

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	Customs: 2330-0815 Immigration: 2330-0715
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: PCN 74/R/C/X/T S Apron : AUW 11t
2	Taxiway width, surface and strength	Surface : Asphalt concrete and concrete Strength : A1, A3 and P4 : PCN 14/F/C/Y/T B1- B5,C1, C2 , C4 - C6 and P3 : PCN 91/F/C/X/T C3 : PCN 74/R/C/X/T S : AUW 11t Width : B1 and B5 : 29m 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

RJSN 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
04	031.91°	1314x45	PCN 14/F/C/Y/T Asphalt Concrete	375653.73N 1390652.82E	THR ELEV:22.7ft
22	211.91°	1314x45	PCN 14/F/C/Y/T Asphalt Concrete	375729.96N 1390721.31E	THR ELEV: 5.9ft
10	092.69°	2500x45	PCN 91/F/C/X/T Asphalt Concrete	375724.64N 1390544.23E	THR ELEV: 29.1ft
28	272.69°	2500x45	PCN 91/F/C/X/T Asphalt Concrete	375720.84N 1390726.53E	THR ELEV: 11.8ft TDZ ELEV: 8.0ft
Slope of RWY		Strip Dimensions(M)	RESA (Overrun) Dimensions (M)		Remarks
7		10	11		14
SEE ATTACHED CHART		1434x150	84x(MNM:120 MAX:150)*		Nil
		1434x150	1x(MNM:120 MAX:121)*		
SEE ATTACHED CHART		2620x300	30x(MNM:195 MAX:277)*		RWY grooving: 2500m×45m
		2620x300	194x(MNM:133 MAX:300)*		
		*For detail, ask airport administrator			

RWY 10

Distance (m)	Elevation (ft)	Slope (%)
0	29.1	0.76
580	14.6	0.43
1040	8.2	0.47
1230	5.2	LEVEL
2230	5.2	0.74
2500	11.8	

RWY 22

Distance (m)	Elevation (ft)	Slope (%)
0	5.9	0.25
200	5.9	
400	5.9	0.18
600		LEVEL
800	5.9	
1000	6.5	0.89
1200	13.9	1.41
1400	22.7	1.59

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 541m 74ft	-	2500m 30m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil (*1)
28	PALS (CAT I) 600m LIH	Green Green	PAPI 3.0°/Left 482m 69ft	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: 450m from RWY28 THR, LGTD RWY10: 330m 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/2008)	GTC	115.5MHz	H24	375729.86N 1390653.59E		
TACAN	GTC	1189MHz (CH-102X)	H24	375729.71N 1390656.04E	39ft	TACAN Unusable: 095°-120° beyond 35nm BLW 9,000ft.
ILS-LOC 28	INC	109.3MHz	2230 - 1230	375724.98N 1390534.58E		LOC Unusable beyond 14NM FM antenna. LOC: 235m away FM RWY10 THR. BRG (MAG) 281°
ILS-GP 28	-	332.0MHz	2230 - 1230	375725.83N 1390711.34E		GP: 377m(1237ft) inside FM RWY28 THR, 137m(449ft) N of RCL. GP angle 3.0°. HGT of ILS Ref datum 17.7m(58ft).
ILS-DME 28	INC	991.0MHz (CH-30X)	2230 - 1230	375725.97N 1390710.89E	18ft	DME: 388m(1273ft) inside FM RWY28 THR, 141m(463ft) N of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based

ILSNIIGATA AP

REMARKS : 1. LOC beam BRG (MAG) 281°
 2. HGT of ILS REF datum 17.7m (58 ft)
 3. GP Angle 3.0°



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

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

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.

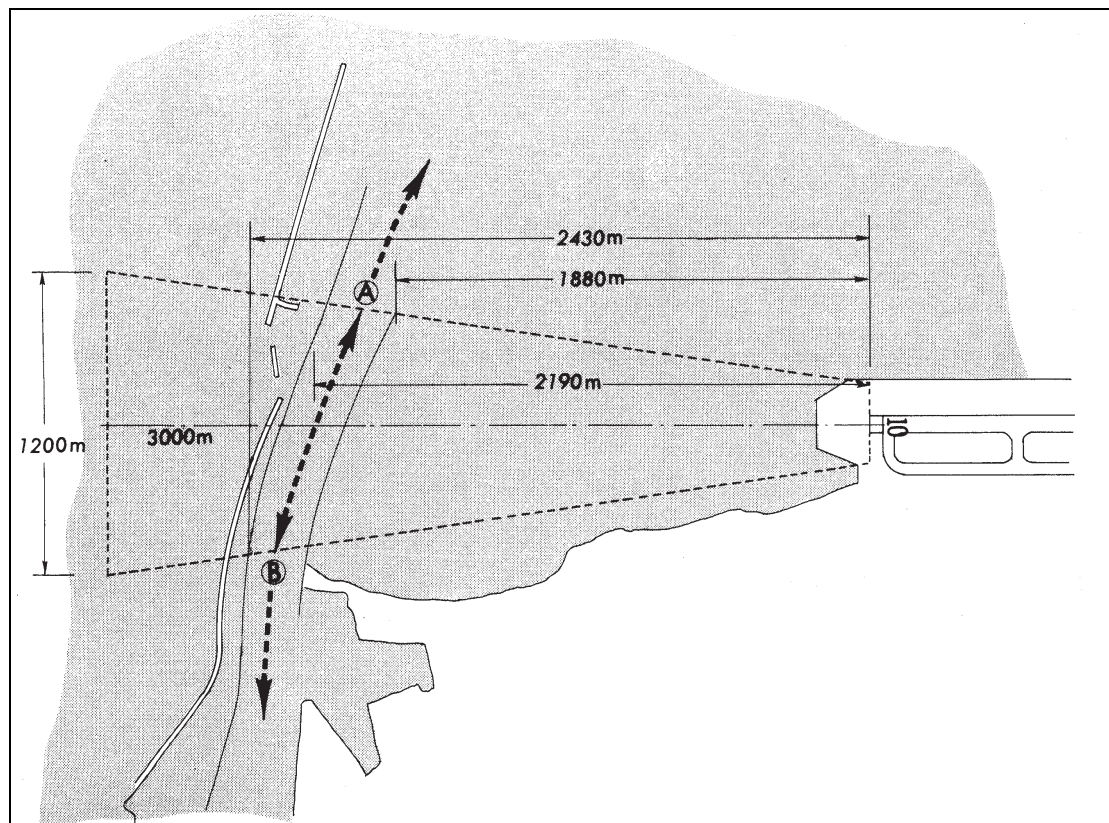
RJSN AD 2.23 ADDITIONAL INFORMATION

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 55m(181ft) 超の場合、全ての到着機
 - b) RWY28 出発時及び着陸時
船舶高が 59m(194ft) 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 55m(181ft): all arrival ACFT
 - b) ACFT for take-off/landing RWY28
When vessel height is above 59m(194ft): IFR departure ACFT
When vessel height is above 93m(306ft): IFR arrival ACFT

船舶経路

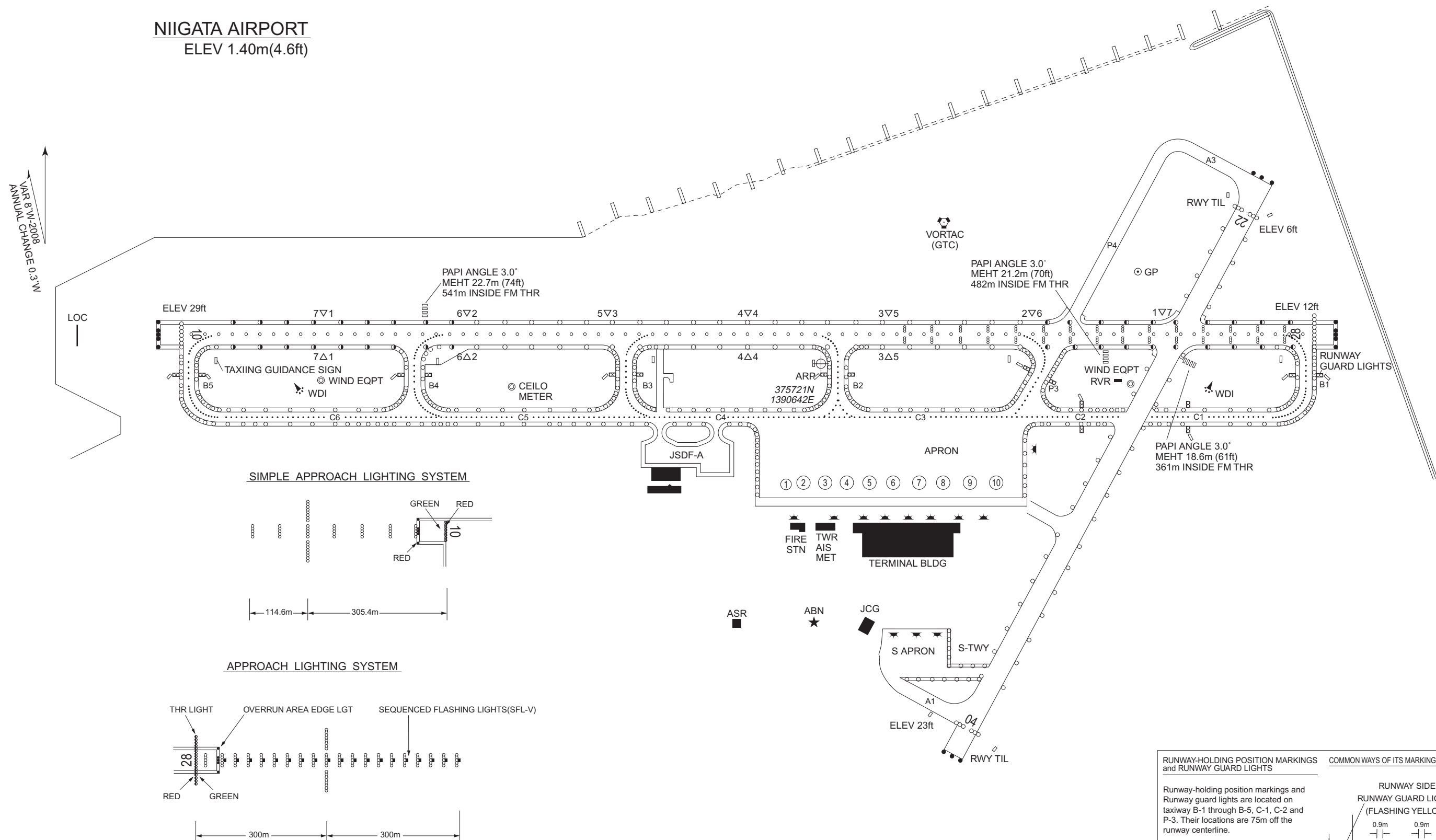
VESSEL COURSE




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 (KENSI)
Standard Departure Chart - Instrument (KADBO, NIIGATA)
Standard Departure Chart - Instrument (SASAGA-RNAV)
Standard Departure Chart - Instrument (MOKBA-RNAV)
Standard Arrival Chart - Instrument (NIIGATA)
Standard Arrival Chart - Instrument (INAHO, GOSEN, MAGNA, TERAD-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 (RNAV(GNSS) RWY10)
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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RUNWAY-HOLDING POSITION MARKINGS and RUNWAY GUARD LIGHTS	COMMON WAYS OF ITS MARKING AND LIGHTS
<p>Runway-holding position markings and Runway guard lights are located on taxiway B-1 through B-5, C-1, C-2 and P-3. Their locations are 75m off the runway centerline.</p>	

RJSN / NIIGATA

AD CHART



AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

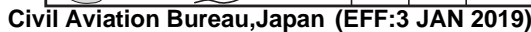
MAGNETIC VARIATION 8°09' W-APR 2015



LEGEND		AMENDMENT RECORD		
①	IDENTIFICATION NUMBER	Nr	DATE	ENTERED BY
●	POLE, TOWER, SPIRE, ANTENNA, ETC			
✱	TREE			
—+—+—	RAILROAD			
—+—+—	TRANSMISSION LINE OR OVERHEAD CABLE			
	LEVEE			
—+—+—	RIVER			



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

SID

OKESA FIVE DEPARTURE

RWY 04/10 : Turn left HDG 244°,...
 RWY 22 : Climb RWY HDG to 800FT, turn left,...
 RWY 28 : Turn right,....
 climb via GTC R289 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 R221 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 R243 to HAKBA.



STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

SID

KENSI SIX DEPARTURE

RWY 04/10 : Turn left HDG 283°,...

RWY 22 : Climb RWY HDG to 800FT, turn left,...

RWY 28 : Turn right HDG 013°,...

... climb via GTC R328 to GTC 18.0DME, turn right to intercept and proceed via YSE R244 to KENSI.



STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

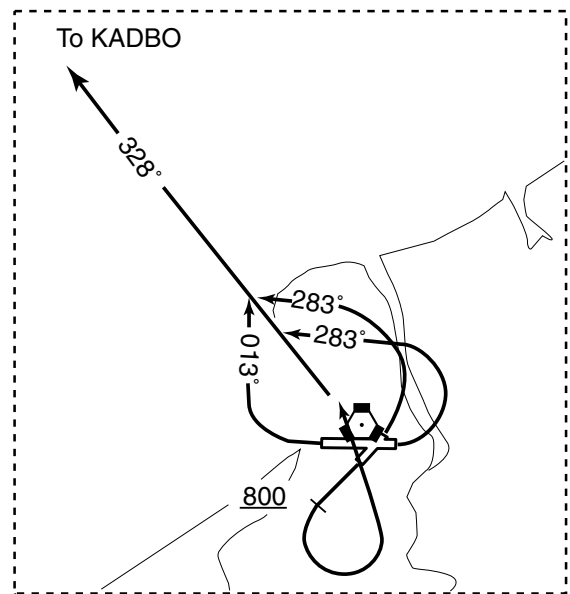
SID

KADBO SIX DEPARTURE

- RWY 04/10 : Turn left HDG 283°,...
- RWY 22 : Climb RWY HDG to 800FT, turn left,...
- RWY 28 : Turn right HDG 013°,....
- climb via GTC R328 to KADBO.
- Cross KADBO at assigned altitude.

Cross KADBO at
assigned

KADBO SIX DEPARTURE



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



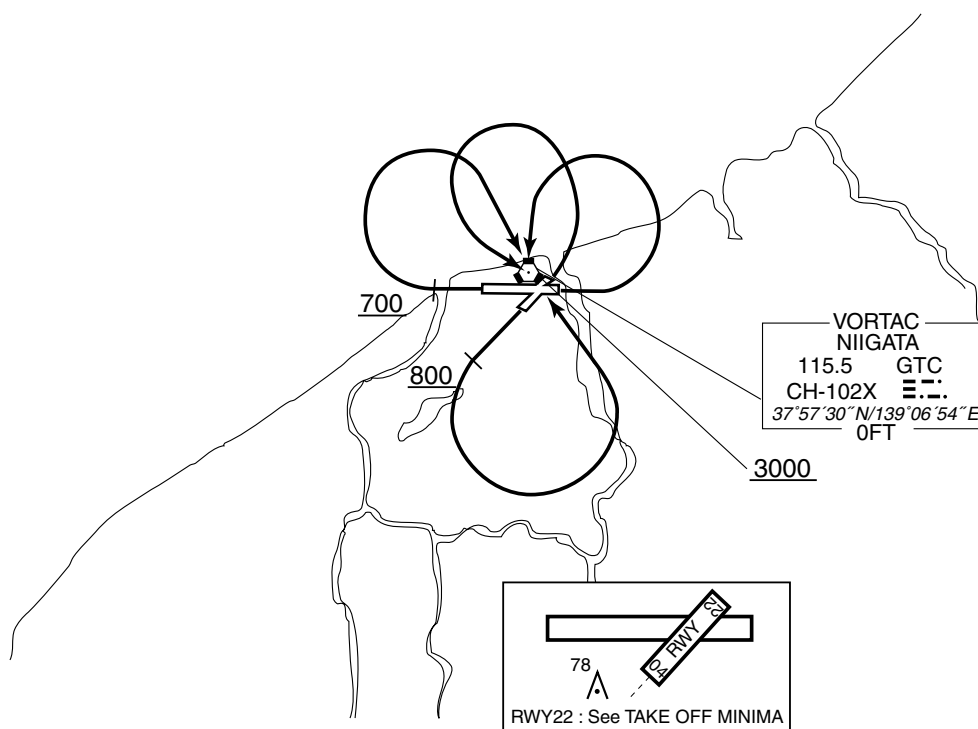
STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

SID

NIIGATA REVERSAL SIX DEPARTURE

RWY 04/10 : 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.

NIIGATA REVERSAL SIX DEPARTURE

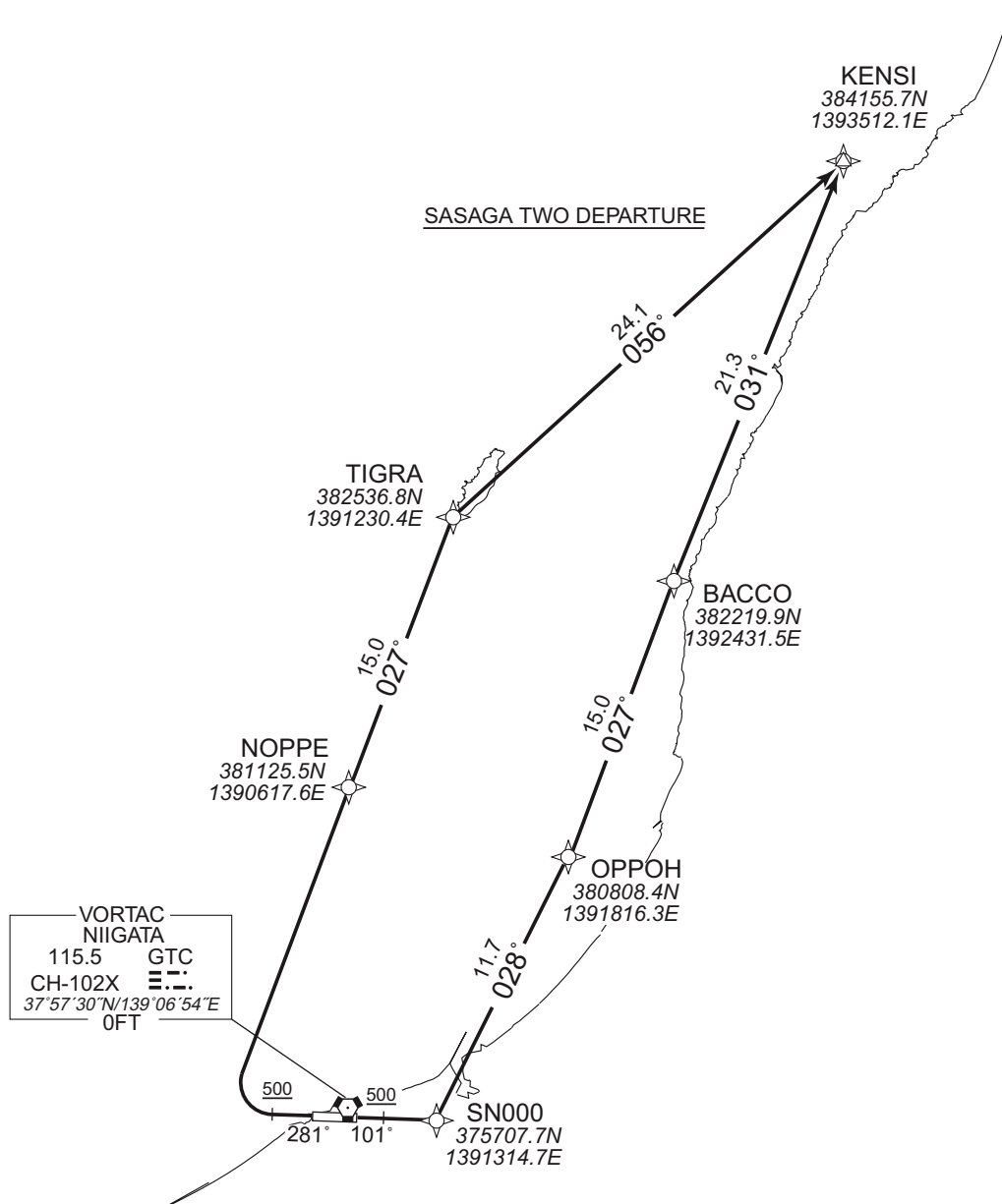
STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

RNAV SID

SASAGA TWO DEPARTURE		RNAV1
NOTE 1) DME/DME/IRU or GNSS required. ※ The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll. 2) RADAR service required.	Critical DME	RWY10 : GTC : 11.0NM to KENSI – 5.0NM to KENSI YTE : 11.0NM to KENSI – 5.0NM to KENSI RWY28 : GTC : 5.0NM to TIGRA – 9.0NM to KENSI YSE : 5.0NM to TIGRA – 9.0NM to KENSI
	DME GAP	RWY10 : DER – 11.0NM to KENSI 5.0NM to KENSI – KENSI RWY28 : DER – 5.0NM to TIGRA 9.0NM to KENSI – KENSI
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1.

VAR 8°W (2018)



CHANGE : VAR

SASAGA TWO DEPARTURE

RWY10 : Climb on HDG101° at or above 500FT, direct to SN000, to OPPOH, to BACCO, to KENSI.

RWY28 : Climb on HDG281° at or above 500FT, turn right direct to NOPPE, to TIGRA, to KENSI.

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

OBST ALT 197FT located at 0.9NM 115° FM end of RWY10.

STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

RNAV SID

SASAGA TWO 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)	-8.3	—	—	+500	—	—	RNAV1
002	DF	SN000	—	—	-8.3	—	—	—	—	—	RNAV1
003	TF	OPPOH	—	028 (019.7)	-8.3	11.7	—	—	—	—	RNAV1
004	TF	BACCO	—	027 (019.1)	-8.3	15.0	—	—	—	—	RNAV1
005	TF	KENSI	—	031 (023.0)	-8.3	21.3	—	—	—	—	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)	-8.3	—	—	+500	—	—	RNAV1
002	DF	NOPPE	—	—	-8.3	—	R	—	—	—	RNAV1
003	TF	TIGRA	—	027 (018.9)	-8.3	15.0	—	—	—	—	RNAV1
004	TF	KENSI	—	056 (047.3)	-8.3	24.1	—	—	—	—	RNAV1

CHANGE : VAR

STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

RNAV SID and TRANSITION

MOKBA ONE DEPARTURE KARIWA TRANSITION / TERAD TRANSITION / VIKET TRANSITION		RNAV1
NOTE 1) DME/DME/IRU or GNSS required. ※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll. 2) RADAR service required.	Critical DME	VIKET TRANSITION : GTC : 13.0NM to VIKET – 11.0NM to VIKET NTE : 13.0NM to VIKET – 5.0NM to VIKET
	DME GAP	RWY10 : DER – MOKBA RWY28 : DER – MOKBA KARIWA TRANSITION : MOKBA – 3.0NM to NAEBA TERAD TRANSITION : MOKBA – TERAD VIKET TRANSITION : MOKBA – 13.0NM to VIKET
	Inappropriate NavAids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1.
<div>VAR 8°W (2018)</div> <p>The chart illustrates the MOKBA ONE DEPARTURE procedure. It shows the flight paths from MOKBA (375152.0N, 1385245.3E) to various transition points and navigation aids. Key features include: - TERAD TRANSITION: From MOKBA to TERAD (373613.2N, 1382849.2E) via a 24.6 NM segment at 239°. The path continues to NAEBA (371514.9N, 1383208.6E) via a 40.1 NM segment at 212°. - KARIWA TRANSITION: From MOKBA to KARIWA (375745.2N, 1385620.0E) via a 6.5 NM segment at 214°. The path continues to SN800 (375745.2N, 1385620.0E) via a 14.9 NM segment at 233°. - VIKET TRANSITION: From MOKBA to TAMBO (374730.9N, 1390407.4E) via a 10.0 NM segment at 124°. The path continues to VIKET (374205.1N, 1393414.6E) via a 24.4 NM segment at 111°. - Navigation Aids: SN000 (375707.7N, 1391314.7E), SN001 (380207.7N, 1391332.9E), SN002 (380224.7N, 1390602.0E), and VORTAC NIIGATA (115.5 MHz, CH-102X, 37°57'30"N/139°06'54"E, 0FT). - Obstacles: OBST ALT 197FT located at 0.9NM 115° FM end of RWY10.</p>		
<p>MOKBA ONE DEPARTURE RWY10 : Climb on HDG101° at or above 500FT, direct to SN000, to SN001, to SN002, to MOKBA. RWY28 : Climb on HDG281° at or above 500FT, direct to SN800, to MOKBA. NOTE RWY10 : 5.0% climb gradient required up to 500FT. OBST ALT 197FT located at 0.9NM 115° FM end of RWY10.</p>		
<p>KARIWA TRANSITION From MOKBA, to NAEBA at or above FL200.</p> <p>TERAD TRANSITION From MOKBA, to TERAD.</p> <p>VIKET TRANSITION From MOKBA, to TAMBO, to VIKET at or above FL140.</p>		

STANDARD DEPARTURE CHART-INSTRUMENT

RJSN / NIIGATA

RNAV SID and TRANSITION

MOKBA 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)	-8.3	—	—	+500	—	—	RNAV1
002	DF	SN000	—	—	-8.3	—	—	—	—	—	RNAV1
003	TF	SN001	—	011 (002.7)	-8.3	5.0	—	—	—	—	RNAV1
004	TF	SN002	—	281 (272.8)	-8.3	5.9	—	—	—	—	RNAV1
005	TF	MOKBA	—	233 (224.9)	-8.3	14.9	—	—	—	—	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)	-8.3	—	—	+500	—	—	RNAV1
002	DF	SN800	—	—	-8.3	—	—	—	—	—	RNAV1
003	TF	MOKBA	—	214 (205.6)	-8.3	6.5	—	—	—	—	RNAV1

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	—	—	-8.3	—	—	—	—	—	RNAV1
002	TF	NAEBA	—	212 (204.2)	-8.3	40.1	—	+FL200	—	—	RNAV1

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	—	—	-8.3	—	—	—	—	—	RNAV1
002	TF	TERAD	—	239 (230.5)	-8.3	24.6	—	—	—	—	RNAV1

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	—	—	-8.3	—	—	—	—	—	RNAV1
002	TF	TAMBO	—	124 (115.8)	-8.3	10.0	—	—	—	—	RNAV1
003	TF	VIKET	—	111 (102.7)	-8.3	24.4	—	+FL140	—	—	RNAV1

CHANGE : New PROC (VIKET TRANSITION), Abolition PROC (KAMOH TRANSITION), VAR

STANDARD ARRIVAL CHART-INSTRUMENT

RJSN / NIIGATA

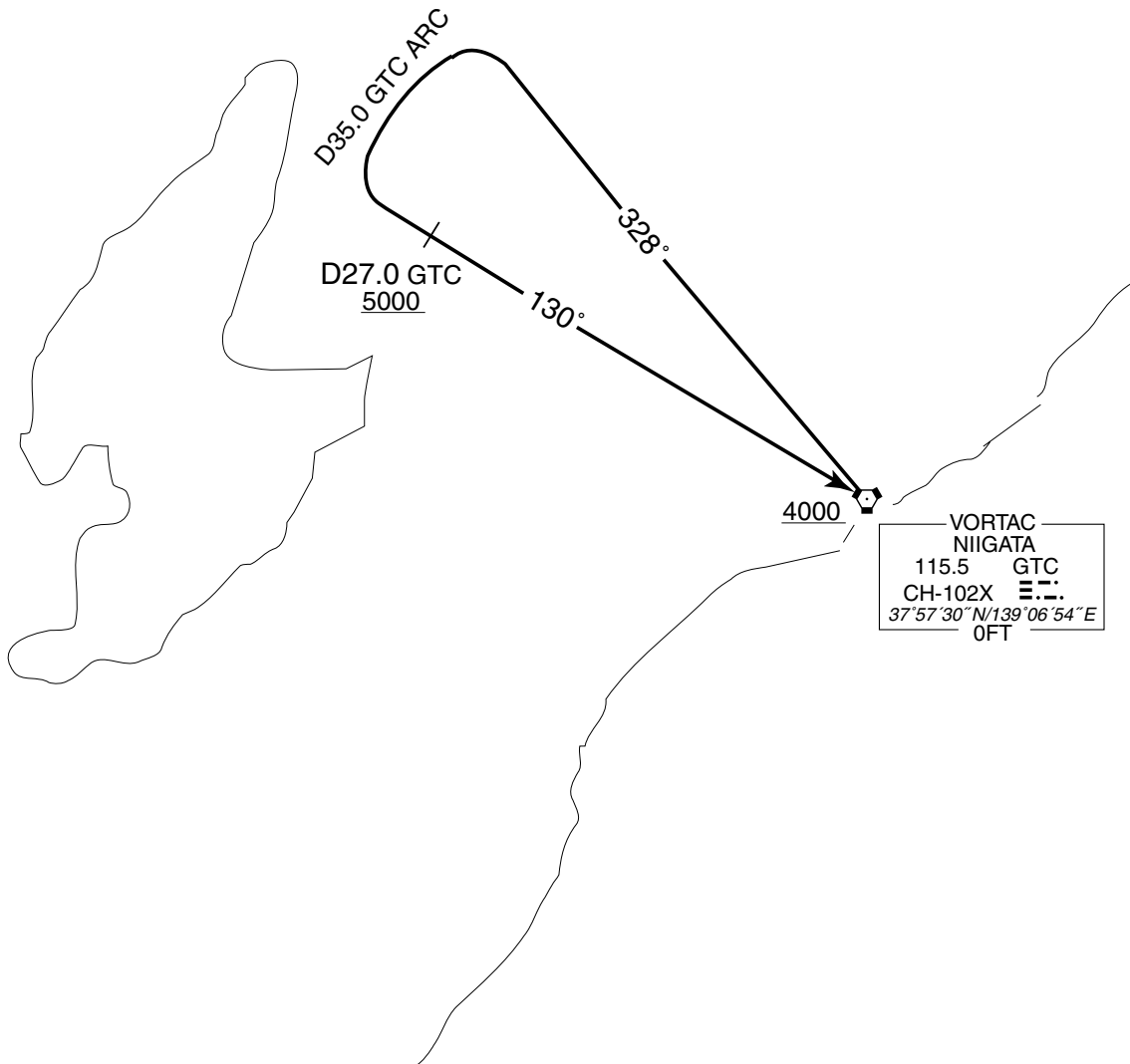
STAR

NIIGATA ARRIVAL

From over GTC VORTAC, proceed via GTC R328, turn left to intercept and proceed via GTC 35.0DME counterclockwise ARC, turn left, proceed via GTC R310 to GTC VORTAC.

Cross GTC R310/27.0DME at or above 5000FT, cross GTC VORTAC at or above 4000FT.

NIIGATA ARRIVAL



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	—	—	-8.5	—	—	+5000	—	—	RNAV1
002	TF	SHIUN	—	150 (141.9)	-8.5	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	—	—	-8.5	—	—	+9000	—	—	RNAV1
002	TF	KYOGA	—	009 (000.9)	-8.5	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	—	—	-8.5	—	—	+12000	—	—	RNAV1
002	TF	KYOGA	—	061 (052.0)	-8.5	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	—	—	-8.5	—	—	+10000	—	—	RNAV1
002	TF	KYOGA	—	082 (073.1)	-8.5	40.8	—	+6000	—	—	RNAV1

 CHANGE : MAG VAR. Course FM TERAD to KYOGA, FM MAGNA to KYOGA. ALT restriction at MAGNA.
 Critical DME, DME GAP (MAGNA EAST ARRIVAL).

STANDARD ARRIVAL CHART-INSTRUMENT

RJSN / NIIGATA

RNAV STAR RWY10

INAHO WEST ARRIVAL
GOSEN WEST ARRIVAL
MAGNA WEST ARRIVAL
TERAD WEST ARRIVAL

RNAV1

Note 1) GNSS required.

2) RADAR service required.

VAR 9°W (2020)

CHANGE : VAR. Course FM INAHO to TOKKY, FM SWALO to MOKBA. ALT restriction at MAGNA.



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	—	—	-8.5	—	—	+5000	—	—	RNAV1
002	TF	TOKKY	—	257 (248.3)	-8.5	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	—	—	-8.5	—	—	+9000	—	—	RNAV1
002	TF	SWALO	—	328 (319.5)	-8.5	14.6	—	+6000	—	—	RNAV1
003	TF	MOKBA	—	328 (319.4)	-8.5	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	—	—	-8.5	—	—	+12000	—	—	RNAV1
002	TF	RYUTO	—	022 (013.6)	-8.5	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	—	—	-8.5	—	—	+10000	—	—	RNAV1
002	TF	RYUTO	—	050 (041.9)	-8.5	23.0	—	+4000	—	—	RNAV1

 CHANGE : MAG VAR. Course FM INAHO to TOKKY, FM SWALO to MOKBA. ALT restriction at MAGNA.
Critical DME, DME GAP (MAGNA WEST ARRIVAL).

INSTRUMENT APPROACH CHART

RJSN / NIIGATA

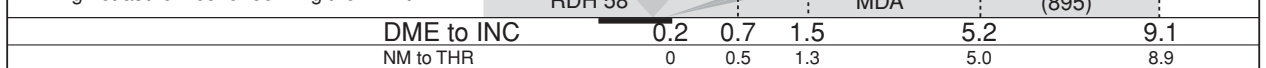
ILS Z or LOC Z RWY28



MISSED APPROACH

Climb to 2000FT via GTC R287,
turn right, direct to GTC VORTAC
and hold at 3000FT.
Contact NIIGATA APP.

Timing not authorized for defining the MAPt.



Missed APCH climb gradient MNM 3.0%

MINIMA		THR elev. 12		AD elev. 5	
CAT	CAT I	RVR/ CMV	LOC	CIRCLING	VIS
	DA(H)				
A	212 (200)	700	470 (465)	1400	720 (715)
B				1500	
C				1600	790 (785)
D				1800	

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

INSTRUMENT APPROACH CHART

RJSN / NIIGATA

ILS Y or LOC Y RWY28



MISSED APPROACH

Climb to 2000FT via GTC R287,
turn right, direct to GTC
VORTAC and hold at 3000FT.
Contact NIIGATA APP.

Timing not authorized for defining the MAPt.



DME to INC

NM to THR

0.2	0.7	1.5	5.2
0	0.5	1.3	5.0

Missed APCH climb gradient MNM 3.0%

MINIMA		THR elev. 12		AD elev. 5		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	212 (200)	700	470 (465)	1400	720 (715)	1600
B				1500		
C				1600	790 (785)	2400
D				1800		3200

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

INSTRUMENT APPROACH CHART

RJSN / NIIGATA

VOR RWY28



INSTRUMENT APPROACH CHART

RJSN / NIIGATA

RNAV(GNSS) RWY10



MINIMA		THR elev. 29		AD elev. 5	
CAT	LNAV/VNAV		LNAV		CIRCLING
	DA(H)	CMV	MDA(H)	CMV	MDA(H) VIS
A	580 (551)	1400	580 (575)	1400	710 (705) 1600
B		1500		1500	
C		1600		1600	
D		1800		1800	

INSTRUMENT APPROACH CHART

RJSN / NIIGATA

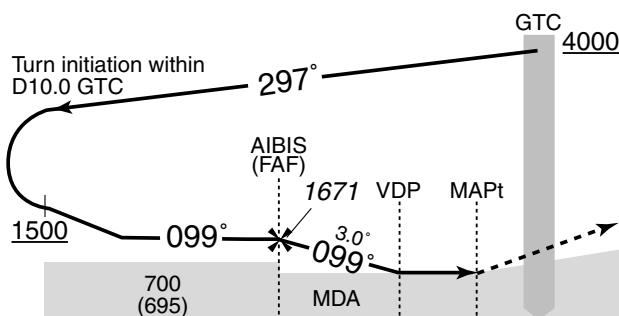
VOR RWY10



MISSED APPROACH

Turn left, climb to 2000FT via GTC R027, turn left, direct to GTC VORTAC and hold at 4000FT.
Contact NIIGATA APP.

Timing not authorized for defining the MAPt.



5.9	2.7	0.9	DME to GTC
5.0	1.8	0	NM to THR

MINIMA		THR elev. 29	AD elev. 5
CAT			CIRCLING
	MDA(H)	CMV	MDA(H) VIS
A	630 (625)	1400	720 (715) 1600
B		1500	
C		1600	790 (785) 2400
D		1800	

RJSN / NIIGATA

Visual REP



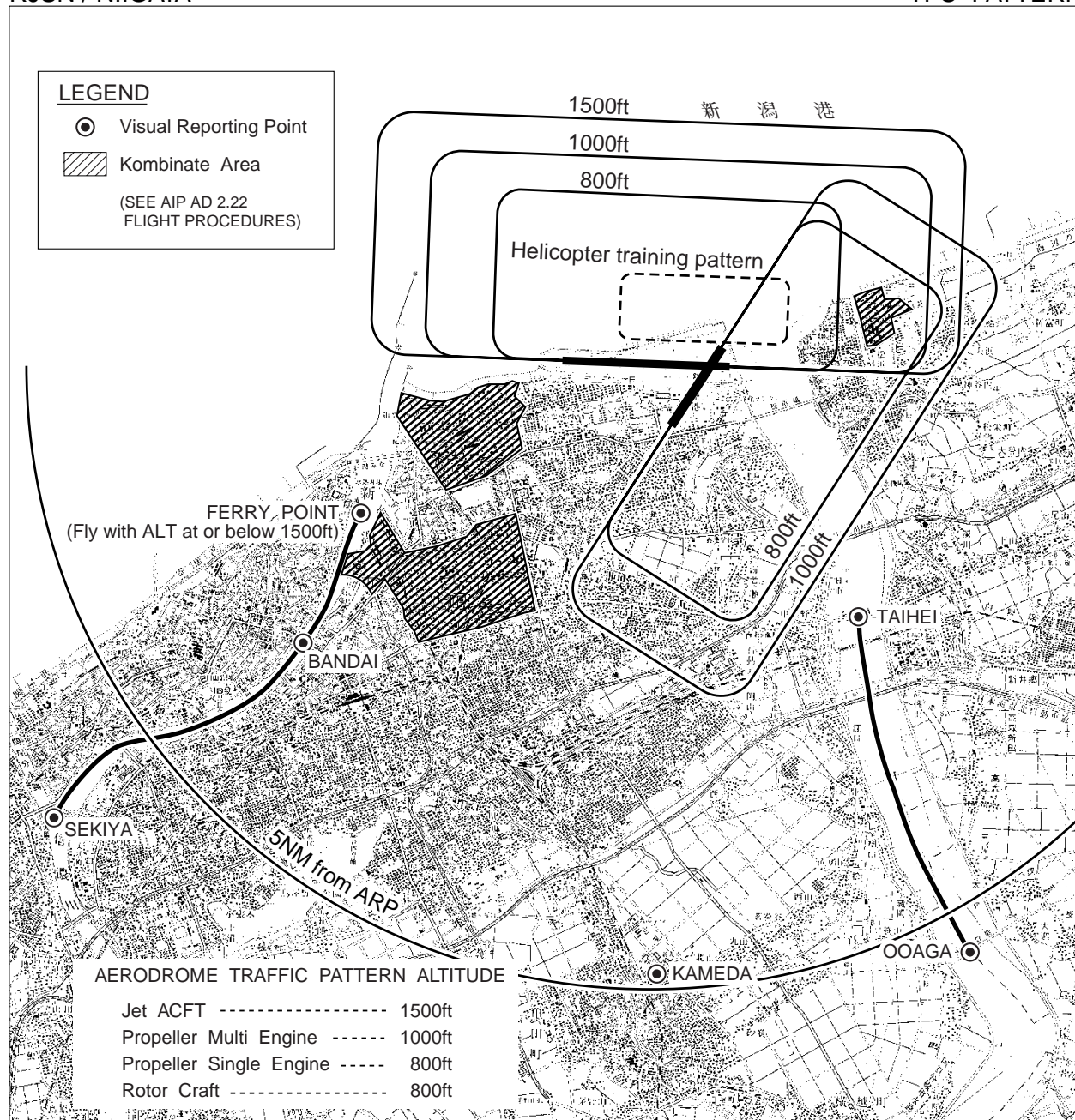
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

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

RJSN / NIIGATA

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)



- | | | |
|--------------------|--------------------|--------------------|
| ① RWY10: | ② RWY28: | ③ RWY22: |
| Angle 3.0° | Angle 3.0° | Angle 3.0° |
| MEHT 22.6m (74ft) | MEHT 21.0m (69ft) | MEHT 18.6m (61ft) |
| 541m inside fm THR | 482m inside fm THR | 361m inside fm THR |

RJSN / NIIGATA

Minimum Vectoring Altitude CHART

