

## AD 2 AERODROMES

## RJSY AD 2.1 AERODROME LOCATION INDICATOR AND NAME

## RJSY - SHONAI

## RJSY AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	384844N/1394714E 80°/1.0km from RWY09 THR
2	Direction and distance from (city)	5nm NNW from Tsuruoka city
3	Elevation/ Reference temperature	72ft / 29°C (2003-2007)
4	Geoid undulation at AD ELEV PSN	125ft
5	MAG VAR/ Annual change	9° W(2024)/4' W
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Shonai Airport Office(Yamagata Pref) 30-3, Aza-Murahigashi, Hamanaka, Sakata-shi, Yamagata Pref. Tel: 0234-92-4123 Fax: 0234-92-4122 e-mail: yshonaikuko@pref.yamagata.jp Web: http://www.pref.yamagata.jp/
7	Types of traffic permitted(IFR/VFR)	IFR/VFR
8	Remarks	Nil

## RJSY AD 2.3 OPERATIONAL HOURS

1	AD Administration	2200 - 1300
2	Customs and immigration	On request Customs: 0234-22-1024 Immigration: 0234-22-2746
3	Health and sanitation	On request Quarantine(human): 018-846-8280, 022-367-8101 Quarantine(animal): 025-275-4565 Quarantine(plant): 025-244-4401
4	AIS Briefing Office	Nil
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (TOKYO)
7	ATS	2200 - 1300 Remarks: AFIS provided by New Chitose Airport Office.
8	Fuelling	2200 - 0915
9	Handling	2100 - 1230
10	Security	2115 - 0915
11	De-icing	Nil
12	Remarks	Nil

**RJSY AD 2.4 HANDLING SERVICES AND FACILITIES**

1	Cargo-handling facilities	AVBL up to B767-300 aircraft
2	Fuel/ oil types	JET A-1
3	Fuelling facilities/ capacity	Fuel truck / Total Max 220kl
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

**RJSY AD 2.5 PASSENGER FACILITIES**

1	Hotels	Nil
2	Restaurants	At Airport
3	Transportation	Buses and Taxi
4	Medical facilities	Nil
5	Bank and Post Office	Nil
6	Tourist Office	Nil
7	Remarks	Nil

**RJSY AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

1	AD category for fire fighting	CAT 8
2	Rescue equipment	Chemical fire fighting truck x 3 Emergency medical equipments conveyance truck x 1
3	Capability for removal of disabled aircraft	Ask Airline (0234-92-4195)
4	Remarks	Nil

**RJSY AD 2.7 SEASONAL AVAILABILITY-CLEARING**

1	Types of clearing equipment	Snow remove equipment: Truck x 8, Rotary x 2, Dozer x 1, Sweeper x 2
2	Clearance priorities	1.RWY 2.TWY 3.APRON
3	Remarks	Snow removal will be commenced, if the RWY is covered with a depth of 3cm snow or more.

**RJSY AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA**

1	Apron surface and strength	Surface : Cement concrete and Asphalt concrete Strength : PCN 52/R/C/X/T
2	Taxiway width, surface and strength	Width : 30 m Surface : Asphalt concrete Strength : PCN 58/F/C/X/T
3	ACL and elevation	Not Available
4	VOR checkpoints	Not Available
5	INS checkpoints	Spot NR 1: 384855.57N/1394717.77E 2: 384855.22N/1394715.32E 3: 384854.86N/1394712.88E 5: 384854.53N/1394710.74E
6	Remarks	Nil

**RJSY 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	Nil
2	RWY and TWY markings and LGT	RWY 09/27 (Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe, RWY turn pad edge, RWY turn pad CL (LGT) RCLL, REDL, RTHL, RENL, RTZL(FOR RWY09), WBAR(FOR RWY 09), Turning point indicator LGT, RWY DIST marker LGT  TWY (Marking) TWY CL, RWY HLDG PSN, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT
3	Stop bars	Nil
4	Remarks	(Marking) Overrun area (LGT) Apron flood LGT

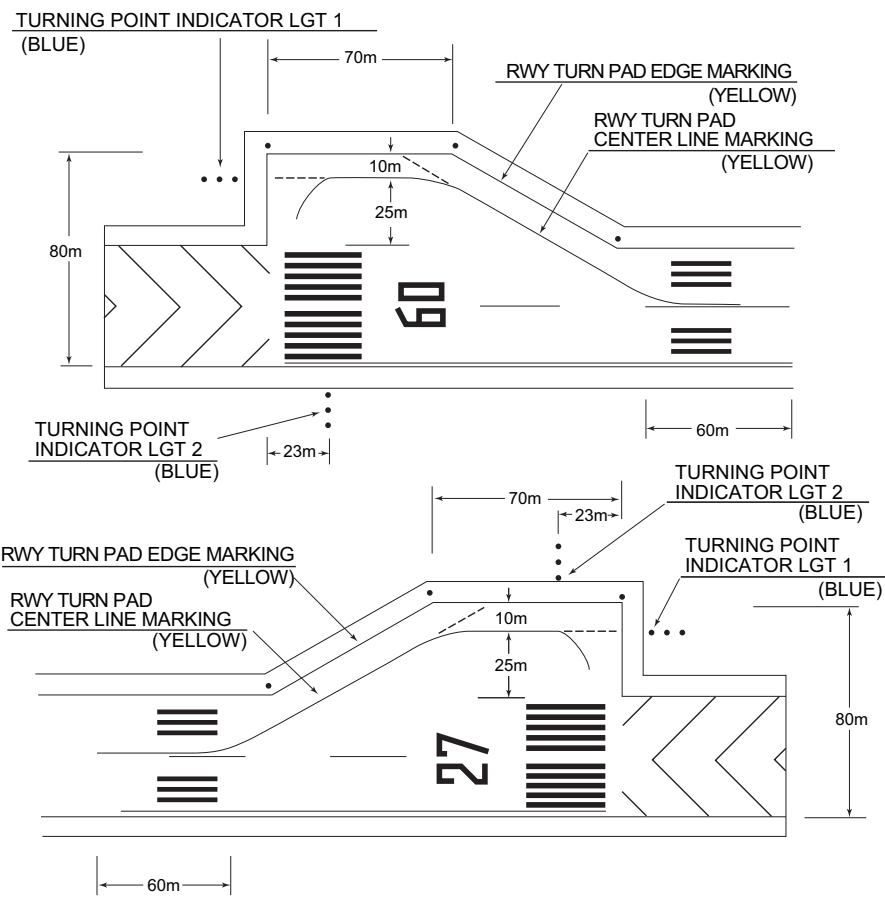
180° turn on RWY

滑走路のターニングパッドは下図のように設置されている。滑走路上で180°転回の要領は、09及び27方向において以下の通りである。

- a. 滑走路中心線からターニングパッド中心線標識に従って進行する。
- b. 転回灯1が一直線に見えるように進行し、転回灯2が一直線に見えた時転回を開始する。転回時はMAX STEERING ANGLEを使用する。

RWY turn pads are installed as shown in below figure, and procedure for 180° turn on RWY is established for RWY09 and 27 as follows ;

- a. Proceed along the RWY Center Line to the starting point of the RWY Turn Pad Center Line Marking ; then
- b. Proceed along the RWY Turn Pad Center Line Marking to see the Turning Point Indicator Lights 1 on a straight line, then commence turn at the spot where you(pilot) can see the Turning Point Indicator Lights 2 on a straight line at an angle of 9 o'clock. When turning, take MAX STEERING ANGLE.



**RJSY AD 2.10 AERODROME OBSTACLES**

- In Area2 See Obstacle data
- In Area3 To be developed

**RJSY 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	Nil
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 <sub>6</sub> , U <sub>85</sub> , U <sub>7</sub> , U <sub>5</sub> , U <sub>3</sub> , U <sub>25</sub> , U <sub>2</sub> /T <sub>r</sub> , P <sub>S</sub> , P <sub>5</sub> , P <sub>3</sub> , P <sub>25</sub> , P <sub>SWE</sub> , P <sub>SWF</sub> , P <sub>SWG</sub> , P <sub>SWI</sub> , P <sub>SWM</sub> , P <sub>SW</sub> (domestic), E, C, W <sub>E</sub> , W <sub>F</sub> , W <sub>G</sub> , W <sub>I</sub> , W, N
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	RADIO
10	Additional information(limitation of service, etc.)	Nil

**RJSY 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
09	079.45°	2000x45	PCN 58/F/C/X/T Asphalt-Concrete	384838.58N 1394633.12E	THR ELEV: 59ft TDZ ELEV:71ft
27	259.45°	2000x45	PCN 58/F/C/X/T Asphalt-Concrete	384850.46N 1394754.61E	THR ELEV: 86ft
Slope of RWY	Strip Dimensions(M)	RESA (Overrun) Dimensions(M)	Remarks		
7	10	11	14		
See AD2.24 AD chart	2120x300 2120x300	186 x (MNM:153 MAX:300)* *For detail, ask airport administrator 40 x 300	RWY grooving : 2000m x 30m		

**RJSY AD 2.13 DECLARED DISTANCES**

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
09	2000	2000	2000	2000	Nil
27	2000	2000	2000	2000	Nil

## RJSY 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
09	PALS (CAT I) 810m LIH	Green Green	PAPI 3.0°/LEFT 351m 61ft	900m	2000m 30m Coded color (White/Red) LIH	2000m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
27	SALS (*1) 420m LIH	Green	PAPI 3.0°/LEFT 400m 61ft	Nil	2000m 30m Coded color (White/Red) LIH	2000m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
Remarks								
10								
SALS with APCH LGT beacon(600m and 900m FM RWY 27 THR)(*1) Overrun area edge LGT(LEN:60m Color:Red) (*2)								

## RJSY AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 384902N/1394720E, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI: Nil Anemometer: RWY09 : 377.5m from THR, LGTD RWY27 : 339.5m from 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, RCLL, RTHL, RENL, WBAR, Turning point indicator LGT, Overrun area edge LGT Within 15sec : Other LGT
5	Remarks	WDI LGT

## RJSY AD 2.16 HELICOPTER LANDING AREA

Nil
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**RJSY AD 2.17 ATS AIRSPACE**

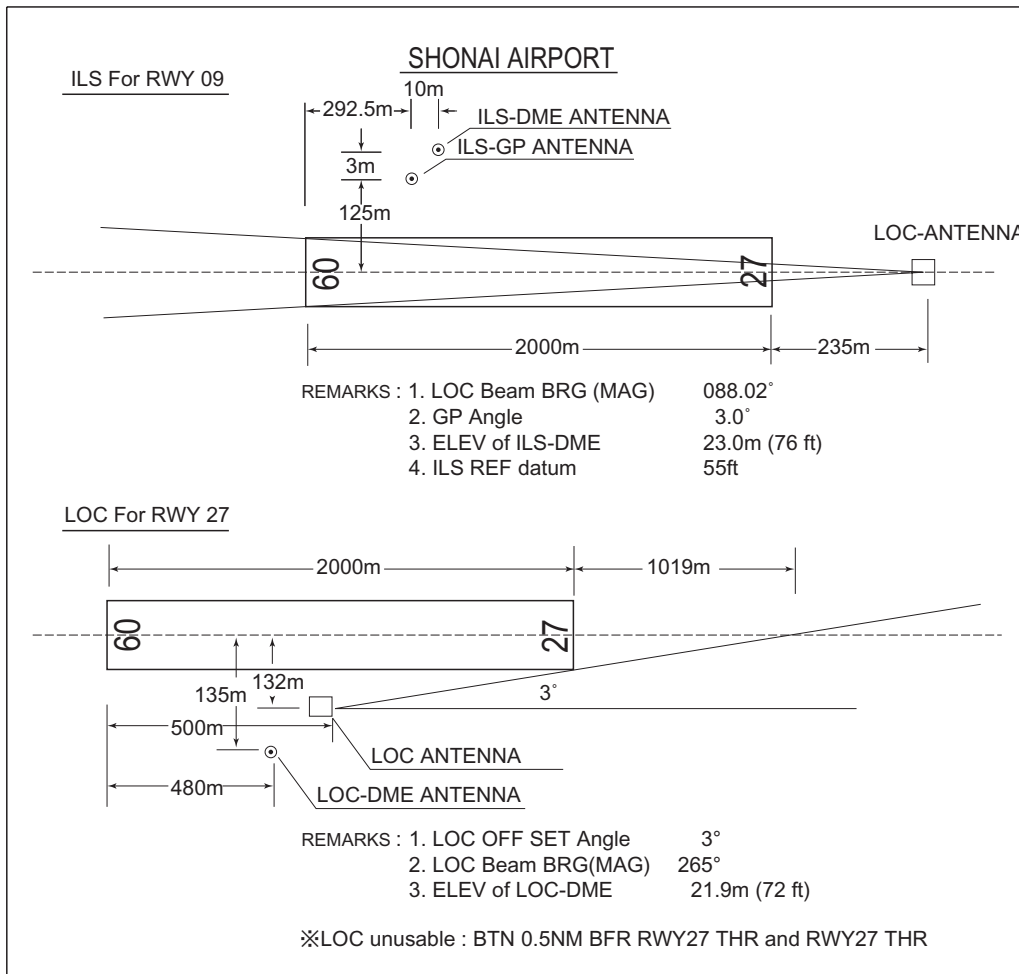
Designation and lateral limits		Vertical limits (ft)	Airspace classification	ATS unit call sign Language	Remarks
1		2	3	4	6
Shonai Information Zone	Area within a radius of 5nm(9km) of Shonai ARP	3,000 or below	E	Shonai Radio En	

**RJSY AD 2.18 ATS COMMUNICATION FACILITIES**

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
AFIS	Shonai Radio	118.8MHz	2200 - 1300	Operated by New Chitose Airport Office.

**RJSY 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)	YSE	109.6MHz	2200 - 1300	384838.81N/ 1394757.51E		VOR unusable: 067°BTN 13-15nm
DME	YSE	994MHz (CH-33X)	2200 - 1300	384838.81N/ 1394757.51E	162ft	
ILS-LOC 09	IYS	110.9MHz	2200 - 1300	384851.86N/ 1394804.20E		For RWY 09 LOC:(IYS) 235m away FM RWY 27 THR. BRG(MAG) 088.02°
ILS-GP 09	-	330.8MHz	2200 - 1300	384844.27N/ 1394644.09E		GP: 292.5m inside FM RWY 09 THR. 125m N of RCL. HGT of ILS Ref datum 55ft GP angle 3.0°
ILS-DME 09	IYS	1007MHz (CH-46X)	2200 - 1300	384844.43N/ 1394644.47E	76ft	DME: 302.5m inside FM RWY 09 THR. 128m N of RCL.
LOC 27	ISN	111.5MHz	2200 - 1300	384837.31N/ 1394654.51E		For RWY 27 LOC: 500m(1641ft) inside FM RWY 09 THR, 132m(433ft) S of RCL. Off set angle 3° BRG (MAG) 265° LOC unusable: BTN 0.5NM BFR RWY27 THR and RWY27 THR
LOC-DME 27	ISN	1013MHz (CH-52X)	2200 - 1300	384837.11N/ 1394653.70E	72ft	DME: 480m(1575ft) inside FM RWY 09 THR, 135m(443ft) S of RCL.



**RJSY AD 2.20 LOCAL TRAFFIC REGULATIONS**

1. Airport regulations

Nil

2. Taxiing to and from stands

Nil

3. Parking area for small aircraft(General aviation)

AD Administrator's prior permission is required.

4. Parking area for helicopters

AD Administrator's prior permission is required.

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

Nil



7. School and training flights - technical test flights - use of runways

AD Administrator's prior permission is required.

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Nil

**RJSY AD 2.21 NOISE ABATEMENT PROCEDURES**

Nil

**RJSY AD 2.22 FLIGHT PROCEDURES**

**TAKE OFF MINIMA**

	RWY	ACFT CAT	REDL & RCLL		REDL or RCLL or RCL Marking		NIL (DAYTIME ONLY)	
			RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with TKOF ALTN AP FILED	09	A,B,C,D	400m	400m	400m	400m	-	500m
	27	A,B,C,D	-	400m	-	400m	-	500m
OTHER	09	A,B,C,D	AVBL LDG MINIMA					
	27	A,B,C,D						

**RJSY AD 2.23 ADDITIONAL INFORMATION**

Nil

**RJSY AD 2.24 CHARTS RELATED TO AN AERODROME**

Aerodrome/Heliport Chart  
 Standard Departure Chart - Instrument (SHONAI REVERSAL)  
 Standard Departure Chart - Instrument (ZUNDA-RNAV)  
 Standard Arrival Chart - Instrument (MOKKE, SHONAI-RNAV)  
 Standard Arrival Chart - Instrument (YURAH-RNAV)  
 Instrument Approach Chart (ILS Z or LOC Z RWY09)  
 Instrument Approach Chart (ILS Y or LOC Y RWY09)  
 Instrument Approach Chart (LOC RWY27)  
 Instrument Approach Chart (VOR RWY09)  
 Instrument Approach Chart (RNP RWY09(AR))  
 Instrument Approach Chart (RNP Z RWY27)  
 Instrument Approach Chart (RNP Y RWY27(AR))  
 Other Chart (Visual REP)  
 Other Chart (LDG CHART)  
 Other Chart (MVA CHART)

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STANDARD DEPARTURE CHART - INSTRUMENT

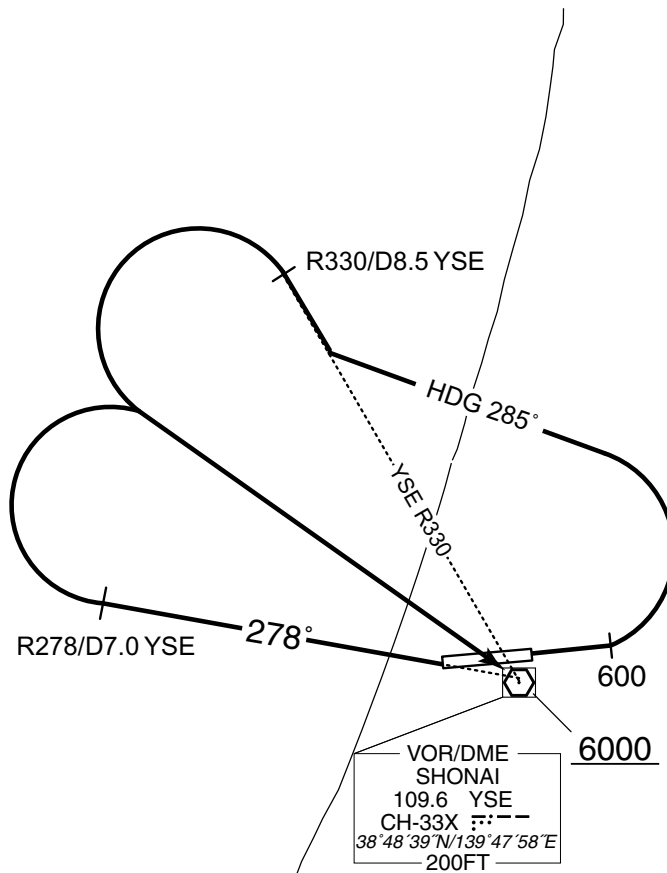
RJSY / SHONAI

SID

SHONAI REVERSAL THREE DEPARTURE

RWY 09 : Climb RWY HDG to 600FT, turn left HDG 285° to intercept and proceed via YSE R330 to YSE R330/8.5DME, turn left,...

RWY 27 : Climb via YSE R278 to YSE R278/7.0DME, turn right, ...direct to YSE VOR/DME.  
Cross YSE VOR/DME at or above 6000FT.



SHONAI REVERSAL THREE DEPARTURE

STANDARD DEPARTURE CHART - INSTRUMENT

RJSY / SHONAI

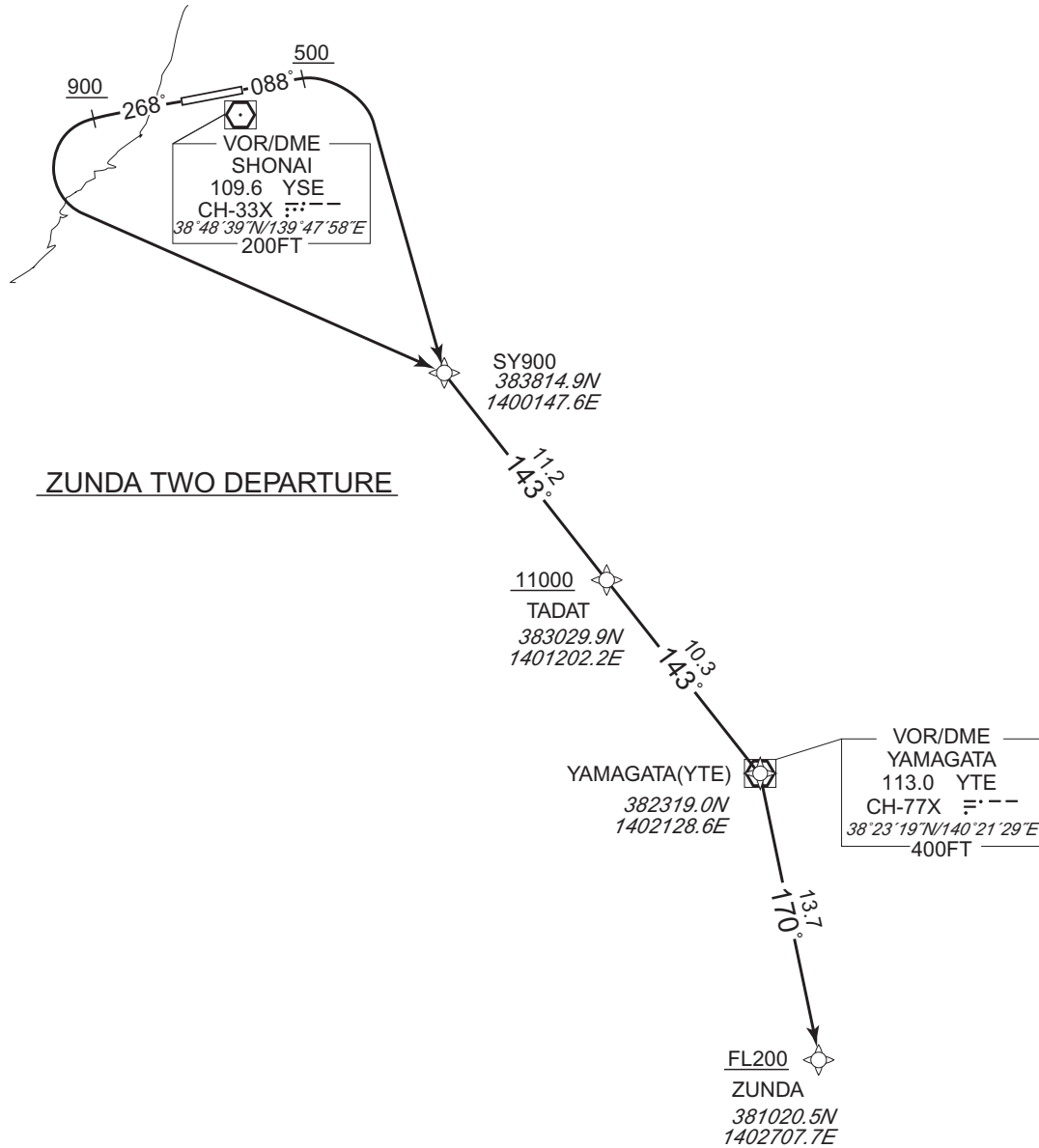
RNAV SID

ZUNDA TWO DEPARTURE

RNP1

Note GNSS required.

VAR 9°W (2022)



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

ZUNDA TWO DEPARTURE

RWY09 : Climb on HDG 088° at or above 500FT, turn right direct to SY900, to TADAT at or above 11000FT, to YTE, to ZUNDA at or above FL200.

RWY27 : Climb on HDG 268° at or above 900FT, turn left direct to SY900, to TADAT at or above 11000FT, to YTE, to ZUNDA at or above FL200.

NOTE RWY09 : 4.8% climb gradient required up to 5000FT.  
OBST ALT 4758FT located at 17.2NM 150°FM end of RWY09.

RWY27 : 4.4% climb gradient required up to 3500FT.  
OBST ALT 1117FT located at 3.1NM 212°FM end of RWY27.

STANDARD DEPARTURE CHART - INSTRUMENT

RJSY / SHONAI

RNAV SID

ZUNDA TWO DEPARTURE

RWY09

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	-	-	088 (079.5)	-8.8	-	-	+500	-	-	RNP1
002	DF	SY900	-	-	-8.8	-	R	-	-	-	RNP1
003	TF	TADAT	-	143 (134.0)	-8.8	11.2	-	+11000	-	-	RNP1
004	TF	YTE	-	143 (134.1)	-8.8	10.3	-	-	-	-	RNP1
005	TF	ZUNDA	-	170 (161.1)	-8.8	13.7	-	+FL200	-	-	RNP1

RWY27

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	-	-	268 (259.5)	-8.8	-	-	+900	-	-	RNP1
002	DF	SY900	-	-	-8.8	-	L	-	-	-	RNP1
003	TF	TADAT	-	143 (134.0)	-8.8	11.2	-	+11000	-	-	RNP1
004	TF	YTE	-	143 (134.1)	-8.8	10.3	-	-	-	-	RNP1
005	TF	ZUNDA	-	170 (161.1)	-8.8	13.7	-	+FL200	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART -INSTRUMENT

RJSY / SHONAI

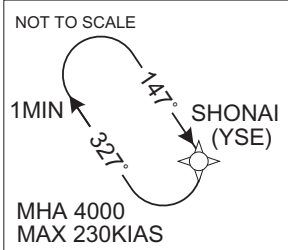
RNAV STAR RWY27

MOKKE ARRIVAL  
SHONAI ARRIVAL

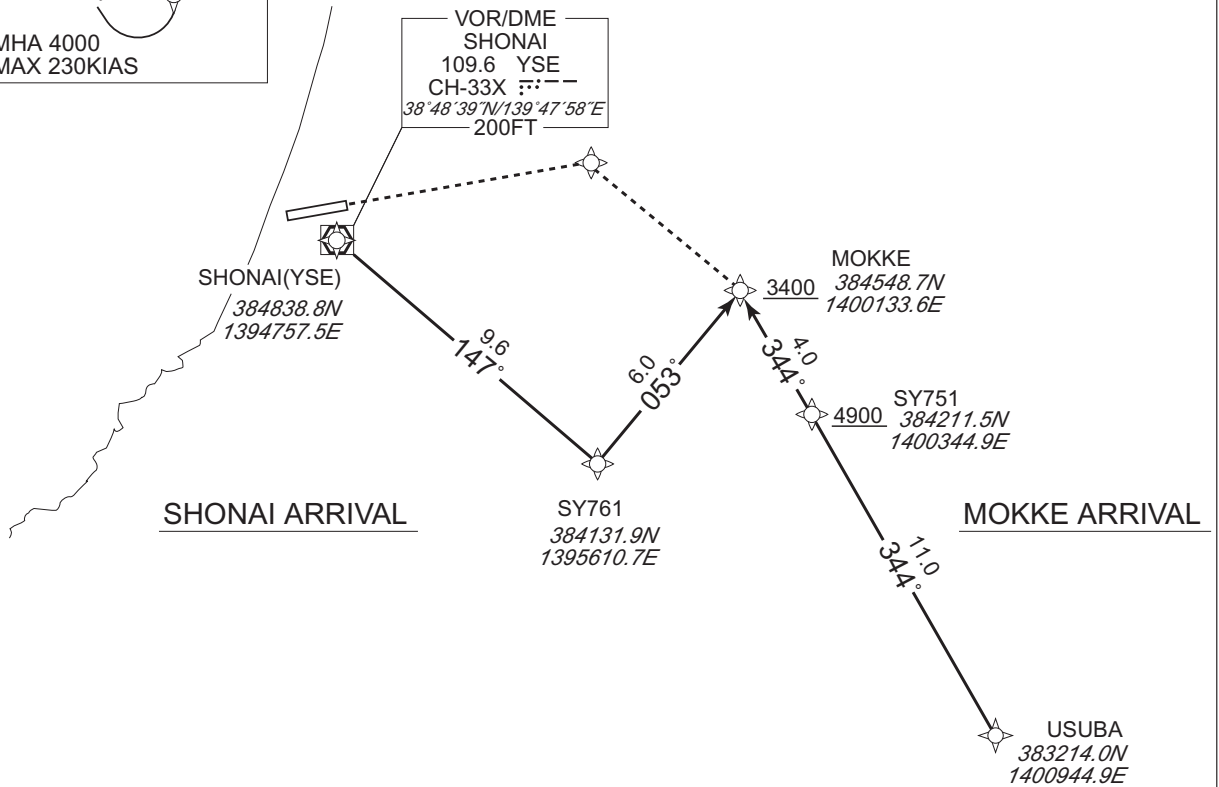
RNP1

Note GNSS required.

VAR 9°W (2022)



VOR/DME  
SHONAI  
109.6 YSE  
CH-33X  
38°48'39"N/139°47'58"E  
200FT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).



STANDARD ARRIVAL CHART -INSTRUMENT

RJSY / SHONAI

RNAV STAR RWY27

MOKKE ARRIVAL

From USUBA, to SY751 at or above 4900FT, to MOKKE at or above 3400FT.

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	USUBA	-	-	-8.8	-	-	-	-	-	RNP1
002	TF	SY751	-	344 (334.8)	-8.8	11.0	-	+4900	-	-	RNP1
003	TF	MOKKE	-	344 (334.8)	-8.8	4.0	-	+3400	-	-	RNP1

SHONAI ARRIVAL

From YSE, to SY761, to MOKKE at or above 3400FT.

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	YSE	-	-	-8.8	-	-	-	-	-	RNP1
002	TF	SY761	-	147 (137.9)	-8.8	9.6	-	-	-	-	RNP1
003	TF	MOKKE	-	053 (044.4)	-8.8	6.0	-	+3400	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	YSE	147 (137.9)	-8.8	1.0(-14000)	R	4000	FL140	-230(-14000)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART -INSTRUMENT

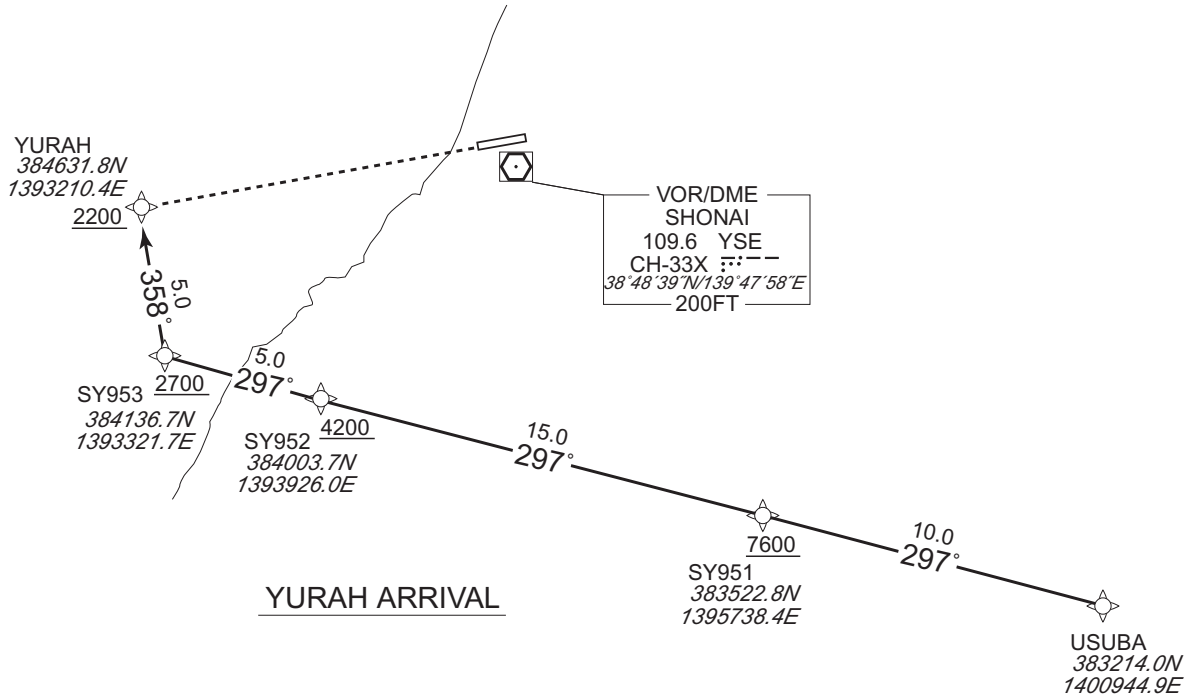
RJSY / SHONAI RNAV STAR RWY09

YURAH ARRIVAL

RNP1

Note GNSS required.

VAR 9°W (2022)



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

YURAH ARRIVAL

From USUBA, to SY951 at or above 7600FT, to SY952 at or above 4200FT, to SY953 at or above 2700FT, to YURAH at or above 2200FT.

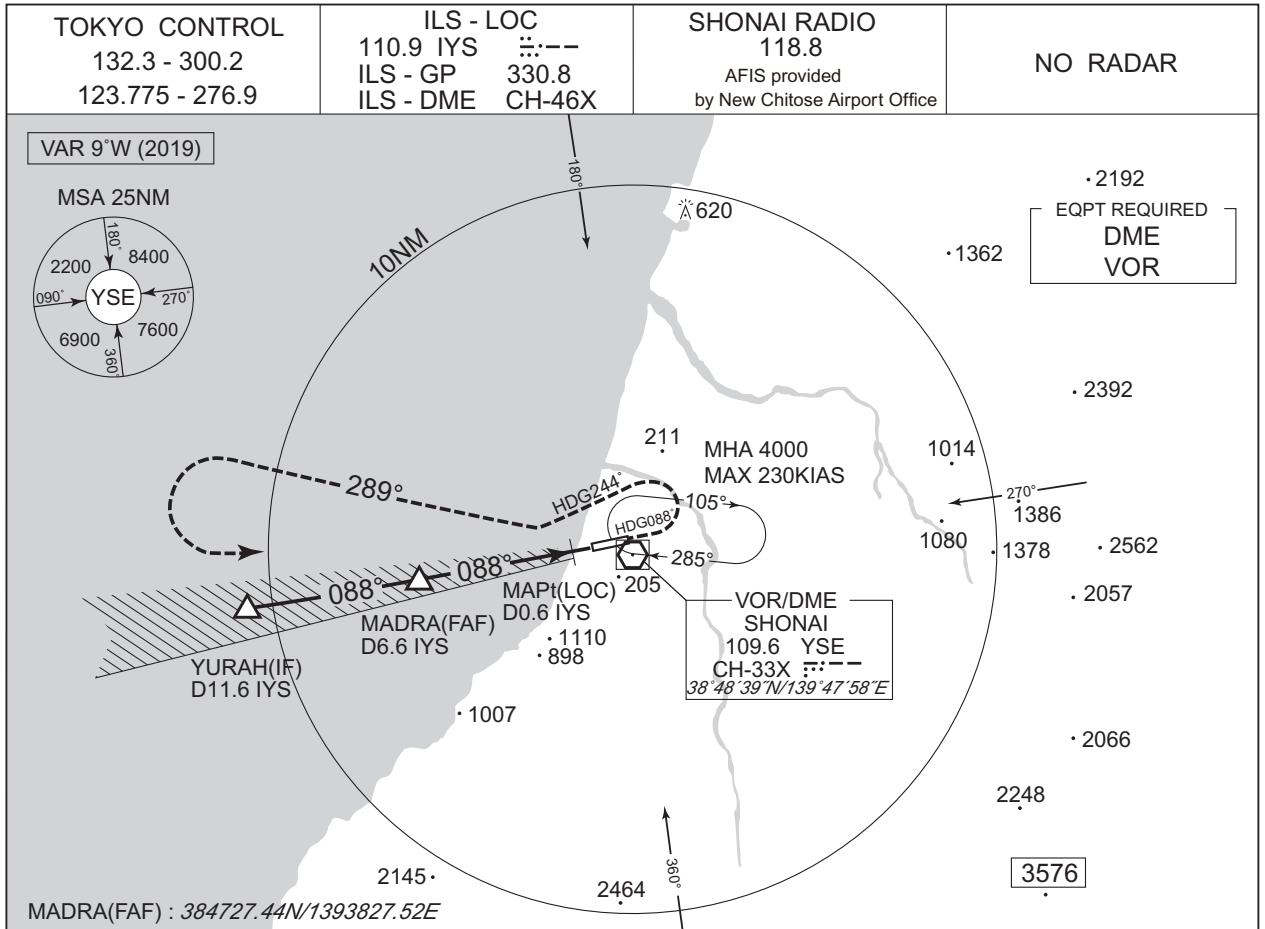
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	USUBA	—	—	-8.8	—	—	—	—	—	RNP1
002	TF	SY951	—	297 (288.4)	-8.8	10.0	—	+7600	—	—	RNP1
003	TF	SY952	—	297 (288.3)	-8.8	15.0	—	+4200	—	—	RNP1
004	TF	SY953	—	297 (288.1)	-8.8	5.0	—	+2700	—	—	RNP1
005	TF	YURAH	—	358 (349.3)	-8.8	5.0	—	+2200	—	—	RNP1

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INSTRUMENT APPROACH CHART

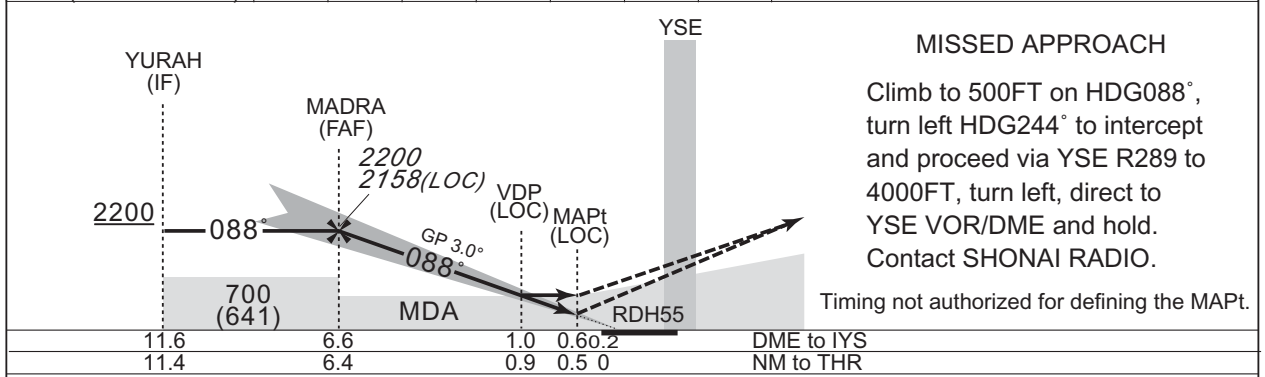
RJSY / SHONAI

ILS Z or LOC Z RWY09



NM to IYS	FAF	6	5	4	3	2	MAPt
ALT (3.0° APCH Path)	2158	1967	1648	1330	1011	693	-

CHANGE : Secondary FREQ for TOKYO CONTROL.



Missed APCH climb gradient MNM 5.0%

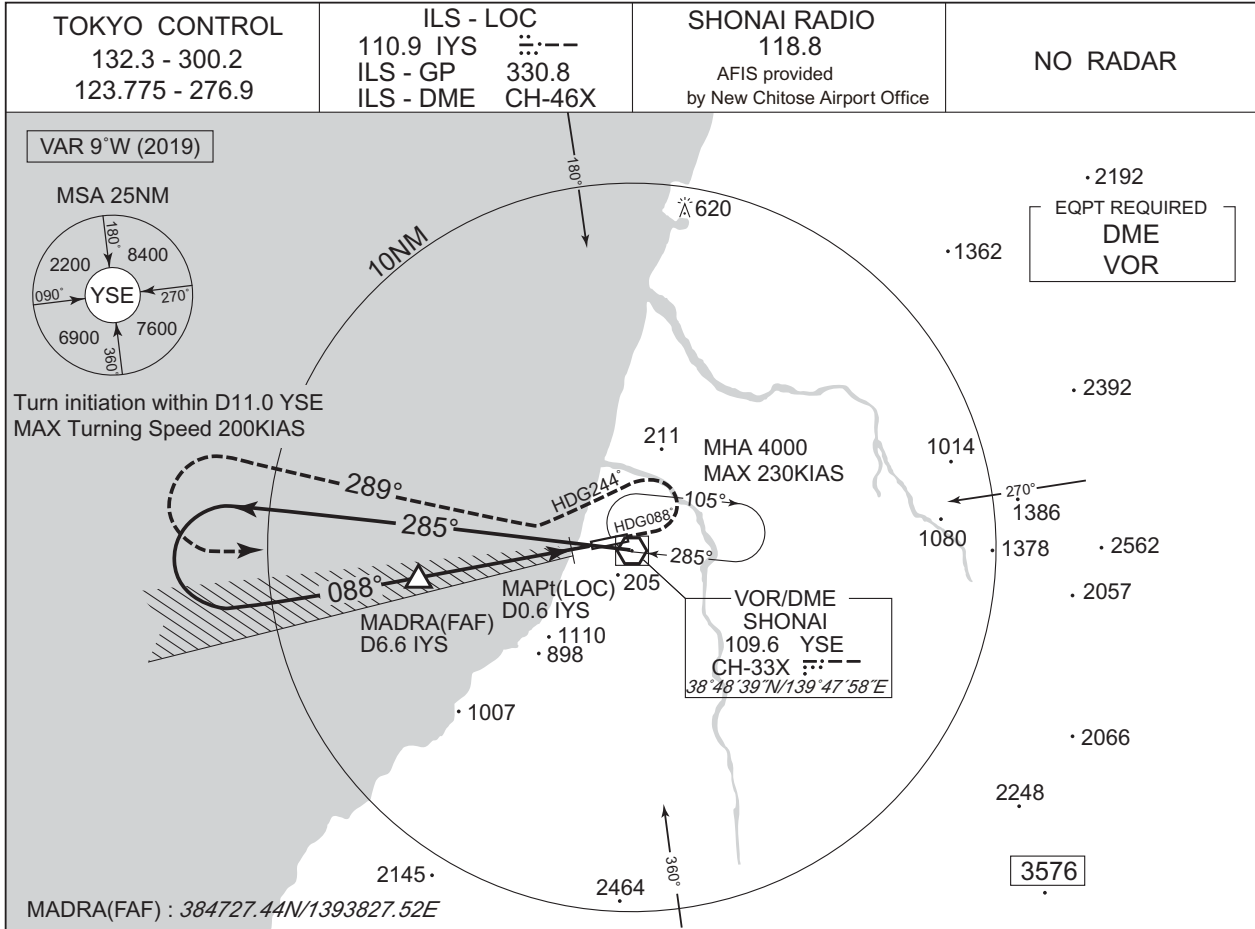
MINIMA		THR elev. 59		AD elev. 72		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	259 (200)	550	380 (321)	900	530 (458)	1600
B				1000		
C				1400	700 (628)	3200
D				1400		

MINIMA with Missed APCH climb gradient of 2.5% are not established.  
 Circling to NORTH side of RWY only.

INSTRUMENT APPROACH CHART

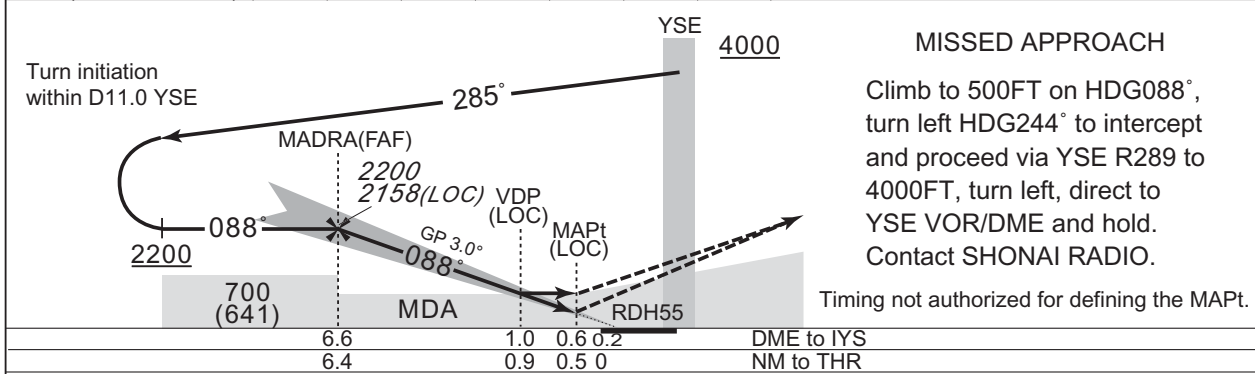
RJSY / SHONAI

ILS Y or LOC Y RWY09



NM to IYS	FAF	6	5	4	3	2	MAPt
ALT (3.0° APCH Path)	2158	1967	1648	1330	1011	693	-

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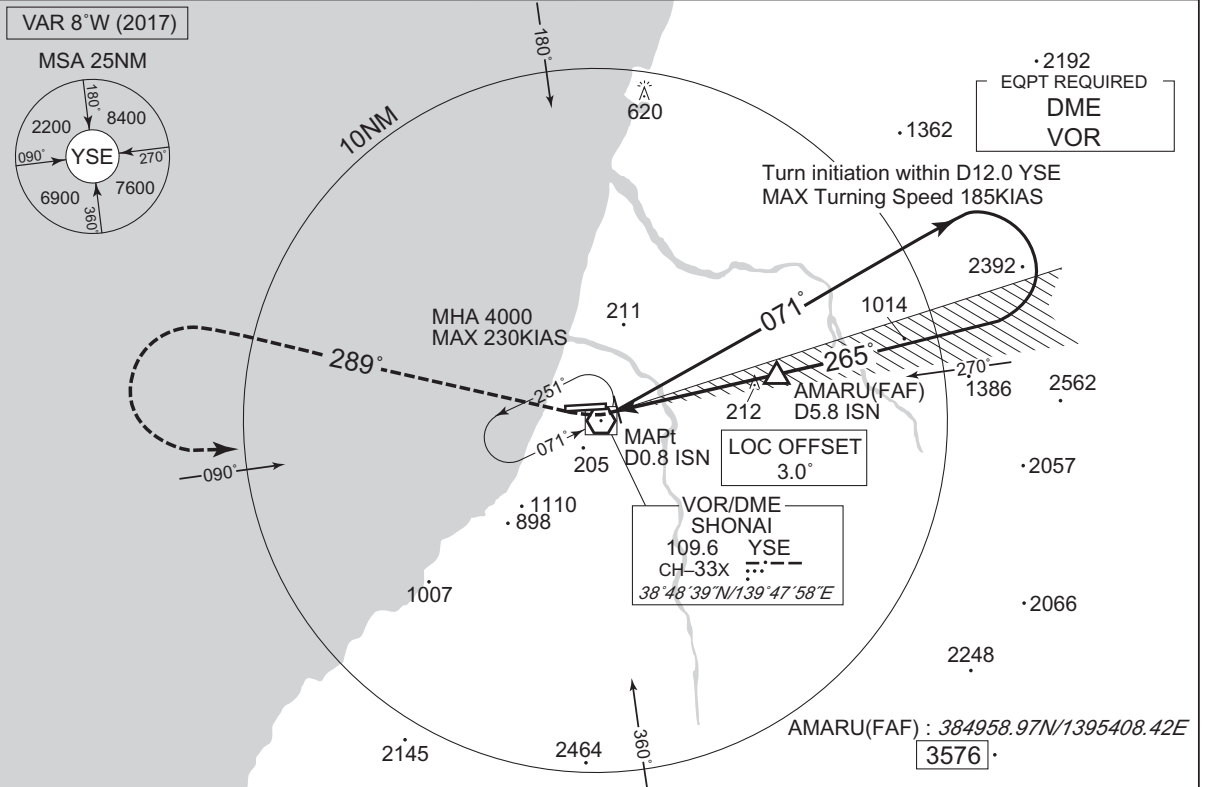
MINIMA		THR elev. 59		AD elev. 72			
CAT	CAT I		LOC		CIRCLING		
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS	
A	259 (200)	550	380 (321)	900	530 (458)	1600	
B				1000			
C				1400			2400
D				1400			700 (628)

MINIMA with Missed APCH climb gradient of 2.5% are not established.  
Circling to NORTH side of RWY only.

INSTRUMENT APPROACH CHART

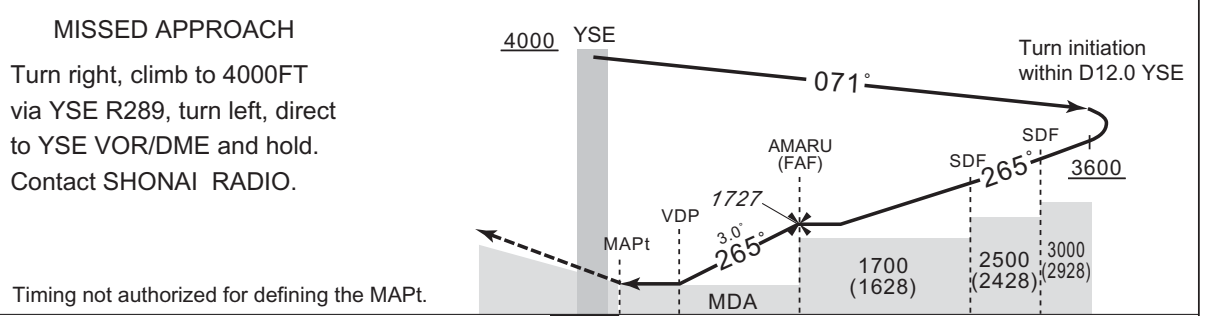
RJSY / SHONAI LOC RWY27

<b>TOKYO CONTROL</b> 132.3 – 300.2 123.775 - 276.9	<b>LOC</b> 111.5 ISN ∴∴ LOC-DME CH-52X	<b>SHONAI RADIO</b> 118.8 AFIS provided by New Chitose Airport Office	<b>NO RADAR</b>
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NM to ISN	MAPt	2	3	4	5	FAF
ALT (3.0° APCH Path)	-	511	830	1148	1467	1727

CHANGE : Secondary FREQ for TOKYO CONTROL.



DME to ISN	0.8	1.9	5.8	10.8	12.8
NM to THR	0	1.0	5.0	10.0	12.0

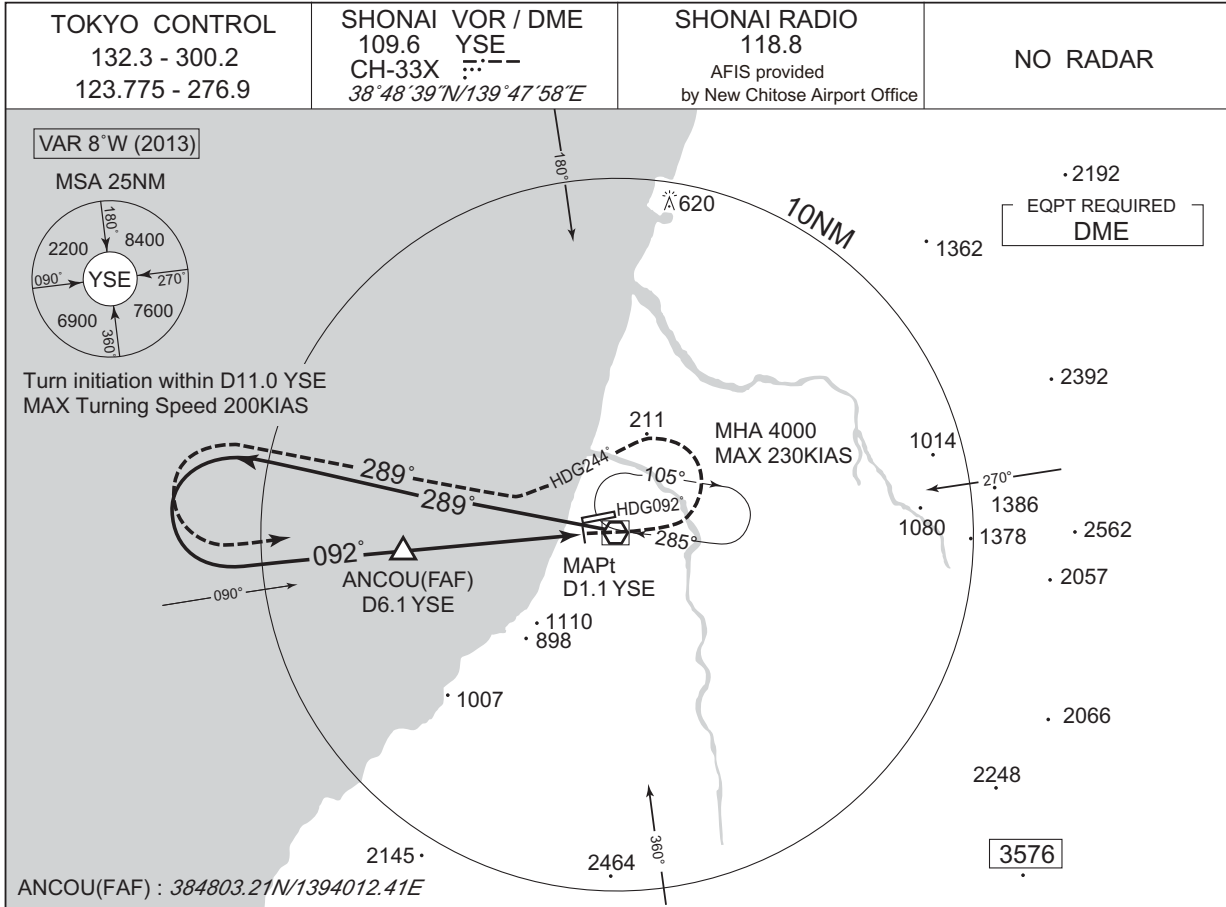
	MINIMA	THR elev. 86	AD elev. 72	
CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	460 (388)	1200	530 (458)	1600
B		1300		2400
C		1400		3200
D		1600		700 (628)

Circling to NORTH side of RWY only

INSTRUMENT APPROACH CHART

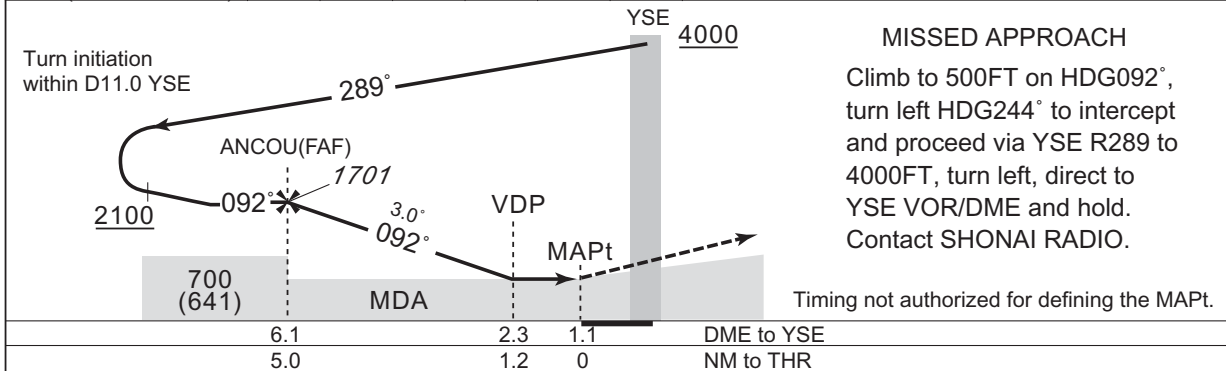
RJSY / SHONAI

VOR RWY09



NM to YSE	FAF	6	5	4	3	MAPt
ALT (3.0° APCH Path)	1701	1673	1355	1036	718	-

CHANGE : Secondary FREQ for TOKYO CONTROL.



	6.1	2.3	1.1	DME to YSE
	5.0	1.2	0	NM to THR

MINIMA		THR elev. 59	AD elev. 72	
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	470 (411)	900	530 (458)	1600
B		1000		2400
C			1400	700 (628)
D				

Circling to NORTH side of RWY only

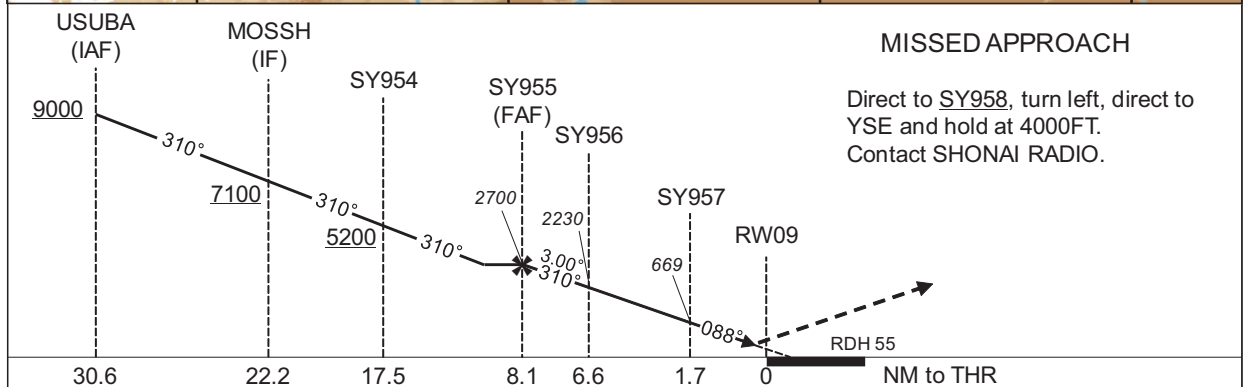
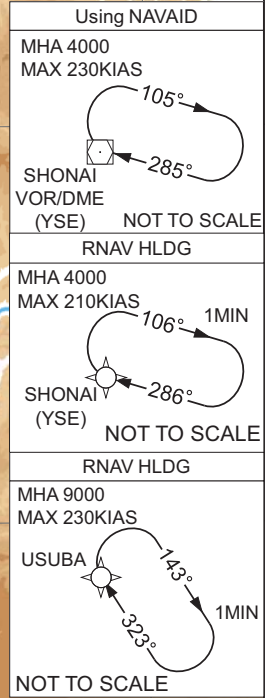
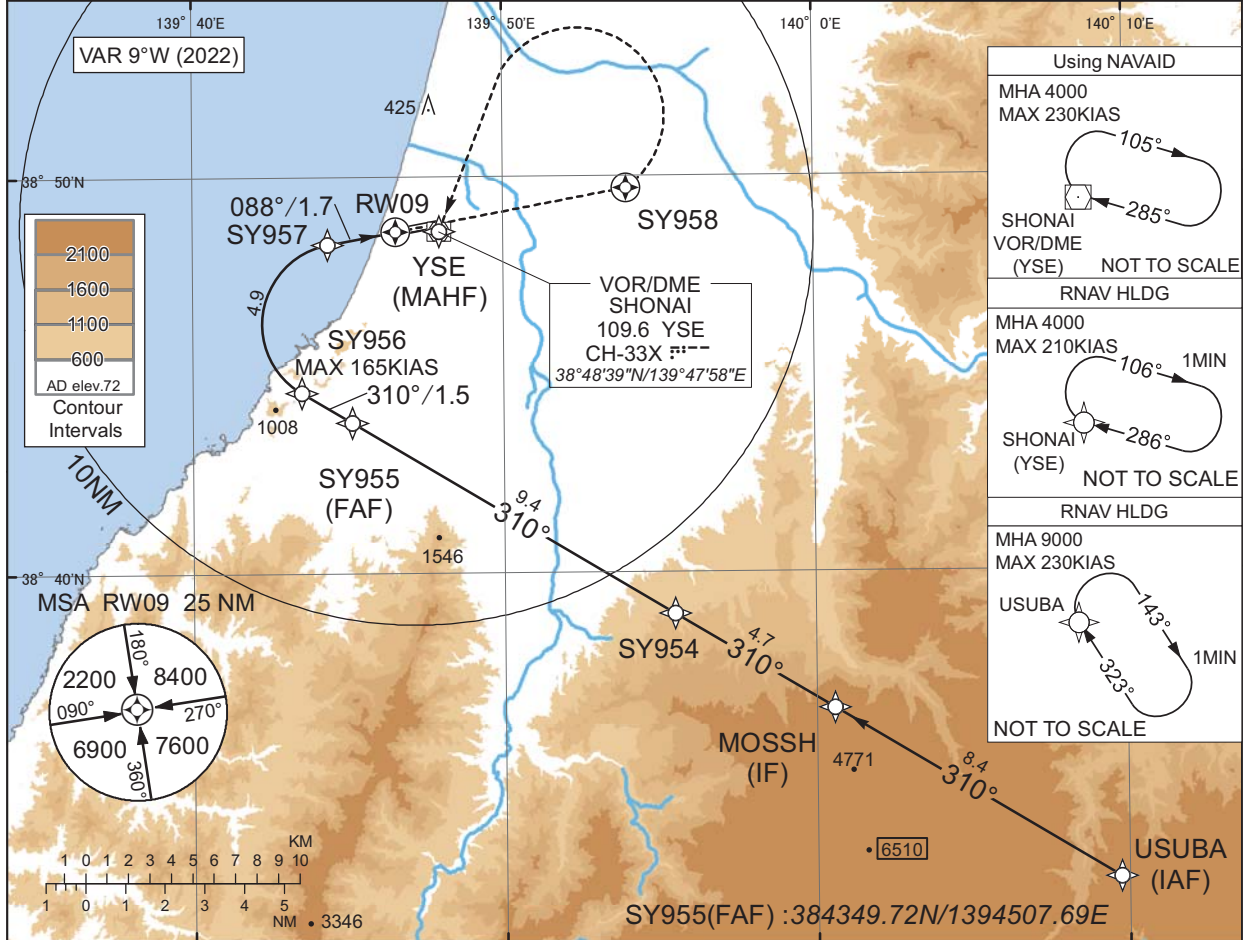
INSTRUMENT APPROACH CHART

RJSY / SHONAI

RNP RWY09(AR)

TOKYO CONTROL 132.3 - 300.2 123.775 - 276.9	RNP AR RF required.	SHONAI RADIO 118.8 AFIS provided by New Chitose Airport Office	NO RADAR
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For uncompensated Baro-VNAV systems, procedure not authorized below -10°C / above 45°C



MISSED APPROACH  
Direct to SY958, turn left, direct to YSE and hold at 4000FT.  
Contact SHONAI RADIO.

CHANGE : Secondary FREQ for TOKYO CONTROL.

Missed APCH climb gradient MNM 5.0%

CAT	RNP 0.10		RNP 0.30	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV
A	-	-	-	-
B	-	-	-	-
C	372(313)	1000	424(365)	1000
D	372(313)	1400	424(365)	1400

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

**Authorization Required**



## INSTRUMENT APPROACH CHART

RJSY / SHONAI

RNP RWY09(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	USUBA	-	-	-8.8	-	-	+9000	-	-	-
002	TF	MOSSH	-	310 (301.2)	-8.8	8.4	-	+7100	-	-	1.0
003	TF	SY954	-	310 (301.1)	-8.8	4.7	-	+5200	-	-	1.0
004	TF	SY955	-	310 (301.1)	-8.8	9.4	-	2700	-	-	1.0
005	TF	SY956	-	310 (301.0)	-8.8	1.5	-	2230	-165	-3.00	0.1 0.3
006	RF Center: SYRF1 r=2.03NM	SY957	-	-	-8.8	4.9	R	669	-	-3.00	0.1 0.3
007	TF	RW09	Y	088 (079.4)	-8.8	1.7	-	114	-	-3.00/55	0.1 0.3
008	DF	SY958	Y	-	-8.8	-	-	-	-	-	1.0
009	DF	YSE	-	-	-8.8	-	L	4000	-	-	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	USUBA	323 (314.1)	-8.8	1.0 (-14000)	R	9000	FL140	-230 (-14000)	1.0
Hold	YSE	286 (277.0)	-8.8	1.0 (-14000)	R	4000	FL140	-210 (-14000)	1.0

Waypoint Coordinates

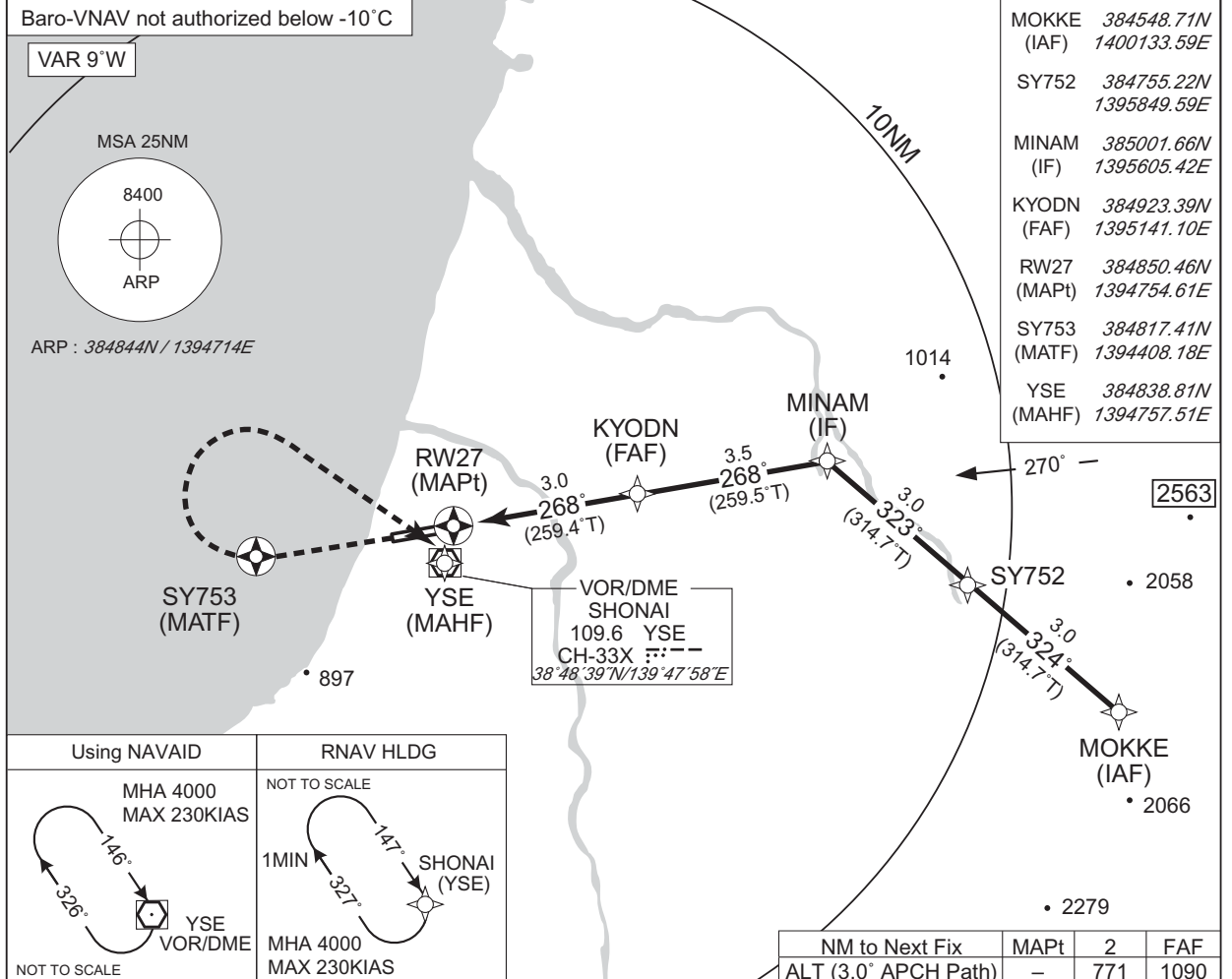
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
USUBA	383214.02N / 1400944.88E	SYRF1	384619.71N / 1394450.17E
MOSSH	383634.00N / 1400035.10E		
SY954	383858.43N / 1395528.53E		
SY955	384349.72N / 1394507.69E		
SY956	384435.19N / 1394330.47E		
SY957	384819.37N / 1394421.61E		
RW09	384838.58N / 1394633.12E		
SY958	384943.40N / 1395359.19E		
YSE	384838.81N / 1394757.51E		

CHANGE : PROC renamed.

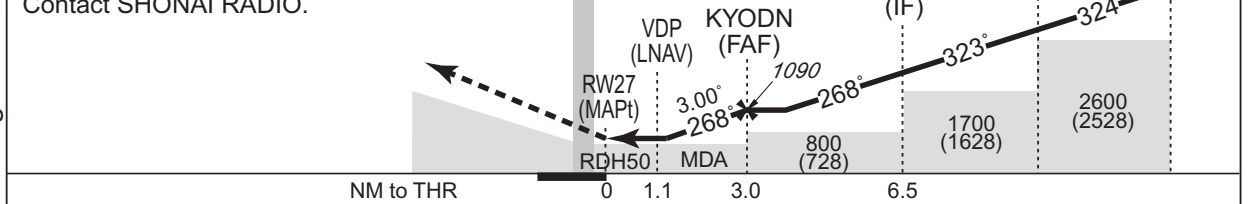
INSTRUMENT APPROACH CHART

RJSY / SHONAI RNP Z RWY27

TOKYO CONTROL 132.3 - 300.2 123.775 - 276.9	RNP APCH	SHONAI RADIO 118.8 AFIS provided by New Chitose Airport Office	NO RADAR
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Using NAVAID MHA 4000 MAX 230KIAS YSE VOR/DME	RNAV HLDG NOT TO SCALE 1MIN MHA 4000 MAX 230KIAS SHONAI (YSE)
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Missed APCH climb gradient MNM 3.0%

<b>MINIMA</b>		THR elev. 86	AD elev. 72			
CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS
A	480 (394)	1200	480 (408)	1200	530 (458)	1600
B		1300		1300		
C		1400		1400		
D		1600		1600		

MINIMA with Missed APCH climb gradient of 2.5% are not established.  
Circling to NORTH side of RWY only

CHANGE : Missed APCH for using VOR/DME abolished.

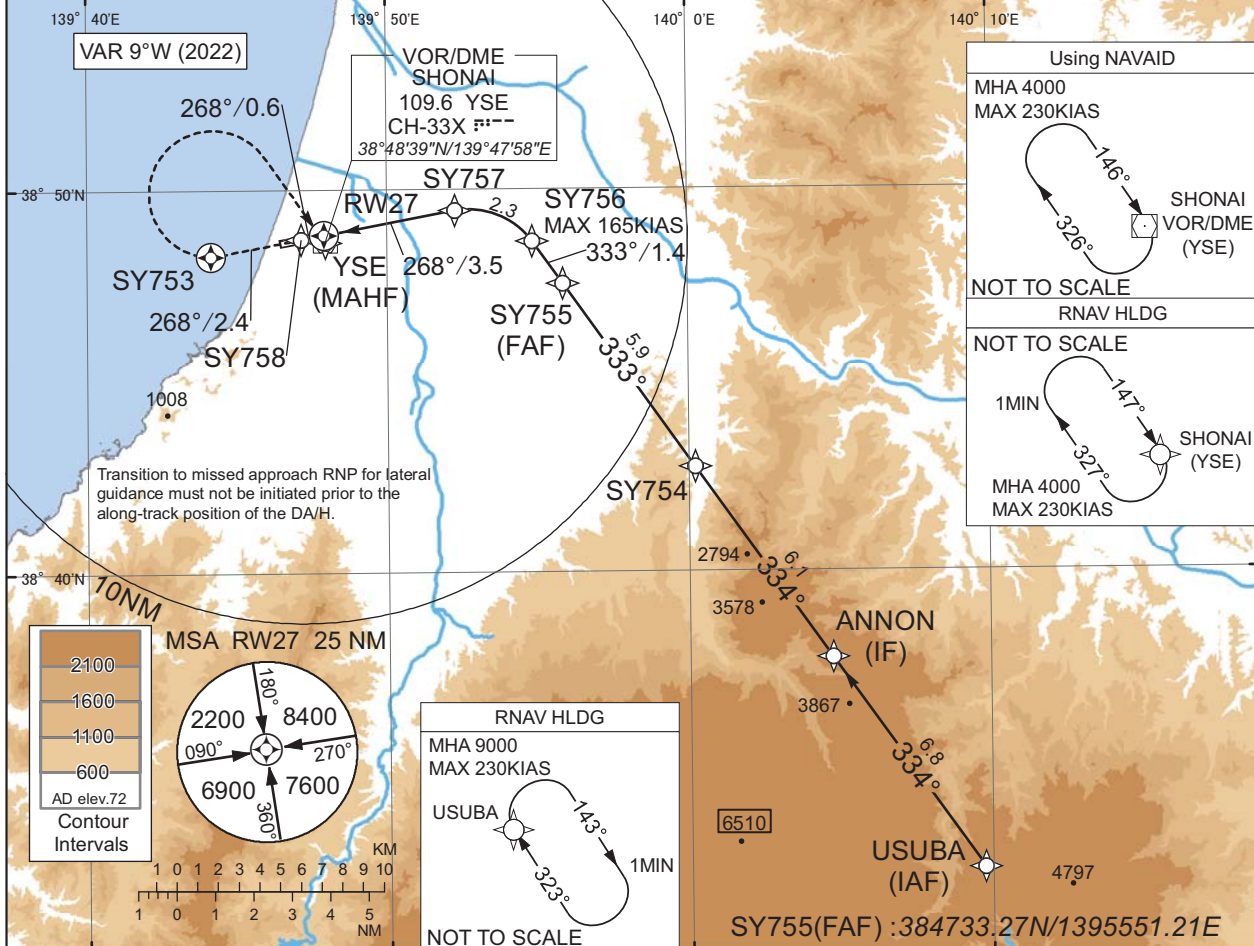
INSTRUMENT APPROACH CHART

RJSY / SHONAI

RNP Y RWY27(AR)

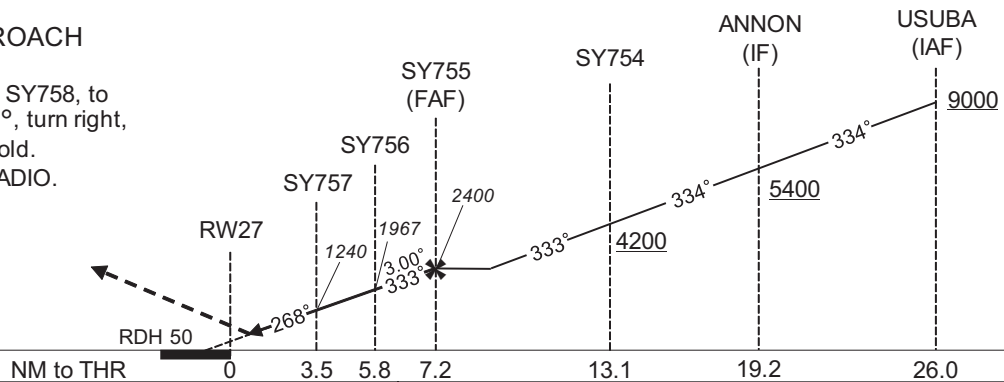
TOKYO CONTROL 132.3 - 300.2 123.775 - 276.9	RNP AR RF required.	SHONAI RADIO 118.8 AFIS provided by New Chitose Airport Office	NO RADAR
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For uncompensated Baro-VNAV systems, procedure not authorized below -10°C / above 45°C



MISSED APPROACH

Climb to 4000FT, to SY758, to SY753 on track 268°, turn right, direct to YSE and hold.  
Contact SHONAI RADIO.



Missed APCH climb gradient MNM 5.0%

CAT	THR elev. 86		AD elev. 72	
	RNP 0.12	RNP 0.30	RNP 0.12	RNP 0.30
	DA(H)	CMV	DA(H)	CMV
A	-	-	-	-
B	-	-	-	-
C	-	1400	-	1400
D	386(300)	1600	424(338)	1600

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

**Authorization Required**

CHANGE : Secondary FREQ for TOKYO CONTROL.

INSTRUMENT APPROACH CHART

RJSY / SHONAI

RNP Y RWY27(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	USUBA	-	-	-8.8	-	-	+9000	-	-	-
002	TF	ANNON	-	334 (324.8)	-8.8	6.8	-	+5400	-	-	1.0
003	TF	SY754	-	334 (324.7)	-8.8	6.1	-	+4200	-	-	1.0
004	TF	SY755	-	333 (324.7)	-8.8	5.9	-	2400	-	-	1.0
005	TF	SY756	-	333 (324.6)	-8.8	1.4	-	1967	-165	-3.00	0.12 0.30
006	RF Center: SYRF2 r=2.01NM	SY757	-	-	-8.8	2.3	L	1240	-	-3.00	0.12 0.30
007	TF	RW27	Y	268 (259.5)	-8.8	3.5	-	136	-	-3.00/50	0.12 0.30
008	TF	SY758	-	268 (259.4)	-8.8	0.6	-	-	-	-	0.12 0.30
009	CF	SY753	Y	268 (259.4)	-8.8	2.4	-	-	-	-	1.0
010	DF	YSE	-	-	-8.8	-	R	4000	-	-	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	USUBA	323 (314.1)	-8.8	1.0 (-14000)	R	9000	FL140	-230 (-14000)	1.0
Hold	YSE	147 (137.9)	-8.8	1.0 (-14000)	R	4000	FL140	-230 (-14000)	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
USUBA	383214.02N / 1400944.88E	SYRF2	384729.55N / 1395244.67E
ANNON	383745.37N / 1400445.25E		
SY754	384245.22N / 1400013.26E		
SY755	384733.27N / 1395551.21E		
SY756	384839.83N / 1395450.54E		
SY757	384928.52N / 1395216.49E		
RW27	384850.46N / 1394754.61E		
SY758	384843.80N / 1394708.93E		
SY753	384817.41N / 1394408.18E		
YSE	384838.81N / 1394757.51E		

CHANGE : PROC renamed.

RJSY / SHONAI

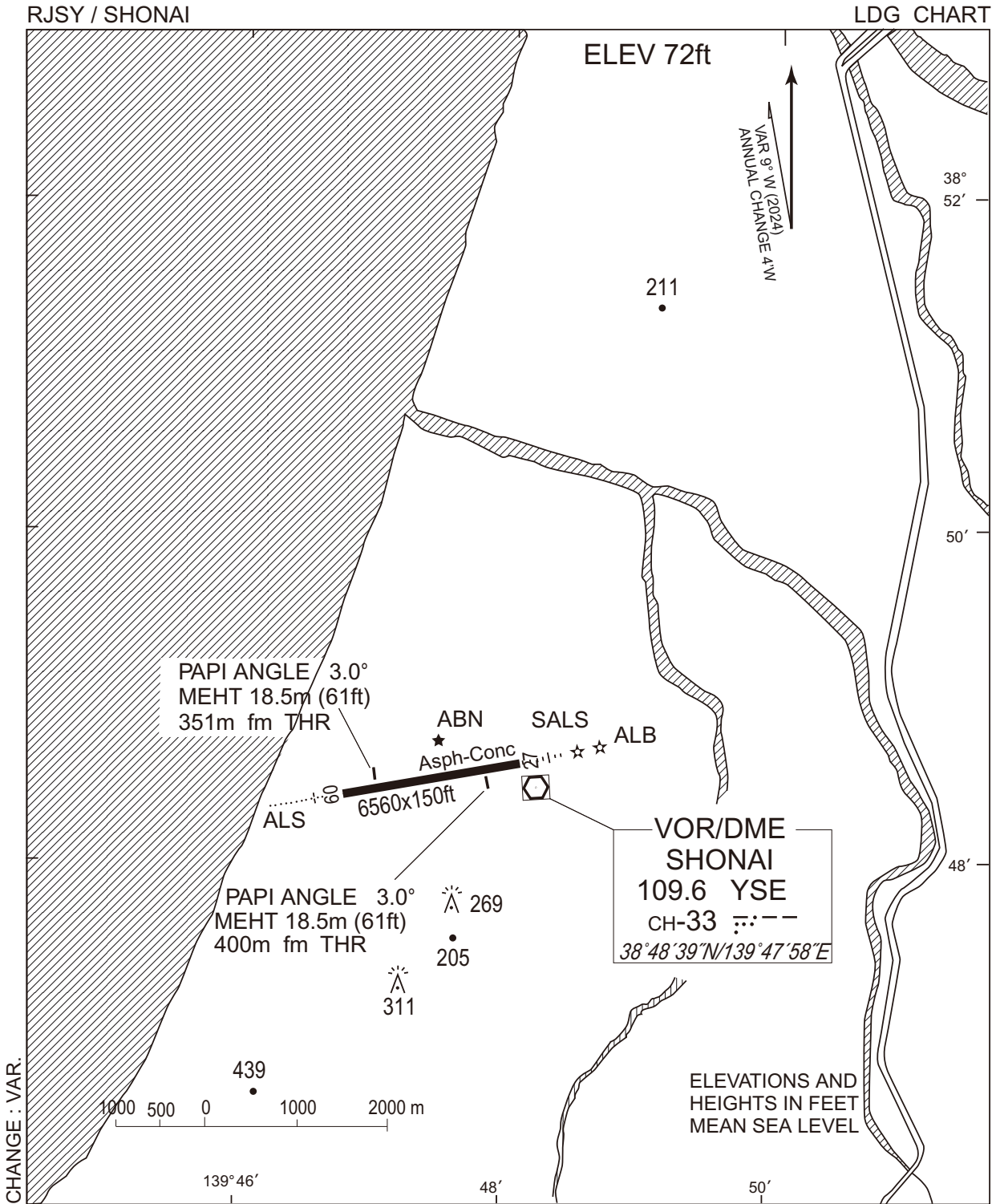
Visual REP



※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).

CHANGE : VAR.

Call sign	BRG / DIST from ARP	Remarks
吹浦 Fukura	014°T / 16.0NM	吹浦港 Harbor
酒田 Sakata	009°T / 8.1NM	酒田港 Harbor
最上 Mogami	089°T / 9.1NM	最上川橋 Bridge
鶴岡 Tsuruoka	153°T / 4.9NM	JR駅 Station
波渡崎 Hatozaki	225°T / 10.6NM	岬 Cape
あさひインター Asahi Inter	167°T / 11.9NM	山形自動車道 庄内あさひインターチェンジ Interchange



RJSY / SHONAI

Minimum Vectoring Altitude CHART

