#### **AD 2 AERODROMES**

# **RJCM AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

# **RJCM - MEMANBETSU**

#### **RJCM AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

1	ARP coordinates and site at AD	435250N / 1440951E 175° / 1.25km from RWY 18 THR
2	Direction and distance from (city)	9.7nm SSW ABASHIRI
3	Elevation/ Reference temperature	109FT / 26°C (2004-2008)
4	Geoid undulation at AD ELEV PSN	99FT
5	MAG VAR/ Annual change	9°W(2009) / 2.1'E
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Hokkaido Airports Co.,Ltd. Memanbetsu Airport Office 256-3, Chuo, Memanbetsu, Ozora-cho Abashiri-gun, Hokkaido TEL: 0152-74-2222 FAX: 0152-74-3674 e-MAIL: hap-mmb-unjyo@hokkaido-airports.co.jp
7	Types of traffic permitted(IFR/VFR)	IFR/VFR
8	Remarks	Memanbetsu Airport Branch (CAB) 256, Chuo, Memanbetsu, Ozora-cho Abashiri-gun, Hokkaido TEL:0152-74-2673

#### **RJCM AD 2.3 OPERATIONAL HOURS**

1	AD Administration	2300-1200
2	Customs and immigration	On request Customs: 0154-22-3730 Immigration: 0154-22-2430
3	Health and sanitation	Quarantine(human): On request(0154-23-3340) Quarantine(animal, plant): Nil
4	AIS Briefing Office	Nil
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (NEW CHITOSE)
7	ATS	2300-1200
8	Fuelling	2300-1200
9	Handling	2300-1200
10	Security	2300-1200
11	De-icing	Nil
12	Remarks	Nil

# **RJCM AD 2.4 HANDLING SERVICES AND FACILITIES**

1	Cargo-handling facilities	All the modern institutions that deal with the weight thing to a A306 type freighter
2	Fuel/ oil types	JET A-1
3	Fuelling facilities/ capacity	Fuel truck refueling, 22L/sec
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

#### **RJCM AD 2.5 PASSENGER FACILITIES**

1	Hotels	Nil	
2	Restaurants	At airport	
3	Transportation	Buses and taxies	
4	Medical facilities	Hospital in Ozora-town, 5km from AP	
5	Bank and Post Office	Nil	
6	Tourist Office	At airport	
7	Remarks	Nil	

# **RJCM AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

1	AD category for fire fighting	CAT 8
2	Rescue equipment	Chemical fire fighting truck x 3  Emergency medical equipments conveyance truck x 1
3	Capability for removal of disabled aircraft	Nil
4	Remarks	Nil

#### **RJCM AD 2.7 SEASONAL AVAILABILITY-CLEARING**

1	Types of clearing equipment	Snow removal equipment: 42			
2	Clearance priorities	1) RWY 18/36, T1, T6, P1-P6, Apron A 2) T2-T5, TB, Apron B			
3	Remarks	Nil			

# **RJCM AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA**

1	Apron surface and strength	Apron A : Surface:Cement-concrete, Strength:PCN 74/R/B/X/T Apron B : Surface:Asphalt-concrete, Strength:PCN 20/R/B/Y/T
2	Taxiway width, surface and strength	T1-T6, P1-P6 : Surface:Asphalt-concrete, Width:30m, Strength:PCN 89/F/C/X/T TB : Surface:Asphalt-concrete, Width:9m, Strength:PCN 21/F/B/Y/T
3	ACL and elevation	Not available
4	VOR checkpoints	Not available
5	INS checkpoints	(Spot NR)  1: 435257.24N/1440933.47E  2: 435255.56N/1440933.89E  3: 435253.47N/1440934.16E  4: 435251.21N/1440934.53E  5: 435248.95N/1440934.82E  6: 435246.85N/1440935.01E
6	Remarks	Nil

#### RJCM AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs,	Aircraft stand ID sign : Nil
	TWY guide lines and Visual dock-	ACFT stand taxi lane marking : See AD2.24. AD chart
	ing/ parking guidance system of	Visual docking guidance system : Nil
	aircraft stands	
2	RWY and TWY markings and	RWY: RWY18/36
	LGT	(Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe
		(LGT) RCLL, REDL, RTHL, RENL, RTZL, RWY DIST marker LGT, WBAR
		TWY: ALL
		(Marking) TWY CL, TWY side stripe
		(LGT) TWY edge LGT
		TWY: T1-T6
		(Marking) RWY HLDG PSN, Mandatory instruction
		(LGT) TWY CL LGT, RWY guard LGT, Taxiing guidance sign
		TWY: P1-P6
		(LGT) TWY CL LGT
		TWY: TB
		(Marking) RWY HLDG PSN, Mandatory instruction
		(LGT) RWY guard LGT, Taxiing guidance sign
3	Stop bars	Nil
4	Remarks	(Marking) Overrun area
		(LGT) Apron flood LGT

#### **RJCM AD 2.10 AERODROME OBSTACLES**

In Area2 See Obstacle data

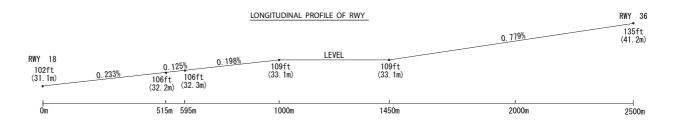
In Area3 To be developed

# **RJCM AD 2.11 METEOROLOGICAL INFORMATION PROVIDED**

1	Associated MET Office	NEW CHITOSE
2	Hours of service MET Office outside hours	H24 (NEW CHITOSE)
	MET Office outside flours	
3	Office responsible for TAF preparation	NEW CHITOSE
	Periods of validity	30 Hours
4	Trend forecast	Nil
	Interval of issuance	
5	Briefing/ consultation provided	Briefing is available upon inquiry at NEW CHITOSE
6	Flight documentation	С
	Language(s) used	En
7	Charts and other information available for briefing or consultation	$\begin{split} &S_6, U_{85}, U_7, U_5, U_3, U_{25,} U_2\!/T_r, P_s, P_5, P_3, P_{25}, P_{\mathrm{SWE}}, P_{\mathrm{SWF}}, P_{\mathrm{SWG}}, P_{\mathrm{SWI}},\\ &P_{\mathrm{SWM}}, P_{\mathrm{SW}}(\mathrm{domestic}), E, C, W_{E}, W_{F}, W_{G}, W_{I}, W, N \end{split}$
8	Supplementary equipment	Nil
	available for providing information	
9	ATS units provided with information	TWR
10	Additional information(limitation of ser-	Nil
	vice, etc.)	

# **RJCM 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 undulation	THR elevation and highest elevation of TDZ of precision APP RWY	
1	2	3	4	5	6	
18 174.66°		2500x45	PCN 89/F/C/X/T Asphalt-concrete	435330.51N/1440945.38E 98.8FT	THR ELEV: 102.0FT TDZ ELEV: 108FT	
36 354.66°		2500x45	•	435209.85N/1440955.80E 98.8FT	THR ELEV: 135.2FT TDZ ELEV: 131FT	
Slope o	Slope of RWY		RESA (Overrun) Dimensions (M)		Remarks	
7	7	10	11		14	
See below figure		2620x300	190×(MNM:140 MAX:300)*		RWY Grooving 2500m x 45m	
		2620x300	90×(MNM:90 MAX:300)* *For detail, ask airport administrator			



#### **RJCM AD 2.13 DECLARED DISTANCES**

RWY	TORA	TODA	ASDA	LDA	Remarks
Designator	(m)	(m)	(m)	(m)	
1	2	3	4	5	6
18	2500	2500	2500	2500	Nil
36	2500	2500	2500	2500	Nil

# **RJCM 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
18	PALS (CAT I) 900m LIH	Green Green	PAPI 3.0°/Left 404.5m 65.6ft	900m	2500m 30m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil(*1)
36	PALS (CAT I) 900m LIH	Green Green	PAPI 3.0°/Left 499.2m 65.6ft	900m	2500m 30m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil(*1)
				Remarks				
				10				
Overrun area	edge LGT(LE	N:60m, Co	lor:Red)(*1)					

# RJCM AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 435259N /1440926E , ALTN FLG(2)WG EV 4.3SEC, HO
2	LDI location and LGT Anemometer location and LGT	LDI : Nil Anemometer : RWY 18: 285m from RWY 18 THR RWY 36: 289m from RWY 36 THR
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 LGT
5	Remarks	WDI LGT

#### **RJCM AD 2.16 HELICOPTER LANDING AREA**

Nil

# **RJCM 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
Memanbetsu CTR	Momanhoteu APD (4252N/14410E)		D	Memanbetsu TWR En	

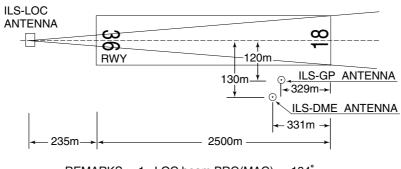
# **RJCM AD 2.18 ATS COMMUNICATION FACILITIES**

Service designation	Call sign	Frequency	Hours of operation	Remarks	
1	2	3	4	5	
TWR	Memanbetsu tower	118.85MHZ(1) 126.2MHZ	2300 - 1200 (1)Primary		

# **RJCM 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/2010)	TBE	110.85MHz	H24	435305.67N/ 1440958.26E		
DME	TBE	1132MHz (CH-45Y)	H24	435305.67N/ 1440958.26E	132ft	
ILS-LOC 18	ITB	110.1MHz	2300 - 1200	435202.26N/ 1440956.74E		LOC: 235m (771ft) away FM RWY 36 THR, BRG (MAG) 184°
ILS-GP 18	-	334.4MHz	2300 - 1200	435320.20N/ 1440952.07E		GP: 329m (1079ft) inside FM RWY 18 THR,120m (394ft) E of RCL. Angle 3.0°, HGT of ILS reference datum 16.5m (54ft)
ILS-DME 18	ITB	999MHz (CH-38X)	2300 - 1200	435320.16N/ 1440952.39E	119ft	DME: 331m (1086ft) inside FM RWY 18 THR, 130m(427ft) E of RCL.
ILS-LOC 36	IHM	110.3MHz	2300 - 1200	435316.40N/ 1440950.98E		LOC: 445m(1460ft) inside FM RWY 18 THR, 85m(279ft) E of RCL. LOC off-set angle 1.74° BRG(MAG) 5° LOC unusable beyond 17NM from LOC antenna
ILS-GP 36	-	335MHz	2300 - 1200	435221.41N/ 1440948.86E		GP: 370m(1214ft) inside FM RWY 36 THR, 120m(394ft) W of RCL. HGT of ILS reference datum: 16.5m(54ft). GP angle 3.0°.
ILS-DME 36	IHM	1001MHz (CH-40X)	2300 - 1200	435221.39N/ 1440948.51E	141ft	DME: 370m(1214ft) inside FM RWY 36, 128m(420ft) W of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

#### ILS for RWY18



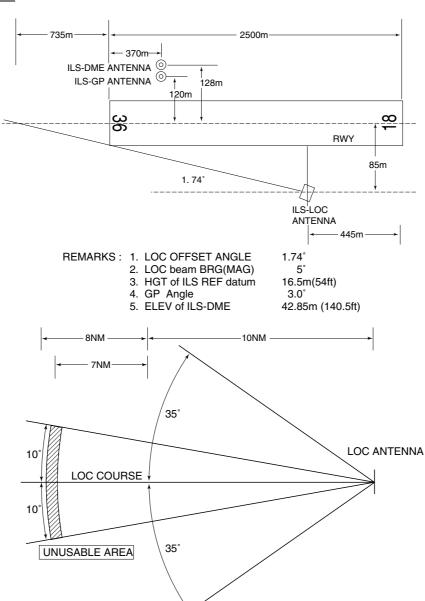
REMARKS: 1. LOC beam BRG(MAG) 184°

2. HGT of ILS REF datum 16.5m(54ft)

3. GP Angle 3.0°

4. ELEV of ILS-DME 36.2m(119ft)

#### ILS for RWY36



LOC unusable in the following area: BEY 17NM FM LOC ANT.

# **RJCM AD 2.20 LOCAL TRAFFIC REGULATIONS**

1. Airport regulations

PPR

Prior permission is required for transient aircraft due to parking congestion except scheduled and/or emergency flight.  Tel: Hokkaido Airports Co.,Ltd. Memanbetsu Airport Office 0152-74-2222
Taxiing to and from stands
Nil
Parking area for small aircraft(General aviation)
Nil
Parking area for helicopters
Nil
Apron - taxiing during winter conditions
Nil
Faxiing - limitations
Nil
School and training flights - technical test flights - use of runways
Nil
Helicopter traffic - limitation
Nil
Removal of disabled aircraft from runways
Nil
RJCM AD 2.21 NOISE ABATEMENT PROCEDURES
Nil

#### **RJCM AD 2.22 FLIGHT PROCEDURES**

#### 1.TAKE OFF MINIMA

	RWY	REDL & RCLL		_	CLL or RCL king	NIL (DAY ONLY)		
		RVR	VIS	RVR	VIS	RVR	VIS	
Multi-Engine ACFT with TKOF ALTN AP Filed	18/36	40	400m		400m	-	500m	
OTHER	18/36			AVBL LDG MINIMA				

#### **RJCM AD 2.23 ADDITIONAL INFORMATION**

双方向に設置されている ILS の輻射について

IIS 18/36

RWY18 および 36 ILS は同時に輻射する。

Two separate ILS radiate at opposite ends of a single runway

ILS 18/36

RWY18 and 36 ILS radiate simultaneously.

#### **RJCM AD 2.24 CHARTS RELATED TO AN AERODROME**

Aerodrome/Heliport Chart

Standard Departure Chart (KUSHIRO)

Standard Departure Chart (EATAK)

Standard Departure Chart (MEMANBETSU REVERSAL)

Standard Departure Chart (SHIBARE-RNAV)

Standard Arrival Chart (QURIO ARC)

Instrument Approach Chart (ILS Z or LOC Z RWY18)

Instrument Approach Chart (ILS Y or LOC Y RWY18)

Instrument Approach Chart (ILS or LOC RWY36)

Instrument Approach Chart (VOR RWY18)

Instrument Approach Chart (VOR RWY36)

Instrument Approach Chart (RNP Z RWY18)

Instrument Approach Chart (RNP Y RWY18 (AR))

Instrument Approach Chart (RNP RWY36)

Other Chart (Visual REP)

Other Chart (LDG CHART)

Other Chart (MVA CHART)



#### STANDARD DEPARTURE CHART -INSTRUMENT

#### RJCM / MEMANBETSU

SID

# KUSHIRO THREE DEPARTURE

RWY 18: Climb via TBE R187/KSE R007 to KSE VOR/DME.

RWY 36: Climb RWY HDG to 800FT, turn right HDG 217° to intercept and proceed via

TBE R187/KSE R007 to KSE VOR/DME.

Note RWY18 : 3.9% climb gradient required up to 4500FT.

OBST ALT 3281FT located at 17.0NM 179° FM end of RWY18.



#### STANDARD DEPARTURE CHART-INSTRUMENT

#### RJCM / MEMANBETSU SID

#### EATAK THREE DEPARTURE

RWY 18: Climb RWY HDG to 800FT, turn right climb via TBE R220/OBE R039 to EATAK....

RWY 36 : Climb RWY HDG to 1000FT, turn left HDG 175° to intercept and proceed via TBE R220/OBE R039 to EATAK....

....Cross EATAK at or above 6000FT.

Note RWY36: 3.9% climb gradient required up to 2000FT.

OBST ALT 1181FT located at 4.5NM 290° FM end of RWY36.

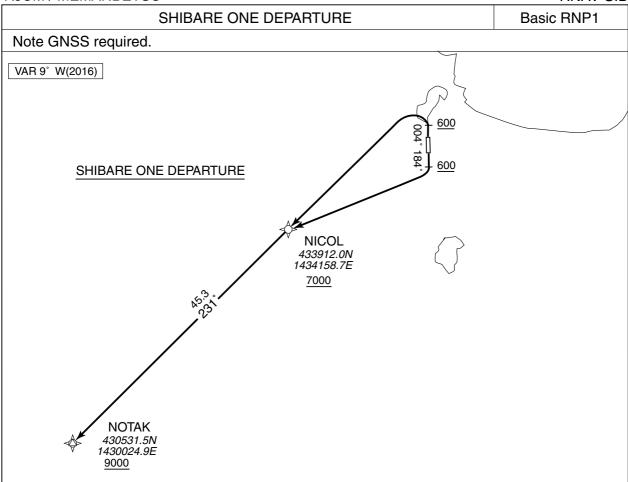


# STANDARD DEPARTURE CHART-INSTRUMENT RJCM / MEMANBETSU SID MEMANBETSU REVERSAL THREE DEPARTURE RWY 18: Climb via TBE R187 to TBE 5.0DME, turn left.... RWY 36: Climb via TBE R001 to TBE 5.0DME, turn right,.... ....Proceed to TBE VOR/DME. Cross TBE VOR/DME at or above 4000FT. D5.0 TBE MEMANBETSU REVERSAL THREE DEPARTURE VOR/DME **MEMANBETSU** 110.85 CH-45Y TBE 43°53′06″N/144°09′58″E 4000 - 100FT -D5.0 TBE

#### STANDARD DEPARTURE CHART-INSTRUMENT

#### RJCM / MEMANBETSU

**RNAV SID** 



#### SHIBARE ONE DEPARTURE

RWY18: Climb on HDG184° at or above 600FT, turn right direct to NICOL at or above 7000FT,

to NOTAK at or above 9000FT.

RWY36: Climb on HDG004° at or above 600FT, turn left direct to NICOL at or above 7000FT,

to NOTAK at or above 9000FT.

Note RWY36: 5.0% climb gradient required up to 600FT.

OBST ALT 1181FT located at 6.3NM 312° FM end of RWY36.

#### RWY18

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	184 (174.7)	-9.2	_	-	+600		_	Basic RNP1
002	DF	NICOL	_	_	-9.2	_	R	+7000	_	_	Basic RNP1
003	TF	NOTAK	_	231 (222.1)	-9.2	45.3	_	+9000	_	_	Basic RNP1

#### RWY36

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	-	ı	004 (354.7)	-9.2	_	_	+600	_	_	Basic RNP1
002	DF	NICOL	-	_	-9.2	_	L	+7000	_	_	Basic RNP1
003	TF	NOTAK	-	231 (222.1)	-9.2	45.3	_	+9000	_	_	Basic RNP1

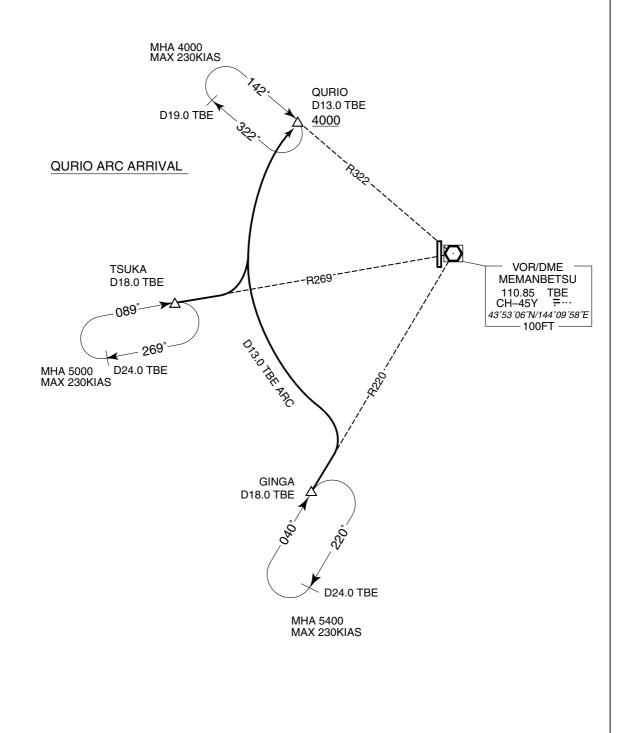
#### STANDARD ARRIVAL CHART-INSTRUMENT

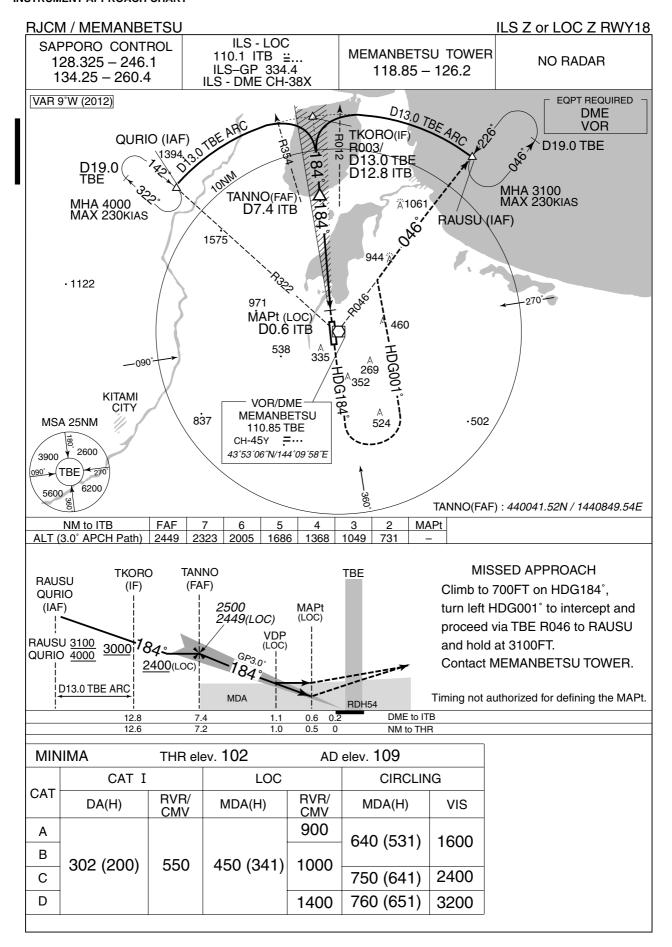
#### **RJCM / MEMANBETSU**

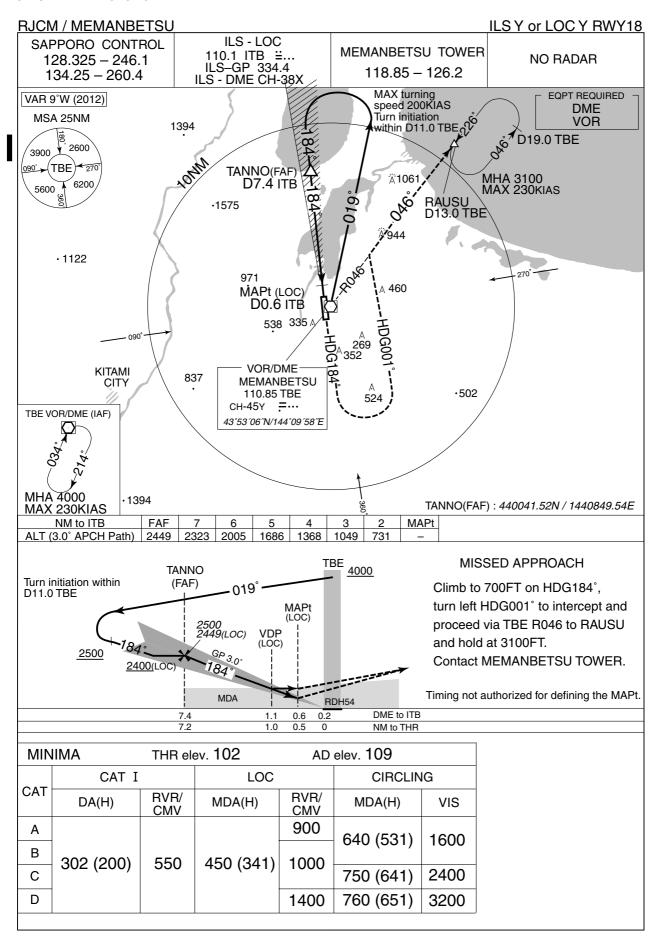
**STAR** 

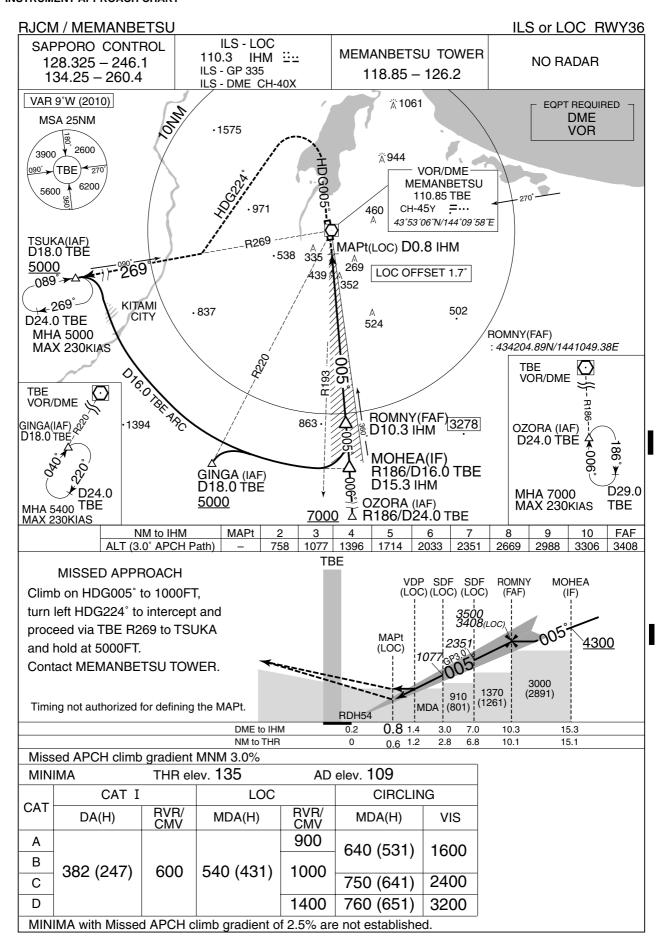
# **QURIO ARC ARRIVAL**

From over GINGA or TSUKA, turn left via TBE 13.0DME clockwise ARC to QURIO. Cross QURIO at or above 4000FT.

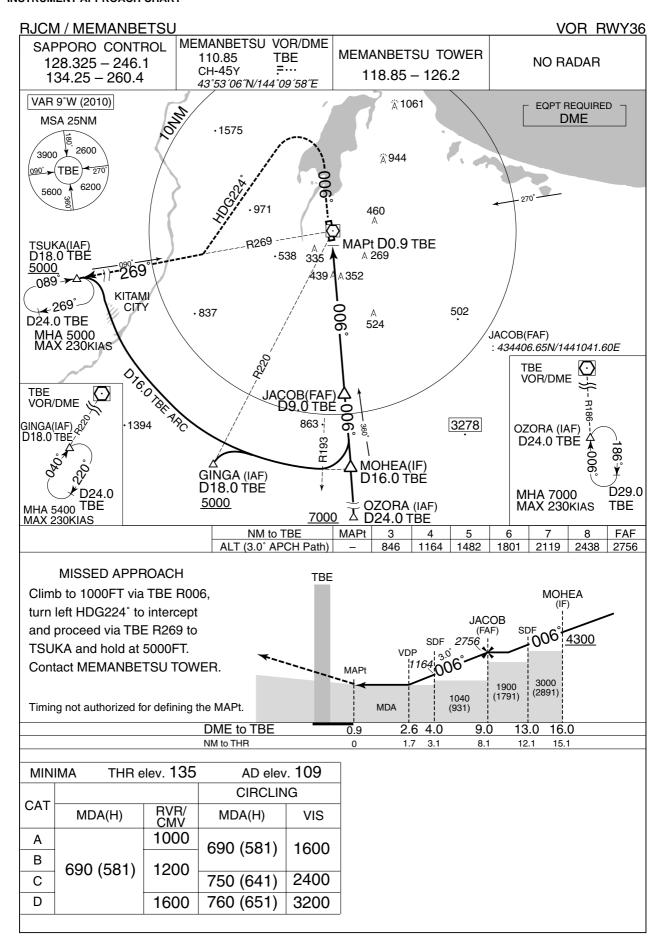


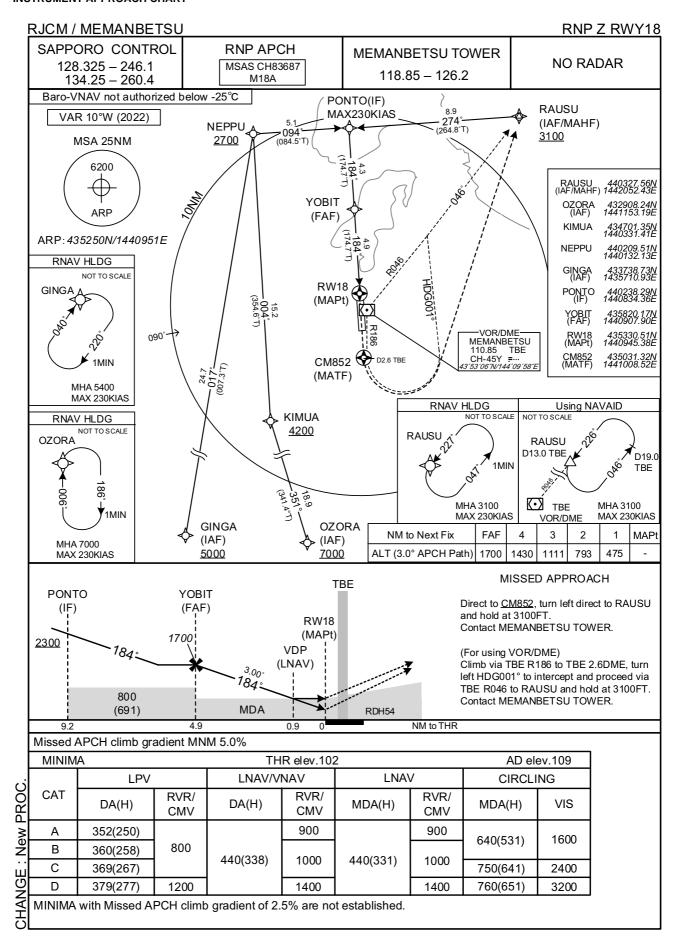












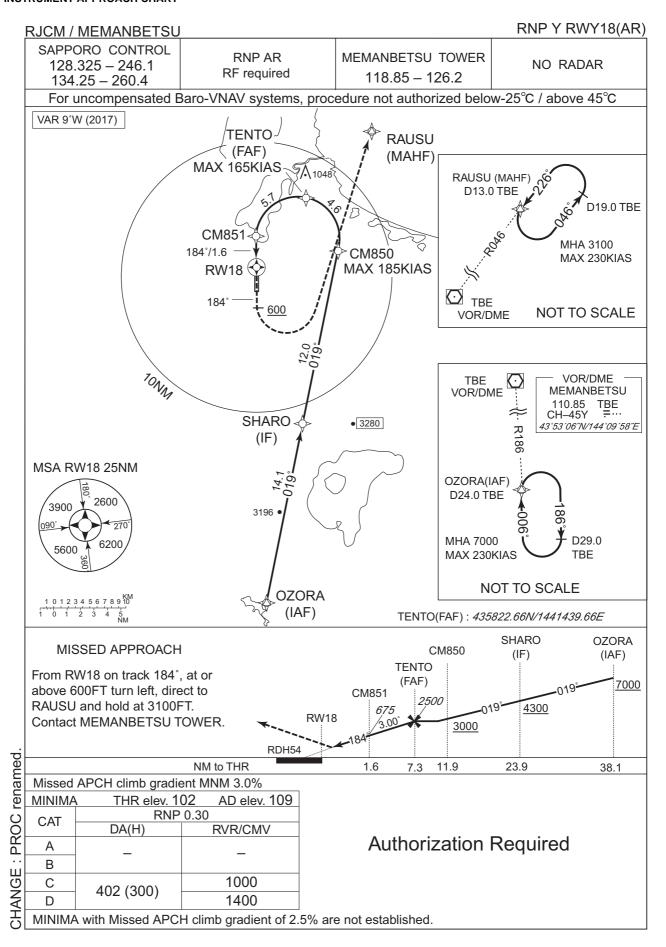
# RJCM / MEMANBETSU

RNP Z RWY18

FAS DATA BLOCK			
Operation type	0	LTP/FTP ellipsoidal height	+00618
SBAS service provider identifier	2	FPAP latitude	435209.8350N
Airport identifier	RJCM	FPAP longitude	1440955.7670E
Runway	18	Threshold crossing height	00016.5
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	M18A	✓ length offset	0000
LTP/FTP latitude	435330.4920N	HAL	40.0
LTP/FTP longitude	1440945.3395E	VAL	50.0
CRC reminder	257C1F8B		

#### Required additional data

LTP/FTP orthometric height	31.0		



# RJCM / MEMANBETSU

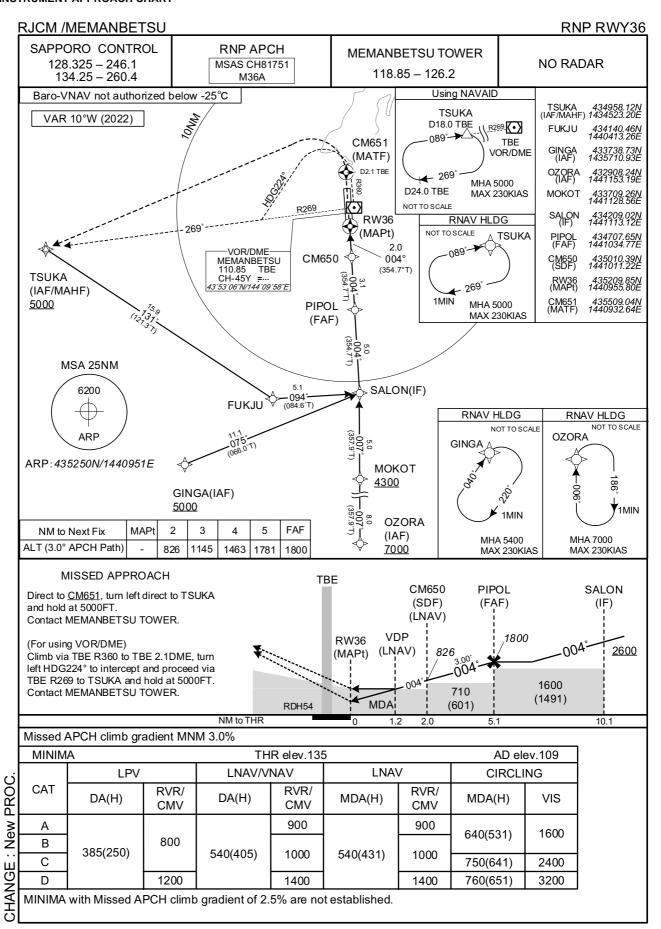
RNP Y RWY18(AR)

# 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	OZORA	_	_	-9.2	_	-	+7000	_	_	_
002	TF	SHARO	_	019 (009.5)	-9.2	14.1	-	+4300	_	_	1.0
003	TF	CM850	_	019 (009.6)	-9.2	12.0	_	+3000	-185	_	1.0
004	RF Center: CMRF1 r=3.04	TENTO	_	_	-9.2	4.6	L	2500	-165	-	1.0
005	RF Center: CMRF1 r=3.04	CM851	_	_	-9.2	5.7	L	675	_	-3.00	0.3
006	TF	RW18	Υ	184 (174.7)	-9.2	1.6	-	156	_	-3.00/54	0.3
007	FA	_	_	184 (174.7)	-9.2	-	-	+600	_	-	1.0
008	DF	RAUSU	_	_	-9.2	_	L	3100	_	_	1.0

# Waypoint Coordinates

	T		T
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
OZORA	432908.24N / 1441153.19E	CMRF1	435524.66N / 1441344.15E
SHARO	434301.91N / 1441506.66E		
CM850	435454.27N / 1441753.05E		
TENTO	435822.66N / 1441439.66E		
CM851	435507.75N / 1440932.81E		
RW18	435330.51N / 1440945.38E		
RAUSU	440327.56N / 1442052.43E		



# RJCM / MEMANBETSU

**RNP RWY36** 

			_	
$-\lambda c$	- N	ΓΑ ΒΙ		~1/

Operation type	0	LTP/FTP ellipsoidal height	+00719
SBAS service provider identifier	2	FPAP latitude	435330.4920N
Airport identifier	RJCM	FPAP longitude	1440945.3395E
Runway	36	Threshold crossing height	00016.5
Approach performance designator	0	TCH units selector	1
Route indicator		Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M36A	∠ length offset	0000
LTP/FTP latitude	435209.8350N	HAL	40.0
LTP/FTP longitude	1440955.7670E	VAL	50.0
CRC reminder	28C6AB24		

Required additional data

4 _		
	LTP/FTP orthometric height	41.1



※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
ARP.	網走 Abashiri	025°T / 9.2NM	JR駅 Station
	涛沸湖 Tofutsuko	074°T / 10.5NM	湖 Lake
from	小清水 Koshimizu	097°T / 13.3NM	学校 School
VGE : Map updated. BRG/DIST	東藻琴 Higashimokoto	110°T / 6.1NM	市街地 Town
	美幌峠 Bihoro Toge	165°T / 14.4NM	峠 Pass
	津別 Tsubetsu	210°T / 12.2NM	市街地 Town
	美幌ステーション Bihoro Station	223°T / 3.7NM	JR駅 Station
	北見 Kitami	248°T / 12.4NM	JR駅 Station
CHANGE	浜佐呂間 Hamasaroma	321°T / 15.5NM	佐呂間大橋 Bridge



