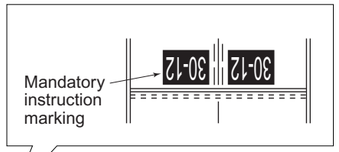
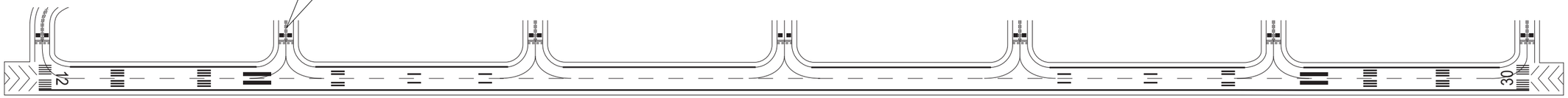
AERODROME CHART

HAKODATE AIRPORT

ELEV34.1m (111.9ft)

MARKING AIDS



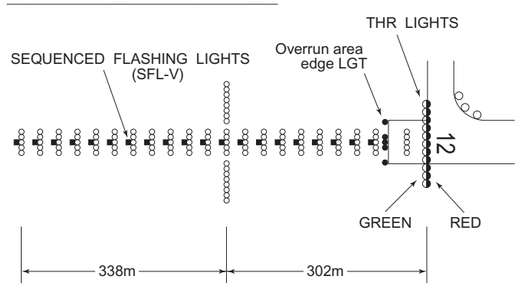


VAR9°W-2009
Annual Change 1.2° E

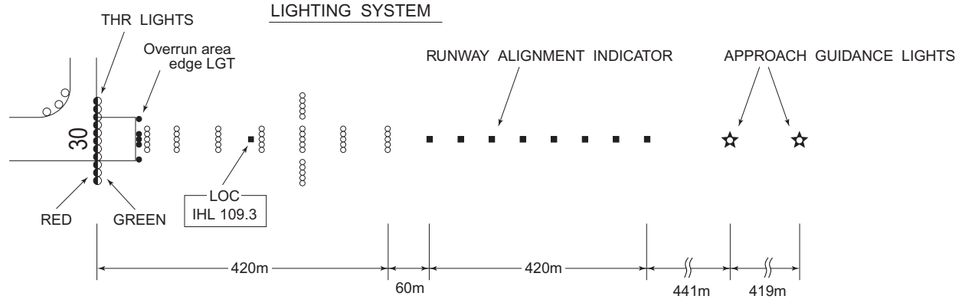
VOR/DME
HWE 112.3
CH-70X

TERMINAL BLDG
CARGO
INTL
DOMESTIC
TWR
AIS/MET
ABN
APRON
FIRE STATION
1 2W2 3 4 5 6 7 8 9 10
P1 P2 P3 P4 P5 P6
WDI WIND SPEED METER
RVR
CEILO METER
WDI
WIND SPEED METER
T1 T2 T3 T4 T5 T6 T7
ELEV 151ft
9▽1 8▽2 7▽3 6▽4 5▽5 4▽6 3▽7 1▽9
Asph conc
PCN 98F/C/X/T
3000m×45m
12
30
ELEV 92ft
9△1 8△2 7△3 6△4 5△5 4△6 3△7 2△8 1△9
TDZ ELEV 103ft
RWY GUARD LGT(T1-T7)
ARP *414612N*
1404919E
ILS
GP 332.0
PAPI ANGLE 3.0°
MEHT 19.9m (65ft)
384m INSIDE FM THR
PAPI ANGLE 3.0°
MEHT 22.5m (74ft)
538m INSIDE FM THR

APPROACH LIGHTING SYSTEM



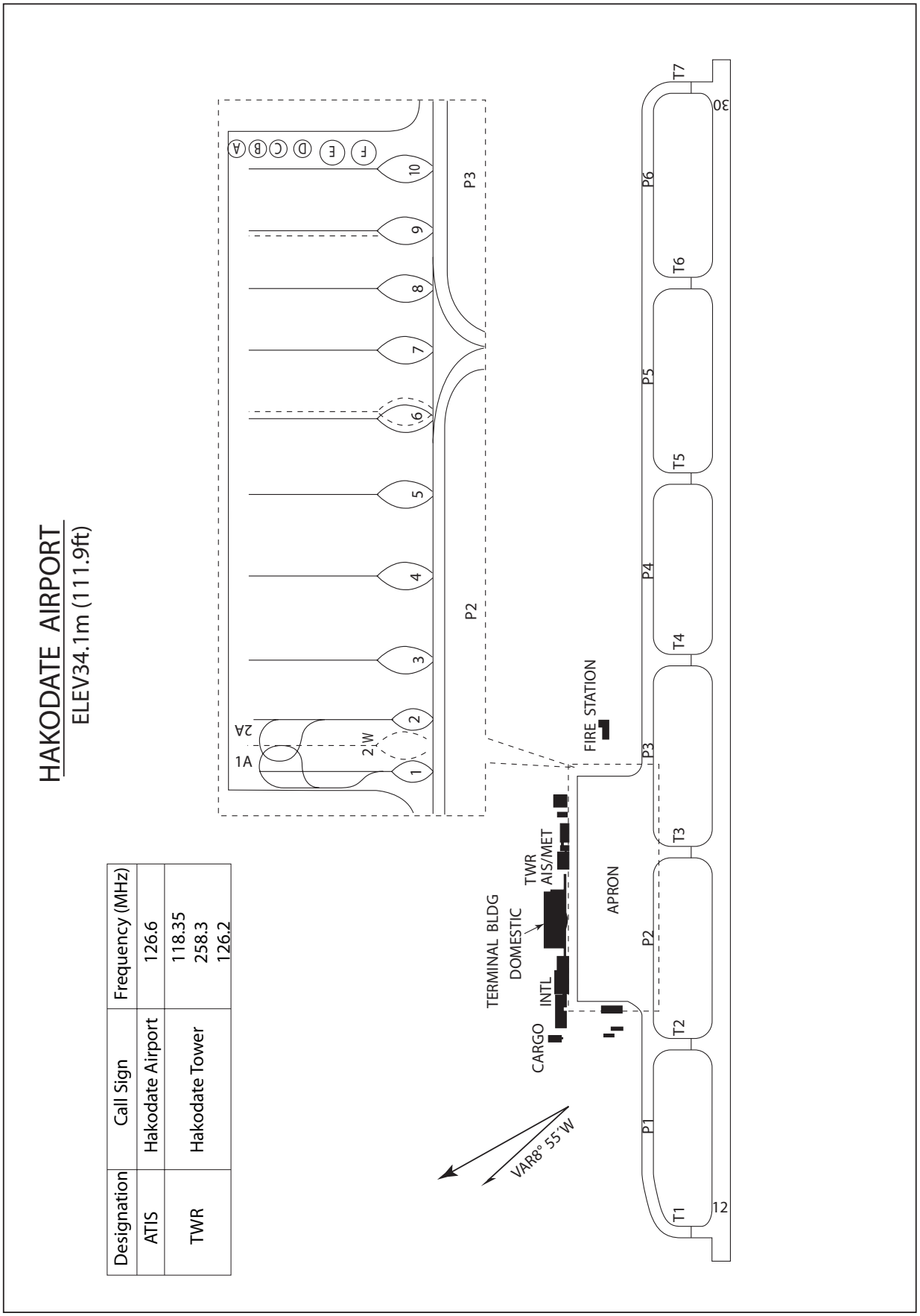
SIMPLE APPROACH LIGHTING SYSTEM



CHANGE:STOP BAR LGT abolished

AIRCRAFT PARKING/DOCKING CHART

RJCH / HAKODATE AD CHART



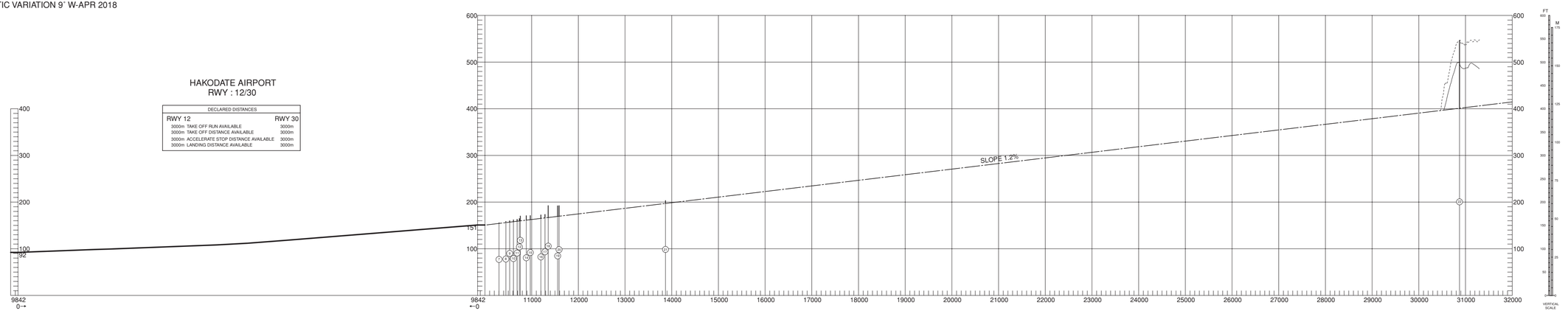
AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

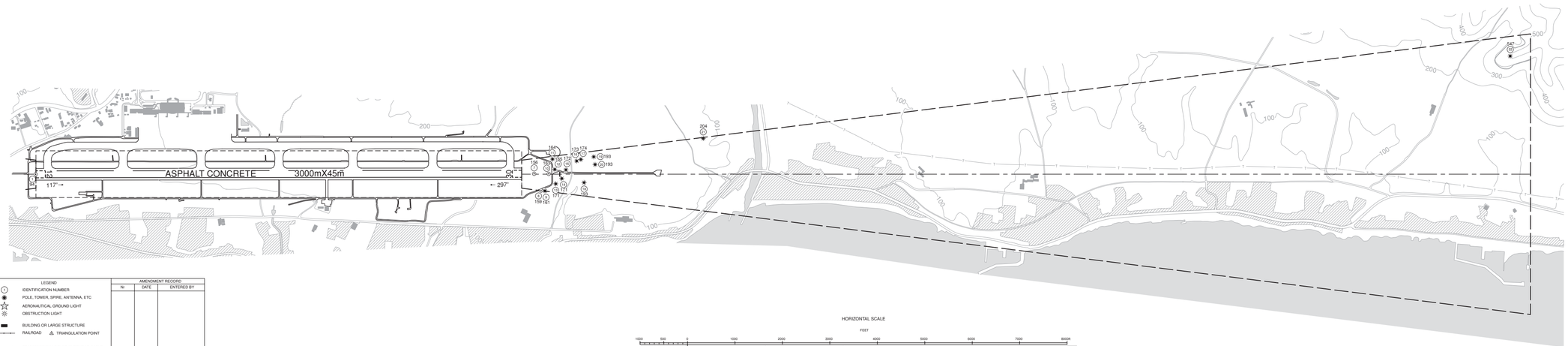
DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 9° W-APR 2018

HAKODATE AIRPORT
RWY : 12/30

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

- IDENTIFICATION NUMBER
- POLE,TOWER, SPIRE, ANTENNA, ETC
- AERONAUTICAL GROUND LIGHT
- OBSTRUCTION LIGHT
- BUILDING OR LARGE STRUCTURE
- RAILROAD
- TRIANGULATION POINT
- TRANSMISSION LINE OR OVERHEAD CABLE
- LEVEE
- RIVER
- TREE
- LAKE
- CONTOURS(ft)

AMENDMENT RECORD

Nr	DATE	ENTERED BY

CHANGE: Update

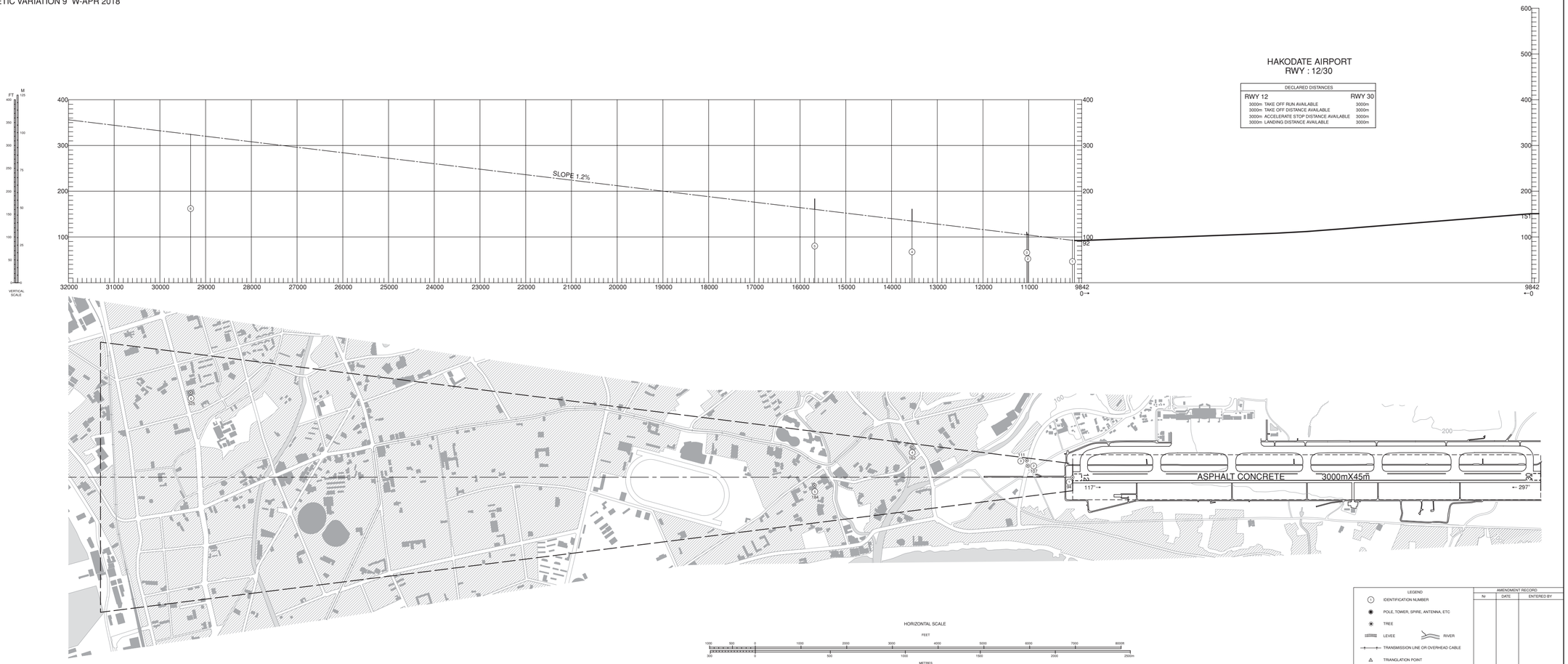
AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 9° W-APR 2018

HAKODATE AIRPORT
RWY : 12/30

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
- IDENTIFICATION NUMBER
- POLE, TOWER, SPIRE, ANTENNA, ETC
- TREE
- LEVEE
- RIVER
- TRANSMISSION LINE OR OVERHEAD CABLE
- TRIANGULATION POINT
- AERONAUTICAL GROUND LIGHT

AMENDMENT RECORD		
Nr	DATE	ENTERED BY

CHANGE: Update

AERODROME OBSTACLE CHART - ICAO
TYPE B

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC

AERODROME ELEVATION 111.9ft ARP

VAR8° W APR.2018
ANNUAL CHANGE2.6'W

HORIZONTAL SCALE
FEET
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000ft
300 0 500 1000 1500 2000 2500 3000m
METERS

HAKODATE CITY
HORIZONTAL SURFACE
CONICAL SURFACE
SLOPE 1:50
TRANSITIONAL SURFACE
SLOPE 1:7
APPROACH SURFACE
SLOPE 1:50
TAKE-OFF FLIGHT PATH
SLOPE 1.2%
ASPHALT/CONCRETE
RACE TRACK
TSUGARU STRAIT

140°44'0"E 140°45'0"E 140°46'0"E 140°47'0"E 140°48'0"E 140°49'0"E 140°50'0"E 140°51'0"E 140°52'0"E 140°53'0"E 140°54'0"E 140°55'0"E
41°50'0"N 41°49'0"N 41°48'0"N 41°47'0"N 41°46'0"N 41°45'0"N

LEGEND
- AERODROME REFERENCE POINT *41°46'12"N 140°49'19"E*
- POLE, TOWER, SPIRE, ANTENNA, ETC
- AERONAUTICAL GROUND LIGHT
- OBSTRUCTION LIGHT
- BUILDING OR LARGE STRUCTURE
- RAILROAD △ TRIANGULATION POINT
- TRANSMISSION LINE OR OVERHEAD CABLE
- LEVEE
- TREE
- RIVER
- LAKE
- CONTOURS(ft)

AMENDMENT RECORD		
NO	DATE	ENTERED BY

CHANGE: Update

STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE SID and TRANSITION

CHANGE : ESASI SIX DEPARTURE.

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.

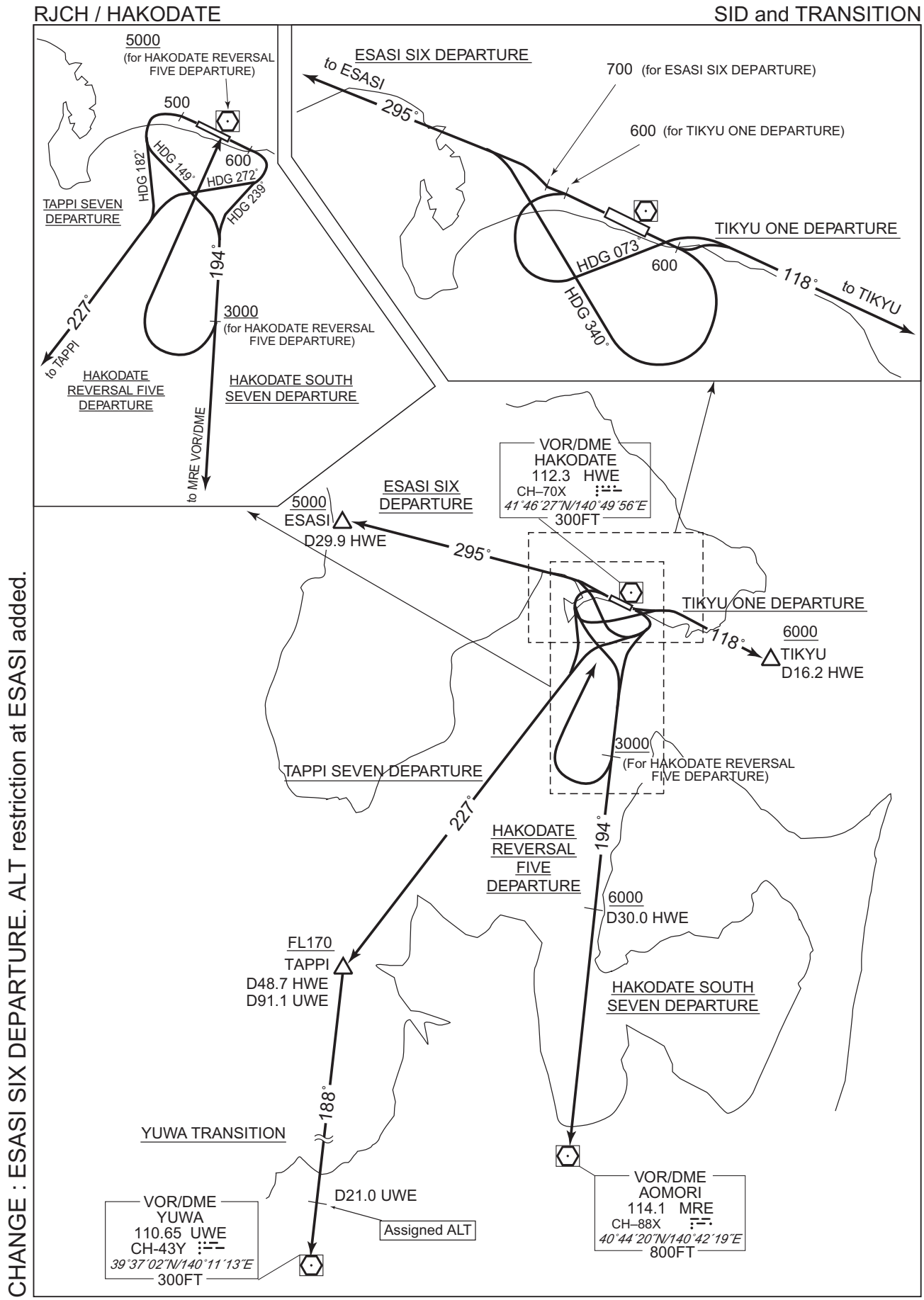
ESASI SIX DEPARTURE

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.

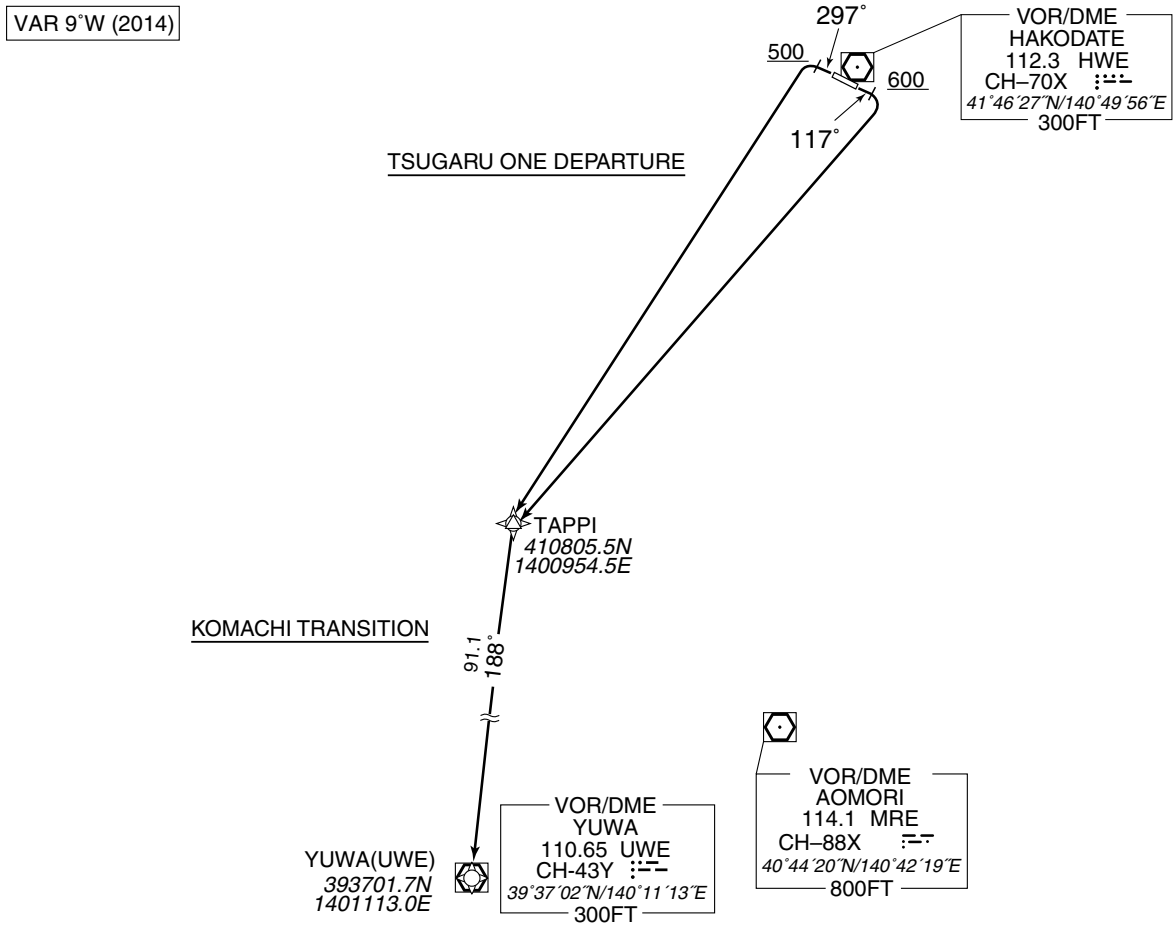
STANDARD DEPARTURE CHART - INSTRUMENT



STANDARD DEPARTURE CHART - INSTRUMENT

RJCH / HAKODATE RNAV SID and TRANSITION

TSUGARU ONE DEPARTURE KOMACHI TRANSITION		RNAV1
Note 1) DME/DME/IRU or GNSS required. ※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. 2) RADAR service required.	Critical DME	RWY12 : MRE : 30.0NM to TAPPI – TAPPI RWY30 : MRE : 47.6NM to TAPPI – TAPPI HWE : 47.6NM to TAPPI – 40.0NM to TAPPI KOMACHI Transition : MRE: TAPPI - 24.0NM to UWE HWE: TAPPI - 55.0NM to UWE UWE: 55.0NM to UWE - 24.0NM to UWE HPE: 16.0NM to UWE - UWE
	DME GAP	RWY12 : RWY12DER – 30.0NM to TAPPI RWY30 : RWY30DER – 47.6NM to TAPPI KOMACHI Transition: 24.0NM to UWE – 22.0NM to UWE 19.0NM to UWE – 16.0NM to UWE
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



TSUGARU ONE DEPARTURE

RWY12 : Climb on HDG117˚ at or above 600FT, turn right direct to TAPPI.
RWY30 : Climb on HDG297˚ at or above 500FT, turn left direct to TAPPI.

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.

KOMACHI TRANSITION

From TAPPI, to UWE.

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

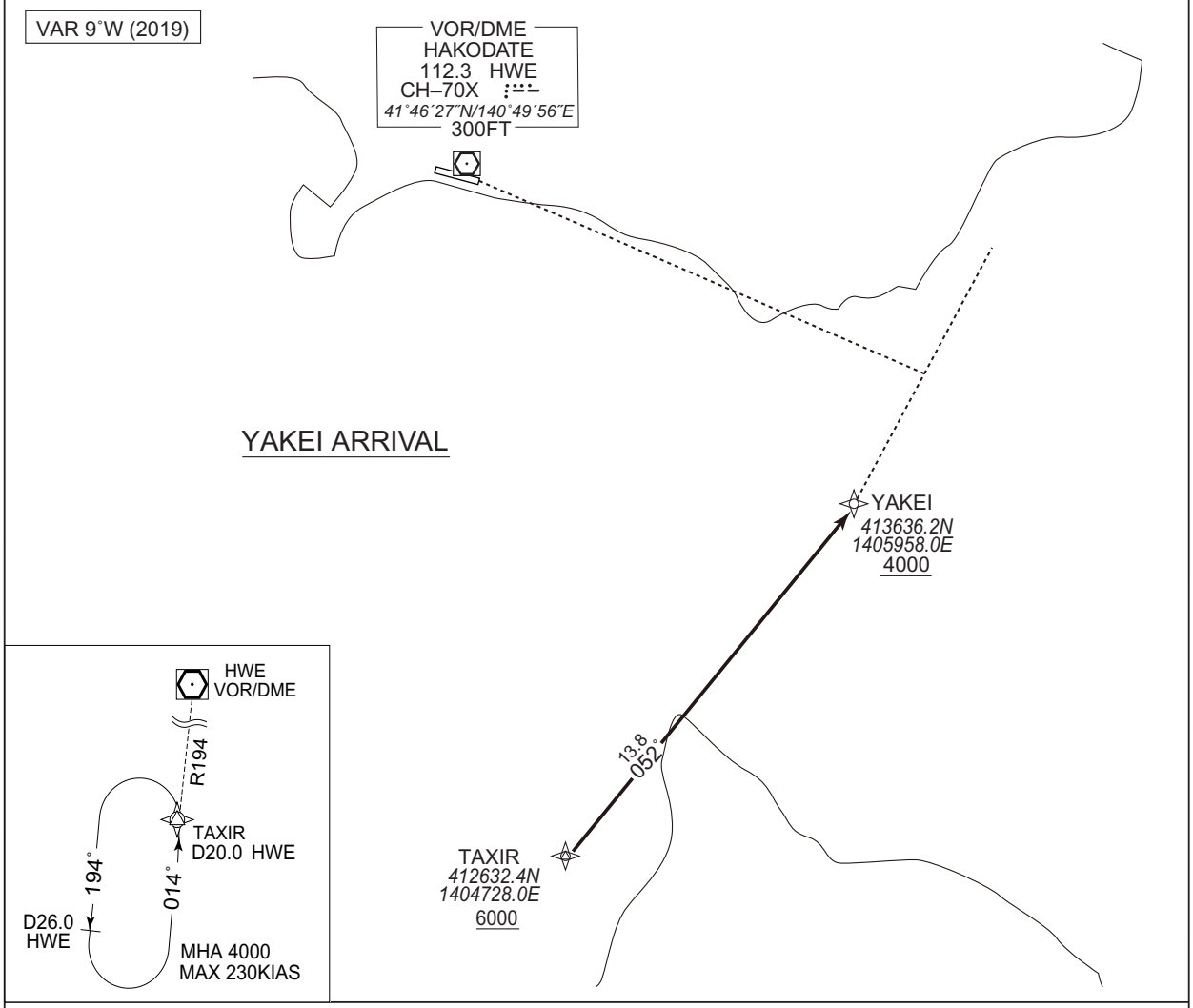
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	TAPPI	—	—	-8.9	—	—	—	—	—	RNAV1
002	TF	UWE	—	188 (179.4)	-8.9	91.1	—	—	—	—	RNAV1

STANDARD ARRIVAL CHART - INSTRUMENT

RJCH / HAKODATE — RNAV STAR RWY30

YAKEI ARRIVAL	RNAV1

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



YAKEI ARRIVAL

From TAXIR at or above 6000FT, to YAKEI at or above 4000FT.

Critical DME	MKE : TAXIR – 10.0NM to YAKEI HWE : 3.0NM to YAKEI – YAKEI
DME GAP	–
Inappropriate Navaids	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	YAKEI	—	052 (042.9)	-9.4	13.8	—	+4000	—	—	RNAV1

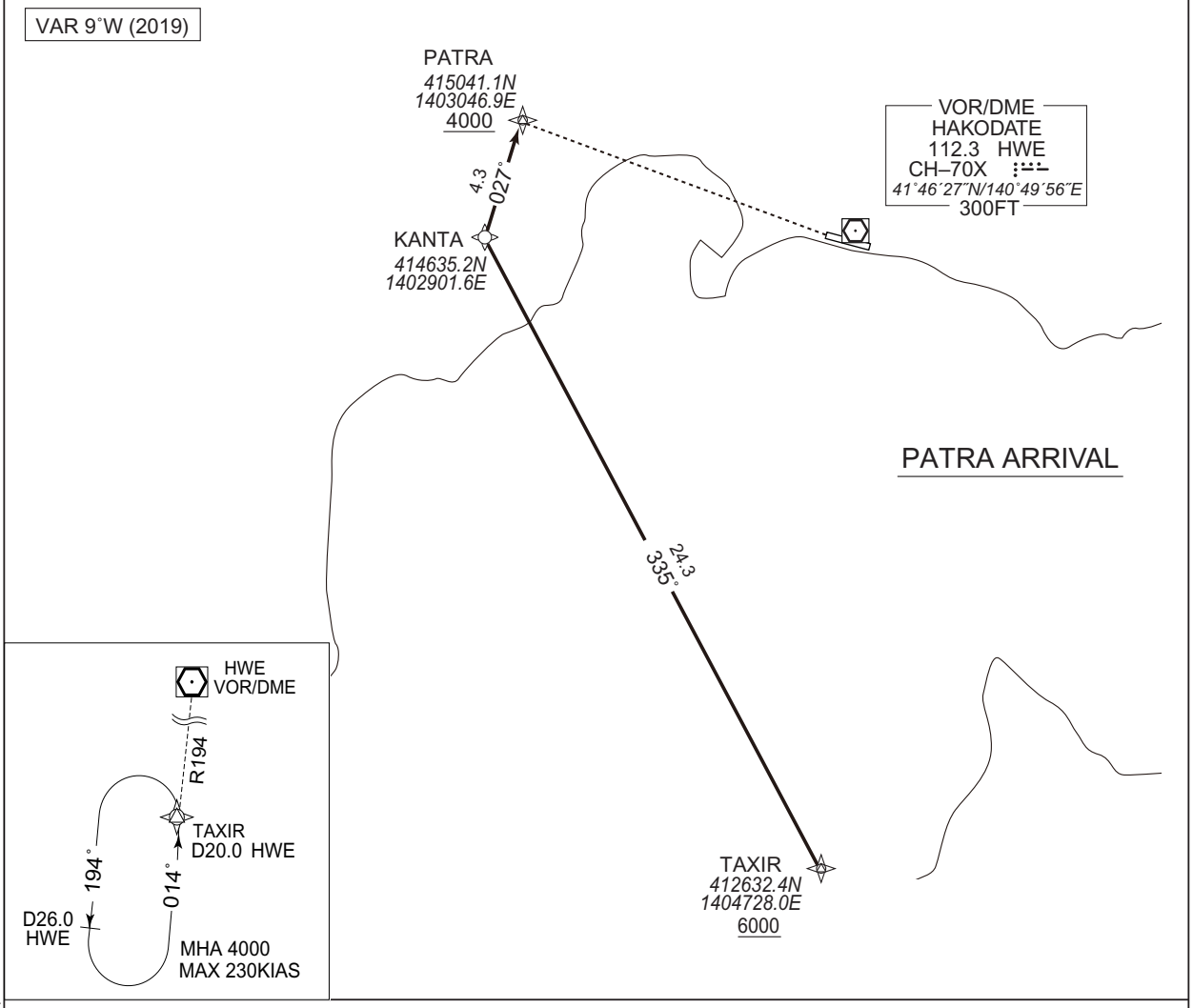
CHANGE : New PROC.

STANDARD ARRIVAL CHART - INSTRUMENT

RJCH / HAKODATE — RNAV STAR RWY12

PATRA ARRIVAL	RNAV1

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



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 Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

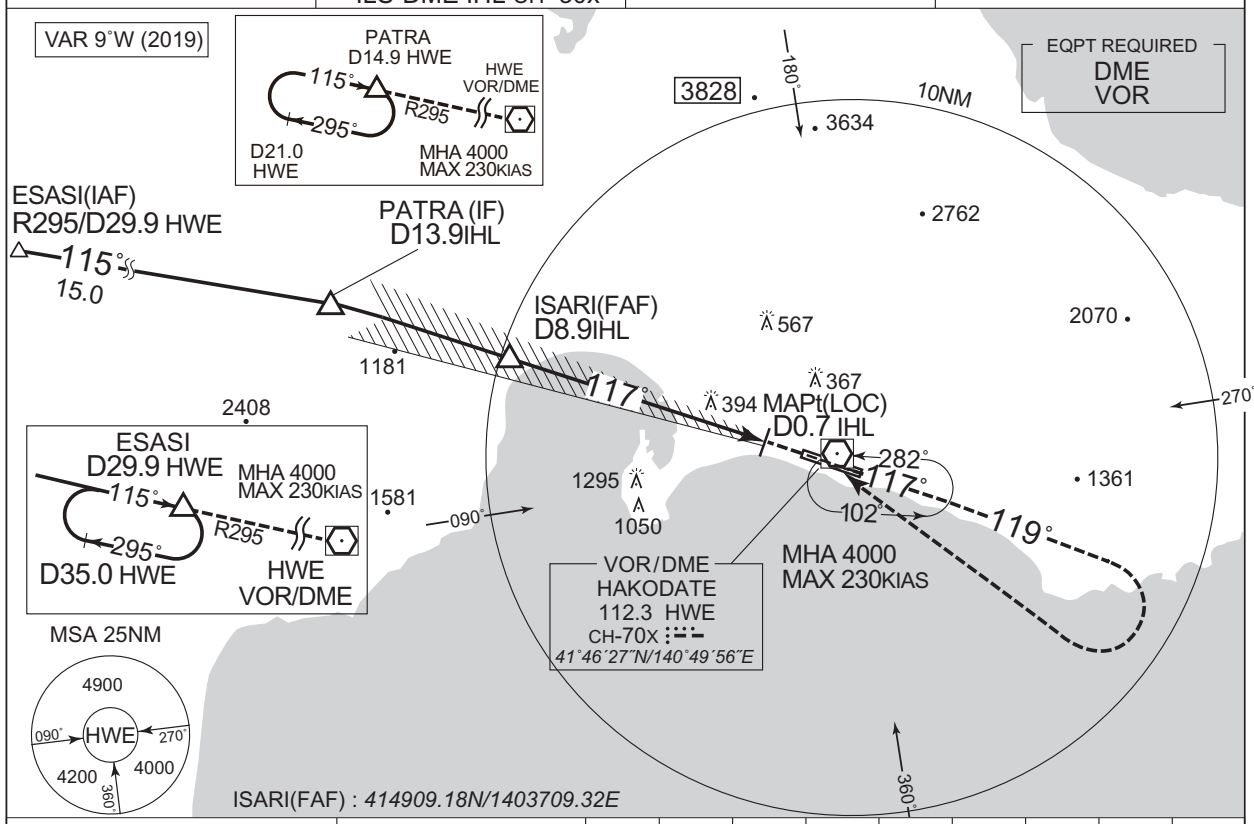
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	TAXIR	—	—	-9.4	—	—	+6000	—	—	RNAV1
002	TF	KANTA	—	335 (325.6)	-9.4	24.3	—	—	—	—	RNAV1
003	TF	PATRA	—	027 (017.7)	-9.4	4.3	—	+4000	—	—	RNAV1

CHANGE : Correction of misdescription(Name of PROC).

INSTRUMENT APPROACH CHART

RJCH / HAKODATE — ILS Z or LOC Z RWY12

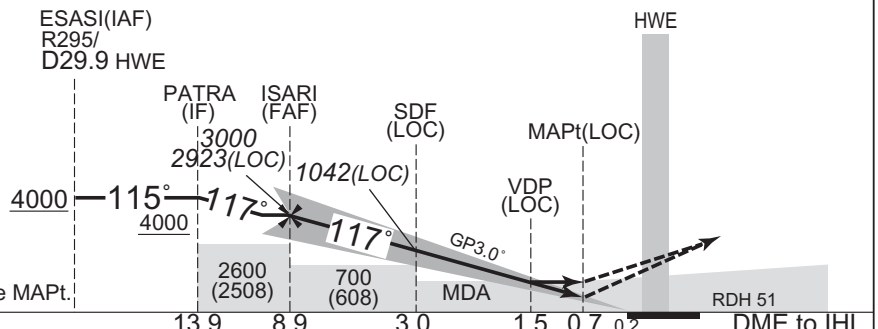
HAKODATE APP	ILS–LOC	HAKODATE TWR	RADAR AVBL
119.0 – 121.0 127.9	109.3 IHL ILS–GP 332.0 ILS-DME IHL CH–30x	118.35 – 126.2	ATIS 126.6



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	–

MISSED APPROACH
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

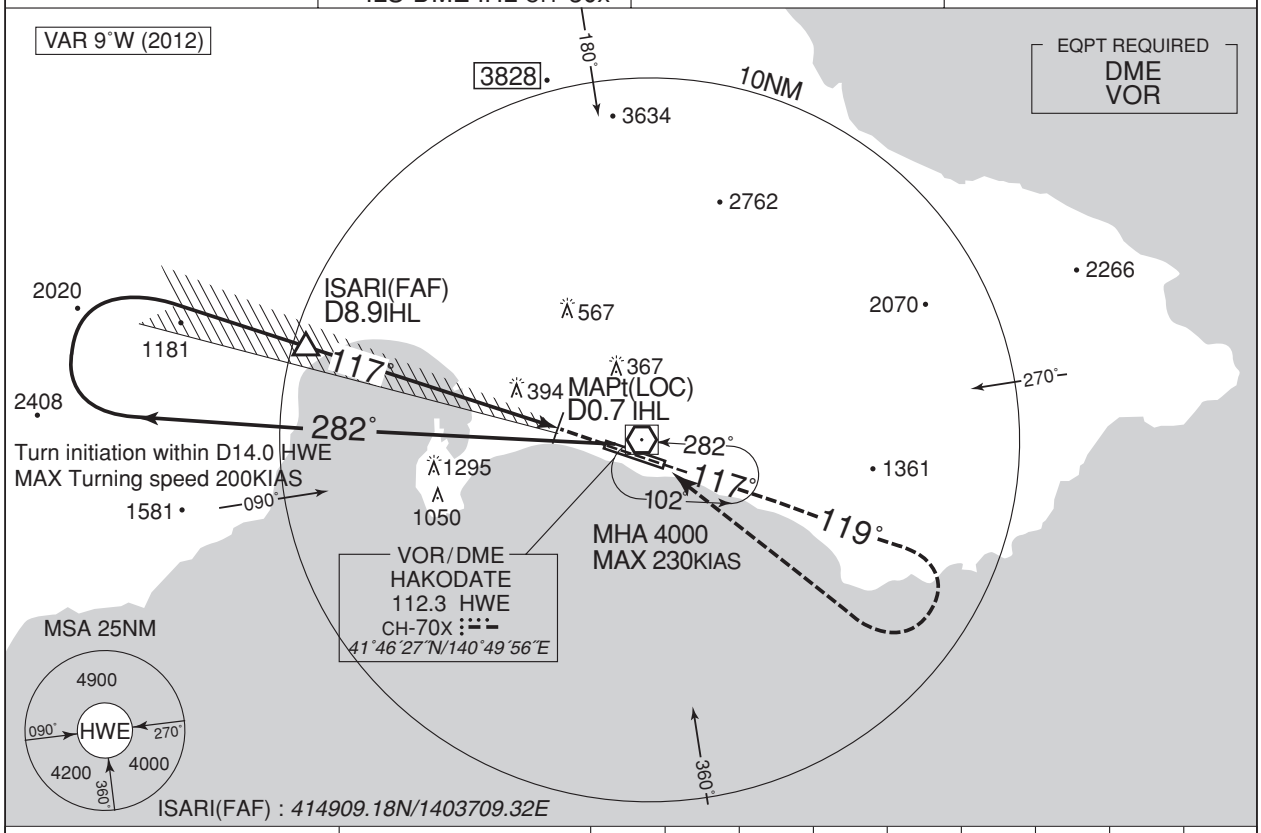
Circling to SOUTH side of RWY only.
MINIMA with Missed APCH climb gradient of 2.5% are not established.

CHANGE : ALT restriction at PATRA.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE — ILS Y or LOC Y RWY12

HAKODATE APP	ILS-LOC	HAKODATE TWR	RADAR AVBL
119.0 – 121.0 127.9	109.3 IHL ILS–GP 332.0 ILS-DME IHL CH–30x	118.35 – 126.2	ATIS 126.6

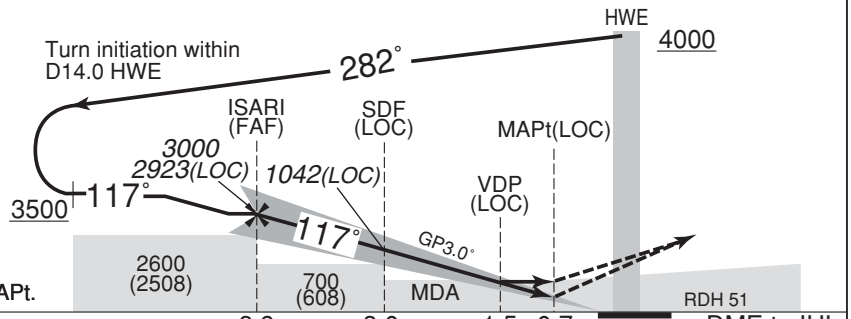


	NM to IHL	FAF	8	7	6	5	4	3	2	MAPt
	ALT (3.0° APCH Path)	2923	2634	2316	1997	1679	1361	1042	724	–

MISSED APPROACH

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

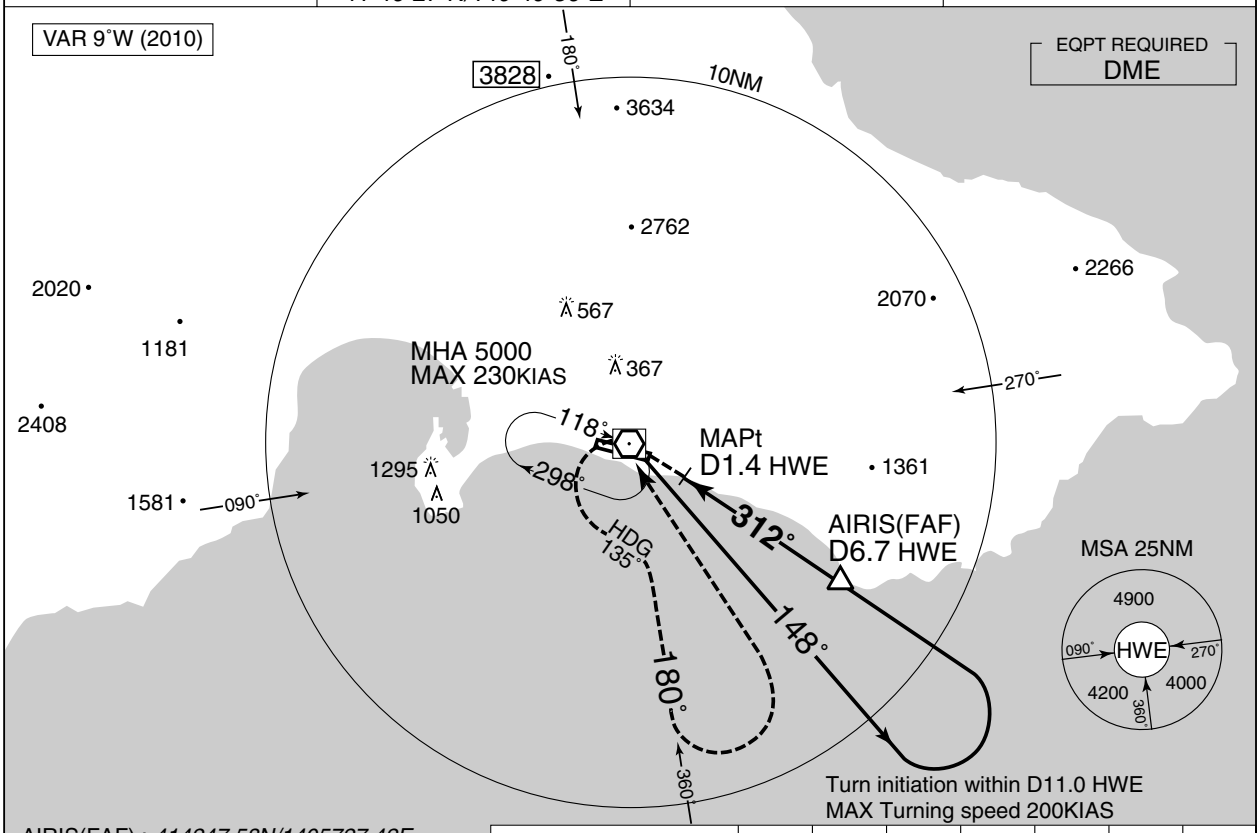
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	292 (200)	700	540 (448)	1200	550 (438)	1600
B				1300	570 (458)	
C	299 (207)			1400	600 (488)	2400
D	309 (217)			1600	690 (578)	3200

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

INSTRUMENT APPROACH CHART

RJCH / HAKODATE VOR RWY30

HAKODATE APP	HAKODATE VOR/DME	HAKODATE TOWER	RADAR AVBL
119.0 – 121.0 127.9	112.3 HWE CH–70X *41˚46´27˝N/140˚49´56˝E*	118.35 – 126.2	ATIS 126.6

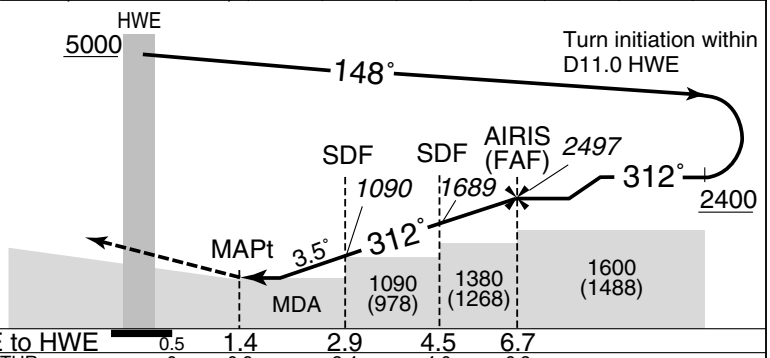


AIRIS(FAF) : *414247.58N/1405727.42E*

NM to HWE	MAPt	2	3	4	5	6	FAF
ALT (3.5˚ APCH Path)	–	750	1122	1494	1865	2237	2497

MISSED APPROACH
Turn left HDG135˚ to intercept HWE R180 to 3000FT, turn left direct to HWE VOR/DME and hold at 5000FT.
Contact HAKODATE APP.

No Turn before MAPt.
PAPI and descent angles not coincident.
Timing not authorized for definding the MAPt.



DME to HWE	0.5	1.4	2.9	4.5	6.7
NM to THR	0	0.9	2.4	4.0	6.2

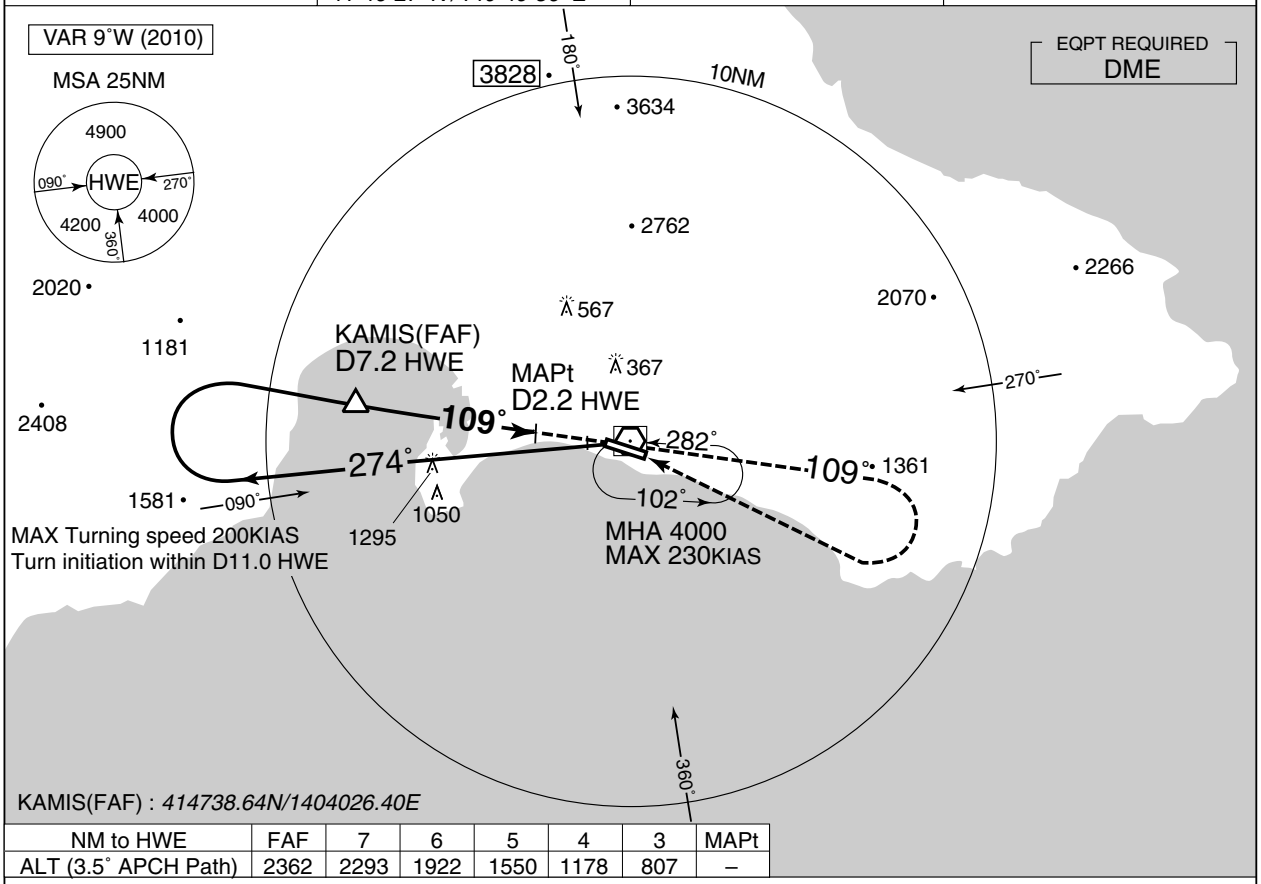
MINIMA	THR elev. 151		AD elev. 112	
CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	730 (618)	1000	730 (618)	1600
B		1200		
C				2400
D		1600		3200

Circling to SOUTH side of RWY only.

INSTRUMENT APPROACH CHART

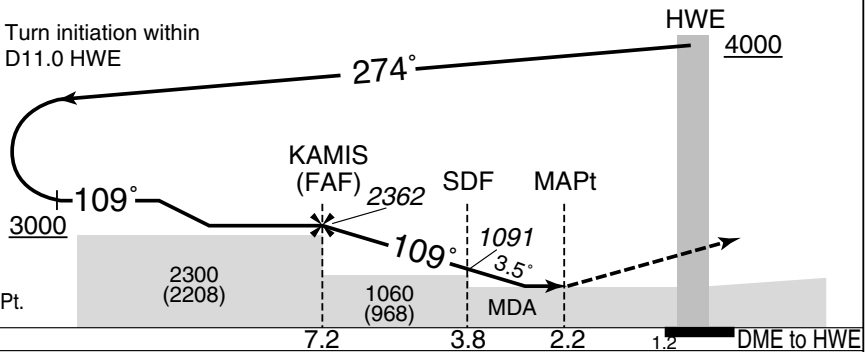
RJCH / HAKODATE VOR RWY12

HAKODATE APP	HAKODATE VOR/DME	HAKODATE TOWER	RADAR AVBL
119.0 – 121.0 127.9	112.3 HWE CH–70X *41˚46´27˝N/140˚49´56˝E*	118.35 – 126.2	ATIS 126.6



NM to HWE	FAF	7	6	5	4	3	MAPt
ALT (3.5˚ APCH Path)	2362	2293	1922	1550	1178	807	–

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 definding 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)	2400
D		1600	690 (578)	3200

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

HAKODATE APP
119.0 – 121.0
127.9

1. DME/DME not authorized.
2. RADAR service required.
3. GNSS required.

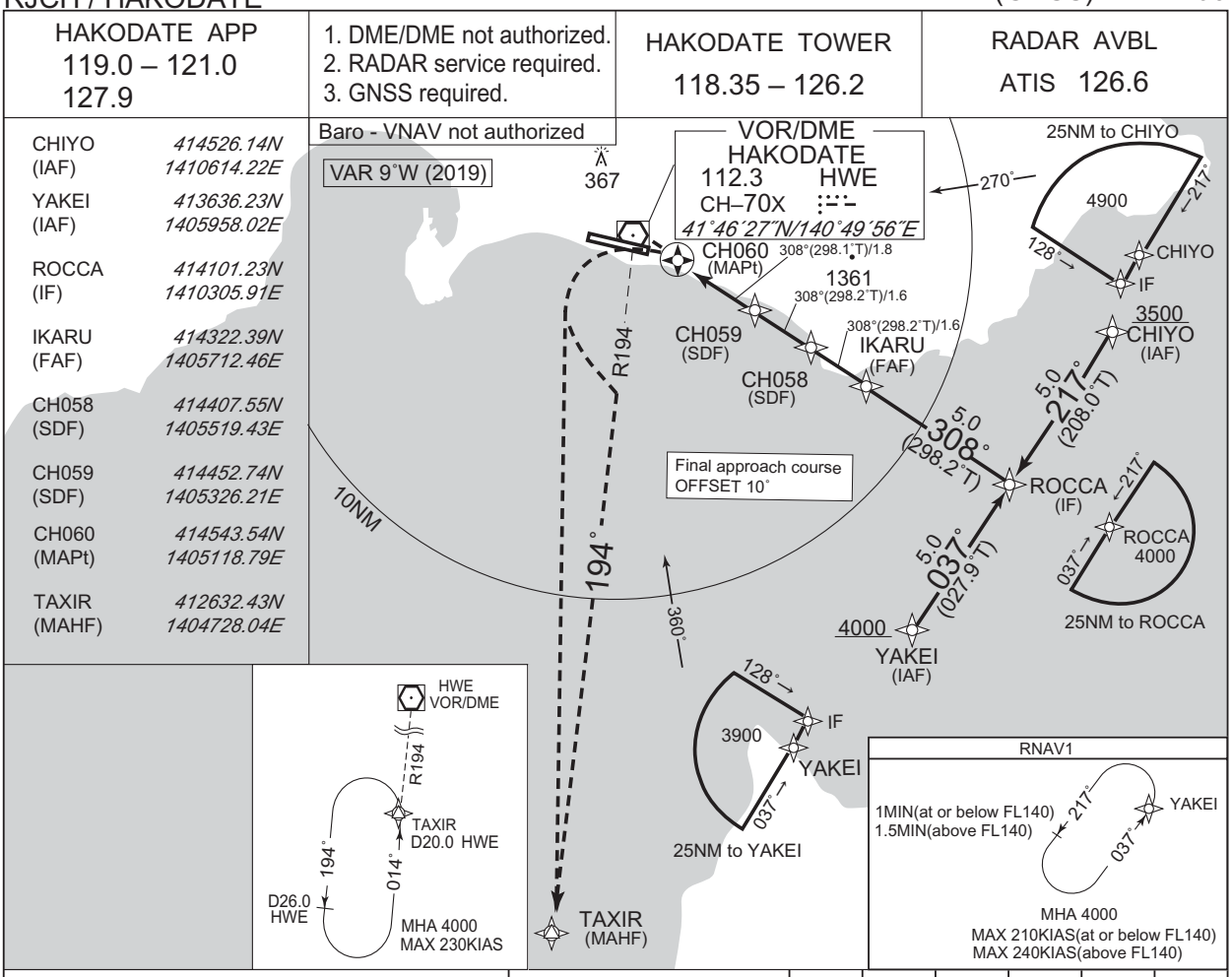
HAKODATE TOWER
118.35 – 126.2

RADAR AVBL
ATIS 126.6

Baro - VNAV not authorized

VAR 9˚W (2019)

CHIYO (IAF)	414526.14N 1410614.22E
YAKEI (IAF)	413636.23N 1405958.02E
ROCCA (IF)	414101.23N 1410305.91E
IKARU (FAF)	414322.39N 1405712.46E
CH058 (SDF)	414407.55N 1405519.43E
CH059 (SDF)	414452.74N 1405326.21E
CH060 (MAPt)	414543.54N 1405118.79E
TAXIR (MAHF)	412632.43N 1404728.04E

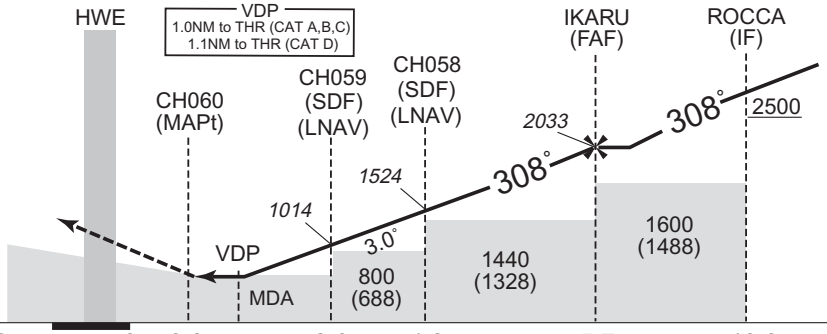


NM to Next Fix	MAPt	1	2	3	4	FAF
ALT (3.0˚ APCH Path)	–	760	1078	1397	1715	2033

MISSED APPROACH

Turn left direct to TAXIR
and hold at 4000FT.
Contact HAKODATE APP.

(for using VOR/DME)
Turn left climb to 4000FT
via HWE R194 to TAXIR
and hold.
Contact HAKODATE APP.



MINIMA THR elev. 151 AD elev. 112

CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS
A	Not applicable		530 (418)	900	550 (438)	1600
B				1000	570 (458)	
C					600 (488)	2400
D			550 (438)	1400	690 (578)	3200

Circling to SOUTH side of RWY only.

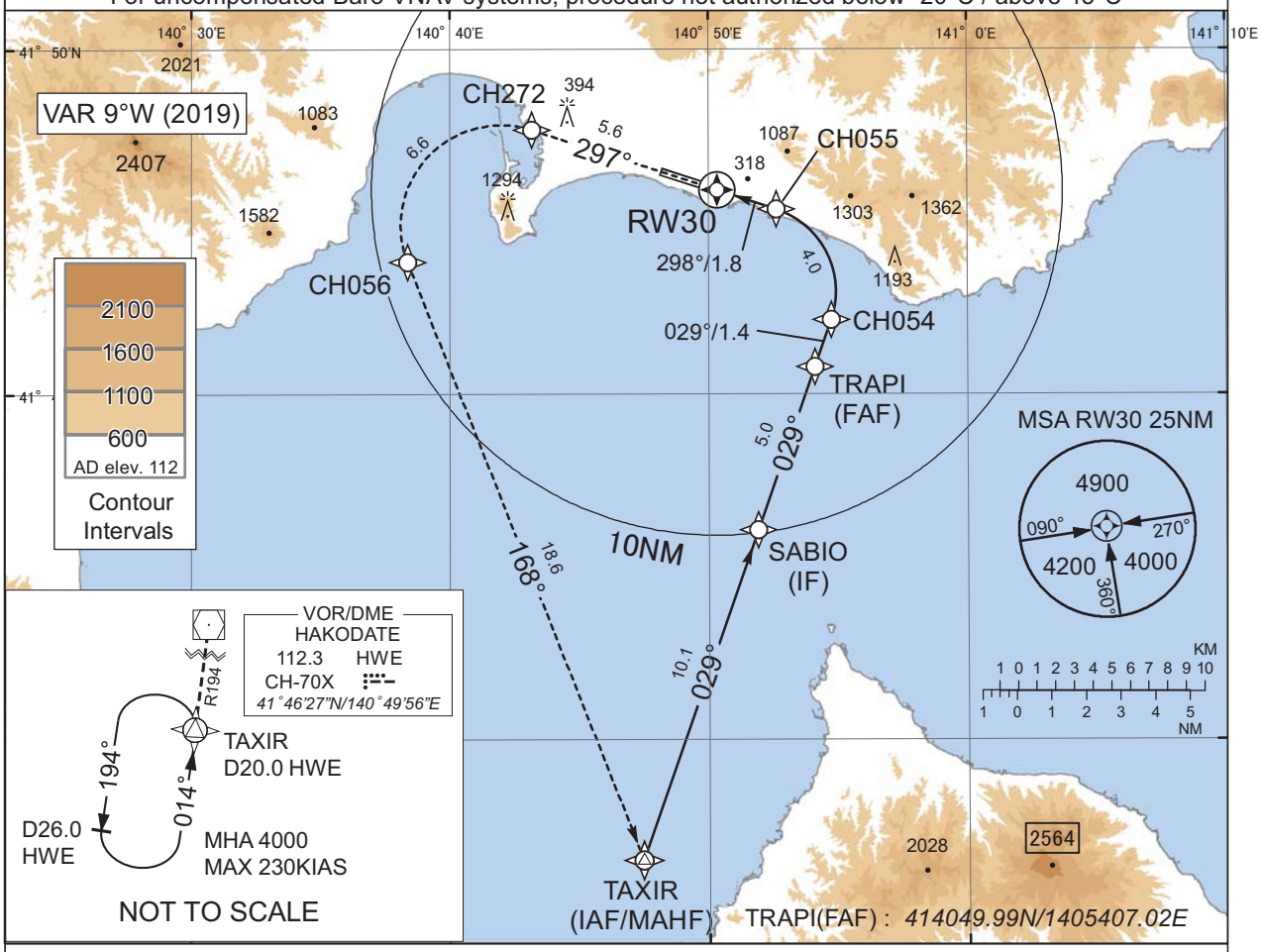
CHANGE : VAR. PROC. HLDG Pattern(TAXIR,YAKEI) established.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE RNAV(RNP) Y RWY30

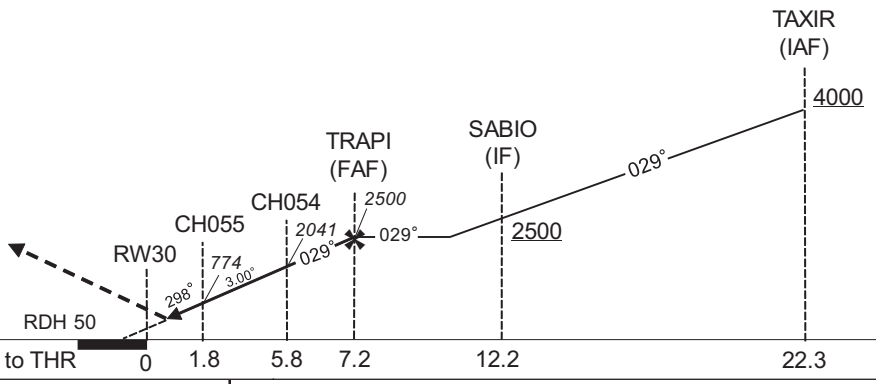
HAKODATE APP 119.0 - 121.0 127.9	GNSS and RF required.	HAKODATE TWR 118.35 - 126.2	RADAR AVBL ATIS 126.6

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

RNP AR

Special Authorization Required

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

INSTRUMENT APPROACH CHART

RJCH / HAKODATE RNAV(RNP) Y RWY30

RNAV(RNP) Y RWY30

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	-	-	-9.4	-	-	+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
TAXIR	*412632.43N / 1404728.04E*
SABIO	*413606.58N / 1405154.81E*
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*

RF Arc Center Identifier	Coordinates
CHRF3	*414301.30N / 1405136.09E*
CHRF4	*414456.26N / 1404159.49E*

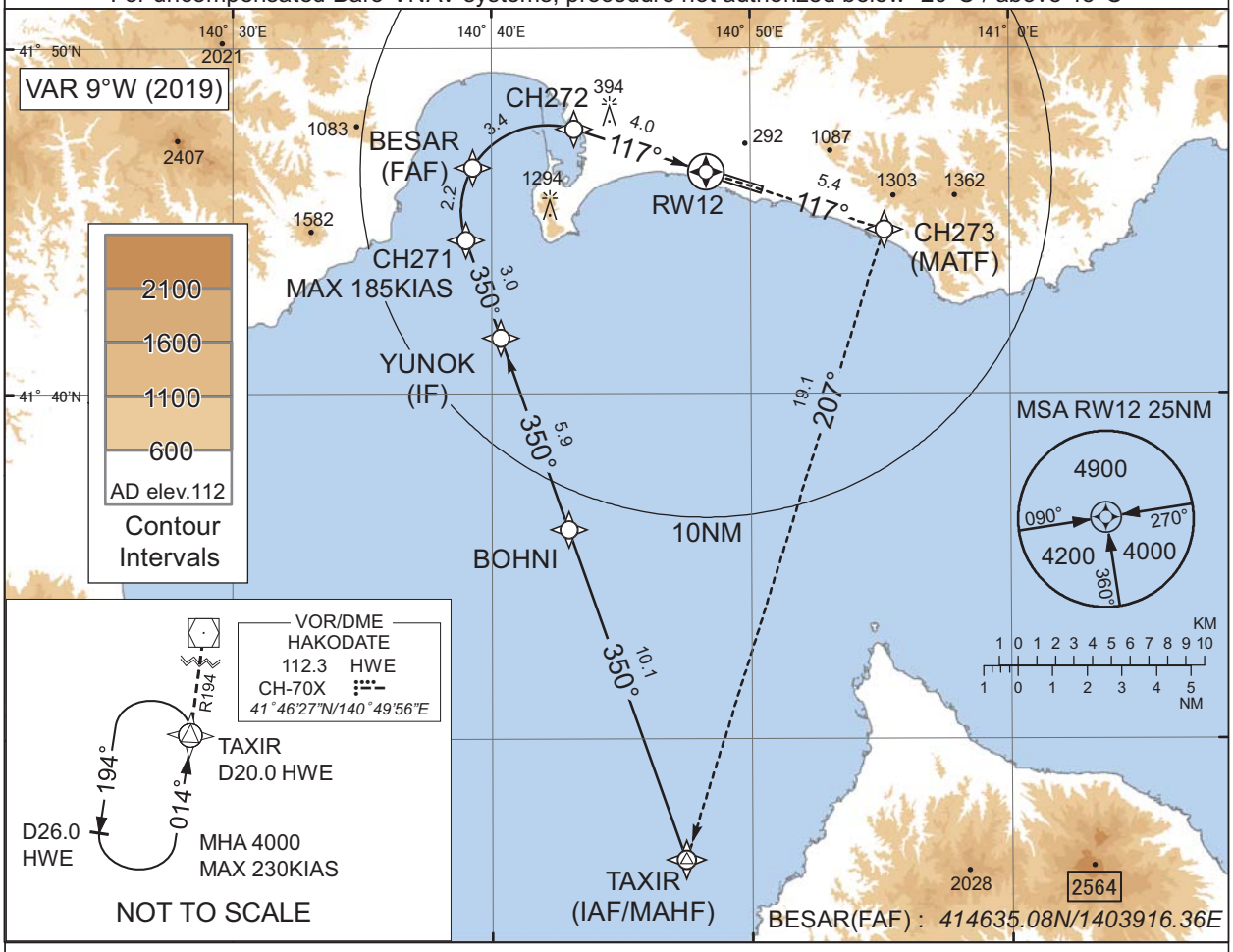
CHANGE : VAR. PROC.

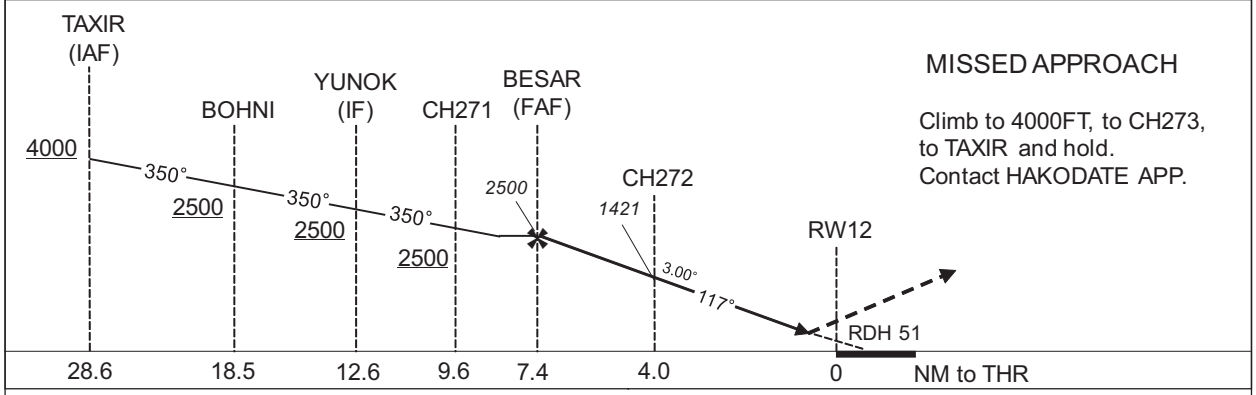
INSTRUMENT APPROACH CHART

RJCH / HAKODATE — RNAV(RNP) RWY12

HAKODATE APP 119.0 - 121.0 127.9	GNSS and RF required.	HAKODATE TWR 118.35 - 126.2	RADAR AVBL ATIS 126.6

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.

RNP AR

Special Authorization Required

CHANGE : New PROC.

INSTRUMENT APPROACH CHART

RJCH / HAKODATE RNAV(RNP) RWY12

RNAV(RNP) RWY12

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	-	-	-9.4	-	-	+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

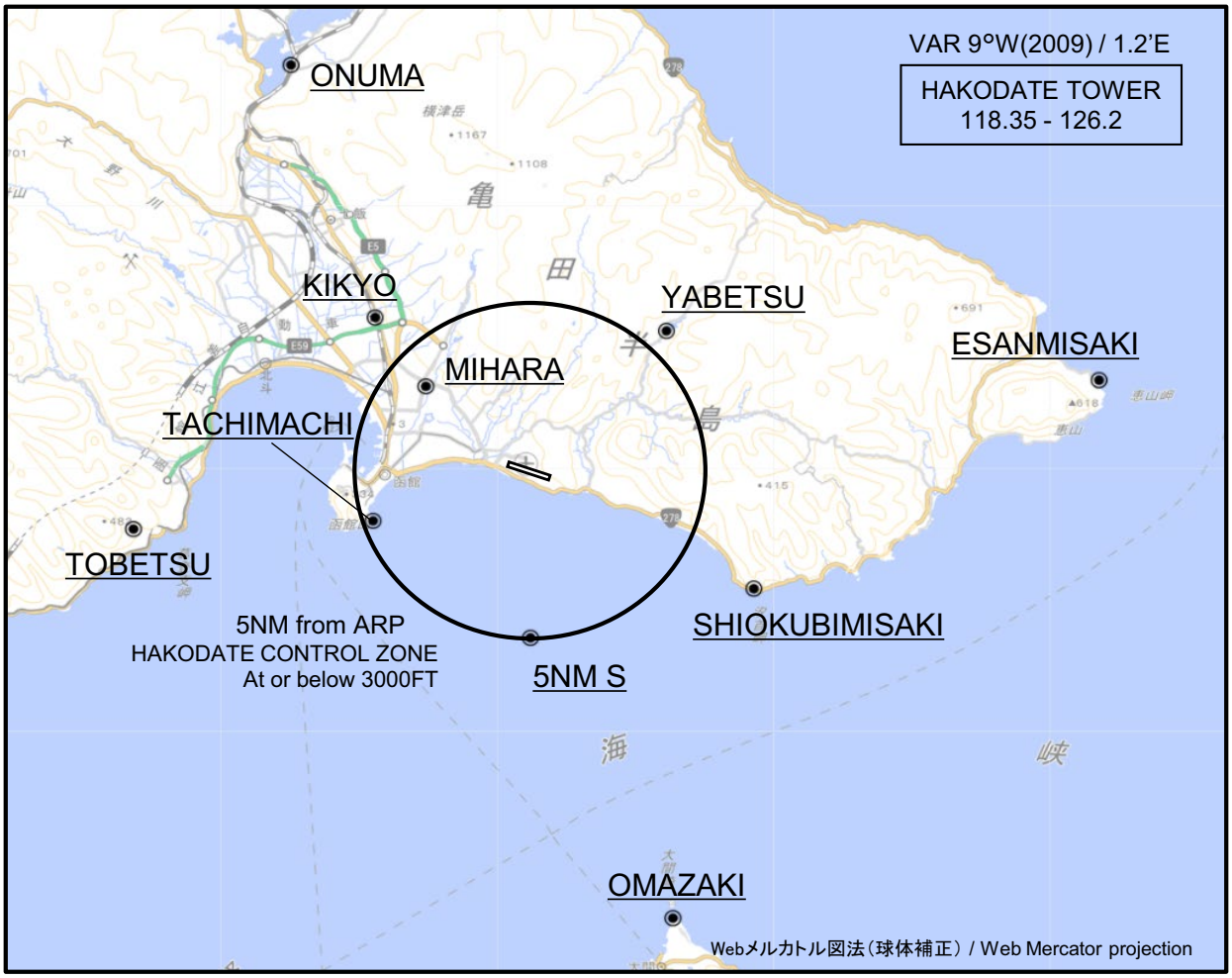
Waypoint Coordinates

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

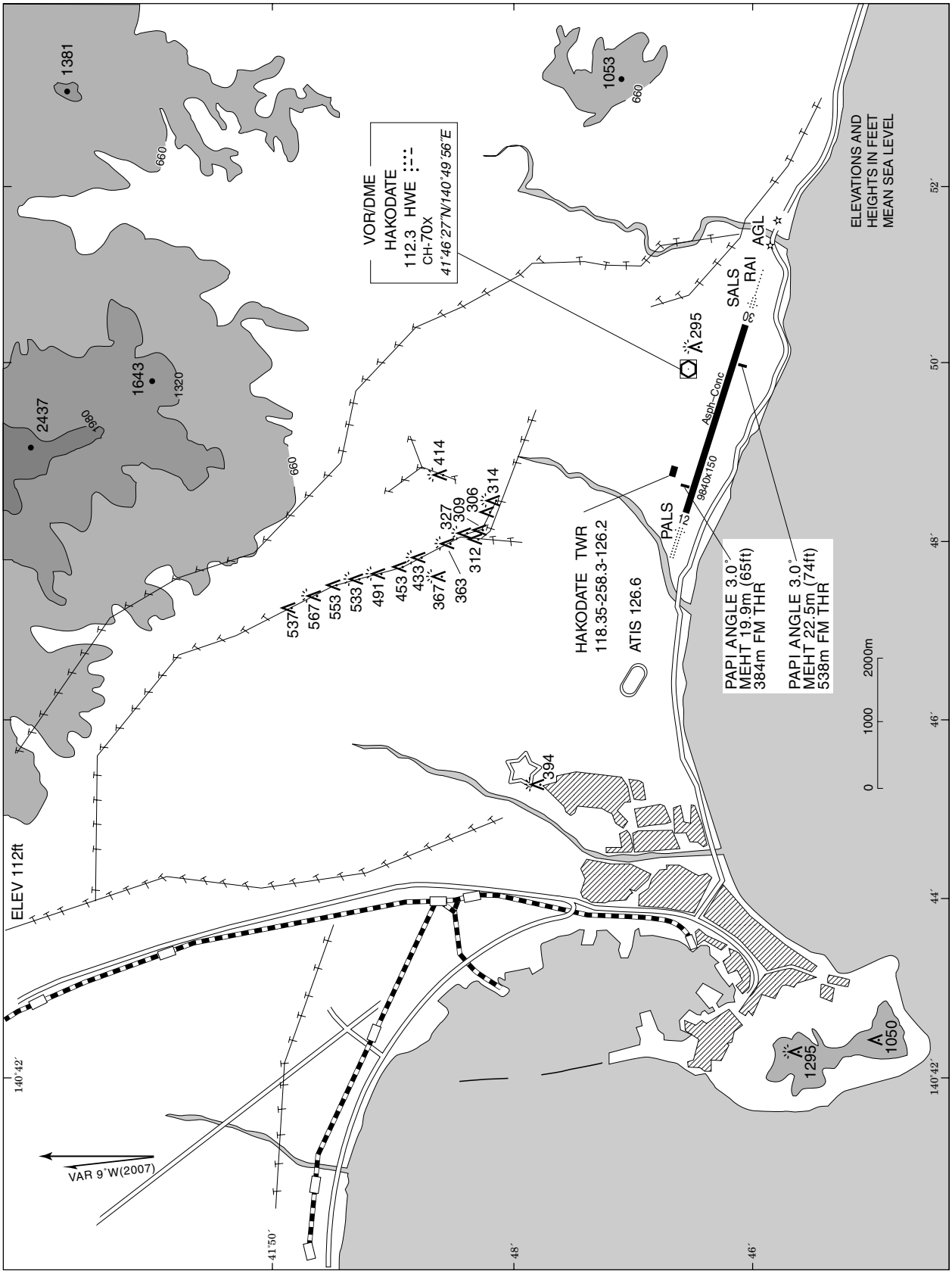


※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

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

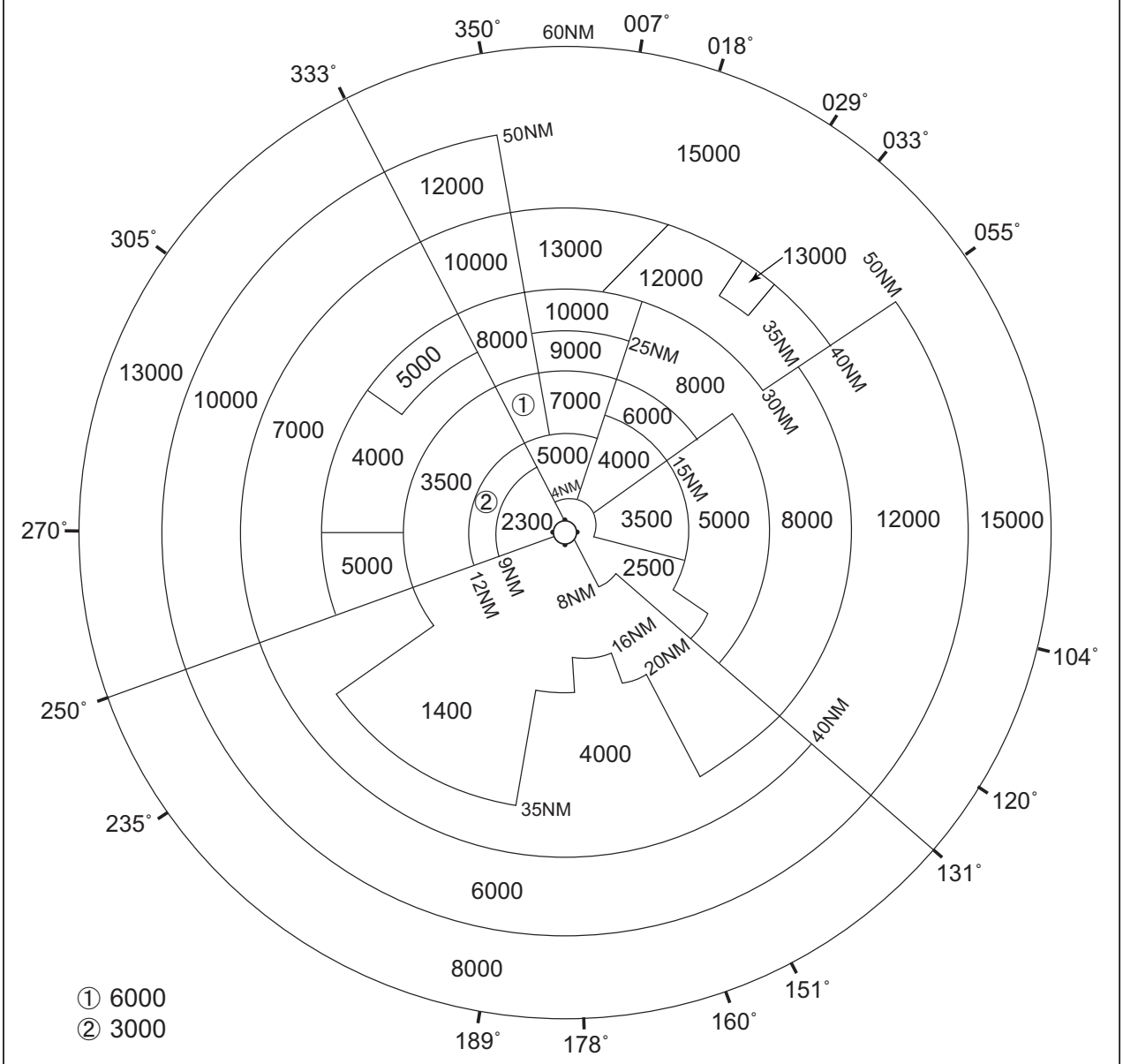
LDG CHART


ELEV 112ft
VOR/DME
HAKODATE
112.3 HWE
CH-70X
41°46'27"N/140°49'56"E
HAKODATE TWR
118.35-258.3-126.2
ATIS 126.6
PALS
SALS
RAI
AGL
Asph-Conc
9840x150
PAPI ANGLE 3.0°
MEHT 19.9m (65ft)
384m FM THR
PAPI ANGLE 3.0°
MEHT 22.5m (74ft)
538m FM THR
ELEVATIONS AND
HEIGHTS IN FEET
MEAN SEA LEVEL
VAR 9°W(2007)
0 1000 2000m
1381
1053
1643
2437
660
1320
1980
295
414
327
309
306
314
312
367
363
433
453
491
533
553
567
537
394
1295
1050
140°42'
41°50'
48'
46'
52'
50'
48'
46'
44'

RJCH / HAKODATE

Minimum Vectoring Altitude CHART

VAR 9˚W (2009)



CENTER : *414632N/1404907E* (RADAR SITE)

CHANGE : Update(BTN 007° and 033°).

INTENTIONALLY LEFT BLANK