

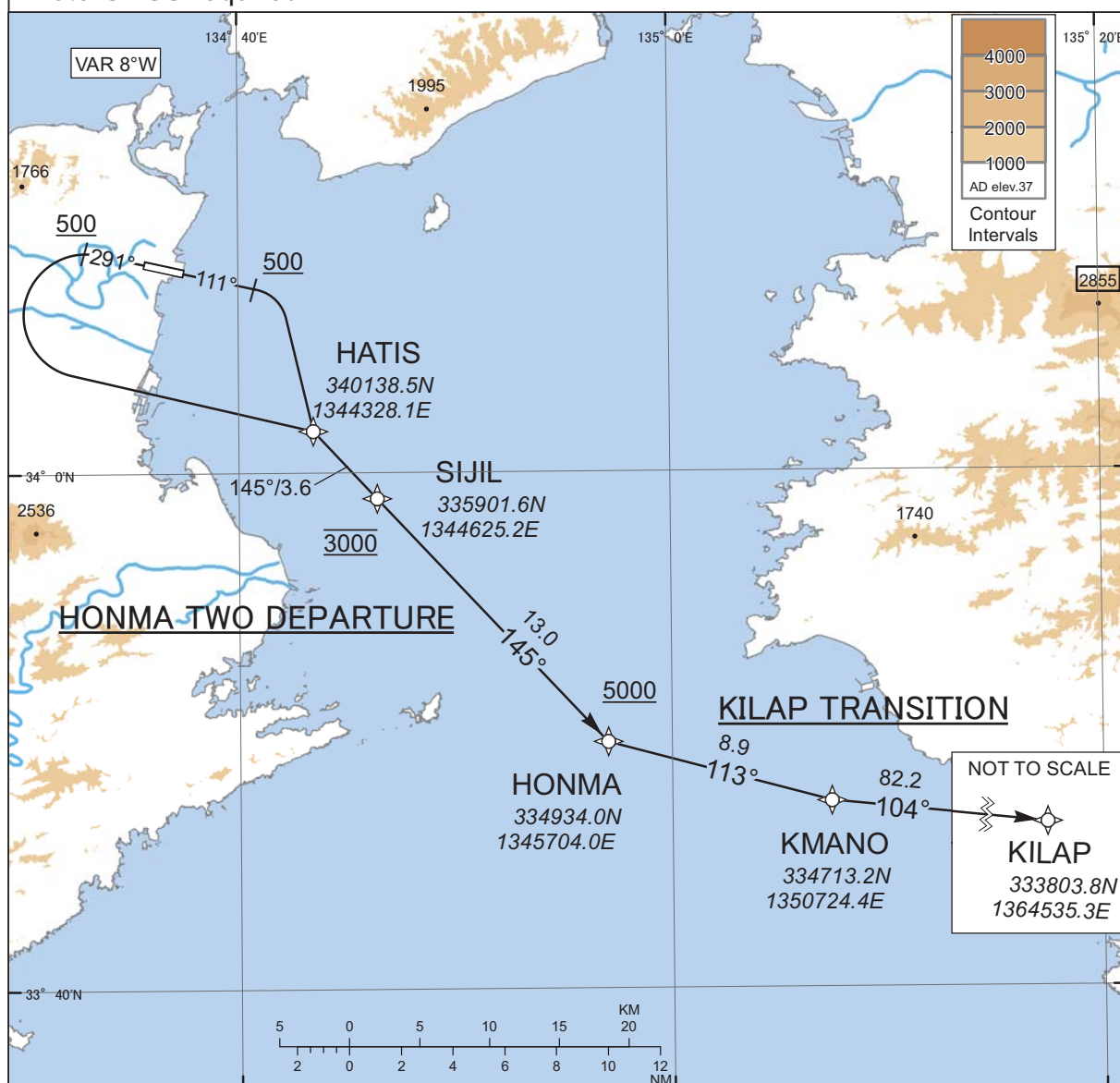
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R JOS / TOKUSHIMA

RNAV SID and TRANSITION

RNP1

CHANGE : PROC course. PROC renamed(HONMA TWO DEPARTURE). Note. Navigation Specification(RNAV1 → RNP1). TOKUSHIMA VORTAC,GOBOH DME,NANKI VOR/DME deleted.



RWY11 : Climb on HDG111° at or above 500FT, turn right direct to HATIS, to SIJIL at 3000FT, to HONMA at or above 5000FT.

RWY29 : Climb on HDG291° at or above 500FT, turn left direct to HATIS, to SIJIL at 3000FT, to HONMA at or above 5000FT.

Note RWY29 : 5.0% climb gradient required up to 1200FT.
OBST ALT 1115FT located at 4.9NM 224° FM end of RWY29.

From HONMA at or above 5000FT, to KMANO, to KILAP.

STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

RNAV SID and TRANSITION

HONMA TWO DEPARTURE

RWY11

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	-	-	111 (102.6)	-8.0	-	-	+500	-	-	RNP1
002	DF	HATIS	-	-	-8.0	-	R	-	-	-	RNP1
003	TF	SIJIL	-	145 (136.9)	-8.0	3.6	-	3000	-	-	RNP1
004	TF	HONMA	-	145 (136.9)	-8.0	13.0	-	+5000	-	-	RNP1

RWY29

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	-	-	291 (282.6)	-8.0	-	-	+500	-	-	RNP1
002	DF	HATIS	-	-	-8.0	-	L	-	-	-	RNP1
003	TF	SIJIL	-	145 (136.9)	-8.0	3.6	-	3000	-	-	RNP1
004	TF	HONMA	-	145 (136.9)	-8.0	13.0	-	+5000	-	-	RNP1

KILAP TRANSITION

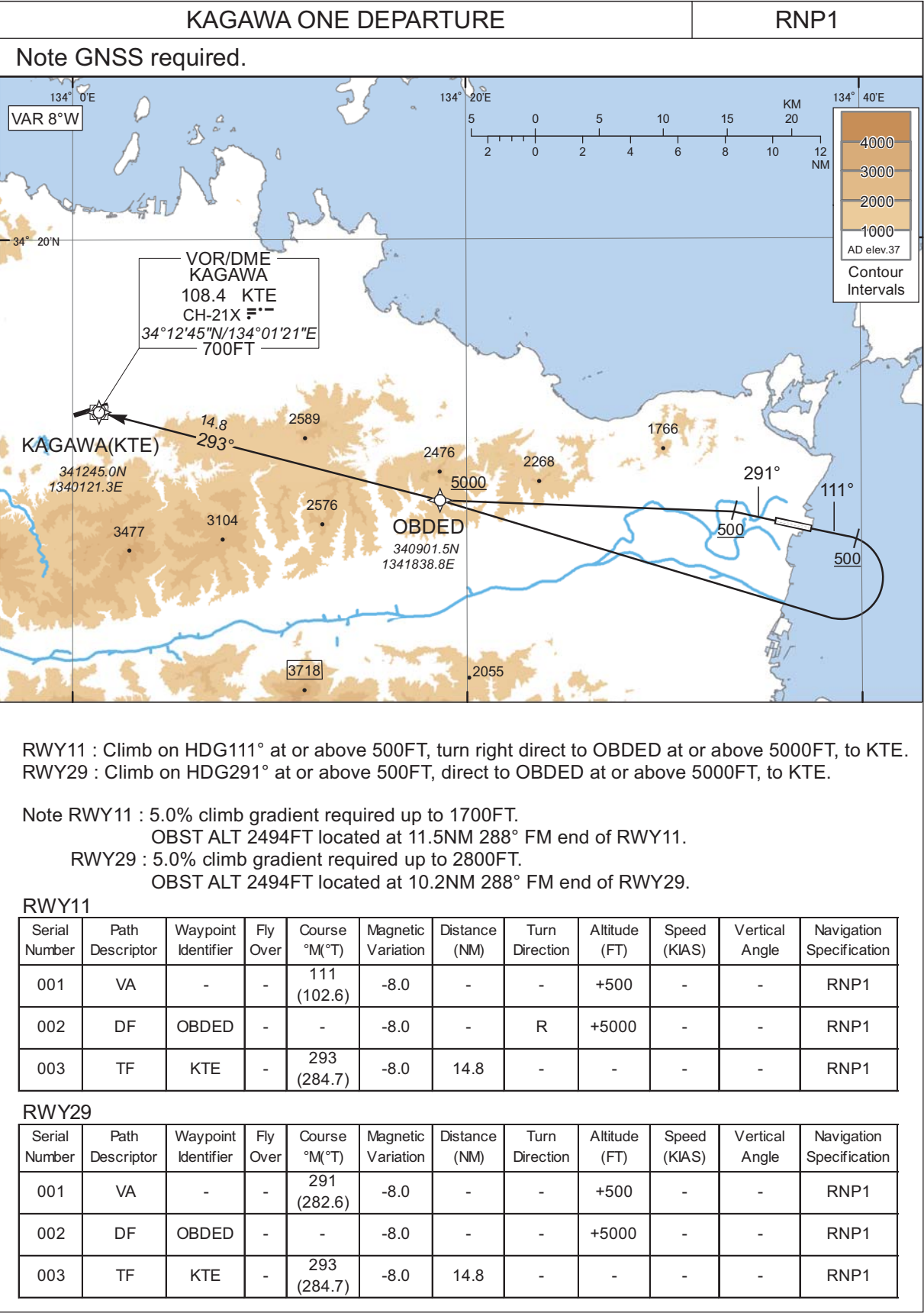
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	HONMA	-	-	-8.0	-	-	+5000	-	-	RNP1
002	TF	KMANO	-	113 (105.2)	-8.0	8.9	-	-	-	-	RNP1
003	TF	KILAP	-	104 (095.9)	-8.0	82.2	-	-	-	-	RNP1

CHANGE : PROC course. PROC renamed(HONMA TWO DEPARTURE). Navigation Specification(RNAV1 → RNP1). VAR.

STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

RNAV SID



CHANGE : New PROC.

STANDARD DEPARTURE CHART-INSTRUMENT

R JOS / TOKUSHIMA

SID

TOSAR SIX DEPARTURE

RWY11 : Climb RWY HDG to 500FT, turn right HDG232°...

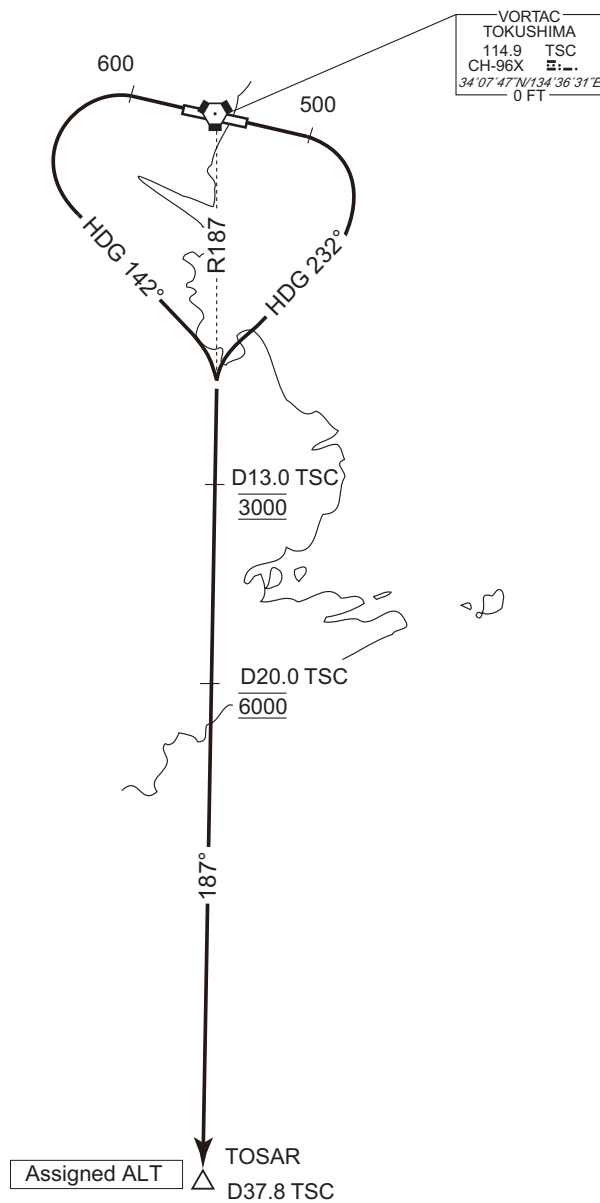
RWY29 : Climb RWY HDG to 600FT, turn left HDG142°...

...to intercept and proceed via TSC R187 to TOSAR.

Cross TSC R187/13.0DME at 3000FT, cross TSC R187/20.0DME at 6000FT, cross TOSAR at assigned altitude.

NOTE RWY29 : 4.0% climb gradient required up to 800FT.

OBST ALT 1105FT located at 5.0NM 224° FM end of RWY29.



CHANGE : PROC course. PROC renamed(TOSAR SIX DEPARTURE). Note.

STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

SID

TOKUSHIMA REVERSAL SEVEN DEPARTURE

RWY11 : Climb RWY HDG to 500FT, turn right HDG205°...

RWY29 : Climb RWY HDG to 600FT, turn left HDG115°...

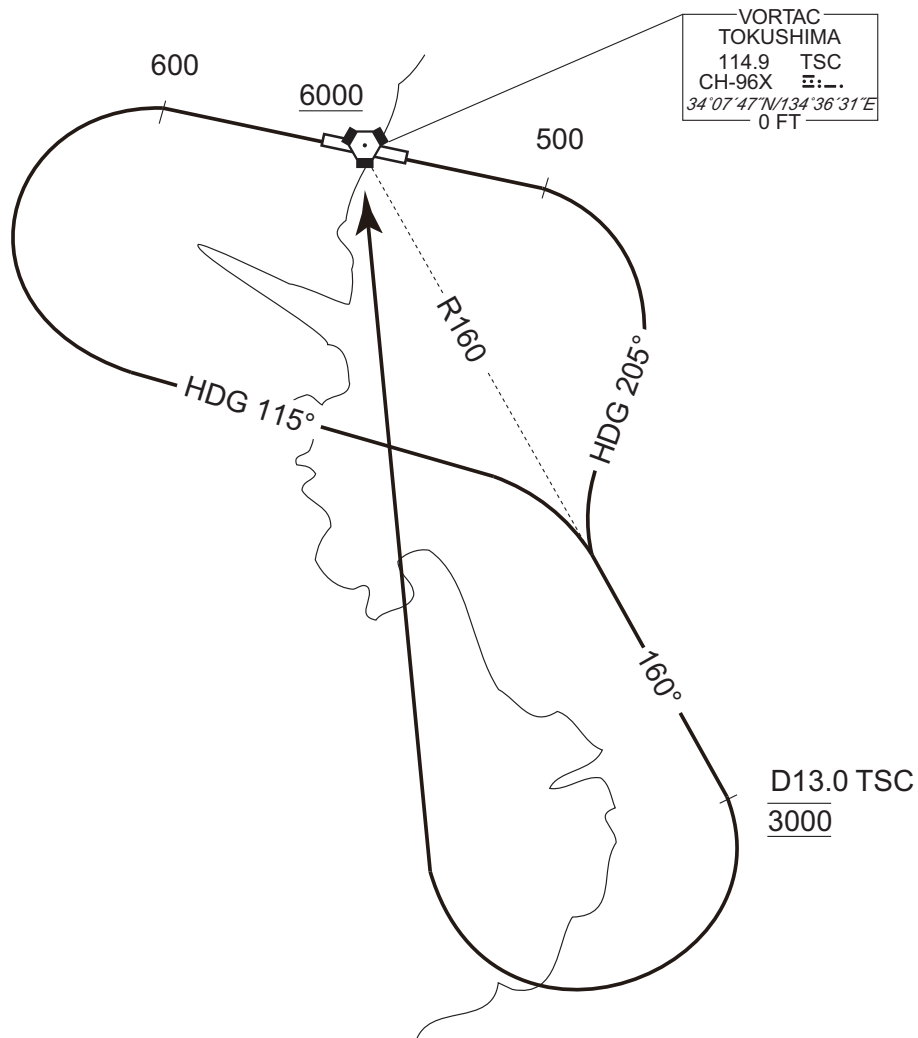
...to intercept and proceed via TSC R160 to 13.0DME, turn right, direct to TSC VORTAC.

Cross TSC R160/13.0DME at 3000FT, cross TSC VORTAC at or above 6000FT.

NOTE RWY29 : 4.0% climb gradient required up to 800FT.

OBST ALT 1105FT located at 5.0NM 224° FM end of RWY29.

CHANGE : PROC course. PROC renamed(TOKUSHIMA REVERSAL SEVEN DEPARTURE). Note.



STANDARD DEPARTURE CHART -INSTRUMENT

RJOS / TOKUSHIMA

SID and TRANSITION

MISAKI FOUR DEPARTURE

RWY11 : Climb RWY HDG to 500FT, turn right,...

RWY29 : Climb RWY HDG to 600FT, turn left HDG098° to intercept and proceed...
...via TSC R143 to HONMA.

Cross TSC R143/12.0DME at 3000FT, cross HONMA at or above 8000FT.

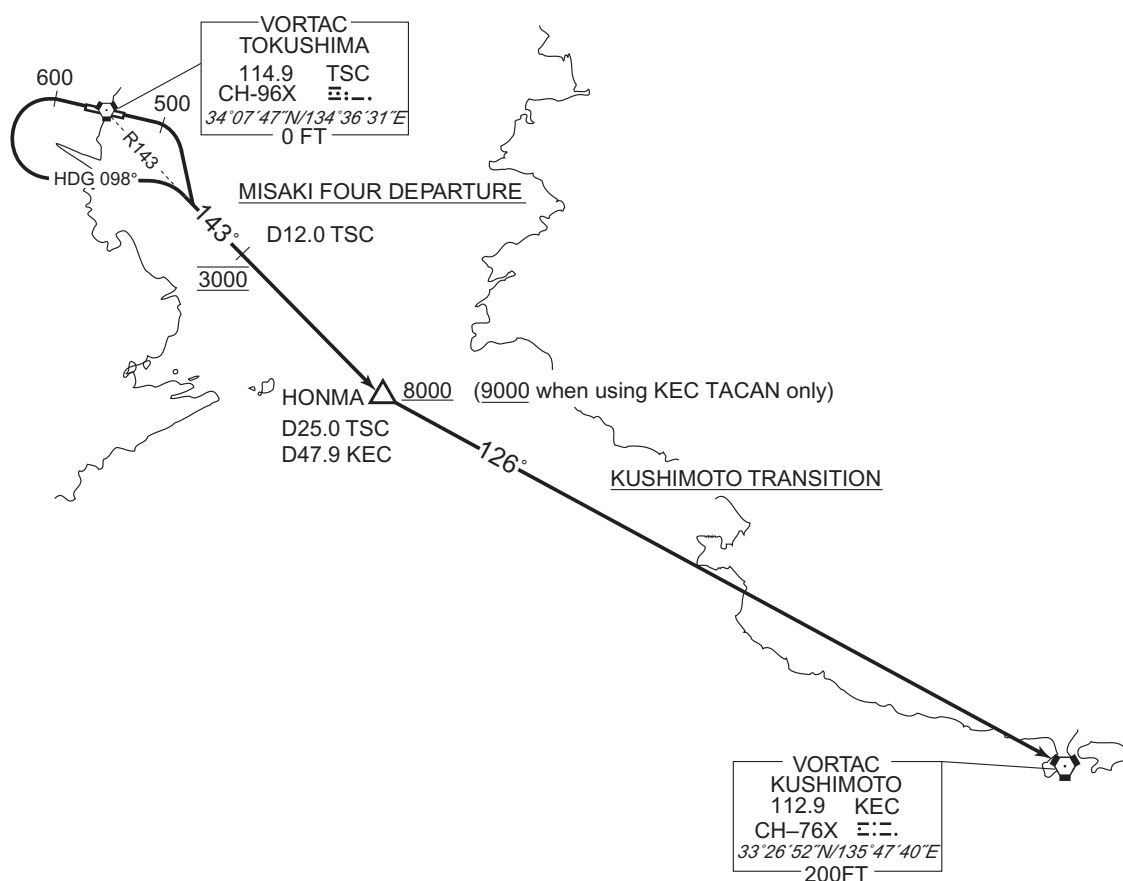
(Cross HONMA at or above 9000FT when using KEC TACAN only).

NOTE RWY29 : 4.0% climb gradient required up to 800FT.

OBST ALT 1105FT located at 5.0NM 224° FM end of RWY29.

KUSHIMOTO TRANSITION

From over HONMA, via KEC R306 to KEC VORTAC.



CHANGE : PROC renamed. PROC course. ALT restriction at HONMA when using KEC TACAN only.

STANDARD ARRIVAL CHART-INSTRUMENT

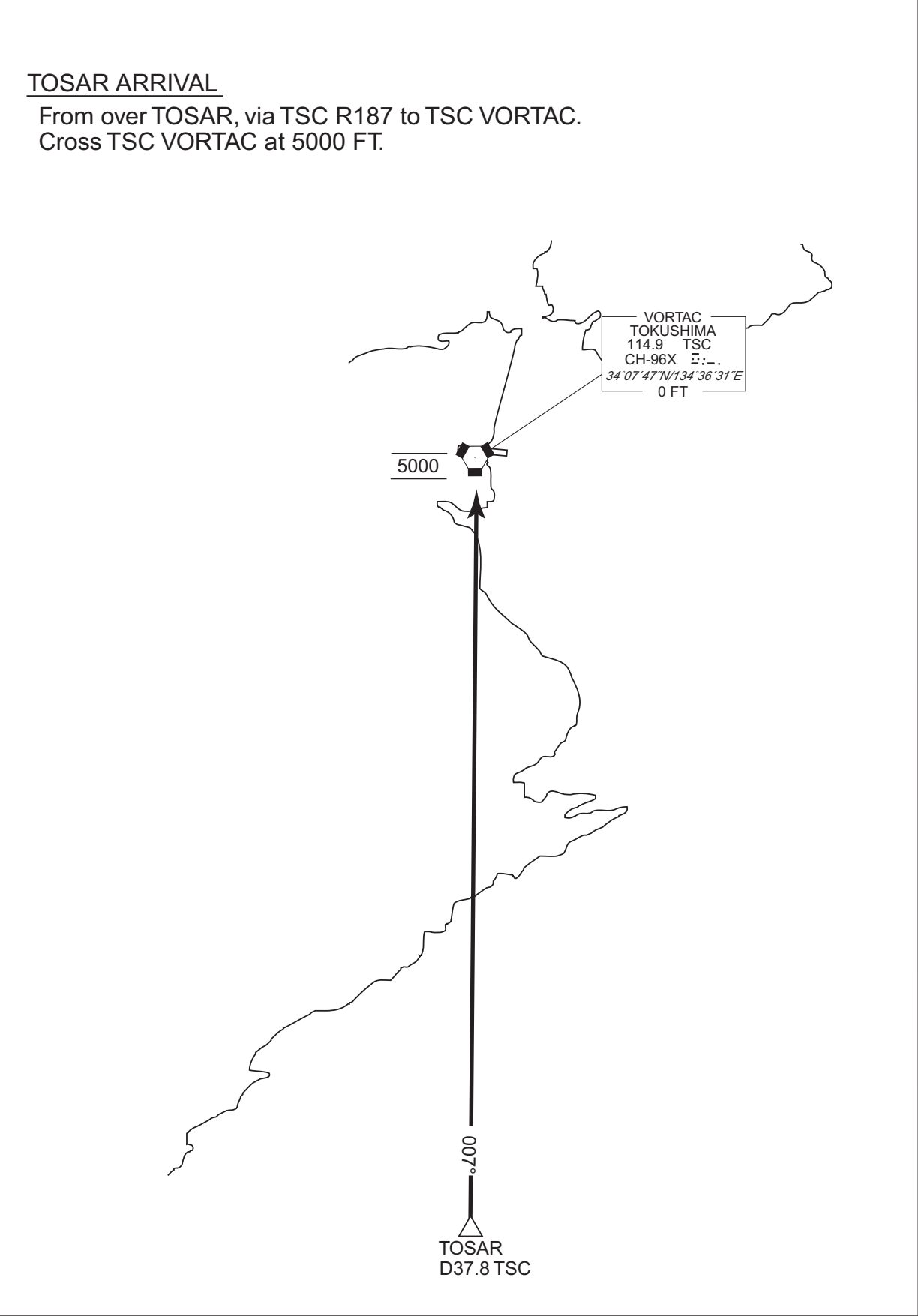
RJOS / TOKUSHIMA

STAR

TOSAR ARRIVAL

From over TOSAR, via TSC R187 to TSC VORTAC.
Cross TSC VORTAC at 5000 FT.

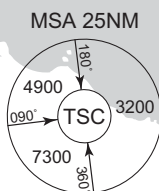
CHANGE : Distance FM TSC to TOSAR added.



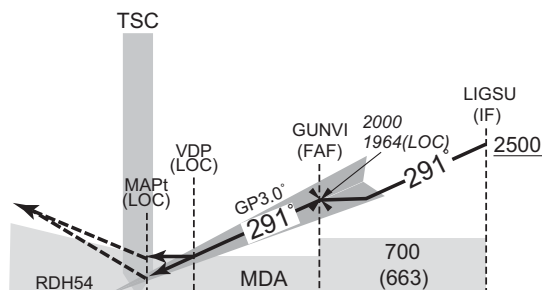
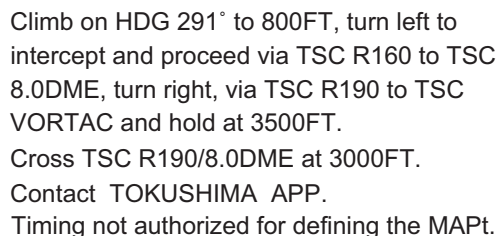
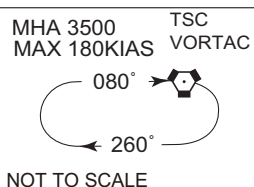
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CHANGE : PROC course. Missed APCH PROC. MINIMA. ALT(3.0° APCH Path) established. HLDG pattern. EQPT REQUIRED. PROC ALT established. OCA/H established. ALT restriction. LIGSU, GUNVI established. DME to ITS. NM to THR.

ILS Z or LOC Z RWY 29

VAR 8°W (2023)

EQPT REQUIRED
DME
VOR



NM to ITS	MAPt	2	3	4	5	FAF
ALT (3.0° APCH Path)	—	652	971	1289	1608	1964

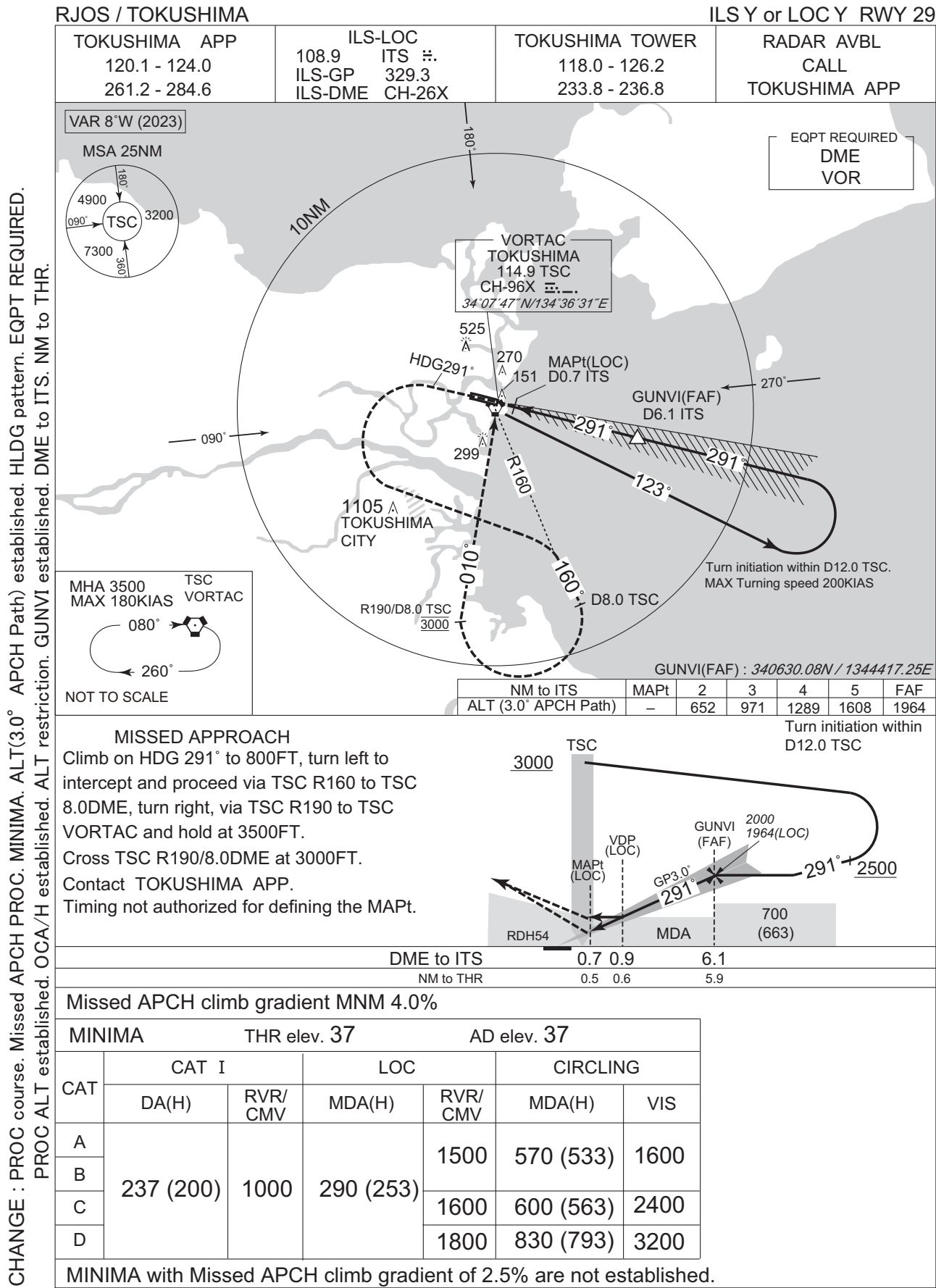
DME to ITS	0.7	0.9	6.1	11.1
NM to THR	0.5	0.6	5.9	10.9

Missed APCH climb gradient MNM 4.0%

MINIMA		THR elev. 37		AD elev. 37		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	237 (200)	1000	290 (253)	1500	570 (533)	1600
B				1600	600 (563)	2400
C				1800	830 (793)	3200
D						

MINIMA with Missed APCH climb gradient of 2.5% are not established.

INSTRUMENT APPROACH CAHRT



CHANGE : PROC course. Missed APCH PROC. MINIMA. ALT(3.0° APCH Path) established. HLDG pattern. PROC ALT established. OCA/H established. ALT restriction. ENSES, IRTUG, GUNVI established. ANANN abolished. DME to ITS. NM to THR.



CHANGE : Description of RADAR Service. MSA. VAR.

RJOS / TOKUSHIMA

TOKUSHIMA APP
120.1 - 124.0
261.2 - 284.6

TOKUSHIMA VORTAC
114.9 TSC
CH-96X
34°07'47"N / 134°36'31"E

TOKUSHIMA TOWER
118.0 - 126.2
233.8 - 236.8

RADAR AVBL
CALL
TOKUSHIMA APP

VAR 8°W (2023)

MSA 25NM

EQPT REQUIRED
DME

10NM

090°

180°

270°

360°

4900

3200

7300

TSC

MAPt
D1.0 TSC
A/270
151

HDG284°

ADKIP(FAF)
D6.0 TSC
284°

120°

284°

299

1105
A
TOKUSHIMA CITY

R190/D8.0 TSC
3000

D8.0 TSC

160°

010°

360°

3346

Turn initiation within D11.0 TSC
MAX Turning speed 200KIAS

MHA 3500
MAX 180KIAS

TSC
VORTAC

080°

260°

NOT TO SCALE

ADKIP(FAF) : 340659.22N/1344340.71E

NM to TSC	MAPt	2	3	4	5	FAF
ALT (3.0° APCH Path)	—	505	823	1142	1460	1779

MISSED APPROACH

Climb to 800FT on HDG 284°, turn left to intercept and proceed via TSC R160 to TSC 8.0DME, turn right, via TSC R190 to TSC VORTAC and hold at 3500FT.

Cross TSC R190/8.0DME at 3000FT.

Contact TOKUSHIMA APP.

Timing not authorized for defining the MAPt.

3500

TSC

120°

Turn initiation within D11.0 TSC

VDP
D1.5 TSC (CAT-A)
D1.6 TSC (CAT-B)
D1.7 TSC (CAT-C)
D1.8 TSC (CAT-D)

ADKIP (FAF)
1779

284°

2500

MAPt VDP

30°

284°

MDA

700 (663)

DME to TSC
0.7 1.0

NM to THR
0 0.3

6.0

5.3

Missed APCH climb gradient MNM 4.0%

MINIMA		THR elev. 37	AD elev. 37	
CAT	MDA(H)	RVR/CMV	MDA(H)	VIS
A	350 (313)	1500	570 (533)	1600
B	380 (343)			
C	410 (373)	1800	600 (563)	2400
D	430 (393)	2000	830 (793)	3200

MINIMA with Missed APCH climb gradient of 2.5% are not established.

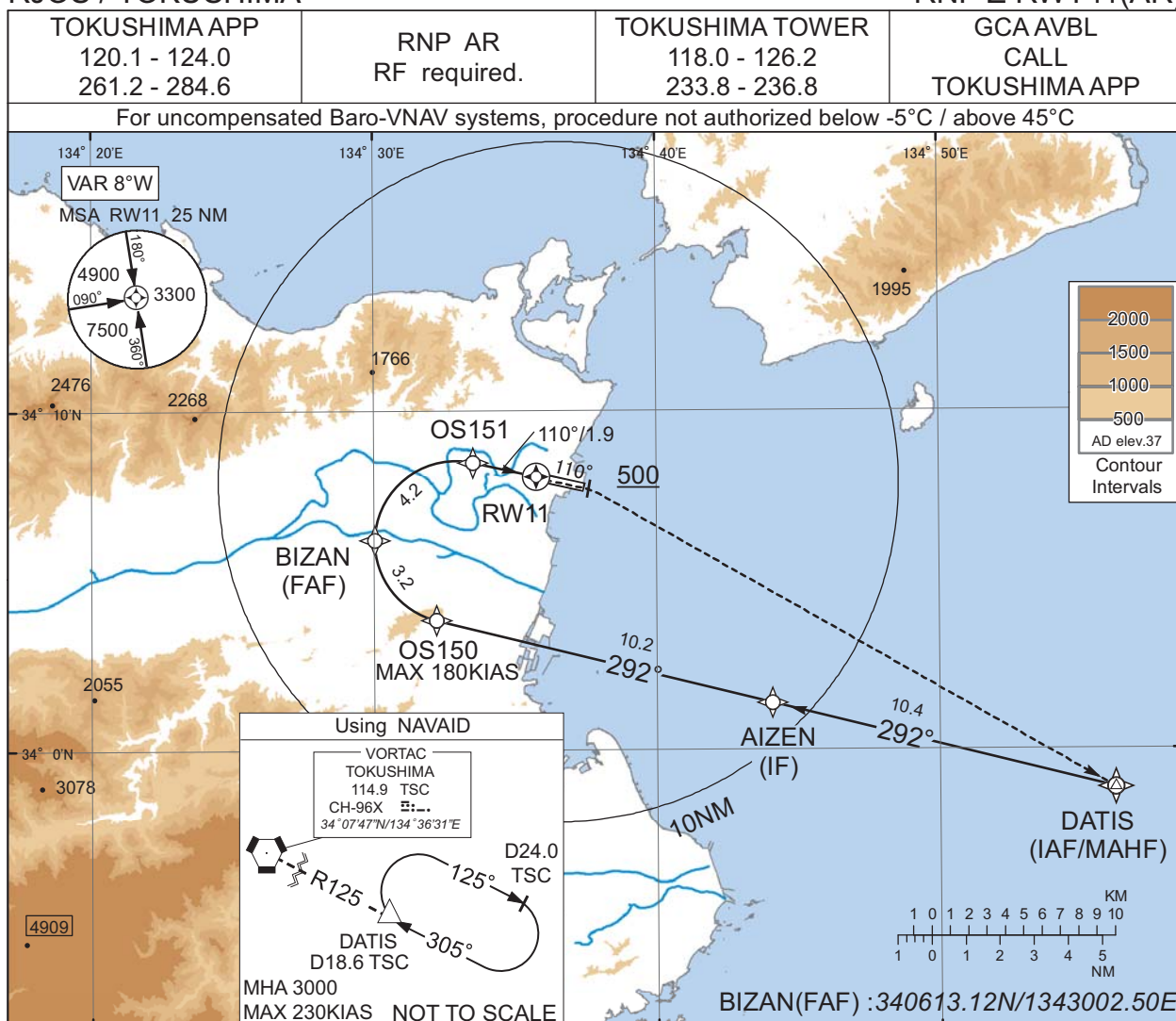
CHANGE : PROC course. Missed APCH PROC. MINIMA. HLDG pattern. OCA/H established. ENSES, INVUX, OTKEV established. ANANN abolished. DME to TSC. Description of RADAR Service. MSA. VAR.



INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Z RWY11(AR)



CHANGE : Description of VAR.

Missed APCH climb gradient MNM 5.0%

CAT	THR elev. 6		AD elev. 37	
	RNP 0.15		RNP 0.30	
	DA(H)	CMV	DA(H)	CMV
A	-	-	-	-
B	-	-	-	-
C	306(300)	1400	362(356)	1400
D		1600		1600

MINIMA with Missed APCH climb gradient of 2.5% are not established.

Authorization Required

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Z RWY11(AR)

Coding 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	DATIS	-	-	-7.8	-	-	+3000	-	-	-
002	TF	AIZEN	-	292 (284.2)	-7.8	10.4	-	-	-	-	1.0
003	TF	OS150	-	292 (284.1)	-7.8	10.2	-	+3000	-180	-	0.3
004	RF Center: OSRF2 r=2.38NM	BIZAN	-	-	-7.8	3.2	R	2000	-	-	0.3
005	RF Center: OSRF2 r=2.38NM	OS151	-	-	-7.8	4.2	R	661	-	-3.00	0.15 0.30
006	TF	RW11	Y	110 (102.6)	-7.8	1.9	-	56	-	-3.00/50	0.15 0.30
007	FA	-	-	110 (102.6)	-7.8	-	-	+500	-	-	1.0
008	DF	DATIS	-	-	-7.8	-	R	3000	-	-	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
DATIS	335851.96N / 1345613.14E	OSRF2	340610.26N / 1343254.26E
AIZEN	340123.97N / 1344405.59E		
OS150	340351.55N / 1343212.95E		
BIZAN	340613.12N / 1343002.50E		
OS151	340829.79N / 1343331.39E		
RW11	340804.98N / 1343545.74E		

CHANGE : PROC renamed.

RJOS / TOKUSHIMA

RNP Y RWY11(AR)

For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 45°C



Authorization Required

MINIMA with Missed APCH climb gradient of 2.5% are not established.

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Y RWY11(AR)

Coding 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	KULUL	-	-	-7.8	-	-	+5000	-210	-	-
002	TF	DOCHU	-	179 (171.2)	-7.8	2.7	-	+3100	-	-	0.3
003	TF	OS152	-	179 (171.2)	-7.8	2.0	-	-	-180	-	0.3
004	RF Center: OSRF1 r=2.88NM	OS153	-	-	-7.8	7.5	L	-	-	-	0.3
005	TF	FUDOU	-	030 (022.4)	-7.8	1.8	-	2000	-	-	0.3
006	TF	OS154	-	030 (022.4)	-7.8	0.9	-	1717	-	-3.00	0.15 0.30
007	RF Center: OSRF2 r=2.38NM	OS151	-	-	-7.8	3.3	R	661	-	-3.00	0.15 0.30
008	TF	RW11	Y	110 (102.6)	-7.8	1.9	-	56	-	-3.00/50	0.15 0.30
009	FA	-	-	110 (102.6)	-7.8	-	-	+500	-	-	1.0
010	DF	DATIS	-	-	-7.8	-	R	3000	-	-	1.0

Waypoint Coordinates

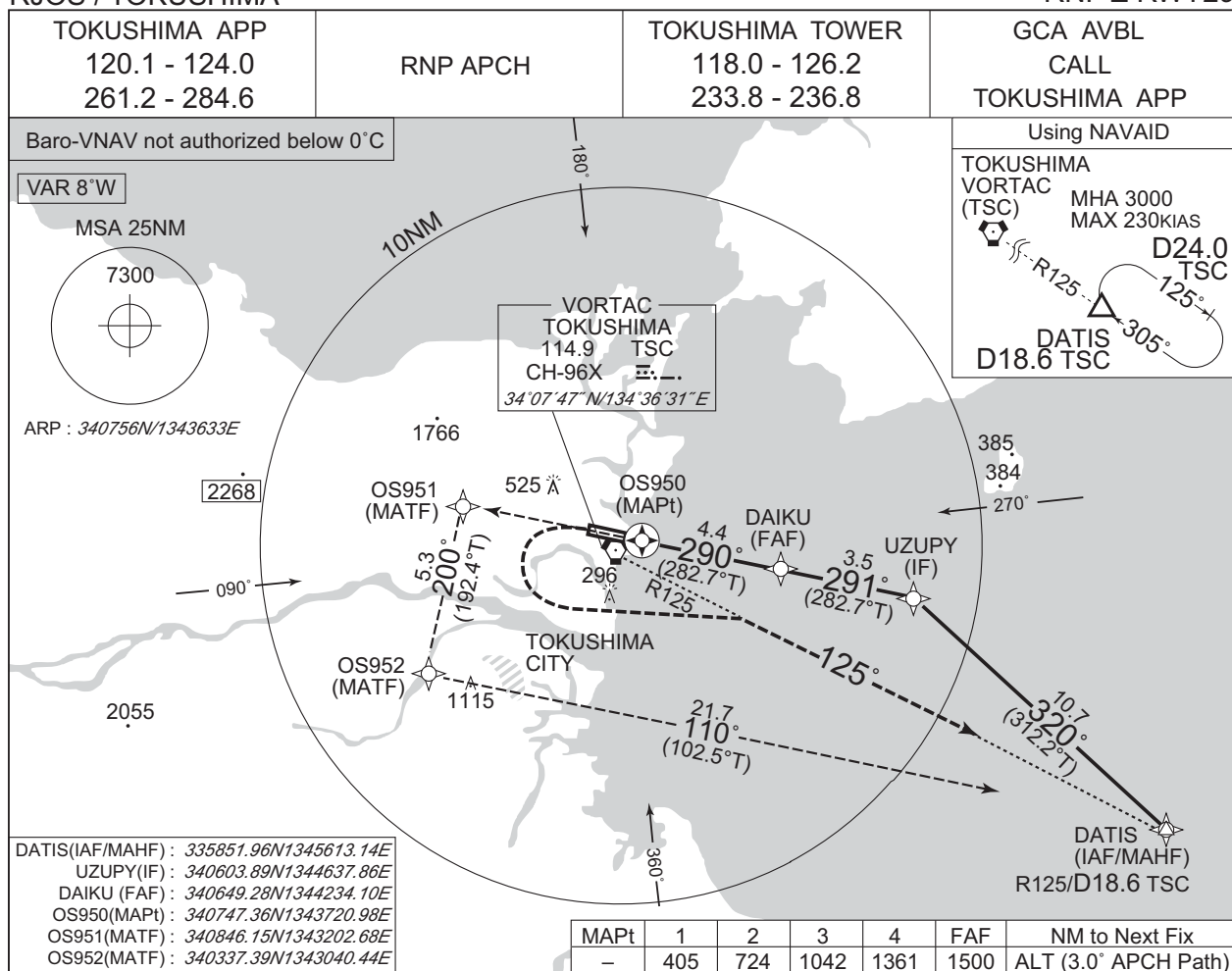
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
KULUL	340954.74N / 1342131.22E	OSRF1	340544.73N / 1342549.48E
DOCHU	340716.80N / 1342200.89E	OSRF2	340610.26N / 1343254.26E
OS152	340517.99N / 1342223.19E		
OS153	340438.24N / 1342902.35E		
FUDOU	340615.76N / 1342950.98E		
OS154	340705.08N / 1343015.59E		
OS151	340829.79N / 1343331.39E		
RW11	340804.98N / 1343545.74E		
DATIS	335851.96N / 1345613.14E		

CHANGE : PROC renamed.

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Z RWY29

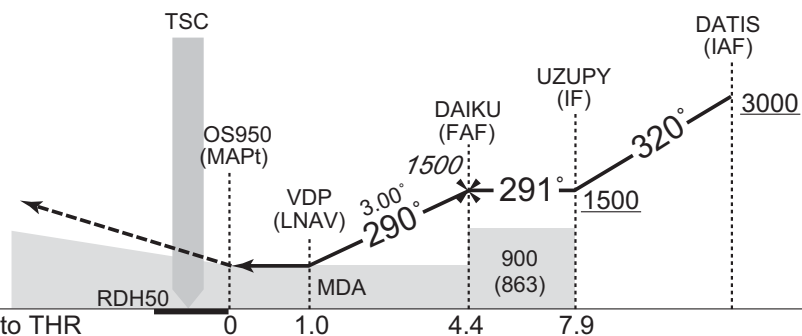


MISSED APPROACH

Climb to 3000FT direct to OS951,
to OS952, to DATIS and hold.
Contact TOKUSHIMA APP.

(For using VORTAC)

Climb on HDG290° to 800FT,
turn left climb to 3000FT via TSC
R125 to DATIS and hold.
Contact TOKUSHIMA APP.



Missed APCH climb gradient MNM 5.0%

MINIMA		THR elev. 37		AD elev. 37		
CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	380 (343)	1500	380 (343)	1500	580 (543)	1600
B		1800		1800	600 (563)	2400
C						
D						

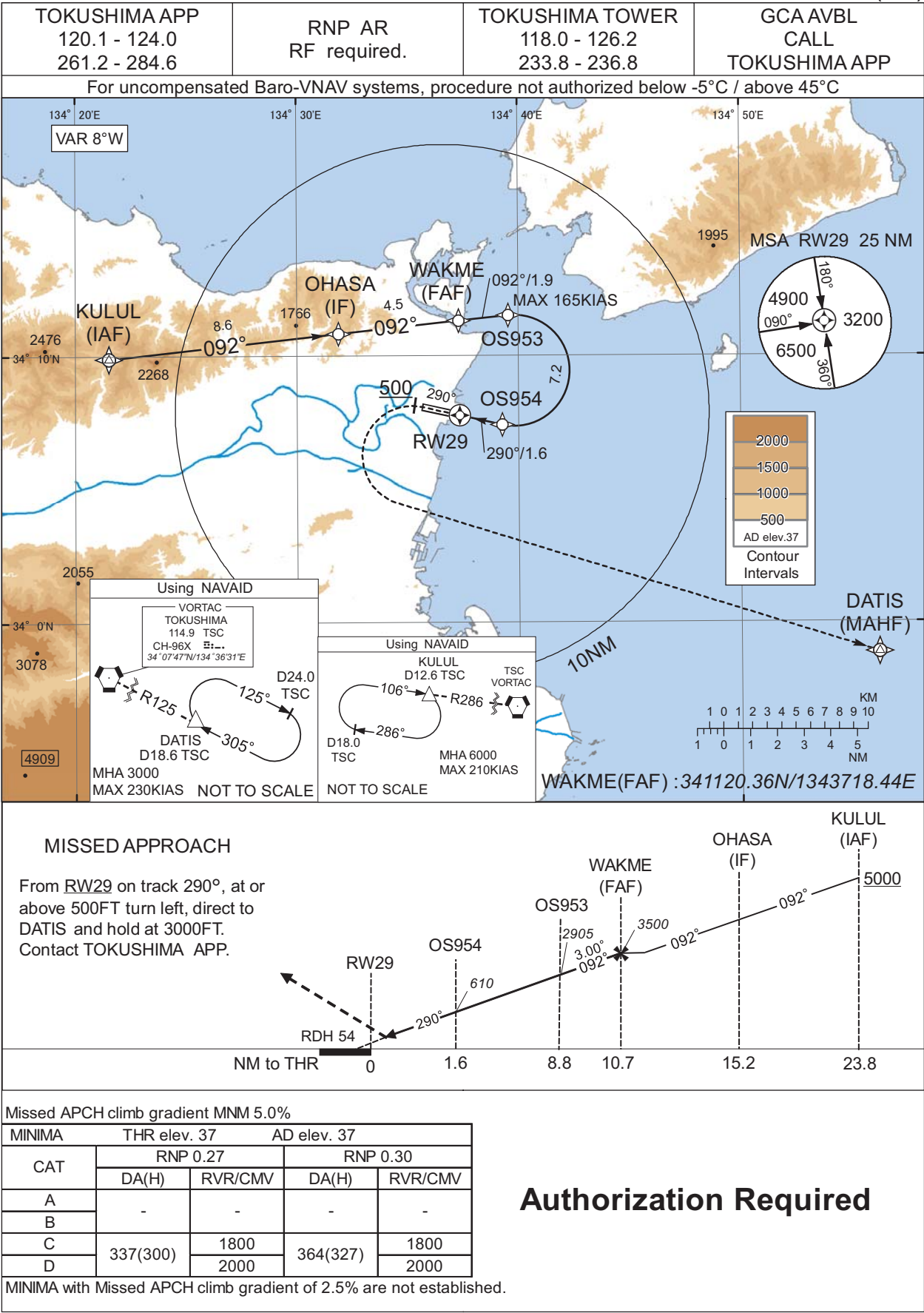
MINIMA with Missed APCH climb gradient of 2.5% are not established.

CHANGE : Description of VAR.

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Y RWY29(AR)



INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Y RWY29(AR)

Coding 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	KULUL	-	-	-7.8	-	-	+5000	-	-	-
002	TF	OHASA	-	092 (083.7)	-7.8	8.6	-	-	-	-	1.0
003	TF	WAKME	-	092 (083.8)	-7.8	4.5	-	3500	-	-	0.7
004	TF	OS953	-	092 (083.8)	-7.8	1.9	-	2905	-165	-3.00	0.27 0.30
005	RF Center: OSRF3 r=2.08NM	OS954	-	-	-7.8	7.2	R	610	-	-3.00	0.27 0.30
006	TF	RW29	Y	290 (282.6)	-7.8	1.6	-	91	-	-3.00/54	0.27 0.30
007	FA	-	-	290 (282.6)	-7.8	-	-	+500	-	-	1.0
008	DF	DATIS	-	-	-7.8	-	L	3000	-	-	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
KULUL	340954.74N / 1342131.22E	OSRF3	340928.04N / 1343948.74E
OHASA	341051.19N / 1343153.12E		
WAKME	341120.36N / 1343718.44E		
OS953	341132.33N / 1343932.73E		
OS954	340726.04N / 1343916.02E		
RW29	340747.36N / 1343720.97E		
DATIS	335851.96N / 1345613.14E		

CHANGE : PROC renamed.

RJOS / TOKUSHIMA

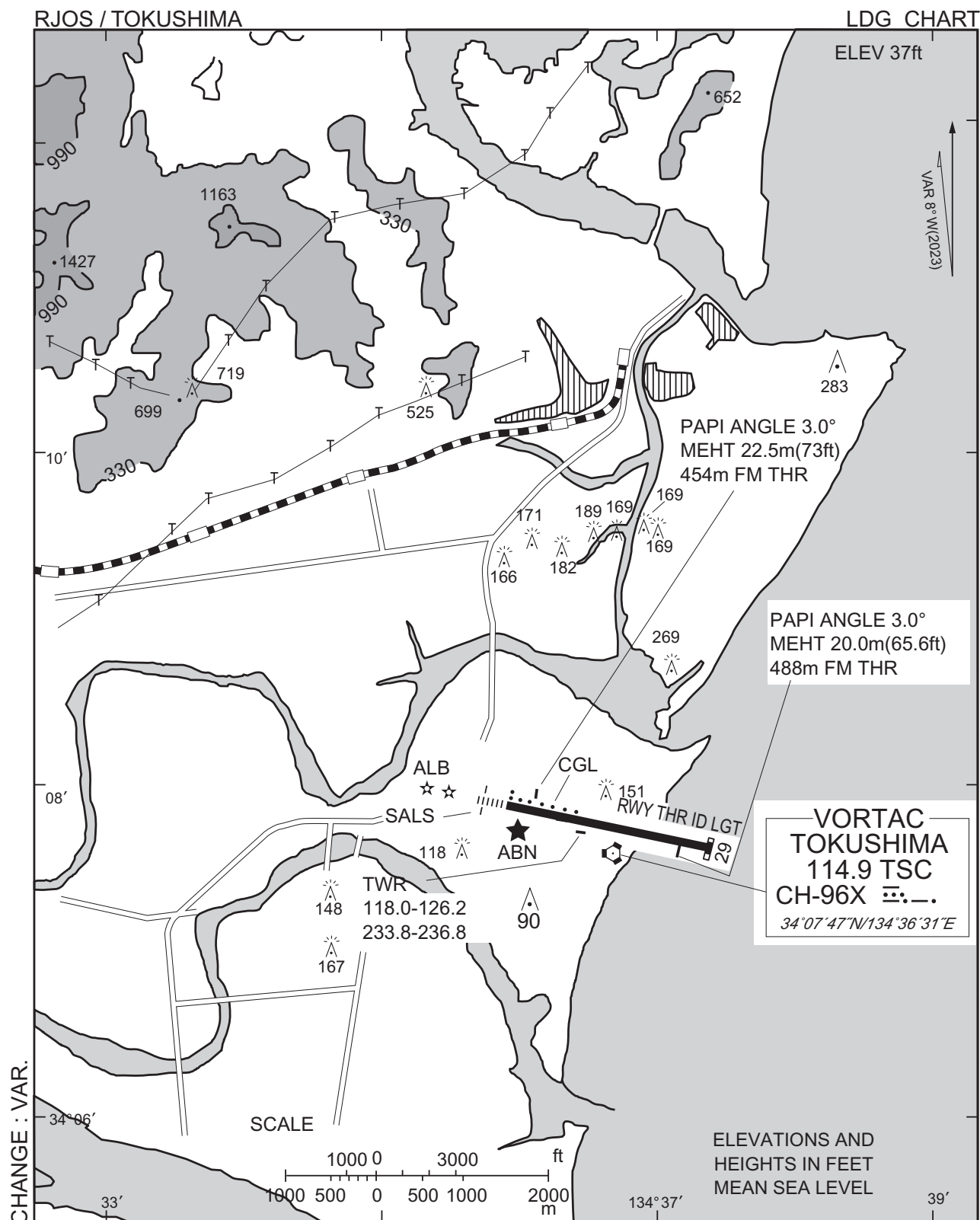
Visual REP



※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).

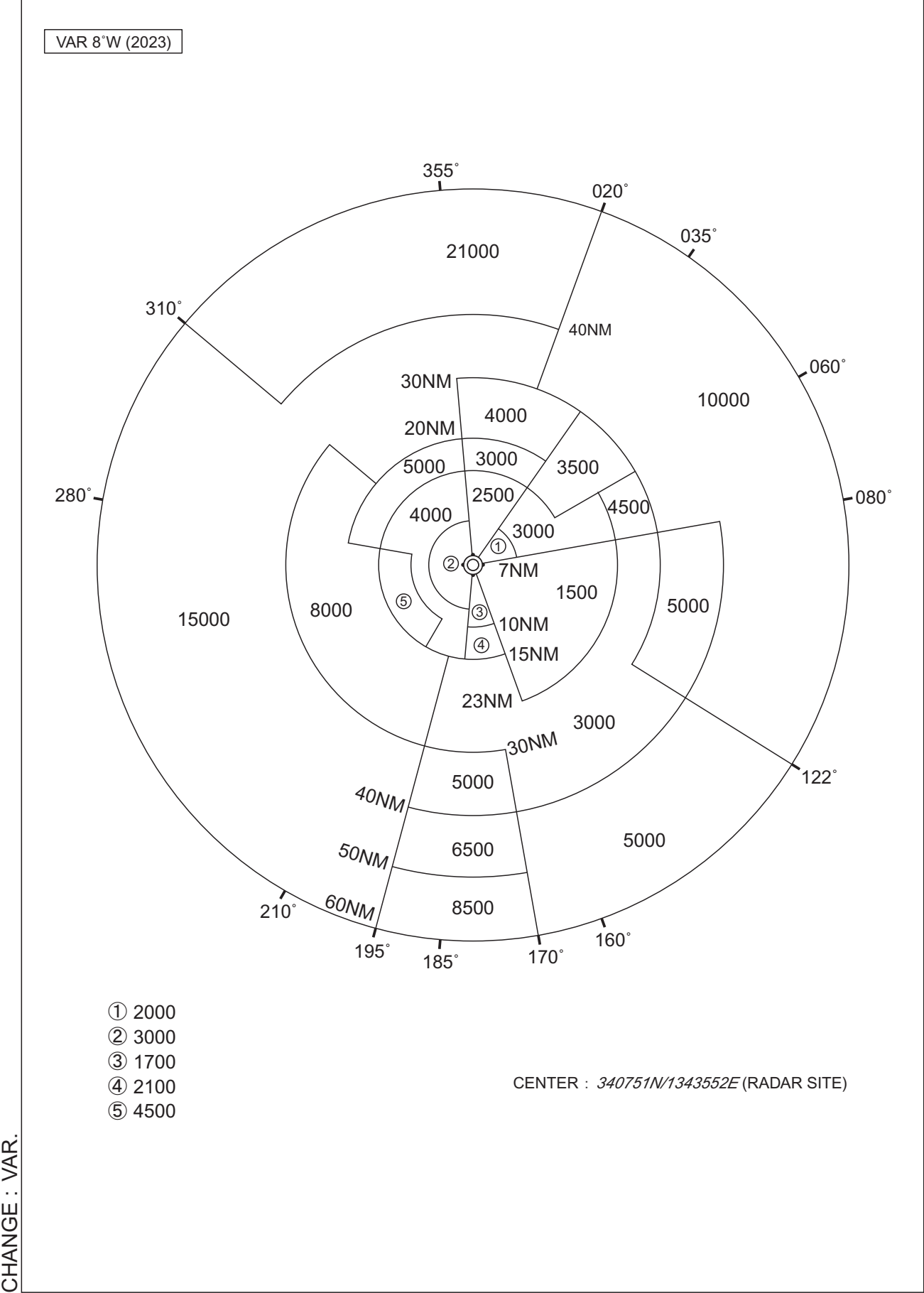
CHANGE : VAR.

Call sign	BRG / DIST from ARP	Remarks
福良 Fukura	037°T / 9.0NM	港 Harbor
岡崎 Okazaki	029°T / 3.3NM	灯台 Lighthouse
沼島 Nushima	079°T / 11.1NM	灯台 Lighthouse
吉野イニシャル Yoshino Initial	248°T / 4.5NM	鉄道橋中央 The center of iron bridge
吉野リバー Yoshino River	188°T / 3.3NM	吉野川河口 River mouth



RJOS / TOKUSHIMA

Minimum Vectoring Altitude CHART



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