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:PCR 1132/R/B/W/T Apron B : Surface:Cement-concrete, Strength:PCR 257/R/B/W/T
2	Taxiway width, surface and strength	T1-T6, P1-P6 : Surface:Asphalt-concrete, Width:30m, Strength:PCR 1170/F/C/X/T TB : Surface:Asphalt-concrete, Width:9m, Strength:PCR 273/F/C/X/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, TWY guide lines and Visual docking/ parking guidance system of aircraft stands	Aircraft stand ID sign : Nil ACFT stand taxi lane marking : See AD2.24. AD chart Visual docking guidance system : Nil
2	RWY and TWY markings and LGT	RWY: RWY18/36 (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

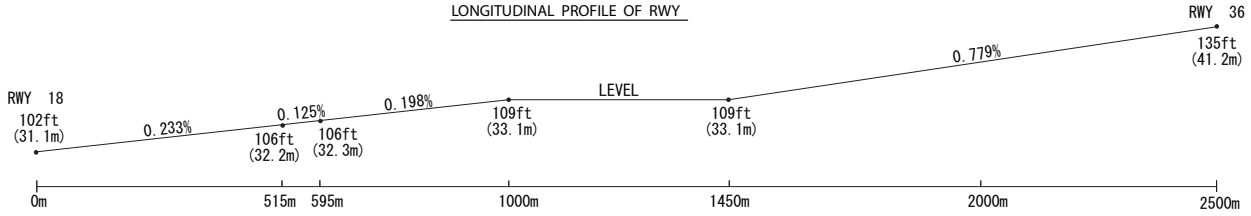
RJCM AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	NEW CHITOSE
2	Hours of service MET Office outside hours	H24 (NEW CHITOSE)
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	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_{SWE}, P_{SWF}, P_{SWG}, P_{SWI}, P_{SWM}, P_{SW}(domestic), E, C, W_E, W_F, W_G, W_I, W, N
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	TWR
10	Additional information(limitation of service, etc.)	Nil

RJCM AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCR) 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	PCR 1027/F/D/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 of RWY	Strip Dimensions(M)	RESA (Overrun) Dimensions (M)	Remarks
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 Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
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(LEN:60m, Color: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	Area within a radius of 5nm(9km) of Memanbetsu ARP (*4353N/14410E*)	3000 or below	D	Memanbetsu TWR En	
Hidaka ACA	See RJEC attached chart		E	Hidaka APP En	

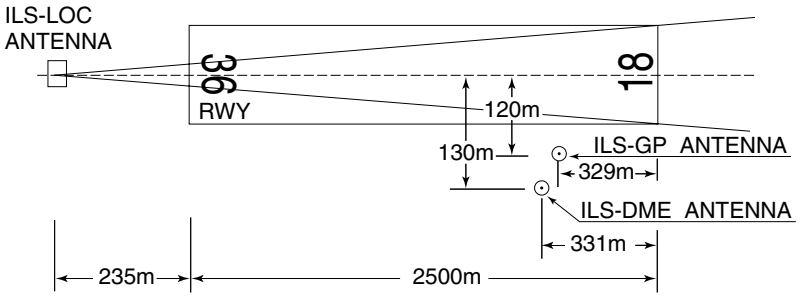
RJCM AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Hidaka Approach	128.325MHz 246.1MHz 134.55MHz 121.5MHz (E) 243.0MHz (E)	2230 - 1200	
TWR	Memanbetsu tower	118.85MHz(1) 126.2MHz	2300 - 1200 (1)Primary	

RJCM AD 2.19 RADIO NAVIGATION AND LANDING AIDS

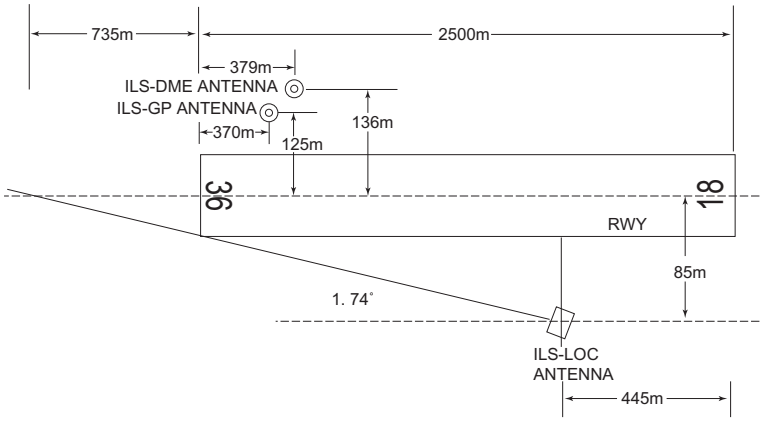
Type of aid (VOR declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (9°W/2010)	TBE	110.85MHz	H24	*435305.67N/ 1440958.26E*		
DME	TBE	1132MHz (CH-45Y)	H24	*435305.67N/ 1440958.26E*	132ft	
ILS-LOC 18	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 offset angle 1.74° BRG(MAG) 5.90° LOC unusable: beyond 17nm from LOC antenna
ILS-GP 36	-	335MHz	2300 - 1200	*435221.40N/ 1440948.65E*		GP: 370m(1214ft) inside FM RWY 36 THR, 125m(410ft) W of RCL. HGT of ILS REF datum: 16.5m(54ft). GP angle 3.0°.
ILS-DME 36	IHM	1001MHz (CH-40X)	2300 - 1200	*435221.65N/ 1440948.07E*	137ft	DME: 379m(1243ft) inside FM RWY 36, 136m(446ft) W of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

ILS for RWY18

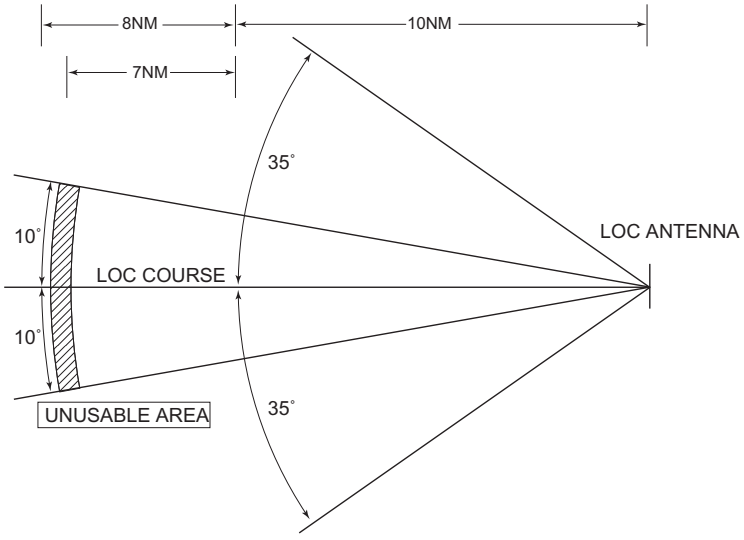


REMARKS : 1. LOC beam BRG(MAG) 184˚
2. HGT of ILS REF datum 16.5m(54ft)
3. GP Angle 3.0˚
4. ELEV of ILS-DME 36.2m(119ft)

ILS for RWY36



REMARKS : 1. LOC OFFSET ANGLE 1.74˚
2. LOC beam BRG(MAG) 5.90˚
3. HGT of ILS REF datum 16.5m(54ft)
4. GP Angle 3.0˚
5. ELEV of ILS-DME 41.7m (137ft)



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

2. Taxiing to and from stands

Nil

3. Parking area for small aircraft(General aviation)

Nil

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

Nil

7. School and training flights - technical test flights - use of runways

Nil

8. Helicopter traffic - limitation

Nil

9. 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		REDL or RCLL or RCL Marking		NIL (DAY ONLY)	
		RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with TKOF ALTN AP Filed	18/36	400m		400m	400m	-	500m
OTHER	18/36	AVBL LDG MINIMA					

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

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

(I) 1. Contact Memanbetsu Tower.

2. If unable, proceed in accordance with visual flight rules.

3. If unable, proceed to MEMANBETSU VOR/DME at last assigned altitude or 4,000 feet whichever is higher, and execute instrument approach.

(II) Procedures other than above will be issued when situation requires.

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

ILS 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.

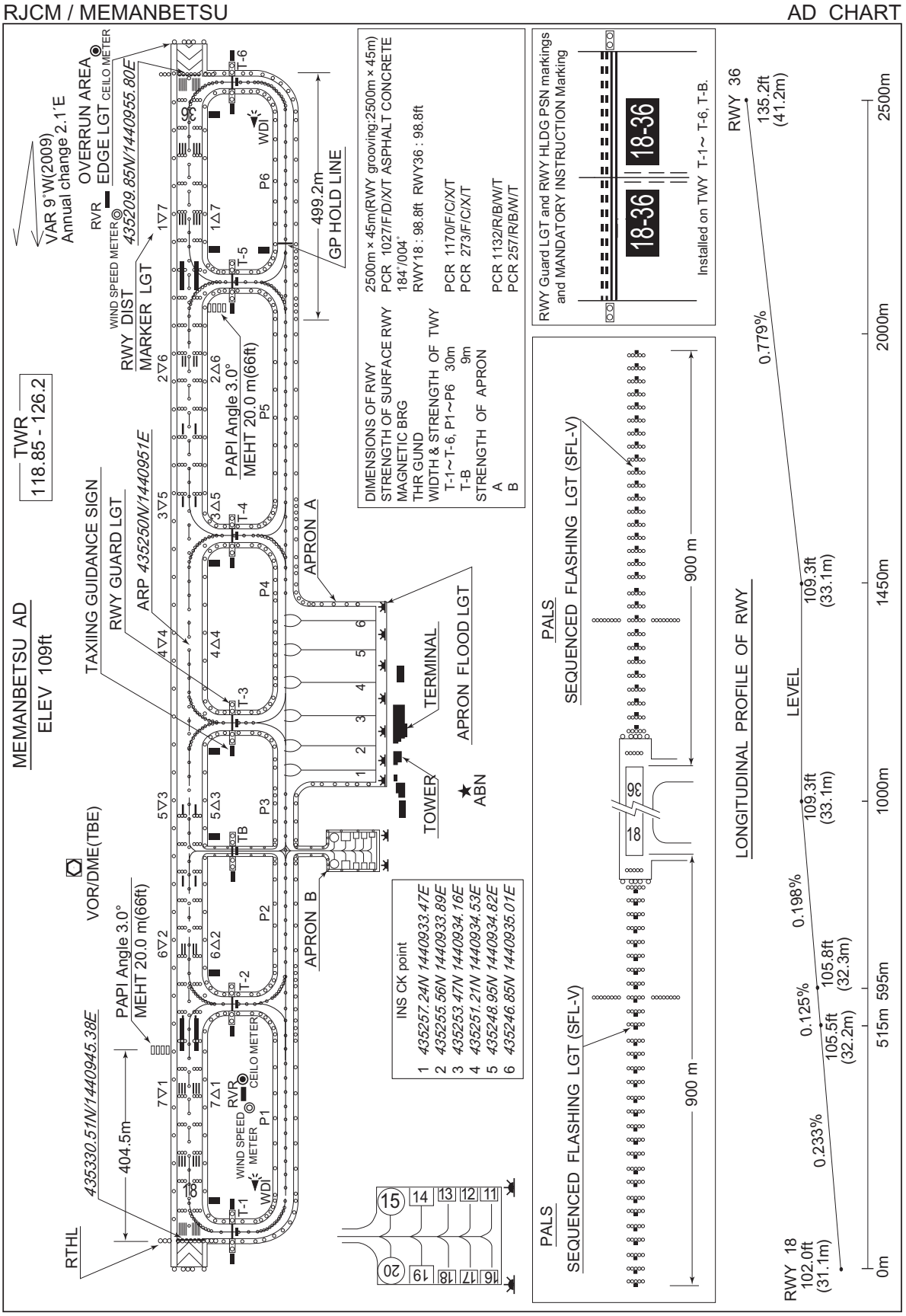
RJCM AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart

Standard Departure Chart (MEMANBETSU REVERSAL)
Standard Departure Chart (MENIB-RNAV)
Standard Departure Chart (NICOL-RNAV)
Standard Departure Chart (NULKI-RNAV)

Instrument Approach Chart (ILS Z or LOC Z RWY18)
Instrument Approach Chart (ILS Y or LOC Y RWY18)
Instrument Approach Chart (ILS X 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)

CHANGE : Description of strength of pavement.



STANDARD DEPARTURE CHART-INSTRUMENT

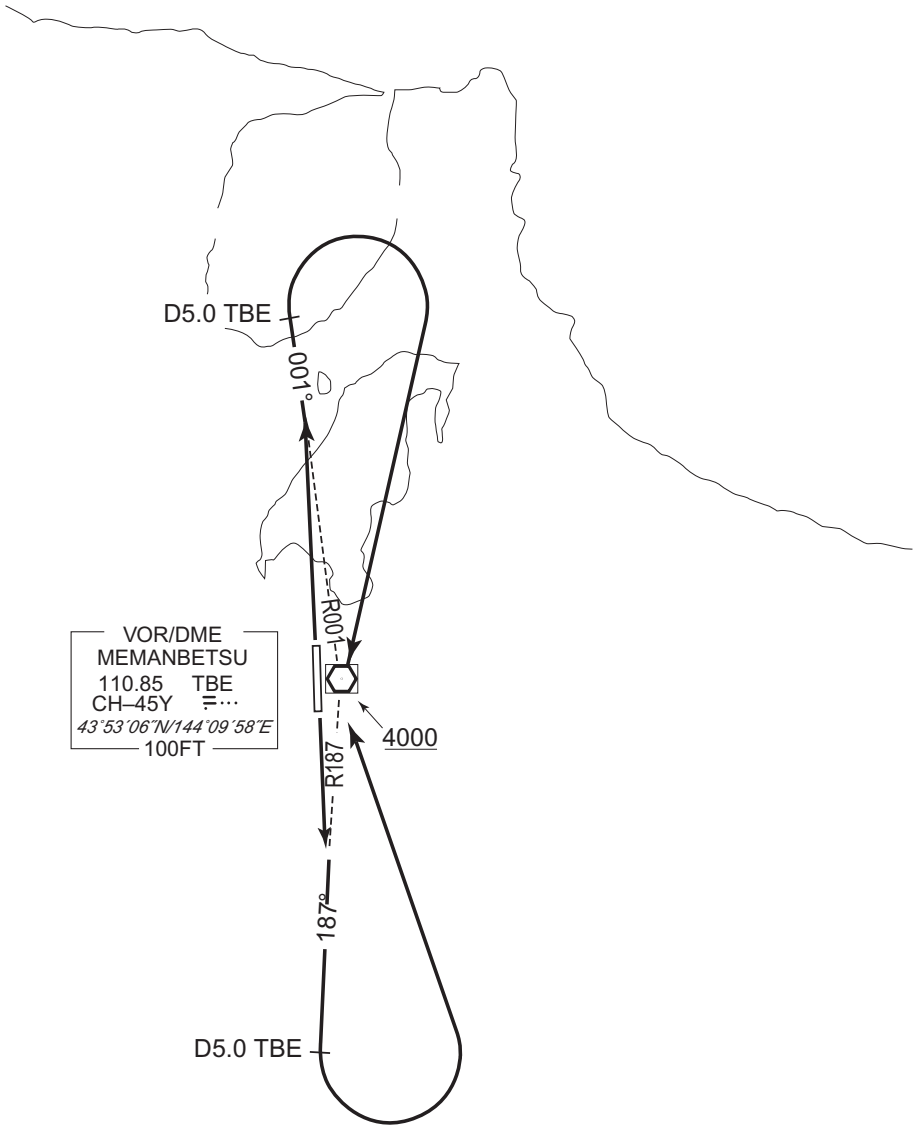
RJCM / MEMANBETSU SID

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.



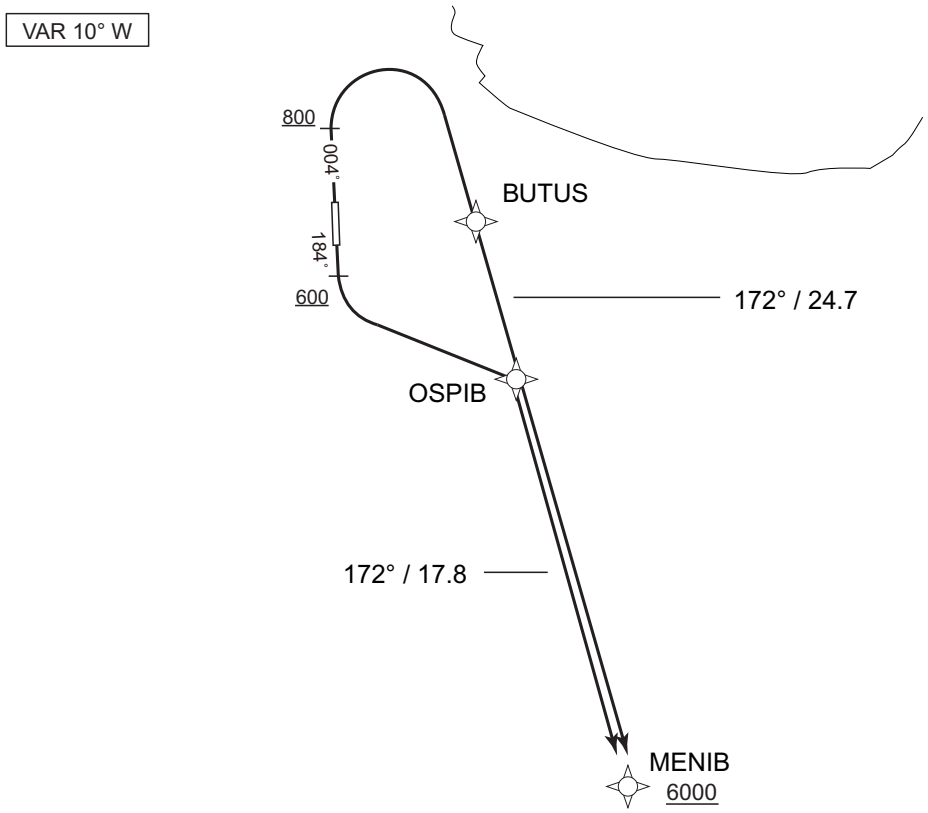
CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU RNAV SID

MENIB ONE DEPARTURE	RNP1

Note GNSS required.



RWY18 : Climb on HDG184° at or above 600FT, turn left direct to OSPIB, to MENIB at or above 6000FT.
RWY36 : Climb on HDG004° at or above 800FT, turn right direct to BUTUS, to MENIB at or above 6000FT.

Note RWY18 : 5.0% climb gradient required up to 2300FT.
OBST ALT 3314FT located at 12.2NM 153° FM end of RWY18.

RWY18

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	–	–	184 (174.7)	-9.6	–	–	+600	–	–	RNP1
002	DF	OSPIB	–	–	-9.6	–	L	–	–	–	RNP1
003	TF	MENIB	–	172 (162.3)	-9.6	17.8	–	+6000	–	–	RNP1

RWY36

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	–	–	004 (354.7)	-9.6	–	–	+800	–	–	RNP1
002	DF	BUTUS	–	–	-9.6	–	R	–	–	–	RNP1
003	TF	MENIB	–	172 (162.3)	-9.6	24.7	–	+6000	–	–	RNP1

CHANGE : Description of latitude and longitude.

STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU RNAV SID

Waypoint Coordinates

Waypoint Identifier	Coordinates
OSPIB	*434628.5N / 1442055.9E*
BUTUS	*435301.9N / 1441802.1E*
MENIB	*432929.4N / 1442822.9E*

CHANGE : Waypoint Coordinates added.

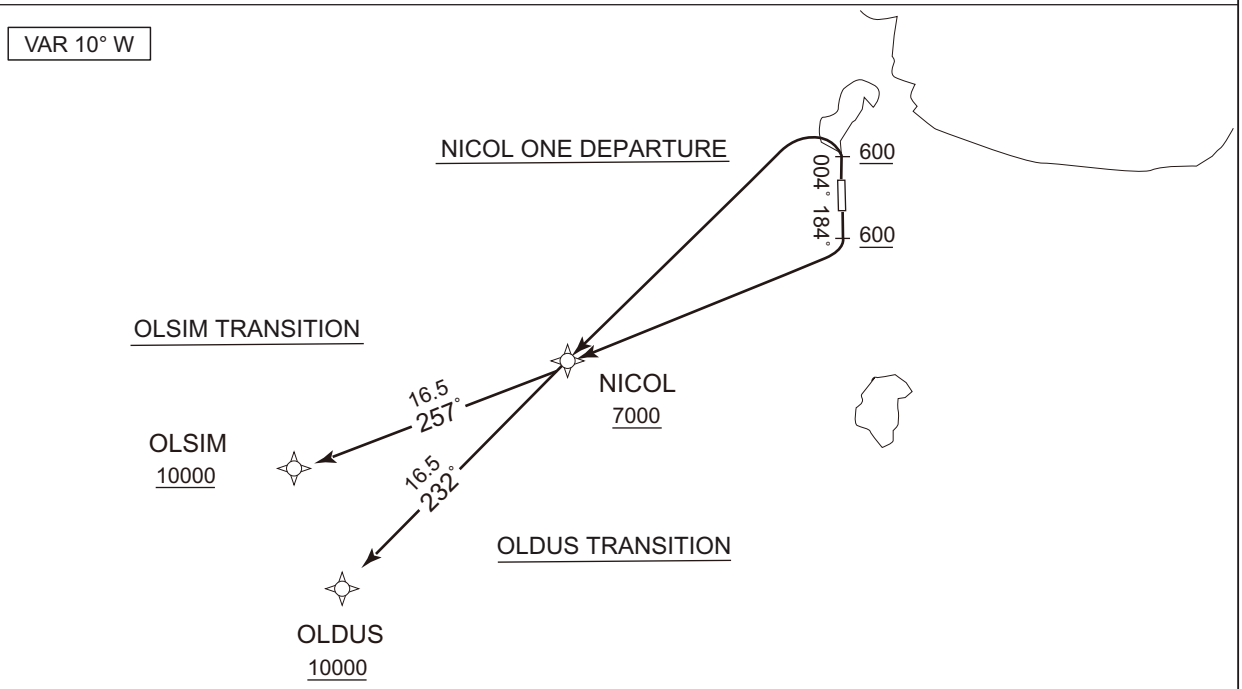
STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU RNAV SID and TRANSITION

NICOL ONE DEPARTURE
OLSIM TRANSITION / OLDUS TRANSITION

RNP1

Note GNSS required.



NICOL ONE DEPARTURE

RWY18 : Climb on HDG184° at or above 600FT, turn right direct to NICOL at or above 7000FT.
RWY36 : Climb on HDG004° at or above 600FT, turn left direct to NICOL at or above 7000FT.

Note RWY36 : 5.0% climb gradient required up to 600FT.
OBST ALT 1181FT located at 6.3NM 312˚ FM end of RWY36.

OLSIM TRANSITION

From NICOL at or above 7000FT, to OLSIM at or above 10000FT.

OLDUS TRANSITION

From NICOL at or above 7000FT, to OLDUS at or above 10000FT.

CHANGE : Description of latitude and longitude.

STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU RNAV SID and TRANSITION

NICOL ONE DEPARTURE

RWY18

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	-	-	184 (174.7)	-9.6	-	-	+600	-	-	RNP1
002	DF	NICOL	-	-	-9.6	-	R	+7000	-	-	RNP1

RWY36

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	-	-	004 (354.7)	-9.6	-	-	+600	-	-	RNP1
002	DF	NICOL	-	-	-9.6	-	L	+7000	-	-	RNP1

OLSIM 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	NICOL	-	-	-9.6	-	-	+7000	-	-	RNP1
002	TF	OLSIM	-	257 (247.6)	-9.6	16.5	-	+10000	-	-	RNP1

OLDUS 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	NICOL	-	-	-9.6	-	-	+7000	-	-	RNP1
002	TF	OLDUS	-	232 (222.9)	-9.6	16.5	-	+10000	-	-	RNP1

Waypoint Coordinates

Waypoint Identifier	Coordinates
NICOL	*433912.0N / 1434158.7E*
OLSIM	*433251.7N / 1432055.3E*
OLDUS	*432703.7N / 1432629.1E*

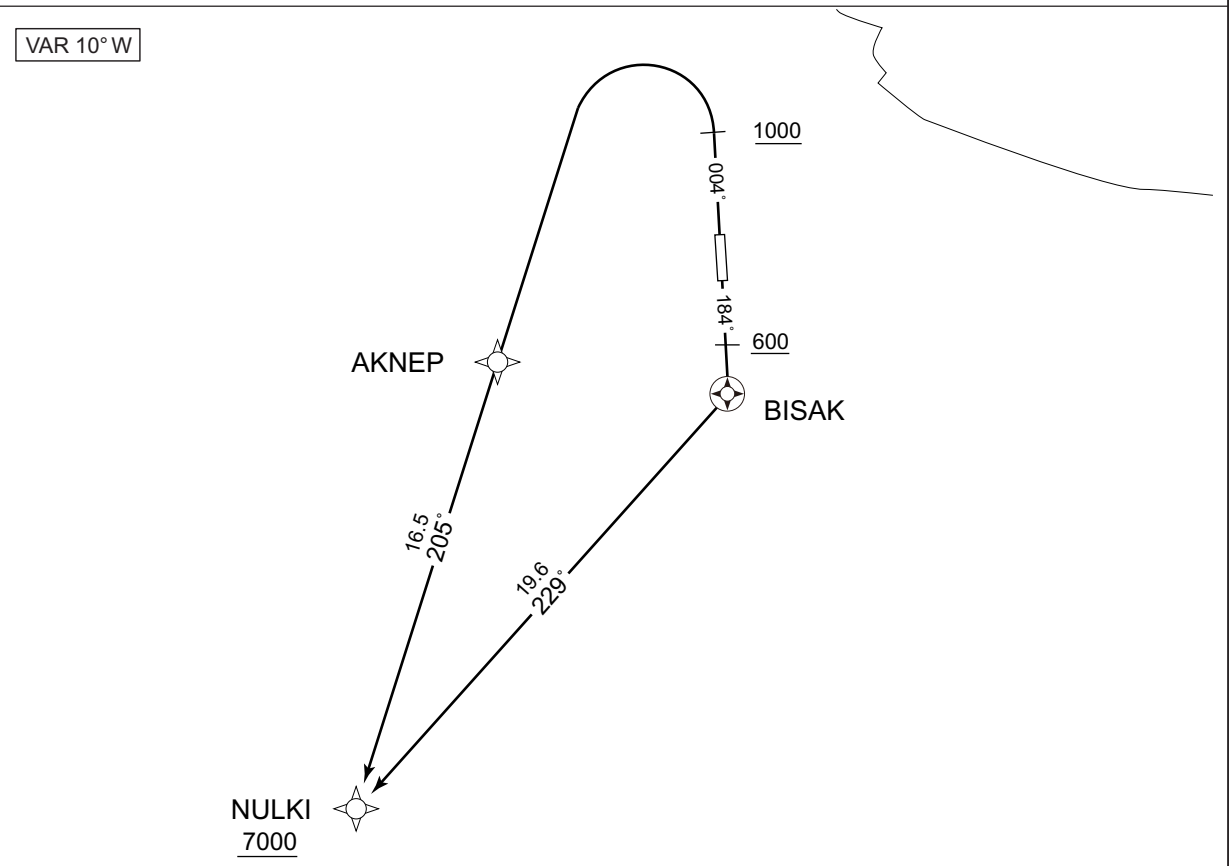
CHANGE : Waypoint Coordinates added.

STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU RNAV SID

NULKI ONE DEPARTURE	RNP1

Note GNSS required.



RWY18 : Climb on HDG184° at or above 600FT, direct to BISAK, to NULKI at or above 7000FT.

RWY36 : Climb on HDG004° at or above 1000FT, turn left direct to AKNEP, to NULKI at or above 7000FT.

Note RWY36 : 3.9% climb gradient required up to 1500FT.

OBST ALT 1673FT located at 8.2NM 320° FM end of RWY36.

RWY18

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	–	–	184 (174.7)	-9.6	–	–	+600	–	–	RNP1
002	DF	BISAK	Y	–	-9.6	–	–	–	–	–	RNP1
003	TF	NULKI	–	229 (219.6)	-9.6	19.6	–	+7000	–	–	RNP1

RWY36

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	–	–	004 (354.7)	-9.6	–	–	+1000	–	–	RNP1
002	DF	AKNEP	–	–	-9.6	–	L	–	–	–	RNP1
003	TF	NULKI	–	205 (194.9)	-9.6	16.5	–	+7000	–	–	RNP1

CHANGE : Description of latitude and longitude.

STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU RNAV SID

Waypoint Coordinates

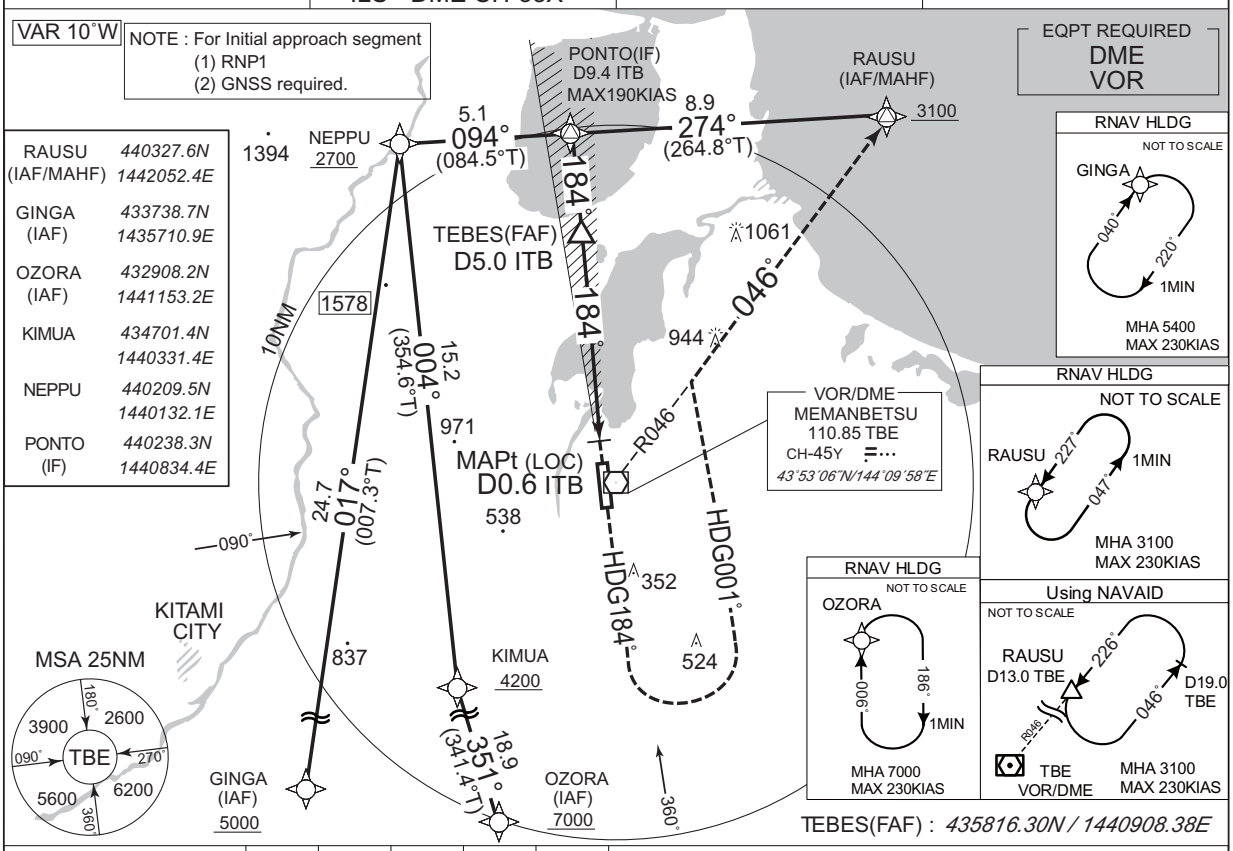
Waypoint Identifier	Coordinates
BISAK	*434808.9N / 1441026.9E*
AKNEP	*434859.1N / 1435906.4E*
NULKI	*433301.6N / 1435313.7E*

CHANGE : Waypoint Coordinates added.

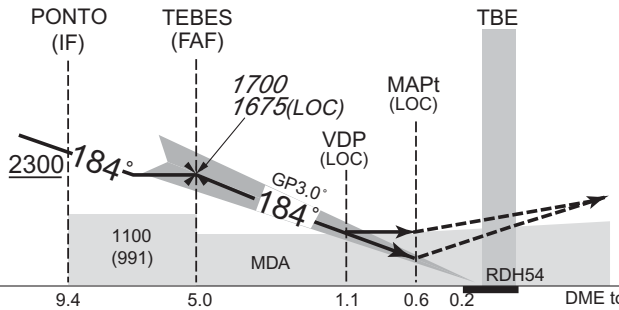
INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU — ILS Z or LOC Z RWY18

HIDAKA APP	ILS - LOC	MEMANBETSU TOWER	RADAR AVBL
128.325 - 246.1 - 134.55	110.1 ITB ILS–GP 334.4 ILS - DME CH-38X	118.85 – 126.2	



NM to ITB	FAF	4	3	2	MAPt
ALT (3.0° APCH Path)	1675	1368	1049	731	–



MISSED APPROACH

Climb to 700FT on HDG184°,
turn left HDG001° to intercept and
proceed via TBE R046 to RAUSU
and hold at 3100FT.
Contact HIDAKA APP.

Timing not authorized for defining the MAPt.

9.4	5.0	1.1	0.6	0.2	DME to ITB
9.2	4.8	1.0	0.5	0	NM to THR

MINIMA THR elev. 102 AD elev. 109

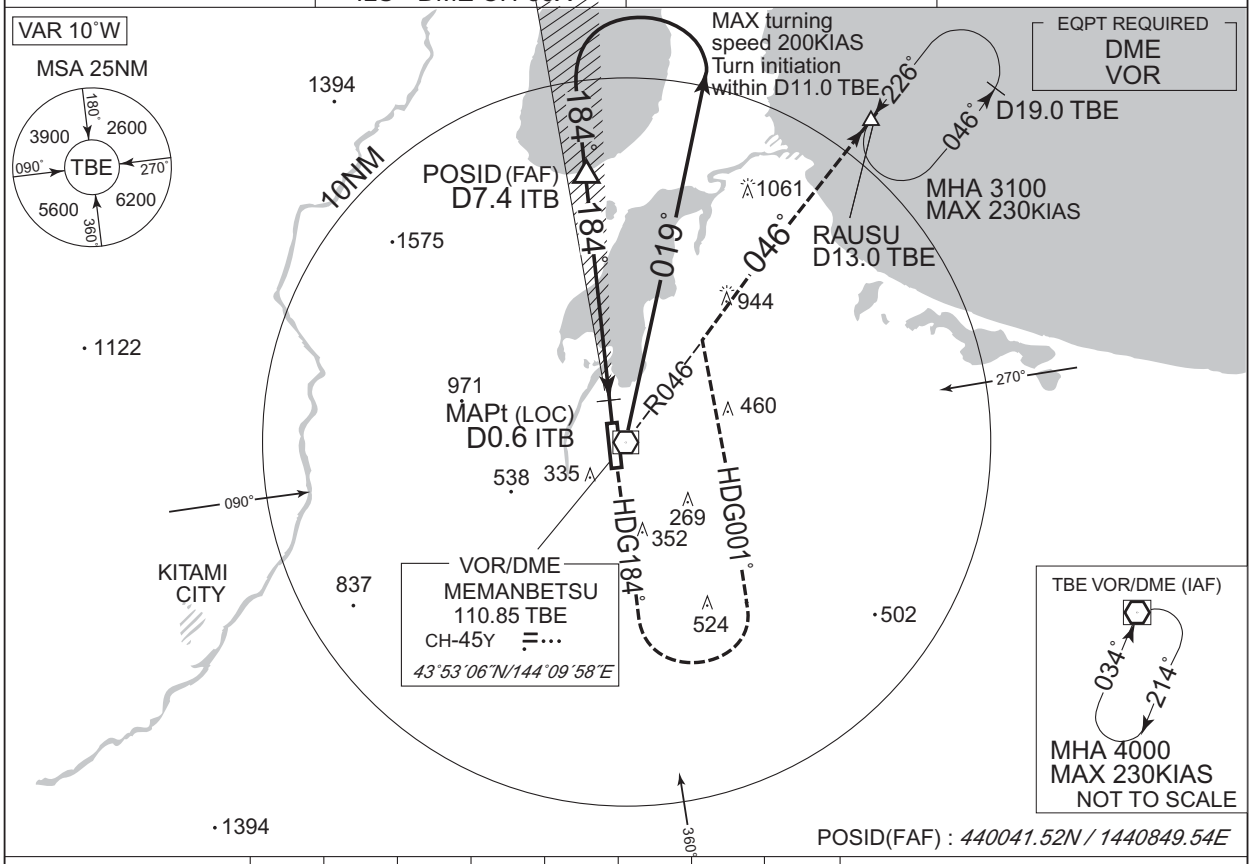
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	302 (200)	550	450 (341)	900	640 (531)	1600
B				1000		
C					750 (641)	2400
D				1400	760 (651)	3200

CHANGE : VAR. Description of latitude and longitude.

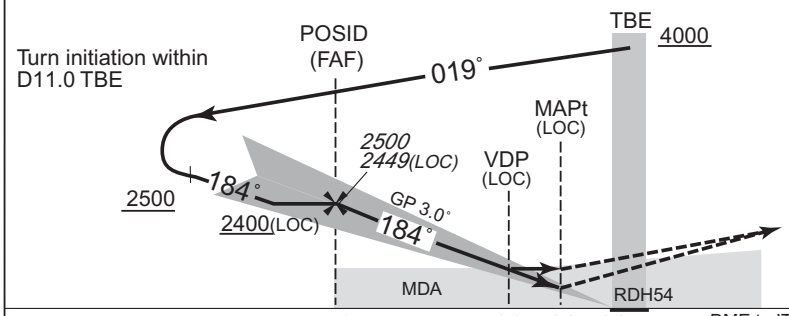
INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU — ILS Y or LOC Y RWY18

HIDAKA APP	ILS - LOC	MEMANBETSU TOWER	RADAR AVBL
128.325 - 246.1 - 134.55	110.1 ITB ≡... ILS–GP 334.4 ILS - DME CH-38X	118.85 – 126.2	



NM to ITB	FAF	7	6	5	4	3	2	MAPt
ALT (3.0˚ APCH Path)	2449	2323	2005	1686	1368	1049	731	–



MISSED APPROACH

Climb to 700FT on HDG184˚, turn left HDG001˚ to intercept and proceed via TBE R046 to RAUSU and hold at 3100FT.
Contact HIDAKA APP.

Timing not authorized for defining the MAPt.

7.4		1.1	0.6	0.2	DME to ITB
7.2		1.0	0.5	0	NM to THR

MINIMA — THR elev. 102 — AD elev. 109

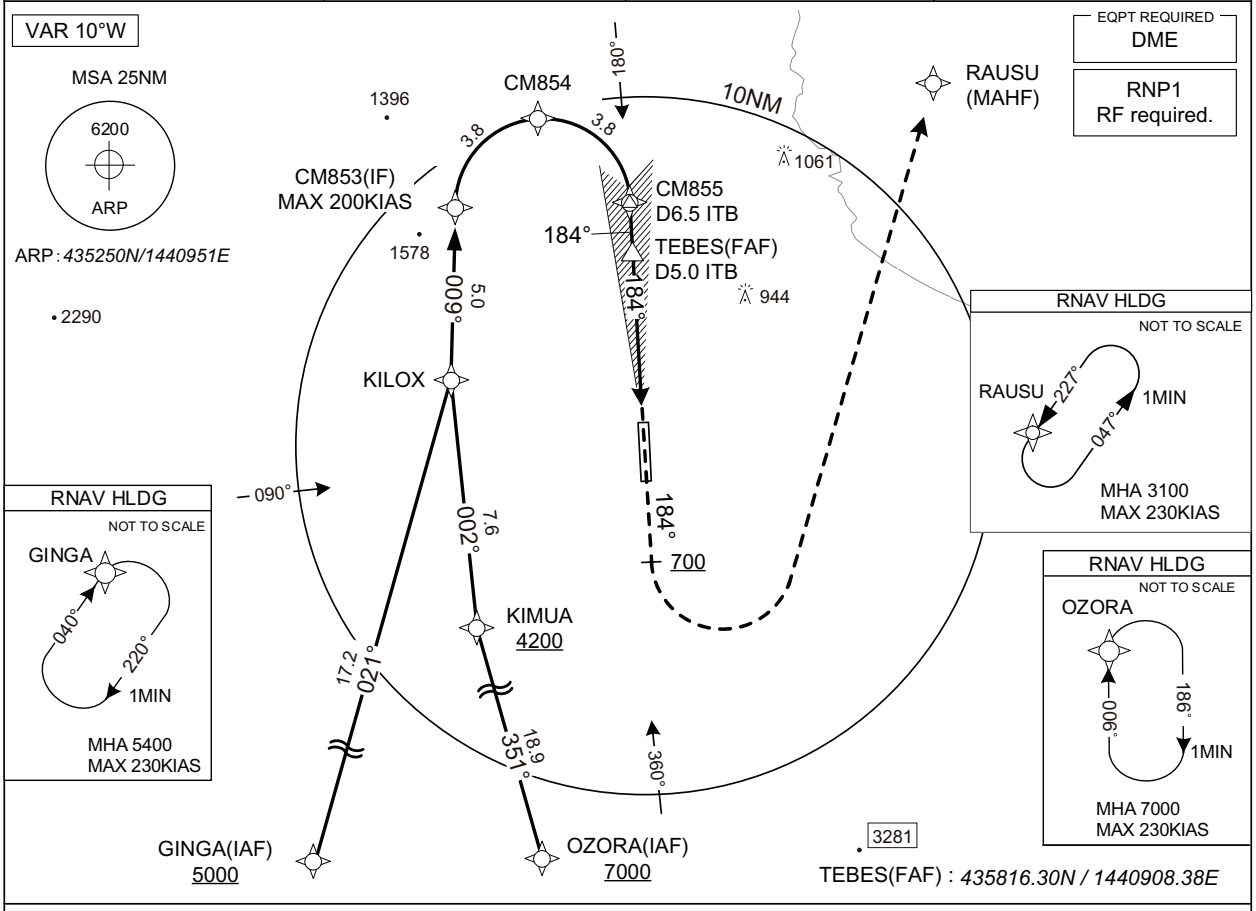
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	302 (200)	550	450 (341)	900	640 (531)	1600
B				1000		
C					750 (641)	2400
D				1400	760 (651)	3200

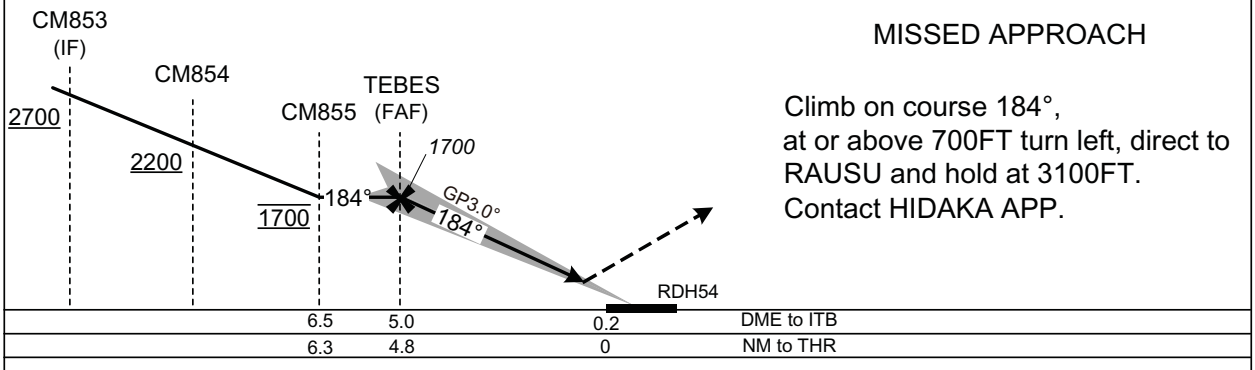
CHANGE : VAR. POSID established. TANNO abolished.

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU — ILS X RWY18

HIDAKA APP	ILS - LOC	MEMANBETSU TOWER	RADAR AVBL
128.325 - 246.1 - 134.55	110.1 ITB ⁝⁝... ILS–GP 334.4 ILS - DME CH-38X	118.85 – 126.2	





MISSED APPROACH

Climb on course 184°,
at or above 700FT turn left, direct to RAUSU and hold at 3100FT.
Contact HIDAKA APP.

MINIMA	THR elev. 102		AD elev. 109	
CAT	CAT I		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	VIS
A	302 (200)	550	640 (531)	1600
B				
C			750 (641)	2400
D			760 (651)	3200

CHANGE : VAR.

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU ILS X RWY18

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

Coding Table

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	GINGA	-	-	-9.6	-	-	+5000	-	-	RNP1
002	TF	KILOX	-	021 (011.9)	-9.6	17.2	-	-	-	-	RNP1
003	TF	CM853	-	009 (359.2)	-9.6	5.0	-	+2700	-200	-	RNP1
001	IF	OZORA	-	-	-9.6	-	-	+7000	-	-	RNP1
002	TF	KIMUA	-	351 (341.4)	-9.6	18.9	-	+4200	-	-	RNP1
003	TF	KILOX	-	002 (352.2)	-9.6	7.6	-	-	-	-	RNP1
004	TF	CM853	-	009 (359.2)	-9.6	5.0	-	+2700	-200	-	RNP1
001	IF	CM853	-	-	-9.6	-	-	+2700	-200	-	RNP1
002	RF Center: CMRF2 r=2.51NM	CM854	-	-	-9.6	3.8	R	+2200	-	-	RNP1
003	RF Center: CMRF2 r=2.51NM	CM855	-	-	-9.6	3.8	R	1700	-	-	RNP1
001	CA	-	-	184 (174.7)	-9.6	-	-	+700	-	-	RNP1
002	DF	RAUSU	-	-	-9.6	-	L	3100	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	GINGA	040 (030.8)	-9.5	1.0 (-14000)	R	5400	FL140	-230 (-14000)	RNP1
Hold	OZORA	006 (356.7)	-9.5	1.0 (-14000)	R	7000	FL140	-230 (-14000)	RNP1
Hold	RAUSU	227 (217.0)	-9.5	1.0 (-14000)	L	3100	FL140	-230 (-14000)	RNP1

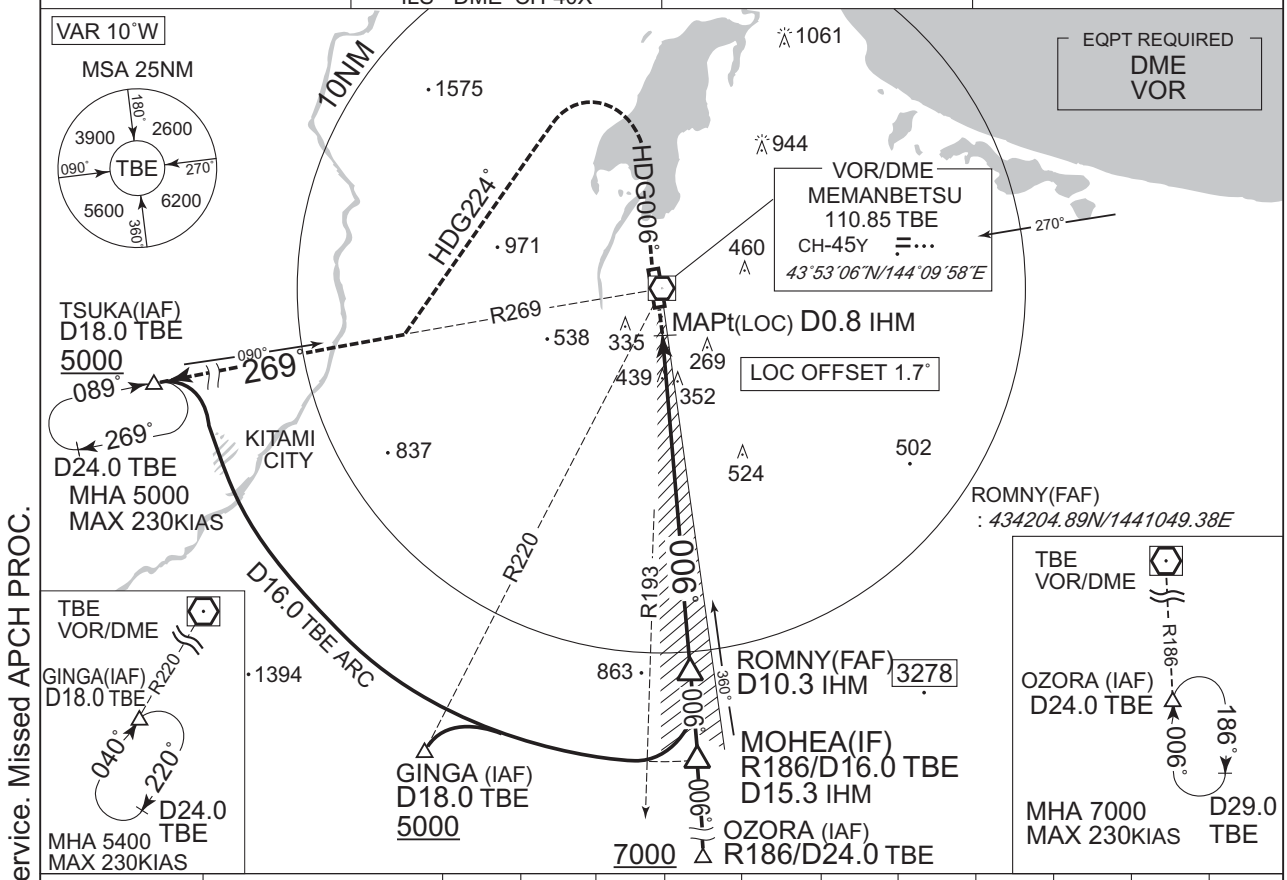
Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
GINGA	*433738.73N / 1435710.93E*	CMRF2	*435931.80N / 1440529.11E*
OZORA	*432908.24N / 1441153.19E*		
KIMUA	*434701.35N / 1440331.41E*		
KILOX	*435429.92N / 1440206.12E*		
CM853	*435929.83N / 1440200.57E*		
CM854	*440202.15N / 1440517.96E*		
CM855	*435945.90N / 1440856.76E*		
RAUSU	*440327.56N / 1442052.43E*		

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU — ILS or LOC RWY36

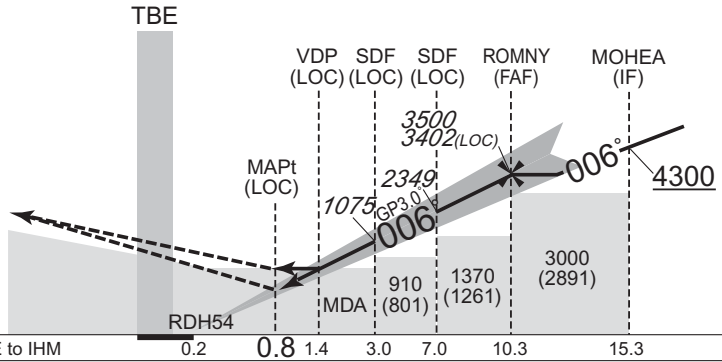
HIDAKA APP	ILS - LOC	MEMANBETSU TOWER	RADAR AVBL
128.325 - 246.1 - 134.55	110.3 IHM ILS - GP 335 ILS - DME CH-40X	118.85 – 126.2	



NM to IHM	MAPt	2	3	4	5	6	7	8	9	10	FAF
ALT (3.0° APCH Path)	–	756	1075	1393	1712	2030	2349	2667	2986	3304	3402

MISSED APPROACH
Climb to 1000FT on HDG006°,
turn left HDG224° to intercept and
proceed via TBE R269 to TSUKA
and hold at 5000FT.
Contact HIDAKA APP.

Timing not authorized for defining the MAPt.



DME to IHM	0.2	0.8	1.4	3.0	7.0	10.3	15.3
NM to THR	0	0.6	1.2	2.8	6.8	10.1	15.1

Missed APCH climb gradient MNM 3.0%

MINIMA THR elev. 135 AD elev. 109

CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	382 (247)	600	540 (431)	900	640 (531)	1600
B				1000		
C					750 (641)	2400
D				1400	760 (651)	3200

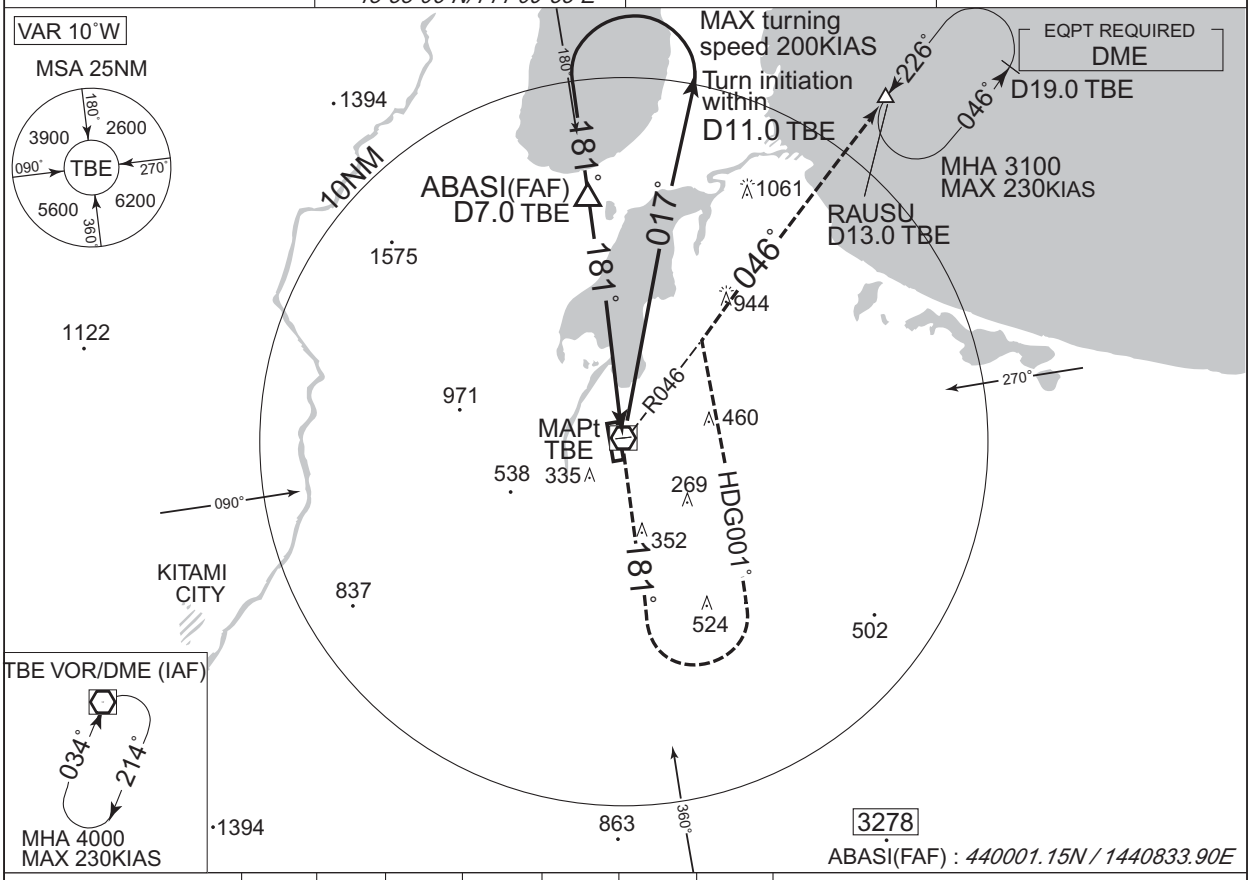
MINIMA with Missed APCH climb gradient of 2.5% are not established.

CHANGE : ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC.

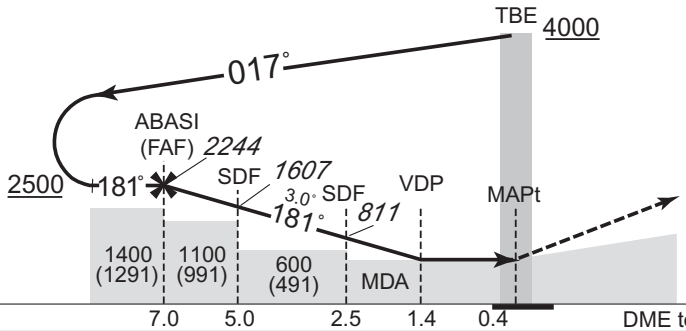
INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU VOR RWY18

HIDAKA APP	MEMANBETSU VOR/DME	MEMANBETSU TOWER	RADAR AVBL
128.325 - 246.1 - 134.55	110.85 TBE CH-45Y *43°53′06″N/144°09′58″E*	118.85 – 126.2	



NM to TBE	FAF	6	5	4	3	2	MAPt
ALT (3.0° APCH Path)	2244	1926	1607	1289	970	652	–



MISSED APPROACH

Climb to 900FT via TBE R181, turn left HDG001° to intercept and proceed via TBE R046 to RAUSU and hold at 3100FT.
Contact HIDAKA APP.

Timing not authorized for defining the MAPt.

7.0	5.0	2.5	1.4	0.4	DME to TBE
6.6	4.6	2.1	1.0	0	NM to THR

MINIMA THR elev. 102 AD elev. 109

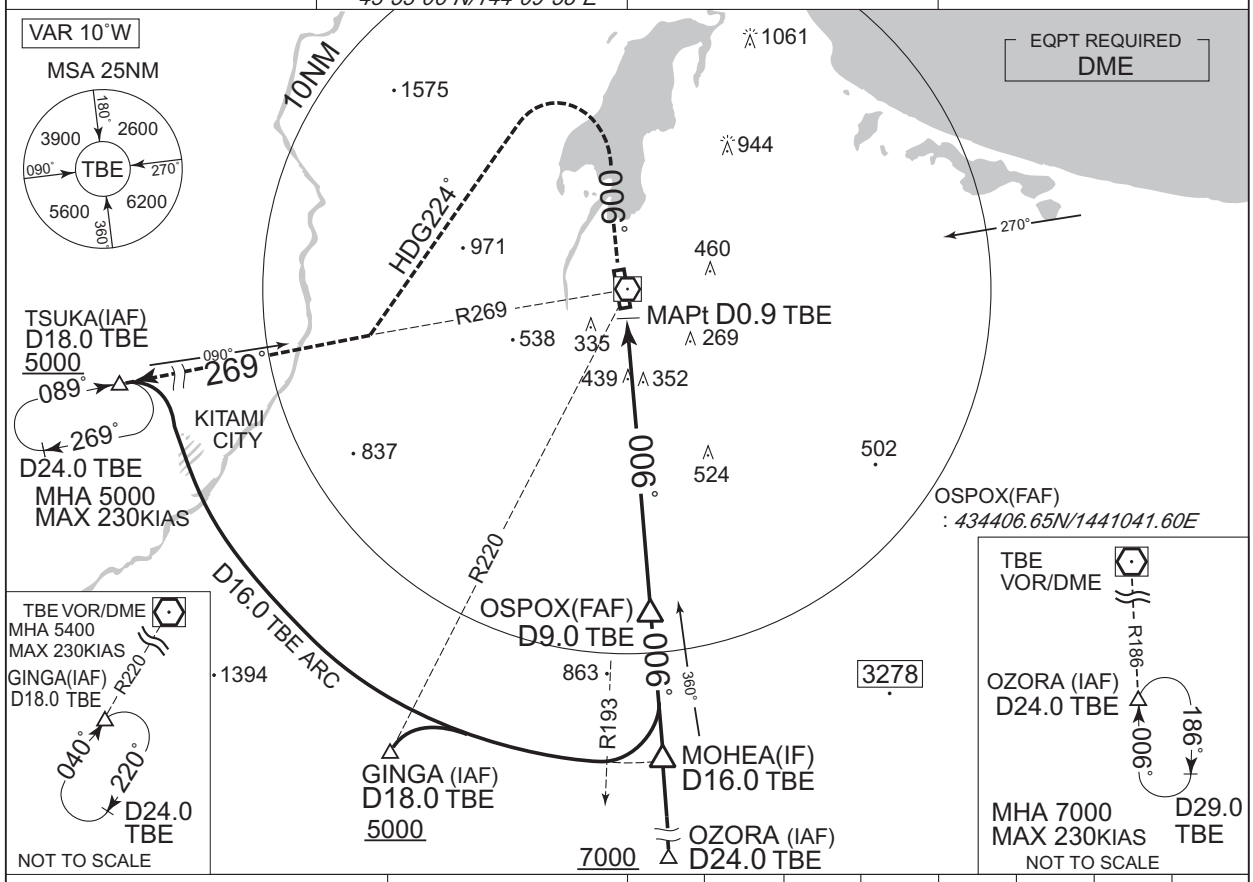
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	480 (371)	900	640 (531)	1600
B		1000		
C			750 (641)	2400
D		1400	760 (651)	3200

CHANGE : VAR.

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU VOR RWY36

HIDAKA APP	MEMANBETSU VOR/DME	MEMANBETSU TOWER	RADAR AVBL
128.325 - 246.1 - 134.55	110.85 TBE CH-45Y *43°53′06″N/144°09′58″E*	118.85 – 126.2	

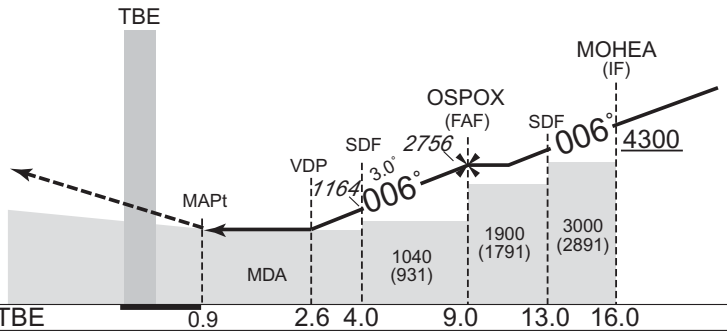


NM to TBE	MAPt	3	4	5	6	7	8	FAF
ALT (3.0° APCH Path)	–	846	1164	1482	1801	2119	2438	2756

MISSED APPROACH

Climb to 1000FT via TBE R006, turn left HDG224° to intercept and proceed via TBE R269 to TSUKA and hold at 5000FT. Contact HIDAKA APP.

Timing not authorized for defining the MAPt.



DME to TBE	0.9	2.6	4.0	9.0	13.0	16.0
NM to THR	0	1.7	3.1	8.1	12.1	15.1

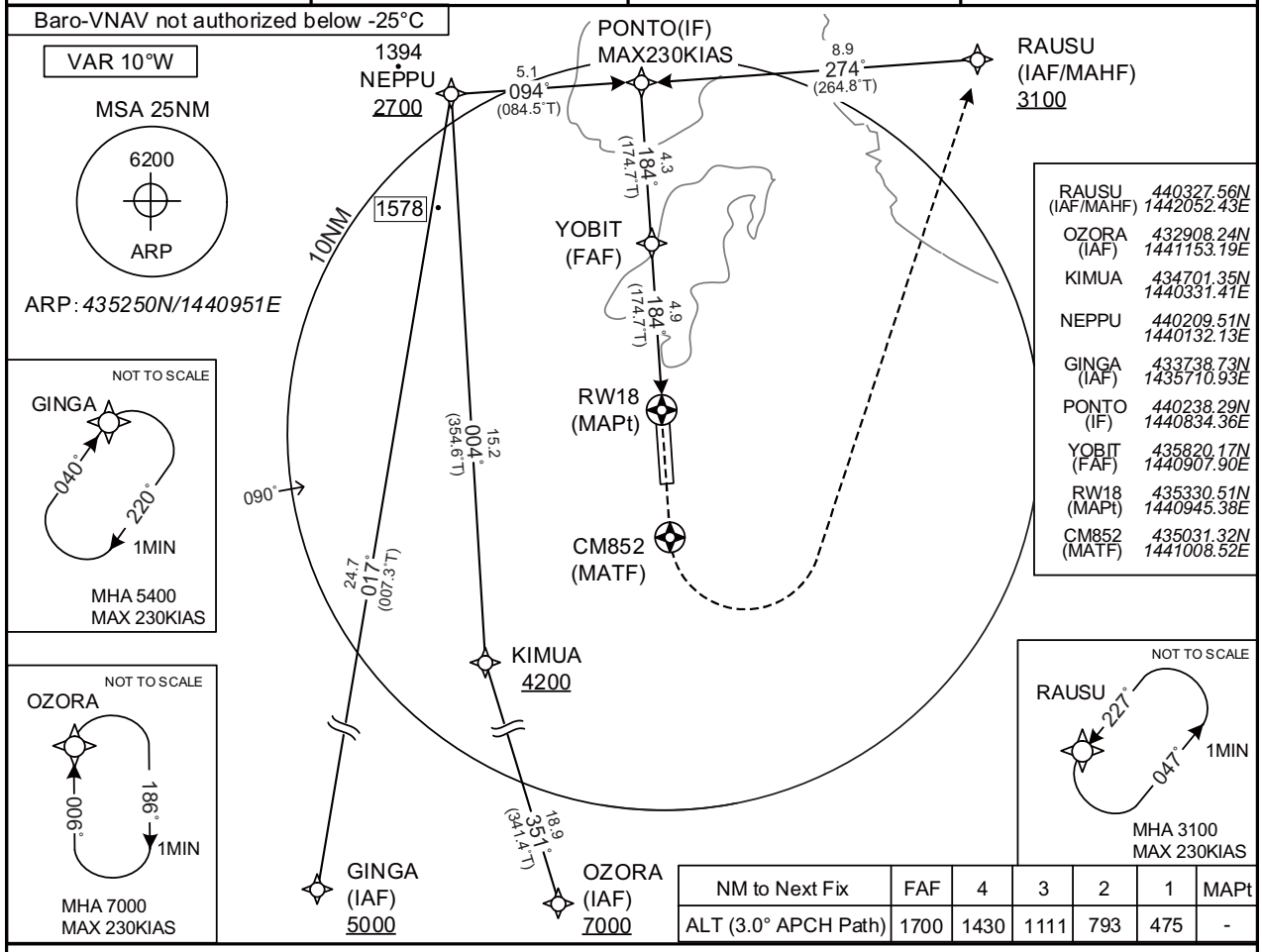
MINIMA	THR elev. 135		AD elev. 109	
CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	690 (581)	1000	690 (581)	1600
B		1200		
C			750 (641)	2400
D		1600	760 (651)	3200

CHANGE : VAR. OSPOX established. JACOB abolished.

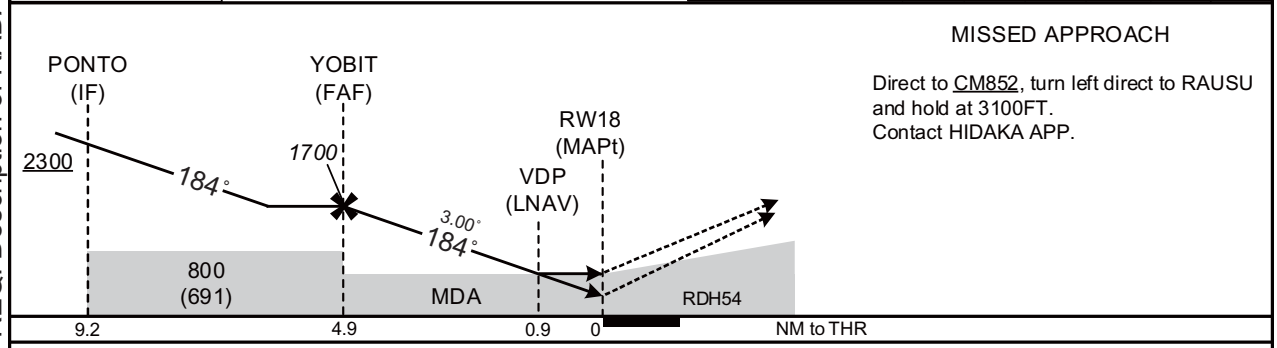
INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU — RNP Z RWY18

HIDAKA APP	RNP APCH	MEMANBETSU TOWER	RADAR AVBL
128.325 - 246.1 - 134.55	MSAS CH83687 M18A	118.85 – 126.2	



NM to Next Fix	FAF	4	3	2	1	MAPt
ALT (3.0° APCH Path)	1700	1430	1111	793	475	-



MISSED APPROACH

Direct to CM852, turn left direct to RAUSU and hold at 3100FT.
Contact HIDAKA APP.

Missed APCH climb gradient MNM 5.0%

MINIMA — THR elev.102 — AD elev.109

CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	352(250)	800	440(338)	900	440(331)	900	640(531)	1600
B	360(258)			1000		1000		
C	369(267)						750(641)	2400
D	379(277)	1200		1400		1400	760(651)	3200

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

CHANGE : ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC.

INSTRUMENT APPROACH CHART

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 remainder	257C1F8B		

Required additional data

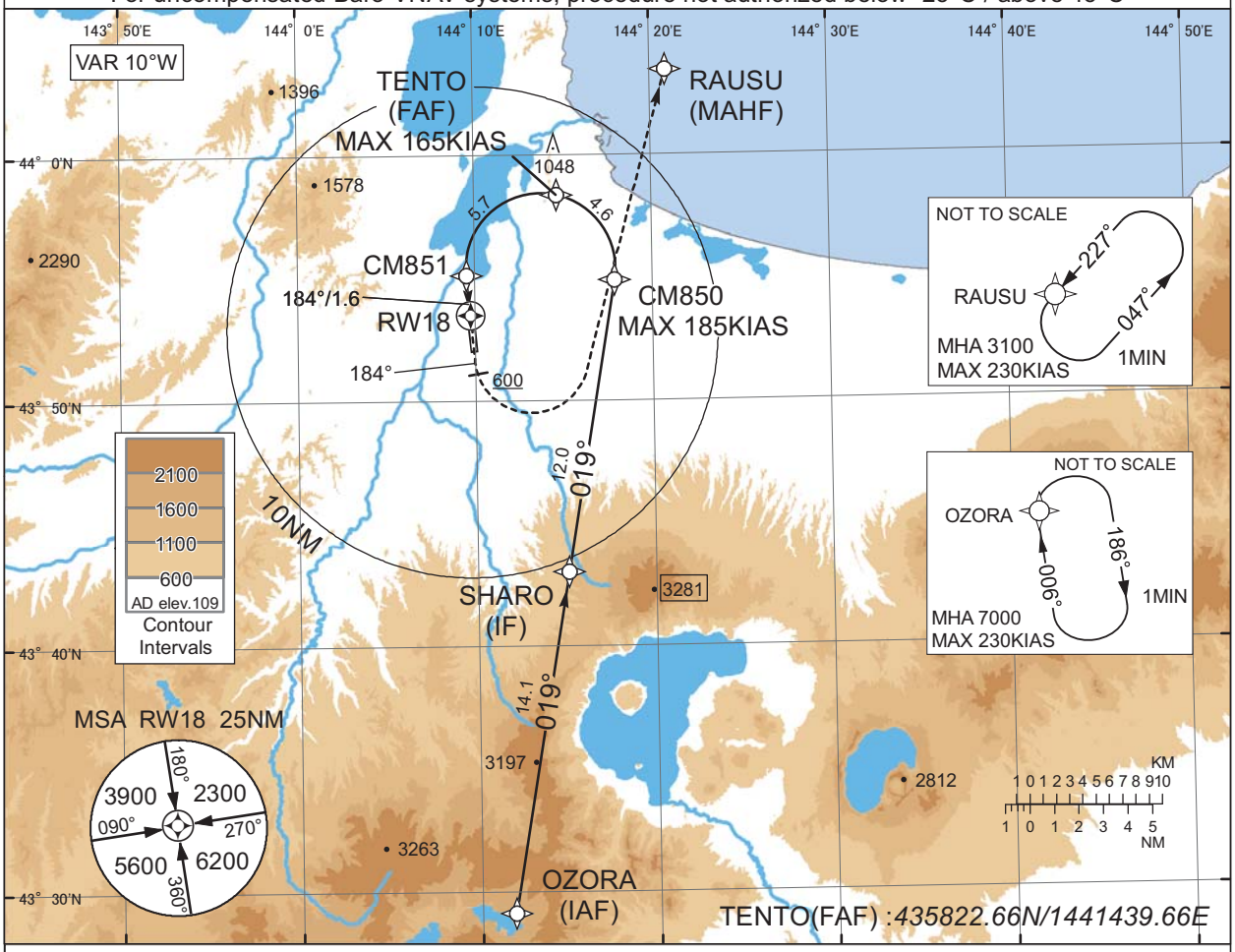
LTP/FTP orthometric height	31.0

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU — RNP Y RWY18(AR)

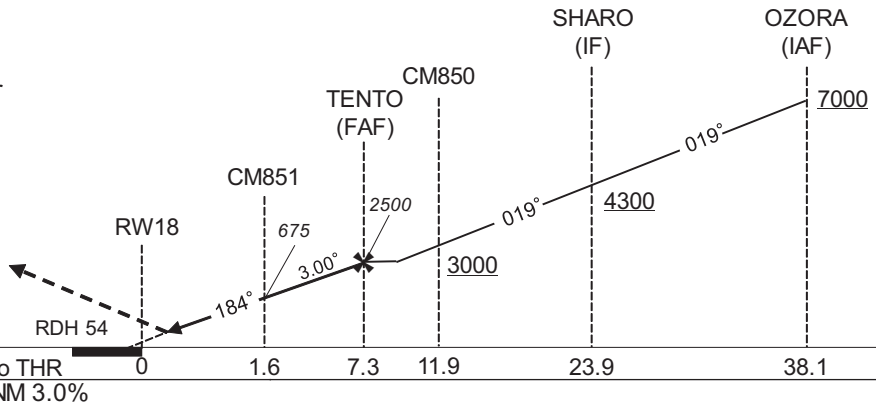
HIDAKA APP 128.325 - 246.1 - 134.55	RNP AR RF required	MEMANBETSU TOWER 118.85 - 126.2	RADAR AVBL

For uncompensated Baro-VNAV systems, procedure not authorized below -25°C / above 45°C



MISSED APPROACH

From RW18 on track 184°, at or above 600FT turn left, direct to RAUSU and hold at 3100FT.
Contact HIDAKA APP.



Missed APCH climb gradient MNM 3.0%

MINIMA	THR elev. 102	AD elev. 109
CAT	RNP 0.30	
	DA(H)	RVR/CMV
A	-	-
B		
C	402(300)	1000
D		1400

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

Authorization Required

CHANGE : ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC.

INSTRUMENT APPROACH CHART

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	-	-	-9.5	-	-	+7000	-	-	-
002	TF	SHARO	-	019 (009.5)	-9.5	14.1	-	+4300	-	-	1.0
003	TF	CM850	-	019 (009.6)	-9.5	12.0	-	+3000	-185	-	1.0
004	RF Center: CMRF1 r=3.04NM	TENTO	-	-	-9.5	4.6	L	2500	-165	-	1.0
005	RF Center: CMRF1 r=3.04NM	CM851	-	-	-9.5	5.7	L	675	-	-3.00	0.3
006	TF	RW18	Y	184 (174.7)	-9.5	1.6	-	156	-	-3.00/54	0.3
007	FA	-	-	184 (174.7)	-9.5	-	-	+600	-	-	1.0
008	DF	RAUSU	-	-	-9.5	-	L	3100	-	-	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	OZORA	006 (356.7)	-9.5	1.0 (-14000)	R	7000	FL140	-230 (-14000)	1.0
Hold	RAUSU	227 (217.0)	-9.5	1.0 (-14000)	L	3100	FL140	-230 (-14000)	1.0

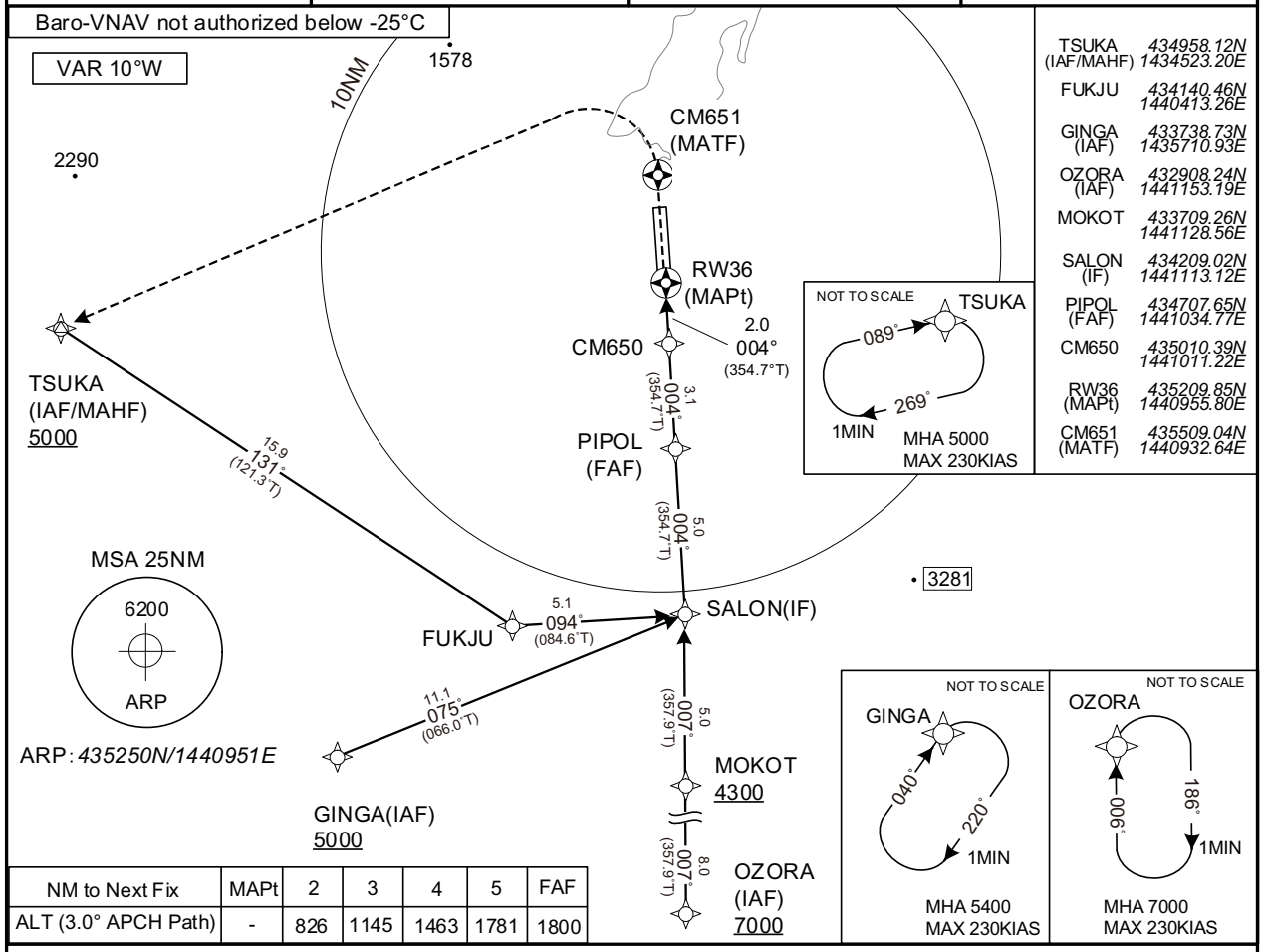
Waypoint Coordinates

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*		

INSTRUMENT APPROACH CHART

RJCM /MEMANBETSU RNP RWY36

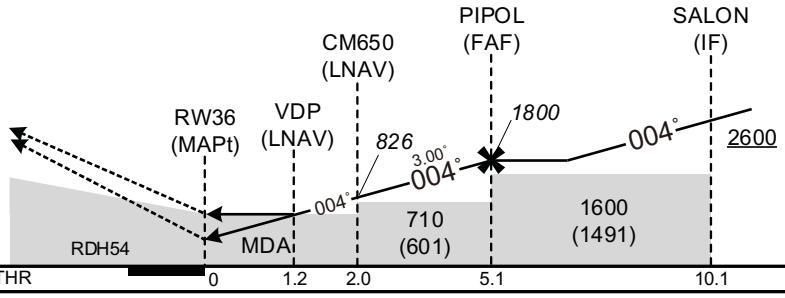
HIDAKA APP	RNP APCH	MEMANBETSU TOWER	RADAR AVBL
128.325 - 246.1 - 134.55	MSAS CH81751 M36A	118.85 – 126.2	



NM to Next Fix	MAPt	2	3	4	5	FAF
ALT (3.0° APCH Path)	-	826	1145	1463	1781	1800

MISSED APPROACH

Direct to CM651, turn left direct to TSUKA and hold at 5000FT.
Contact HIDAKA APP.



Missed APCH climb gradient MNM 3.0%

MINIMA			THR elev.135				AD elev.109	
CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	385(250)	800	540(405)	900	540(431)	900	640(531)	1600
B				1000		1000		
C							750(641)	2400
D		1200		1400		1400	760(651)	3200

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

CHANGE : Description of SDF, HLDG pattern.

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU RNP RWY36

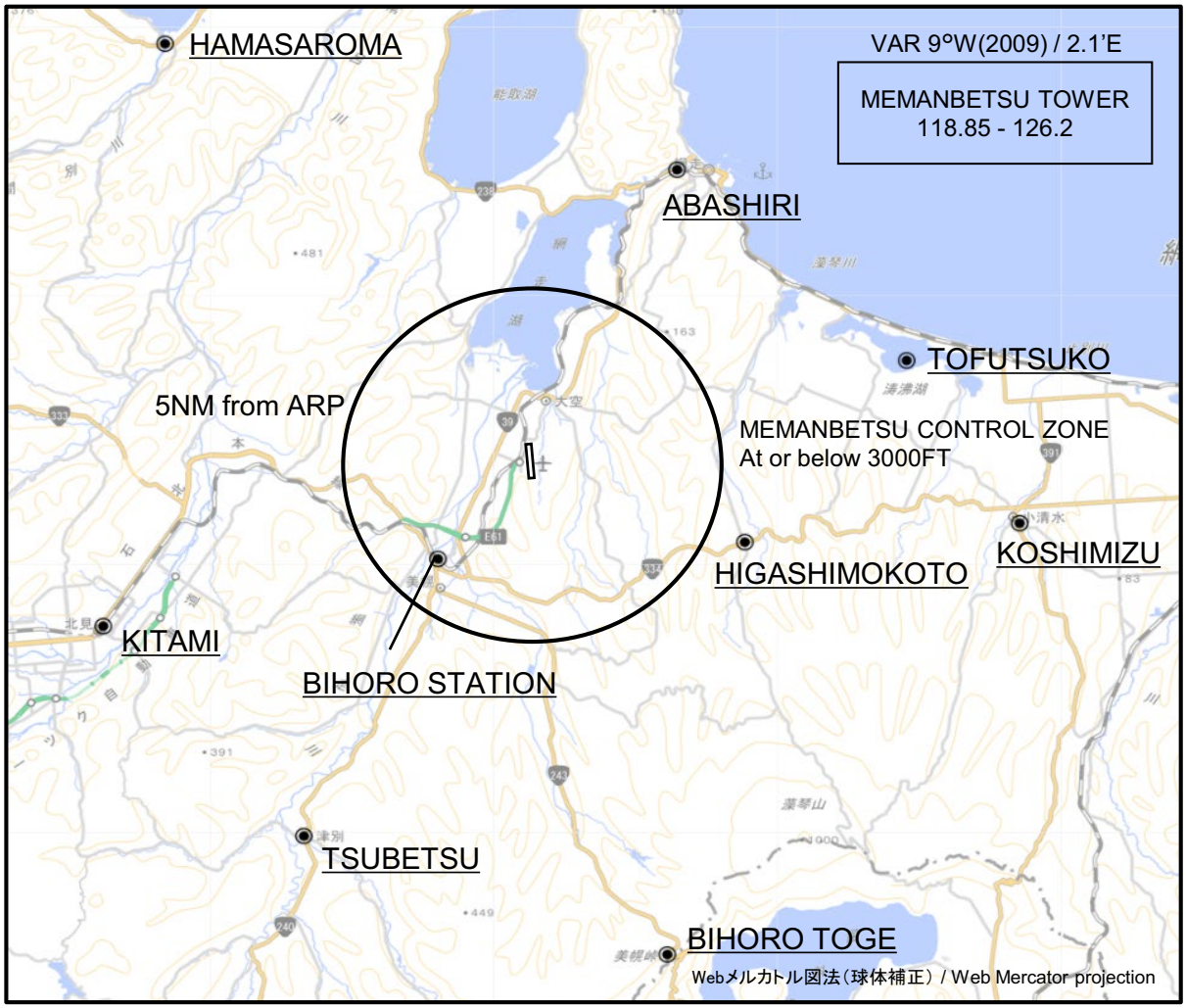
FAS DATA BLOCK

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 remainder	28C6AB24		

Required additional data

LTP/FTP orthometric height	41.1

RJCM / MEMANBETSU Visual REP

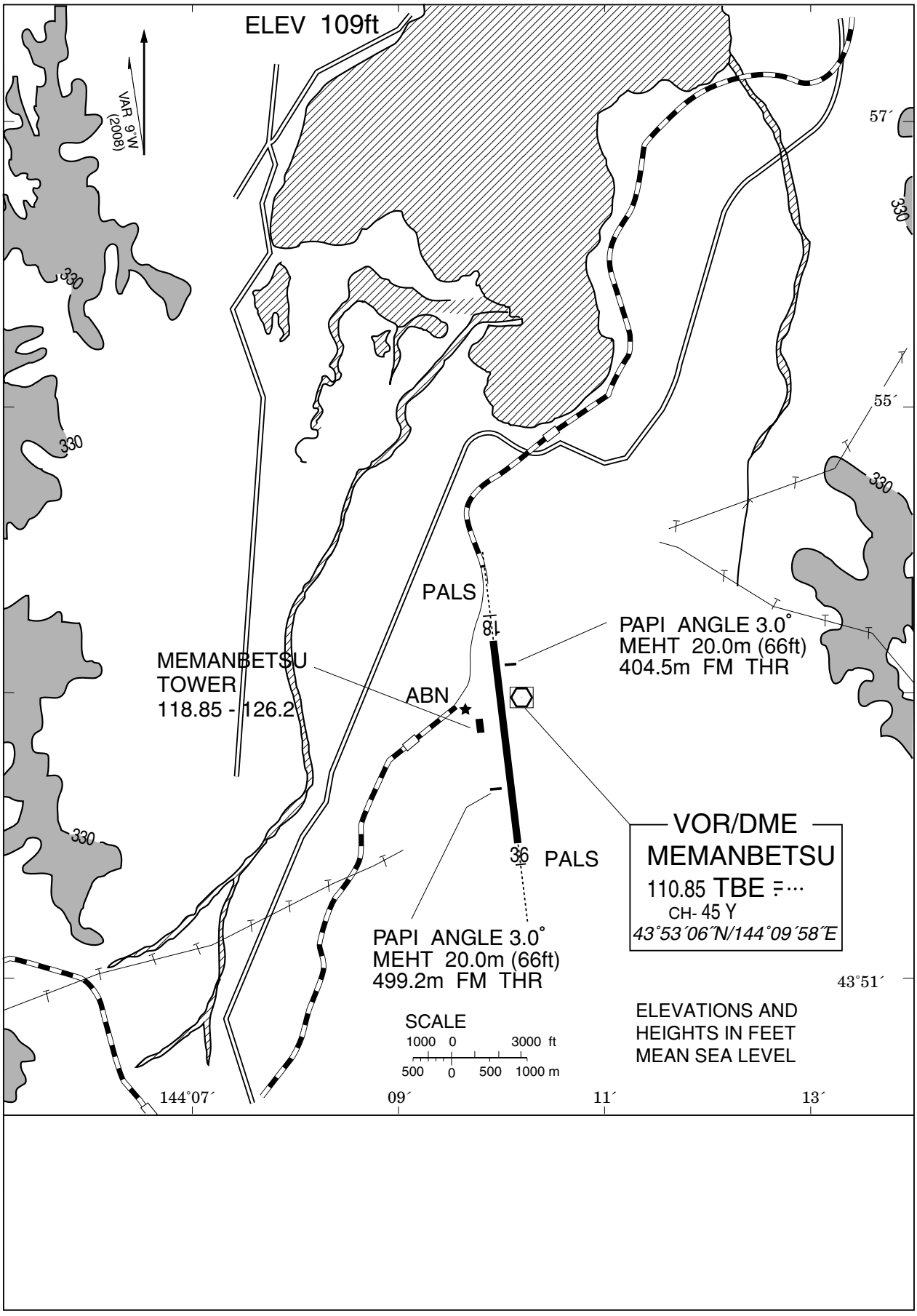


※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

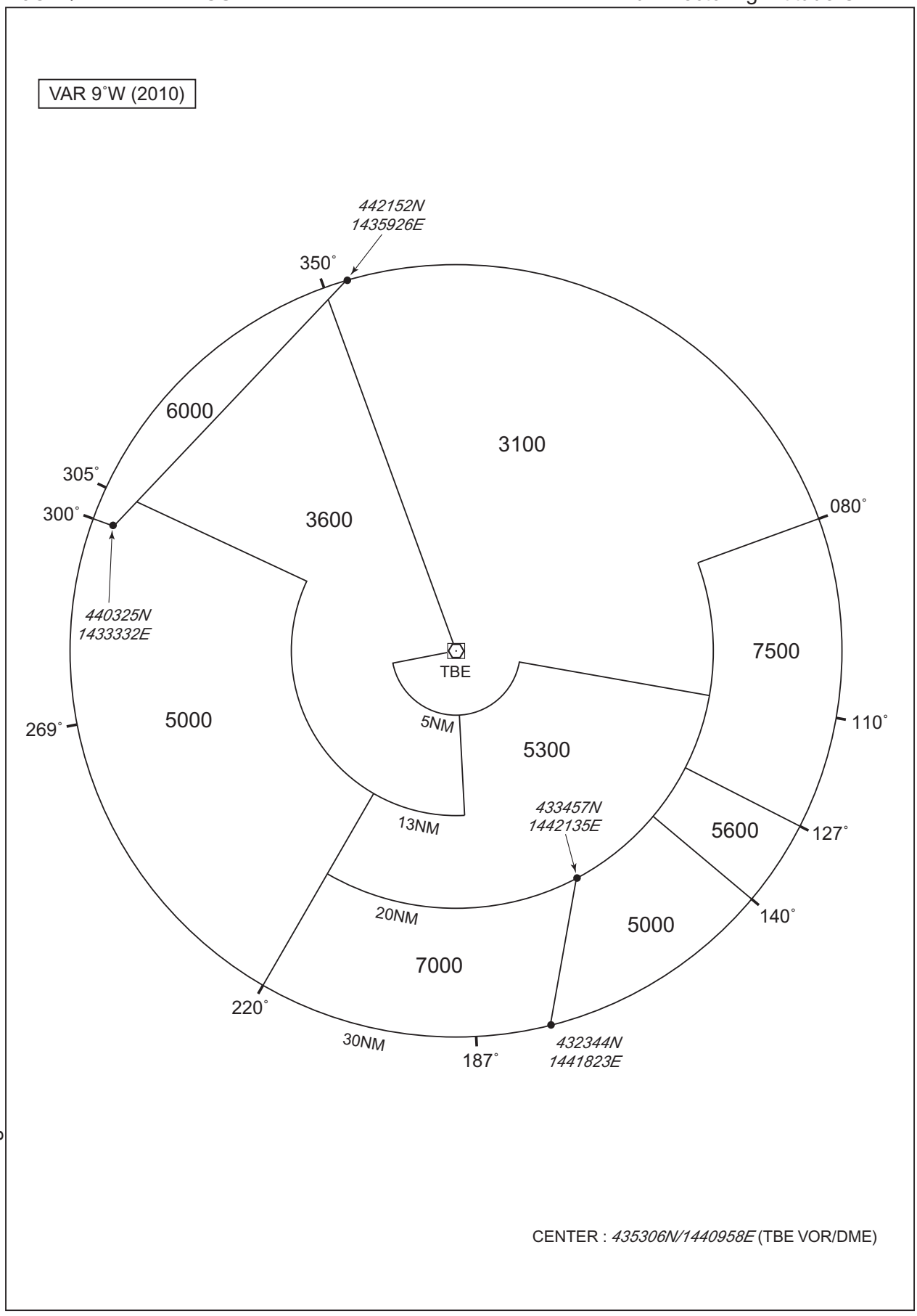
CHANGE : Map updated. BRG/DIST from ARP.

Call sign	BRG / DIST from ARP	Remarks
網走 Abashiri	025°T / 9.2NM	JR駅 Station
涛沸湖 Tofutsuko	074°T / 10.5NM	湖 Lake
小清水 Koshimizu	097°T / 13.3NM	学校 School
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
浜佐呂間 Hamasaroma	321°T / 15.5NM	佐呂間大橋 Bridge

RJCM / MEMANBETSU LDG CHART



RJCM / MEMANBETSU Minimum Vectoring Altitude CHART



CHANGE : Bearing of KSE deleted.