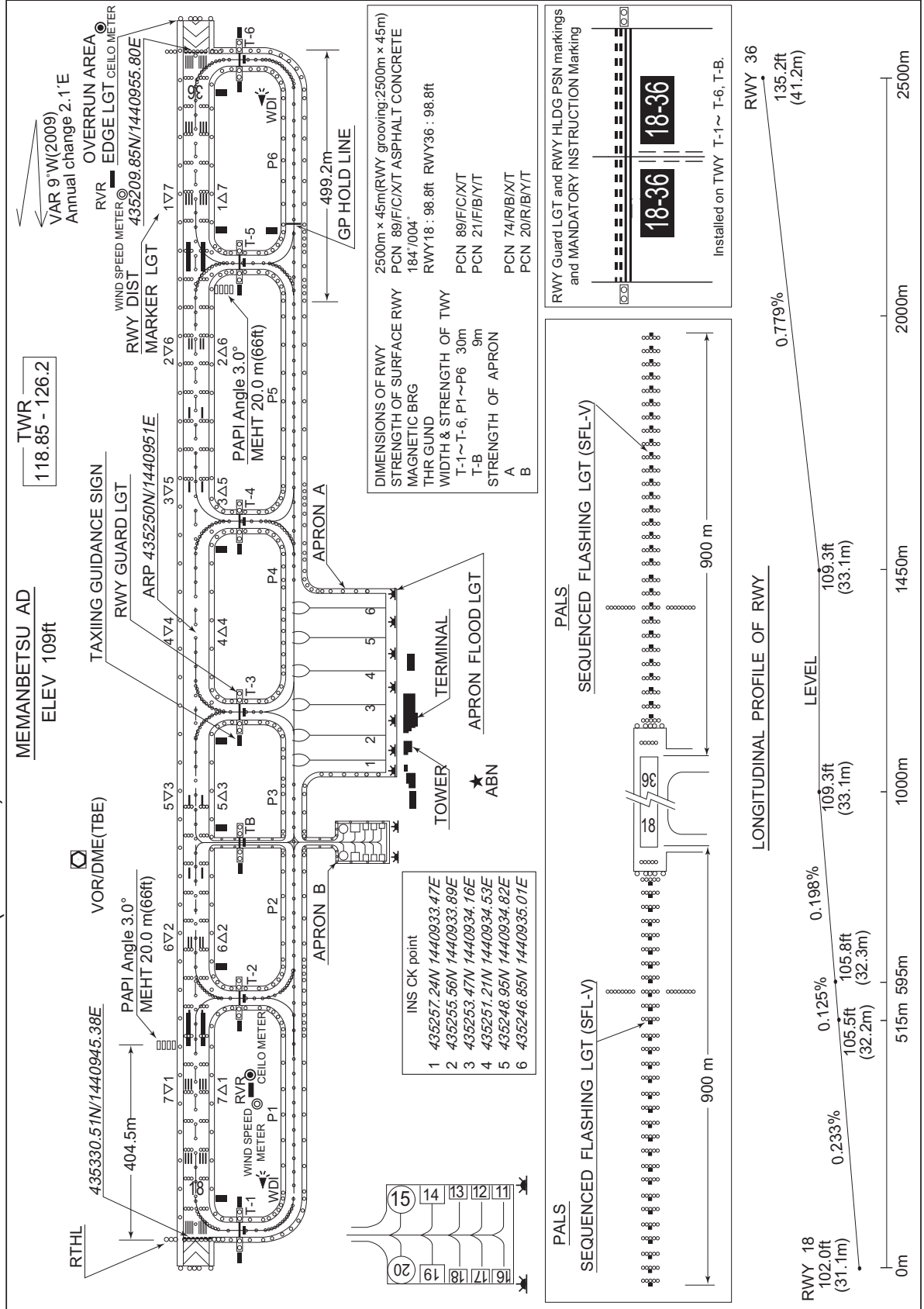


RJCM / MEMANBETSU

AD CHART

CHANGE : STRENGTH OF APRON(APRON B).



STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU

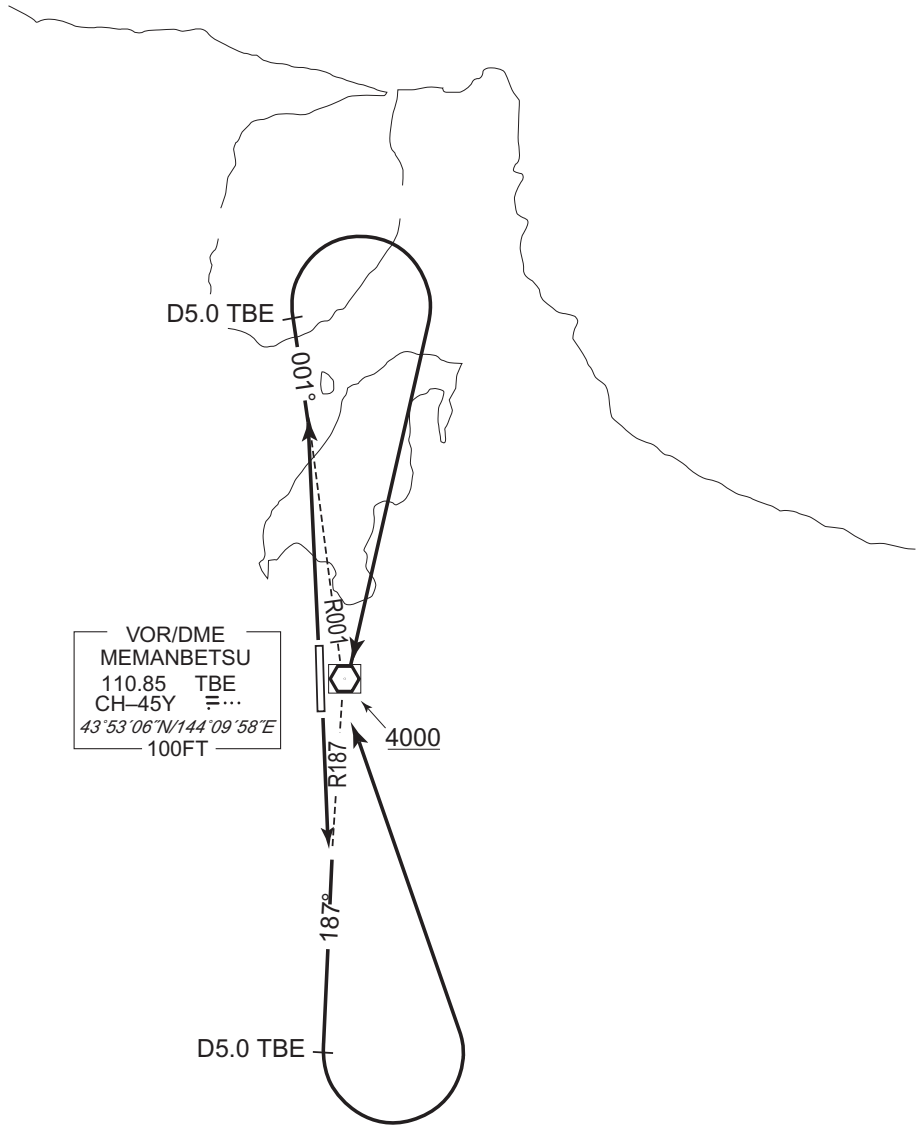
SID

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

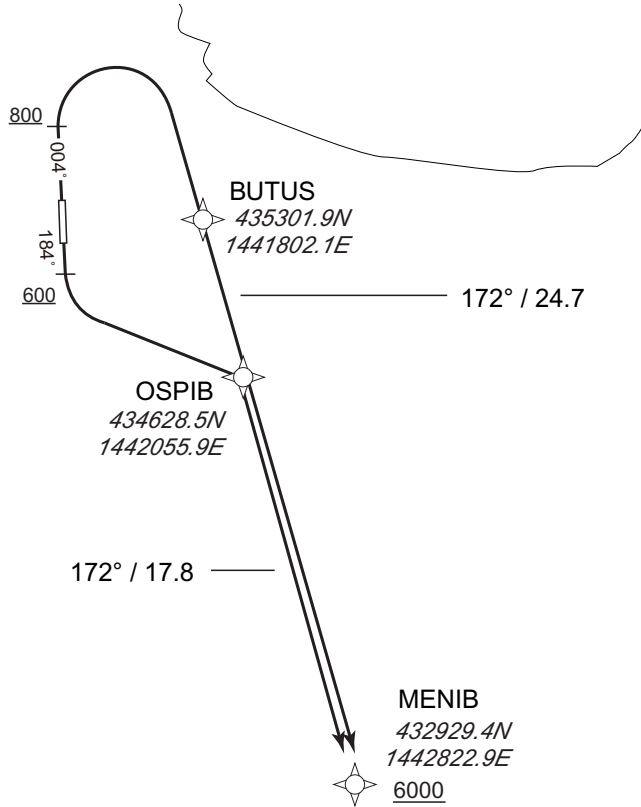
RNAV SID

MENIB ONE DEPARTURE

RNP1

Note GNSS required.

VAR 10° W



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

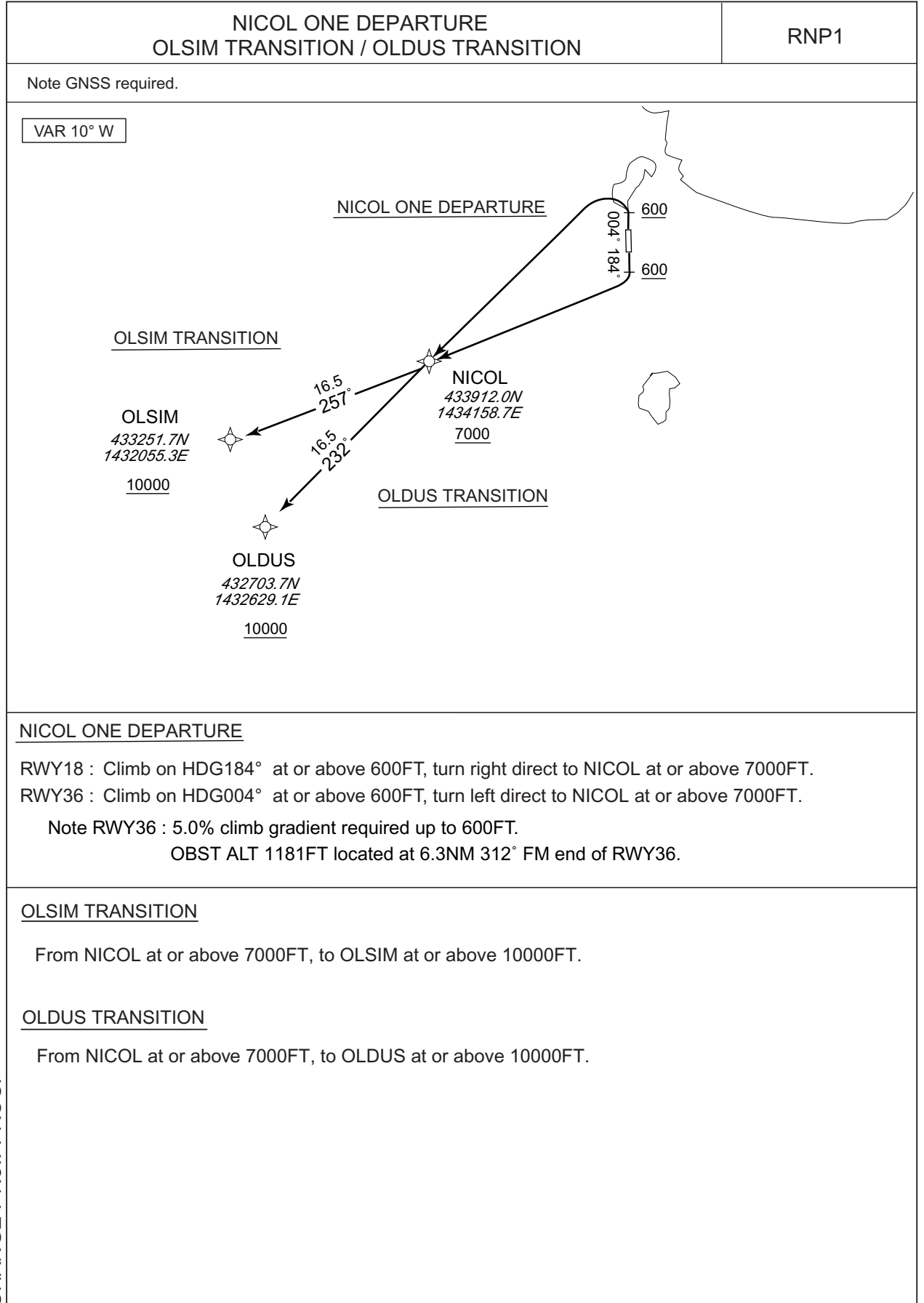
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	004 (354.7)	-9.6	-	-	+800	-	-	RNP1
002	DF	BUTUS	-	-	-9.6	-	R	-	-	-	RNP1
003	TF	MENIB	-	172 (162.3)	-9.6	24.7	-	+6000	-	-	RNP1

CHANGE : New PROC.

STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU

RNAV SID and TRANSITION



CHANGE : New PROC.

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

CHANGE : New PROC.

STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU

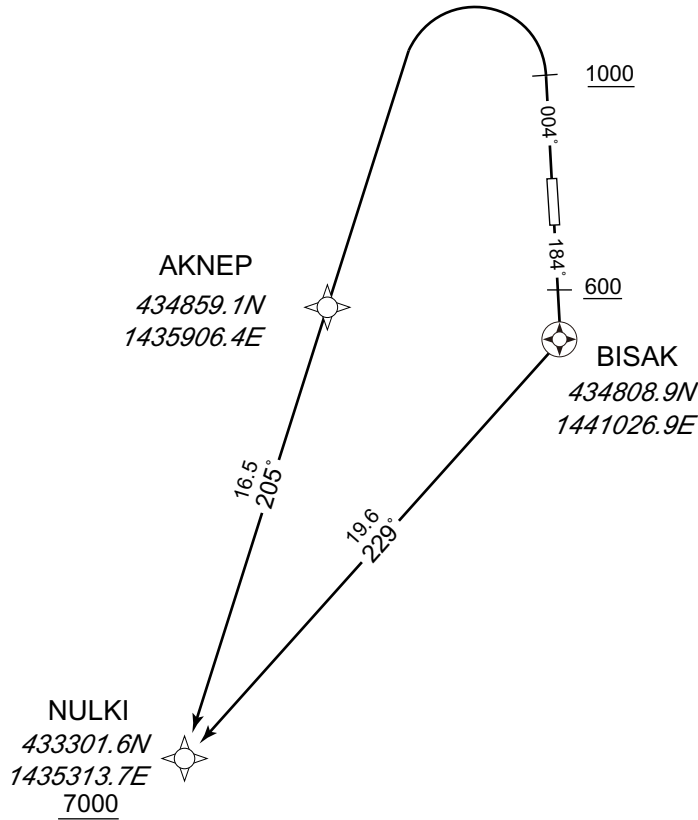
RNAV SID

NULKI ONE DEPARTURE

RNP1

Note GNSS required.

VAR 10° W



RWY18 : Climb on HDG184° at or above 600FT, direct to BISAQ, 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	BISAQ	Y	-	-9.6	-	-	-	-	-	RNP1
003	TF	NULKI	-	229 (219.6)	-9.6	19.6	-	+7000	-	-	RNP1

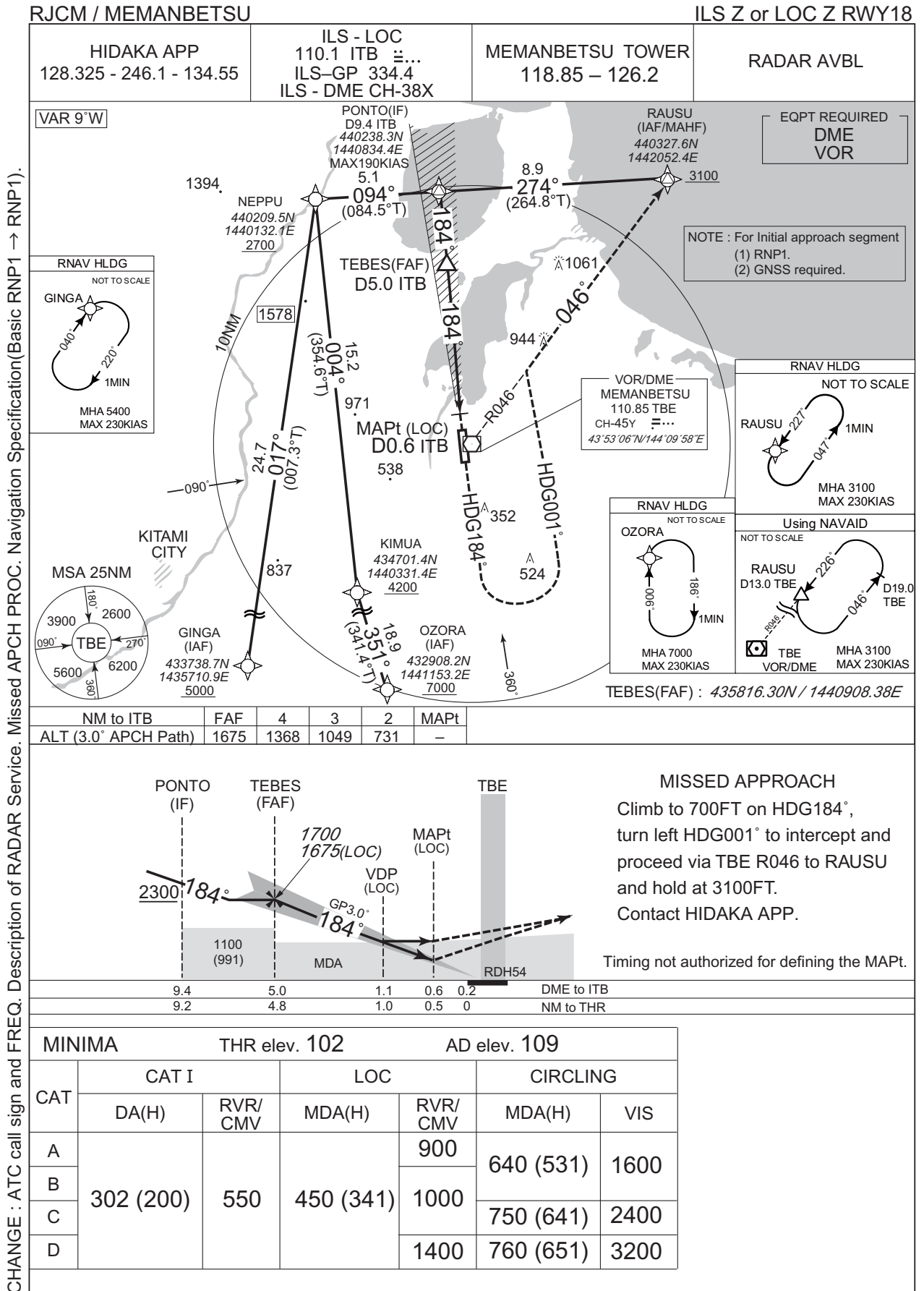
RWY36

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 : New PROC.

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INSTRUMENT APPROACH CHART

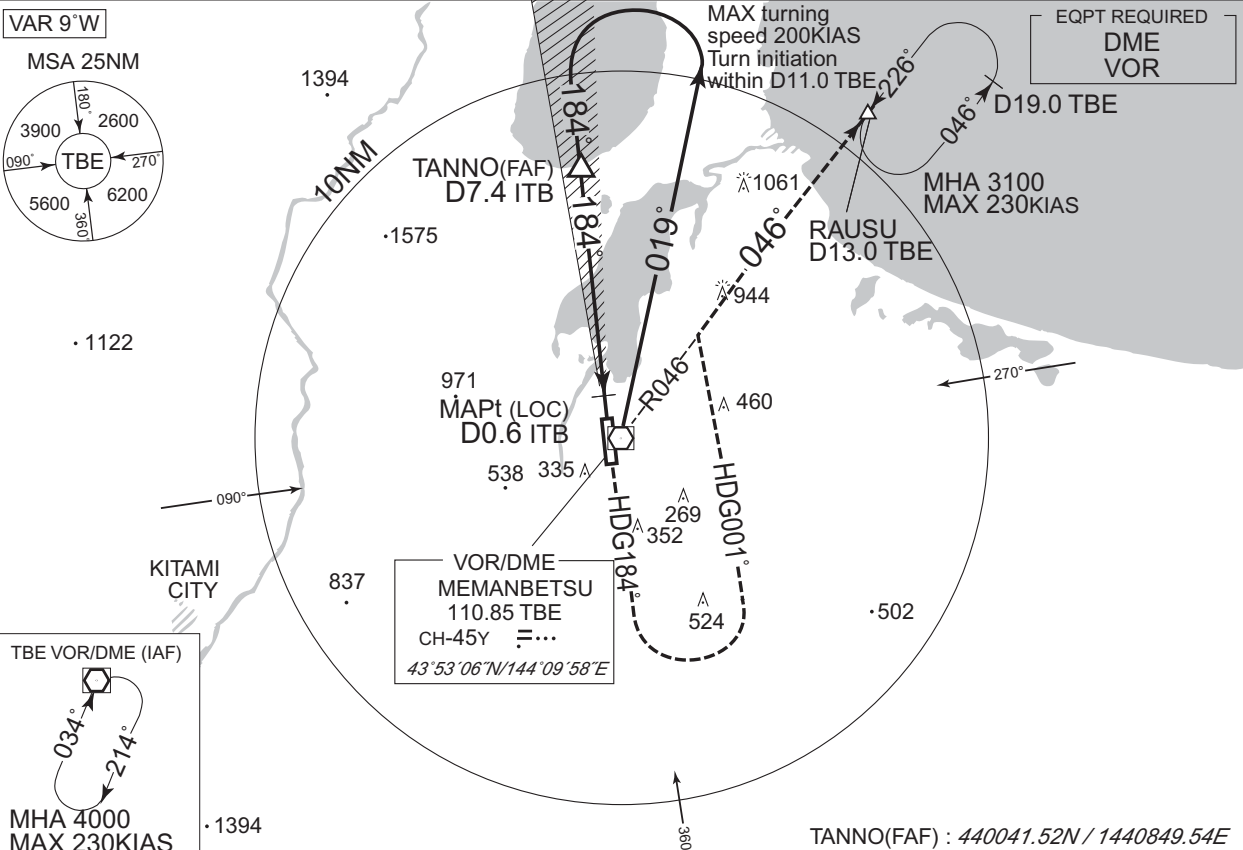


CHANGE : ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC. Navigation Specification(Basic RNP1 → RNP1).

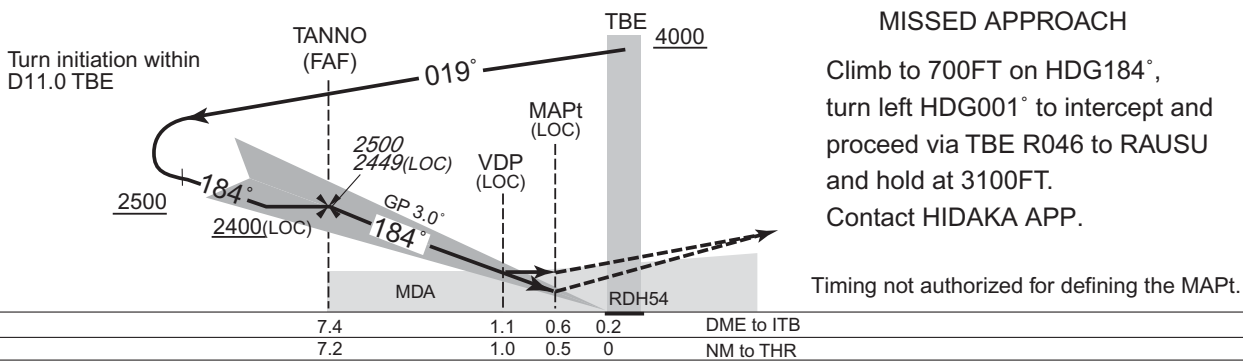
INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU ILS Y or LOC Y RWY18

HIDAKA APP 128.325 - 246.1 - 134.55	ILS - LOC 110.1 ITB ILS-GP 334.4 ILS - DME CH-38X	MEMANBETSU TOWER 118.85 - 126.2	RADAR AVBL
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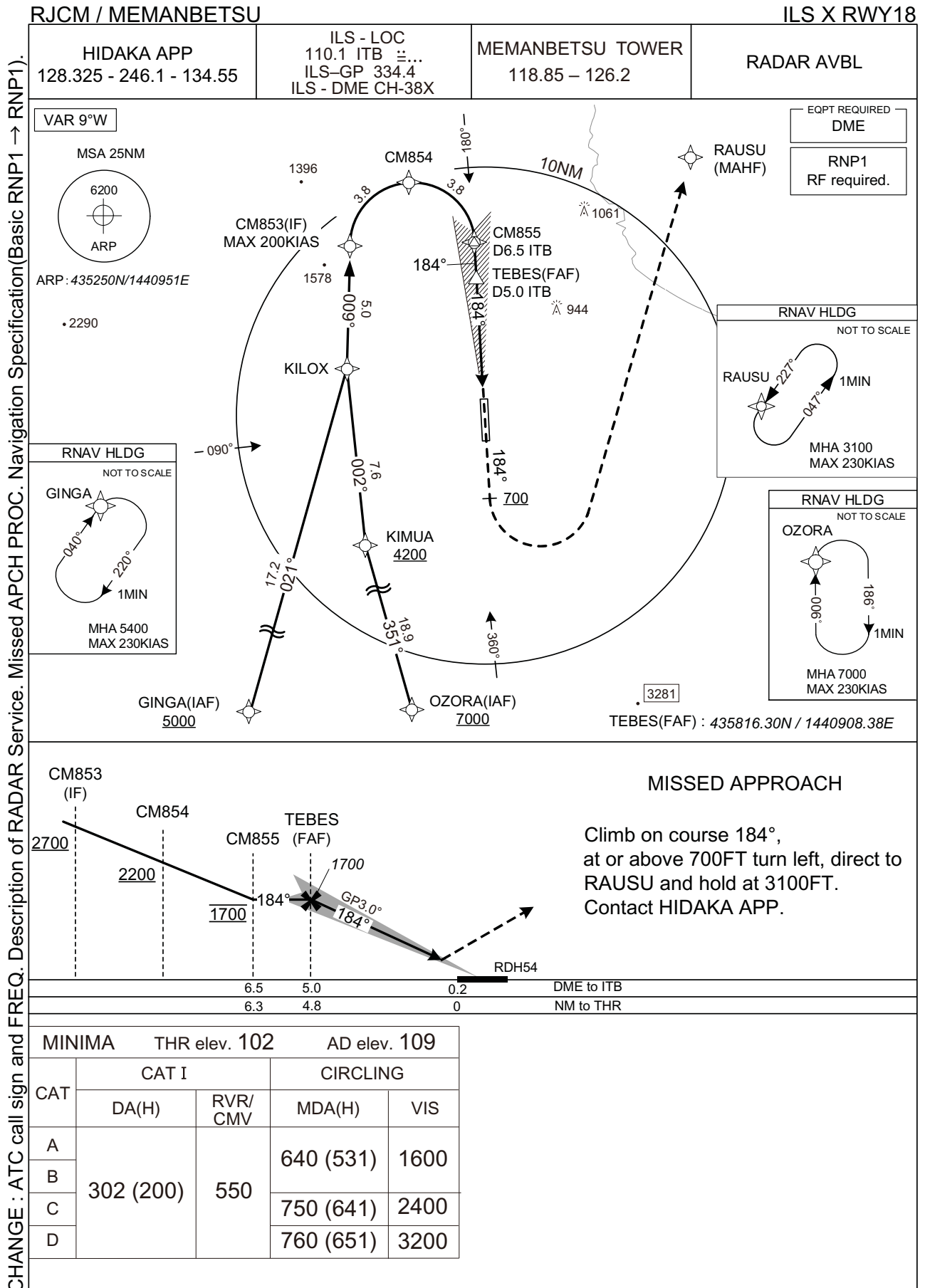
NM to ITB	FAF	7	6	5	4	3	2	MAPt
ALT (3.0° APCH Path)	2449	2323	2005	1686	1368	1049	731	-



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

INSTRUMENT APPROACH CHART



CHANGE : ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC. Navigation Specification(Basic RNP1 → RNP1).

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

ILS X RWY18

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

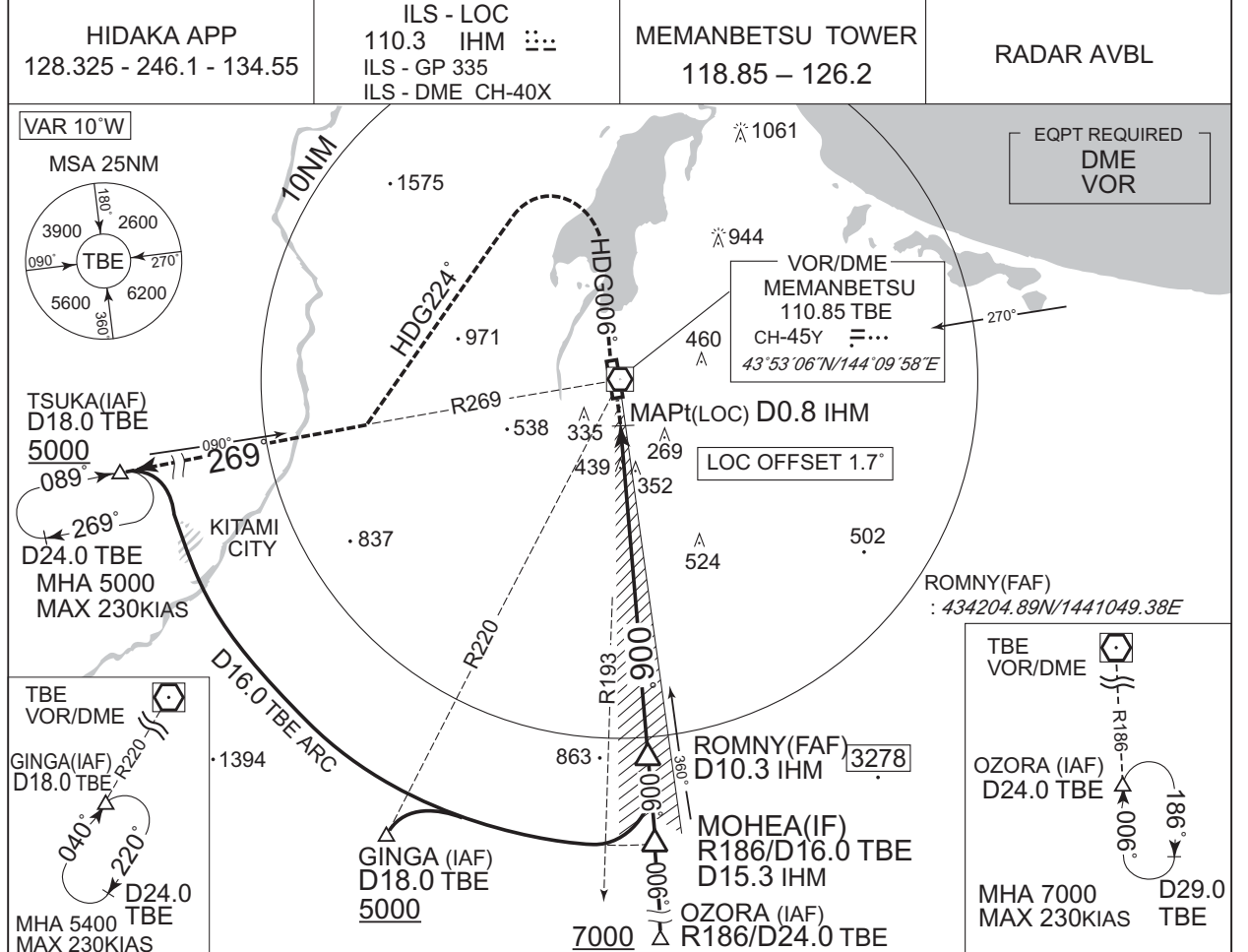
Waypoint Coordinates

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		

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

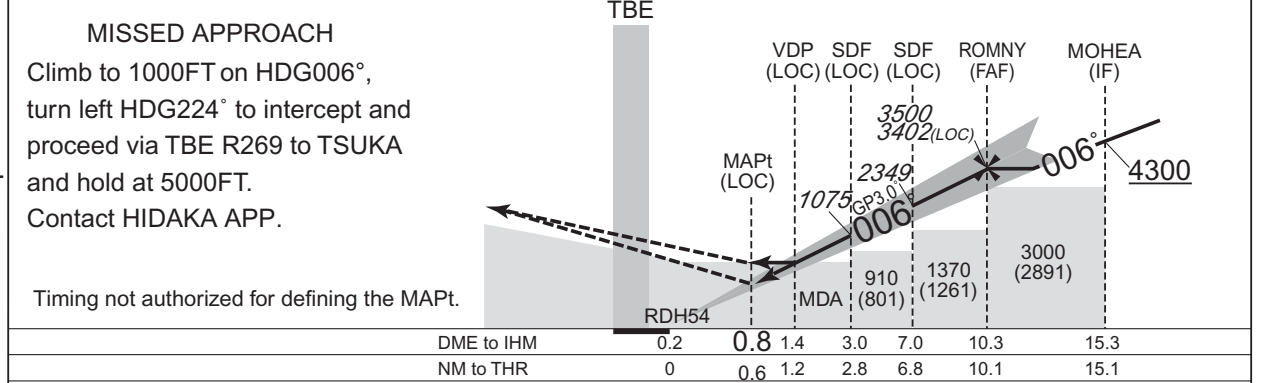
INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU ILS or LOC RWY36



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

	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.

Missed APCH climb gradient MNM 3.0%

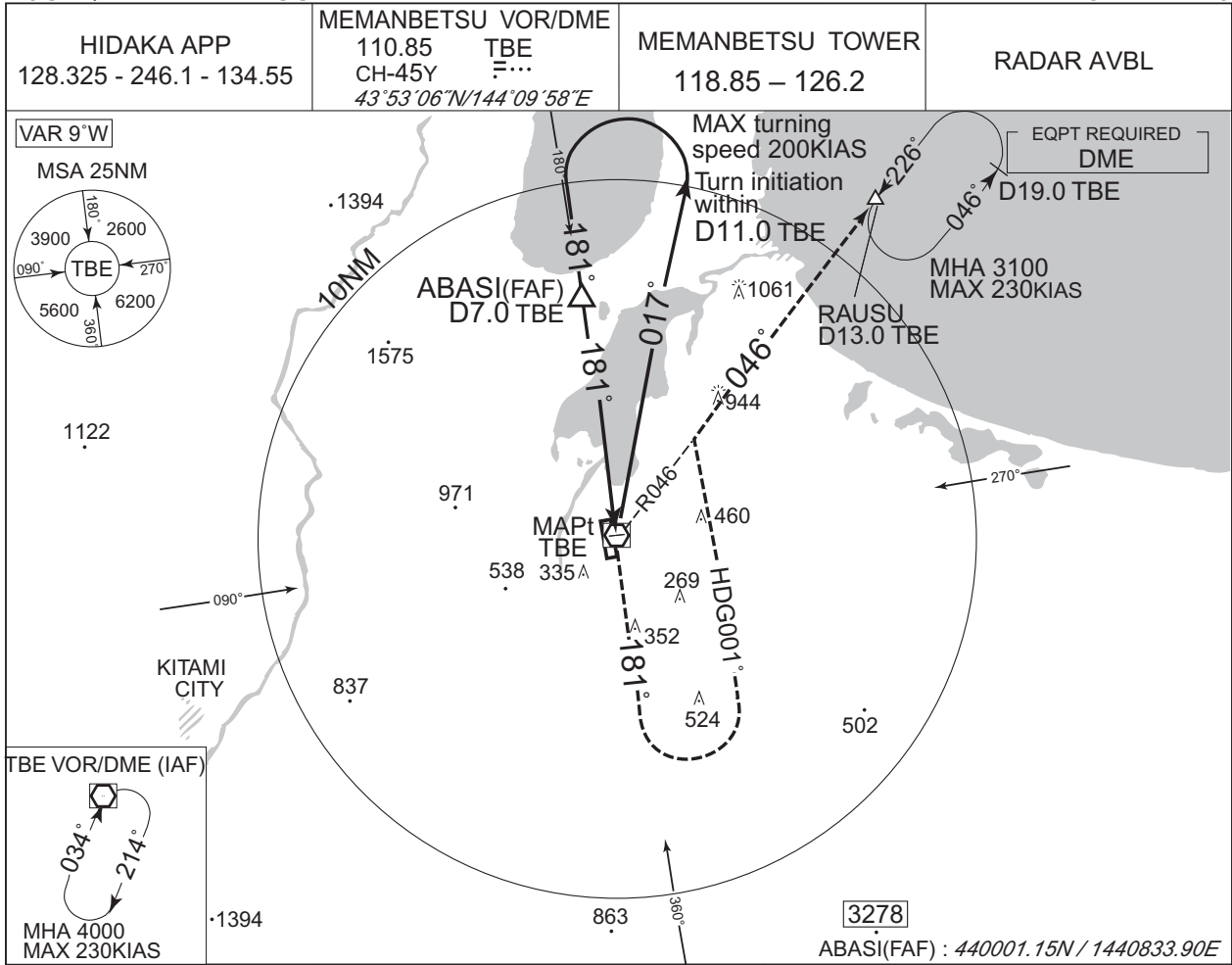
MINIMA		THR elev. 135		AD elev. 109				
CAT	CAT I		LOC		CIRCLING			
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS		
A	382 (247)	600	540 (431)	900	640 (531)	1600		
B				1000				
C				1400			750 (641)	2400
D				1400			760 (651)	3200

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

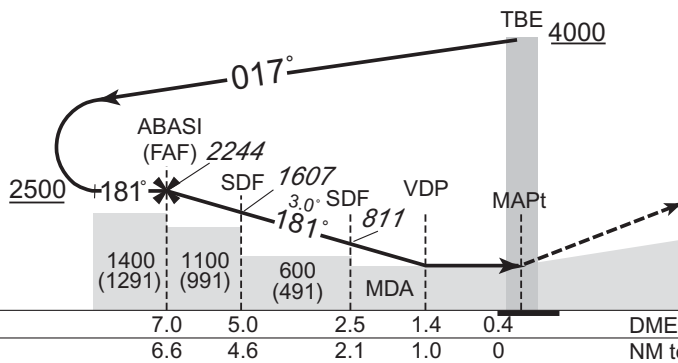
INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

VOR RWY18



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



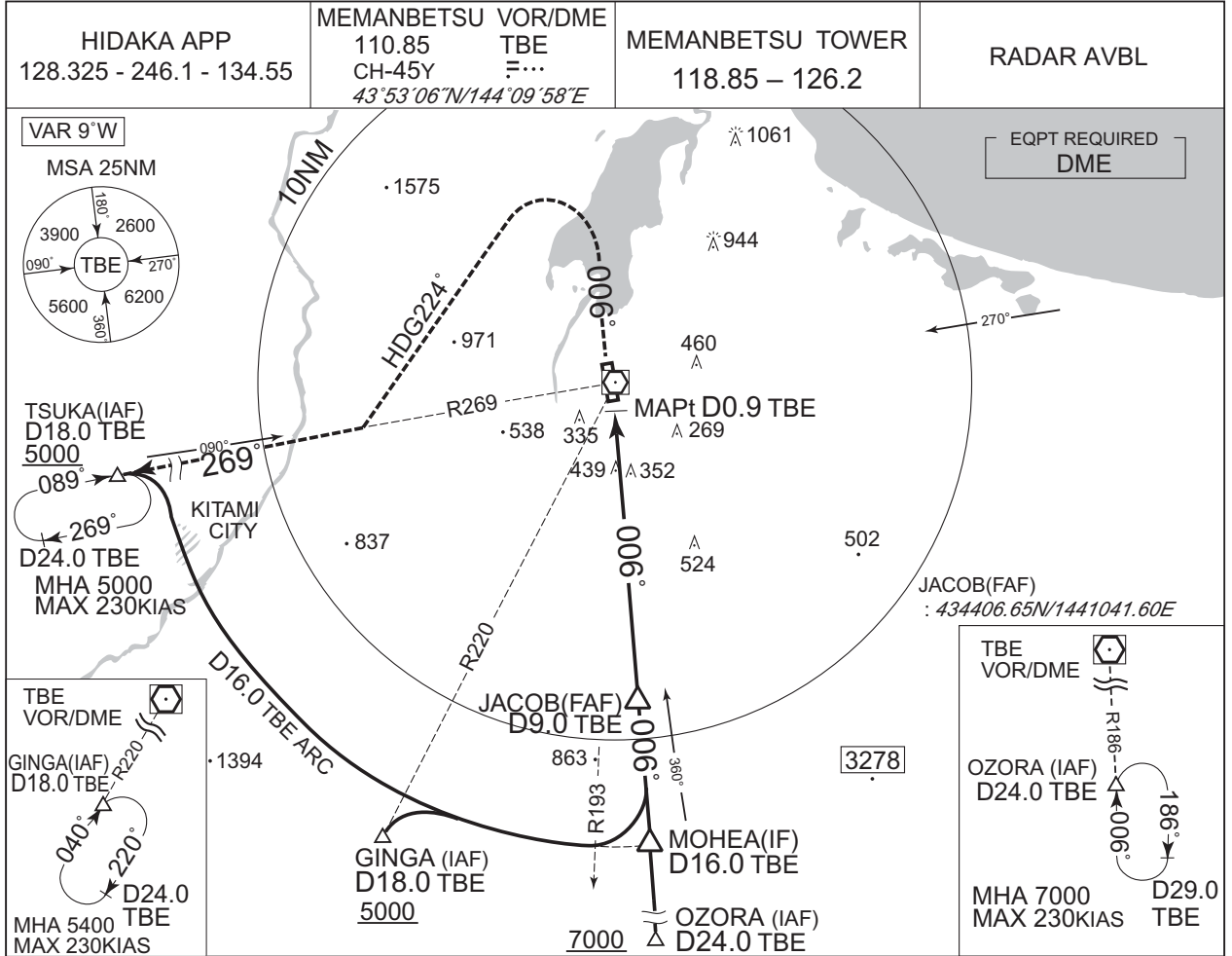
MINIMA		THR elev. 102	AD elev. 109	
CAT	MDA(H)		CIRCLING	
	RVR/CMV	MDA(H)	VIS	
A	480 (371)	900	640 (531)	1600
B		1000	750 (641)	2400
C		1400	760 (651)	3200
D				

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

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

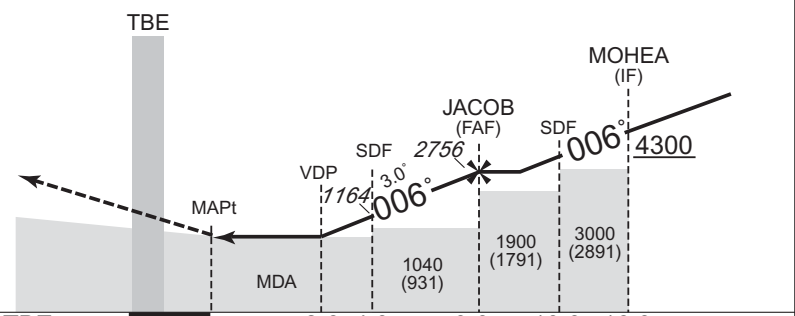
VOR RWY36



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

	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.



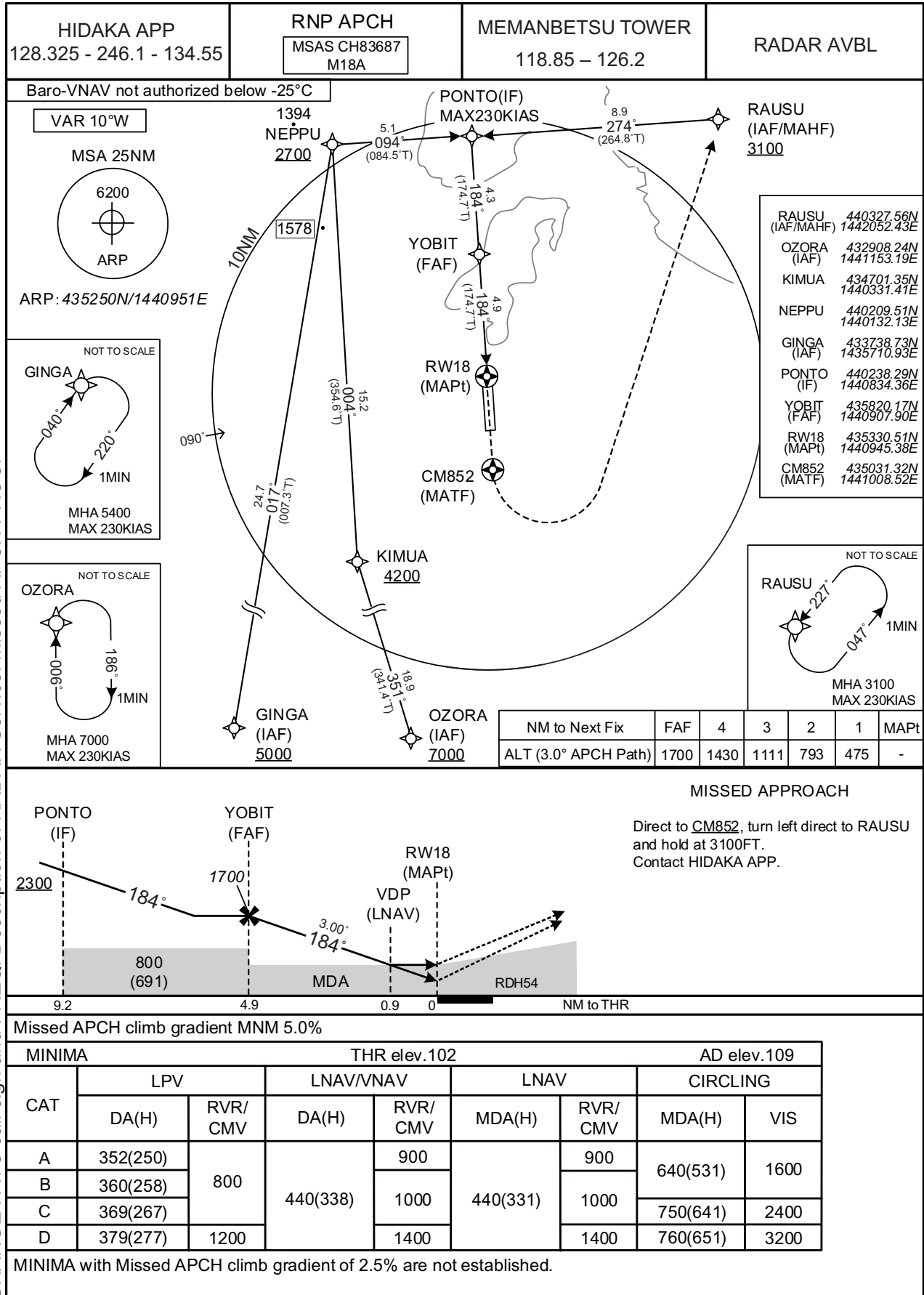
DME to TBE	0.9	2.6	4.0	9.0	13.0	16.0
NM to THR	0	1.7	3.1	8.1	12.1	15.1

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)

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

RNP Z RWY18



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
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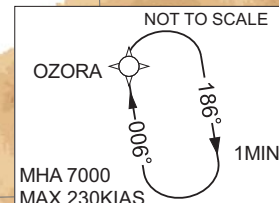
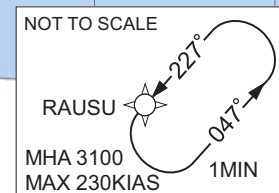
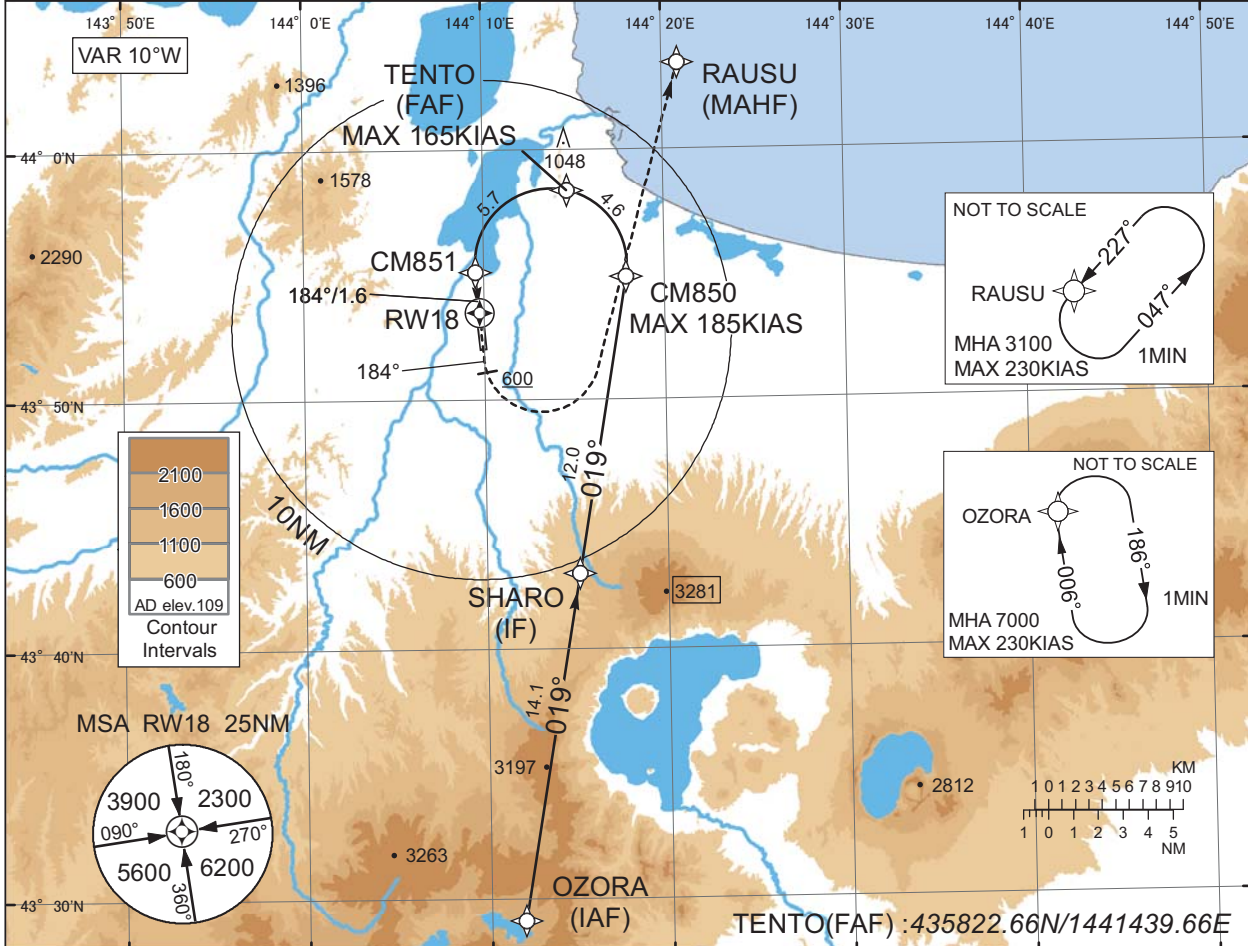
INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

RNP Y RWY18(AR)

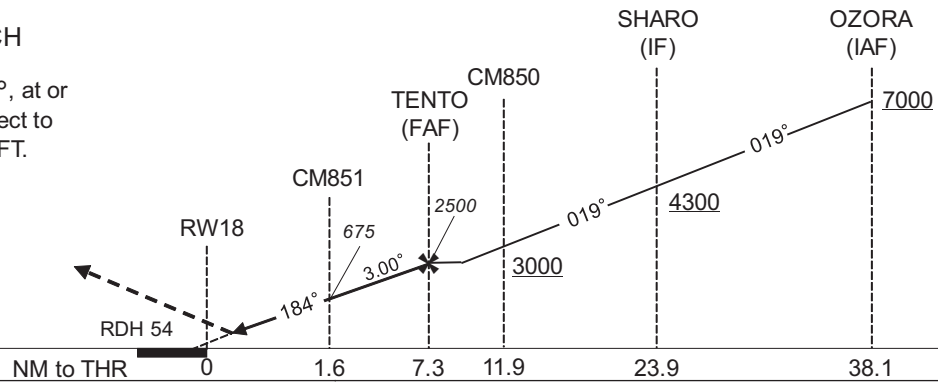
HIDAKA APP 128.325 - 246.1 - 134.55	RNP AR RF required	MEMANBETSU TOWER 118.85 - 126.2	RADAR AVBL
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For uncompensated Baro-VNAV systems, procedure not authorized below -25°C / above 45°C



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

Authorization Required

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 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

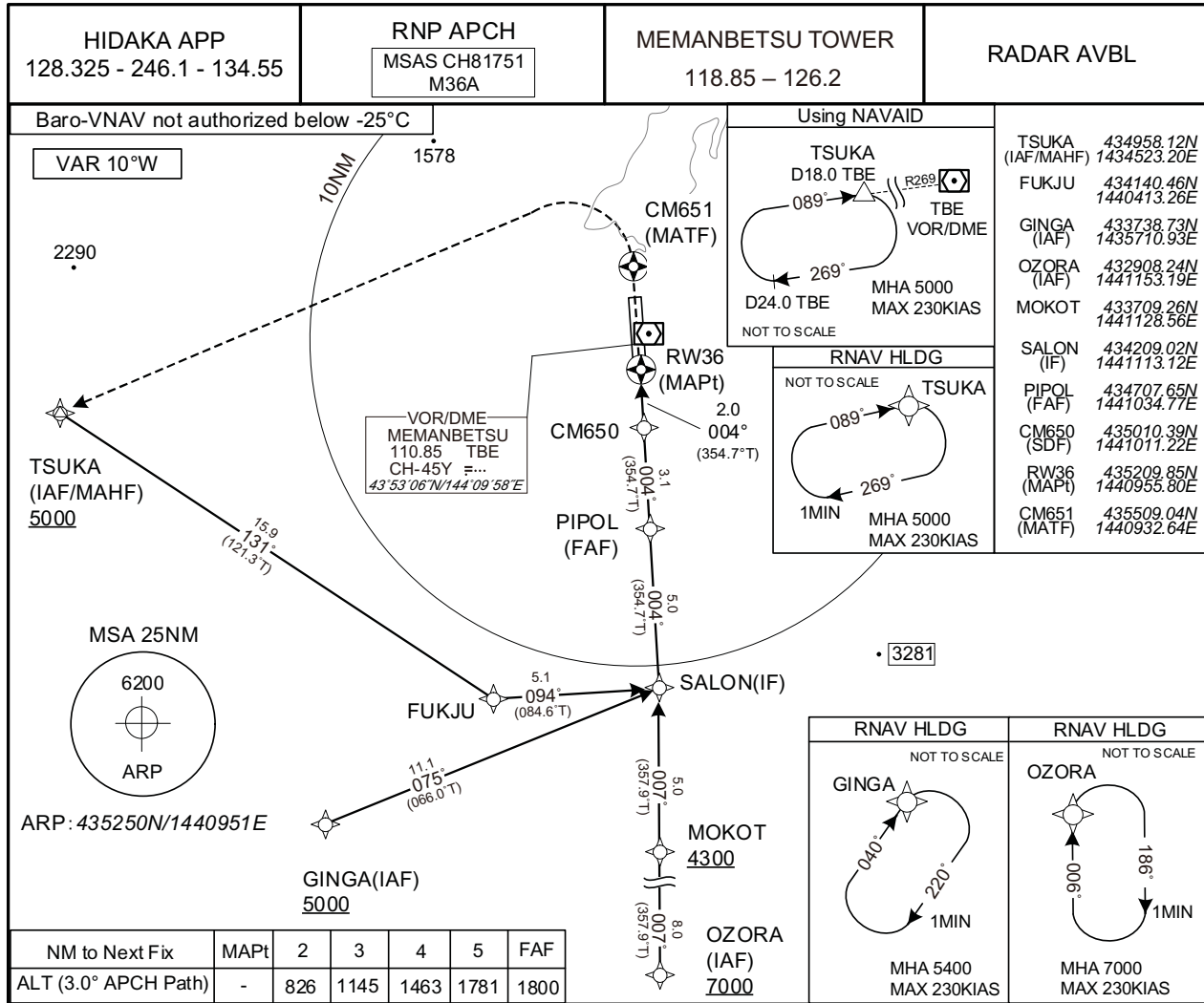
Waypoint Coordinates

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

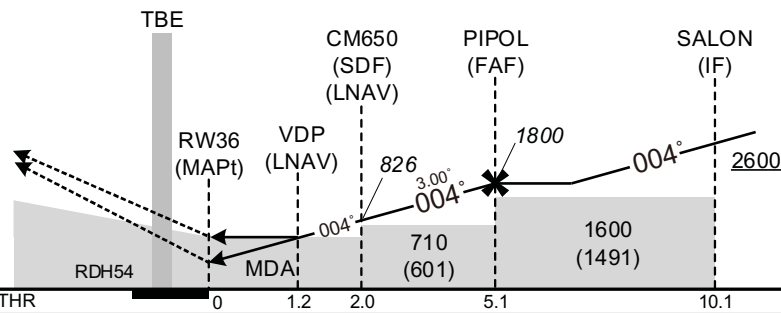
RJCM /MEMANBETSU

RNP RWY36



MISSED APPROACH

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



Missed APCH climb gradient MNM 3.0%

CAT	MINIMA		THR elev.135				AD elev.109	
	LPV		LNAV/VNAV	LNAV	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		750(641)		
C				1400			760(651)	
D				1200		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 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
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RJCM / MEMANBETSU

Visual REP



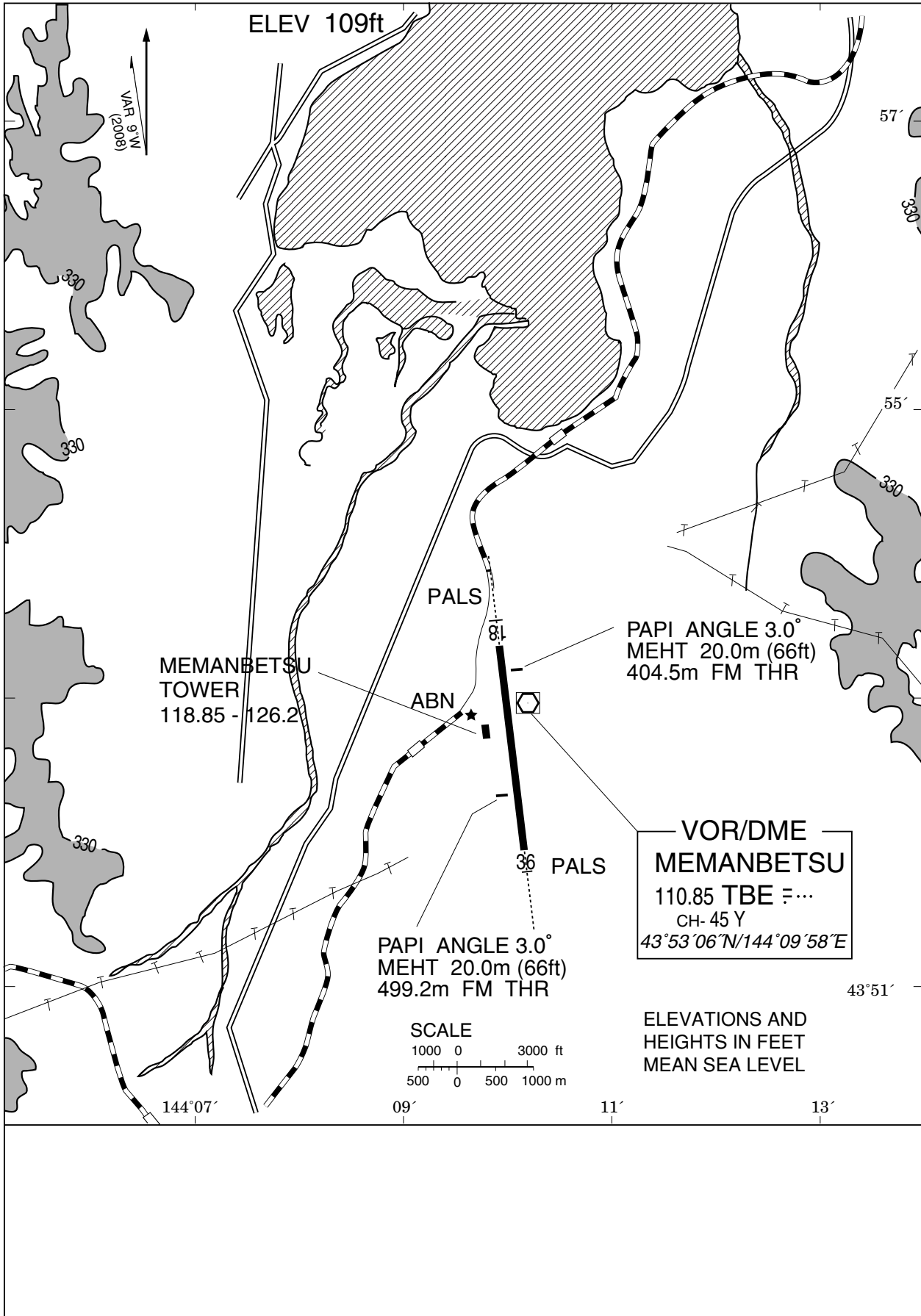
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE : Map updated. BRG/DIST from ARP.

Call sign	BRG / DIST from ARP	Remarks
網走 Abashiri	025°T / 9.2NM	JR駅 Station
湧沸湖 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

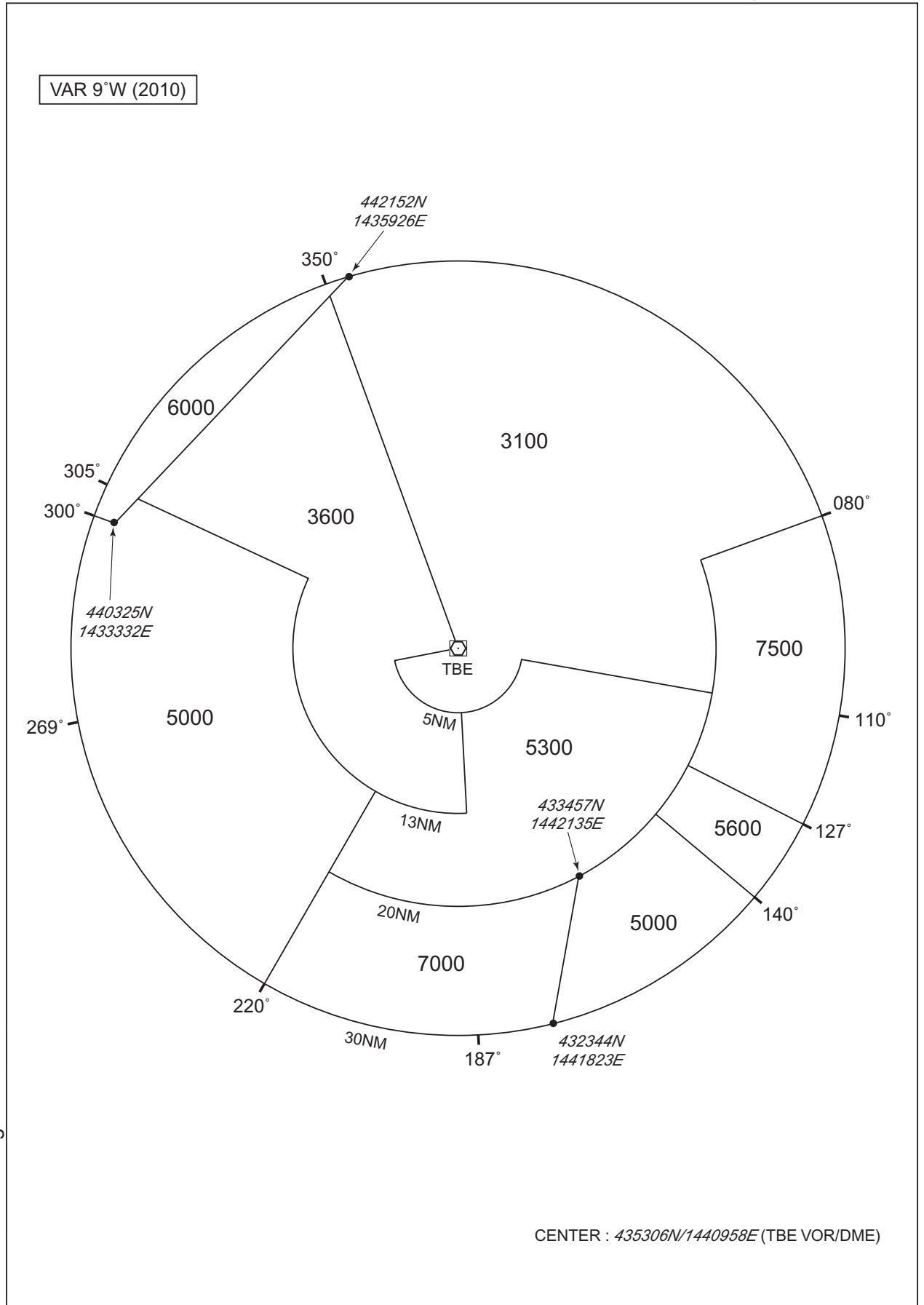
RJCM / MEMANBETSU

LDG CHART



RJCM / MEMANBETSU

Minimum Vectoring Altitude CHART



CHANGE : Bearing of KSE deleted.

CENTER : 435306N/1440958E (TBE VOR/DME)