

## 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<br>126.2 |



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 |                                     | AMENDMENT RECORD |      |            |
|--------|-------------------------------------|------------------|------|------------|
| ①      | IDENTIFICATION NUMBER               | Nr               | DATE | ENTERED BY |
| ●      | POLE, TOWER, SPIRE, ANTENNA, ETC    |                  |      |            |
| ✳      | TREE                                |                  |      |            |
| ▨      | LEVEE                               |                  |      |            |
| —+—    | TRANSMISSION LINE OR OVERHEAD CABLE |                  |      |            |
| △      | TRIANGULATION POINT                 |                  |      |            |
| ★      | AERONAUTICAL GROUND LIGHT           |                  |      |            |
|        | RIVER                               |                  |      |            |

CHANGE: Update



AERODROME OBSTACLE CHART - ICAO  
TYPE B

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 SIX 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.

Cross ESASI at or above 5000FT.

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.

CHANGE : ESASI SIX DEPARTURE.

## STANDARD DEPARTURE CHART - INSTRUMENT



STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE

RNAV SID and TRANSITION

| TSUGARU ONE DEPARTURE<br>KOMACHI TRANSITION  |                       | RNAV1   |
|--|-----------------------|---|
| <p>Note 1) DME/DME/IRU or GNSS required.<br/>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll.<br/>2) RADAR service required.</p>   | Critical DME          | <p>RWY12 : MRE : 30.0NM to TAPPI – TAPPI</p> <p>RWY30 : MRE : 47.6NM to TAPPI – TAPPI<br/>HWE : 47.6NM to TAPPI – 40.0NM to TAPPI</p> <p>KOMACHI Transition :<br/>MRE: TAPPI - 24.0NM to UWE<br/>HWE: TAPPI - 55.0NM to UWE<br/>UWE: 55.0NM to UWE - 24.0NM to UWE<br/>HPE: 16.0NM to UWE - UWE</p> |
|  | DME GAP               | <p>RWY12 : RWY12DER – 30.0NM to TAPPI<br/>RWY30 : RWY30DER – 47.6NM to TAPPI</p> <p>KOMACHI Transition: 24.0NM to UWE – 22.0NM to UWE<br/>19.0NM to UWE – 16.0NM to UWE</p>   |
|  | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1   |
| <p>VAR 9°W (2014)</p> <p><u>TSUGARU ONE DEPARTURE</u></p> <p><u>KOMACHI TRANSITION</u></p> <p>YUWA(UWE)<br/>393701.7N<br/>1401113.0E</p> <p>VOR/DME<br/>YUWA<br/>110.65 UWE<br/>CH-43Y<br/>300FT</p> <p>VOR/DME<br/>AOMORI<br/>114.1 MRE<br/>CH-88X<br/>800FT</p> <p>VOR/DME<br/>HAKODATE<br/>112.3 HWE<br/>CH-70X<br/>300FT</p>   |                       |   |
| <p><u>TSUGARU ONE DEPARTURE</u></p> <p>RWY12 : Climb on HDG117° at or above 600FT, turn right direct to TAPPI.<br/>RWY30 : Climb on HDG297° at or above 500FT, turn left direct to TAPPI.</p> <p>NOTE RWY12 : 4.0% climb gradient required up to 1300FT.<br/>OBST ALT 919FT located at 3.43NM 105° FM end of RWY12.<br/>RWY30 : 5.4% climb gradient required up to 1600FT.<br/>OBST ALT 1296FT located at 4.63NM 267° FM end of RWY30.</p> |                       |   |
| <p><u>KOMACHI TRANSITION</u><br/>From TAPPI, to UWE.</p>   |                       |   |



## 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<br>(108.0) | -8.9               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | TAPPI               | —        | —              | -8.9               | —             | R              | —             | —            | —              | RNAV1                    |

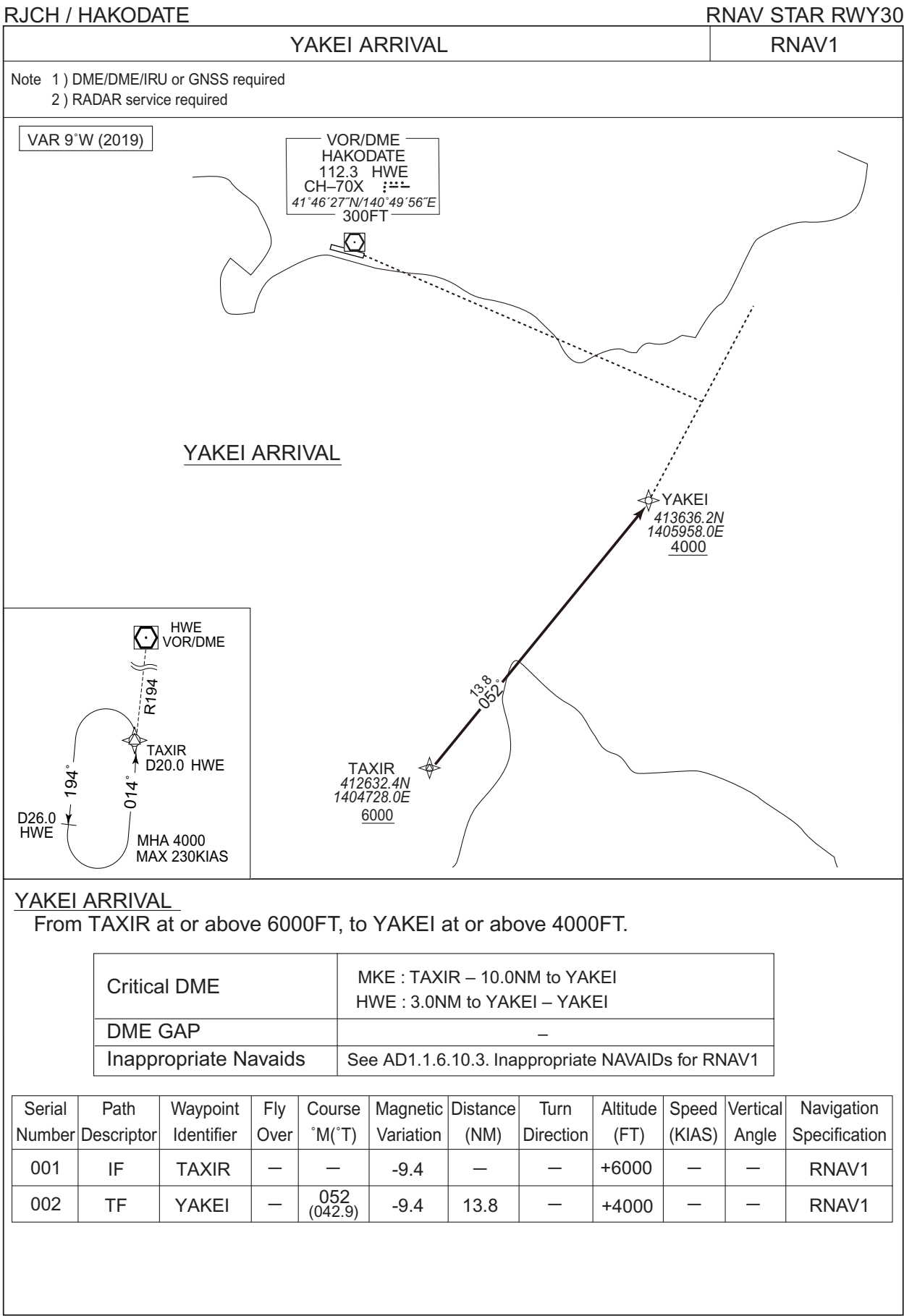
## RWY30

| 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<br>(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<br>(179.4) | -8.9               | 91.1          | —              | —             | —            | —              | RNAV1                    |

STANDARD ARRIVAL CHART - INSTRUMENT



## 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.

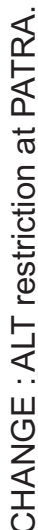
|                        |   |
|------------------------|---|
| Critical DME           | MRE : 18.0NM to KANTA – KANTA<br>HWE : 2.2NM to KANTA – KANTA |
| DME GAP                | KANTA – PATRA   |
| Inappropriate Nav aids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1             |

| 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).

## RJCH / HAKODATE

ILS Z or LOC Z RWY12





## INSTRUMENT APPROACH CHART

RJCH / HAKODATE

ILS Y or LOC Y RWY12

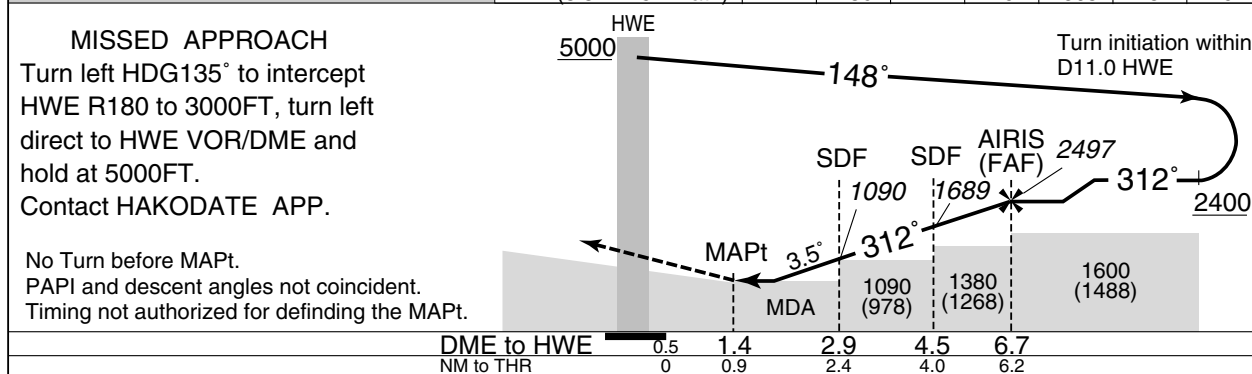
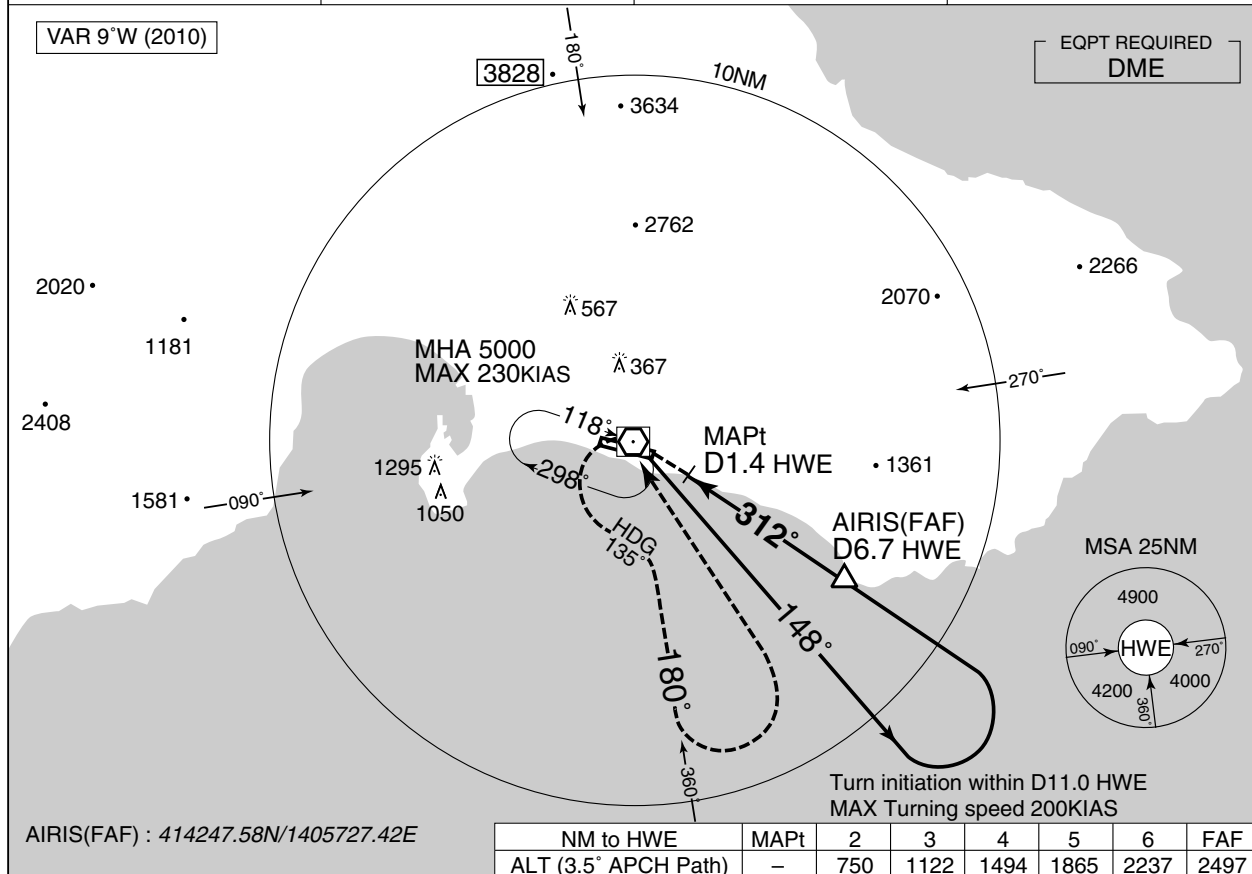


INSTRUMENT APPROACH CHART

RJCH / HAKODATE

VOR RWY30

|  |   |                                  |                          |
|--|---|----------------------------------|--------------------------|
| HAKODATE APP<br>119.0 – 121.0<br>127.9 | HAKODATE VOR/DME<br>112.3 HWE<br>CH-70X<br>41°46'27"N/140°49'56"E | HAKODATE TOWER<br>118.35 – 126.2 | RADAR AVBL<br>ATIS 126.6 |
|--|---|----------------------------------|--------------------------|



| 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 |           |      |               |              |

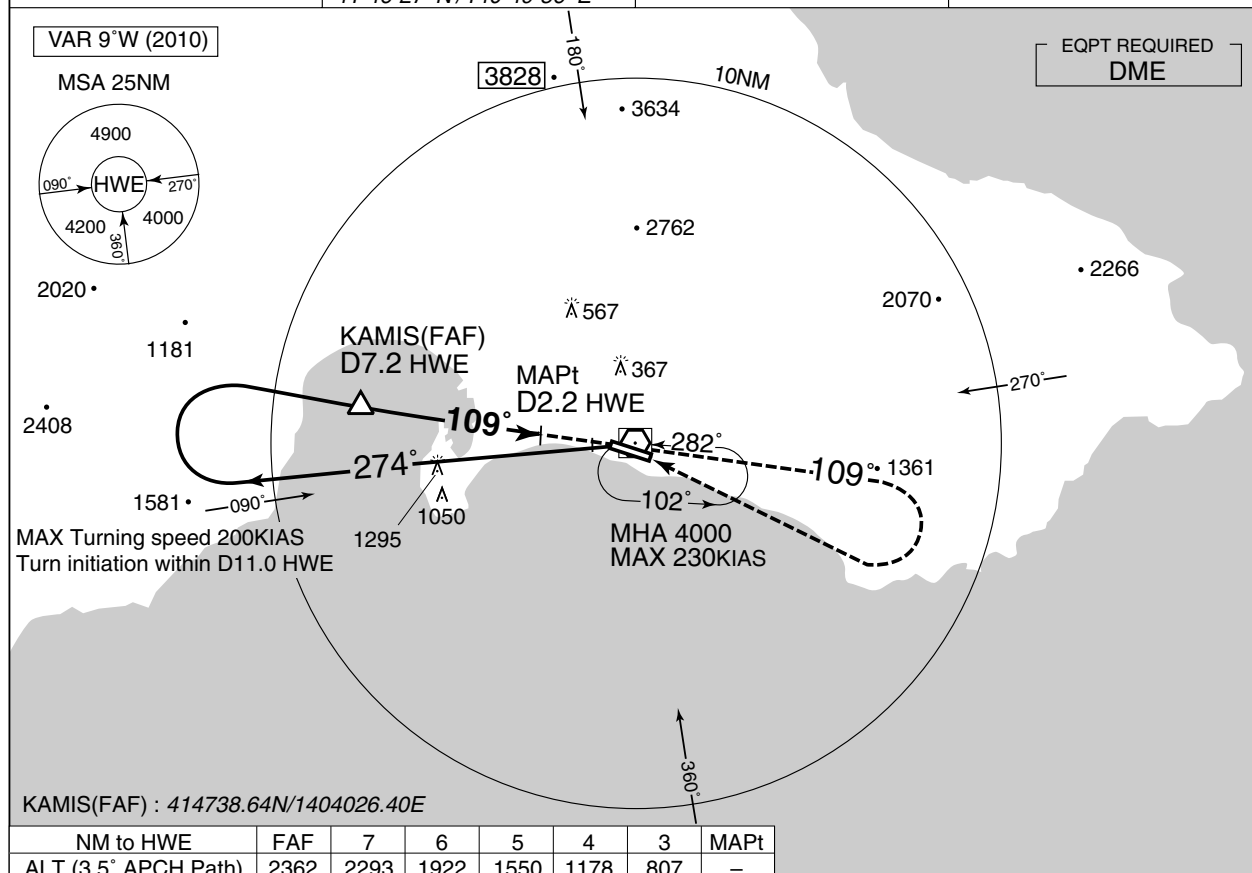
Circling to SOUTH side of RWY only.

## INSTRUMENT APPROACH CHART

RJCH / HAKODATE

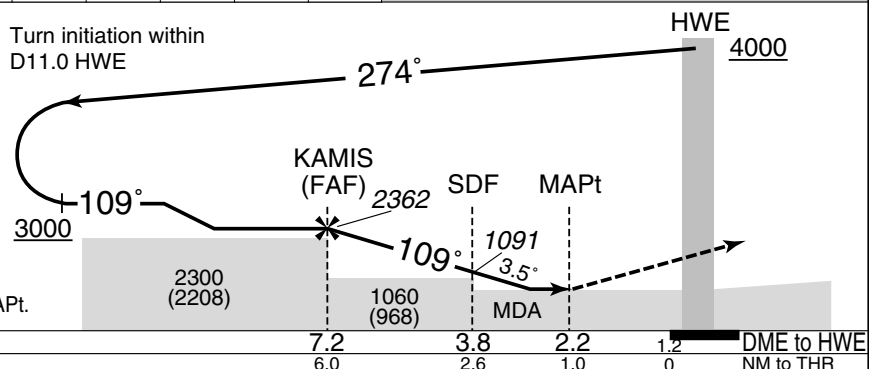
VOR RWY12

|  |   |                                  |                          |
|--|---|----------------------------------|--------------------------|
| HAKODATE APP<br>119.0 – 121.0<br>127.9 | HAKODATE VOR/DME<br>112.3 HWE<br>CH-70X<br>41°46'27"N/140°49'56"E | HAKODATE TOWER<br>118.35 – 126.2 | RADAR AVBL<br>ATIS 126.6 |
|--|---|----------------------------------|--------------------------|



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

Waypoint Coordinates

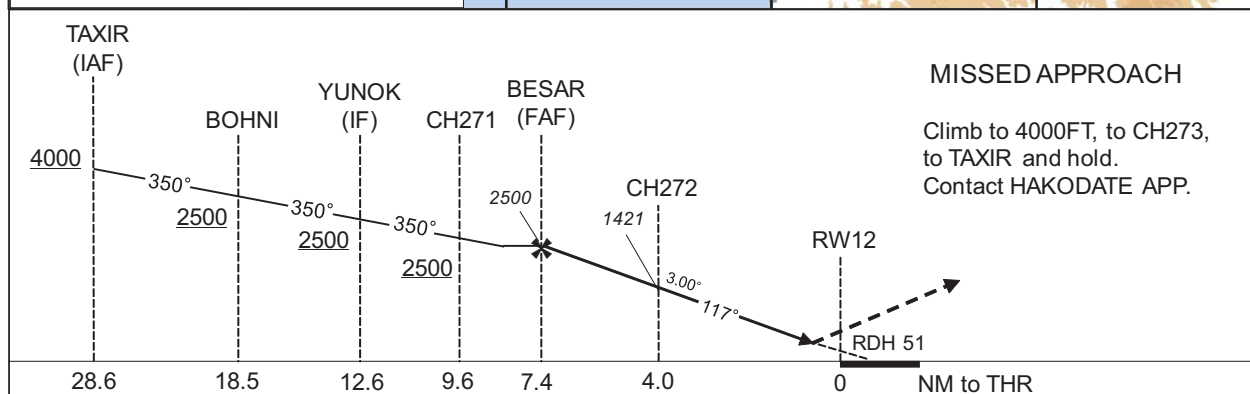
| Waypoint Identifier | Coordinates              | RF Arc Center Identifier | Coordinates              |
|---------------------|--------------------------|--------------------------|--------------------------|
| TAXIR               | 412632.43N / 1404728.04E | CHRF3                    | 414301.30N / 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<br>(340.6) | -9.4               | 10.1          | -              | +2500         | -            | -               | 1.0       |
| 003           | TF                                 | YUNOK               | -        | 350<br>(340.6) | -9.4               | 5.9           | -              | +2500         | -            | -               | 1.0       |
| 004           | TF                                 | CH271               | -        | 350<br>(340.5) | -9.4               | 3.0           | -              | +2500         | -185         | -               | 1.0       |
| 005           | RF<br>Center:<br>CHRF5<br>r=2.50NM | BESAR               | -        | -              | -9.4               | 2.2           | R              | 2500          | -            | -               | 1.0       |
| 006           | RF<br>Center:<br>CHRF5<br>r=2.50NM | CH272               | -        | -              | -9.4               | 3.4           | R              | 1421          | -            | -3.00           | 0.3       |
| 007           | TF                                 | RW12                | Y        | 117<br>(108.0) | -9.4               | 4.0           | -              | 143           | -            | -3.00/51        | 0.3       |
| 008           | TF                                 | CH273               | -        | 117<br>(108.1) | -9.4               | 5.4           | -              | -             | -            | -               | 1.0       |
| 009           | TF                                 | TAXIR               | -        | 207<br>(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

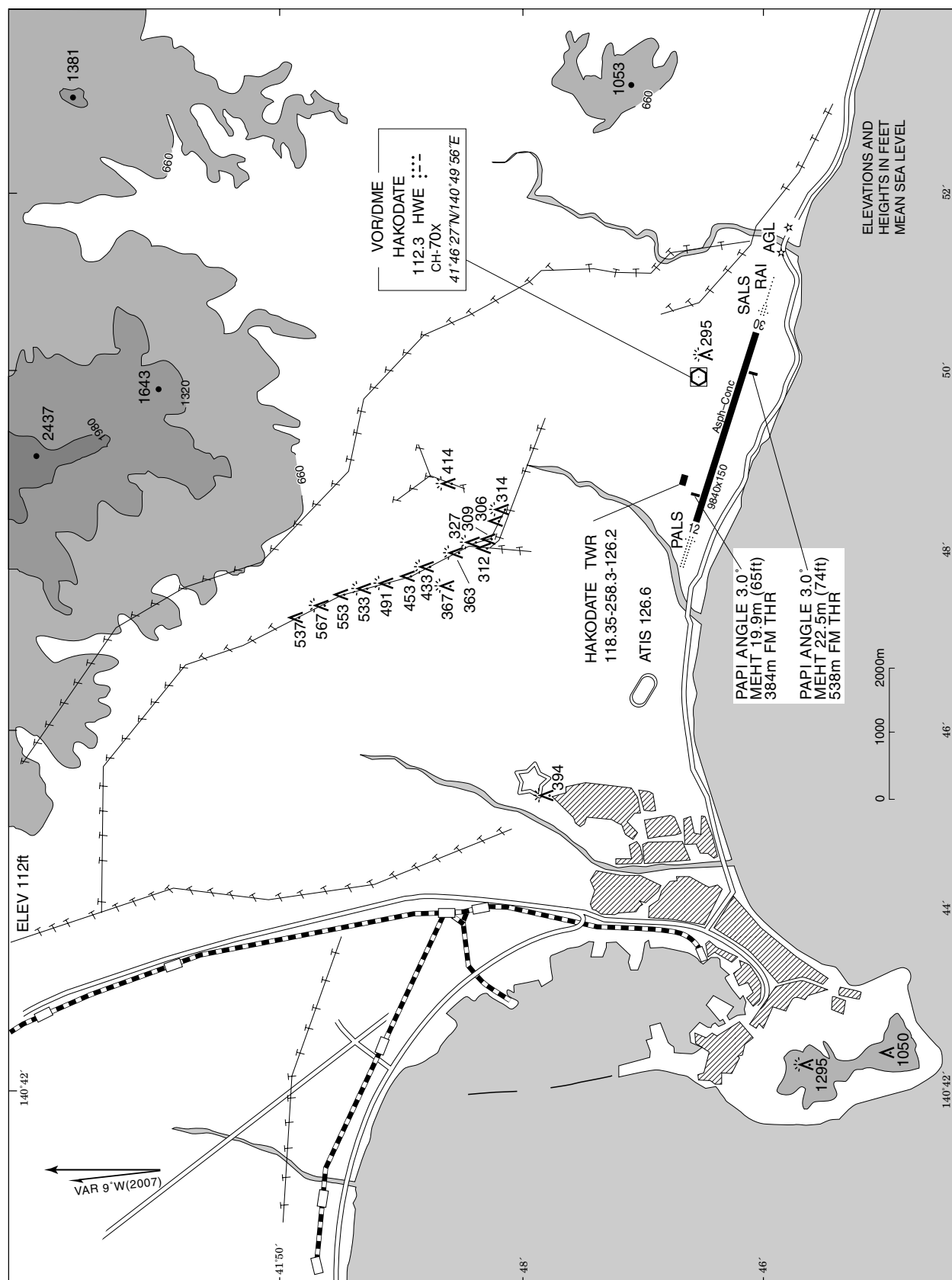


※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE :DIST from ARP(Mihara):

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

## LDG CHART





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