

## 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<br>(102.6) | -7.6               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | HATIS               | —        | —              | -7.6               | —             | R              | —             | —            | —              | RNAV1                    |
| 003           | TF              | SIJIL               | —        | 144<br>(136.9) | -7.6               | 3.6           | —              | 3000          | —            | —              | RNAV1                    |
| 004           | TF              | HONMA               | —        | 144<br>(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<br>(282.6) | -7.6               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | HATIS               | —        | —              | -7.6               | —             | L              | —             | —            | —              | RNAV1                    |
| 003           | TF              | SIJIL               | —        | 144<br>(136.9) | -7.6               | 3.6           | —              | 3000          | —            | —              | RNAV1                    |
| 004           | TF              | HONMA               | —        | 144<br>(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<br>(105.2) | -7.6               | 8.9           | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | KILAP               | —        | 104<br>(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.

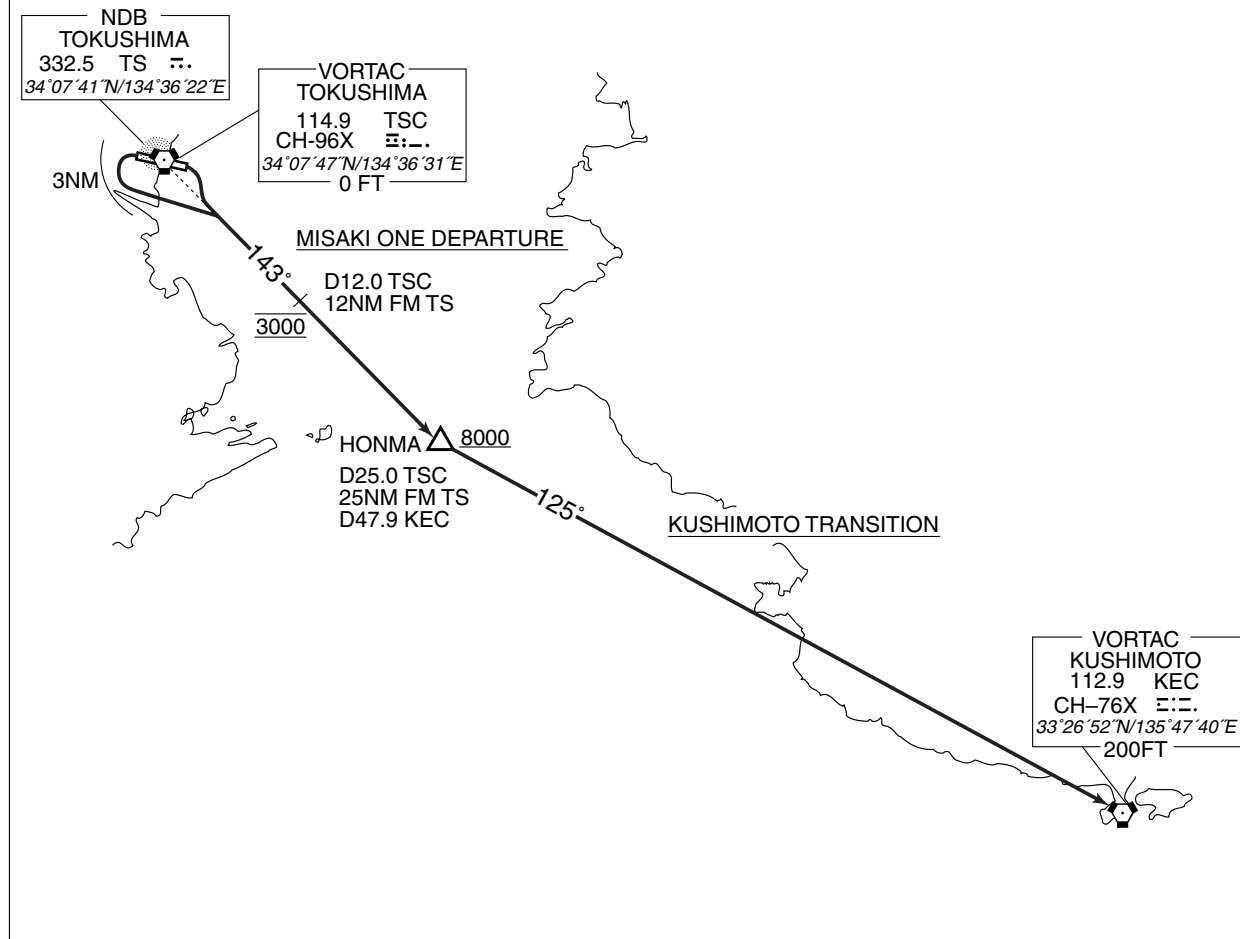
Note1 : When take off RWY29, following climb gradient should be maintained  
until passing 300FT

|                 |     |     |     |     |     |      |
|-----------------|-----|-----|-----|-----|-----|------|
| 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.



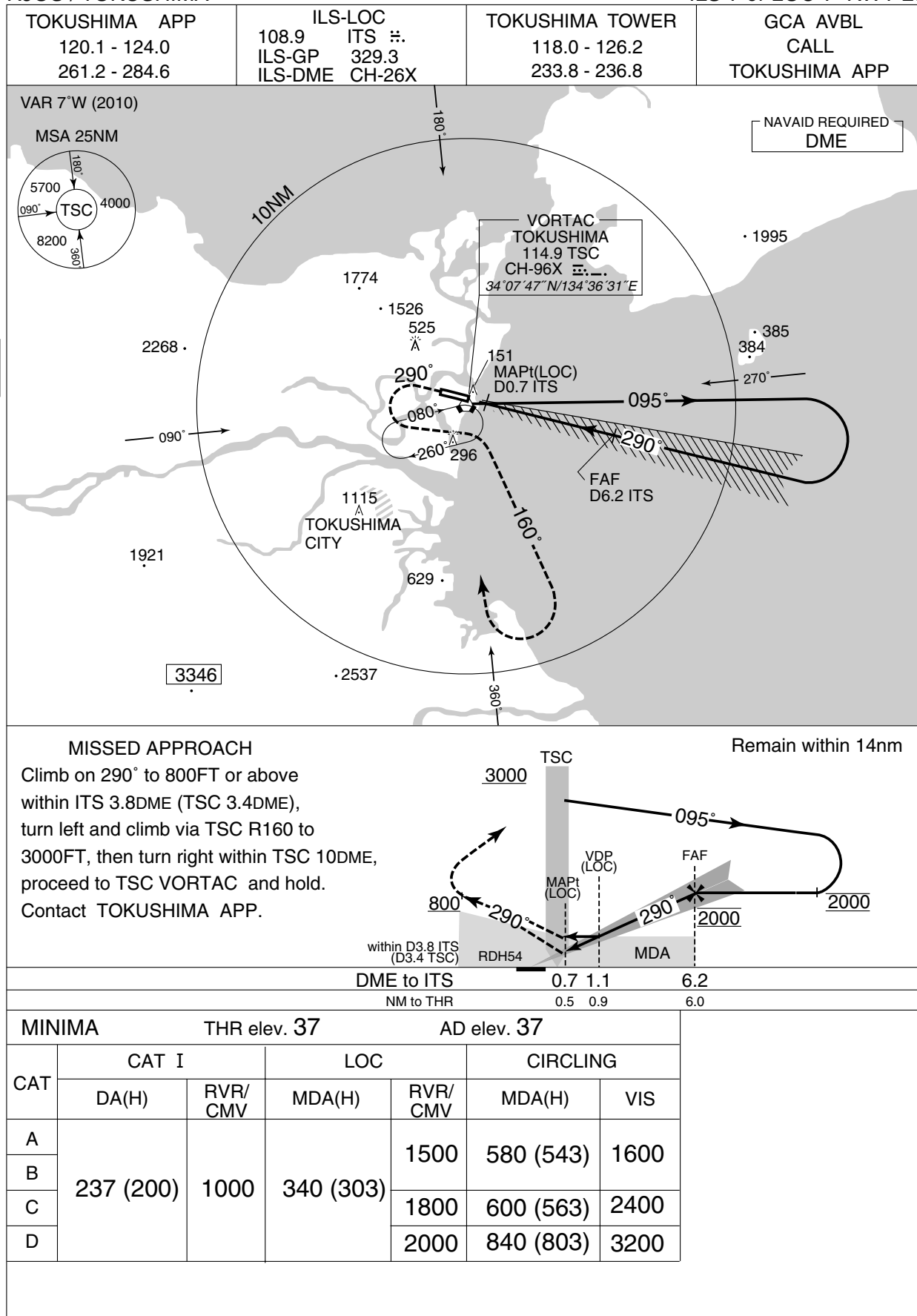
| MINIMA |           | THR elev. 37 |           | AD elev. 37 |           |      |
|--------|-----------|--------------|-----------|-------------|-----------|------|
| CAT    | CAT I     |              | LOC       |             | CIRCLING  |      |
|        | DA(H)     | RVR/<br>CMV  | MDA(H)    | RVR/<br>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 CAHRT

RJOS / TOKUSHIMA

ILS Y or LOC Y RWY 29



## INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

ILS X or LOC X RWY 29

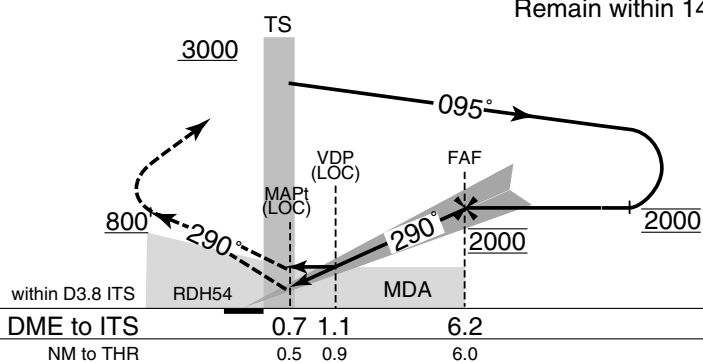
|   |   |   |                                   |
|---|---|---|-----------------------------------|
| TOKUSHIMA APP<br>120.1 - 124.0<br>261.2 - 284.6 | ILS-LOC<br>108.9 ITS 3.<br>ILS-GP 329.3<br>ILS-DME CH-26X | TOKUSHIMA TOWER<br>118.0 - 126.2<br>233.8 - 236.8 | GCA AVBL<br>CALL<br>TOKUSHIMA APP |
|---|---|---|-----------------------------------|



## 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

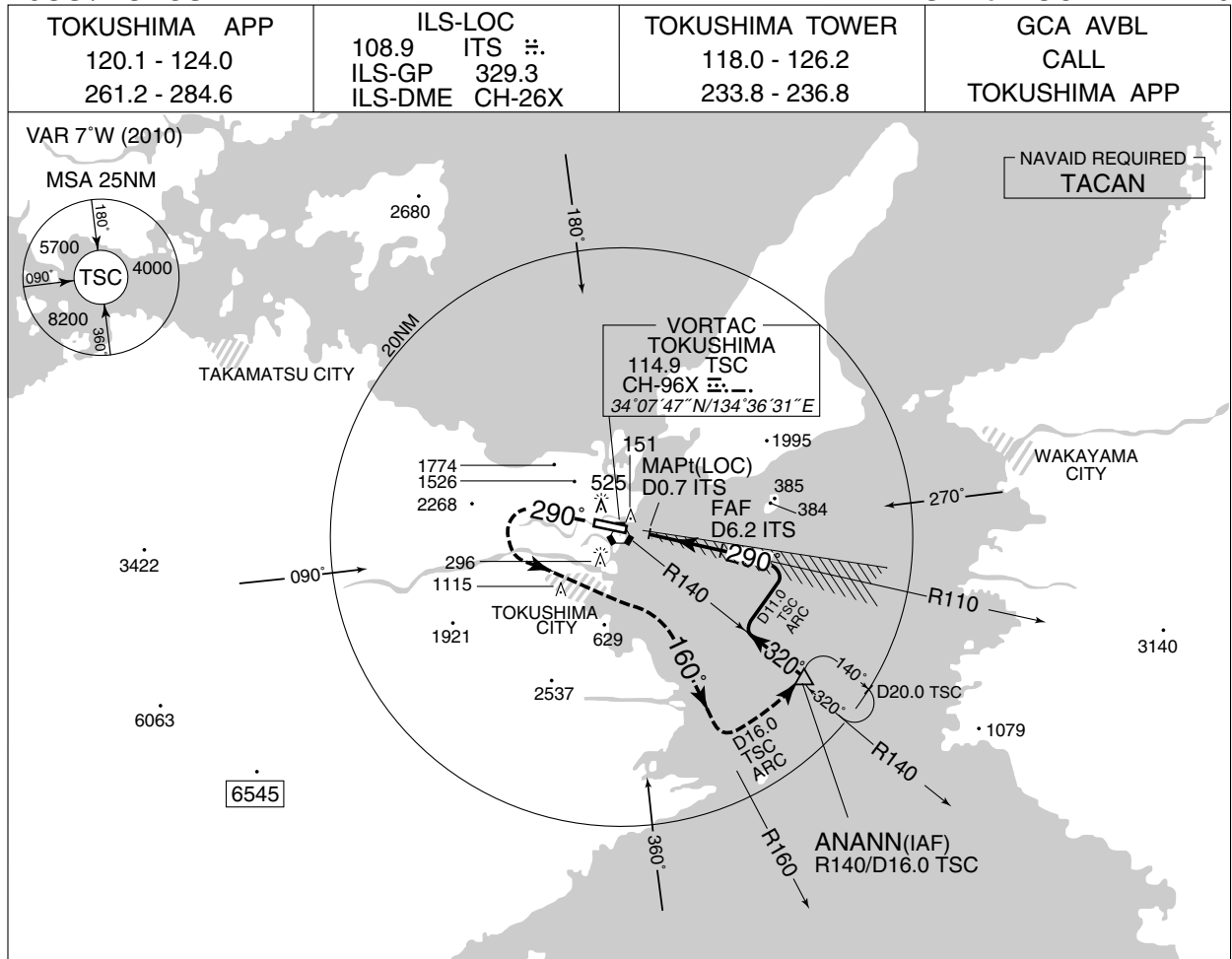
AD elev. 37

| 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   |           |         |           | 1800    | 600 (563) | 2400 |
| C   |           |         |           | 2000    | 840 (803) | 3200 |
| D   |           |         |           |         |           |      |

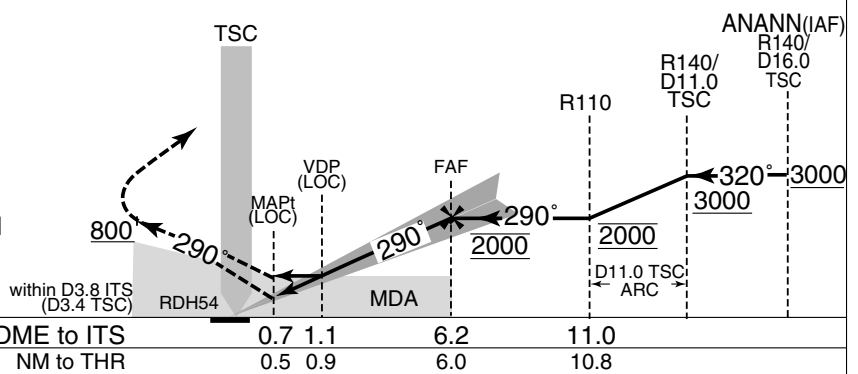
INSTRUMENT APPROACH CHART

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/<br>CMV  | MDA(H)    | RVR/<br>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

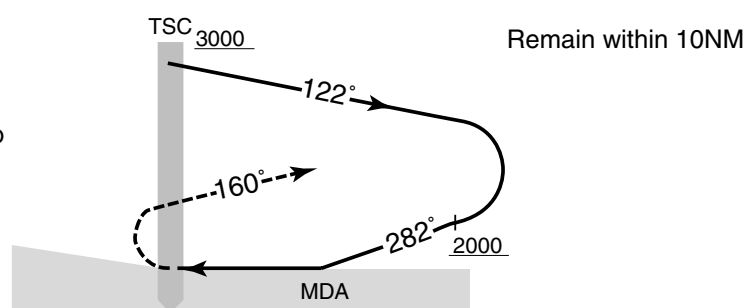
## VOR RWY 29

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

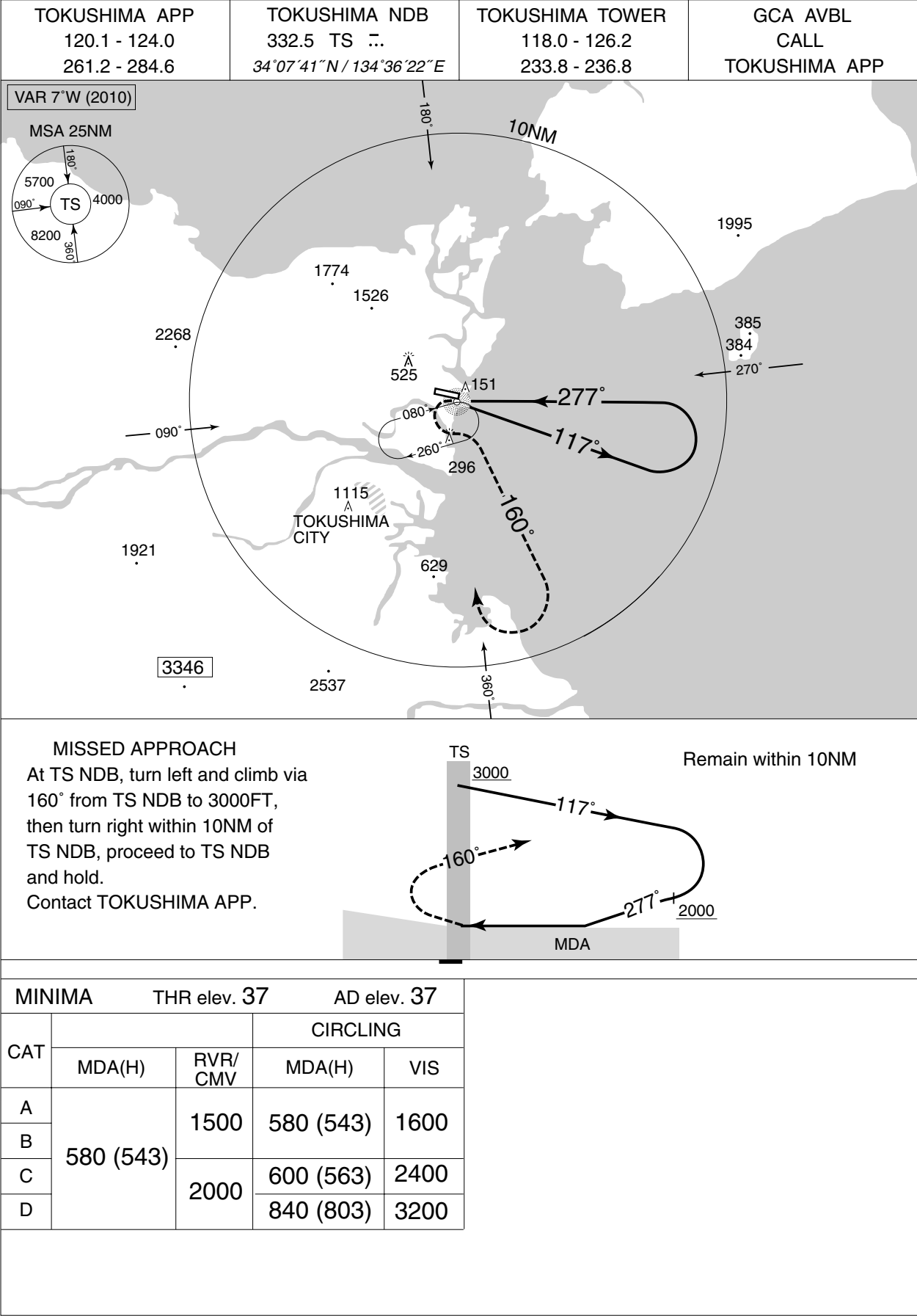


| MINIMA |           | THR elev. 37 | AD elev. 37 |      |
|--------|-----------|--------------|-------------|------|
| CAT    |           |              | CIRCLING    |      |
|        | MDA(H)    | RVR/CMV      | MDA(H)      | VIS  |
| A      | 580 (543) | 1500         | 580 (543)   | 1600 |
| B  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

INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

NDB RWY 29



## INSTRUMENT APPROACH CHART

RJOS / TOKUSHIMA

TACAN A

|   |  |   |                                   |
|---|--|---|-----------------------------------|
| TOKUSHIMA APP<br>120.1 - 124.0<br>261.2 - 284.6 | TOKUSHIMA TACAN<br>CH-96X TSC ㄟ:..<br>34°07'48"N / 134°36'36"E | TOKUSHIMA TOWER<br>118.0 - 126.2<br>233.8 - 236.8 | GCA AVBL<br>CALL<br>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.

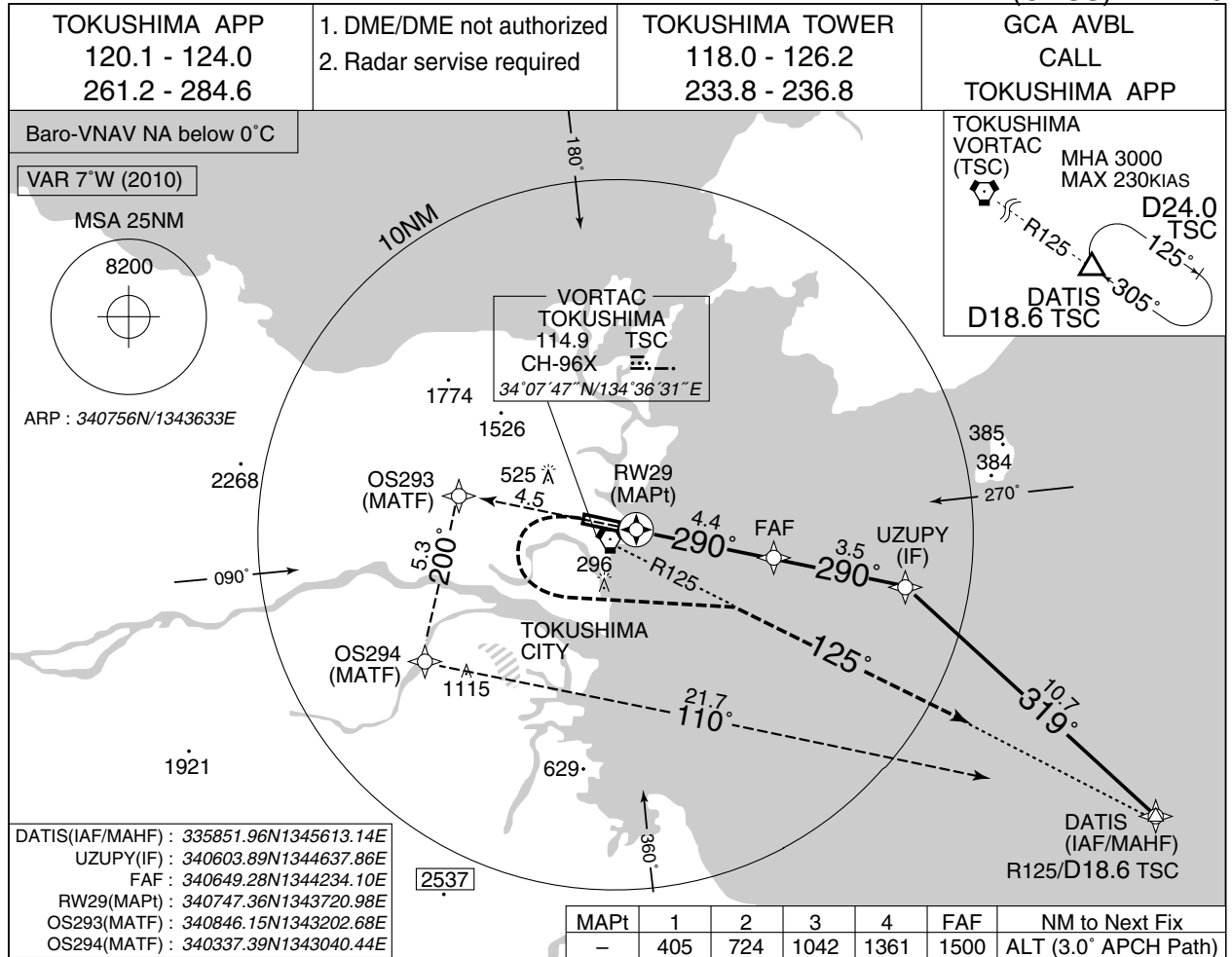


| MINIMA |           | THR elev. 37 | AD elev. 37 |
|--------|-----------|--------------|-------------|
| CAT    | CIRCLING  |              |             |
|        | MDA(H)    | VIS          |             |
| A      | 580 (543) | 1600         |             |
| B      |           |              |             |
| 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.



Missed APCH climb gradient MNM 5.0%

| MINIMA |           | THR elev. 37 |           | AD elev. 37 |           |      |
|--------|-----------|--------------|-----------|-------------|-----------|------|
| CAT    | LNAV/VNAV |              | LNAV      |             | CIRCLING  |      |
|        | DA(H)     | RVR/<br>CMV  | MDA(H)    | RVR/<br>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.

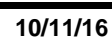
## RJOS / TOKUSHIMA

## Visual REP



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





## RJOS / TOKUSHIMA

## Minimum Vectoring Altitude CHART

VAR 7°W (2013)



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