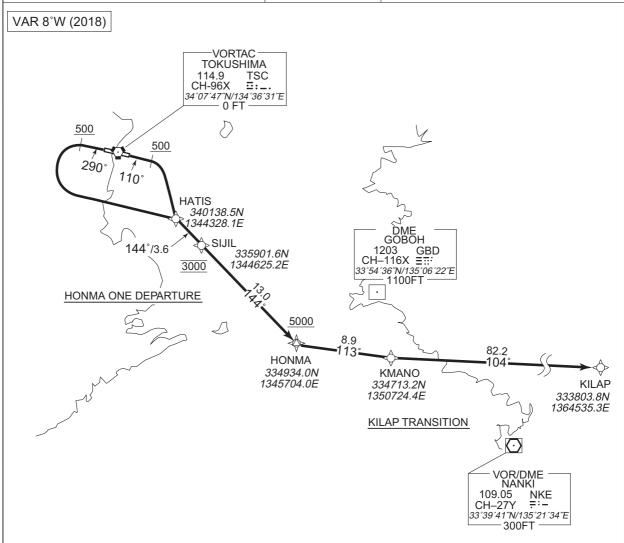




RJOS / TOKUSHIMA

RNAV SID and TRANSITION

HONMA ONE DEPARTURE / KILAP TRANSITION RNAV								
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.	Critical DME	RWY29 AJD: 3.0NM to HA KILAP TRANSITION AJD: 4.0NM to KM						
2) RADAR service required.	DME GAP		-					
	Inappropriate Navaids	See AD1.1.6.10.3. Inapp	ropriate NAVAIDs for RNAV1					



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.

RJOS / TOKUSHIMA

RNAV SID and TRANSITION

HONMA ONE DEPARTURE

RWY11

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		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 Numbe	Path r Descriptor	Waypoint Identifier	Fly Over		Magnetic Variation	1	Turn Direction	Altitude (FT)		I .	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

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.

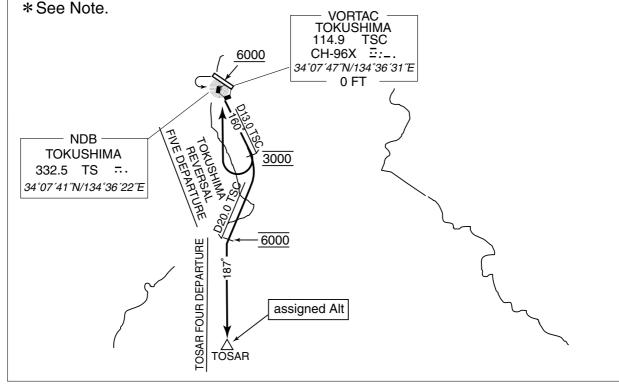
TOKUSHIMA REVERSAL FIVE DEPARTURE

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.



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. VOR/DME MIYAZU 112.6 YME CH-73X =:=-Note1: When take off RWY29, following climb 35°28′50″N/135°08′13″E gradient should be mantained until passing 2400FT 300FT. Speed (Knots) 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). MIYAZU EIGHT DEPARTURE 7000 ITE R297 \odot VOR/DME ITÂMI NDB 114.75 ITE CH-94Y ∺ **TOKUSHIMA** 332.5 TS ... 34°48′20″N/135°24′13″E 34°07′41″N/134°36′22″E 200FT **VORTAC TOKUSHIMA** 114.9 TSC CH-96X Ξ:_.

34°07′47″N/134°36′31″E 0 FT

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.

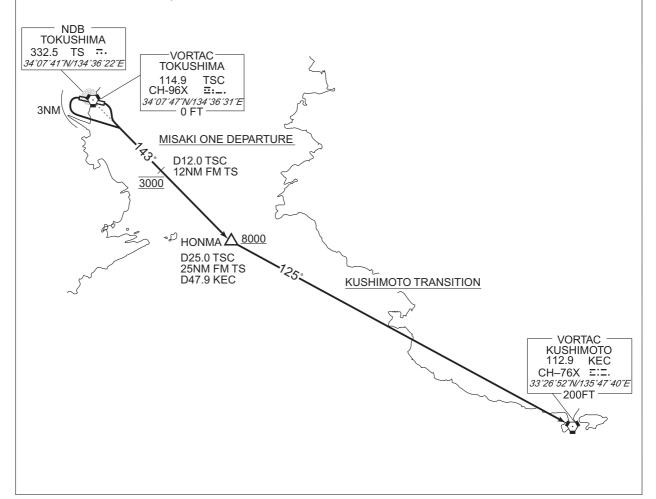
Note1: When take off RWY29, following climb gradient should be maintained until passing 300FT

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

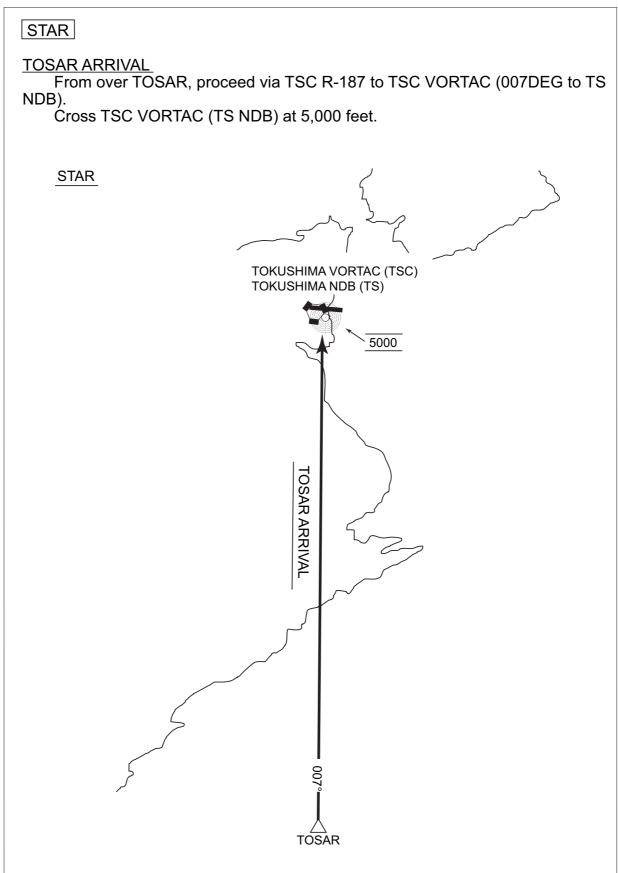
From over HONMA, via KEC R305 to KEC VORTAC.



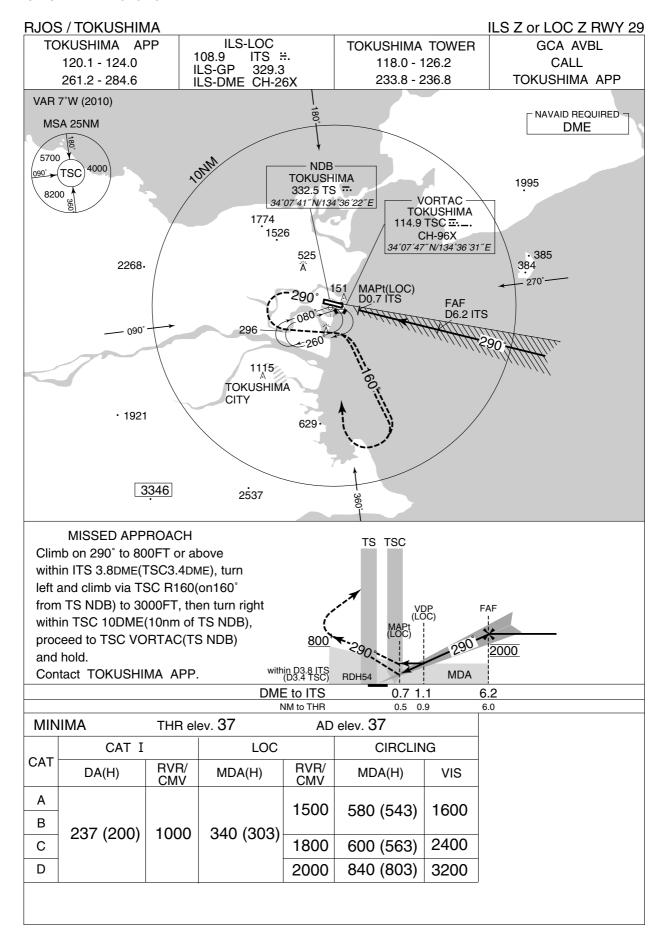


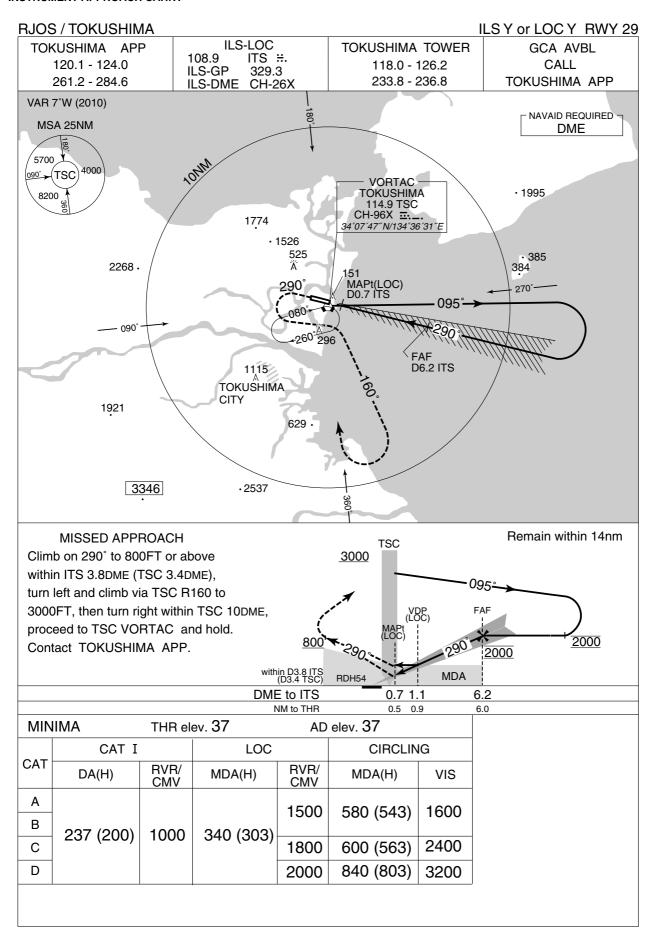
STANDARD ARRIVAL CHART-INSTRUMENT

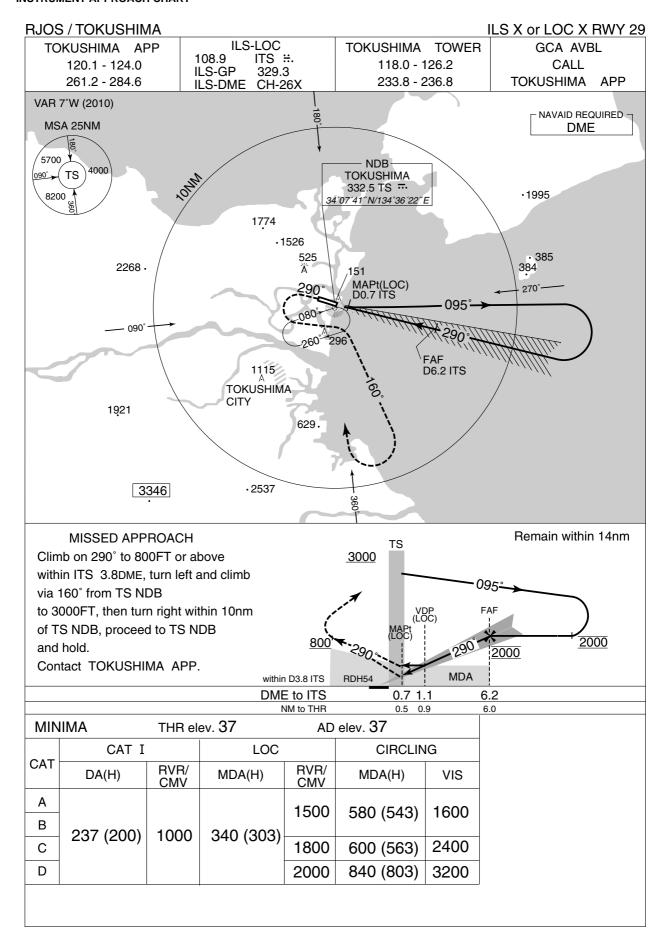
RJOS / TOKUSHIMA STAR

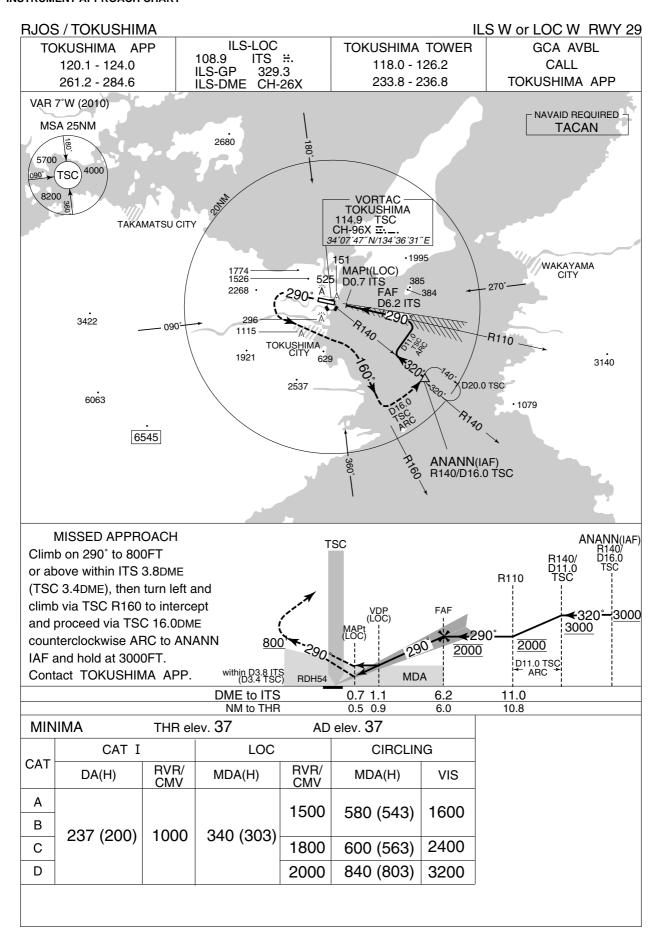


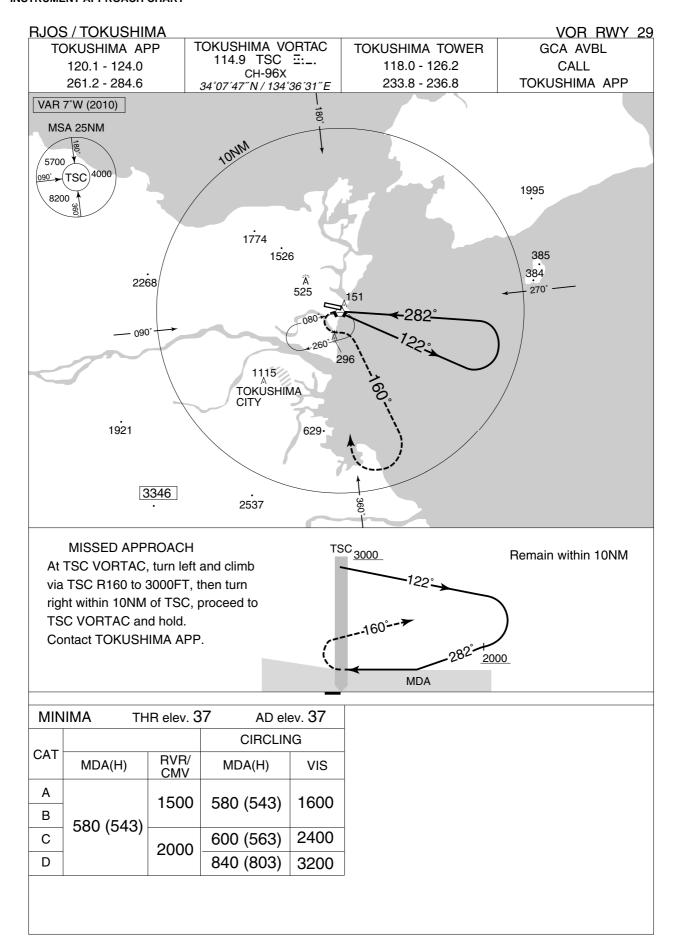


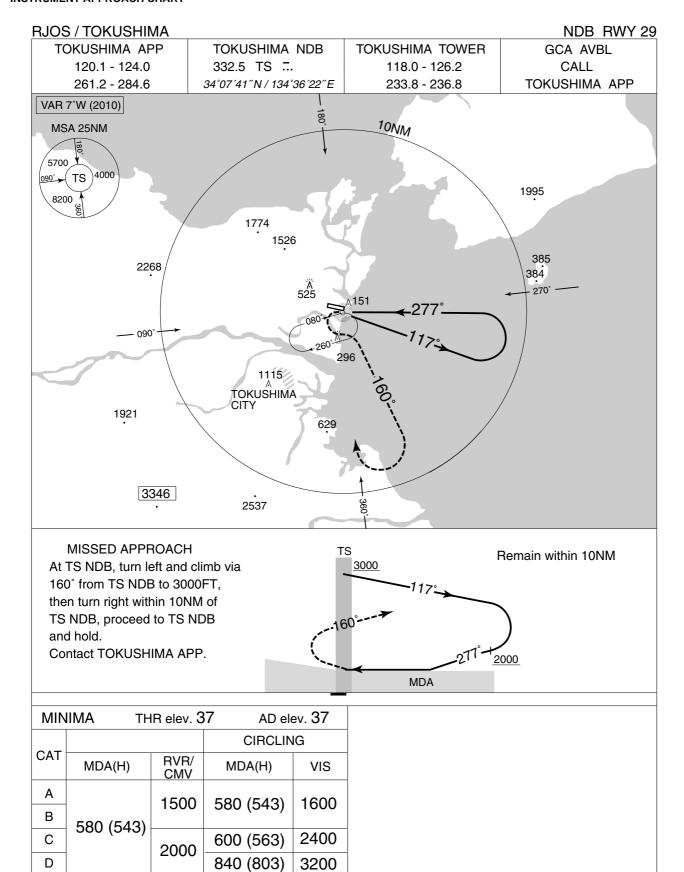


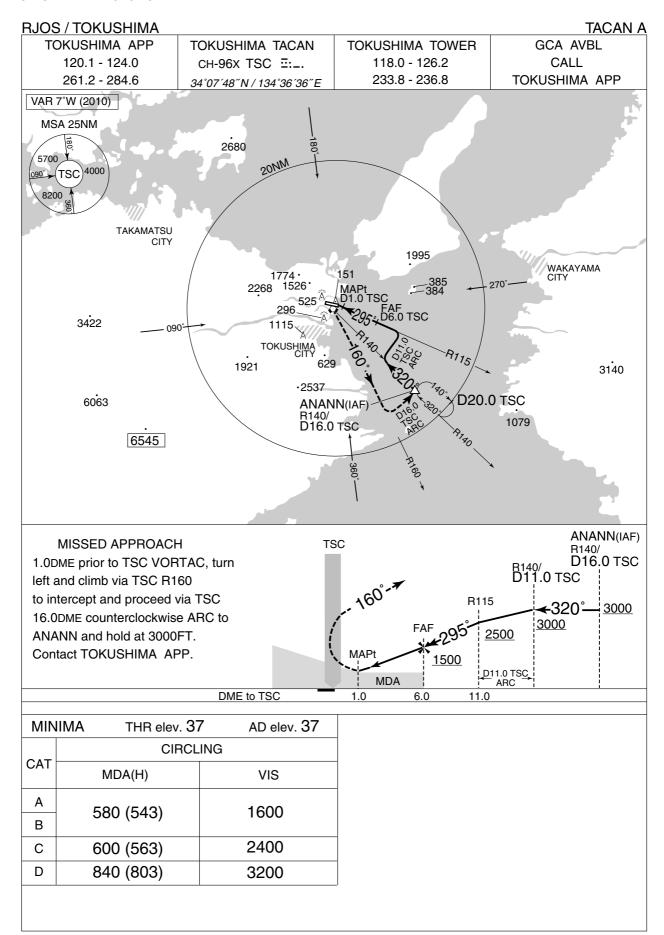


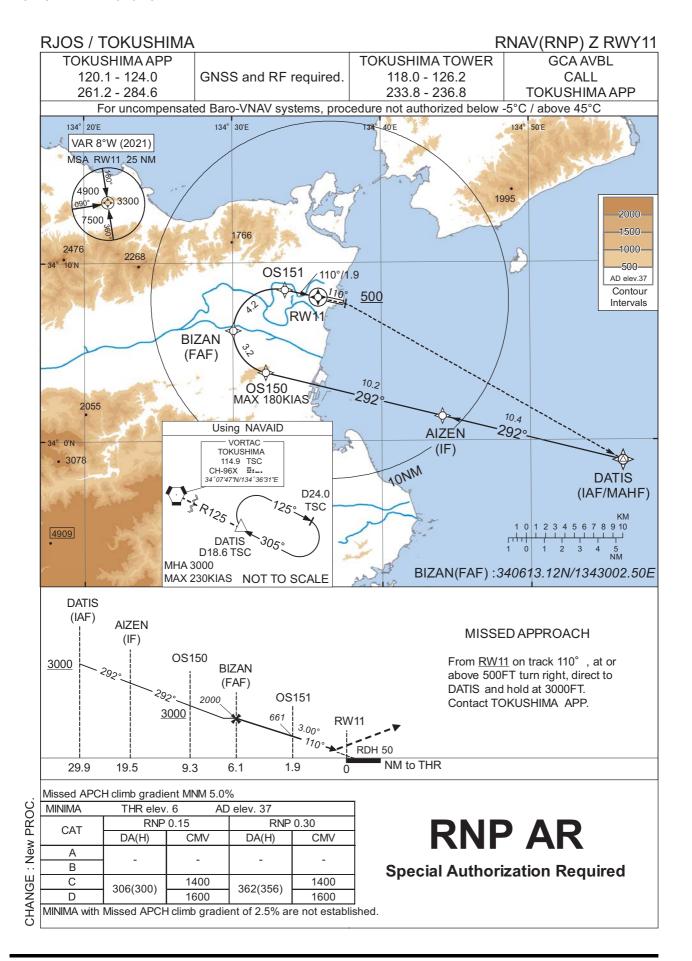












RJOS / TOKUSHIMA

RNAV(RNP) Z RWY11

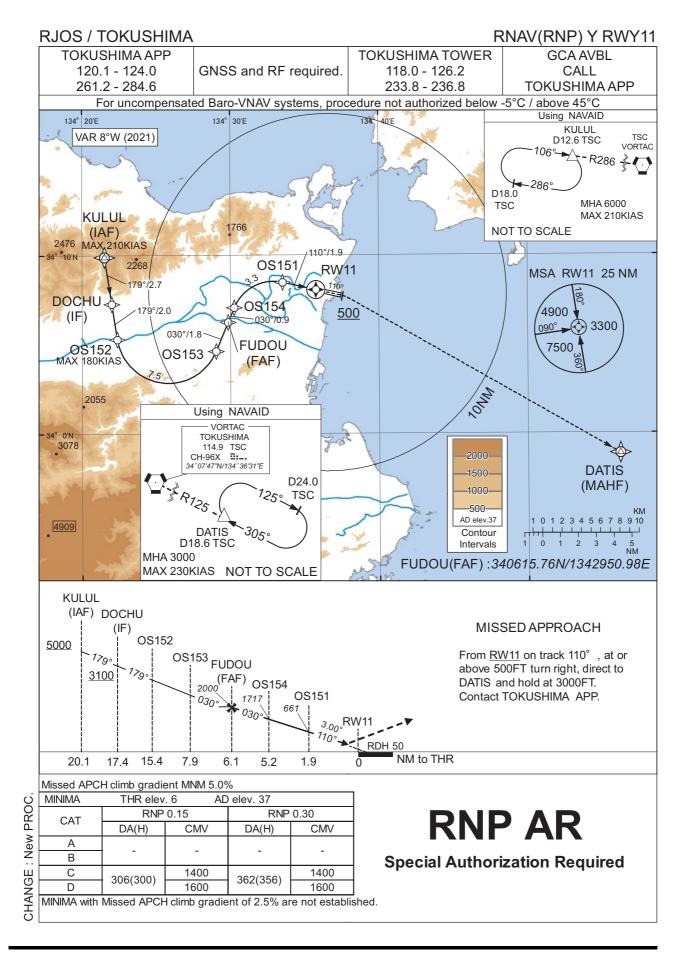
RNAV(RNP) Z RWY11

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	-	ı	-7.8	-	-	+3000	ı	-	-
002	TF	AIZEN	1	292 (284.2)	-7.8	10.4	1	ı	1	ı	1.0
003	TF	OS150	1	292 (284.1)	-7.8	10.2	ı	+3000	-180	ı	0.3
004	RF Center: OSRF2 r=2.38NM	BIZAN	1	1	-7.8	3.2	R	2000	1	,	0.3
005	RF Center: OSRF2 r=2.38NM	OS151	ı	1	-7.8	4.2	R	661	1	-3.00	0.15 0.30
006	TF	RW11	Υ	110 (102.6)	-7.8	1.9	-	56	1	-3.00/50	0.15 0.30
007	FA	-	-	110 (102.6)	-7.8	-	-	+500	-	-	1.0
008	DF	DATIS	-	-	-7.8	-	R	3000	ı	-	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		



RJOS / TOKUSHIMA

RNAV(RNP) Y RWY11

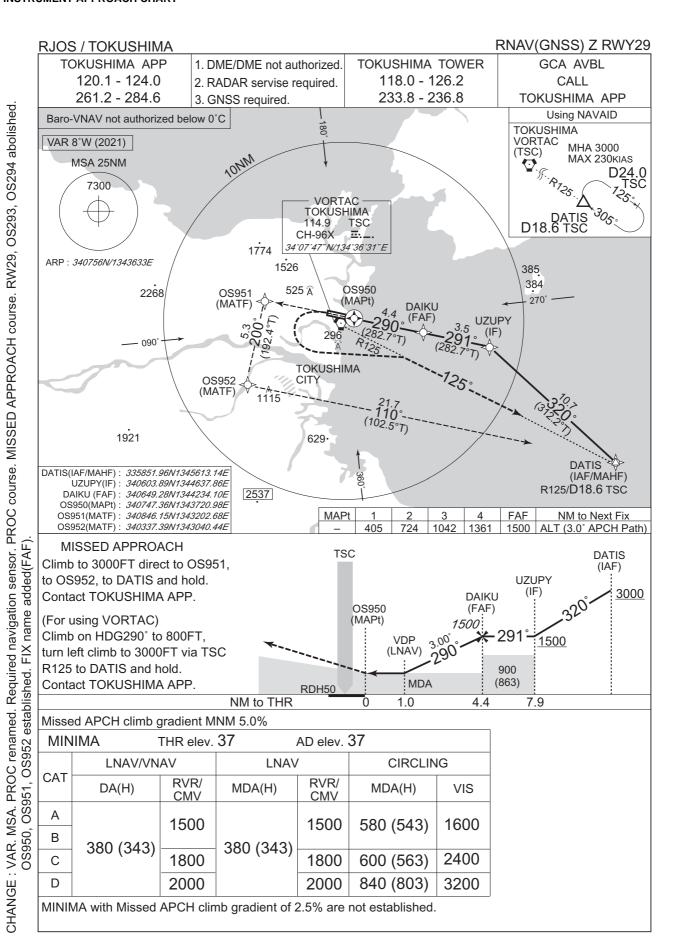
RNAV(RNP) Y RWY11

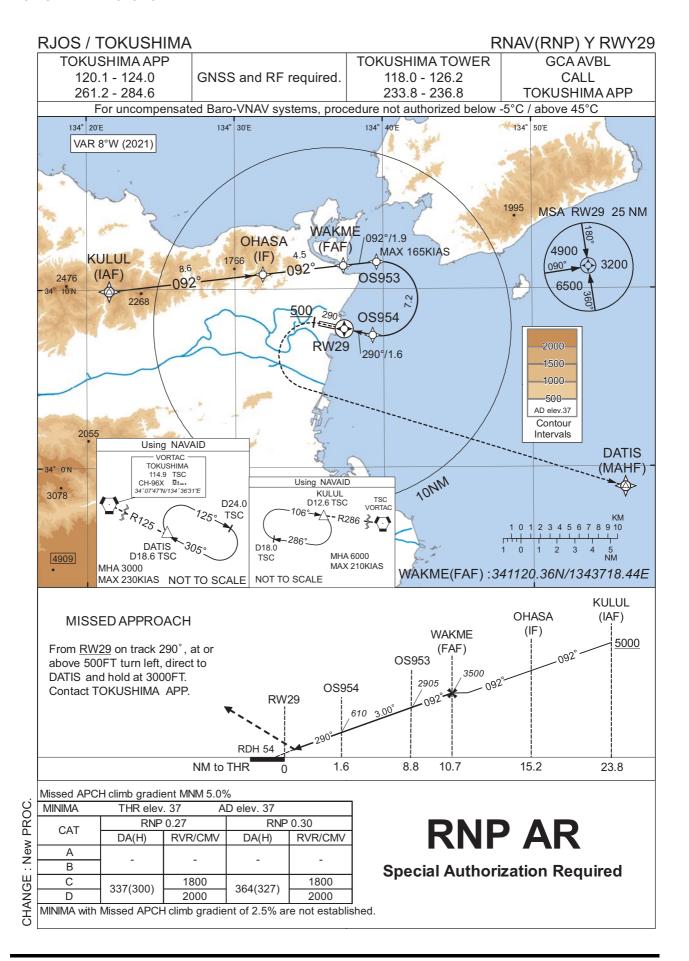
Coding Table

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	1	-	-7.8	-	1	+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	1	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	Υ	110 (102.6)	-7.8	1.9	-	56	1	-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		
		-	





RJOS / TOKUSHIMA

RNAV(RNP) Y RWY29

RNAV(RNP) Y RWY29

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	ı	1	-7.8	1	-	+5000	1	1	-
002	TF	OHASA	1	092 (083.7)	-7.8	8.6	-	-	1	-	1.0
003	TF	WAKME	1	092 (083.8)	-7.8	4.5	-	3500	1	-	0.7
004	TF	OS953	1	092 (083.8)	-7.8	1.9	-	2905	-165	-3.00	0.27 0.30
005	RF Center: OSRF3 r=2.08NM	OS954	ı	ı	-7.8	7.2	R	610	ı	-3.00	0.27 0.30
006	TF	RW29	Υ	290 (282.6)	-7.8	1.6	1	91	1	-3.00/54	0.27 0.30
007	FA	-	ı	290 (282.6)	-7.8	-	-	+500	ı	-	1.0
800	DF	DATIS	-		-7.8	-	L	3000	1	-	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		



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

