

AD CHART



STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

RNAV SID and TRANSITION

HONMA ONE DEPARTURE / KILAP TRANSITION

RNAV1

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

RWY29

AJD : 3.0NM to HATIS – HATIS

KILAP TRANSITION

AJD : 4.0NM to KMANO – KMANO

DME GAP

–

Inappropriate Nav aids

See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 8°W (2018)

HONMA ONE DEPARTURE

RWY11 : Climb on HDG110° at or above 500FT, turn right direct to HATIS, to SIJIL at 3000FT, to HONMA at or above 5000FT.

RWY29 : Climb on HDG290° 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 FM end of RWY29.

KILAP TRANSITION

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

CHANGE : New PROC (KILAP TRANSITION), Abolition PROC (MEIWA TRANSITION), VAR

STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

RNAV SID and TRANSITION

HONMA ONE 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	—	—	110 (102.6)	-7.6	—	—	+500	—	—	RNAV1
002	DF	HATIS	—	—	-7.6	—	R	—	—	—	RNAV1
003	TF	SIJIL	—	144 (136.9)	-7.6	3.6	—	3000	—	—	RNAV1
004	TF	HONMA	—	144 (136.9)	-7.6	13.0	—	+5000	—	—	RNAV1

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	—	—	290 (282.6)	-7.6	—	—	+500	—	—	RNAV1
002	DF	HATIS	—	—	-7.6	—	L	—	—	—	RNAV1
003	TF	SIJIL	—	144 (136.9)	-7.6	3.6	—	3000	—	—	RNAV1
004	TF	HONMA	—	144 (136.9)	-7.6	13.0	—	+5000	—	—	RNAV1

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	—	—	-7.6	—	—	+5000	—	—	RNAV1
002	TF	KMANO	—	113 (105.2)	-7.6	8.9	—	—	—	—	RNAV1
003	TF	KILAP	—	104 (095.9)	-7.6	82.2	—	—	—	—	RNAV1

CHANGE : New PROC (KILAP TRANSITION), Abolition PROC (MEIWA TRANSITION), VAR

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 EIGHT 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 ITE R297, climb via ITE 22.2DME clockwise ARC to intercept and proceed via YME R170 to YME VOR/DME.

Cross ITE R297 at or above 7000FT.

* See Note.

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

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



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.



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

**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	600 (563) 2400
C				2000	840 (803) 3200
D					

INSTRUMENT APPROACH CAHRT

RJOS / TOKUSHIMA

ILS Y or LOC Y RWY 29



INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

ILS X or LOC X RWY 29

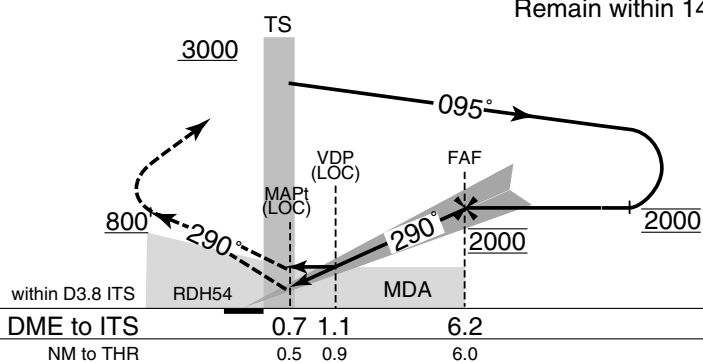
TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	ILS-LOC 108.9 ITS 3. ILS-GP 329.3 ILS-DME CH-26X	TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8	GCA AVBL CALL TOKUSHIMA APP
---	---	---	-----------------------------------



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

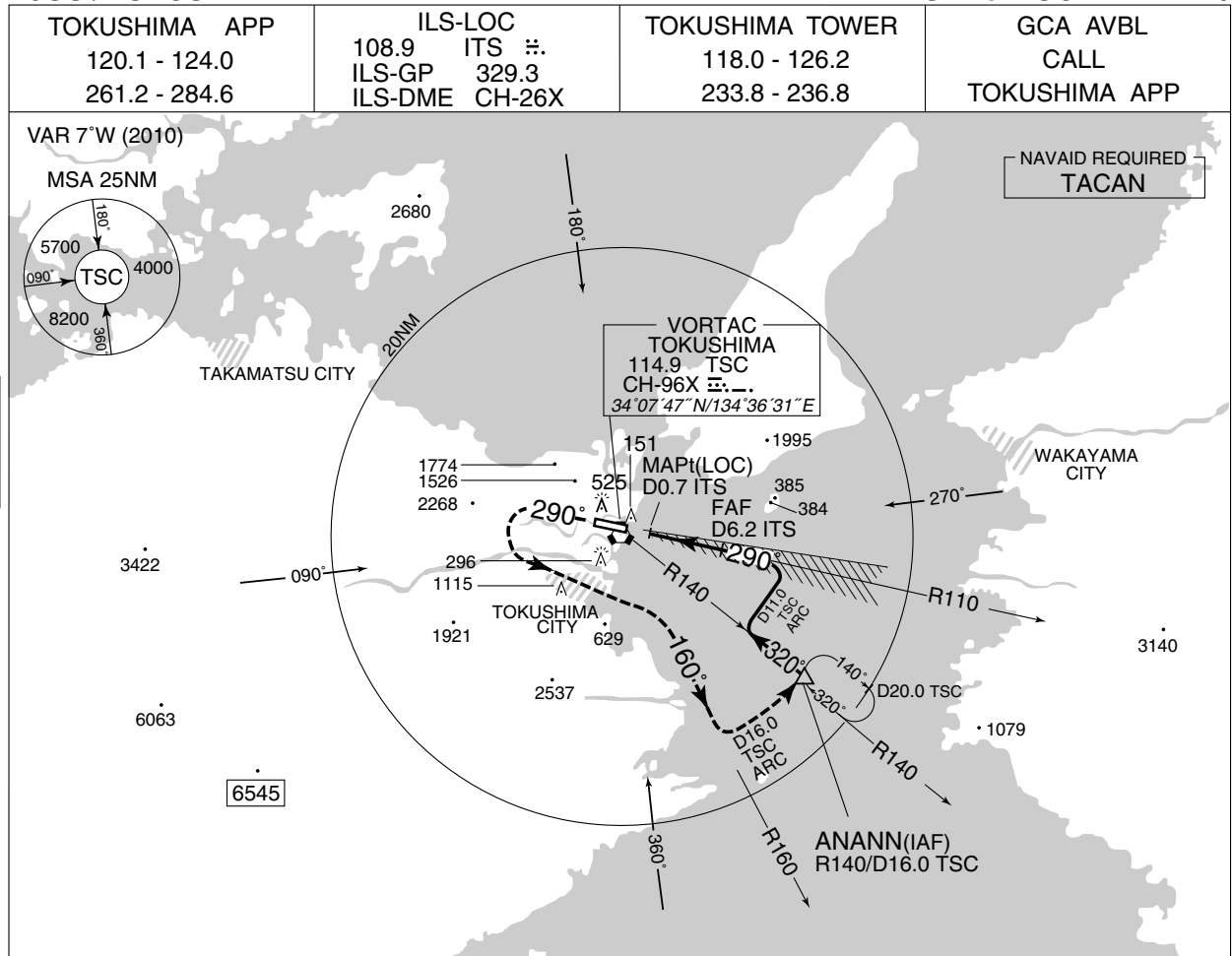


MINIMA		THR elev. 37		AD elev. 37		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	237 (200)	1000	340 (303)	1500	580 (543)	1600
B						
C				1800	600 (563)	2400
D				2000	840 (803)	3200

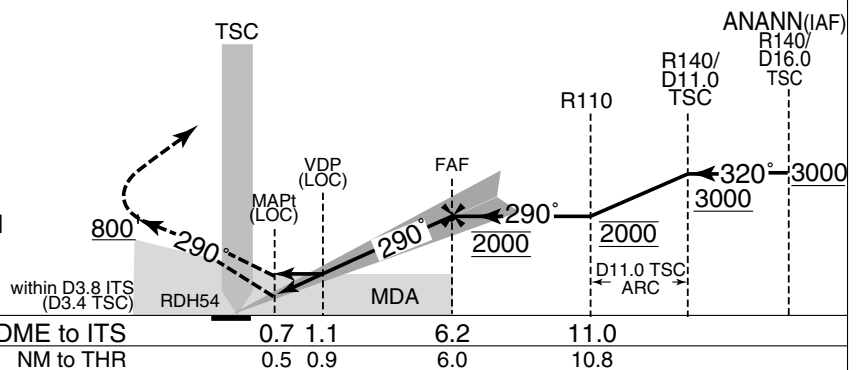
INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

ILS W or LOC W RWY 29



MISSED APPROACH
 Climb on 290° to 800FT
 or above within ITS 3.8DME
 (TSC 3.4DME), then turn left and
 climb via TSC R160 to intercept
 and proceed via TSC 16.0DME
 counterclockwise ARC to ANANN
 IAF and hold at 3000FT.
 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						
C				1800	600 (563)	2400
D				2000	840 (803)	3200

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

VOR RWY 29

TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6	TOKUSHIMA VORTAC 114.9 TSC $\overline{\text{E}}\text{--}\text{L}$ 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
---	--	---	-----------------------------------



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				
C		2000	600 (563)	2400
D			840 (803)	3200

R JOS / TOKUSHIMA

NDB RWY 29

Diagram illustrating a turn maneuver. The vertical axis is labeled **TS** (Top Surface) and the horizontal axis is labeled **MDA** (Minimum Descent Altitude). The initial heading is 117° and the final heading is 277° . The altitude constraint is 3000 (feet) and the MDA is 2000 (feet). The maneuver is labeled "Remain within 10NM". A dashed line indicates a 160° turn angle.

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

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
---	--	---	-----------------------------------



MISSED APPROACH

1.0DME prior to TSC VORTAC, turn left and climb via TSC R160 to intercept and proceed via TSC 16.0DME counterclockwise ARC to ANANN and hold at 3000FT. Contact TOKUSHIMA APP.

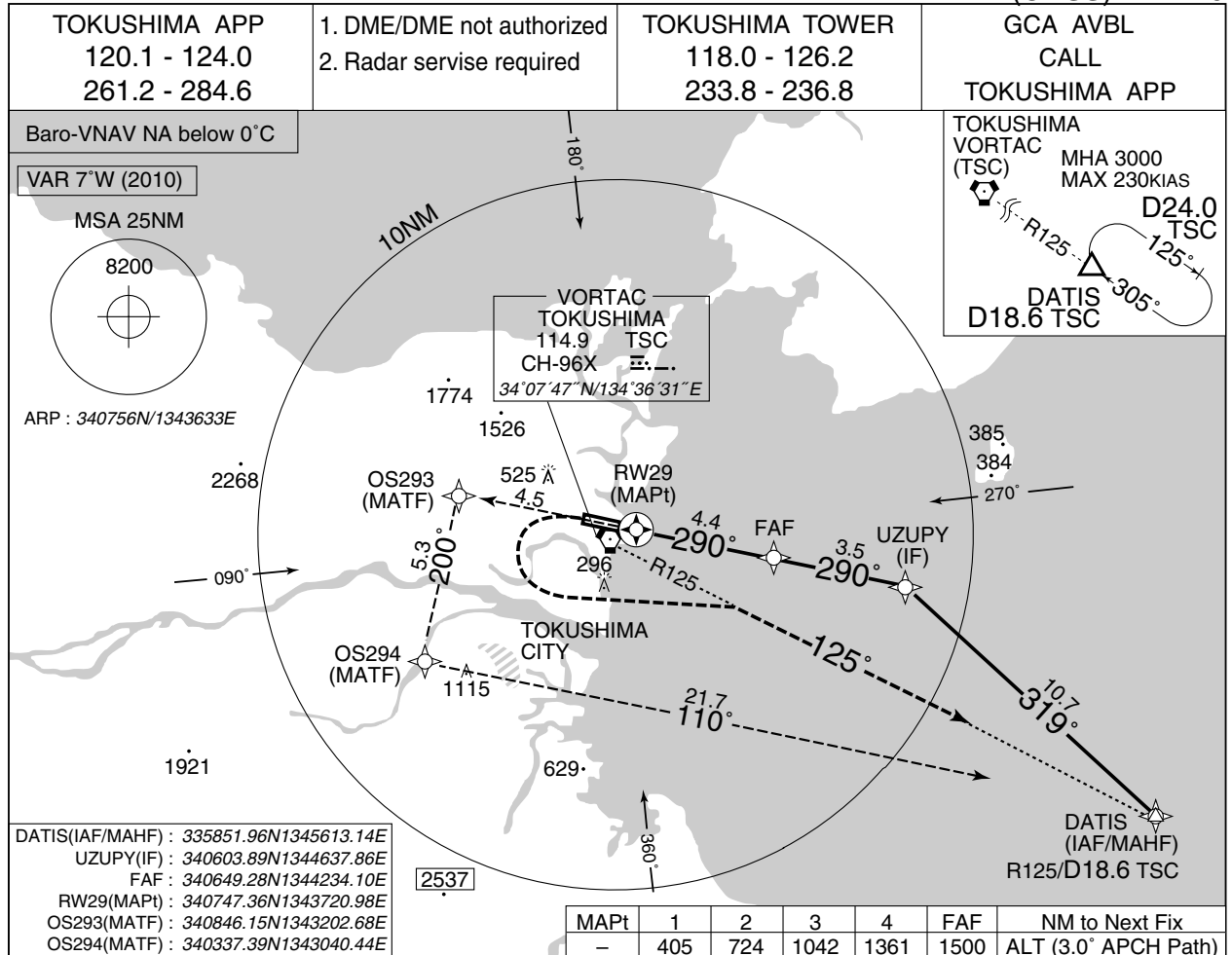


MINIMA		THR elev. 37	AD elev. 37
CAT	CIRCLING		
	MDA(H)	VIS	
A	580 (543)	1600	
B			
C	600 (563)	2400	
D	840 (803)	3200	

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNAV(GNSS) RWY29



MISSED APPROACH

Climb to 3000FT direct to OS293, to OS294, 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.

The diagram illustrates a missed approach procedure. It starts with a climb from 800FT to 3000FT via TSC R125 to DATIS and hold. The climb is on HDG290°. The diagram shows the VDP (LNAV) at 1500 and the MDA (900/863). The climb gradient is 3.00°. The diagram also shows the TSC R125 and the DATIS (IAF) at 3000FT. The diagram includes the VDP (LNAV) at 1500 and the MDA (900/863). The climb gradient is 3.00°. The diagram also shows the TSC R125 and the DATIS (IAF) at 3000FT.

Missed APCH climb gradient MNM 5.0%

MINIMA		THR elev. 37	AD elev. 37	
CAT	LNAV/VNAV		LNAV	
	DA(H)	RVR/CMV	MDA(H)	
A	380 (343)	1500	1500	
B		380 (343)	1800	1800
C			2000	2000
D			2000	2000

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

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

RJOS / TOKUSHIMA

LDG CHART



RJOS / TOKUSHIMA

Minimum Vectoring Altitude CHART

VAR 7°W (2013)



- ① 2000
- ② 3000
- ③ 1700
- ④ 2100
- ⑤ 4500

CENTER : 340751N/1343552E (RADAR SITE)