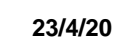
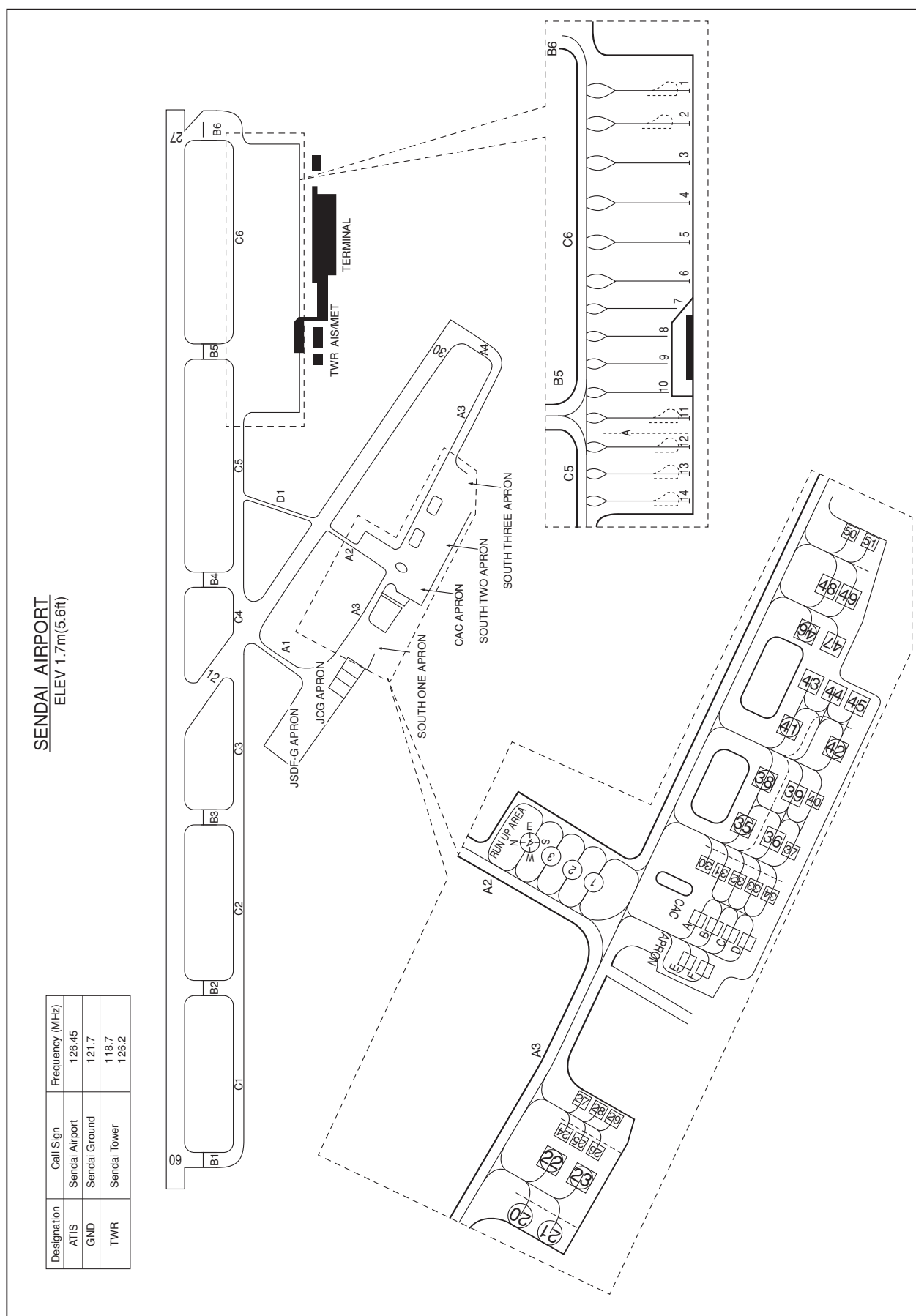


SENDAI AIRPORT  
ELEV 1.7m(5.6ft)





AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



## 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 : PROC renamed.Restriction added (IXE R024/46.7DME).



## 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.

SENDAI REVERSAL SIX DEPARTURE



RJSS / SENDAI
RNAV SID and TRANSITION

**DERBY FOUR DEPARTURE**  
**YAMAGATA TRANSITION / NIIGATA TRANSITION /**  
**RIKYU NORTH TRANSITION / SASAP TRANSITION**

**Basic RNP1**

Note GNSS required.

**DERBY FOUR DEPARTURE**

RWY09 : Climb on HDG091° at or above 500FT, direct to SS901, turn right direct to ANEMO, to EBOSI, to DERBY at or above 9000FT.

RWY27 : Climb on HDG271° at or above 500FT, direct to SS701, turn left direct to EBOSI, to DERBY at or above 9000FT.

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

RWY27: 5.9% climb gradient required up to 1300FT.  
 OBST ALT 1181FT located at 4.6NM 285° FM end of RWY27.

**YAMAGATA TRANSITION**

From DERBY at or above 9000FT, to YTE.

**NIIGATA TRANSITION**

From DERBY at or above 9000FT, to GTC.

**RIKYU NORTH TRANSITION**

From DERBY at or above 9000FT, to RIKYU.

**SASAP TRANSITION**

From DERBY at or above 9000FT, to SASAP.

CHANGE : VAR. SID renamed. YAMAGATA TRANSITION, RIKYU NORTH TRANSITION, SASAP TRANSITION established. Navigation specification. Sensor for RNAV. SID course. ALT restriction at DERBY.

## 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	—	—	Basic RNP1
002	DF	SS901	Y	—	-8.3	—	—	—	—	—	Basic RNP1
003	DF	ANEMO	—	—	-8.3	—	R	—	—	—	Basic RNP1
004	TF	EBOSI	—	285 (276.4)	-8.3	17.6	—	—	—	—	Basic RNP1
005	TF	DERBY	—	276 (268.1)	-8.3	7.7	—	+9000	—	—	Basic 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	—	—	Basic RNP1
002	DF	SS701	Y	—	-8.3	—	—	—	—	—	Basic RNP1
003	DF	EBOSI	—	—	-8.3	—	L	—	—	—	Basic RNP1
004	TF	DERBY	—	276 (268.1)	-8.3	7.7	—	+9000	—	—	Basic RNP1

CHANGE : VAR. SID renamed. SID course. ALT restriction at DERBY. Navigation specification. NIIGATA TRANSITION deleted.



## 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	—	—	Basic RNP1
002	TF	YTE	—	356 (347.9)	-8.3	23.7	—	—	—	—	Basic 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	—	—	Basic RNP1
002	TF	GTC	—	276 (268.0)	-8.3	63.9	—	—	—	—	Basic RNP1

RIKYU NORTH TRANSITION

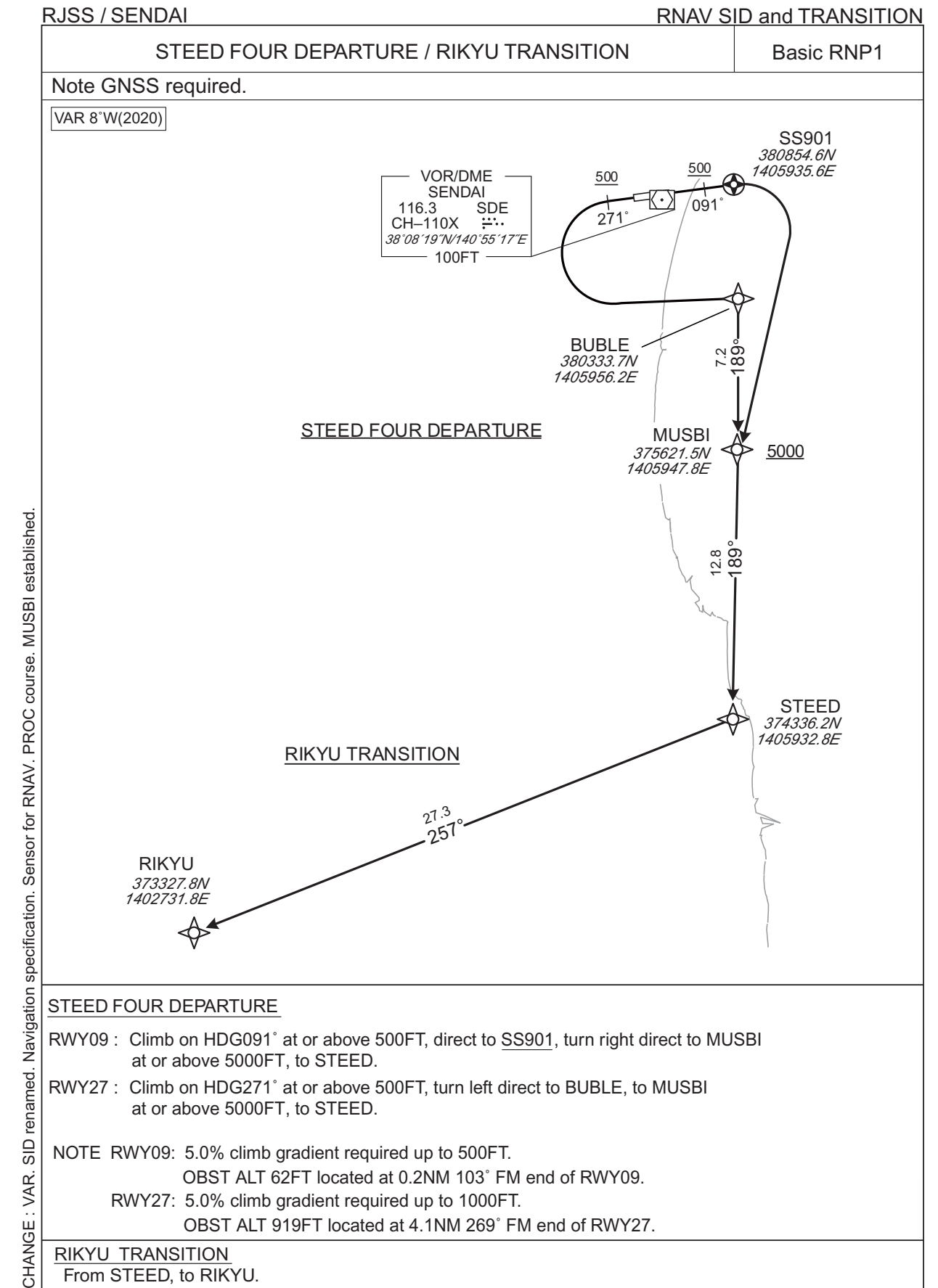
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	DERBY	—	—	-8.3	—	—	+9000	—	—	Basic RNP1
002	TF	RIKYU	—	189 (180.5)	-8.3	26.8	—	—	—	—	Basic RNP1

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	—	—	Basic RNP1
002	TF	SASAP	—	188 (179.4)	-8.3	49.3	—	—	—	—	Basic RNP1

CHANGE : YAMAGATA TRANSITION, RIKYU NORTH TRANSITION, SASAP TRANSITION established. NIIGATA TRANSITION added.

STANDARD DEPARTURE CHART - INSTRUMENT



## 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	—	—	Basic RNP1
002	DF	SS901	Y	—	-8.3	—	—	—	—	—	Basic RNP1
003	DF	MUSBI	—	—	-8.3	—	R	+5000	—	—	Basic RNP1
004	TF	STEED	—	189 (180.9)	-8.3	12.8	—	—	—	—	Basic 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	—	—	Basic RNP1
002	DF	BUBLE	—	—	-8.3	—	L	—	—	—	Basic RNP1
003	TF	MUSBI	—	189 (180.9)	-8.3	7.2	—	+5000	—	—	Basic RNP1
004	TF	STEED	—	189 (180.9)	-8.3	12.8	—	—	—	—	Basic 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	—	—	—	—	—	Basic RNP1
002	TF	RIKYU	—	257 (248.4)	-8.3	27.3	—	—	—	—	Basic RNP1

CHANGE : VAR. SID renamed. Navigation specification. PROC course. MUSBI established.

## STANDARD DEPARTURE CHART - INSTRUMENT

RJSS / SENDAI

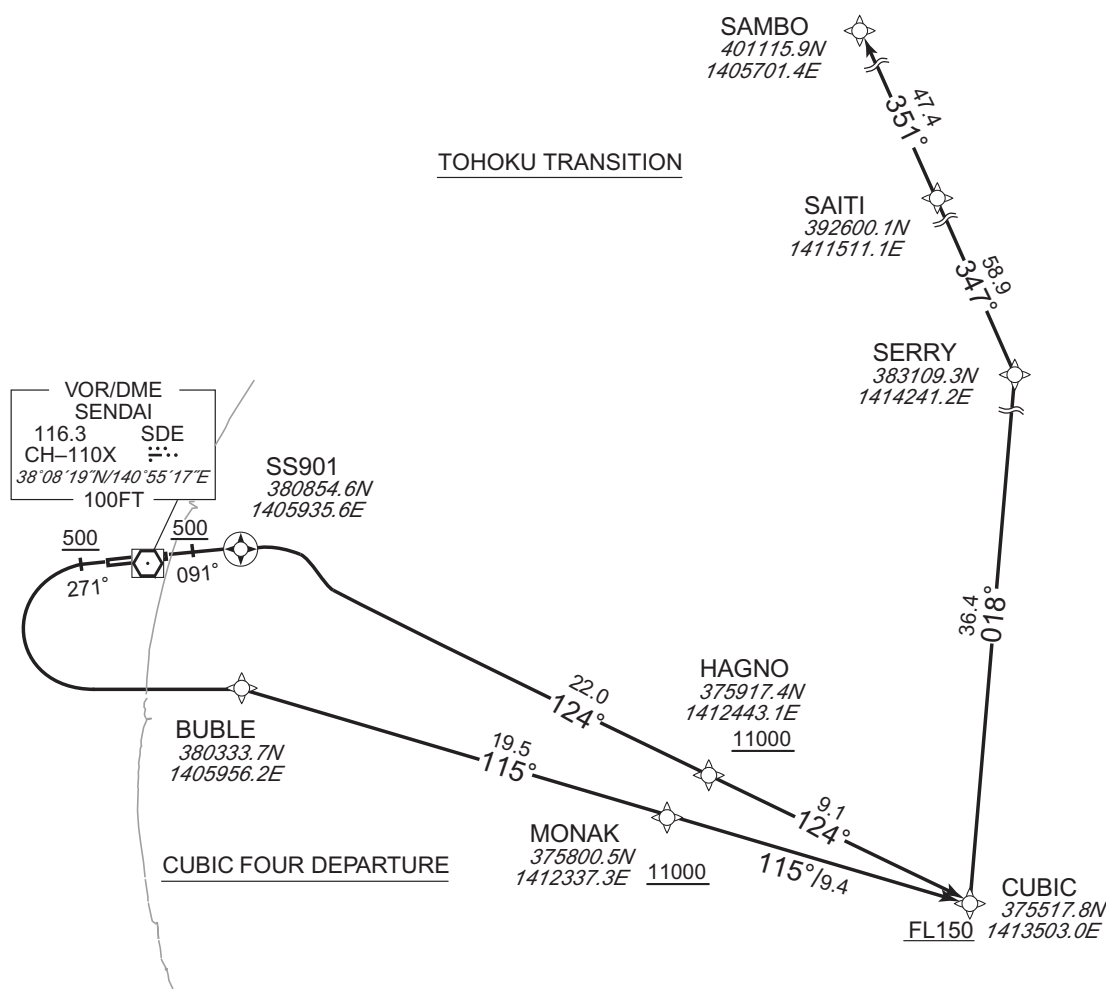
RNAV SID and TRANSITION

## CUBIC FOUR DEPARTURE / TOHOKU TRANSITION

Basic RNP1

Note GNSS required.

VAR 8°W(2020)



## 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 : VAR. SID renamed. Navigation specification. Sensor for RNAV. PROC course. HAGNO, MONAK, SERRY established. RIDER abolished. TOHOKU TRANSITION added.

## 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	—	—	Basic RNP1
002	DF	SS901	Y	—	-8.3	—	—	—	—	—	Basic RNP1
003	TF	HAGNO	—	124 (115.8)	-8.3	22.0	—	+11000	—	—	Basic RNP1
004	TF	CUBIC	—	124 (116.1)	-8.3	9.1	—	+FL150	—	—	Basic 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	—	—	Basic RNP1
002	DF	BUBLE	—	—	-8.3	—	L	—	—	—	Basic RNP1
003	TF	MONAK	—	115 (106.4)	-8.3	19.5	—	+11000	—	—	Basic RNP1
004	TF	CUBIC	—	115 (106.7)	-8.3	9.4	—	+FL150	—	—	Basic 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	—	—	Basic RNP1
002	TF	SERRY	—	018 (009.5)	-8.3	36.4	—	—	—	—	Basic RNP1
003	TF	SAITI	—	347 (338.8)	-8.3	58.9	—	—	—	—	Basic RNP1
004	TF	SAMBO	—	351 (343.0)	-8.3	47.4	—	—	—	—	Basic RNP1

CHANGE : VAR. SID renamed. Navigation specification. PROC course. HAGNO, MONAK, SERRY established. RIDER abolished. TOHOKU TRANSITION added.

STANDARD ARRIVAL CHART-INSTRUMENT

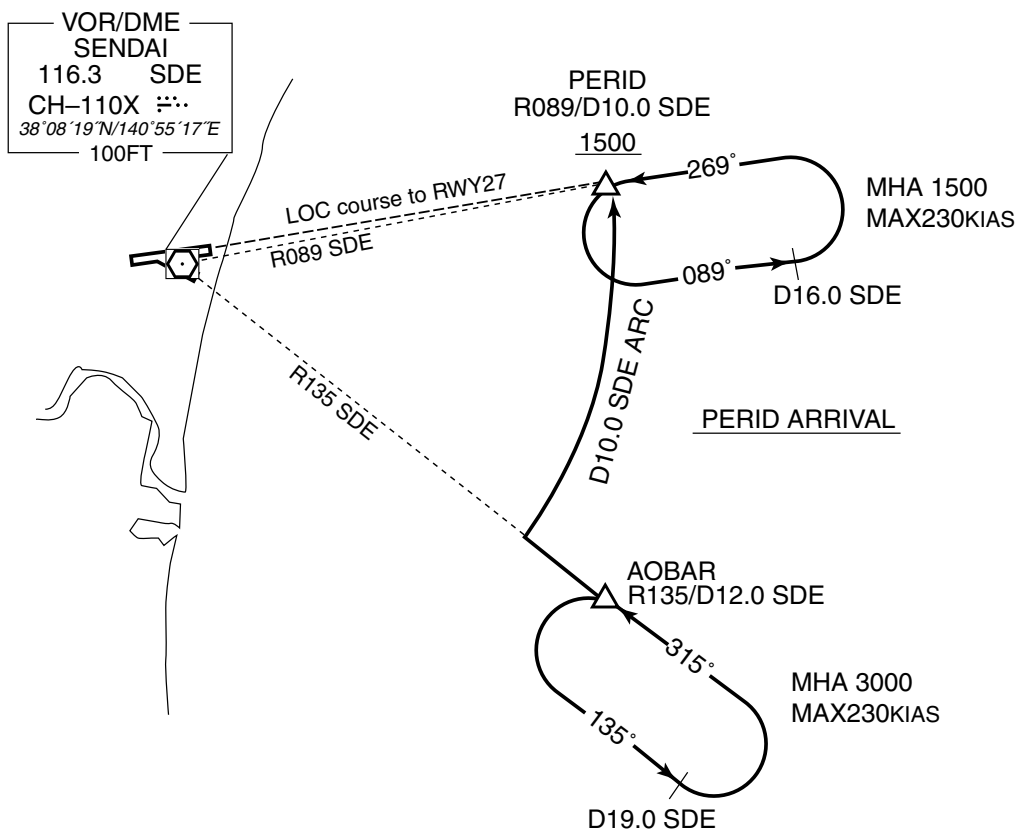
RJSS / SENDAI

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.





## STANDARD ARRIVAL CHART - INSTRUMENT

CHANGE : VAR. Sensor for RNAV. Navigation specification. PROC course. ALT restriction at QUAIL. HLDG pattern established.

RJSS / SENDAI

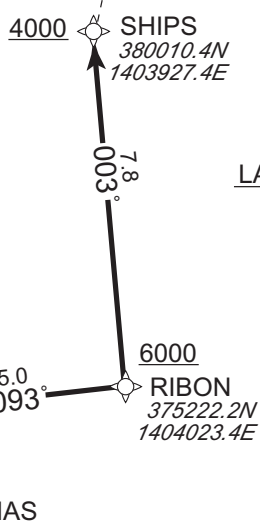
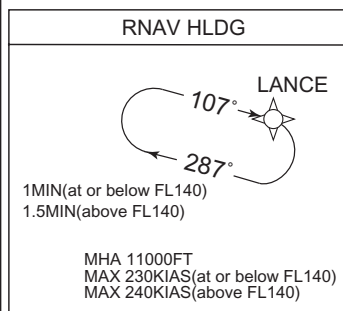
RNAV STAR RWY09

## LANCE WEST ARRIVAL

Basic RNP1

Note GNSS required.

VAR 8°W (2020)



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

## LANCE WEST ARRIVAL

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	—	—	Basic RNP1
002	TF	QUAIL	—	128 (119.4)	-8.3	5.0	—	+9400	-250	—	Basic RNP1
003	TF	RIBON	—	093 (084.5)	-8.3	5.0	—	+6000	—	—	Basic RNP1
004	TF	SHIPS	—	003 (354.6)	-8.3	7.8	—	+4000	—	—	Basic 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)	Basic RNP1

## STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

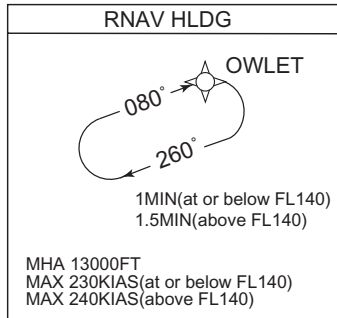
RNAV STAR RWY09

## OWLET WEST ARRIVAL

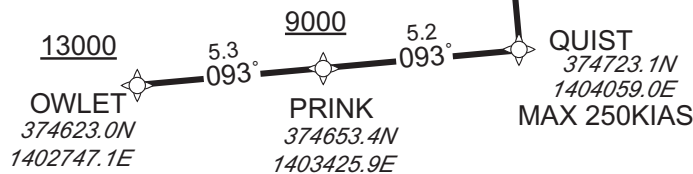
Basic RNP1

Note GNSS required.

VAR 8°W (2020)



## OWLET WEST ARRIVAL



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

## OWLET WEST ARRIVAL

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	—	—	Basic RNP1
002	TF	PRINK	—	093 (084.4)	-8.3	5.3	—	+9000	—	—	Basic RNP1
003	TF	QUIST	—	093 (084.5)	-8.3	5.2	—	—	-250	—	Basic RNP1
004	TF	RIBON	—	003 (354.6)	-8.3	5.0	—	+6000	—	—	Basic RNP1
005	TF	SHIPS	—	003 (354.6)	-8.3	7.8	—	+4000	—	—	Basic 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)	Basic RNP1

CHANGE : VAR. PROC course. ALT restriction at PRINK. HLDG pattern established.

## STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

RNAV STAR RWY27

## LANCE EAST ALFA ARRIVAL

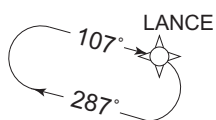
Basic RNP1

Note GNSS required.

VAR 8°W (2020)

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

## RNAV HLDG



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

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

11000 5.9° 085°  
LANCE 375422.0N  
1402833.6E  
9000  
FUBOU 375540.2N  
1403551.6E

4000  
SNOOK 375901.5N  
1405451.7E

## LANCE EAST ALFA ARRIVAL

380944.8N  
1410749.4E  
1500  
001° 4.5°  
TOPAZ 380516.8N  
1410833.5E  
MAX 230KIAS

## LANCE EAST ALFA ARRIVAL

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.

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	—	—	Basic RNP1
002	TF	FUBOU	—	085 (077.2)	-8.3	5.9	—	+9000	—	—	Basic RNP1
003	TF	SNOOK	—	086 (077.3)	-8.3	15.4	—	+4000	—	—	Basic RNP1
004	TF	TOPAZ	—	068 (059.8)	-8.3	12.5	—	—	-230	—	Basic RNP1
005	TF	PERID	—	001 (352.6)	-8.3	4.5	—	+1500	—	—	Basic 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)	Basic RNP1

CHANGE : VAR. Navigation specification. Sensor for RNAV. Course FM FUBOU to SNOOK. Course FM TOPAZ to PERID. ALT restriction at FUBOU. HLDG pattern established.

## STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

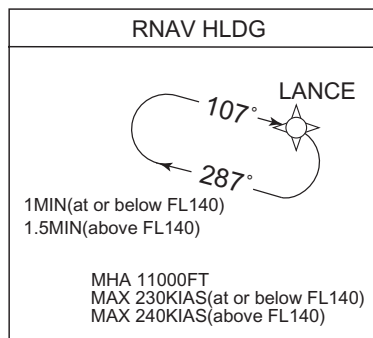
RNAV STAR RWY27

## LANCE EAST BRAVO ARRIVAL

Basic RNP1

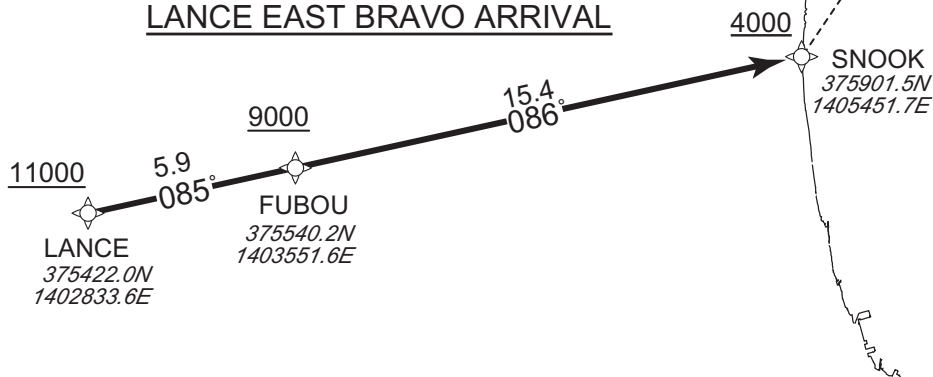
Note GNSS required.

VAR 8°W (2020)



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

## LANCE EAST BRAVO ARRIVAL



## LANCE EAST BRAVO ARRIVAL

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	—	—	Basic RNP1
002	TF	FUBOU	—	085 (077.2)	-8.3	5.9	—	+9000	—	—	Basic RNP1
003	TF	SNOOK	—	086 (077.3)	-8.3	15.4	—	+4000	—	—	Basic 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)	Basic RNP1

CHANGE : VAR. Course FM FUBOU to SNOOK. ALT restriction at FUBOU. HLDG pattern established.

## STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

RNAV STAR RWY27

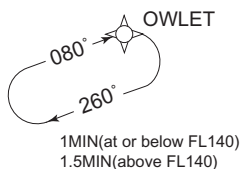
## OWLET EAST ALFA ARRIVAL

Basic RNP1

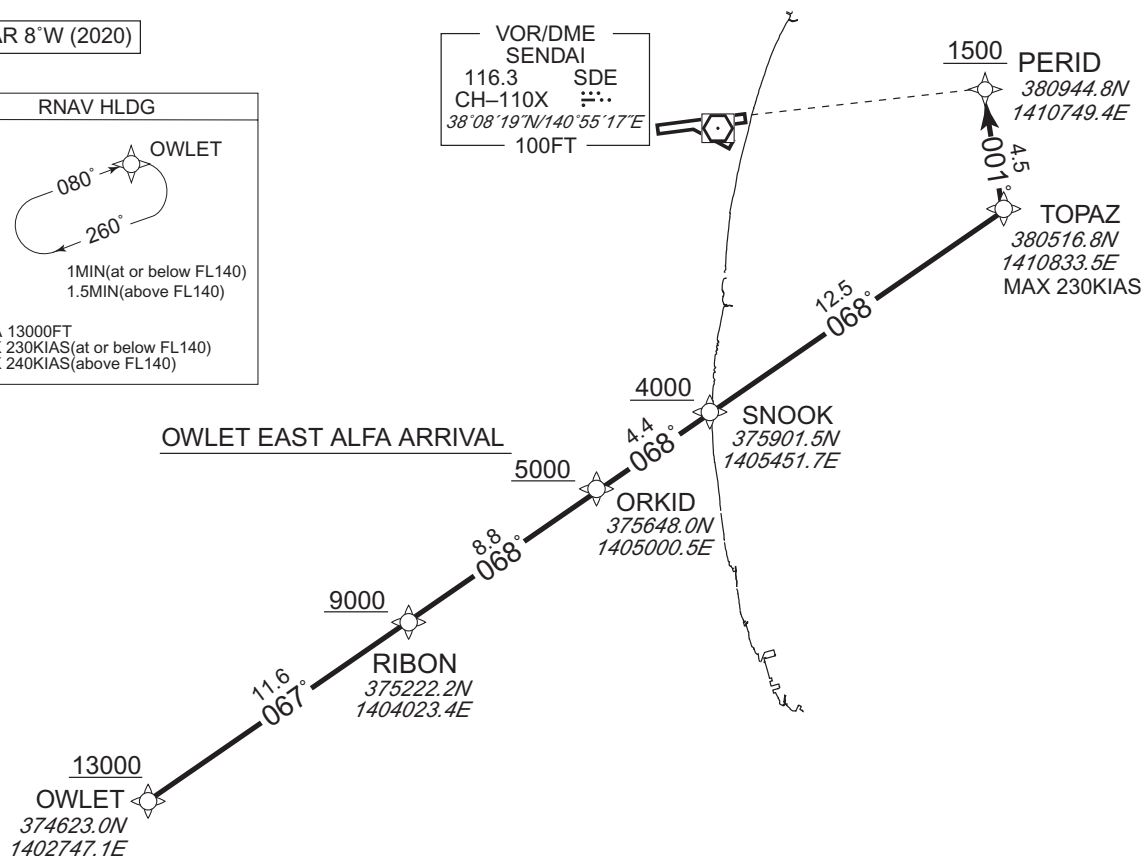
Note GNSS required.

VAR 8°W (2020)

## RNAV HLDG



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



## OWLET EAST ALFA ARRIVAL

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	—	—	Basic RNP1
002	TF	RIBON	—	067 (058.9)	-8.3	11.6	—	+9000	—	—	Basic RNP1
003	TF	ORKID	—	068 (059.7)	-8.3	8.8	—	+5000	—	—	Basic RNP1
004	TF	SNOOK	—	068 (059.8)	-8.3	4.4	—	+4000	—	—	Basic RNP1
005	TF	TOPAZ	—	068 (059.8)	-8.3	12.5	—	—	-230	—	Basic RNP1
006	TF	PERID	—	001 (352.6)	-8.3	4.5	—	+1500	—	—	Basic 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)	Basic RNP1

CHANGE : VAR. Navigation specification. Sensor for RNAV. ORKID established. DATTE abolished. PROC course. ALT restriction at RIBON. HLDG pattern established.

## STANDARD ARRIVAL CHART-INSTRUMENT

RJSS / SENDAI

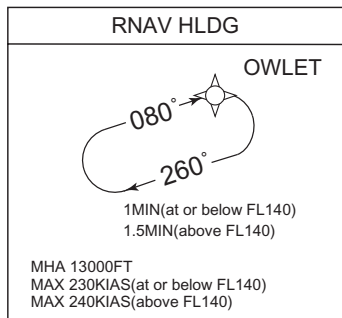
RNAV STAR RWY27

## OWLET EAST BRAVO ARRIVAL

Basic RNP1

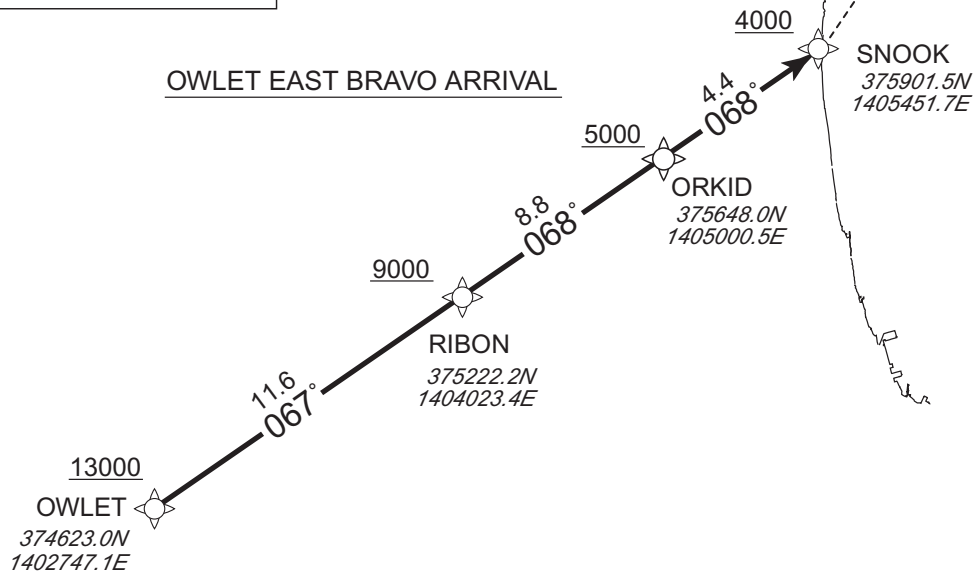
Note GNSS required.

VAR 8°W (2020)



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

## OWLET EAST BRAVO ARRIVAL



## OWLET EAST BRAVO ARRIVAL

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	—	—	Basic RNP1
002	TF	RIBON	—	067 (058.9)	-8.3	11.6	—	+9000	—	—	Basic RNP1
003	TF	ORKID	—	068 (059.7)	-8.3	8.8	—	+5000	—	—	Basic RNP1
004	TF	SNOOK	—	068 (059.8)	-8.3	4.4	—	+4000	—	—	Basic 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)	Basic RNP1

CHANGE : VAR. ORKID established. DATTE abolished. Course FM RIBON to SNOOK. ALT restriction at RIBON. HLDG pattern established.

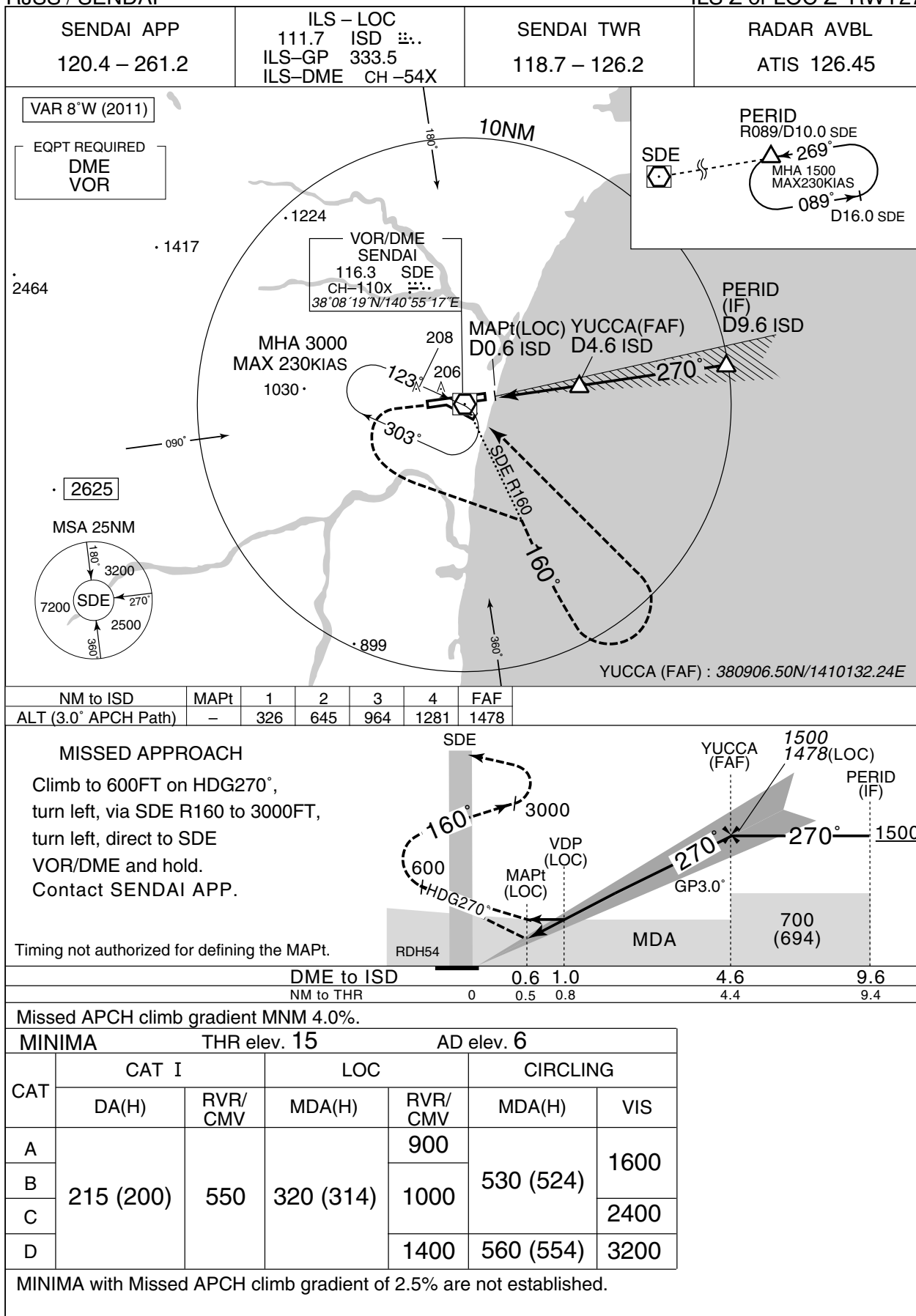


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## INSTRUMENT APPROACH CHART

RJSS / SENDAI

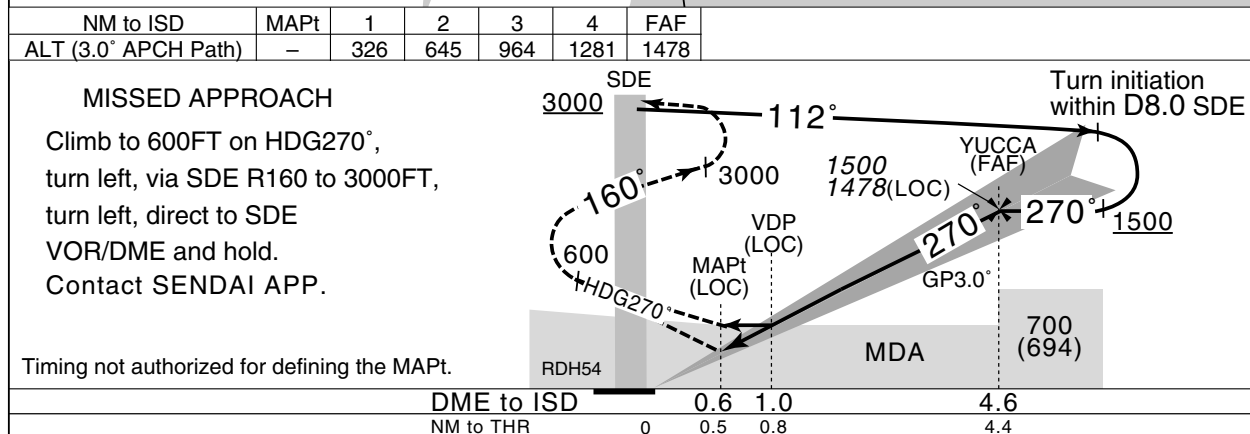
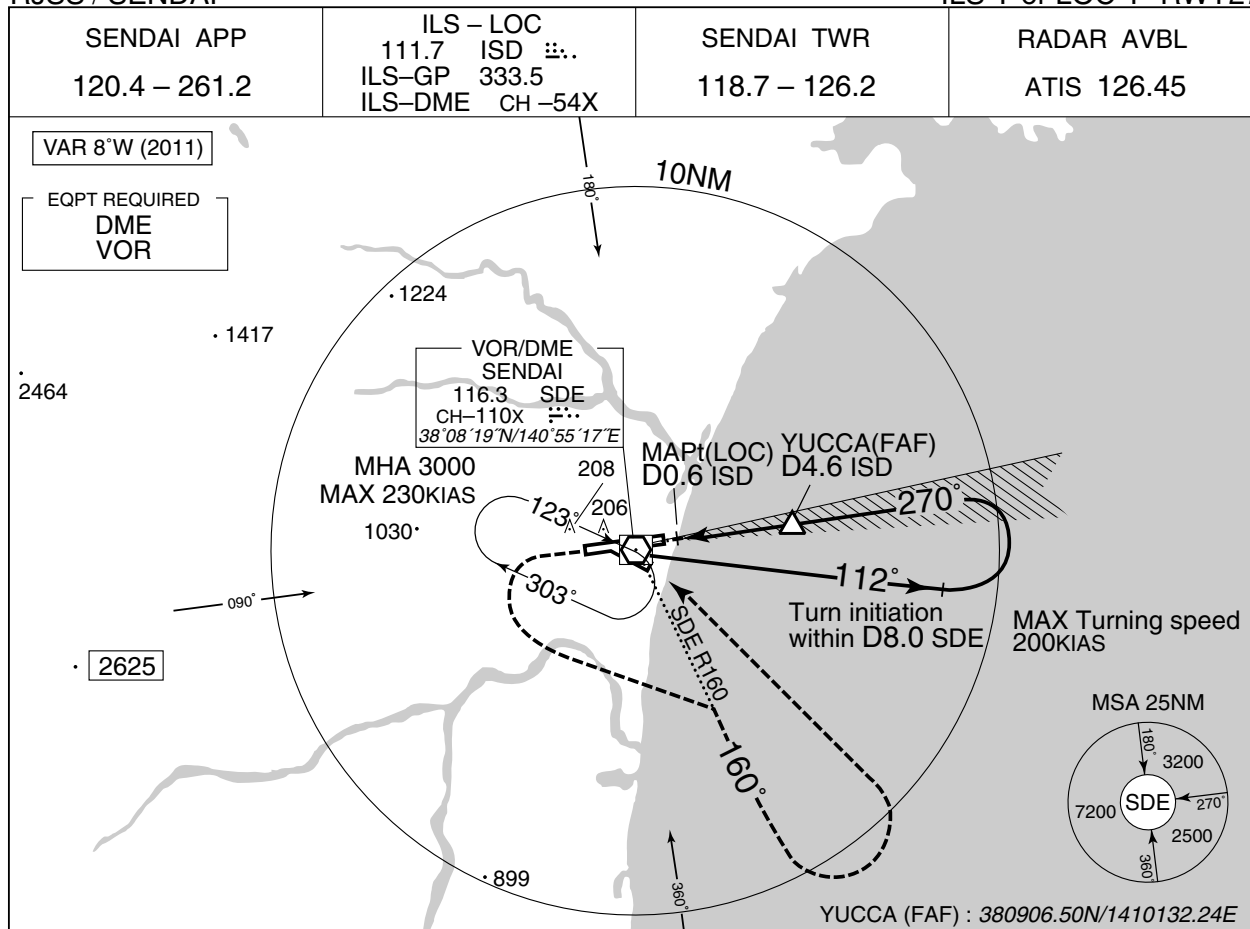
ILS Z or LOC Z RWY27



## INSTRUMENT APPROACH CHART

RJSS / SENDAI

ILS Y or LOC Y RWY27



Missed APCH climb gradient MNM 4.0%.

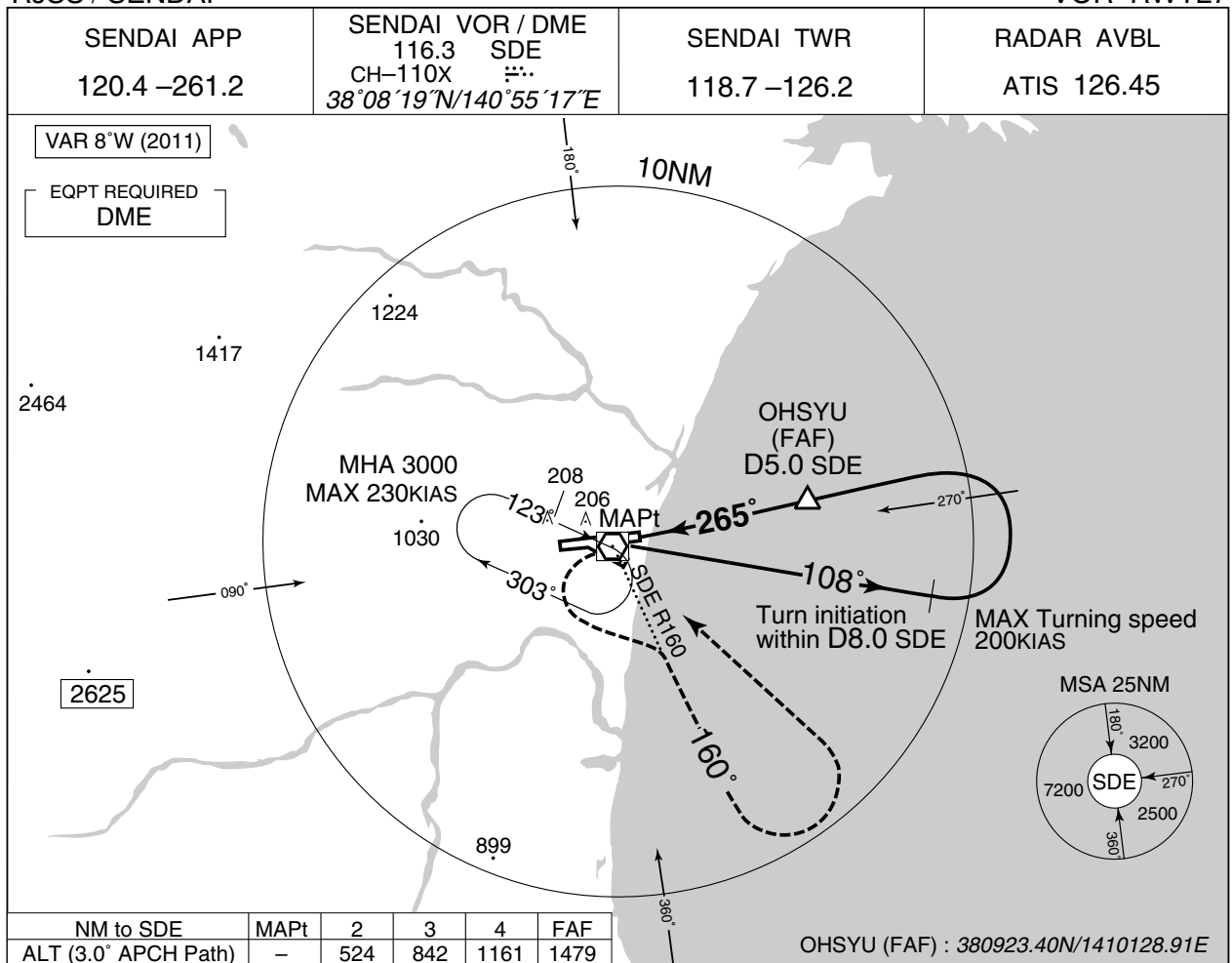
MINIMA		THR elev. 15		AD elev. 6		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	215 (200)	550	320 (314)	900	530 (524)	1600
B				1000		2400
C						
D				1400	560 (554)	3200

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

## INSTRUMENT APPROACH CHART

RJSS / SENDAI

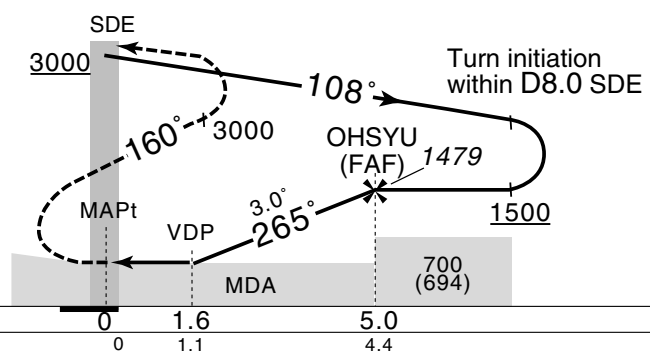
VOR RWY27



## MISSED APPROACH

Turn left, climb via SDE R160 to 3000FT,  
turn left, direct to SDE VOR/DME  
and hold.  
Contact SENDAI APP.

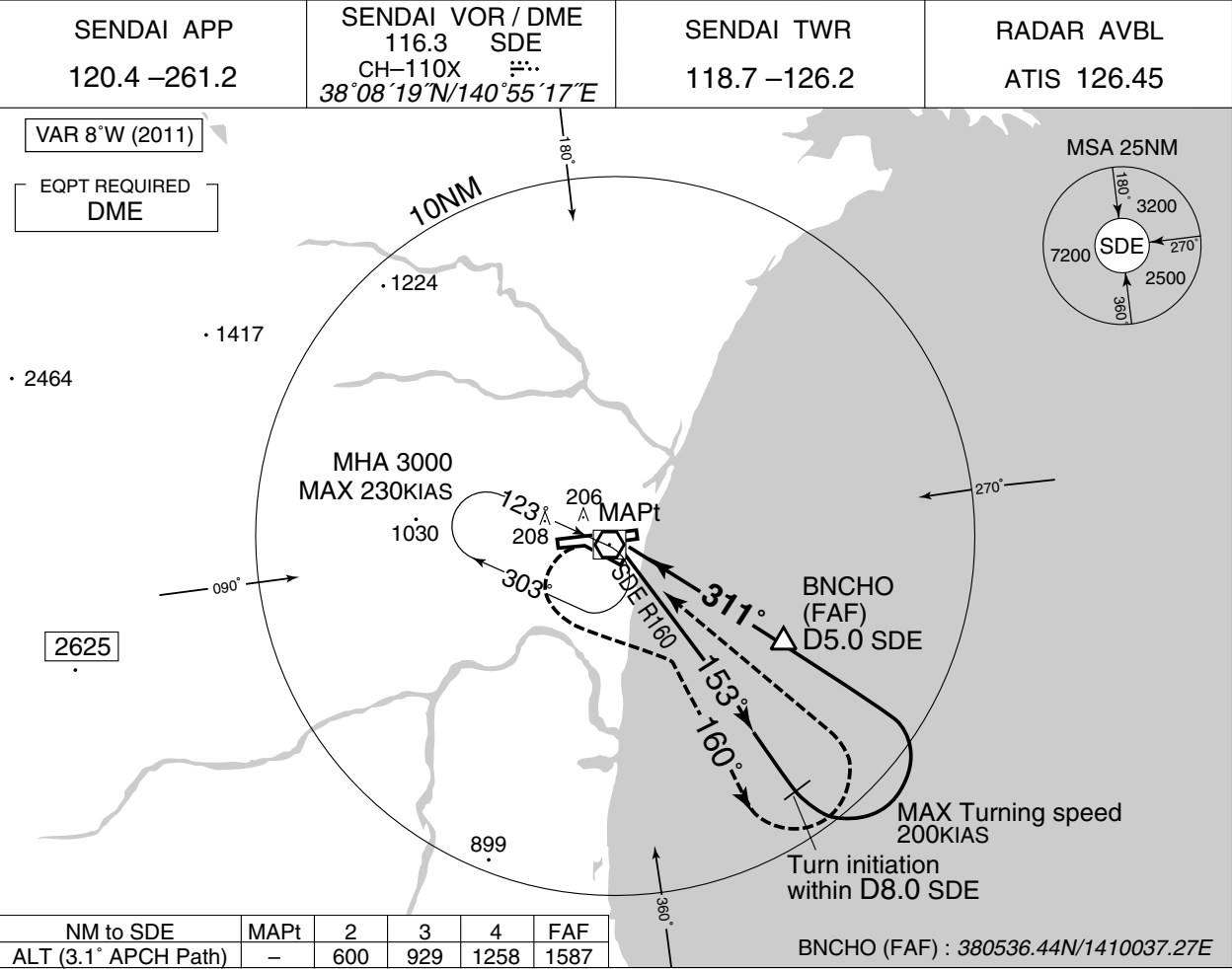
Timing not authorized for defining the MAPt.



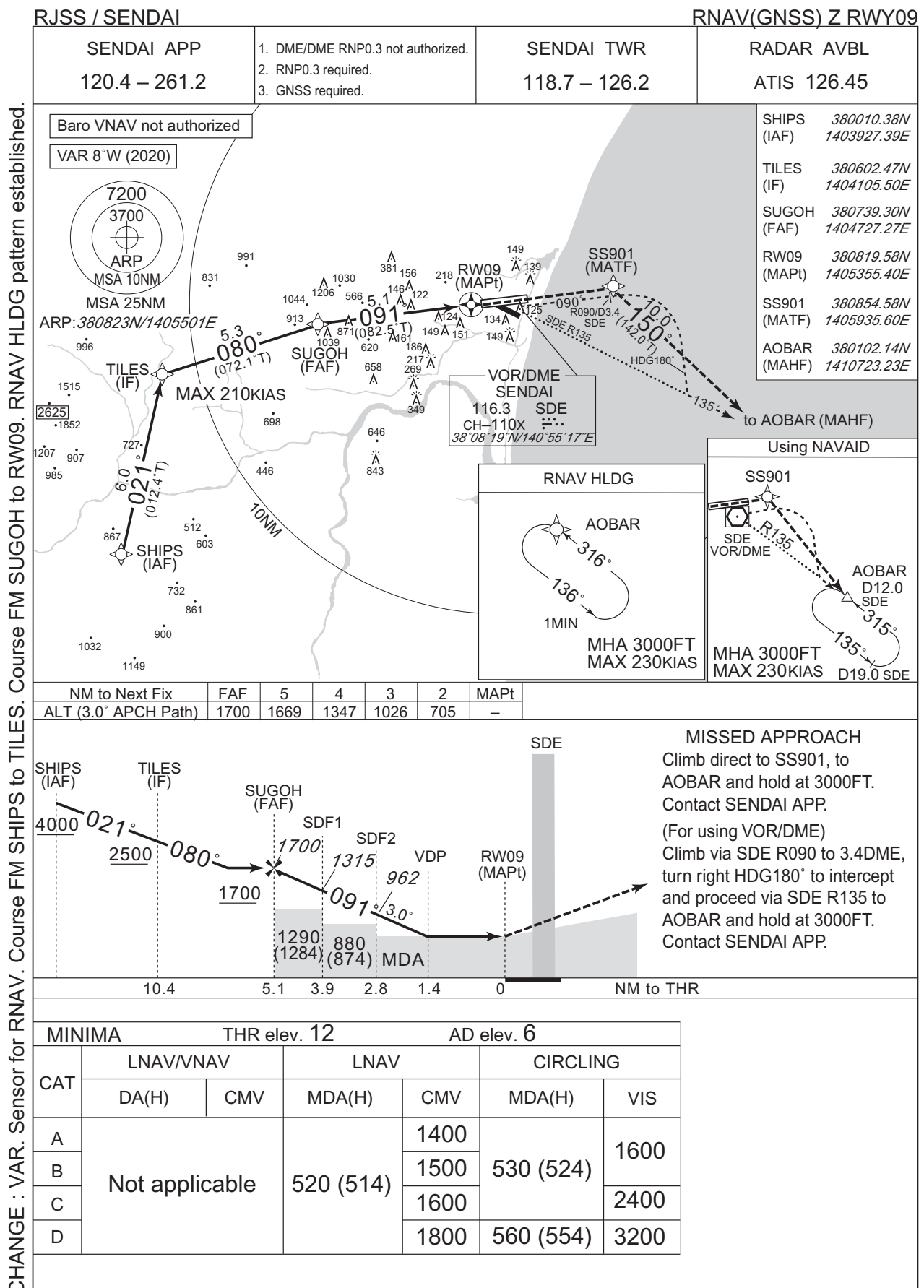
MINIMA		THR elev. 15	AD elev. 6	
CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	390 (384)	900	530 (524)	1600
B		1000		2400
C				
D		1400	560 (554)	3200

INSTRUMENT APPROACH CHART

RJSS / SENDAIVOR RWY30



## INSTRUMENT APPROACH CHART





## INSTRUMENT APPROACH CHART

RJSS / SENDAI

RNAV(RNP) Y RWY09

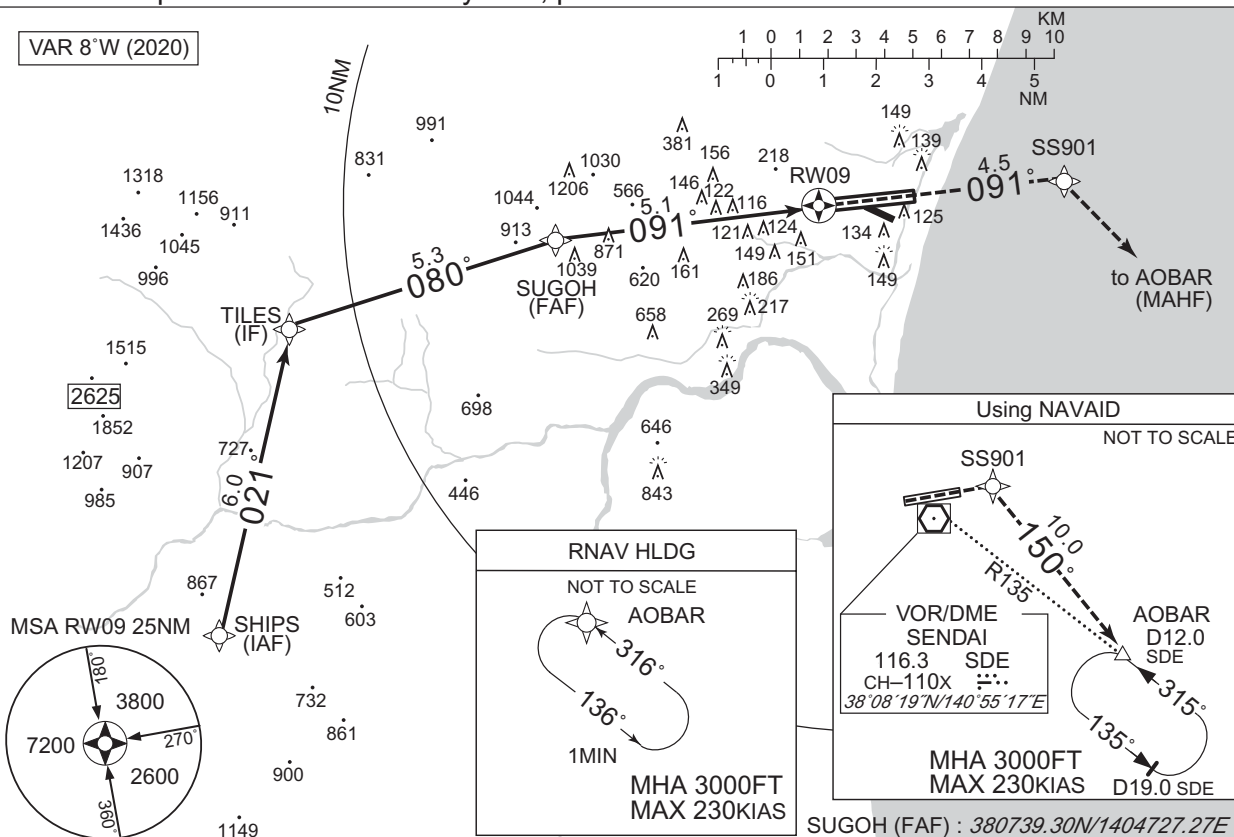
SENDAI APP  
120.4 – 261.2

GNSS required

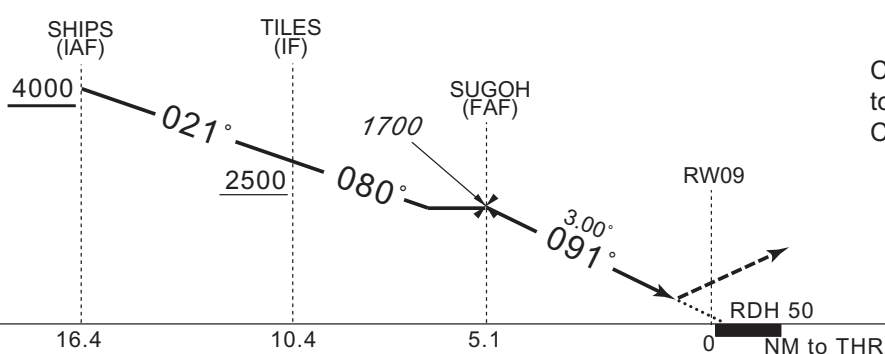
SENDAI TWR  
118.7 – 126.2RADAR AVBL  
ATIS 126.45

For uncompensated Baro-VNAV system, procedure not authorized below -10°C / above 45°C

VAR 8°W (2020)



CHANGE : VAR. PROC course. MSA. RNAV HLDG pattern established.



## MISSED APPROACH

Climb to 3000FT, to SS901,  
to AOBAR and hold.  
Contact SENDAI APP.

MINIMA		THR elev. 12	AD elev. 6
CAT	RNP 0.30		
	DA(H)	CMV	
A	—	—	
B			
C	312 (300)	1400	
D			1600

# RNP AR

Special Authorization Required

## INSTRUMENT APPROACH CHART

RJSS / SENDAI

RNAV(RNP) Y RWY09

RNAV(RNP) Y RWY09Coding 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	SHIPS	—	—	-8.3	—	—	+4000	—	—	—
002	TF	TILES	—	021 (012.4)	-8.3	6.0	—	+2500	—	—	1.0
003	TF	SUGOH	—	080 (072.1)	-8.3	5.3	—	1700	—	—	1.0
004	TF	RW09	Y	091 (082.5)	-8.3	5.1	—	62	—	-3.00/50	0.3
005	TF	SS901	—	091 (082.5)	-8.3	4.5	—	—	—	—	1.0
006	TF	AOBAR	—	150 (142.0)	-8.3	10.0	—	3000	—	—	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	RNP Value
Hold	AOBAR	316 (307.5)	-8.3	1.0(-14000)	L	3000	FL140	-230(-14000)	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates
SHIPS	380010.38N/1403927.39E
TILES	380602.47N/1404105.50E
SUGOH	380739.30N/1404727.27E
RW09	380819.58N/1405355.40E
SS901	380854.58N/1405935.60E
AOBAR	380102.14N/1410723.23E

CHANGE : VAR. PROC course. RNAV HLDG pattern established.

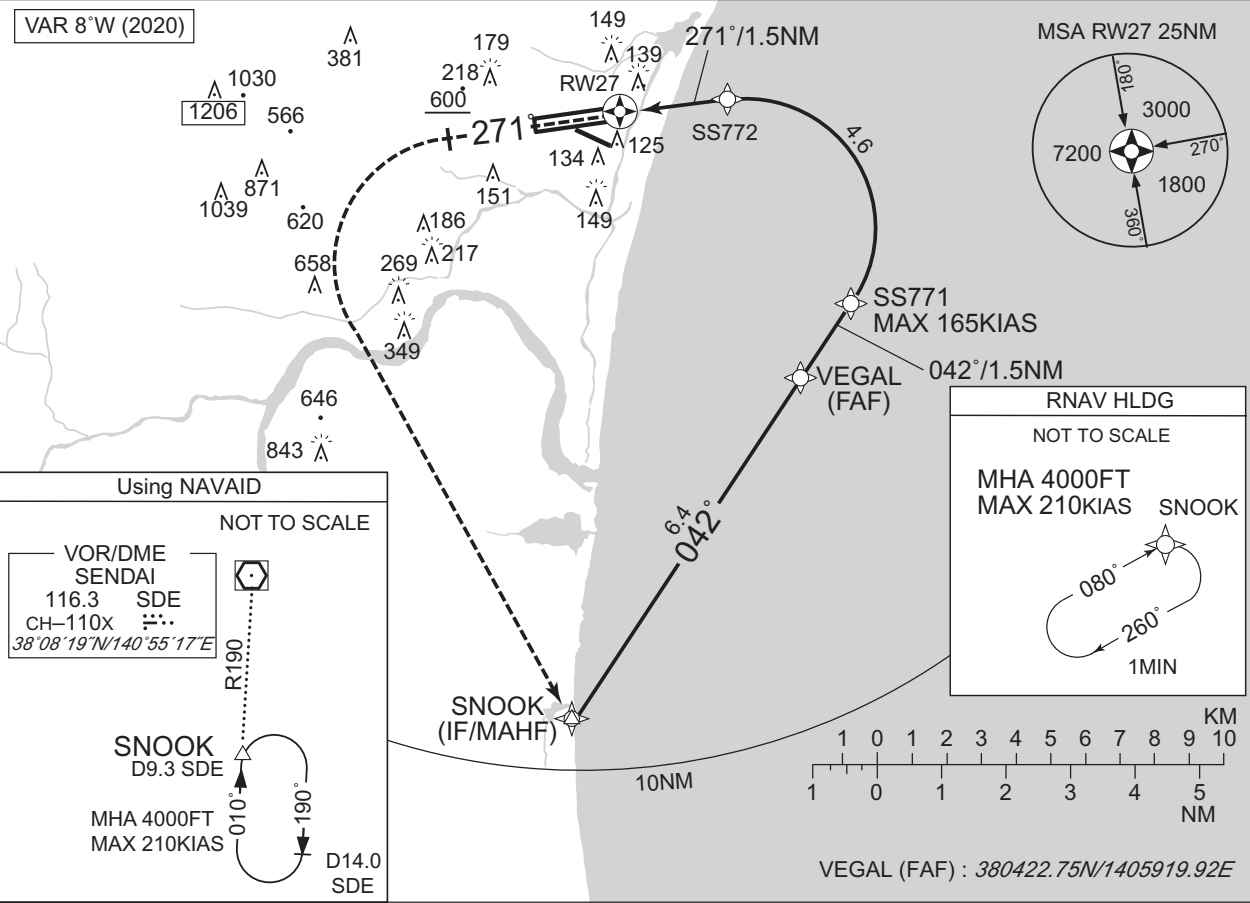
INSTRUMENT APPROACH CHART

RJSS / SENDAI

RNAV(RNP) RWY27

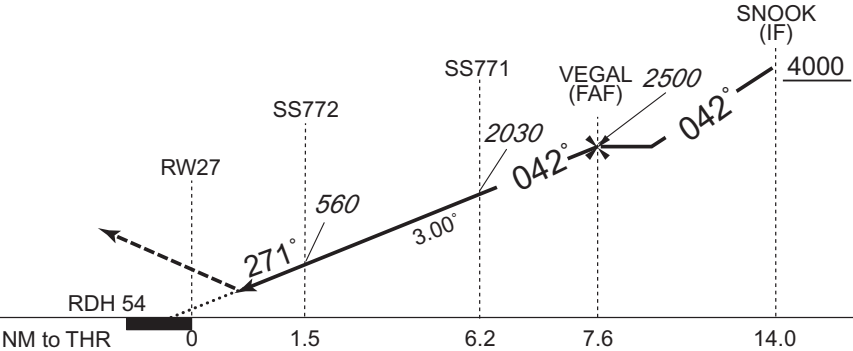
SENDAI APP 120.4 – 261.2	GNSS and RF required	SENDAI TWR 118.7 – 126.2	RADAR AVBL ATIS 126.45
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For uncompensated Baro-VNAV system, procedure not authorized below -10°C / above 45°C



MISSED APPROACH

From RW27 on track 271°, at or above 600FT turn left, direct to SNOOK and hold at 4000FT.  
Contact SENDAI APP.



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

**RNP AR**  
Special Authorization Required

\* Missed APCH climb gradient MNM 4.0%

CHANGE : VAR. PROC course, MSA. RNAV HLDG pattern established.

## INSTRUMENT APPROACH CHART

RJSS / SENDAI

RNAV(RNP) RWY27

RNAV(RNP) RWY27Coding Table

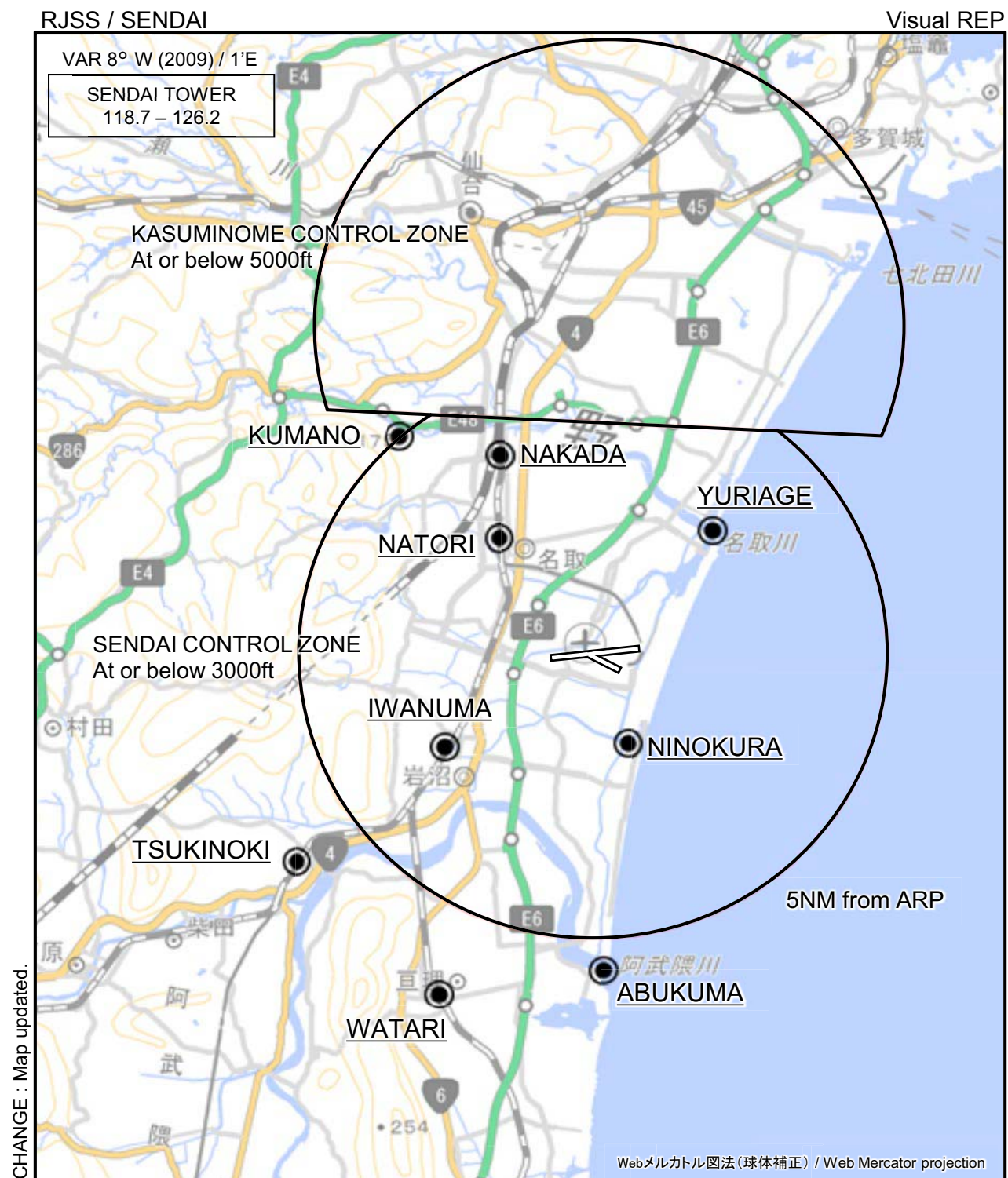
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/RDH (°/FT)	RNP Value
001	IF	SNOOK	—	—	-8.3	—	—	+4000	—	—	—
002	TF	VEGAL	—	042 (033.3)	-8.3	6.4	—	2500	—	—	1.0
003	TF	SS771	—	042 (033.4)	-8.3	1.5	—	2030	-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		

CHANGE : VAR. PROC course. RNAV HLDG pattern established.



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。

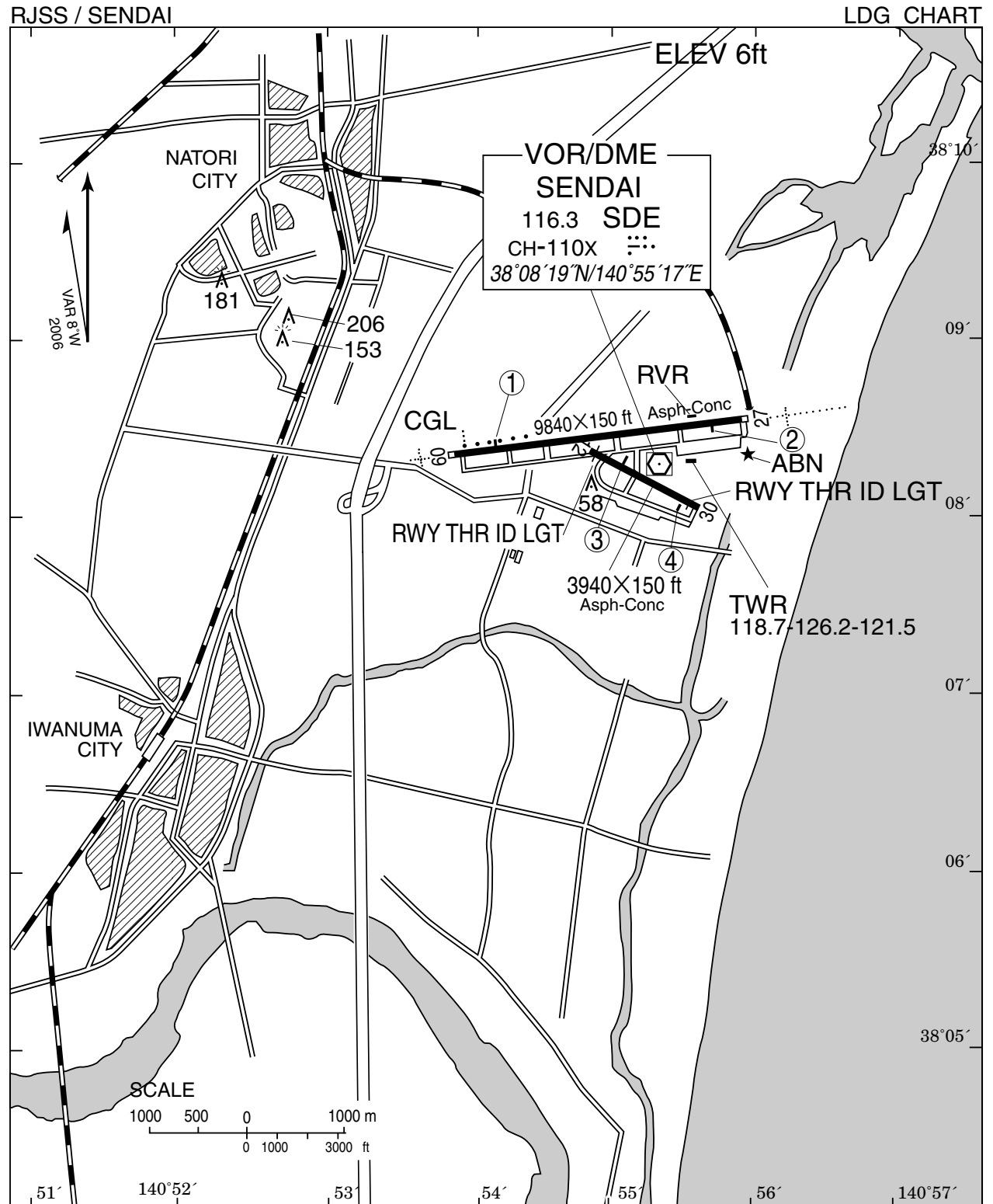
NOTE : When any VFR flight enters SENDAI CTR directly via KASUMINOME CTR, the pilot shall report to "SENDAI TWR" before entering SENDAI CTR.

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 : BRG/DIST from ARP.





①	②	③	④
Angle 3.0°	Angle 3.0°	Angle 3.0°	Angle 3.1°
MEHT 22.5m (73.8 ft)	MEHT 20.0m (65.6 ft)	MEHT 13.6m (44.5 ft)	MEHT 13.6m (44.5 ft)
456m FM THR	439m FM THR	306m FM THR	262m FM THR

RJSS / SENDAI

Minimum Vectoring Altitude CHART

