

MARKING AIDS

Mandatory
instruction
marking



VAR9® W-2009
Annual Change 1.2% E



SEQUENCED FLASHING LIGHTS
(SFL-V)



RUNWAY ALIGNMENT INDICATOR



CHANGE:STOP BAR LGT abolished

AIRCRAFT PARKING/DOCKING CHART
RJCH / HAKODATE

AD CHART

CHANGE : UHF frequency(TWR) deleted.

HAKODATE AIRPORT
ELEV34.1m (111.9ft)

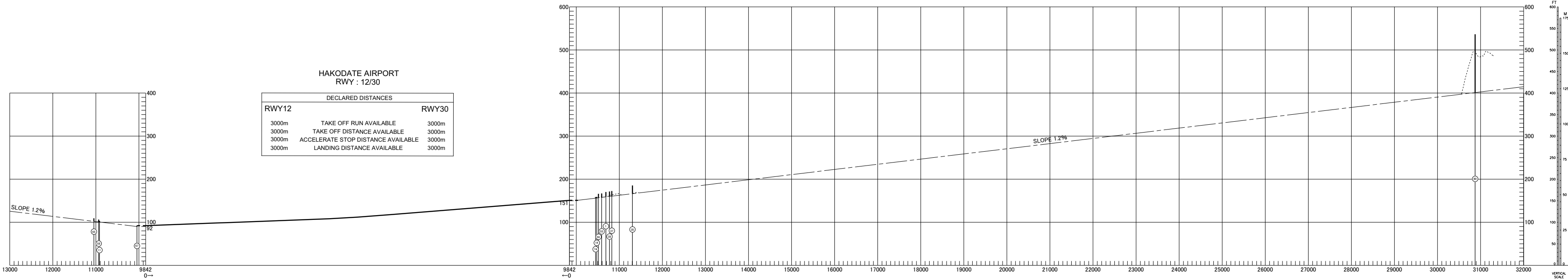
Designation	Call Sign	Frequency (MHz)
ATIS	Hakodate Airport	126.6
TWR	Hakodate Tower	118.35 126.2



AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC
Transverse Mercator Projection

MAGNETIC VARIATION 10°W - OCT 2022



LEGEND	AMENDMENT RECORD	
	Nr	ENTERED BY
① IDENTIFICATION NUMBER		
⊙ POLE, TOWER, SPIRE, ANTENNA, ETC		
* TREE		
RAILROAD		
TRANSMISSION LINE OR OVERHEAD CABLE		
▲ TRIANGULATION POINT		
★ AERONAUTICAL GROUND LIGHT		
■ BUILDING OR LARGE STRUCTURE		
CONTOURS(10)		



CHANGE: Update

AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC
Transverse Mercator Projection



AERODROME OBSTACLE CHART - ICAO
TYPE B

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC
Transverse Mercator Projection



STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

SID

HAKODATE REVERSAL SIX DEPARTURE

RWY 12: Climb RWY HDG to 600FT, turn right HDG239°...

RWY 30: Climb RWY HDG to 500FT, turn left HDG149°...

...to intercept and proceed via HWE R194 to 3000FT, turn right direct to HWE VOR/DME.
Cross HWE VOR/DME at or above 5000FT.

Note RWY12 : 4.0% climb gradient required up to 600FT.

OBST ALT 657FT located at 3.4NM 108° FM end of RWY12.

RWY30 : 5.2% climb gradient required up to 1600FT.

OBST ALT 1294FT located at 4.6NM 268° FM end of RWY30.

CHANGE : PROC renamed(HAKODATE REVERSAL SIX DEPARTURE), PROC abolished(HAKODATE SOUTH SEVEN DEPARTURE, TAPPI SEVEN DEPARTURE, YUWA TRANSITION, ESASI SIX DEPARTURE, TIKYU ONE DEPARTURE), Note(HAKODATE REVERSAL SIX DEPARTURE).

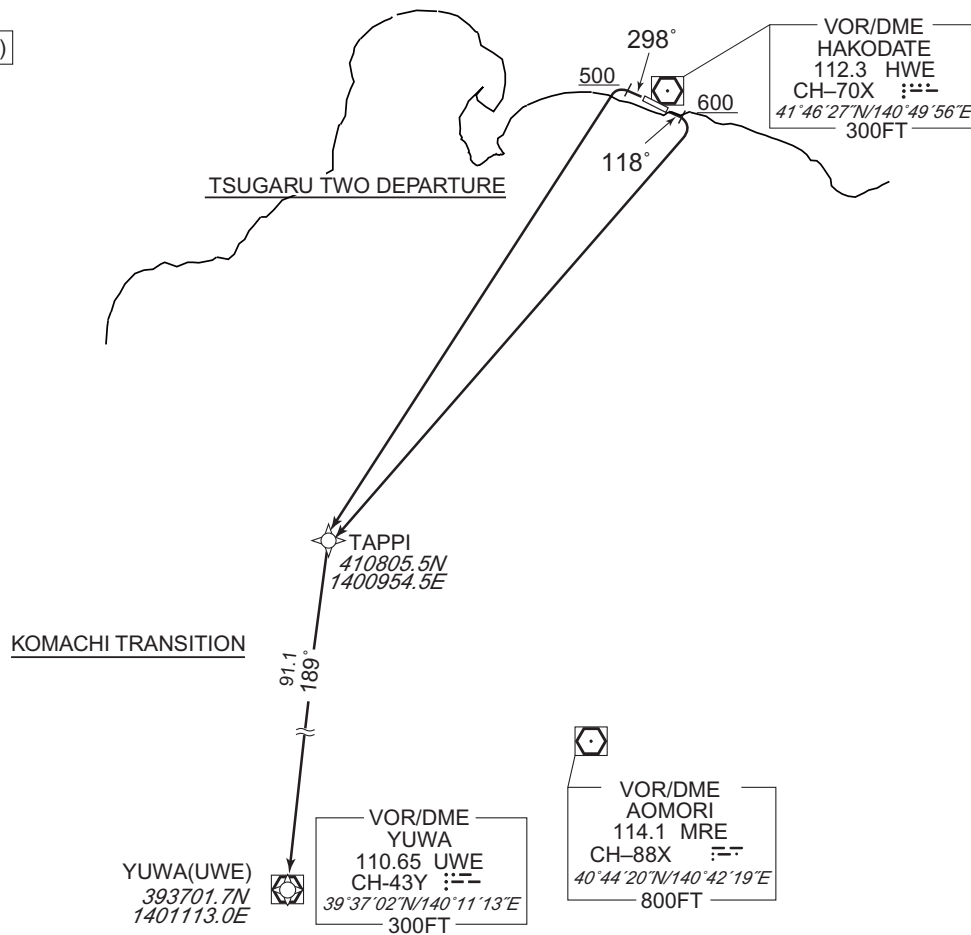


CHANGE : VAR. PROC renamed(TSUGARU TWO DEPARTURE). Navigation specification. Sensor for RNAV. PROC course(TSUGARU TWO DEPARTURE, KOMACHI TRANSITION). NOTE(TSUGARU TWO DEPARTURE).

RNAV SID and TRANSITION

Basic RNP1

VAR 10°W (2022)



RWY12 : Climb on HDG118° at or above 600FT, turn right direct to TAPPI.
RWY30 : Climb on HDG298° at or above 500FT, turn left direct to TAPPI.

NOTE RWY12 : 4.0% climb gradient required up to 600FT.
OBST ALT 657FT located at 3.4NM 108° FM end of RWY12.
RWY30 : 5.2% climb gradient required up to 1600FT.
OBST ALT 1294FT located at 4.6NM 268° FM end of RWY30.

From TAPPI, to UWE.

STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

RNAV SID and TRANSITION

TSUGARU TWO DEPARTURE

RWY12

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	—	—	118 (108.0)	-9.6	—	—	+600	—	—	Basic RNP1
002	DF	TAPPI	—	—	-9.6	—	R	—	—	—	Basic RNP1

RWY30

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	—	—	298 (288.1)	-9.6	—	—	+500	—	—	Basic RNP1
002	DF	TAPPI	—	—	-9.6	—	L	—	—	—	Basic RNP1

KOMACHI 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	TAPPI	—	—	-9.6	—	—	—	—	—	Basic RNP1
002	TF	UWE	—	189 (179.4)	-9.6	91.1	—	—	—	—	Basic RNP1

CHANGE : VAR. PROC course(TSUGARU TWO DEPARTURE, KOMACHI TRANSITION). NAVIGATION SPECIFICATION.

STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

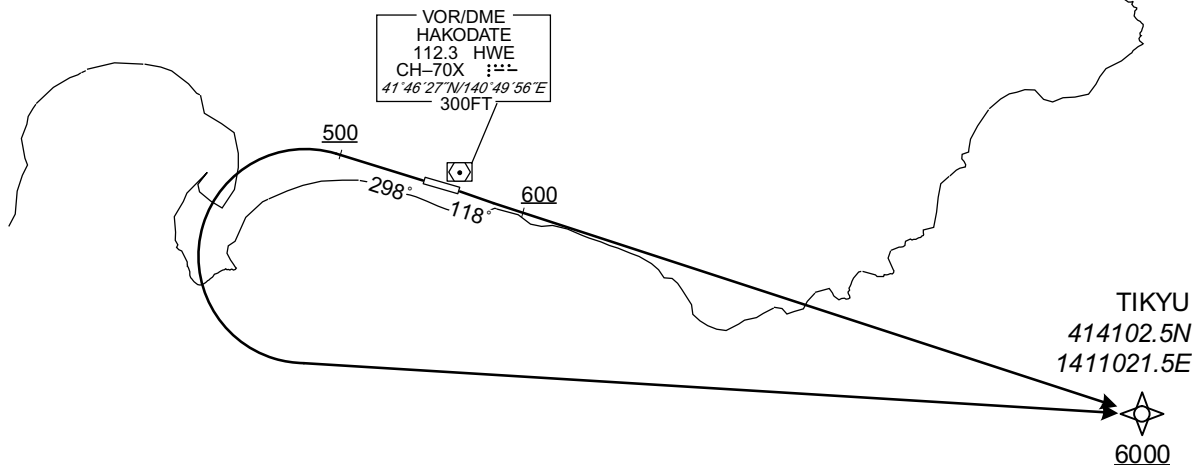
RNAV SID

TOI ONE DEPARTURE

Basic RNP1

Note GNSS required.

VAR 10°W (2022)



RWY12 : Climb on HDG118° at or above 600FT, direct to TIKYU at or above 6000FT.

RWY30 : Climb on HDG298° at or above 500FT, turn left direct to TIKYU at or above 6000FT.

NOTE RWY12 : 6.0% climb gradient required up to 1500FT.

OBST ALT 1247FT located at 3.6NM 101° FM end of RWY12.

RWY30 : 5.2% climb gradient required up to 1600FT.

OBST ALT 1294FT located at 4.6NM 268° FM end of RWY30.

RWY12

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	-	—	118 (108.1)	-9.6	—	—	+600	—	—	Basic RNP1
002	DF	TIKYU	—	—	-9.6	—	—	+6000	—	—	Basic RNP1

RWY30

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	-	—	298 (288.1)	-9.6	—	—	+500	—	—	Basic RNP1
002	DF	TIKYU	—	—	-9.6	—	L	+6000	—	—	Basic RNP1

CHANGE : New PROC.

STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

RNAV SID

OKUSHIRI ONE DEPARTURE

Basic RNP1

Note GNSS required.

VAR 10°W (2022)



RWY12 : Climb on HDG118° at or above 600FT, turn right direct to ESASI at or above 5000FT.
RWY30 : Climb on HDG298° at or above 700FT, direct to ESASI at or above 5000FT.

NOTE RWY12 : 4.0% climb gradient required up to 600FT.

OBST ALT 657FT located at 3.4NM 108° FM end of RWY12.

RWY30 : 3.4% climb gradient required up to 700FT.

OBST ALT 1969FT located at 12.2NM 304° FM end of RWY30.

RWY12

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	-	—	118 (108.1)	-9.6	—	—	+600	—	—	Basic RNP1
002	DF	ESASI	—	—	-9.6	—	R	+5000	—	—	Basic RNP1

RWY30

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	-	—	298 (288.1)	-9.6	—	—	+700	—	—	Basic RNP1
002	DF	ESASI	—	—	-9.6	—	—	+5000	—	—	Basic RNP1

CHANGE : New PROC.

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STANDARD ARRIVAL CHART - INSTRUMENT

RJCH / HAKODATE

RNAV STAR RWY30

CHIYO ARRIVAL
YAKEI ARRIVAL

Basic RNP1

Note GNSS required.

VAR 10°W (2022)



CHIYO ARRIVAL

From UPLOK at or above 8000FT, to OKTOL at or above 6000FT, to CHIYO at or above 3500FT.

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	UPLOK	—	—	-9.6	—	—	+8000	—	—	Basic RNP1
002	TF	OKTOL	—	133 (123.9)	-9.6	8.4	—	+6000	—	—	Basic RNP1
003	TF	CHIYO	—	182 (172.4)	-9.6	11.3	—	+3500	—	—	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	UPLOK	130 (120.0)	-9.6	1.0(-14000)	R	8000	13000	-230(-13000)	Basic RNP1

YAKEI ARRIVAL

From TAXIR at or above 6000FT, to YAKEI 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	TAXIR	—	—	-9.6	—	—	+6000	—	—	Basic RNP1
002	TF	YAKEI	—	052 (042.9)	-9.6	13.8	—	+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	TAXIR	015 (005.3)	-9.6	1.0(-14000)	L	4000	FL140	-220(-14000)	Basic RNP1

CHANGE : VAR. CHIYO ARRIVAL established. Navigation specification. RNAV HLDG established(TAXIR, UPLOK).
HLDG for using NAVAID abolished(TAXIR).

STANDARD ARRIVAL CHART - INSTRUMENT

RJCH / HAKODATE

RNAV STAR RWY12



CHANGE : VAR. PATRA NORTH ARRIVAL established. PROC renamed(PATRA SOUTH ARRIVAL). Navigation specification.
RNAV HLDG established(TAXIR, UPLOK). HLDG for using NAVAID abolished(TAXIR).

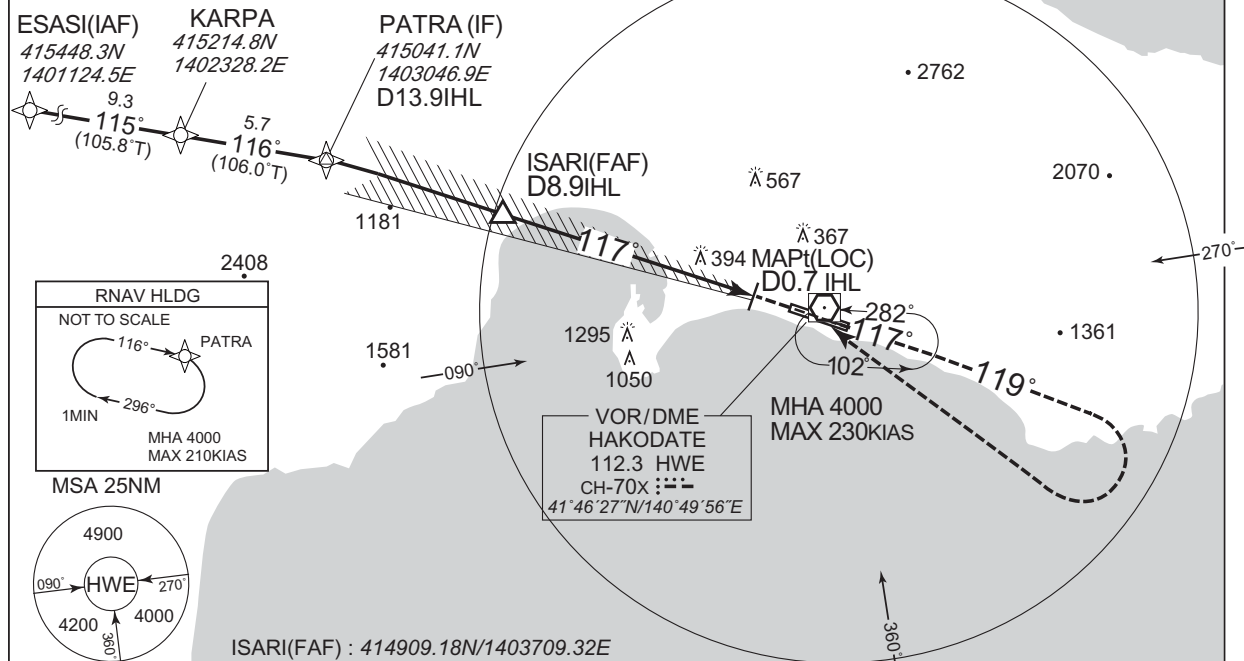
RJCH / HAKODATE

ILS Z or LOC Z RWY12

VAR 10°W (2022)

NOTE : For Initial approach segment
(1) Basic RNP1.
(2) GNSS required.

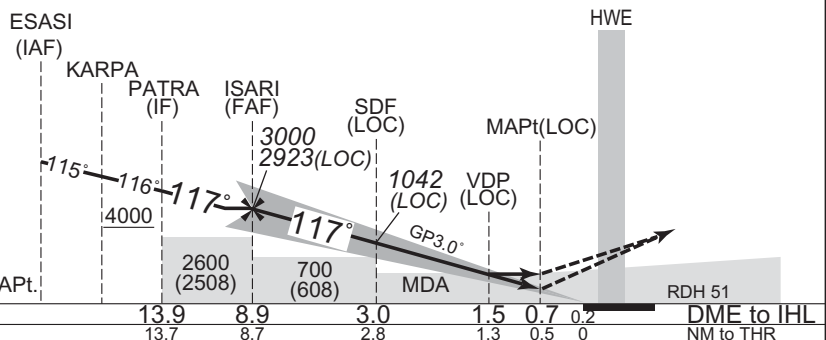
EQPT REQUIRED
DME
VOR



NM to IHL	FAF	8	7	6	5	4	3	2	MAPt
ALT (3.0° APCH Path)	2923	2634	2316	1997	1679	1361	1042	724	—

Climb on HDG117° to 600FT.
via HWE R119 to 4000FT,
turn right, direct to HWE
VOR/DME and hold.
Contact HAKODATE APP.

Timing not authorized for defining the MAPt.



Missed APCH climb gradient MNM 5.0%

MINIMA		THR elev. 92		AD elev. 112		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	292 (200)	700	540 (448)	1200	550 (438)	1600
B				1300	570 (458)	
C	299 (207)			1400	600 (488)	2400
D	309 (217)			1600	690 (578)	3200

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

CHANGE : VAR. KARPA established. course FM ESAS1 to PATRA. RNAV HLDG established(PATRA).
HLDG for NAVAIDS abolished(PATRA, ESAS1).

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

ILS Y or LOC Y RWY12

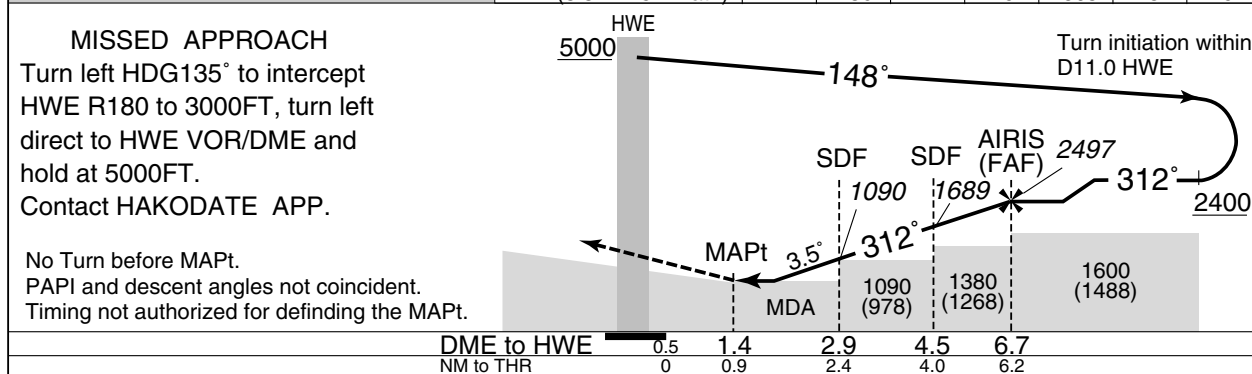


INSTRUMENT APPROACH CHART

RJCH / HAKODATE

VOR RWY30

HAKODATE APP 119.0 – 121.0 127.9	HAKODATE VOR/DME 112.3 HWE CH-70X 41°46'27"N/140°49'56"E	HAKODATE TOWER 118.35 – 126.2	RADAR AVBL ATIS 126.6
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MINIMA					THR elev. 151	AD elev. 112
CAT			CIRCLING			
	MDA(H)	CMV	MDA(H)	VIS		
A	730 (618)	1000	730 (618)	1600		
B		1200		2400		
C				3200		
D		1600				

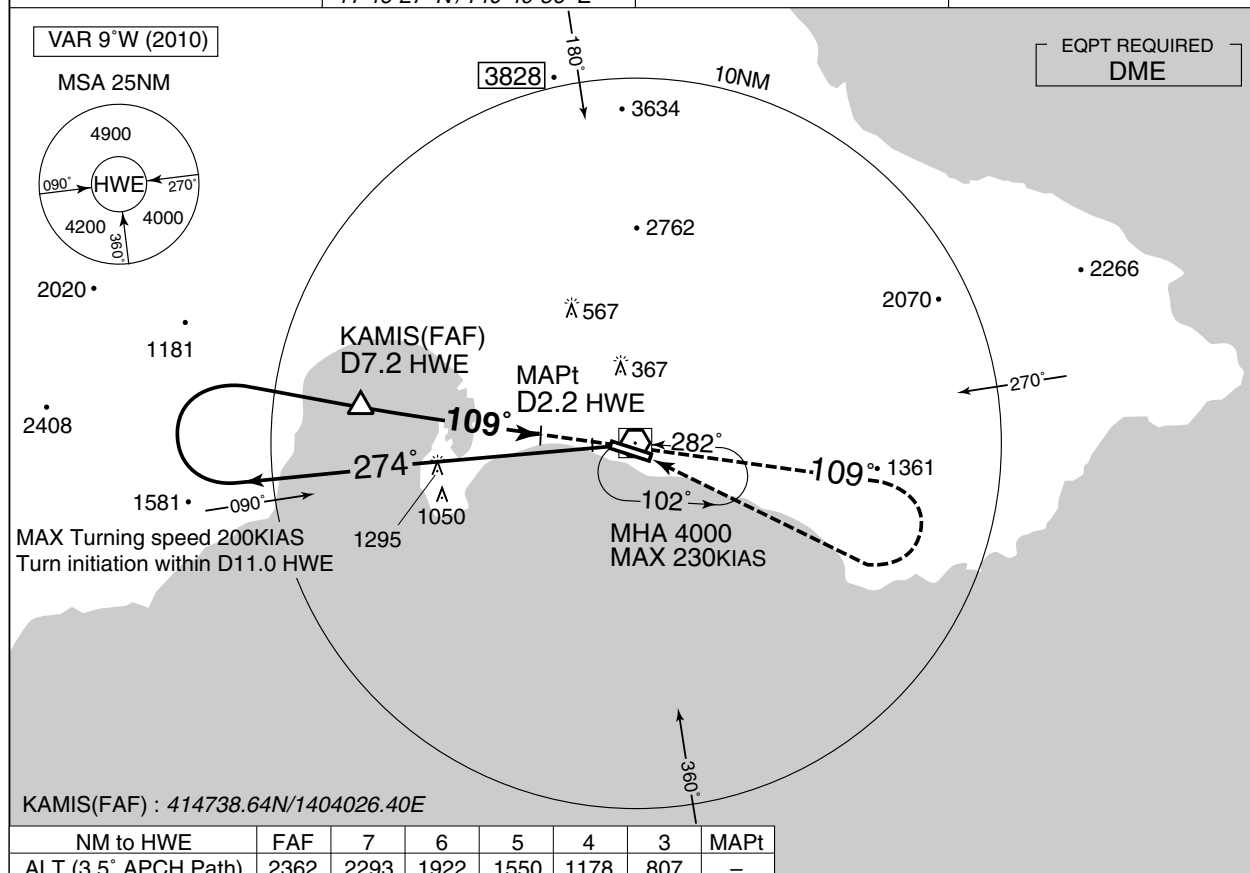
Circling to SOUTH side of RWY only.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

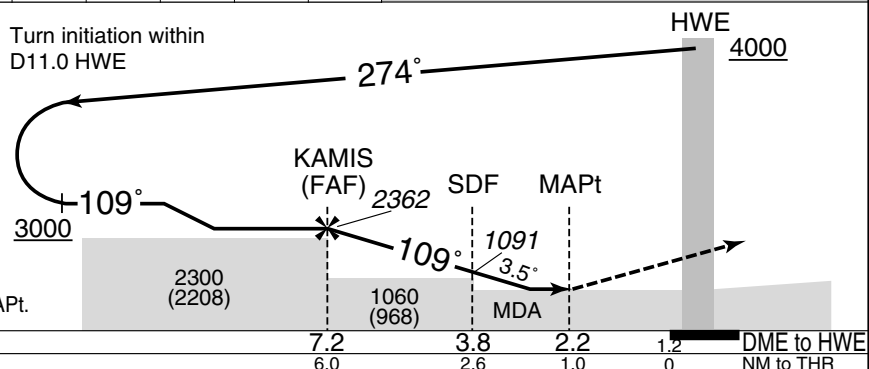
VOR RWY12

HAKODATE APP 119.0 – 121.0 127.9	HAKODATE VOR/DME 112.3 HWE CH-70X 41°46'27"N/140°49'56"E	HAKODATE TOWER 118.35 – 126.2	RADAR AVBL ATIS 126.6
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MISSED APPROACH
Climb via HWE R109 to 4000FT, turn right direct to HWE VOR/DME and hold.
Contact HAKODATE APP.

PAPI and descent angles not coincident.
Timing not authorized for defining the MAPt.



Missed APCH climb gradient MNM 3.6%

MINIMA THR elev. 92 AD elev. 112

CAT	CIRCLING			
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	530 (438)	1200	550 (438)	1600
B		1300	570 (458)	
C		1400	600 (488)	
D		1600	690 (578)	

Circling to SOUTH side of RWY only.

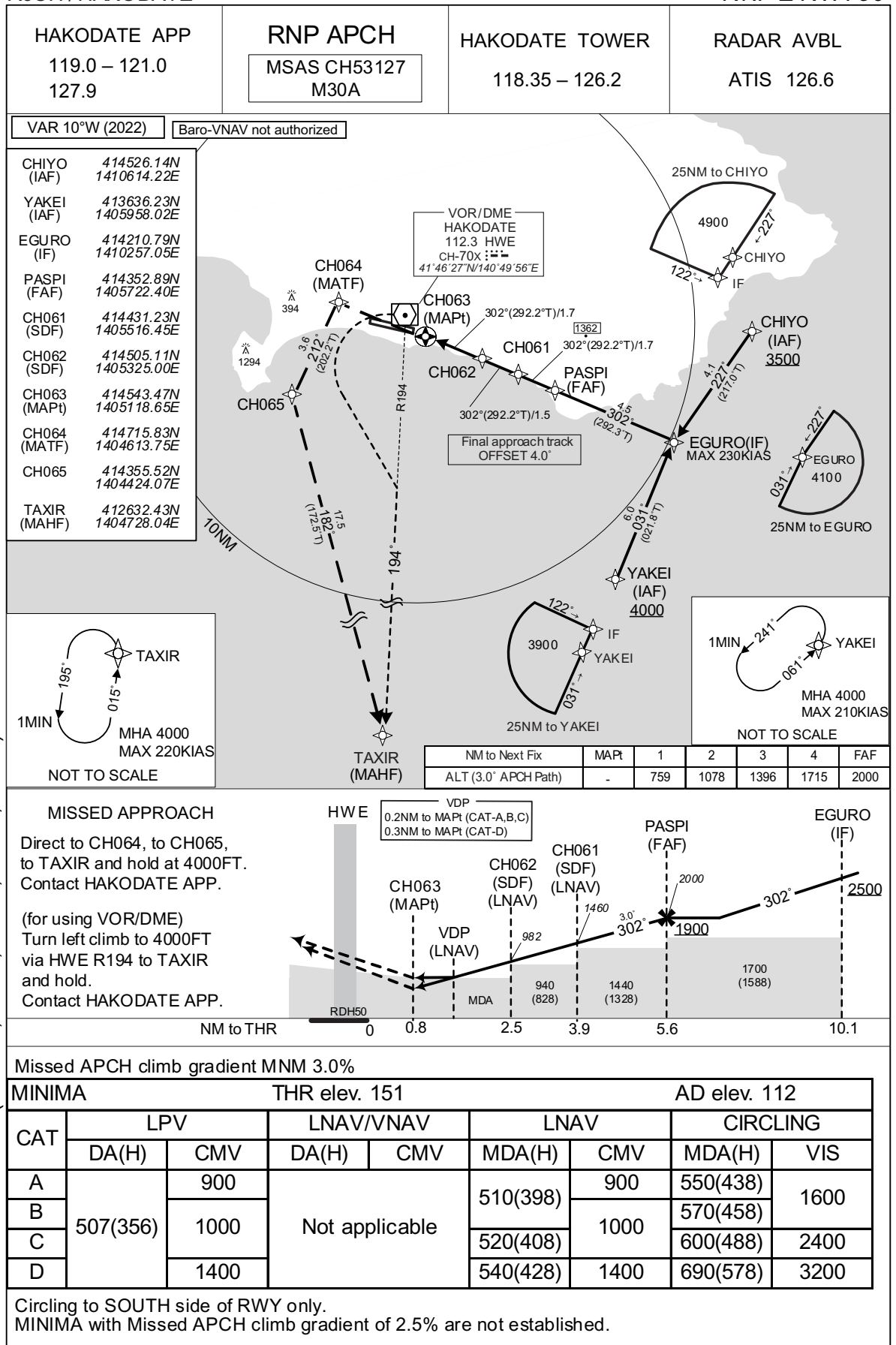
MINIMA with Missed APCH climb gradient of 2.5% are not established.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNP Z RWY30

CHANGE : VAR. MSAS CH added. PROC course. FIX established(EGURO,PASPI,CH061,CH062,CH063,CH064,CH065).
FIX abolished(ROCCA,IKARU,CH058,CH059,CH060). PROC ALT. MINIMA for LPV established. MINIMA for LNAV.



INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNP Z RWY30

FAS DATA BLOCK

Operation type	0	LTP/FTP ellipsoidal height	+00803
SBAS service provider identifier	2	FPAP latitude	414636.9835N
Airport identifier	RJCH	FPAP longitude	1404822.0795E
Runway	30	Threshold crossing height	00015.0
Approach performance designator	0	TCH units selector	1
Route indicator	Z	Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M30A	∠ length offset	0000
LTP/FTP latitude	414600.5615N	HAL	40.0
LTP/FTP longitude	1405022.5820E	VAL	50.0
CRC remainder	5F964DC7		

Required additional data

LTP/FTP orthometric height	46.0
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CHANGE : Description of FAS DATA BLOCK ITEM(CRC remainder).

RJCH / HAKODATE

RNP Y RWY30(AR)

For uncompensated Baro-VNAV systems, procedure not authorized below -20°C / above 45°C



Climb to 4000FT, to CH272,
to CH056 via fixed radius turn,
to TAXIR and hold.
Contact HAKODATE APP.



MINIMA	THR elev. 151	AD elev. 112
CAT	RNP 0.30	
	DA(H)	CMV
A	-	-
B		
C	486(335)	1000
D	496(345)	1400

Authorization Required

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNP Y RWY30(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	TAXIR	-	-	-9.6	-	-	+4000	-	-	-
002	TF	SABIO	-	029 (019.2)	-9.6	10.1	-	+2500	-	-	1.0
003	TF	TRAPI	-	029 (019.2)	-9.6	5.0	-	2500	-	-	1.0
004	TF	CH054	-	029 (019.2)	-9.6	1.4	-	2041	-	-3.00	0.3
005	RF Center: CHRF3 r=2.50NM	CH055	-	-	-9.6	4.0	L	774	-	-3.00	0.3
006	TF	RW30	Y	298 (288.1)	-9.6	1.8	-	201	-	-3.00/50	0.3
007	TF	CH272	-	298 (288.1)	-9.6	5.6	-	-	-	-	1.0
008	RF Center: CHRF4 r=2.90NM	CH056	-	-	-9.6	6.6	L	-	-	-	1.0
009	TF	TAXIR	-	168 (158.5)	-9.6	18.6	-	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	TAXIR	015 (005.3)	-9.6	1.0 (-14000)	L	4000	FL140	-220 (-14000)	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
TAXIR	412632.43N / 1404728.04E	CHRF3	414301.30N / 1405136.09E
SABIO	413606.58N / 1405154.81E	CHRF4	414456.26N / 1404159.49E
TRAPI	414049.99N / 1405407.02E		
CH054	414211.71N / 1405445.20E		
CH055	414524.03N / 1405238.26E		
RW30	414557.54N / 1405021.00E		
CH272	414742.10N / 1404311.31E		
CH056	414352.33N / 1403822.94E		

CHANGE : VAR: Course FM RW30 to CH272. RNAV HLDG established (TAXIR).

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNP Z RWY12



CHANGE : New PROC.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNP Z RWY12

FAS DATA BLOCK

Operation type	0	LTP/FTP ellipsoidal height	+00625
SBAS service provider identifier	2	FPAP latitude	414557.5735N
Airport identifier	RJCH	FPAP longitude	1405021.1555E
Runway	12	Threshold crossing height	00015.5
Approach performance designator	0	TCH units selector	1
Route indicator	Z	Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M12A	∠ length offset	0000
LTP/FTP latitude	414627.5895N	HAL	40.0
LTP/FTP longitude	1404817.5995E	VAL	50.0
CRC remainder	69B323C3		

Required additional data

LTP/FTP orthometric height	28.1
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CHANGE : Description of FAS DATA BLOCK ITEM(CRC remainder).

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNP Y RWY12(AR)

HAKODATE APP 119.0 - 121.0 127.9	RNP AR RF required.	HAKODATE TWR 118.35 - 126.2	RADAR AVBL ATIS 126.6
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For uncompensated Baro-VNAV systems, procedure not authorized below -20°C / above 45°C



Missed APCH climb gradient MNM 5.0%		
MINIMA	THR elev. 92	AD elev. 112
CAT	RNP 0.30	
	DA(H)	RVR/CMV
A	-	-
B	-	-
C	402(310)	1400
D	423(331)	1600

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

Authorization Required

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNP Y RWY12(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	TAXIR	-	-	-9.6	-	-	+4000	-	-	-
002	TF	BOHNI	-	350 (340.6)	-9.6	10.1	-	+2500	-	-	1.0
003	TF	YUNOK	-	350 (340.6)	-9.6	5.9	-	+2500	-	-	1.0
004	TF	CH271	-	350 (340.5)	-9.6	3.0	-	+2500	-185	-	1.0
005	RF Center: CHRF5 r=2.50NM	BESAR	-	-	-9.6	2.2	R	2500	-	-	1.0
006	RF Center: CHRF5 r=2.50NM	CH272	-	-	-9.6	3.4	R	1421	-	-3.00	0.3
007	TF	RW12	Y	118 (108.0)	-9.6	4.0	-	143	-	-3.00/51	0.3
008	TF	CH273	-	118 (108.1)	-9.6	5.4	-	-	-	-	1.0
009	TF	TAXIR	-	207 (197.6)	-9.6	19.1	-	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	TAXIR	015 (005.3)	-9.6	1.0 (-14000)	L	4000	FL140	-220 (-14000)	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
TAXIR	412632.43N / 1404728.04E	CHRF5	414519.29N / 1404209.46E
BOHNI	413606.23N / 1404258.19E		
YUNOK	414139.34N / 1404020.87E		
CH271	414429.13N / 1403900.50E		
BESAR	414635.08N / 1403916.36E		
CH272	414742.10N / 1404311.31E		
RW12	414627.62N / 1404817.61E		
CH273	414446.88N / 1405510.13E		

CHANGE : VAR. PROC renamed. PROC course. RNAV HLDG established (TAXIR).

RJCH / HAKODATE

Visual REP

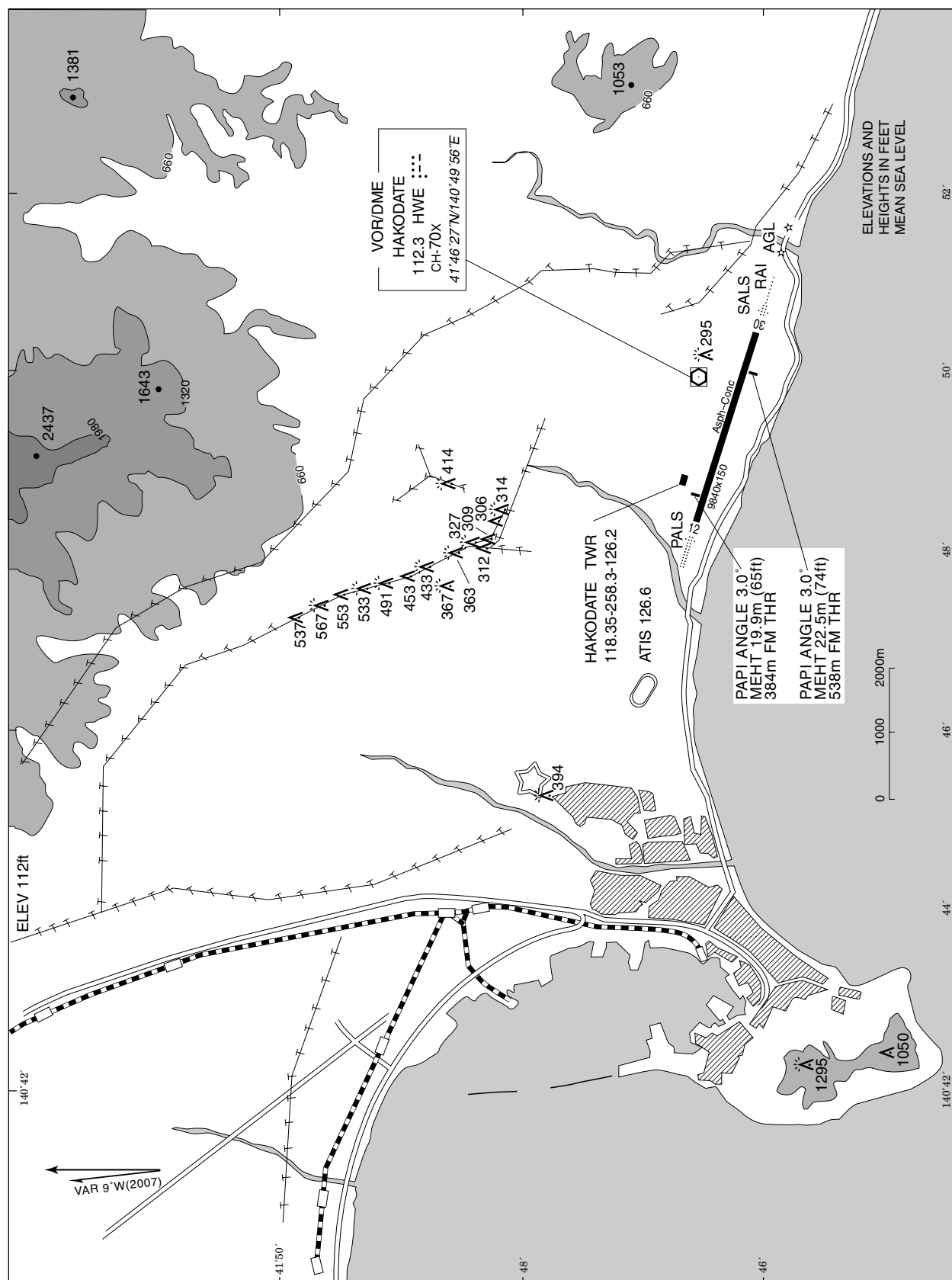


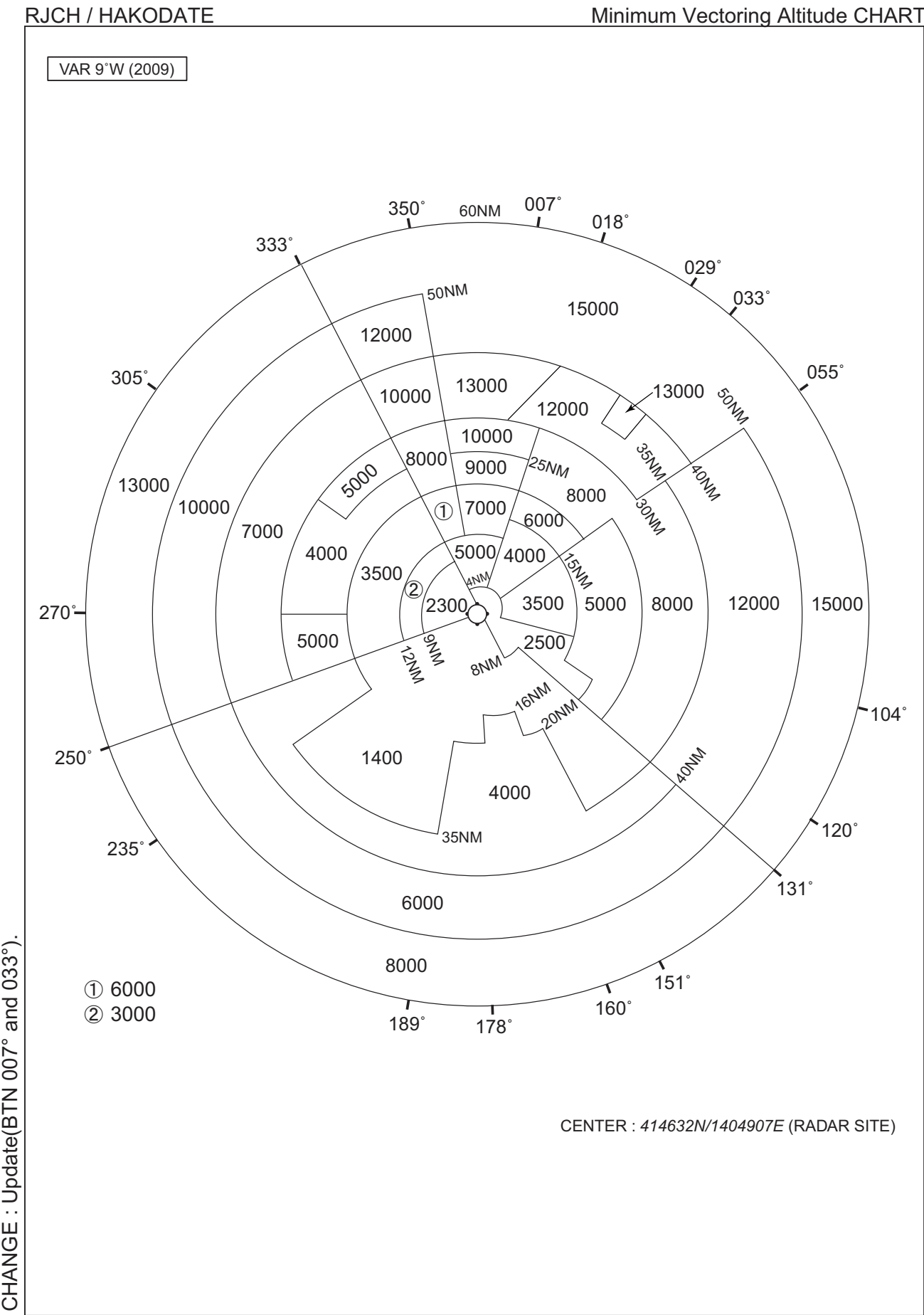
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE :DIST from ARP(Mihara):

Call sign	BRG / DIST from ARP	Remarks
大沼 Onuma	330°T / 13.9NM	JR駅 JR Station
桔梗 Kikyo	316°T / 6.4NM	JR駅 JR Station
矢別 Yabetsu	043°T / 5.7NM	ダム Dam
恵山岬 Esanmisaki	081°T / 16.5NM	灯台 Lighthouse
美原 Mihara	310°T / 3.9NM	NHKラジオアンテナ NHK radio antenna
立待 Tachimachi	252°T / 4.8NM	岬 Cape
当別 Tobetsu	261°T / 11.5NM	トラピスト修道院 Religious house
汐首岬 Shiokubimisaki	119°T / 7.3NM	灯台 Lighthouse
5NM S	180°T / 5.0NM	海上 Over the sea
大間崎 Omazaki	163°T / 14.0NM	岬 Cape

LDG CHART





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