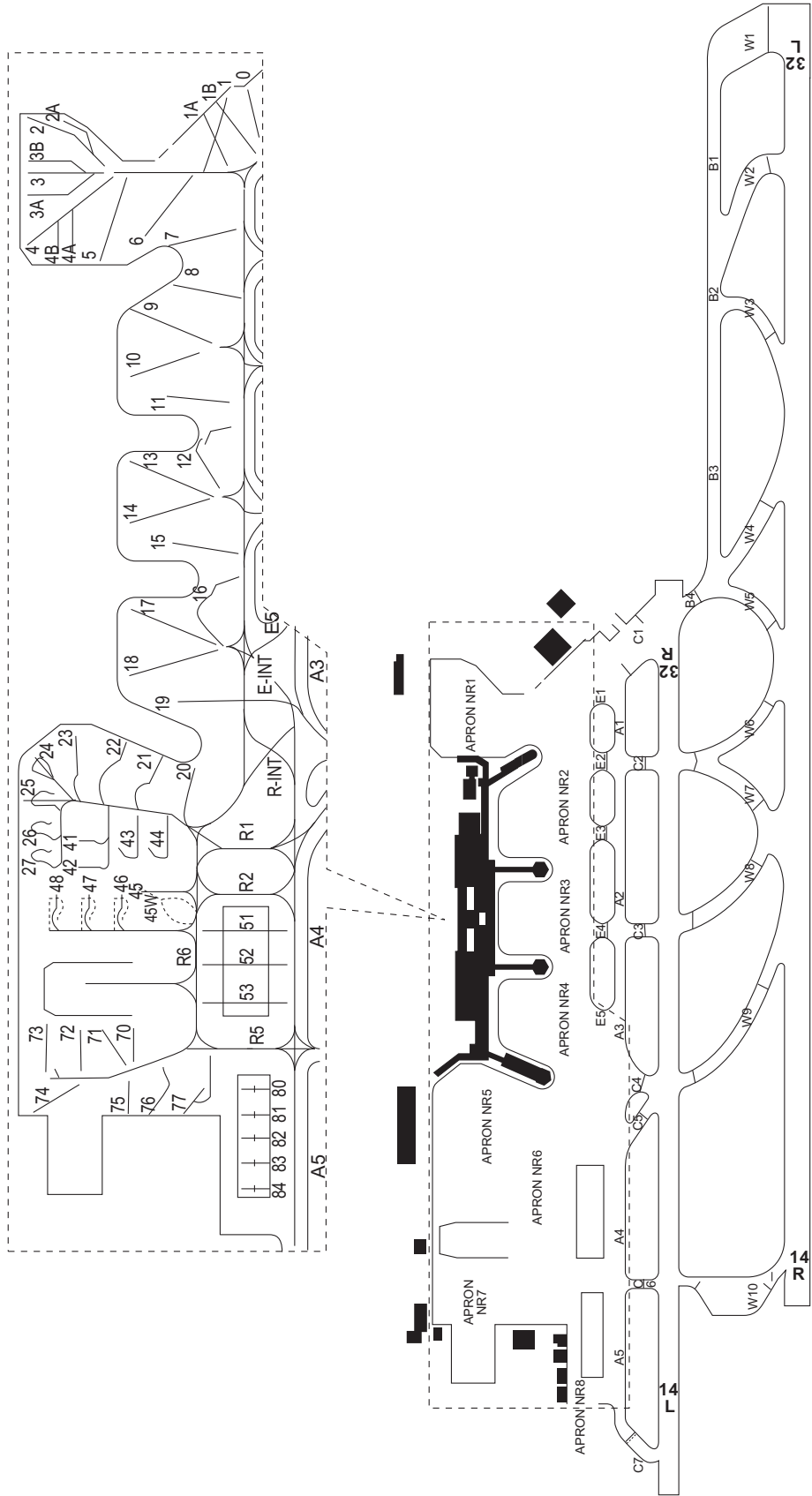
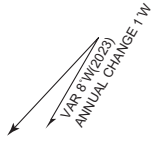
RJOO / OSAKA INTL

AD CHART

CHANGE : VAR.

Designation	Call Sign	Frequency (MHz)
ATIS	Osaka Intl Airport	128.6
DLVRY	Osaka Delivery	118.8
GND	Osaka Ground	121.7 126.2
TWR	Osaka Tower	118.1 126.2 236.8

OSAKA INTERNATIONAL AIRPORT  
 ELEV 12m(39ft)

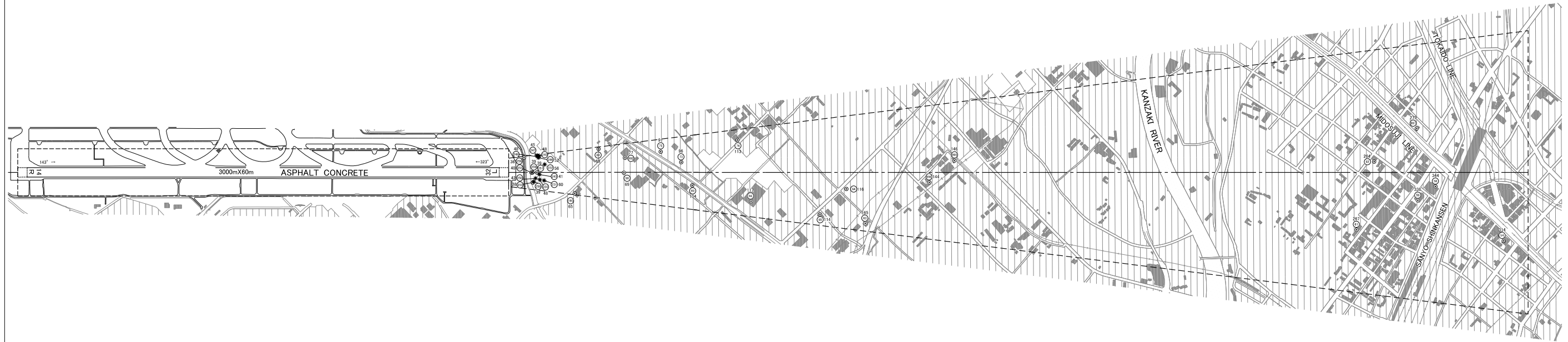
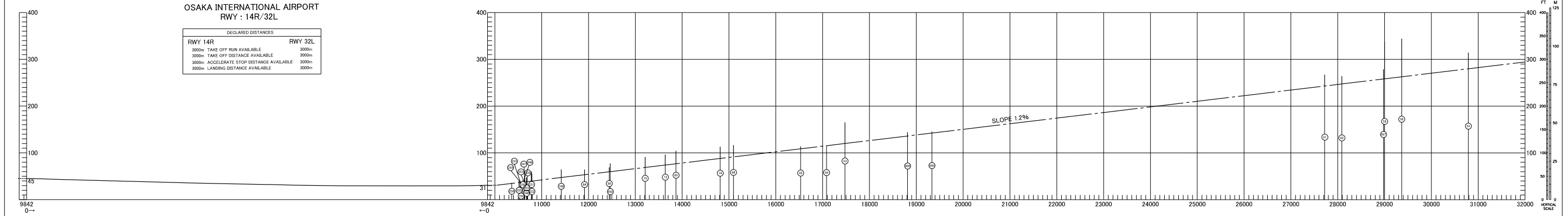


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AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

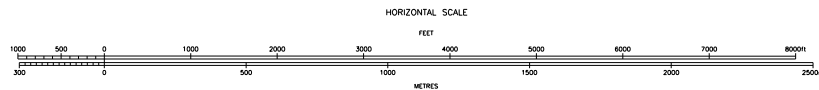
DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 8° W-FEB 2022



CHANGE : Update

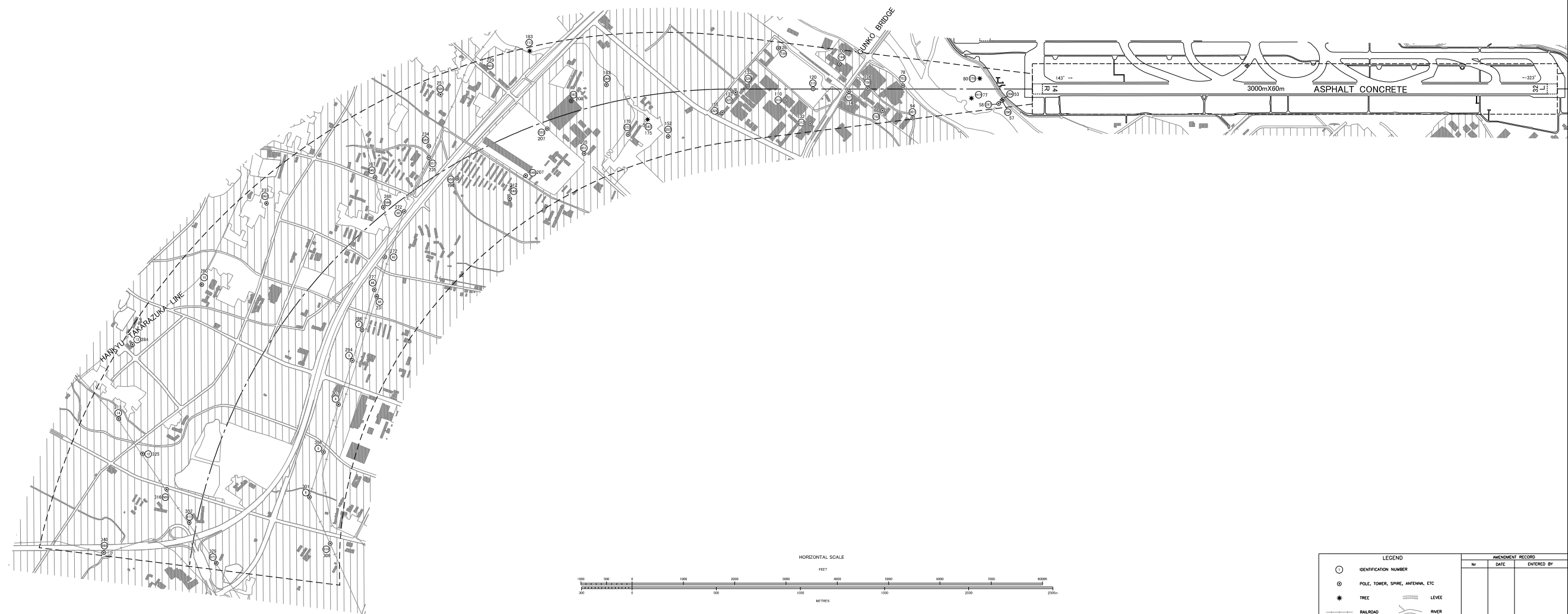
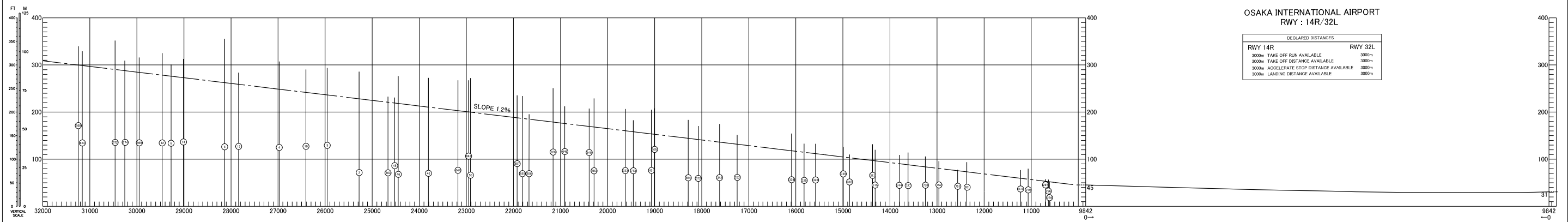
LEGEND	AMENDMENT RECORD		
	No	DATE	ENTERED BY
○ IDENTIFICATION NUMBER			
⊙ POLE, TOWER, SPIRE, ANTENNA, ETC			
* TREE			
▨ LDYER			
— RAILROAD			
— RIVER			
— TRANSMISSION LINE OR OVERHEAD CABLE			
△ TRIANGULATION POINT			
★ AERONAUTICAL GROUND LIGHT			



AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 8°W-FEB 2022



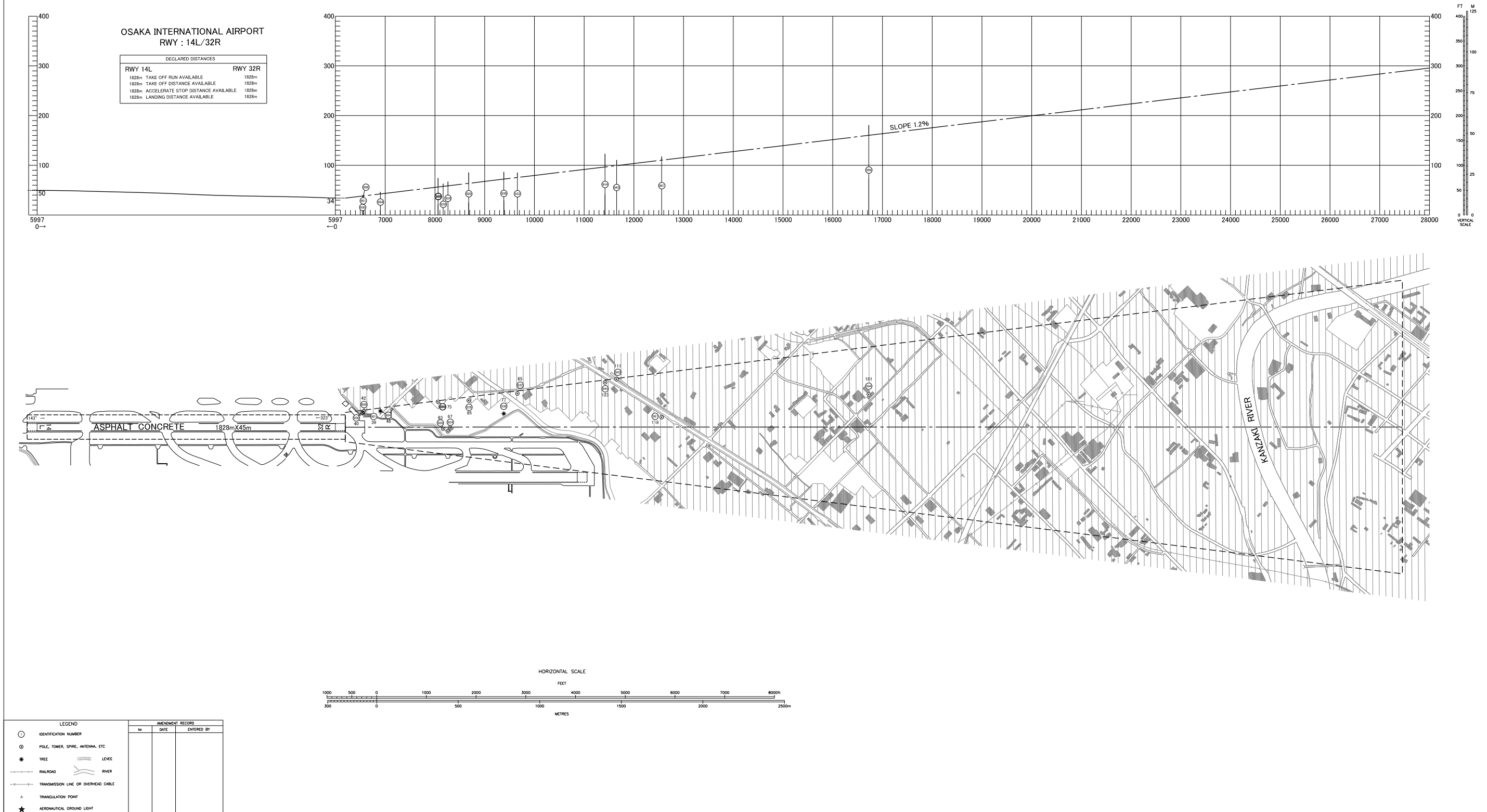
LEGEND		AMENDMENT RECORD	
○	IDENTIFICATION NUMBER	Nr	ENTERED BY
⊙	POLE, TOWER, SPIRE, ANTENNA, ETC	DATE	
*	TREE		
—	RAILROAD		
—	TRANSMISSION LINE OR OVERHEAD CABLE		
△	TRIANGULATION POINT		
★	AERONAUTICAL GROUND LIGHT		
—	LEVEE		
—	RIVER		

CHANGE : Update

AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 8°W-FEB 2022

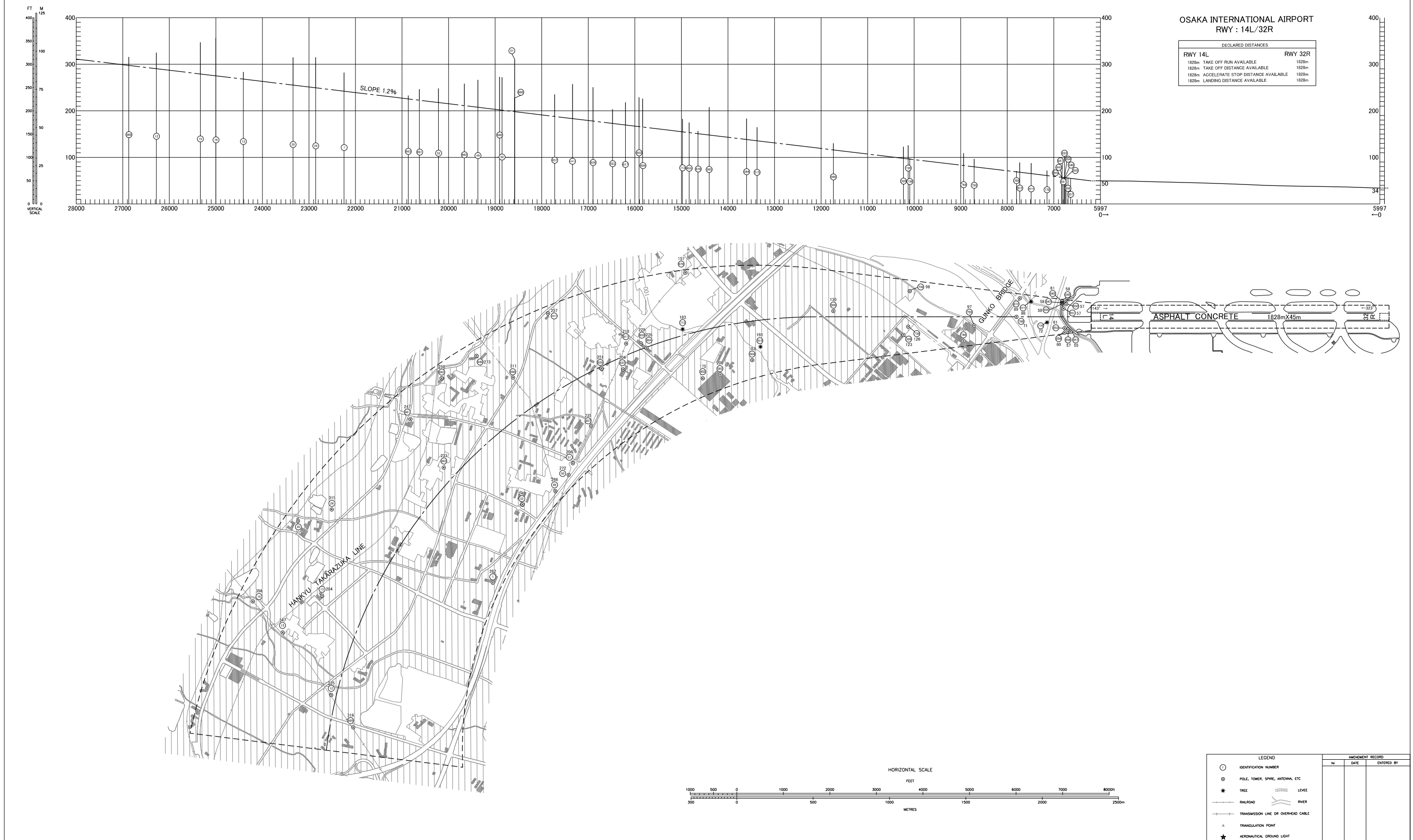


CHANGE : Update

AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

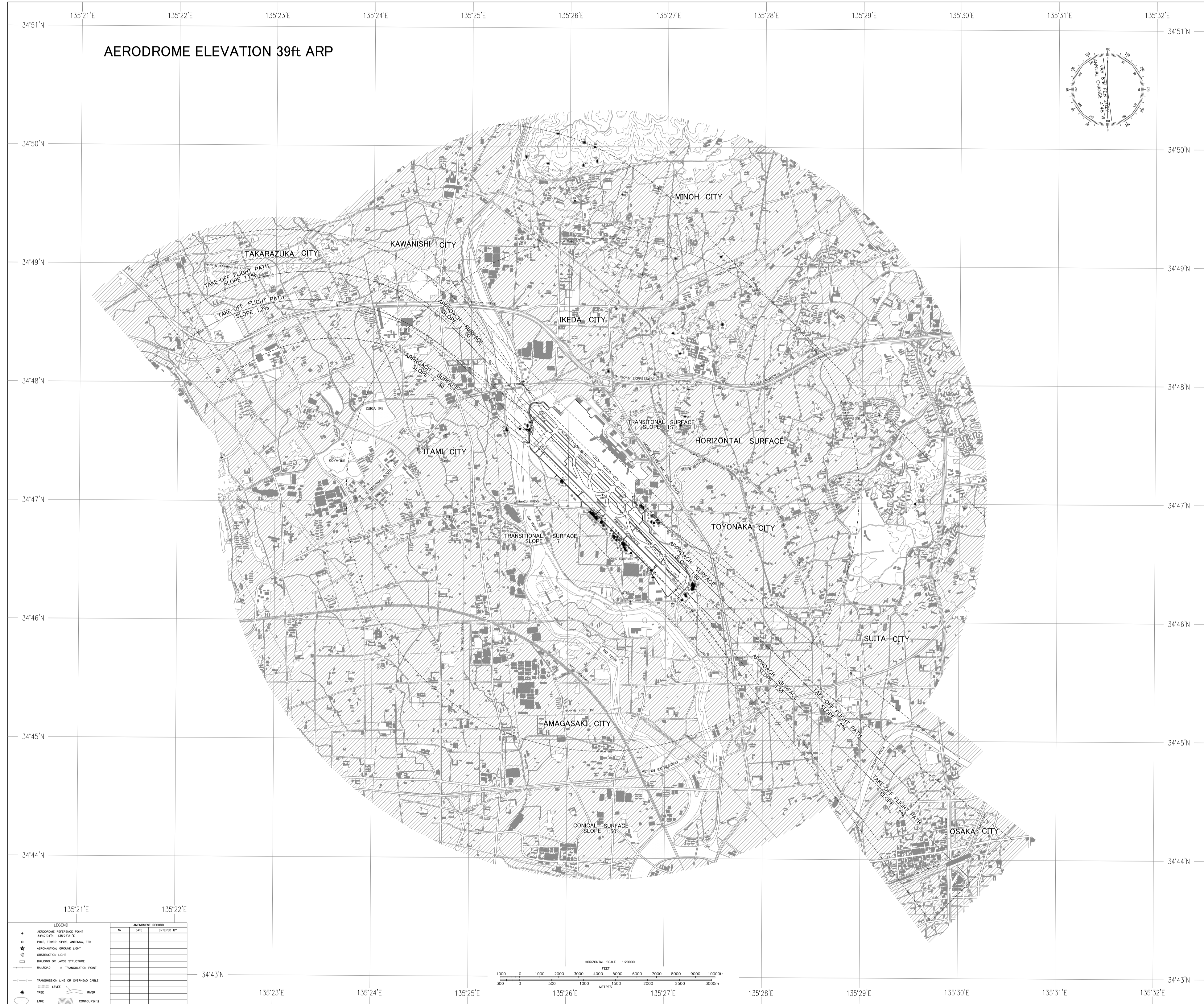
MAGNETIC VARIATION 8° W-FEB 2022



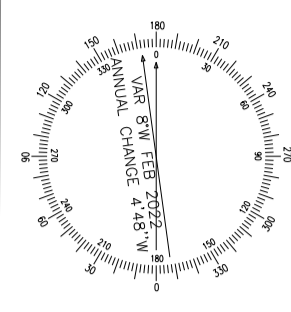
CHANGE : Update

# AERODROME OBSTACLE CHART-ICAO TYPE B

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



AERODROME ELEVATION 39ft ARP



CHANGE : Update

LEGEND		AMENDMENT RECORD		
		No.	DATE	ENTERED BY
•	AERODROME REFERENCE POINT (MAGNETIC)			
⊙	POLE, TOWER, SPINE, ANTENNA, ETC.			
★	AERONAUTICAL GROUND LIGHT			
⊠	OBSTRUCTION LIGHT			
□	BUILDING OR LARGE STRUCTURE			
—	RAILROAD			
△	TRIANGULATION POINT			
—	TRANSMISSION LINE OR OVERHEAD CABLE			
—	LEVEL			
—	RIVER			
—	LAKE			
—	CONTOUR(S)			



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,...

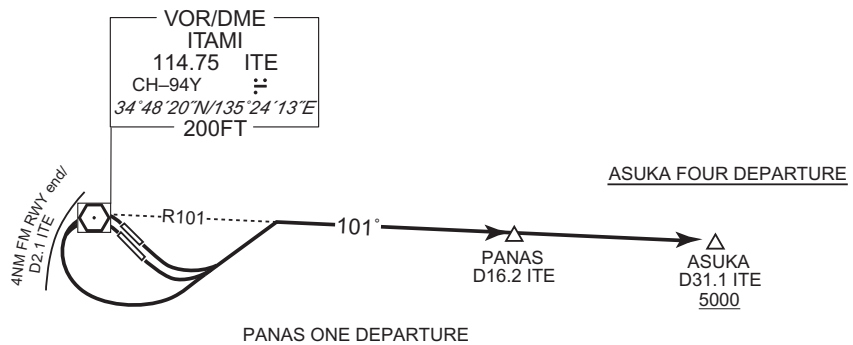
RWY 14R/14L : Climb RWY HDG to 500FT or above, turn left,...

...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).

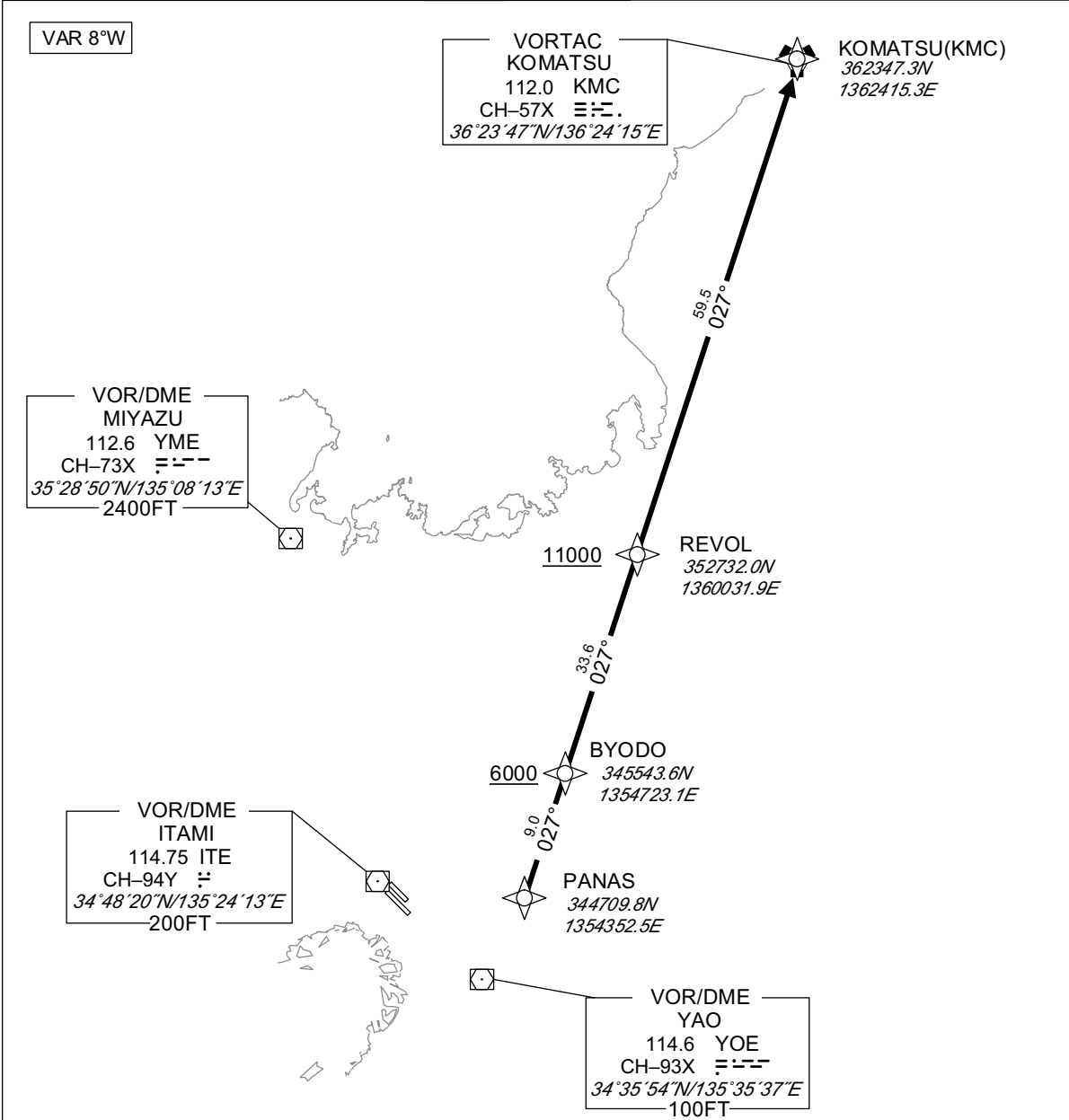


STANDARD DEPARTURE CHART -INSTRUMENT

RJOO / OSAKA INTL

RNAV TRANSITION

KOMAZ TRANSITION		RNAV1
Note 1 ) DME/DME/IRU or GNSS required. 2 ) RADAR service required.	Critical DME	-
	DME GAP	-
	Inappropriate Nav aids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



From PANAS, to BYODO at or above 6000FT, to REVOL at or above 11000FT, to KMC.

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

CHANGE : Description of VAR and PROC name.

STANDARD DEPARTURE CHART -INSTRUMENT

RJOO / OSAKA INTL

SID

IZUMI ONE DEPARTURE

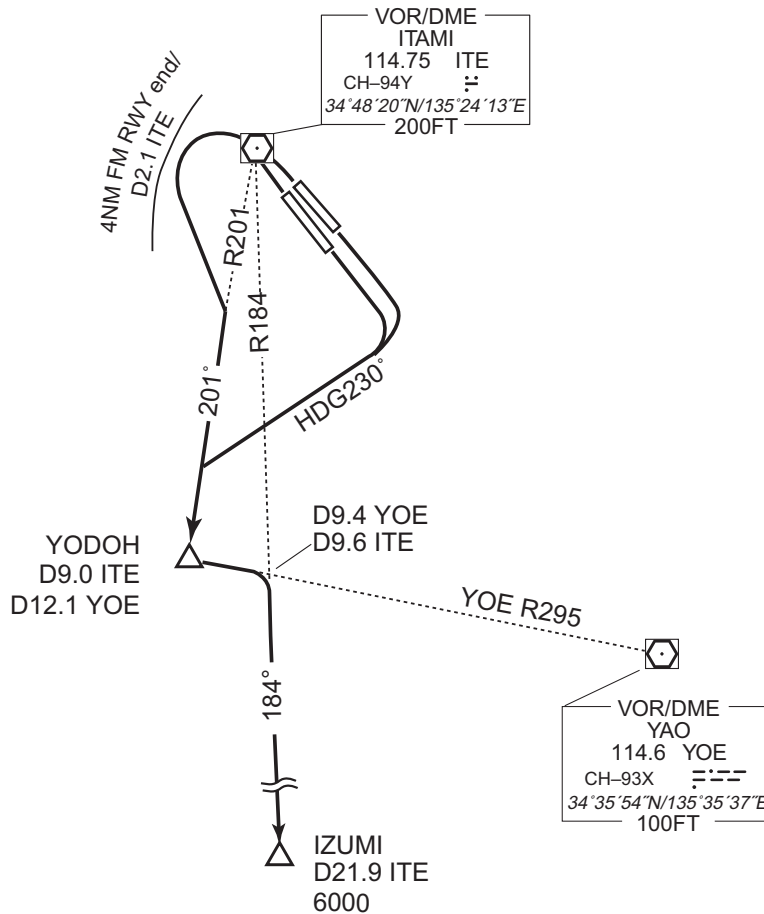
RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/ITE 2.1DME, via ITE R201 to YODOH,...

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

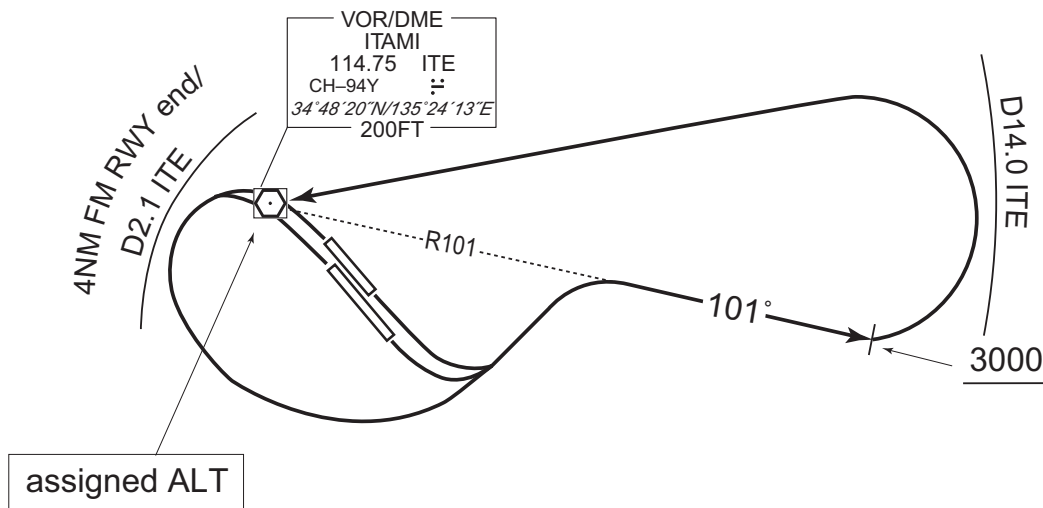
RWY 32R/32L : Climb RWY HDG to 500FT or above, turn left within 4NM from RWY end/ITE 2.1DME,...

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...

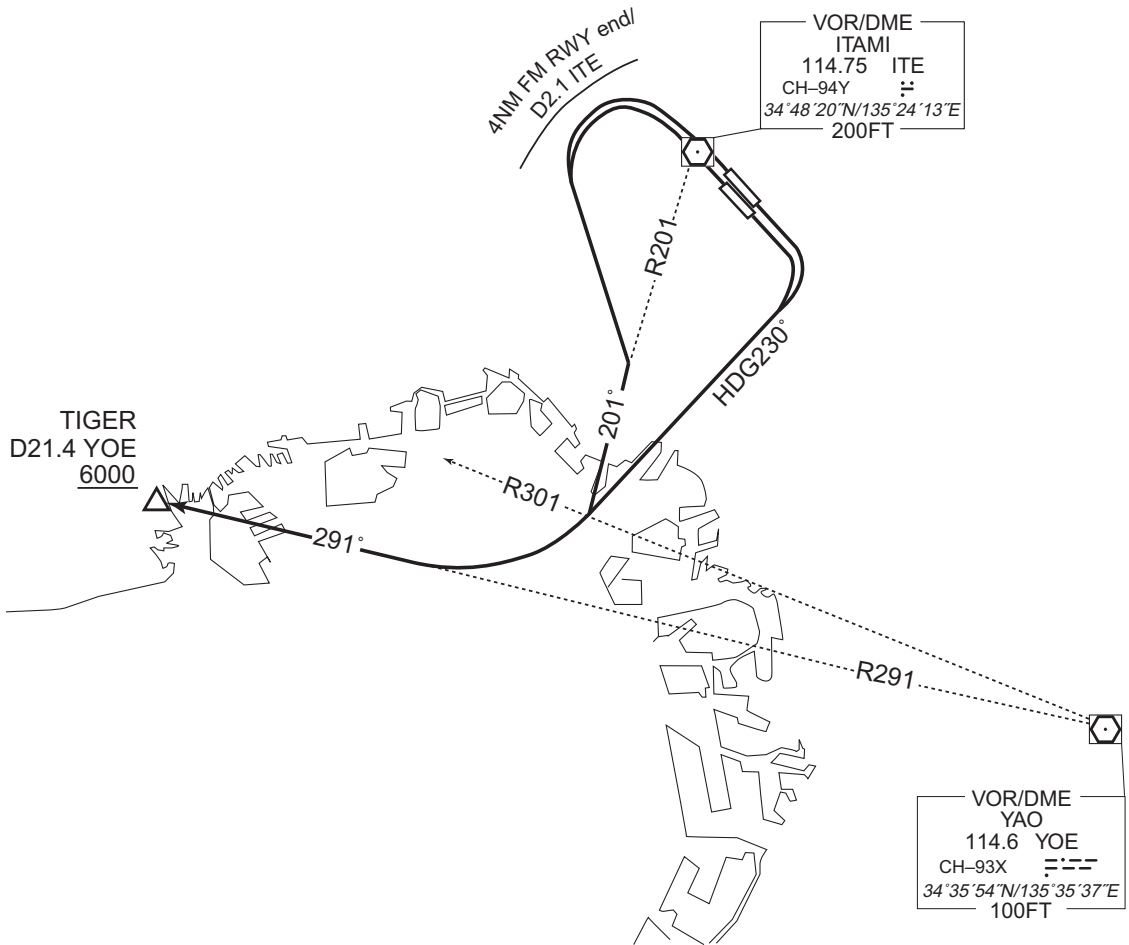
...turn right to intercept and proceed via YOE R291 to TIGER.

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

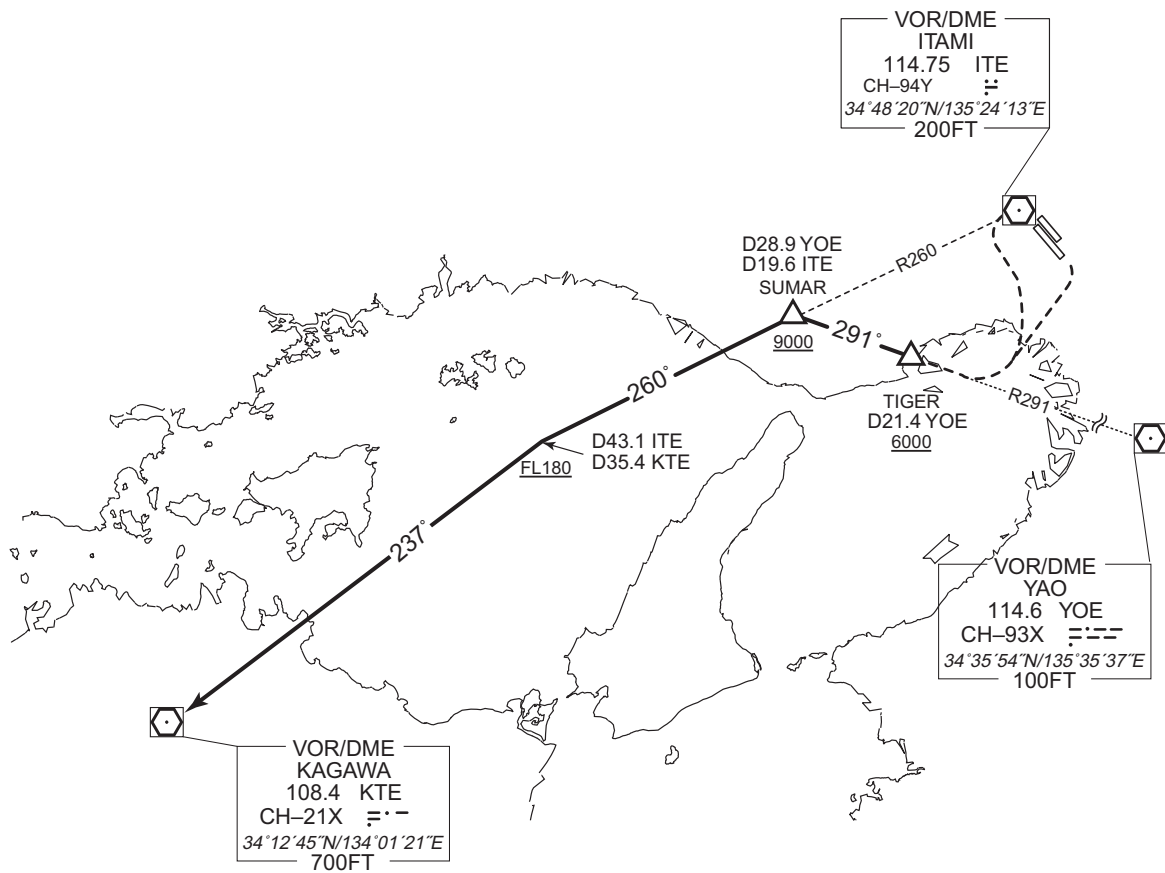
RJOO / OSAKA INTL

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.

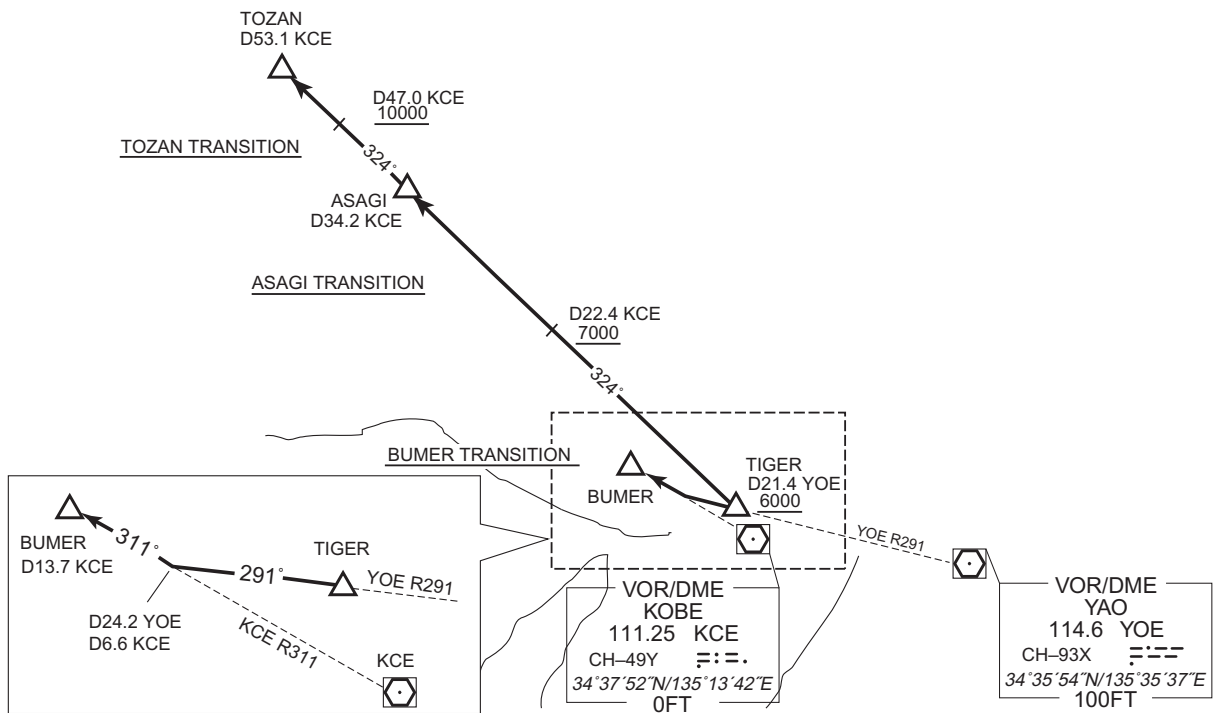
TOZAN TRANSITION

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.

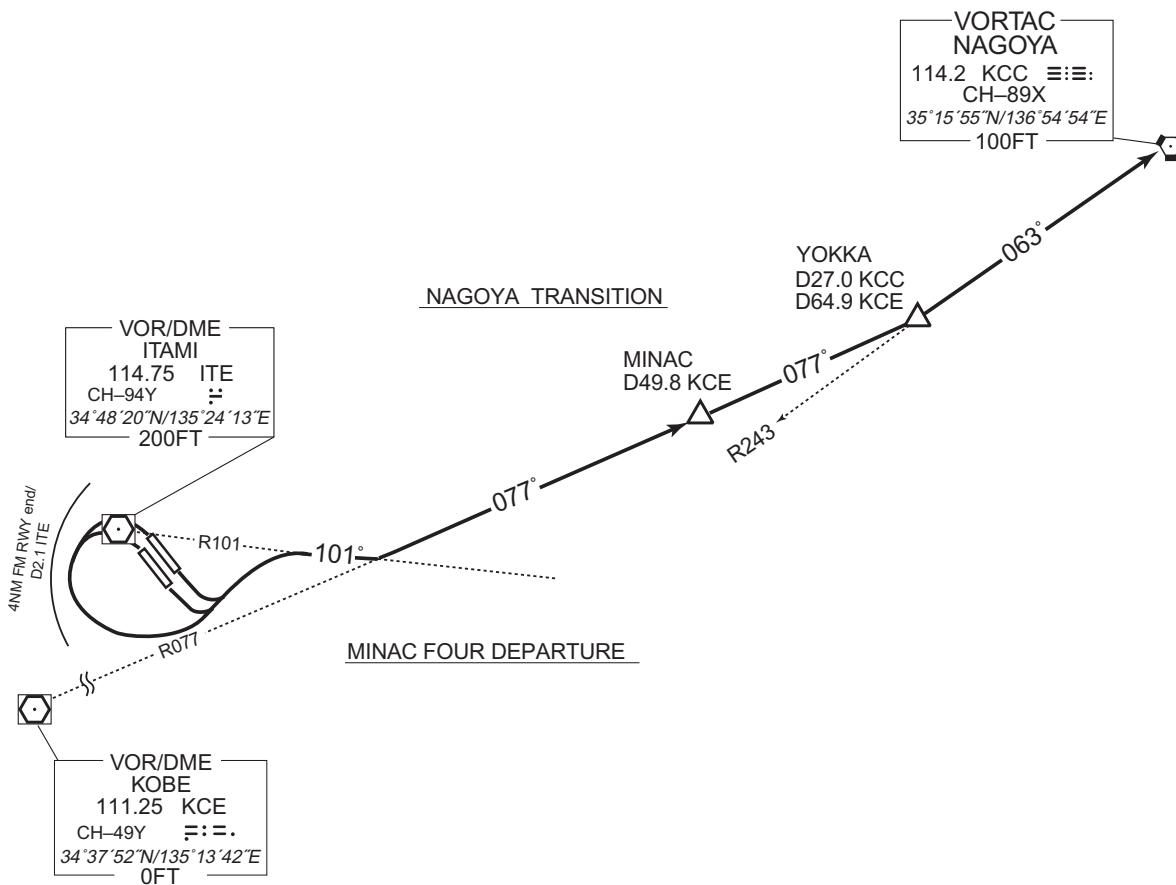
Note: When take off RWY14R/14L, following climb gradient should be maintained until 500FT.

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.

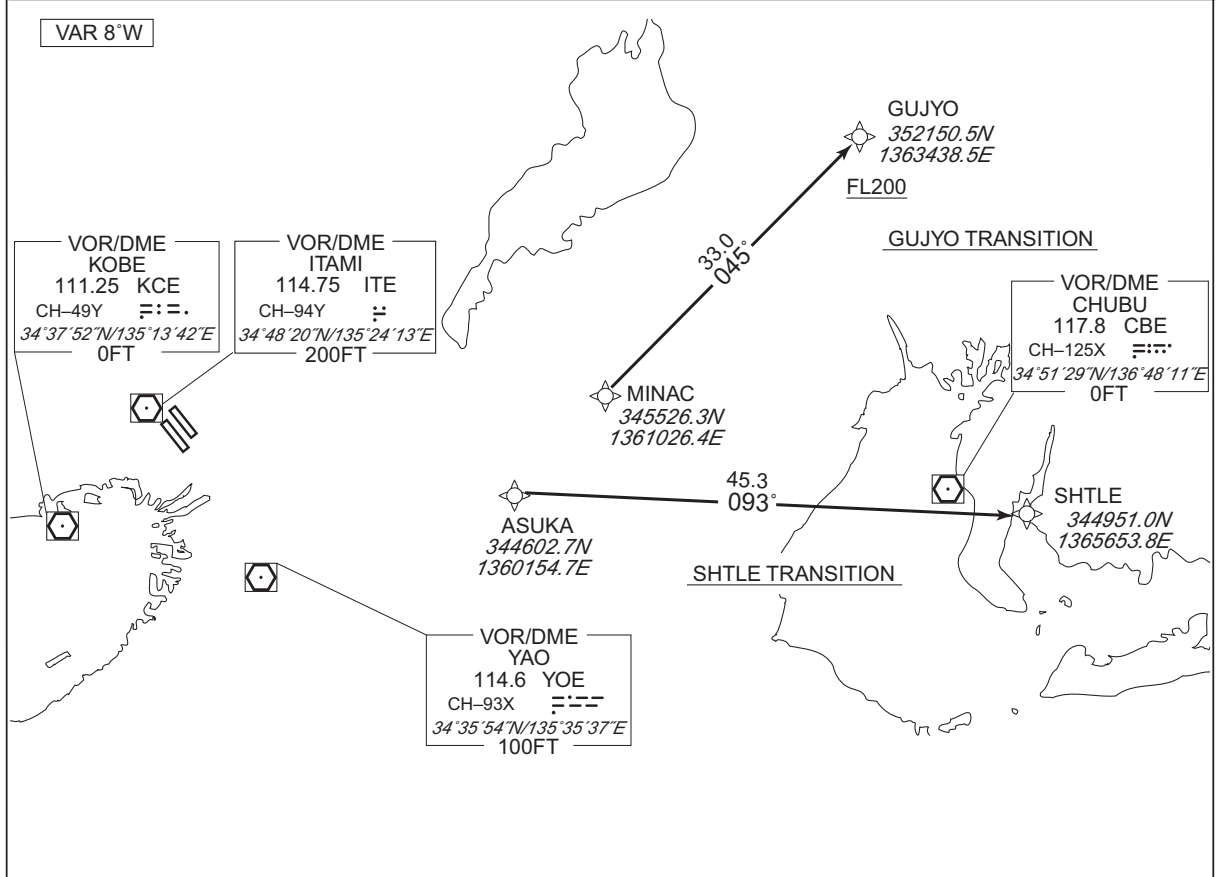




STANDARD DEPARTURE CHART-INSTRUMENT

RJOO / OSAKA INTL RNAV TRANSITION

GUJYO TRANSITION / SHTLE TRANSITION	RNAV1
NOTE 1 ) DME/DME/IRU or GNSS required. 2 ) RADAR service required.	Critical DME <span style="float: right;">-</span>
	DME GAP <span style="float: right;">-</span>
	Inappropriate Navaids <span style="float: right;">See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1</span>



**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

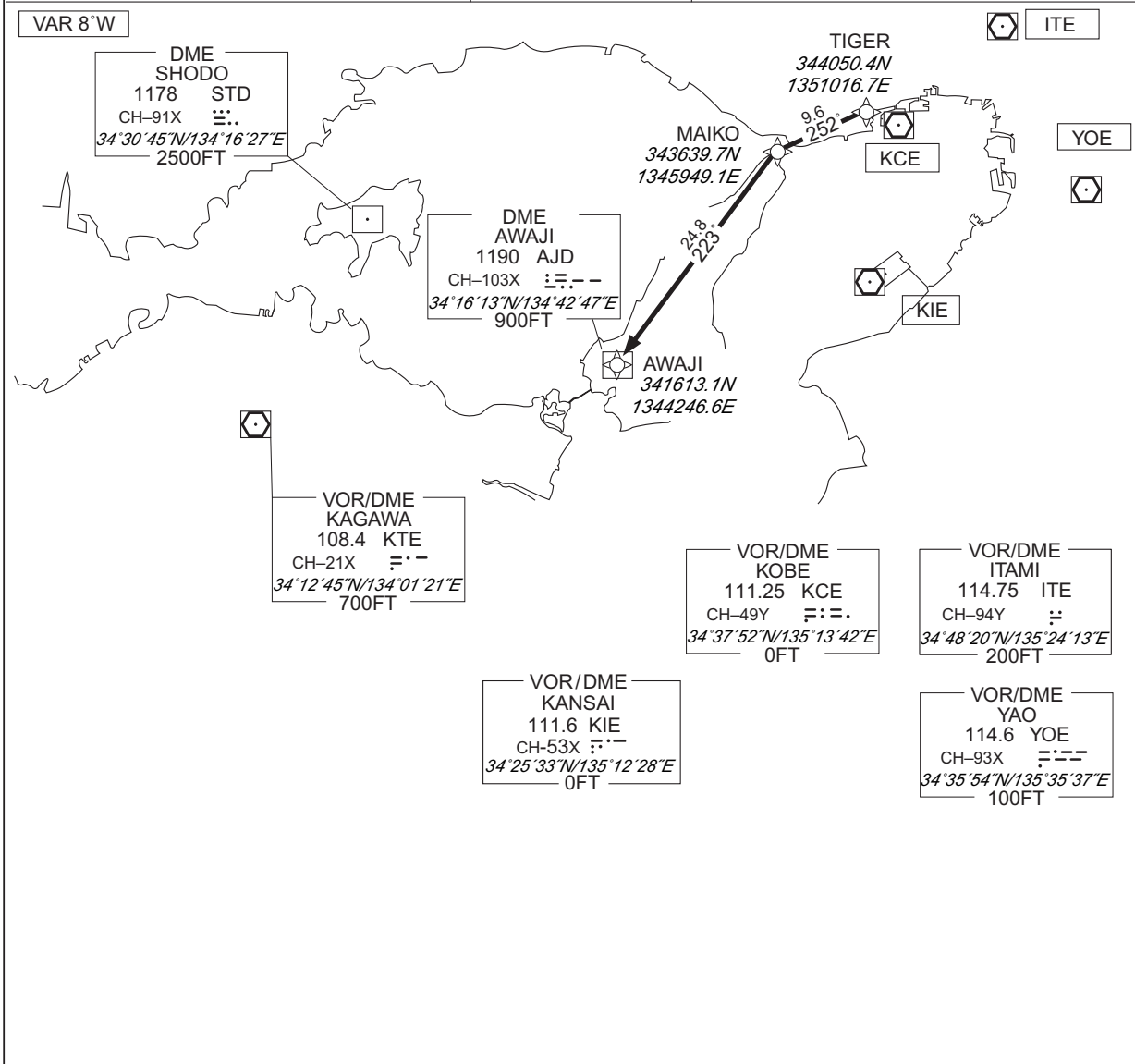
CHANGE : Description of VAR.

STANDARD DEPARTURE CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV TRANSITION

AWAJI TRANSITION		RNAV1
NOTE 1 ) DME/DME/IRU or GNSS required. 2 ) RADAR service required.	Critical DME	-
	DME GAP	-
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



From TIGER, to MAIKO, to AWAJI.

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	-	-	-8.0	-	-	-	-	-	RNAV1
002	TF	MAIKO	-	252 (244.2)	-8.0	9.6	-	-	-	-	RNAV1
003	TF	AWAJI	-	223 (214.6)	-8.0	24.8	-	-	-	-	RNAV1

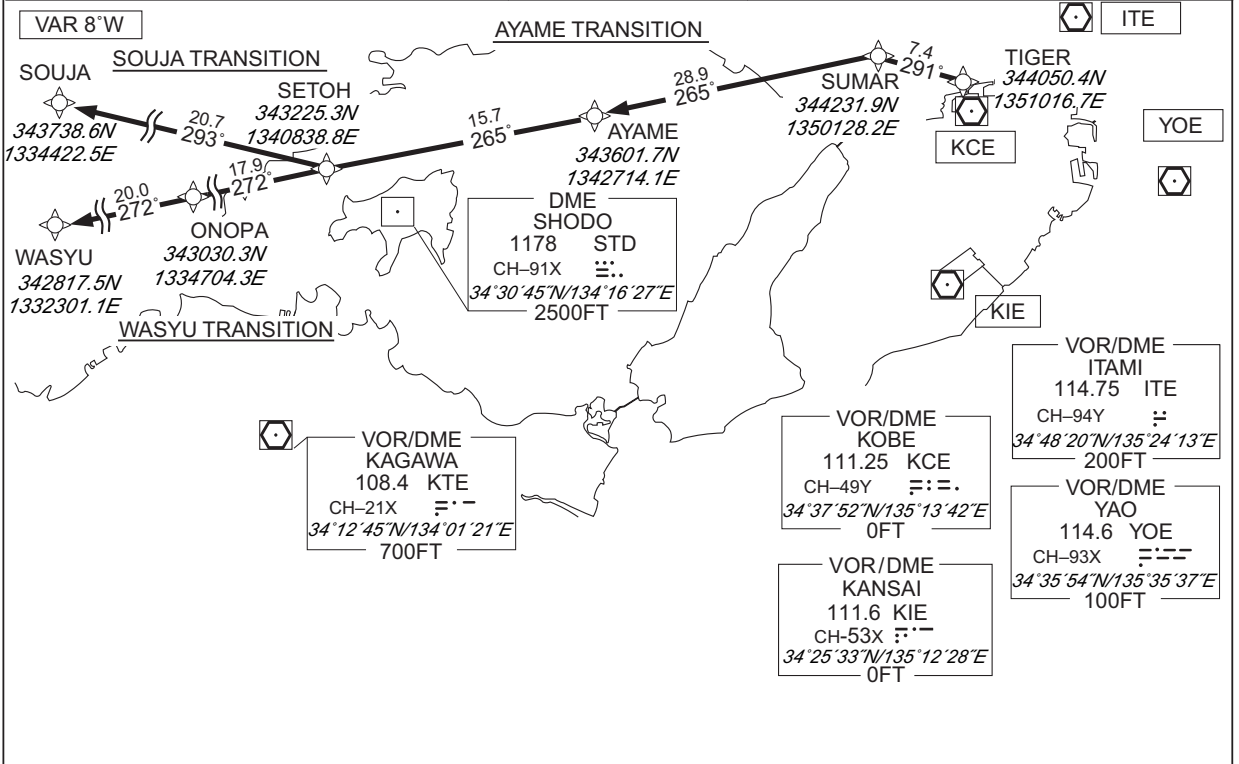
CHANGE : TAKAMATSU TACAN abolished.

STANDARD DEPARTURE CHART-INSTRUMENT

RJOO / OSAKA INTL

RNAV TRANSITION

AYAME TRANSITION / SOUJA TRANSITION / WASYU TRANSITION		RNAV1
NOTE 1 ) DME/DME/IRU or GNSS required. 2 ) RADAR service required.	Critical DME	-
	DME GAP	-
	Inappropriate Nav aids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



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 (283.2)	-8.1	7.4	-	-	-	-	RNAV1
003	TF	AYAME	-	265 (257.2)	-8.1	28.9	-	-	-	-	RNAV1

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 (283.2)	-8.1	7.4	-	-	-	-	RNAV1
003	TF	AYAME	-	265 (257.2)	-8.1	28.9	-	-	-	-	RNAV1
004	TF	SETOH	-	265 (256.8)	-8.1	15.7	-	-	-	-	RNAV1
005	TF	SOUJA	-	293 (284.8)	-8.1	20.7	-	-	-	-	RNAV1

CHANGE : TAKAMATSU TACAN abolished.

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 (283.2)	-8.1	7.4	-	-	-	-	RNAV1
003	TF	AYAME	-	265 (257.2)	-8.1	28.9	-	-	-	-	RNAV1
004	TF	SETOH	-	265 (256.8)	-8.1	15.7	-	-	-	-	RNAV1
005	TF	ONOPA	-	272 (263.9)	-8.1	17.9	-	-	-	-	RNAV1
006	TF	WASYU	-	272 (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 counterclockwise ARC to intercept and proceed via ITE R141 to IKOMA.

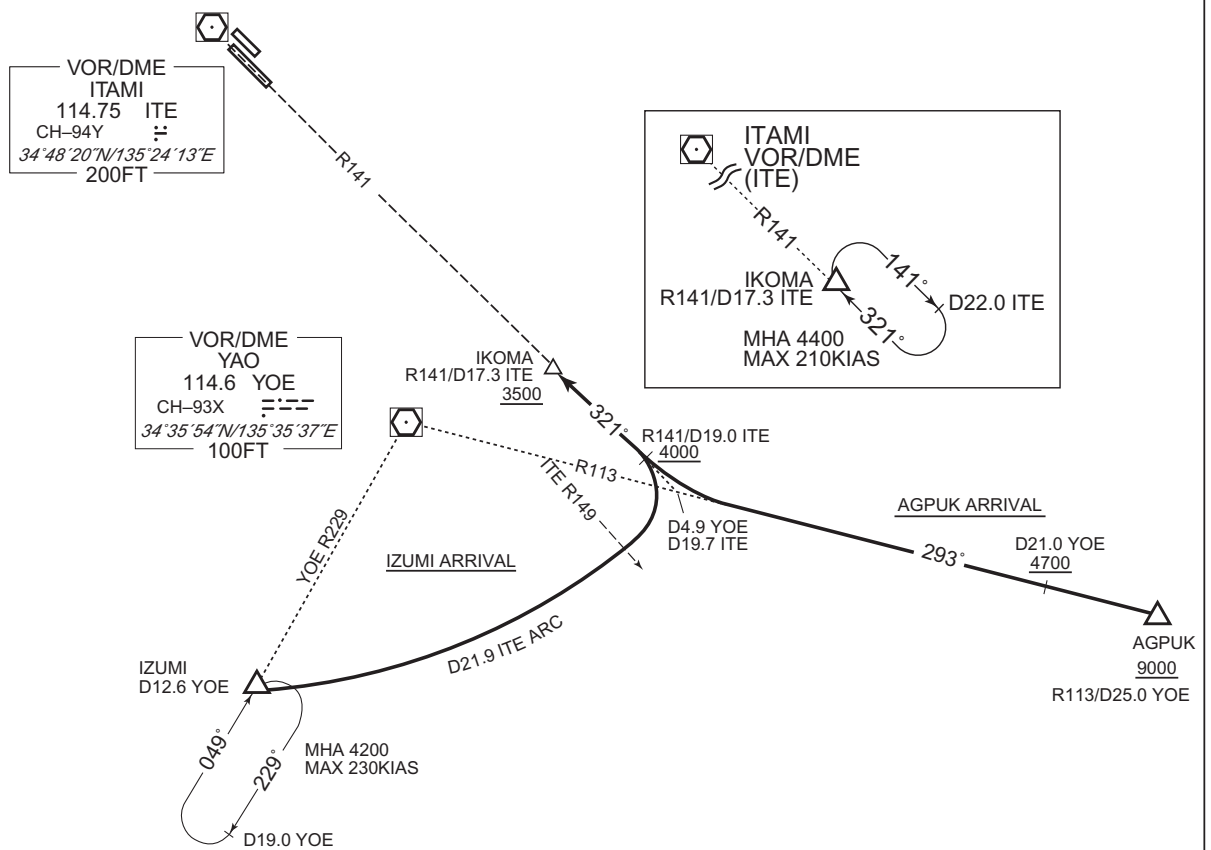
Cross ITE R141/19.0DME at or above 4000FT, cross IKOMA at or above 3500FT.

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

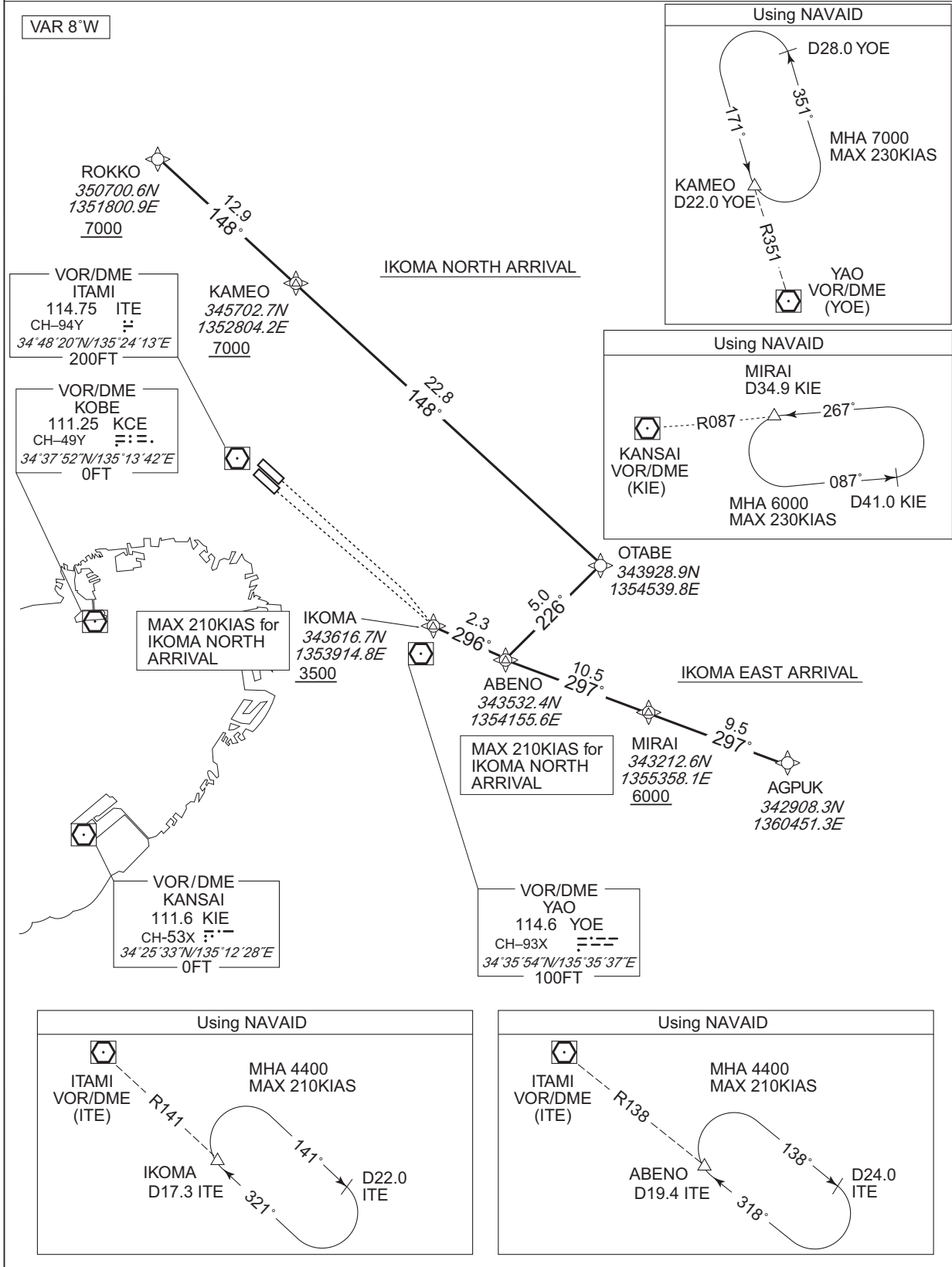
RNAV STAR RWY32L/32R

IKOMA EAST ARRIVAL / IKOMA NORTH ARRIVAL

RNAV1

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

VAR 8°W



CHANGE : Description of VAR.

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 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°48'20"N/135°24'13"E  
200FT

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

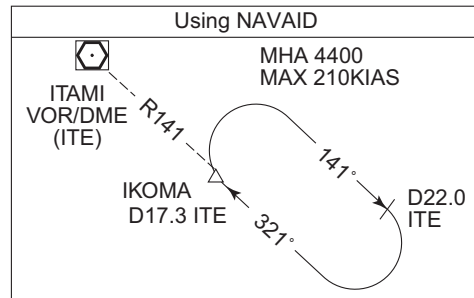
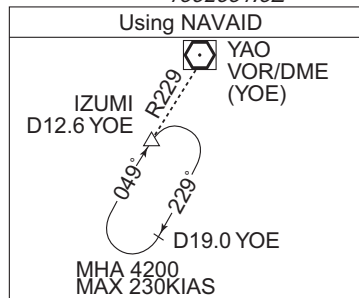
VOR/DME  
YAO  
114.6 YOY  
CH-93X  
34°35'54"N/135°35'37"E  
100FT

IKOMA  
343616.7N  
1353914.8E  
3500

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

IZUMI  
342628.5N  
1352531.3E

HABIK  
343246.8N  
1353914.2E



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 (060.8)	-8.0	13.0	-	-	-	-	RNAV1
003	TF	IKOMA	-	008 (000.1)	-8.0	3.5	-	+3500	-	-	RNAV1

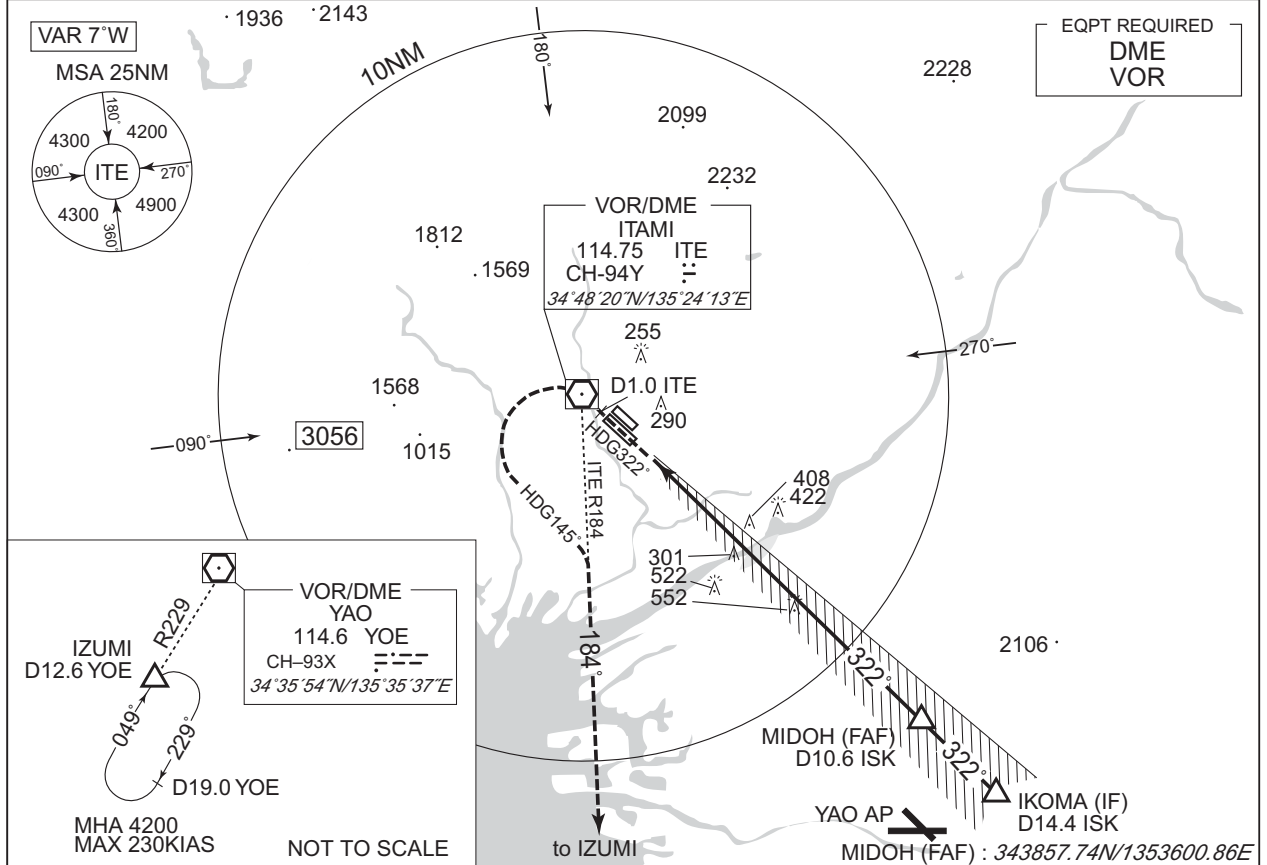


INSTRUMENT APPROACH CHART

RJOO / OSAKA INTL

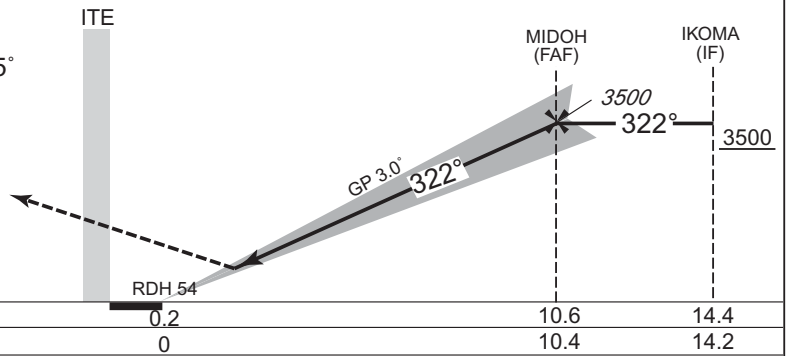
ILS RWY32L

KANSAI APP 120.45 - 124.7 261.2	ILS-LOC 110.1 ISK ILS-GP 334.4 ILS-DME CH-38X	OSAKA TOWER 118.1 - 236.8 126.2 - 121.7G	RADAR AVBL ATIS 128.6
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MISSED APPROACH

Climb to 5000FT on HDG322°, 1.0DME prior to ITE VOR/DME, turn left HDG145° to intercept and proceed via ITE R184 to IZUMI and hold. Contact KANSAI APP.



CHANGE : MDA(H) for Circling(TOTAL AREA).

Missed APCH climb gradient MNM 4.0%

MINIMA		THR elev. 31	AD elev. 39		
CAT	CAT I		CIRCLING		
	DA(H)	RVR/CMV	MDA(H)		VIS
A	281 (250)	700	TOTAL AREA	WEST of RWY	
B			590 (551)	590 (551)	1600
C			660 (621)	610 (571)	2400
D			-	760 (721)	3200

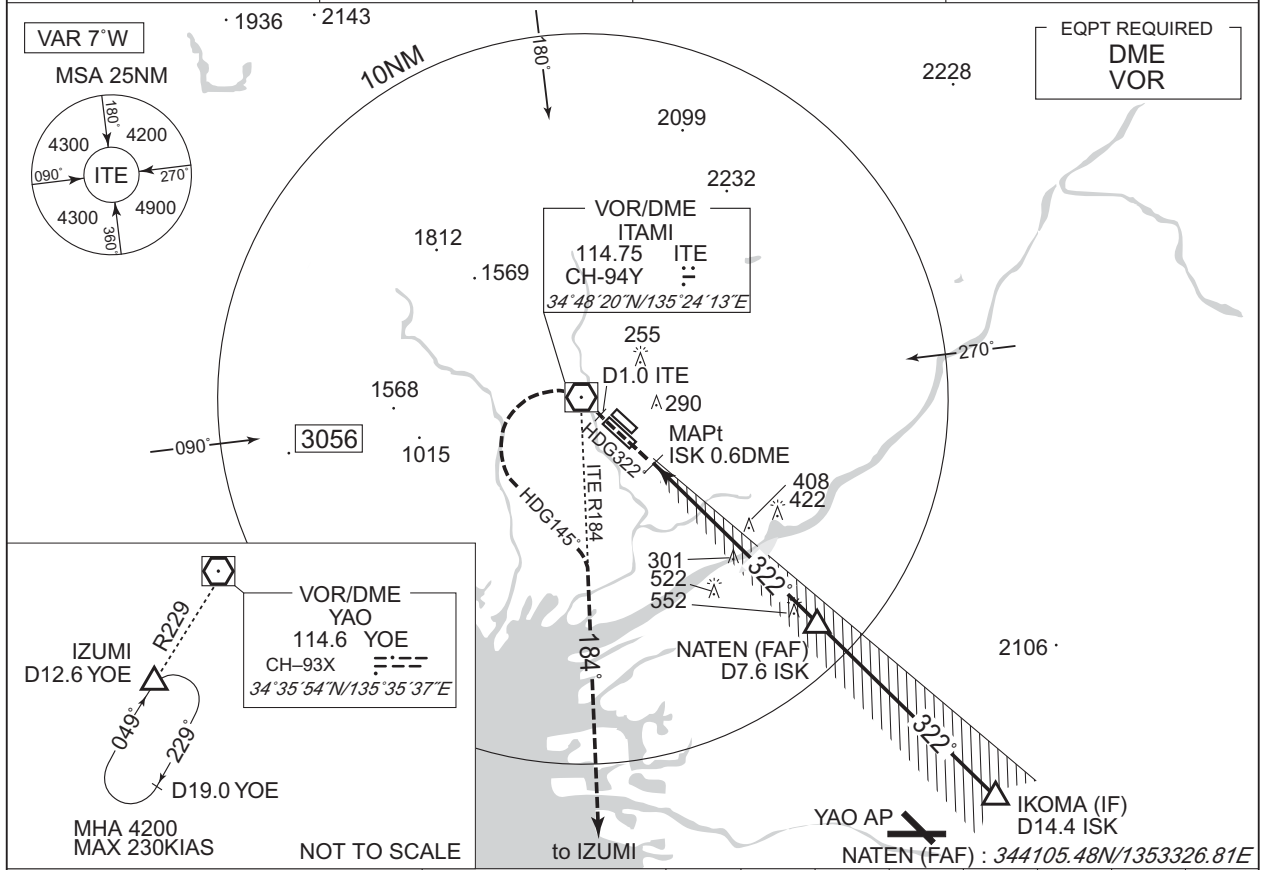
MINIMA with Missed APCH climb gradient of 2.5% are not established. JET circling to WEST side of RWY only.

INSTRUMENT APPROACH CHART

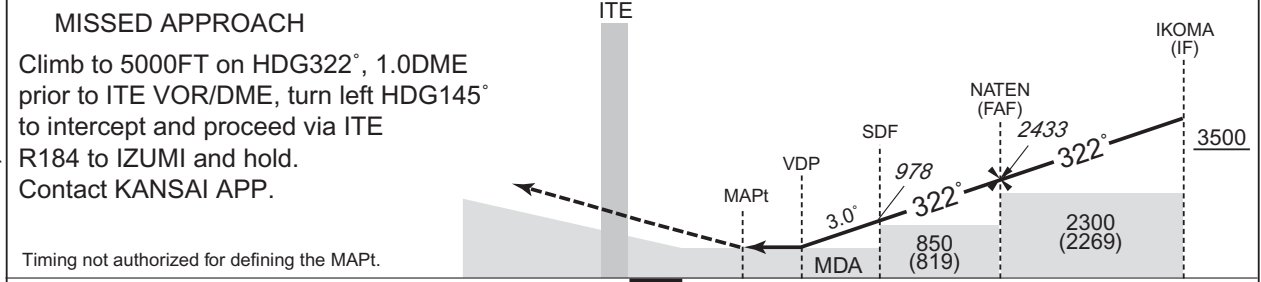
RJOO / OSAKA INTL

LOC RWY32L

KANSAI APP 120.45 - 124.7 261.2	ILS - LOC 110.1 ISK $\dashv$ ILS-DME CH-38X	OSAKA TOWER 118.1 - 236.8 126.2 - 121.7G	RADAR AVBL ATIS 128.6
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	NM to ISK	MAPt	2	3	4	5	6	7	FAF
	ALT (3.0° APCH Path)		660	978	1297	1615	1934	2252	2433



	DME to ISK	0.2	0.6	1.2	3.0	7.6	14.4
	NM to THR	0	0.5	1.0	2.8	7.4	14.2

Missed APCH climb gradient MNM 3.2%

MINIMA	THR elev. 31	AD elev. 39
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CAT	MDA(H)	RVR/CMV	CIRCLING MDA(H)		VIS
			TOTAL AREA	WEST of RWY	
A	390 (359)	1200	590 (551)	590 (551)	1600
B		1300			
C		1400	610 (571)		
D		1600	760 (721)		

MINIMA with Missed APCH climb gradient of 2.5% are not established. JET circling to WEST side of RWY only.

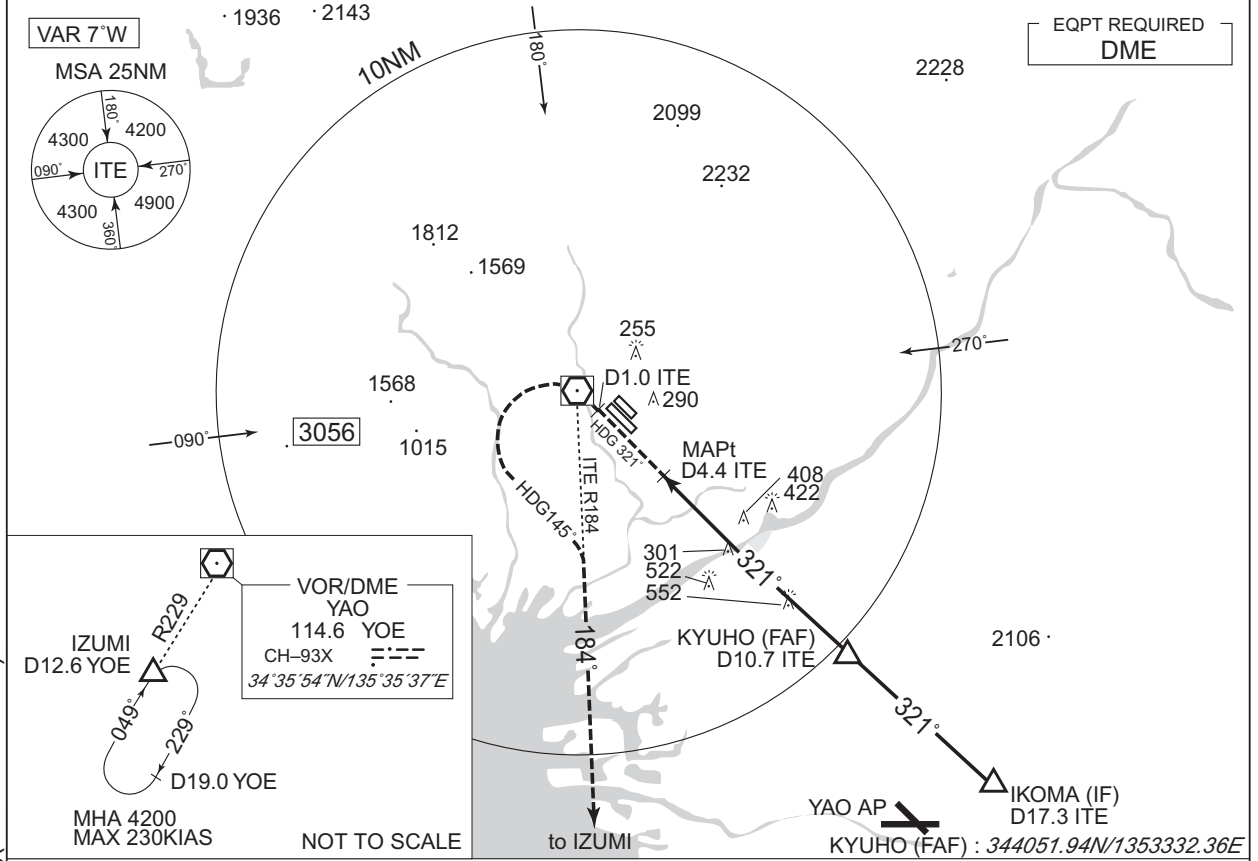
CHANGE : MDA(H) for Circling(TOTAL AREA).

**INSTRUMENT APPROACH CHART**

RJOO / OSAKA INTL

VOR A

KANSAI APP 120.45 - 124.7 261.2	ITAMI VOR/DME 114.75 ITE CH-94Y 34°48'20"N/135°24'13"E	OSAKA TOWER 118.1 - 236.8 126.2 - 121.7G	RADAR AVBL ATIS 128.6
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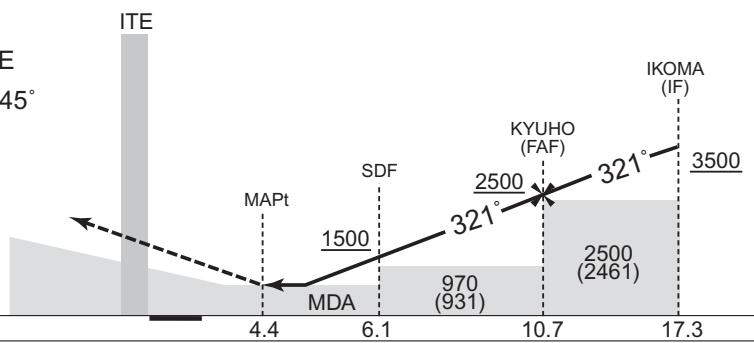


CHANGE : OCA/H BTN KYUHO and SDF. MDA(H) for Circling(TOTAL AREA).

**MISSED APPROACH**

Climb to 5000FT on HDG321°, 1.0DME prior to ITE VOR/DME, turn left HDG145° to intercept and proceed via ITE R184 to IZUMI and hold.  
 Contact KANSAI APP.

Timing not authorized for defining the MAPt.



MINIMA		AD elev. 39	
CAT	CIRCLING		VIS
	MDA(H)		
	TOTAL AREA	WEST of RWY	
A	590 (551)	590 (551)	1600
B	660 (621)	610 (571)	2400
C	-	760 (721)	3200

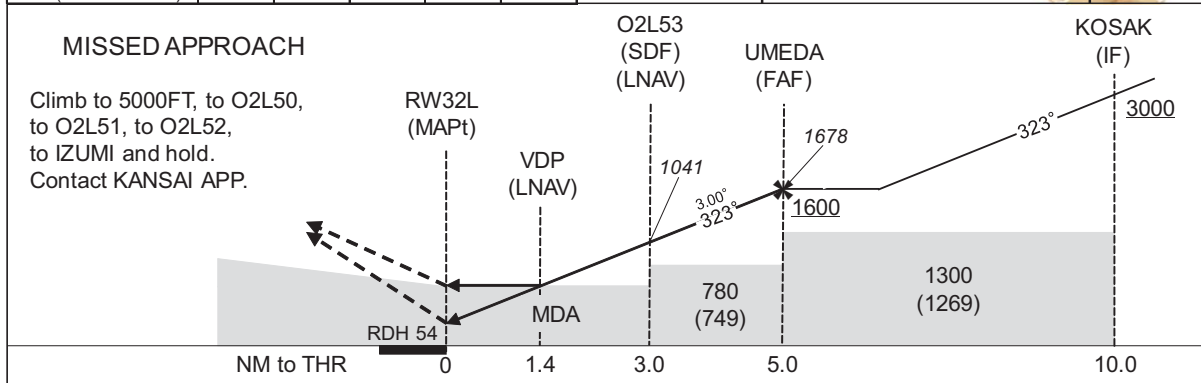
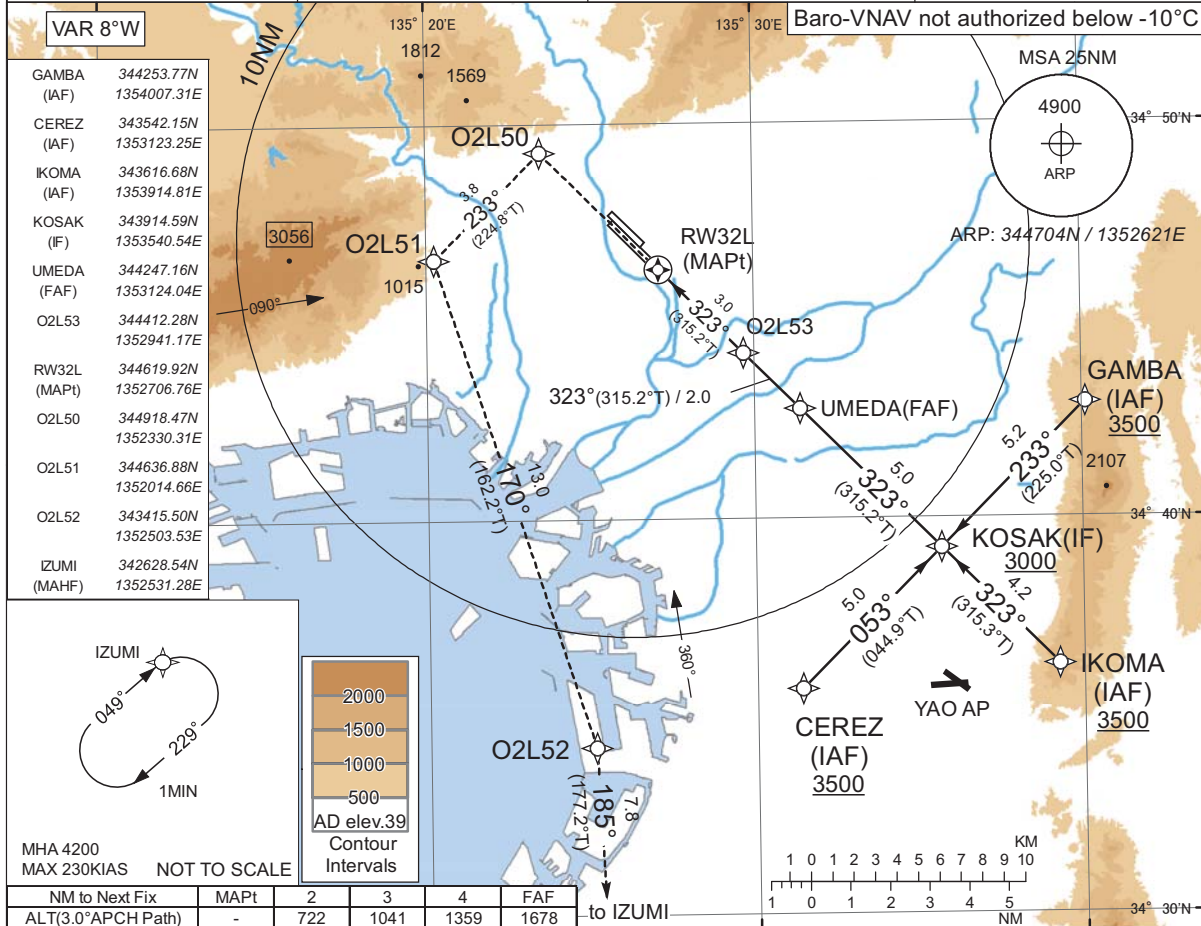
JET circling to WEST side of RWY only.

INSTRUMENT APPROACH CHART

RJOO / OSAKA INTL

RNP RWY32L

<b>KANSAI APP</b> 120.45 - 124.7 261.2	<b>RNP APCH</b> MSAS CH68881 M32A	<b>OSAKA TOWER</b> 118.1 - 236.8 126.2 - 121.7G	<b>RADAR AVBL</b> ATIS 128.6
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MISSED APPROACH

Climb to 5000FT, to O2L50, to O2L51, to O2L52, to IZUMI and hold. Contact KANSAI APP.

MDA (749) 780, 1300 (1269)

VDP (LNAV) 1041

RDH 54

NM to THR 0, 1.4, 3.0, 5.0, 10.0

MISSED APCH climb gradient MNM 6.0%

CAT	LPV		LNAV/VNAV		LNAV		CIRCLING		
	DA(H)	RVR/CMV	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	WEST of RWY	VIS
A	289(258)	1000	510(479)	1400	510(479)	1400	590(551)	590(551)	1600
B	299(268)	1100		1500		1500	610(571)	610(571)	2400
C	309(278)	1200		1600		1600	660(621)	660(621)	
D	318(287)	1400		1800		1800	-	760(721)	3200

JET circling to WEST side of RWY only.  
MISSED APCH climb gradient of 6.0% up to 2400FT.

CHANGE : O2L53 established. MSAS CH added. Minimum TEMP for Baro-VNAV. HLDG Pattern. PROC ALT at FAF. Missed APCH for Using VOR/DME abolished. OCAVH BTN KOSAK and UMEDA. LPV established. MINIMA. NM to THR at VDP.

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		

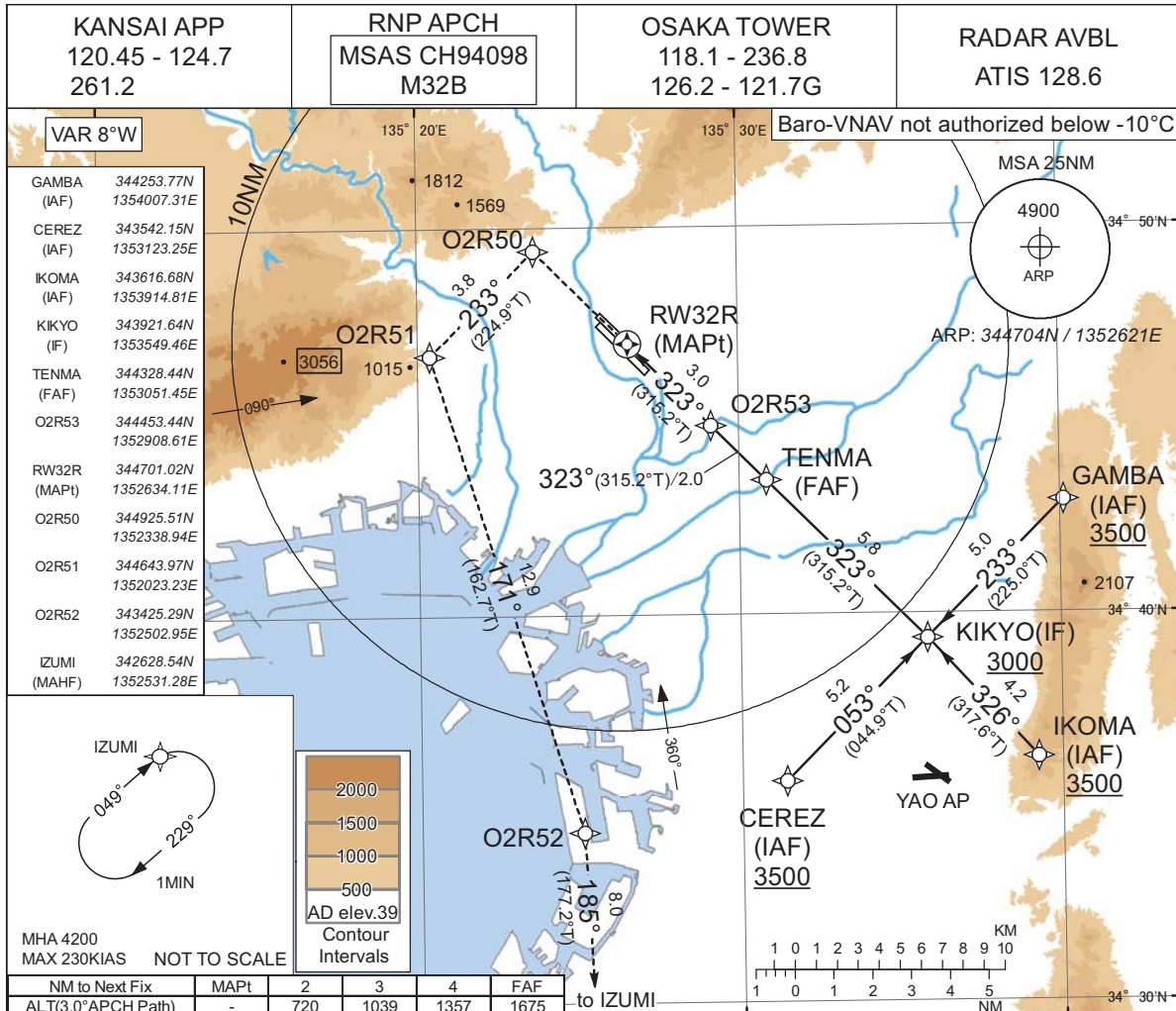
**Required additional data**

LTP/FTP orthometric height	9.6
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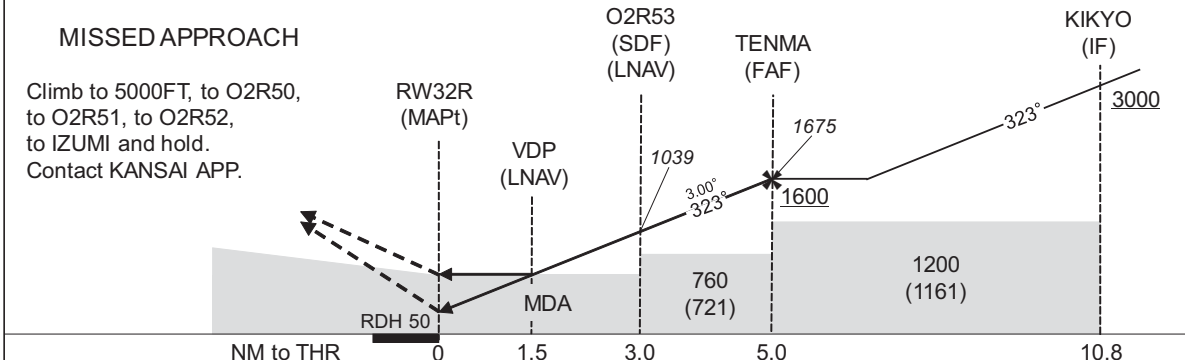
CHANGE : FAS DATA BLOCK, Required additional data established.

INSTRUMENT APPROACH CHART

RJOO / OSAKA INTL RNP RWY32R



CHANGE : O2R53 established. MSAS CH added. Minimum TEMP for Baro-VNAV. HLDG Pattern. ALT(3.0°APCH Path). PROCALT.  
 Missed APCH for Using VOR/DME abolished. OCA/H. LPV established. MINIMA. NM to THR at VDP.



Missed APCH climb gradient MNM 6.0%

MINIMA	THR elev. 34	AD elev. 39
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CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	CMV	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS
A	400(366)	1200	530(496)	1400	530(491)	1400	570(531)	1600
B	410(376)	1300		1500		1500		
C	419(385)	1400		1600		1600	2400	
D	429(395)	1600	1800	1800	760(721)	3200		

Circling to WEST side of RWY only.  
 Missed APCH climb gradient of 6.0% up to 2500FT.

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		

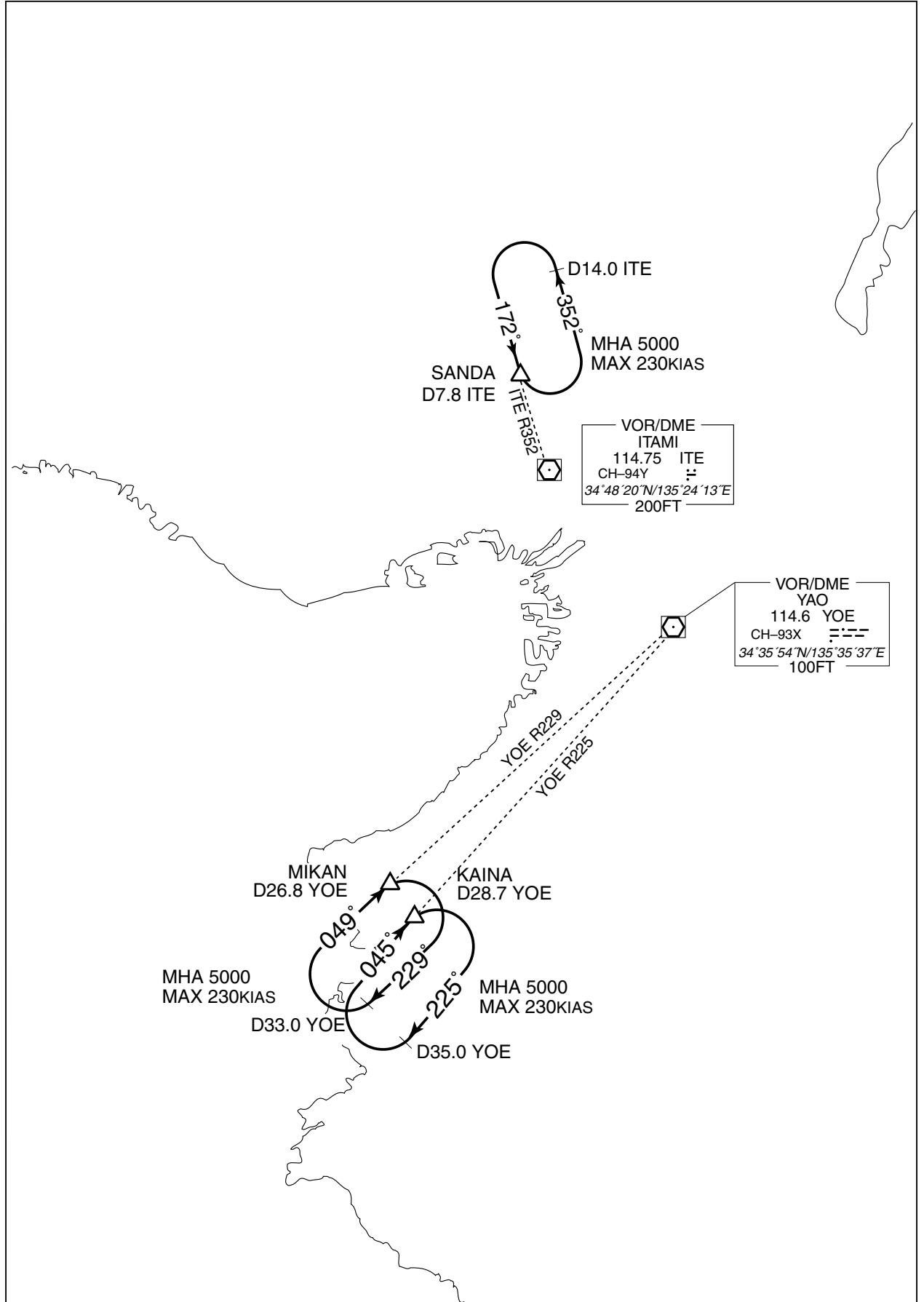
**Required additional data**

LTP/FTP orthometric height	10.6
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CHANGE : FAS DATA BLOCK, Required additional data established.

RJOO / OSAKA INTL

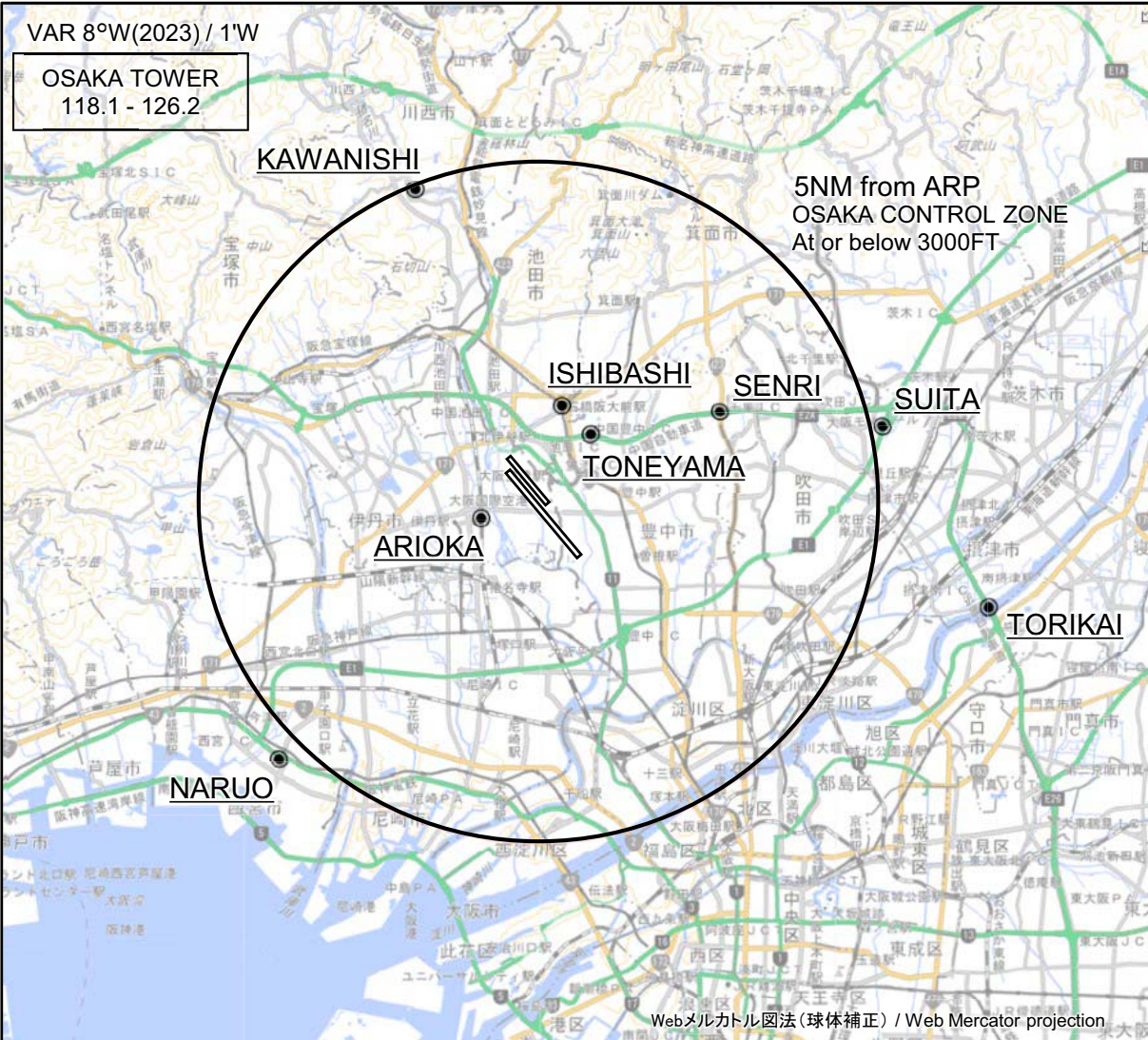
HLDG PATTERN





RJOO / OSAKA INTL

Visual REP



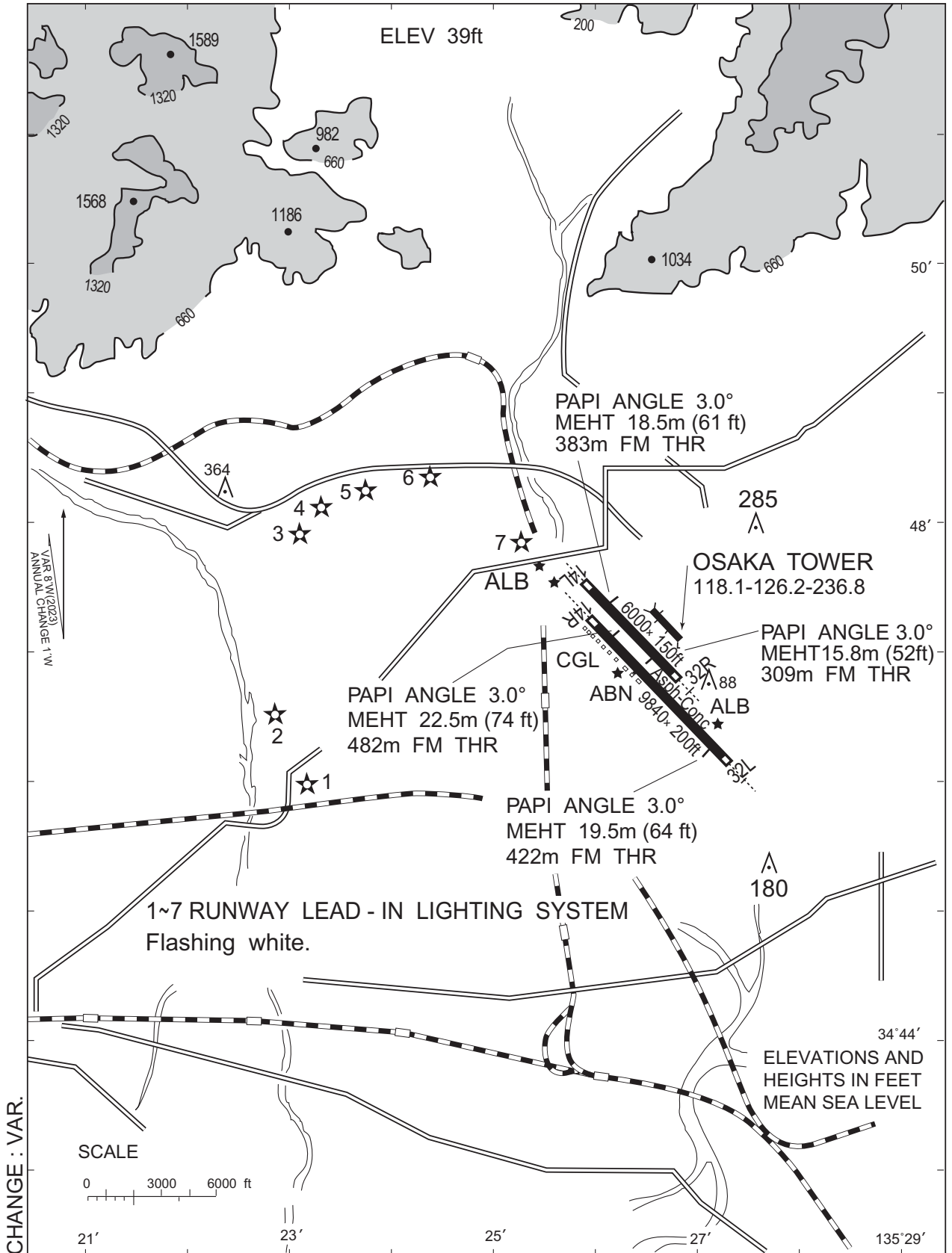
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE : VAR.

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

RJOO / OSAKA INTL

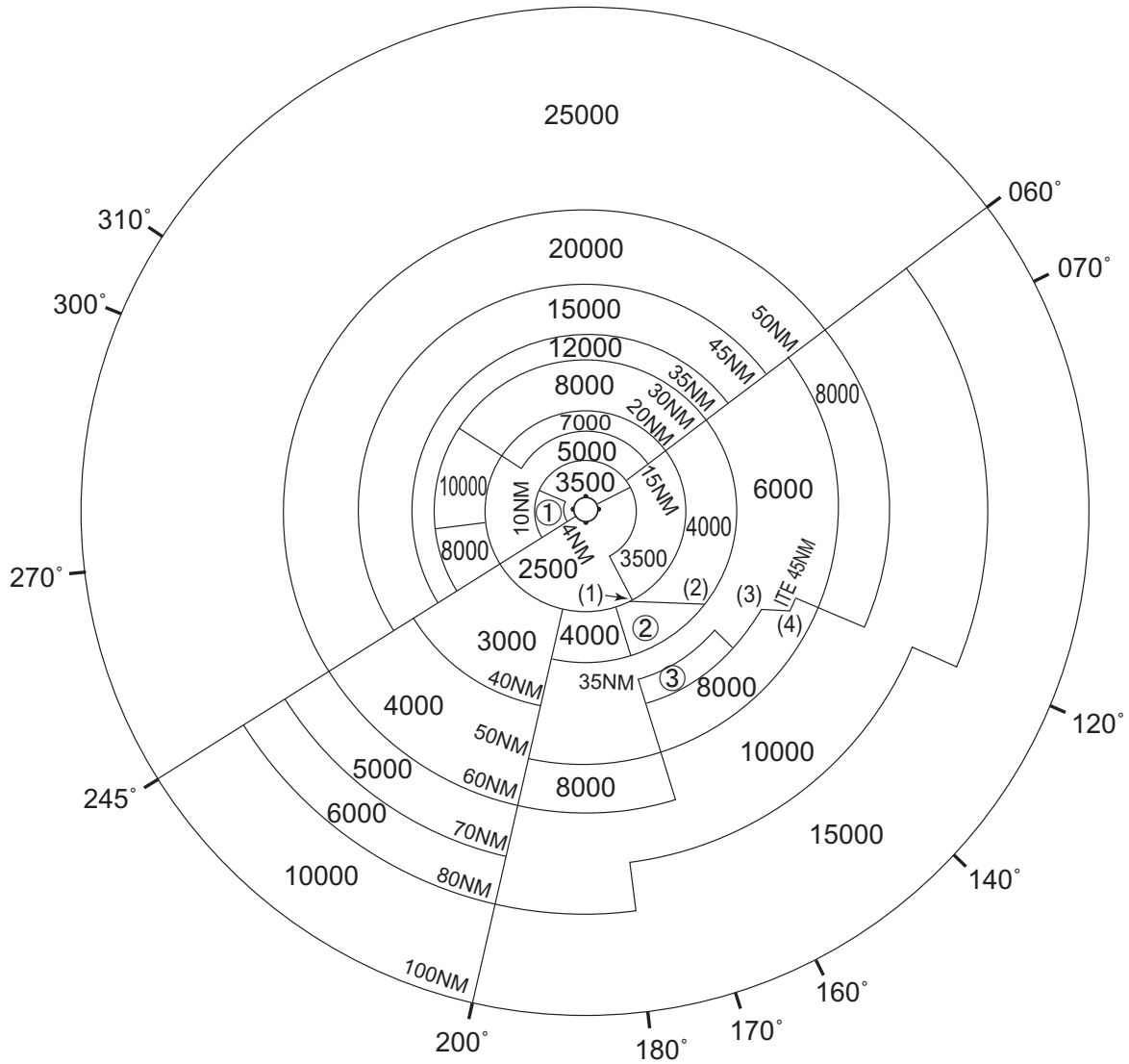
LDG CHART



RJOO / OSAKA INTL

Minimum Vectoring Altitude CHART

VAR 8°W (2023)



- |        |                      |
|--------|----------------------|
| ① 4500 | (1) 342930N/1353527E |
| ② 5000 | (2) 342925N/1355432E |
| ③ 7000 | (3) 342918N/1360849E |
|        | (4) 342924N/1361335E |

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

CHANGE : VAR.