

## RJSI / HANAMAKI

## AD CHART



STANDARD DEPARTURE CHART -INSTRUMENT

RJSI / HANAMAKI

➡ SID

OHSU ONE DEPARTURE

RWY 02 : Climb RWY HDG to 900FT, turn left...

RWY 20 : Climb RWY HDG to 1300FT, turn left HDG 324° ...  
...to intercept and proceed via HPE R009 to OHSU.

OHSU ONE DEPARTURE



## STANDARD DEPARTURE CHART -INSTRUMENT

RJSI / HANAMAKI

SID

NIIGATA FOUR DEPARTURE

RWY 02 : Climb RWY HDG to HPE 3.5 DME, turn right...

RWY 20 : Climb RWY HDG to HPE 3.5 DME, turn left...

...proceed to HPE VOR/DME, via HPE R236 to GTC VORTAC.

Cross HPE VOR/DME at or above 2200 FT.

Note RWY02 : 4.5% climb gradient required up to 2400FT.

OBST ALT 1641FT located at 4.1NM 091° FM end of RWY02.

RWY20 : 3.9% climb gradient required up to 1100FT.

OBST ALT 722FT located at 2.8NM 166° FM end of RWY20.



STANDARD DEPARTURE CHART -INSTRUMENT

RJSI / HANAMAKI

SID

HANAMAKI REVERSAL TWO DEPARTURE

RWY 02 : Climb RWY HDG to 700FT, via HPE R022 to 6.0 DME, turn right...

RWY 20 : Climb RWY HDG to 700FT, via HPE R194 to 6.0 DME, turn left...

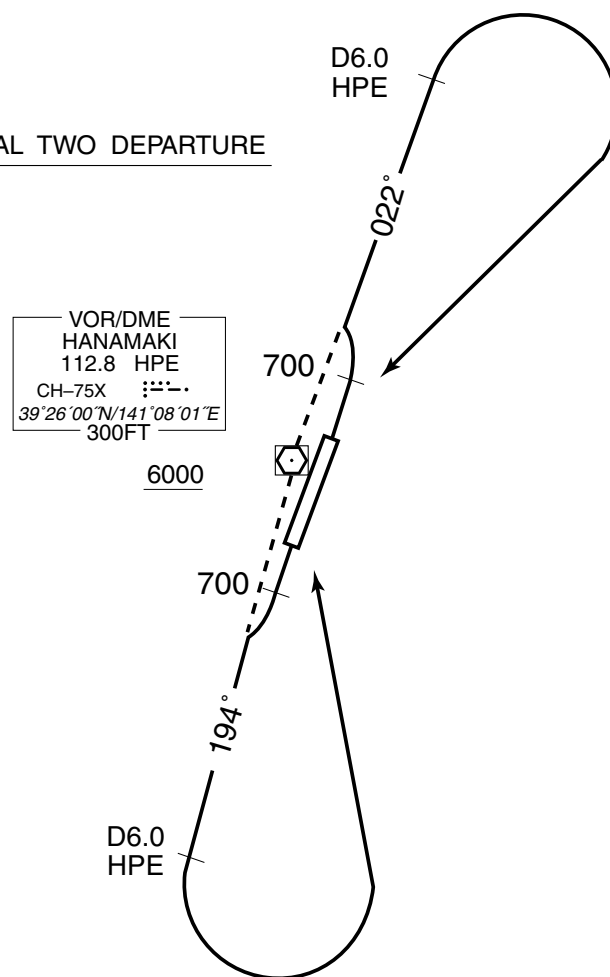
...proceed to HPE VOR/DME.

Cross HPE VOR/DME at or above 6000FT.

Note RWY02 : 5.0% climb gradient required up to 3200FT.

OBST ALT 2691FT located at 9.1NM 058° FM end of RWY02.

HANAMAKI REVERSAL TWO DEPARTURE



## STANDARD DEPARTURE CHART -INSTRUMENT

RJSI / HANAMAKI

RNAV SID

## SAMBO ONE DEPARTURE

Basic RNP1

Note GNSS required.

VAR 9°W (2019)



## SAMBO ONE DEPARTURE

RWY02 : Climb on HDG 019° at or above 700FT, direct to AKARI, to DASCO to SAMBO.

RWY20 : Climb on HDG 199° at or above 1300FT, turn right direct to SI010, to AKARI, to DASCO to SAMBO.

Note RWY02: 4.0% climb gradient required up to 700FT.

OBST ALT 318FT located at 0.2NM 061° FM end of RWY02.

RWY20: 4.0% climb gradient required up to 2700FT.

OBST ALT 3117FT located at 10.7NM 350° FM end of RWY20.

## RWY02

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	—	—	019 (010.7)	-8.6	—	—	+700	—	—	Basic RNP1
002	DF	AKARI	—	—	-8.6	—	—	—	—	—	Basic RNP1
003	TF	DASCO	—	009 (000.8)	-8.6	7.9	—	—	—	—	Basic RNP1
004	TF	SAMBO	—	345 (336.6)	-8.6	21.9	—	—	—	—	Basic RNP1

## RWY20

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	—	—	199 (190.7)	-8.6	—	—	+1300	—	—	Basic RNP1
002	DF	SI010	—	—	-8.6	—	R	—	—	—	Basic RNP1
003	TF	AKARI	—	025 (016.7)	-8.6	17.0	—	—	—	—	Basic RNP1
004	TF	DASCO	—	009 (000.8)	-8.6	7.9	—	—	—	—	Basic RNP1
005	TF	SAMBO	—	345 (336.6)	-8.6	21.9	—	—	—	—	Basic RNP1

CHANGE : New PROC

STANDARD DEPARTURE CHART -INSTRUMENT

RJSI / HANAMAKI

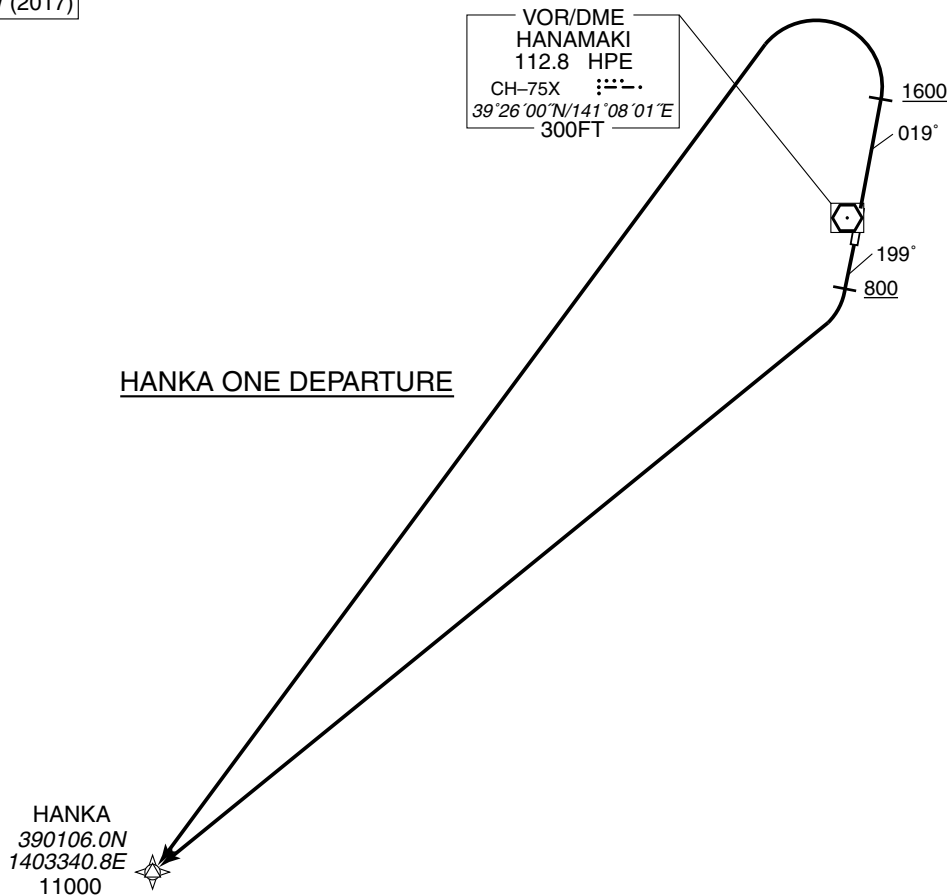
➔ RNAV SID

HANKA ONE DEPARTURE

Basic RNP1

Note GNSS required

VAR 8°W (2017)



HANKA ONE DEPARTURE

RWY02 : Climb on HDG 019° at or above 1600FT, turn left direct to HANKA, at or above 11000FT.

RWY20 : Climb on HDG 199° at or above 800FT, turn right direct to HANKA, at or above 11000FT.

Note RWY02: 5.0% climb gradient required up to 3600FT.

OBST ALT 1936FT located at 5.5NM 340° FM end of RWY02.

OBST ALT 3018FT located at 8.2NM 310° FM end of RWY02.

RWY20: 5.0% climb gradient required up to 5400FT.

OBST ALT 4593FT located at 18.2NM 227° FM end of RWY20.

OBST ALT 5151FT located at 20.8NM 231° FM end of RWY20.

RWY02

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	—	—	019 (010.7)	-8.4	—	—	+1600	—	—	Basic RNP1
002	DF	HANKA	—	—	-8.4	—	L	+11000	—	—	Basic RNP1

RWY20

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	—	—	199 (190.7)	-8.4	—	—	+800	—	—	Basic RNP1
002	DF	HANKA	—	—	-8.4	—	R	+11000	—	—	Basic RNP1

STANDARD ARRIVAL CHART - INSTRUMENT

RJSI / HANAMAKI

RNAV STAR RWY02



REMEN ARRIVAL

From MORIO at or above 9000FT, to JAMEN at or above 7400FT, to REMEN at or above 4100FT.

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	MORIO	—	—	-8.4	—	—	+9000	—	—	Basic RNP1
002	TF	JAMEN	—	218 (209.6)	-8.4	10.0	—	+7400	—	—	Basic RNP1
003	TF	REMEN	—	218 (209.5)	-8.4	15.7	—	+4100	—	—	Basic RNP1

## STANDARD ARRIVAL CHART - INSTRUMENT

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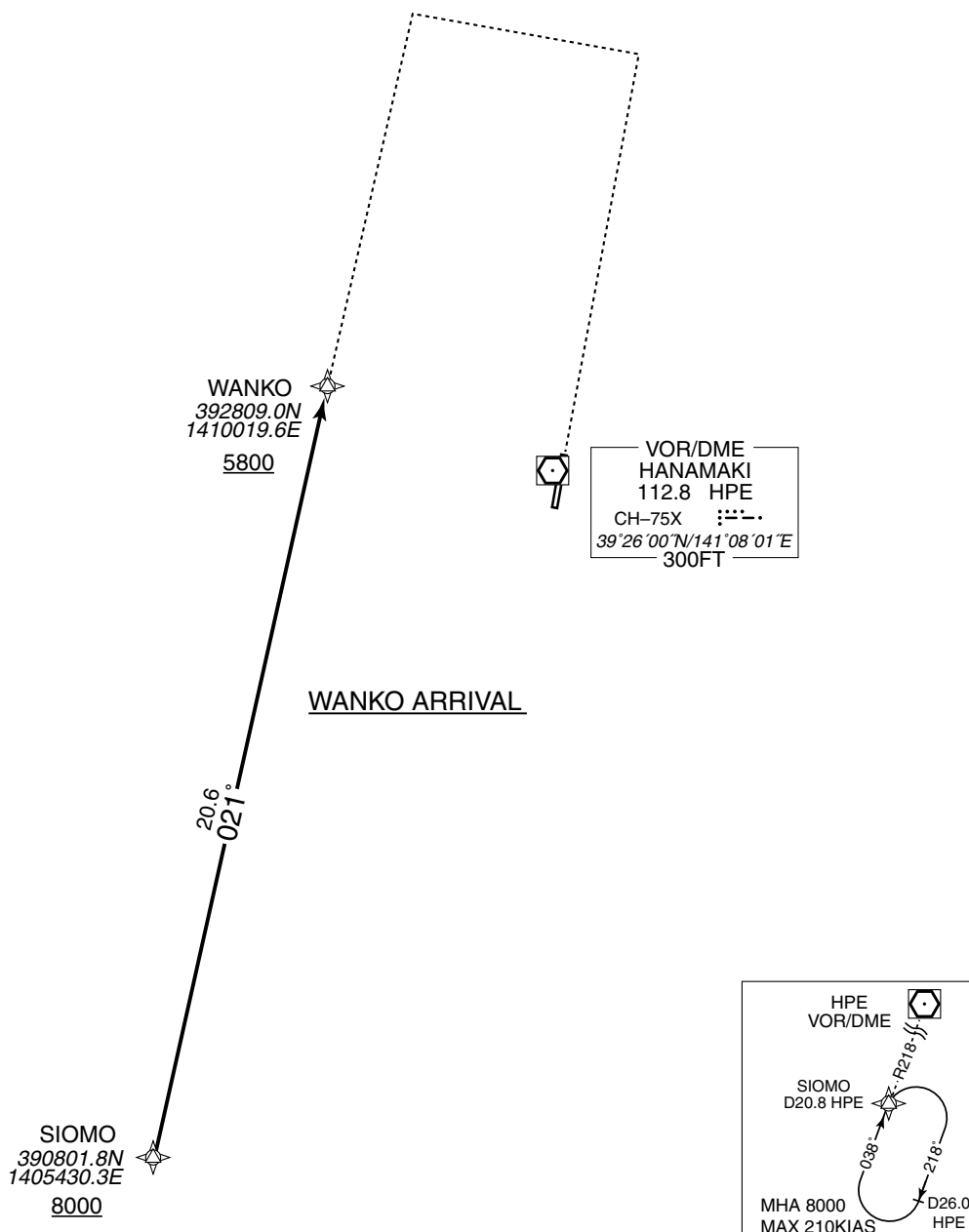
RNAV STAR RWY20

## WANKO ARRIVAL

Basic RNP1

Note GNSS required

VAR 8°W (2017)



## WANKO ARRIVAL

From SIOMO at or above 8000FT, to WANKO at or above 5800FT.

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	SIOMO	—	—	-8.4	—	—	+8000	—	—	Basic RNP1
002	TF	WANKO	—	021 (012.6)	-8.4	20.6	—	+5800	—	—	Basic RNP1



STANDARD ARRIVAL CHART - INSTRUMENT



## STANDARD ARRIVAL CHART - INSTRUMENT

RJSI / HANAMAKI

RNAV STAR RWY20

## SUIHO ARRIVAL

Basic RNP1

Note GNSS required.

VAR 9°W (2019)



## SUIHO ARRIVAL

From ESBEL at or above 9000FT, to MAMEB at or above 8200FT, to NONBE at or above 6600FT, to SUIHO at or above 3200FT.

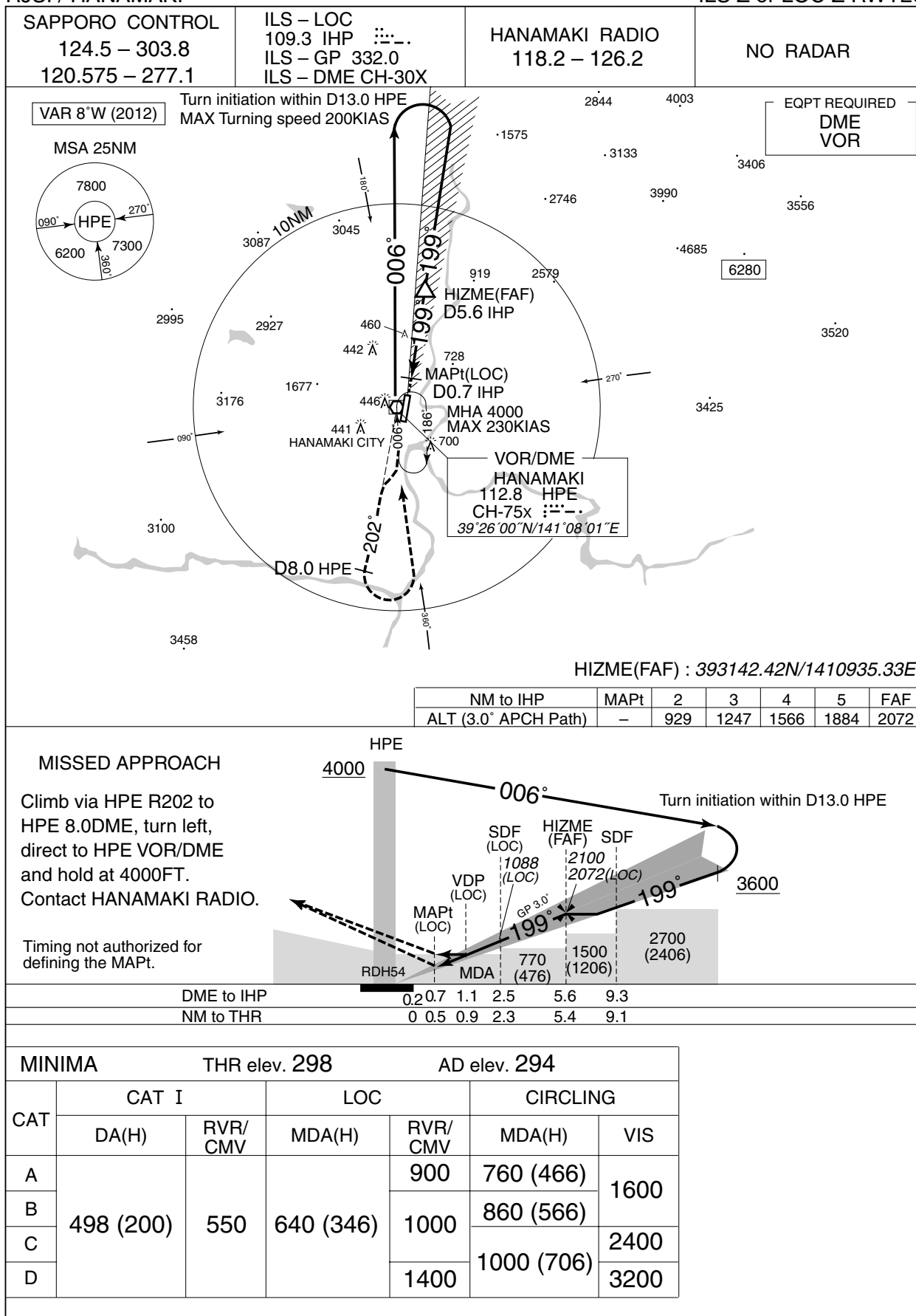
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	ESBEL	—	—	-8.6	—	—	+9000	—	—	Basic RNP1
002	TF	MAMEB	—	159 (150.7)	-8.6	4.6	—	+8200	—	—	Basic RNP1
003	TF	NONBE	—	159 (150.8)	-8.6	3.4	—	+6600	—	—	Basic RNP1
004	TF	SUIHO	—	159 (150.8)	-8.6	10.0	—	+3200	—	—	Basic RNP1

CHANGE : New PROC

## INSTRUMENT APPROACH CHART

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ILS Z or LOC Z RWY20



## INSTRUMENT APPROACH CHART

RJSI / HANAMAKI

ILS Y or LOC Y RWY20

SAPPORO CONTROL  
124.5 – 303.8  
120.575 – 277.1

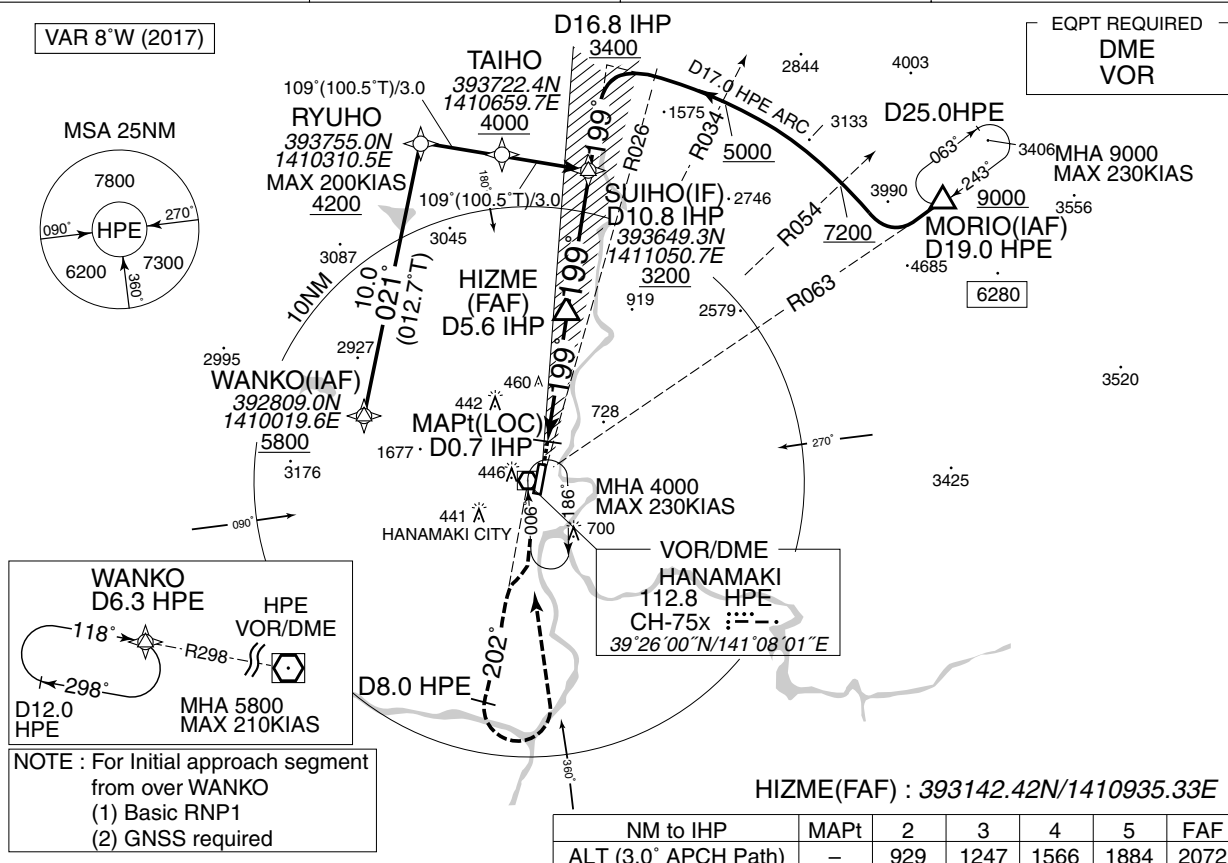
ILS – LOC  
109.3 IHP  
ILS – GP 332.0  
ILS – DME CH-30X

HANAMAKI RADIO  
118.2 – 126.2

NO RADAR

VAR 8°W (2017)

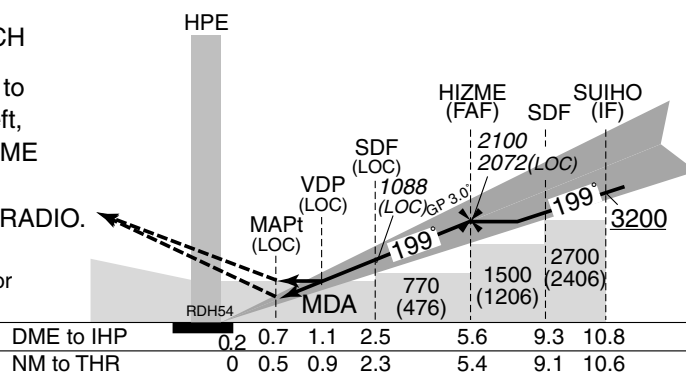
EQPT REQUIRED  
DME  
VOR



## MISSED APPROACH

Climb via HPE R202 to HPE 8.0DME, turn left, direct to HPE VOR/DME and hold at 4000FT. Contact HANAMAKI RADIO.

Timing not authorized for defining the MAPt.



DME to IHP	0.2	0.7	1.1	2.5	5.6	9.3	10.8
NM to THR	0	0.5	0.9	2.3	5.4	9.1	10.6

## MINIMA

THR elev. 298

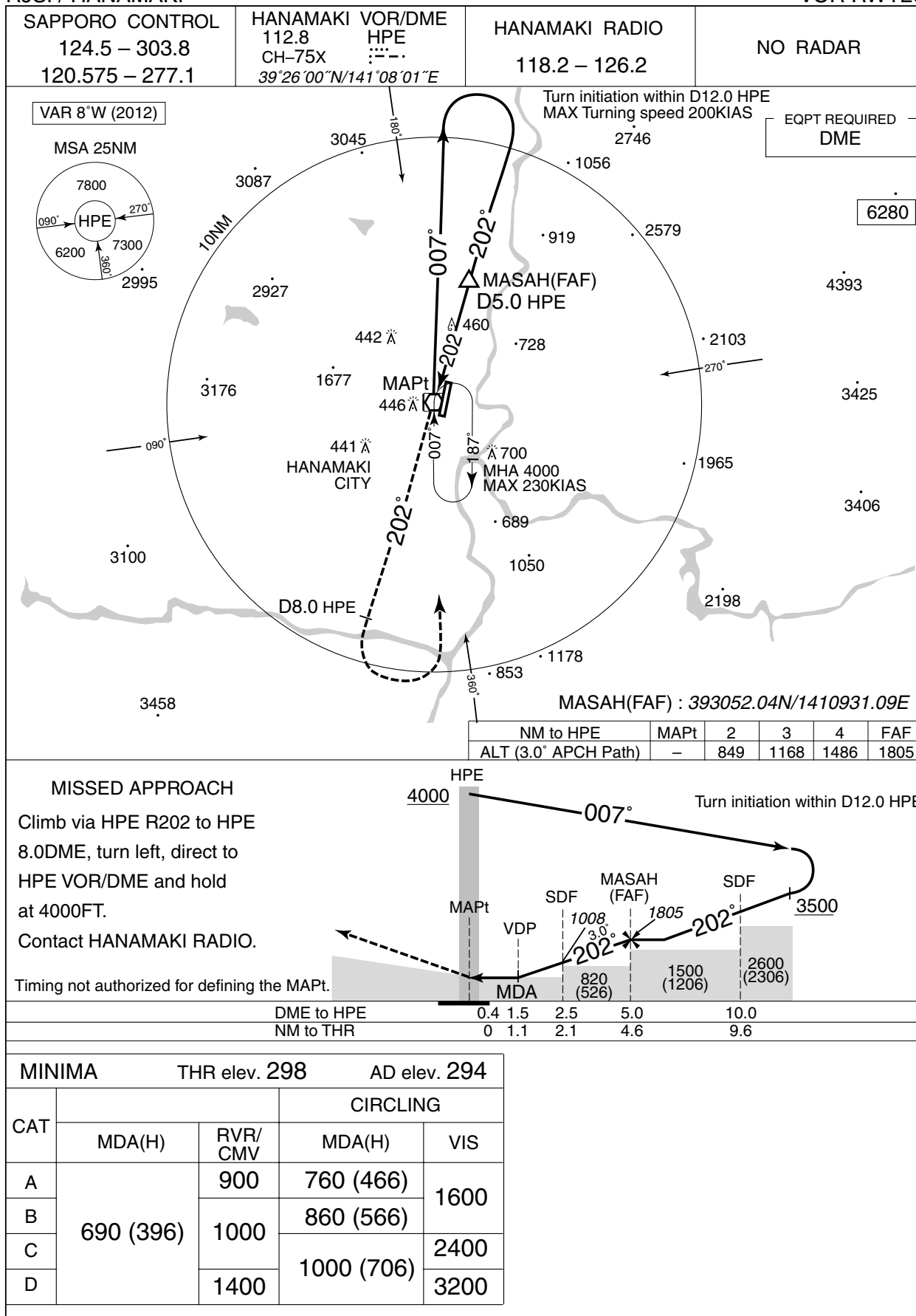
AD elev. 294

CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	498 (200)	550	640 (346)	900	760 (466)	1600
B				1000	860 (566)	
C				1400	1000 (706)	2400
D						3200

INSTRUMENT APPROACH CHART

RJSI / HANAMAKI

VOR RWY20



## RJSI / HANAMAKI

SAPPORO CONTROL  
124.5 – 303.8  
120.575 – 277.1

HANAMAKI VOR/DME  
112.8 HPE  
CH-75X  
39°26'00"N/141°08'01"E

HANAMAKI RADIO  
118.2 – 126.2

NO RADAR

VAR 8°W (2012)

MSA 25NM

EQPT REQUIRED  
DME

6280

SHIHO(FAF) : 392005.53N/1410711.95E  
3458

MAPt 446  
D0.9 HPE  
441  
HANAMAKI CITY

SHIHO (FAF)  
D5.9 HPE

MHA4500  
MAX 230KIAS

700

689

1050

1178

853  
Turn initiation within D11.0 HPE  
MAX Turning speed 200KIAS

NM to HPE	FAF	5	4	3	2	MAPt
ALT (3.0° APCH Path)	1925	1626	1308	989	671	—

Turn initiation within D11.0 HPE

4500 HPE

178°

SHIHO (FAF)

1925

830

3.0°

SDF VDP

MAPt

2300

014°

014°

1500 (1217)

750 (467)

MDA

MISSED APPROACH

Climb via HPE R014 to HPE  
6.0DME, turn right, proceed to HPE  
VOR/DME and hold at 4500FT.  
Contact HANAMAKI RADIO.

Timing not authorized for defining the MAPt.

	5.9	2.5	1.9	0.9	DME to HPE
	5.0	1.6	1.0	0	NM to THR
Missed APCH climb gradient MNM 3.6%					
MINIMA		THR elev. 283		AD elev. 294	
CAT			CIRCLING		
	MDA(H)	CMV	MDA(H)	VIS	
A	640 (357)	1200	760 (466)	1600	
B		1300	860 (566)		
C		1400			
D	650 (367)	1600	1000 (706)	3200	

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

## INSTRUMENT APPROACH CHART

RJSI / HANAMAKI

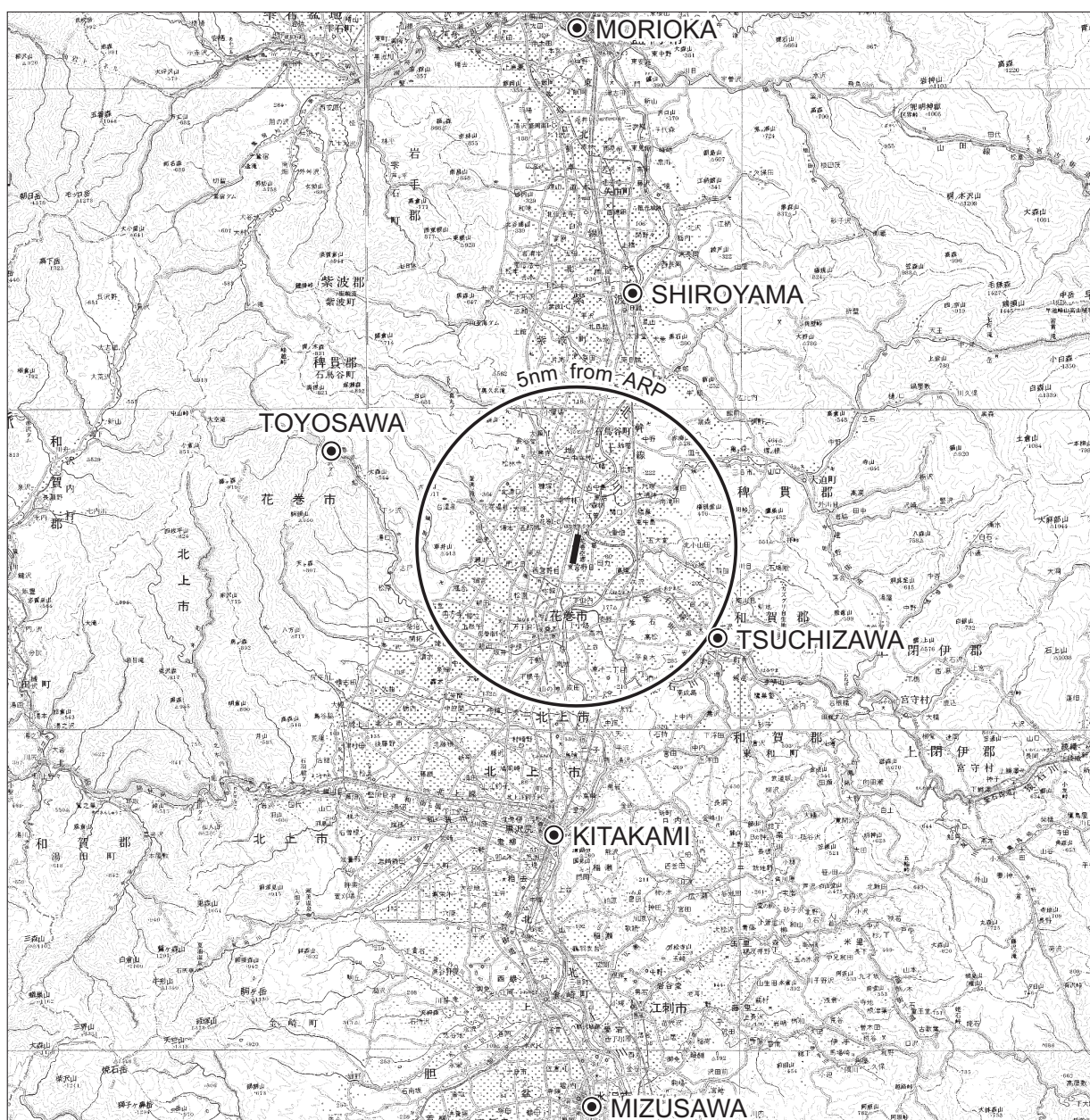
➔ RNAV(GNSS) RWY02





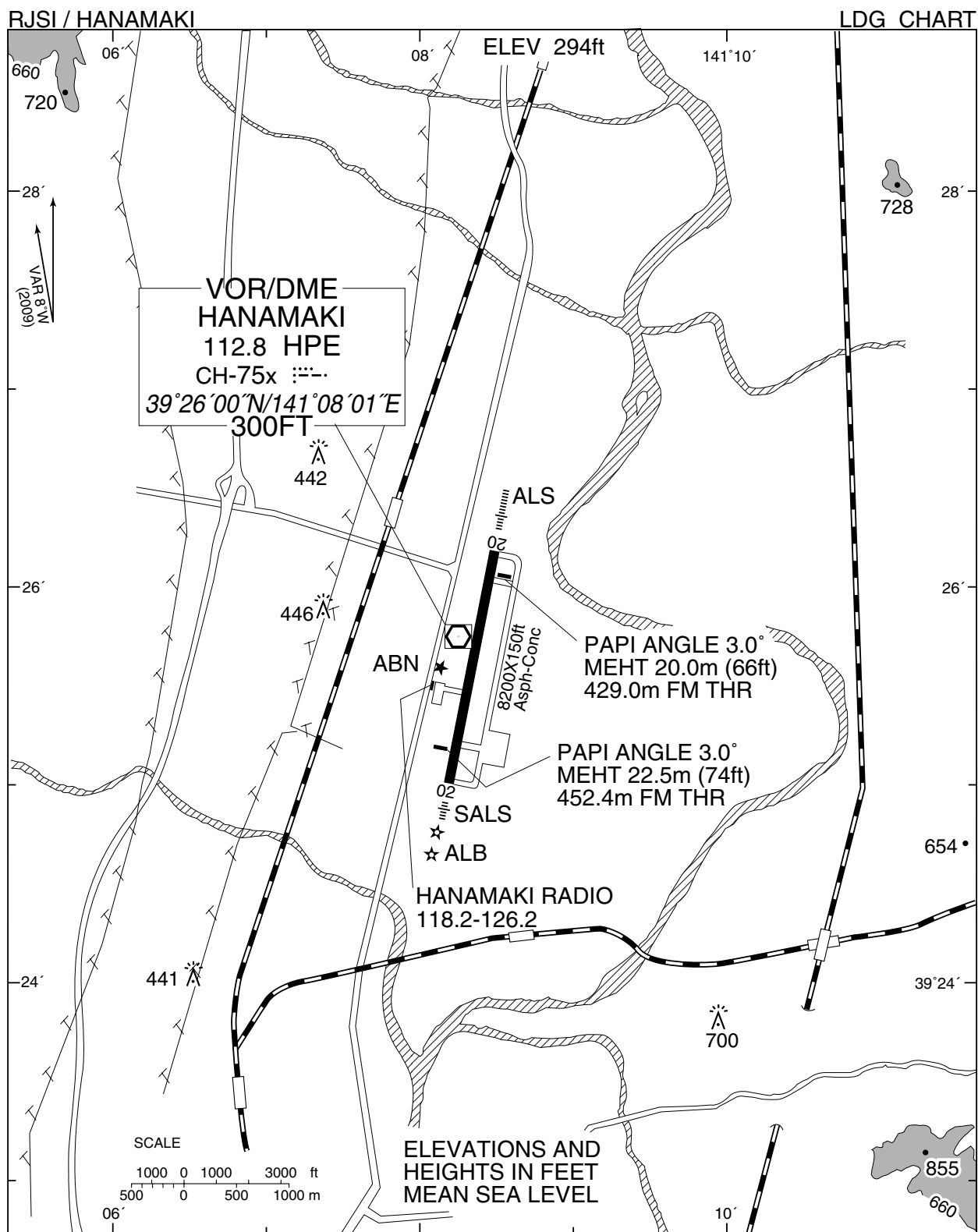
## RJSI / HANAMAKI

## Visual REP



Call sign	BRG / DIST from ARP	Remarks
盛岡 Morioka	006°/16.5NM	駅 Station
城山 Shiroyama	018°/ 8.4NM	城跡 The site of a castle
豊沢 Toyosawa	301°/ 8.0NM	豊沢湖ダム Dam
土沢 Tsuchisawa	127°/ 5.1NM	駅 Station
北上 Kitakami	192°/ 8.9NM	駅 Station
水沢 Mizusawa	186°/17.5NM	駅 Station





RJSI / HANAMAKI

Minimum Vectoring Altitude CHART

