

MARKING AIDS

Mandatory
instruction
marking

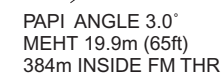
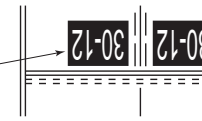


Diagram illustrating the layout of the 12th station, showing the sequence of lights and distances:

- SEQUENCED
- FLASHING LIGHTS (SFL-V)
- LIGHTS
- Overrun area edge LGT
- THR LIGHTS
- GREEN
- RED

Distances indicated:

- 338m
- 302m

Station number: 12

Diagram illustrating the lighting system for Runway 30, showing the layout of various lights and their dimensions:

- THR LIGHTS:** Located at the start of the runway, including RED and GREEN lights.
- Overrun area edge LGT:** Lights at the end of the overrun area.
- LOC IHL 109.3:** Lights indicating the runway centerline.
- RUNWAY ALIGNMENT INDICATOR:** Lights along the runway centerline.
- APPROACH GUIDANCE LIGHTS:** Lights at the end of the runway.

Dimensions (meters):

- 420m (from THR LIGHTS to LOC IHL 109.3)
- 60m (from LOC IHL 109.3 to RUNWAY ALIGNMENT INDICATOR)
- 420m (from RUNWAY ALIGNMENT INDICATOR to APPROACH GUIDANCE LIGHTS)
- 441m (from APPROACH GUIDANCE LIGHTS to the end of the runway)
- 419m (from the end of the runway to the end of the approach)

Civil Aviation Bureau, Japan (EFF:26 MAR 2020)

AIRCRAFT PARKING/DOCKING CHART

RJCH / HAKODATE

AD CHART



AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC



AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 9° W-APR 2018



DECLARED DISTANCES	
RWY 12	RWY 30
3000m TAKE OFF RUN AVAILABLE	3000m
3000m TAKE OFF DISTANCE AVAILABLE	3000m
3000m ACCELERATE STOP DISTANCE AVAILABLE	3000m
3000m LANDING DISTANCE AVAILABLE	3000m

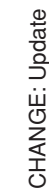


LEGEND	
①	IDENTIFICATION NUMBER
●	POLE, TOWER, SPIRE, ANTENNA, ETC
✱	TREE
▨	LEVEE
—+—	TRANSMISSION LINE OR OVERHEAD CABLE
△	TRIANGULATION POINT
☆	AERONAUTICAL GROUND LIGHT
—	RIVER

AMENDMENT RECORD		
Nr	DATE	ENTERED BY

CHANGE: Update

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC



STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

SID and TRANSITION

HAKODATE SOUTH SEVEN DEPARTURE

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

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

...to intercept and proceed via HWE R194 to MRE VOR/DME.

Cross HWE R194/30.0DME at or above 6000FT.

Note RWY12 : 4.0% climb gradient required up to 1300FT.

OBST ALT 919FT located at 3.43NM 105° FM end of RWY12.

RWY30 : 5.4% climb gradient required up to 1600FT.

OBST ALT 1296FT located at 4.63NM 267° FM end of RWY30.

HAKODATE REVERSAL FIVE DEPARTURE

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

RWY 30: Climb RWY HDG until 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 1300FT.

OBST ALT 919FT located at 3.43NM 105° FM end of RWY12.

RWY30 : 5.4% climb gradient required up to 1600FT.

OBST ALT 1296FT located at 4.63NM 267° FM end of RWY30.

TAPPI SEVEN DEPARTURE

RWY 12: Climb RWY HDG until 600FT, turn right HDG272°...

RWY 30: Climb RWY HDG until 500FT, turn left HDG182°...

...to intercept and proceed via HWE R227 to TAPPI. Cross TAPPI at or above FL170.

Note RWY12 : 4.0% climb gradient required up to 1300FT.

OBST ALT 919FT located at 3.43NM 105° FM end of RWY12.

RWY30 : 5.4% climb gradient required up to 1600FT.

OBST ALT 1296FT located at 4.63NM 267° FM end of RWY30.

YUWA TRANSITION

From over TAPPI, proceed via UWE R008 to UWE VOR/DME.

Cross UWE R008/21.0DME at assigned altitude.

ESASI FIVE DEPARTURE

RWY 12: Climb RWY HDG until 600FT, turn right HDG340°...

RWY 30: Climb RWY HDG until 700FT, turn right,...

...to intercept and proceed via HWE R295 to ESASI.

Note RWY12 : 4.9% climb gradient required up to 1300FT.

OBST ALT 919FT located at 3.43NM 105° FM end of RWY12.

TIKYU ONE DEPARTURE

RWY 12: Climb RWY HDG until 600FT, turn left,...

RWY 30: Climb RWY HDG until 600FT, turn left HDG073°...

...to intercept and proceed via HWE R118 to TIKYU.

Cross TIKYU at or above 6000FT.

Note RWY12 : 6.3% climb gradient required up to 1700FT.

OBST ALT 1302FT located at 4.03NM 101° FM end of RWY12.

RWY30 : 5.4% climb gradient required up to 1600FT.

OBST ALT 1296FT located at 4.63NM 267° FM end of RWY30.

STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

SID and TRANSITION



RJCH / HAKODATE

RNAV SID and TRANSITION

11/10/18

STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

RNAV SID and TRANSITION

TSUGARU ONE 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	—	—	117 (108.0)	-8.9	—	—	+600	—	—	RNAV1
002	DF	TAPPI	—	—	-8.9	—	R	—	—	—	RNAV1

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	—	—	297 (288.1)	-8.9	—	—	+500	—	—	RNAV1
002	DF	TAPPI	—	—	-8.9	—	L	—	—	—	RNAV1

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	—	—	-8.9	—	—	—	—	—	RNAV1
002	TF	UWE	—	188 (179.4)	-8.9	91.1	—	—	—	—	RNAV1

STANDARD ARRIVAL CHART - INSTRUMENT

RJCH / HAKODATE

RNAV STAR RWY30



CHANGE : New PROC.

STANDARD ARRIVAL CHART - INSTRUMENT

RJCH / HAKODATE

RNAV STAR RWY12

PATRA ARRIVAL

RNAV1

Note 1) DME/DME/IRU or GNSS required
2) RADAR service required

VAR 9°W (2019)

PATRA ARRIVAL

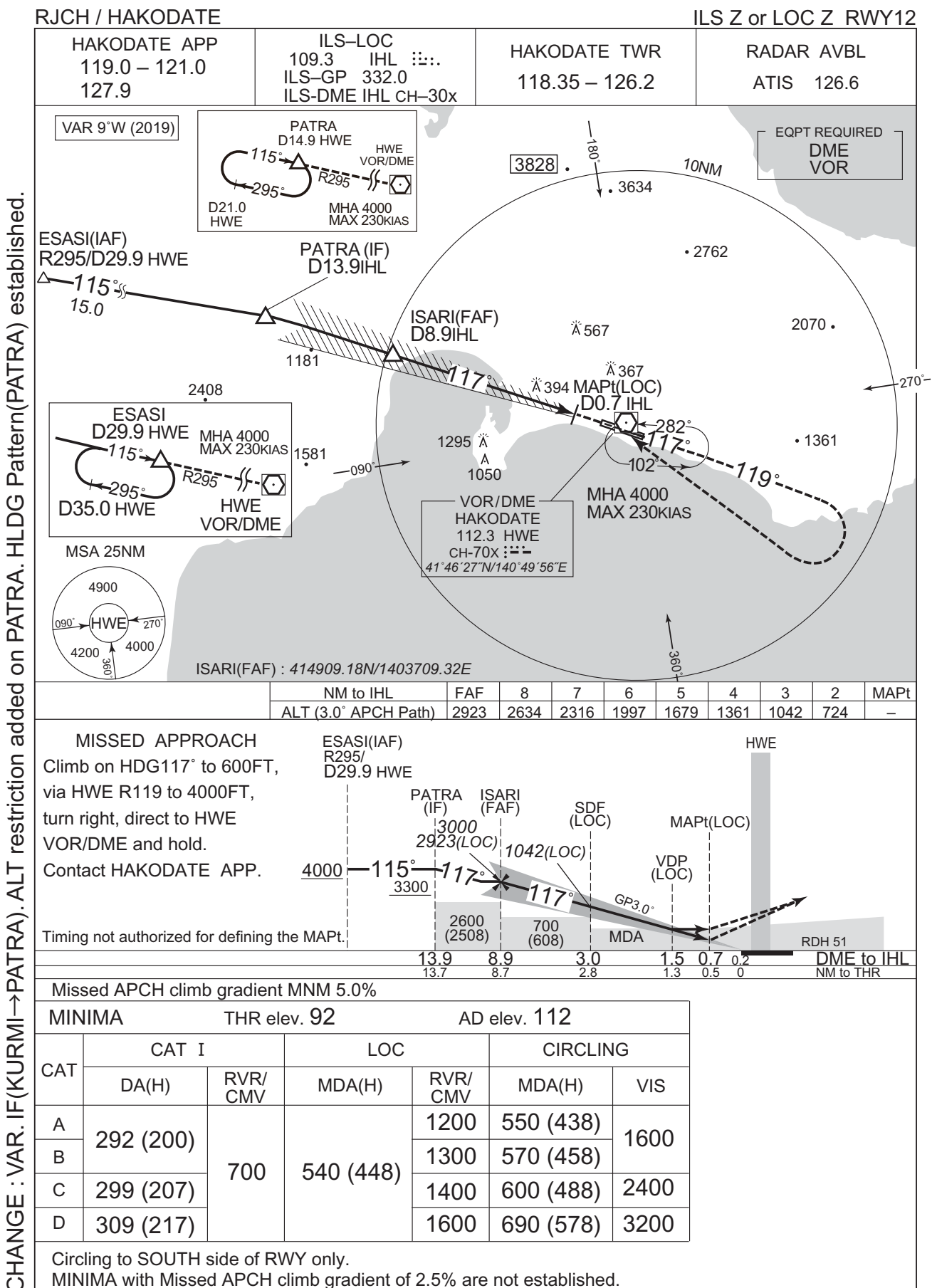
From TAXIR at or above 6000FT, to KANTA, to PATRA at or above 4000FT.

Critical DME	MRE : 18.0NM to KANTA – KANTA HWE : 2.2NM to KANTA – KANTA
DME GAP	KANTA – PATRA
Inappropriate Nav aids	See AD1.1.6.10.3. Inappropriate NAV AIDs for RNAV1

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	—	—	-9.4	—	—	+6000	—	—	RNAV1
002	TF	KANTA	—	335 (325.6)	-9.4	24.3	—	—	—	—	RNAV1
003	TF	PATRA	—	027 (017.7)	-9.4	4.3	—	+4000	—	—	RNAV1

CHANGE : Correction of misdescription(Name of PROC).

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJCH / HAKODATE

ILS Y or LOC Y RWY12

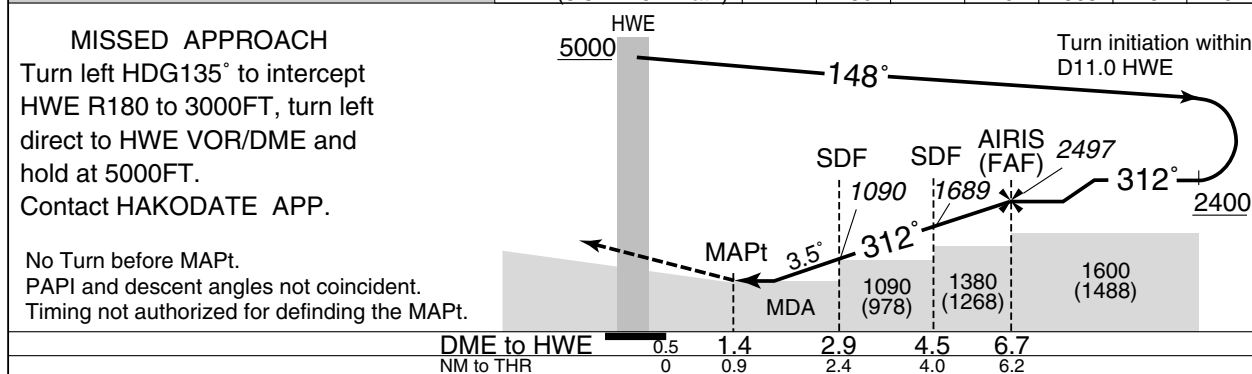
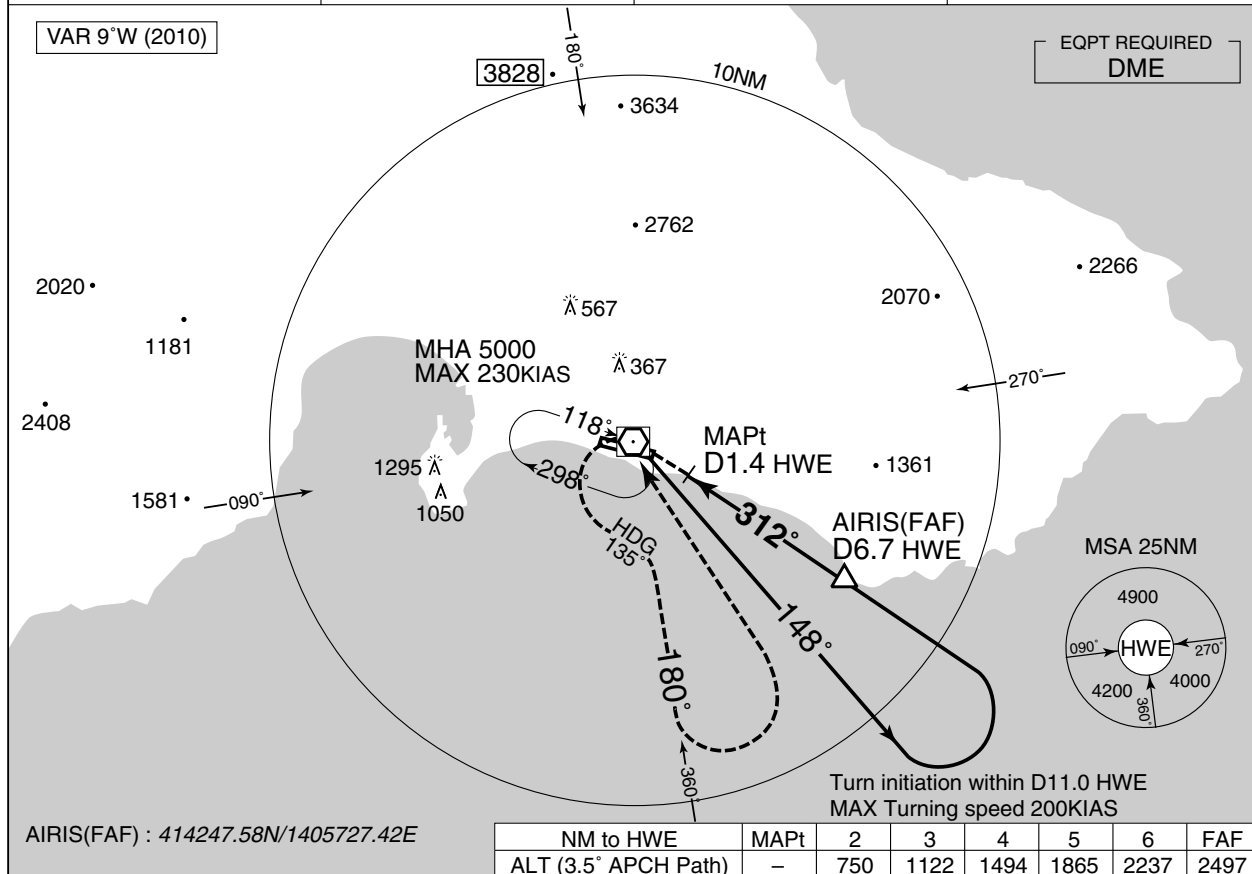


INSTRUMENT APPROACH CHART

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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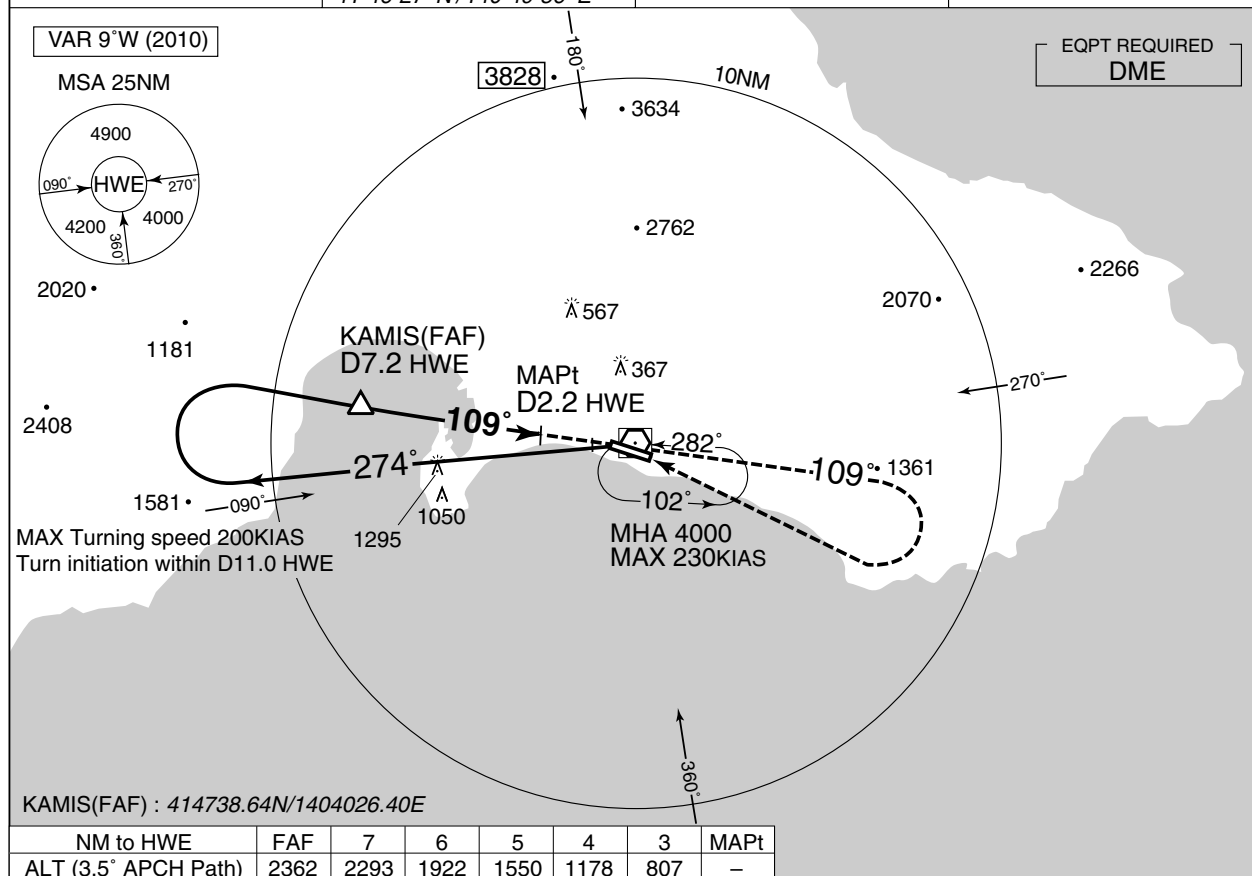
MINIMA					THR elev. 151	AD elev. 112
CAT			CIRCLING			
	MDA(H)	CMV	MDA(H)	VIS		
A	730 (618)	1000	730 (618)	1600		
B		1200				
C				1600	2400	
D						
Circling to SOUTH side of RWY only.						

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

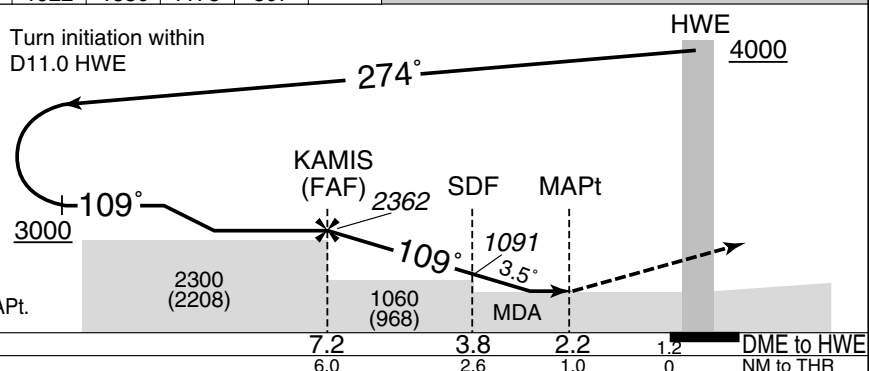
VOR RWY12

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)	

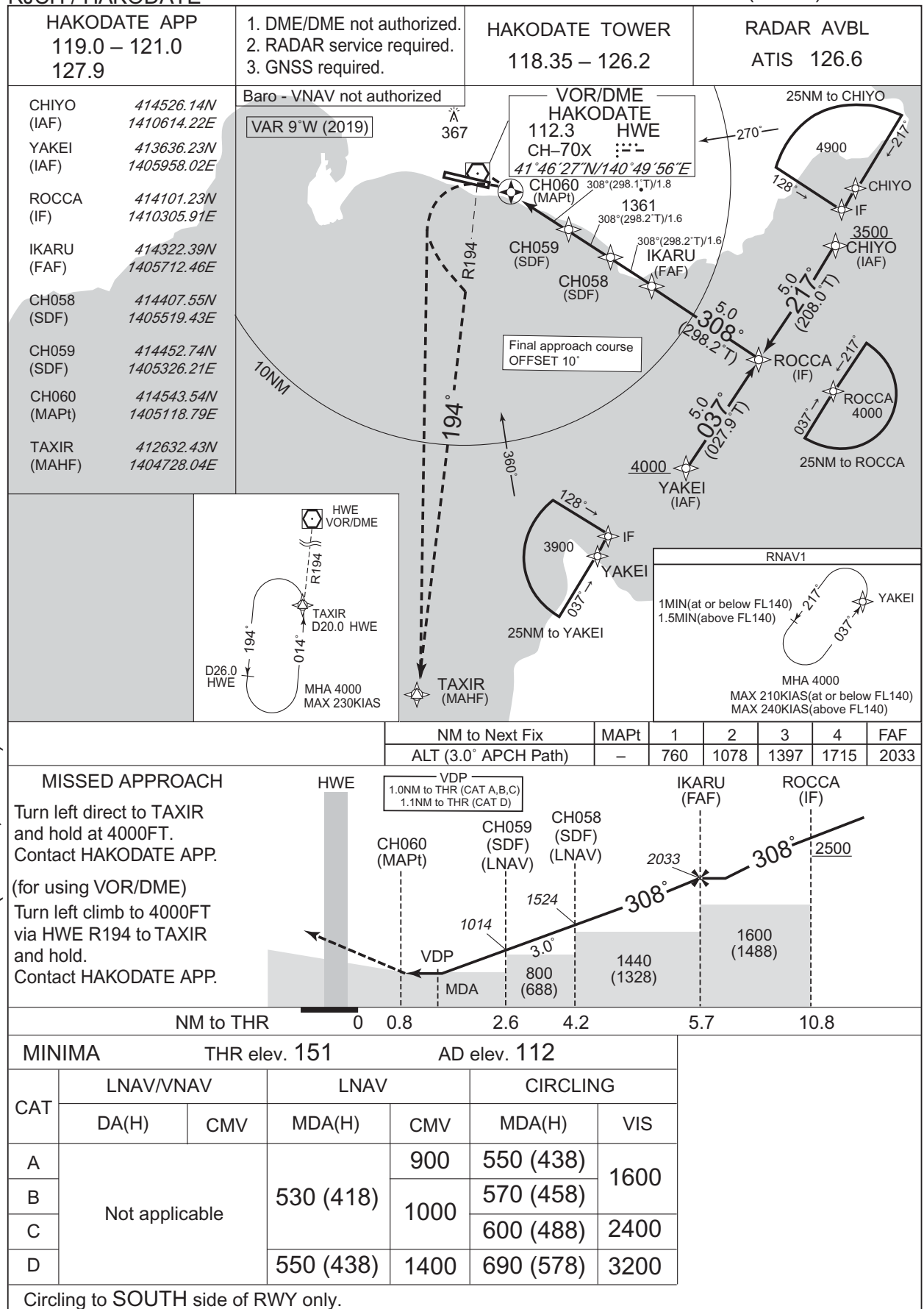
Circling to SOUTH side of RWY only.

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

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNAV(GNSS) Z RWY30

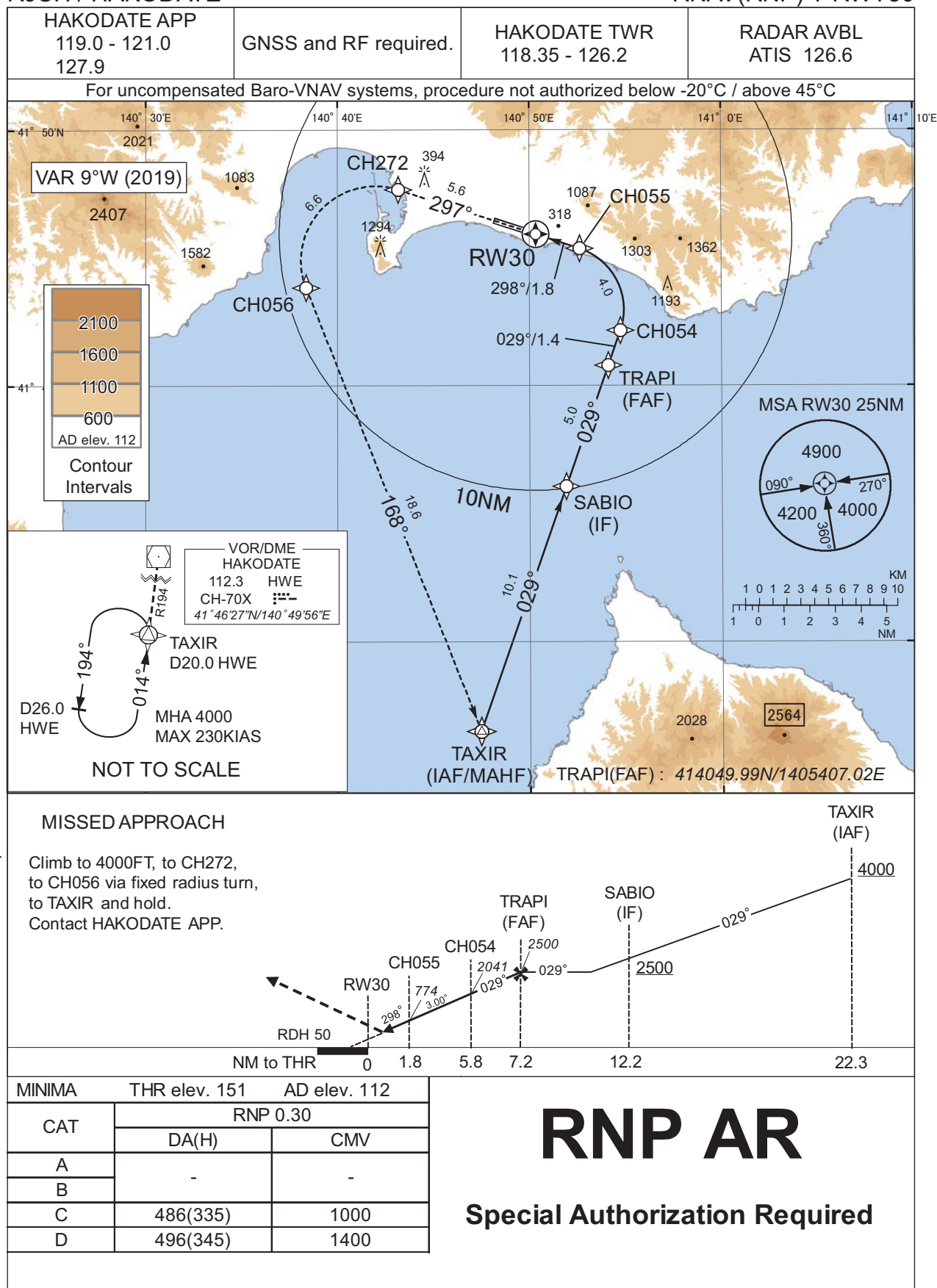


CHANGE : VAR. PROC. HLDG Pattern(TAXIR,YAKEI) established.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNAV(RNP) Y RWY30



CHANGE : VAR. PROC. HLDG Pattern. Minimum temperature.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNAV(RNP) Y RWY30

RNAV(RNP) Y RWY30Coding 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	-	-	-9.4	-	-	+4000	-	-	-
002	TF	SABIO	-	029 (019.2)	-9.4	10.1	-	+2500	-	-	1.0
003	TF	TRAPI	-	029 (019.2)	-9.4	5.0	-	2500	-	-	1.0
004	TF	CH054	-	029 (019.2)	-9.4	1.4	-	2041	-	-3.00	0.3
005	RF Center: CHRF3 r=2.50NM	CH055	-	-	-9.4	4.0	L	774	-	-3.00	0.3
006	TF	RW30	Y	298 (288.1)	-9.4	1.8	-	201	-	-3.00/50	0.3
007	TF	CH272	-	297 (288.1)	-9.4	5.6	-	-	-	-	1.0
008	RF Center: CHRF4 r=2.90NM	CH056	-	-	-9.4	6.6	L	-	-	-	1.0
009	TF	TAXIR	-	168 (158.5)	-9.4	18.6	-	4000	-	-	1.0

Waypoint Coordinates

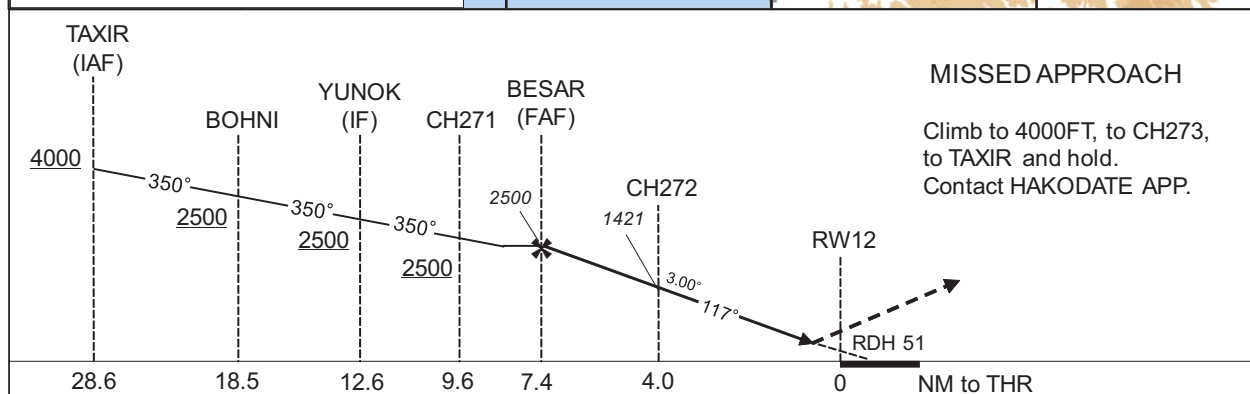
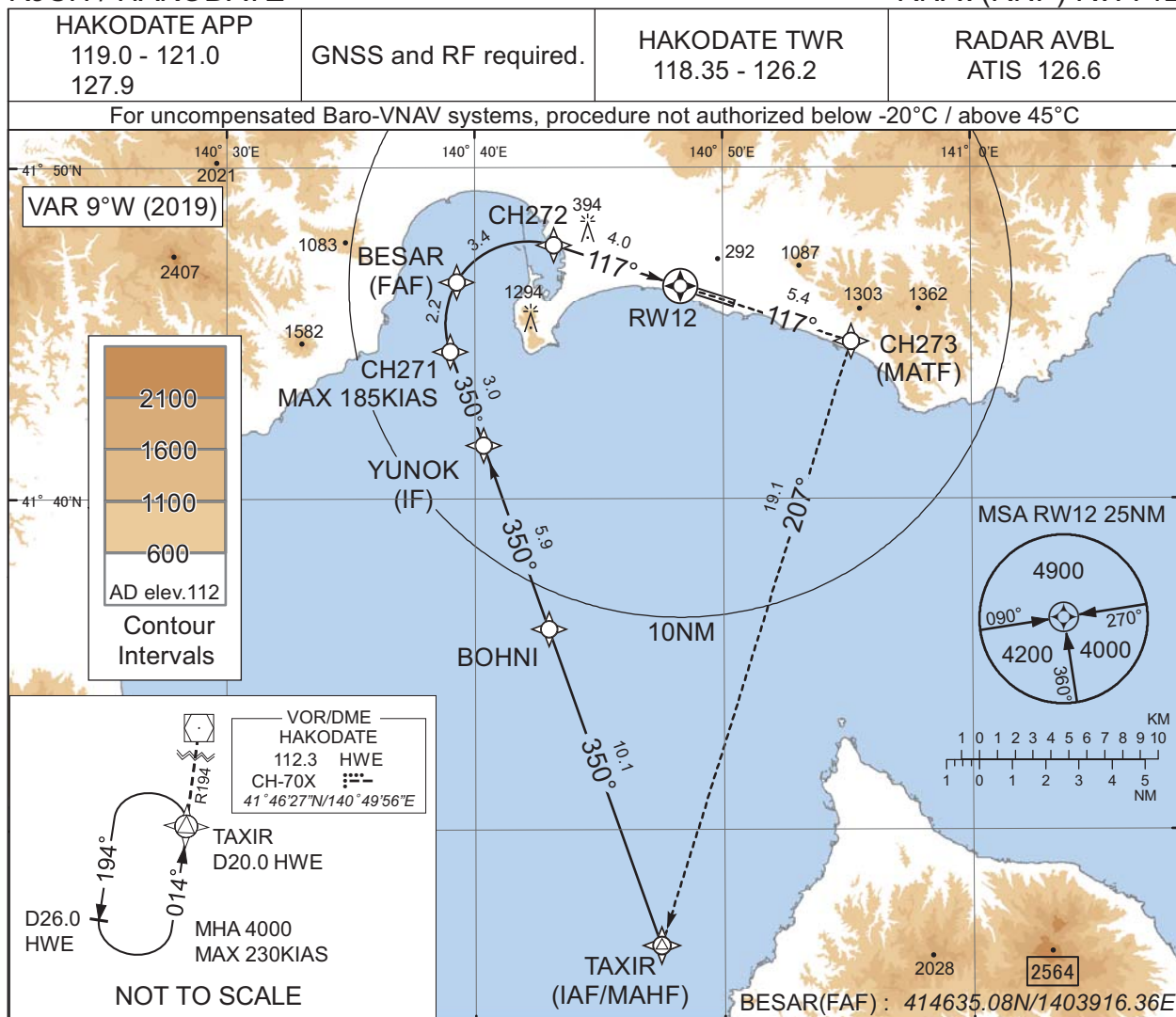
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
TAXIR	412632.43N / 1404728.04E	CHRF3	414301.30N / 1405136.09E
SABIO	413606.58N / 1405154.81E	CHRF4	414456.26N / 1404159.49E
TRAPI	414049.99N / 1405407.02E		
CH054	414211.71N / 1405445.20E		
CH055	414524.03N / 1405238.26E		
RW30	414557.54N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

CHANGE : VAR. PROC.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNAV(RNP) RWY12



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.

RNP AR**Special Authorization Required**

CHANGE : New PROC.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNAV(RNP) RWY12

RNAV(RNP) RWY12Coding 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	-	-	-9.4	-	-	+4000	-	-	-
002	TF	BOHNI	-	350 (340.6)	-9.4	10.1	-	+2500	-	-	1.0
003	TF	YUNOK	-	350 (340.6)	-9.4	5.9	-	+2500	-	-	1.0
004	TF	CH271	-	350 (340.5)	-9.4	3.0	-	+2500	-185	-	1.0
005	RF Center: CHRF5 r=2.50NM	BESAR	-	-	-9.4	2.2	R	2500	-	-	1.0
006	RF Center: CHRF5 r=2.50NM	CH272	-	-	-9.4	3.4	R	1421	-	-3.00	0.3
007	TF	RW12	Y	117 (108.0)	-9.4	4.0	-	143	-	-3.00/51	0.3
008	TF	CH273	-	117 (108.1)	-9.4	5.4	-	-	-	-	1.0
009	TF	TAXIR	-	207 (197.6)	-9.4	19.1	-	4000	-	-	1.0

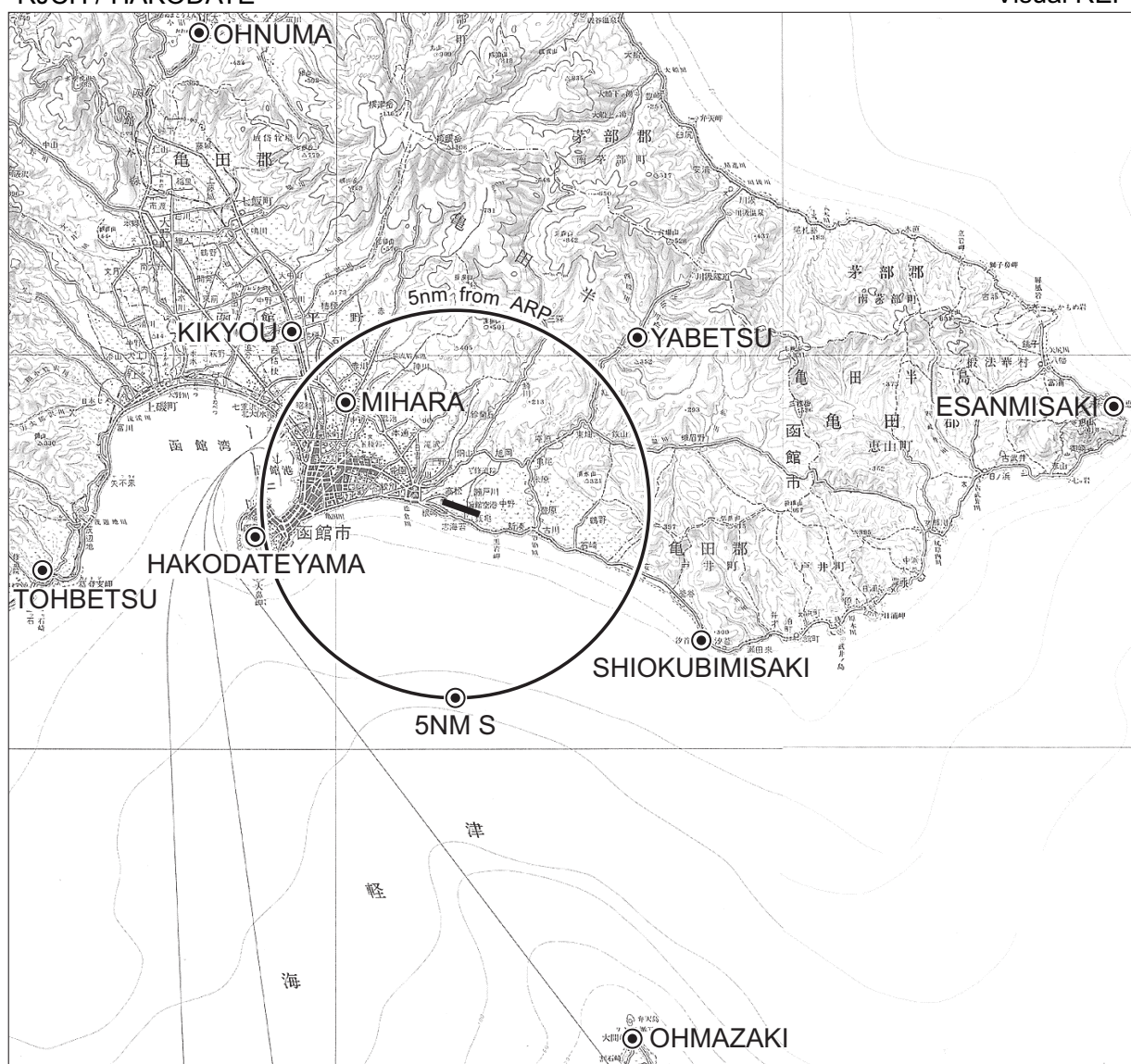
Waypoint Coordinates

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 : New PROC.

RJCH / HAKODATE

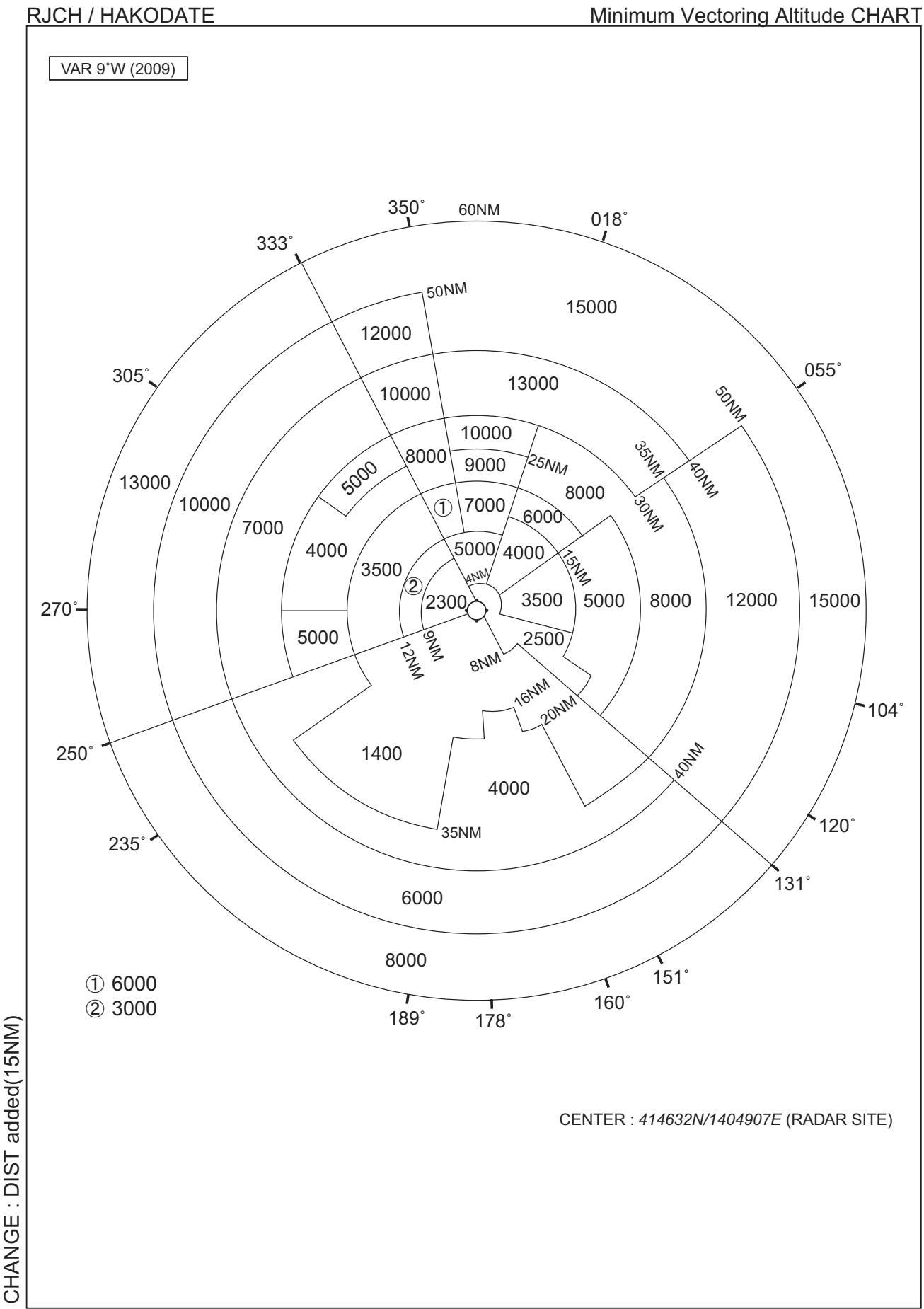
Visual REP



Call sign	BRG / DIST from ARP	Remarks
矢 別 Yabetsu	052°/ 5.7NM	ダム Dam
恵 山 岬 Esanmisaki	089°/16.4NM	灯台 Lighthouse
汐 首 岬 Shiokubimisaki	128°/ 7.3NM	灯台 Lighthouse
大 間 崎 Ohmazaki	170°/14.2NM	岬 Cape
5NM S	180°/ 5.0NM	海上 Over the sea
美 原 Mihara	319°/ 4.5NM	ラジオアンテナ Radio antenna
桔 梗 Kikyou	325°/ 5.7NM	JR駅 JR Station
当 別 Tohbetsu	270°/11.5NM	トラビスト修道院 Religious house
函 館 山 Hakodateyama	271°/ 5.3NM	テレビ塔 TV tower
大 沼 Ohnuma	340°/14.4NM	JR駅 JR Station

LDG CHART





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