AD 2 AERODROMES

RJCH AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJCH - HAKODATE

RJCH AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	414612N/1404919E
2	Direction and distance from (city)	7.6KM (4.1NM), BRG 095° from Hakodate JR Station
3	Elevation/ Reference temperature	111.9ft / 25°C (2004-2008)
4	Geoid undulation at AD ELEV PSN	112.5FT
5	MAG VAR/ Annual change	9°W (2009) / 1.2'E
6	AD Administration, address, tele- phone, telefax, telex, AFS, e-mail and/or Web-site addresses	Hokkaido Airports Co.,Ltd. Hakodate Airport Office 511, Takamatsu-cho, Hakodate, Hokkaido TEL: 0138-57-1620 FAX:0138-57-1621
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Hakodate Airport Office(Civil Aviation Bureau) 511, Takamatsu-cho, Hakodate, Hokkaido TEL:0138-57-1737, FAX:0138-59-4745 e-mail and web-site:Nil

RJCH AD 2.3 OPERATIONAL HOURS

1	AD Administration	2230 - 1130			
2	Customs and immigration	INTL SKED FLT hours only			
3	Health and sanitation	Quarantine(human): 2330-0815 Quarantine(animal): 2330-0800 Quarantine(plant): INTL SKED FLT hours only			
4	AIS Briefing Office	Nil			
5	ATS Reporting Office(ARO)	Nil			
6	MET Briefing Office	H24 (NEW CHITOSE)			
7	ATS	2230 - 1130			
8	Fuelling	2230 - 1130			
9	Handling	2230 - 1130			
10	Security	2230 - 1130			
11	De-icing	Nil			
12	Remarks	Nil			

RJCH AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	All the modern institutions that deal with the weight thing to a Boeing747 type freighter
2	Fuel/ oil types	Fuel grades: JET A-1 Oil grades: W80, MJO-2
3	Fuelling facilities/ capacity	Fuel Truck Refuelling
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJCH AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels in Hakodate city	
2	Restaurants	Available , Not continuous	
3	Transportation	Busses and Taxis	
4	Medical facilities	Hospitals in Hakodate city	
5	Bank and Post Office	Bank in Hakodate city, Post office in Hakodate city	
6	Tourist Office	Tourist office in Hakodate city	
7	Remarks	Nil	

RJCH AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 9
2	Rescue equipment	Fire engines
3	Capability for removal of disabled aircraft	Nil
4	Remarks	Nil

RJCH AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Snow removed equipment: a)rotatry x 3 b)snow plows x 4 c)snow sweeper x 4 d)urea sprinkler equipment x 1	
2	Clearance priorities	1.RWY, 2.TWY, 3.APRON	
3	Remarks	Seasonal availability: All seasons.	

RJCH AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	Surface: Concrete Strength: PCN 74/F/B/X/T			
2	Taxiway width, surface and strength	Width: P1 - P6 : 23m T1, T7 : 28.5m T2 - T6 : 34m Surface: All TWY(except P2 and P3 behind SPOT1-10) : Asphalt Concrete TWY P2 and P3 behind SPOT1-10 : Concrete Strength: All TWY(except P2 and P3 behind SPOT1-10) : PCN 98/F/C/X/T TWY P2 and P3 behind SPOT1-10 : PCN 74/F/B/X/T			
3	ACL and elevation	Not available			
4	VOR checkpoints	Not available			
5	INS checkpoints	Spot NR 1			
6	Remarks	Nil			

RJCH AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

ACFT stand ID signs:NR.3, NR.4 and NR.5

	TWY guide lines and Visual docking/ parking guidance system of aircraft stands	ACFT stand taxi lane:Nil Visual docking guidance system :Nil
2	RWY and TWY markings and LGT	RWY: RWY12/30 (Marking) RWY designation, RWY CL, RWY THR,
		TWY: P1-P6 (Marking) TWY CL, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT
		TWY: T1-T7 (Marking) TWY CL, RWY HLDG PSN, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT, RWY guard LGT, Taxiing guidance sigr
3	Stop bars	Nil
4	Remarks	(Marking) Overrun area (LGT) Apron flood LGT

1 Use of aircraft stand ID signs,

RJCH AD 2.10 AERODROME OBSTACLES

SEE ATTACHED CHARTS

In approach/TKOF areas

RWY/Area affected	WY/Area affected Obstacle type Coordinates		Elevation	Markings/ LGT	Remarks
RWY30	RWY30 Light Facility 414557.2N/1405024.8E		152FT		
RWY30	Light Facility	414556.5N/1405027.3E	152FT		
RWY30	RWY30 Antenna		160FT		
RWY30	LOC	414555.3N/1405032.1E	165FT		
RWY30	Building	414556.7N/1405033.0E	164FT		
RWY30	Fence	414555.5N/1405033.5E	161FT		
RWY30	Tree	414551.5N/1405033.2E	171FT		
RWY30	Tree	414550.4N/1405035.0E	169FT		
RWY30	Light Facility	414554.0N/1405037.1E	162FT		
RWY30	Light Facility	414553.4N/1405039.6E	165FT		
RWY30	Light Facility	414552.8N/1405042.1E	168FT		
RWY30	Light Facility	414552.1N/1405044.5E	171FT		
RWY30	Post	414551.9N/1405045.7E	176FT		
RWY30	Light Facility	414551.6N/1405046.9E	174FT		
RWY30	Light Facility	414551.0N/1405049.3E	177FT		
RWY30	Tree	414549.6N/1405049.2E	181FT		
RWY30	Light Facility	414550.4N/1405052.0E	180FT		
RWY30	Light Facility	414549.8N/1405054.4E	183FT		
RWY30	Light Facility	414549.2N/1405056.9E	186FT		
RWY30	Light Facility	414548.6N/1405059.4E	189FT		
RWY12	Light Facility	414628.2N/1404816.4E	93FT		
RWY12	Fence	414628.7N/1404814.0E	95FT		
RWY12	Post	414633.5N/1404809.4E	104FT		
RWY12	Post	414633.1N/1404807.6E	101FT		
RWY12	Post	414632.3N/1404804.9E	105FT		
RWY12	Post	414634.8N/1404805.3E	106FT		
RWY12	Post	414633.5N/1404804.3E	106FT		
RWY12	Tree	414630.0N/1404801.3E	102FT		
RWY12	Rod	414640.3N/1404736.1E	132FT		
RWY12	Rod	414645.2N/1404734.8E	162FT		
RWY12	Rod	414646.0N/1404733.7E	164FT		
RWY12	Rod	414646.8N/1404732.0E	164FT		
RWY12	Rod	414643.6N/1404658.5E	171FT		
RWY12	Post	414633.8N/1404811.5E	100FT		
RWY12	Building	414635.5N/1404807.7E	100FT		
RWY12	Post	414635.9N/1404806.7E	111FT		
RWY12	Post	414635.7N/1404805.2E	105FT		
RWY12	Antenna	414637.3N/1404805.9E	103FT		
RWY12	Post	414636.5N/1404805.5E	110FT		
RWY12	Chimney	414637.3N/1404804.9E	111FT		
RWY12	Lamppost	414626.9N/1404759.8E	97FT		
RWY12	Building	414628.1N/1404750.0E	125FT		

RWY/Area affected	Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
RWY12	Rod	414633.0N/1404720.2E	170FT		
	Spire	414805.6N/1405049.0E	464FT		
	Spire	414811.5N/1404802.8E	293FT		
	Spire	414812.6N/1405042.4E	540FT		
	Rod	414713.0N/1405202.5E	338FT		
	Spire	414817.5N/1404804.3E	292FT		
	Spire	414819.4N/1405035.8E	562FT		
	Antenna	414834.3N/1404848.9E	424FT		
	Spire	414826.4N/1405033.8E	559FT		
	Spire	414822.2N/1404741.2E	344FT		
	chimney	414824.9N/1404743.9E	327FT		
	Spire	414830.4N/1404756.8E	362FT		
	Building	414830.1N/1404752.9E	340FT		
	Spire	414826.1N/1404740.3E	369FT		
	Spire	414842.2N/1405026.8E	541FT		
	Antenna	414849.6N/1404847.6E	438FT		
		414849.6N/1404847.6E 414843.6N/1404747.0E	438F1 416FT		
	Spire				
	Spire	414858.3N/1405002.8E	595FT		
	Spire	414905.8N/1404952.3E	618FT		
	Spire	414851.8N/1404739.5E	453FT		
	Spire	414912.0N/1404943.6E	702FT		
	Spire	414915.6N/1404932.4E	570FT		
	Spire	414900.2N/1404736.9E	488FT		
	Spire	414917.8N/1404920.0E	530FT		
	Spire	414919.5N/1404906.0E	654FT		
	Spire	414921.4N/1404850.7E	629FT		
	Spire	414905.9N/1404735.2E	491FT		
RWY 12	Rod	414643.3N/1404704.1E	174FT		
	Building	414825.4N/1405040.2E	573FT		
	Antenna	414854.4N/1404843.5E	437FT		
	Post	414835.0N/1404917.1E	413FT		
	Tree	414839.8N/1404912.7E	446FT		
	Building	414847.3N/1404850.0E	407FT		Above the conical surface
	Building	414847.8N/1404833.6E	403FT		Above the conical surface
	Building	414854.4N/1404856.4E	427FT		Above the conical surface
	Building	414820.0N/1405000.0E	423FT	- / LIL	Above the conical surface
	Building	414830.7N/1405007.6E	398FT	-/-	Above the conical surface
	Spire	414820.2N/1404852.4E	414FT	Marking / LIL	Above the conical surface
	Spire	414829.1N/1404859.3E	406FT	Marking / -	Above the conical surface
	Spire	414830.4N/1404906.0E	394FT	-/-	Above the conical surface
	Spire	414833.4N/1404854.2E	388FT	Marking / -	Above the conical surface
	Spire	414841.1N/1404851.4E	391FT		Above the conical surface
	Spire	414830.9N/1404919.9E	387FT	Marking / LIL	Above the conical surface
	Spire	414822.3N/1405031.8E	480FT	- / -	Above the conical surface
	Spire	414820.4N/1405036.0E	524FT	-/-	Above the conical surface
	·	414815.0N/1405041.3E	545FT		Above the conical surface
	Spire	414013.0N/1403041.3E	040F1	Marking / -	Above the conical surface

RWY/Area affected	Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
	Spire	414807.6N/1405048.9E	476FT	Marking / -	Above the conical surface
	Spire	414800.5N/1405055.3E	406FT	Marking / -	Above the conical surface
	Spire	414811.5N/1404803.2E	350FT	Marking / -	Above the conical surface
	Building	414831.3N/1405009.2E	398FT	-/-	Above the conical surface
	Spire	414826.3N/1404757.7E	363FT	Marking / -	Above the conical surface
	Spire	414818.6N/1404807.1E	378FT	Marking / LIL	Above the conical surface

In circling area and at AD

Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
Building	414632.7N/1404818.4E	102FT		
Post	414634.3N/1404815.8E	114FT		
Post	414637.4N/1404807.7E	106FT		
Building	414602.1N/1405028.7E	161FT		
Lamppost	414637.9N/1404808.9E	117FT		
Post	414635.4N/1404816.0E	126FT		
Post	414635.0N/1404819.8E	123FT		
Post	414636.1N/1404816.0E	126FT		
Post	414634.4N/1404822.6E	117FT		
Fence	414604.3N/1405030.7E	182FT		
Equipment	414616.2N/1404941.6E	168FT		
Post	414637.4N/1404816.0E	128FT		
ITV	414623.9N/1404914.3E	139FT		
ABN	414633.3N/1404844.6E	185FT		
Light Pole	414628.3N/1404907.9E	192FT		
Light Pole	414630.8N/1404857.0E	191FT		
Light Pole	414629.8N/1404902.2E	192FT		
Light Pole	414631.7N/1404854.6E	190FT		
Light Pole	414627.4N/1404913.1E	192FT		
Light Pole	414627.9N/1404911.0E	192FT		
Fence	414612.8N/1405014.8E	241FT		
Fence	414615.3N/1405004.4E	246FT		
Rod	414630.3N/1404903.8E	219FT		
Tree	414618.6N/1404830.4E	116FT		
Tree	414616.0N/1404840.9E	139FT		

Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
Tree	414603.3N/1404932.7E	142FT		
Building	414629.9N/1404711.2E	182FT		
Antenna	414603.2N/1404929.2E	147FT		
Rod	414621.0N/1404757.2E	166FT		
Signboard	414618.8N/1404810.9E	136FT		
Antenna	414559.6N/1404919.4E	166FT		
Equipment	414631.8N/1404909.0E	227FT		
Antenna	414549.6N/1404937.0E	226FT		
Equipment	414626.5N/1404957.2E	292FT		
Post	414633.2N/1404959.4E	260FT		
Signboard	414632.8N/1405000.6E	261FT		
Building	414633.9N/1405001.9E	270FT		
Building	414619.2N/1405010.5E	288FT		
Post	414623.4N/1405014.3E	298FT		
Antenna	414539.0N/1405005.7E	206FT		
Antenna	414816.0N/1404947.4E	407FT		
Rod	414815.4N/1404958.4E	438FT		
Spire	414754.3N/1405100.0E	370FT		
Antenna	414819.1N/1404905.8E	401FT		
chimney	414818.4N/1405001.7E	458FT		
Antenna	414820.0N/1404905.0E	401FT		Above the horizontal surface
Post	414622.7N/1405024.0E	273FT		
Antenna	414622.1N/1405025.0E	314FT		
Post	414620.7N/1405026.7E	262FT		
Post	414629.5N/1405029.6E	292FT		
Tree	414647.6N/1405024.0E	302FT		
Building	414716.9N/1404921.4E	280FT		
Spire	414632.5N/1405043.2E	298FT		
Spire	414644.0N/1405039.6E	317FT		
Spire	414703.0N/1405031.9E	326FT		
Post	414653.9N/1405043.5E	322FT		
Building	414629.4N/1405102.3E	255FT		
Tree	414729.4N/1404959.6E	334FT		
Spire	414733.3N/1405000.6E	321FT		
Antenna	414737.0N/1404959.0E	377FT		
Spire	414740.1N/1404946.4E 414614.6N/1405121.2E	378FT 257FT		
Spire	414742.9N/1404935.0E			
Spire Spire	414742.9N/1404935.0E 414606.3N/1405123.6E	400FT 253FT		
Building	414737.9N/1405011.4E	313FT		
Spire	414743.6N/1404952.0E	377FT		
Rod	414747.6N/1404932.0E 414747.6N/1404928.6E	350FT		
Lamppost	414731.4N/1405037.0E	315FT		
Building	414751.4N/1404952.6E	348FT		
Spire	414754.7N/1404843.8E	351FT		
Spire	414722.9N/1405108.6E	318FT		

Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
Antenna	414802.1N/1404939.9E	411FT		
Spire	414743.6N/1405107.5E	301FT		
Post	414619.7N/1405050.8E	269FT		
Rod	414742.2N/1404927.7E	328FT		
Post	414627.4N/1405044.8E	267FT		
Spire	414700.7N/1405033.4E	327FT		
Spire	414731.5N/1405108.2E	323FT		
Rod	414803.5N/1404947.0E	430FT		
Antenna	414740.0N/1404942.0E	383FT		Above the horizontal surface
Building	414804.3N/1404943.2E	381FT	-/-	Above the horizontal surface
Spire	414811.3N/1404845.5E	341FT	Marking / -	Above the horizontal surface
Spire	414752.8N/1405102.4E	304FT	-/-	Above the horizontal surface
Spire	414743.8N/1405108.2E	298FT	Marking / -	Above the horizontal surface
Spire	414730.6N/1405109.1E	309FT	-/-	Above the horizontal surface
Spire	414807.0N/1404806.1E	309FT	-/-	Above the horizontal surface
Spire	414803.6N/1404816.9E	313FT	Marking / -	Above the horizontal surface
Spire	414801.7N/1404823.0E	314FT	Marking / LIL	Above the horizontal surface
Antenna	414748.6N/1404929.7E	341FT	-/-	Above the horizontal surface
Antenna	414806.3N/1404945.3E	407FT	-/-	Above the horizontal surface
Building	414804.1N/1404943.8E	372FT	-/-	Above the horizontal surface
Spire	414826.6N/1405028.7E	549FT	-/-	Above the conical surface
Spire	414833.7N/1404931.0E	386FT	Marking / -	Above the conical surface
Spire	414837.1N/1404940.3E	340FT	Marking / LIL	Above the conical surface
Antenna	414851.9N/1404847.9E	460FT	Marking / -	Above the conical surface
Antenna	414827.7N/1405012.4E	406FT	-/-	Above the conical surface
Antenna	414748.1N/1404930.3E	311FT	-/-	Above the horizontal surface
Building	414834.4N/1405013.5E	418FT	-/-	Above the conical surface
Building	414828.7N/1405010.1E	408FT	-/-	Above the conical surface
Antenna	414822.4N/1404742.7E	330FT	-/-	Above the conical surface
Antenna	414817.2N/1404950.9E	392FT	-/-	Above the horizontal surface
Antenna	414821.6N/1404743.9E	349FT	-/-	Above the conical surface
Antenna	414821.5N/1404744.0E	349FT	-/-	Above the conical surface
Antenna	414816.0N/1404948.0E	400FT	-/-	Above the horizontal surface
Antenna	414904.0N/1404847.0E	479FT	-/-	Above the conical surface
Building	414902.0N/1404854.0E	465FT	-/-	Above the conical surface
Solar power plant	414835.3N/1404833.6E	375FT	-/-	Above the conical surface
Rod	414818N1404807E	303FT	-/-	Above the conical surface
Rod	414818N1404808E	306FT	-/-	Above the conical surface
Rod	414819N1404809E	308FT	-/-	Above the conical surface
Rod	414819N1404810E	314FT	-/-	Above the conical surface

RJCH AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	NEW CHITOSE
2	Hours of service MET Office outside hours	H24 (NEW CHITOSE)
3	Office responsible for TAF preparation Periods of validity	NEW CHITOSE 30 Hours
4	Trend forecast Interval of issuance	Nil
5	Briefing/consultation provided	Briefing is available upon inquiry at NEW CHITOSE
6	Flight documentation Language(s) used	C En
7	Charts and other information available for briefing or consultation	$ \begin{aligned} &S_{6},U_{85},U_{7},U_{5}U_{3},U_{25},U_{2}/Tr,P_{S},P_{5},P_{3},P_{25},P_{SWE},P_{SWF},P_{SWG},P_{SWI},\\ &P_{SWM},P_{SW}(domestic),E,C,W_{E},W_{F},W_{G},W_{I},W,N \end{aligned} $
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	TWR, APP, ATIS
10	Additional information(limitation of service, etc.)	Nil

RJCH AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCN) and surface of RWY	THR coordinates THR geoid undulatio	THR elevation and highest elevation of n TDZ of precision APP RWY	
1	2	3	4	5	6	
12	107.98°	3000×45	PCN 98/F/C/X/T Asphalt Concrete	414627.62N 1404817.61E 112.6FT	THR ELEV 92.2ft TDZ ELEV 103ft	
30	287.98°	3000×45	PCN 98/F/C/X/T Asphalt Concrete	414557.54N 1405021.00E 112.5FT	THR ELEV 151ft	
Slope	of RWY	Strip Dimensions(M)	RESA (O Dimensio	,	Remarks	
7	7		11		14	
see attach	see attached figure		192 × (MNM:10	RWY grooving 3000X45m		
		3120×300	240 × *For detail, ask airp			
RWY 12					RWY 30	
92.2ft 0.38 0m	98.4ft 3% 0.3 500m	30%	108.3ft 0.55 1300m	0.76%	0.80% 3000m	

RJCH AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
12	3000	3000	3000	3000	Nil
30	3000	3000	3000	3000	Nil

RJCH AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	RTHL Color WBAR	PAPI (VASIS) Angle DIST FM THR MEHT	RTZL LEN	RCLL LEN Spacing Color INTST	REDL LEN Spacing Color INTST	RENL Color WBAR	STWL LEN Color
1	2	3	4	5	6	7	8	9
12	PALS (CAT I) 640m LIH	Green Green	PAPI 3.0°/Left 384m 65ft	900m	3000m 30m Coded Color (White/Red) LIH	3000m 60m Coded Color (White/Yellow) LIH	Red	Nil (*2)
30	SALS (*1) 420m LIH	Green -	PAPI 3.0°/Left 538m 74ft	-	3000m 30m Coded Color (White/Red) LIH	3000m 60m Coded Color (White/Yellow) LIH	Red	Nil (*2)
				Remarks				
10								

RJCH AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 414633N/1404843E, ALTN FLG(2)WG EV 4.3sec , HO
2	LDI location and LGT Anemometer location and LGT	LDI : Nil Anemometer: RWY12 400m WSW from ABN, LGTD RWY30 2350m ESE from ABN, LGTD
3	TWY edge and center line lighting	TWY edge and center line lights installed, see AD2.9
4	Secondary power supply/ switch-over time	Within 1sec: REDL, RENL, RTHL, WBAR, RCLL, Overrun area edge LGT Within 15sec: Other lights
5	Remarks	WDI LGT

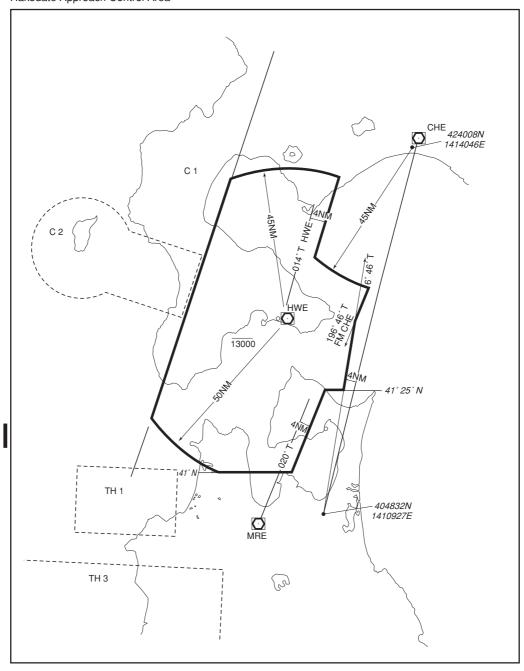
RJCH AD 2.16 HELICOPTER LANDING AREA

Nil

RJCH AD 2.17 ATS AIRSPACE

	Designation and lateral limits	Vertical limits (ft)	Airspace classification	ATS unit call sign Language	Remarks
	1	2	3	4	6
HAKODATE CTR	Area within a radius of 5 nm of HAKODATE ARP (41°46'N140°49'E)	3000	D	HAKODATE TWR En	
HAKODATE ACA	SEE RJCH ATTACHED CHART		E	HAKODATE APP HAKODATE DEP HAKODATE RADAR En	

函館進入管制区 Hakodate Approach Control Area



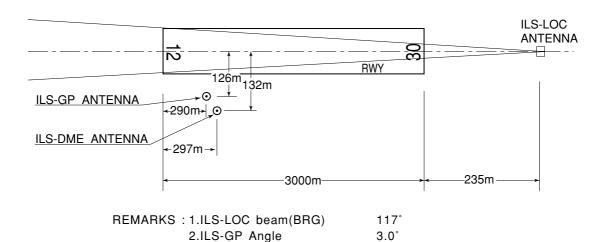
RJCH AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	Hakodate Tower	118.35MHz(1)	2230 - 1130	(1)Primary (2)Secondary
		126.2MHz(2)		(2)0000
		121.5 MHz(E)		
		243.0 MHz(E)		
		240.0 WH IZ(L)		
APP/ASR	Hakodate	119.0 MHz	2230 - 1130	
	Approach/Radar	121.0 MHz		
		121.5MHz(E)		
		243.0MHz(E)		
DEP	Hakodate Departure	127.9 MHz	2230 - 1130	
		121.0 MHz		
		121.5MHz(E)		
		243.0MHz(E)		
ATIS	Hakodate Airport	126.6MHz	2230 - 1130	

RJCH AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid (VOR declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (9°W/2014)	HWE	112.3MHz	H24	414626.51N/ 1404955.98E		VOR unusable: 020°-030° beyond 30nm BLW 6000ft. 030°-040° beyond 35nm BLW 5000ft. 070°-090° beyond 25nm BLW 5000ft. 090°-100° beyond 35nm BLW 5000ft. 100°-110° beyond 20nm BLW 4000ft. 200°-240° beyond 35nm BLW 5000ft. 340°-350° beyond 35nm BLW 6000ft.
DME	HWE	1157MHz (CH-70X)	H24	414626.51N/ 1404955.98E	300ft	DME unusable: 000°-020° beyond 25nm BLW 6000ft. 100°-110° beyond 35nm BLW 4000ft. 340°-360° beyond 30nm BLW 6000ft.
ILS-LOC 12	IHL	109.3MHz	2230 - 1130	414555.24N/ 1405030.81E		LOC:235m (771ft) away FM RWY 30 THR, BRG (MAG) 117°
ILS-GP 12	-	332.0MHz	2230 - 1130	414620.82N/ 1404827.84E		GP : 290m (951ft) FM inside RWY 12 THR, 126m (413ft) S of RCL. GP 3.0° HGT of ILS Ref datum 15.5m(51ft).
ILS-DME 12	IHL	991MHz (CH-30X)	2230 - 1130	414620.53N/ 1404828.07E	111ft	DME:297m(974ft) inside FM RWY 12 THR, 132m(433ft) S of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

ILS for RWY12



15.5m(51.0ft)

33.9m(111ft)

3.HGT of ILS REF datum

4.ELEV of ILS-DME

RJCH AD2-14

RJCH AD 2.20 LOCAL TRAFFIC REGULATIONS

1.	Airport	regulations	
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PPR Prior permission is required for all tr except scheduled and/or emergency	y flight.			
Tel: Hokkaido Airports Co.,Ltd. Hako	odate Airport Off	ice 0138-57-17	29	
Taxiing to and from stands				
		Nil		
Parking area for small aircraft(General a	viation)			
		Nil		
Parking area for helicopters				
		Nil		
Apron - taxiing during winter conditions				
		Nil		
. Taxiing - limitations				
. Taking immunone				
Wing tip clearance at the TWY inte				
Wing tip clearance at the TWY integrated aircraft taxiing behind it are as follows:		n the aircraft h	olding at the sto	p marking on the TWY and the other
When B772 holding at the stop ma		2 or T6		
Wing Span (WS) of aircraft taxiing on TWY P1-P2 or P5-P6	WS=<35.4m	35.4m <ws =<52.4m</ws 	WS >52.4m	Legend: *A : wing tip clearance >= 15m
Wing tip clearance	*A	*B	*C	*B: 6.5m =< wing tip clearance < 15m *C: wing tip clearance < 6.5m
School and training flights - technical tes	st flights - use of	runways		
		Nil		
Helicopter traffic - limitation				
		NIII		
		Nil		
Removal of disabled aircraft from runwa	ys			
		Nil		

AIP Japan HAKODATE

RJCH AD 2.21 NOISE ABATEMENT PROCEDURES

1.Noise abatement Operating Procedures

For all jet aircraft, in order to reduce aircraft noise in the vicinity of airport, the following procedures shall be applied unless compliance of the procedures adversely affects the safety of aircraft operations. In case that the aircraft is unable to take these procedures, pilots should execute alternative procedures which are considered to be practically equivalent.

- (1) For take-off from RWY30: Steepest Climb Procedure
- (2) For landing to RWY12: Delayed Flap Approach Procedure and Reduced Flap Setting Procedure
- (3) Reverse Thrust: Nil
- 2. Preferential Runways Procedures: Nil
- 3. Noise Preferential Routes: Nil

1. 騒音軽減運航方式

すべてのジェット機に対して、空港周辺における航空機騒音軽減のため、運航の安全に支障のない範囲で、以下の方式が適用される。ただし、これらの方式によることができない航空機は実効的にこれらと同等と認められる代替方式を実施するものとする。

(1)離陸について(滑走路30)

急上昇方式

(2) 着陸について(滑走路 12)

ディレイド・フラップ進入方式及び低フラップ角着陸方式

(3) リバース・スラストについて

なし

2. 優先滑走路方式

なし

3. 優先飛行経路

なし

RJCH AD 2.22 FLIGHT PROCEDURES

1. TAKE OFF MINIMA

	RWY	ACFT CAT	REDL 8	& RCLL	_	RCLL or narking		IL IE ONLY)
		OAI	RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with	12	A,B, C,D	400m	400m	400m	400m	-	500m
TKOF ALTN AP Filed	30	A,B, C,D	-	400m	-	400m	-	500m
OTHER	12 30	A,B, C,D			AVBL LDG	MINIMA		

1

2. Trajectorized Airport Traffic Data Processing System (TAPS)

Aircraft flying under control of Hakodate approach control in the approach control area will be instructed to reply with discrete code on Mode A/3 and Mode C

If an aircraft with non-discrete capability be instructed to reply with the discrete code, it shall report a controller accordingly. 函館アプローチの指示のもとに、当該進入管制区を飛行する航空機は、モード A/3 の二次レーダー個別コード及びモード C による応答を指示される。

二次レーダー個別コードを搭載していない航空機が当該コードによる応答を指示された場合は、管制官に対してその旨 通報すること。

3. Lost communication procedures for arrival aircraft under radar navigational guidance

If radio communications with HAKODATE Approach/Radar are lost for 1 minute, squawk Mode A/3 Code 7600 and;

- (I) 1. Contact HAKODATE Tower.
 - 2. If unable, proceed in accordance with visual flight rules.
 - 3. If unable, proceed to HAKODATE VOR/DME at last assigned altitude or 5,000 feet whichever is higher, and execute instrument approach
- (II) Procedures other than above will be issued when situation required.

RJCH AD 2.23 ADDITIONAL INFORMATION

Nil

RJCH AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome Chart

Aircraft Parking/Docking Chart

Aerodrome Obstacle Chart-ICAO type A (RWY12)

Aerodrome Obstacle Chart-ICAO type A (RWY30)

Aerodrome Obstacle Chart-ICAO type B

Standard Departure Chart-Instrument (HAKODATE REVERSAL)

Standard Departure Chart-Instrument (TSUGARU-RNAV)

Standard Departure Chart-Instrument (TOI-RNAV)

Standard Departure Chart-Instrument (OKUSHIRI-RNAV)

Standard Arrival Chart-Instrument (CHIYO, YAKEI-RNAV)

Standard Arrival Chart-Instrument (PATRA NORTH, PATRA SOUTH-RNAV)

Instrument Approach Chart (ILS Z or LOC Z RWY12)

Instrument Approach Chart (ILS Y or LOC Y RWY12)

Instrument Approach Chart (VOR RWY30)

Instrument Approach Chart (VOR RWY12)

Instrument Approach Chart (RNP Z RWY30)

Instrument Approach Chart (RNP Y RWY30 (AR))

Instrument Approach Chart (RNP Z RWY12)

Instrument Approach Chart (RNP Y RWY12 (AR))

Other Chart (Visual REP)

Other Chart (LDG CHART)

Other Chart (MVA CHART)

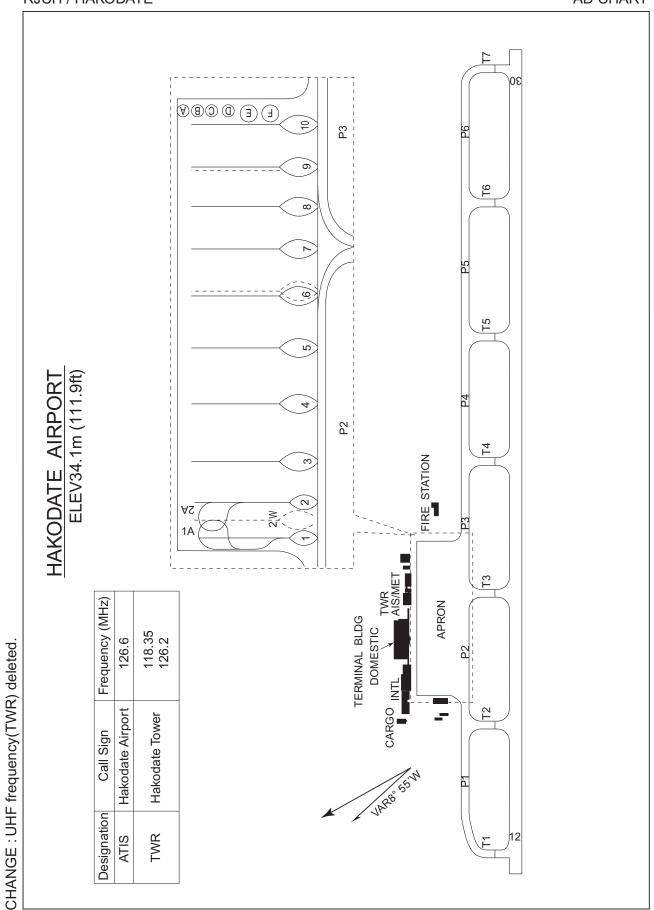
AERODROME CHART



AIRCRAFT PARKING/DOCKING CHART

RJCH / HAKODATE

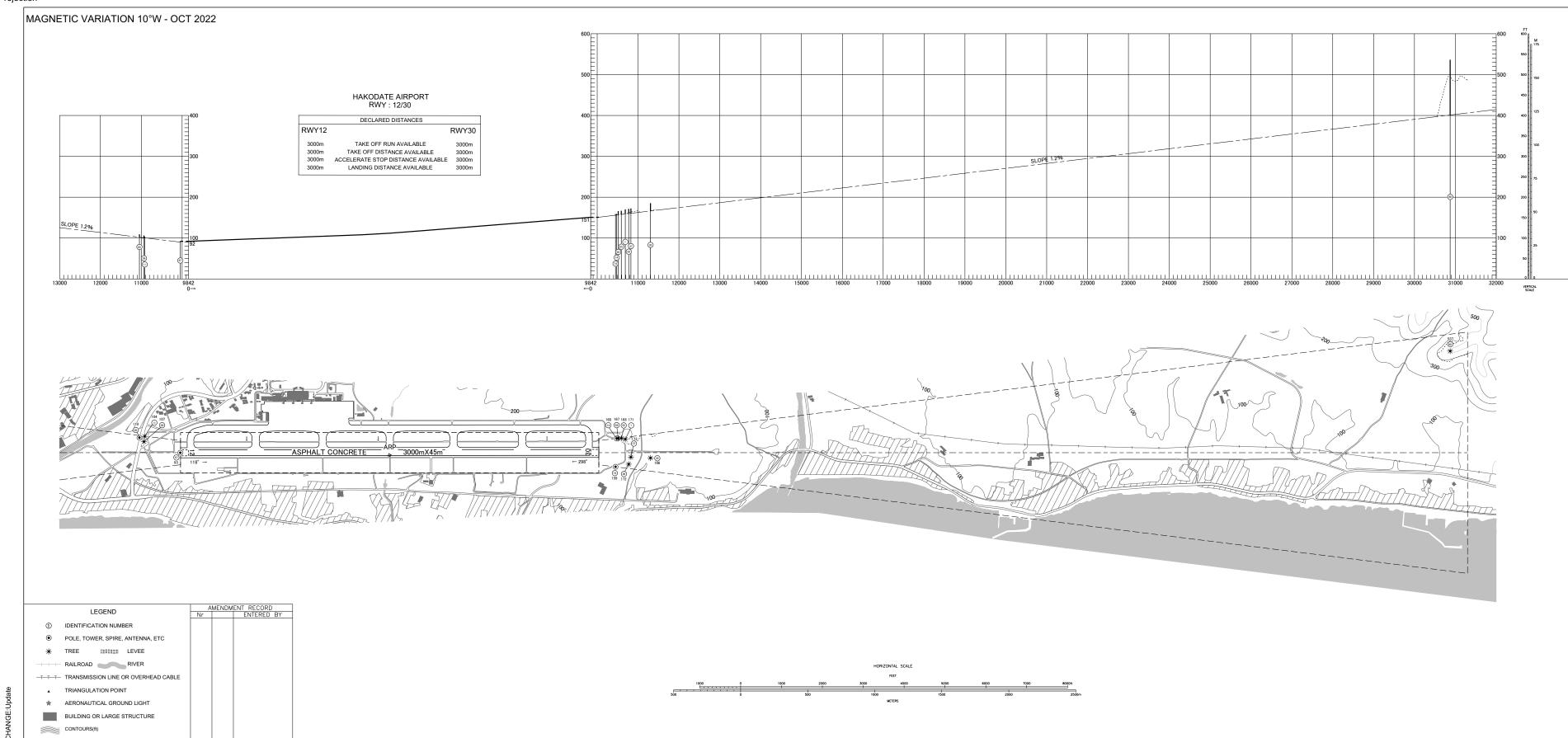
AD CHART



AERODROME OBSTACLE CHART - ICAO TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC

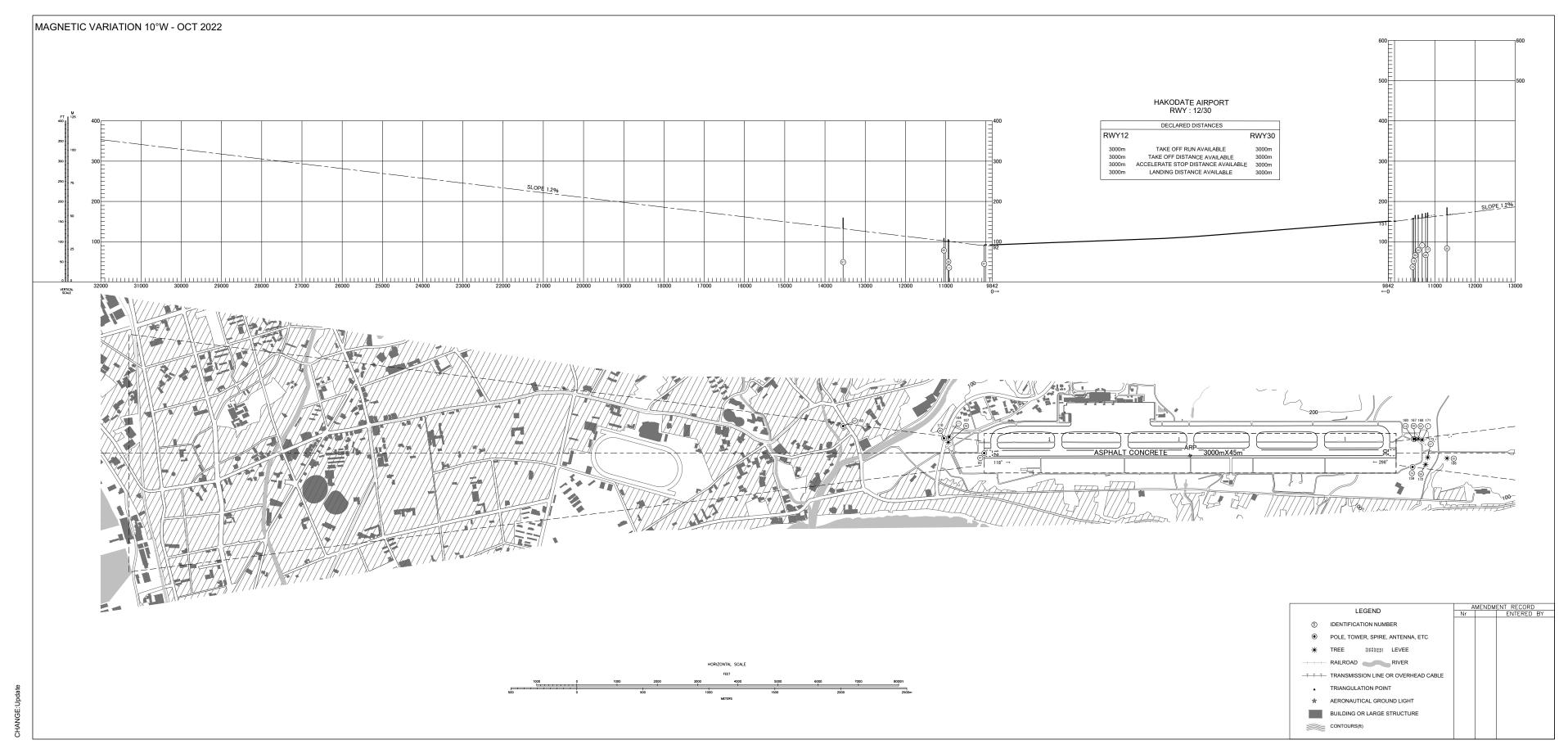
Transverse Mercator Projection



AERODROME OBSTACLE CHART - ICAO TYPE A (OPERATING LIMITATIONS)

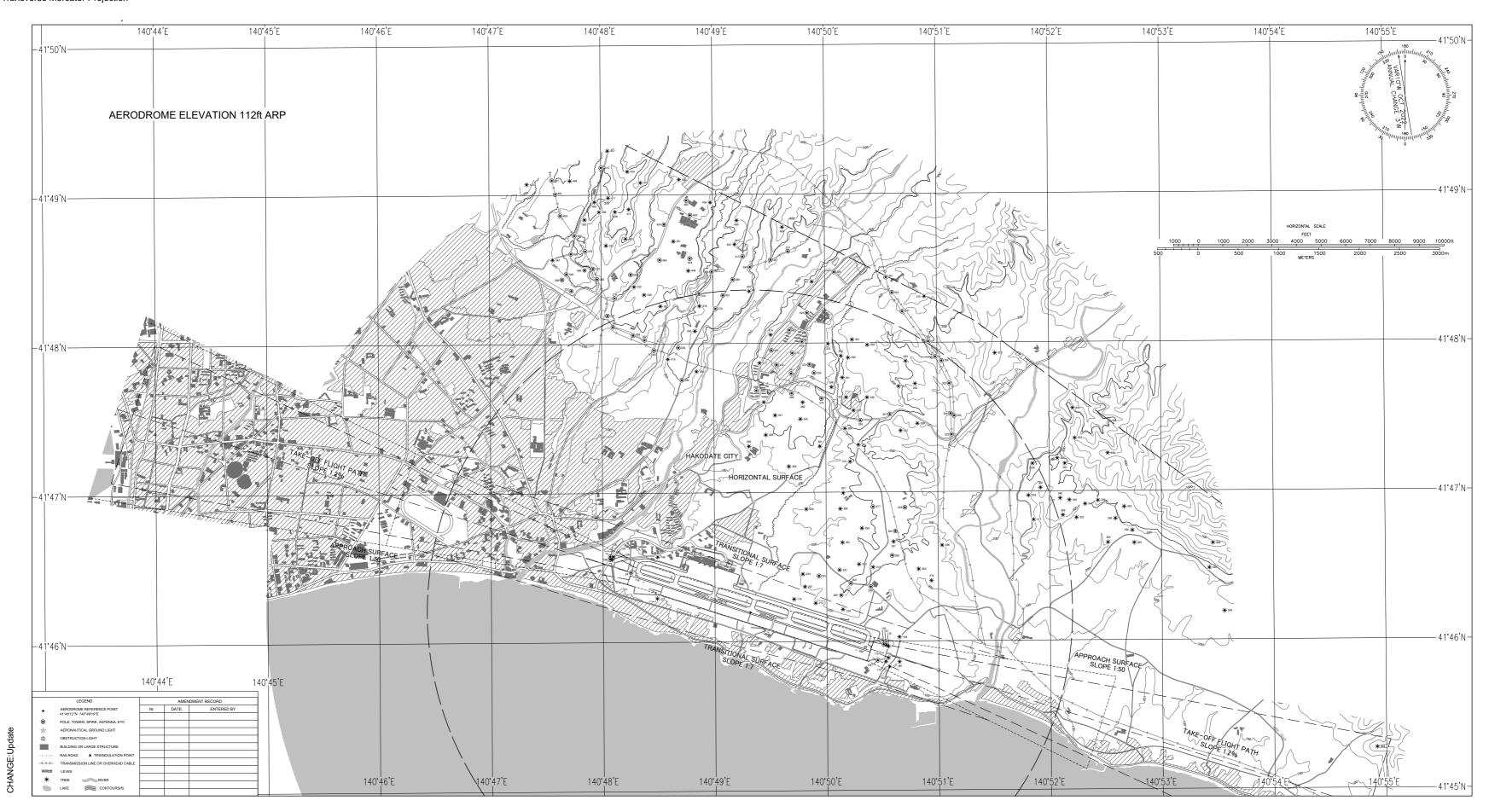
DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC

Transverse Mercator Projection



AERODROME OBSTACLE CHART - ICAO TYPE B

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



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.

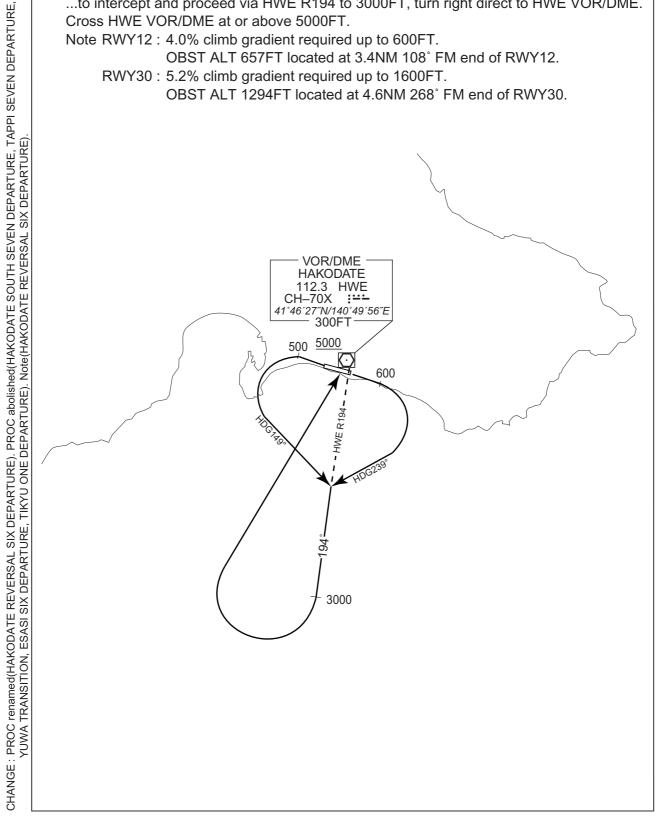
Cross HWE VOR/DME at or above 5000FT.

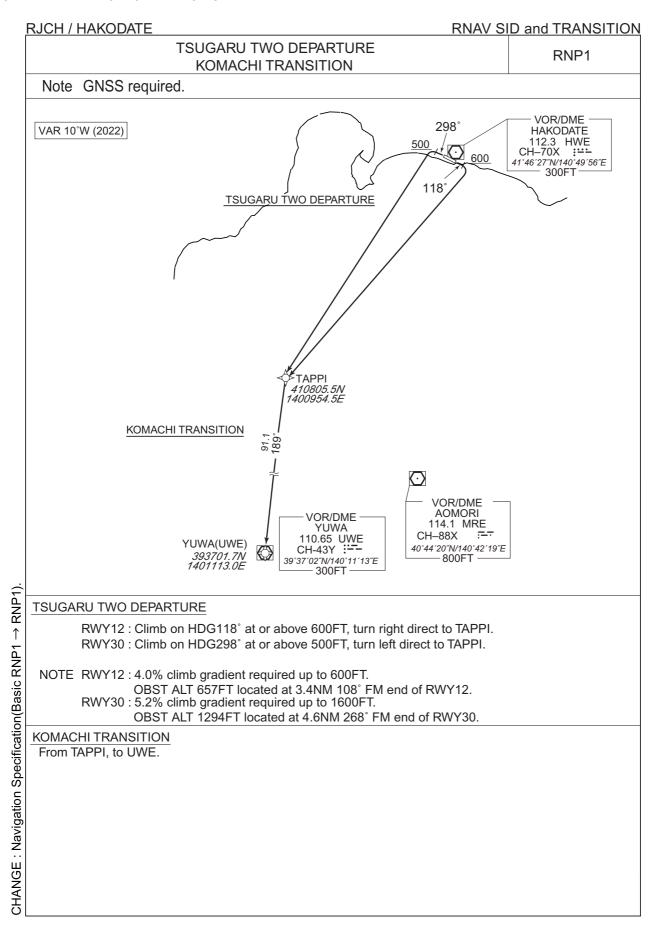
Note RWY12: 4.0% climb gradient required up to 600FT.

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.





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	1	1	118 (108.0)	-9.6	-	ı	+600	1	1	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	1	-	298 (288.1)	-9.6	-	ı	+500	1	1	RNP1
002	DF	TAPPI	-	-	-9.6	-	L	-	-	-	RNP1

KOMACHI TRANSITION

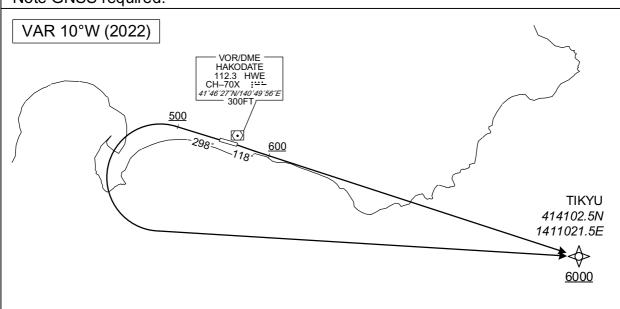
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	TAPPI	1	-	-9.6	1	-	-	-	1	RNP1
002	TF	UWE	-	189 (179.4)	-9.6	91.1	-	-	-	-	RNP1

TOI ONE DEPARTURE

RNP1

Note GNSS required.

STANDARD DEPARTURE CHART - INSTRUMENT



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	-	_	RNP1
002	DF	TIKYU	-	-	-9.6	-	_	+6000	-	-	RNP1

RWY30

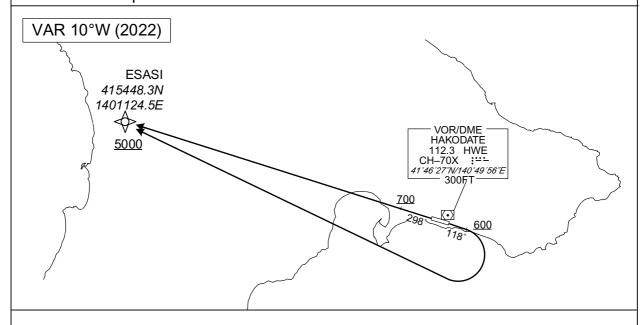
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	1	298 (288.1)	-9.6	-	_	+500	_	_	RNP1
002	DF	TIKYU	ı	-	-9.6	Ι	L	+6000	-	_	RNP1

RJCH / HAKODATE

RNAV SID

OKUSHIRI ONE DEPARTURE RNP1

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

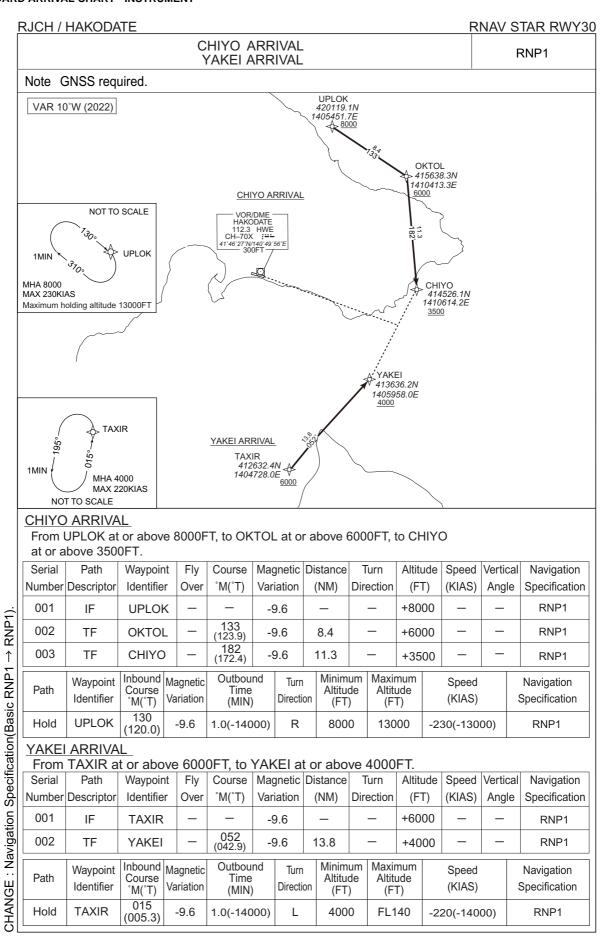
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	_	118 (108.1)	-9.6	ı	_	+600	ı	ı	RNP1
002	DF	ESASI	_	ı	-9.6	_	R	+5000	_		RNP1

RWY30

Seria Numb		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	ı	_	+700	ı	ı	RNP1
002	DF	ESASI	-	ı	-9.6		_	+5000	ı	ı	RNP1

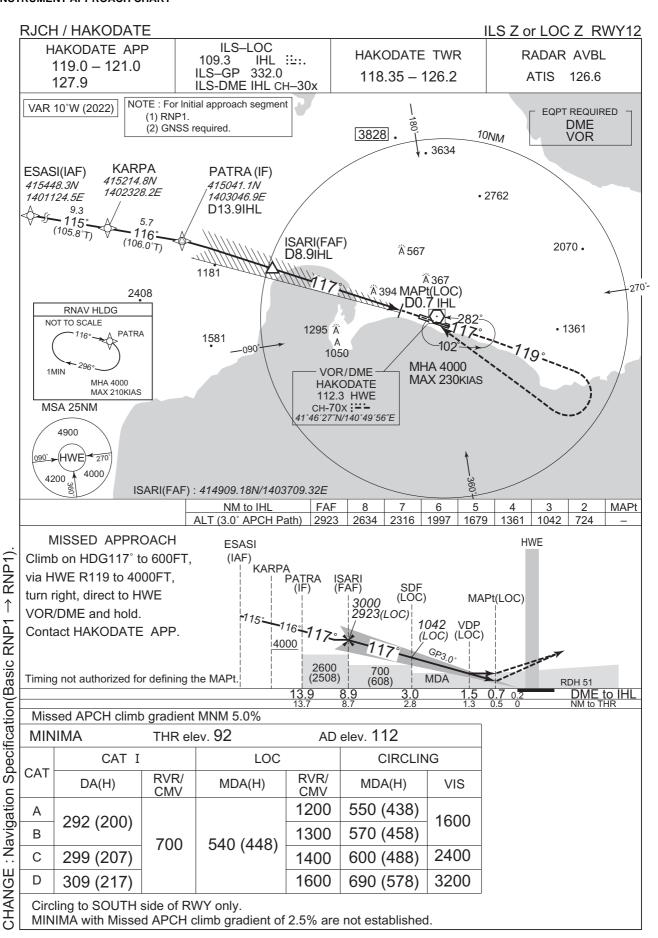


STANDARD ARRIVAL CHART - INSTRUMENT



STANDARD ARRIVAL CHART - INSTRUMENT

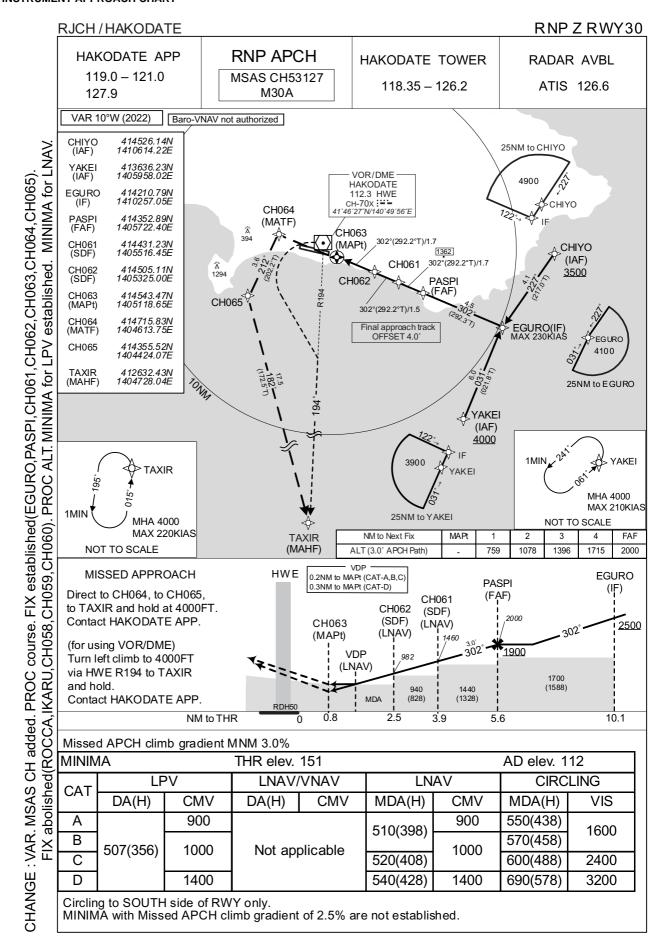
RJCH /			D 4 TD 4	NODE							
				NORT SOUT							RNP1
Note G	NSS requir	red									
VAR 10	0°W (2022)		<u>6</u>	EPKOP 415813.5 1403209.6	5N 1	NODES 415943.0N 404301.8E 7000		Δ 4	PLOK 20119.1N 05451.7E		
				°76	PATE	RA NORTH	ARRIVA	_			
f	or PATRA SOUT		PATRA 415041.1 1403046.9 4000 MAX 240KIAS	N N N N		11 CH–	OR/DME AKODATE 2.3 HWE 70X ::: 7"N/140°49 300FT	-			NOT TO SCAL
		41	NTA 44635.2N 2901.6E		<u> </u>				\	3000 30KIAS	UPLC
	<u>PATR</u>	RA SOUTH	ARRIVAL		6000	TAXIR 41263 140472	2.4N		1MIN		TAXIR MHA 4000 MAX 220KIAS
									I .		U 6CVI E
PATRA	A NORTH	ARRIVA	۸L							NOT	O SCALE
From	UPLOK a	at or abo	ve 8000				7000F	T, to EF	PKOP	NOTI	O SCALE
From at or	UPLOK a above 600	at or abo 00FT, to	ve 8000 PATRA	at or ab	ove 400	DFT.					
From at or Serial	UPLOK a	at or abo	ve 8000 PATRA nt Fly	at or ab	ove 400		7000F Turn Direction	Altitud		Vertica	al Navigation
From at or Serial	above 600	at or abo 00FT, to Waypoir	ve 8000 PATRA nt Fly r Over	at or ab	ove 400 Magnetic	DFT. Distance	Turn	Altitud	le Speed (KIAS)	Vertica	al Navigation
From at or Serial Number	above 600 Path Descriptor	at or abo 00FT, to Waypoir Identifie	ve 8000 PATRA at Fly r Over	at or ab Course °M(°T) - 269	ove 400 Magnetic Variation	DFT. Distance	Turn	Altitud	le Speed (KIAS)	Vertica	Al Navigation Specification
From at or Serial Number 001	above 600 Path Descriptor	at or abo 00FT, to Waypoir Identifie UPLOK	ve 8000 PATRA t Fly r Over C —	at or ab Course M(T) - 269 (259.7) 269	ove 400 Magnetic Variation -9.6	DFT. Distance (NM)	Turn	Altitud (FT) +8000	le Speed (KIAS) 0 — 0 —	Vertica	al Navigation Specification RNP1
From at or Serial Number 001 002	DPLOK a above 600 Path Descriptor IF TF	at or abo 00FT, to Waypoir Identifie UPLOK	ve 8000 PATRA at Fly r Over c —	at or ab Course *M(*T) - 269 (259.7)	ove 400 Magnetic Variation -9.6 -9.6	DISTANCE (NM) - 8.9	Turn	Altitud (FT) +8000 +7000	de Speed (KIAS) 0 - 0 -	Vertica	Al Navigation Specification RNP1 RNP1
From at or Serial Number 001 002 003	DESCRIPTION OF THE	Maypoir Identifie UPLOK NODES EPKOF PATRA Inbound Course "M("T)	ve 8000 PATRA at Fly r Over c —	at or ab Course °M(°T) - 269 (259.7) 269 (259.6) 197	ove 400 Magnetic Variation -9.6 -9.6 -9.6	DFT. Distance (NM) - 8.9 8.2 7.6 Minim Altitue	Turn Direction — — — — — um Max de Alt	Altitud (FT) +8000 +7000	de Speed (KIAS) 0 - 0 -	Vertica	al Navigation Specification RNP1 RNP1 RNP1
From at or Serial Number 001 002 003 004	Descriptor IF TF TF TF Waypoint	at or abo 00FT, to Waypoir Identifie UPLOK NODES EPKOF PATRA	ve 8000 PATRA It Fly r Over C — B — Magnetic	at or ab Course °M(°T) - 269 (259.7) 269 (259.6) 197 (187.8) Outbour Time	Magnetic Variation -9.6 -9.6 -9.6 -9.6 -9.6 Direct	DFT. Distance (NM) - 8.9 8.2 7.6 Minim Altitud	Turn Direction — — — — — um Max de Alt	+7000 +6000 +4000 imum tude	de Speed (KIAS) 0 — 0 — 0 — Speed	Vertica Angle	Al Navigation Specification RNP1 RNP1 RNP1 RNP1 RNP1 RNP1 Navigation
From at or Serial Number 001 002 003 004 Path Hold	Descriptor IF TF TF TF Waypoint Identifier UPLOK	NODES Inbound Course "M("T) ARRIVA	PATRA at Fly r Over C — B — Magnetic Variation -9.6	at or ab Course °M(°T) - 269 (259.7) 269 (259.6) 197 (187.8) Outbour Time (MIN) 1.0(-140	ove 400 Magnetic Variation -9.6 -9.6 -9.6 -9.6 did Tur Direct 000) R	DISTANCE (NM) - 8.9 8.2 7.6 Minim Altitut (FT) 800	Turn Direction — — — — um Max de Alt (() 0 13	+8000 +6000 +4000 imum tude -TT)	le Speed (KIAS) 0 — 0 — 0 — Speed (KIAS) -230(-130	Vertica Angle	al Navigation Specification RNP1 RNP1 RNP1 RNP1 RNP1 RNP1 Specification Specification
From at or Serial Number 001 002 003 004 Path Hold PATRA	Descriptor IF TF TF Waypoint Identifier UPLOK A SOUTH	at or abo 00FT, to Waypoir Identifie UPLOK NODES EPKOF PATRA Inbound Course 'M('T) 130 (120.0) ARRIVA	ve 8000 PATRA It Fly r Over C — S — Magnetic Variation -9.6 LL 6000FT	at or ab Course M(°T) - 269 (259.7) 269 (259.6) 197 (187.8) Outbour Time (MIN) 1.0(-140	ove 400 Magnetic Variation -9.6 -9.6 -9.6 -9.6 -0.6 Tur Direct TA, to P.	DISTANCE (NM) - 8.9 8.2 7.6 Minim Altitut (FT) 800	Turn Direction — — — — — — um Maxde Alt) (() 0 13	+8000 +7000 +6000 +4000 imum tude -T)	Be Speed (KIAS) 0 — 0 — Speed (KIAS) -230(-130	Vertica Angle — — — —	al Navigation Specification RNP1 RNP1 RNP1 RNP1 RNP1 RNP1 RNP1 RNP1
From at or Serial Number 001 002 003 004 Path Hold PATRA From 1 Serial	DUPLOK a above 600 Path Descriptor IF TF TF TF UPLOK A SOUTH TAXIR at co	Maypoir Identifie UPLOK NODES EPKOF PATRA Inbound Course "M("T) 130 (120.0) ARRIVA or above Waypoi	PATRA It Fly r Over C — B — Magnetic Variation -9.6 L 6000FT	at or ab Course °M(°T) - 269 (259.7) 269 (259.6) 197 (187.8) Outbour Time (MIN) 1.0(-140 to KAN	A TA, to Paragraphics (Appendix Appendix Appendix Appness of Appne	DISTANCE (NM) - 8.9 8.2 7.6 Minim Altitud (FT) 800 ATRA at	Turn Direction — — — — — um Max de Alt (0 0 13 or abov Turn	+4000 Altitude FT) -2 4000F Altitude	Speed (KIAS) 0 — 0 — Speed (KIAS) -230(-130 -T. de Speed	Vertica Angle — — — — — 000)	al Navigation Specification RNP1 RNP1 RNP1 RNP1 Navigation Specification RNP1
From at or Serial Number 001 002 003 004 Path Hold PATRA From 1 Serial	Descriptor Waypoint Identifier UPLOK A SOUTH TAXIR at colored a path Descriptor	at or abo 00FT, to Waypoir Identifie UPLOK NODES EPKOF PATRA Inbound Course "M("T) 130 (120.0) ARRIVA or above Waypoi Identifie	PATRA It Fly r Over C — S — Magnetic Variation -9.6 L 6000FT nt Fly Over	at or ab Course M(°T) - 269 (259.7) 269 (259.6) 197 (187.8) Outbour Time (MIN) 1.0(-140	ove 400 Magnetic Variation -9.6 -9.6 -9.6 -9.6 Oo) R TA, to P Magnetic	DISTANCE (NM) - 8.9 8.2 7.6 Minim Altitud (FT) 800 ATRA at	Turn Direction — — — — — — um Maxde Alt) (() 0 13	+4000 Altitude FT) Altitude FT Altitude F	Speed (KIAS)	Vertica Angle — — — — — 000)	al Navigation Specification RNP1 RNP1 RNP1 RNP1 RNP1 Navigation Specification RNP1 Al Navigation Specification Specification Specification Specification
From at or Serial Number 001 002 003 004 Path Hold PATRA From 1 Serial Number	DUPLOK a above 600 Path Descriptor IF TF TF TF UPLOK A SOUTH TAXIR at co	Maypoir Identifie UPLOK NODES EPKOF PATRA Inbound Course "M("T) 130 (120.0) ARRIVA or above Waypoi	PATRA It Fly r Over C — Magnetic Variation -9.6 L 6000FT It Fly er Over	at or ab Course M(°T) 269 (259.7) 269 (259.6) 197 (187.8) Outbour Time (MIN) 1.0(-140 to KAN Course M(°T) - 335	A TA, to Paragraphics (Appendix Appendix Appendix Appness of Appne	DISTANCE (NM) - 8.9 8.2 7.6 Minim Altitud (FT) 800 ATRA at	Turn Direction — — — — — um Max de Alt (0 0 13 or abov Turn	Altitud (FT) +8000 +4000 +4000	Speed (KIAS)	Vertica Angle — — — — — 000)	al Navigation Specification RNP1 RNP1 RNP1 RNP1 Navigation Specification RNP1
From at or Serial Number 001 002 003 004 Path Hold PATRAFORM From 1 Serial Number 001	DUPLOK a above 600 Path Descriptor IF TF TF TF Waypoint Identifier UPLOK A SOUTH TAXIR at co Path Descriptor	at or abo 00FT, to Waypoir Identifie UPLOK NODES EPKOF PATRA Inbound Course "M("T) 130 (120.0) ARRIVA or above Waypoi Identifie TAXIR	PATRA It Fly r Over C — B — Magnetic Variation -9.6 AL 6000FT Int Fly er Over A —	at or ab Course M(°T) - 269 (259.7) 269 (259.6) 197 (187.8) Outbour Time (MIN) 1.0(-140 Course M(°T) - 335 (325.6) 027	ove 400 Magnetic Variation -9.6 -9.6 -9.6 -9.6 output TA, to Paragram Magnetic Variation -9.6	DISTANCE (NM) - 8.9 8.2 7.6 Minim Altitut (FT) 800 ATRA at at a Distance (NM) -	Turn Direction — — — — — um Max de Alt (0 0 13 or abov Turn	Altitud (FT) +8000 +4000 +4000	Speed (KIAS) 0 — 0 — 0 — 0 — Speed (KIAS) -230(-130 -T. de Speed (KIAS) 0 — — —	Vertica Angle — — — — — 000)	al Navigation Specification RNP1 RNP1 RNP1 RNP1 Navigation Specification RNP1 All Navigation Specification RNP1 RNP1 RNP1
From at or Serial Number 001 002 003 004 Path Hold PATRA From 1 Serial Number 001 002	DUPLOK a above 600 Path Descriptor IF TF TF TF Waypoint Identifier UPLOK A SOUTH FAXIR at co Path Pescriptor IF TF	at or abo 00FT, to Waypoir Identifie UPLOK NODES EPKOF PATRA Inbound Course "M("T) 130 (120.0) ARRIVA or above Waypoi Identifie TAXIF KANTA	PATRA It Fly r Over C — B — Magnetic Variation -9.6 AL 6000FT Int Fly er Over A —	at or ab Course M(°T) - 269 (259.7) 269 (259.6) 197 (187.8) Outbour Time (MIN) 1.0(-140 to KAN Course M(°T) - 335 (325.6)	ove 400 Magnetic Variation -9.6 -9.6 -9.6 -9.6 TA, to P. Magnetic Variation -9.6 -9.6 -9.6 nd Tur Direct Tagnetic Tagn	DISTANCE (NM)	Turn Direction — — — — um Max de Alt ((0) 0 13 or abov Turn Directic — — — um Max de Al	Altitud (FT) +8000 +7000 +6000 +4000 imum tude FT) 000 - e 4000F Altitud (FT) +600	Speed (KIAS) 0 — 0 — 0 — 0 — Speed (KIAS) -230(-130 -T. de Speed (KIAS) 0 — — —	Vertica Angle — — — — — — — — — — — — — — — — — — —	al Navigation Specification RNP1 RNP1 RNP1 RNP1 Navigation Specification RNP1 Al Navigation Specification RNP1 RNP1 RNP1 RNP1 RNP1 RNP1











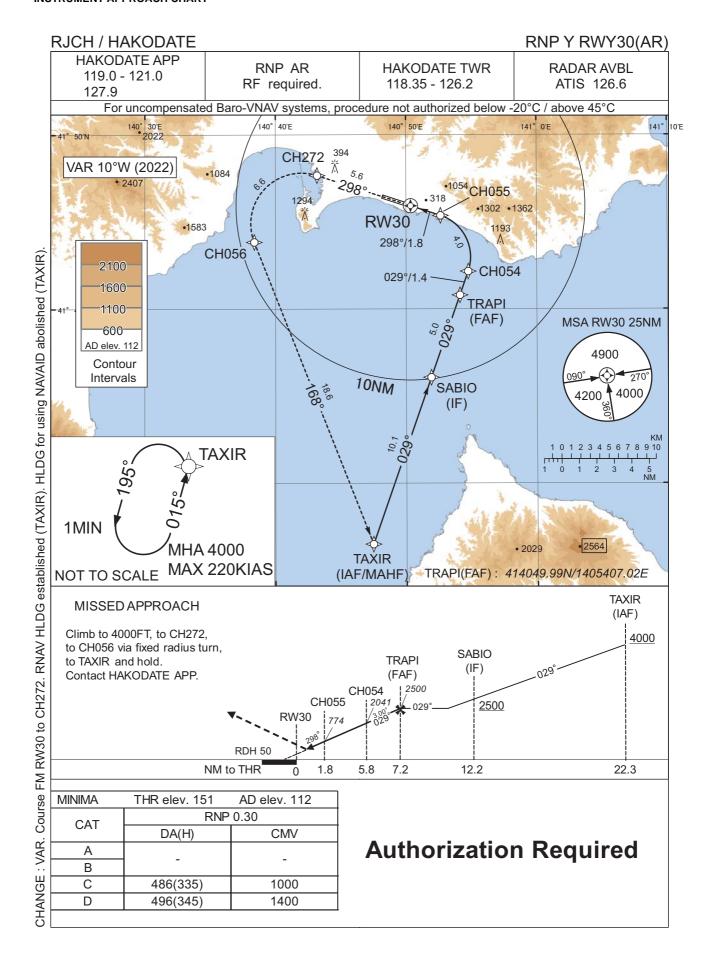
RJCH / HAKODATE

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



RJCH / HAKODATE

RNP Y RWY30(AR)

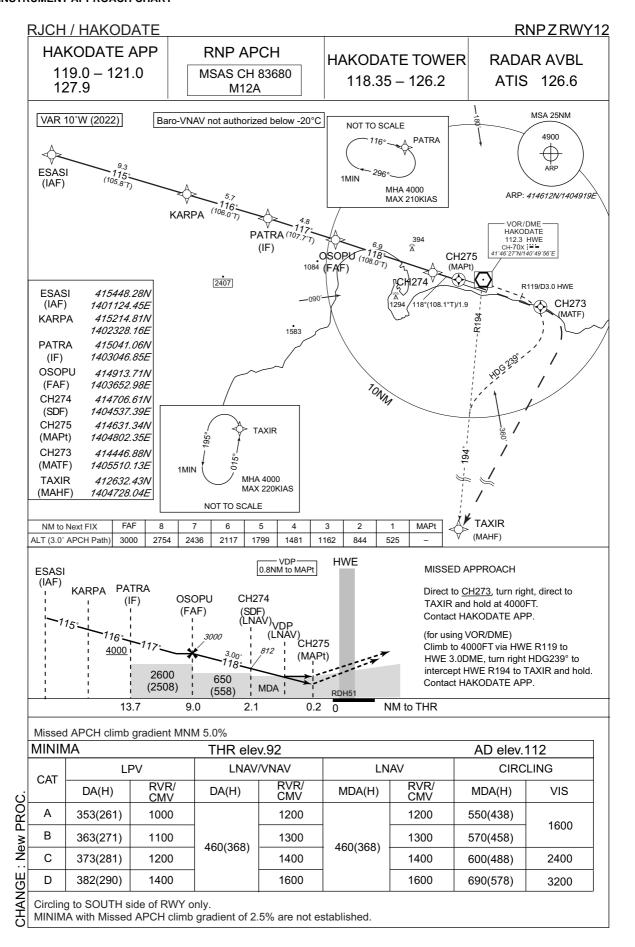
Coding Table

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	1	-	-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	Υ	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	Time	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	1	
		•	



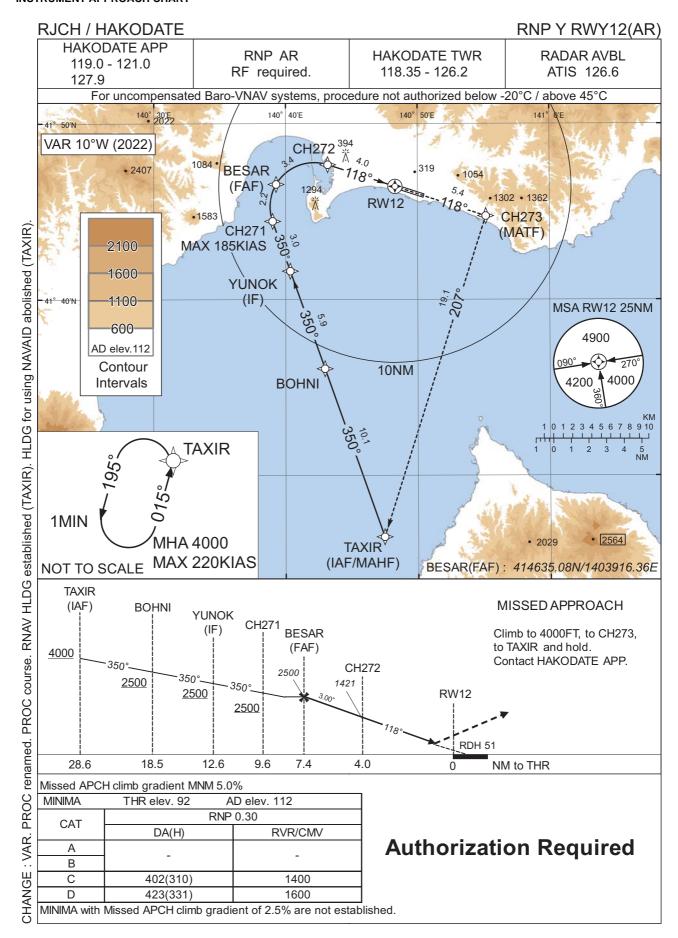
RJCH / HAKODATE

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

- 1		
	LTP/FTP orthometric height	28.1



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	1	-	-9.6	-	1	+4000	1	1	-
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	1	350 (340.5)	-9.6	3.0	ı	+2500	-185	ı	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	1	-	-9.6	3.4	R	1421	-	-3.00	0.3
007	TF	RW12	Υ	118 (108.0)	-9.6	4.0	-	143	-	-3.00/51	0.3
800	TF	CH273	1	118 (108.1)	-9.6	5.4	ı	-	-	-	1.0
009	TF	TAXIR	1	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		
	•	•	



※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).

	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
ıara).	美原 Mihara	310°T / 3.9NM	NHKラジオアンテナ NHK radio antenna
R)	立待 Tachimachi	252°T / 4.8NM	岬 Cape
:DIST from ARP(Mihara).	当別 Tobetsu	261°T / 11.5NM	トラピスト修道院 Religious house
JIST fr	汐首岬 Shiokubimisaki	119°T / 7.3NM	灯台 Lighthouse
	5NM S	180°T / 5.0NM	海上 Over the sea
CHANGE	大間崎 Omazaki	163°T / 14.0NM	岬 Cape

LDG CHART



