

TOYAMA AP



STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA

SID and TRANSITION

IKUJI FIVE DEPARTURE

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

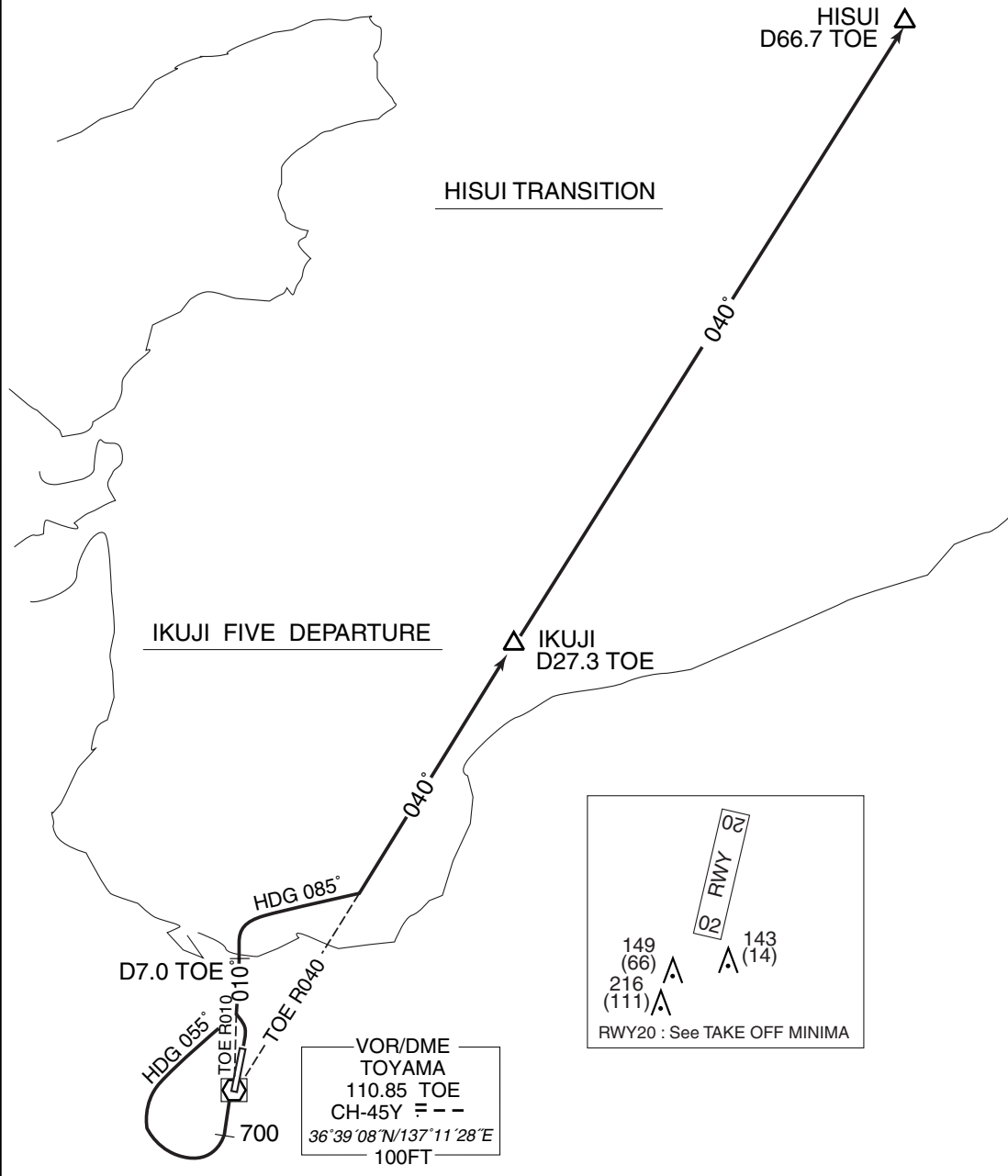
RWY20 : Climb RWY HDG until 700FT, turn right HDG 055° to intercept
and proceed via TOE R010 to TOE 7.0DME...
...turn right HDG 085° to intercept and proceed via
TOE R040 to IKUJI.

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

RJNT / TOYAMA

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.

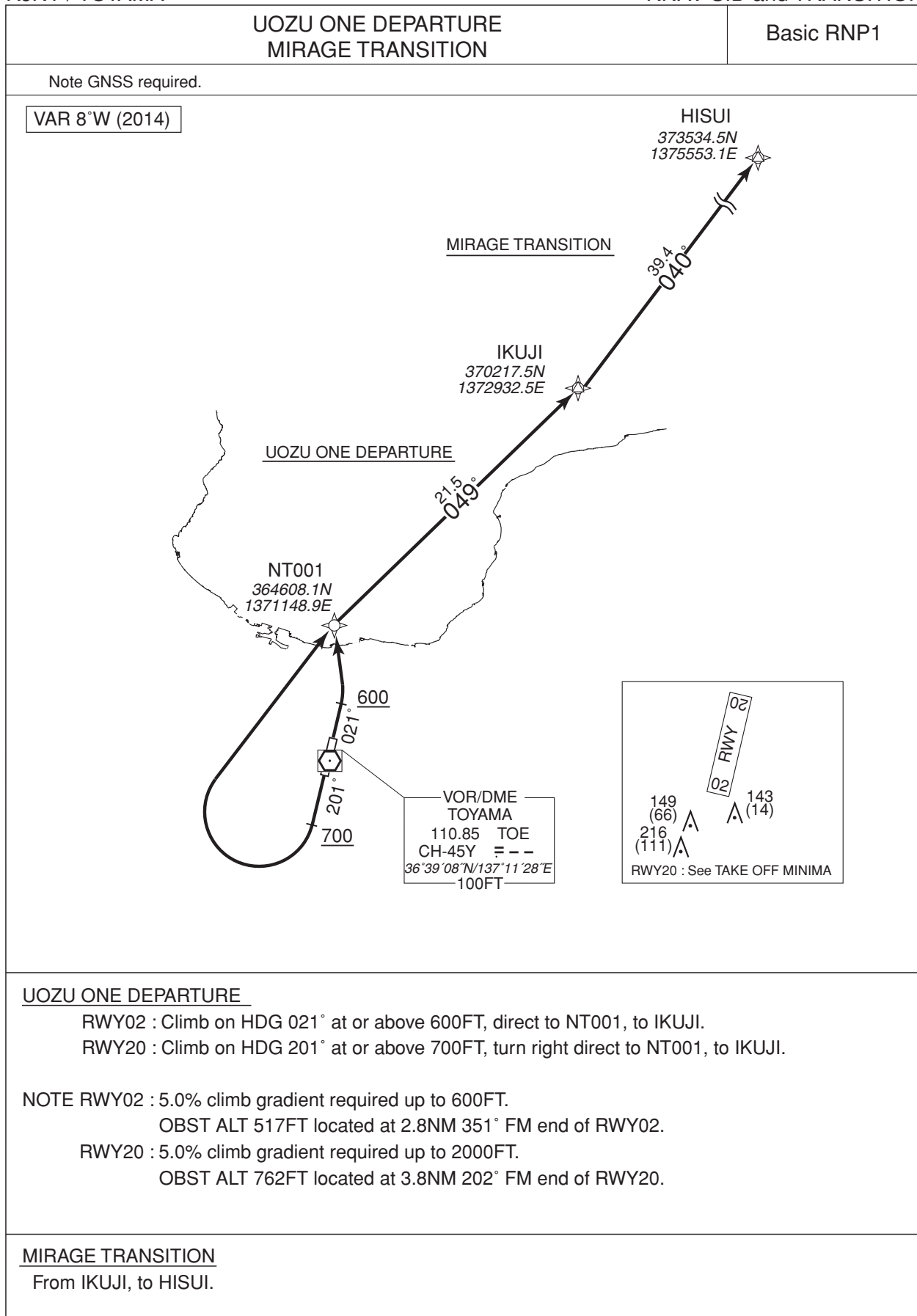
URUSI REVERSAL FOUR DEPARTURE

CHANGE : Minor change

STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA

RNAV SID and TRANSITION



STANDARD DEPARTURE CHART -INSTRUMENT

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RNAV SID and TRANSITION

UOZU ONE 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 | — | — | 021 (013.5) | -7.8 | — | — | +600 | — | — | Basic RNP1 |
| 002 | DF | NT001 | — | — | -7.8 | — | — | — | — | — | Basic RNP1 |
| 003 | TF | IKUJI | — | 049 (041.2) | -7.8 | 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 | — | — | 201 (193.5) | -7.8 | — | — | +700 | — | — | Basic RNP1 |
| 002 | DF | NT001 | — | — | -7.8 | — | R | — | — | — | Basic RNP1 |
| 003 | TF | IKUJI | — | 049 (041.2) | -7.8 | 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 | — | — | -7.8 | — | — | — | — | — | Basic RNP1 |
| 002 | TF | HISUI | — | 040 (032.1) | -7.8 | 39.4 | — | — | — | — | Basic RNP1 |

STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA

STAR

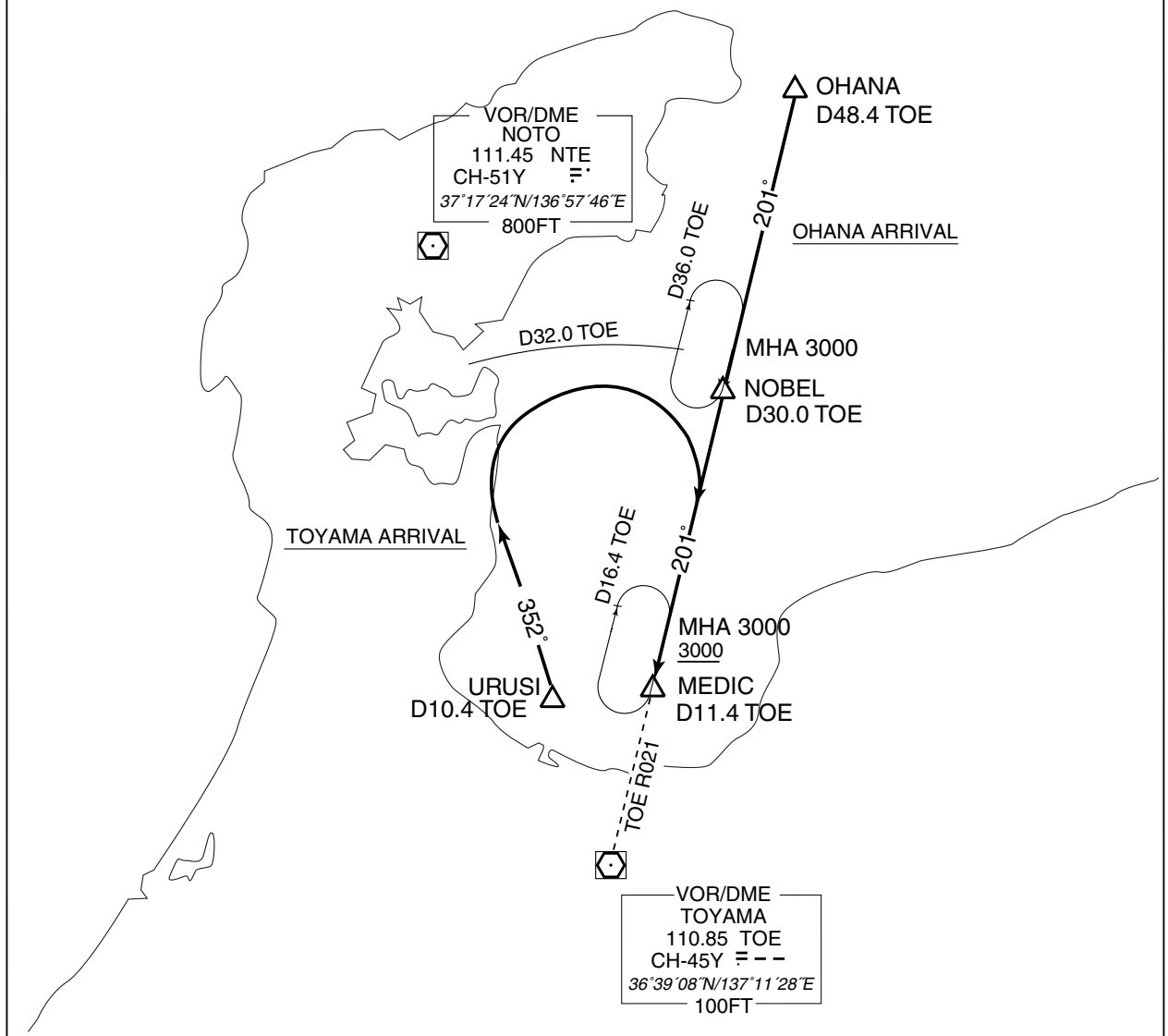
OHANA ARRIVAL

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 (2014)



NANAO ARRIVAL

NANAO ARRIVAL

From URUSI, to NANAQ, 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 | — | — | -7.8 | — | — | — | — | — | Basic RNP1 |
| 002 | TF | NANAQ | — | 352 (344.1) | -7.8 | 14.6 | — | — | -250 | — | Basic RNP1 |
| 003 | TF | NT050 | — | 052 (043.8) | -7.8 | 5.0 | — | — | — | — | Basic RNP1 |
| 004 | TF | NT051 | — | 099 (091.3) | -7.8 | 6.1 | — | — | — | — | Basic RNP1 |
| 005 | TF | NT052 | — | 142 (134.2) | -7.8 | 4.7 | — | — | — | — | Basic RNP1 |
| 006 | TF | MEDIC | — | 202 (194.2) | -7.8 | 13.6 | — | +3000 | — | — | Basic RNP1 |

STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA

RNAV STAR

MANYO ARRIVAL

Basic RNP1

Note GNSS required.

VAR 8°W (2014)

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 | — | — | -7.8 | — | — | — | — | — | Basic RNP1 |
| 002 | TF | MANYO | — | 061 (053.5) | -7.8 | 14.3 | — | +8000 | — | — | Basic RNP1 |
| 003 | TF | NT053 | — | 045 (037.0) | -7.8 | 11.7 | — | — | — | — | Basic RNP1 |
| 004 | TF | MEDIC | — | 135 (127.4) | -7.8 | 6.5 | — | +3000 | — | — | Basic RNP1 |

STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA

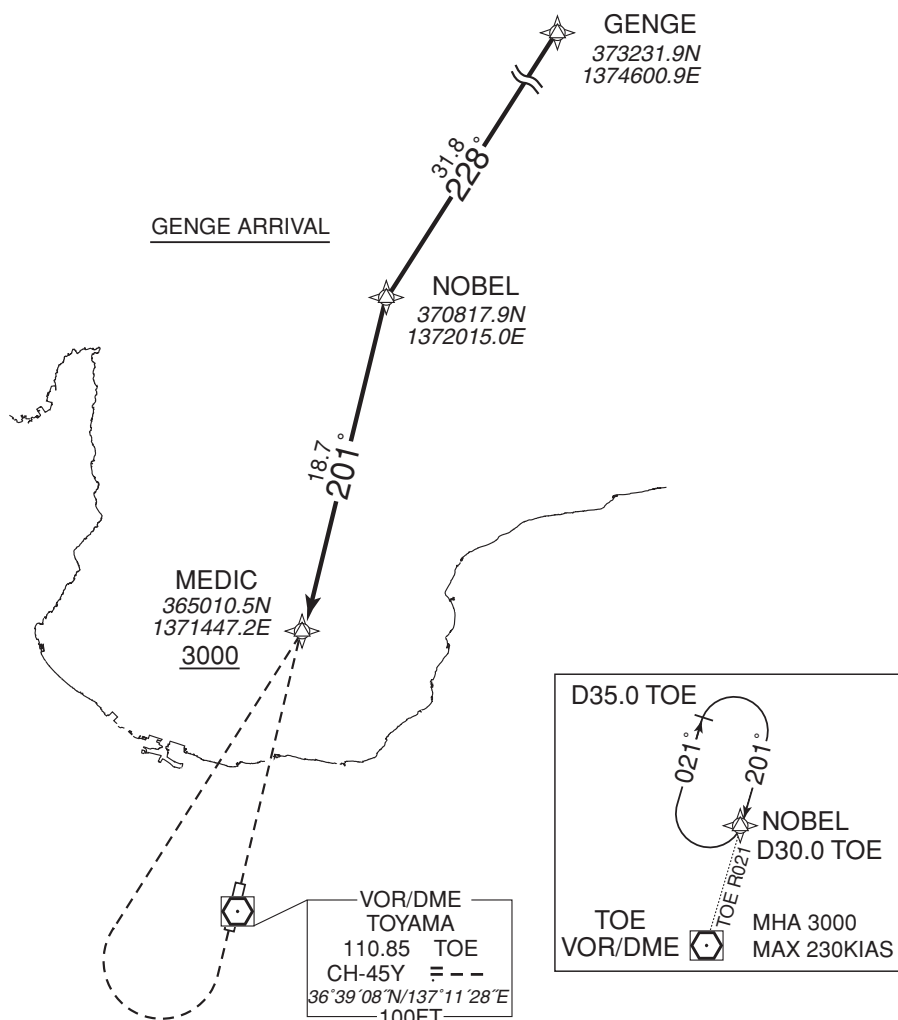
RNAV STAR

GENGE ARRIVAL

Basic RNP1

Note GNSS required.

VAR 8°W (2014)



GENGE ARRIVAL

From GENG, to NOBEL, 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 | GENGE | — | — | -7.8 | — | — | — | — | — | Basic RNP1 |
| 002 | TF | NOBEL | — | 228 (220.3) | -7.8 | 31.8 | — | — | — | — | Basic RNP1 |
| 003 | TF | MEDIC | — | 201 (193.6) | -7.8 | 18.7 | — | +3000 | — | — | Basic RNP1 |

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

LOC Z 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%

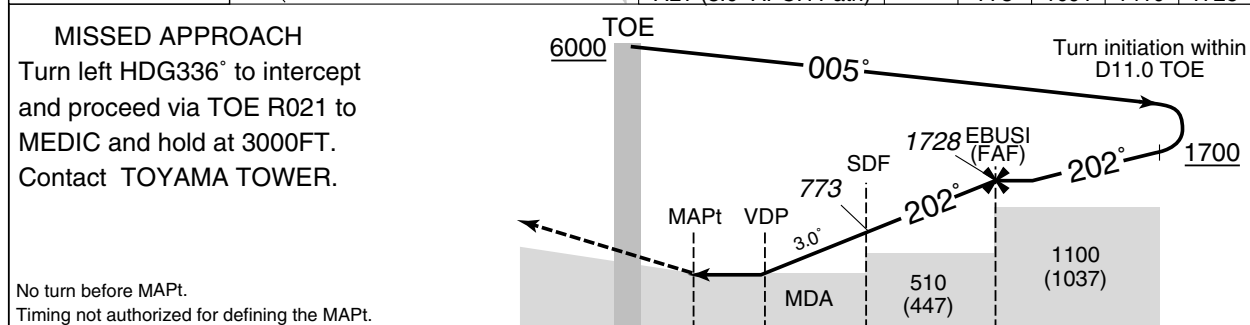
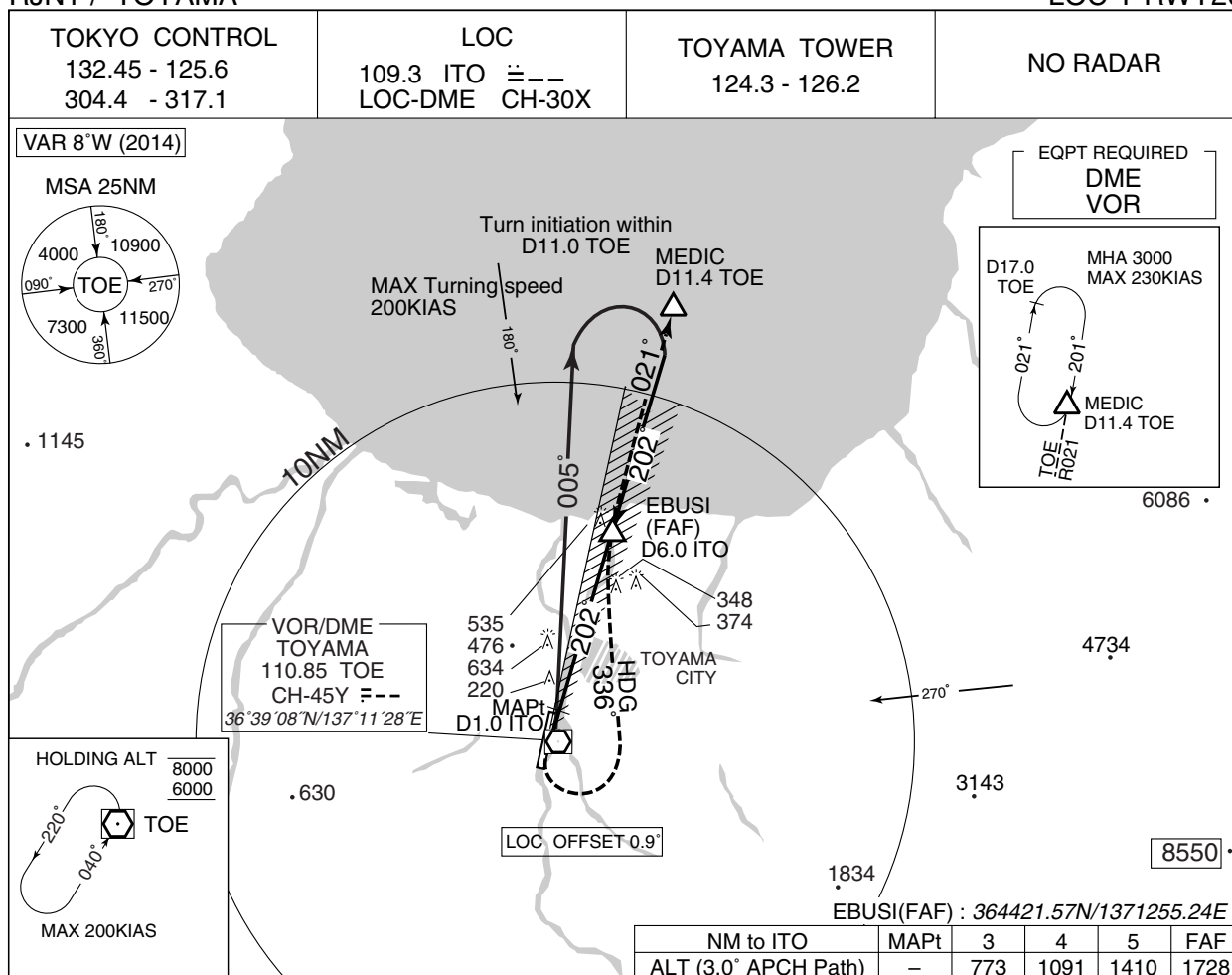
| MINIMA | | THR elev. 63 | AD elev. 77 | |
|--------|-----------|--------------|-------------|------|
| CAT | | | CIRCLING | |
| | MDA(H) | CMV | MDA(H) | VIS |
| A | 470 (407) | 900 | 590 (513) | 1600 |
| B | | 1000 | | |
| C | | | 630 (553) | 2400 |
| D | | | | |

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

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

LOC Y RWY20



| | | | | | |
|------------|-----|-----|-----|-----|-----|
| DME to ITO | 0.9 | 1.0 | 2.1 | 3.0 | 6.0 |
| NM to THR | 0 | 0.1 | 1.1 | 2.1 | 5.1 |

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 | | | | 1400 |

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

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNAV(GNSS) Z RWY20



INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNAV(RNP) RWY02



INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNAV(RNP) RWY02

RNAV(RNP) RWY02Coding 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 | — | — | -7.8 | — | — | +3000 | — | — | — |
| 002 | TF | NT250 | — | 225 (217.2) | -7.8 | 14.0 | — | +3000 | -185 | — | 1.0 |
| 003 | RF Center: NTRF1 r=2.87NM | OWARA | — | — | -7.8 | 3.1 | L | 3000 | — | — | 1.0 |
| 004 | RF Center: NTRF1 r=2.87NM | NT251 | — | — | -7.8 | 7.1 | L | 723 | — | -3.00 | 0.3 |
| 005 | TF | RW02 | Y | 021 (013.5) | -7.8 | 1.8 | — | 145 | — | -3.00/50 | 0.3 |
| 006 | TF | NT252 | — | 021 (013.5) | -7.8 | 7.6 | — | — | — | — | 1.0 |
| 007 | TF | MEDIC | — | 023 (015.0) | -7.8 | 4.6 | — | 3000 | — | — | 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 | | |

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNAV(RNP) Y RWY20

TOKYO CONTROL
132.45-125.6
304.4 -317.1

GNSS required

TOYAMA TOWER
124.3-126.2

NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -10°C/ above 50°C

VAR 8°W (2014)

MSA RW20 25NM



MISSED APPROACH

From RW20 on track 201°, at
or above 500FT turn right,
direct to MEDIC and hold at
3000FT.
Contact TOYAMA TWR.



NM to THR

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 63 AD elev. 77

| CAT | RNP 0.30 | |
|-----|-----------|------|
| | DA(H) | CMV |
| A | — | — |
| B | — | — |
| C | 370 (307) | 1000 |
| D | — | 1400 |

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

RNP AR

Special Authorization Required

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNAV(RNP) Y RWY20

RNAV(RNP) Y RWY20Coding 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 | — | — | -7.8 | — | — | +3000 | — | — | — |
| 002 | TF | TULIP | — | 202 (194.7) | -7.8 | 6.1 | — | 1700 | — | — | 1.0 |
| 003 | TF | RW20 | Y | 201 (193.5) | -7.8 | 5.0 | — | 113 | — | -3.00/50 | 0.3 |
| 004 | FA | — | — | 201 (193.5) | -7.8 | — | — | +500 | — | — | 1.0 |
| 005 | DF | MEDIC | — | — | -7.8 | — | R | 3000 | — | — | 1.0 |

Waypoint Coordinates

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

INSTRUMENT APPROACH CHART

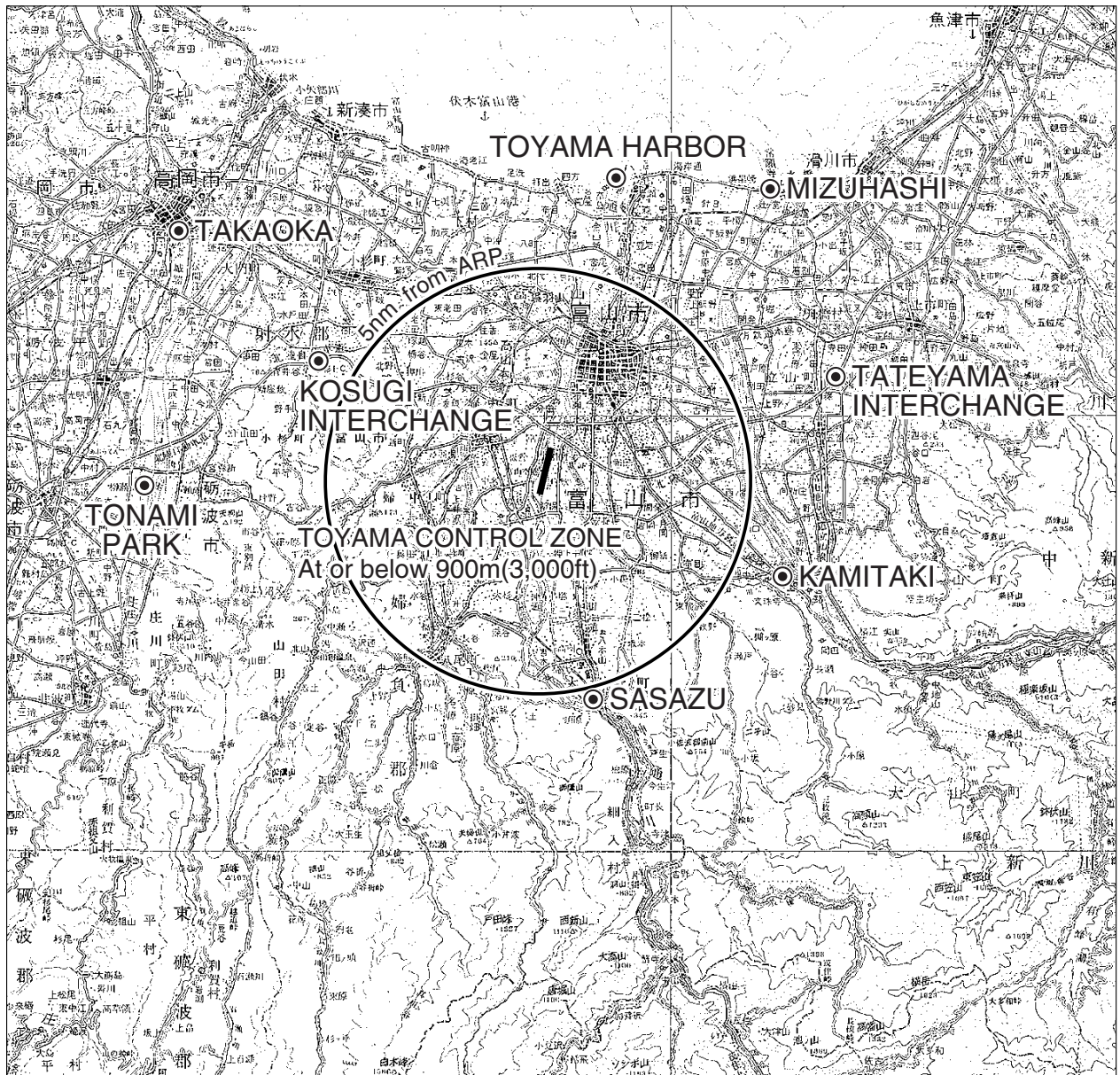
RJNT / TOYAMA

VOR A



RJNT / TOYAMA

Visual REP



| Call sign | BRG / DIST from ARP | Remarks |
|------------------------------------|---------------------|-------------------------------|
| 富山ハーバー Toyama harbor | 022°/7.1NM | 港 Harbor |
| 高岡 Takaoka | 312°/10.0NM | JR駅 JR Station |
| 小杉インターチェンジ Kosugi Interchange | 304°/5.7NM | 北陸自動車道インターチェンジ Interchange |
| 立山インターチェンジ Tateyama Interchange | 080°/7.0NM | 北陸自動車道インターチェンジ Interchange |
| 水橋 Mizuhashi | 046°/8.6NM | (常願寺川) 河口 River-mouth |
| 上滝 Kamitaki | 121°/5.7NM | 駅 Station |
| 笹津 Sasazu | 175°/5.3NM | JR駅 JR Station |
| 砺波パーク Tonami Park | 275°/9.0NM | 砺波総合運動公園 Park |

| 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

