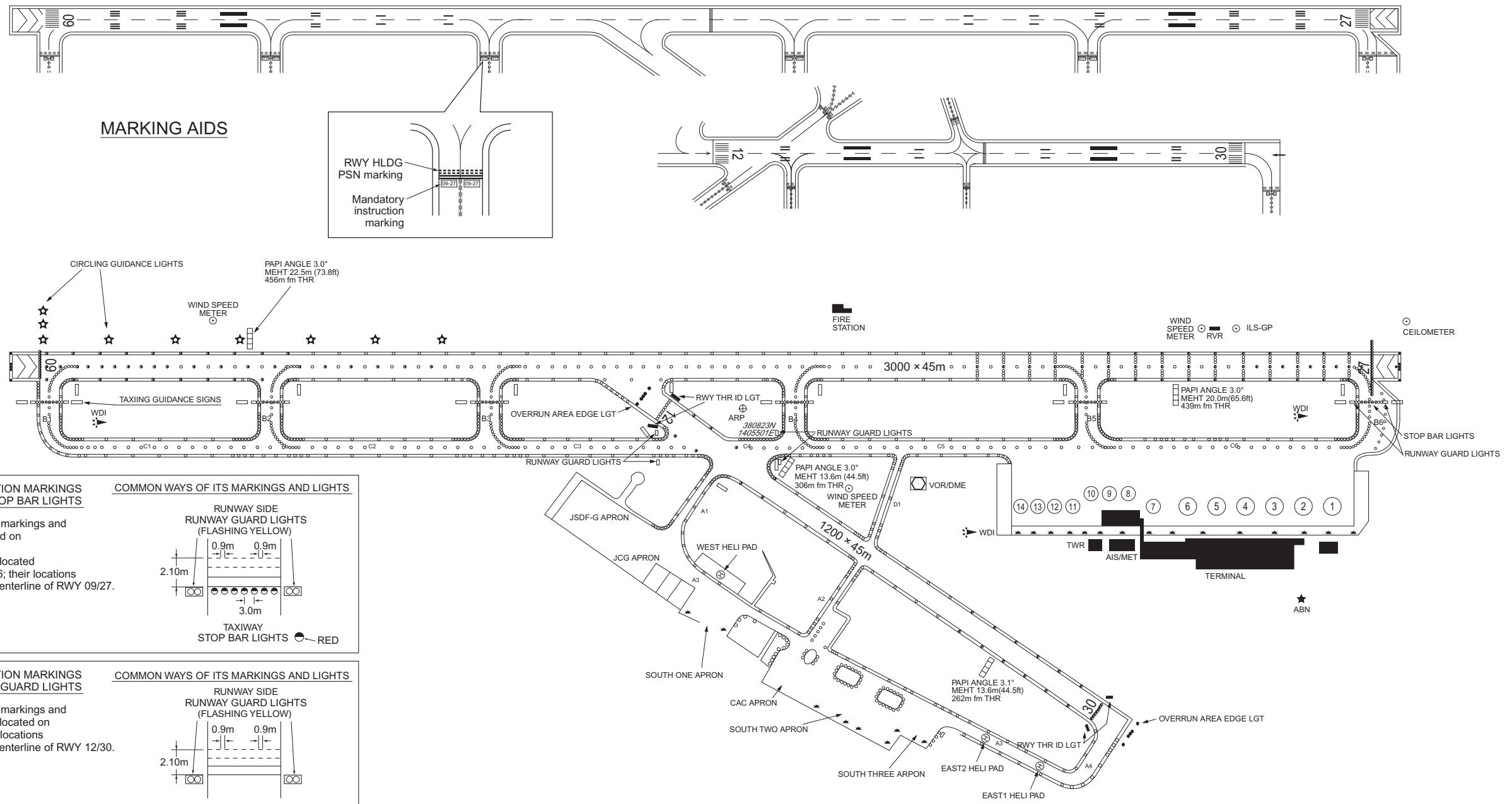
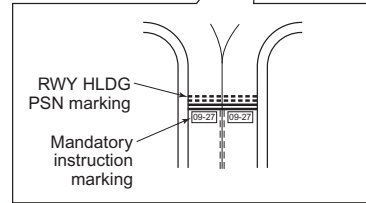


AERODROME CHART

SENDAI AIRPORT  
ELEV 1.7m(5.6ft)



MARKING AIDS



**RUNWAY-HOLDING POSITION MARKINGS and STOP BAR LIGHTS**

Runway-holding position markings and Stop bar lights are located on taxiway B1 through B6. Runway guard lights are located on taxiway B1 through B6; their locations are 75m off the runway centerline of RWY 09/27.

**COMMON WAYS OF ITS MARKINGS AND LIGHTS**

TAXIWAY STOP BAR LIGHTS RED

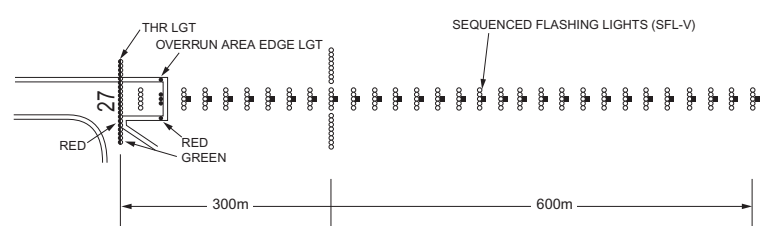
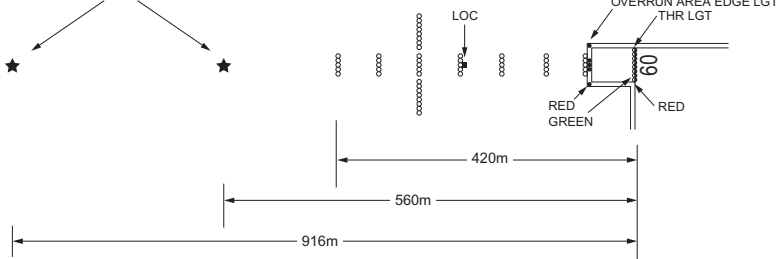
**RUNWAY-HOLDING POSITION MARKINGS and RUNWAY GUARD LIGHTS**

Runway-holding position markings and Runway guard lights are located on taxiway C3 and C4; their locations are 75m off the runway centerline of RWY 12/30.

**COMMON WAYS OF ITS MARKINGS AND LIGHTS**

TAXIWAY

APPROACH LGT BEACON

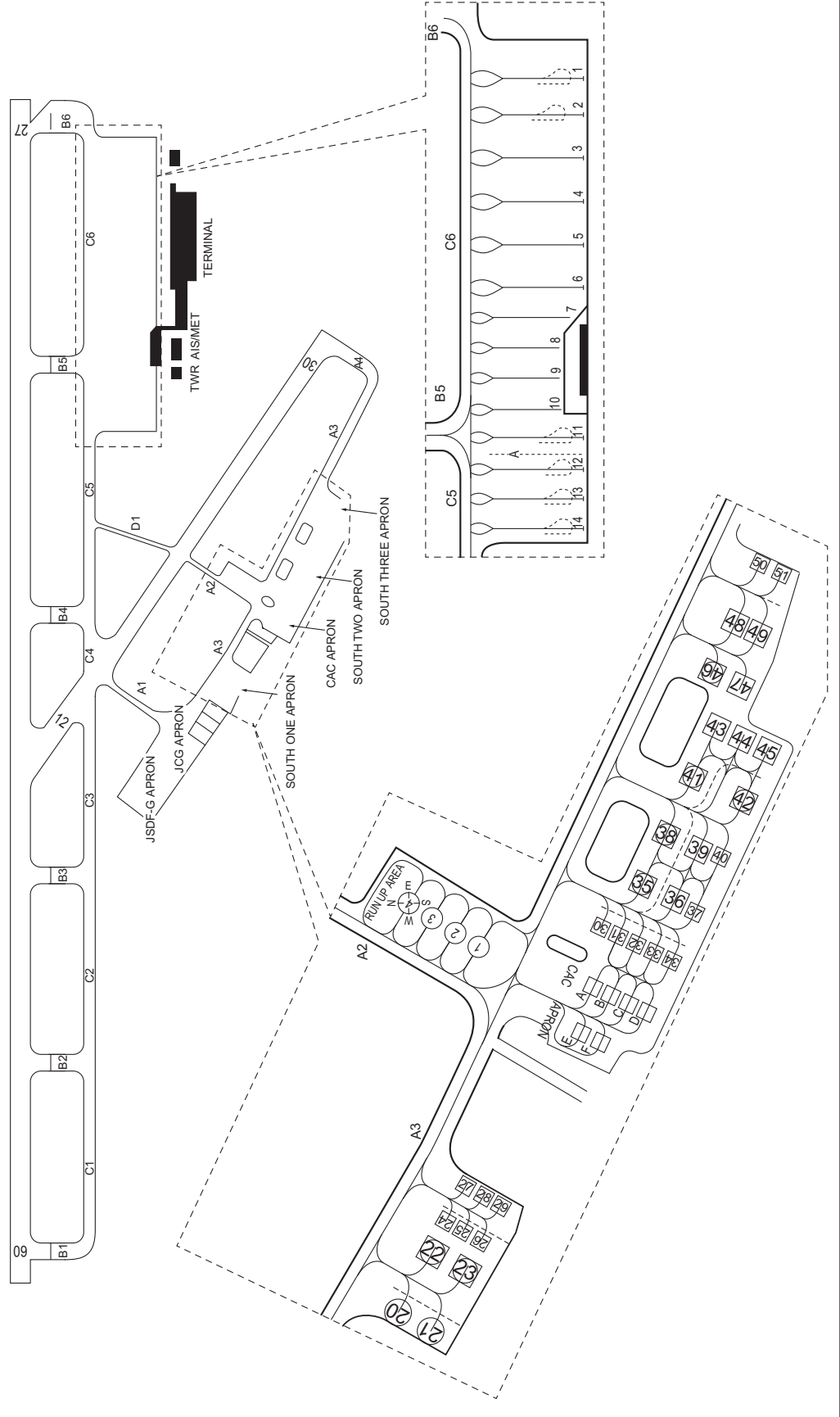


CHANGE : CEILOMETER relocated.

CHANGE : AFIS unit added.

**SENDAI AIRPORT**  
ELEV 1.7m(5.6ft)

Designation	Call Sign	Frequency (MHz)	OPR HR(UTC)
ATIS	Sendai Airport	126.45	2230 - 1300
GND	Sendai Ground	121.7	2230 - 1200
TWR	Sendai Tower	118.7	2230 - 1200
AFIS	Sendai Radio	118.7	1200 - 1300



# AERODROME OBSTACLE CHART-ICAO

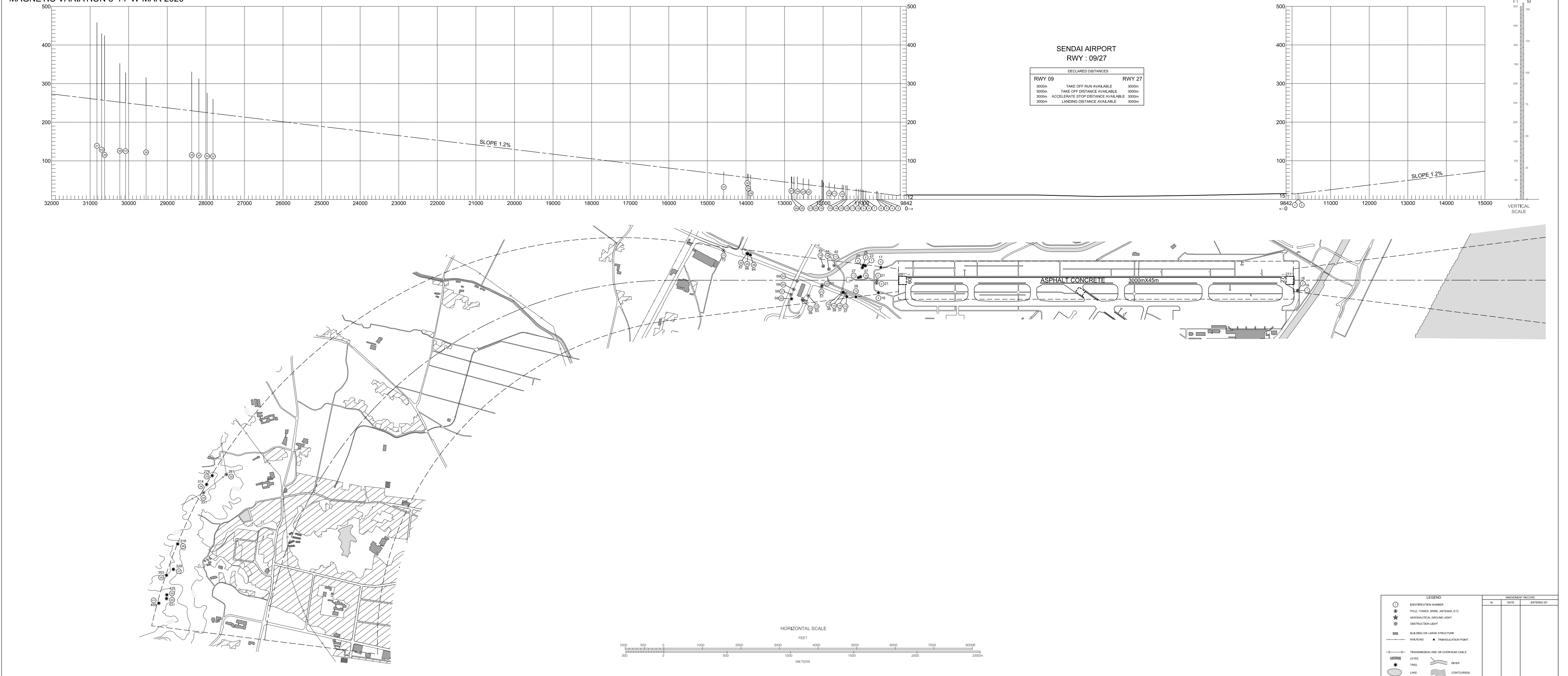
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 8°14' W-MAR 2020

SENDAI AIRPORT  
RWY : 09/27

DECLARED DISTANCES	
RWY 09	RWY 27
3000m TAKE OFF RUN AVAILABLE	3000m
3000m TAKE OFF DISTANCE AVAILABLE	3000m
3000m ACCELERATE STOP DISTANCE AVAILABLE	3000m
3000m LANDING DISTANCE AVAILABLE	3000m



CHANGE:Update



STANDARD DEPARTURE CHART-INSTRUMENT

RJSS / SENDAI

SID

IWAKI EIGHT DEPARTURE

RWY 09 : Climb RWY HDG to SDE 3.4DME (2.8NM FM DER), turn right to intercept and proceed...

RWY 12 : Climb ...

RWY 27 : Climb RWY HDG to 500FT, turn left HDG 090° to intercept and proceed...

RWY 30 : Climb RWY HDG to 500FT, turn left HDG 090° to intercept and proceed...  
...via SDE R120, via IXE R024 to IXE VOR/DME.

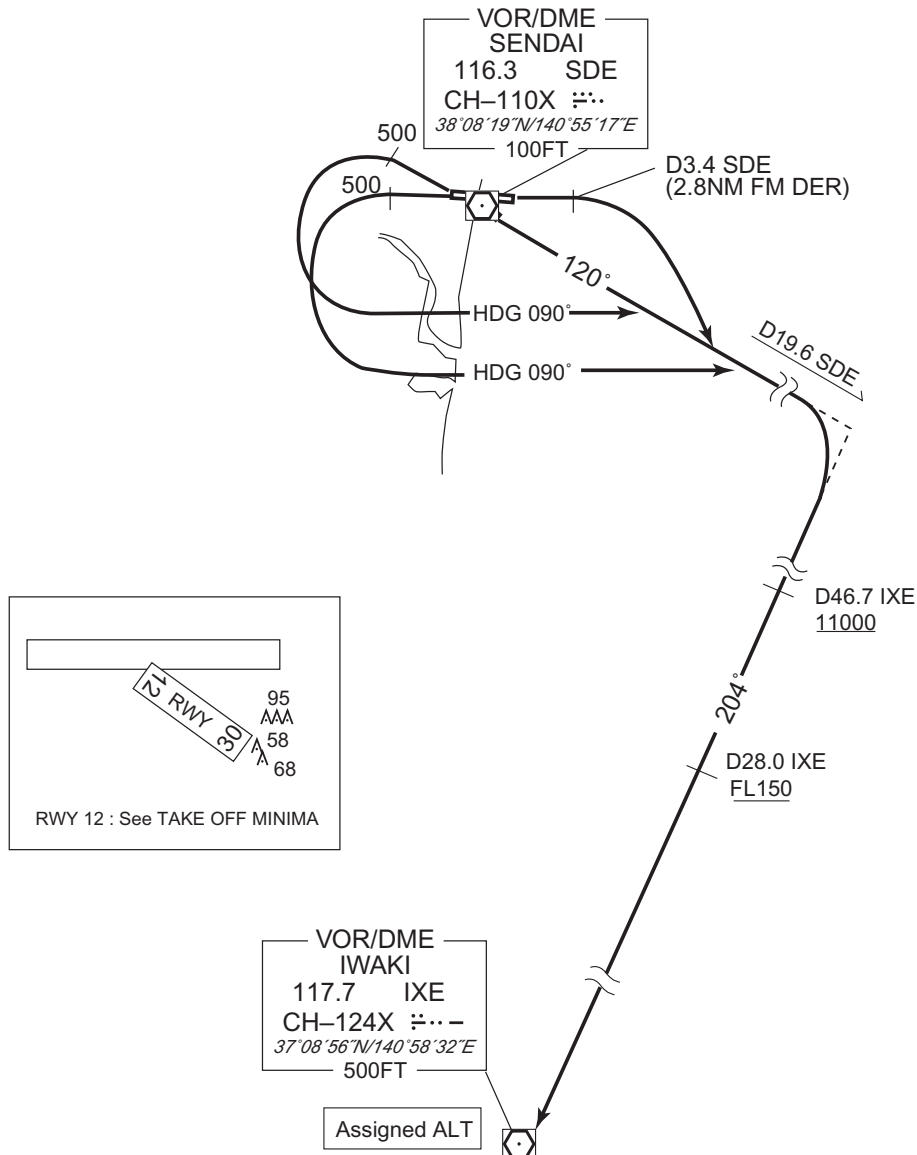
Cross IXE R024/46.7DME at or above 11000FT, cross IXE R024/28.0DME at or above FL150, cross IXE VOR/DME at assigned altitude.

Note RWY 09 : 5.0% climb gradient required up to 500FT.  
OBST ALT 62FT located at 0.2NM 102° FM end of RWY09.

RWY 27 : 5.0% climb gradient required up to 1000FT.  
OBST ALT 919FT located at 4.1NM 269° FM end of RWY27.

RWY 30 : 5.0% climb gradient required up to 1200FT.  
OBST ALT 1181FT located at 5.3NM 283° FM end of RWY30.

CHANGE : Description of PROC name.



STANDARD DEPARTURE CHART-INSTRUMENT

RJSS / SENDAI

SID

SENDAI REVERSAL SIX DEPARTURE

RWY 09 : Climb RWY HDG to SDE 3.4DME (2.8NM fm DER), turn right to intercept and proceed...

RWY 12 : Climb ...

RWY 27 : Climb RWY HDG to 500FT, turn left HDG 090° to intercept and proceed...

RWY 30 : Climb RWY HDG to 500FT, turn left HDG 090° to intercept and proceed...  
...via SDE R120 to 10.0DME, turn right, direct to SDE VOR/DME.  
Cross SDE VOR/DME at or above 7000FT(\*).

\* In case of proceeding to IXE VOR/DME : Cross SDE VOR/DME at or above 5000FT.

In case of proceeding to FKE VOR/DME : Cross SDE VOR/DME at or above 6000FT.

Note RWY 09 : 5.0% climb gradient required up to 500FT.

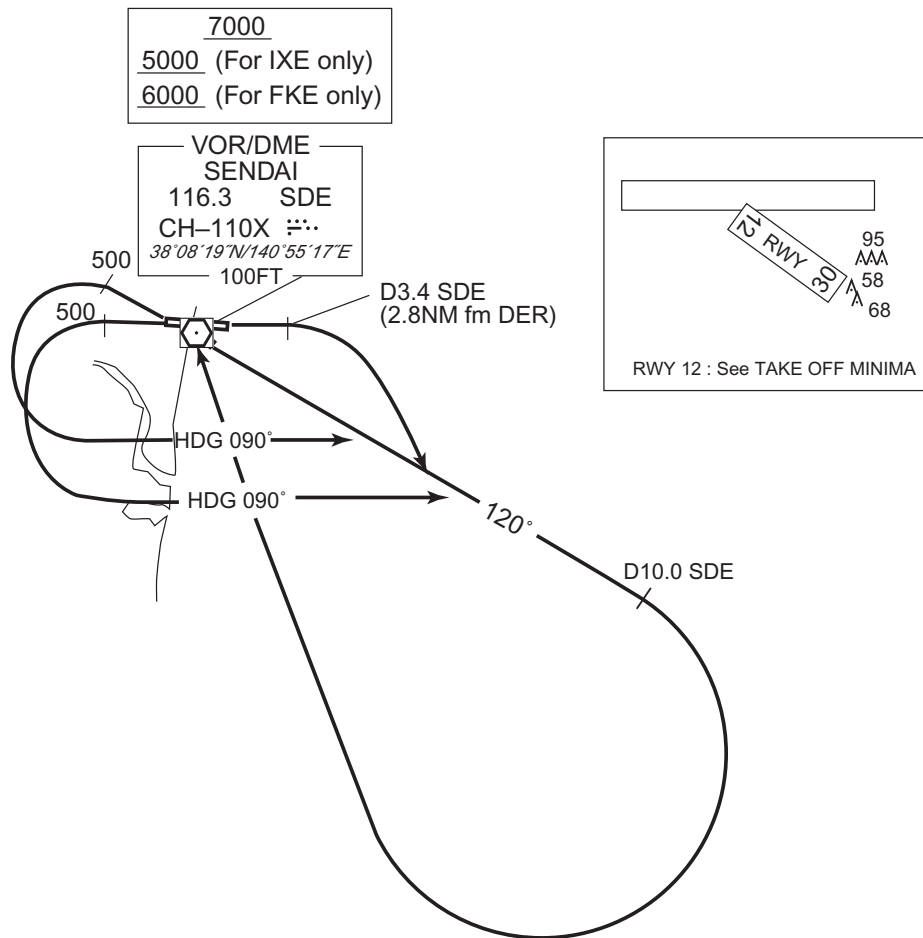
OBST ALT 62FT located at 0.2NM 102° FM end of RWY09.

RWY 27 : 5.0% climb gradient required up to 1000FT.

OBST ALT 919FT located at 4.1NM 269° FM end of RWY27.

RWY 30 : 5.0% climb gradient required up to 1200FT.

OBST ALT 1181FT located at 5.3NM 283° FM end of RWY30.



CHANGE : Description of PROC name.



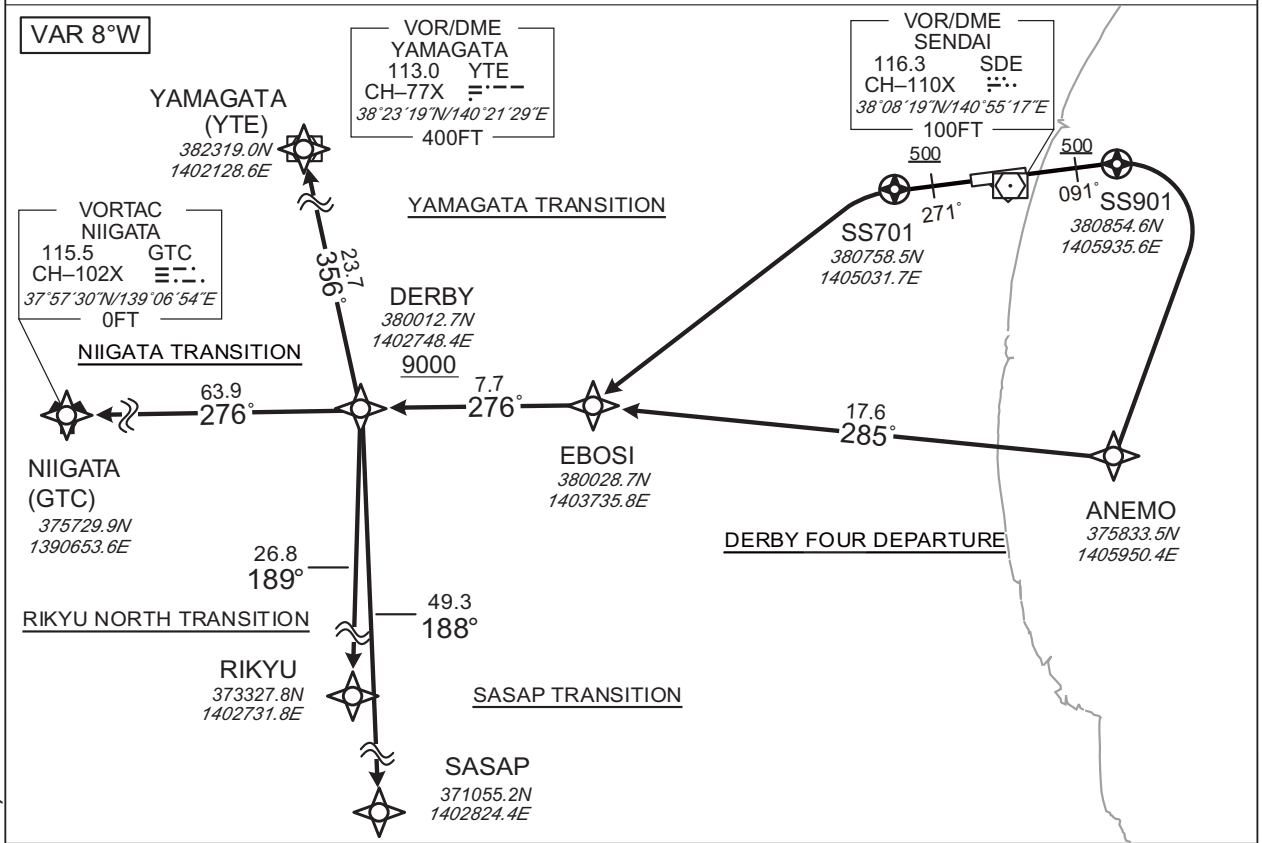
STANDARD DEPARTURE CHART - INSTRUMENT

RJSS / SENDAI

RNAV SID and TRANSITION

<b>DERBY FOUR DEPARTURE</b> YAMAGATA TRANSITION / NIIGATA TRANSITION / RIKYU NORTH TRANSITION / SASAP TRANSITION	RNP1
--	------

Note GNSS required.



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

<p><b>DERBY FOUR DEPARTURE</b></p> <p>RWY09 : Climb on HDG091° at or above 500FT, direct to <u>SS901</u>, turn right direct to ANEMO, to EBOSI, to DERBY at or above 9000FT.</p> <p>RWY27 : Climb on HDG271° at or above 500FT, direct to <u>SS701</u>, turn left direct to EBOSI, to DERBY at or above 9000FT.</p> <p>NOTE RWY09: 5.0% climb gradient required up to 500FT.                  OBST ALT 62FT located at 0.2NM 103° FM end of RWY09.</p> <p>RWY27: 5.9% climb gradient required up to 1300FT.                  OBST ALT 1181FT located at 4.6NM 285° FM end of RWY27.</p>
<p><b>YAMAGATA TRANSITION</b></p> <p>From DERBY at or above 9000FT, to YTE.</p>
<p><b>NIIGATA TRANSITION</b></p> <p>From DERBY at or above 9000FT, to GTC.</p>
<p><b>RIKYU NORTH TRANSITION</b></p> <p>From DERBY at or above 9000FT, to RIKYU.</p>
<p><b>SASAP TRANSITION</b></p> <p>From DERBY at or above 9000FT, to SASAP.</p>

STANDARD DEPARTURE CHART - INSTRUMENT

RJSS / SENDAI

RNAV SID and TRANSITION

DERBY FOUR 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	-	-	091 (082.5)	-8.3	-	-	+500	-	-	RNP1
002	DF	SS901	Y	-	-8.3	-	-	-	-	-	RNP1
003	DF	ANEMO	-	-	-8.3	-	R	-	-	-	RNP1
004	TF	EBOSI	-	285 (276.4)	-8.3	17.6	-	-	-	-	RNP1
005	TF	DERBY	-	276 (268.1)	-8.3	7.7	-	+9000	-	-	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	-	-	271 (262.5)	-8.3	-	-	+500	-	-	RNP1
002	DF	SS701	Y	-	-8.3	-	-	-	-	-	RNP1
003	DF	EBOSI	-	-	-8.3	-	L	-	-	-	RNP1
004	TF	DERBY	-	276 (268.1)	-8.3	7.7	-	+9000	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).



STANDARD DEPARTURE CHART - INSTRUMENT

RJSS / SENDAI

RNAV SID and TRANSITION

YAMAGATA 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	DERBY	-	-	-8.3	-	-	+9000	-	-	RNP1
002	TF	YTE	-	356 (347.9)	-8.3	23.7	-	-	-	-	RNP1

NIIGATA 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	DERBY	-	-	-8.3	-	-	+9000	-	-	RNP1
002	TF	GTC	-	276 (268.0)	-8.3	63.9	-	-	-	-	RNP1

RIKYU NORTH 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	DERBY	-	-	-8.3	-	-	+9000	-	-	RNP1
002	TF	RIKYU	-	189 (180.5)	-8.3	26.8	-	-	-	-	RNP1

SASAP 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	DERBY	-	-	-8.3	-	-	+9000	-	-	RNP1
002	TF	SASAP	-	188 (179.4)	-8.3	49.3	-	-	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART - INSTRUMENT

RJSS / SENDAI

RNAV SID and TRANSITION

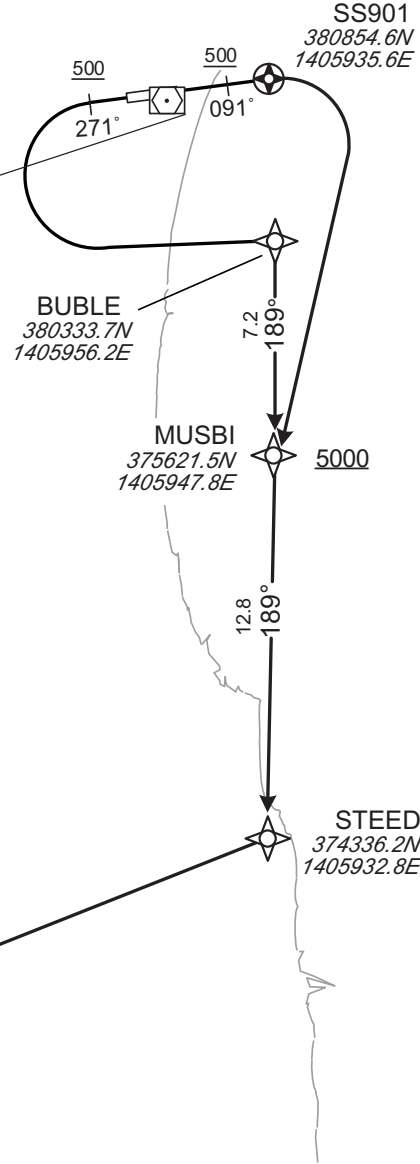
STEED FOUR DEPARTURE / RIKYU TRANSITION

RNP1

Note GNSS required.

VAR 8°W

VOR/DME  
SENDAI  
116.3 SDE  
CH-110X  
38°08'19"N/140°55'17"E  
100FT



STEED FOUR DEPARTURE

RIKYU TRANSITION

RIKYU  
373327.8N  
1402731.8E

STEED  
374336.2N  
1405932.8E

BUBLE  
380333.7N  
1405956.2E

MUSBI  
375621.5N  
1405947.8E

SS901  
380854.6N  
1405935.6E

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STEED FOUR DEPARTURE

RWY09 : Climb on HDG091° at or above 500FT, direct to SS901, turn right direct to MUSBI at or above 5000FT, to STEED.

RWY27 : Climb on HDG271° at or above 500FT, turn left direct to BUBLE, to MUSBI at or above 5000FT, to STEED.

NOTE RWY09: 5.0% climb gradient required up to 500FT.

OBST ALT 62FT located at 0.2NM 103° FM end of RWY09.

RWY27: 5.0% climb gradient required up to 1000FT.

OBST ALT 919FT located at 4.1NM 269° FM end of RWY27.

RIKYU TRANSITION

From STEED, to RIKYU.

STANDARD DEPARTURE CHART - INSTRUMENT

RJSS / SENDAI

RNAV SID and TRANSITION

STEED FOUR 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	-	-	091 (082.5)	-8.3	-	-	+500	-	-	RNP1
002	DF	SS901	Y	-	-8.3	-	-	-	-	-	RNP1
003	DF	MUSBI	-	-	-8.3	-	R	+5000	-	-	RNP1
004	TF	STEED	-	189 (180.9)	-8.3	12.8	-	-	-	-	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	-	-	271 (262.5)	-8.3	-	-	+500	-	-	RNP1
002	DF	BUBLE	-	-	-8.3	-	L	-	-	-	RNP1
003	TF	MUSBI	-	189 (180.9)	-8.3	7.2	-	+5000	-	-	RNP1
004	TF	STEED	-	189 (180.9)	-8.3	12.8	-	-	-	-	RNP1

RIKYU 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	STEED	-	-	-8.3	-	-	-	-	-	RNP1
002	TF	RIKYU	-	257 (248.4)	-8.3	27.3	-	-	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART - INSTRUMENT

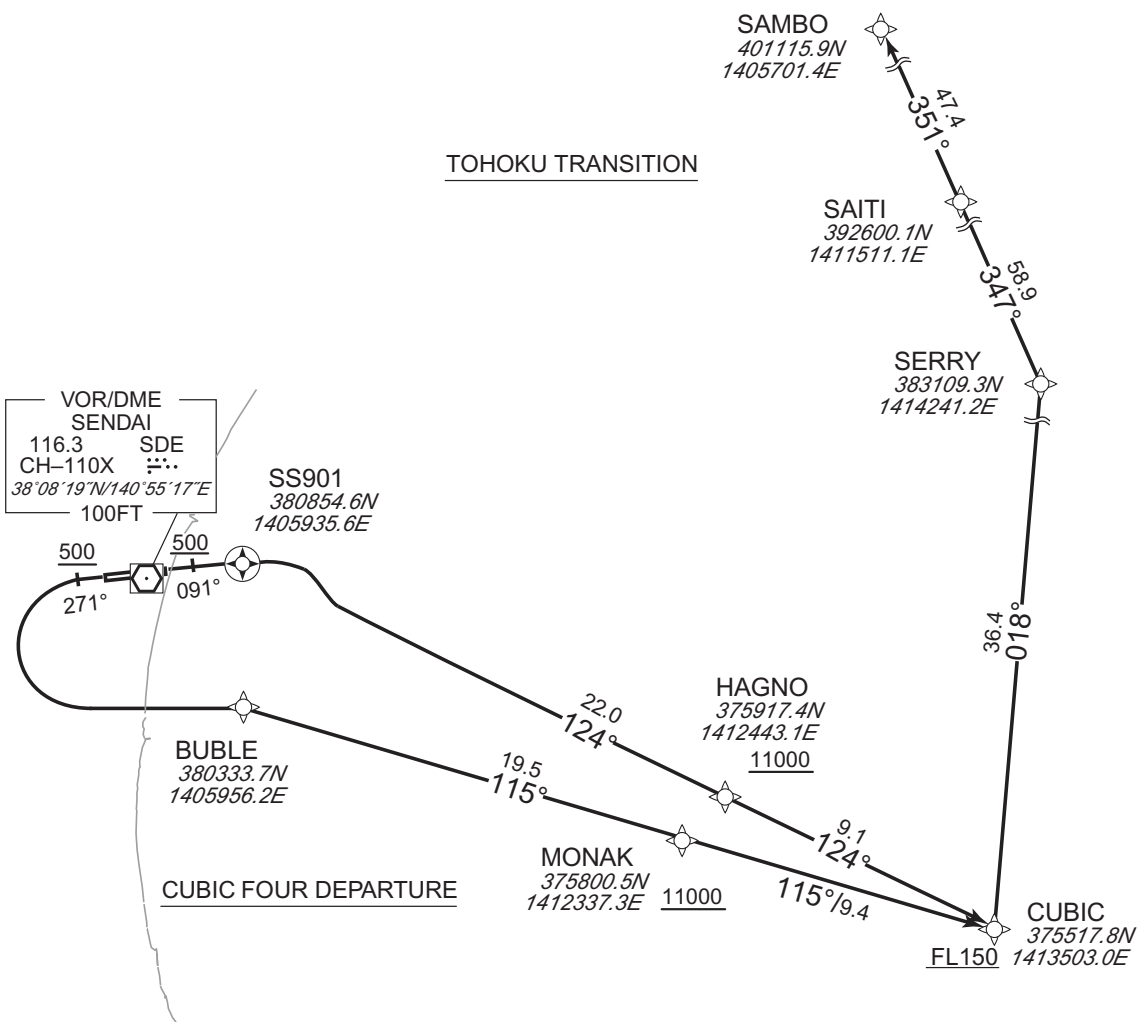
RJSS / SENDAI

RNAV SID and TRANSITION

CUBIC FOUR DEPARTURE / TOHOKU TRANSITION	RNP1
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Note GNSS required.

VAR 8°W



CUBIC FOUR DEPARTURE

RWY09 : Climb on HDG091° at or above 500FT, direct to SS901, to HAGNO at or above 11000FT, to CUBIC at or above FL150.

RWY27 : Climb on HDG271° at or above 500FT, turn left direct to BUBLE, to MONAK at or above 11000FT, to CUBIC at or above FL150.

NOTE RWY09: 5.0% climb gradient required up to 500FT.  
 OBST ALT 62FT located at 0.2NM 103° FM end of RWY09.  
 RWY27: 5.0% climb gradient required up to 1000FT.  
 OBST ALT 919FT located at 4.1NM 269° FM end of RWY27.

TOHOKU TRANSITION

From CUBIC at or above FL150, to SERRY, to SAITI, to SAMBO.

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART - INSTRUMENT

RJSS / SENDAI

RNAV SID and TRANSITION

CUBIC FOUR 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	-	-	091 (082.5)	-8.3	-	-	+500	-	-	RNP1
002	DF	SS901	Y	-	-8.3	-	-	-	-	-	RNP1
003	TF	HAGNO	-	124 (115.8)	-8.3	22.0	-	+11000	-	-	RNP1
004	TF	CUBIC	-	124 (116.1)	-8.3	9.1	-	+FL150	-	-	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	-	-	271 (262.5)	-8.3	-	-	+500	-	-	RNP1
002	DF	BUBLE	-	-	-8.3	-	L	-	-	-	RNP1
003	TF	MONAK	-	115 (106.4)	-8.3	19.5	-	+11000	-	-	RNP1
004	TF	CUBIC	-	115 (106.7)	-8.3	9.4	-	+FL150	-	-	RNP1

TOHOKU 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	CUBIC	-	-	-8.3	-	-	+FL150	-	-	RNP1
002	TF	SERRY	-	018 (009.5)	-8.3	36.4	-	-	-	-	RNP1
003	TF	SAITI	-	347 (338.8)	-8.3	58.9	-	-	-	-	RNP1
004	TF	SAMBO	-	351 (343.0)	-8.3	47.4	-	-	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT

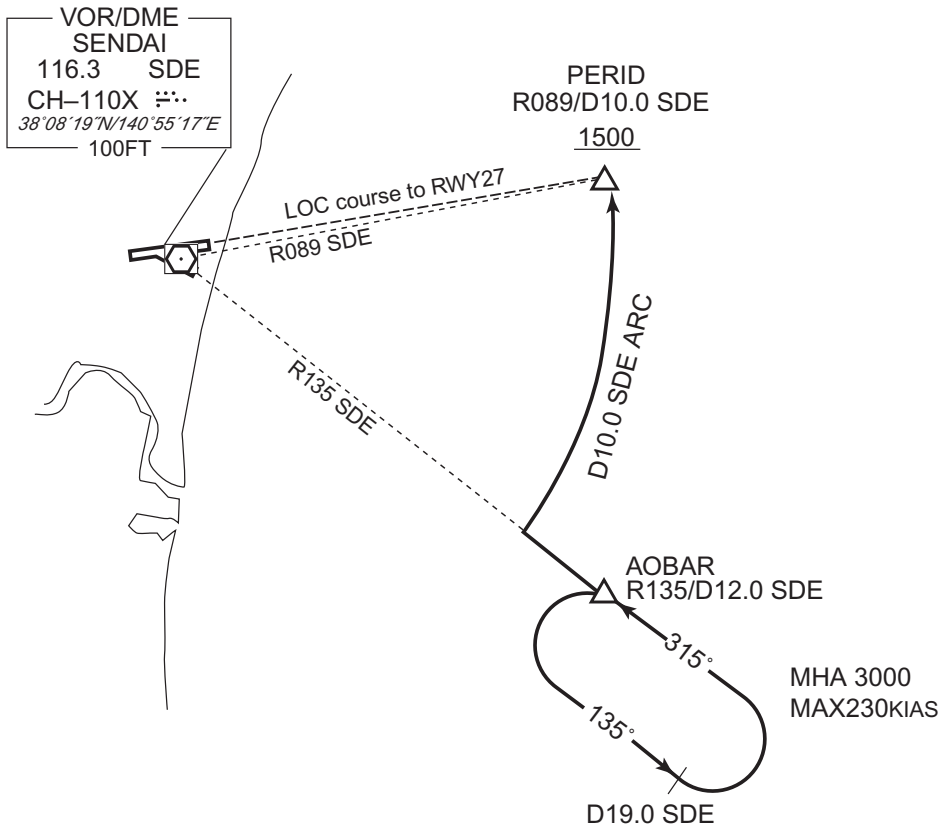
RJSS / SENDAI

STAR

PERID ARRIVAL

From over AOBAR, via SDE R135 to intercept and proceed via SDE 10.0DME counterclockwise ARC to PERID.

Cross PERID at or above 1500FT.



CHANGE : HLDG abolished(PERID).

STANDARD ARRIVAL CHART - INSTRUMENT

RJSS / SENDAI

RNAV STAR RWY09

LANCE WEST ARRIVAL

RNP1

Note GNSS required.

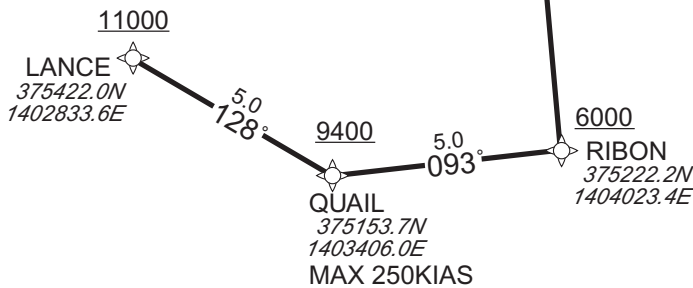
VAR 8°W

NOT TO SCALE

1MIN(at or below FL140)  
1.5MIN(above FL140)

MHA 11000FT  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)

VOR/DME  
SENDAI  
116.3 SDE  
CH-110X  
38°08'19"N/140°55'17"E  
100FT



From LANCE at or above 11000FT, to QUAIL, at or above 9400FT, to RIBON at or above 6000FT, to SHIPS at or above 4000FT.

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	LANCE	—	—	-8.3	—	—	+11000	—	—	RNP1
002	TF	QUAIL	—	128 (119.4)	-8.3	5.0	—	+9400	-250	—	RNP1
003	TF	RIBON	—	093 (084.5)	-8.3	5.0	—	+6000	—	—	RNP1
004	TF	SHIPS	—	003 (354.6)	-8.3	7.8	—	+4000	—	—	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	LANCE	107 (098.3)	-8.3	1.0(-14000) 1.5(+14001)	R	11000	—	-230(-14000) -240(+14001)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).



STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

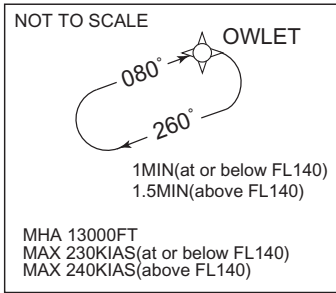
RNAV STAR RWY09

OWLET WEST ARRIVAL

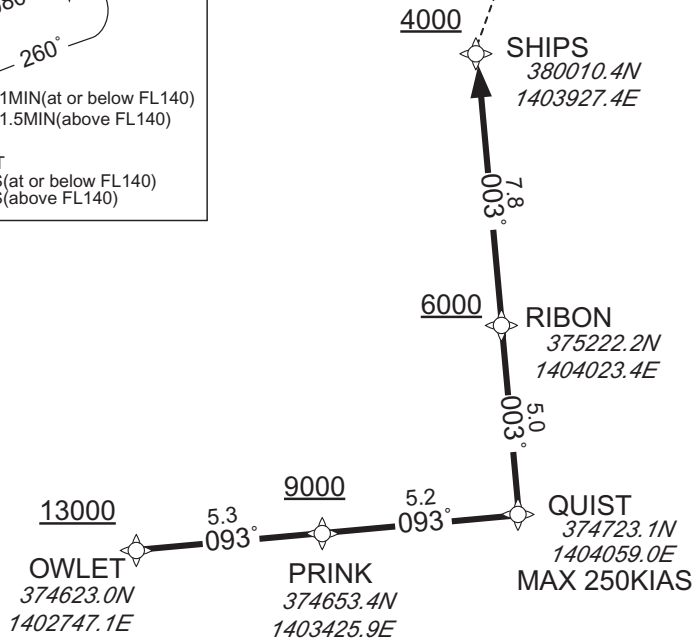
RNP1

Note GNSS required.

VAR 8°W



VOR/DME  
SENDAI  
116.3 SDE  
CH-110X  
38°08'19"N/140°55'17"E  
100FT



From OWLET at or above 13000FT, to PRINK at or above 9000FT, to QUIST, to RIBON at or above 6000FT, to SHIPS at or above 4000FT.

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	OWLET	—	—	-8.3	—	—	+13000	—	—	RNP1
002	TF	PRINK	—	093 (084.4)	-8.3	5.3	—	+9000	—	—	RNP1
003	TF	QUIST	—	093 (084.5)	-8.3	5.2	—	—	-250	—	RNP1
004	TF	RIBON	—	003 (354.6)	-8.3	5.0	—	+6000	—	—	RNP1
005	TF	SHIPS	—	003 (354.6)	-8.3	7.8	—	+4000	—	—	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	OWLET	080 (071.7)	-8.3	1.0(-14000) 1.5(+14001)	R	13000	—	-230(-14000) -240(+14001)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

RNAV STAR RWY27

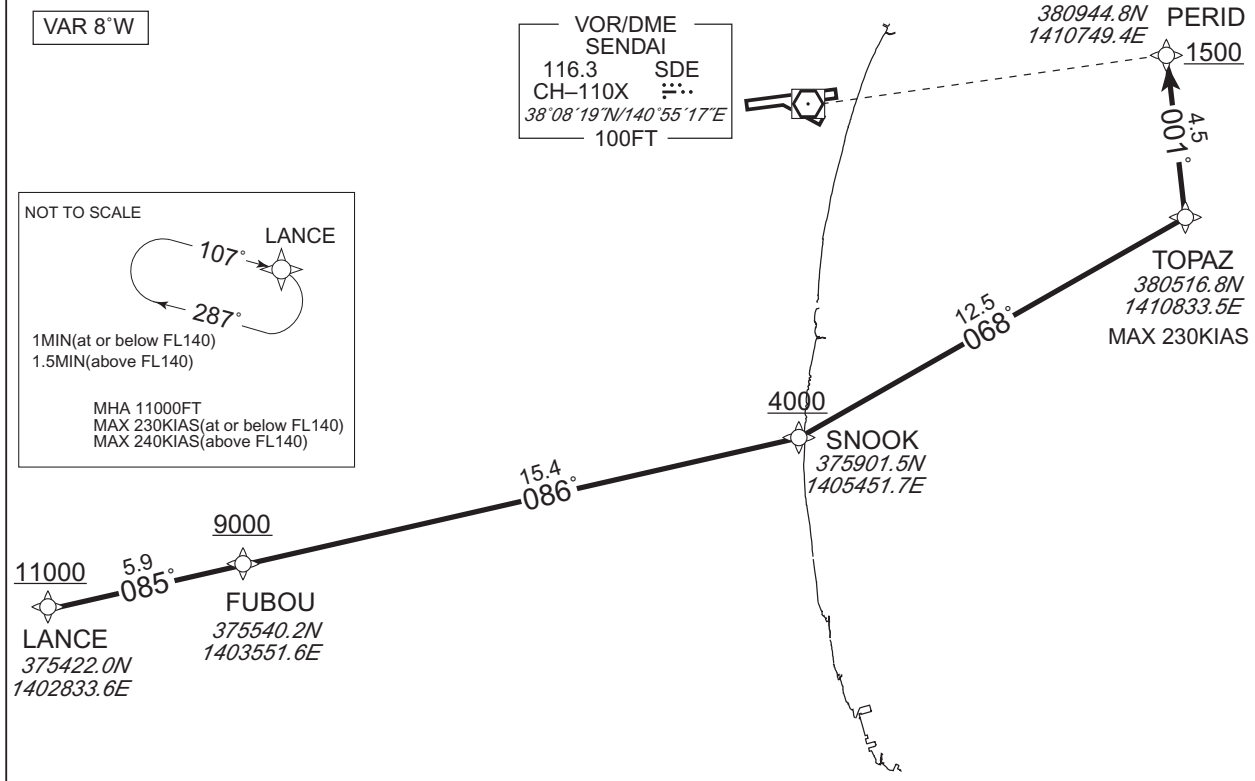
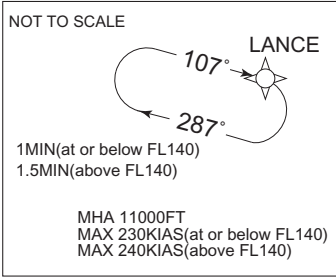
LANCE EAST ALFA ARRIVAL

RNP1

Note GNSS required.

VAR 8°W

VOR/DME  
SENDAI  
116.3 SDE  
CH-110X  
38°08'19"N/140°55'17"E  
100FT



From LANCE at or above 11000FT, to FUBOU at or above 9000FT, to SNOOK at or above 4000FT, to TOPAZ, to PERID at or above 1500FT.

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

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	LANCE	—	—	-8.3	—	—	+11000	—	—	RNP1
002	TF	FUBOU	—	085 (077.2)	-8.3	5.9	—	+9000	—	—	RNP1
003	TF	SNOOK	—	086 (077.3)	-8.3	15.4	—	+4000	—	—	RNP1
004	TF	TOPAZ	—	068 (059.8)	-8.3	12.5	—	—	-230	—	RNP1
005	TF	PERID	—	001 (352.6)	-8.3	4.5	—	+1500	—	—	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	LANCE	107 (098.3)	-8.3	1.0(-14000) 1.5(+14001)	R	11000	—	-230(-14000) -240(+14001)	RNP1

STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

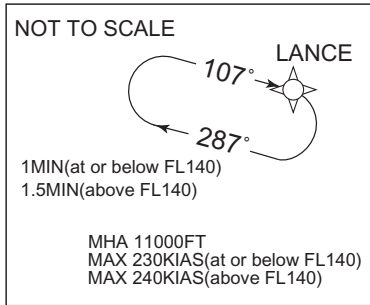
RNAV STAR RWY27

LANCE EAST BRAVO ARRIVAL

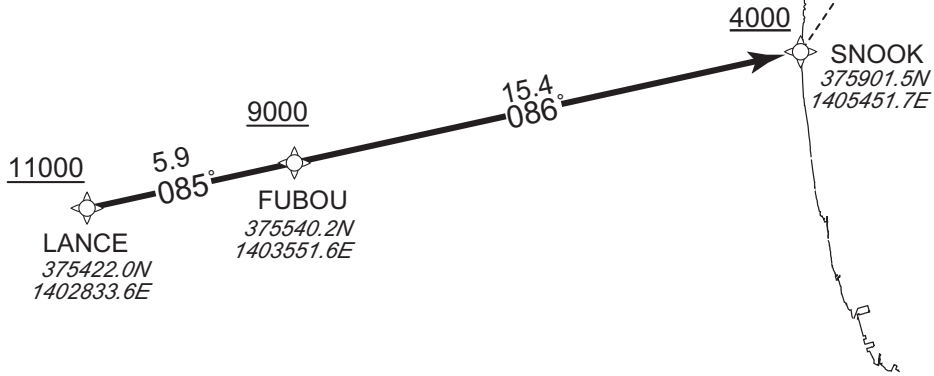
RNP1

Note GNSS required.

VAR 8°W



VOR/DME  
SENDAI  
116.3 SDE  
CH-110X  
38°08'19"N/140°55'17"E  
100FT



From LANCE at or above 11000FT, to FUBOU at or above 9000FT, to SNOOK at or above 4000FT.

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	LANCE	—	—	-8.3	—	—	+11000	—	—	RNP1
002	TF	FUBOU	—	085 (077.2)	-8.3	5.9	—	+9000	—	—	RNP1
003	TF	SNOOK	—	086 (077.3)	-8.3	15.4	—	+4000	—	—	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	LANCE	107 (098.3)	-8.3	1.0(-14000) 1.5(+14001)	R	11000	—	-230(-14000) -240(+14001)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT

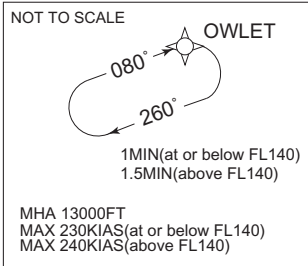
RJSS / SENDAI RNAV STAR RWY27

OWLET EAST ALFA ARRIVAL

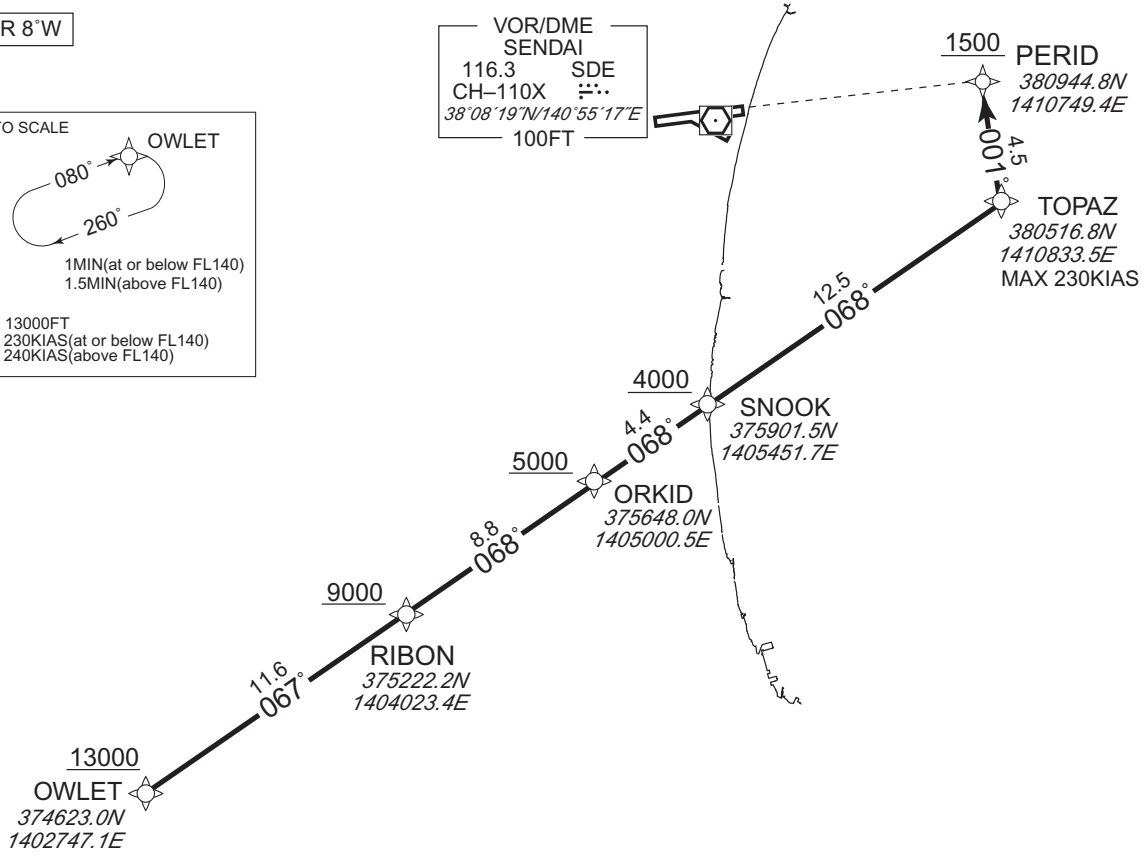
RNP1

Note GNSS required.

VAR 8°W



VOR/DME  
SENDAI  
116.3 SDE  
CH-110X  
38°08'19"N/140°55'17"E  
100FT



From OWLET at or above 13000FT, to RIBON at or above 9000FT, to ORKID at or above 5000FT, to SNOOK at or above 4000FT, to TOPAZ, to PERID at or above 1500FT.

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	OWLET	—	—	-8.3	—	—	+13000	—	—	RNP1
002	TF	RIBON	—	067 (058.9)	-8.3	11.6	—	+9000	—	—	RNP1
003	TF	ORKID	—	068 (059.7)	-8.3	8.8	—	+5000	—	—	RNP1
004	TF	SNOOK	—	068 (059.8)	-8.3	4.4	—	+4000	—	—	RNP1
005	TF	TOPAZ	—	068 (059.8)	-8.3	12.5	—	—	-230	—	RNP1
006	TF	PERID	—	001 (352.6)	-8.3	4.5	—	+1500	—	—	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	OWLET	080 (071.7)	-8.3	1.0(-14000) 1.5(+14001)	R	13000	—	-230(-14000) -240(+14001)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

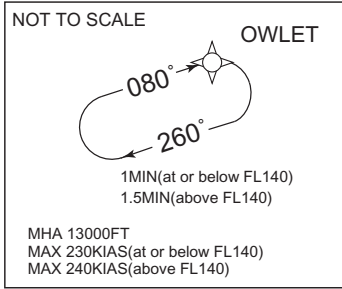
RNAV STAR RWY27

OWLET EAST BRAVO ARRIVAL

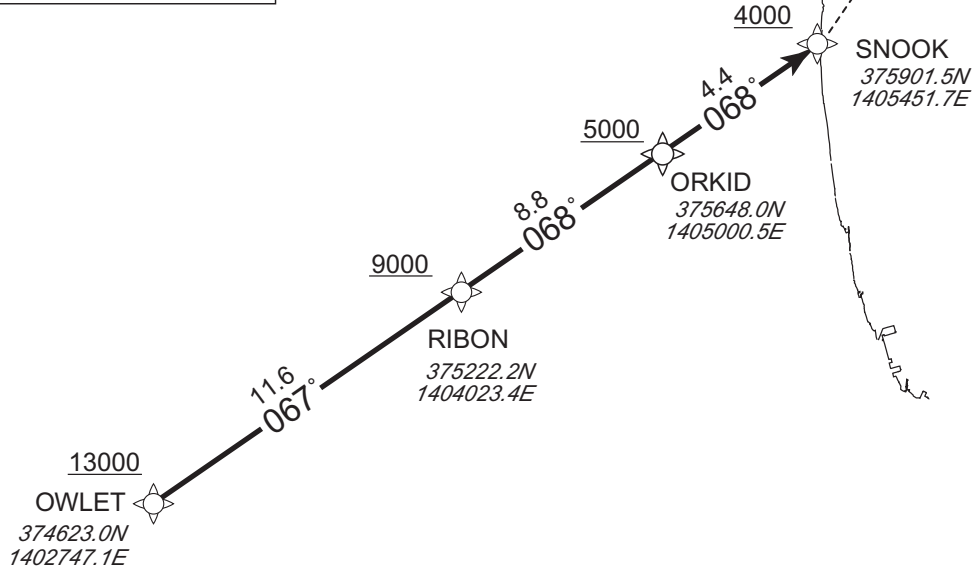
RNP1

Note GNSS required.

VAR 8°W



VOR/DME  
SENDAI  
116.3 SDE  
CH-110X  
38°08'19"N/140°55'17"E  
100FT



From OWLET at or above 13000FT, to RIBON at or above 9000FT, to ORKID at or above 5000FT, to SNOOK at or above 4000FT.

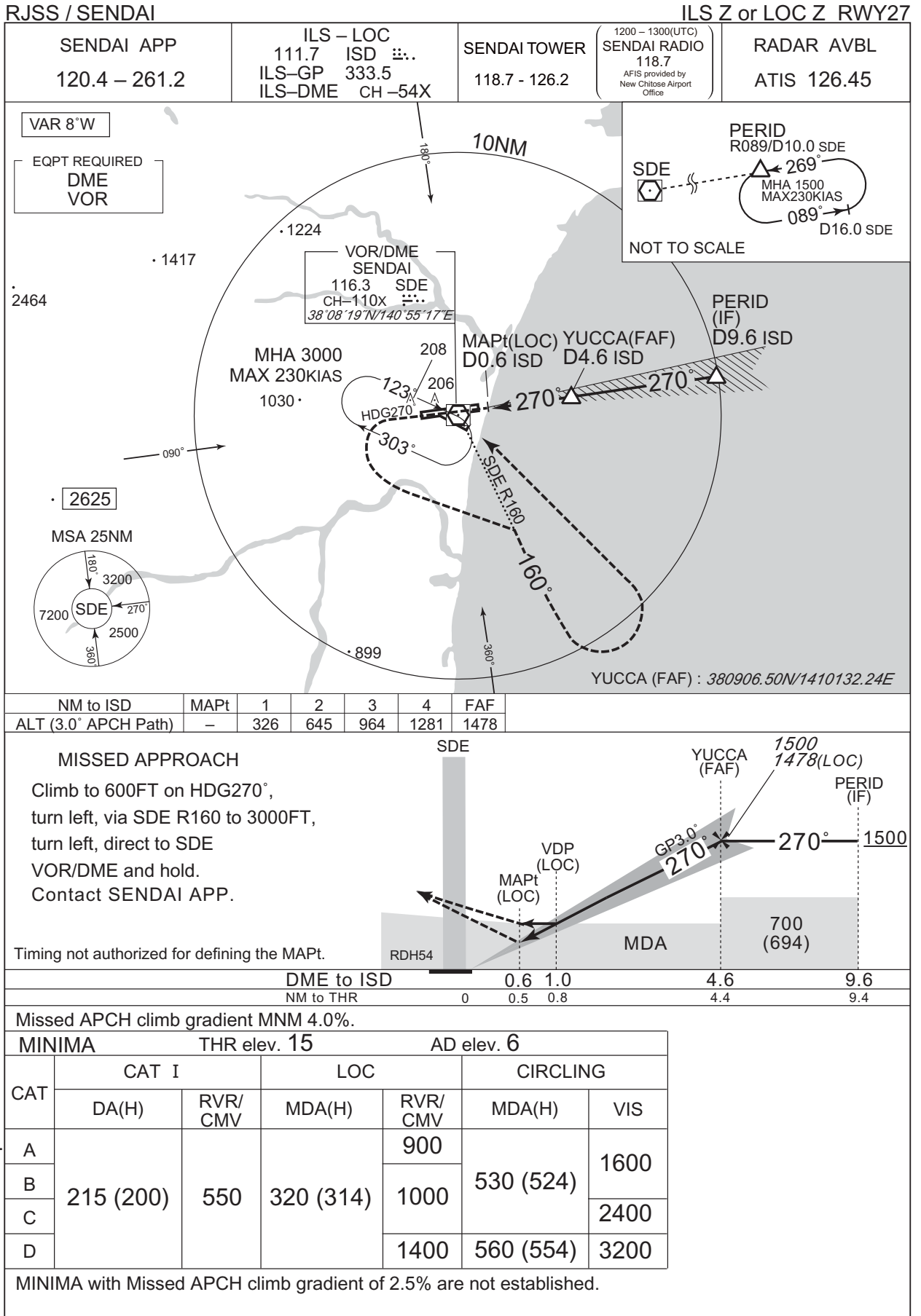
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	OWLET	—	—	-8.3	—	—	+13000	—	—	RNP1
002	TF	RIBON	—	067 (058.9)	-8.3	11.6	—	+9000	—	—	RNP1
003	TF	ORKID	—	068 (059.7)	-8.3	8.8	—	+5000	—	—	RNP1
004	TF	SNOOK	—	068 (059.8)	-8.3	4.4	—	+4000	—	—	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	OWLET	080 (071.7)	-8.3	1.0(-14000) 1.5(+14001)	R	13000	—	-230(-14000) -240(+14001)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

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INSTRUMENT APPROACH CHART



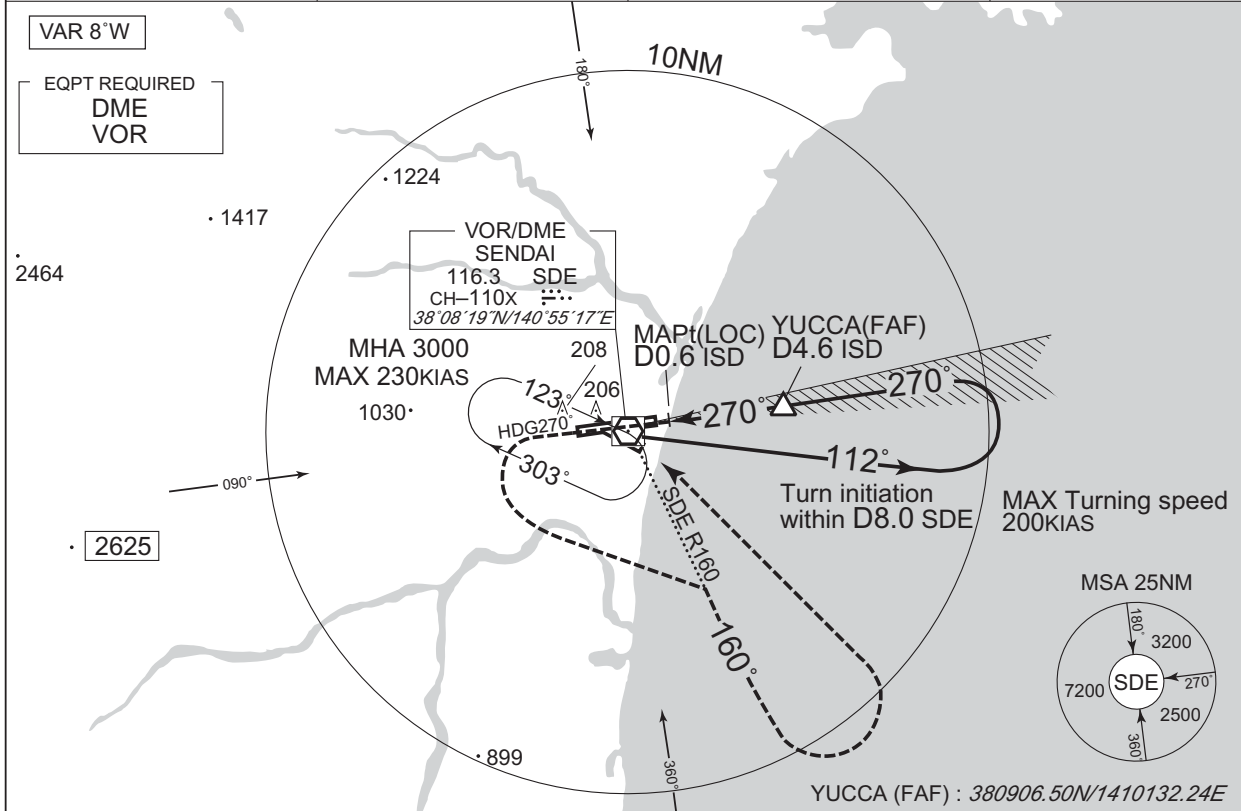


INSTRUMENT APPROACH CHART

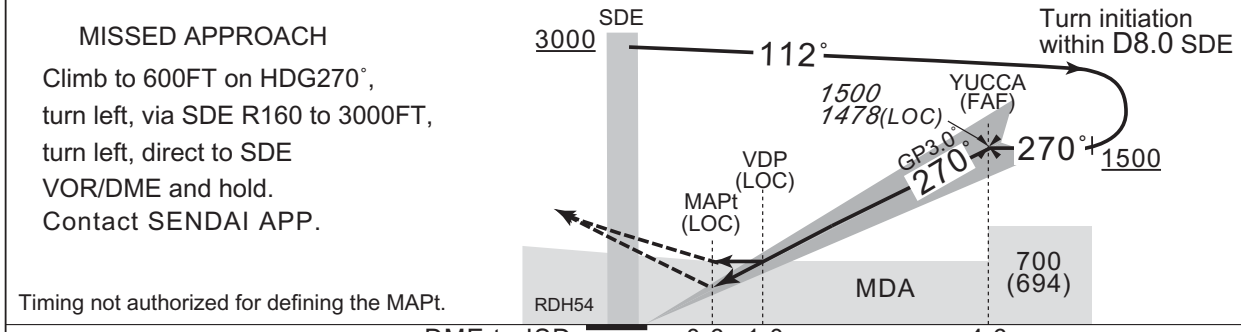
RJSS / SENDAI

ILS Y or LOC Y RWY27

SENDAI APP 120.4 – 261.2	ILS – LOC 111.7 ISD 333.5 ILS-GP 333.5 ILS-DME CH-54X	SENDAI TOWER 118.7 - 126.2	1200 – 1300(UTC) SENDAI RADIO 118.7 AFIS provided by New Chitose Airport Office	RADAR AVBL ATIS 126.45
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NM to ISD	MAPt	1	2	3	4	FAF
ALT (3.0° APCH Path)	-	326	645	964	1281	1478



DME to ISD	0.6	1.0	4.6
NM to THR	0	0.5	0.8

Missed APCH climb gradient MNM 4.0%.

MINIMA		THR elev. 15	AD elev. 6					
CAT	CAT I		LOC		CIRCLING			
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS		
A	215 (200)	550	320 (314)	900	530 (524)	1600		
B				1000				
C				1400			560 (554)	3200
D								

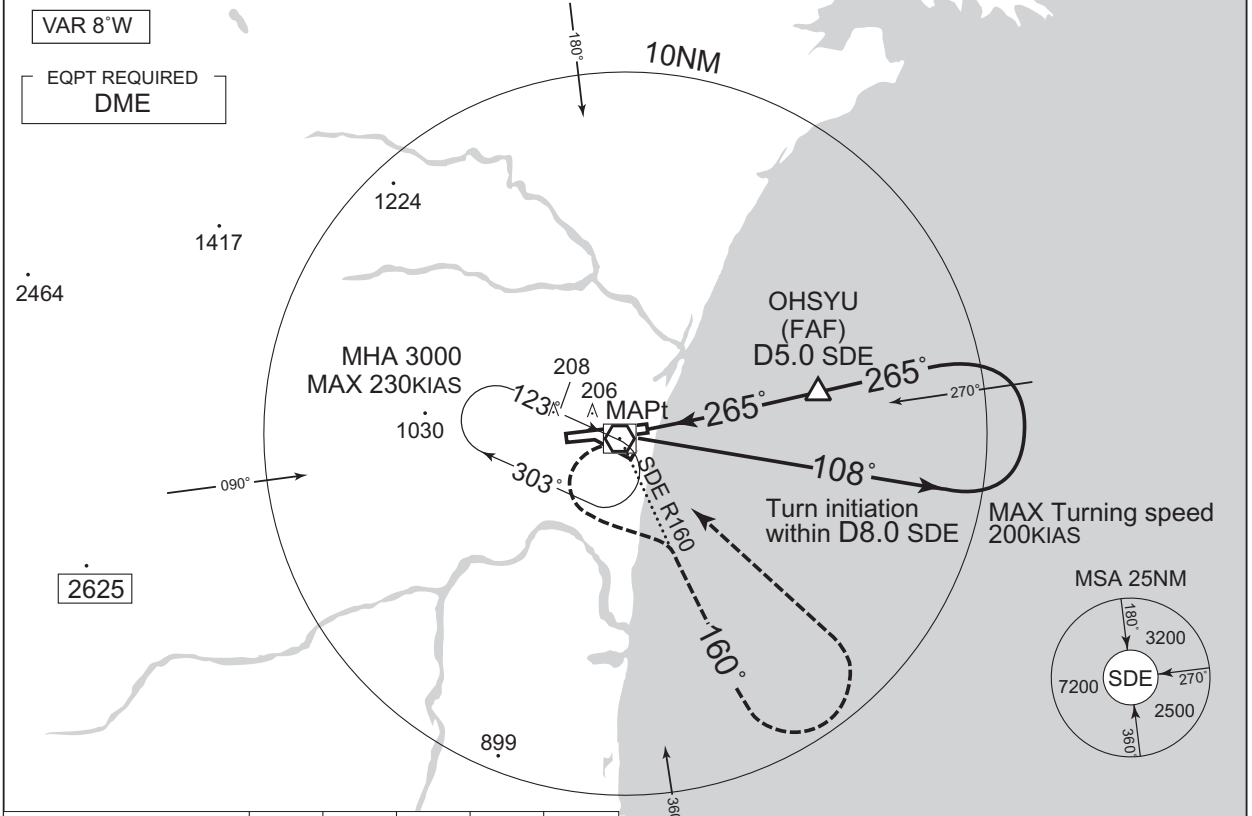
MINIMA with Missed APCH climb gradient of 2.5% are not established.

CHANGE : Description of Missed APCH course.

INSTRUMENT APPROACH CHART

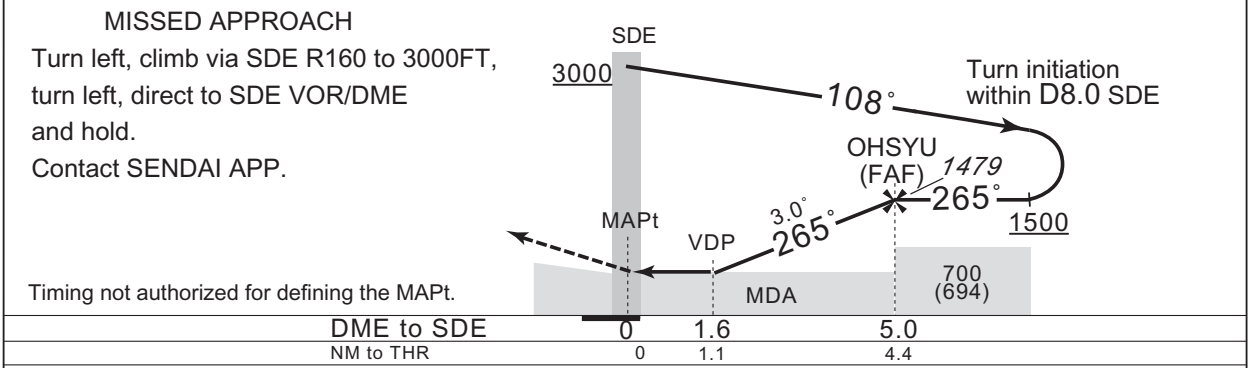
RJSS / SENDAI VOR RWY27

SENDAI APP 120.4 - 261.2	SENDAI VOR / DME 116.3 SDE CH-110X 38°08'19"N/140°55'17"E	SENDAI TOWER 118.7 - 126.2	1200 - 1300(UTC) SENDAI RADIO 118.7 <small>AFIS provided by New Chitose Airport Office</small>	RADAR AVBL ATIS 126.45
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NM to SDE	MAPt	2	3	4	FAF
ALT (3.0° APCH Path)	-	524	842	1161	1479

OHSYU (FAF) : 380923.40N/1410128.91E



CHANGE : Description of PROC course.

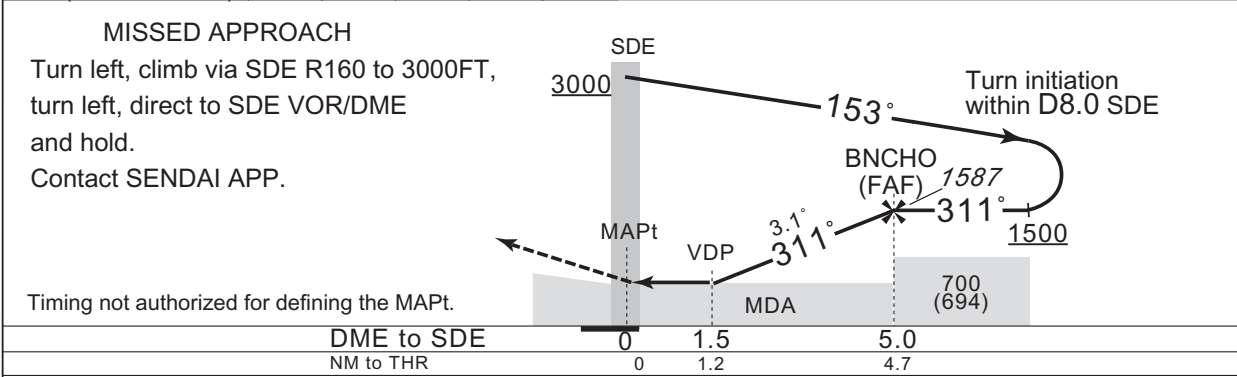
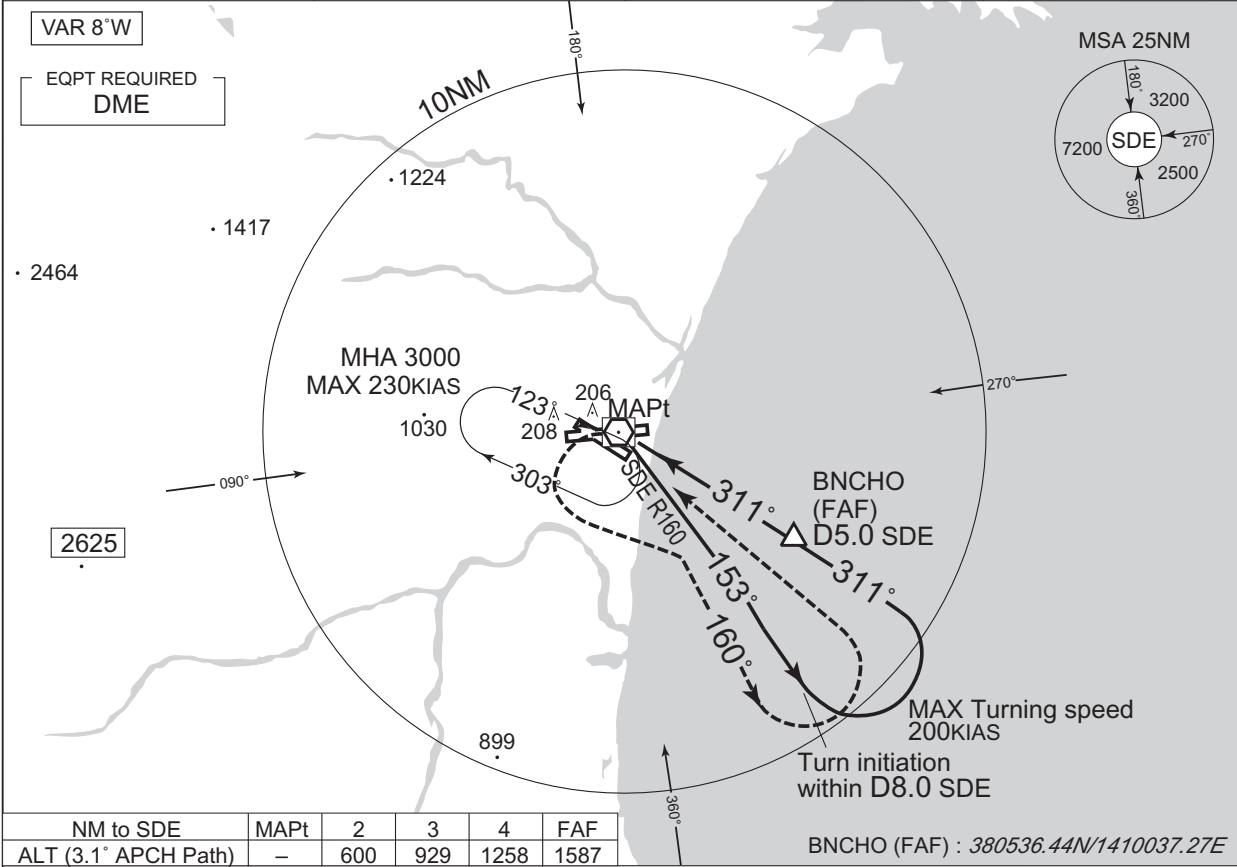
	THR elev. 15	AD elev. 6			
MINIMA	CIRCLING				
CAT	MDA(H)	RVR/ CMV	MDA(H)	VIS	
A	390 (384)	900	530 (524)	1600	
B		1000		2400	
C				1400	3200
D					

INSTRUMENT APPROACH CHART

RJSS / SENDAI

VOR RWY30

SENDAI APP 120.4 -261.2	SENDAI VOR / DME 116.3 SDE CH-110X 38°08'19"N/140°55'17"E	SENDAI TOWER 118.7 - 126.2	1200 - 1300(UTC) SENDAI RADIO 118.7 AFIS provided by New Chitose Airport Office	RADAR AVBL ATIS 126.45
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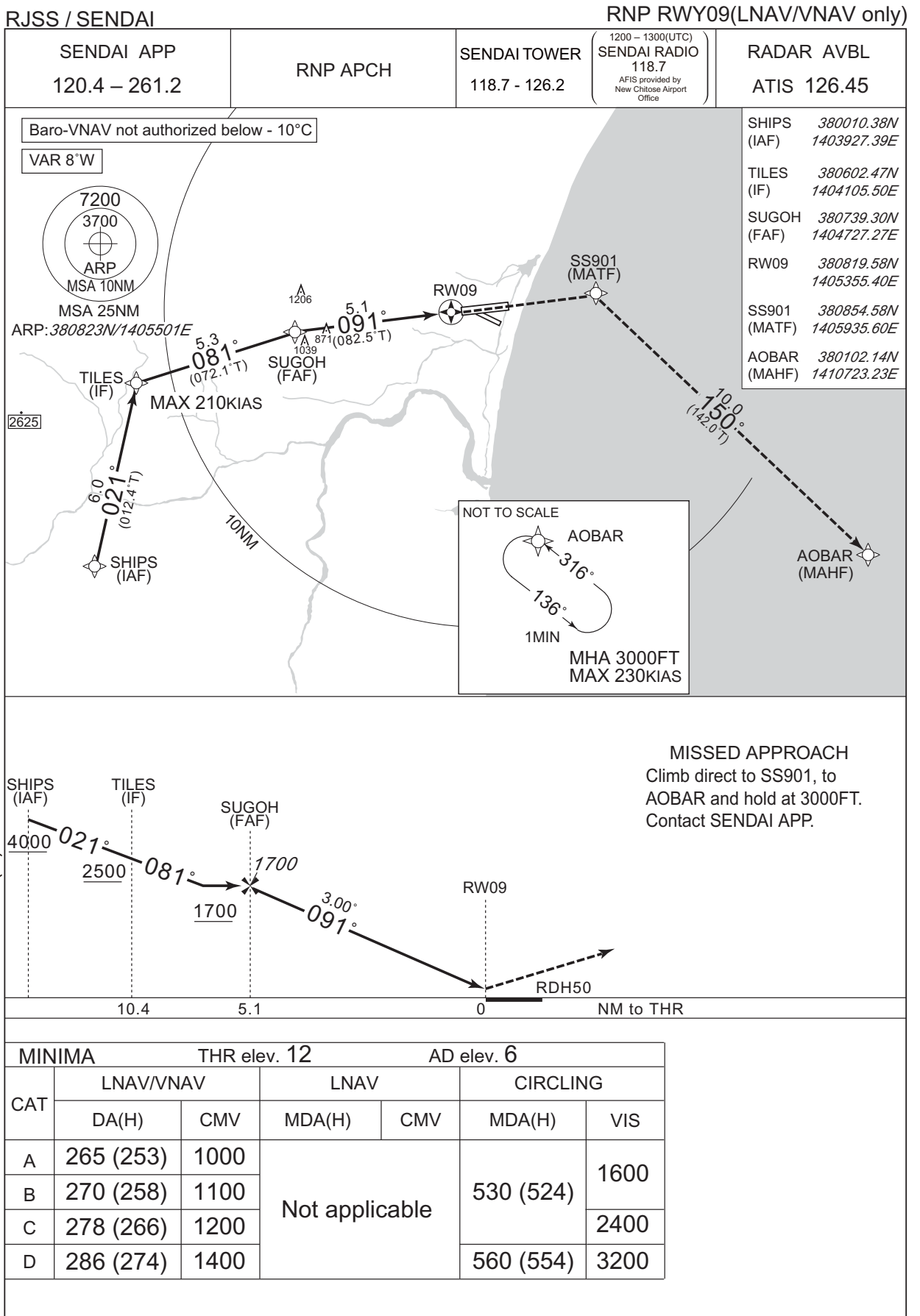


CHANGE : Description of PROC course.

MINIMA		THR elev. 5	AD elev. 6	
CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	410 (404)	1500	530 (524)	1600
B				2400
C		1800		
D	-	-	-	-

INSTRUMENT APPROACH CHART

CHANGE : PROC renamed. Course FM TILES to SUGOH. MAPt abolished. Missed APCH PROC. MINIMA for LNAV/VNAV, LNAV. HLDG for NAVAID abolished. OCA(H) deleted.



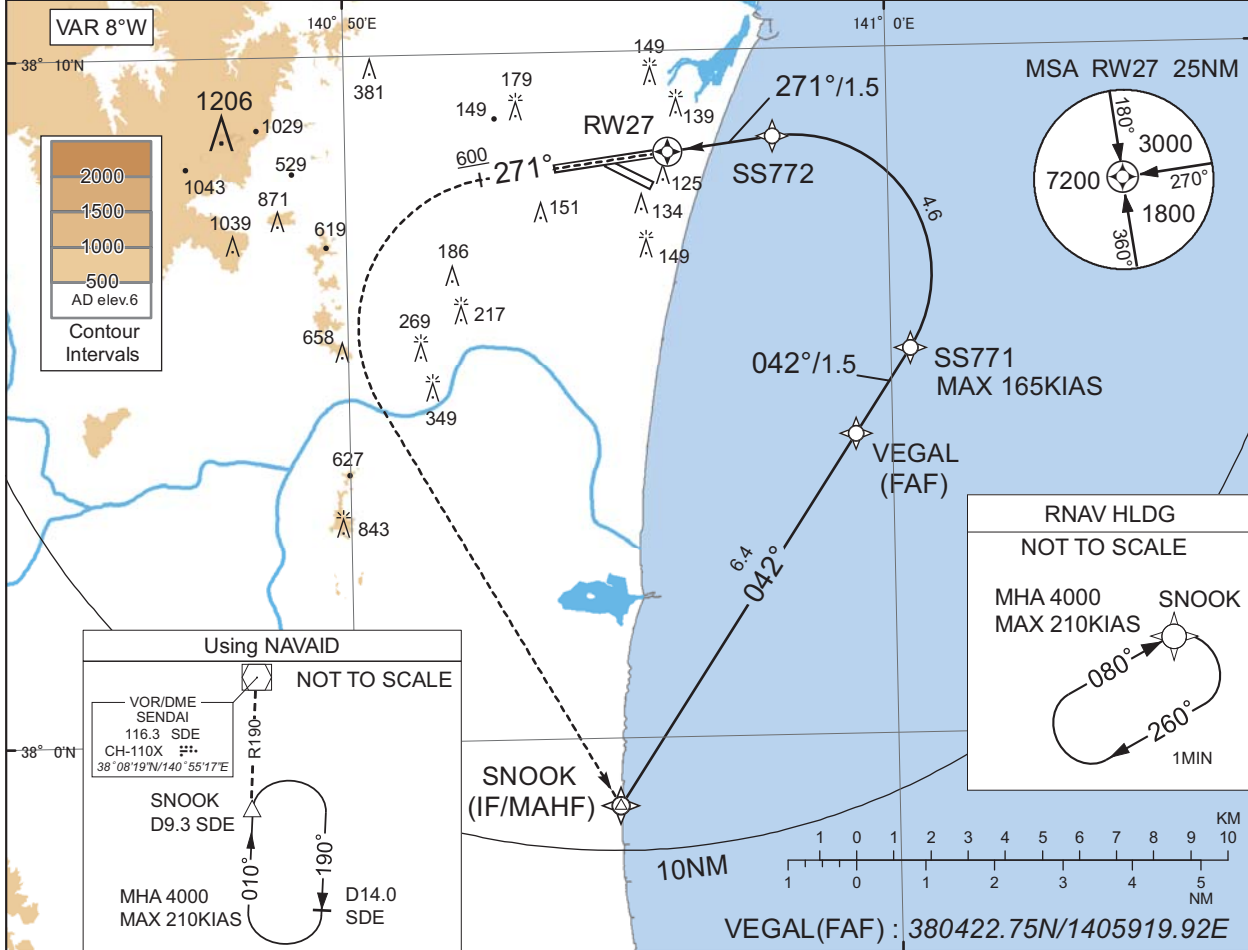
INSTRUMENT APPROACH CHART

RJSS / SENDAI

RNP RWY27(AR)

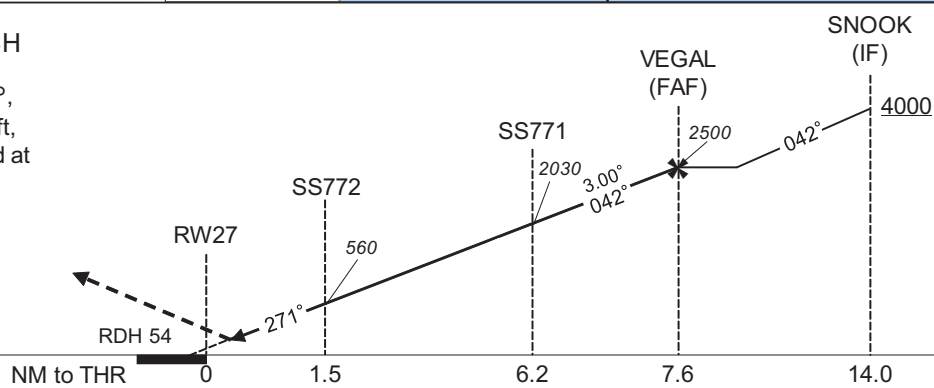
SENDAI APP 120.4 - 261.2	RNP AR RF required.	SENDAI TOWER 118.7 - 126.2	1200 - 1300(UTC) SENDAI RADIO 118.7 AFIS provided by New Chitose Airport Office	RADAR AVBL ATIS 126.45
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For uncompensated Baro-VNAV systems, procedure not authorized below -10°C / above 45°C



MISSED APPROACH

From RWY27 on track 271°, at or above 600FT turn left, direct to SNOOK and hold at 4000FT. Contact SENDAI APP.



CHANGE : Description of VAR.

CAT	MINIMA	THR elev. 15	AD elev. 6
	RNP 0.30		
	DA(H)	RVR/CMV	
A	-	-	
B	-	-	
C	315(300)	1000	
D		1400	

**Authorization Required**

\* Missed APCH climb gradient MNM 4.0%

INSTRUMENT APPROACH CHART

RJSS / SENDAI

RNP 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	SNOOK	-	-	-8.3	-	-	+4000	-	-	-
002	TF	VEGAL	-	042 (033.3)	-8.3	6.4	-	2500	-	-	1.0
003	TF	SS771	-	042 (033.4)	-8.3	1.5	-	2030	-165	-3.00	0.3
004	RF Center: SSRF1 r=2.02NM	SS772	-	-	-8.3	4.6	L	560	-	-3.00	0.3
005	TF	RW27	Y	271 (262.6)	-8.3	1.5	-	69	-	-3.00/54	0.3
006	FA	-	-	271 (262.6)	-8.3	-	-	+600	-	-	1.0
007	DF	SNOOK	-	-	-8.3	-	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	SNOOK	080 (071.9)	-8.3	1.0 (-14000)	R	4000	FL140	-210 (-14000)	1.0

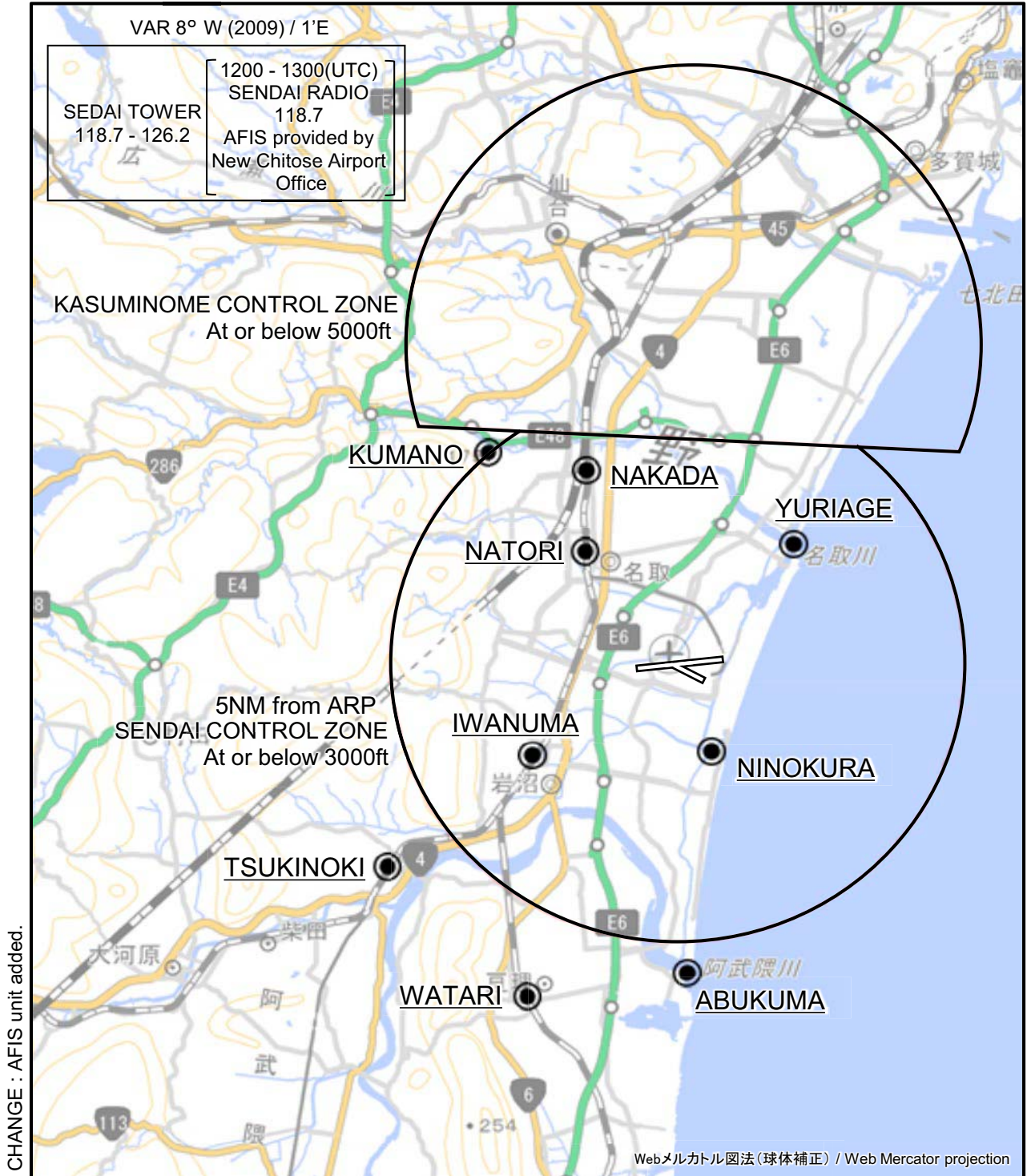
Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
SNOOK	375901.53N / 1405451.66E	SSRF1	380643.74N / 1405813.69E
VEGAL	380422.75N / 1405919.92E		
SS771	380536.78N / 1410021.86E		
SS772	380844.14N / 1405753.87E		
RW27	380832.18N / 1405557.56E		



RJSS / SENDAI

Visual REP





RJSS / SENDAI

Visual REP

Call sign	BRG / DIST from ARP	Remarks
熊野 Kumano	319°T / 5.0NM	熊野神社 Kumano Shrine
中田 Nakada	336°T / 3.8NM	JR南仙台駅 Station
関上 Yuriage	043°T / 2.9NM	名取川河口 River-mouth of the Natori
名取 Natori	321°T / 2.6NM	JR名取駅 Station
二の倉 Ninokura	160°T / 1.7NM	県南浄化センター Sewage disposal center
岩沼 Iwanuma	236°T / 3.0NM	JR岩沼駅 Station
槻木 Tsukinoki	234°T / 6.2NM	JR槻木駅 Station
阿武隈 Abukuma	178°T / 5.6NM	阿武隈川河口 River-mouth of the Abukuma
亘理 Watari	204°T / 6.5NM	JR亘理駅 Station

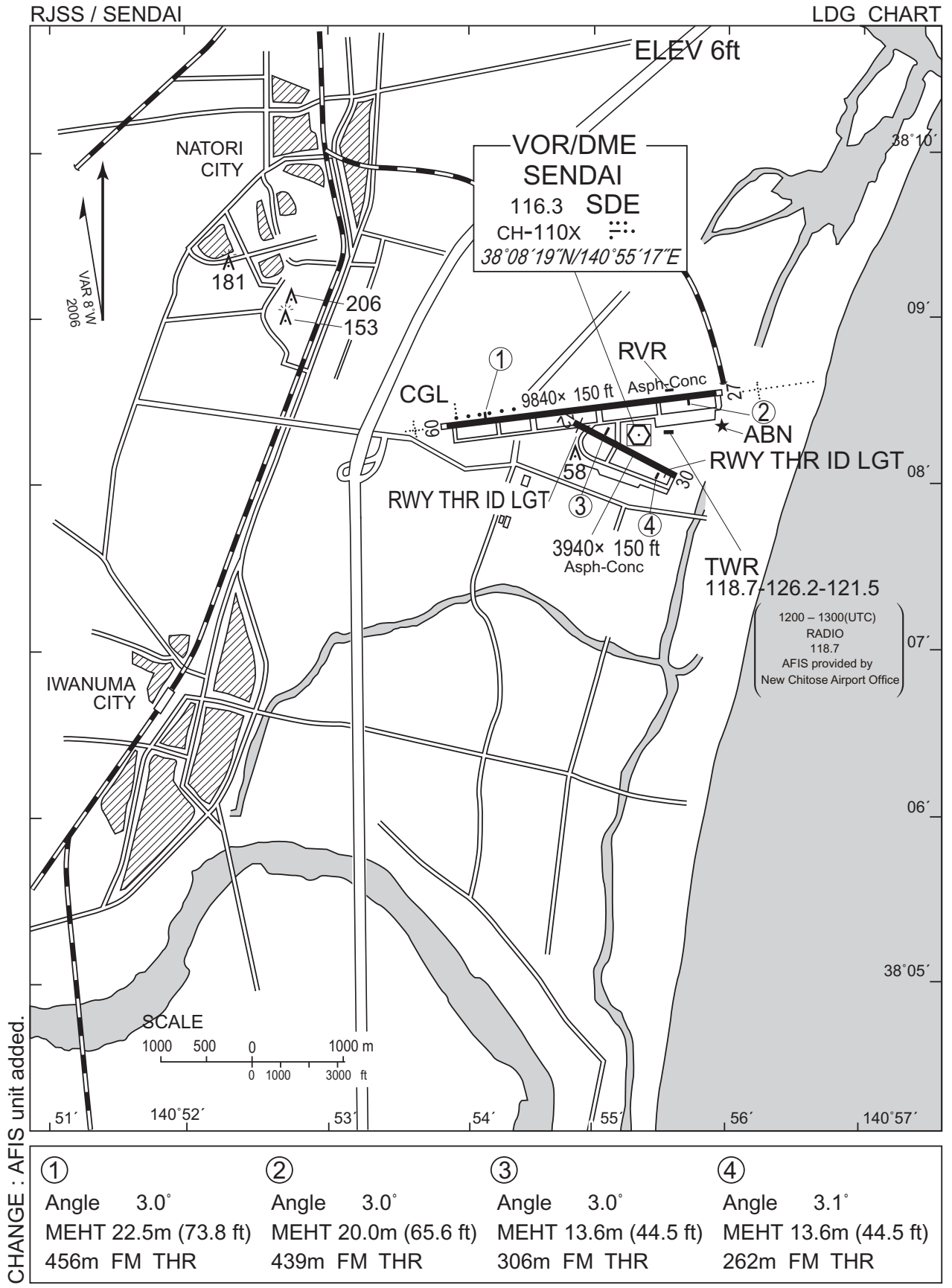
注: 有視界飛行方式により霞目管制圏から仙台管制圏へ進入しようとする航空機は、仙台管制圏に入圏する前に仙台タワーまたは仙台ラジオへ通報すること。

NOTE : When any VFR flight enters SENDAI CTR directly via KASUMINOME CTR, the pilot shall report to "SENDAI TWR" or "SENDAI RADIO" before entering SENDAI CTR.

注: VFR機とIFR機の航行の安全のため、仙台進入管制区のうち、仙台空港から15NM以内の地域をVFRで航行する場合は、仙台TCAと積極的にコンタクトすること。

NOTE : In order to ensure the safety operations for both VFR and IFR aircraft, VFR aircraft should contact SENDAI TCA positively when the flight includes SENDAI Approach Control Area, within 15 miles from Sendai Airport.

CHANGE : SENDAI RADIO added to NOTE.



RJSS / SENDAI

Minimum Vectoring Altitude CHART

