

AD 2 AERODROMES

RJNT AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJNT - TOYAMA

RJNT AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| | | |
|---|--|--|
| 1 | ARP coordinates and site at AD | 363854N/1371115E 201°/1.0km FM RWY 20 THR |
| 2 | Direction and distance from (city) | 3NM SSW FM Toyama city |
| 3 | Elevation/ Reference temperature | 77ft / 32°C(2003-2007) |
| 4 | Geoid undulation at AD ELEV PSN | 127ft |
| 5 | MAG VAR/ Annual change | 8° W(2009) / 0' |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Toyama pref. Public AP. Toyama Airport Administration Office 30, Akigashima, Toyama city, Toyama Pref. 939-8252 Japan Tel: 076-495-3055 Fax: 076-495-3064 |
| 7 | Types of traffic permitted(IFR/ VFR) | IFR/VFR |
| 8 | Remarks | Toyama Airport Office(CAB) 35 Akigashima, Toyama city, Toyama Pref. 939-8252 Japan Tel: 076-495-3188 Fax: 076-429-6762 |

RJNT AD 2.3 OPERATIONAL HOURS

| | | |
|----|---------------------------|---|
| 1 | AD Administration | 2200 - 1230 |
| 2 | Customs and immigration | Customs: 2330-0815 Immigration: 0020-1000 |
| 3 | Health and sanitation | Quarantine(human): 2330-0815 Quarantine(animal, plant): INTL SKED FLT hours only |
| 4 | AIS Briefing Office | Nil |
| 5 | ATS Reporting Office(ARO) | Nil |
| 6 | MET Briefing Office | H24 (TOKYO) |
| 7 | ATS | 2200 - 1230 |
| 8 | Fuelling | 2100 - 1230 |
| 9 | Handling | 2100 - 1230 |
| 10 | Security | 2100 - 1230 |
| 11 | De-icing | |
| 12 | Remarks | Nil |

RJNT AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|-----------------------------------|
| 1 | Cargo-handling facilities | AVBL up to B777-200 ACFT |
| 2 | Fuel/ oil types | Fuel: JET A1, Oil: Turbine grades |
| 3 | Fuelling facilities/ capacity | Fuel truck : 28 liter/sec |
| 4 | De-icing facilities | Nil |
| 5 | Hangar space for visiting aircraft | Nil |
| 6 | Repair facilities for visiting aircraft | Nil |
| 7 | Remarks | Nil |

RJNT AD 2.5 PASSENGER FACILITIES

| | | |
|---|----------------------|--|
| 1 | Hotels | Nil |
| 2 | Restaurants | At airport |
| 3 | Transportation | Buses and Taxi |
| 4 | Medical facilities | First aid treatment: hospital in Toyama city 5km |
| 5 | Bank and Post Office | Nil |
| 6 | Tourist Office | At airport |
| 7 | Remarks | Nil |

RJNT AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

| | | |
|---|---|---|
| 1 | AD category for fire fighting | CAT 9 |
| 2 | Rescue equipment | Chemical fire fighting truck x 3, Emergency medical equipments conveyance truck |
| 3 | Capability for removal of disabled aircraft | Ask AD administration |
| 4 | Remarks | Nil |

RJNT AD 2.7 SEASONAL AVAILABILITY-CLEARING

| | | |
|---|-----------------------------|---|
| 1 | Types of clearing equipment | Snow removal equipments: Snow sweeper x 2, Snow plow x 6, Rotary snow remover x 3 |
| 2 | Clearance priorities | RWY 02/20 TWY T1,T2 APRON |
| 3 | Remarks | Seasonal availability: All seasons Snow removal will be commenced, if the RWY and TWY are covered with a depth of 3cm snow or more. TWY/APN to measure the coefficient of friction: TWY T1, T2, A-APRON |

RJNT AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

| | | |
|---|-------------------------------------|--|
| 1 | Apron surface and strength | A-Apron: 7-1 / Surface:Concrete Strength: PCN 52/R/B/X/T 7-2 / Surface:Concrete Strength: PCN 16/R/B/X/T B-Apron: B-1 / Surface:Asphalt Strength: PCN 14/F/A/X/T B-2 / Surface:Asphalt Strength: AUW 5700kg/0.28Mpa B-3 / Surface:Asphalt Strength: AUW 5700kg/0.28Mpa B-4 / Surface:Asphalt Strength: PCN 40/F/A/X/T |
| 2 | Taxiway width, surface and strength | TWY T1,T2 Width: 30m Surface:Asphalt Strength: PCN 42/F/A/X/T |
| 3 | ACL and elevation | Not available |
| 4 | VOR checkpoints | Not Available |
| 5 | INS checkpoints | Spot NR 1:363834.76N/1371117.92E 2:363836.74N/1371118.52E 3:363838.61N/1371119.08E 5:363840.35N/1371119.53E 6:363842.20N/1371119.92E 7:363845.06N/1371117.44E |
| 6 | Remarks | Nil |

RJNT 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 | Aircraft stand identification signs: Spot 1,2,3,5,6,7 |
| 2 | RWY and TWY markings and LGT | RWY: RWY02/20 (Marking) RWY designation, RWY CL, RWY THR, RWY middle point, Fixed DIST, RWY side stripe, RWY turn pad edge, RWY turn pad CL (LGT) RCLL, REDL, RTHL, RENL, RWY DIST marker, Turning point indicator LGT TWY: (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT, TWY CL LGT, Taxiing guidance sign |
| 3 | Stop bars | Nil |
| 4 | Remarks | (Marking) Overrun area (LGT) APN flood LGT |

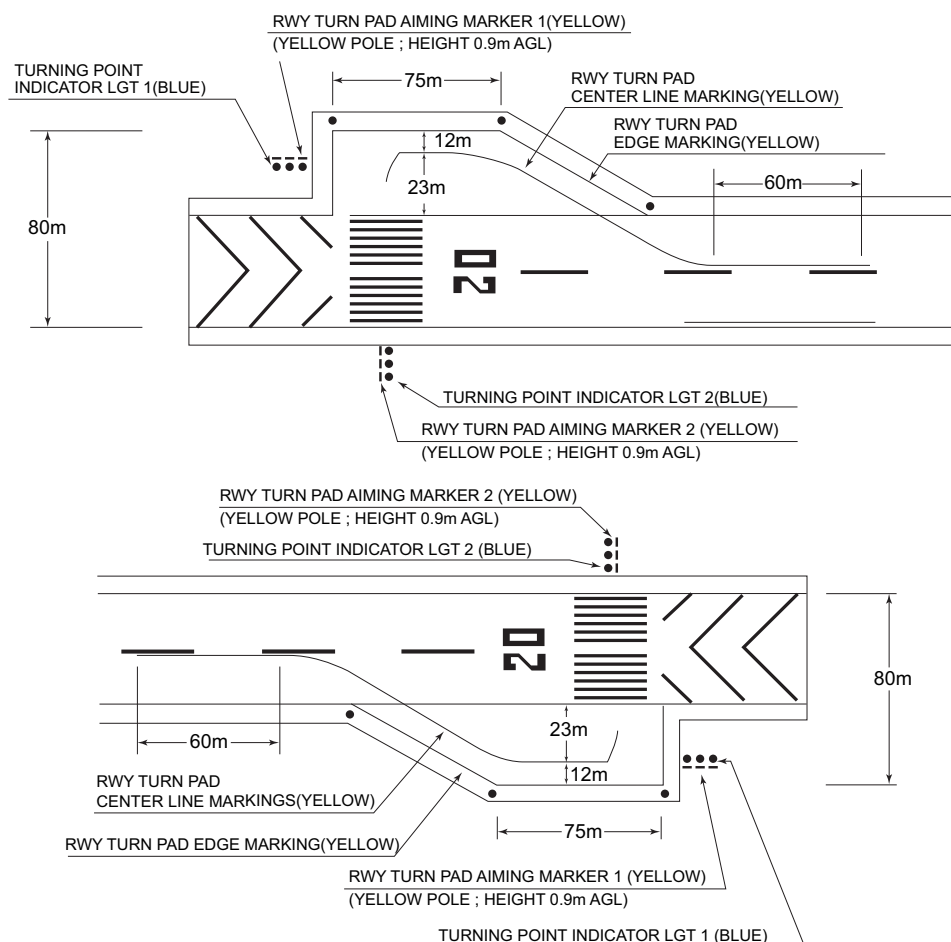
180° Turn on RWY

B777-200型機の滑走路180°転回実施要領

1. 滑走路中心線からターニングパッド中心線標識に従って進行する。
2. 経路目標標識1または転回灯1が一直線に見えるように進行し、経路目標標識2または転回灯2が一直線に見えたとき転回を開始する。転回時のSTEERING ANGLE は59度以上を使用する。

Procedure of 180° turn on RWY of B777-200 aircraft.

1. Proceed along the RWY Center Line to the starting point of the RWY Turn Pad Center Line Marking ; then
2. Proceed along the RWY Turn Pad Center Line Marking to see the RWY Turn Pad Aiming Marker 1 or Turning Point Indicator Light 1 on a straight line, then commence turn at the spot where you (pilot) can see the RWY Turn Pad Aiming Marker 2 or Turning point Indicator Light 2 on a straight line at an angle of 9 o'clock. When turning, take 59° or more steering angle.



RJNT AD 2.10 AERODROME OBSTACLES

See AD2.24 LDG Chart

In approach/TKOF areas

| RWY/Area affected | Obstacle type | Coordinates | Elevation | Markings/LGT | Remarks |
|-------------------|---------------|------------------|-----------|--------------|------------|
| RWY 02 | Pylon | 363702N/1371050E | 270ft | Marking/ - | OBST NR 22 |
| RWY 02 | Pylon | 363701N/1371037E | 279ft | Marking/ - | OBST NR 23 |
| RWY 02 | Factory | 363753N/1371059E | 149ft | - /LIL | OBST NR 29 |
| RWY 20 | Pylon | 364046N/1371131E | 220ft | Marking/LIL | OBST NR 1 |
| RWY 20 | Pylon | 364036N/1371152E | 213ft | Marking/LIL | OBST NR 2 |
| RWY 20 | Bridge | 363947N/1371130E | 97ft | Marking/LIL | OBST NR 3 |

In circling area and at AD

| Obstacle type | Coordinates | Elevation | Markings/LGT | Remarks |
|---------------|------------------|-----------|--------------|------------|
| Pylon | 363947N/1371244E | 256ft | Marking/LIL | OBST NR 4 |
| Pylon | 363938N/1371249E | 233ft | Marking/LIL | OBST NR 5 |
| Pylon | 363921N/1371224E | 246ft | Marking/LIL | OBST NR 6 |
| Pylon | 363914N/1371231E | 249ft | - /LIL | OBST NR 7 |
| Pylon | 363908N/1371243E | 262ft | - /LIL | OBST NR 8 |
| Pylon | 363901N/1371249E | 259ft | Marking/LIL | OBST NR 9 |
| Pylon | 363854N/1371255E | 263ft | - /LIL | OBST NR 10 |
| Pylon | 363844N/1371303E | 282ft | - /LIL | OBST NR 11 |
| Pylon | 363835N/1371311E | 299ft | Marking/LIL | OBST NR 12 |
| Pylon | 363805N/1371256E | 212ft | - /LIL | OBST NR 13 |
| Pylon | 363801N/1371247E | 261ft | Marking/LIL | OBST NR 14 |
| Pylon | 363756N/1371236E | 273ft | Marking/LIL | OBST NR 15 |
| Pylon | 363747N/1371219E | 236ft | - /LIL | OBST NR 16 |
| Pylon | 363740N/1371211E | 238ft | Marking/LIL | OBST NR 17 |
| Pylon | 363733N/1371204E | 228ft | - /LIL | OBST NR 18 |
| Pylon | 363719N/1371151E | 249ft | Marking/LIL | OBST NR 19 |
| Pylon | 363743N/1371013E | 231ft | Marking/LIL | OBST NR 20 |
| Pylon | 363729N/1371024E | 222ft | Marking/LIL | OBST NR 21 |

RJNT AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|----|--|---|
| 1 | Associated MET Office | TOKYO |
| 2 | Hours of service MET Office outside hours | H24 (TOKYO) |
| 3 | Office responsible for TAF preparation Periods of validity | TOKYO 30 Hours |
| 4 | Trend forecast Interval of issuance | Nil |
| 5 | Briefing/ consultation provided | Briefing is available upon inquiry at TOKYO |
| 6 | Flight documentation Language(s) used | C En |
| 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} , 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 |
| 10 | Additional information(limitation of service, etc.) | Nil |

RJNT 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 |
| 02 | 013.59° | 2000×45 | PCN 42/F/A/X/T Asphalt-Concrete | 363822.79N 1371105.23E 127ft | THR ELEV: 95ft |
| 20 | 193.59° | 2000×45 | PCN 42/F/A/X/T Asphalt-Concrete | 363925.86N 1371124.14E 127ft | THR ELEV: 63ft |
| Slope of RWY | | Strip Dimensions(M) | RESA(Overrun) Dimensions(M) | | Remarks |
| 7 | | 10 | 11 | | 14 |
| See AD2.24 AD chart | | 2120×150 | 43x(MNM:120 MAX:150)* | | RWY Grooving: 2000×30m |
| See AD2.24 AD chart | | 2120×150 | 43x(MNM:117 MAX:150)* | | RWY Grooving: 2000×30m |
| *For detail, ask airport administrator | | | | | |

RJNT AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 02 | 2000 | 2000 | 2000 | 2000 | Nil |
| 20 | 2000 | 2000 | 2000 | 2000 | Nil |

RJNT 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 |
| 02 | - | Green | PAPI 3.0/LEFT 444.25m 63ft | - | 2000m 30m Coded color (White/Red) LIH | 2000m 60m Coded color (White/Yellow) LIH | Red | Nil (*2) |
| 20 | SALS 405m (*1) | Green | PAPI 3.0/LEFT 360.07m 63ft | - | 2000m 30m Coded color (White/Red) LIH | 2000m 60m Coded color (White/Yellow) LIH | Red | Nil (*2) |
| Remarks | | | | | | | | |
| 10 | | | | | | | | |
| SALS with RAI(LEN:495m)(*1) Overrun area edge LGT(LEN:60m Color:Red)(*2) CGL for RWY 02 RWY THR ID LGT for RWY 02 THR(Color : White) | | | | | | | | |

RJNT AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

| | | |
|---|--|---|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN:363828N/1371122E, White/Green EV4.3sec, HO |
| 2 | LDI location and LGT Anemometer location and LGT | LDI:Nil Anemometer: RWY20 : 190m FM RWY 20 THR, LGTD RWY02 : 240m FM RWY 02 THR, LGTD |
| 3 | TWY edge and center line lighting | TWY edge LGT: Blue TWY CL LGT: Green/Yellow from RWY leaving point, other Green |
| 4 | Secondary power supply/ switch-over time | Within 15 sec: All lights |
| 5 | Remarks | WDI LGT |

RJNT AD 2.16 HELICOPTER LANDING AREA

| |
|-----|
| Nil |
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RJNT 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 |
| TOYAMA CTR | Area within a radius of 5nm(9km) of TOYAMA ARP (3639N/13711E) | 3,000 or below | D | TOYAMA TWR En | |

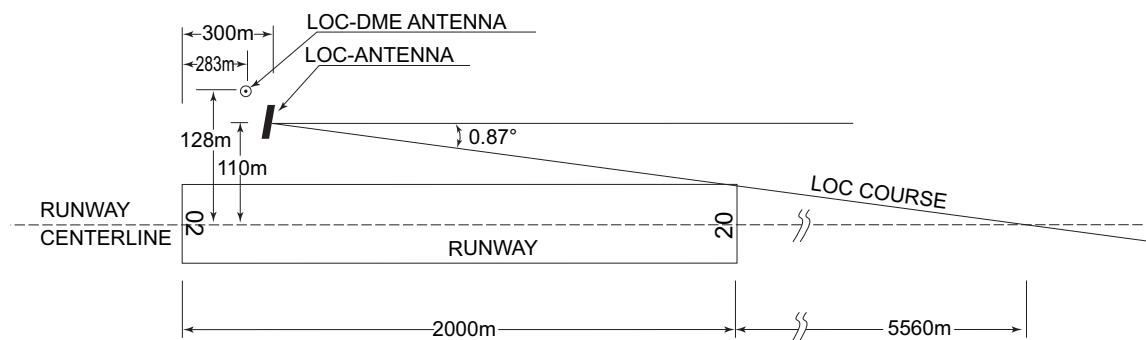
RJNT AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---------------------|--------------|-------------------------|--------------------|------------|
| 1 | 2 | 3 | 4 | 5 |
| TWR | Toyama Tower | 124.3MHz(1) 126.2MHz | 2200 - 1230 | (1)Primary |

RJNT AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aid (VOR declination) | ID | Frequency | Hours of operation | Position of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|-------------------------------------|-----|---------------------|-----------------------|---|--|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| VOR (8°W/2011) | TOE | 110.85MHz | 2200 - 1230 | 363907.88N/ 1371128.00E | - | |
| DME | TOE | 1132MHz (CH-45Y) | 2200 - 1230 | 363907.88N/ 1371128.00E | 116ft | |
| LOC 20 | ITO | 109.3MHz | 2200 - 1230 | 363833.11N/ 1371103.77E | - | LOC : 300m (984ft) inside FM RWY 02 THR, 110m(361ft) W of RCL. BRG (MAG) 201°. Off set angle 0.87°. |
| LOC-DME 20 | ITO | 991MHz (CH-30X) | 2200 - 1230 | 363832.69N/ 1371102.88E | 98ft | DME : 283m(928ft) inside FM RWY 02 THR, 128m(420ft) W of RCL. |
| MSAS | | 1575.42MHz | H24 | | | Transmitting antennas are satellite based |

TOYAMA AIRPORT



REMARKS : 1.LOC OFF SET ANGLE 0.87°
2.LOC beam BRG(MAG) 201°
3.ELEV of LOC-DME 29.8m(98 ft)

RJNT AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

| |
|--|
| Aircraft operations other than scheduled flights or in an emergency on use of this airport, aircraft operator is required to obtain the prior permission of the airport administrator. |
|--|

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 |
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RJNT AD 2.21 NOISE ABATEMENT PROCEDURES

| |
|-----|
| Nil |
|-----|

RJNT AD 2.22 FLIGHT PROCEDURES

1.TAKE OFF MINIMA

| | RWY | REDL & RCLL | | REDL or RCLL or RCL Marking | | NIL (DAY ONLY) | |
|--|-----|-----------------|-----------|--------------------------------|-----------|----------------|-----------|
| | | RVR | CEIL-VIS | RVR | CEIL-VIS | RVR | CEIL-VIS |
| Multi-Engine ACFT with TKOF ALTN AP filed | 02 | - | 0'-400m | - | 0'-400m | - | 0'-500m |
| | 20 | - | 200'-800m | - | 200'-800m | - | 200'-800m |
| OTHER | 02 | AVBL LDG MINIMA | | | | | |
| | 20 | | | | | | |

RJNT AD 2.23 ADDITIONAL INFORMATION

Nil

RJNT AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Standard Departure Chart - Instrument (IKUJI)
Standard Departure Chart - Instrument (URUSI REVERSAL)
Standard Departure Chart - Instrument (UOZU-RNAV)
Standard Arrival Chart - Instrument (OHANA, TOYAMA)
Standard Arrival Chart - Instrument (NANAO-RNAV)
Standard Arrival Chart - Instrument (MANYO-RNAV)
Standard Arrival Chart - Instrument (GENGE-RNAV)
Instrument Approach Chart (LOC Z RWY 20)
Instrument Approach Chart (LOC Y RWY 20)
Instrument Approach Chart (RNAV(GNSS) Z RWY 20)
Instrument Approach Chart (RNAV(RNP) RWY 02)
Instrument Approach Chart (RNAV(RNP) Y RWY 20)
Instrument Approach Chart (VOR A)
Other Chart (Visual REP)
Other Chart (LDG Chart)
Other Chart (MVA Chart)

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TOYAMA AP



STANDARD DEPARTURE CHART -INSTRUMENT

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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.

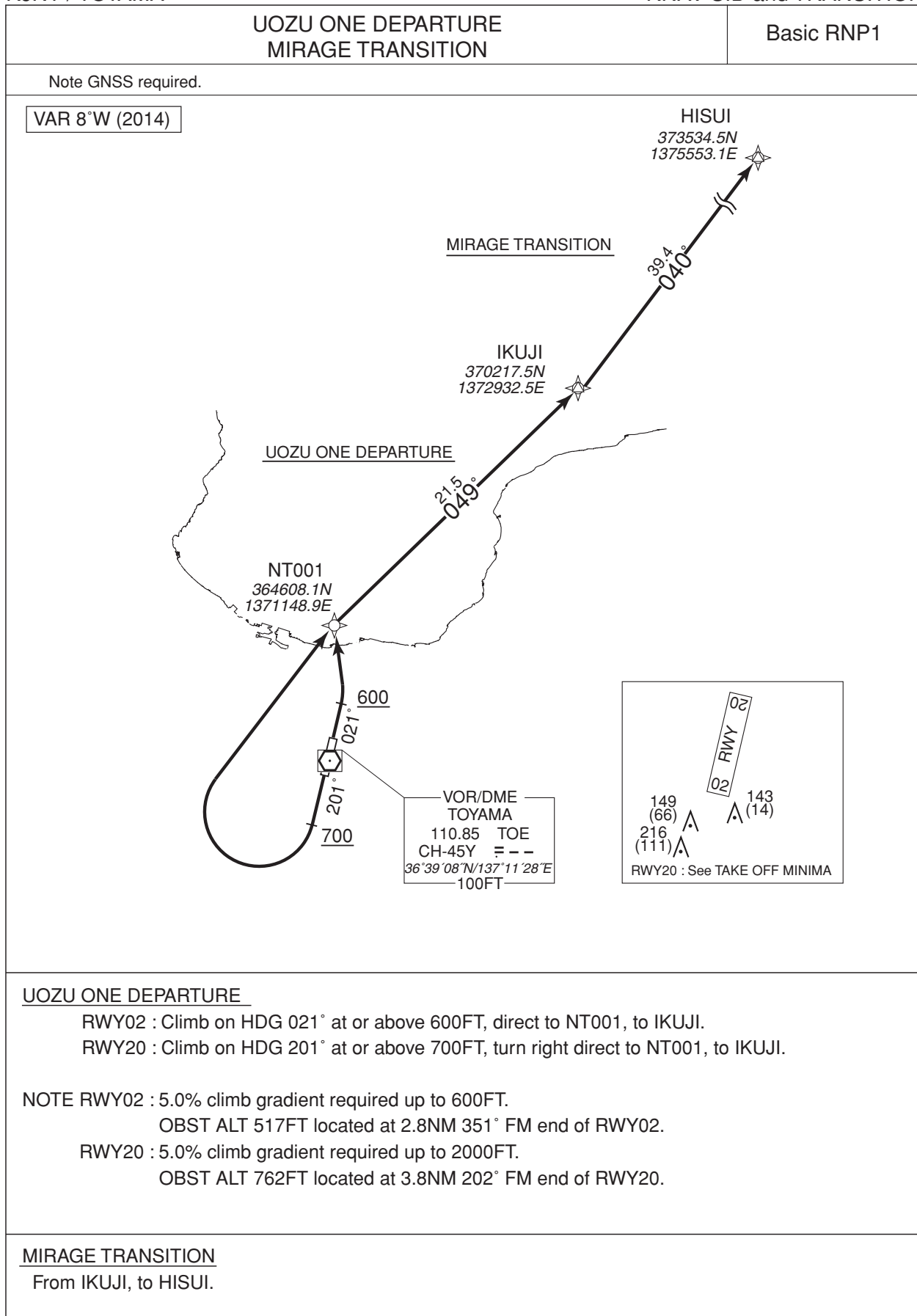
URUSI REVERSAL FOUR DEPARTURE

CHANGE : Minor change

STANDARD DEPARTURE CHART -INSTRUMENT

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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

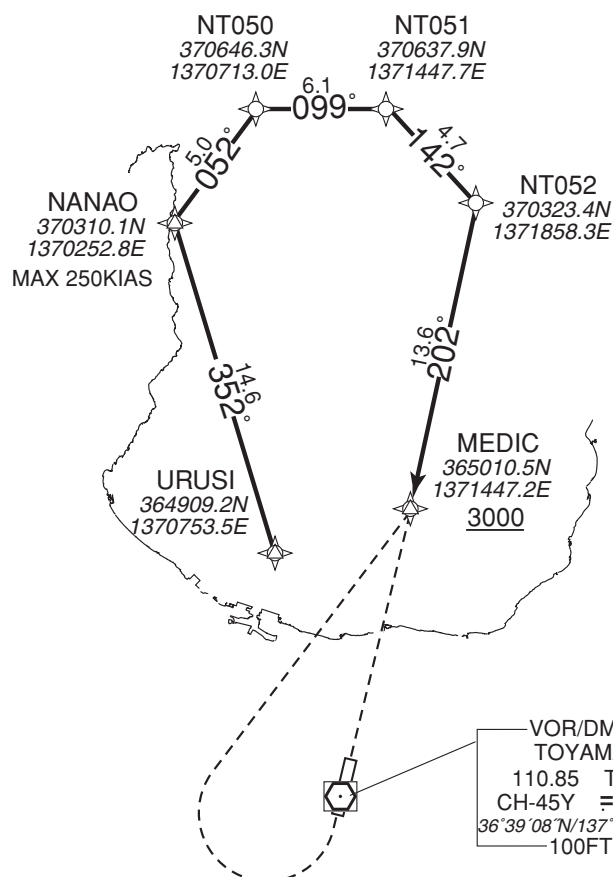
RNAV STAR

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

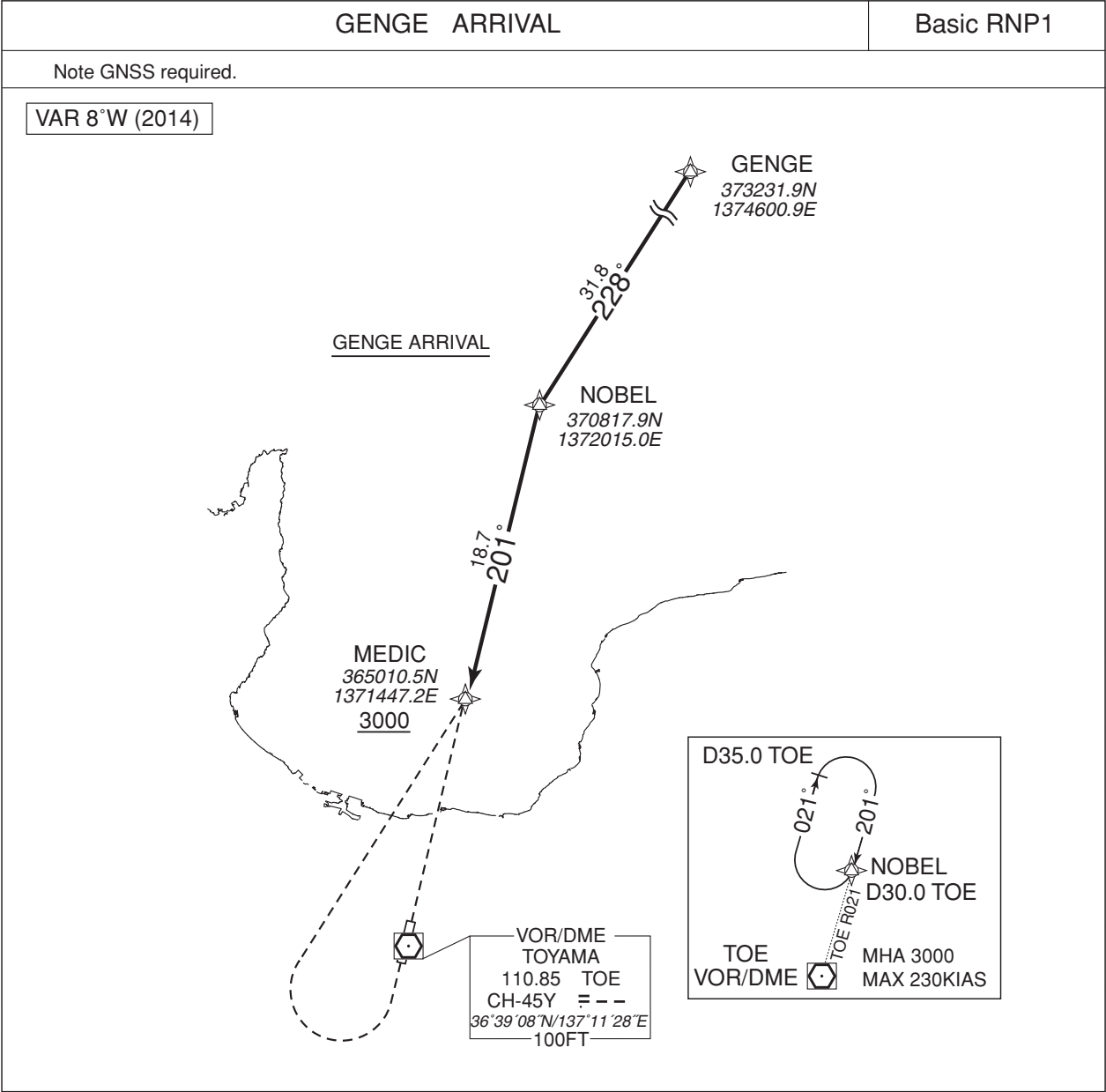
From OYABE, to MANYO at or above 8000FT, to NT053, to MEDIC at or above 3000FT.

| 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

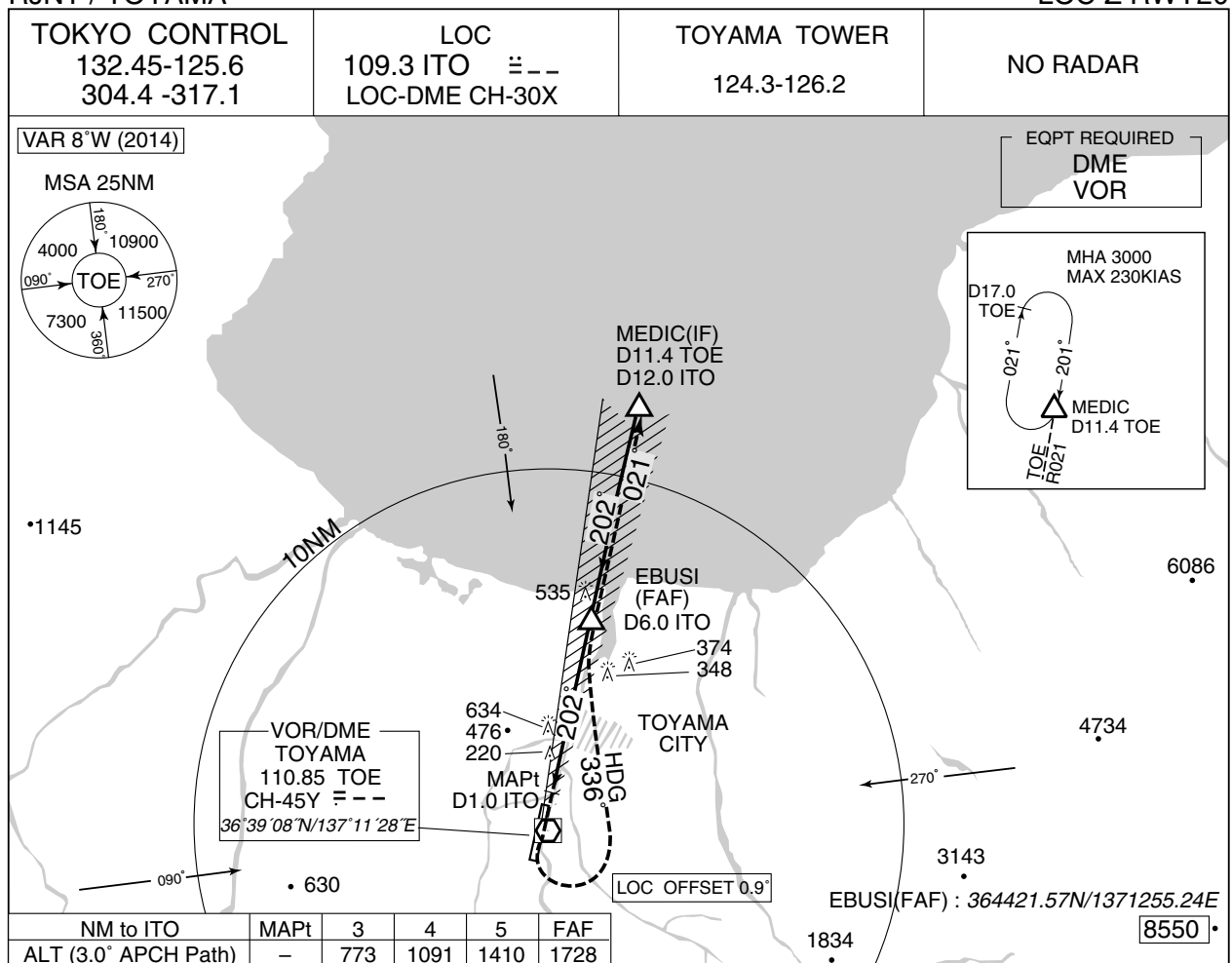
From GENG, to NOBEL, to MEDIC at or above 3000FT.

| 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 | VIS |
| A | 470 (407) | 900 | 590 (513) |
| B | | 1000 | 1600 |
| C | | | 2400 |
| D | | 1400 | 630 (553) |

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

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

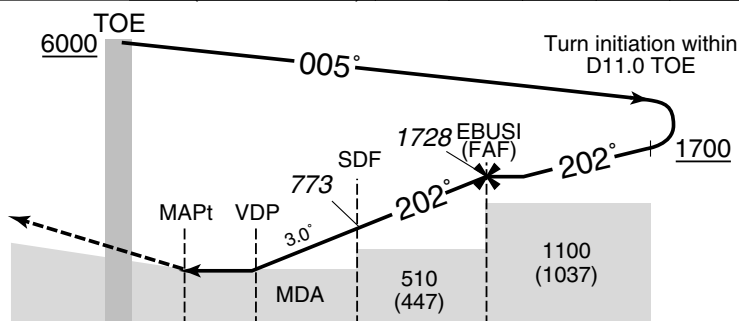
LOC Y RWY20



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.



DME to ITO

NM to THR

0.9

1.0

2.1

3.0

6.0

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.

RJNT / TOYAMA

RNAV(GNSS) Z RWY20

Civil Aviation Bureau, Japan (EFF:28 FEB 2019)

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

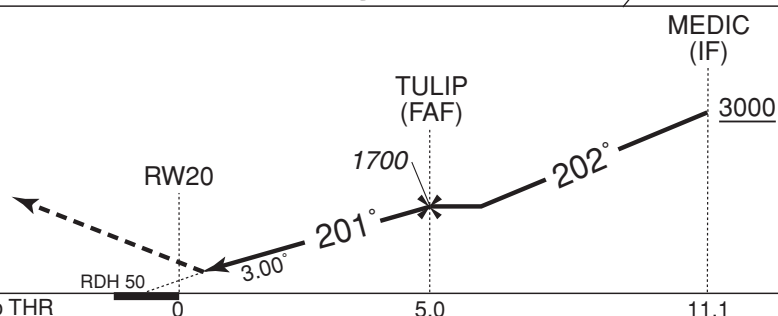
VAR 8°W (2014)

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

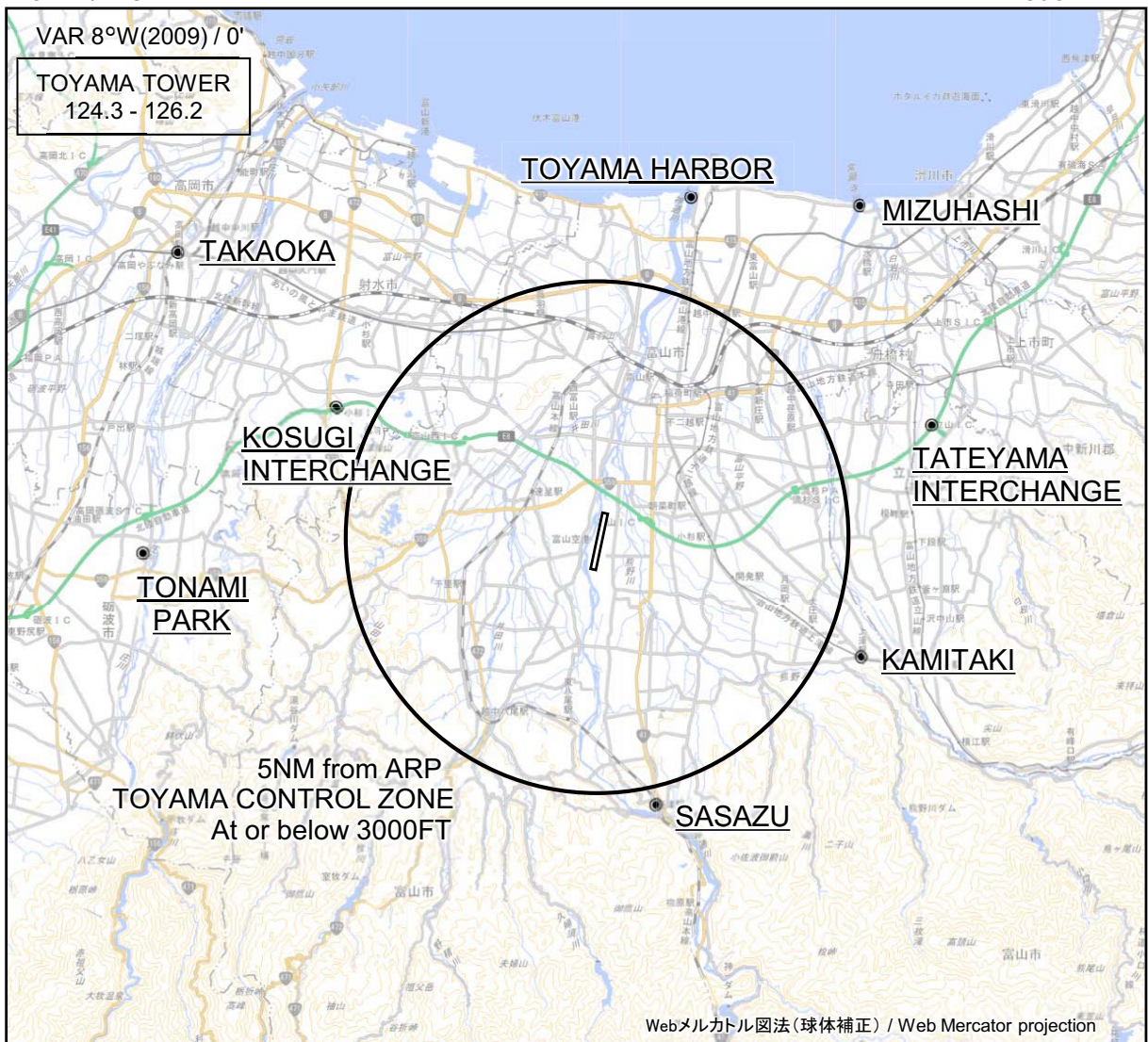
RJNT / TOYAMA

VOR A



RJNT / TOYAMA

Visual REP



※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 Toyama harbor | 016°T / 6.9NM | 港 Harbor |
| 水橋 Mizuhashi | 039°T / 8.3NM | (常願寺川)河口 River-mouth |
| 高岡 Takaoka | 304°T / 10.0NM | JR駅 JR Station |
| 小杉インターチェンジ Kosugi Interchange | 296°T / 5.8NM | 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 | 072°T / 7.0NM | 北陸自動車道インターチェンジ Interchange |
| 砺波パーク Tonami Park | 268°T / 9.0NM | 砺波総合運動公園 Park |
| 上滝 Kamitaki | 114°T / 5.7NM | 駅 Station |
| 笹津 Sasazu | 167°T / 5.3NM | JR駅 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

