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

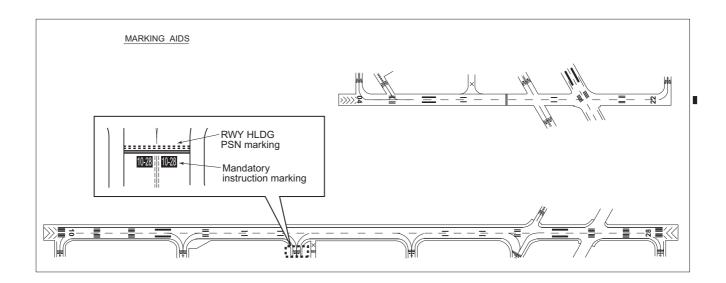
1	Types of clearing equipment	Snow Removal Equipments : Rotary x 2, Snow plows x 6, Snow sweeper x 4, Road sweeper X 1
2	Clearance priorities	1.RWY 10/28 , TWY C1-C6,B1,B5 SPOT NR4-8 2.TWY P3,B2-B4 SPOT NR1-3,NR9,NR10 S-Apron, S-TWY , RWY 04/22(FM S-TWY TO C-TWY)
3	Remarks	Seasonal availability: All 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 dock- ing/ 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	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)
			RWY:04/22 (Marking) RWY designation, RWY CL, RWY middle point, Aiming point(RWY04), TDZ (LGT) REDL, RTHL, RENL
			TWY: B1-B5 and P3 (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT, TWY CL LGT, Stop bar LGT, RWY guard LGT, Taxiing
			guidance sign 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
•			TWY: C3-C6 (Marking)TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT, TWY CL LGT
•			TWY: S (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction (LGT) TWY edge LGT
			TWY:A1, A3, P4 (Marking) TWY CL, RWY HLDG PSN, Mandatory instruction (LGT) Nil
	3	Stop bars	Stop bar system:TWY B1-B5 and P3 Stop bar LGT operations are as follows,
			(1)Stop bar lights are installed at each taxi holding position associated with RWY 10/28.
			(2)Stop bar lights will be operated when the visibility or the lowest RVR of runway 10/28 is at or less than 600m.
			(3)Stop bar lights on taxiway B1 and B5 are controlled individually by ATC.
			(4)Stop bar lights on taxiways B2 through B4 and P3 are not controlled individually by ATC.
			(5)During the period Stop bar lights operated. taxiways B2 through B4 and P3 are not available for departure aircraft.
	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

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1	Associated MET Office	токуо
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	$\begin{split} &S_6, U_{85}, U_7, U_5, U_3, U_{25}, U_2/T_r, P_s, P_5, P_3, P_{25}, P_{SWE}, P_{SWF}, P_{SWG}, P_{SWI},\\ &P_{SWM}, P_{SW}(\text{domestic}), E, C, W_E, W_F, W_G, W_I, W, N \end{split}$
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 RWY(M)	of	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°	1314×45		PCN 14/F/C/Y/T Asphalt Concrete	375653.73N 1390652.82E	THR ELEV:22.7ft
22	211.91°	1314×45		PCN 14/F/C/Y/T Asphalt Concrete	375729.96N 1390721.31E	THR ELEV: 5.9ft
10	092.69°	2500×45		PCN 91/F/C/X/T Asphalt Concrete	375724.64N 1390544.23E	THR ELEV: 29.1ft
28	272.69°	2500×45		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)		A (Overrun) ensions (M)	Remarks
7	7	10			11	14
SEE ATTACH	HED CHART	1434×150)	84×(MNN	1:120 MAX:150)*	Nil
		1434×150)	1×(MNM	:120 MAX:121)*	
SEE ATTACH	HED CHART	2620×300)	30×(MNN	1:195 MAX:277)*	RWY grooving:
		2620×300)		M:133 MAX:300)* k airport administrator	2500m×45m
RWY 10						RWY 28
29.1ft						KW1 Z0
	3/ ₂ 14.6ft	t 8.	2ft	5.2ft		11.8ft
29 <u>.</u> 1ft	14.6ft	8. 0.43%	2ft 0.47		LEVEL	11.8ft
0.76	_	0.43%	0.47	7%	LEVEL	5.2ft 0.74%
	14.6ft 580m	0.43%			LEVEL	11.8ft
0.76	_	0.43%	0.47	7%	LEVEL	5.2ft 0.74%
0.76	_	0.43%	0.47	7%	LEVEL	5.2ft 0.74%
0.76	_	0.43%	0.47	7%	LEVEL	5.2ft 11.8ft 0.74% 2230m 2500m
0.76	_	0.43%	0.47	7%	LEVEL	5.2ft 11.8ft 0.74% 2230m 2500m
0.76	_	0.43%	0.47	7%		11.8ft 5.2ft 0.74% 2230m 2500m 22.7ft
0.76 Um	_	0.43%	0.47	7%	LEVEL	11.8ft 5.2ft 0.74% 2230m 2500m 22.7ft 18.8ft
0.76	_	0.43%	0.47	7%	13.9	11.8ft 5.2ft 0.74% 2230m 2500m 22.7ft
0.76 Om	580m	0.43%	0.47	1230m	9.2ft Anole	11.8ft 5.2ft 0.74% 2230m 2500m 22.7ft 18.8ft
0.76 Um	580m	0.43%	0.47	1230m 5.9ft	9.2ft Note 6.5ft 0.890/0	11.8ft 5.2ft 0.74% 2230m 2500m 22.7ft 18.8ft
0.76 0m 0m	580m	0.43% 104 5.9ft	0.47	1230m	9.2ft Note 0.89° 0 0.18%	11.8ft 5.2ft 0.74% 2230m 2500m 22.7ft 18.8ft

AIP Japan NIIGATA

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 28	2500 2500	2500 2500	2500 2500	2500 2500	Nil 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 e RWY THR ID I	,		, , ,					

RJSN AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

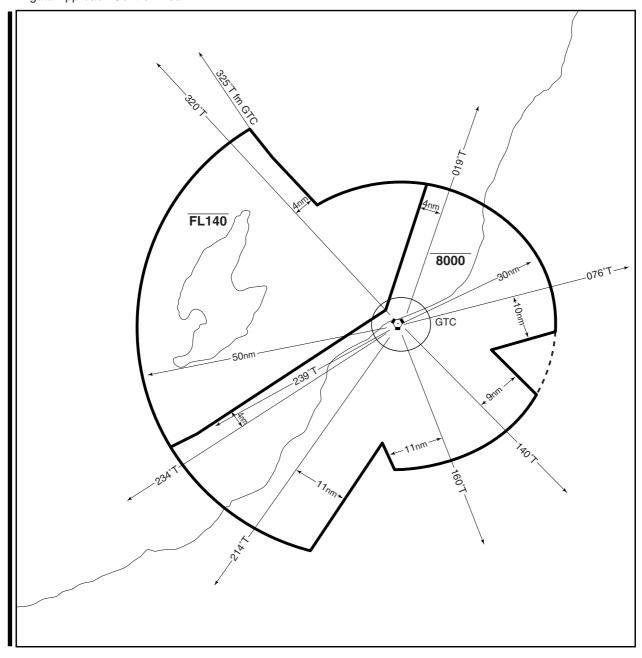
1	ABN/IBN location, characteristics and hours of operation	ABN: 375701N/1390640E, White/Green EV4.3sec, HO			
2	LDI location and LGT Anemometer location and LGT	LDI:Nil Anemometor: RWY28: 450m from RWY28 THR. LGTD RWY10: 330m from RWY10 THR, LGTD			
3	TWY edge and center line lighting	TWY edge LGT:Blue TWY center line LGT:ALTN Green/Yellow FM RWY leaving report point,other Green			
4	Secondary power supply/ switch-over time	Within 1sec : REDL(RWY 10/28), RENL(RWY 10/28), RTHL(RWY 10/28), WBAR, RCLL, Overrun area edge LGT(RWY 10/28) and Stop bar LGT(RWY 10/28) Within 15sec: Other lights			
5	Remarks	WDILGT			

RJSN AD 2.16 HELICOPTER LANDING AREA

RJSN AD 2.17 ATS AIRSPACE

Designation and lateral limits			Airspace classification	ATS unit call sign Language	Remarks
	1	2	3	4	6
_	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

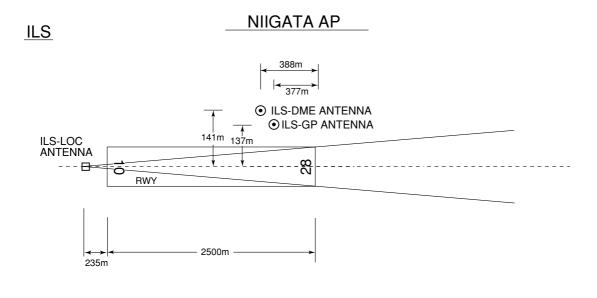


RJSN AD 2.18 ATS COMMUNICATION FACILITIES

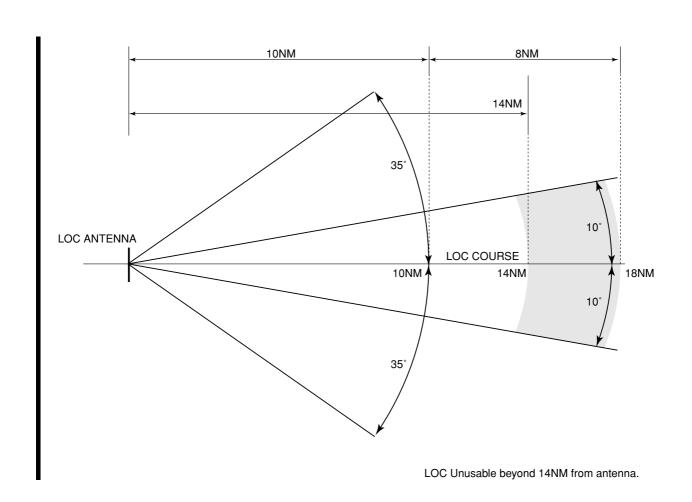
Service designation	Call sign	Frequency Hours of operation		Remarks
1	2	3	4	5
APP/ASR	Niigata Approach / Radar	121.4MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1230	(1) Primary
DEP	Niigata Departure	119.05MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1230	
TWR	Niigata Tower	118.0MHz(1) 126.2MHz 121.5MHz(E) 243.0MHz(E)	2230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

RJSN AD 2.19 RADIO NAVIGATION AND LANDING AIDS

(\	Type of aid /OR 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



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



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 opetators
 - 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。

) 誘道路

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<="" th=""><th>WS >69.2m</th><th>Legend *A: wing tip</th></ws>	WS >69.2m	Legend *A: wing tip
wing tip clearance	*A	*B	*C	*B : 6.5m =< *C : wing tip

*A : wing tip clearance >= 15m

*B: 6.5m =< wing tip clearance < 15m

*C : wing tip clearance < 6.5m

7. Sch	hool and training flights - technical test flights - use of runways
	Nil
8. He	licopter traffic - limitation
	Nil
9. Re	moval 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
- For landing to RWY 28
 Delayed Flap Approach Procedure and Reduced Flap Setting Procedure
- 3) Reverse Thrust Nil

2. Preferential Runways Procedures

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 in 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 8	RCLL		or RCLL Marking	NIL (DAYTIME ONLY)					
		CAI	CEIL-RVR	CEIL-VIS	CEIL-RVR	CEIL-VIS	CEIL-RVR	CEIL-VIS				
	10	A,B,C,D	-	0′-400m	-	0′-400m	-	0′-500m				
Multi-Engine ACFT with	28	A,B,C,D	0′-400m	0′-400m	0′-400m	0′-400m	-	0′-500m				
TKOF ALTN AP FILED	04	A,B,C	-	-	-	0′-400m	-	0′-500m				
	22	A,B,C	-	-	-	200′-2400m	-	200'-2400m				
OTHER	10 28	A,B,C,D										
OTHER	04 22	A,B,C	AVBL LDG MINIMA									

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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. Terminal Radar Alphanumeric Display System (TRAD)

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

- 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 オス
 - 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

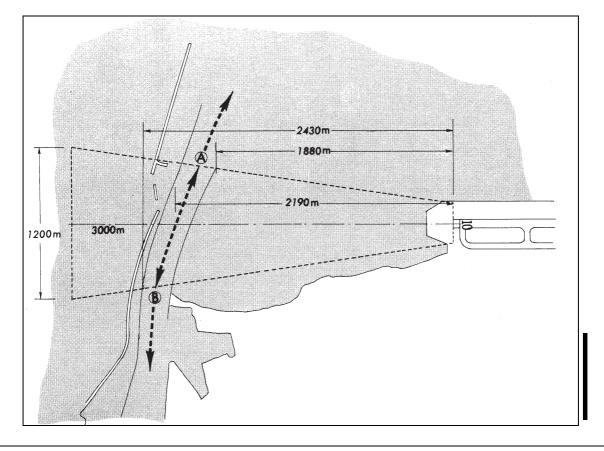
船舶高が 93m(306ft) 超の場合、IFR 到着機

- 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)

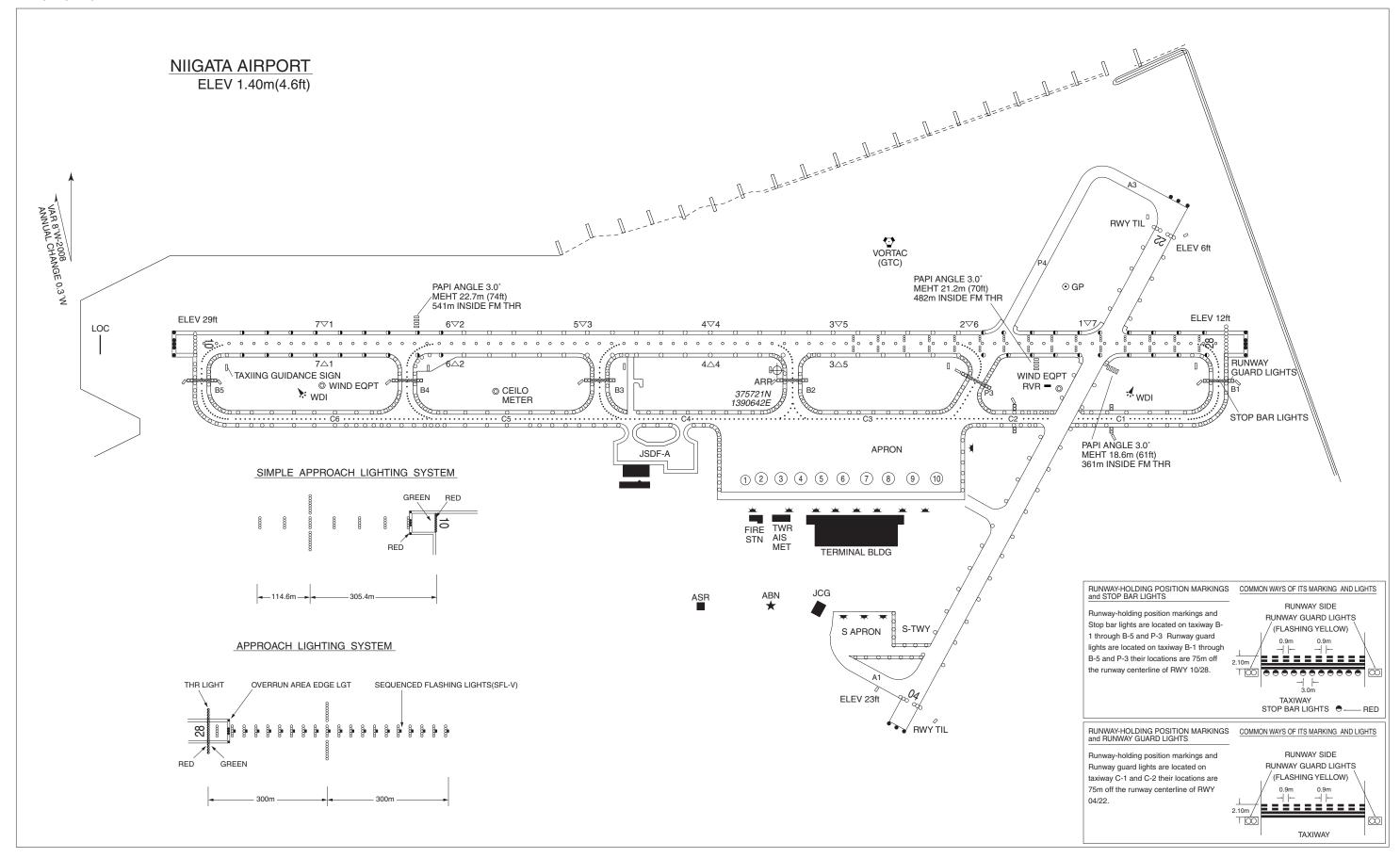
Other Chart (TFC PATTERN)

Other Chart (LDG CHART)

Other Chart (MVA CHART)



AERODROME CHART

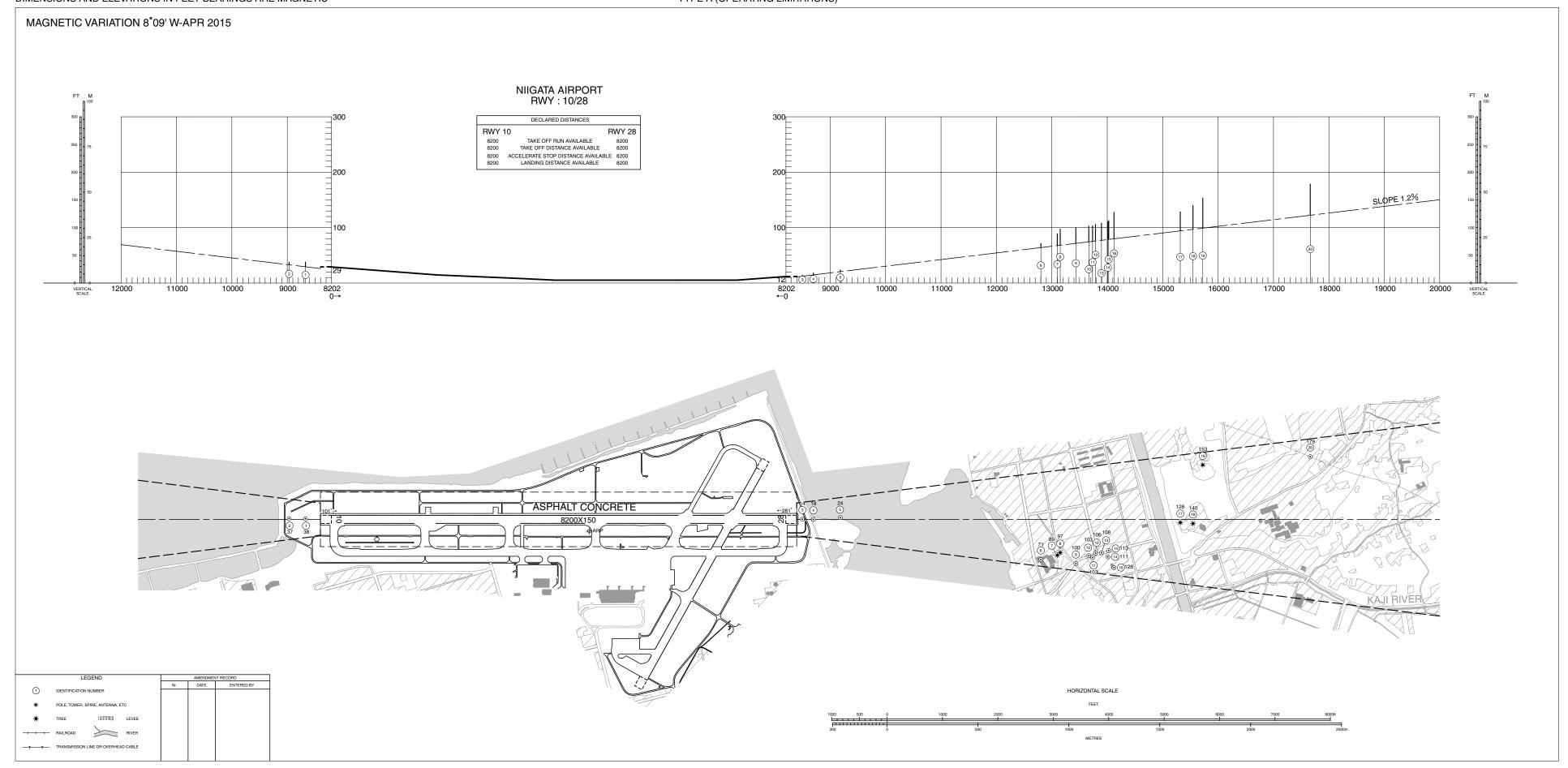


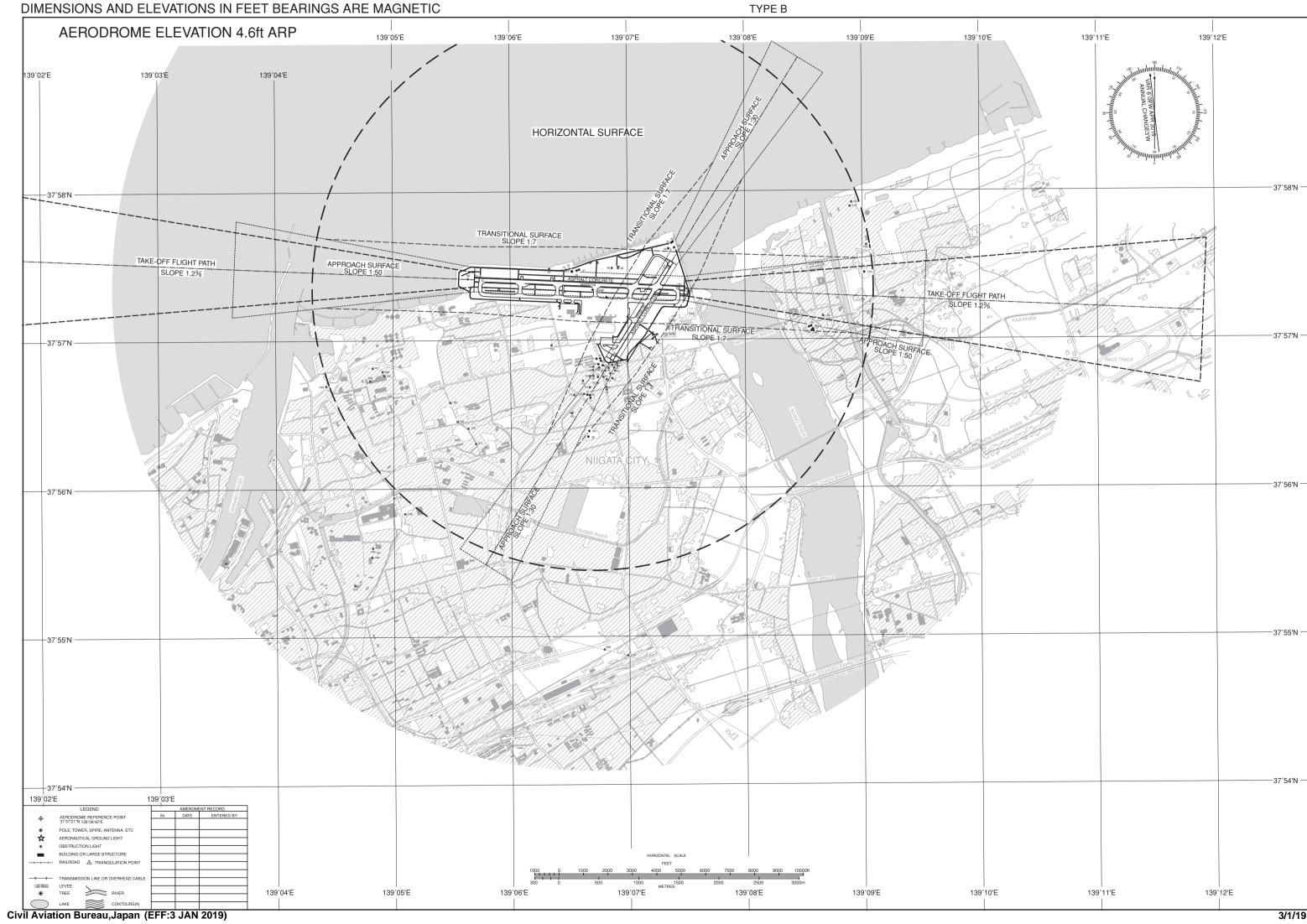




AERODROME OBSTACLE CHART-ICAO TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC





3/1/19

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,....

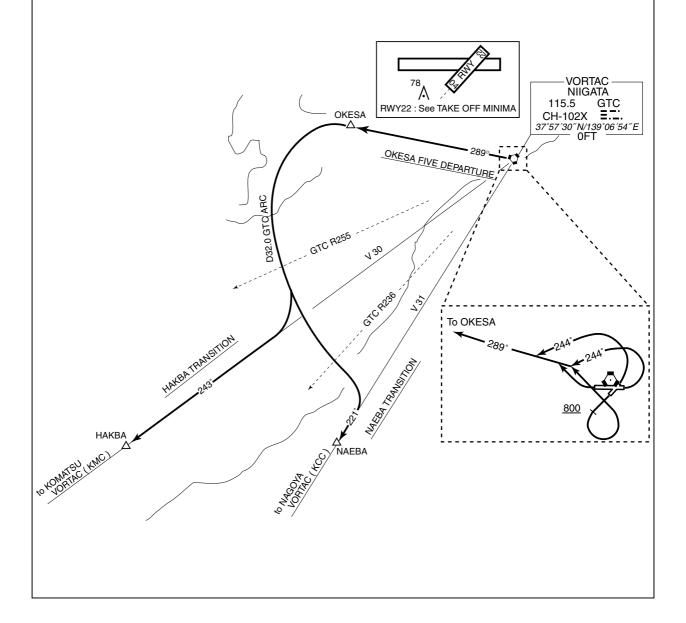
.... climb via GTC R289 to OKESA.

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.



RJSN / NIIGATA SID

KENSI SIX DEPARTURE

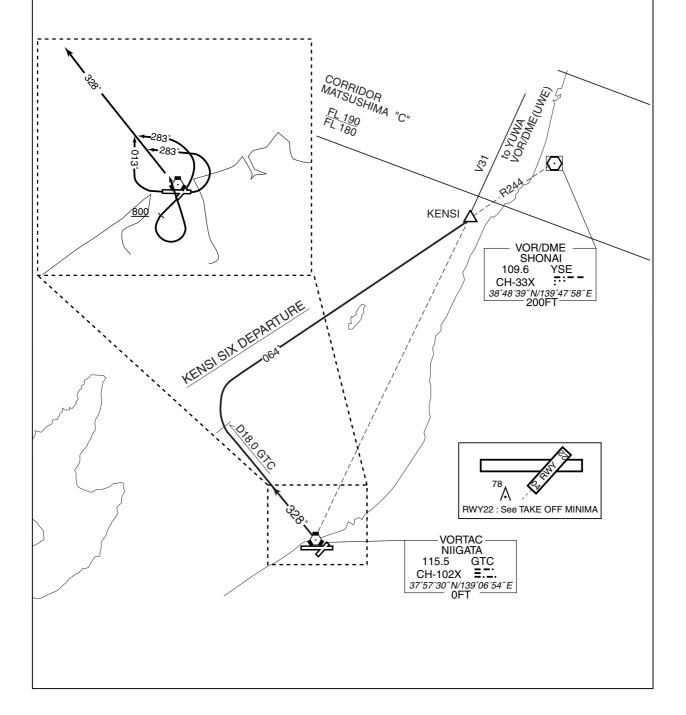
RWY 04/10 : Turn left HDG 283°,...

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

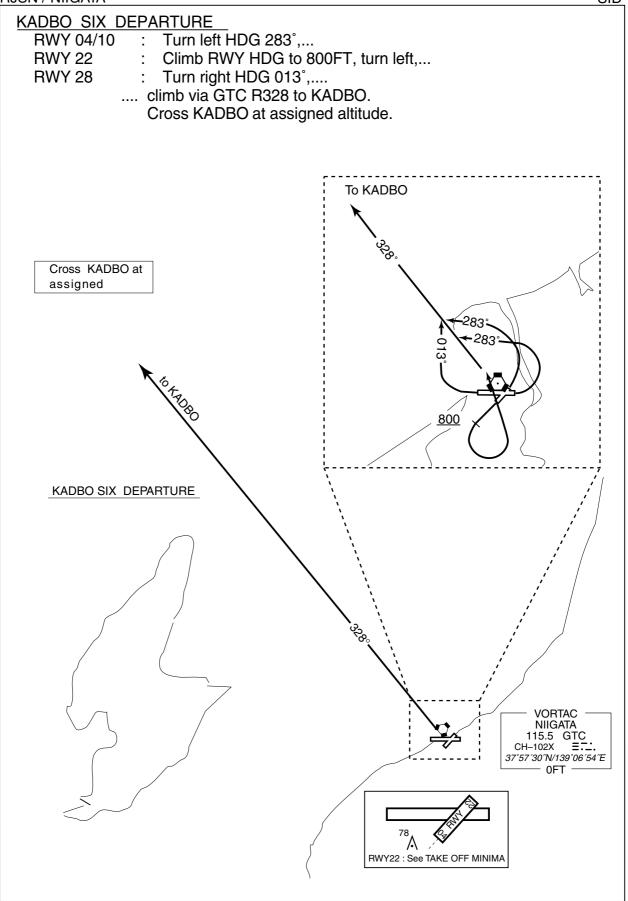
RWY 28 : Turn right HDG 013°,...

... climb via GTC R328 to GTC 18.0DME, turn right to intercept and

proceed via YSE R244 to KENSI.



RJSN / NIIGATA SID



RJSN / NIIGATA SID

NIIGATA REVERSAL SIX DEPARTURE

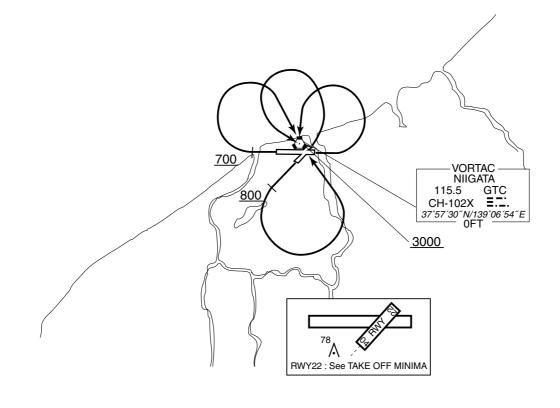
RWY 04/10 : Turn left...

RWY 22 : Climb RWY HDG to 800FT, turn left... RWY 28 : Climb RWY HDG to 700FT, turn right...

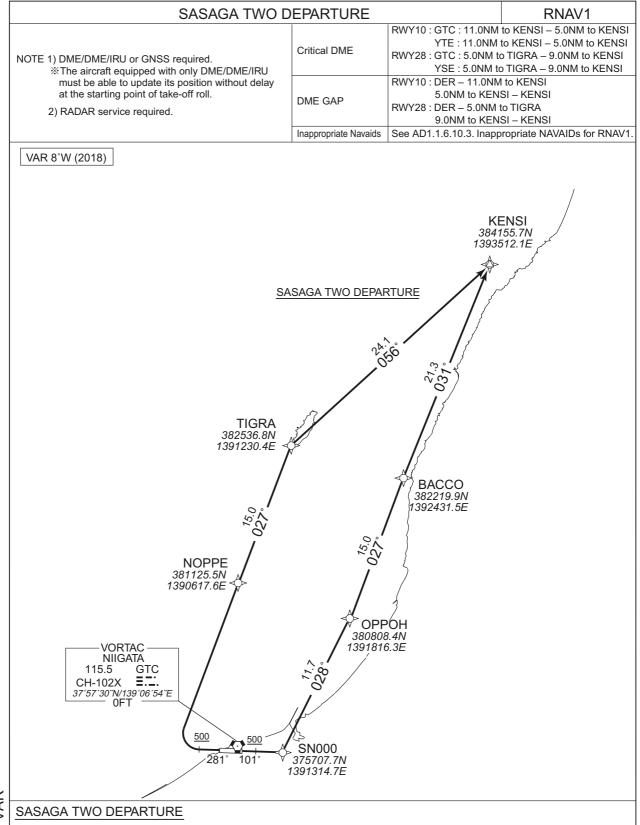
....direct to GTC VORTAC.

Cross GTC VORTAC at or above 3000FT.

NIIGATA REVERSAL SIX DEPARTURE



RJSN / NIIGATA RNAV SID



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.

RJSN / NIIGATA RNAV SID

SASAGA TWO DEPARTURE

RWY10

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)		Navigation Specification
001	VA	_	_	101 (092.7)	-8.3	_	_	+500	_	_	RNAV1
002	DF	SN000	_	_	-8.3	_	_	_	_	_	RNAV1
003	TF	ОРРОН	_	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

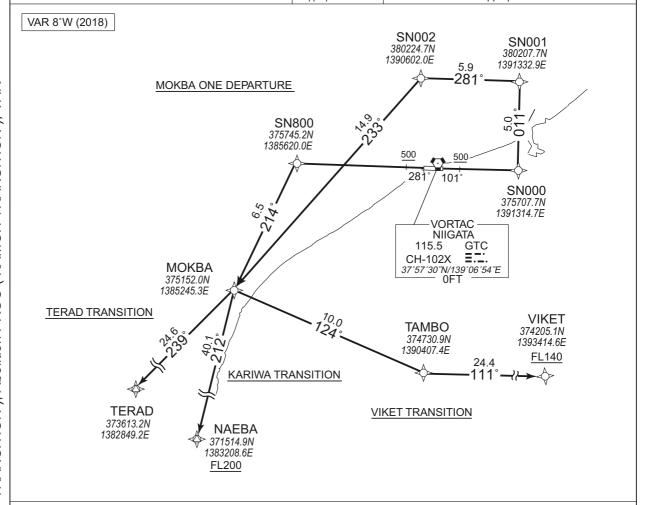
RWY28

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	
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

RJSN / NIIGATA

RNAV SID and TRANSITION

MOKBA ONE DEPARTURE RNAV1 KARIWA TRANSITION / TERAD TRANSITION / VIKET TRANSITION VIKET TRANSITION GTC: 13.0NM to VIKET – 11.0NM to VIKET NTE: 13.0NM to VIKET – 5.0NM to VIKET NOTE 1) DME/DME/IRU or GNSS required. Critical DMF %The aircraft equipped with only DME/DME/IRU must be able to update its position without delay RWY10: DER - MOKBA at the starting point of take-off roll. RWY28: DER - MOKBA KARIWA TRANSITION 2) RADAR service required. MOKBA - 3.0NM to NAEBA DME GAP TERAD TRANSITION: MOKBA - TERAD VIKET TRANSITION MOKBA - 13.0NM to VIKET See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1. Inappropriate Navaids



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.

KARIWA TRANSITION

From MOKBA, to NAEBA at or above FL200.

TERAD TRANSITION

From MOKBA, to TERAD.

VIKET TRANSITION

From MOKBA, to TAMBO, to VIKET at or above FL140.

RJSN / NIIGATA

RNAV SID and TRANSITION

MOKBA ONE DEPARTURE

RWY10

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)		Navigation Specification
001	VA	_	_	101 (092.7)	-8.3	_	_	+500	ı	_	RNAV1
002	DF	SN000	_	_	-8.3	_	_	_	ı	_	RNAV1
003	TF	SN001	_	011 (002.7)	-8.3	5.0	_	_	ı	_	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		Magnetic Variation		Turn Direction		Speed (KIAS)		Navigation Specification
001	VA	_	_	281 (272.7)	-8.3	_	_	+500	ı	1	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				Turn Direction				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		Magnetic Variation		Turn Direction				Navigation Specification
001	IF	MOKBA	_	_	-8.3	_	-	_	_	_	RNAV1
002	TF	TERAD	_	239 (230.5)	-8.3	24.6	_	_	_	_	RNAV1

VIKET TRANSITION

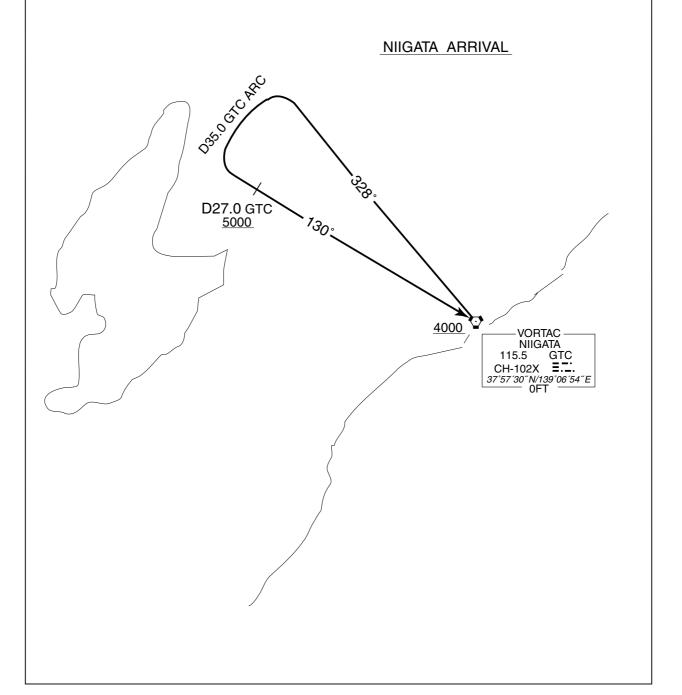
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction				Navigation Specification
I TUITIDOI	Doddinptor	idontinoi	0 101	141(1)	Variation	(14141)	Diroction	(' ')	(111710)	7 111910	Opcomodicin
001	IF	MOKBA	_	_	-8.3	_	_	_	ı	_	RNAV1
002	TF	TAMBO	_	124 (115.8)	-8.3	10.0	_	_	1	_	RNAV1
003	TF	VIKET	_	111 (102.7)	-8.3	24.4	_	+FL140	_	_	RNAV1

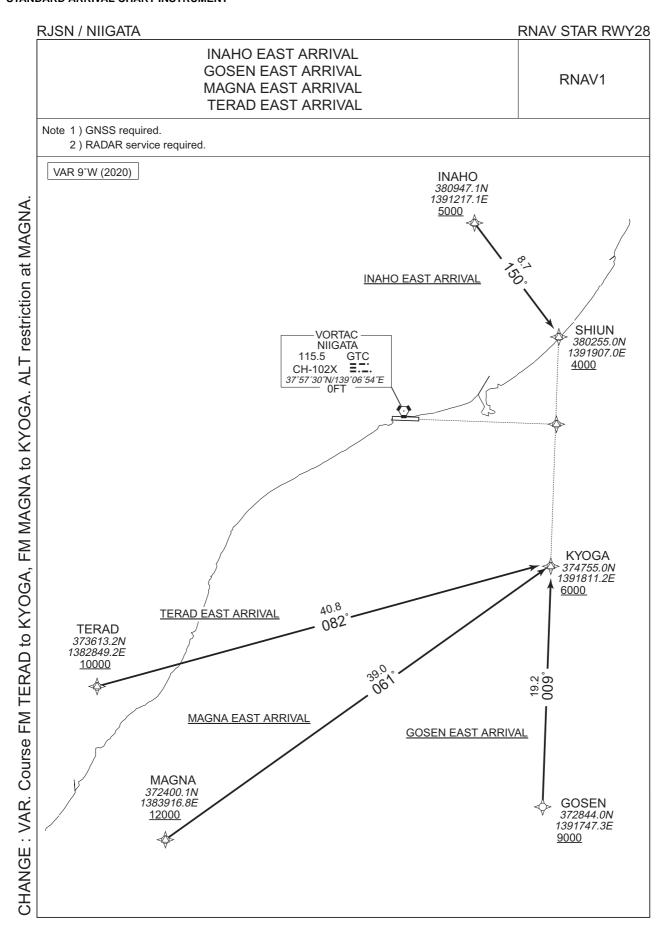
RJSN / NIIGATA STAR

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.





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 Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

Seria	Path	Waypoint	Fly		Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Numbe	Pr Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	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 Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	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 Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

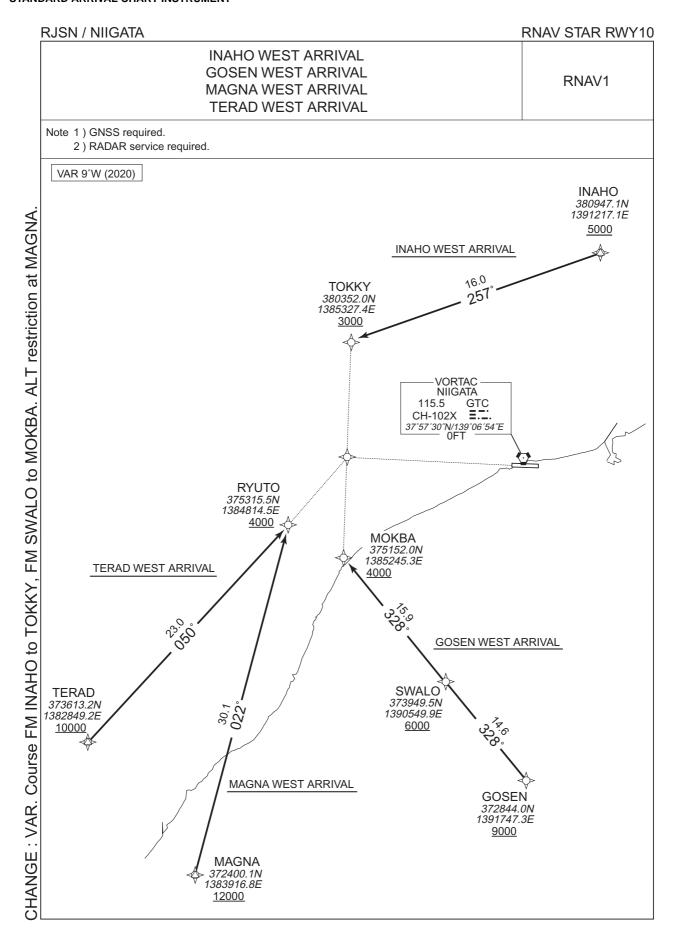
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	MAGNA	_	_	-8.5	_	_	+12000	_	_	RNAV1
002	TF	KYOGA	_	061 (052.0)	-8.5	39.0	_	+6000	_	_	RNAV1

TERAD EAST ARRIVAL

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

Critical DME	-
DME GAP	TERAD - KYOGA
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

	Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
ı	Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
	001	IF	TERAD	_	_	-8.5	_	_	+10000	_	_	RNAV1
	002	TF	KYOGA	_	082 (073.1)	-8.5	40.8	_	+6000	_	_	RNAV1



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 Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction			l	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 Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	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 Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

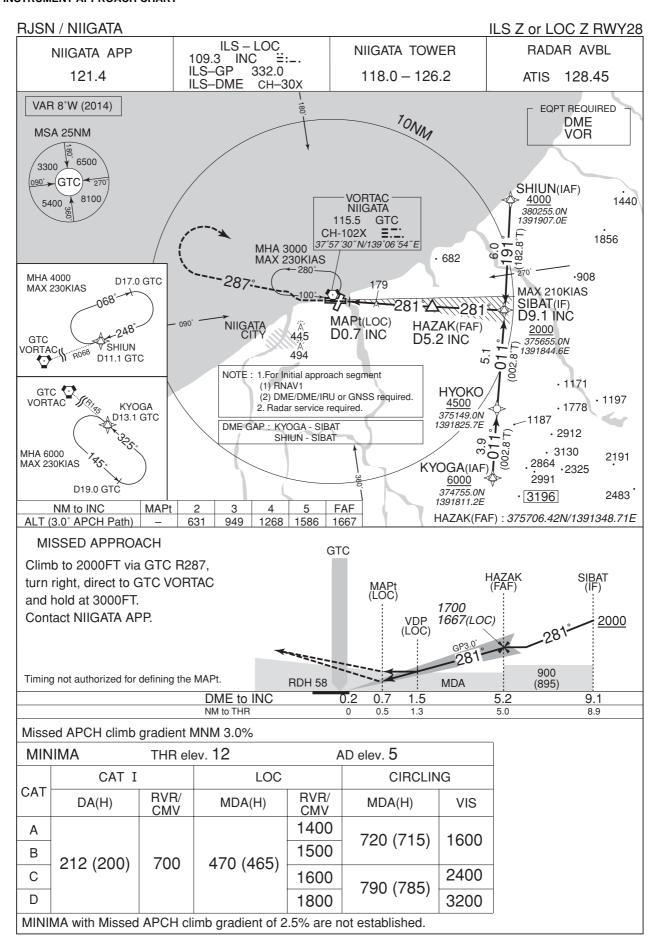
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction			I	Navigation Specification
001	IF	MAGNA	_	_	-8.5	_	_	+12000	_	_	RNAV1
002	TF	RYUTO	_	022 (013.6)	-8.5	30.1	_	+4000	_	_	RNAV1

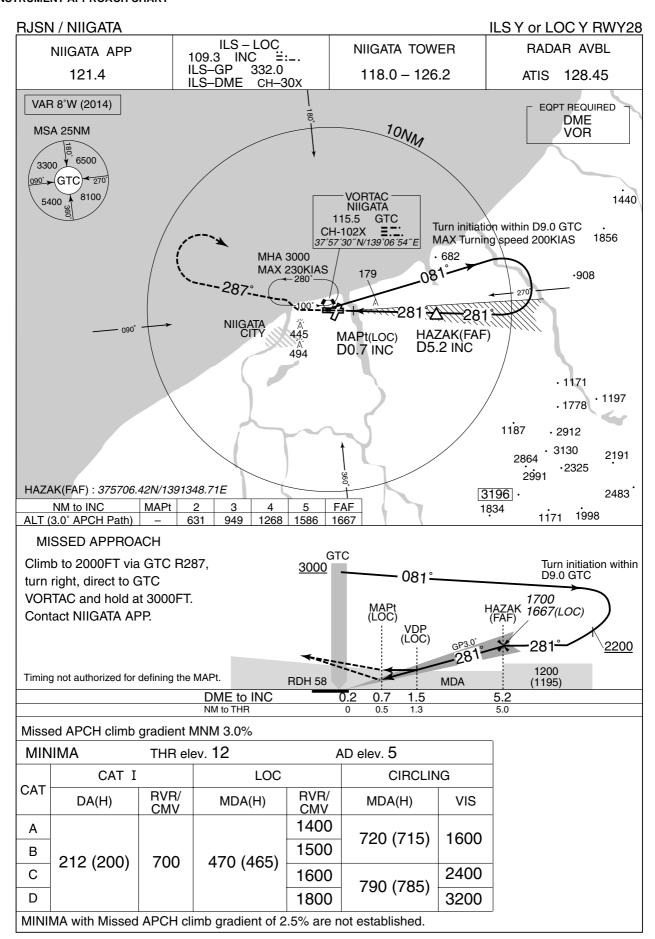
TERAD WEST ARRIVAL

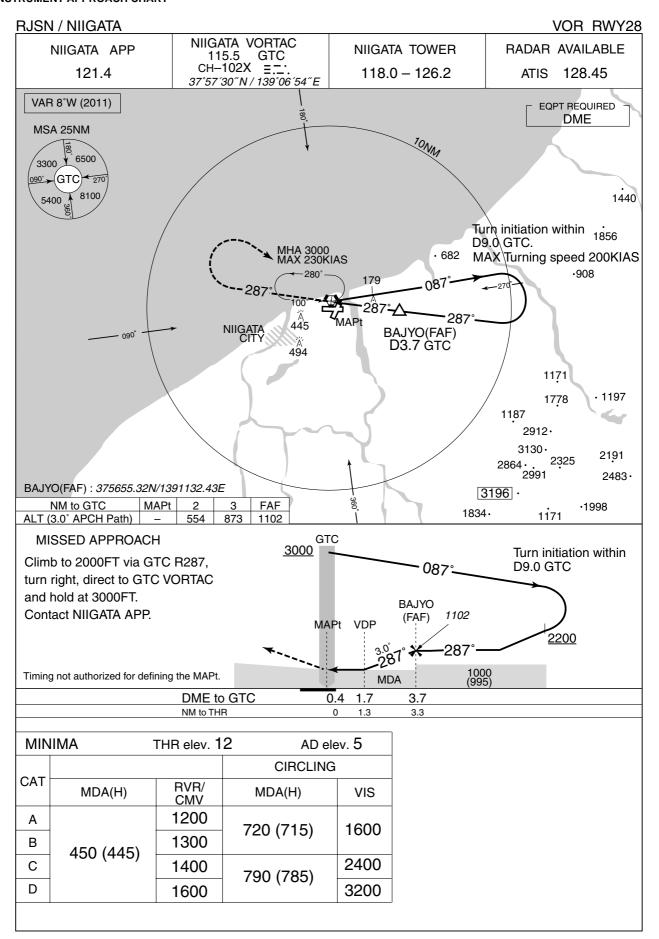
From TERAD at or above 10000FT, to RYUTO at or above 4000FT.

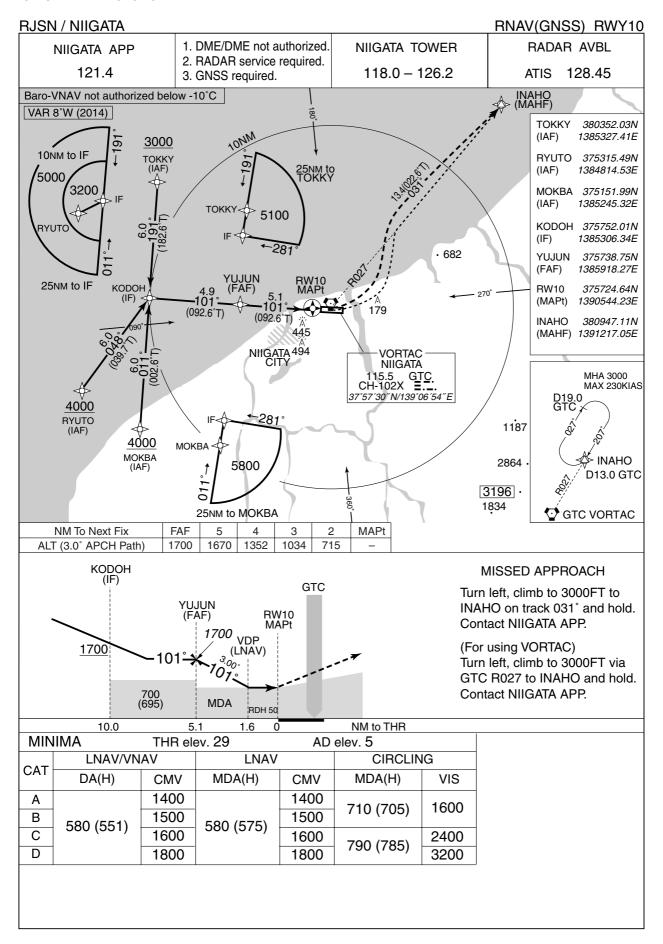
Critical DME	-
DME GAP	TERAD - RYUTO
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

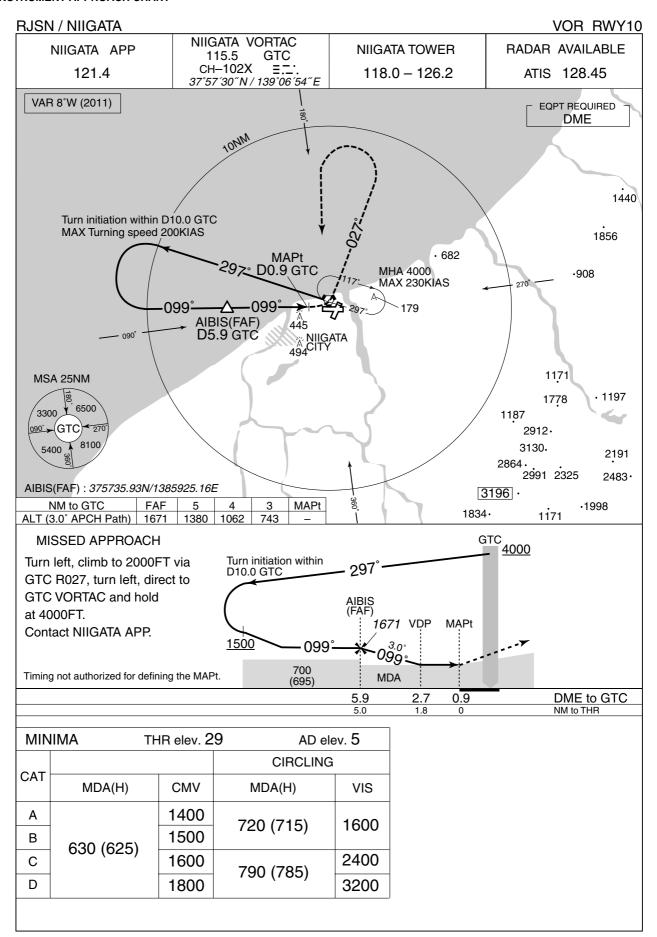
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	TERAD	_	_	-8.5	_	_	+10000	_	_	RNAV1
002	TF	RYUTO	_	050 (041.9)	-8.5	23.0	_	+4000	_	_	RNAV1

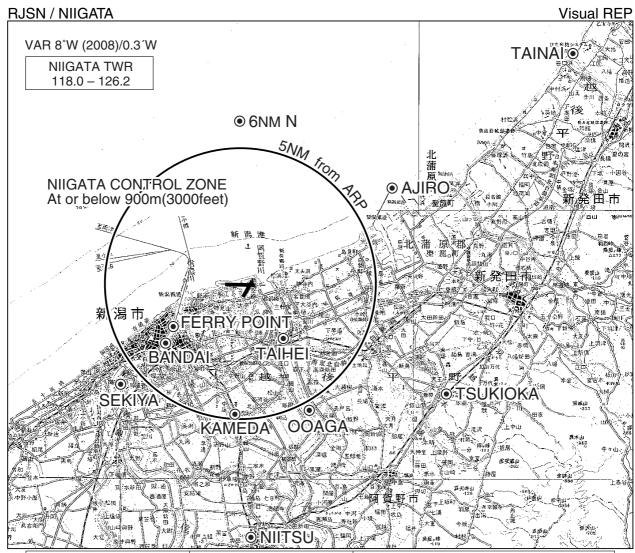






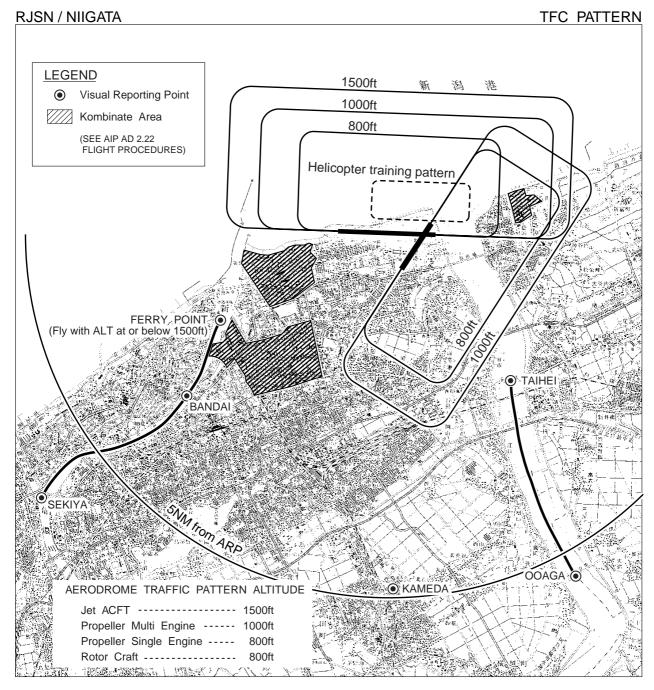






Call sign	BRG(MAG) / DIST from ARP	Remarks				
胎 内 Tainai	062°/15NM	胎内川河口 River-mouth				
月 岡 Tsukioka	126°/ 8.6NM	JR駅 Station				
新 津 Niitsu	185°/ 9NM	JR駅 Station				
大阿賀 Ooaga	159°/ 5.2NM	橋 Bridge				
亀 田 Kameda	190°/ 4.7NM	JR駅 Station				
関 屋 Sekiya	240°/ 6NM	分水路への分岐点 Diverging-point for Flood-control channel				
*泰 平 Taihei	149°/ 2.6NM	橋 Bridge				
*万 代 Bandai	240°/ 3.5NM	橋 Bridge				
*フェリーポイント Ferry point	251°/ 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)				
6NM N	360°/ 6NM	海上 Over the sea				
網 代 Ajiro	065°/ 7NM	防波堤突端の赤色灯台 Red lighthouse at the tip of breakwater				

*ヘリコプター Use for helicopter



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)

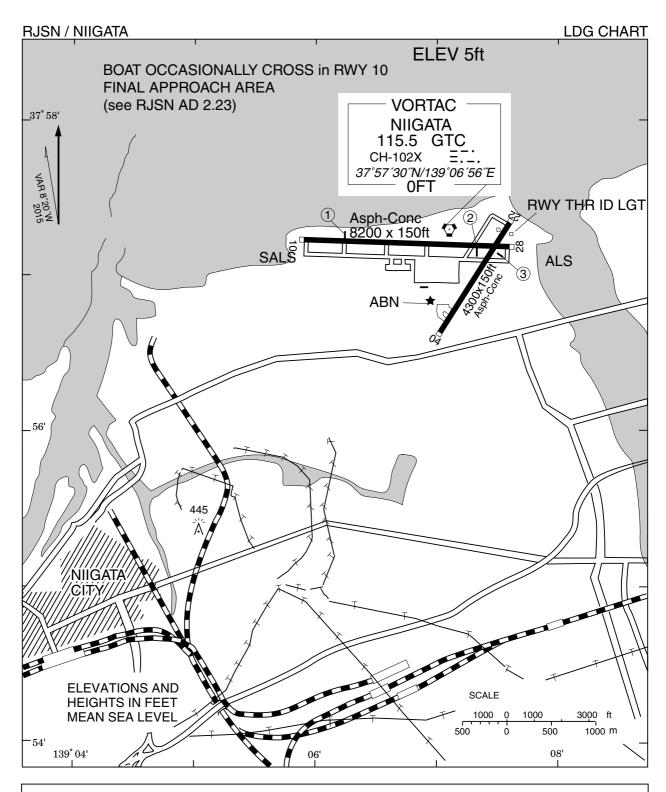
AGANO ROUTE: The route along Agano river between OOAGA and TAIHEI (Use for Rotor Craft)

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 insrtucted by Niigata tower. (except the case of IMC)



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

