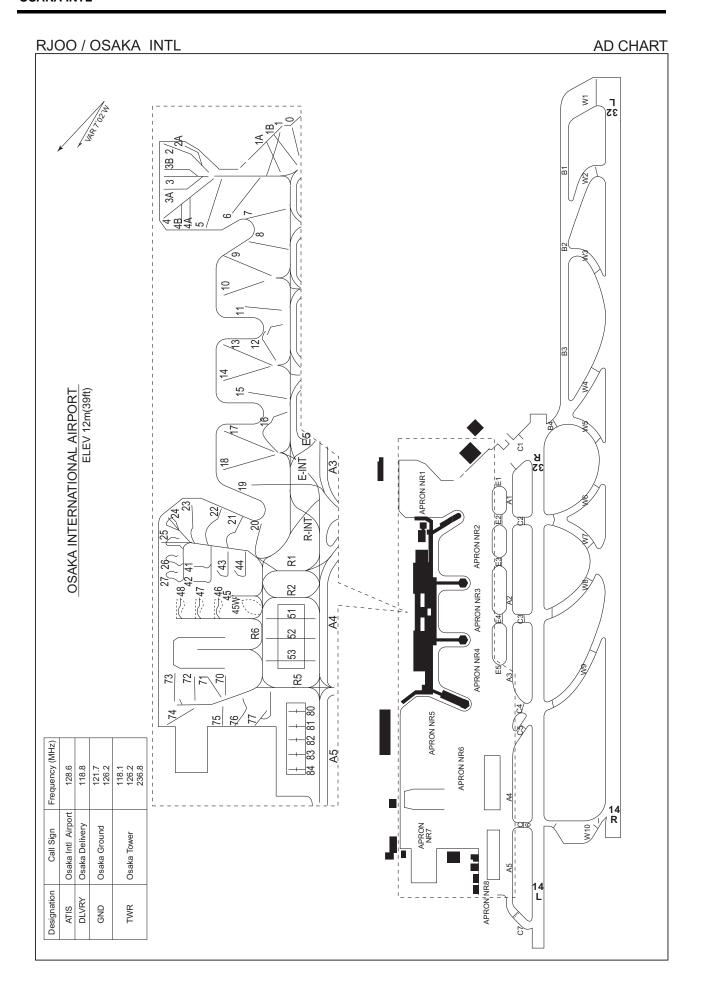
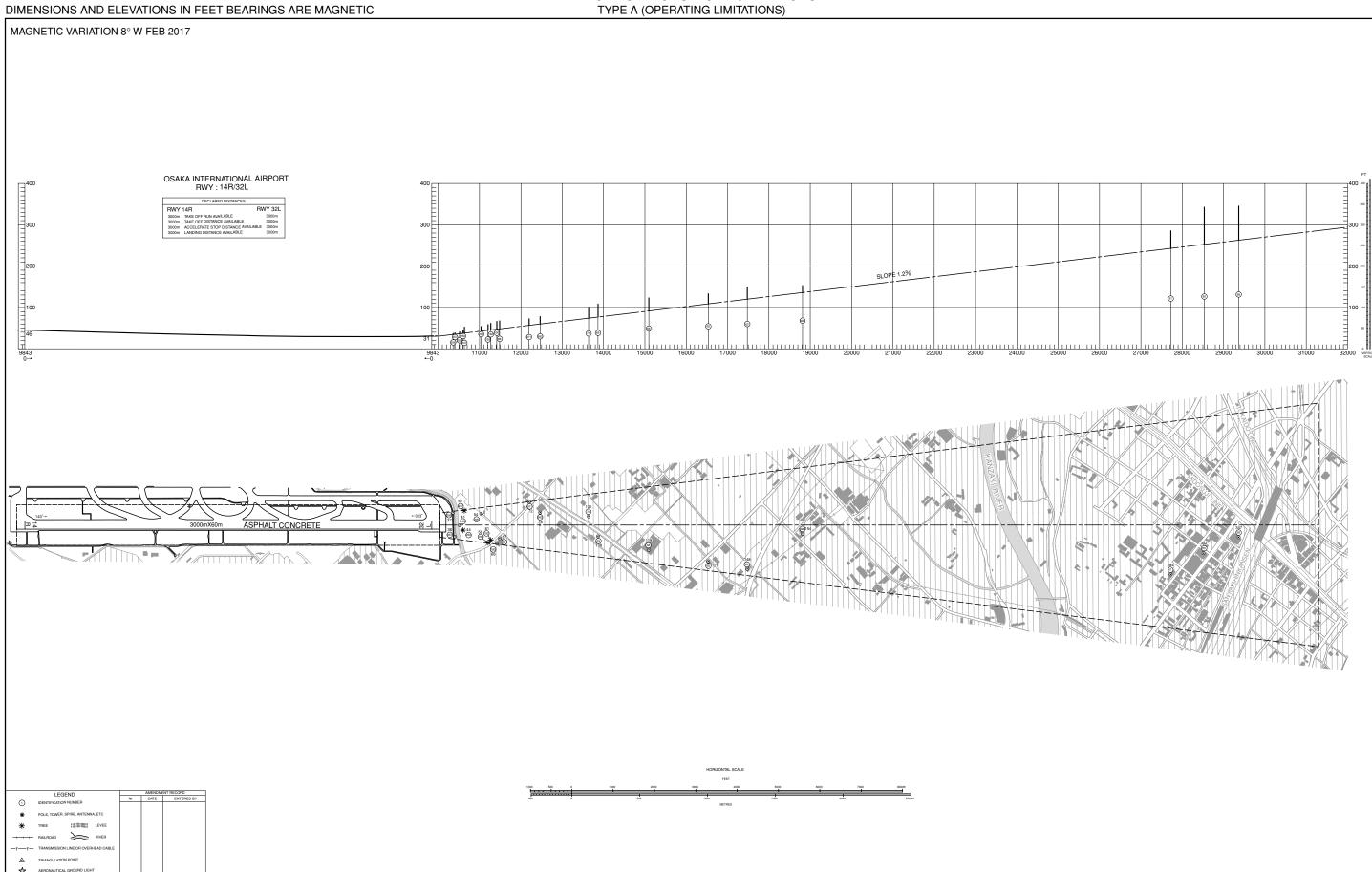
AERODROME CHART OSAKA INTERNATIONAL AIRPORT ELEV 12m(39ft) MARKING AIDS # 4 R PARKING LOT 43A33B2 27 26 25 24 APRON 72 71) INTERMEDIATE HOLDING POSITION LIGHT ANTI NOISE WALL A APRON NR6 for RWY32L) APPROACH LIGHTING SYSTEM RWY GUARD LIGHT ELEV ' APPROACH LGT BEACON 1828 × 45m Asph-Conc ° ° INTERMEDIATE HOLDING POSITION LIGHT NO.1 STOP RWY THR ID LGT PAPI Angle 3.0° \$\mathcal{Z}\$ MEHT 15.8m(52ft) Correction of misdescription(TDZ SEQUENCED FLASHING LGT / (SFL-V) PAPI Angle 3.0° \ MEHT 22.5m(74ft) PAPI Angle 3.0° MEHT 18.5m(61ft) 383m inside FM THR APPROACH LIGHT BEACON RWY THR ID LGT *** TDZ ELEV 30ft OVERRUN AREA EDGE LGT ⊙ CEILOMETER ELEV 31ft ELEV 46ft ⊙ ILS-DME ARP 344704N 1352621E CIRCLING GUIDANCE LIGHTS POL PAPI Angle 3.0° MEHT 19.5m (64ft) 422m inside FM THR FIRE STN WIND SPEED METER WIND SPEED METER CHANGE

Civil Aviation Bureau, Japan (EFF:10 AUG 2023)

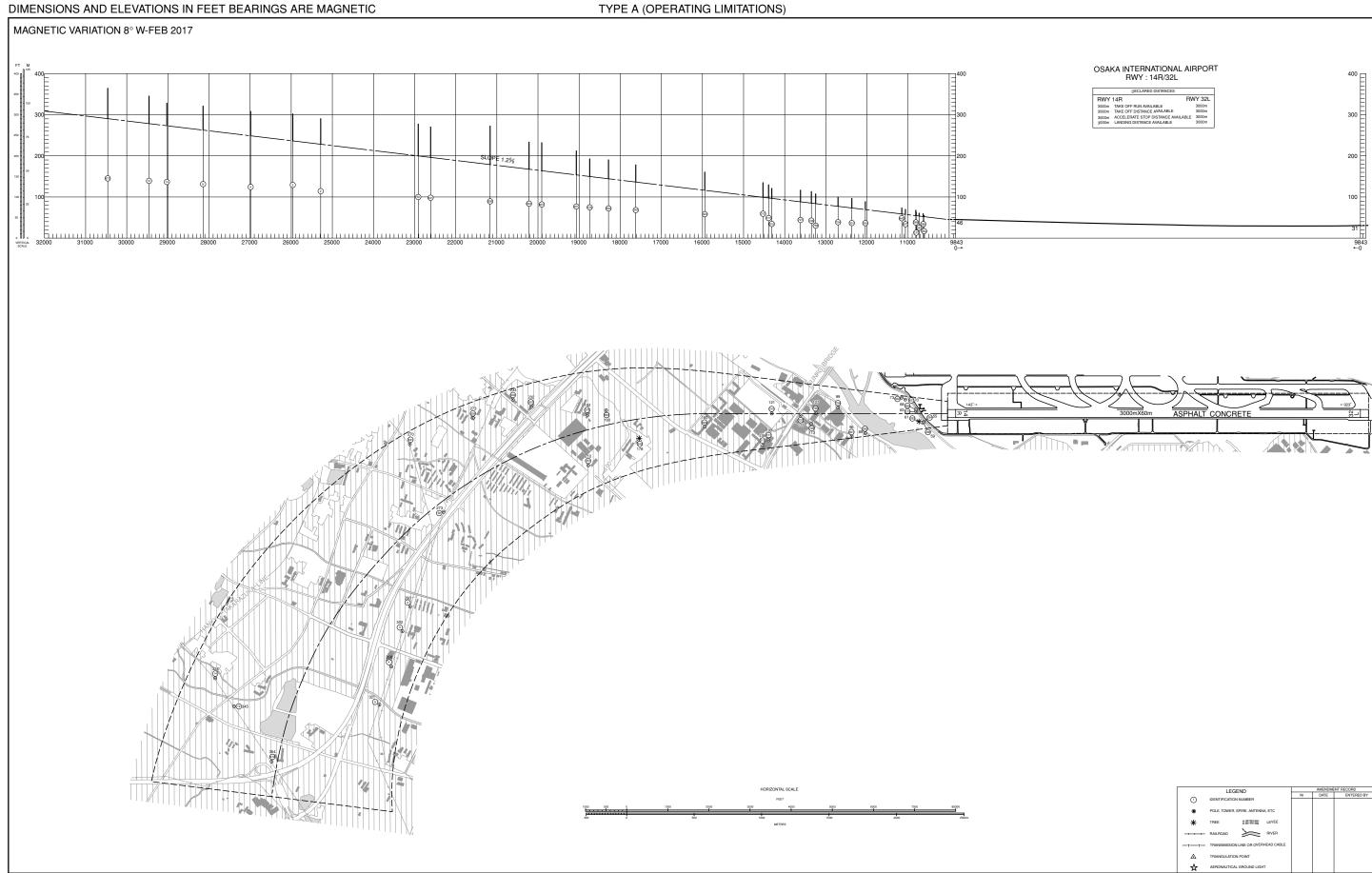




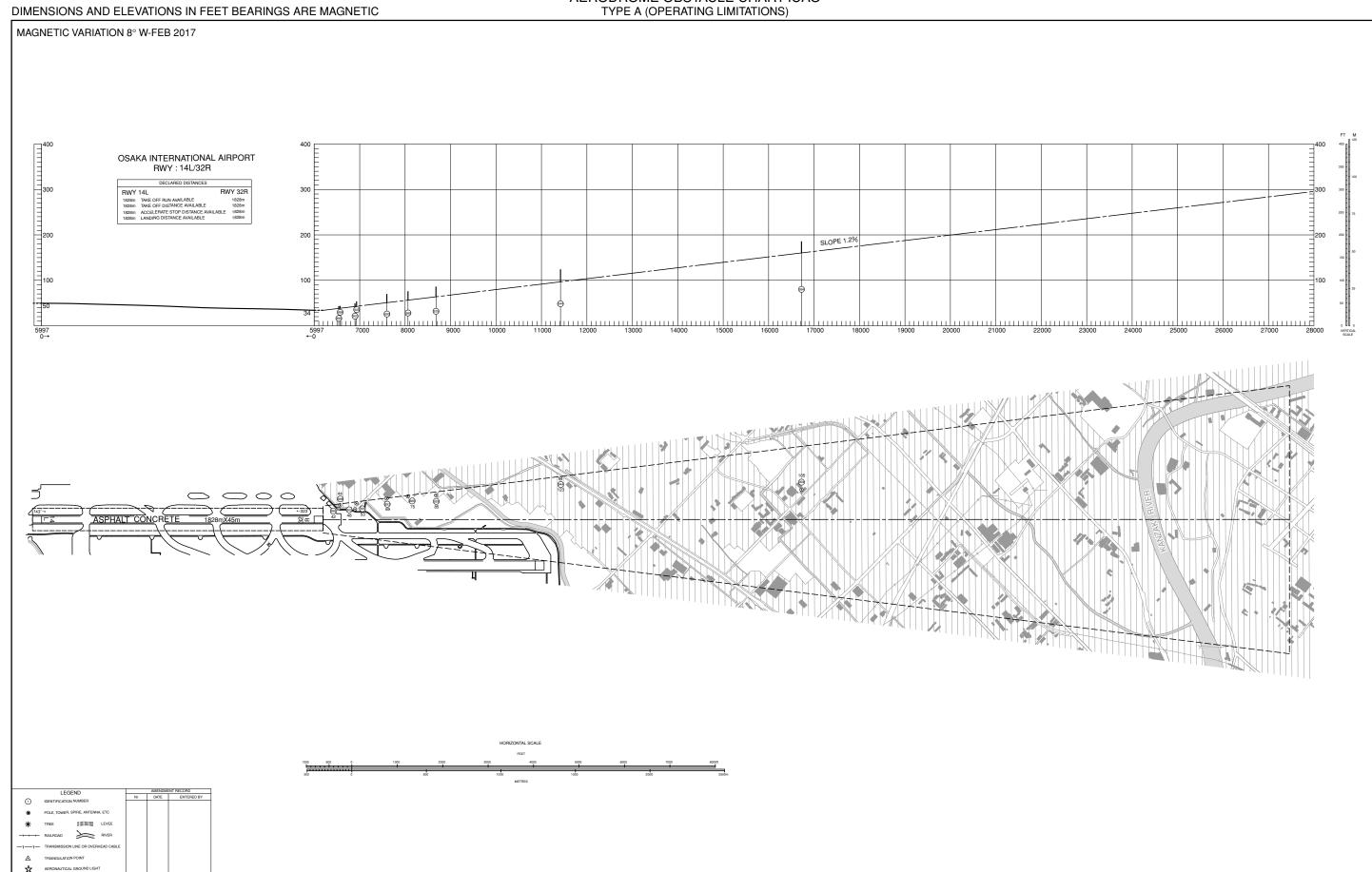
AERODROME OBSTACLE CHART-ICAO TYPE A (OPERATING LIMITATIONS)



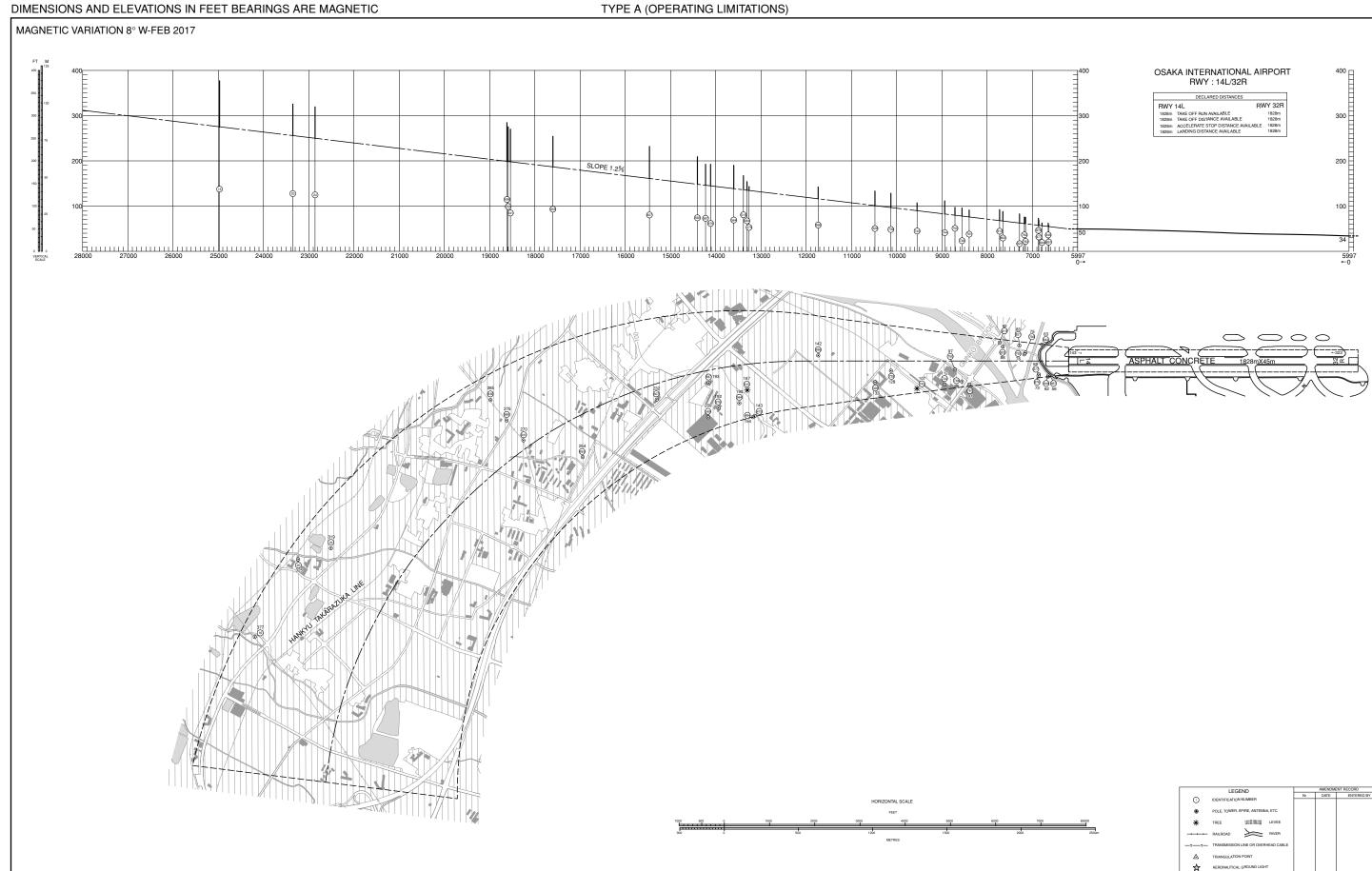
AERODROME OBSTACLE CHART-ICAO TYPE A (OPERATING LIMITATIONS)



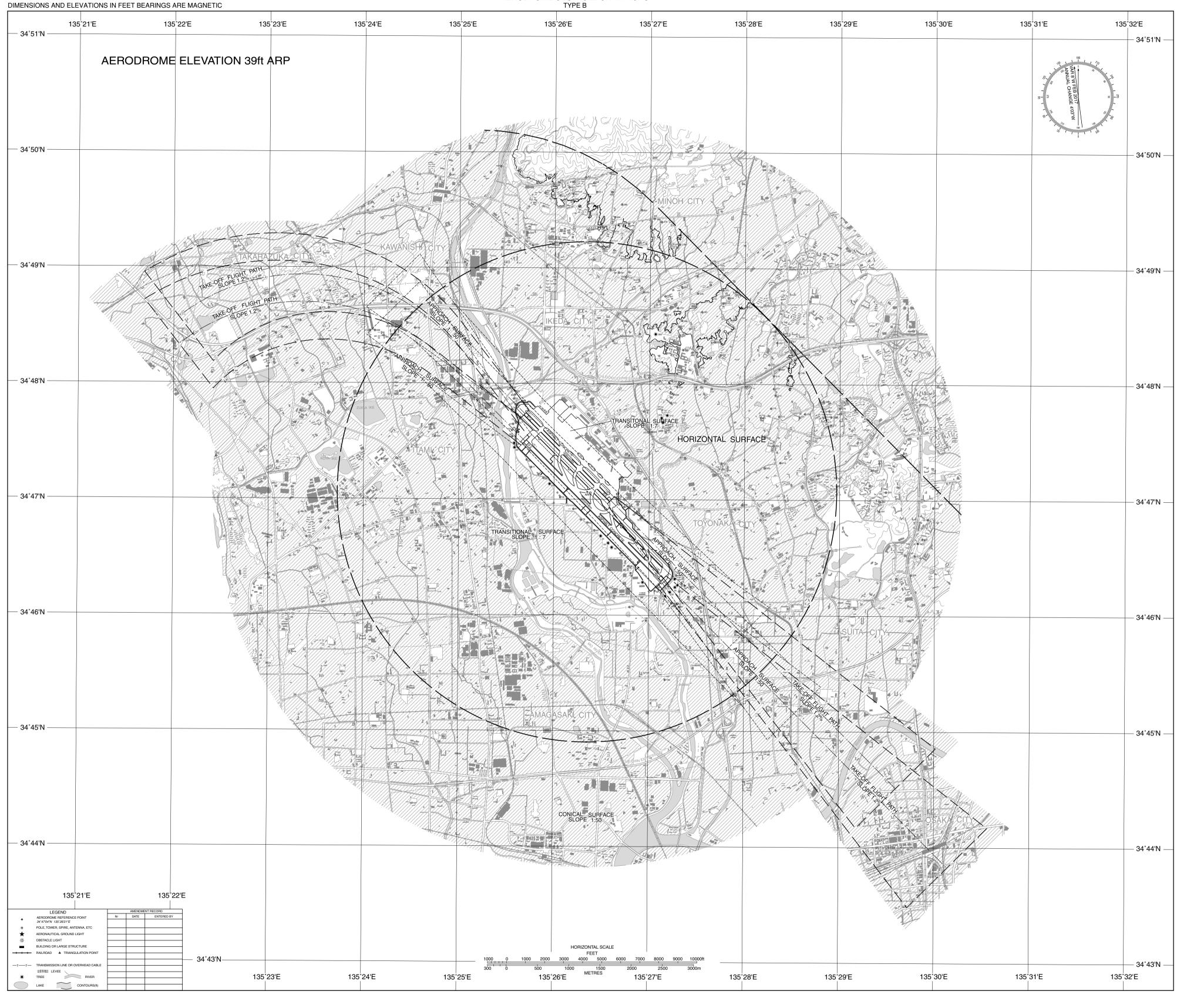
AERODROME OBSTACLE CHART-ICAO TYPE A (OPERATING LIMITATIONS)



AERODROME OBSTACLE CHART-ICAO



AERODROME OBSTACLE CHART-ICAO TYPE B



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

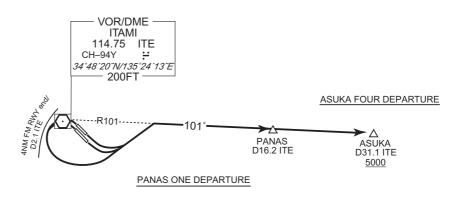
from RWY end/ITE 2.1DME,...

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



RJOO / OSAKA INTL **RNAV TRANSITION** RNAV1 KOMAZ TRANSITION Critical DME _ Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. DME GAP Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 8°W **VORTAC** KOMATSU(KMC) 362347.3N **KOMATSU** 112.0 KMC 1362415.3E CH-57X **Ξ:**-. 36°23′47″N/136°24′15″E 59.5 VOR/DME MIYAZU 112.6 YME CH-73X =:-35°28′50″N/135°08′13″E -2400FT **REVOL** 11000 352732.0N 1360031.9E **BYODO** 6000 345543.6N 1354723.1E VOR/DME -ITAMI 114.75 ITE CH-94Y ∷ **PANAS** 34°48′20″N/135°24′13″E 344709.8N -200FT 1354352.5E VOR/DME YAO and PROC name. 114.6 YOE CH-93X =---34°35′54″N/135°35′37″E 100FT From PANAS, to BYODO at or above 6000FT, to REVOL at or above 11000FT, to KMC. Description of VAR Serial Path Waypoint Fly Magnetic Turn Altitude Vertical Navigation Course Distance Speed Descriptor Direction Number Identifier Over °M(°T) Variation (NM) (FT) (KIAS) Angle Specification 001 IF **PANAS** -8.0 RNAV1 027 002 TF **BYODO** RNAV1 -8.0 9.0 +6000 (018.6)027 003 **REVOL** TF -8.0 33.6 +11000 RNAV1 CHANGE (018.6)027 004 TF **KMC** -8.0 59.5 RNAV1 $(0\overline{18.7})$

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,...

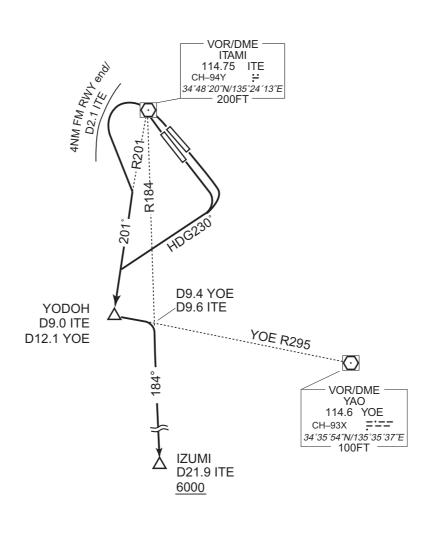
...turn left, via YOE R295 to intercept and proceed via ITE R184 to IZUMI.

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



RJOO / OSAKA INTL SID

EAST REVERSAL FOUR DEPARTURE

RWY 32R/32L: Climb RWY HDG to 500FT or above, turn left within 4NM

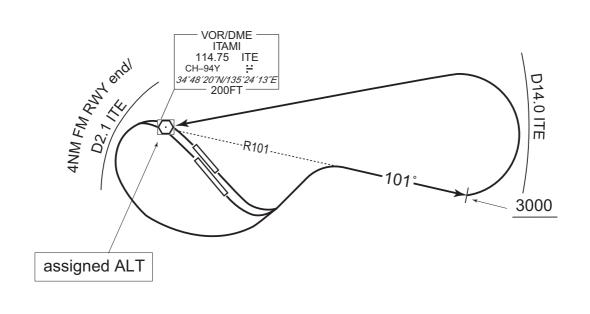
from RWY end/ITE 2.1DME,...

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



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

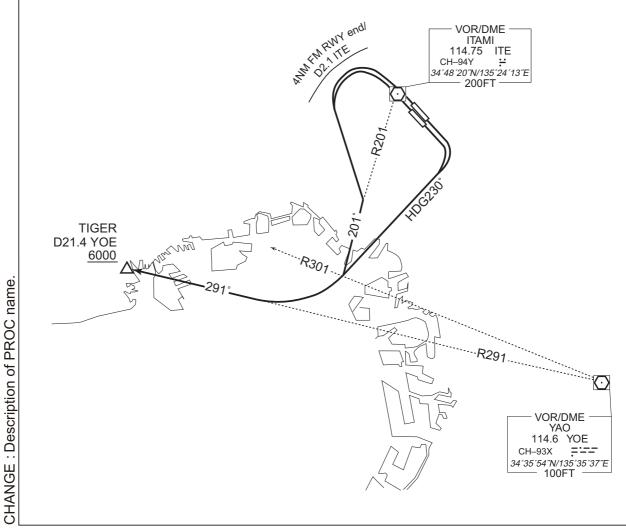
R301...

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.

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

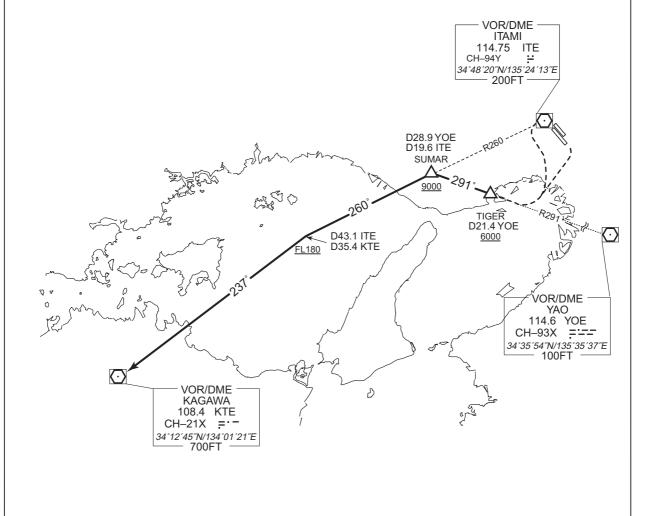


RJOO / OSAKA INTL TRANSITION

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.



RJOO / OSAKA INTL

TRANSITION

ASAGI TRANSITION

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

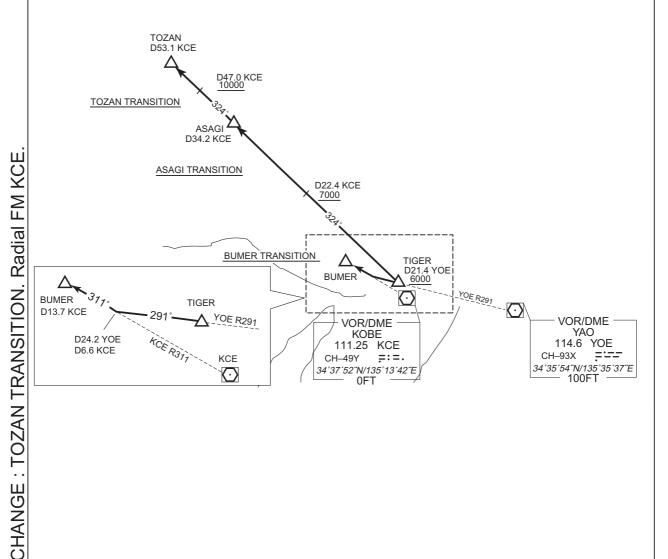
TOZAN TRANSITION

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.



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,...

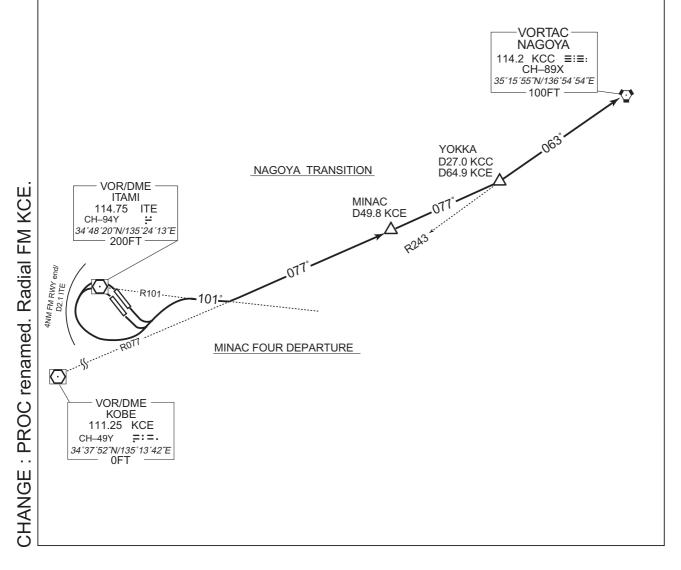
RWY 14R/14L: Climb RWY HDG to 500FT or above, turn left,... ...via ITE R101 to intercept and proceed via KCE R077 to MINAC.

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.



RJOO / OSAKA INTL **RNAV TRANSITION GUJYO TRANSITION / SHTLE TRANSITION** RNAV1 Critical DME NOTE 1) DME/DME/IRU or GNSS required. DME GAP 2) RADAR service required. See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 Inappropriate Navaids VAR 8°W GUJYO 352150.5N 1363438.5E FL200 **GUJYO TRANSITION** VOR/DME VOR/DME **KOBE** ITAMI 111.25 KCE VOR/DME 114.75 ITE CHUBU CH-49Y ≓:=. CH-94Y 117.8 CBE 34°37′52″N/135°13′42″E 34°48′20″N/135°24′13″E CH-125X **;::::** 0FT 200FT 34°51′29″N/136°48′11″E MINAC 0FT 345526.3N 1361026.4E 45.3 SHTLE 093 344951.0N \odot ASUKA 1365653.8E 344602.7N 1360154.7E SHTLE TRANSITION \odot VOR/DME YAO 114.6 YOE CH-93X =:--34°35′54″N/135°35′37″E 100FT **GUJYO TRANSITION** From MINAC, to GUJYO at or above FL200. Serial Path Waypoint Fly Course Magnetic Distance Turn Altitude Speed Vertical Navigation Direction Number Descriptor Identifier Over Specification °M(°T) Variation (NM) (FT) (KIAS) Angle 001 IF RNAV1 MINAC -8.0 045 (036.7) 002 **GUJYO** -8.0 +FL200 RNAV1 TF 33.0

SHTLE TRANSITION

From ASUKA, to SHTLE.

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

RJOO/OSAKA INTL RNAV TRANSITION RNAV1 **AWAJI TRANSITION** Critical DME NOTE 1) DME/DME/IRU or GNSS required. DME GAP 2) RADAR service required. Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 8°W ITE \odot **TIGER** DME 344050 4N SHODO 1351016.7E 1178 STD CH-91X MAIKO 34°30′45″N/134°16′27″E YOE 343639.7N 2500FT **KCE** 1345949 1F \odot DME AWAJI 1190 AJD CH-103X :=.-34°16′13″N/134°42′47″E ∕KIE 900FT **⊘** AWAJI 341613.1N **TACAN** 1344246.6E **TAKAMATSU** \odot 1209 TZT CH-122X **Ξ-**• 34°19′34″N/133°57′14″E VOR/DME 1600FT KAGAWA 108.4 KTE VOR/DME VOR/DME CH-21X **KOBE** ITAMI 34°12′45″N/134°01′21″E 114.75 ITE 111.25 KCE 700FT CH-49Y CH-94Y 34°37′52″N/135°13′42″E 34°48′20″N/135°24′13″E 0FT 200FT -VOR/DME VOR/DME KANSAI YAO 111.6 KIE 114.6 YOE CH-53X ... CH-93X =:--34°25′33″N/135°12′28″E 34°35′54″N/135°35′37″E 0FT 100FT CHANGE: Description of VAR and PROC name. From TIGER, to MAIKO, to AWAJI. Serial Path Waypoint Fly Course Magnetic Distance Turn Altitude Speed Vertical Navigation Number Descriptor Identifier °M(°T) Variation (NM) Specification Over Direction (FT) (KIAS) Angle 001 IF **TIGER** -8.0 RNAV1 252 (244.2) 002 TF **MAIKO** -8.0 RNAV1 9.6 223 (214.6) 003 TF RNAV1 **AWAJI** -8.0 24.8

RJOO / OSAKA INTL RNAV TRANSITION AYAME TRANSITION / SOUJA TRANSITION / WASYU TRANSITION RNAV1 Critical DME NOTE 1) DME/DME/IRU or GNSS required. DMF GAP 2) RADAR service required. Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 8°W AYAME TRANSITION SOUJA TRANSITION ₹291 **TIGER** SOUJA 28.9 265 SUMAR 344050.4N SETOH ~5 344231.9N 343225.3N YOE ∀ AYAME *343601.7N* 1350128.2E 343738.6N 1340838.8E 265 1334422.5E 1342714.1E \odot DME SHODO **ONOPA** 1178 STD WASYU 343030.3N CH-91X ≝:. $\langle \cdot \rangle$ 1334704.3E 342817.5N 34°30′45″N/134°16′27″E 1332301.1E /KIE 2500FT WASYU TRANSITION VOR/DME ITAMI 114.75 ITE VOR/DME CH-94Y **TACAN** \odot 34°48′20″N/135°24′13″E VOR/DME **KOBE TAKAMATSU** 200FT -**KAGAWA** 111.25 KCE 1209 TZT 108.4 KTE CH-49Y =:=. VOR/DME CH-122X **Ξ-··** CH-21X 34°37′52″N/135°13′42″E YAO 34°19′34″N/133°57′14″E 114.6 YOE 34°12′45″N/134°01′21″E 0FT 1600FT 700FT CH-93X =:--VOR/DME 34°35′54″N/135°35′37″E KANSAI 100FT 111.6 KIE сн-53х ;;·· 34°25′33″N/135°12′28″E - ŐFT AYAME TRANSITION From TIGER, to SUMAR, to AYAME Serial Path Waypoint Fly Magnetic Distance Turn Altitude Speed Vertical Navigation Course Descriptor Identifier Variation (NM) Direction (FT) (KIAS) Angle Specification 001 IF **TIGER** -8.1 RNAV1 established 291 (283.2) 002 TF SUMAR -8.1 7.4 RNAV1 003 TF **AYAME** 265 (257.2) -8.1 28.9 RNAV1 ONOPA SOUJA TRANSITION From TIGER, to SUMAR, to AYAME, to SETOH, to SOUJA. Serial Path Waypoint Fly Course Magnetic Distance Turn Altitude Speed Vertical Navigation Identifier Over Variation (NM) Direction (KIAS) Number Descriptor °M(°T) (FT) Angle Specification 001 IF **TIGER** -8.1 RNAV1 291 (283.2) 002 RNAV1 -8.1 TF SUMAR 7.4 003 265 (257.2) TF **AYAME** -8.1 28.9 RNAV1 265 (256.8) 004 TF SETOH -8.1 15.7 RNAV1

005

TF

SOUJA

293 (284.8)

-8.1

20.7

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RNAV1

RJOO/OSAKA INTL

RNAV TRANSITION

WASYU TRANSITION

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

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	TIGER	_	1	-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

RJOO / OSAKA INTL STAR

IZUMI ARRIVAL

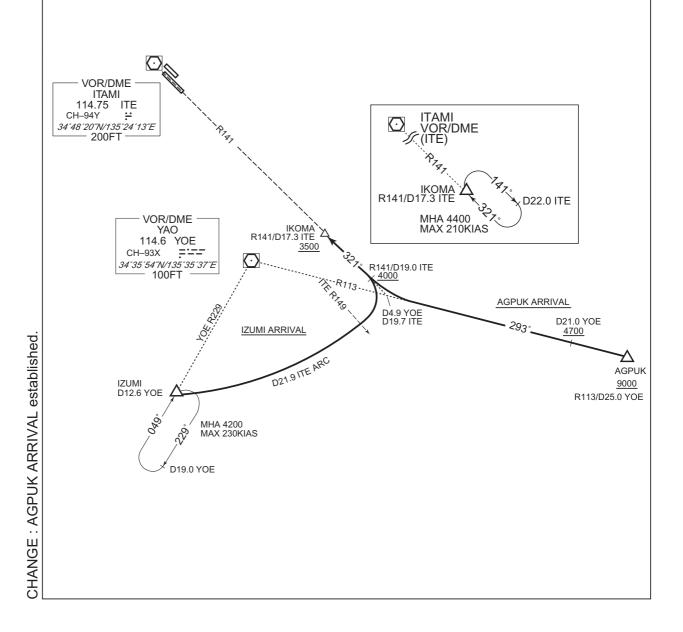
From over IZUMI, via ITE 21.9DME counterclockwise ARC to intercept and proceed via ITE R141 to IKOMA.

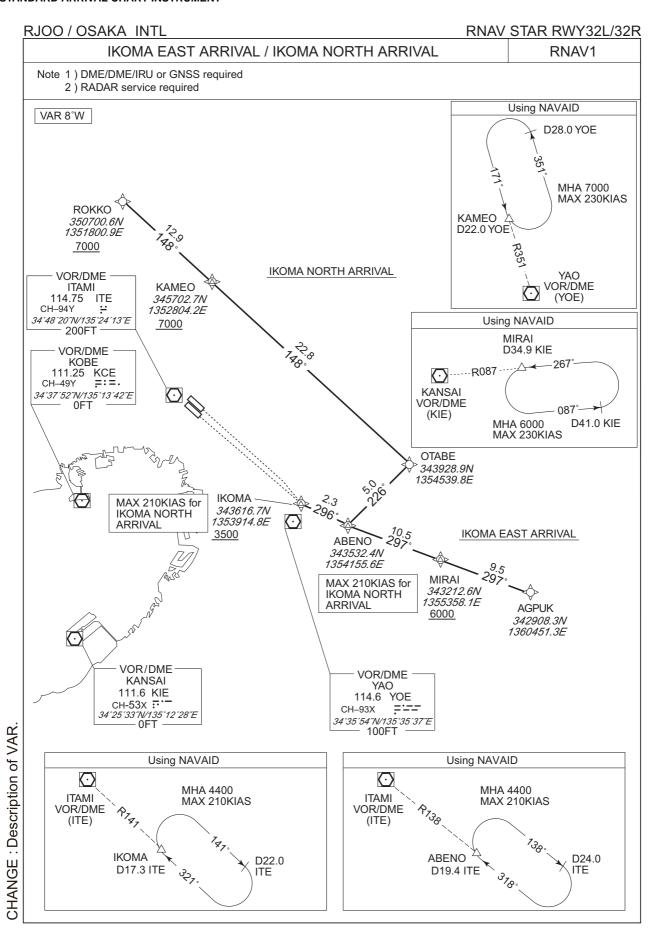
Cross ITE R141/19.0DME at or above 4000FT, cross IKOMA at or above 3500FT.

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.





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

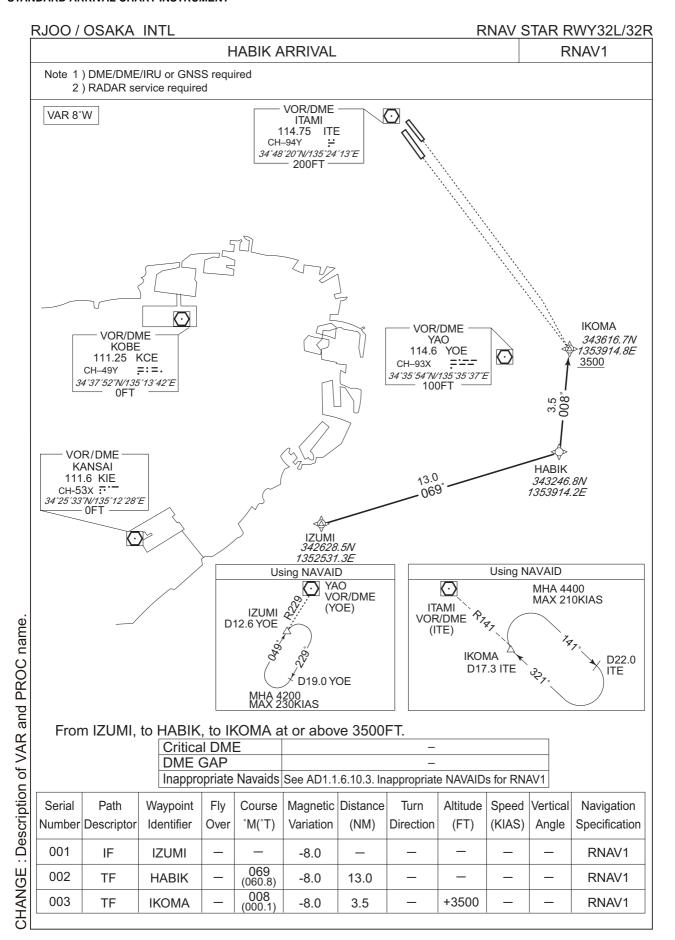
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	AGPUK	_	_	-8.0	1	-	_	_	_	RNAV1
002	TF	MIRAI	_	297 (288.7)	-8.0	9.5	_	+6000	_	_	RNAV1
003	TF	ABENO	_	297 (288.6)	-8.0	10.5	_	_	_	_	RNAV1
004	TF	IKOMA	_	296 (288.5)	-8.0	2.3	_	+3500	_	_	RNAV1

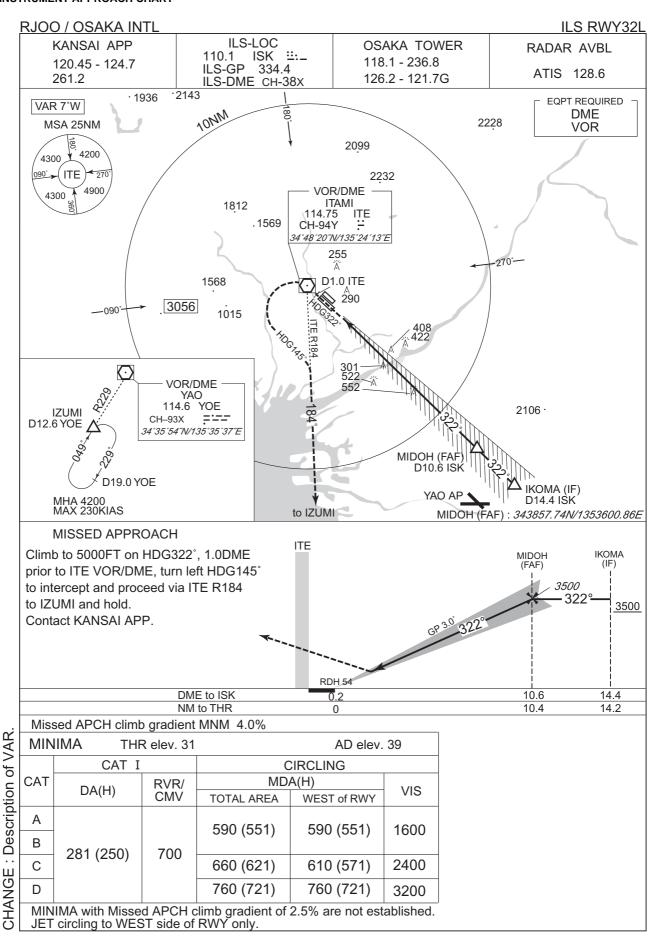
IKOMA NORTH ARRIVAL

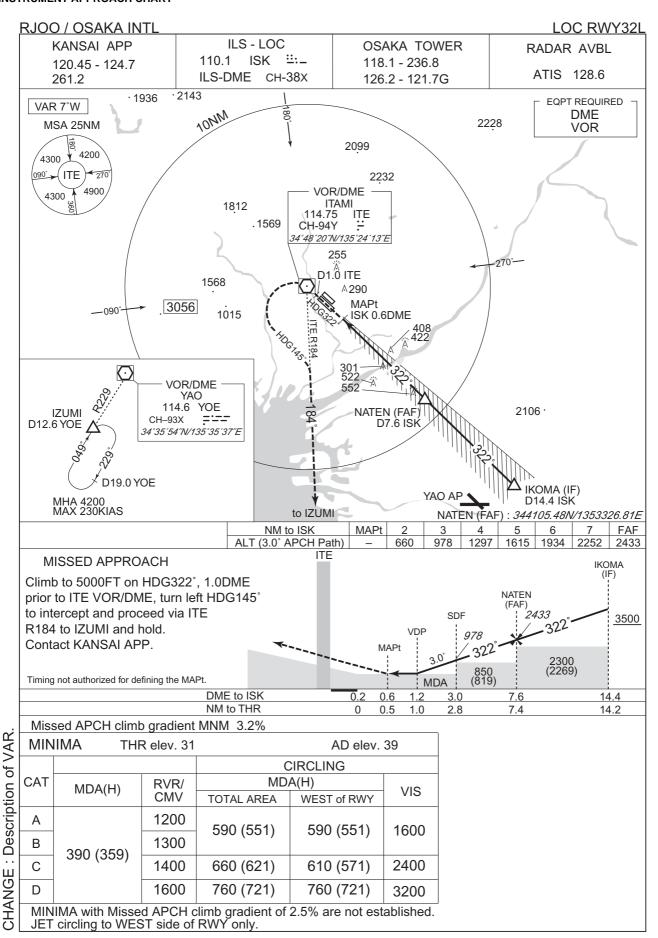
From ROKKO at or above 7000FT, to KAMEO at or above 7000FT, to OTABE, to ABENO, to IKOMA at or above 3500FT.

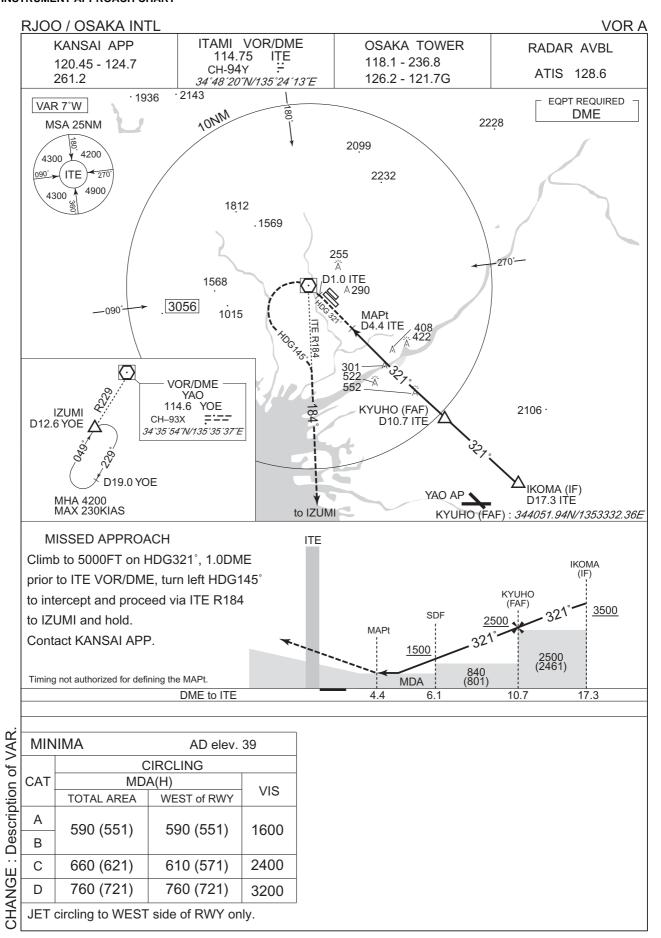
Critical DME	ITE : 9.9NM to KAMEO – KAMEO YME : 19.7NM to OTABE – 13.7NM to OTABE
DME GAP	-
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

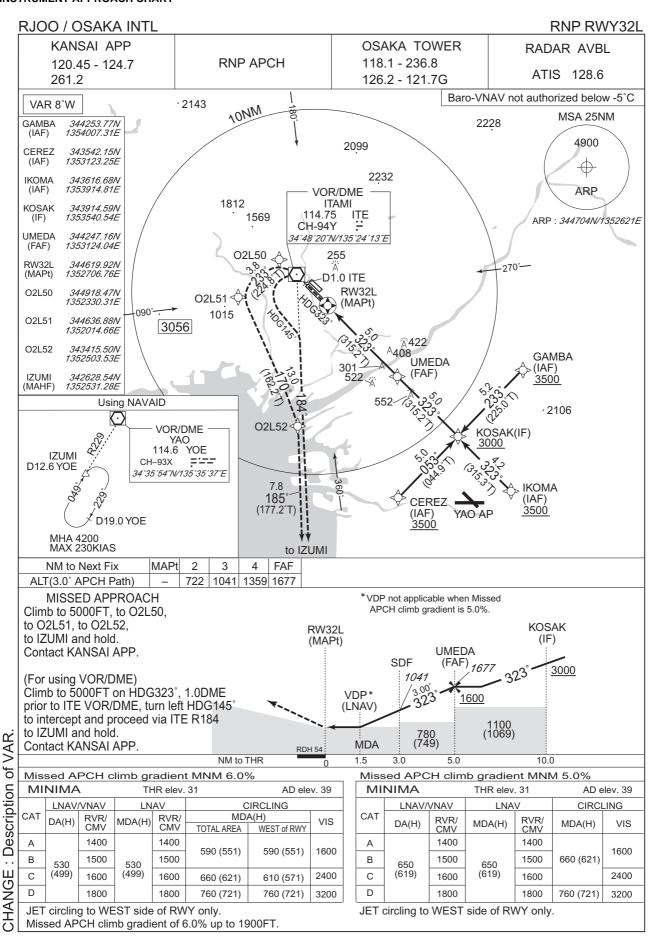
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	ROKKO	_	_	-8.0	_	_	+7000	_	_	RNAV1
002	TF	KAMEO	_	148 (140.4)	-8.0	12.9	_	+7000	_	_	RNAV1
003	TF	OTABE	_	148 (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

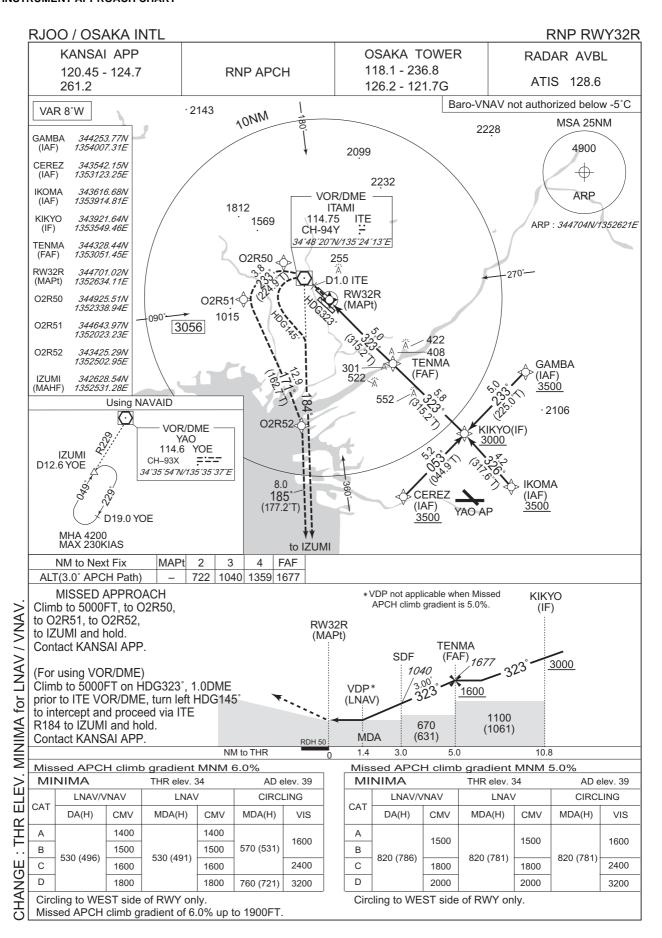




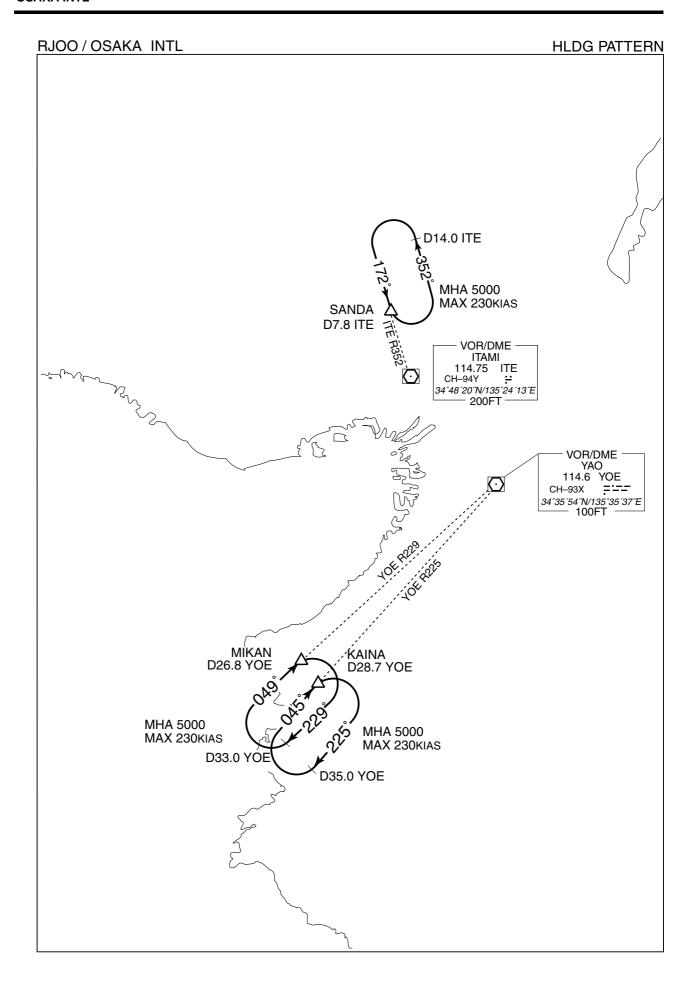














※図中に標高を示す数字がある場合、単位はメートル(m)である。 The unit of measurement used to express elevation is meter(m).

Call sign	BRG / DIST from ARP	Remarks
川西 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

