

TOYAMA AP



STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA

SID and TRANSITION

IKUJI FIVE DEPARTURE

RWY02 : Climb via TOE R010 to 7.0DME...

RWY20 : Climb RWY HDG until 700FT, turn right HDG 055° to intercept  
and proceed via TOE R010 to TOE 7.0DME...  
...turn right HDG 085° to intercept and proceed via  
TOE R040 to IKUJI.

NOTE RWY20 : 5.0% climb gradient required up to 2000FT.

OBST ALT 762FT located at 3.8NM 202° FM end of RWY20.

HISUI TRANSITION

From over IKUJI, climb via TOE R040 to HISUI.



## STANDARD DEPARTURE CHART -INSTRUMENT

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SID

URUSI REVERSAL FOUR DEPARTURE

RWY02 : Climb RWY HDG until 700FT, turn left, climb...

RWY20 : Climb RWY HDG until 700FT, turn right HDG 037° to intercept and proceed...  
...via TOE R352 to NANAO, turn right, proceed via TOE R010 to  
intercept and proceed via KMC R061 to URUSI.

NOTE RWY02 : 4.0% climb gradient required up to 1000FT.

OBST ALT 621FT located at 2.8NM 345° FM end of RWY02.

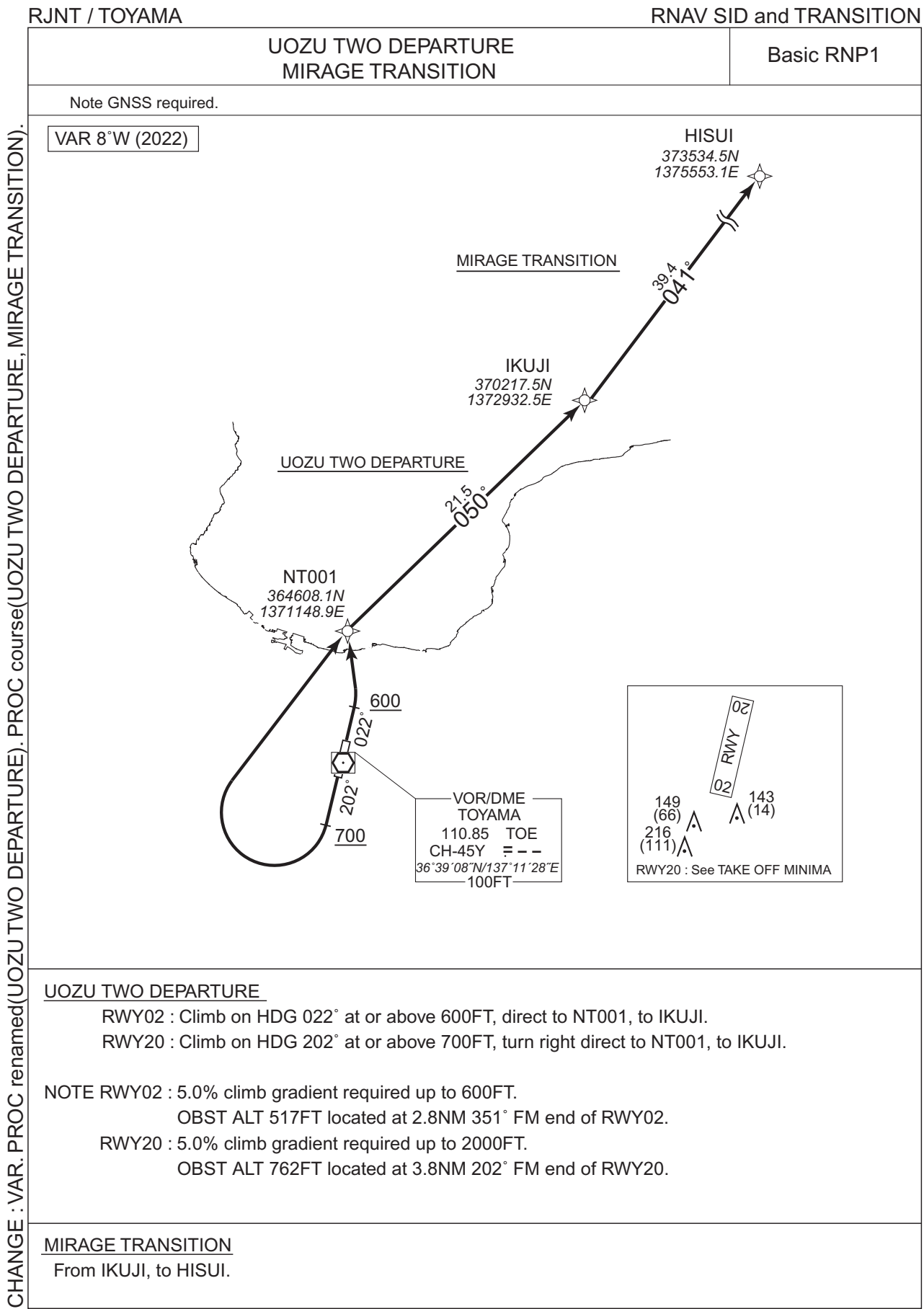
RWY20 : 5.0% climb gradient required up to 2000FT.

OBST ALT 762FT located at 3.8NM 202° FM end of RWY20.

URUSI REVERSAL FOUR DEPARTURE

CHANGE : Minor change

STANDARD DEPARTURE CHART -INSTRUMENT



## STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA

RNAV SID and TRANSITION

UOZU TWO DEPARTURE

## RWY02

| 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              | —                   | —        | 022<br>(013.5)  | -8.5               | —             | —              | +600          | —            | —              | Basic RNP1               |
| 002           | DF              | NT001               | —        | —               | -8.5               | —             | —              | —             | —            | —              | Basic RNP1               |
| 003           | TF              | IKUJI               | —        | 050<br>(041.2)  | -8.5               | 21.5          | —              | —             | —            | —              | Basic RNP1               |

## RWY20

| 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              | —                   | —        | 202<br>(193.5)  | -8.5               | —             | —              | +700          | —            | —              | Basic RNP1               |
| 002           | DF              | NT001               | —        | —               | -8.5               | —             | R              | —             | —            | —              | Basic RNP1               |
| 003           | TF              | IKUJI               | —        | 050<br>(041.2)  | -8.5               | 21.5          | —              | —             | —            | —              | Basic RNP1               |

MIRAGE 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              | IKUJI               | —        | —               | -8.5               | —             | —              | —             | —            | —              | Basic RNP1               |
| 002           | TF              | HISUI               | —        | 041<br>(032.1)  | -8.5               | 39.4          | —              | —             | —            | —              | Basic RNP1               |

CHANGE : VAR. PROC renamed(UOZU TWO DEPARTURE). PROC course(UOZU TWO DEPARTURE, MIRAGE TRANSITION).

STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA

STAR

### OHANA ARRIVAL

From over OHANA, proceed via TOE R021 to MEDIC.  
Cross MEDIC at or above 3000FT.

### TOYAMA ARRIVAL

From over URUSI, proceed via TOE R352, turn right to intercept and proceed via TOE R021 to MEDIC within TOE 32.0DME.

Cross MEDIC at or above 3000FT.



## STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA

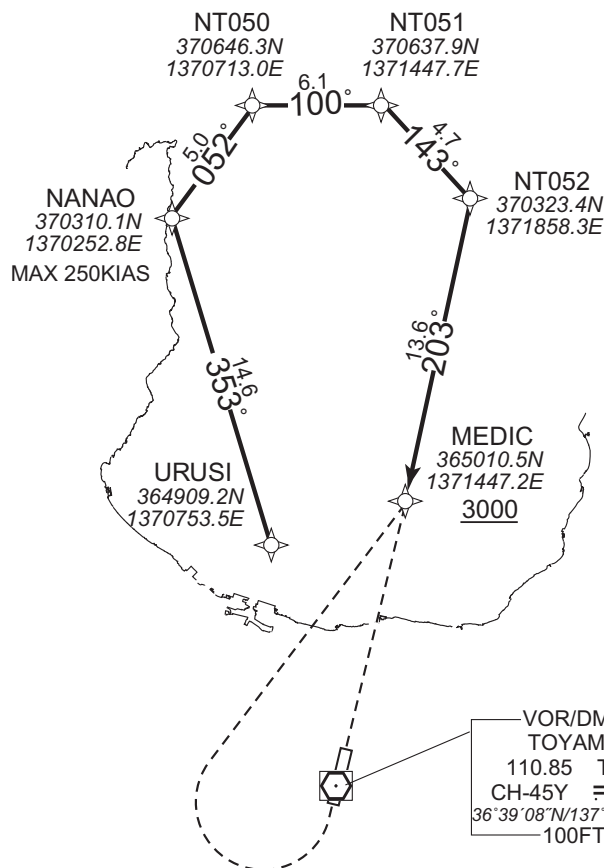
RNAV STAR

## NANAO ARRIVAL

Basic RNP1

Note GNSS required.

VAR 8°W (2022)



NANAO ARRIVAL

## NANAO ARRIVAL

From URUSI, to NANAO, to NT050, to NT051, to NT052, to MEDIC at or above 3000FT.

| 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              | URUSI               | —        | —             | -8.5               | —             | —              | —             | —            | —              | Basic RNP1               |
| 002           | TF              | NANAO               | —        | 353 (344.1)   | -8.5               | 14.6          | —              | —             | -250         | —              | Basic RNP1               |
| 003           | TF              | NT050               | —        | 052 (043.8)   | -8.5               | 5.0           | —              | —             | —            | —              | Basic RNP1               |
| 004           | TF              | NT051               | —        | 100 (091.3)   | -8.5               | 6.1           | —              | —             | —            | —              | Basic RNP1               |
| 005           | TF              | NT052               | —        | 143 (134.2)   | -8.5               | 4.7           | —              | —             | —            | —              | Basic RNP1               |
| 006           | TF              | MEDIC               | —        | 203 (194.2)   | -8.5               | 13.6          | —              | +3000         | —            | —              | Basic RNP1               |

CHANGE : VAR. PROC course.

STANDARD ARRIVAL CHART -INSTRUMENT

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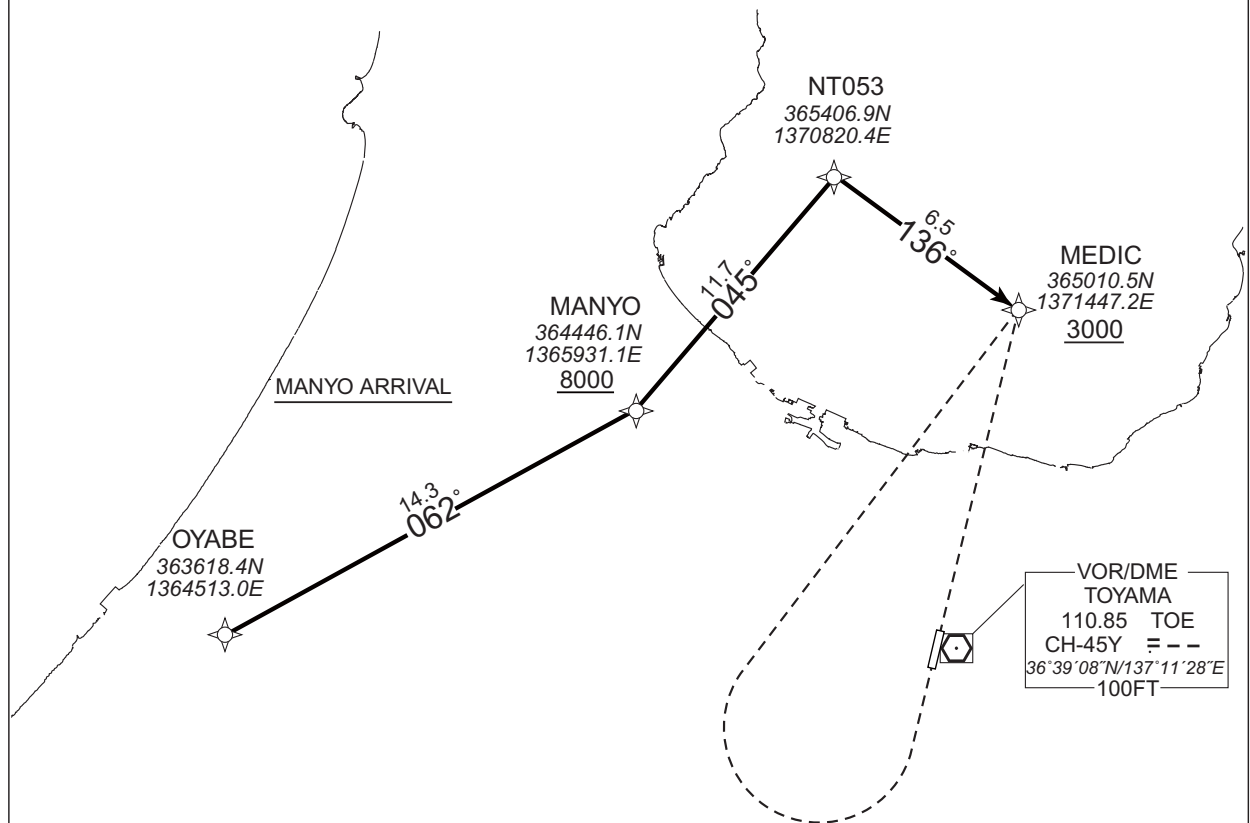
RNAV STAR

MANYO ARRIVAL

Basic RNP1

Note GNSS required.

VAR 8°W (2022)



MANYO ARRIVAL

From OYABE, to MANYO at or above 8000FT, to NT053, to MEDIC at or above 3000FT.

| 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              | OYABE               | —        | —             | -8.5               | —             | —              | —             | —            | —              | Basic RNP1               |
| 002           | TF              | MANYO               | —        | 062 (053.5)   | -8.5               | 14.3          | —              | +8000         | —            | —              | Basic RNP1               |
| 003           | TF              | NT053               | —        | 045 (037.0)   | -8.5               | 11.7          | —              | —             | —            | —              | Basic RNP1               |
| 004           | TF              | MEDIC               | —        | 136 (127.4)   | -8.5               | 6.5           | —              | +3000         | —            | —              | Basic RNP1               |

CHANGE : VAR. PROC course.

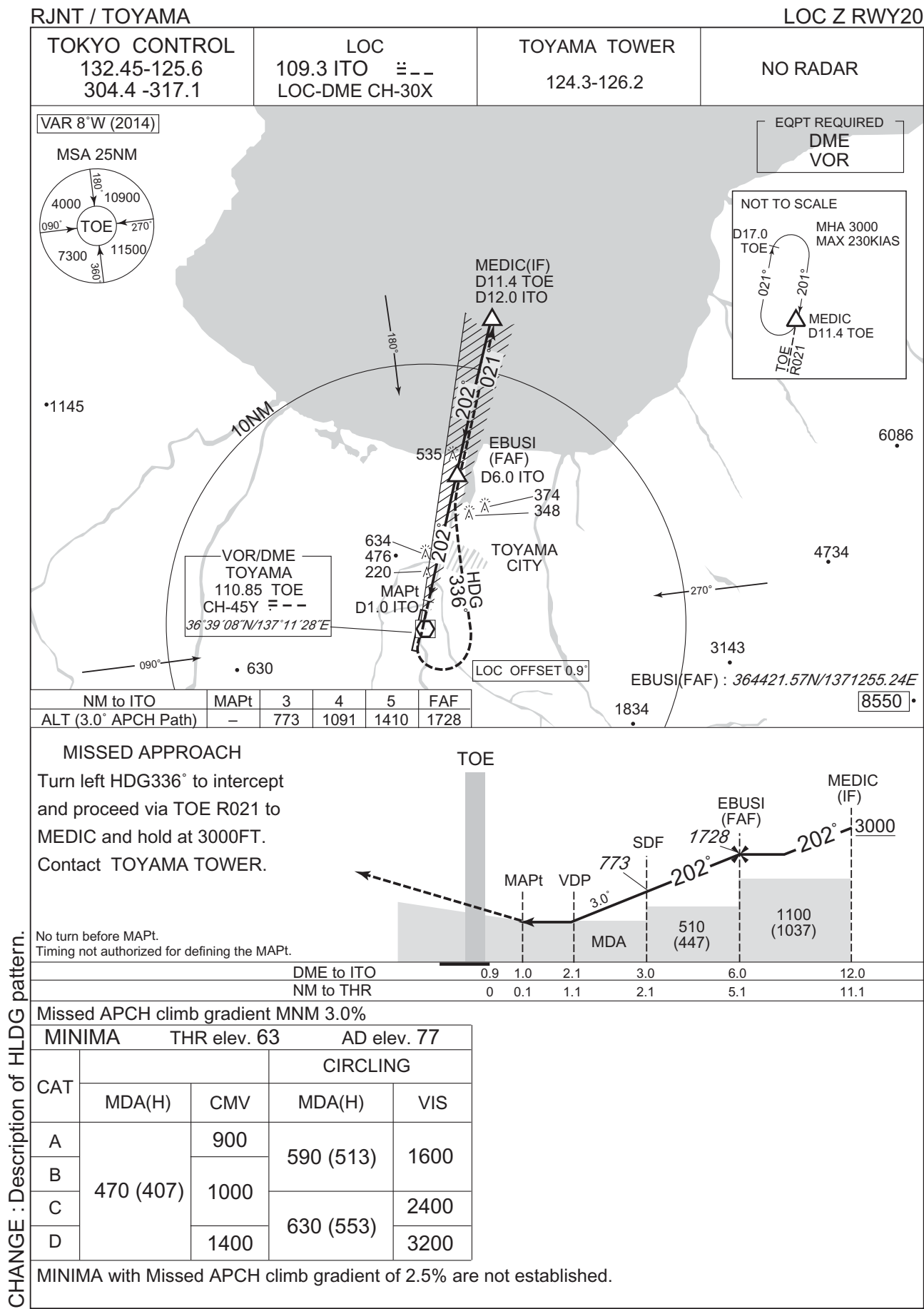


STANDARD ARRIVAL CHART -INSTRUMENT



CHANGE : VAR. PROC course. RNAV HLDG established(NOBEL). HLDG for NAVAID abolished(NOBEL).

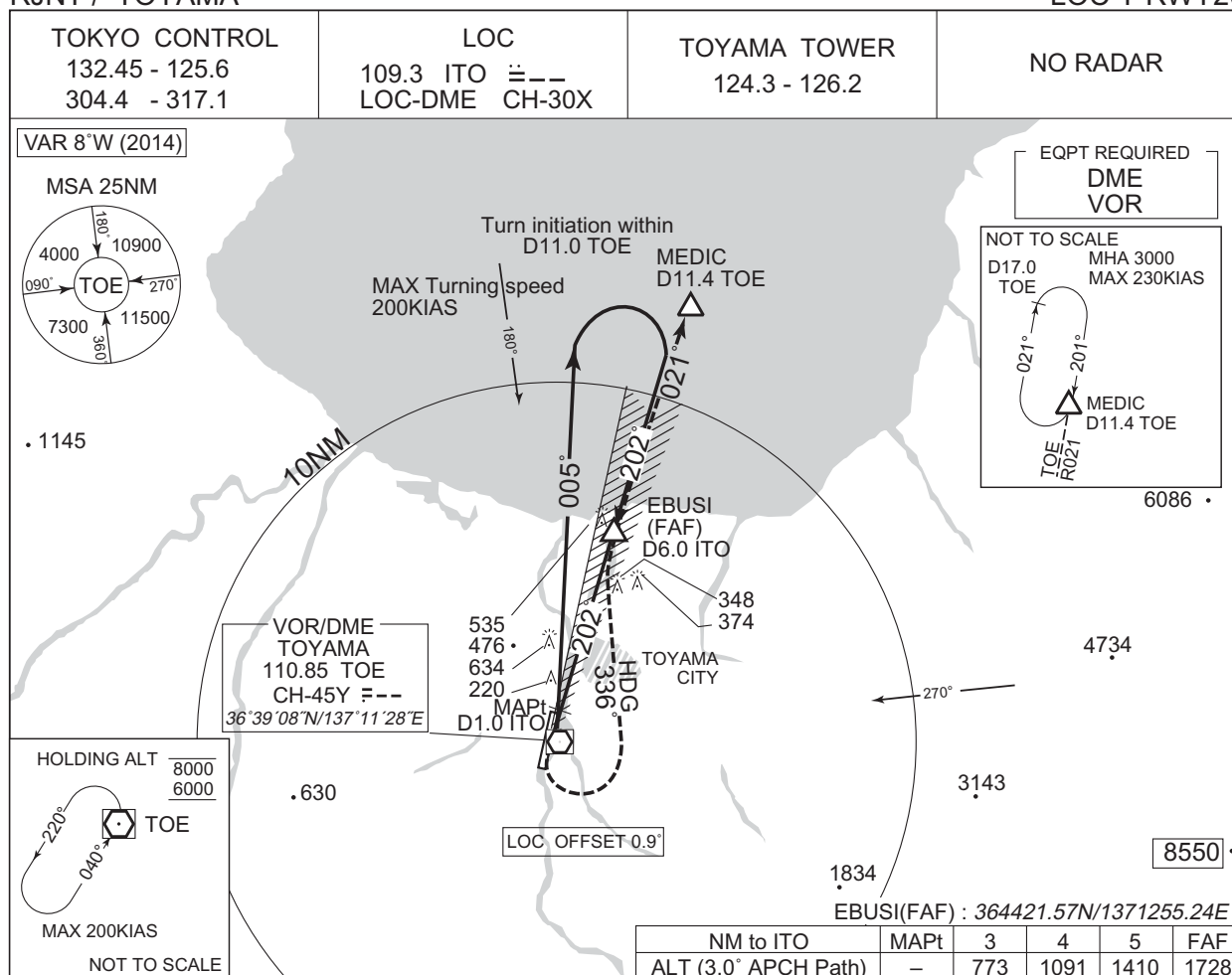
INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

RJNT / TOYAMA

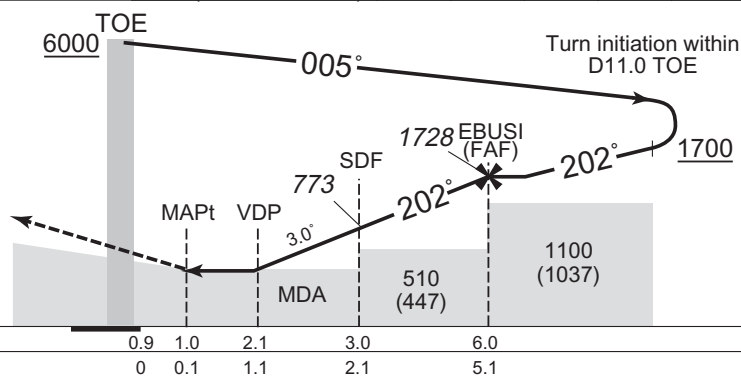
LOC Y RWY20



## MISSED APPROACH

Turn left HDG336° to intercept and proceed via TOE R021 to MEDIC and hold at 3000FT. Contact TOYAMA TOWER.

No turn before MAPt.  
Timing not authorized for defining the MAPt.



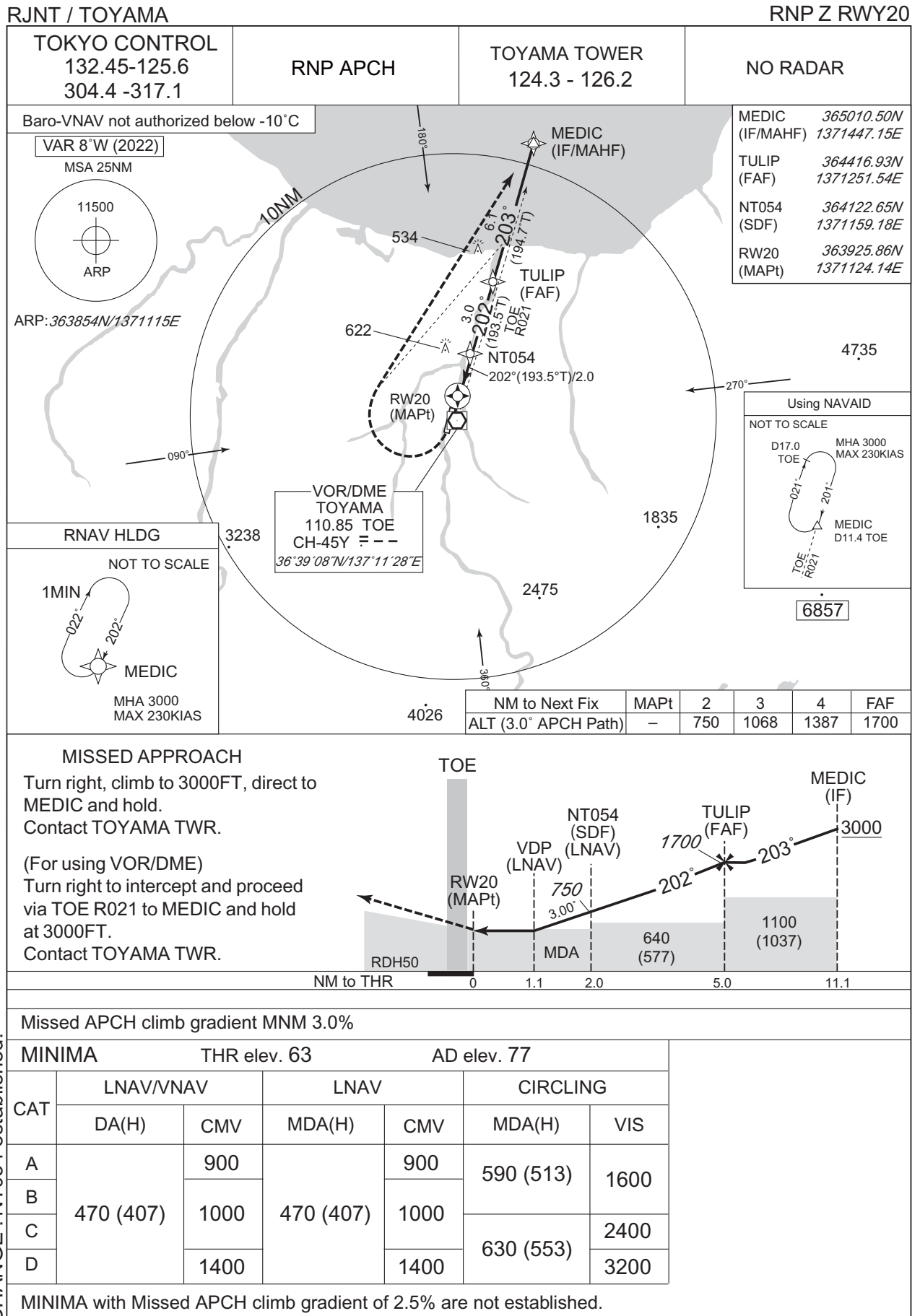
Missed APCH climb gradient MNM 3.0%

| MINIMA |           | THR elev. 63 | AD elev. 77 |      |
|--------|-----------|--------------|-------------|------|
| CAT    |           |              | CIRCLING    |      |
|        | MDA(H)    | CMV          | MDA(H)      | VIS  |
| A      | 470 (407) | 900          | 590 (513)   | 1600 |
| B      |           | 1000         |             |      |
| C      |           |              | 630 (553)   | 2400 |
| D      |           |              |             |      |

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

CHANGE : Description of HLDG pattern.

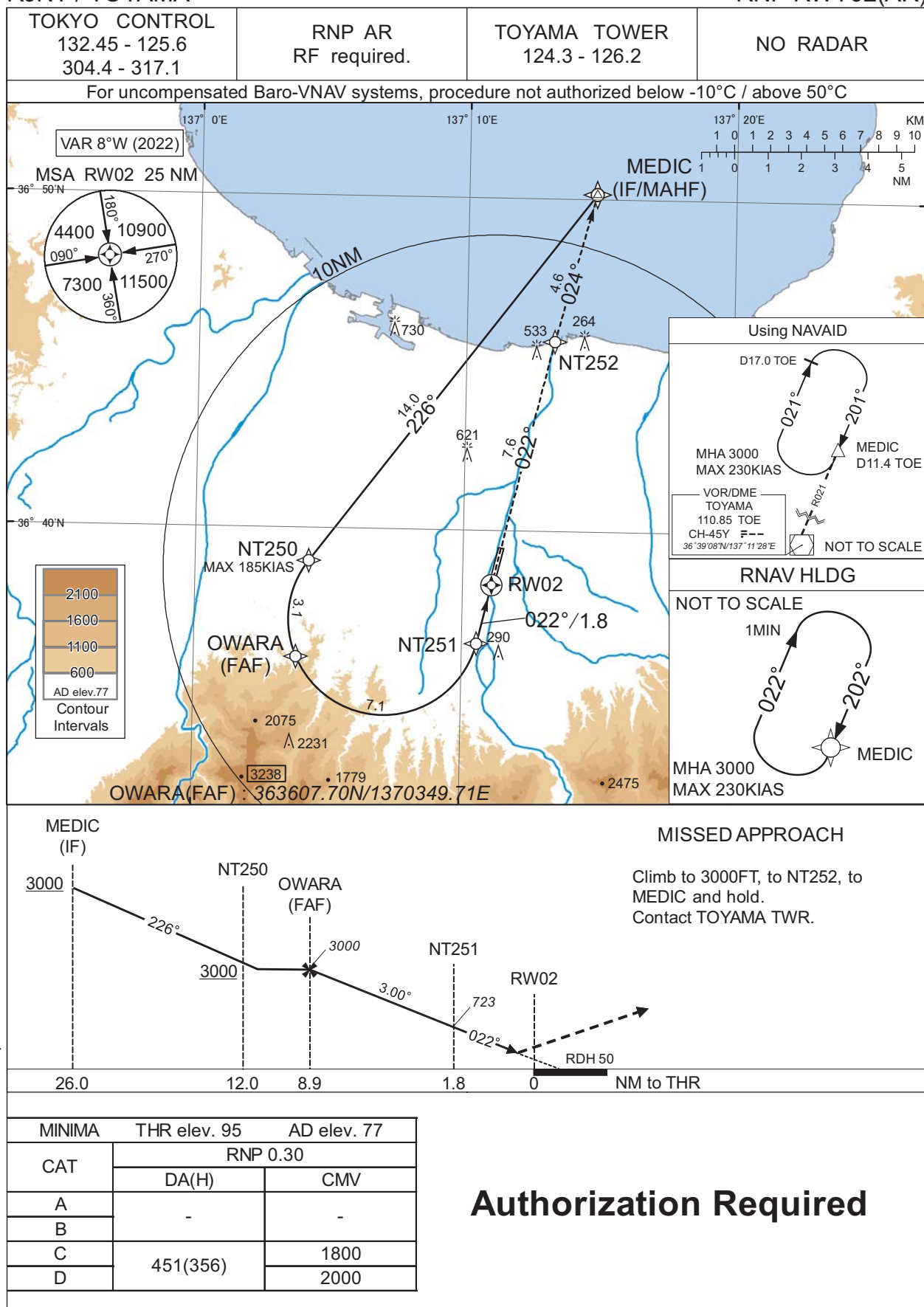
INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP RWY02(AR)



CHANGE : PROC renamed. Requirement for RNP.

## INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP RWY02(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                                 | MEDIC               | -        | -              | -8.5               | -             | -              | +3000         | -            | -               | -         |
| 002           | TF                                 | NT250               | -        | 226<br>(217.2) | -8.5               | 14.0          | -              | +3000         | -185         | -               | 1.0       |
| 003           | RF<br>Center:<br>NTRF1<br>r=2.87NM | OWARA               | -        | -              | -8.5               | 3.1           | L              | 3000          | -            | -               | 1.0       |
| 004           | RF<br>Center:<br>NTRF1<br>r=2.87NM | NT251               | -        | -              | -8.5               | 7.1           | L              | 723           | -            | -3.00           | 0.3       |
| 005           | TF                                 | RW02                | Y        | 022<br>(013.5) | -8.5               | 1.8           | -              | 145           | -            | -3.00/50        | 0.3       |
| 006           | TF                                 | NT252               | -        | 022<br>(013.5) | -8.5               | 7.6           | -              | -             | -            | -               | 1.0       |
| 007           | TF                                 | MEDIC               | -        | 024<br>(015.0) | -8.5               | 4.6           | -              | 3000          | -            | -               | 1.0       |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS)     | RNP Value |
|------|---------------------|-----------------------|--------------------|---------------------|----------------|-----------------------|-----------------------|------------------|-----------|
| Hold | MEDIC               | 202<br>(193.6)        | -8.5               | 1.0 (-14000)        | R              | 3000                  | FL140                 | -230<br>(-14000) | 1.0       |

Waypoint Coordinates

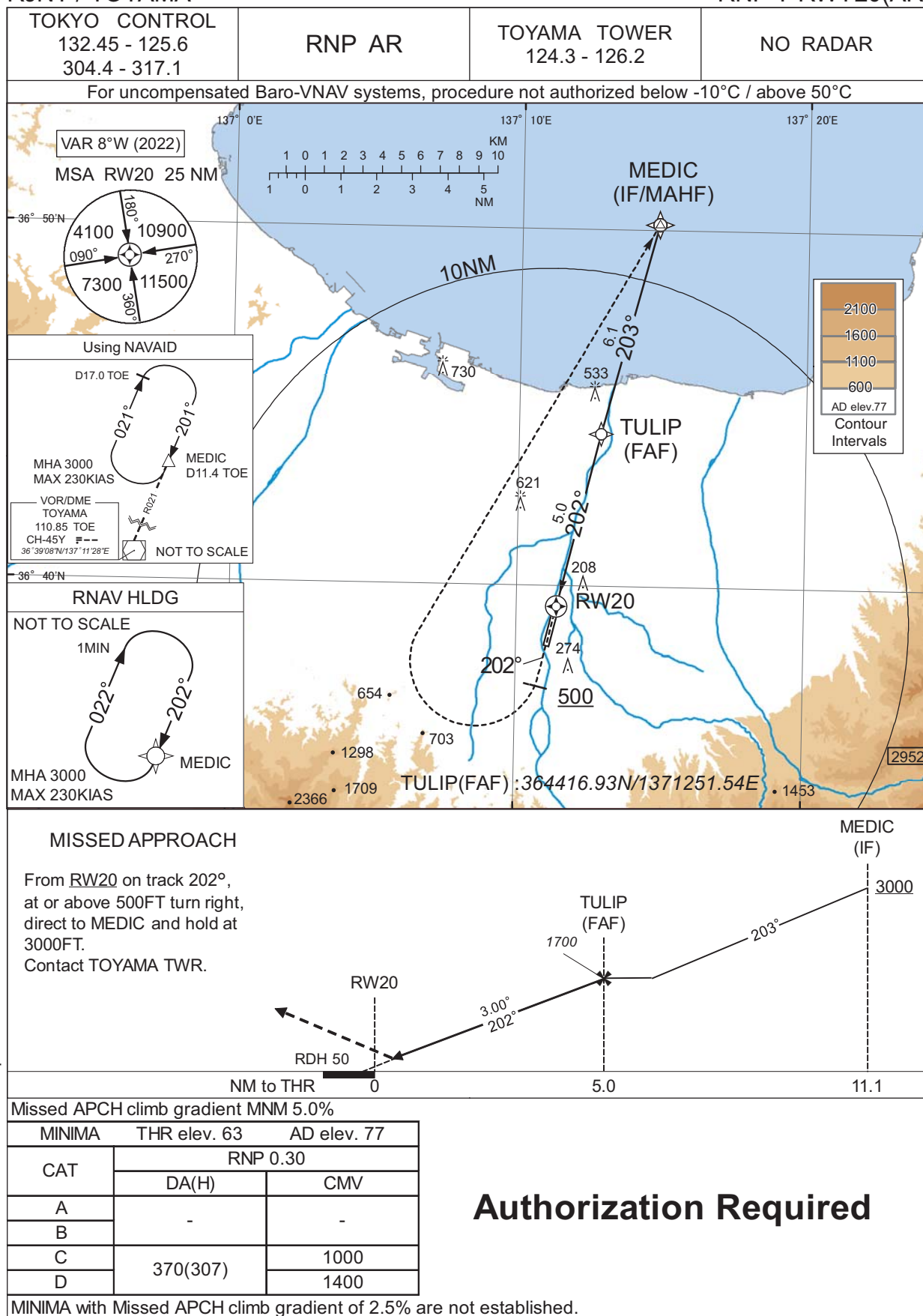
| Waypoint Identifier | Coordinates              | RF Arc Center Identifier | Coordinates              |
|---------------------|--------------------------|--------------------------|--------------------------|
| MEDIC               | 365010.50N / 1371447.15E | NTRF1                    | 363717.08N / 1370705.51E |
| NT250               | 363901.33N / 1370415.09E |                          |                          |
| OWARA               | 363607.70N / 1370349.71E |                          |                          |
| NT251               | 363636.65N / 1371033.43E |                          |                          |
| RW02                | 363822.79N / 1371105.23E |                          |                          |
| NT252               | 364543.55N / 1371317.58E |                          |                          |

CHANGE : PROC renamed.

## INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP Y RWY20(AR)



CHANGE PROC renamed. Requirement for RNP.

Authorization Required

## INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP Y RWY20(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              | MEDIC               | -        | -             | -8.5               | -             | -              | +3000         | -            | -               | -         |
| 002           | TF              | TULIP               | -        | 203 (194.7)   | -8.5               | 6.1           | -              | 1700          | -            | -               | 1.0       |
| 003           | TF              | RW20                | Y        | 202 (193.5)   | -8.5               | 5.0           | -              | 113           | -            | -3.00/50        | 0.3       |
| 004           | FA              | -                   | -        | 202 (193.5)   | -8.5               | -             | -              | +500          | -            | -               | 1.0       |
| 005           | DF              | MEDIC               | -        | -             | -8.5               | -             | R              | 3000          | -            | -               | 1.0       |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS)  | RNP Value |
|------|---------------------|-----------------------|--------------------|---------------------|----------------|-----------------------|-----------------------|---------------|-----------|
| Hold | MEDIC               | 202 (193.6)           | -8.5               | 1.0 (-14000)        | R              | 3000                  | FL140                 | -230 (-14000) | 1.0       |

Waypoint Coordinates

| Waypoint Identifier | Coordinates              |
|---------------------|--------------------------|
| MEDIC               | 365010.50N / 1371447.15E |
| TULIP               | 364416.93N / 1371251.54E |
| RW20                | 363925.86N / 1371124.14E |

CHANGE : PROC renamed.



## INSTRUMENT APPROACH CHART

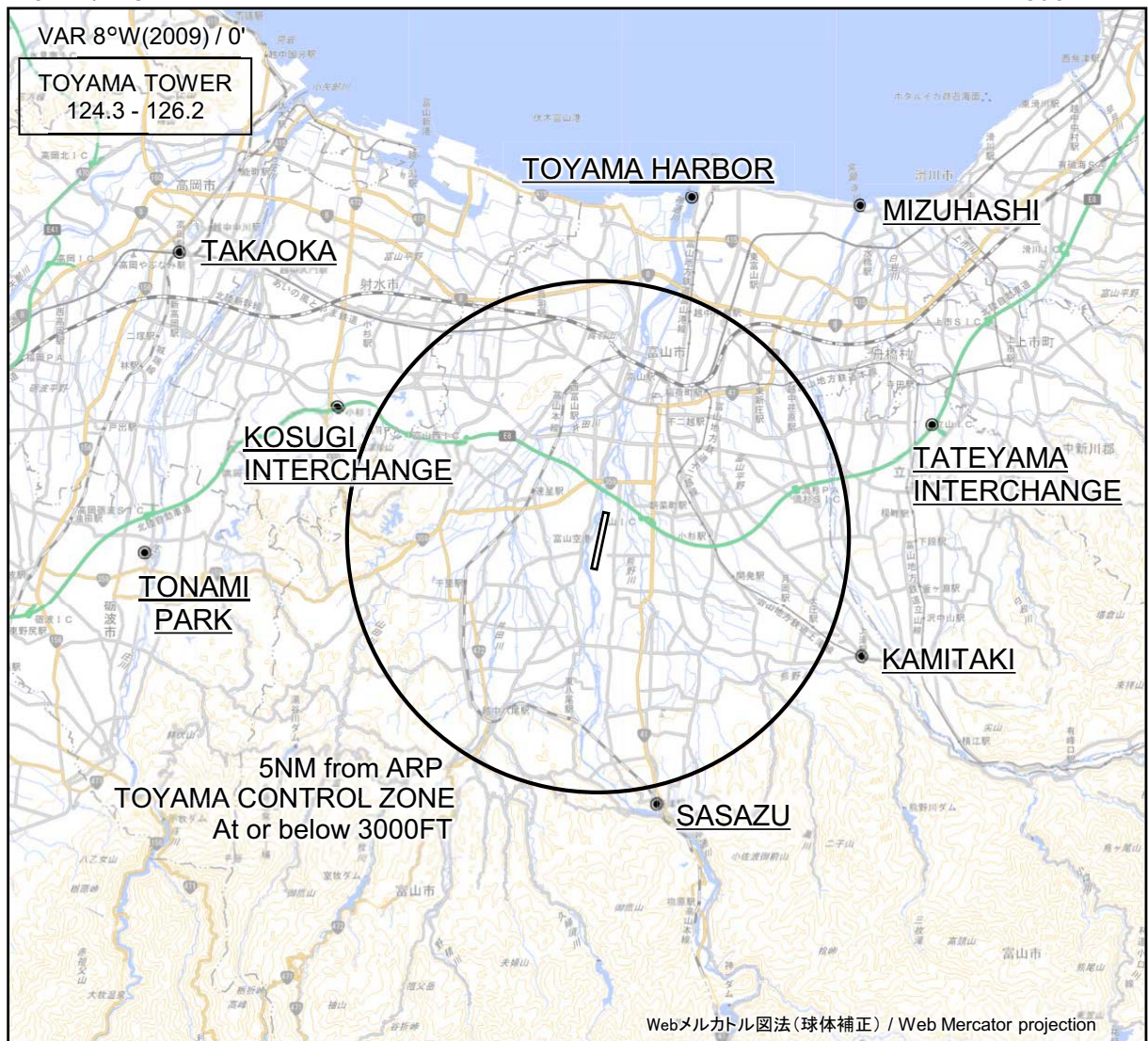
RJNT / TOYAMA

VOR A



RJNT / TOYAMA

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).

| Call sign                          | BRG / DIST from ARP | Remarks                       |
|------------------------------------|---------------------|-------------------------------|
| 富山ハーバー<br>Toyama harbor            | 016°T / 6.9NM       | 港<br>Harbor                   |
| 水橋<br>Mizuhashi                    | 039°T / 8.3NM       | (常願寺川)河口<br>River-mouth       |
| 高岡<br>Takaoka                      | 304°T / 10.0NM      | JR駅<br>JR Station             |
| 小杉インターチェンジ<br>Kosugi Interchange   | 296°T / 5.8NM       | 北陸自動車道インターチェンジ<br>Interchange |
| 立山インターチェンジ<br>Tateyama Interchange | 072°T / 7.0NM       | 北陸自動車道インターチェンジ<br>Interchange |
| 砺波パーク<br>Tonami Park               | 268°T / 9.0NM       | 砺波総合運動公園<br>Park              |
| 上滝<br>Kamitaki                     | 114°T / 5.7NM       | 駅<br>Station                  |
| 笹津<br>Sasazu                       | 167°T / 5.3NM       | JR駅<br>JR Station             |

CHANGE : Map updated. BRG/DIST from ARP.

| LDG CHART     |          |          |                                  |              |
|---------------|----------|----------|----------------------------------|--------------|
| OBSTRCTION NR | AGL (FT) | MSL (FT) | AERONAUTICAL OBSTRUCTIONS LIGHTS | DAY MARKINGS |
| 1             | 185      | 220      | ○                                | ○            |
| 2             | 176      | 213      | ○                                | ○            |
| 3             | 45       | 97       | ○                                | ○            |
| 4             | 187      | 256      | ○                                | ○            |
| 5             | 159      | 233      | ○                                | ○            |
| 6             | 178      | 246      | ○                                | ○            |
| 7             | 173      | 249      | —                                | ○            |
| 8             | 192      | 262      | —                                | ○            |
| 9             | 189      | 259      | ○                                | ○            |
| 10            | 189      | 263      | —                                | ○            |
| 11            | 189      | 282      | —                                | ○            |
| 12            | 189      | 299      | ○                                | ○            |
| 13            | 120      | 212      | —                                | ○            |
| 14            | 135      | 261      | ○                                | ○            |
| 15            | 167      | 273      | ○                                | ○            |
| 16            | 125      | 236      | —                                | ○            |
| 17            | 125      | 238      | ○                                | ○            |
| 18            | 110      | 228      | —                                | ○            |
| 19            | 125      | 249      | ○                                | ○            |
| 20            | 120      | 231      | ○                                | ○            |
| 21            | 103      | 222      | ○                                | ○            |
| 22            | 132      | 270      | —                                | ○            |
| 23            | 132      | 279      | —                                | ○            |
| 24            | 135      | 286      | —                                | —            |
| 25            | 51       | 223      | —                                | —            |
| 26            | 71       | 243      | —                                | —            |
| 27            | 135      | 283      | —                                | —            |
| 28            | 120      | 266      | —                                | —            |
| 29            | 47       | 149      | ○                                | ○            |



RJNT / TOYAMA

Minimum Vectoring Altitude CHART

