

AD 2 AERODROMES

RJSN AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJSN - NIIGATA

RJSN AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| | | |
|---|--|--|
| 1 | ARP coordinates and site at AD | 375721N 1390642E 270° / 1.1km FM RWY 28 THR |
| 2 | Direction and distance from (city) | 6.7km NE of Niigata Railway Station |
| 3 | Elevation/ Reference temperature | 4.6ft / 31°C (2004-2008) |
| 4 | Geoid undulation at AD ELEV PSN | Nil |
| 5 | MAG VAR/ Annual change | 8°W (2008) / 0.3' W |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Niigata Airport Office (Civil Aviation Bureau) 2350-4, Matsuhama-cho, Higashi-ku, Niigata-shi, Niigata Pref, Japan. AFS : RJSNYFYX Tel : 025(273)4567, 025(271)9711 (OPS) |
| 7 | Types of traffic permitted(IFR/ VFR) | IFR/VFR |
| 8 | Remarks | Nil |

RJSN AD 2.3 OPERATIONAL HOURS

| | | |
|----|---------------------------|--|
| 1 | AD Administration | 2230 - 1230 |
| 2 | Customs and immigration | 2330-0815 |
| 3 | Health and sanitation | Quarantine(human): 2330-0815 Quarantine(animal): 2330-0800 Quarantine(plant): INTL SKED FLT hours only |
| 4 | AIS Briefing Office | 2230 - 1230 |
| 5 | ATS Reporting Office(ARO) | Nil |
| 6 | MET Briefing Office | H24 (TOKYO) |
| 7 | ATS | 2230 - 1230 |
| 8 | Fuelling | 2230 - 1230 |
| 9 | Handling | 2230 - 1230 |
| 10 | Security | 2230 - 1230 |
| 11 | De-icing | Nil |
| 12 | Remarks | Nil |

RJSN AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|---|
| 1 | Cargo-handling facilities | All the modern institutions that deal with the weight thing to Airbus 330 |
| 2 | Fuel/ oil types | Fuel Grades : JET A-1, AVGAS 100LL Oil grades : 20W50, 15W50, W100 |
| 3 | Fuelling facilities/ capacity | Fuel truck / Not limited |
| 4 | De-icing facilities | Nil |
| 5 | Hangar space for visiting aircraft | Nil |
| 6 | Repair facilities for visiting aircraft | Nil |
| 7 | Remarks | The prior permission of Oil company is required to foreign aircraft for refueling. (Except schedule Flight) |

RJSN AD 2.5 PASSENGER FACILITIES

| | | |
|---|----------------------|---|
| 1 | Hotels | Hotels in Niigata city |
| 2 | Restaurants | Available (2200 - 1000) |
| 3 | Transportation | Busses and Taxis |
| 4 | Medical facilities | Hospitals in Niigata city (4km from Airport) |
| 5 | Bank and Post Office | Bank :At Airport Post Office :1km S of Airport |
| 6 | Tourist Office | Nil |
| 7 | Remarks | Nil |

RJSN 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 Water-supply truck x 1, Lighting power supply truck x 1, Emergency medical equipments conveyance truck x 1 |
| 3 | Capability for removal of disabled aircraft | Nil |
| 4 | Remarks | Nil |

RJSN AD 2.7 SEASONAL AVAILABILITY-CLEARING

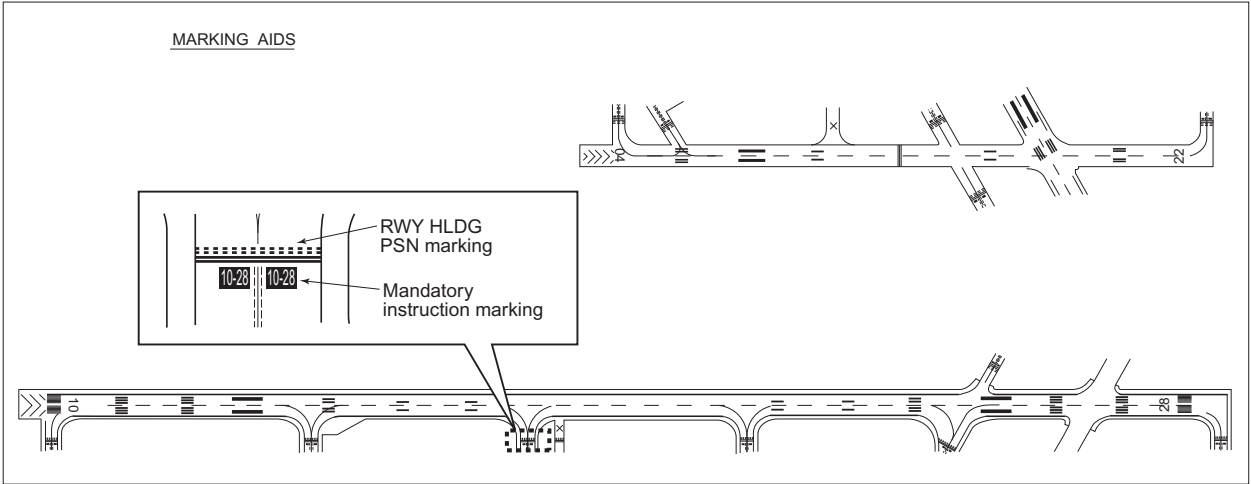
| | | |
|---|-----------------------------|--|
| 1 | Types of clearing equipment | Snow Removal Equipments : Rotary x 2, Snow plows x 6, Snow sweeper x 4, Road sweeper X 1 |
| 2 | Clearance priorities | 1.RWY 10/28 , TWY C1-C6,B1,B5 SPOT NR4-8 2.TWY P3,B2-B4 SPOT NR1-3,NR9,NR10 S-Apron, S-TWY , RWY 04/22(FM S-TWY TO C-TWY) |
| 3 | Remarks | Seasonal availability : All seasons In the case of deposits(snow, slush and ice) on the movement areas, report will be issued as NOTAM(domestic distribution only) at least once a day. |

RJSN AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

| | | |
|---|-------------------------------------|--|
| 1 | Apron surface and strength | Surface : Asphalt Concrete and Concrete, semi-flexible pavement Strength : SPOT 1-10: PCR 1132/R/B/W/T S Apron : AUW 11t |
| 2 | Taxiway width, surface and strength | Surface : Asphalt concrete and concrete Strength : A1, A3 and P4 : PCR 163/F/C/Y/T B1- B5, C1, C2, C4 - C6 and P3 : PCR 1210/F/C/X/T C3 : PCR 1132/R/B/W/T S : AUW 11t Width : B1 : 29m B5 : 28.5m B2 - B4 and P3 : 30m A1, A3, C1-C6 and P4 : 23m S : 18m |
| 3 | ACL and elevation | Location : Not available Elevation : Not available |
| 4 | VOR checkpoints | Not available |
| 5 | INS checkpoints | Spot NR 1: 375711.53N 1390636.75E 2: 375711.93N 1390638.19E 3: 375710.93N 1390640.71E 4: 375710.86N 1390642.55E 5: 375710.82N 1390644.71E 6: 375710.78N 1390647.37E 7: 375710.68N 1390650.23E 8: 375710.51N 1390652.89E 9: 375710.48N 1390655.65E 10: 375710.27N 1390658.41E |
| 6 | Remarks | Nil |

RJSN 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 NR 5-8 Aircraft stand taxi lane: C1, C2, B1-B5, P3 Visual docking guidance system: Nil |
| 2 | RWY and TWY markings and LGT | <p>RWY: 10/28 (Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe (LGT) RCLL, REDL, RTHL, RENL, RTZL(RWY28), WBAR(RWY28)</p> <p>RWY: 04/22 (Marking) RWY designation, RWY CL, RWY middle point, Aiming point(RWY04), TDZ (LGT) REDL, RTHL, RENL</p> <p>TWY: B1-B5 and P3 (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT, TWY CL LGT, RWY guard LGT, Taxiing guidance sign</p> <p>TWY: C1, C2 (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT, TWY CL LGT, RWY guard LGT, Taxiing guidance sign</p> <p>TWY: C3-C6 (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT, TWY CL LGT</p> <p>TWY: S (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT</p> <p>TWY: A1, A3, P4 (Marking) TWY CL, RWY HLDG PSN, Mandatory instruction (LGT) Nil</p> |
| 3 | Stop bars | Nil |
| 4 | Remarks | (Marking) Overrun area (LGT) Apron flood LGT |



RJSN AD 2.10 AERODROME OBSTACLES

In approach / TKOF Areas

| RWY/Area affected | Obstacle type | Coordinates | Elevation | Markings/ LGT | Remarks |
|--------------------|---------------|-------------|-----------|---------------|---------|
| See Obstacle Chart | | | | | |

In circling area and at AD

| Obstacle type | Coordinates | Elevation | Markings/ LGT | Remarks |
|--------------------|-------------|-----------|---------------|---------|
| See Obstacle Chart | | | | |

RJSN 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 _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.) | Nil |

1

RJSN AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 04 | 1314 | 1314 | 1314 | 1314 | Nil |
| 22 | 1314 | 1314 | 1314 | 1314 | Nil |
| 10 | 2500 | 2500 | 2500 | 2500 | Nil |
| 28 | 2500 | 2500 | 2500 | 2500 | Nil |

RJSN 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 |
| 04 | - | Green Nil | - | - | - | 1314m 60m White LIL | Red | Nil (*1) |
| 22 | - | Green Nil | PAPI 3.0°/Left 361m 61ft | - | - | 1314m 60m White LIL | Red | Nil (*1) |
| 10 | SALS 420m LIH | Green Nil | PAPI 3.0°/Left 535m 75ft | - | 2500m 30m Coded color (White/Red) LIH | 2500m 60m Coded color (White/Yellow) LIH | Red | Nil (*1) |
| 28 | PALS (CAT I) 660m LIH | Green Green | PAPI 3.0°/Left 455m 65ft | 900m | 2500m 30m Coded color (White/Red) LIH | 2500m 60m Coded color (White/Yellow) LIH | Red | Nil (*1) |
| Remarks | | | | | | | | |
| 10 | | | | | | | | |
| Overrun area edge LGT(LEN60m color:Red) (*1) RWY THR ID LGT for RWY04/22 THR(Color:White) | | | | | | | | |

RJSN AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

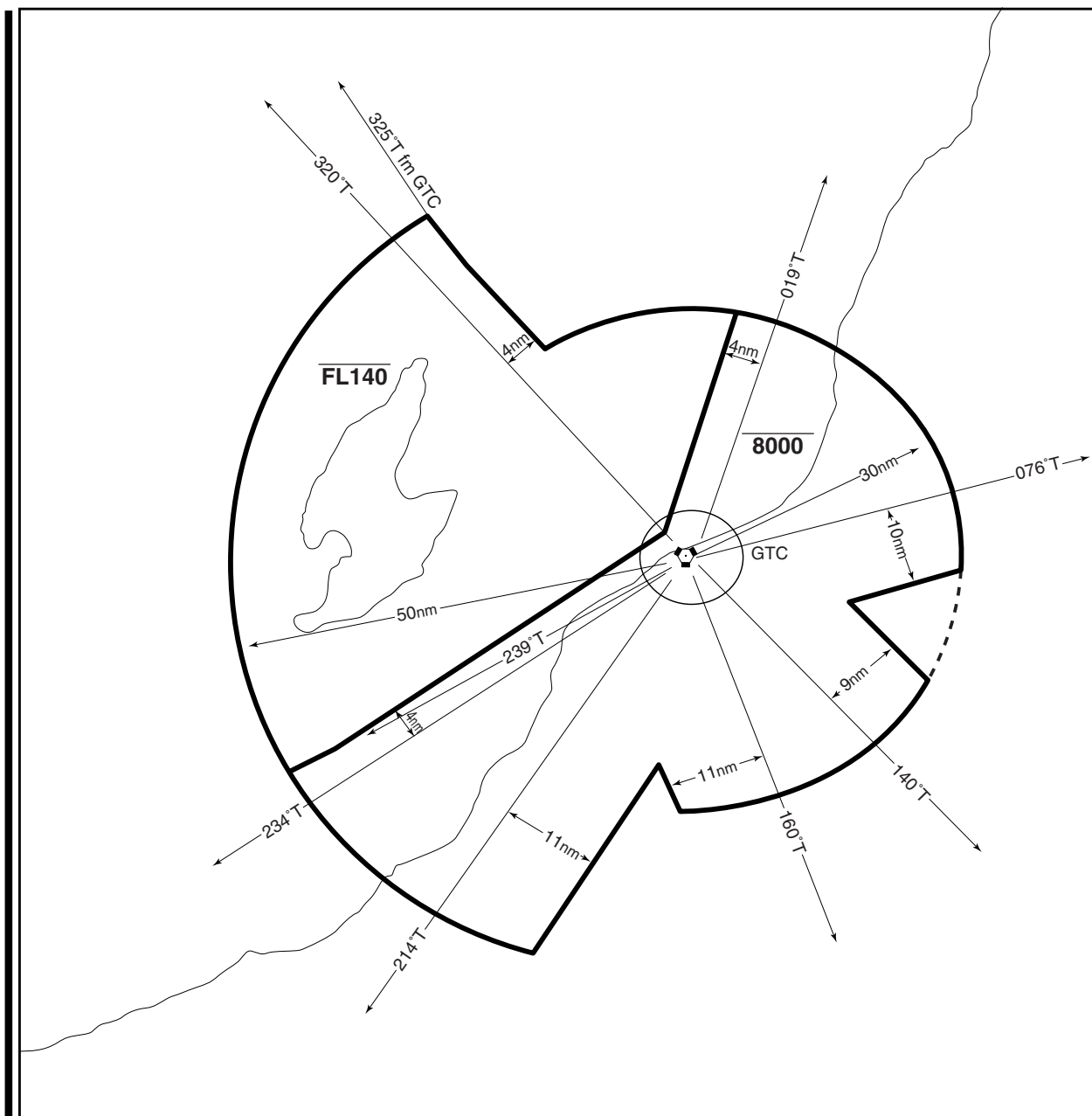
| | | |
|---|--|---|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 375701N/1390640E, White/Green EV4.3sec, HO |
| 2 | LDI location and LGT Anemometer location and LGT | LDI:Nil Anemometer: RWY28: 477.7m from RWY28 THR, LGTD RWY10: 318.5m from RWY10 THR, LGTD |
| 3 | TWY edge and center line lighting | TWY edge and center line lights installed, see AD2.9 |
| 4 | Secondary power supply/ switch-over time | Within 1sec : REDL(RWY 10/28), RENL(RWY 10/28), RTHL(RWY 10/28), WBAR, RCLL and Overrun area edge LGT(RWY 10/28) Within 15sec: Other lights |
| 5 | Remarks | WDI LGT |

RJSN AD 2.16 HELICOPTER LANDING AREA

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

RJSN 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 |
| NIIGATA CTR | Area within a radius of 5NM of NIIGATA ARP (37 °57'N 139 °07'E). | 3,000 or below | D | NIIGATA TWR En | Nil |
| NIIGATA ACA | SEE ATTACHED CHART | | E | NIIGATA APP NIIGATA DEP NIIGATA Radar En | Nil |

新潟進入管制区
Niigata Approach Control Area

RJSN AD 2.18 ATS COMMUNICATION FACILITIES

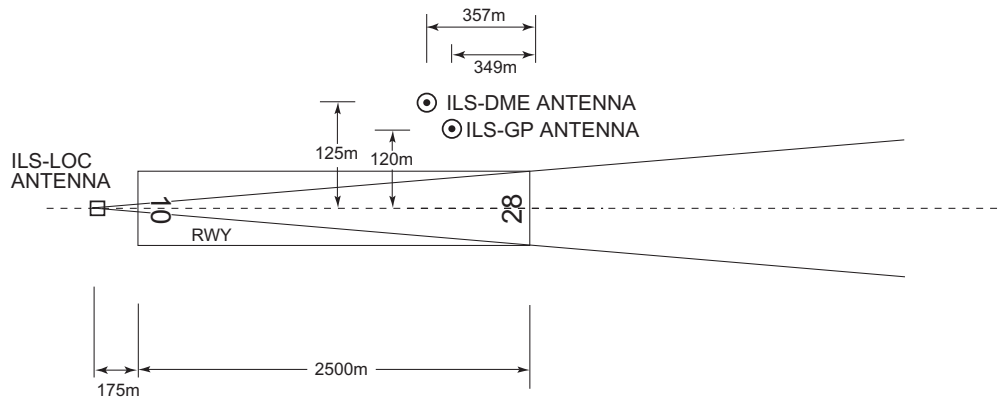
| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---------------------|--------------------------|---|--------------------|-------------|
| 1 | 2 | 3 | 4 | 5 |
| APP/ASR | Niigata Approach / Radar | 121.4MHz 121.5MHz(E) 243.0MHz(E) | 2230 - 1230 | (1) Primary |
| DEP | Niigata Departure | 119.05MHz 121.5MHz(E) 243.0MHz(E) | 2230 - 1230 | |
| TWR | Niigata Tower | 118.0MHz(1) 126.2MHz 121.5MHz(E) 243.0MHz(E) | 2230 - 1230 | |
| ATIS | Niigata Airport | 128.45MHz | 2230 - 1230 | |

RJSN AD 2.19 RADIO NAVIGATION AND LANDING AIDS

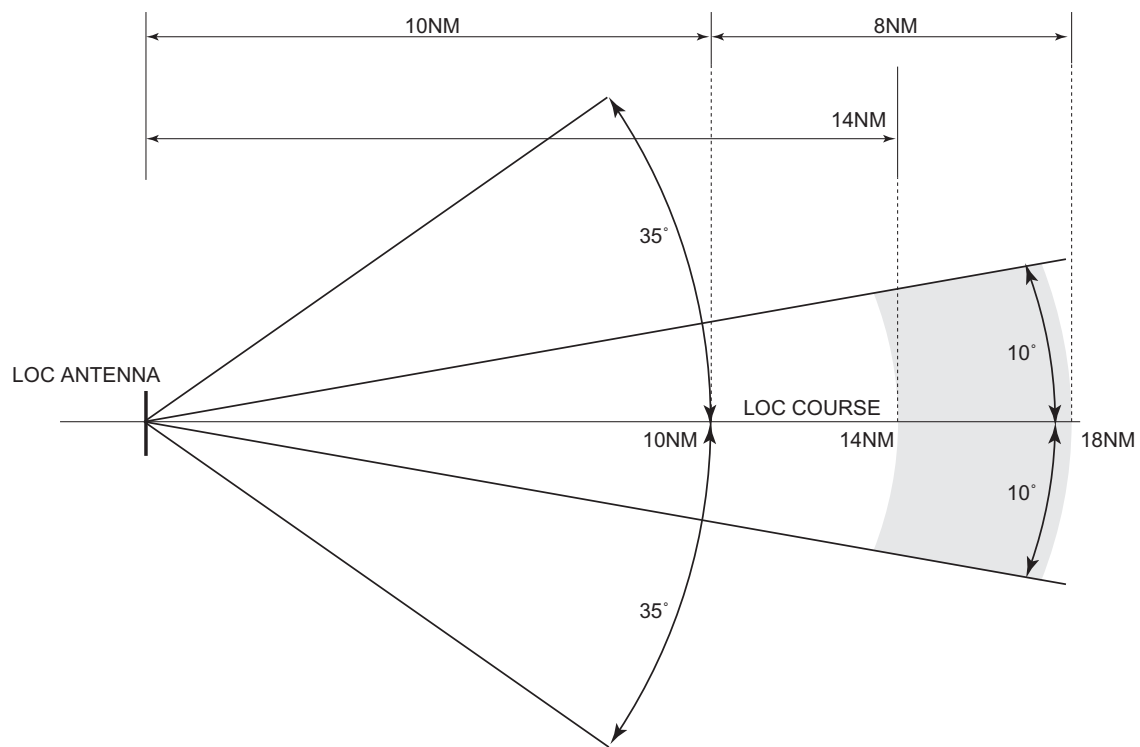
| Type of aid (VOR declination) | ID | Frequency | Hours of operation | Position of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|-------------------------------|-----|-------------------|--------------------|--|---------------------------------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| VOR (8°W/2022) | GTC | 115.5MHz | H24 | 375729.86N 1390653.59E | | |
| TACAN | GTC | 1189MHz (CH-102X) | H24 | 375729.71N 1390656.04E | 39ft | TACAN DME Unusable: 100°-110° beyond 35nm BLW 9,000ft. TACAN AZM Unusable: 100°-120° beyond 35nm BLW 9,000ft. 320°-330° beyond 20nm BLW 3,000ft. |
| ILS-LOC 28 | INC | 109.3MHz | 2230 - 1230 | 375724.99N 1390534.61E | | LOC unusable: beyond 14nm FM antenna. LOC: 175m away FM RWY10 THR. BRG (MAG) 281.26° |
| ILS-GP 28 | - | 332.0MHz | 2230 - 1230 | 375725.35N 1390710.02E | | GP: 349m(1145ft) inside FM RWY28 THR, 120m(394ft) N of RCL. GP angle 3.0°. HGT of ILS Ref datum 16.5m(54ft). |
| ILS-DME 28 | INC | 991.0MHz (CH-30X) | 2230 - 1230 | 375725.51N 1390709.72E | 18ft | DME: 357m(1171ft) inside FM RWY28 THR, 125m(410ft) N of RCL. |
| MSAS | | 1575.42MHz | H24 | | | Transmitting antennas are satellite based |

RJSN / NIIGATA

ILS

ILSNIIGATA AP

REMARKS : 1. LOC beam BRG (MAG) 281.26°
 2. HGT of ILS REF datum 16.5m (54ft)
 3. GP Angle 3.0°
 4. ELEV of ILS-DME 5.5m (18ft)



LOC Unusable beyond 14NM from antenna.

RJSN AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

1.1 Transient ACFT operator is required to obtain the prior permission of the airport administrator.

1.2 Special notice to Boeing 747-8 operators

1) 滑走路

滑走路 10/28 は幅 45m であり、両側に 10m の舗装ショルダーを設置している。

滑走路と平行誘導路の間隔は 184m である。

滑走路 10/28 の停止位置標識は滑走路中心より 75m の位置にある。

滑走路 10/28 に着陸する B748 は、正確な進路を維持するため、デジタル・アビオニクスを備えかつ作動させること。

2) 誘導路

誘導路 C1-C6 は 23m 幅であるので、走行に注意を要する。

誘導路 B2、B3、B4、P3 の走行においてオーバーステアリングが要求される。

3) 駐機場

駐機可能なスポットは、NR 9 である。

1) Runway

The width of RWY10/28 is 45m and paved 10m shoulders are installed on each side of the runway. Separation distance between RWY10/28 center line and parallel taxiway center line is 184m.

Runway-holding position markings for RWY10/28 are located at 75m from the runway center line.

B748 which land on RWY10/28 should equip and activate Digital Avionics to maintain the precise path during approach.

2) Taxiways

The width of taxiway C1-C6 is 23m. Pilots are requested to pay attention when taxiing at those taxiways.

Pilots are requested to oversteer when turning into/out of taxiway B2,B3,B4 and P3.

3) Parking stand

Available Parking stand for B748 is NR9.

2. Taxiing to and from stands

1番スポット及び2番スポットの使用は以下のとおりとする。ただし、空港管理者の承認を受けた場合を除く。

1) 1番スポット

原則として、小型機用スポット（1A, 1B, 1C, 1D）が割り当てられる。各スポットへの進入及び離脱はスポット誘導経路から行うこと。（別図1）

2) 2 番スポット

a) 20m×20m 以下の固定翼機（ジェット機を除く）及び回転翼機

原則として、小型機駐機用スポット（2A, 2B, 2C）が割り当てられる。各スポットへの進入及び離脱はスポット誘導経路から行うこと。（別図1）

b) a) 以外の航空機

2番スポットが割り当てられる。スポットへの進入は導入線から行き、導入線上にノーズイン駐機とすること。ただし、全幅 16.5m 以下の機体は任意の向きで駐機することができる。この場合、2A の小型機駐機用マーキングを目安に駐機するものとし、2A の西端ライン(2番スポット導入線直線部からの水平距離が 10.7m の位置)を超えてはならない。(別図2)

自走アウト時は、旋回完了後、2番スポット導入線に
会合し、導入線を導出線として利用すること。

The use of spot NR1 and spot NR2 should be as follows, except with the approval of the AD administrator.

1) Spot NR1

As a principle, small aircraft spot (1A, 1B, 1C, 1D) are assigned. When entering these spots, aircraft should use the aircraft stand taxilane. (ATTACHMENT 1)

2) Spot NR2

a) Fixed-wing aircraft within 20 meters by 20 meters (excluding jet aircraft) and rotorcraft

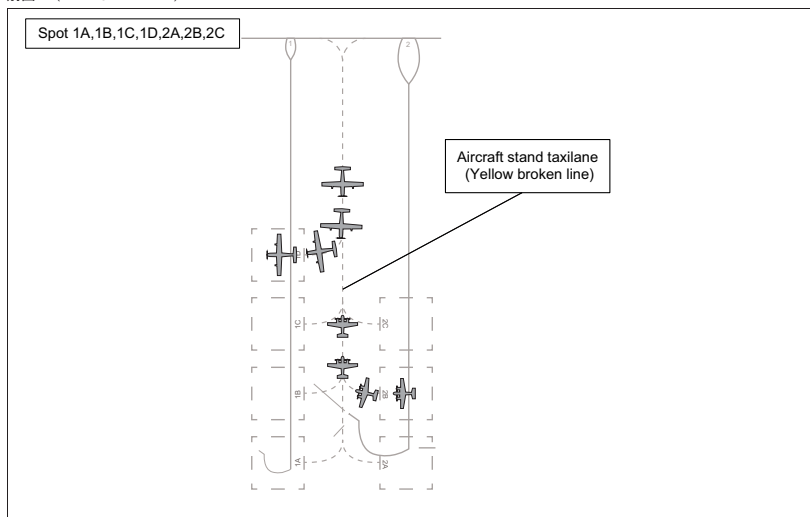
As a principle, small aircraft spot (2A, 2B, 2C) are assigned. When entering these spots, aircraft should use the aircraft stand taxilane. (ATTACHMENT 1)

b) Aircraft other than a)

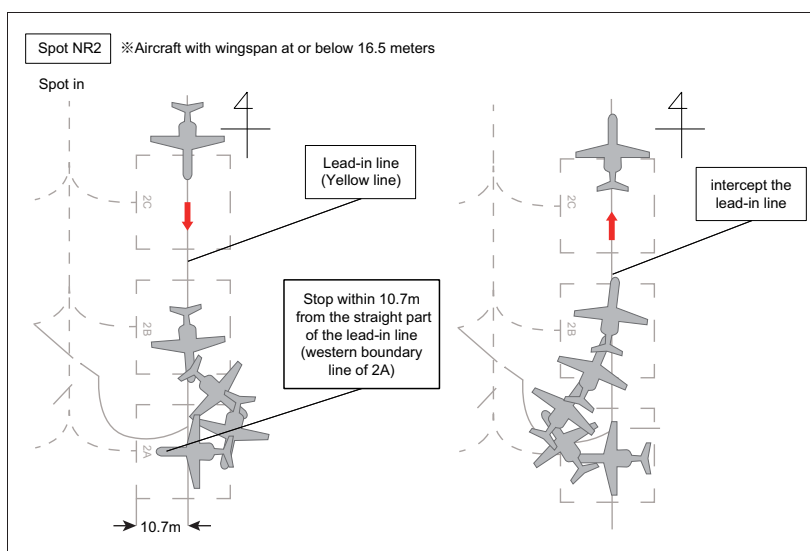
Spot NR2 is assigned. When entering spot, aircraft should use the lead-in line and should park with the nose-in on the lead-in line. However, Aircraft with wingspan at or below 16.5 meters can park in any direction. In this case, small aircraft parking marking of spot 2A should be used as a guideline and should not exceed the western boundary line of 2A. (located 10.7 meters horizontally from the straight part of spot NR2 lead-in line) (ATTACHMENT 2).

When taxing out under power-out operation, intercept the lead-in line after completing the turn and use the line as the lead-out line.

別図1 (ATTACHMENT-1)



別図2 (ATTACHMENT-2)



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

Wing tip clearance at the TWY intersection (REF AD1.1.6.8)
Wing tip clearance at the TWY intersection between the aircraft holding at the stop marking on the TWY and the other aircraft taxiing behind it are as follows.

When A306 holding at the stop marking on TWY B4

| | | | | |
|---|------------|-------------------|-----------|---|
| wing span (WS) of acft taxiing on TWY C5-C6 | WS =<52.2m | 52.2m <WS =<69.2m | WS >69.2m | Legend *A : wing tip clearance >= 15m *B : 6.5m =< wing tip clearance < 15m *C : wing tip clearance < 6.5m |
| wing tip clearance | *A | *B | *C | |

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

RJSN AD 2.21 NOISE ABATEMENT PROCEDURES

1. 騒音軽減運航方式

すべてのジェット機に対して、空港周辺における航空機騒音軽減のため、運航の安全に支障のない範囲で、以下の方式が適用される。ただし、これらの方式によることができない航空機は実効的にこれらと同等と認められる代替方式を実施するものとする。

- 1) 離陸について（滑走路 10）
急上昇方式
- 2) 着陸について（滑走路 28）
ディレイド・フラップ進入方式 及び
低フラップ角着陸方式
- 3) リバース・スラストについて
なし

2. 優先滑走路方式

なし

3. 優先飛行経路

最大離陸重量7,000kg(15,500lbs)を超えるすべての固定翼機に対して、航行の安全確保及び飛行の目的に支障がない範囲において適用される。
滑走路 10 から離陸する場合、新潟 VORTAC から 2 海里の地点を通過するまで直線飛行する。

1. Noise Abatement Operating Procedures

For all jet aircraft, In order to reduce aircraft noise in the vicinity of airport, the following procedures shall be applied unless compliance of the procedures adversely affects the safety of aircraft operations. In case that the aircraft is unable to take these procedures, pilots should execute alternative procedures which are considered to be practically equivalent.

- 1) For take-off from RWY 10
Steepest Climb Procedure
- 2) For landing to RWY 28
Delayed Flap Approach Procedure and
Reduced Flap Setting Procedure
- 3) Reverse Thrust
Nil

2. Preferential Runways Procedures

Nil

3. Noise Preferential Routes

For all fixed wing aircraft over 7,000kg(15,500lbs) maximum take-off weight, the following noise preferential routes are adopted, as long as flight safety is not jeopardized or purpose of flight is not hindered.
Take-off from RWY10, pilots are requested to strictly follow extended runway centerline until passing 2NM from Niigata VORTAC.

RJSN AD 2.22 FLIGHT PROCEDURES

1. TAKE OFF MINIMA

| | RWY | ACFT CAT | REDL & RCLL | | REDL or RCLL or RCL Marking | | NIL (DAYTIME ONLY) | |
|--|----------|-------------|-----------------|----------|--------------------------------|-----------|-----------------------|-----------|
| | | | CEIL-RVR | CEIL-VIS | CEIL-RVR | CEIL-VIS | CEIL-RVR | CEIL-VIS |
| Multi-Engine ACFT with TKOF ALTN AP FILED | 10 | A,B,C,D | - | 0'400m | - | 0'400m | - | 0'500m |
| | 28 | A,B,C,D | 0'400m | 0'400m | 0'400m | 0'400m | - | 0'500m |
| | 04 | A,B,C | - | - | - | 0'400m | - | 0'500m |
| | 22 | A,B,C | - | - | - | 200'2400m | - | 200'2400m |
| OTHER | 10 28 | A,B,C,D | AVBL LDG MINIMA | | | | | |
| | 04 22 | A,B,C | | | | | | |

2. Lost communication procedures for arrival aircraft under radar navigational guidance

If radio communications with Niigata Approach/Radar are lost for 30 seconds,squawk Mode A/3 Code 7600 and;

- (I) 1. Contact Niigata Tower.
2. If unable, proceed in accordance with visual flight rules,
3. If unable, proceed to Niigata VORTAC at last assigned altitude or 4,000 feet whichever is higher, and execute instrument approach.
- (II) Procedures other than above will be issued when situation required.

3. Trajectorized Airport Traffic Data Processing System (TAPS)

Aircraft flying in Niigata approach control area under its control will be instructed to reply with discrete code on Mode A/3 and Mode C. If an aircraft has no capability of replying with discrete code,the pilot shall report ATC if so instructed.

新潟アプローチの指示のもとに、当該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。

二次レーダー個別コード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、管制官に対しその旨通報すること。

4. Flying restrictions:

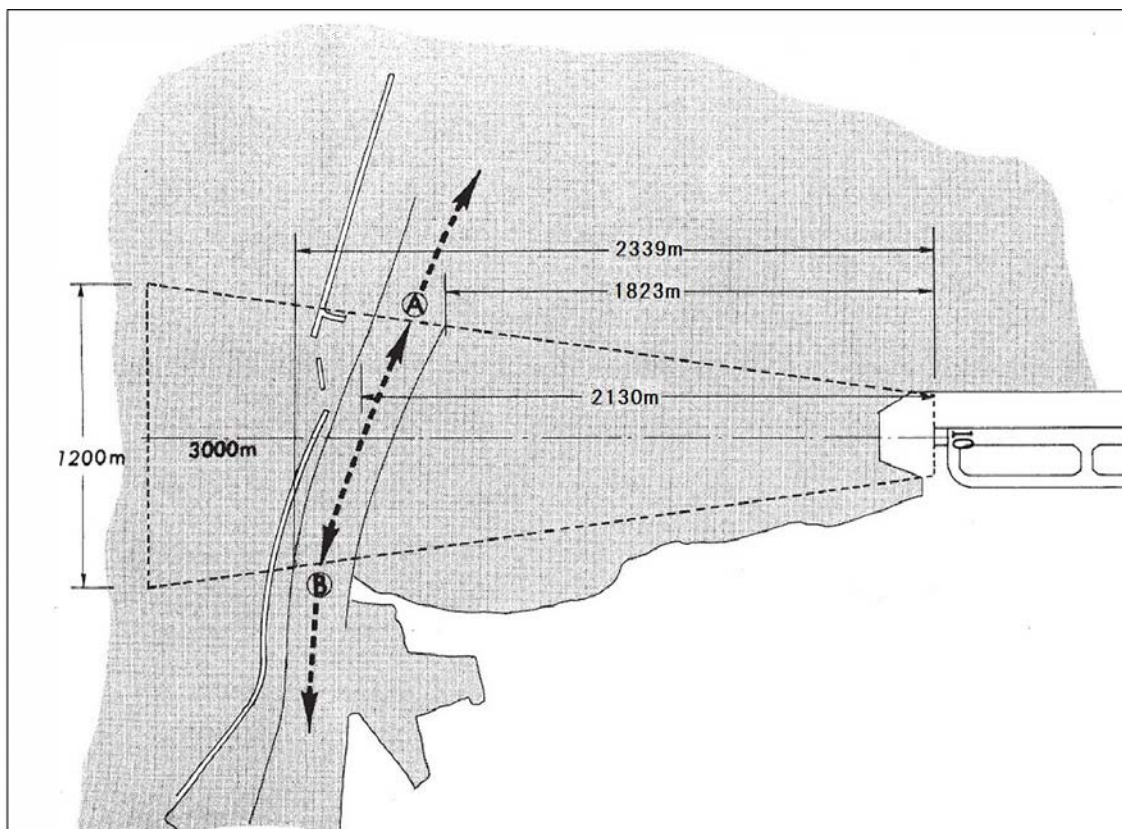
No flight shall be permitted below minimum safe altitude over the petroleum complex area.

RJSN AD 2.23 ADDITIONAL INFORMATION

1. A red-roofed house approx 10M AGL (15M MSL)
located at position 290M outward on 218 deg. mag. from RWY 04 THR.
2. RWY10 進入区域の船舶の通過
航空機の運航に影響がある高さの船舶が RWY10 進入区域を通過する場合、以下の対応が取られる。
 - (1) NOTAM RJSN 又は ATC により船舶の情報提供が行われる。
 - (2) 以下の場合において、船舶が A 点～B 点を通過する間、待機が指示されることがある。船舶高は水面上の高さとする。
 - a) RWY10 着陸時
船舶高が 46m (150ft) 超の場合、RNP AR 進入を行う到着機
船舶高が 53m (174ft) 超の場合、全ての到着機
 - b) RWY28 出発時及び着陸時
船舶高が 57m (188ft) 超の場合、IFR 出発機
船舶高が 93m (306ft) 超の場合、IFR 到着機
2. Passage of vessel across RWY10 approach area
While vessel with height that affects ACFT operations is passing across RWY10 approach area, the following action will be taken.
 - (1) The information of vessel will be provided by NOTAM RJSN or ATC.
 - (2) While vessel is crossing between point A and point B, holding instruction may be issued in the following situations. Vessel height shall be the height above the water surface.
 - a) ACFT for landing RWY10
When vessel height is above 46m (150ft): arrival ACFT to conduct RNP AR APCH
When vessel height is above 53m (174ft): all arrival ACFT
 - b) ACFT for take-off/landing RWY28
When vessel height is above 57m(188ft): IFR departure ACFT
When vessel height is above 93m(306ft): IFR arrival ACFT

船舶経路

VESSEL COURSE

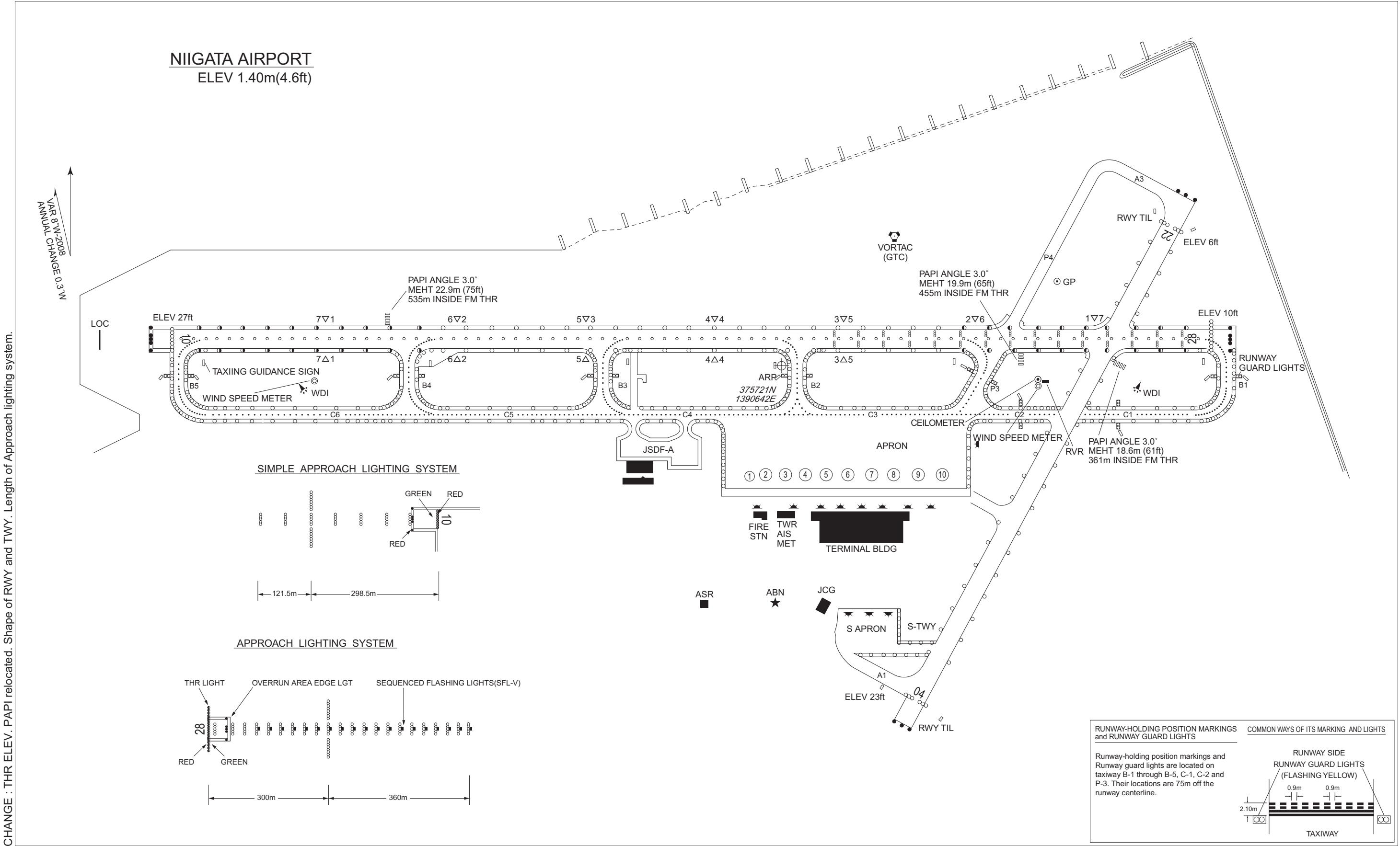


RJSN AD 2.24 CHARTS RELATED TO AN AERODROME

| |
|---|
| Aerodrome/Heliport Chart-1 |
| Aerodrome/Heliport Chart-2 |
| Aerodrome Obstacle Chart type A (RWY10/28) |
| Aerodrome Obstacle Chart type B |
| Standard Departure Chart - Instrument (OKESA) |
| Standard Departure Chart - Instrument (NIIGATA) |
| Standard Departure Chart - Instrument (SASAGA-RNAV) |
| Standard Departure Chart - Instrument (MOKBA-RNAV) |
| Standard Departure Chart - Instrument (SUKOB-RNAV) |
| Standard Arrival Chart - Instrument (INAHO, GOSEN, MAGNA, TERAD-RNAV) |
| Standard Arrival Chart - Instrument (KAETSU-RNAV) |
| Instrument Approach Chart (ILS Z or LOC Z RWY28) |
| Instrument Approach Chart (ILS Y or LOC Y RWY28) |
| Instrument Approach Chart (VOR RWY28) |
| Instrument Approach Chart (RNP Z RWY10) |
| Instrument Approach Chart (RNP Y RWY10(AR)) |
| Instrument Approach Chart (VOR RWY10) |
| Other Chart (Visual REP) |
| Other Chart (TFC PATTERN) |
| Other Chart (LDG CHART) |
| Other Chart (MVA CHART) |

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AERODROME CHART



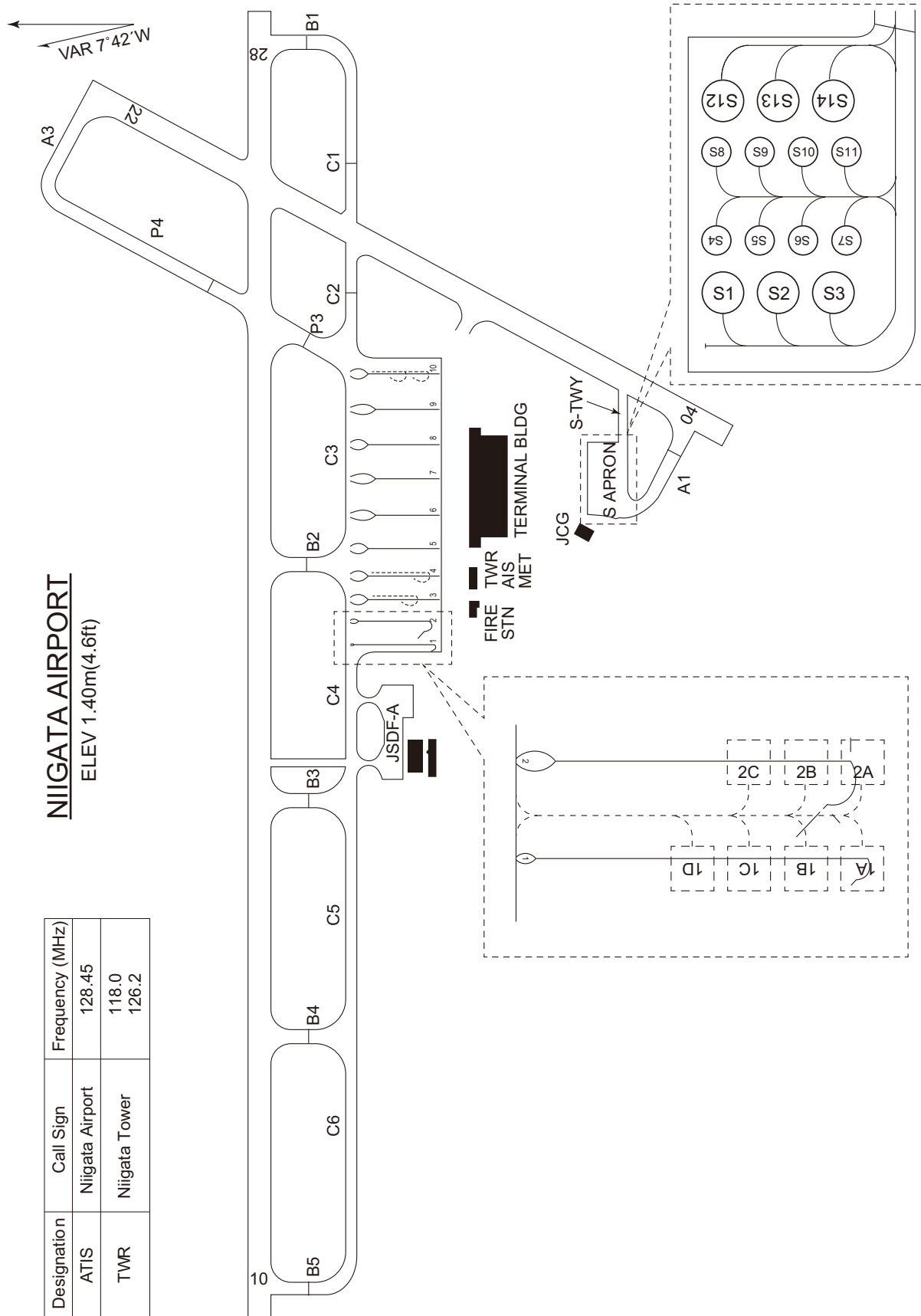
RJSN / NIIGATA

AD CHART

| Designation | Call Sign | Frequency (MHz) |
|-------------|-----------------|-----------------|
| ATIS | Niigata Airport | 128.45 |
| TWR | Niigata Tower | 118.0 126.2 |

NIIGATA AIRPORT

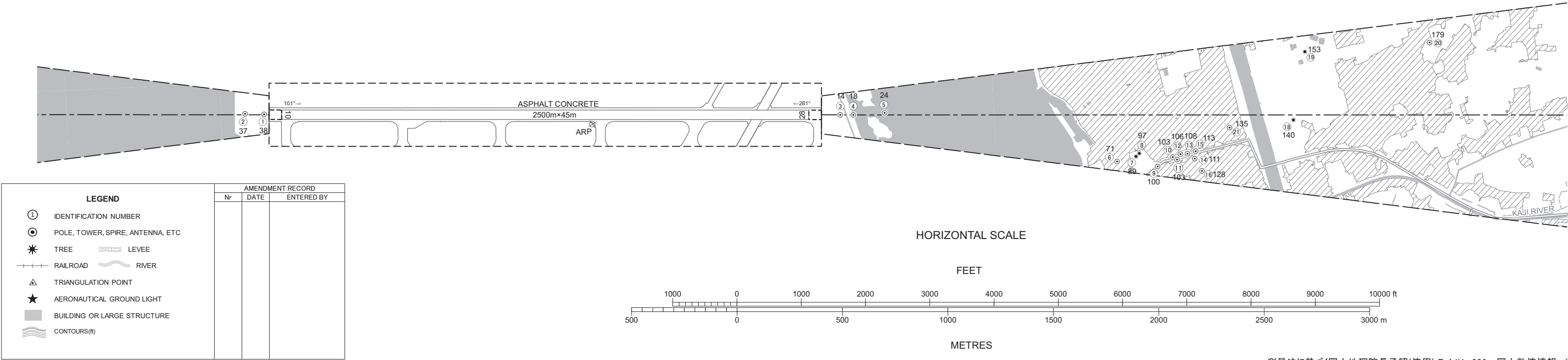
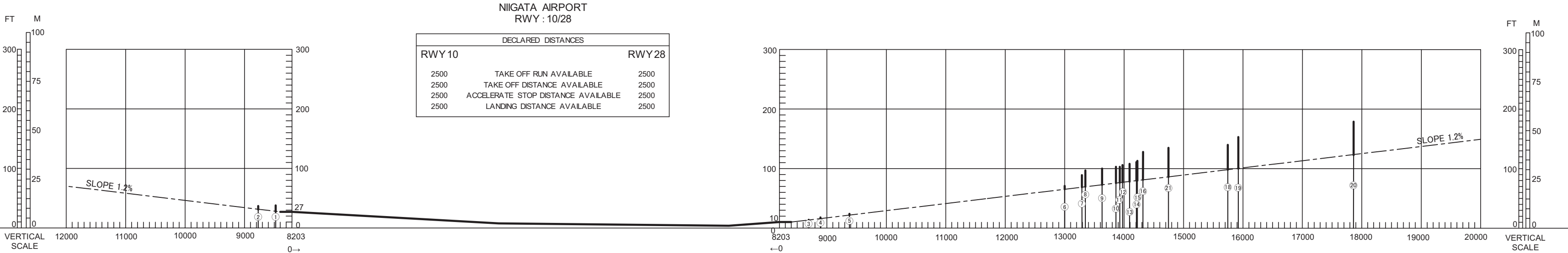
ELEV 1.40m(4.6ft)



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC
Transverse Mercator Projection

AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)

MAGNETIC VARIATION 9°W - DEC 2022

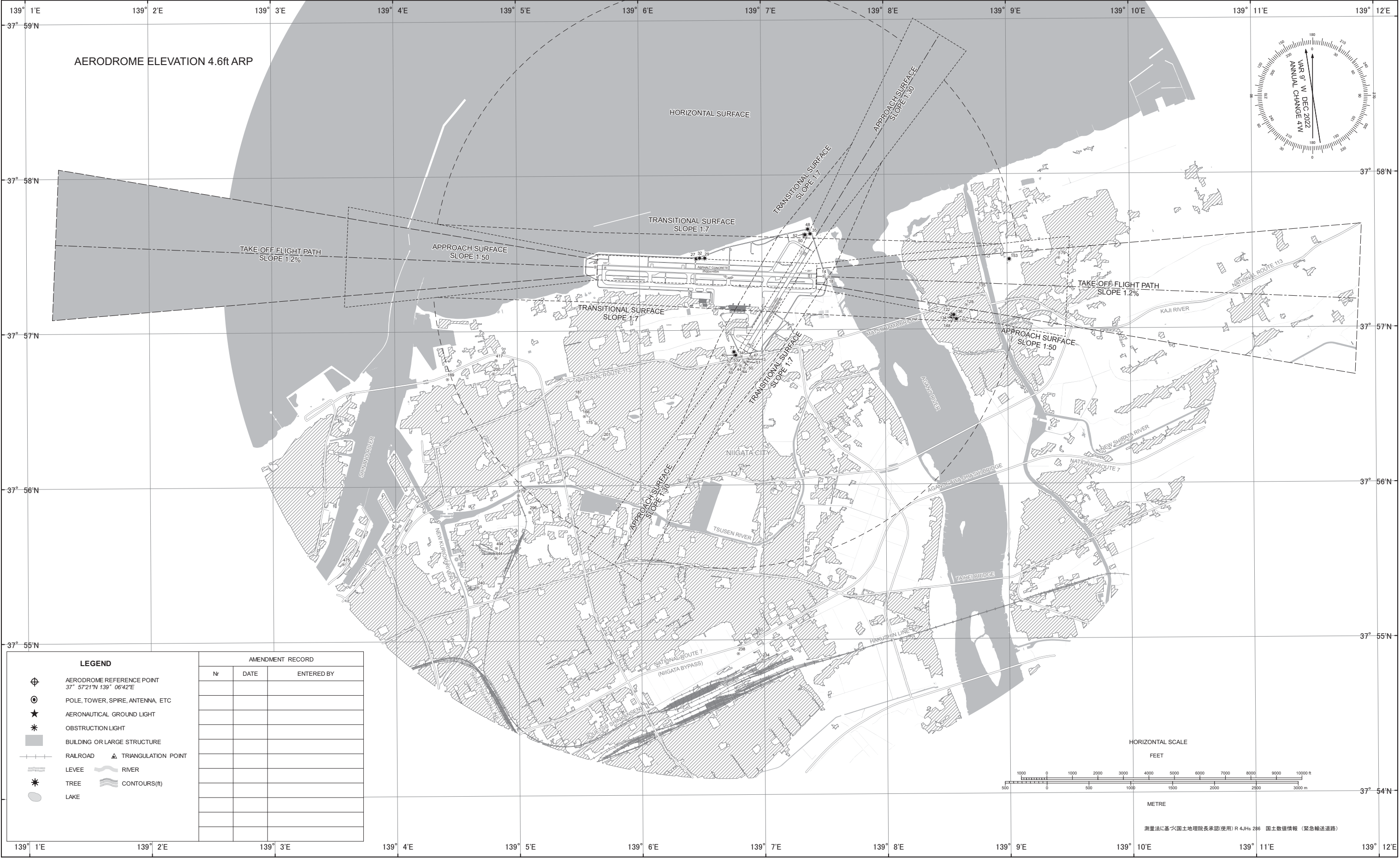


測量法に基づく国土地理院長承認(使用) R 4JHs 286 国土数値情報 (緊急輸送道路)

CHANGE: Update

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC
Transverse Mercator Projection

AERODROME OBSTACLE CHART-ICAO
TYPE B



CHANGE:Update

STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

SID

OKESA SEVEN DEPARTURE

- RWY 04 : Turn left HDG 245°...
- RWY 10 : Climb RWY HDG to 500FT, turn left HDG 245°...
- RWY 22 : Climb RWY HDG to 800FT, turn left...
- RWY 28 : Climb RWY HDG to 500FT, turn right...
...to intercept and proceed via GTC R290 to OKESA.

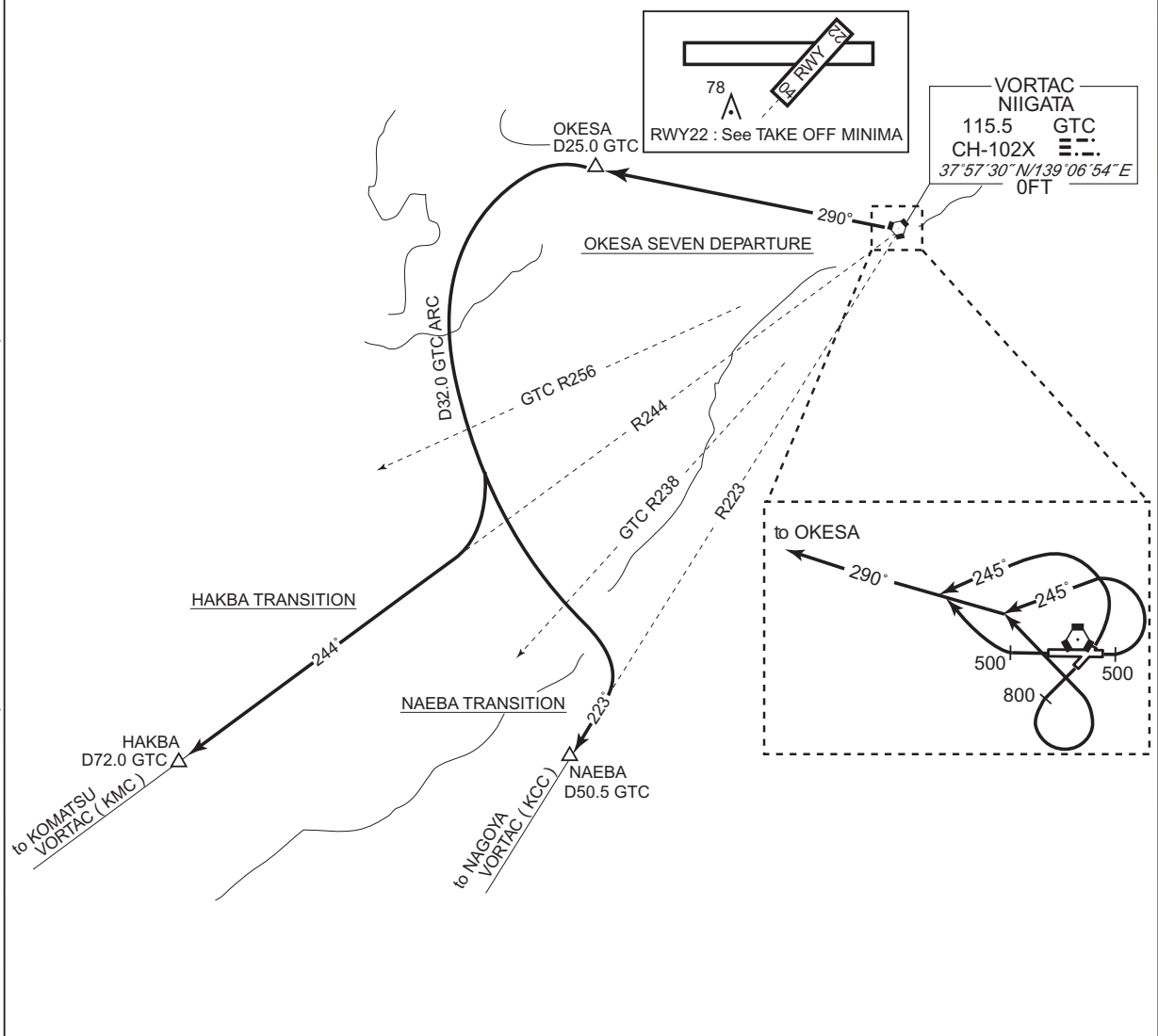
NAEBA TRANSITION

From over OKESA, turn left to intercept and proceed via GTC 32.0DME counterclockwise ARC, turn right to intercept and proceed via GTC R223 to NAEBA.

HAKBA TRANSITION

From over OKESA, turn left to intercept and proceed via GTC 32.0DME counterclockwise ARC, turn right to intercept and proceed via GTC R244 to HAKBA.

CHANGE : PROC renamed(OKESA SEVEN DEPARTURE).PROC course.



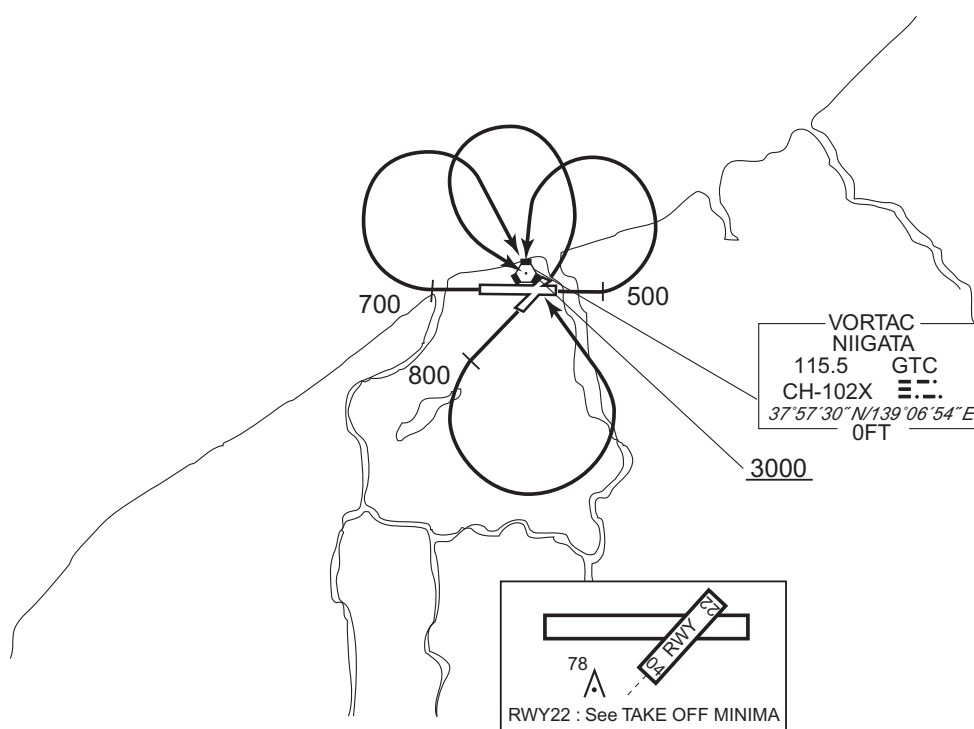
STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

SID

NIIGATA REVERSAL SEVEN DEPARTURE

- RWY 04 : Turn left...
 RWY 10 : Climb RWY HDG to 500FT, turn left...
 RWY 22 : Climb RWY HDG to 800FT, turn left...
 RWY 28 : Climb RWY HDG to 700FT, turn right...
 ...direct to GTC VORTAC.
 Cross GTC VORTAC at or above 3000FT.

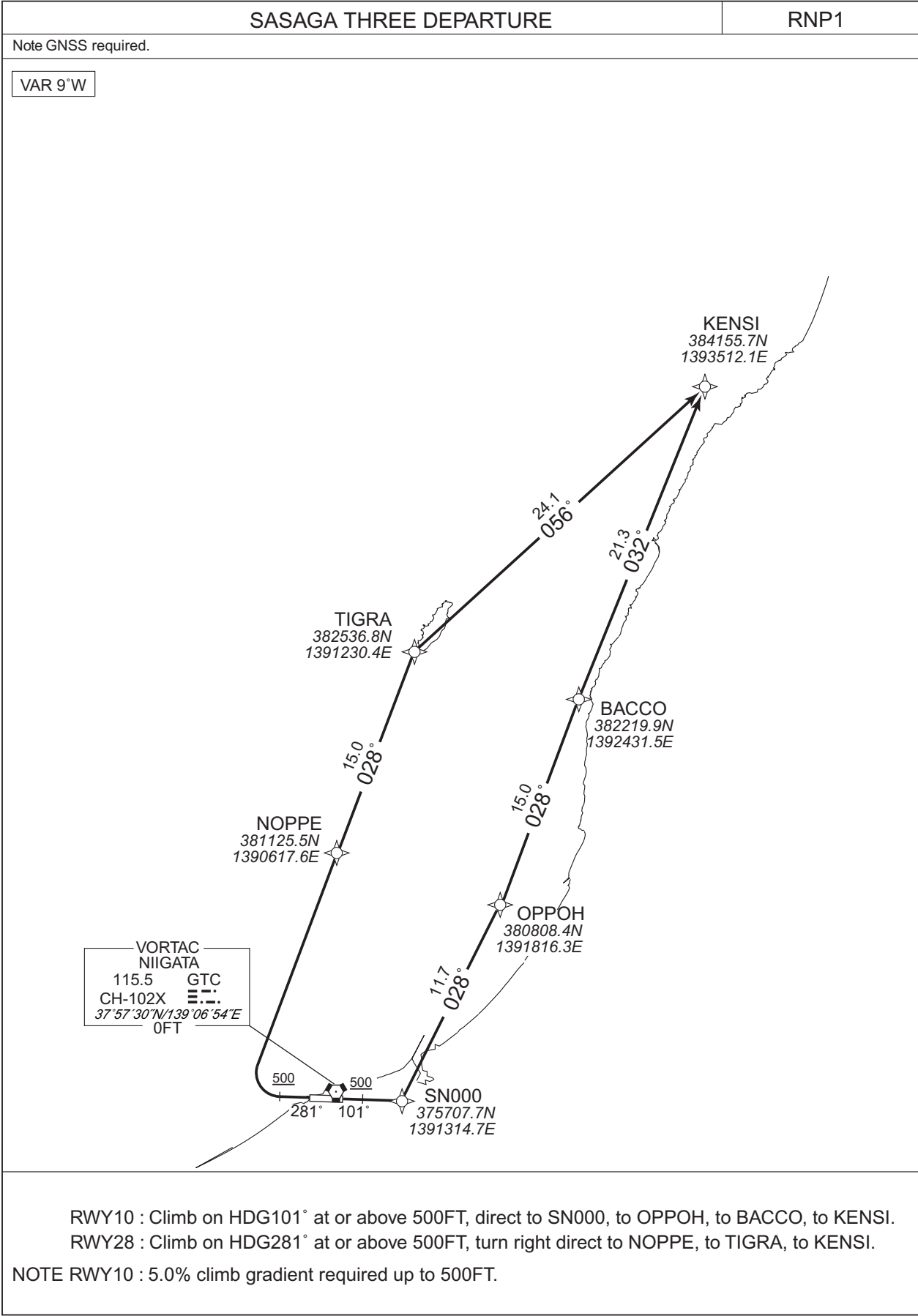


CHANGE : PROC renamed. ALT restriction.

STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

RNAV SID



STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

RNAV SID

SASAGA THREE DEPARTURE

RWY10

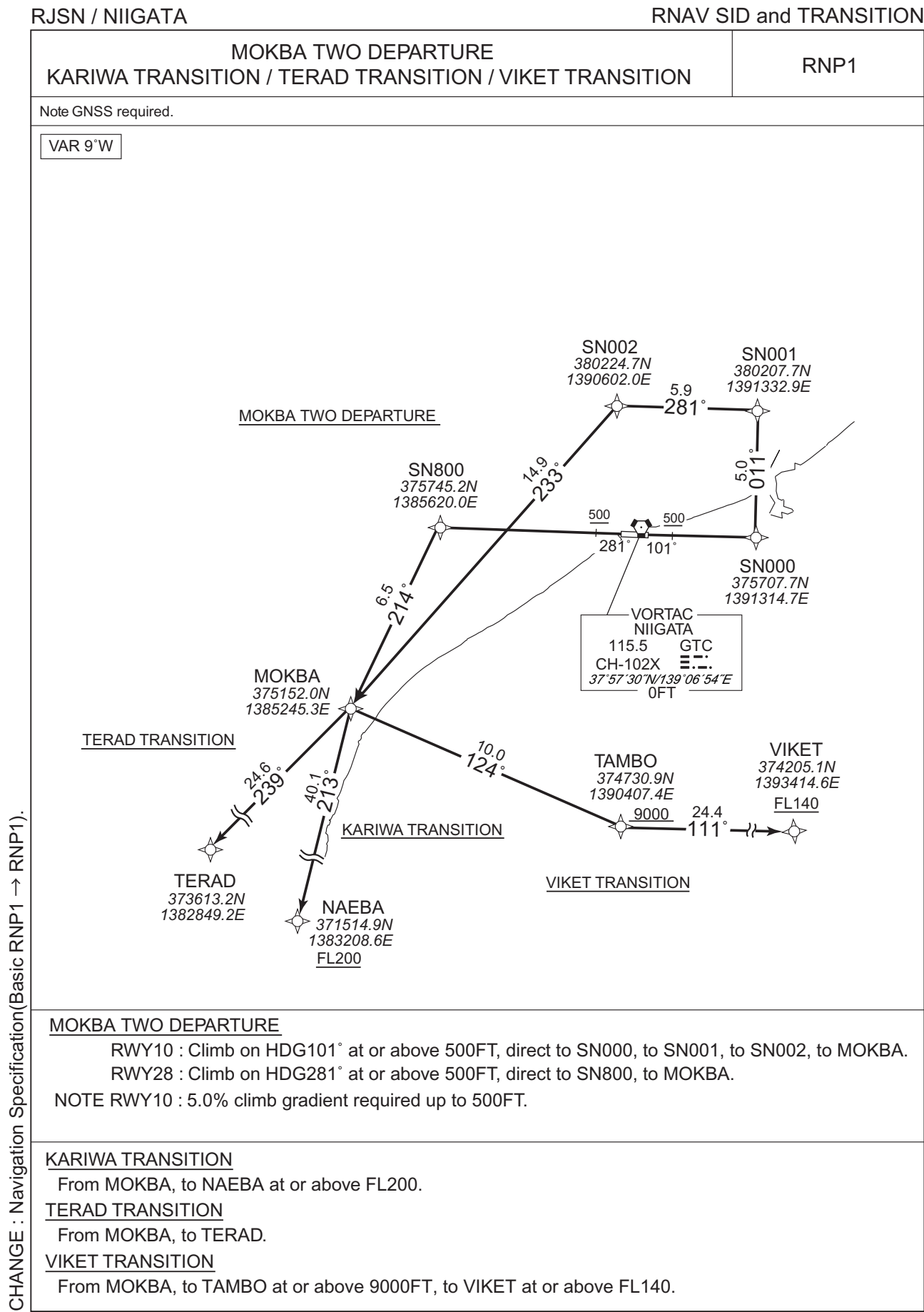
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001 | VA | - | - | 101 (092.7) | -8.6 | - | - | +500 | - | - | RNP1 |
| 002 | DF | SN000 | - | - | -8.6 | - | - | - | - | - | RNP1 |
| 003 | TF | OPPOH | - | 028 (019.7) | -8.6 | 11.7 | - | - | - | - | RNP1 |
| 004 | TF | BACCO | - | 028 (019.1) | -8.6 | 15.0 | - | - | - | - | RNP1 |
| 005 | TF | KENSI | - | 032 (023.0) | -8.6 | 21.3 | - | - | - | - | RNP1 |

RWY28

| 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 | - | - | 281 (272.7) | -8.6 | - | - | +500 | - | - | RNP1 |
| 002 | DF | NOPPE | - | - | -8.6 | - | R | - | - | - | RNP1 |
| 003 | TF | TIGRA | - | 028 (018.9) | -8.6 | 15.0 | - | - | - | - | RNP1 |
| 004 | TF | KENSI | - | 056 (047.3) | -8.6 | 24.1 | - | - | - | - | RNP1 |

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART-INSTRUMENT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

RNAV SID and TRANSITION

MOKBA TWO DEPARTURERWY10

| 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 | - | - | 101 (092.7) | -8.6 | - | - | +500 | - | - | RNP1 |
| 002 | DF | SN000 | - | - | -8.6 | - | - | - | - | - | RNP1 |
| 003 | TF | SN001 | - | 011 (002.7) | -8.6 | 5.0 | - | - | - | - | RNP1 |
| 004 | TF | SN002 | - | 281 (272.8) | -8.6 | 5.9 | - | - | - | - | RNP1 |
| 005 | TF | MOKBA | - | 233 (224.9) | -8.6 | 14.9 | - | - | - | - | RNP1 |

RWY28

| 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 | - | - | 281 (272.7) | -8.6 | - | - | +500 | - | - | RNP1 |
| 002 | DF | SN800 | - | - | -8.6 | - | - | - | - | - | RNP1 |
| 003 | TF | MOKBA | - | 214 (205.6) | -8.6 | 6.5 | - | - | - | - | RNP1 |

KARIWA 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 | MOKBA | - | - | -8.6 | - | - | - | - | - | RNP1 |
| 002 | TF | NAEBA | - | 213 (204.2) | -8.6 | 40.1 | - | +FL200 | - | - | RNP1 |

TERAD 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 | MOKBA | - | - | -8.6 | - | - | - | - | - | RNP1 |
| 002 | TF | TERAD | - | 239 (230.5) | -8.6 | 24.6 | - | - | - | - | RNP1 |

VIKET 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 | MOKBA | - | - | -8.6 | - | - | - | - | - | RNP1 |
| 002 | TF | TAMBO | - | 124 (115.8) | -8.6 | 10.0 | - | +9000 | - | - | RNP1 |
| 003 | TF | VIKET | - | 111 (102.7) | -8.6 | 24.4 | - | +FL140 | - | - | RNP1 |

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

RNAV SID

SUKOB ONE DEPARTURE

RNAV 1

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 roll.

2) RADAR service required.

Critical DME

RWY10 : GTC : 10.0NM to SUKOB - SUKOB
NTE : 10.0NM to SUKOB - SUKOB
RWY28 : GTC : 15.0NM to SUKOB - SUKOB
NTE : 15.0NM to SUKOB - SUKOB

DME GAP

RWY10 : DER - 10.0NM to SUKOB
RWY28 : DER - 15.0NM to SUKOB

Inappropriate Navaids

See AD1.1.6.10.3. Inappropriate NAVAIDS for RNAV1.

VAR 9°W

SUKOB
382919.9N
1381752.8E
FL150



51.5
377°

SN001
380207.7N
1391332.9E

011°/5.0

SN000
375707.7N
1391314.7E

VORTAC
NIIGATA
115.5 GTC
CH-102X
37°57'30"N/139°06'54"E
0FT

CHANGE : Description of VAR.

RWY10 : Climb on HDG101° at or above 500FT, direct to SN000, to SN001, to SUKOB at or above FL150.

RWY28 : Climb on HDG281° at or above 500FT, turn right direct to SUKOB at or above FL150.

Note RWY10 : 5.0% climb gradient required up to 500FT.

STANDARD DEPARTURE CHART-INSTRUMENT

RJSN/ NIIGATA

RNAV SID

SUKOB ONE DEPARTURE

RWY10

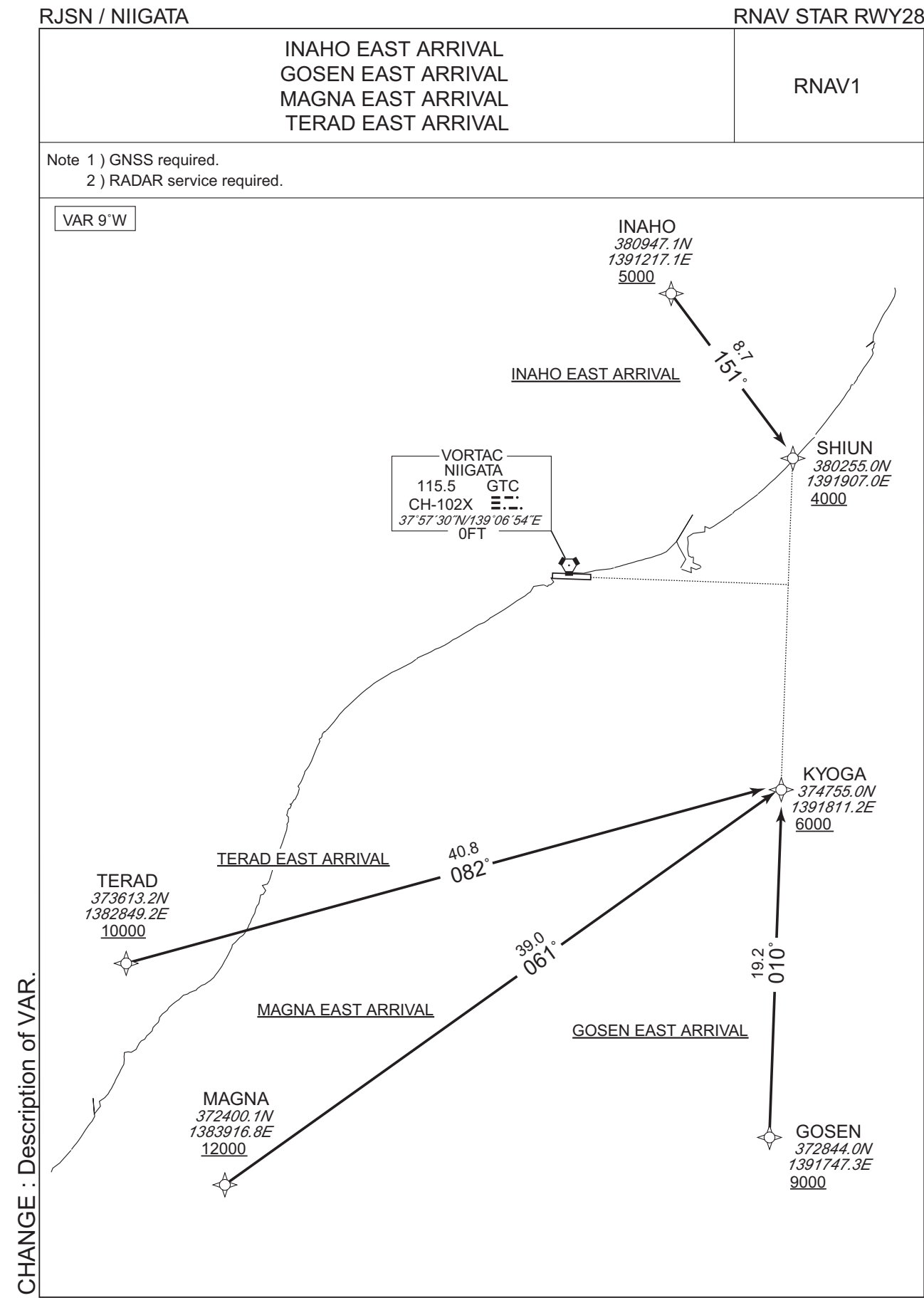
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001 | VA | — | — | 101 (092.7) | -8.6 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | SN000 | — | — | -8.6 | — | — | — | — | — | RNAV1 |
| 003 | TF | SN001 | — | 011 (002.7) | -8.6 | 5.0 | — | — | — | — | RNAV1 |
| 004 | TF | SUKOB | — | 311 (302.2) | -8.6 | 51.5 | — | +FL150 | — | — | RNAV1 |

RWY28

| 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 | — | — | 281 (272.7) | -8.6 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | SUKOB | — | — | -8.6 | — | R | +FL150 | — | — | RNAV1 |

CHANGE : New PROC.

STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

RJSN / NIIGATA

RNAV STAR RWY28

INAHO EAST ARRIVAL

From INAHO at or above 5000FT, to SHIUN at or above 4000FT.

| | |
|------------------------|---|
| Critical DME | — |
| DME GAP | INAHO - SHIUN |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDS for RNAV1 |

| 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 | INAHO | — | — | -8.6 | — | — | +5000 | — | — | RNAV1 |
| 002 | TF | SHIUN | — | 151 (141.9) | -8.6 | 8.7 | — | +4000 | — | — | RNAV1 |

GOSEN EAST ARRIVAL

From GOSEN at or above 9000FT, to KYOGA at or above 6000FT.

| | |
|------------------------|---|
| Critical DME | — |
| DME GAP | GOSEN - KYOGA |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDS for RNAV1 |

| 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 | GOSEN | — | — | -8.6 | — | — | +9000 | — | — | RNAV1 |
| 002 | TF | KYOGA | — | 010 (000.9) | -8.6 | 19.2 | — | +6000 | — | — | RNAV1 |

MAGNA EAST ARRIVAL

From MAGNA at or above 12000FT, to KYOGA at or above 6000FT.

| | |
|------------------------|--|
| Critical DME | GTC:MAGNA - 10.0NM to KYOGA NTE:MAGNA - 10.0NM to KYOGA |
| DME GAP | 10.0NM to KYOGA - KYOGA |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDS for RNAV1 |

| 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 | MAGNA | — | — | -8.6 | — | — | +12000 | — | — | RNAV1 |
| 002 | TF | KYOGA | — | 061 (052.0) | -8.6 | 39.0 | — | +6000 | — | — | RNAV1 |

TERAD EAST ARRIVAL

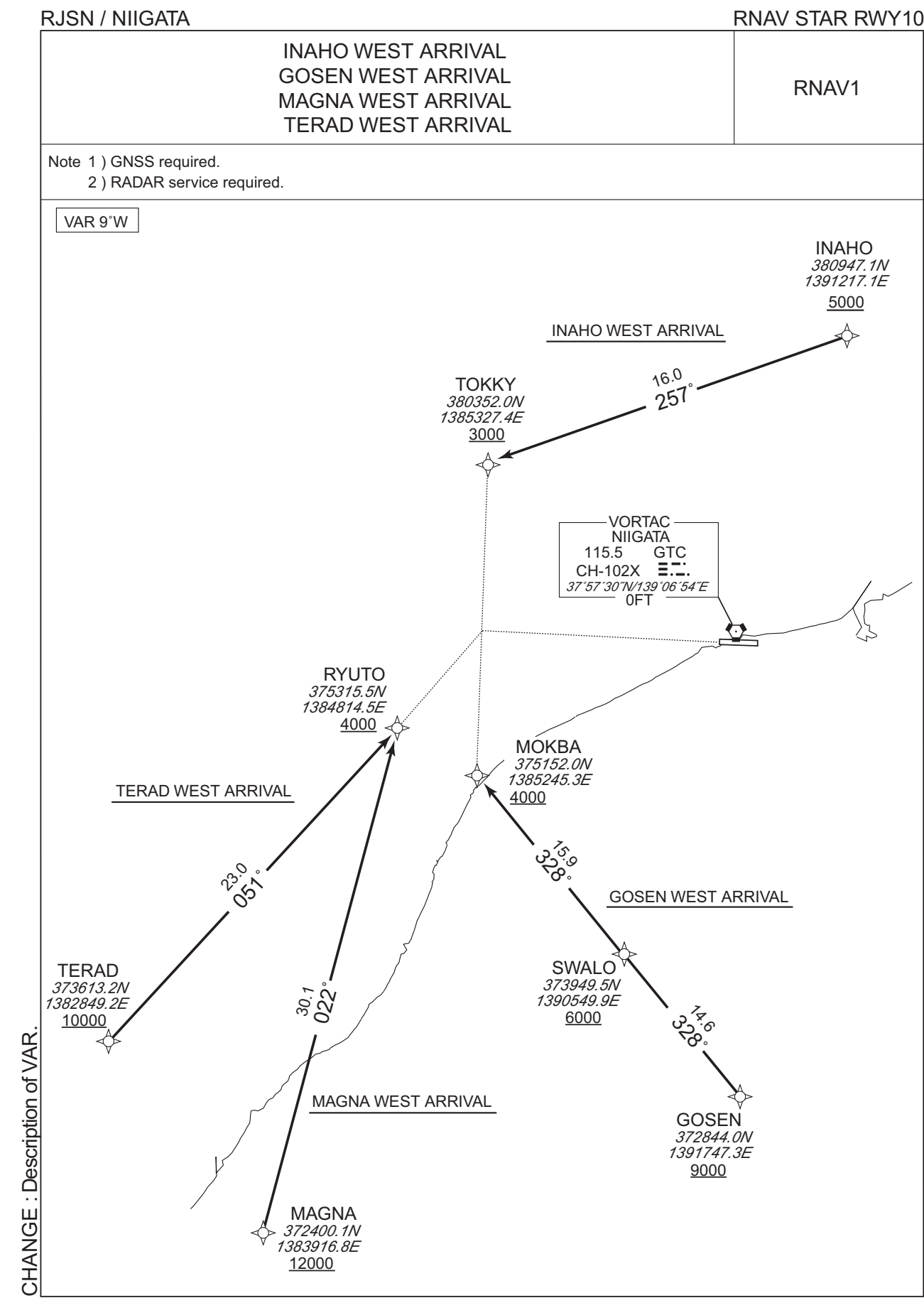
From TERAD at or above 10000FT, to KYOGA at or above 6000FT.

| | |
|------------------------|---|
| Critical DME | — |
| DME GAP | TERAD - KYOGA |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDS for RNAV1 |

| 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 | TERAD | — | — | -8.6 | — | — | +10000 | — | — | RNAV1 |
| 002 | TF | KYOGA | — | 082 (073.1) | -8.6 | 40.8 | — | +6000 | — | — | RNAV1 |

CHANGE : VAR. PROC course.

STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

RJSN / NIIGATA

RNAV STAR RWY10

INAHO WEST ARRIVAL

From INAHO at or above 5000FT, to TOKKY at or above 3000FT.

| | |
|------------------------|---|
| Critical DME | — |
| DME GAP | INAHO - TOKKY |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

| 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 | INAHO | — | — | -8.6 | — | — | +5000 | — | — | RNAV1 |
| 002 | TF | TOKKY | — | 257 (248.3) | -8.6 | 16.0 | — | +3000 | — | — | RNAV1 |

GOSEN WEST ARRIVAL

From GOSEN at or above 9000FT, to SWALO at or above 6000FT, to MOKBA at or above 4000FT.

| | |
|------------------------|---|
| Critical DME | — |
| DME GAP | GOSEN - MOKBA |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

| 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 | GOSEN | — | — | -8.6 | — | — | +9000 | — | — | RNAV1 |
| 002 | TF | SWALO | — | 328 (319.5) | -8.6 | 14.6 | — | +6000 | — | — | RNAV1 |
| 003 | TF | MOKBA | — | 328 (319.4) | -8.6 | 15.9 | — | +4000 | — | — | RNAV1 |

MAGNA WEST ARRIVAL

From MAGNA at or above 12000FT, to RYUTO at or above 4000FT.

| | |
|------------------------|--|
| Critical DME | GTC:MAGNA - 15.0NM to RYUTO NTE:MAGNA - 15.0NM to RYUTO |
| DME GAP | 15.0NM to RYUTO - RYUTO |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

| 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 | MAGNA | — | — | -8.6 | — | — | +12000 | — | — | RNAV1 |
| 002 | TF | RYUTO | — | 022 (013.6) | -8.6 | 30.1 | — | +4000 | — | — | RNAV1 |

TERAD WEST ARRIVAL

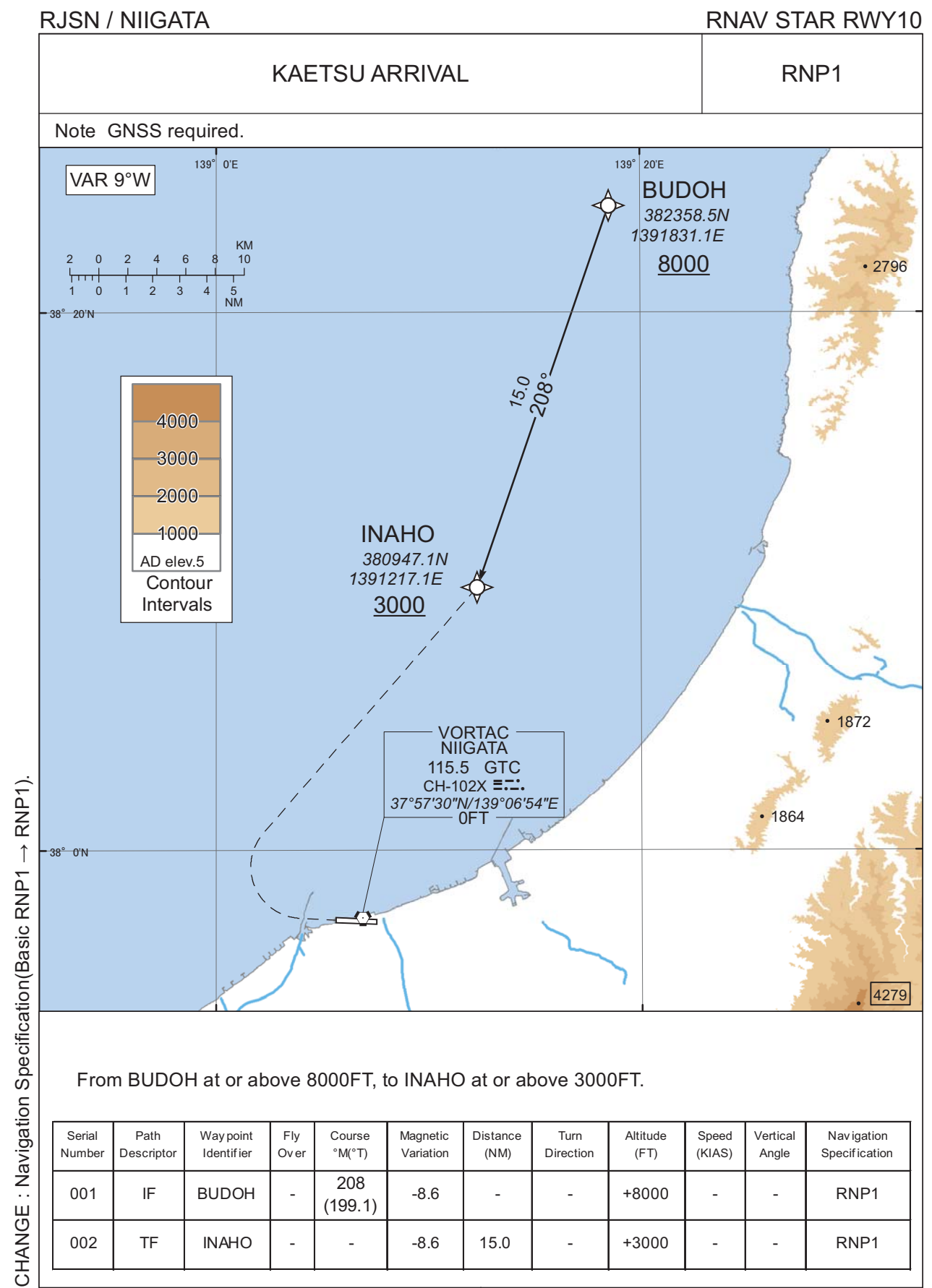
From TERAD at or above 10000FT, to RYUTO at or above 4000FT.

| | |
|------------------------|---|
| Critical DME | — |
| DME GAP | TERAD - RYUTO |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

| 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 | TERAD | — | — | -8.6 | — | — | +10000 | — | — | RNAV1 |
| 002 | TF | RYUTO | — | 051 (041.9) | -8.6 | 23.0 | — | +4000 | — | — | RNAV1 |

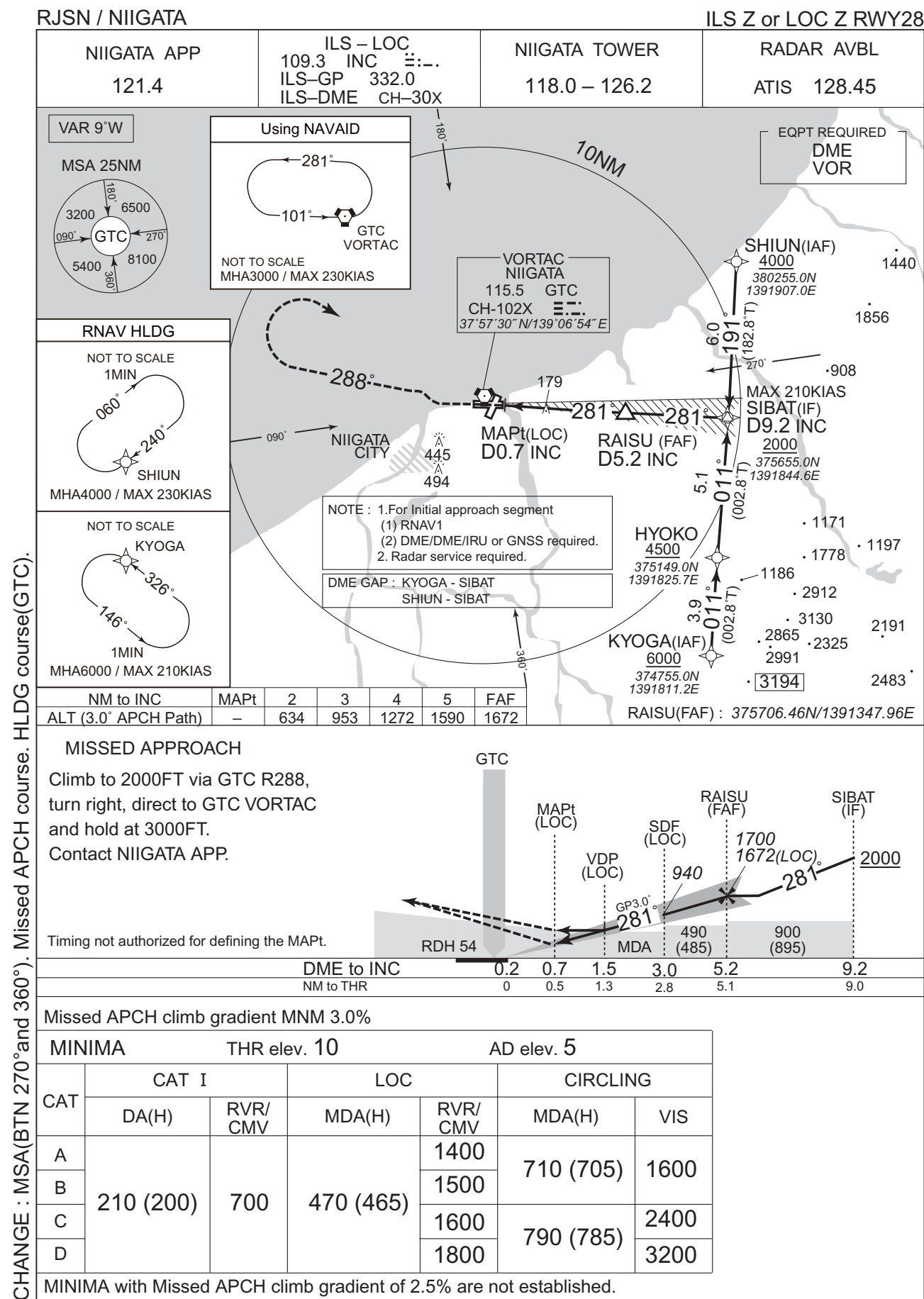
CHANGE : VAR. PROC course FM TERAD to RYUTO.

STANDARD ARRIVAL CHART-INSTRUMENT

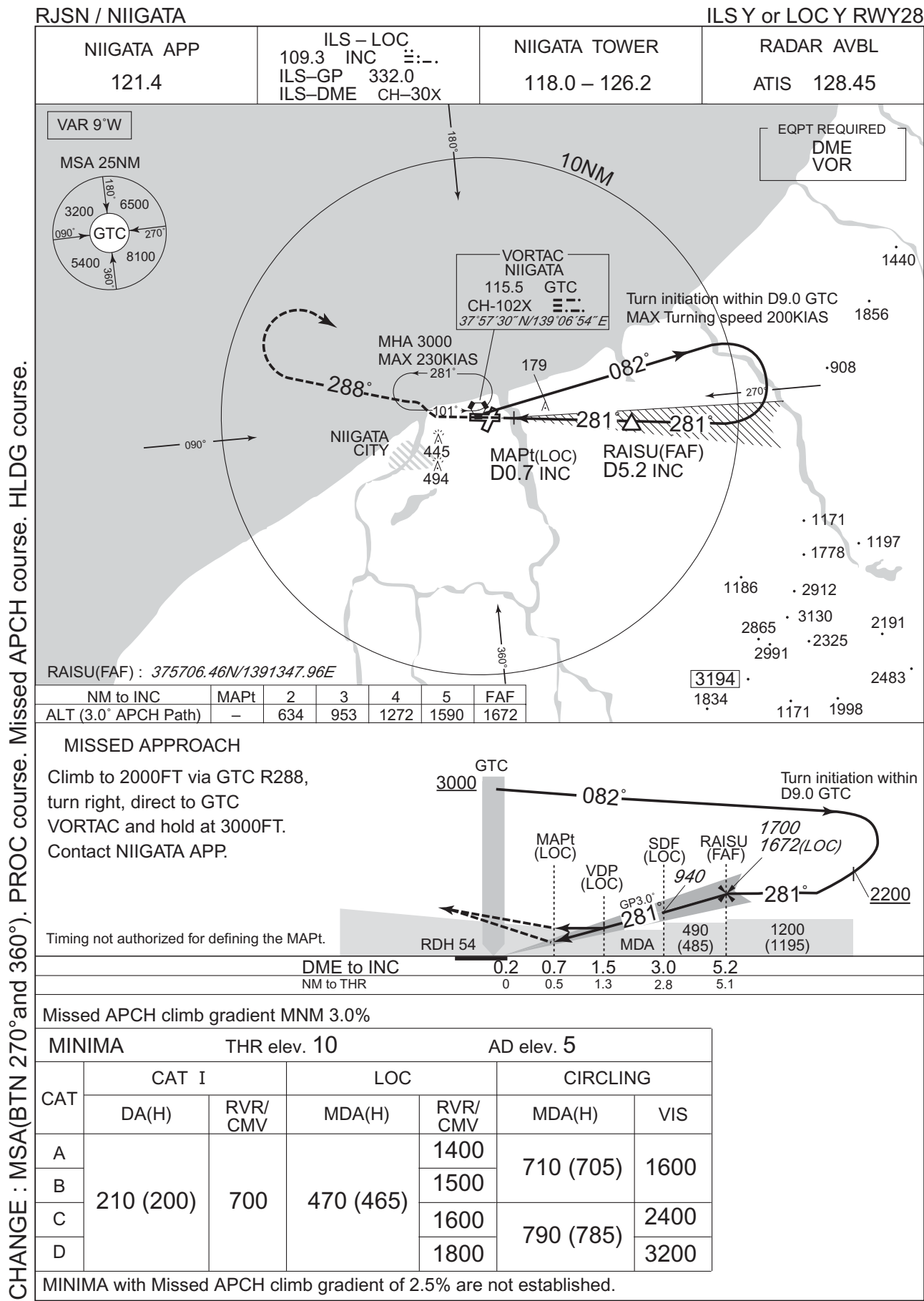


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INSTRUMENT APPROACH CHART



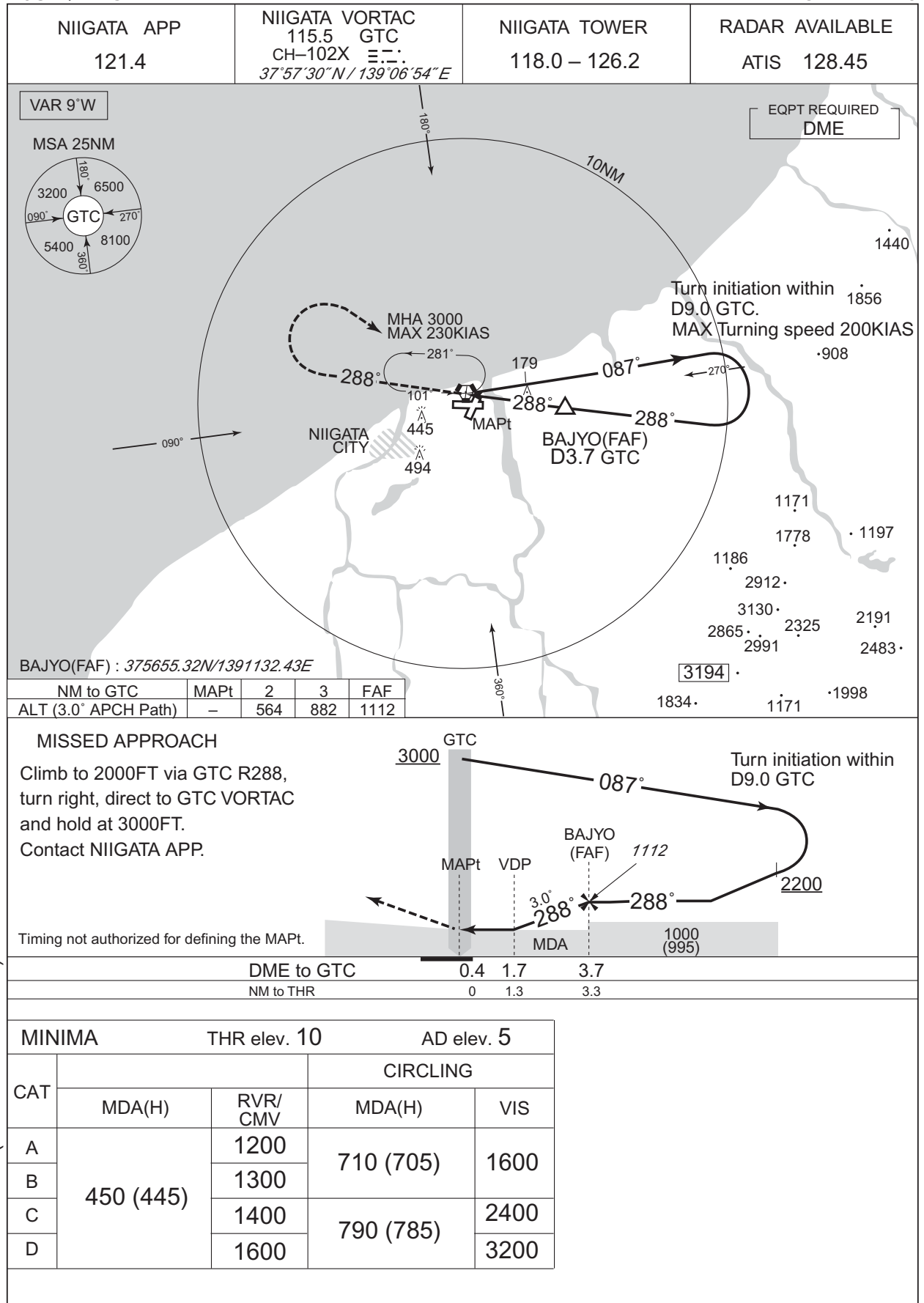
INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJSN / NIIGATA

VOR RWY28

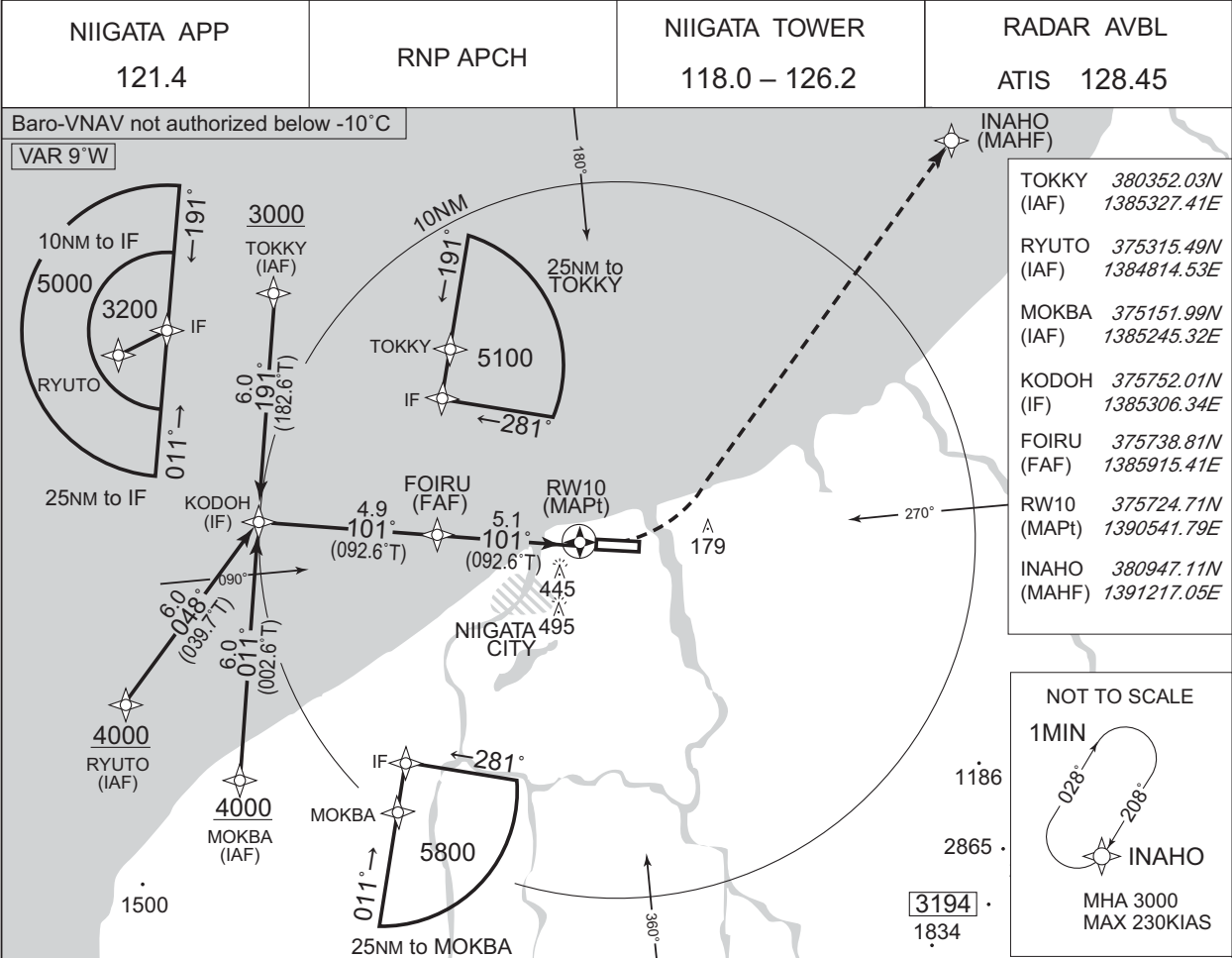


CHANGE : MSA(BTN 270°and 360°). PROC course. Missed APCH course. HLDG course.

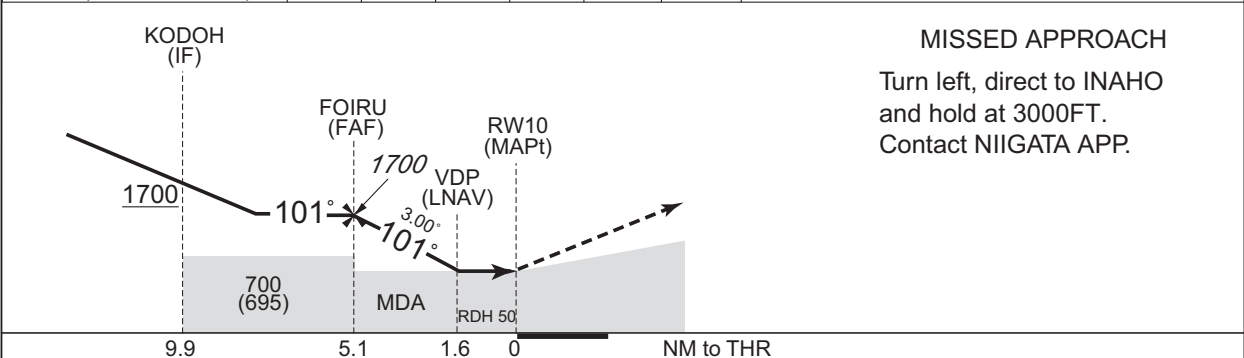
INSTRUMENT APPROACH CHART

RJSN / NIIGATA

RNP Z RWY10



| | | | | | | |
|----------------------|------|------|------|------|-----|------|
| NM To Next Fix | FAF | 5 | 4 | 3 | 2 | MAPt |
| ALT (3.0° APCH Path) | 1700 | 1669 | 1350 | 1032 | 713 | — |



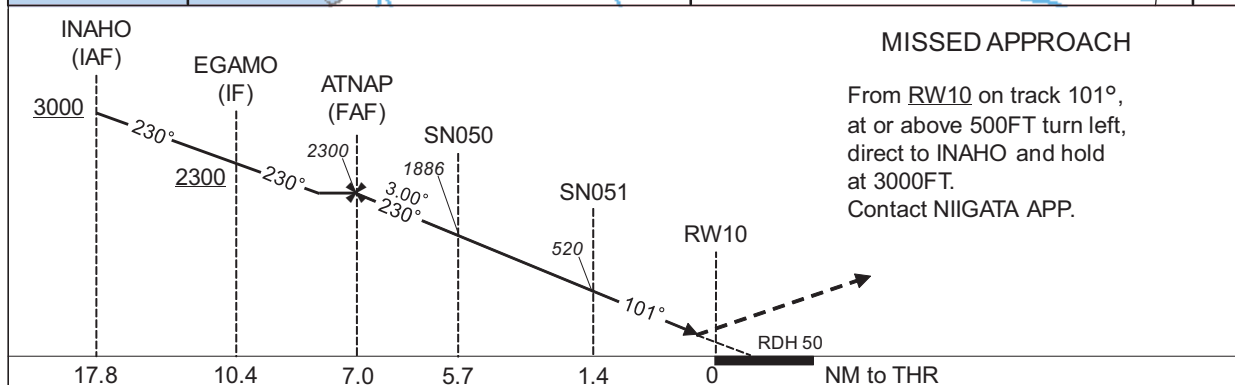
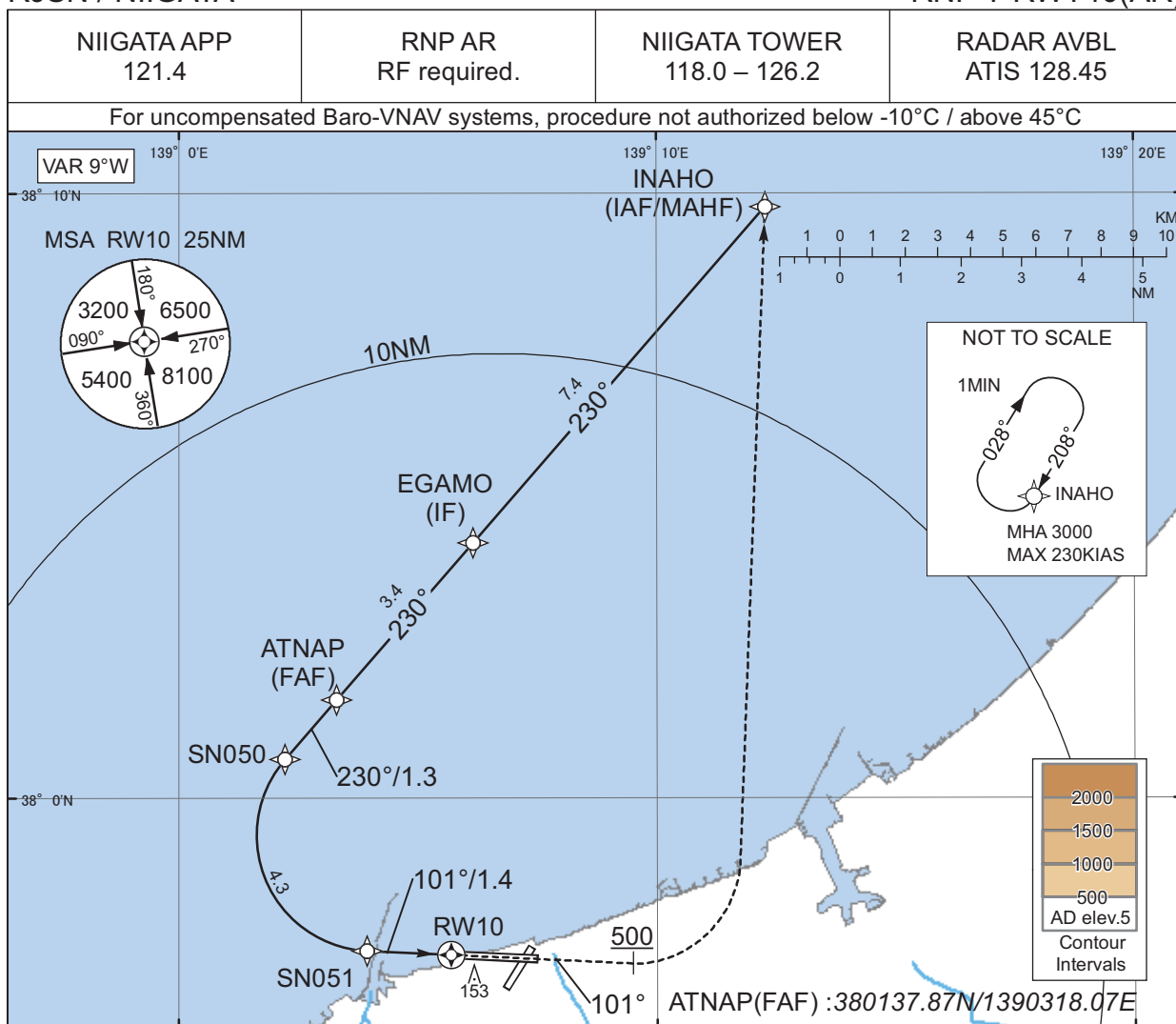
| MINIMA | | THR elev. 27 | | AD elev. 5 | | |
|--------|-----------|--------------|-----------|------------|-----------|------|
| CAT | LNAV/VNAV | | LNAV | | CIRCLING | |
| | DA(H) | CMV | MDA(H) | CMV | MDA(H) | VIS |
| A | 580 (553) | 1400 | 580 (575) | 1400 | 710 (705) | 1600 |
| B | | 1500 | | 1500 | | |
| C | | 1600 | | 1600 | 790 (785) | 2400 |
| D | | 1800 | | 1800 | | |

CHANGE : PROC renamed.

INSTRUMENT APPROACH CHART

RJSN / NIIGATA

RNP Y RWY10(AR)



CHANGE : New PROC.

| MINIMA | THR elev. 27 | AD elev. 5 |
|--------|--------------|------------|
| CAT | RNP 0.30 | |
| | DA(H) | CMV |
| A | - | - |
| B | - | - |
| C | 305(278) | 1200 |
| D | 315(288) | 1400 |

Authorization Required

INSTRUMENT APPROACH CHART

RJSN / NIIGATA

RNP Y RWY10(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 | INAHO | - | - | -8.6 | - | - | +3000 | - | - | - |
| 002 | TF | EGAMO | - | 230 (221.0) | -8.6 | 7.4 | - | +2300 | - | - | 1.0 |
| 003 | TF | ATNAP | - | 230 (220.9) | -8.6 | 3.4 | - | 2300 | - | - | 1.0 |
| 004 | TF | SN050 | - | 230 (220.9) | -8.6 | 1.3 | - | 1886 | - | -3.00 | 0.3 |
| 005 | RF Center: SNRF1 r=1.91NM | SN051 | - | - | -8.6 | 4.3 | L | 520 | - | -3.00 | 0.3 |
| 006 | TF | RW10 | Y | 101 (092.7) | -8.6 | 1.4 | - | 77 | - | -3.00/50 | 0.3 |
| 007 | FA | - | - | 101 (092.7) | -8.6 | - | - | +500 | - | - | 1.0 |
| 008 | DF | INAHO | - | - | -8.6 | - | L | 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 | INAHO | 208 (199.1) | -8.6 | 1.0 (-14000) | R | 3000 | FL140 | -230 (-14000) | 1.0 |

Waypoint Coordinates

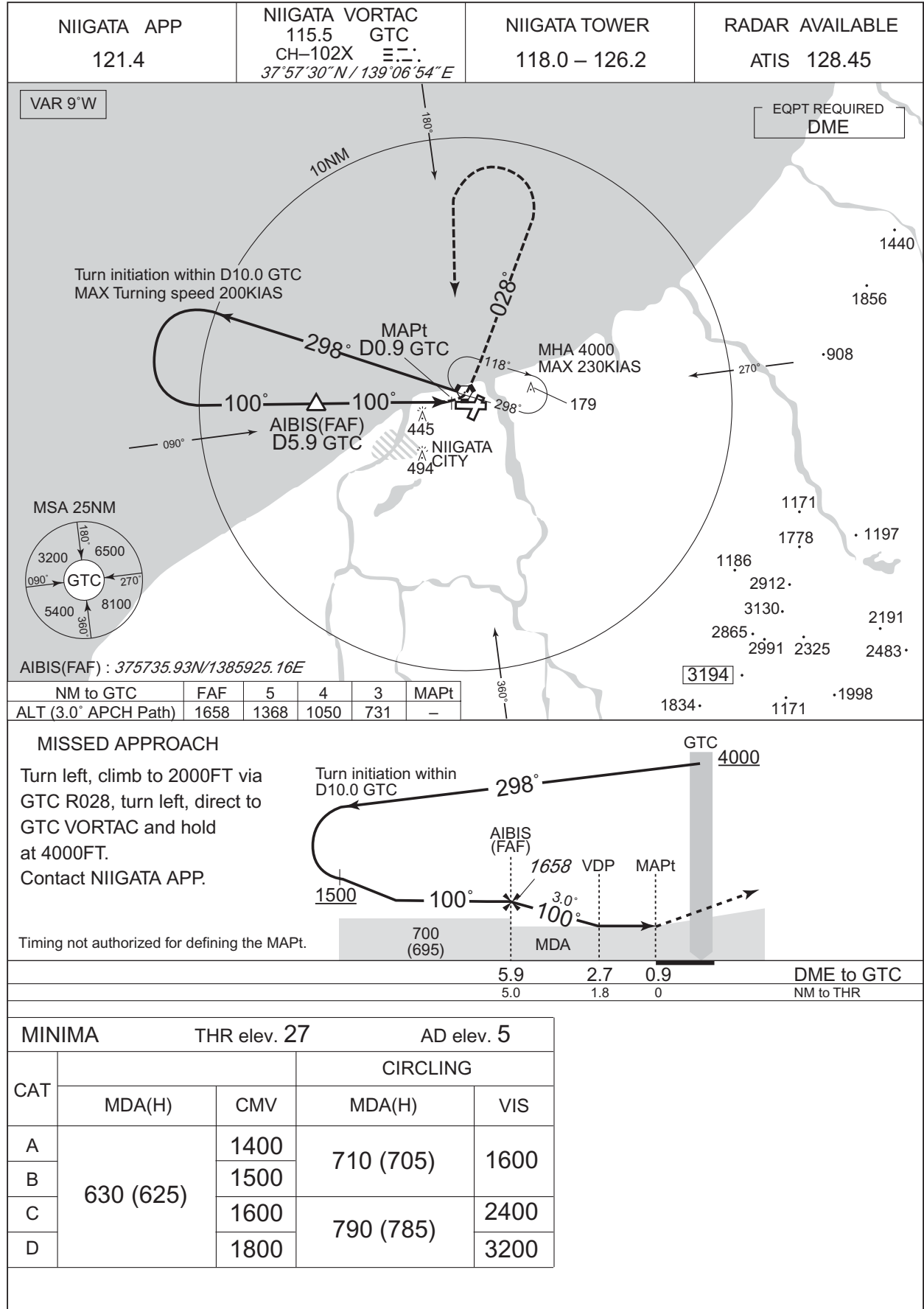
| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|--------------------------|--------------------------|--------------------------|
| INAHO | 380947.11N / 1391217.05E | SNRF1 | 375923.46N / 1390402.94E |
| EGAMO | 380413.79N / 1390609.55E | | |
| ATNAP | 380137.87N / 1390318.07E | | |
| SN050 | 380038.89N / 1390213.27E | | |
| SN051 | 375728.60N / 1390356.21E | | |
| RW10 | 375724.71N / 1390541.79E | | |

CHANGE : New PROC.

INSTRUMENT APPROACH CHART

RJSN / NIIGATA

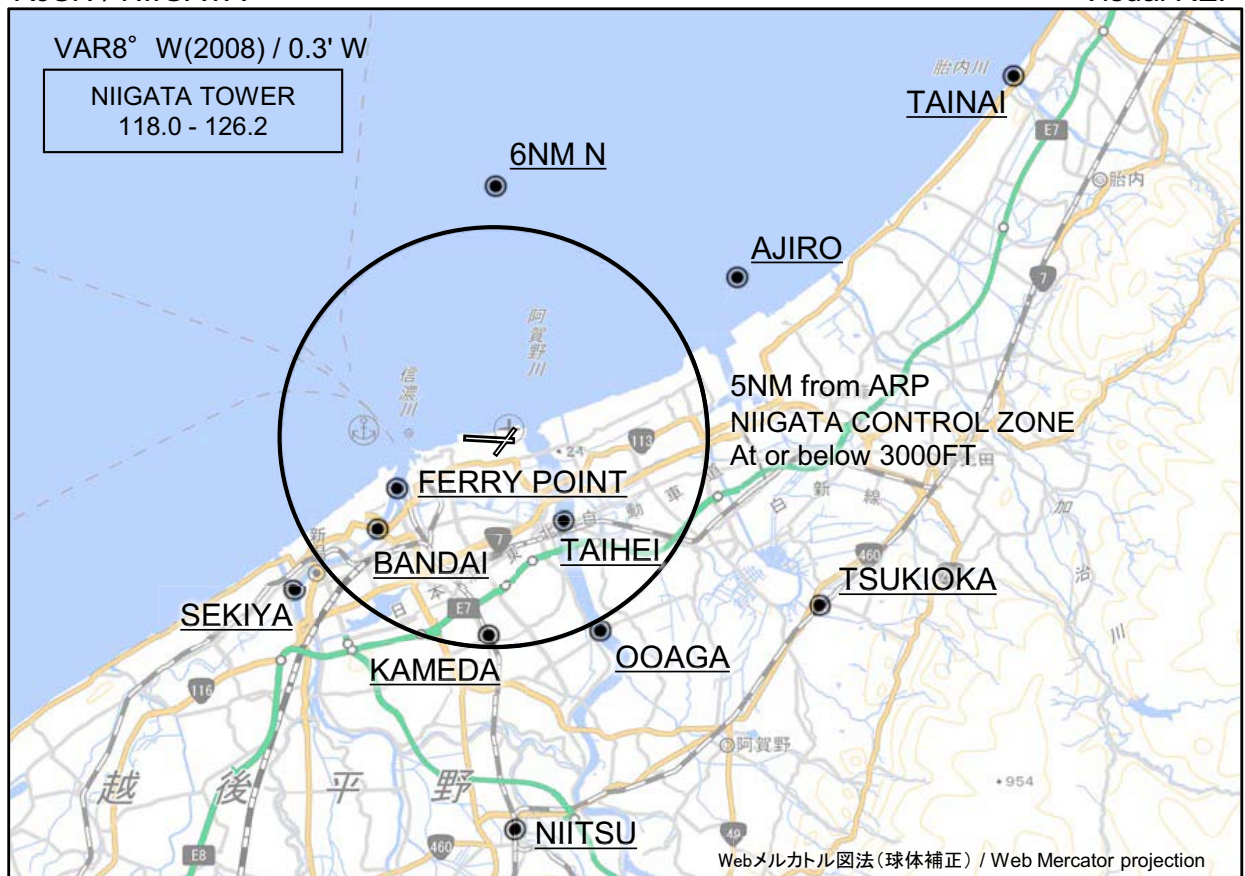
VOR RWY10



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RJSN / NIIGATA

Visual REP



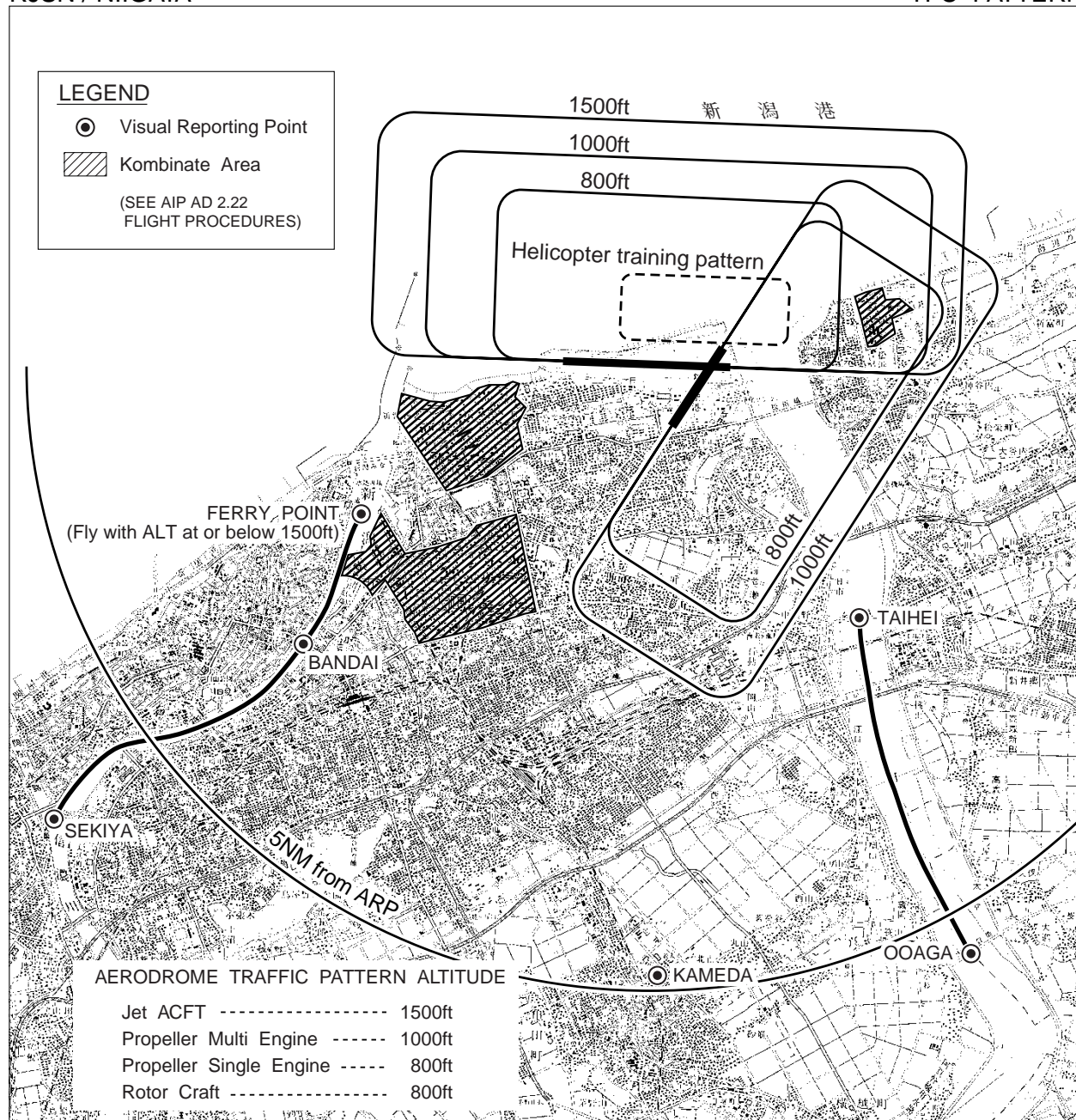
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

| Call sign | BRG / DIST from ARP | Remarks |
|--------------------------|---------------------|---|
| 胎内 Tainai | 054°T / 14.9NM | 胎内川河口 River-mouth |
| 6NM N | 360°T / 6.0NM | 海上 Over the sea |
| 網代 Ajiro | 056°T / 6.9NM | 防波堤突端の赤色灯台 Red lighthouse at the tip of breakwater |
| *フェリーポイント Ferry point | 243°T / 2.6NM | 万代橋より信濃川下流2kmの地点 (1,500FT以下で通過すること) The point 2km down the Shinano from the Bandai Bridge.(Fly with ALT at or below 1500FT) |
| *泰平 Taihei | 141°T / 2.5NM | 橋 Bridge |
| *万代 Bandai | 232°T / 3.5NM | 橋 Bridge |
| 関屋 Sekiya | 232°T / 6.0NM | 分水路への分岐点 Diverging-point for Flood-control channel |
| 月岡 Tsukioka | 118°T / 8.6NM | JR駅 Station |
| 大阿賀 Ooaga | 152°T / 5.2NM | 橋 Bridge |
| 亀田 Kameda | 182°T / 4.7NM | JR駅 Station |
| 新津 Niitsu | 177°T / 9.4NM | JR駅 Station |

*ヘリコプター Use for helicopter

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TFC PATTERN



阿賀野ルート：大阿賀～泰平間の阿賀野川に沿う飛行経路（回転翼航空機用）

AGANO ROUTE : The route along Agano river between OOAGA and TAIHEI (Use for Rotor Craft)

信濃ルート：関屋～万代～フェリーポイント間の信濃川に沿う飛行経路（回転翼航空機用）

SHINANO ROUTE : The route along Shinano river between SEKIYA, BANDAI and FERRY POINT
(Use for Rotor Craft)

※新潟タワーから上記ルートによる飛行の指示があった場合、VFR回転翼航空機は空港周辺における航空機騒音軽減のためVMCを維持できない場合を除き可能な限り当該ルートに沿って飛行することが望ましい。

※In order to reduce aircraft noise in the vicinity of airport, VFR Rotor Craft is expected to follow the above mentioned route when insructed by Niigata tower. (except the case of IMC)



RJSN / NIIGATA

Minimum Vectoring Altitude CHART

