

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.

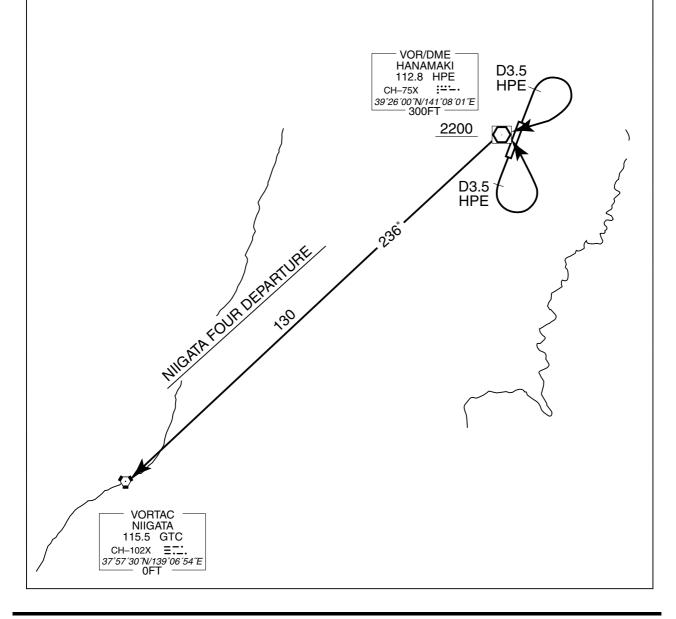
Cross HPE VOR/DME at or above 2200 FT.

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.



RJSI / HANAMAKI SID

HANAMAKI REVERSAL TWO DEPARTURE

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

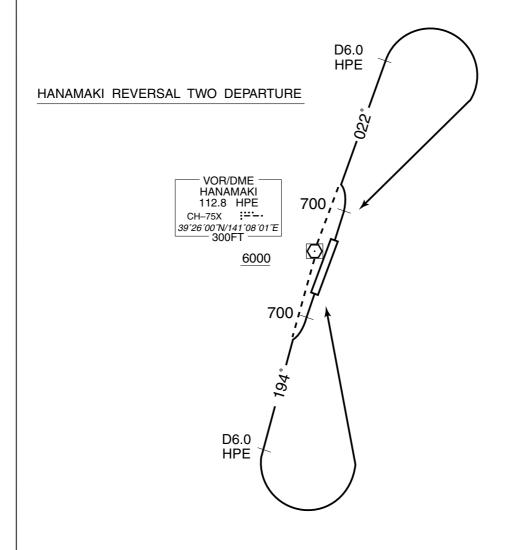
RWY 20: Climb RWY HDG to 700FT, via HPE R194 to 6.0 DME, turn left...

...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.



RJSI / HANAMAKI **RNAV SID** SAMBO ONE DEPARTURE Basic RNP1 Note GNSS required. VAR 9°W (2019) SAMBO 401115.9N 1405701.4E DASCO 395109.2N 1410826.4E AKARI 394317.5N 1410818.3E SAMBO ONE DEPARTURE <u>700</u> SI010 019° 392659.4N 1410155.6E

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.

1300

199

VOR/DME HANAMAKI

39°26′00″N/141°08′01″E 300FT

112.8

CH-75X

HPE

<u>:--</u>.

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.

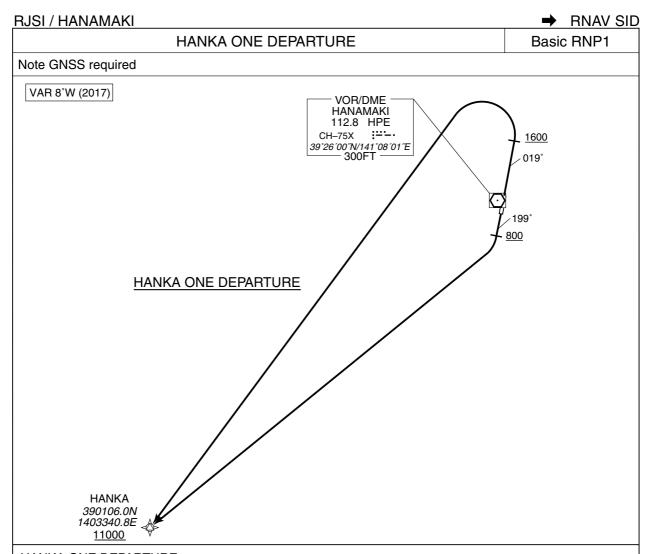
OBST ALT 3117FT located at 10.7NM 350° FM end of RWY20.

RWY02

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	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

П	TVV I ZU											
	Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
!	Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
	001	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
1												



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.

-8.4

RWY02

002

⊓VV I UZ											
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	019 (010.7)	-8.4	_	_	+1600	_	_	Basic RNP1
002	DF	HANKA	_	-	-8.4	-	L	+11000	_	_	Basic RNP1
RWY20	RWY20										
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	199 (190.7)	-8.4	_	_	+800	_	_	Basic RNP1

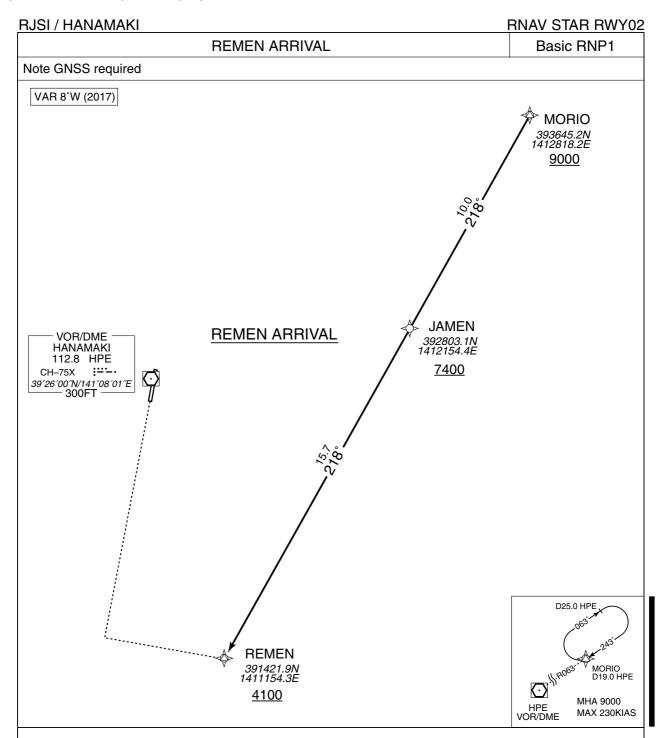
R

+11000

HANKA

DF

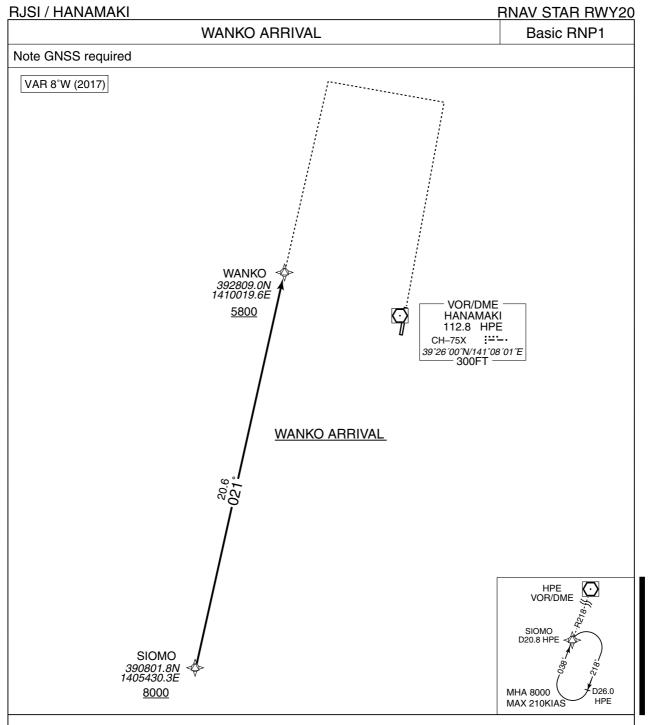
Basic RNP1



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		Turn Direction	Altitude (FT)	Speed (KIAS)		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

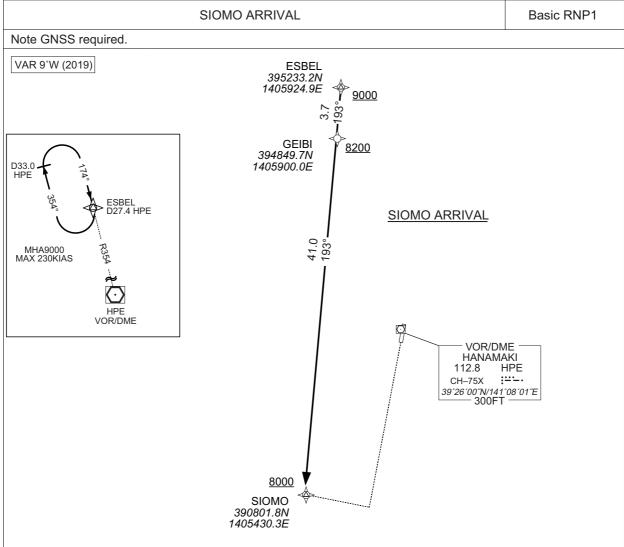


WANKO ARRIVAL

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		Turn Direction	Altitude (FT)	•		Navigation Specification
001	IF	SIOMO	_	_	-8.4	-	_	+8000	_	_	Basic RNP1
002	TF	WANKO	_	021 (012.6)	-8.4	20.6	_	+5800	_	_	Basic RNP1

RJSI / HANAMAKI RNAV STAR RWY02

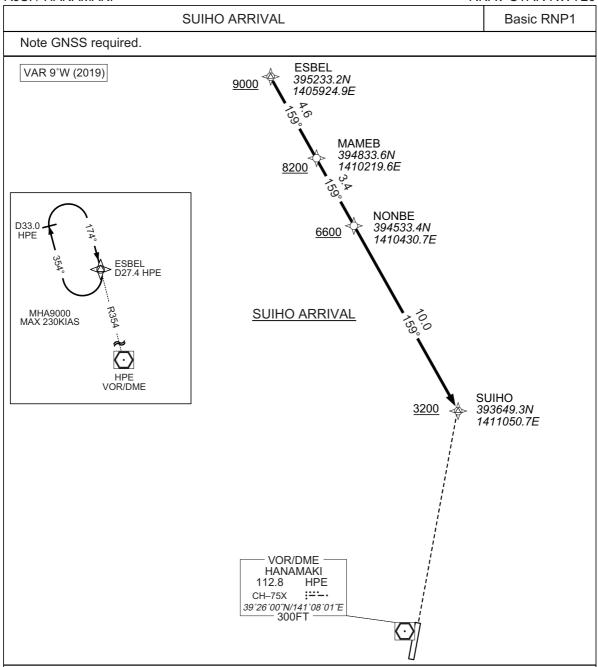


SIOMO ARRIVAL

From ESBEL at or above 9000FT, to GEIBI at or above 8200FT, to SIOMO at or above 8000FT.

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	GEIBI	_	193 (184.9)	-8.6	3.7	_	+8200	_	_	Basic RNP1
003	TF	SIOMO	_	193 (184.9)	-8.6	41.0	_	+8000	_	_	Basic RNP1

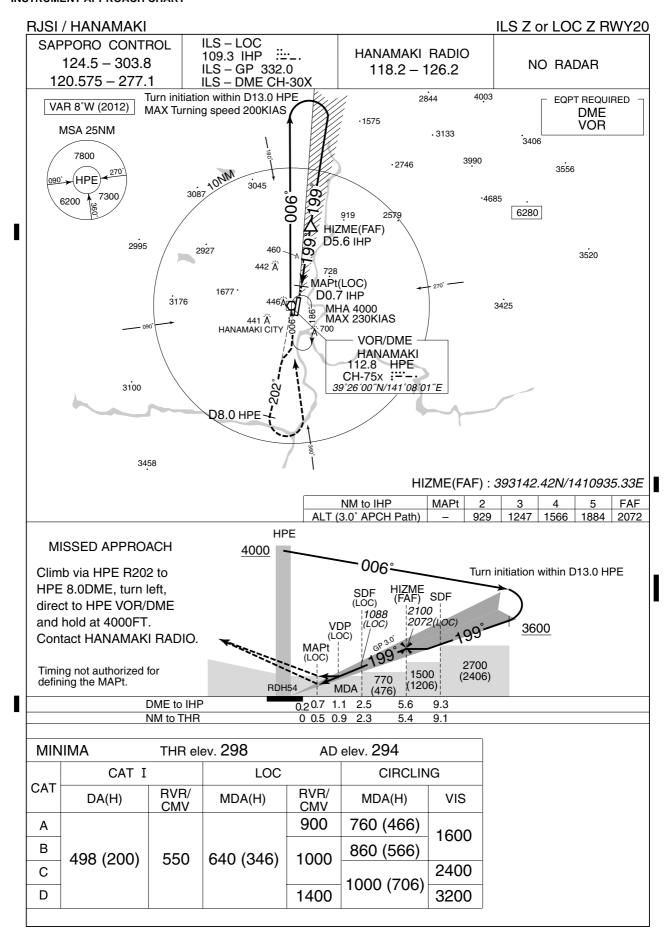
RJSI / HANAMAKI RNAV STAR RWY20

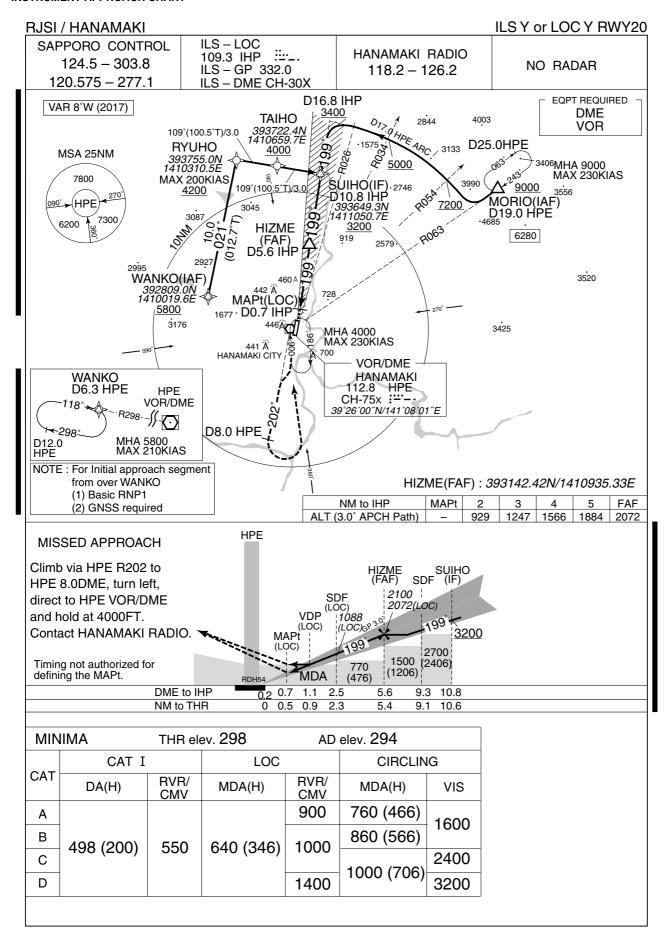


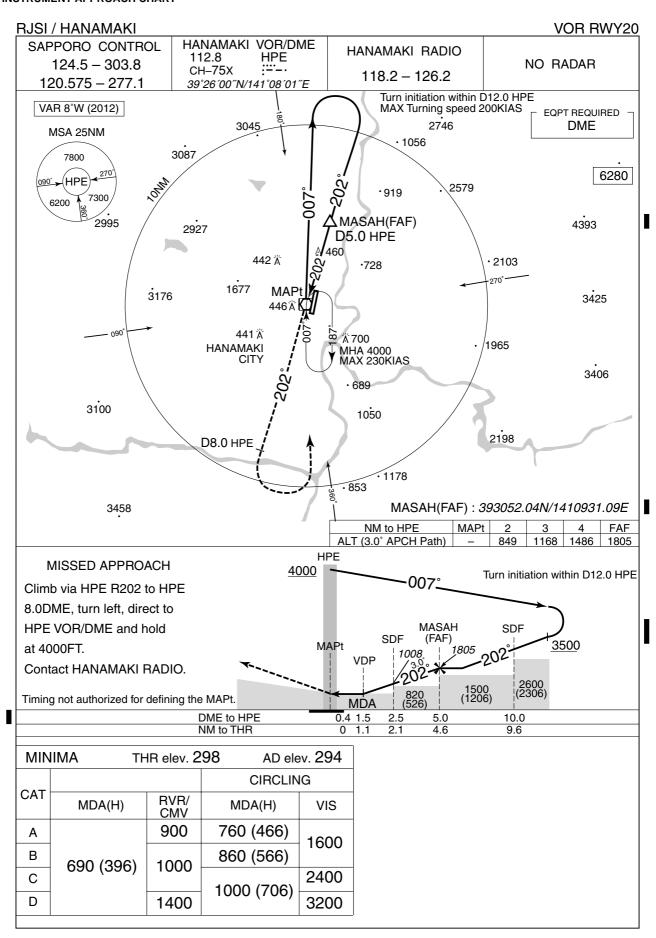
SUIHO ARRIVAL

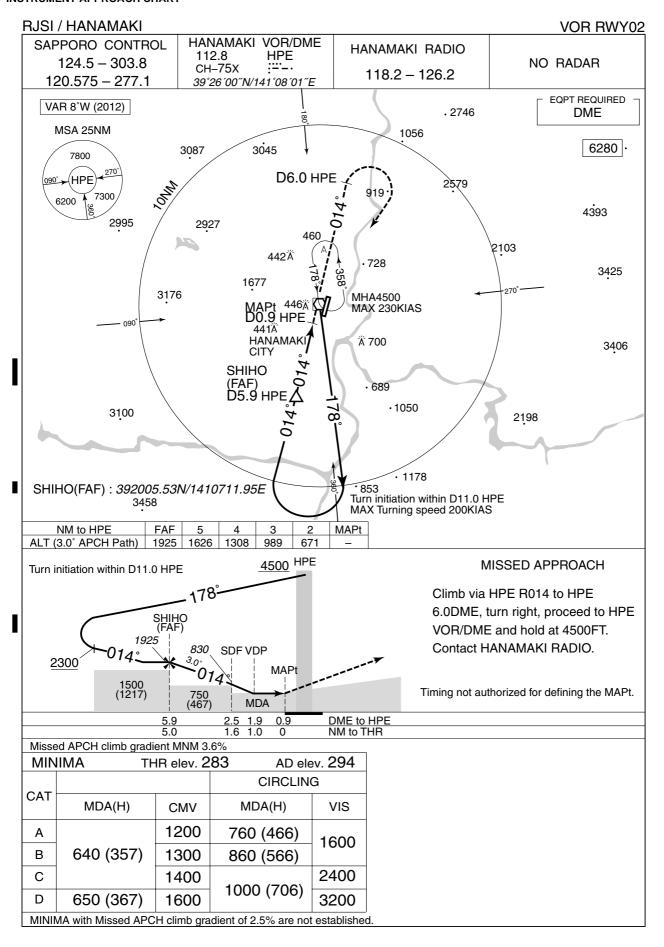
From ESBEL at or above 9000FT, to MAMEB at or above 8200FT, to NONBE at or above 6600FT, to SUIHO at or above 3200FT.

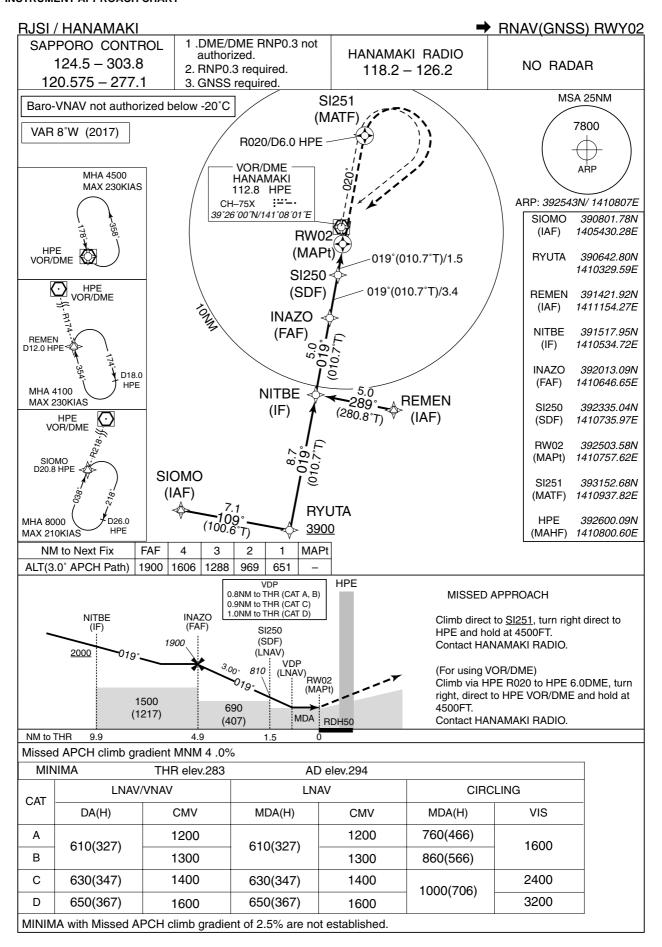
- 1												
)	Serial Number	Path Desc- riptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direc -tion	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
	001	IF	ESBEL	_	_	-8.6	_	_	+9000	-	_	Basic RNP1
2	002	TF	MAMEB	_	159 (150.7)	-8.6	4.6	_	+8200	_	_	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
<i>'</i>												

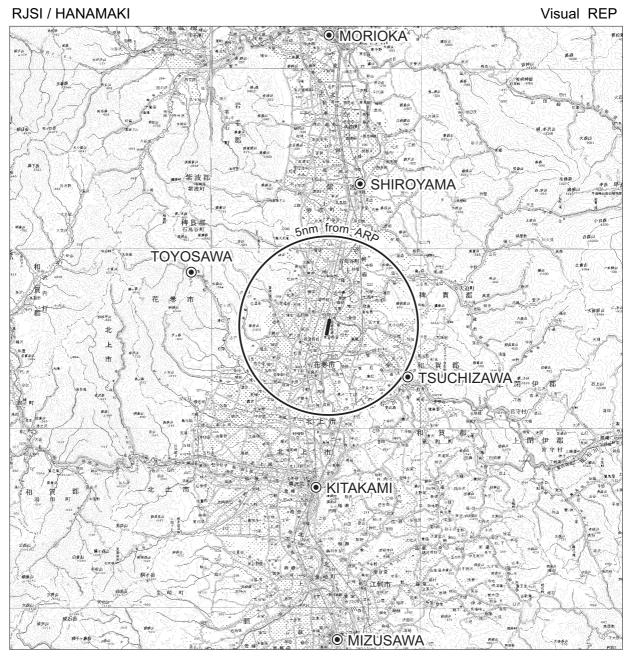












Call sign	BRG / DIST from ARP	Remarks				
盛 岡 Morioka	006°/16.5NM	駅 Station				
城 山 Shiroyama	018°/ 8.4NM	城跡 The site of a castle				
豊 沢 Toyosawa	301°/ 8.0NM	豊沢湖ダム Dam				
土 沢 Tsuchisawa	127°/ 5.1NM	駅 Station				
北 上 Kitakami	192°/ 8.9NM	駅 Station				
水 沢 Mizusawa	186°/17.5NM	駅 Station				



