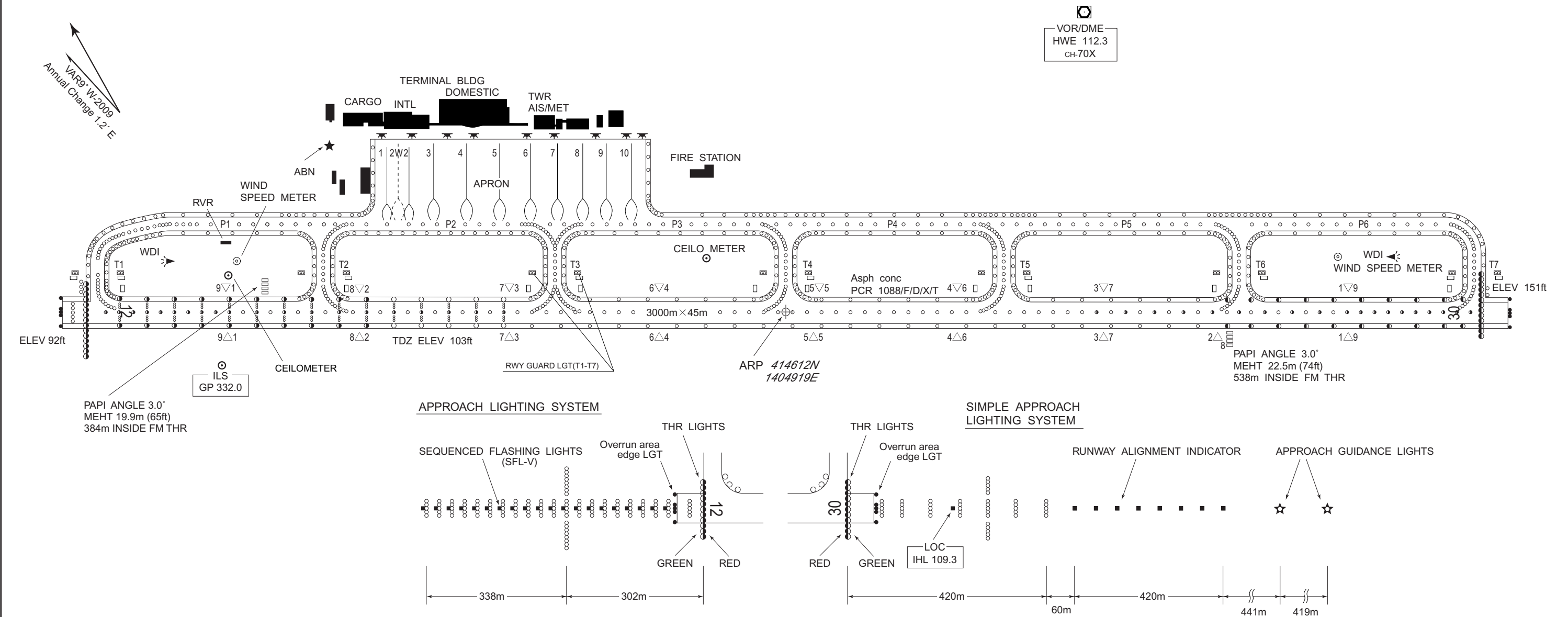
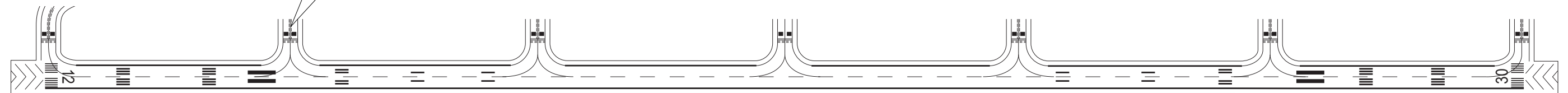


## MARKING AIDS

Mandatory instruction marking



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



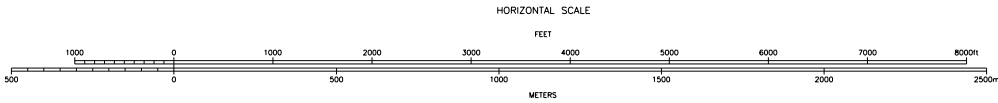
AERODROME OBSTACLE CHART - ICAO  
TYPE A (OPERATING LIMITATIONS)

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

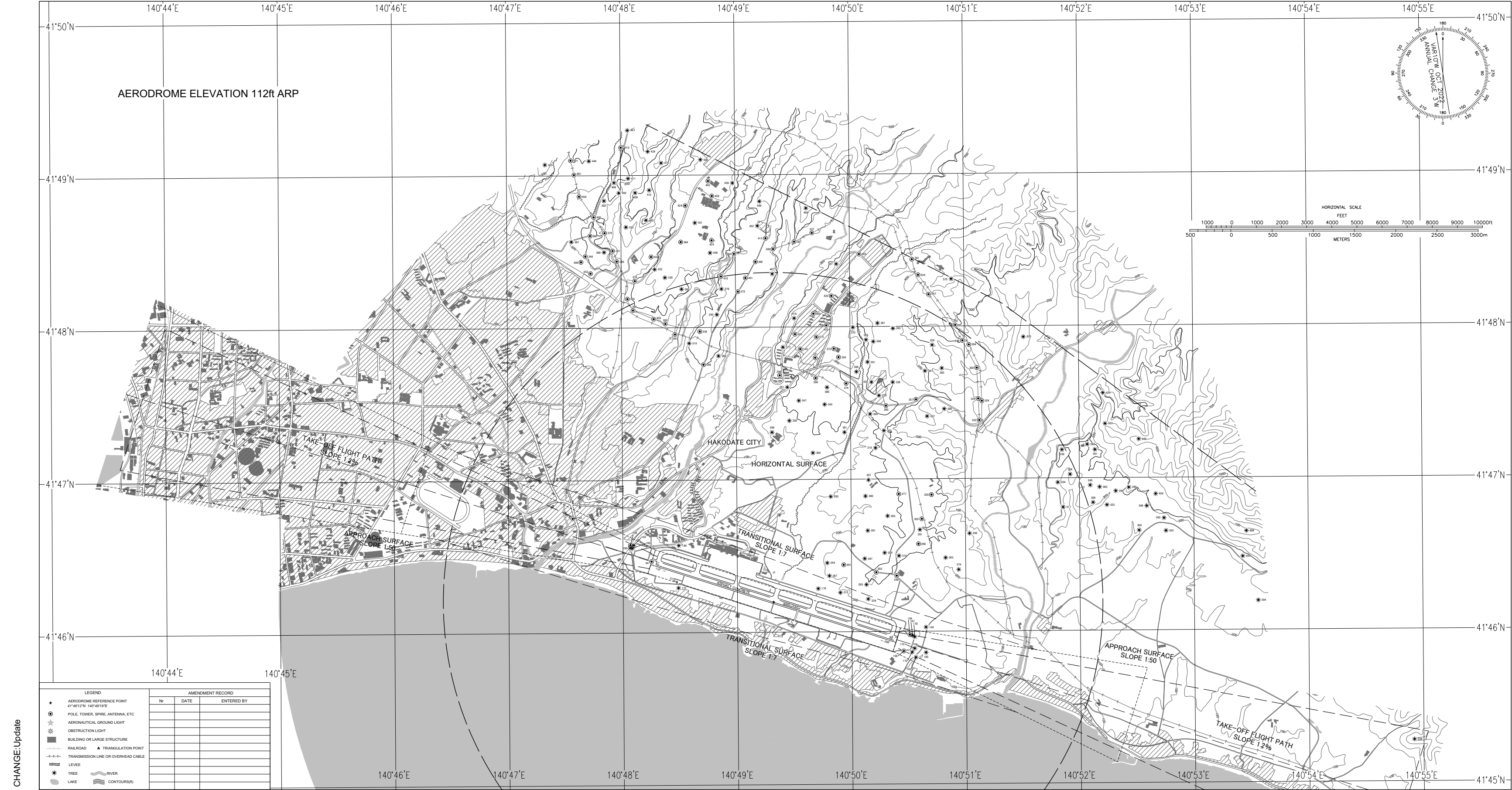
AERODROME OBSTACLE CHART - ICAO  
TYPE A (OPERATING LIMITATIONS)

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.

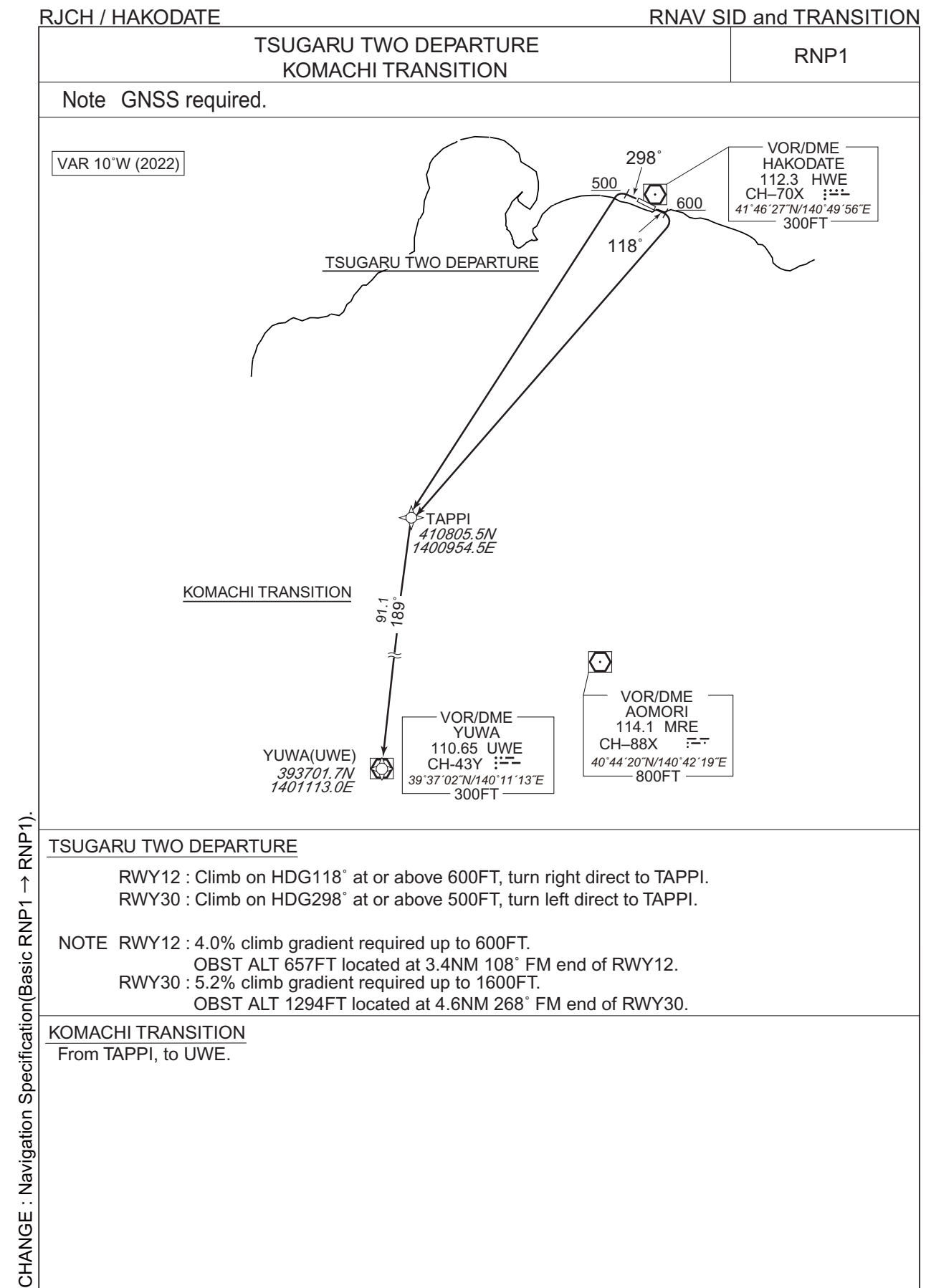
RWY30 : 5.2% climb gradient required up to 1600FT.

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).



STANDARD DEPARTURE CHART - INSTRUMENT



Note GNSS required.

VAR 10°W (2022)

The chart illustrates the TSUGARU TWO DEPARTURE and KOMACHI TRANSITION. It shows the flight path from the runway to the transition point (TAPPI) and then to the YUWA (UWE) VOR/DME station. The chart includes the following information:

- VAR 10°W (2022)**
- TSUGARU TWO DEPARTURE**: A departure procedure starting from the runway and heading 118° or 298° to the TAPPI point.
- KOMACHI TRANSITION**: A transition procedure from TAPPI to YUWA (UWE).
- VOR/DME HAKODATE**: 112.3 MHz, CH-70X, 300FT, 41°46'27"N/140°49'56"E.
- VOR/DME YUWA**: 110.65 MHz, CH-43Y, 300FT, 39°37'02"N/140°11'13"E.
- VOR/DME AOMORI**: 114.1 MHz, CH-88X, 800FT, 40°44'20"N/140°42'19"E.
- NOTE**: RWY12 : 4.0% climb gradient required up to 600FT. RWY30 : 5.2% climb gradient required up to 1600FT.
- OBST ALT**: 657FT located at 3.4NM 108° FM end of RWY12. 1294FT located at 4.6NM 268° FM end of RWY30.

TSUGARU TWO DEPARTURE

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.

KOMACHI TRANSITION

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	-	-	RNP1
002	DF	TAPPI	-	-	-9.6	-	R	-	-	-	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	-	-	RNP1
002	DF	TAPPI	-	-	-9.6	-	L	-	-	-	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	-	-	-	-	-	RNP1
002	TF	UWE	-	189 (179.4)	-9.6	91.1	-	-	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).



STANDARD DEPARTURE CHART - INSTRUMENT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

RNAV SID

OKUSHIRI ONE DEPARTURE	RNP1
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Note GNSS required.



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	-	-	RNP1
002	DF	ESASI	-	-	-9.6	-	R	+5000	-	-	RNP1

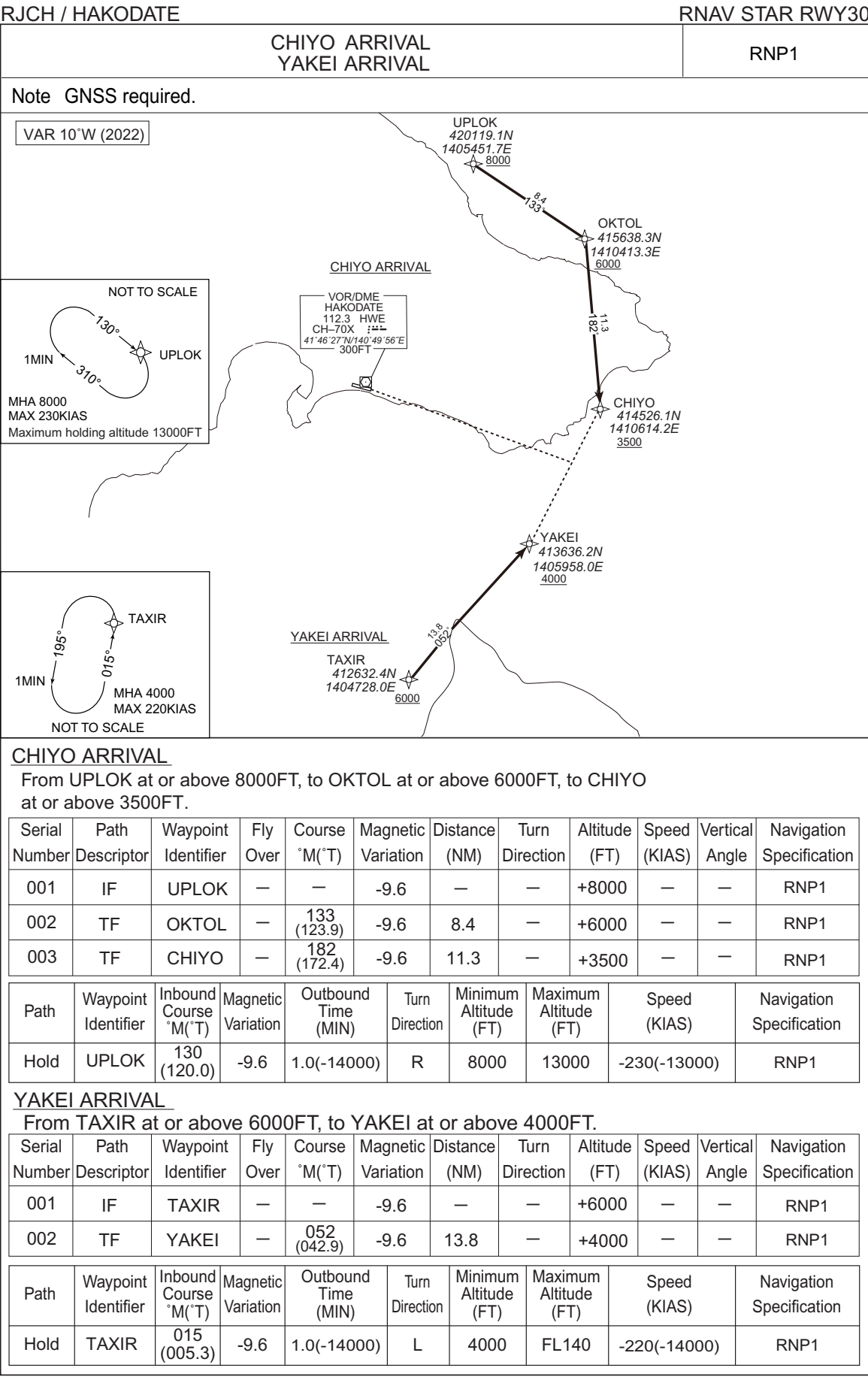
RWY30

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	-	-	RNP1
002	DF	ESASI	-	-	-9.6	-	-	+5000	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

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STANDARD ARRIVAL CHART - INSTRUMENT



## STANDARD ARRIVAL CHART - INSTRUMENT

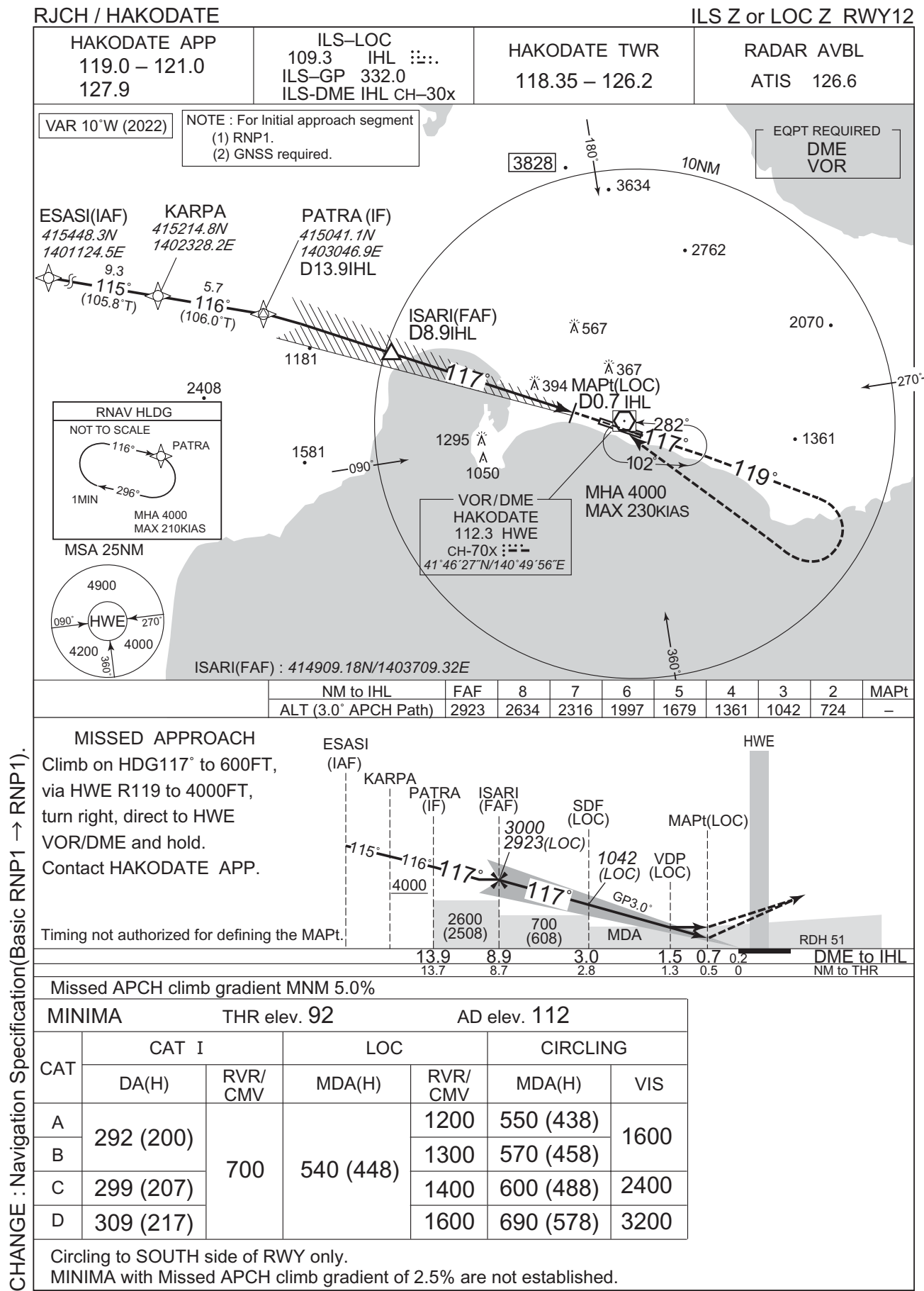
RJCH / HAKODATE

RNAV STAR RWY12



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

RJCH / HAKODATE

ILS Y or LOC Y RWY12

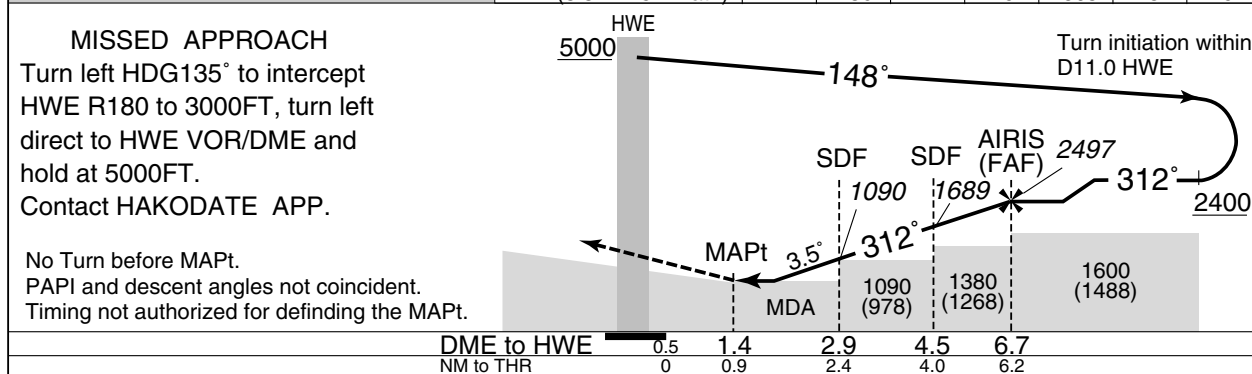


INSTRUMENT APPROACH CHART

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		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.

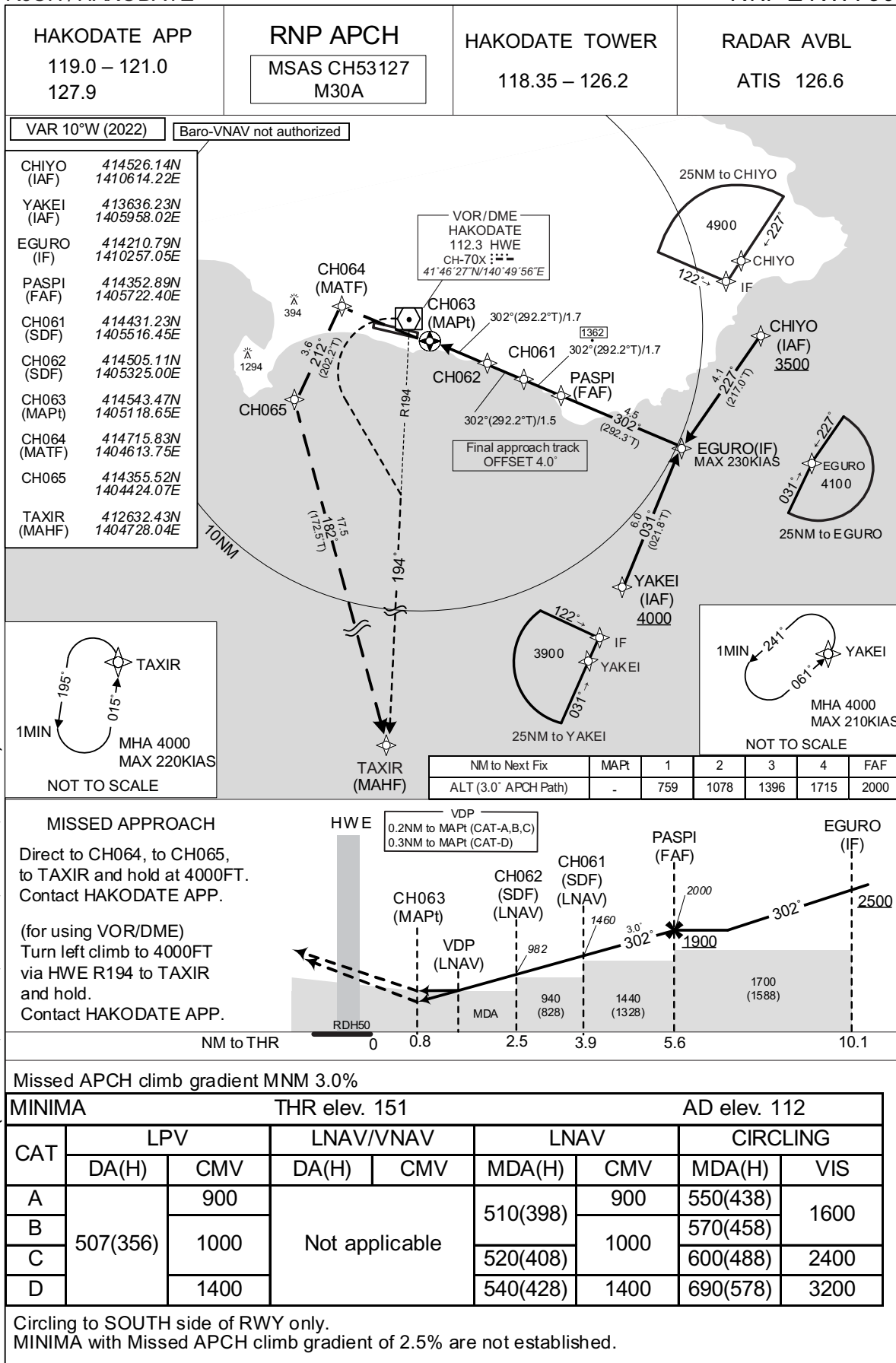
MINIMA with Missed APCH climb gradient of 2.5% are not established.

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,KARU,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).

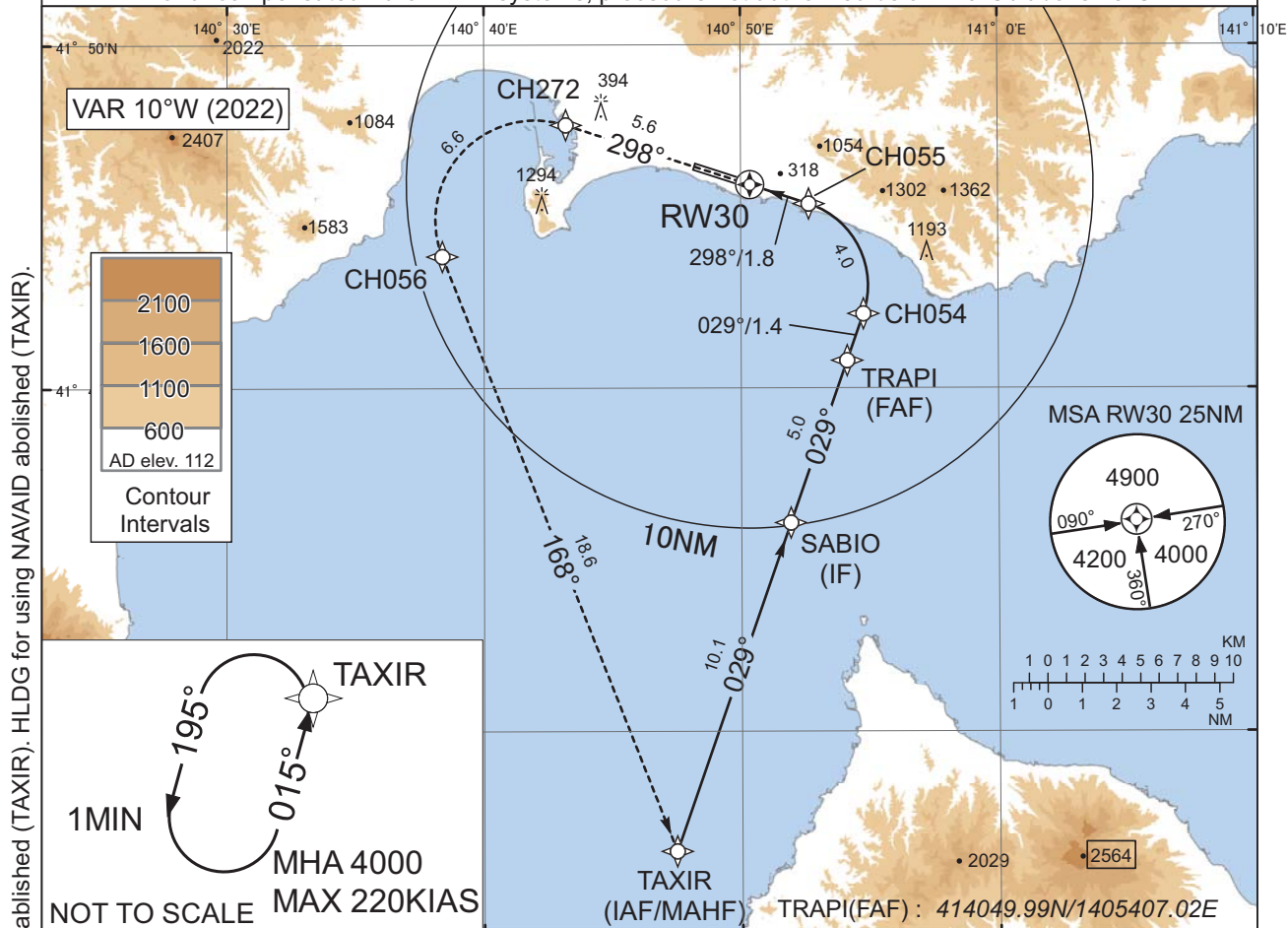
INSTRUMENT APPROACH CHART

RJCH / HAKODATE

RNP Y RWY30(AR)

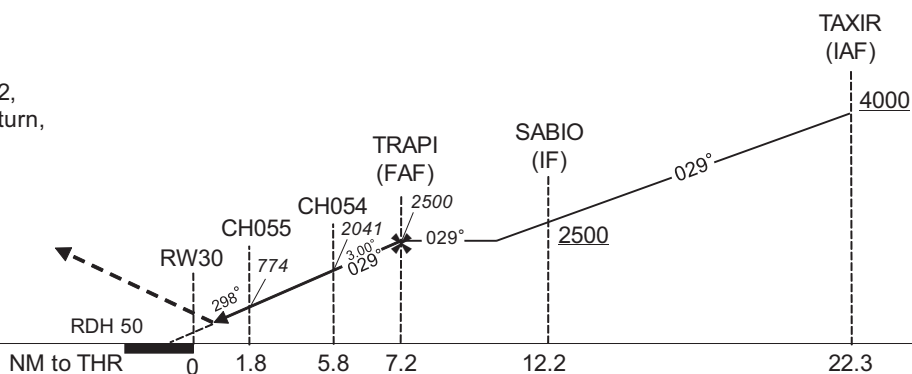
HAKODATE APP 119.0 - 121.0 127.9	RNP AR RF required.	HAKODATE TWR 118.35 - 126.2	RADAR AVBL ATIS 126.6
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For uncompensated Baro-VNAV systems, procedure not authorized below -20°C / above 45°C



MISSED APPROACH

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

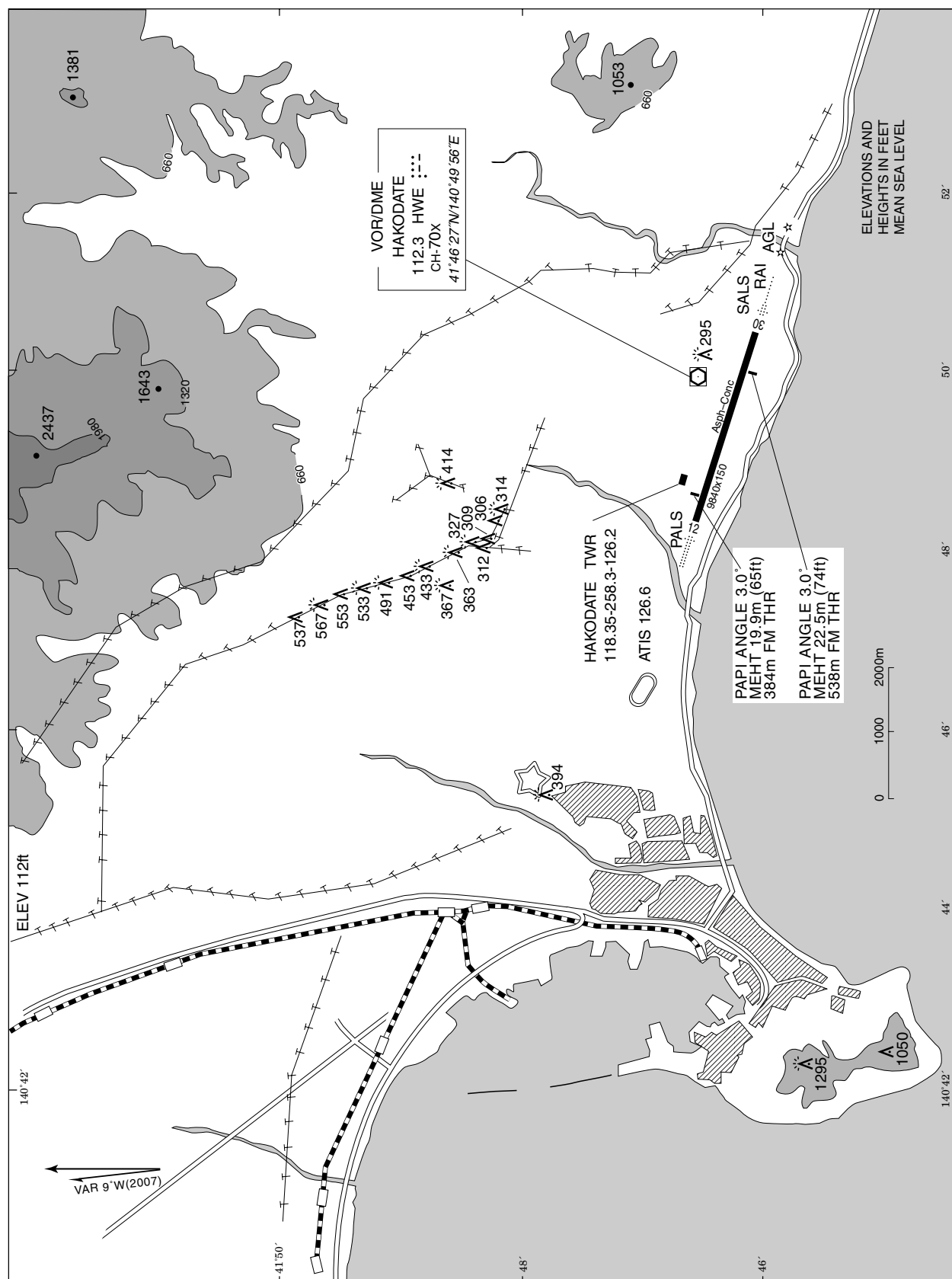


※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

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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