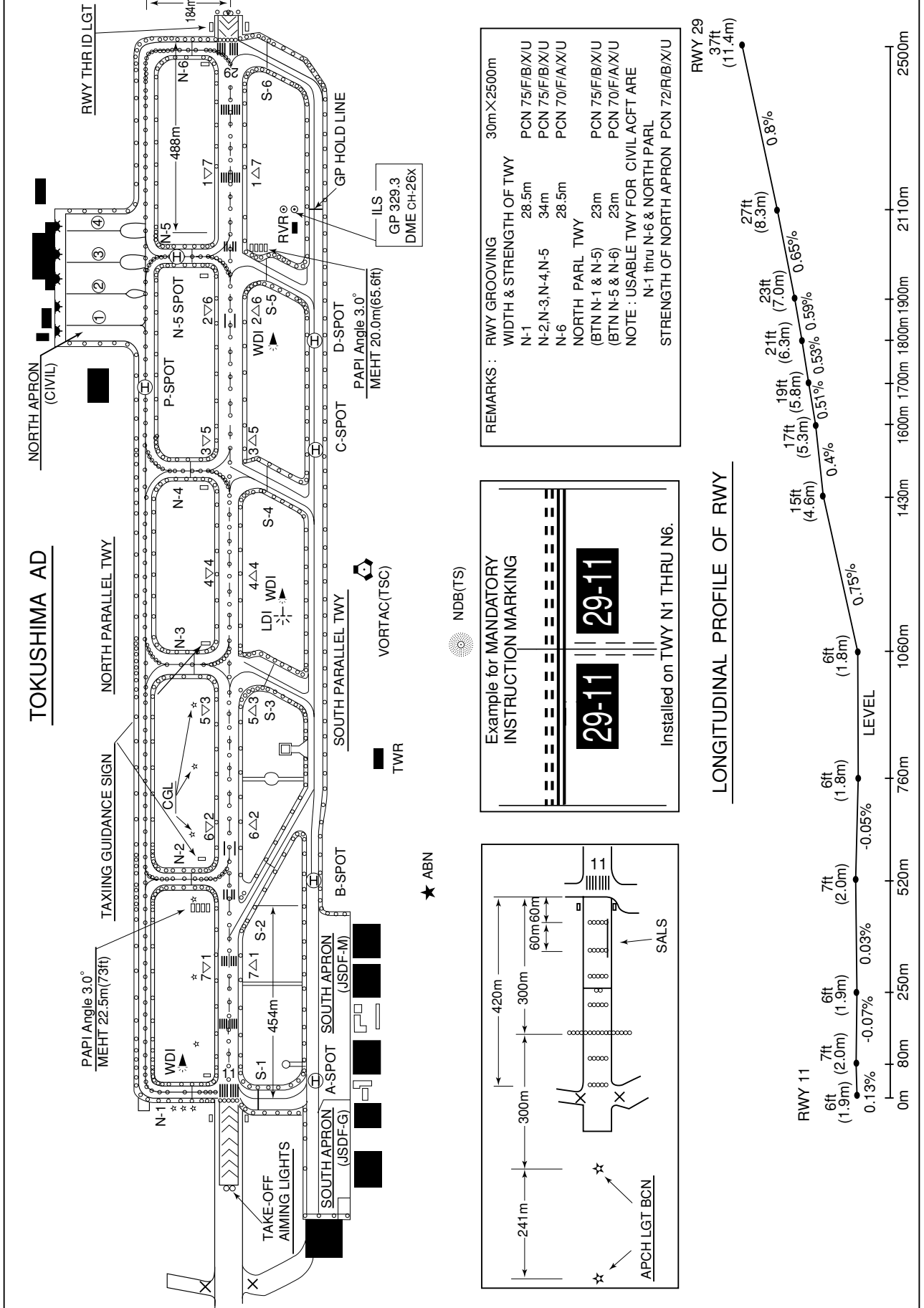


RJOS / TOKUSHIMA

AD CHART



STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

SID

TOSAR FOUR DEPARTURE

RWY 29 : Turn left within 3NM....

RWY 11 : Turn right....

....climb via TSC R160 (160° from TS NDB) to TSC 13.0DME (13NM of TS NDB), turn right to intercept and proceed via TSC R187 (187° from TS NDB) to TOSAR.

Cross TSC 13.0DME (13NM of TS NDB) at 3000FT, cross TSC 20.0DME (20NM of TS NDB) at 6000FT, cross TOSAR at assigned altitude.

* See Note.

TOKUSHIMA REVERSAL FIVE DEPARTURE

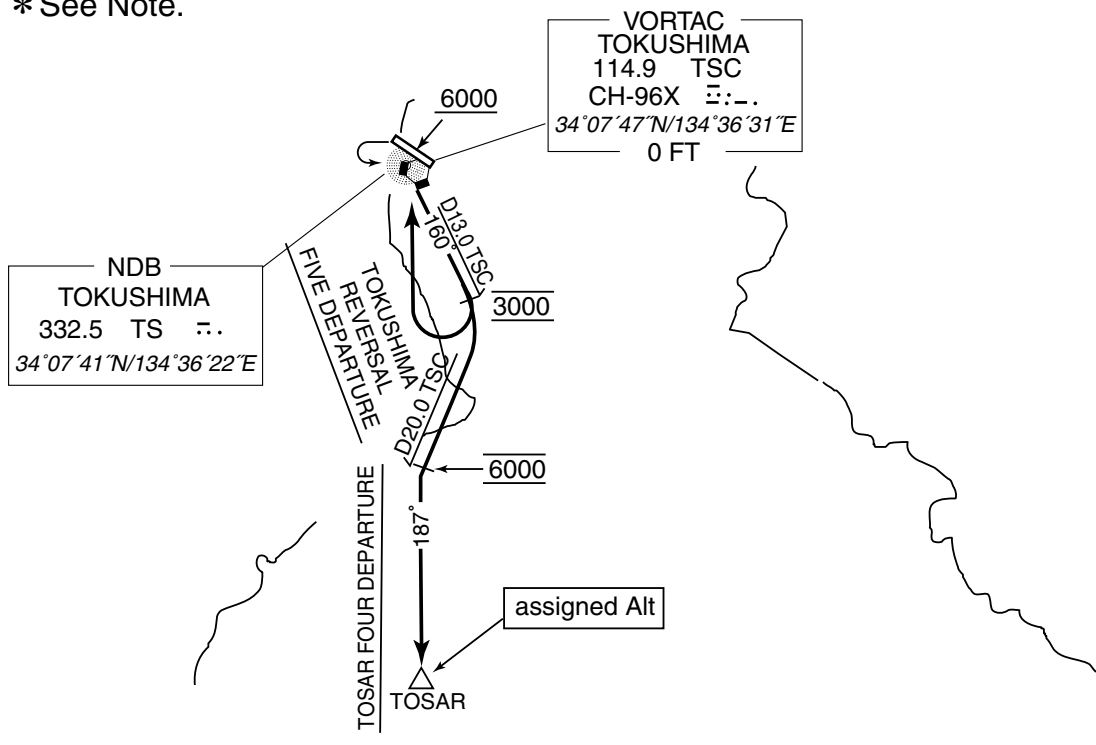
RWY 29 : Turn left within 3NM....

RWY 11 : Turn right....

.... climb via TSC R160 (160° from TS NDB) to TSC 13.0DME (13NM of TS NDB), then turn right proceed to TSC VORTAC (TS NDB).

Cross TSC 13.0DME (13NM of TS NDB) at 3000FT, cross TSC VORTAC (TS NDB) at or above 6000FT.

* See Note.



STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

SID

MIYAZU SIX DEPARTURE

RWY 29 : Turn left within 3NM....

RWY 11 : Turn right....

....cross TS NDB at or above 1000FT, climb via 026° from TS NDB until intercepting OWE R296 (294° from OW NDB), climb via OWE 25.0DME clockwise ARC to intercept and proceed via YME R167 to YME VOR/DME.

Cross SKE R300 (263° from OW NDB) at 4000FT, then climb and maintain 5000FT.

* See Note.

MIKAN TWO DEPARTURE

RWY 29 : Turn left within 3NM....

RWY 11 : Fly runway heading...

....climb via TSC R105 (105° from TS NDB) to intercept and proceed via SKE R229 to MIKAN via ARITA.

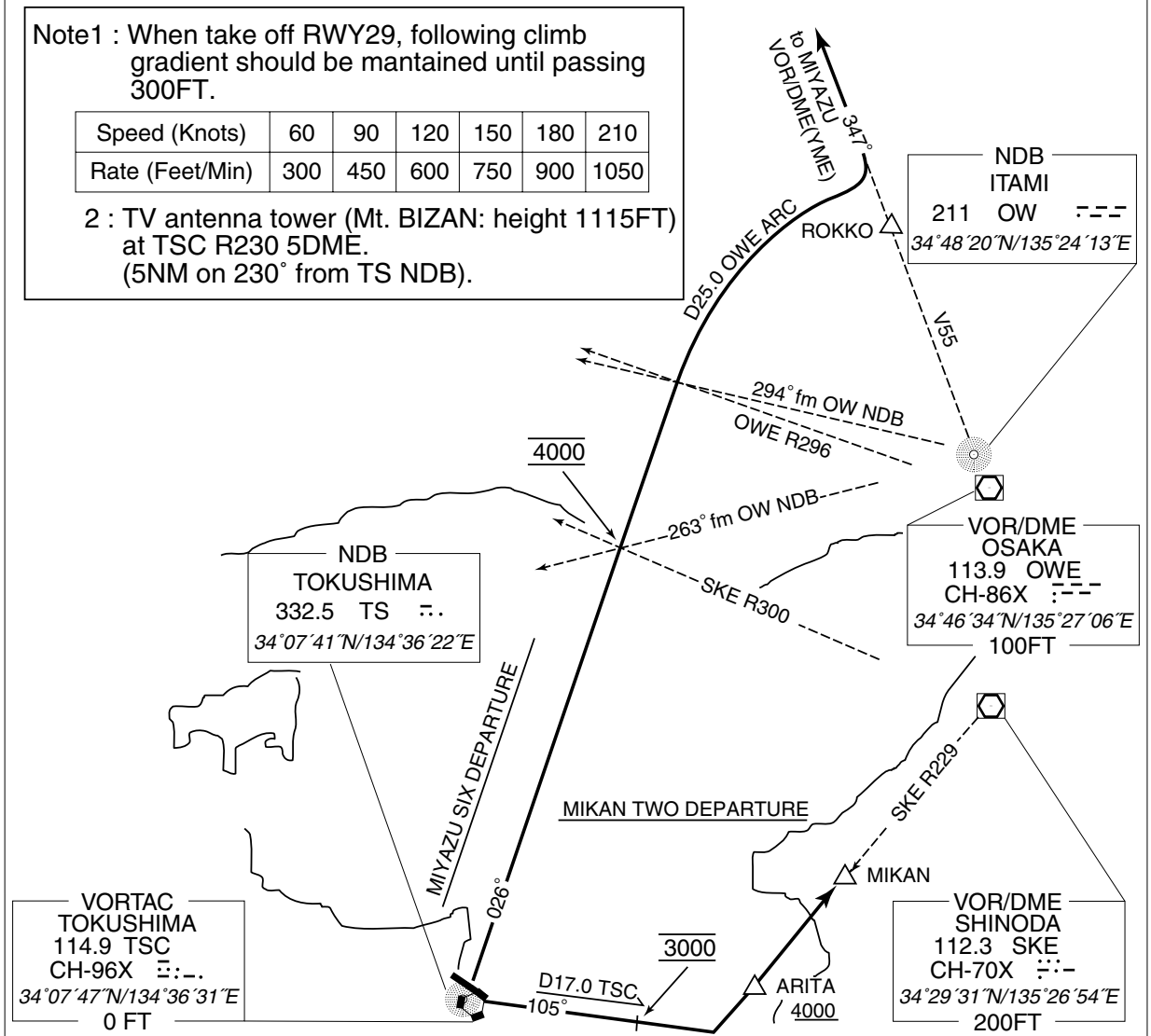
Cross TSC 17.0DME (17NM of TS NDB) at 3000FT, cross ARITA at or above 4000FT.

* See Note.

Note 1 : When take off RWY29, following climb gradient should be maintained until passing 300FT.

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

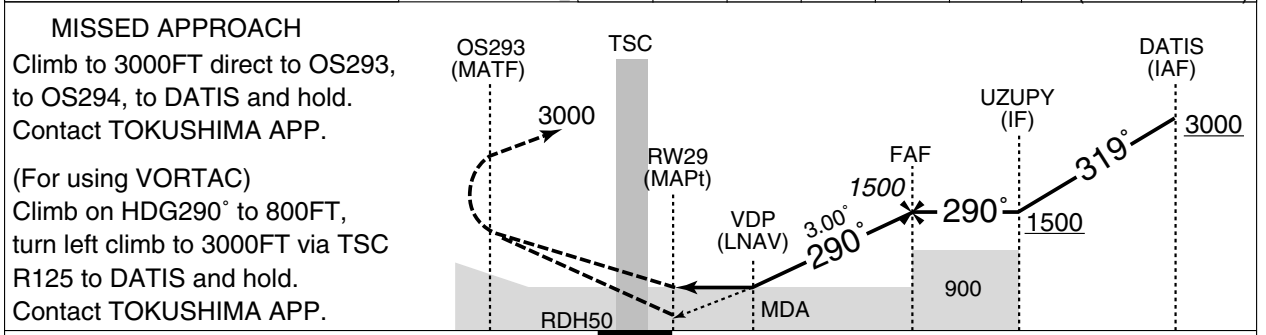
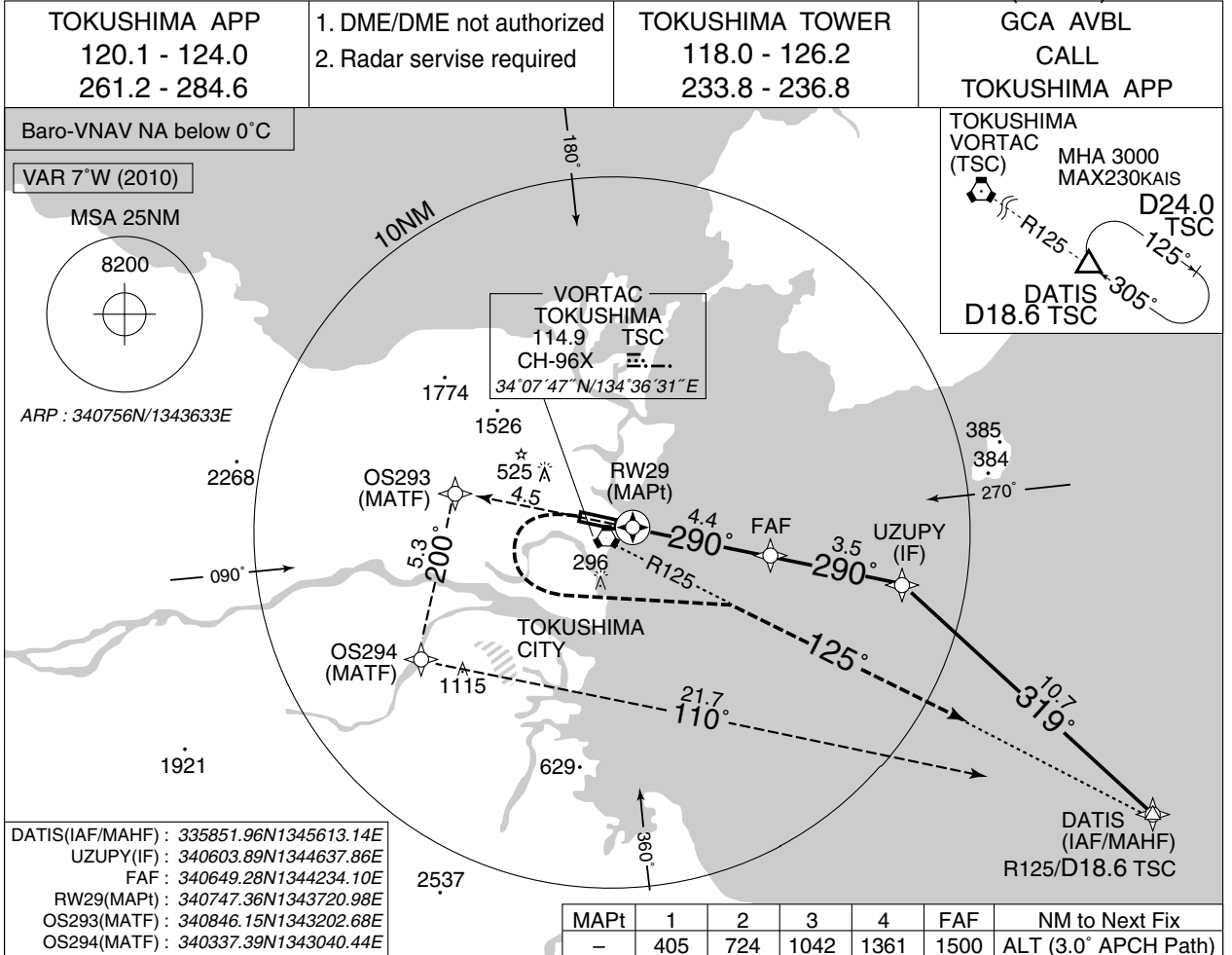
2 : TV antenna tower (Mt. BIZAN: height 1115FT) at TSC R230 5DME. (5NM on 230° from TS NDB).



INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNAV(GNSS) RWY29



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					600 (563)		
C					1800		2400
D					2000		840 (803)

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

STANDARD ARRIVAL CHART-INSTRUMENT

RJOS / TOKUSHIMA

STAR

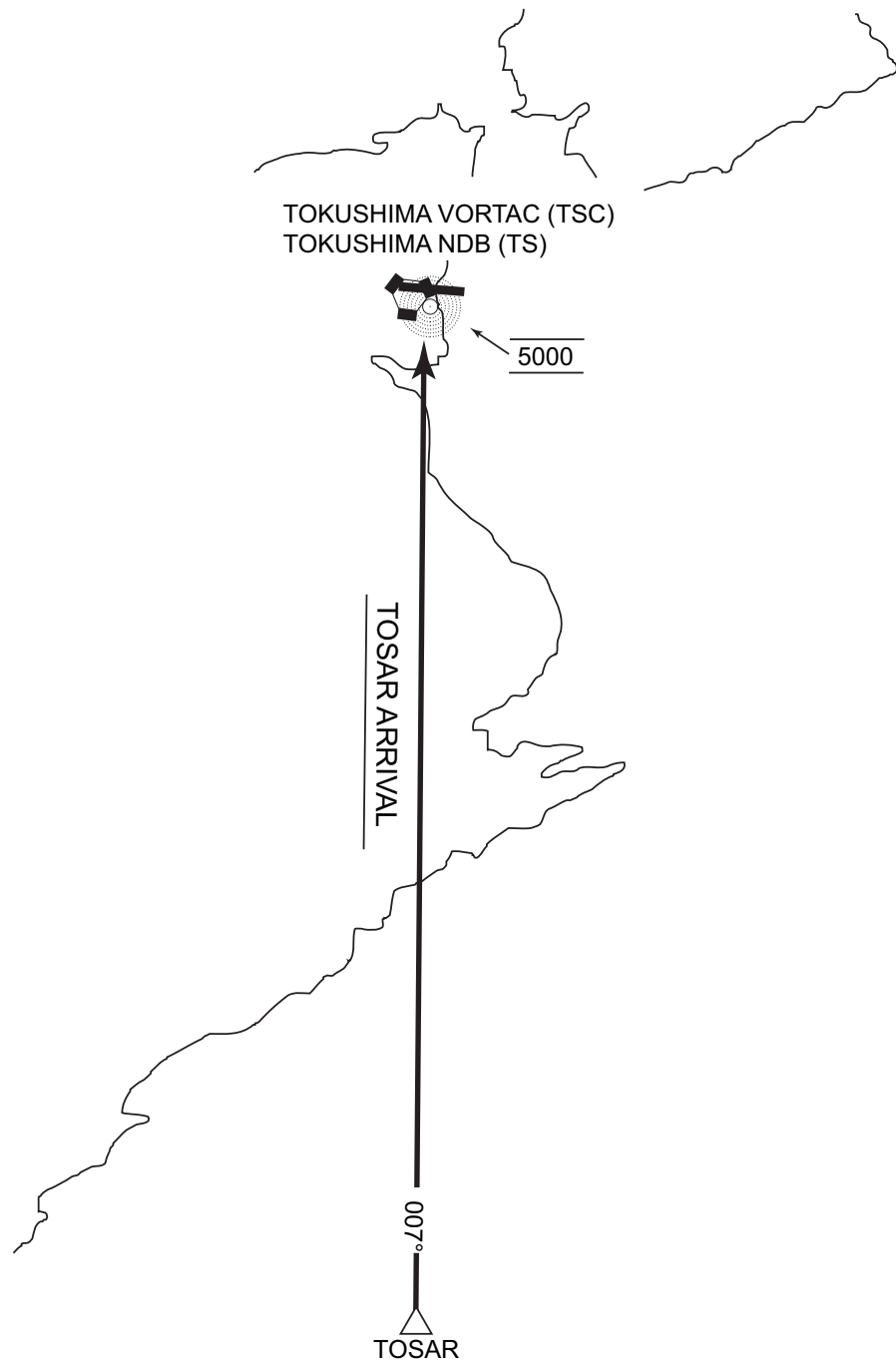
STAR

TOSAR ARRIVAL

From over TOSAR, proceed via TSC R-187 to TSC VORTAC (007DEG to TS NDB).

Cross TSC VORTAC (TS NDB) at 5,000 feet.

STAR

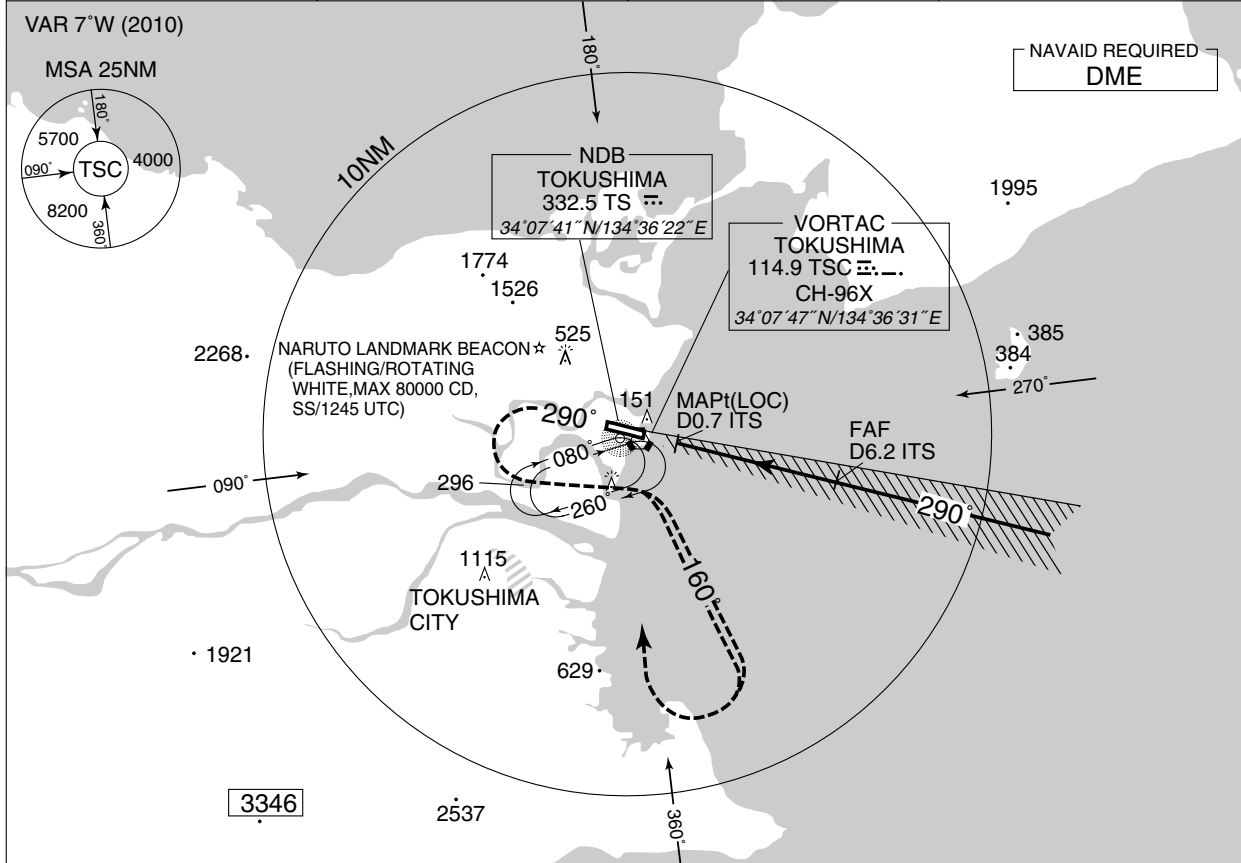


INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

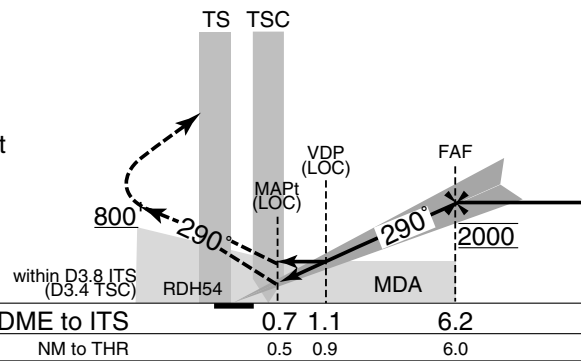
ILS Z or LOC Z RWY 29

TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	ILS-LOC 108.9 ITS #. ILS-GP 329.3 ILS-DME CH-26X	TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8	GCA AVBL CALL TOKUSHIMA APP
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MISSED APPROACH

Climb on 290° to 800FT or above within ITS 3.8DME(TSC3.4DME), turn left and climb via TSC R160(on160° from TS NDB) to 3000FT, then turn right within TSC 10DME(10nm of TS NDB), proceed to TSC VORTAC(TS NDB) and hold.
Contact TOKUSHIMA APP.



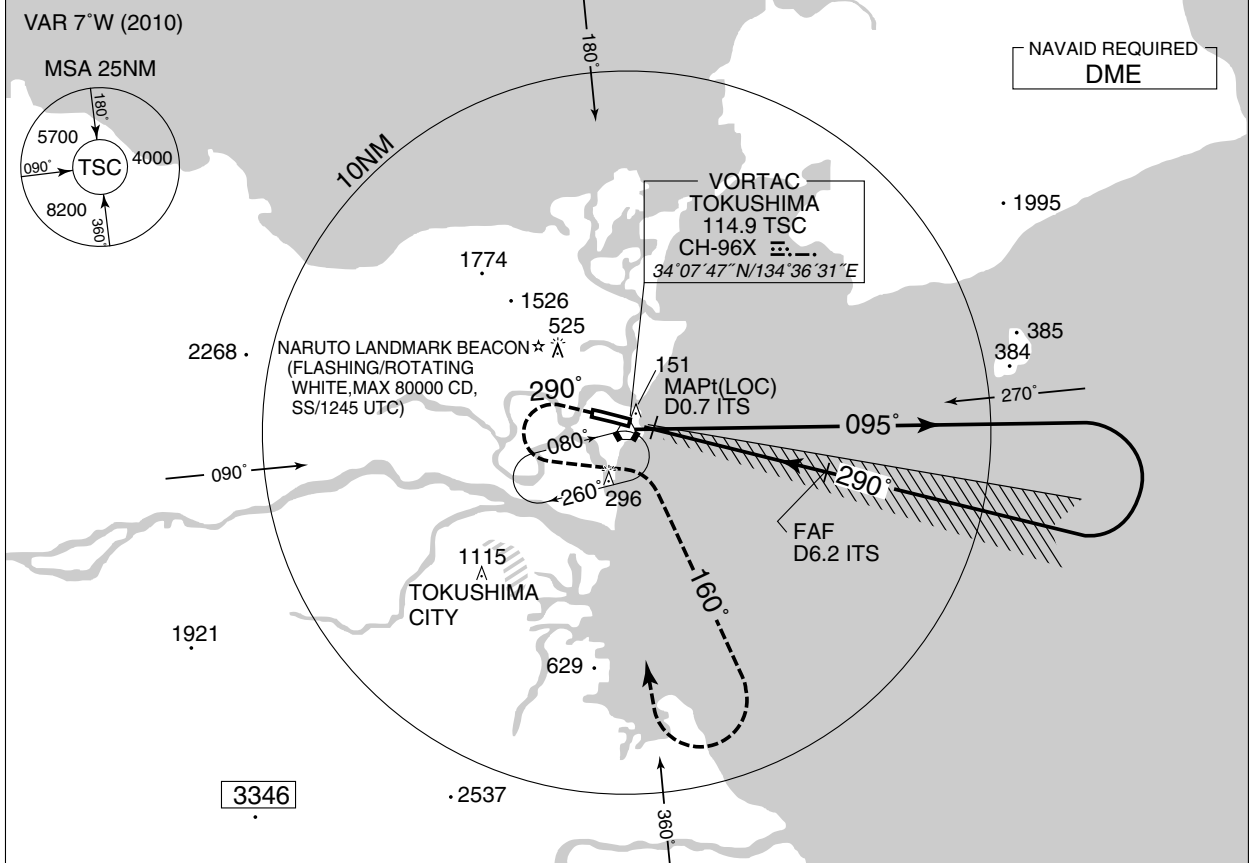
MINIMA		THR elev. 37		AD elev. 37		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	237 (200)	1000	340 (303)	1500	580 (543)	1600
B				1800		
C				2000		
D				2000		

INSTRUMENT APPROACH CAHRT

RJOS / TOKUSHIMA

ILS Y or LOC Y RWY 29

TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	ILS-LOC 108.9 ITS #. ILS-GP 329.3 ILS-DME CH-26X	TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8	GCA AVBL CALL TOKUSHIMA APP
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MISSED APPROACH Remain within 14nm

Climb on 290° to 800FT or above within ITS 3.8DME (TSC 3.4DME), turn left and climb via TSC R160 to 3000FT, then turn right within TSC 10DME, proceed to TSC VORTAC and hold. Contact TOKUSHIMA APP.

DME to ITS	0.7	1.1	6.2
NM to THR	0.5	0.9	6.0

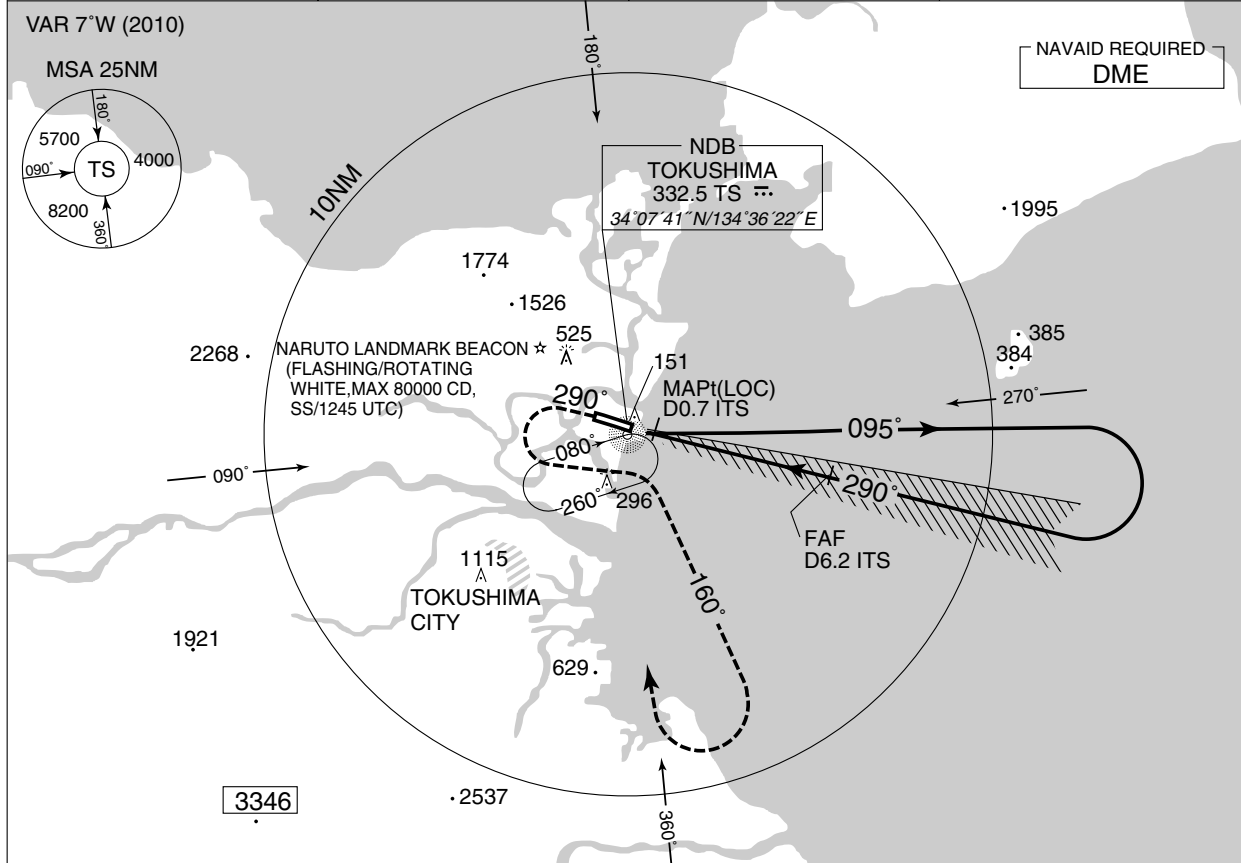
MINIMA		THR elev. 37		AD elev. 37		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	237 (200)	1000	340 (303)	1500	580 (543)	1600
B				1800		
C				2000		
D				2000		

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

ILS X or LOC X RWY 29

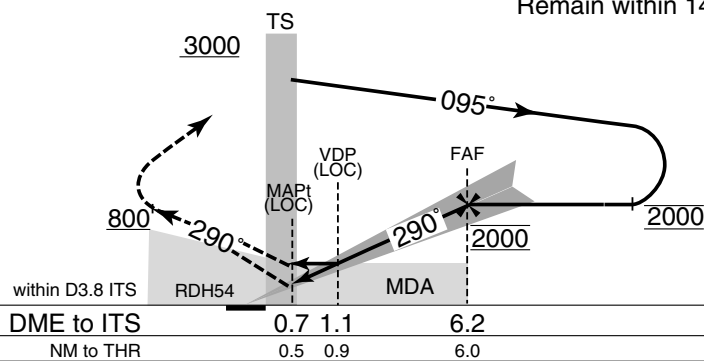
TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	ILS-LOC 108.9 ITS :: ILS-GP 329.3 ILS-DME CH-26X	TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8	GCA AVBL CALL TOKUSHIMA APP
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MISSED APPROACH

Climb on 290° to 800FT or above within ITS 3.8DME, turn left and climb via 160° from TS NDB to 3000FT, then turn right within 10nm of TS NDB, proceed to TS NDB and hold.
 Contact TOKUSHIMA APP.

Remain within 14nm



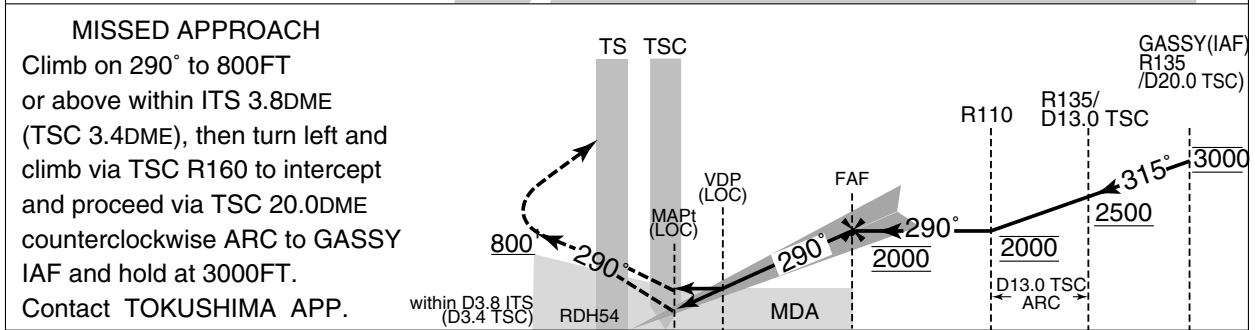
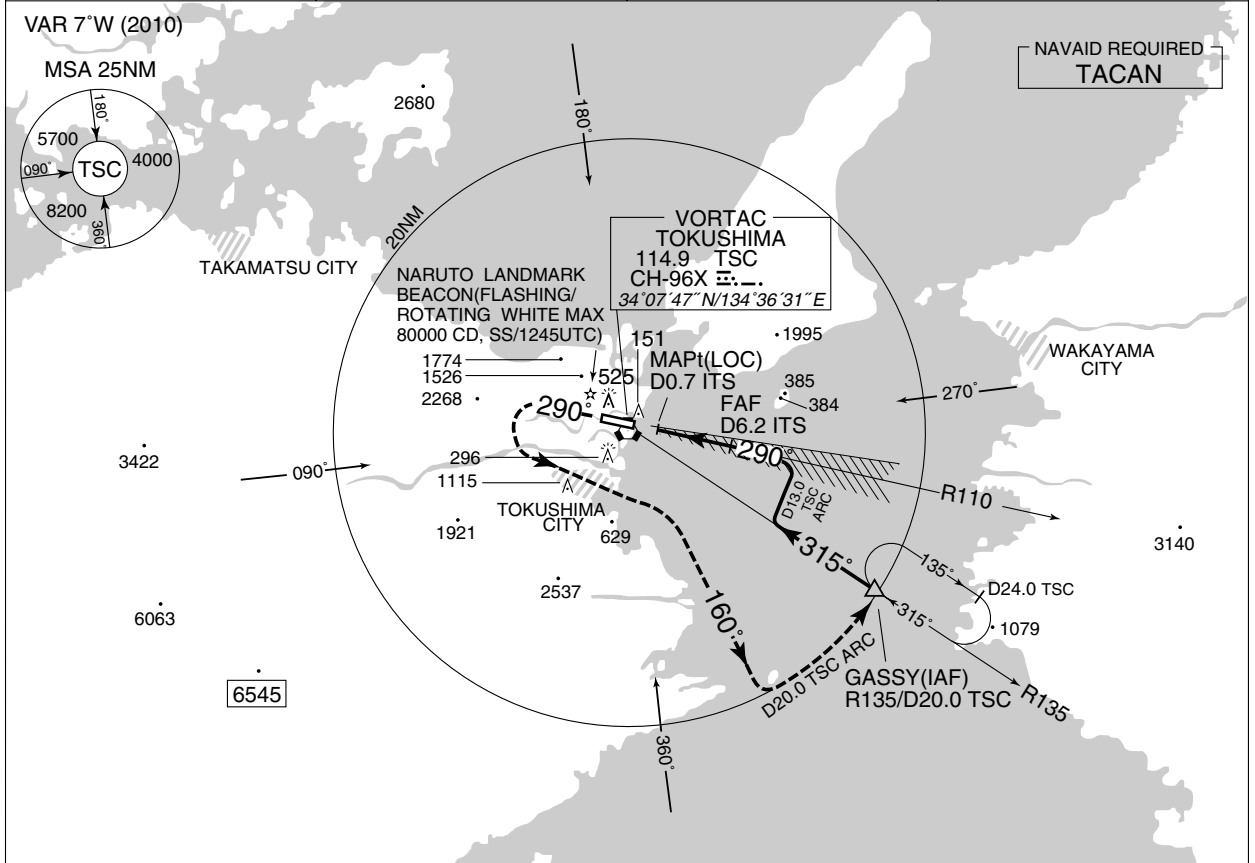
MINIMA		THR elev. 37		AD elev. 37		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	237 (200)	1000	340 (303)	1500	580 (543)	1600
B				1800		
C				2000		
D				2000		

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

ILS W or LOC W RWY 29

TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	ILS-LOC 108.9 ITS :: ILS-GP 329.3 ILS-DME CH-26X	TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8	GCA AVBL CALL TOKUSHIMA APP
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DME to ITS	0.7	1.1	6.2	13.0
NM to THR	0.5	0.9	6.0	12.8

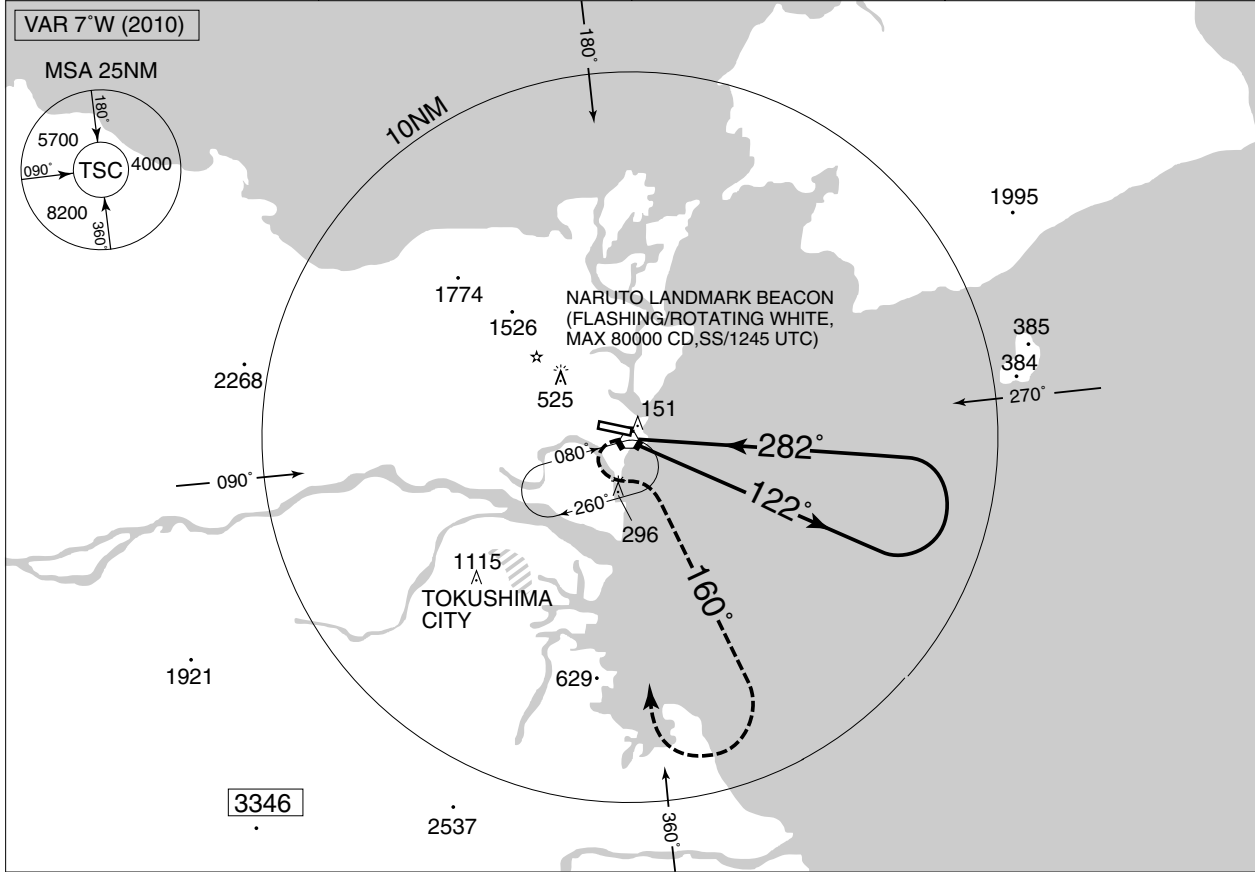
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	237 (200)	1000	340 (303)	1500	580 (543)	1600
B				1800	600 (563)	2400
C				2000	840 (803)	3200
D						

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

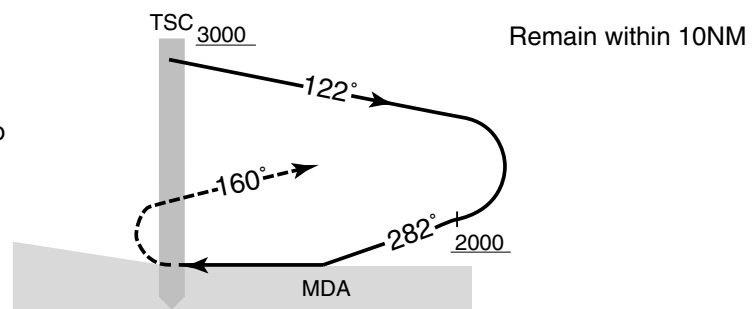
VOR RWY 29

TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	TOKUSHIMA VORTAC 114.9 TSC $\overline{\text{---}}$ CH-96X 34°07'47"N / 134°36'31"E	TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8	GCA AVBL CALL TOKUSHIMA APP
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MISSED APPROACH

At TSC VORTAC, turn left and climb via TSC R160 to 3000FT, then turn right within 10NM of TSC, proceed to TSC VORTAC and hold.
Contact TOKUSHIMA APP.



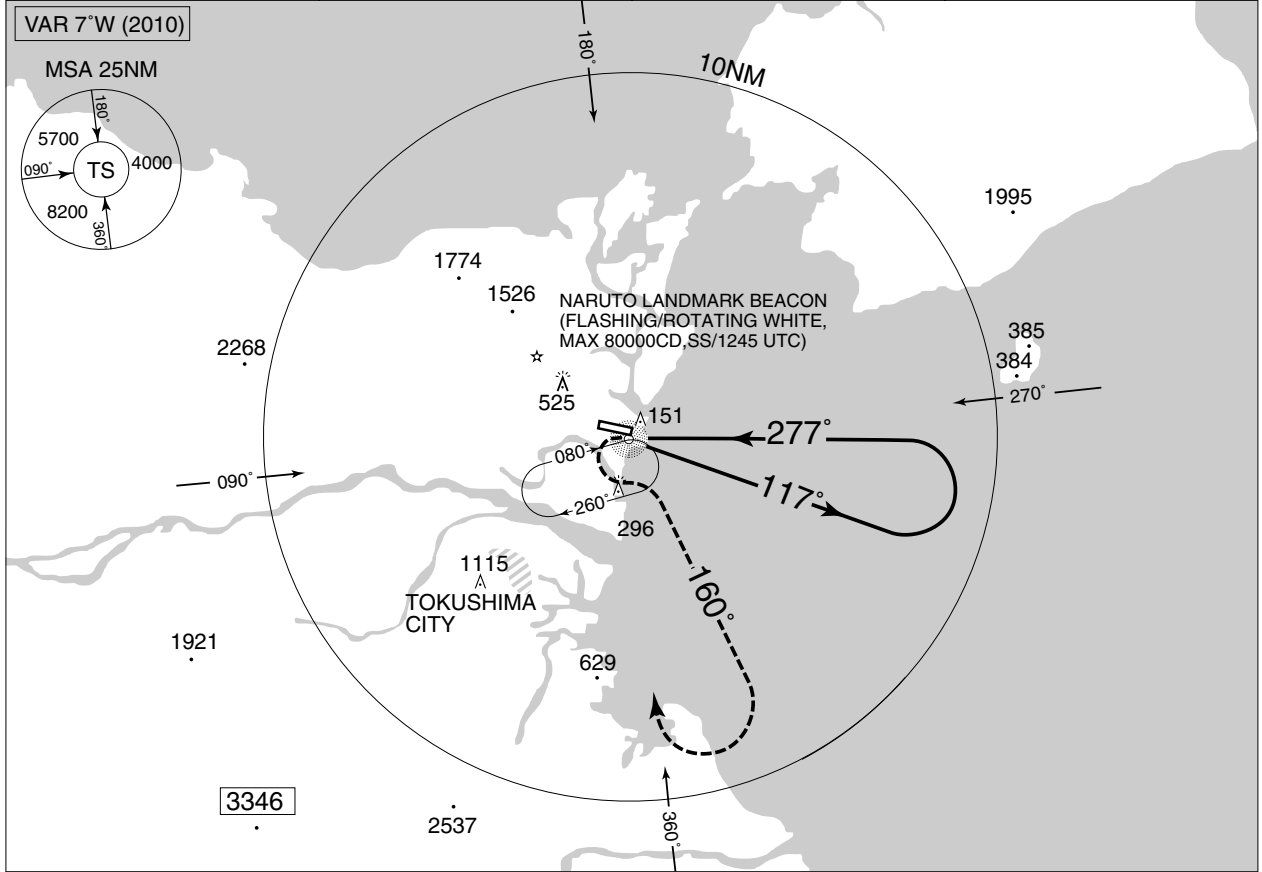
MINIMA		THR elev. 37	AD elev. 37	
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	580 (543)	1500	580 (543)	1600
B			600 (563)	2400
C		2000	840 (803)	3200
D				

INSTRUMENT APPROACH CHART

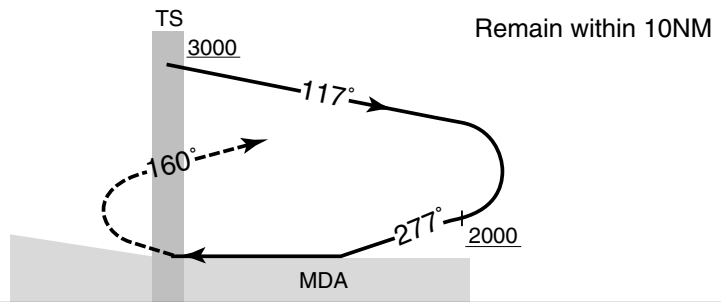
RJOS / TOKUSHIMA

NDB RWY 29

TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	TOKUSHIMA NDB 332.5 TS .. 34°07'41"N / 134°36'22"E	TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8	GCA AVBL CALL TOKUSHIMA APP
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MISSED APPROACH
 At TS NDB, turn left and climb via 160° from TS NDB to 3000FT, then turn right within 10NM of TS NDB, proceed to TS NDB and hold.
 Contact TOKUSHIMA APP.



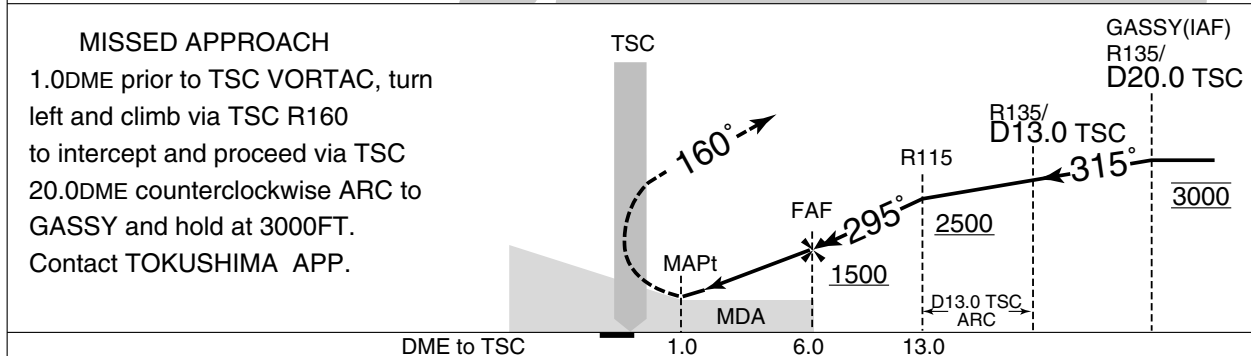
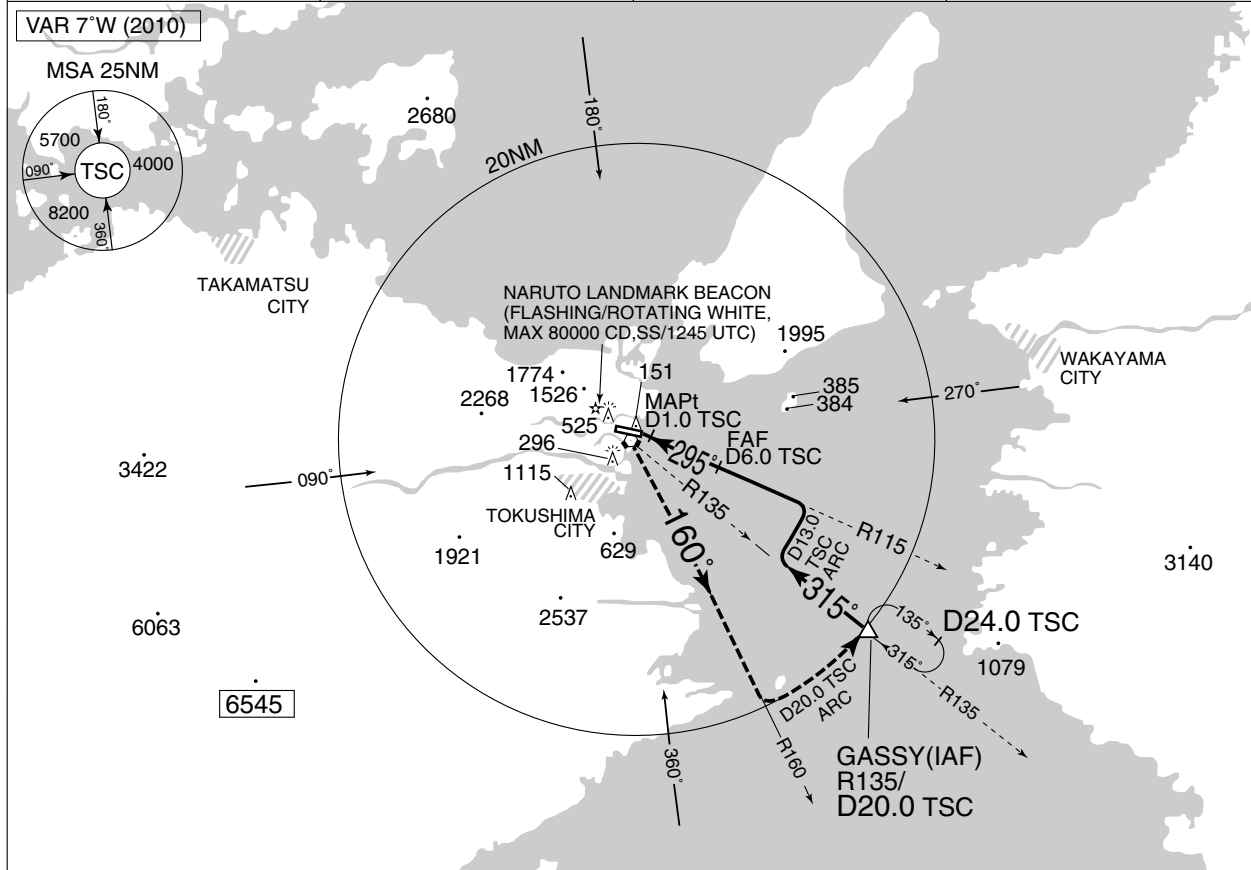
MINIMA	THR elev. 37	AD elev. 37		
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	580 (543)	1500	580 (543)	1600
B			600 (563)	2400
C		2000	840 (803)	3200
D				

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

TACAN A

TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	TOKUSHIMA TACAN CH-96X TSC ̄:.. 34°07'48"N / 134°36'36"E	TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8	GCA AVBL CALL TOKUSHIMA APP
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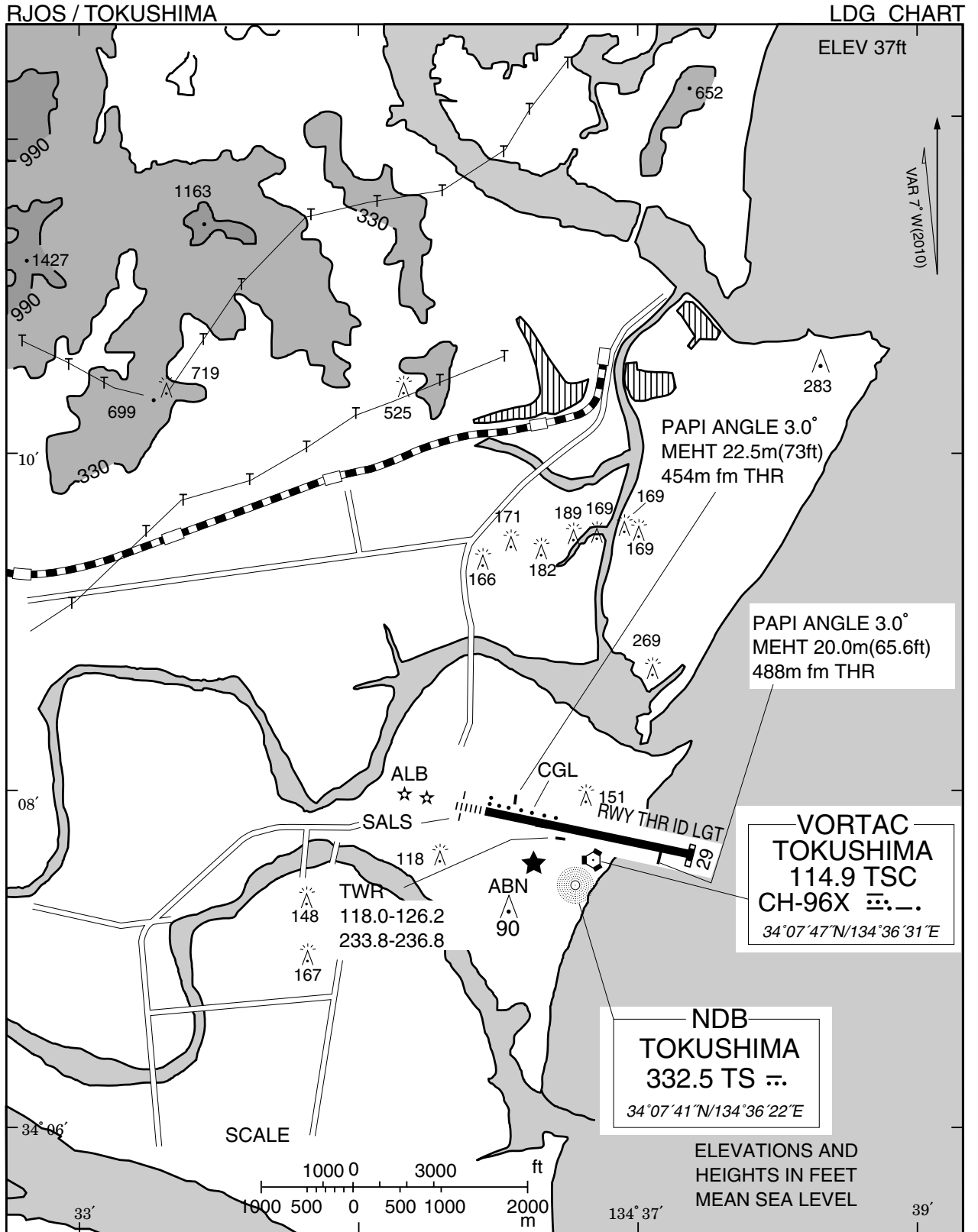
MINIMA	THR elev. 37	AD elev. 37
CAT	CIRCLING	
	MDA(H)	VIS
A	580 (543)	1600
B		
C	600 (563)	2400
D	840 (803)	3200

RJOS / TOKUSHIMA

Visual REP



Call sign	BRG / DIST from ARP	Remarks
沼島 Nushima	086°/11.0NM	灯台 Lighthouse
福良 Fukura	042°/8.5NM	港 Harbor
吉野イニシャル Yoshino Initial	254°/4.5NM	鉄道橋中央 the center of iron bridge
岡崎 Okazaki	036°/3.3NM	灯台 Lighthouse
吉野リバー Yoshino River	195°/3.3NM	吉野川河口 River-mouth



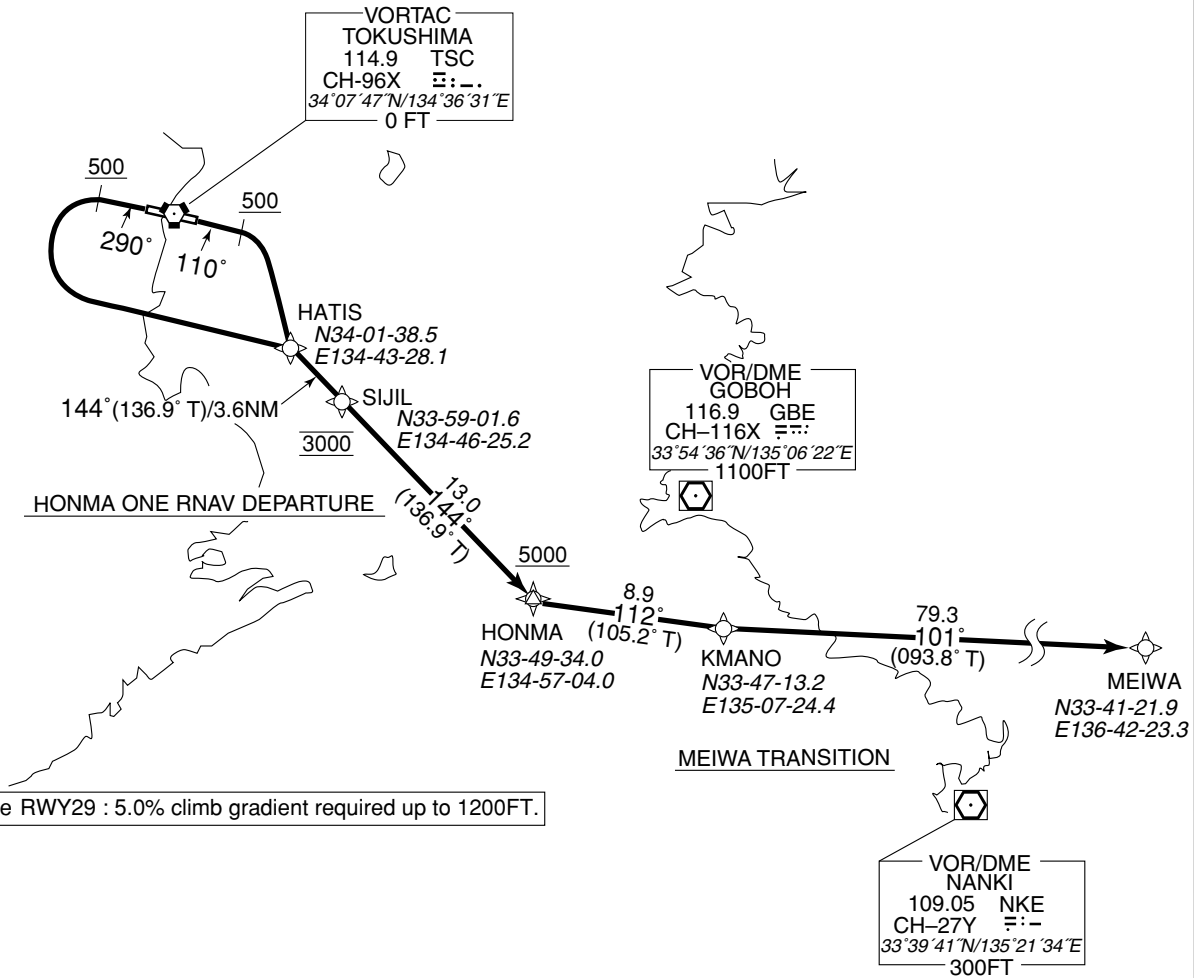
STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

➔ RNAV SID

HONMA ONE RNAV DEPARTURE		RNAV 1
Note 1) DME/DME/IRU or GNSS required. ※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling. 2) RADAR service required.	Critical DME	AJE "4NM to KMANO - 79NM to MEIWA"
	DME GAP	-
	Inappropriate Nav aids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 7°W (2012)



Note RWY29 : 5.0% climb gradient required up to 1200FT.

HONMA ONE RNAV DEPARTURE

RWY11 : Climb on HDG 110° at or above 500FT, turn right direct to HATIS, to SIJIL at 3000FT, to HONMA at or above 5000FT.
 RWY29 : Climb on HDG 290° at or above 500FT, turn left direct to HATIS, to SIJIL at 3000FT, to HONMA at or above 5000FT.

MEIWA TRANSITION

From HONMA, to KMANO, to MEIWA.

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

STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

➔ RNAV SID

HONMA ONE RNAV DEPARTURE

RWY11

Rcmd. Path Terminator	Fix ID (Waypoint Name)	Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	—	—	—	110° (102.6°)	—	+500	—	—	RNAV1
DF	HATIS	—	—	—	R	—	—	—	RNAV1
TF	SIJIL	—	3.6	144° (136.9°)	—	3000	—	—	RNAV1
TF	HONMA	—	13.0	144° (136.9°)	—	+5000	—	—	RNAV1

RWY29

Rcmd. Path Terminator	Fix ID (Waypoint Name)	Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
VA	—	—	—	290° (282.6°)	—	+500	—	—	RNAV1
DF	HATIS	—	—	—	L	—	—	—	RNAV1
TF	SIJIL	—	3.6	144° (136.9°)	—	3000	—	—	RNAV1
TF	HONMA	—	13.0	144° (136.9°)	—	+5000	—	—	RNAV1

MEIWA TRANSITION

Rcmd. Path Terminator	Fix ID (Waypoint Name)	Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
IF	HONMA	—	—	—	—	+5000	—	—	RNAV1
TF	KMANO	—	8.9	112° (105.2°)	—	—	—	—	RNAV1
TF	MEIWA	—	79.3	101° (093.8°)	—	—	—	—	RNAV1

STANDARD DEPARTURE CHART -INSTRUMENT

RJOS / TOKUSHIMA

➡ SID and TRANSITION

MISAKI ONE DEPARTURE

RWY29 : Turn left within 3NM,...

RWY11 : Turn right,...

...climb via TSC R143 (143° from TS NDB) to HONMA.

Cross TSC 12.0DME (12NM of TS NDB) at 3000FT, cross HONMA at or above 8000FT.

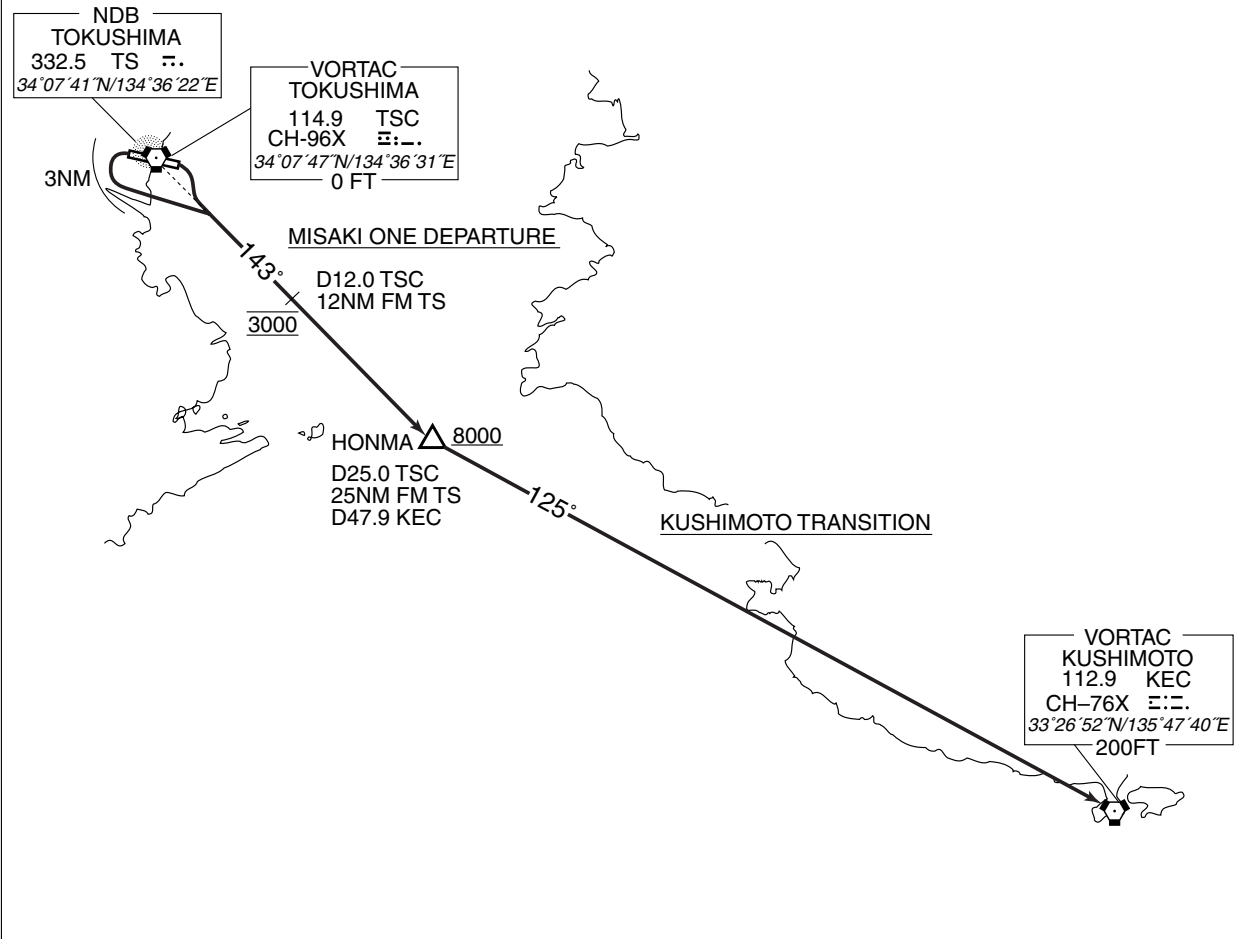
Note1 : When take off RWY29, following climb gradient should be maintained until passing 300FT

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

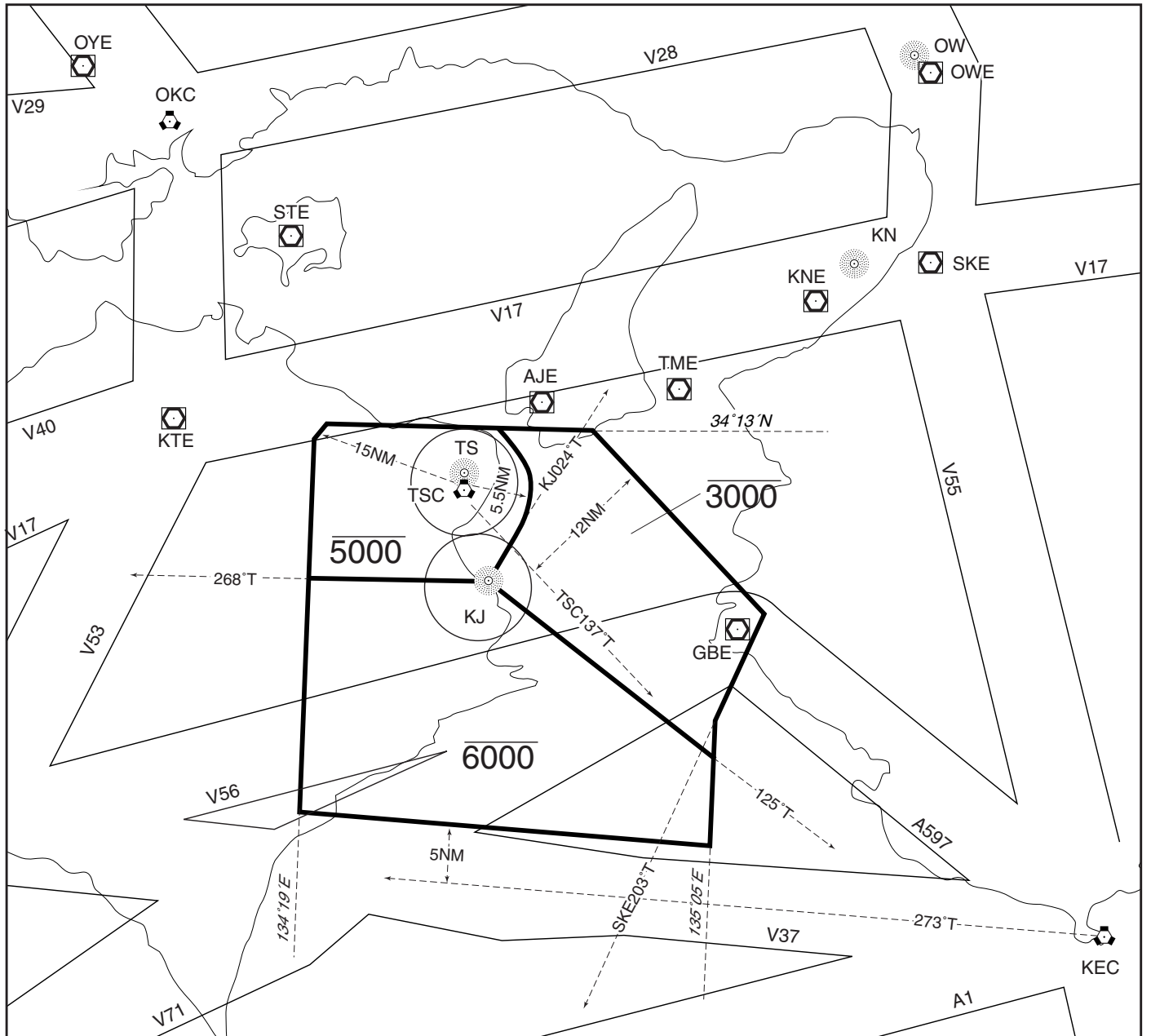
Note2 : TV antenna tower (Mt. BIZAN : height 1115FT) at TSC R230 5DME. (5NM on 230° from TS NDB).

KUSHIMOTO TRANSITION

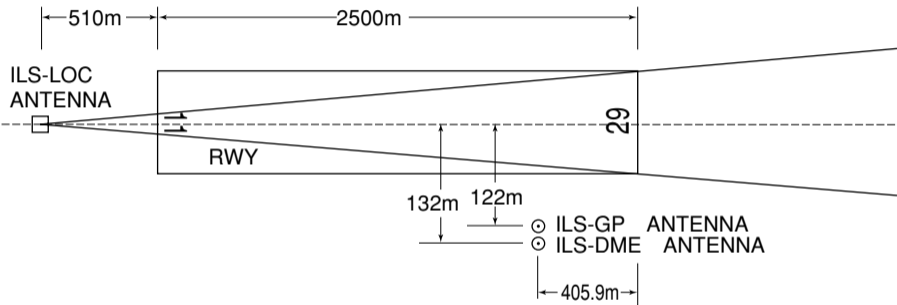
From over HONMA, via KEC R305 to KEC VORTAC.



徳島進入管制区
Tokushima Approach Control Area



ILS



- REMARKS :
- | | |
|-------------------------|-------------|
| 1. LOC beam BRG(MAG) | 290° |
| 2. HGT of ILS REF datum | 16.5m(54ft) |
| 3. GP angle | 3.0° |
| 4. ELEV of ILS-DME | 6.7m(22ft) |