

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

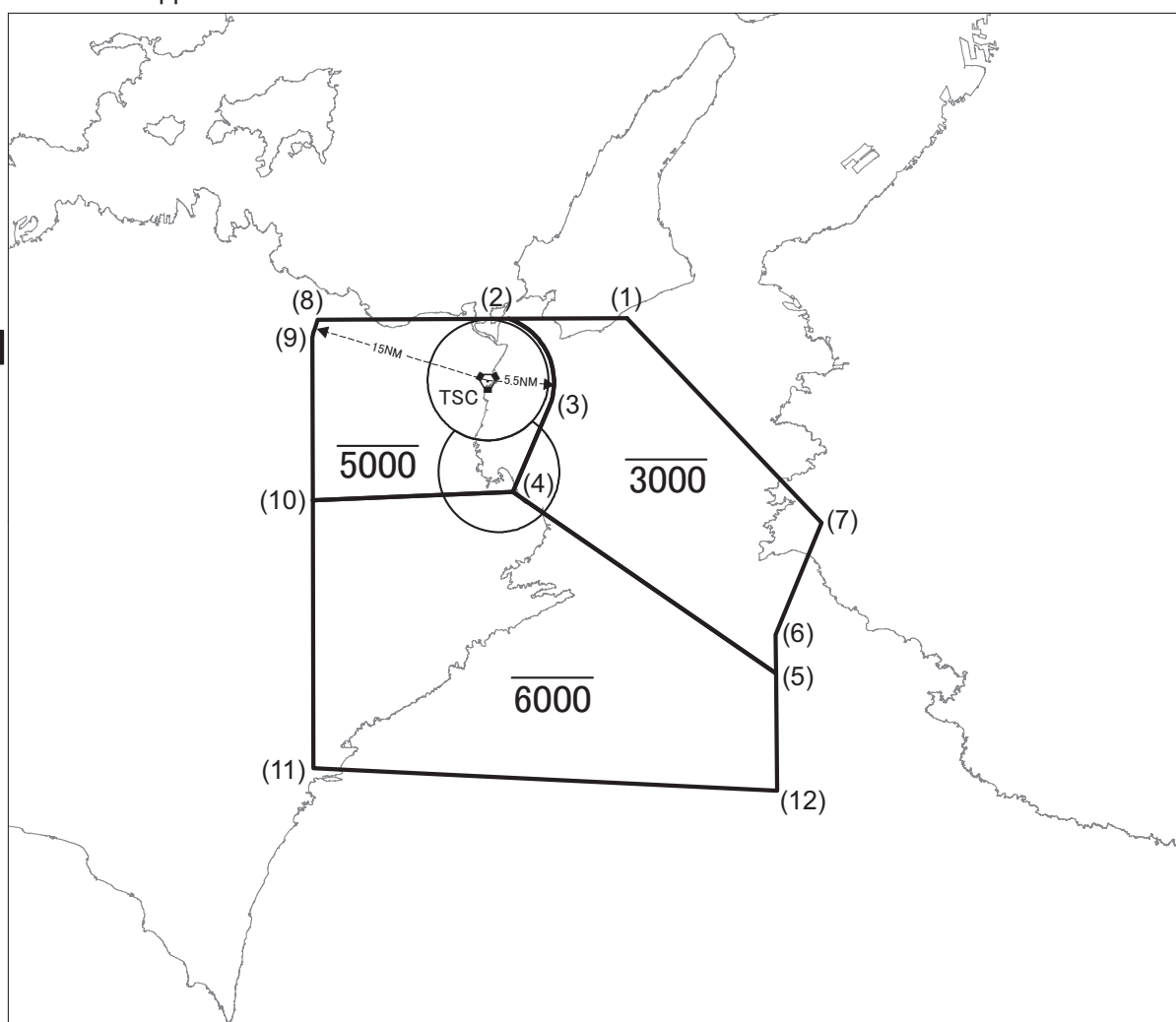
| | | |
|---|--|--|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 340752N/1343547E, White/Green EV 4.3sec, HO |
| 2 | LDI location and LGT Anemometer location and LGT | LDI : AVBL |
| 3 | TWY edge and center line lighting | TWY edge and center line lights installed, see AD2.9 |
| 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 |

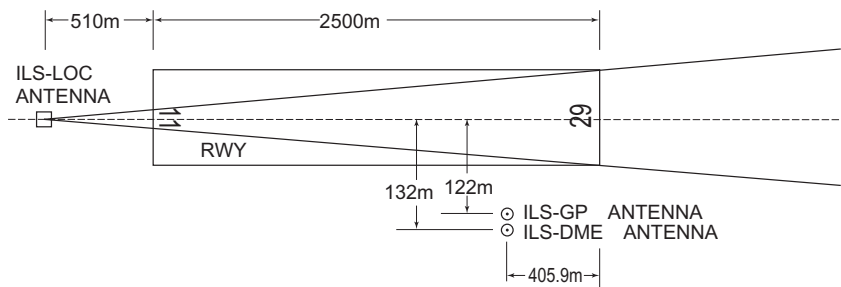
RJOS AD 2.18 ATS COMMUNICATION FACILITIES

| 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) | |

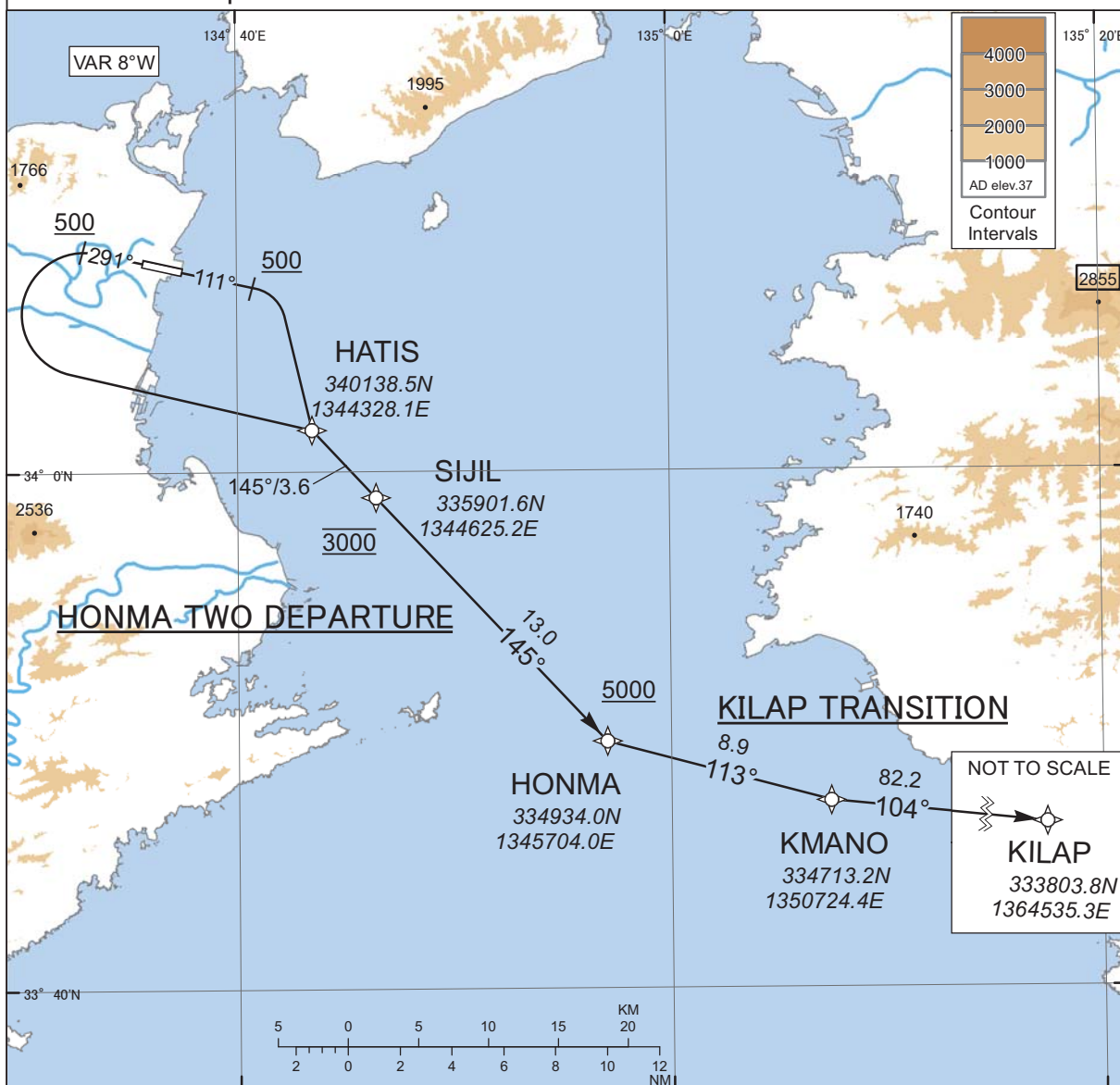
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RJOS / TOKUSHIMA

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

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

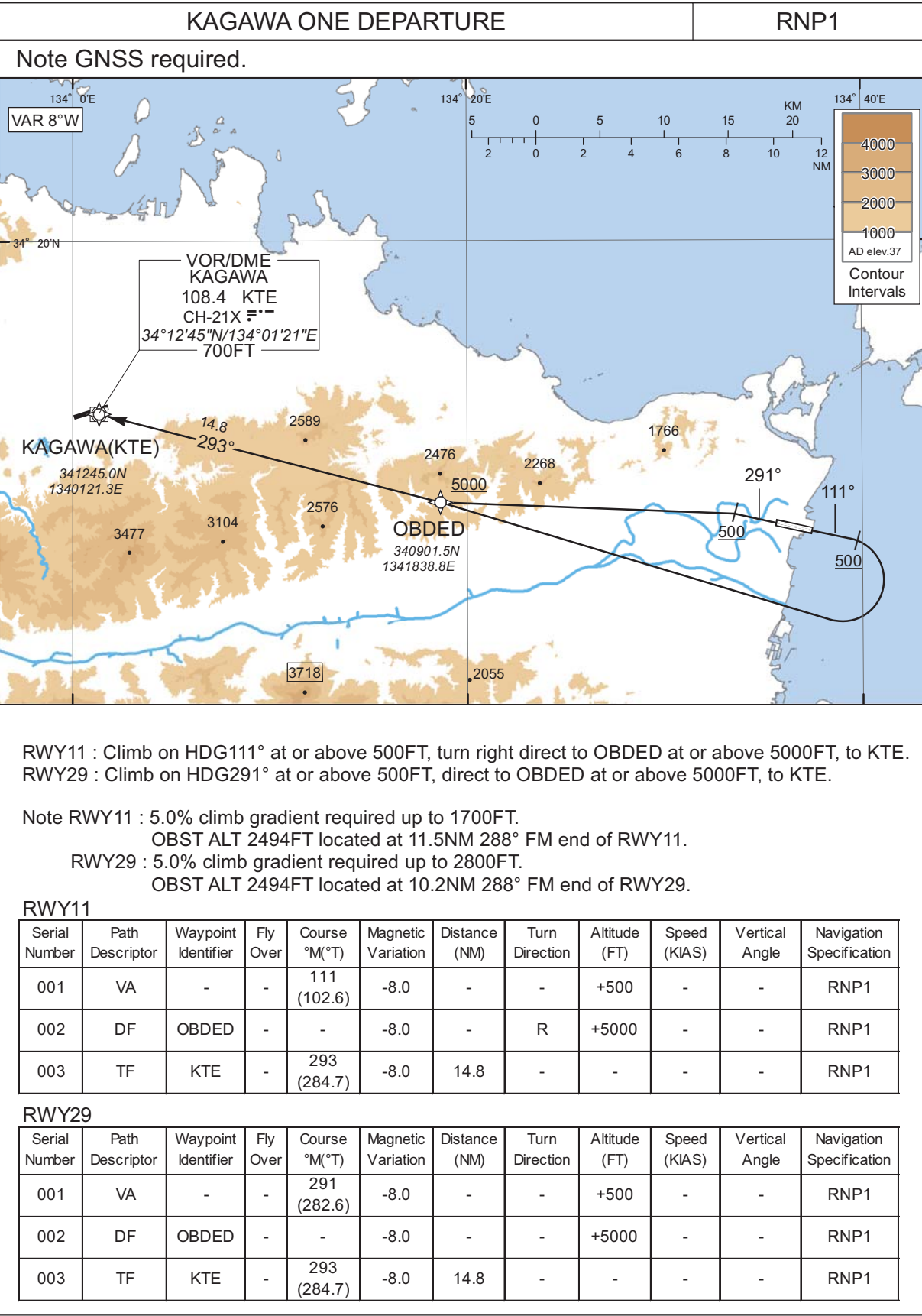
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 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



STANDARD DEPARTURE CHART-INSTRUMENT

RJOS / TOKUSHIMA

SID

TOSAR SIX DEPARTURE

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

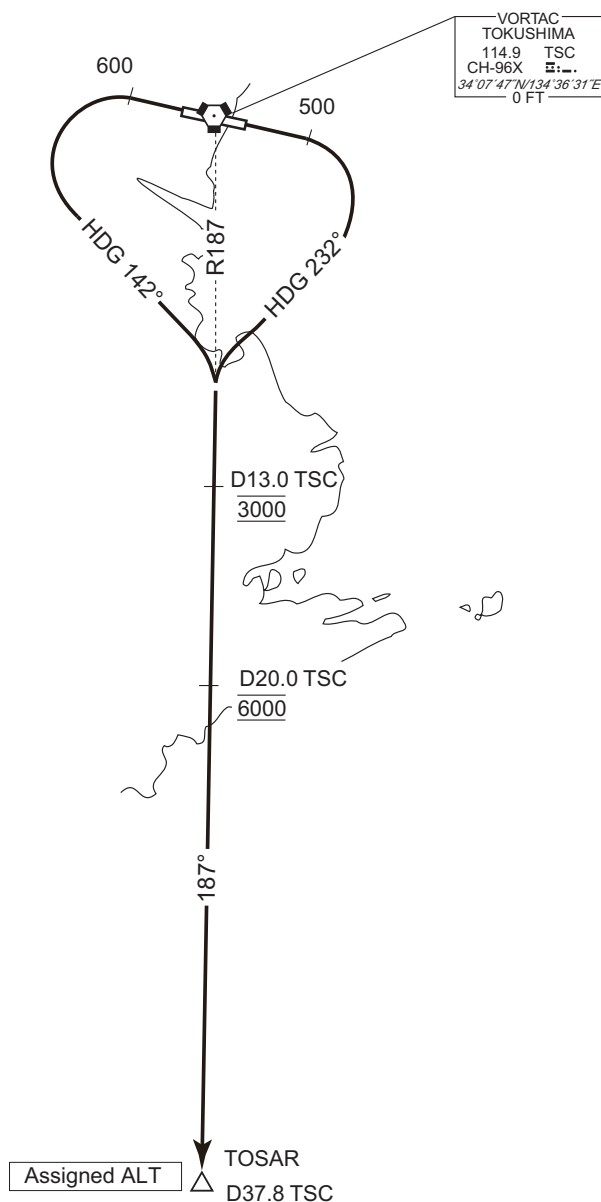
RWY29 : Climb RWY HDG to 600FT, turn left HDG142°...

...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°...

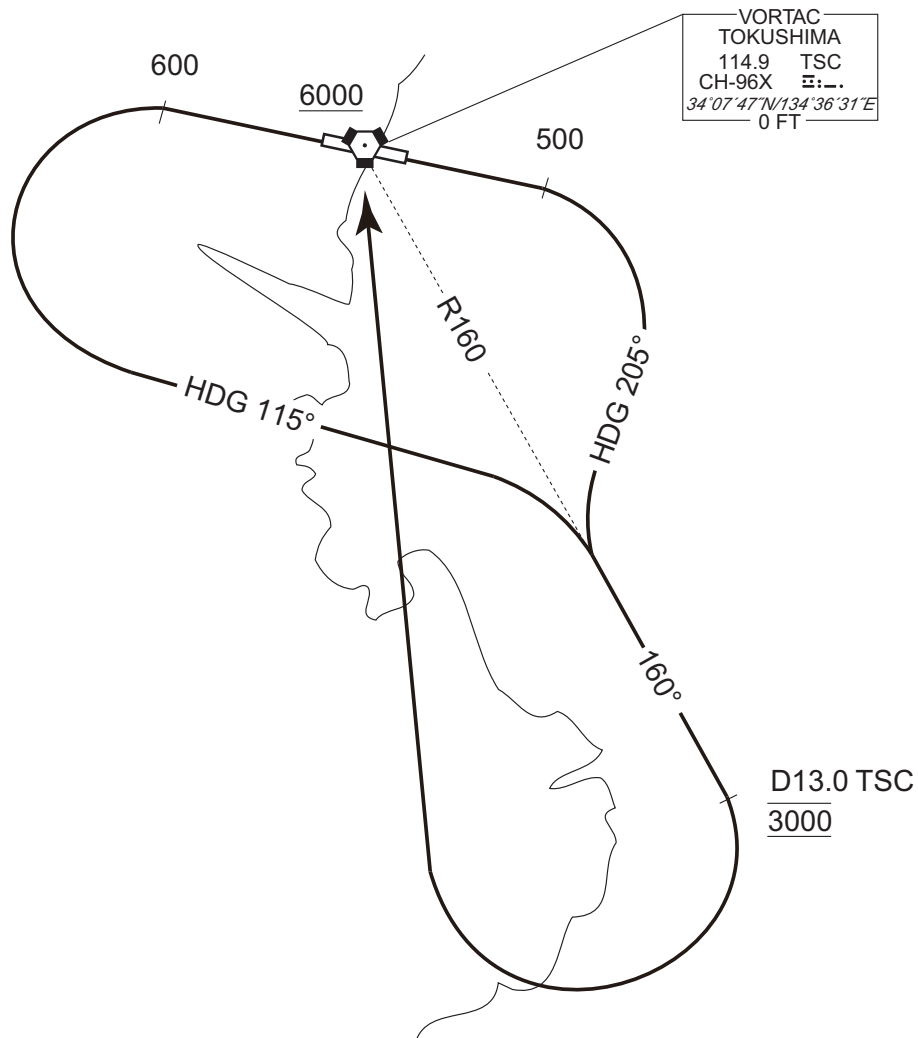
...to intercept and proceed via TSC R160 to 13.0DME, turn right, direct to TSC VORTAC.

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.

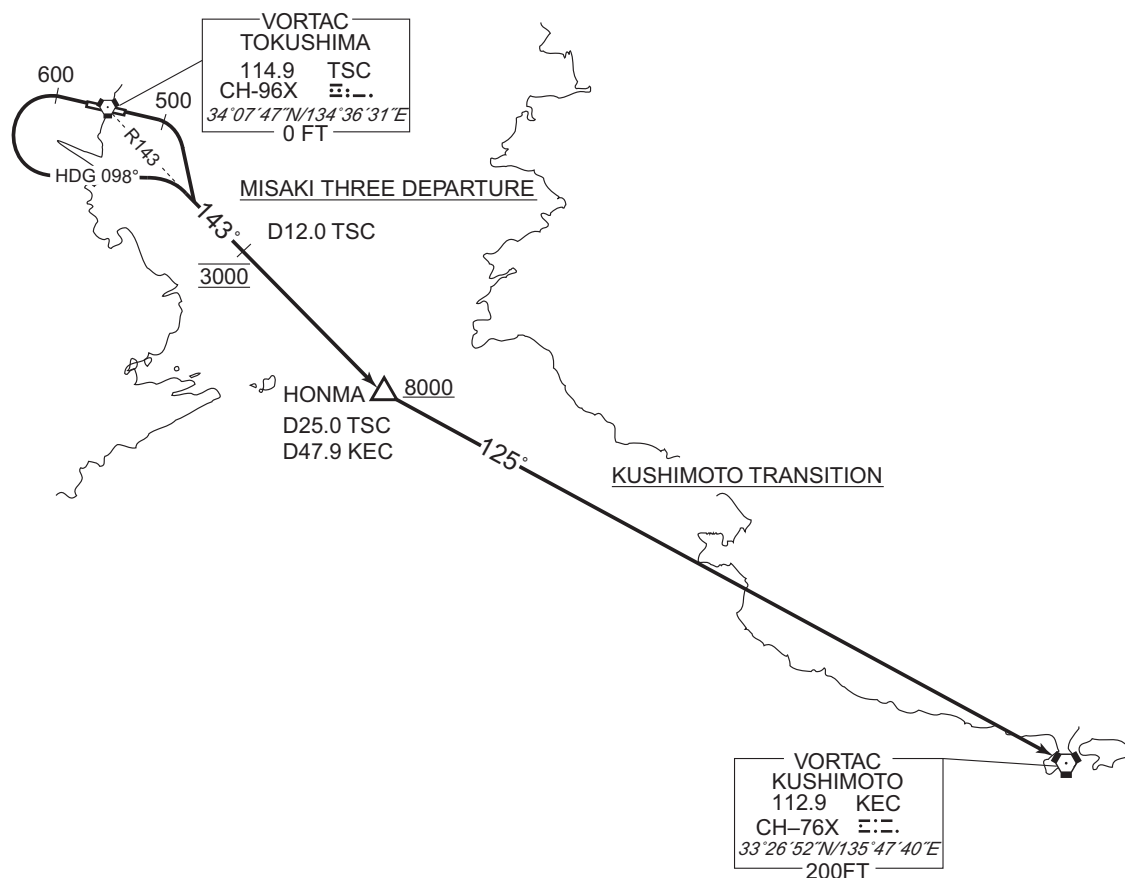
Cross TSC R143/12.0DME at 3000FT, cross HONMA at or above 8000FT.

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

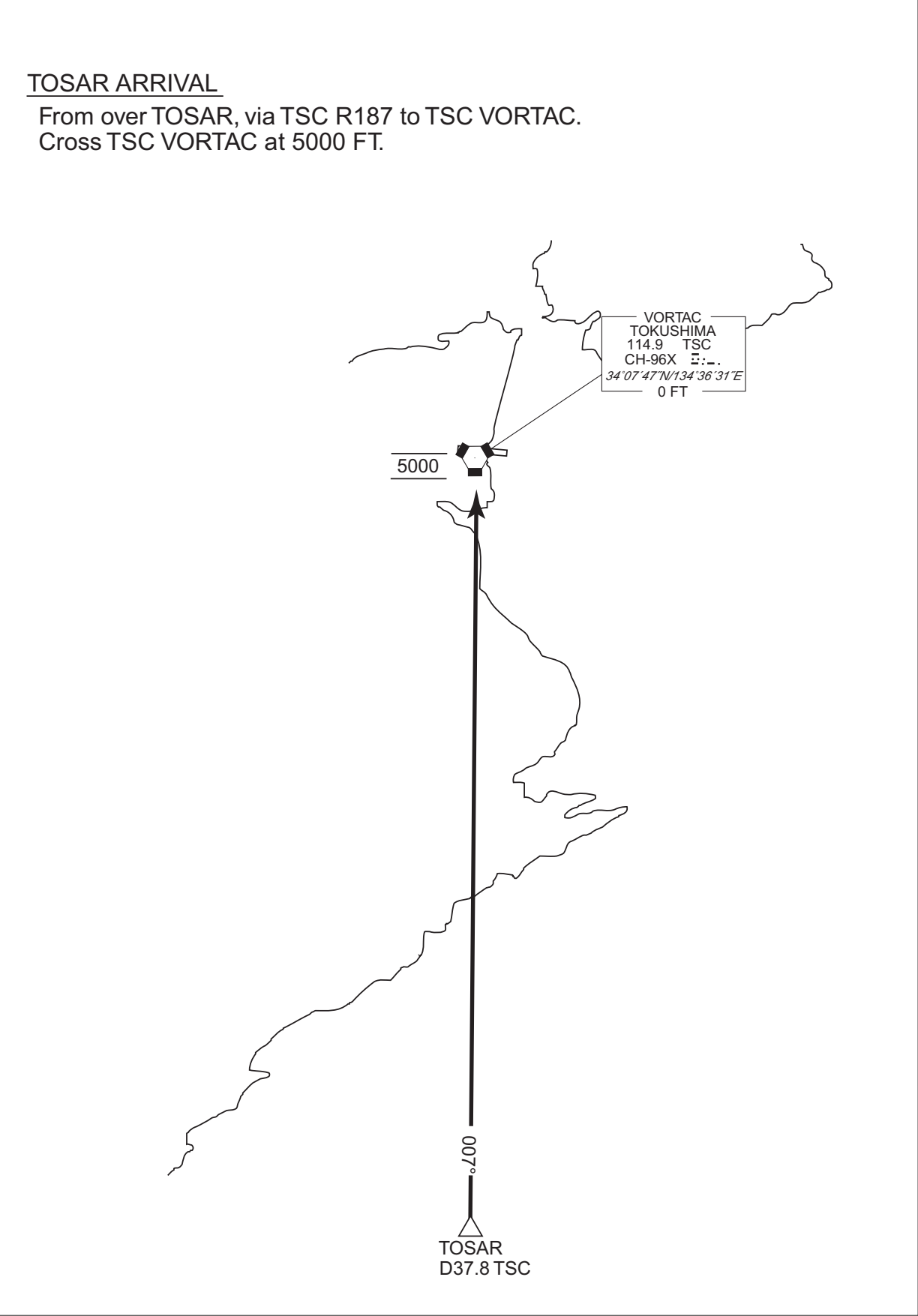
RJOS / TOKUSHIMA

STAR

TOSAR ARRIVAL

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

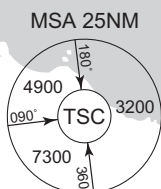
CHANGE : Distance FM TSC to TOSAR added.



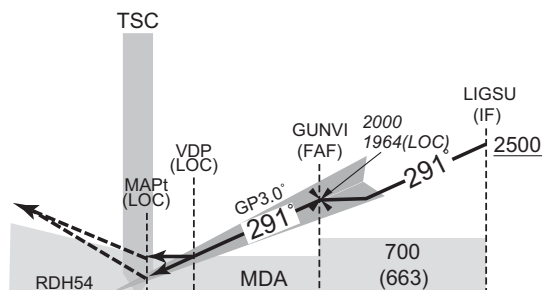
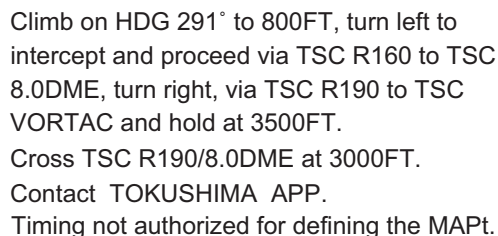
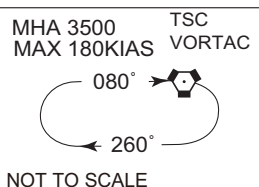
INTENTIONALLY LEFT BLANK

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



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

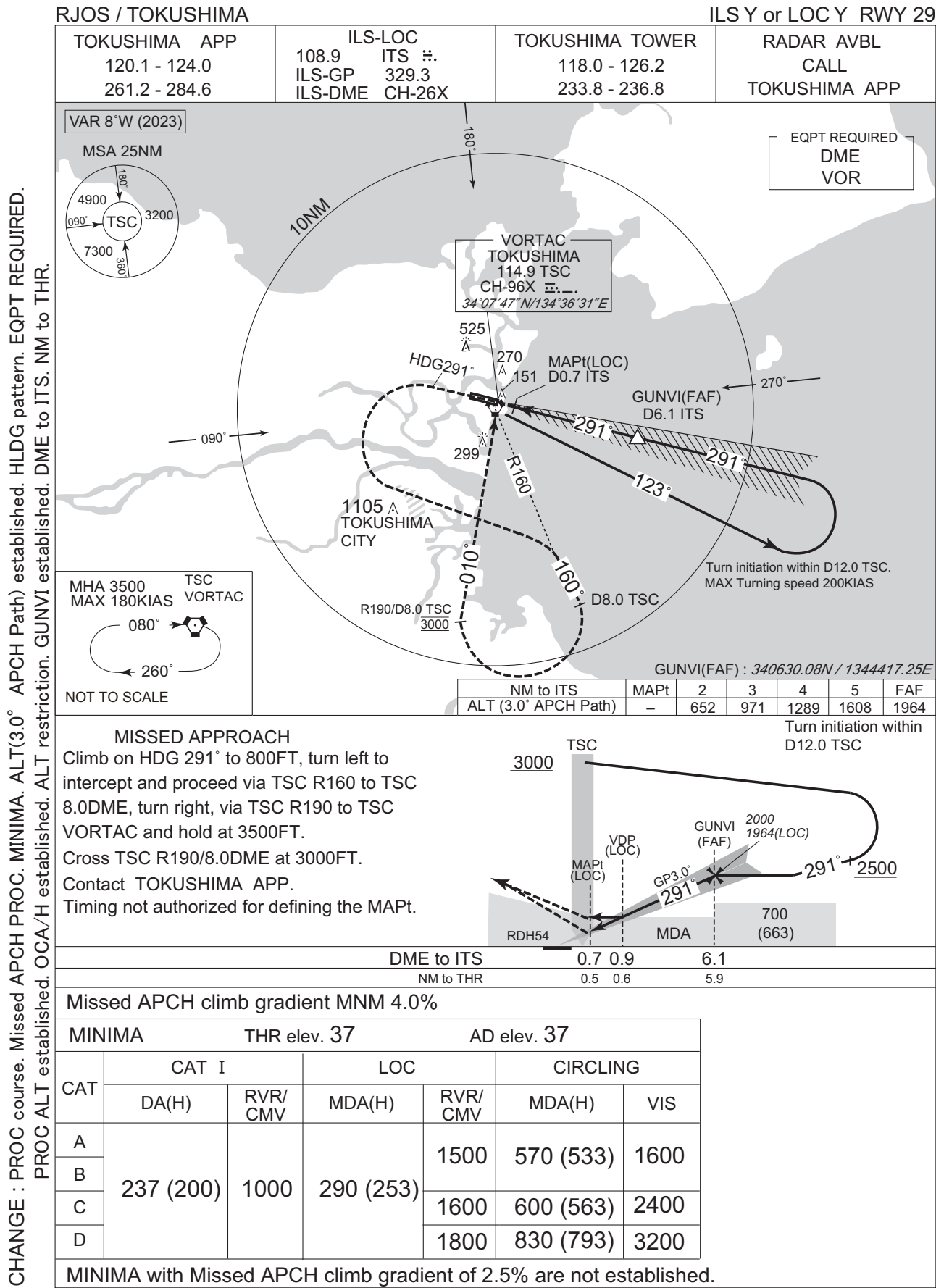
| | | | | |
|------------|-----|-----|-----|------|
| DME to ITS | 0.7 | 0.9 | 6.1 | 11.1 |
| NM to THR | 0.5 | 0.6 | 5.9 | 10.9 |

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 | | | | | | |

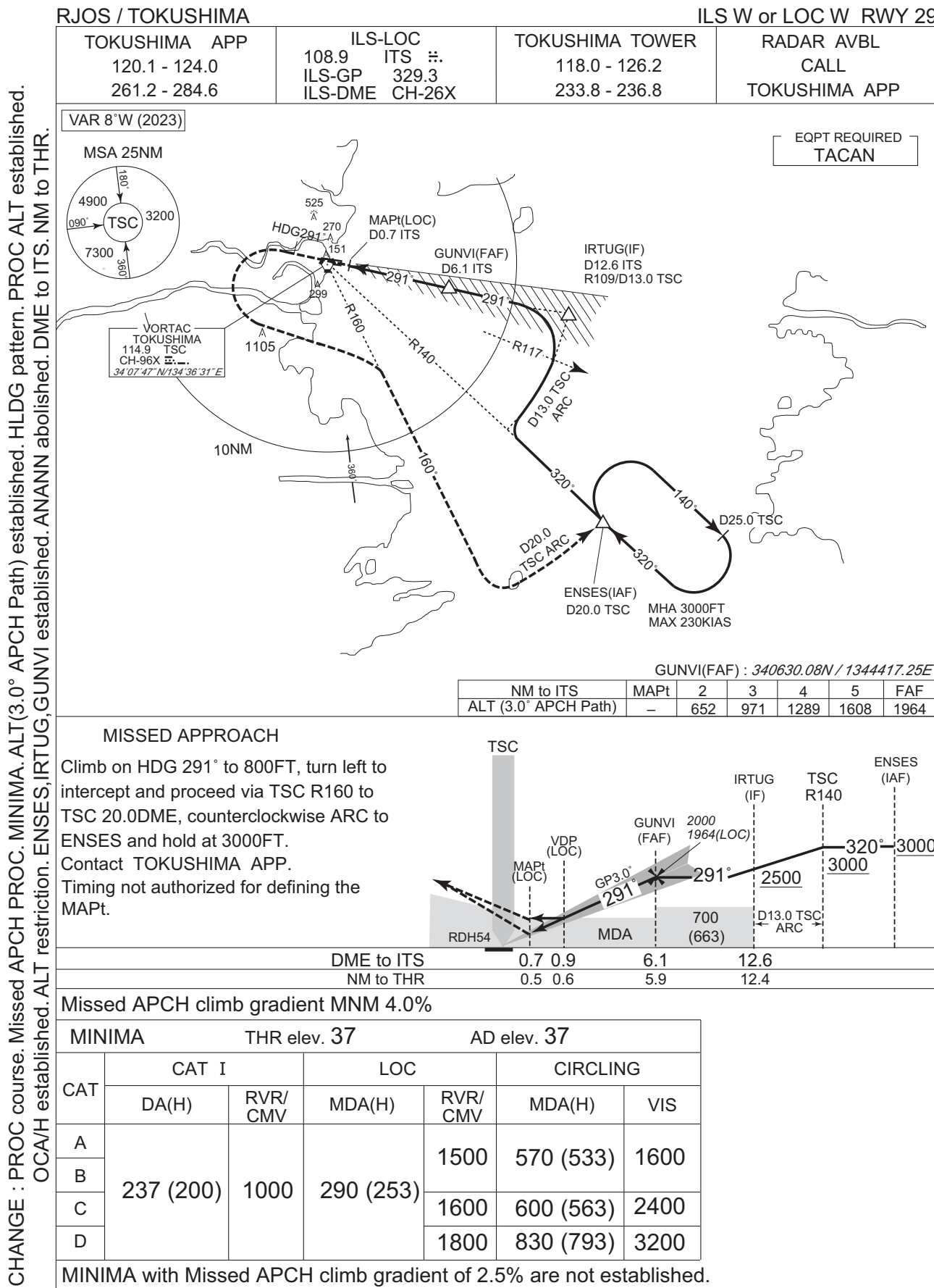
MINIMA with Missed APCH climb gradient of 2.5% are not established.

INSTRUMENT APPROACH CAHRT



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

INSTRUMENT APPROACH CHART



R JOS / TOKUSHIMA

VOR RWY29

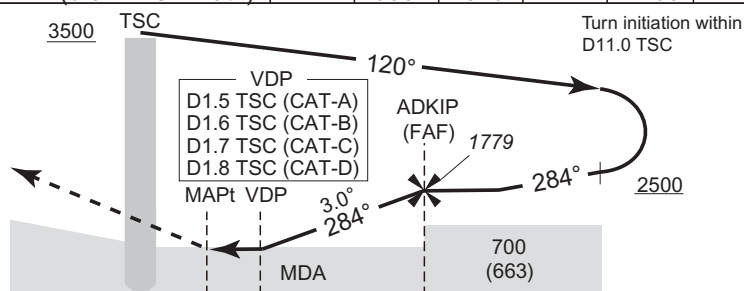
| | | | |
|---|---|---|-------------------------------------|
| TOKUSHIMA APP 120.1 - 124.0 261.2 - 284.6 | TOKUSHIMA VORTAC 114.9 TSC CH-96X 34°07'47"N / 134°36'31"E | TOKUSHIMA TOWER 118.0 - 126.2 233.8 - 236.8 | RADAR AVBL CALL TOKUSHIMA APP |
|---|---|---|-------------------------------------|



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

ADKIP(FAF) : 340659.22N/1344340.71E

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.



| | | |
|------------|--------|-----|
| DME to TSC | 0.71.0 | 6.0 |
| NM to THR | 0 0.3 | 5.3 |

Missed APCH climb gradient MNM 4.0%

| MINIMA | | THR elev. 37 | AD elev. 37 | |
|--------|-----------|--------------|-------------|------|
| CAT | | | CIRCLING | |
| | 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 : Description of RADAR Service. MSA. VAR.

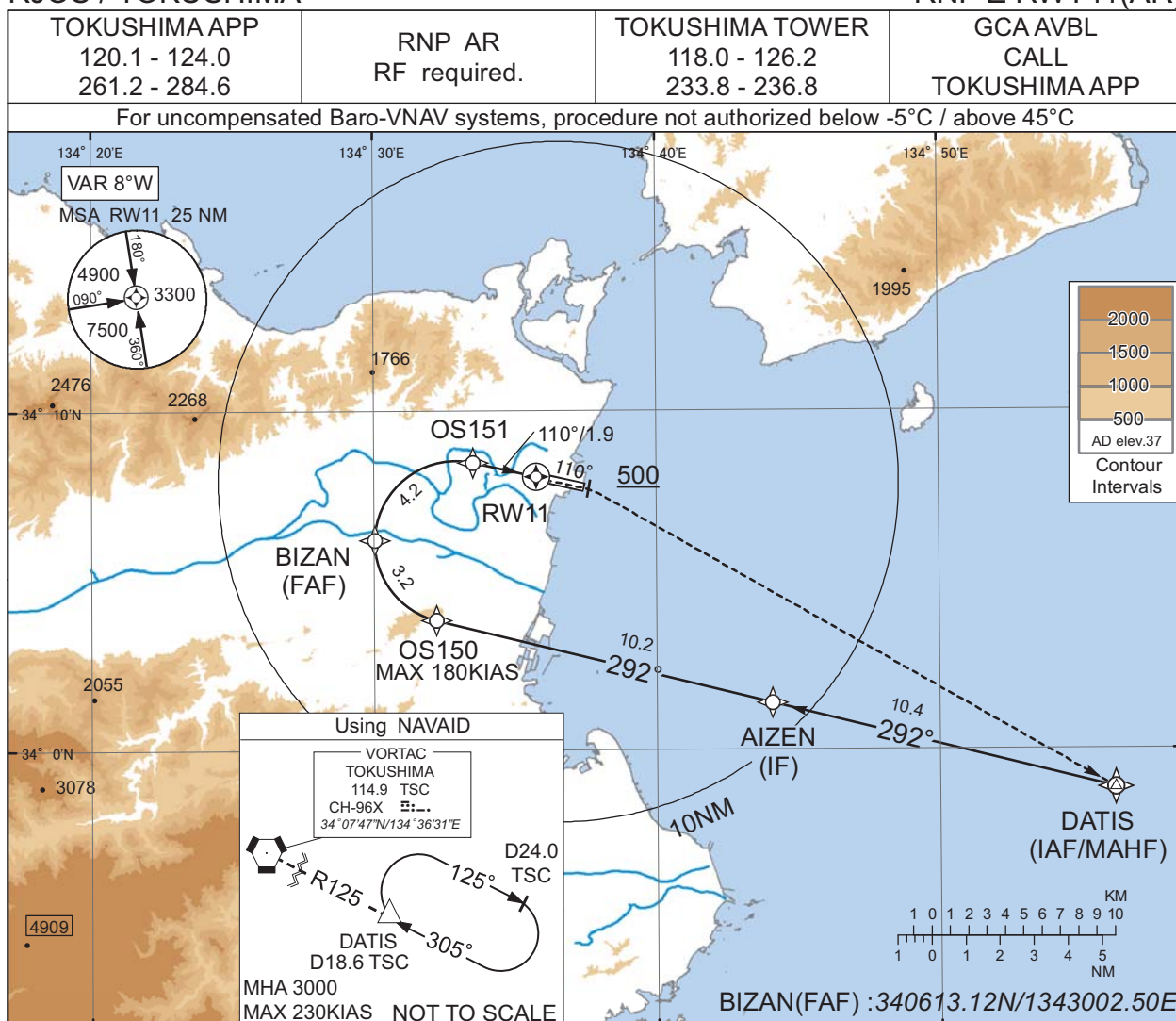
CHANGE : PROC course. Missed APCH PROC. MINIMA. HLDG pattern. OCA/H established. ENSES, INVUX, OTKEV established. ANANN abolished. DME to TSC. Description of RADAR Service. MSA. VAR.



INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

RNP Z RWY11(AR)



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

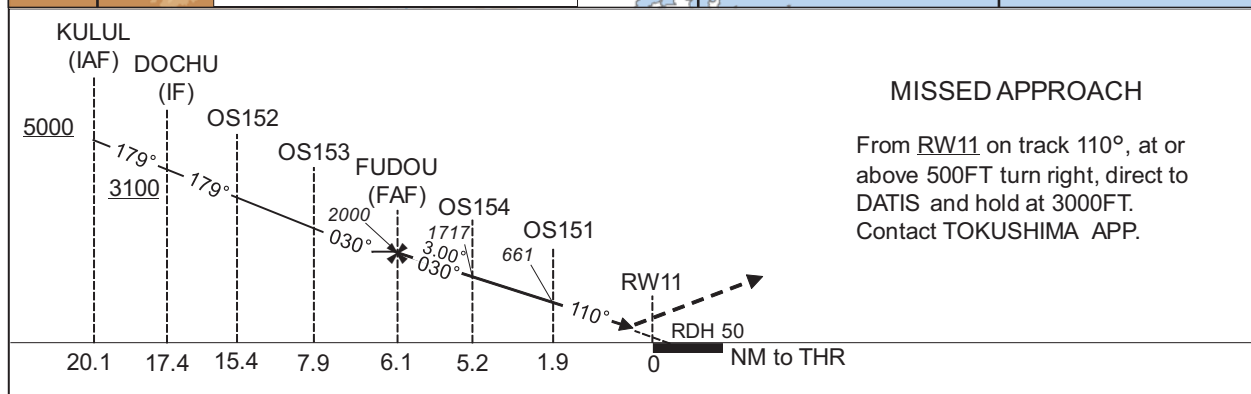
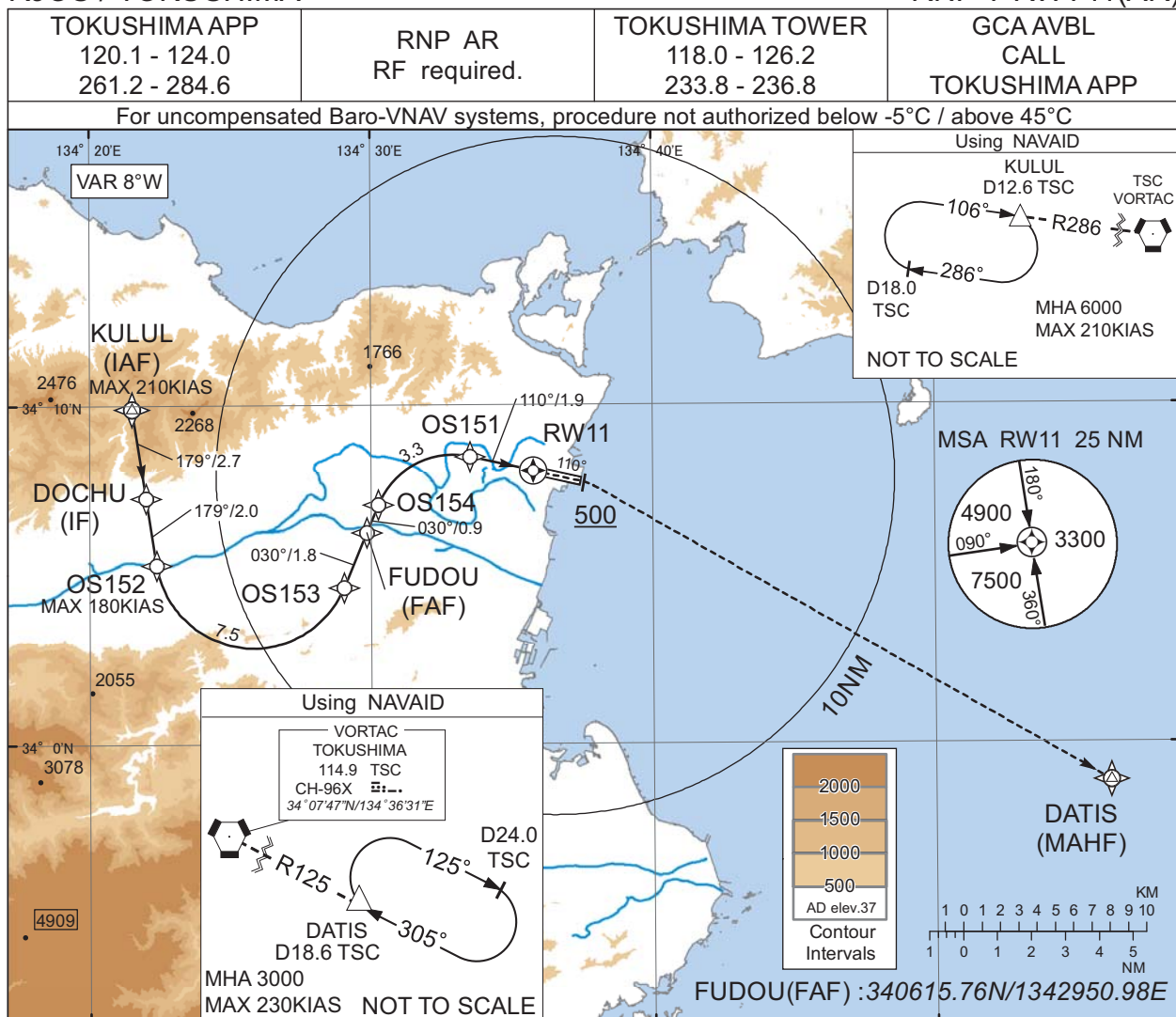
| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|--------------------------|--------------------------|--------------------------|
| DATIS | 335851.96N / 1345613.14E | OSRF2 | 340610.26N / 1343254.26E |
| AIZEN | 340123.97N / 1344405.59E | | |
| OS150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

CHANGE : PROC renamed.

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

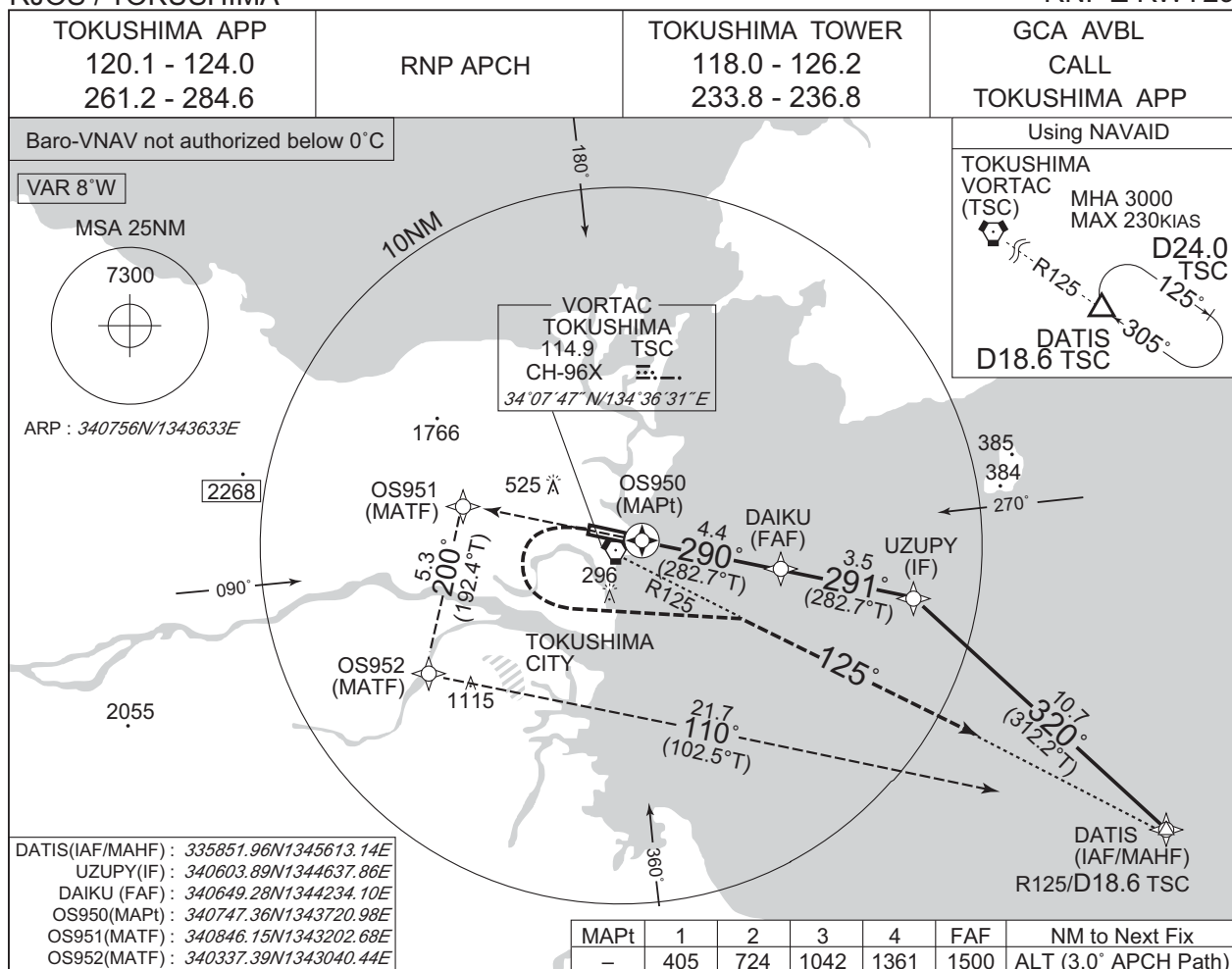
| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|--------------------------|--------------------------|--------------------------|
| KULUL | 340954.74N / 1342131.22E | OSRF1 | 340544.73N / 1342549.48E |
| DOCHU | 340716.80N / 1342200.89E | OSRF2 | 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

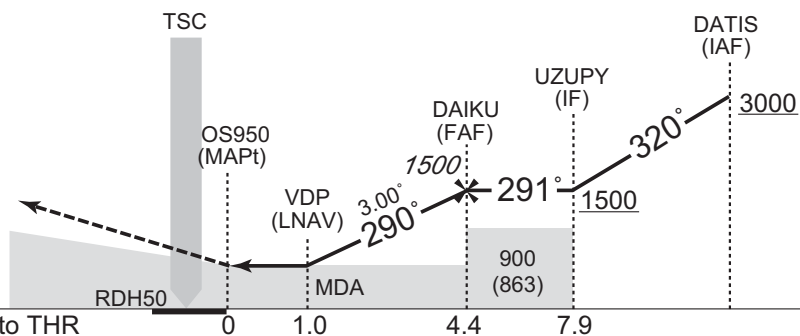


MISSED APPROACH

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 | | | | | | |
| | | 2000 | | 2000 | 840 (803) | 3200 |

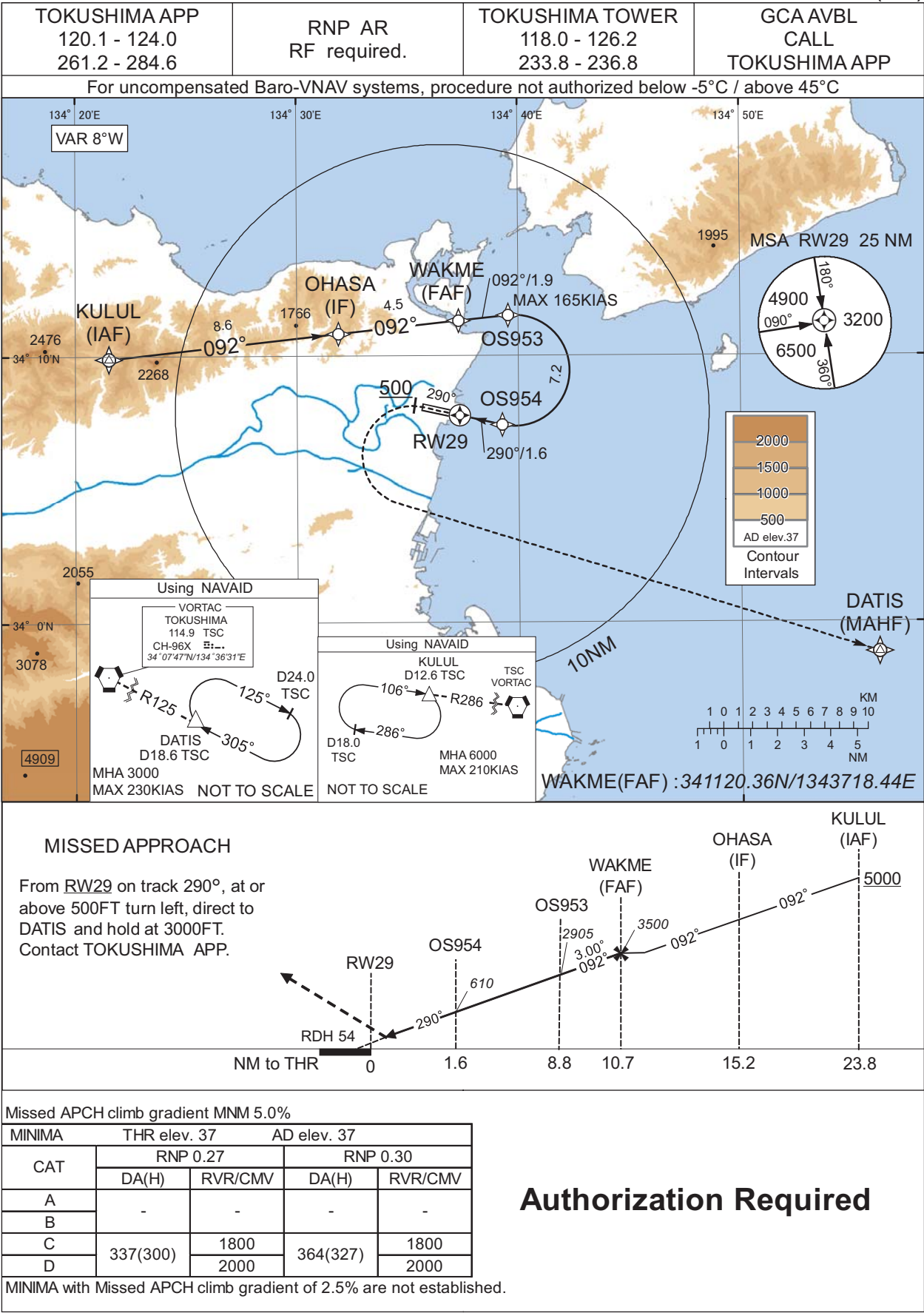
MINIMA with Missed APCH climb gradient of 2.5% are not established.

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

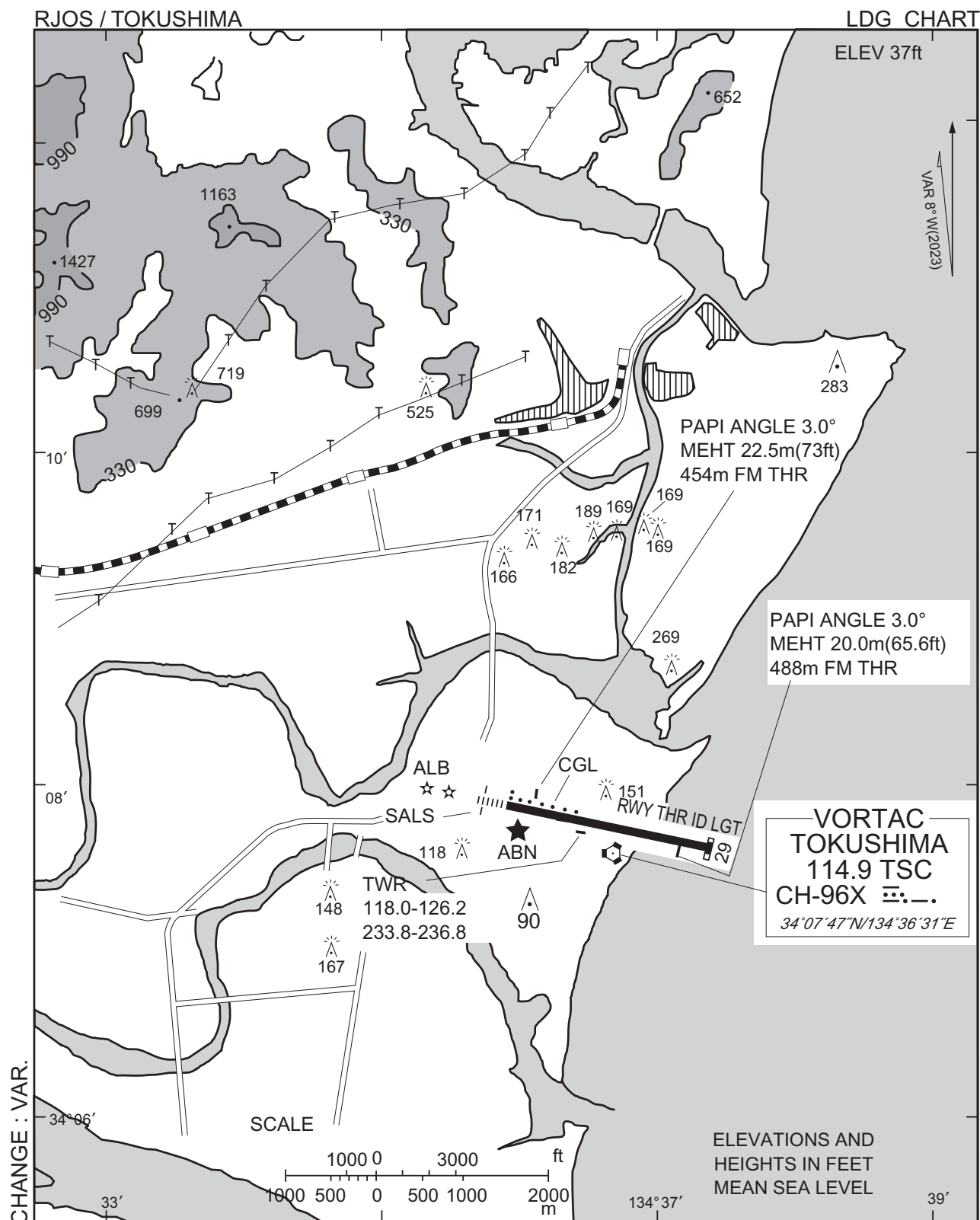
Visual REP



※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).

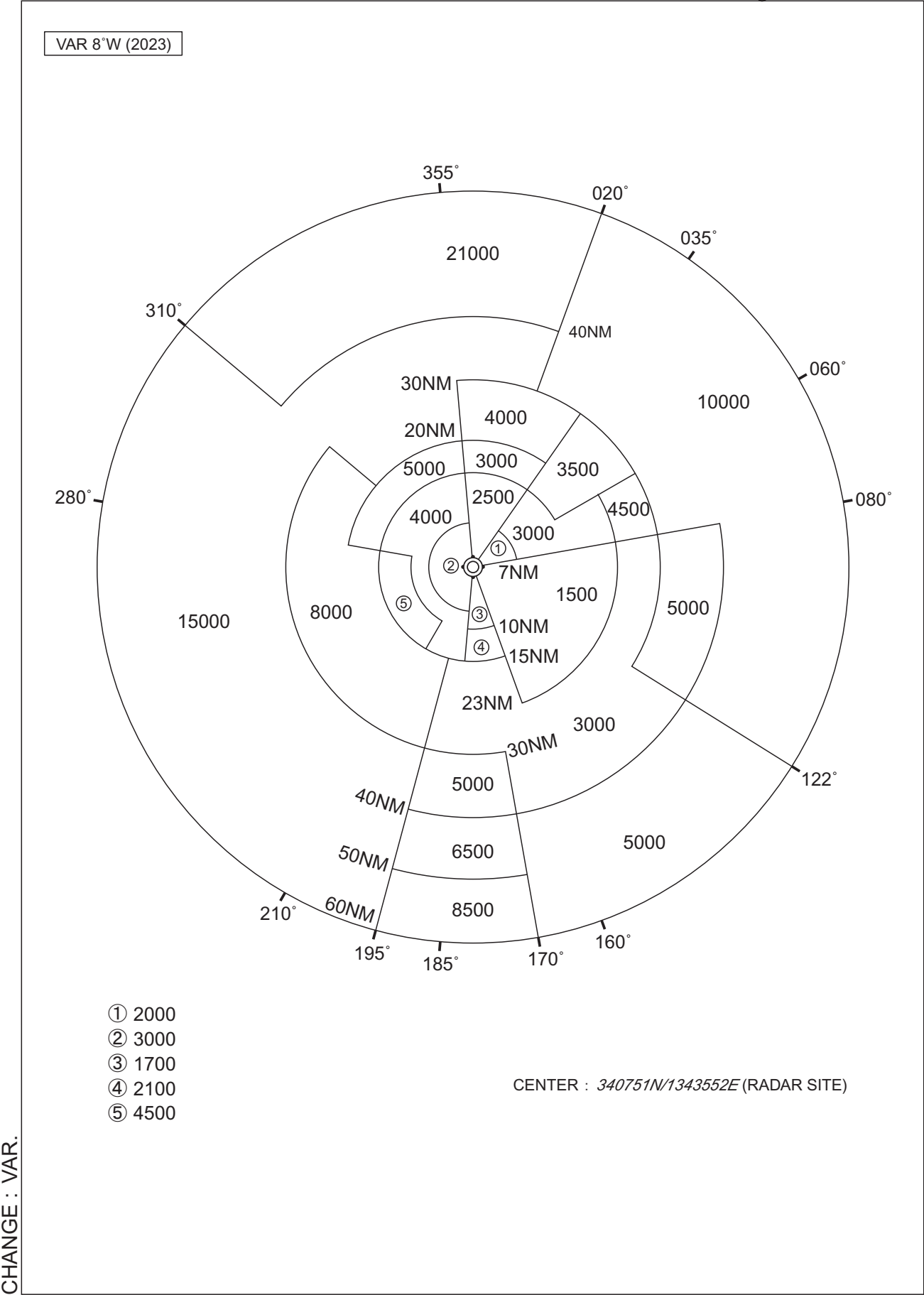
CHANGE : VAR.

| 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



INTENTIONALLY LEFT BLANK