

AD 2 AERODROMES

RJOS AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJOS - TOKUSHIMA

RJOS AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	340756N/1343633E
2	Direction and distance from (city)	4NM ENE FM Tokushima
3	Elevation/ Reference temperature	37ft / -
4	Geoid undulation at AD ELEV PSN	Nil
5	MAG VAR/ Annual change	8° W(2023)/ -
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Japan Maritime Self Defense Force. Public AD
7	Types of traffic permitted(IFR/ VFR)	IFR/VFR
8	Remarks	Tokushima Airport Office(CAB) 16-2 Aza Asahino Toyohisa Matsushige-cho Itano-gun Tokushima Pref Tel : 088-699-6527 Fax : 088-699-4470

RJOS AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	On request Customs: 0885-32-0326 Immigration: 0885-32-1530
3	Health and sanitation	On request Quarantine(human): 0877-46-4279 Quarantine(animal): 087-879-4654 Quarantine(plant): 0885-32-1227
4	AIS Briefing Office	H24(CAB:Nil)
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24(KANSAI)
7	ATS	H24
8	Fuelling	2100-1030
9	Handling	2100-1100
10	Security	Nil
11	De-icing	Nil
12	Remarks	HR of service at CAB OPS Section: 2200 - 1230(Daily)

RJOS AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Nil
2	Fuel/ oil types	JET A-1(CIV only) JP-5(JSDF only)
3	Fuelling facilities/ capacity	Fuel truck(CIV)
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJOS AD 2.5 PASSENGER FACILITIES

1	Hotels	Nil
2	Restaurants	At Airport
3	Transportation	Buses and Taxis
4	Medical facilities	Nil
5	Bank and Post Office	Nil
6	Tourist Office	Nil
7	Remarks	Nil

RJOS AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	To be issued later
2	Rescue equipment	To be issued later
3	Capability for removal of disabled aircraft	To be issued later
4	Remarks	Nil

RJOS AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	To be issued later
2	Clearance priorities	To be issued later
3	Remarks	Nil

RJOS AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	NORTH APRON Surface : Concrete Strength : PCN 72/R/B/X/U
2	Taxiway width, surface and strength	Surface : Asphalt-concrete N-1(NORTH-1) Width : 28.5m, Strength : PCN 75/F/B/X/U SOUTH-1 Width : 23m, Strength : PCN 43/F/C/X/T N-2(NORTH-2), N-3(NORTH-3), N-4(NORTH-4), N-5(NORTH-5) Width : 34m, Strength : PCN 75/F/B/X/U SOUTH-2, SOUTH PARL TWY(BTN SOUTH-2 and SOUTH-5) Width : 23m, Strength : PCN 40/F/C/X/T SOUTH-3 Width : 23m, Strength : PCN 25/F/C/Y/T SOUTH-4, SOUTH-5 Width : 23m, Strength : PCN 41/F/A/X/T N-6(NORTH-6) Width : 28.5m PCN 70/F/A/X/U SOUTH-6, SOUTH PARL TWY(BTN SOUTH-5 and SOUTH-6) Width : 18m, Strength : PCN 28/F/A/Y/T NORTH PARL TWY(BTN N-1(NORTH-1) and N-5(NORTH-5)) Width : 23m, Strength : PCN 75/F/B/X/U NORTH PARL TWY(BTN N-5(NORTH-5) and N-6(NORTH-6)) Width : 23m, Strength : PCN 70/F/A/X/U Surface : Concrete SOUTH PARL TWY(BTN WEST SIDE END and SOUTH-2) Width : 18m, Strength : To be issued later
3	ACL and elevation	Not available
4	VOR checkpoints	Nil
5	INS checkpoints	To be issued later
6	Remarks	Nil

RJOS AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands	Nil
2	RWY and TWY markings and LGT	RWY:11/29 (Marking) RWY designation, RWY CL, RWY THR, TDZ, RWY side stripe (LGT) RCLL, REDL, RTHL, RENL, WBAR, RWY DIST marker, TKOF aiming LGT TWY: (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT, TWY CL LGT(N-1(NORTH-1) THRU N-6(NORTH-6) AND NORTH PARL TWY), Taxiing guidance sign(N-1(NORTH-1) THRU N-6(NORTH-6))
3	Stop bars	Nil
4	Remarks	(Marking) Overrun area (LGT) APN flood LGT

RJOS AD 2.10 AERODROME OBSTACLES

In approach / TKOF Areas

RWY/Area affected	Obstacle type	Coordinates	Elevation	Markings / LGT	Remarks
RWY29	Antenna	340608.2N1343549.5E	296FT	Marking / LIM, LIL	Nil

In circling area and at AD

Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
Nil				

RJOS AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	KANSAI
2	Hours of service MET Office outside hours	H24(KANSAI)
3	Office responsible for TAF preparation Periods of validity	Nil
4	Trend forecast Interval of issuance	Nil
5	Briefing/ consultation provided	Briefing is available upon inquiry at KANSAI
6	Flight documentation Language(s) used	Nil
7	Charts and other information available for briefing or consultation	S ₆ , U ₈₅ , U ₇ , U ₅ , U ₃ , U ₂₅ , U ₂ /T _r , P _S , P ₅ , P ₃ , P ₂₅ , P _{SWE} , P _{SWF} , P _{SWG} , P _{SWI} , P _{SWM} , P _{SW} (domestic), E, C, W _E , W _F , W _G , W _I , W, N
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	TWR, APP, ATIS
10	Additional information(limitation of service, etc.)	Observation is made by the Ministry of Defence.

RJOS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCN) and surface of RWY	THR coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
11	102.53°	2500×45	PCN 70/F/A/X/T SW90000kg (198400lbs) DW124000kg (273400lbs) DTW182000kg (401300lbs) TTTW216000kg (476200lbs) Asphalt-Concrete	340804.98N 1343545.74E	THR EVEV : 6ft
29	282.53°	2500×45	PCN 70/F/A/X/T SW90000kg (198400lbs) DW124000kg (273400lbs) DTW182000kg (401300lbs) TTTW216000kg (476200lbs) Asphalt-Concrete	340747.36N 1343720.97E	THR EVEV : 37ft TDZ ELEV : 37ft
Slope of RWY		Strip Dimensions(M)	Remarks		
7		10	12		
SEE AD2.24 AD chart		2760×300 2760×300	RWY Grooving 30×2500m		

RJOS AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
11	2500	2500	2500	2500	Nil
29	2500	2500	2500	2500	Nil

RJOS AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	RTHL Color WBAR	PAPI (VASIS) Angle DIST FM THR MEHT	RTZL LEN	RCLL LEN Spacing Color INTST	REDL LEN Spacing Color INTST	RENL Color WBAR	STWL LEN Color
1	2	3	4	5	6	7	8	9
11	SALS (*1) 420m	Green -	PAPI 3.0°/Left 454m 73ft	Nil	2500M 30M Coded color (White/Red) LIH	2500M 60M Coded color (White/Yellow) LIH	Red	Nil(*2)
29	Nil	Green Green	PAPI 3.0°/Left 488m 65.6ft	Nil	2500M 30M Coded color (White/Red) LIH	2500M 60M Coded color (White/Yellow) LIH	Red	Nil(*2)
Remarks								
10								
SALS with APCH LGT beacon (600m and 841m FM RWY 11 THR) (*1) Overrun area edge LGT(Color: Red)(*2) CGL for RWY 11(Color: Yellow) RWY THR ID LGT for RWY 11/29 THR(Color: White)								

RJOS AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

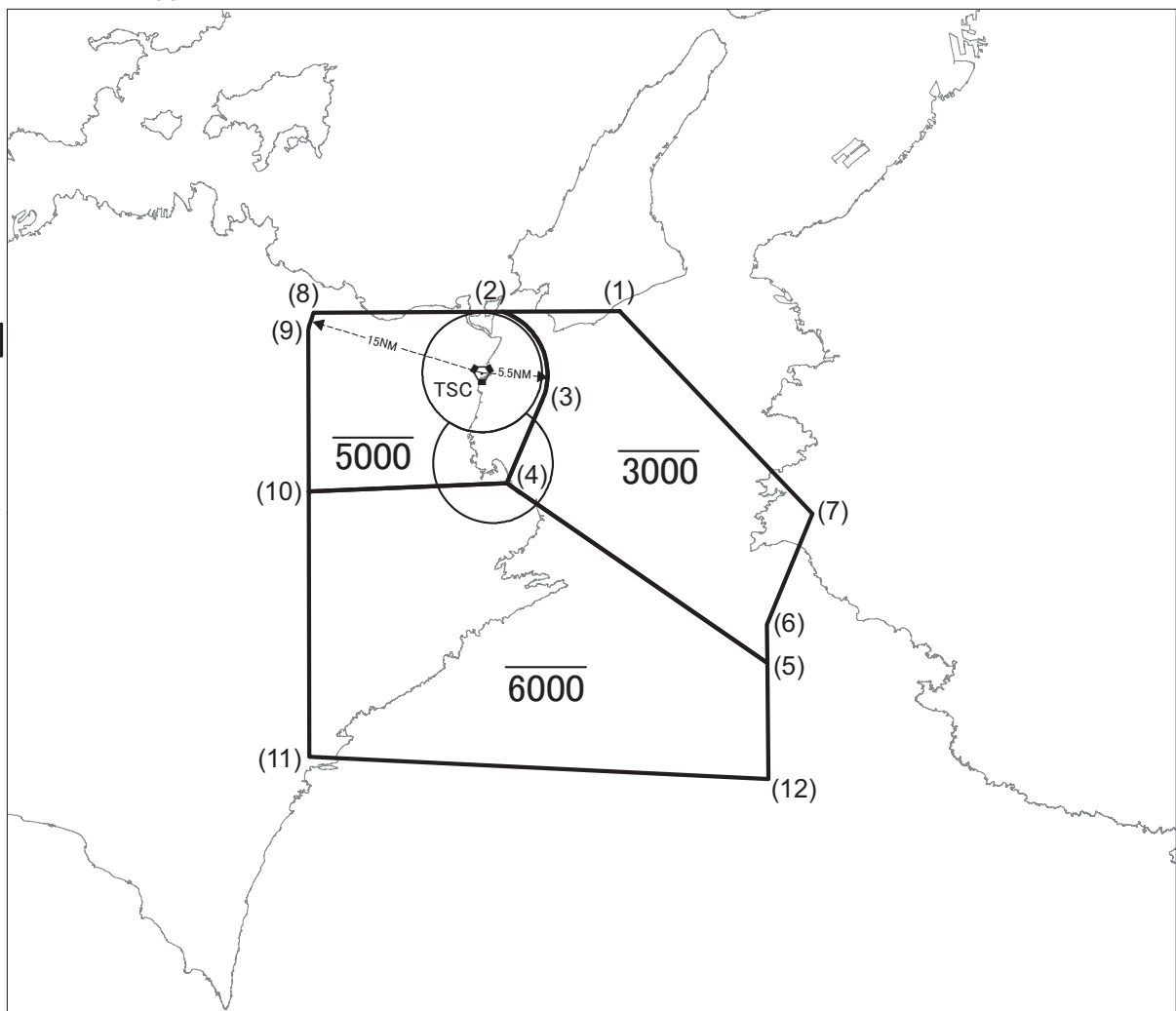
1	ABN/IBN location, characteristics and hours of operation	ABN: 340752N/1343547E, White/Green EV 4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI : AVBL
3	TWY edge and center line lighting	TWY edge and center line lights installed, see AD2.9
4	Secondary power supply/ switch-over time	Within 15 sec: TWY edge LGT(TWY N-1(NORTH-1) THRU N-6(NORTH-6), NORTH PARL) TWY CL LGT(TWY N-1(NORTH-1) THRU N-6(NORTH-6), NORTH PARL), Apron flood LGT(CIV)
5	Remarks	WDI LGT, OBST LGT

RJOS AD 2.16 HELICOPTER LANDING AREA

Nil

RJOS AD 2.17 ATS AIRSPACE

Designation and lateral limits		Vertical limits (ft)	Airspace classification	ATS unit call sign Language	Remarks
1		2	3	4	6
TOKUSHIMA CTR	Area within a radius of 5nm of TOKUSHIMA ARP (34°08'N/134°37'E)	5000 or below	D	Tokushima Tower En	
TOKUSHIMA ACA	See below figure		E	Tokushima Approach Tokushima Departure Tokushima Radar En	

徳島進入管制区
Tokushima Approach Control Area

Point list

- | | |
|----------------------|-----------------------|
| (1) 341300N/1345028E | (7) 335551N/1350941E |
| (2) 341300N/1343838E | (8) 341300N/1341932E |
| (3) 340527N/1344232E | (9) 341136N/1341900E |
| (4) 335837N/1343856E | (10) 335801N/1341900E |
| (5) 334323N/1350500E | (11) 333545N/1341900E |
| (6) 334636N/1350500E | (12) 333338N/1350500E |

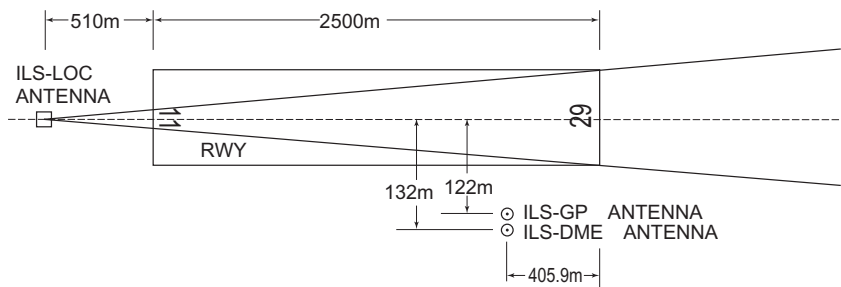
RJOS AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	Tokushima Tower	236.8MHz 126.2MHz(1) 233.8MHz 118.0MHz 123.1MHz(2) 243.0MHz(E) 121.5MHz(E)	H24	(1) Primary (2) For rescue only (3) AVBL on request
GND	Tokushima Ground	233.8MHz 118.0MHz	H24	
DEP/ASR	Tokushima Departure /Tokushima Radar	284.6MHz 124.0MHz(1) 120.1MHz 261.2MHz 362.3MHz 122.45MHz(3) 126.2MHz(3) 228.2MHz(3) 121.5MHz(E) 243.0MHz(E)	2200 - 1230 Other time 1HR PN	
APP	Tokushima Approach	284.6MHz 124.0MHz(1) 120.1MHz 261.2MHz 362.3MHz 122.45MHz(3) 126.2MHz(3) 228.2MHz(3) 121.5MHz(E) 243.0MHz(E)	H24(4)	(4) Terminal Rader SER 2200-1230. Other time 1 HR PN.
GCA-ASR -PAR	Tokushima Radar /Tokushima GCA	335.6MHz 270.8MHz 134.1MHz 125.3MHz 303.8MHz 258.6MHz 141.2MHz 139.55MHz 243.0MHz(E) 121.5MHz(E)	2200- 1230 Other time 1HR PN	ASR,PAR RWY 29 Glide path 3.0° Maintenance period: 2300-0300 FRI in VMC. Blind zone lies BTN 010°-050°,060°-070° 10nm ARC and weak zone lies 140° BTN 23-25nm BLW 1100ft FM ASR site (34°07'51"N 134°35'52"E).
ATIS	Tokushima Airport	246.8MHz	2300- 1100 EXC FRI1101- SUN2259 and HOL. Other time 1HR PN	

RJOS AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR	TSC	114.9MHz	H24	340747N 1343631E		VOR Unusable: R360 - 010 beyond 33NM BLW 3000ft. R010 - 030 beyond 25NM BLW 2000ft. R030 - 050 beyond 35NM BLW 4000ft. R050 - 060 beyond 30NM BLW 2000ft. R060 - 070 beyond 30NM BLW 4000ft. R080 - 100 beyond 30NM BLW 5000ft. R120 - 130 beyond 30NM BLW 4000ft. R130 - 140 beyond 32NM BLW 2000ft. R140 - 180 beyond 25NM BLW 2000ft. R180 - 200 beyond 33NM BLW 4000ft. R200 - 220 beyond 30NM BLW 6000ft. R220 - 240 beyond 35NM BLW 9000ft. R280 - 290 beyond 20NM BLW 5000ft. R290 - 300 beyond 20NM BLW 4000ft. R300 - 310 beyond 20NM BLW 3000ft. R310 - 330 beyond 20NM BLW 4000ft. R330 - 340 beyond 25NM BLW 4000ft. R340 - 350 beyond 30NM BLW 4000ft. R350 - 360 beyond 33NM BLW 4000ft.
TACAN	TSC	1183MHz (CH-96X)	H24	340748N 1343636E	40ft	TACAN Unusable : R360-010 beyond 34nm BLW 4000ft. R010-020 beyond 29nm BLW 4000ft. R020-030 beyond 38nm BLW 5000ft. R060-070 beyond 36nm BLW 5000ft. R100-110 beyond 38nm BLW 6000ft. R180-190 beyond 37nm BLW 3000ft. R200-210 beyond 28nm BLW 6000ft. R210-220 beyond 35nm BLW 7000ft. R220-240 beyond 24nm BLW 9000ft. R240-250 beyond 33nm BLW 9000ft. R250-270 beyond 35nm BLW 9000ft. R270-280 beyond 35nm BLW 8000ft. R280-290 beyond 28nm BLW 6000ft. R290-300 beyond 30nm BLW 6000ft. R300-310 beyond 15nm BLW 4000ft. R310-340 beyond 15nm BLW 5000ft. R340-350 beyond 31nm BLW 5000ft. R350-360 beyond 22nm BLW 4000ft.
ILS-LOC 29	ITS	108.9MHz	H24	340808.59N 1343526.17E		LOC:510m(1673ft) away FM RWY 11 THR, BRG(MAG) 291°
ILS-GP 29	-	329.3MHz	H24	340746.36N 1343704.49E		GP:405.9m(1332ft) inside FM RWY 29 THR, 122m(401ft) S of RCL. HGT of ILS Ref datum 16.5m(54ft). GP Angle 3.0°
ILS-DME 29	ITS	987MHz (CH-26X)	H24	340746.04N 1343704.39E	41ft	DME:405.9m(1332ft) inside FM RWY 29 THR, 132m(433ft) S of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

ILS



REMARKS :	1. LOC beam BRG(MAG)	291°
	2. HGT of ILS REF datum	16.5m(54ft)
	3. GP angle	3.0°
	4. ELEV of ILS-DME	12.4m(41ft)

RJOS AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

PPR Civil transient aircraft must make prior coordination 10days in advance.(088-699-5111)
2. Taxiing to and from stands

Nil
3. Parking area for small aircraft(General aviation)

Nil
4. Parking area for helicopters

Nil
5. Apron - taxiing during winter conditions

Nil
6. Taxiing - limitations

Nil
7. School and training flights - technical test flights - use of runways

Nil
8. Helicopter traffic - limitation

Nil
9. Removal of disabled aircraft from runways

Nil

RJOS AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

RJOS AD 2.22 FLIGHT PROCEDURES

1. TAKE OFF MINIMA

	RWY	ACFT CAT	REDL & RCLL		REDL or RCLL or RCL Marking		NIL (DAYTIME ONLY)	
			RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with TKOF ALTN AP FILED	11	A,B,C,D	-	400m	-	400m	-	500m
	29		400m	400m	400m	400m	-	500m
OTHER	11	A,B,C,D	AVBL LDG MINIMA					
	29							

2. WX MINIMA CONCERNING PAR/ASR APCH PROCEDURE

PAR RWY 29

ASR RWY 29

Missed APCH climb gradient MNM 4.0%

Missed APCH climb gradient MNM 4.0%

MINIMA		THR elev. 37	AD elev. 37	
CAT			CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	VIS
A	237(200)	1000	570(533)	1600
B			600(563)	2400
C			830(793)	3200
D	243(206)			

MINIMA		THR elev. 37	AD elev. 37	
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	340(303)	1500	570(533)	1600
B				
C	370(333)	1800	600(563)	2400
D	390(353)	2000	830(793)	3200

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

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

3. Missed Approach Procedure for PAR/ASR Approach

Unless otherwise instructed by ATC, execute missed approach procedure as follows.

AT guidance limit, Climb on HDG 291° to 800FT, 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.

4. Automated Radar Terminal System(ARTS)

徳島進入管制所の指示のもとに、徳島進入管制区を飛行する航空機は、モード A/3 の二次レーダー個別コード及びモード C による応答を指示される。
モード A/3 またはモード C 応答用の ATC トランスポンダーを搭載していない航空機が当該コードによる応答を指示された場合は、徳島進入管制所に対し、その旨通報すること。

Aircraft flying within the approach control area under the control of Tokushima approach control will be instructed to reply with discrete code on Mode A/3 and Mode C.
If an aircraft non equipped with ATC transponder of Mode A/3 or Mode C instructed to reply such Modes,it shall report a Tokushima approach control accordingly.

5. Lost communication procedures for arrival aircraft under radar navigational guidance

If radio communications with Tokushima Radar/Approach/GCA are lost for 1 minute in the pattern or 5 seconds (PAR)/15 seconds (ASR) on final approach, squawk Mode A/3 Code 7600 and ;

- (I)
1. Contact TOKUSHIMA Tower.
 2. If unable, proceed in accordance with visual flight rules.
 3. If unable, proceed to TOKUSHIMA VORTAC, TACAN IAF or DATIS at last assigned altitude or 3500 feet whichever is higher, and execute instrument approach.
- (II) Procedures other than above will be issued when situation required.

RJOS AD 2.23 ADDITIONAL INFORMATION

Nil

RJOS AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Standard Departure Chart-Instrument (HONMA-RNAV)
Standard Departure Chart-Instrument (KAGAWA-RNAV)
Standard Departure Chart-Instrument (TOSAR)
Standard Departure Chart-Instrument (TOKUSHIMA REVERSAL)
Standard Departure Chart-Instrument (MISAKI)
Standard Arrival Chart-Instrument
Instrument Approach Chart (ILS Z OR LOC Z RWY29)
Instrument Approach Chart (ILS Y OR LOC Y RWY29)
Instrument Approach Chart (ILS W OR LOC W RWY29)
Instrument Approach Chart (VOR RWY29)
Instrument Approach Chart (TACAN A)
Instrument Approach Chart (RNP Z RWY11(AR))
Instrument Approach Chart (RNP Y RWY11(AR))
Instrument Approach Chart (RNP Z RWY29)
Instrument Approach Chart (RNP Y RWY29(AR))
Other Chart (Visual REP)
Other Chart (LDG CHART)
Other Chart (MVA CHART)

LONGITUDINAL PROFILE OF RWY

Station	Elevation (ft)	Elevation (m)	Slope (%)
0m	6ft	(1.9m)	0.13%
80m	7ft	(2.0m)	-0.07%
250m	6ft	(1.9m)	0.03%
520m	7ft	(2.0m)	-0.05%
760m	6ft	(1.8m)	LEVEL
1060m	6ft	(1.8m)	0.75%
1430m	15ft	(4.6m)	0.4%
1600m	17ft	(5.3m)	0.51%
1700m	19ft	(5.8m)	0.53%
1800m	21ft	(6.3m)	0.59%
1900m	23ft	(7.0m)	0.65%
2110m	27ft	(8.3m)	0.8%
2500m	37ft	(11.4m)	

RWY 29

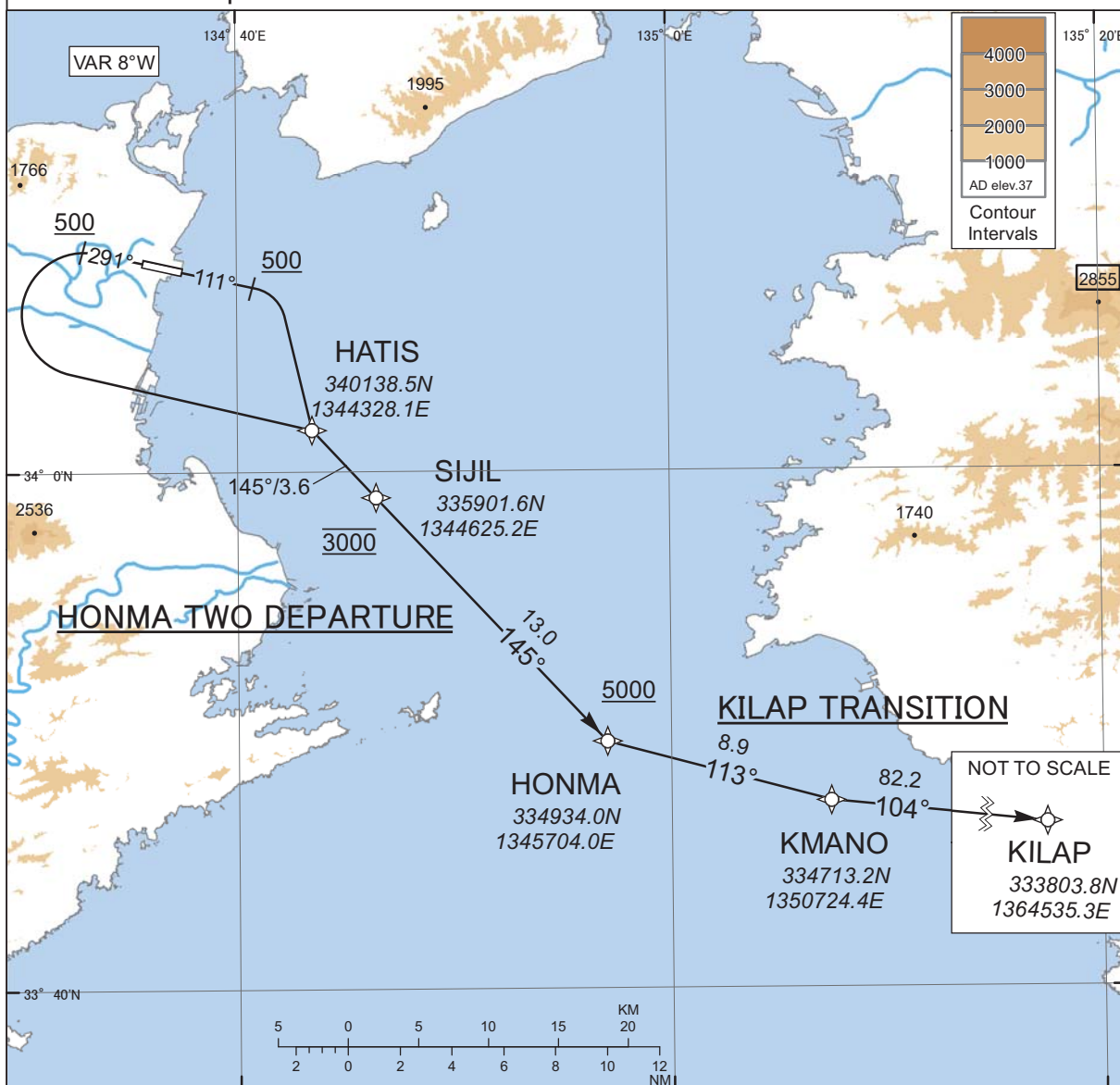
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RJOS / TOKUSHIMA

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

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

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

Civil Aviation Bureau,Japan (EFF:21 MAR 2024)

22/2/24

R JOS / TOKUSHIMA

RNAV SID

KAGAWA ONE DEPARTURE

RNP1

Note RWY11 : 5.0% climb gradient required up to 1700FT.
OBST ALT 2494FT located at 11.5NM 288° FM end of RWY11.
RWY29 : 5.0% climb gradient required up to 2800FT.
OBST ALT 2494FT located at 10.2NM 288° FM end of 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	-	-	111 (102.6)	-8.0	-	-	+500	-	-	RNP1
002	DF	OBDED	-	-	-8.0	-	R	+5000	-	-	RNP1
003	TF	KTE	-	293 (284.7)	-8.0	14.8	-	-	-	-	RNP1

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	OBDED	-	-	-8.0	-	-	+5000	-	-	RNP1
003	TF	KTE	-	293 (284.7)	-8.0	14.8	-	-	-	-	RNP1

Civil Aviation Bureau, Japan (EFF:21 MAR 2024)

STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

SID

TOSAR SIX DEPARTURE

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

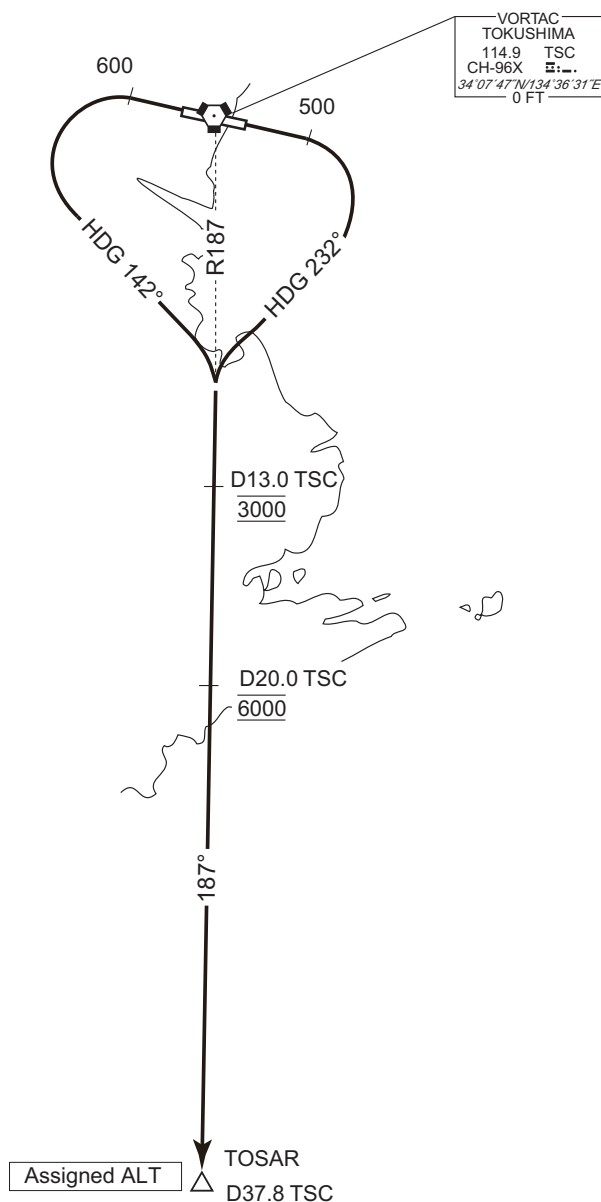
RWY29 : Climb RWY HDG to 600FT, turn left HDG142°...

...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°...

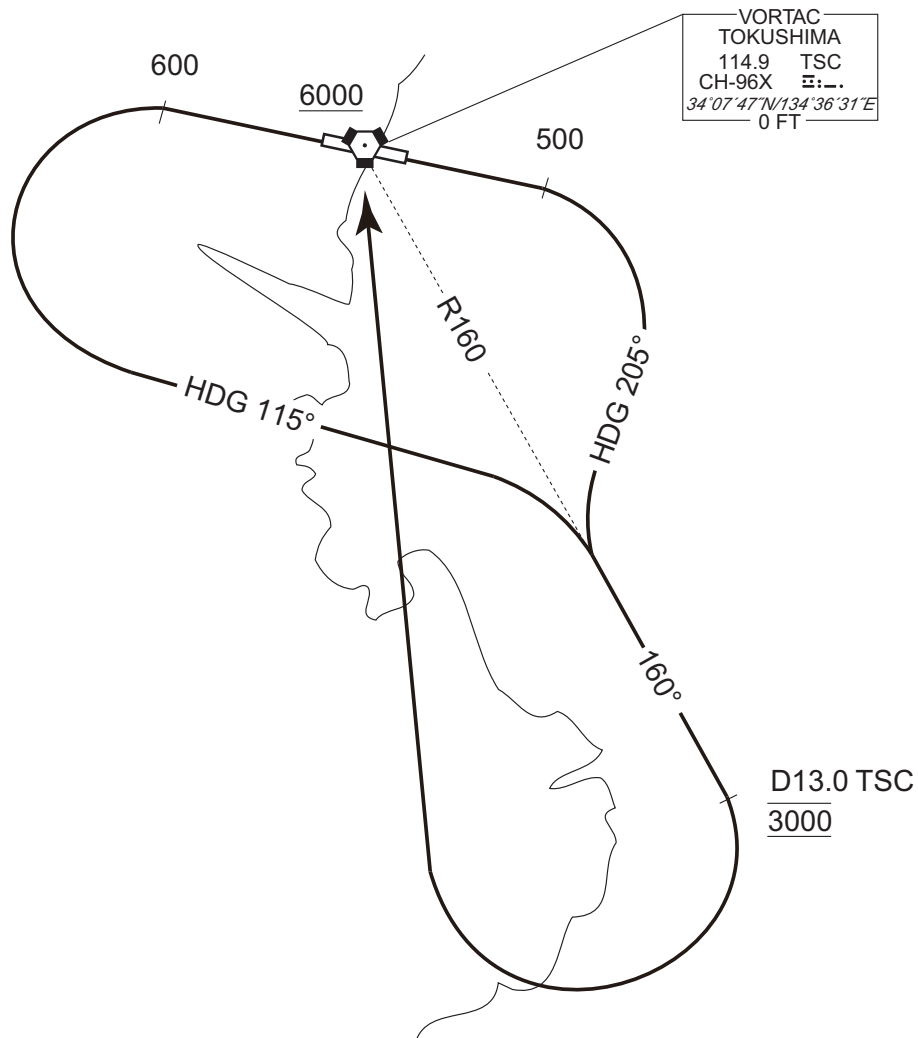
...to intercept and proceed via TSC R160 to 13.0DME, turn right, direct to TSC VORTAC.

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 THREE 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.

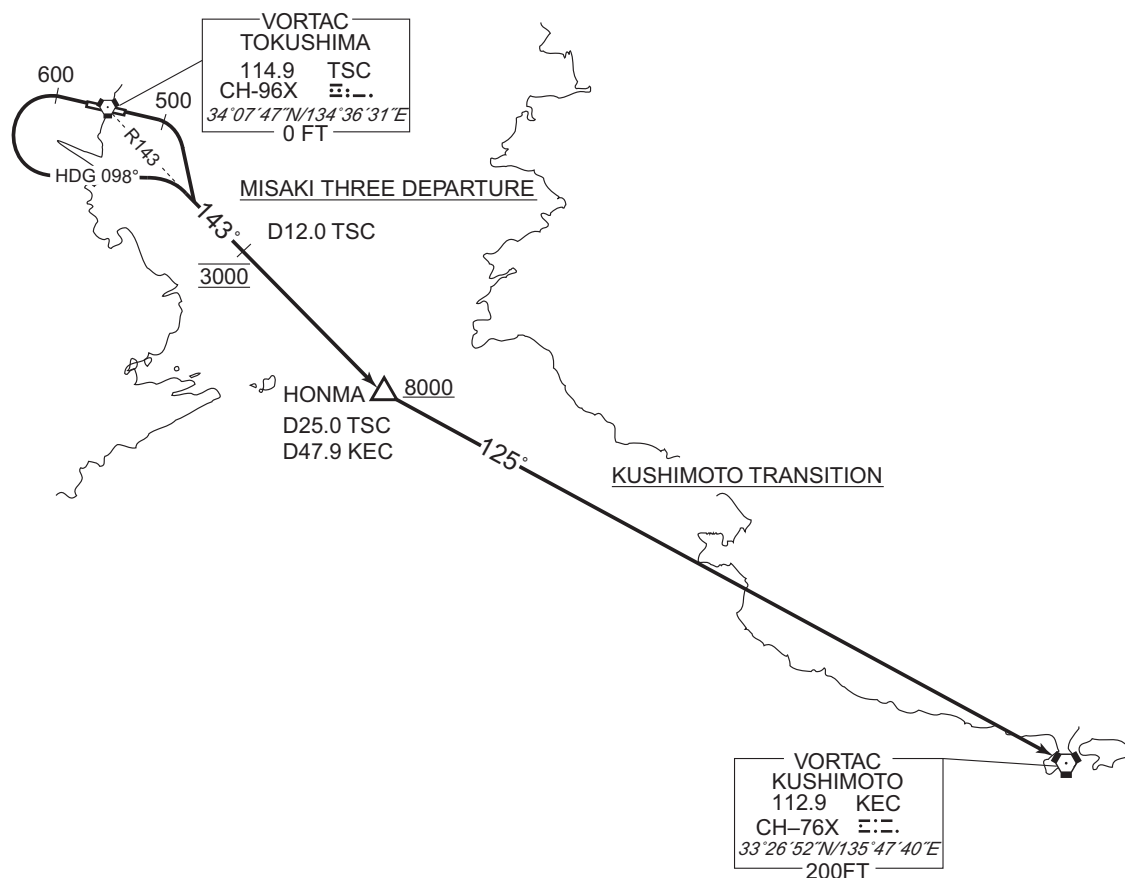
Cross TSC R143/12.0DME at 3000FT, cross HONMA at or above 8000FT.

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 R305 to KEC VORTAC.



CHANGE : PROC course. PROC renamed(MISAKI THREE DEPARTURE). Note(MISAKI THREE DEPARTURE).

STANDARD ARRIVAL CHART-INSTRUMENT

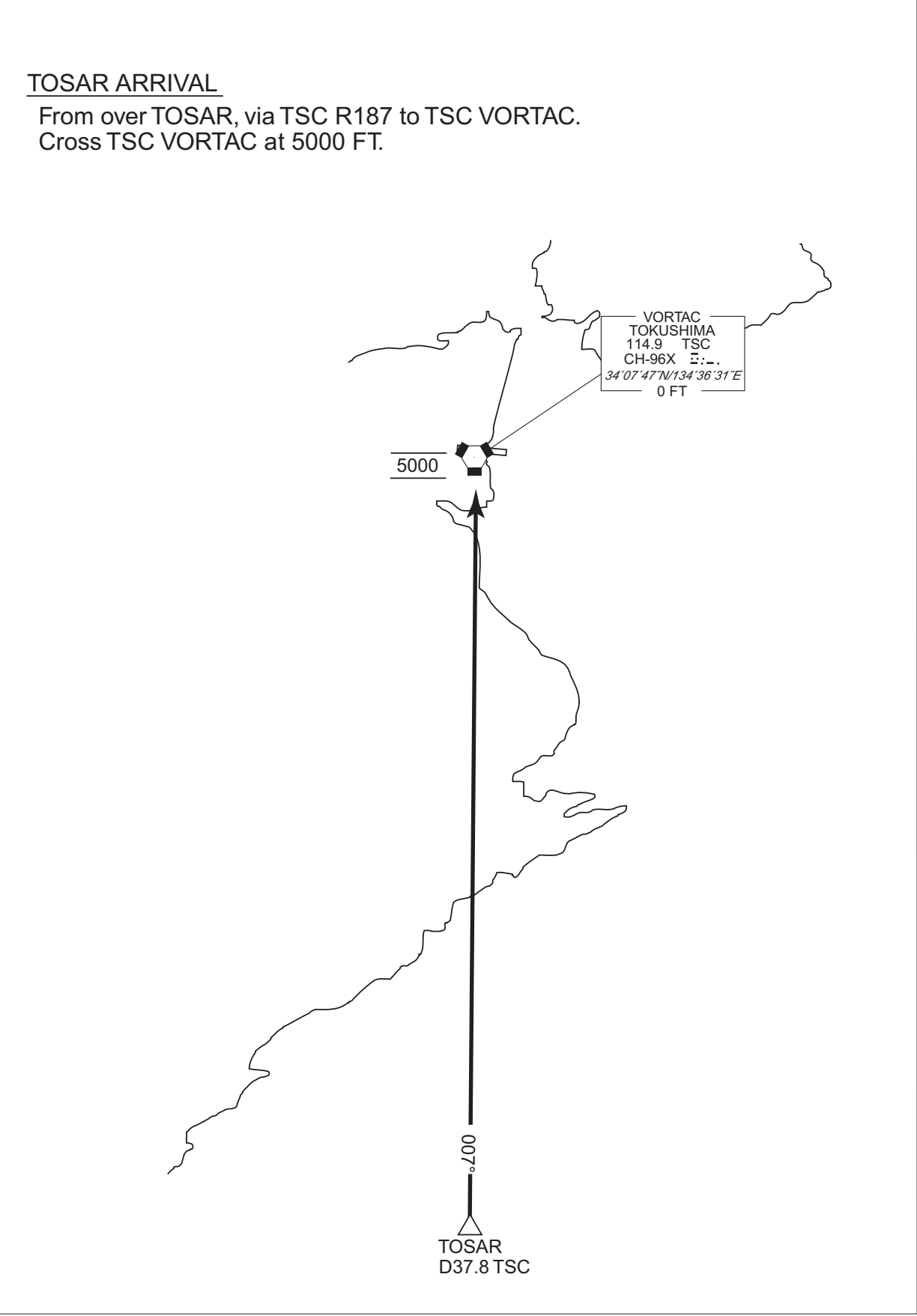
RJOS / TOKUSHIMA

STAR

TOSAR ARRIVAL

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

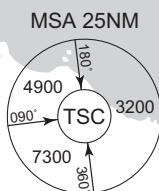
CHANGE : Distance FM TSC to TOSAR added.



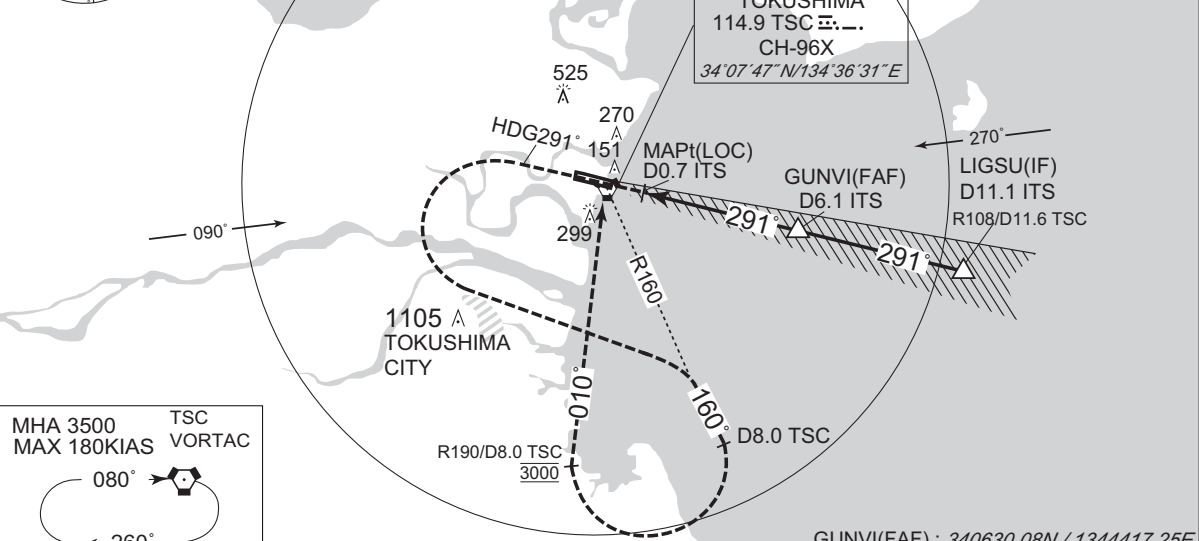
INTENTIONALLY LEFT BLANK

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



MHA 3500
MAX 180KIAS

TSC
VORTAC

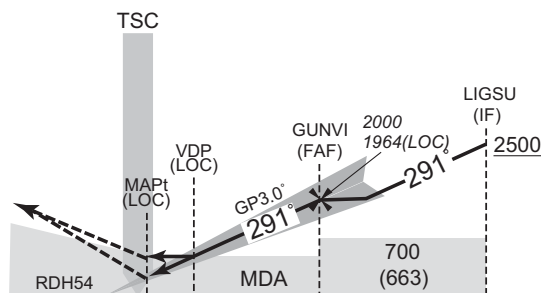
080°

260°

NOT TO SCALE

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

Climb on HDG 291° to 800FT, 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.



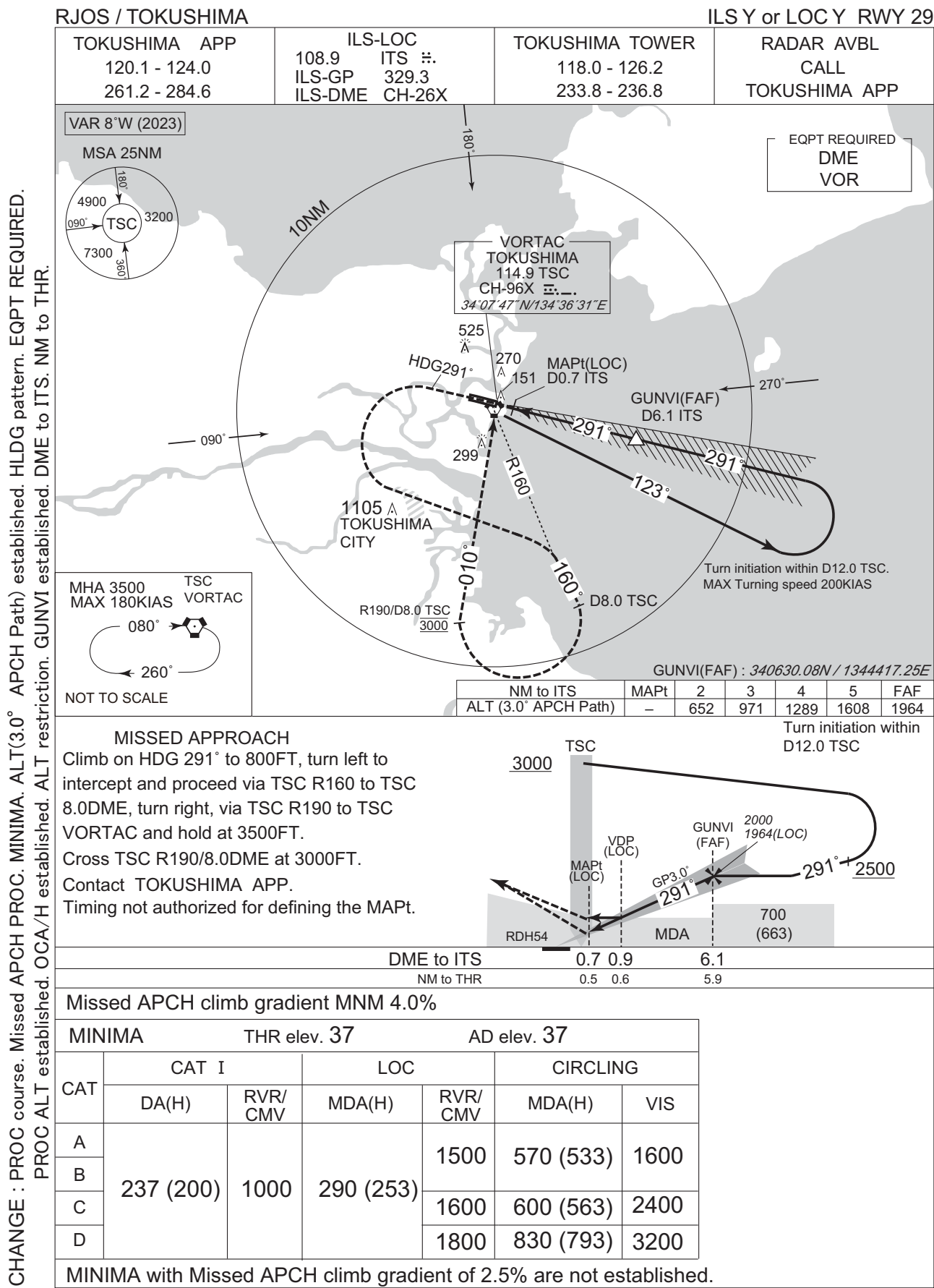
DME to ITS	0.7	0.9	6.1	11.1
NM to THR	0.5	0.6	5.9	10.9

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.

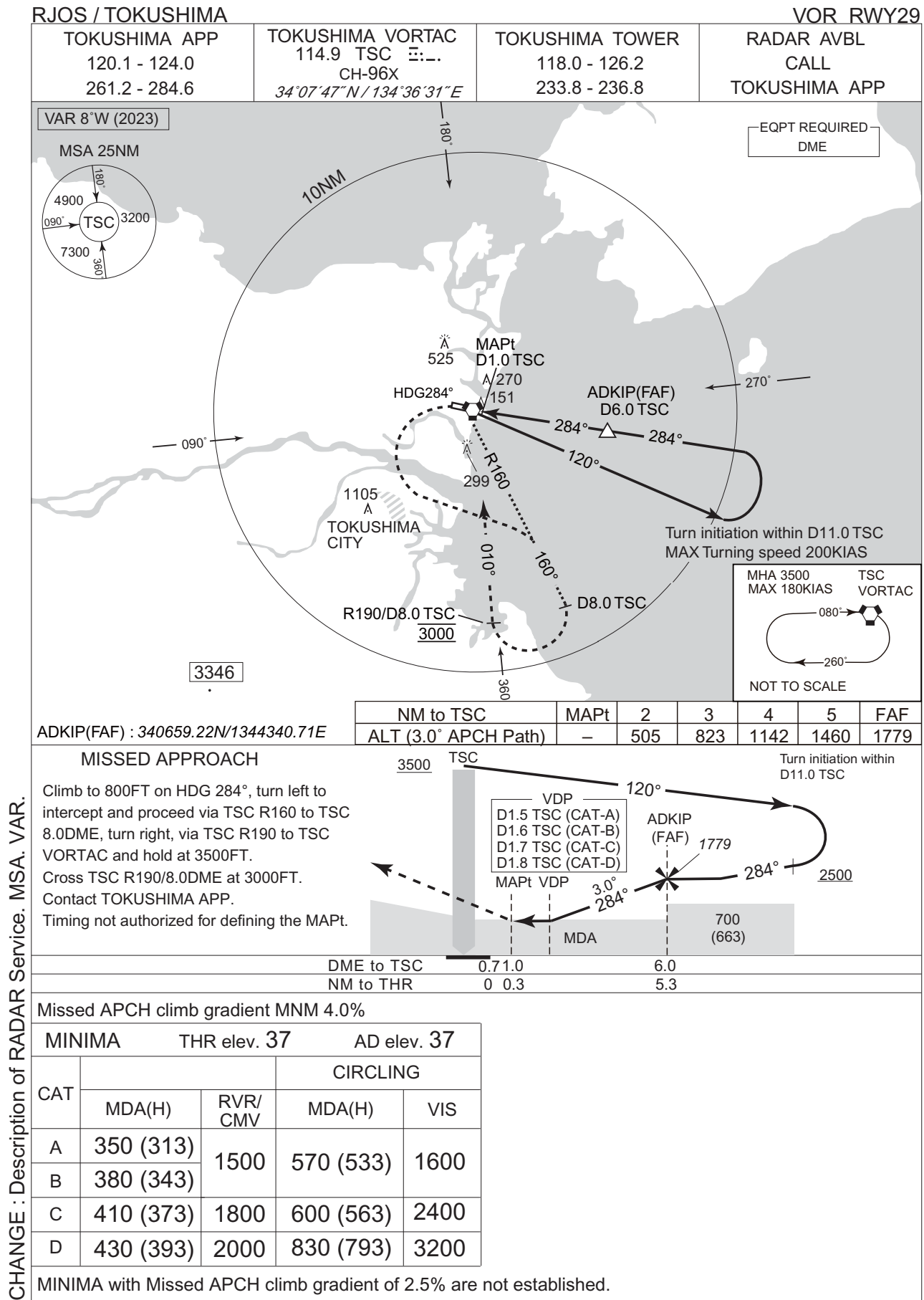
INSTRUMENT APPROACH CAHRT



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.



INSTRUMENT APPROACH CHART



CHANGE : Description of RADAR Service. MSA. VAR.

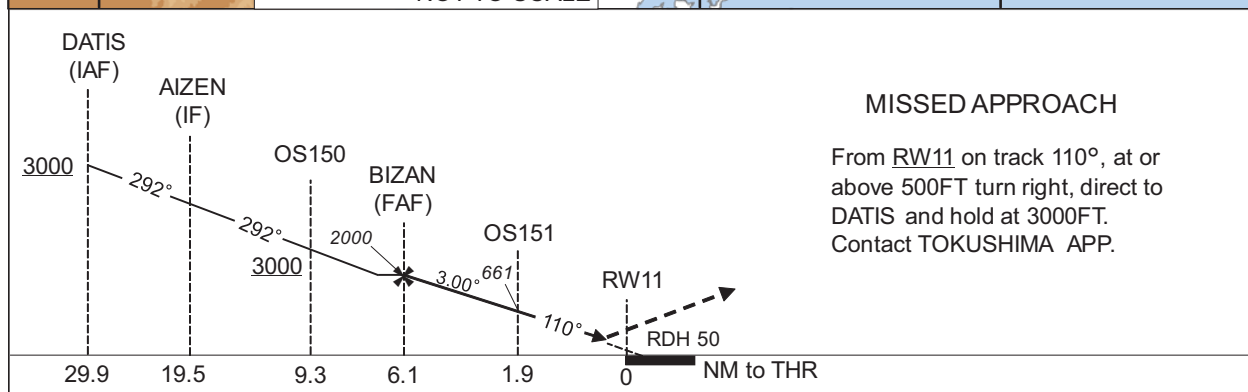
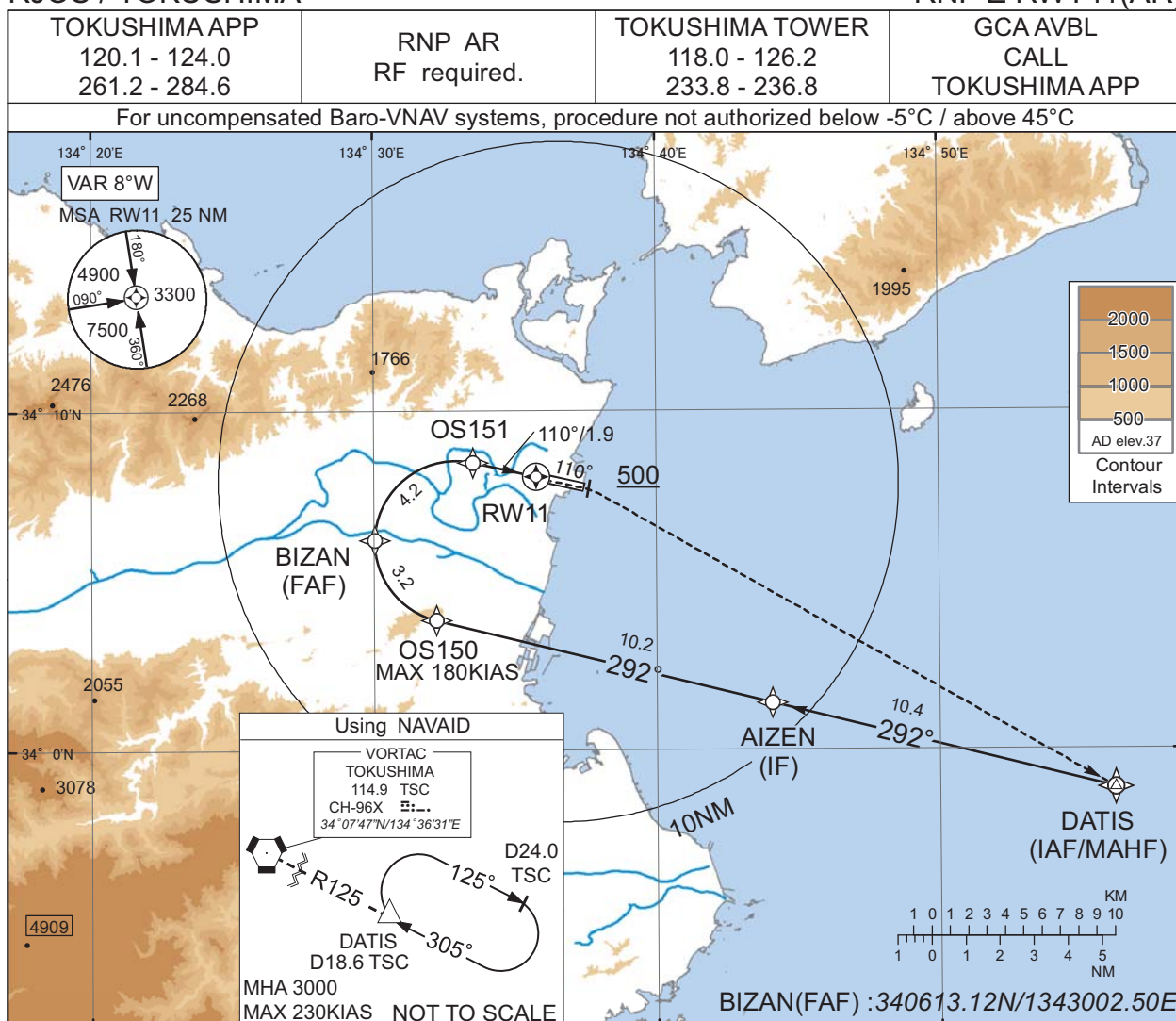
CHANGE : PROC course. Missed APCH PROC. MINIMA. HLDG pattern. OCA/H established. ENSES, INVUX, OTKEV established. ANANN abolished. DME to TSC. Description of RADAR Service. MSA. VAR.



INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Z RWY11(AR)



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

CHANGE : Description of VAR.

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

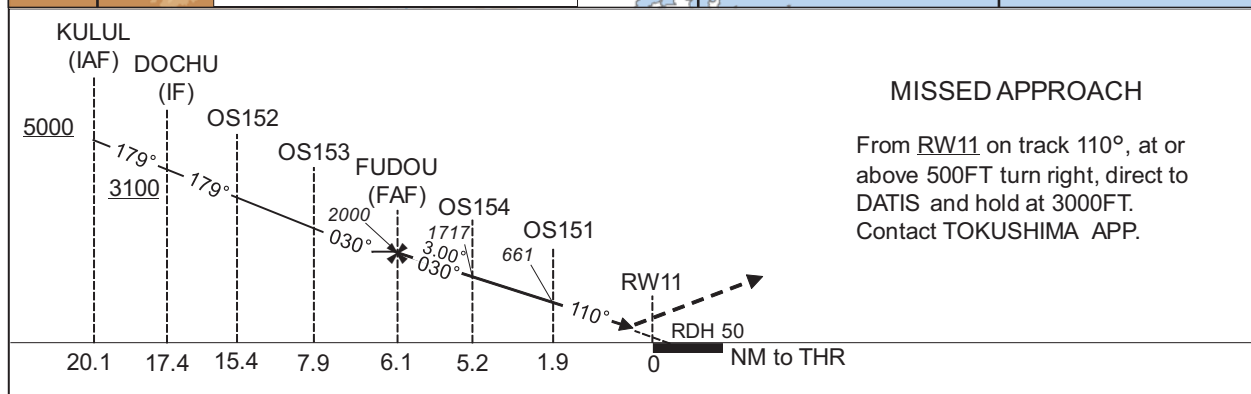
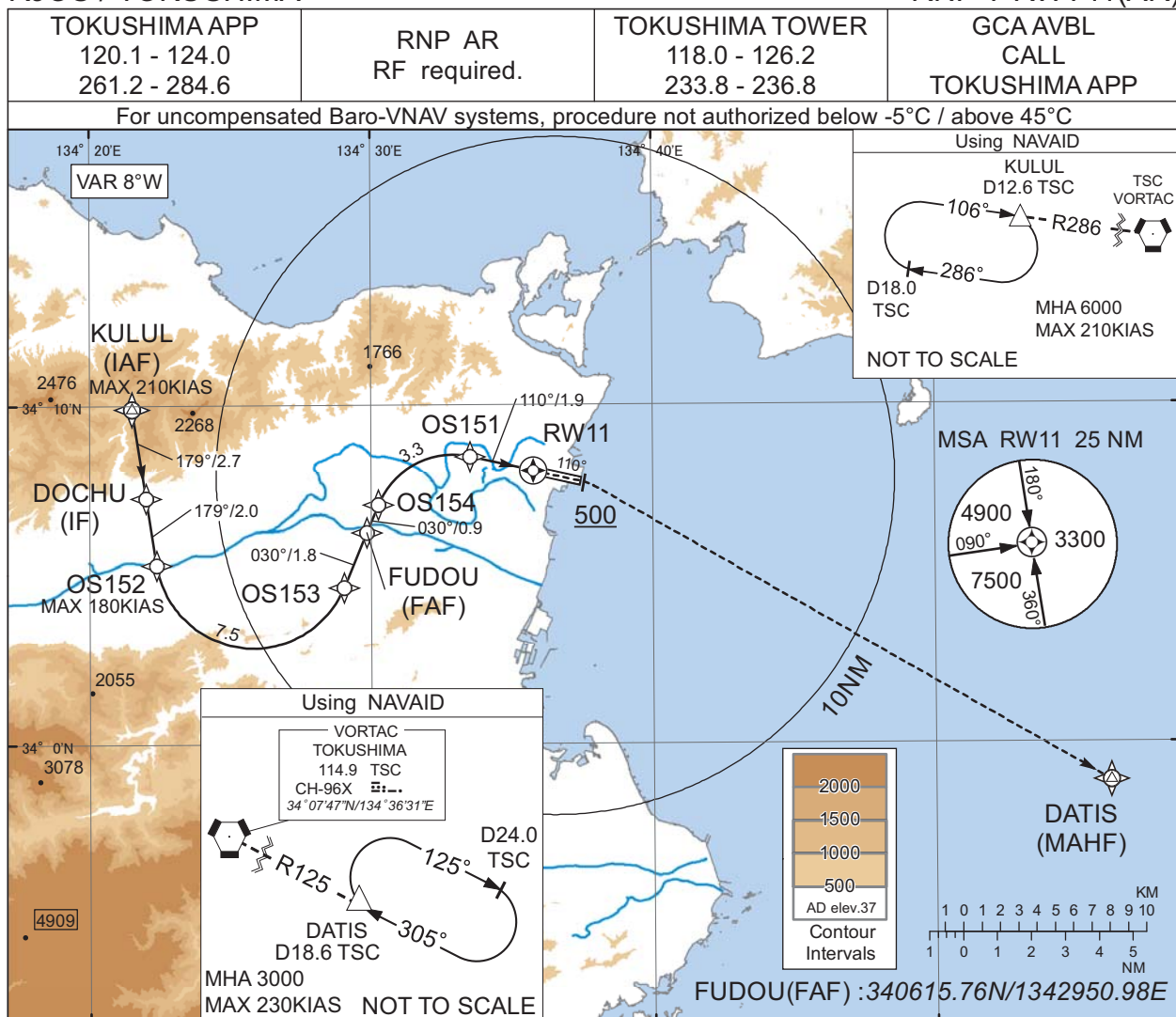
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
DATIS	335851.96N / 1345613.14E	OSRF2	340610.26N / 1343254.26E
AIZEN	340123.97N / 1344405.59E		
OS150	340351.55N / 1343212.95E		
BIZAN	340613.12N / 1343002.50E		
OS151	340829.79N / 1343331.39E		
RW11	340804.98N / 1343545.74E		

CHANGE : PROC renamed.

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Y RWY11(AR)



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

CHANGE : Description of VAR.

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

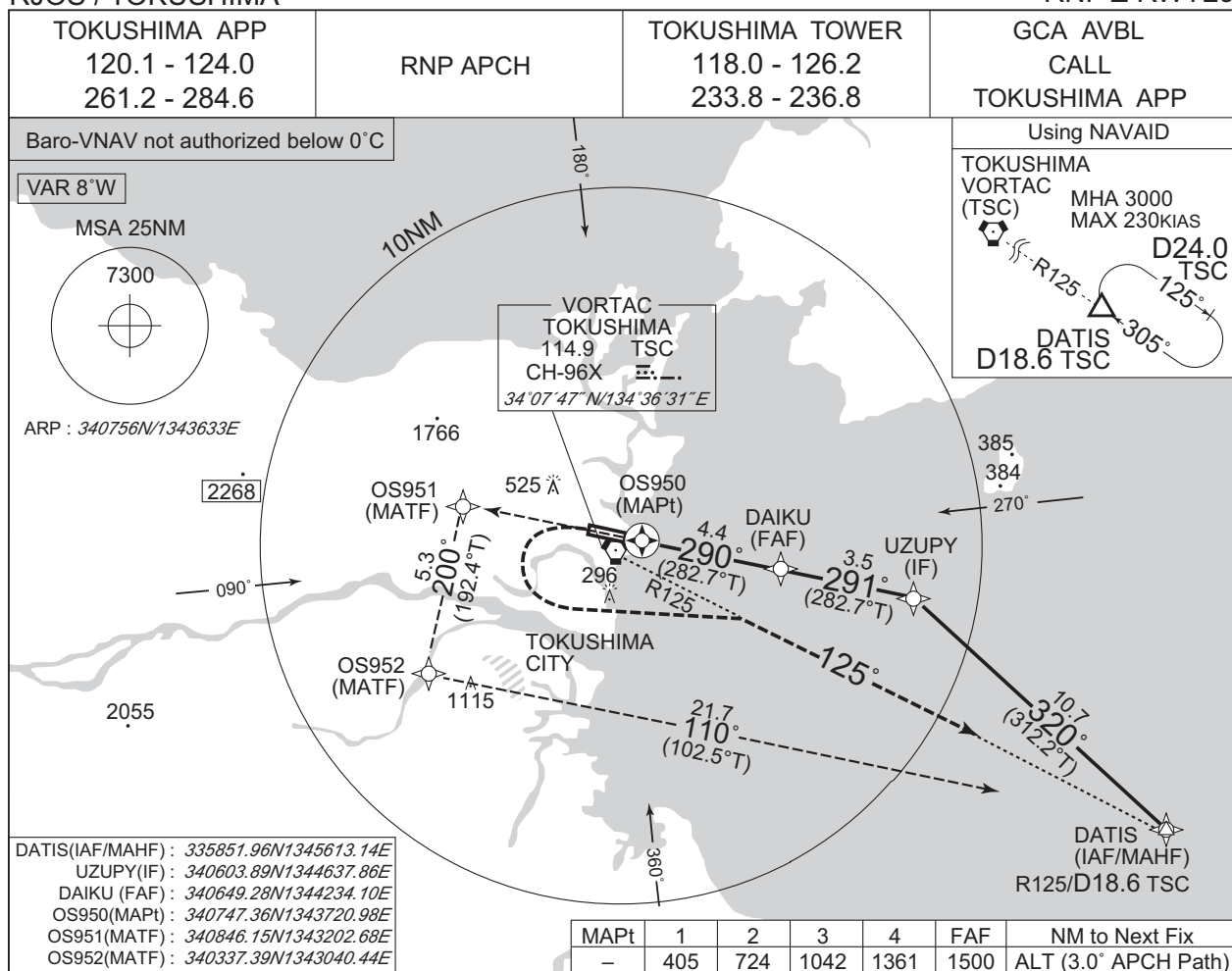
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
KULUL	340954.74N / 1342131.22E	OSRF1	340544.73N / 1342549.48E
DOCHU	340716.80N / 1342200.89E	OSRF2	340610.26N / 1343254.26E
OS152	340517.99N / 1342223.19E		
OS153	340438.24N / 1342902.35E		
FUDOU	340615.76N / 1342950.98E		
OS154	340705.08N / 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

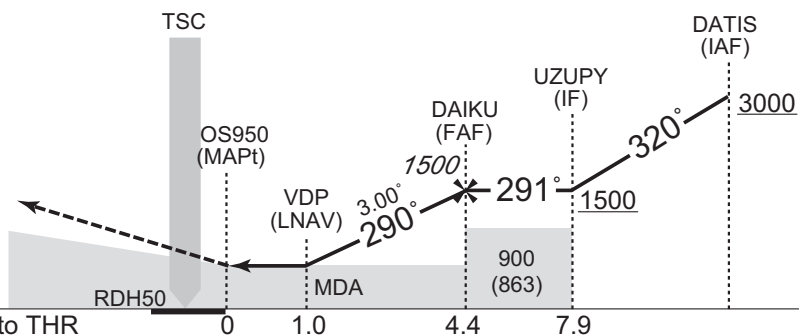


MISSED APPROACH

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%

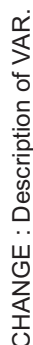
MINIMA		THR elev. 37		AD elev. 37		
CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	380 (343)	1500	380 (343)	1500	580 (543)	1600
B		1800		1800	600 (563)	2400
C						
D						

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

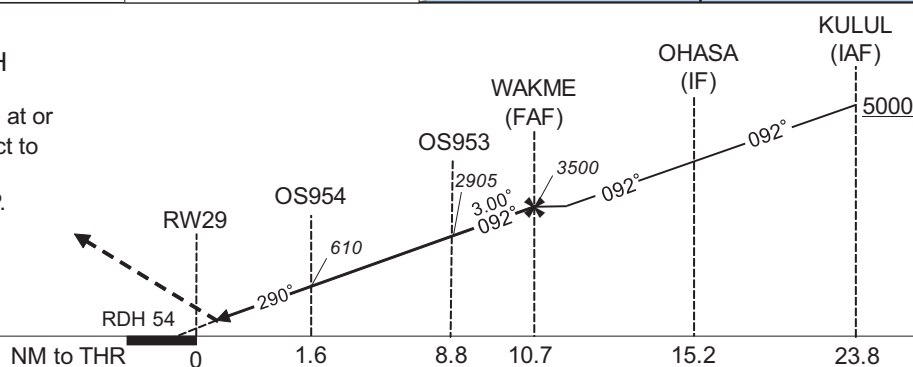
CHANGE : Description of VAR.

R JOS / TOKUSHIMA

RNP Y RWY29(AR)



From RW29 on track 290°, at or above 500FT turn left, direct to DATIS and hold at 3000FT. Contact TOKUSHIMA APP.



Missed APCH climb gradient MNM 5.0%

MINIMA		THR elev. 37		AD elev. 37	
CAT	RNP 0.27		RNP 0.30		
	DA(H)	RVR/CMV	DA(H)	RVR/CMV	
A	-	-	-	-	
B					
C	337(300)	1800	364(327)	1800	
D		2000		2000	

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

Authorization Required

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

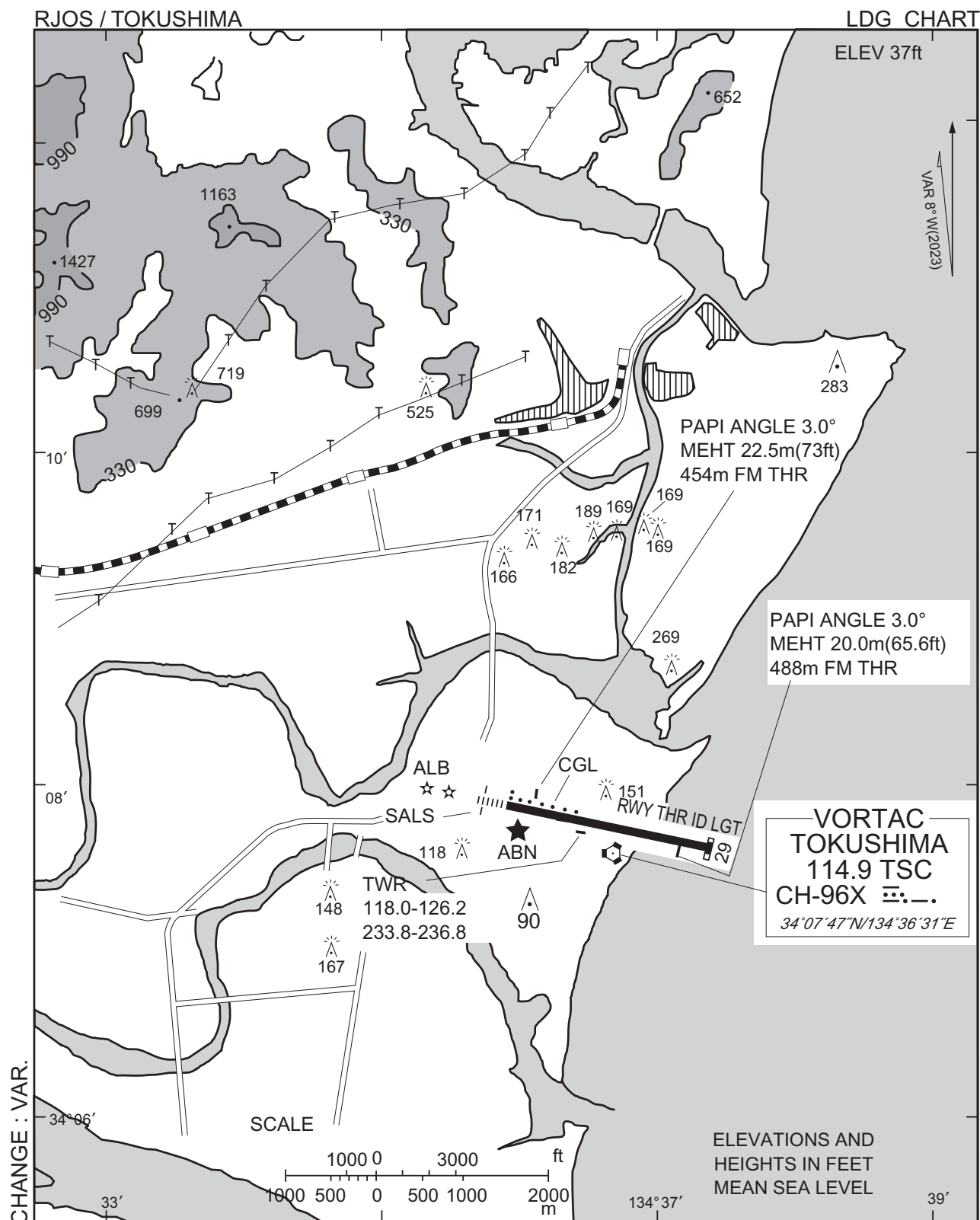
Visual REP



※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).

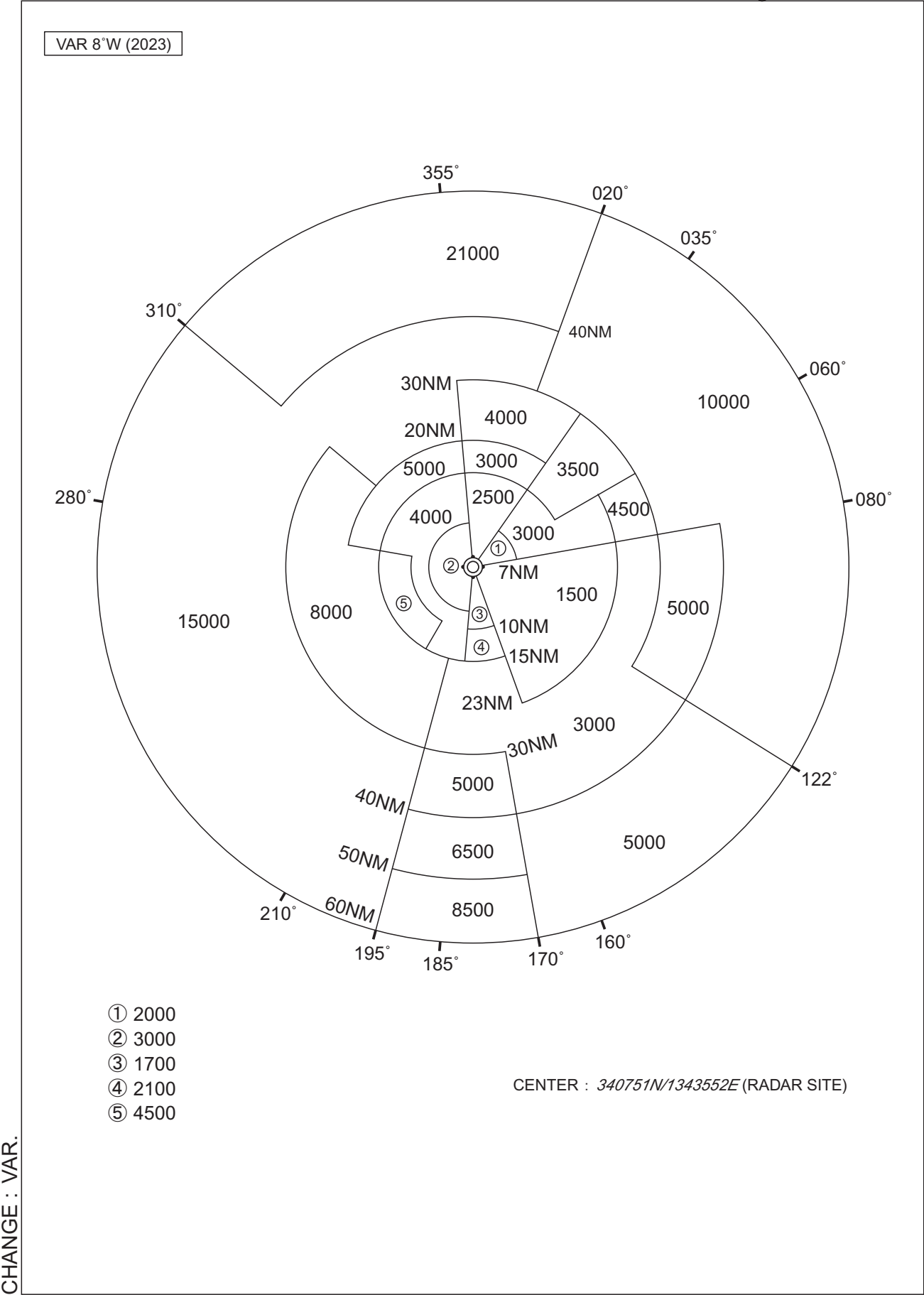
CHANGE : VAR.

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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