

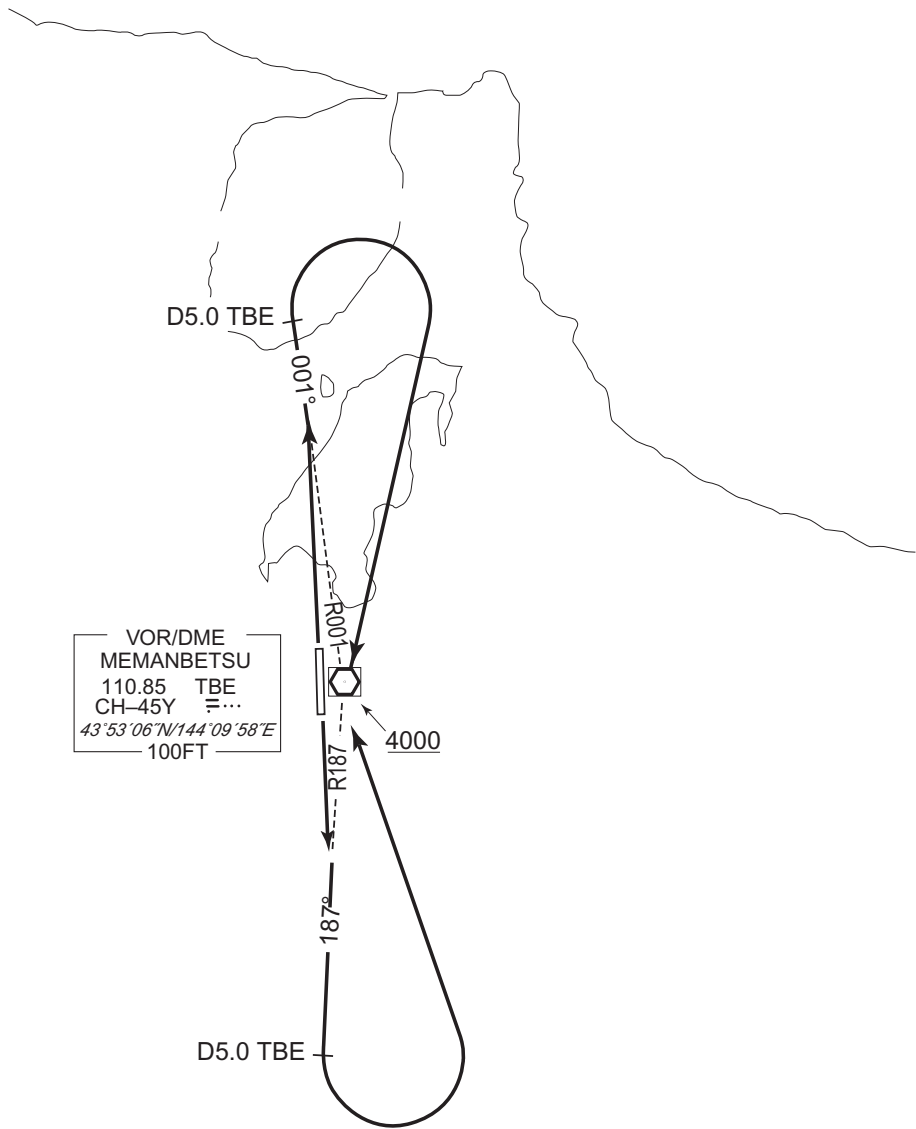
STANDARD DEPARTURE CHART-INSTRUMENT

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.

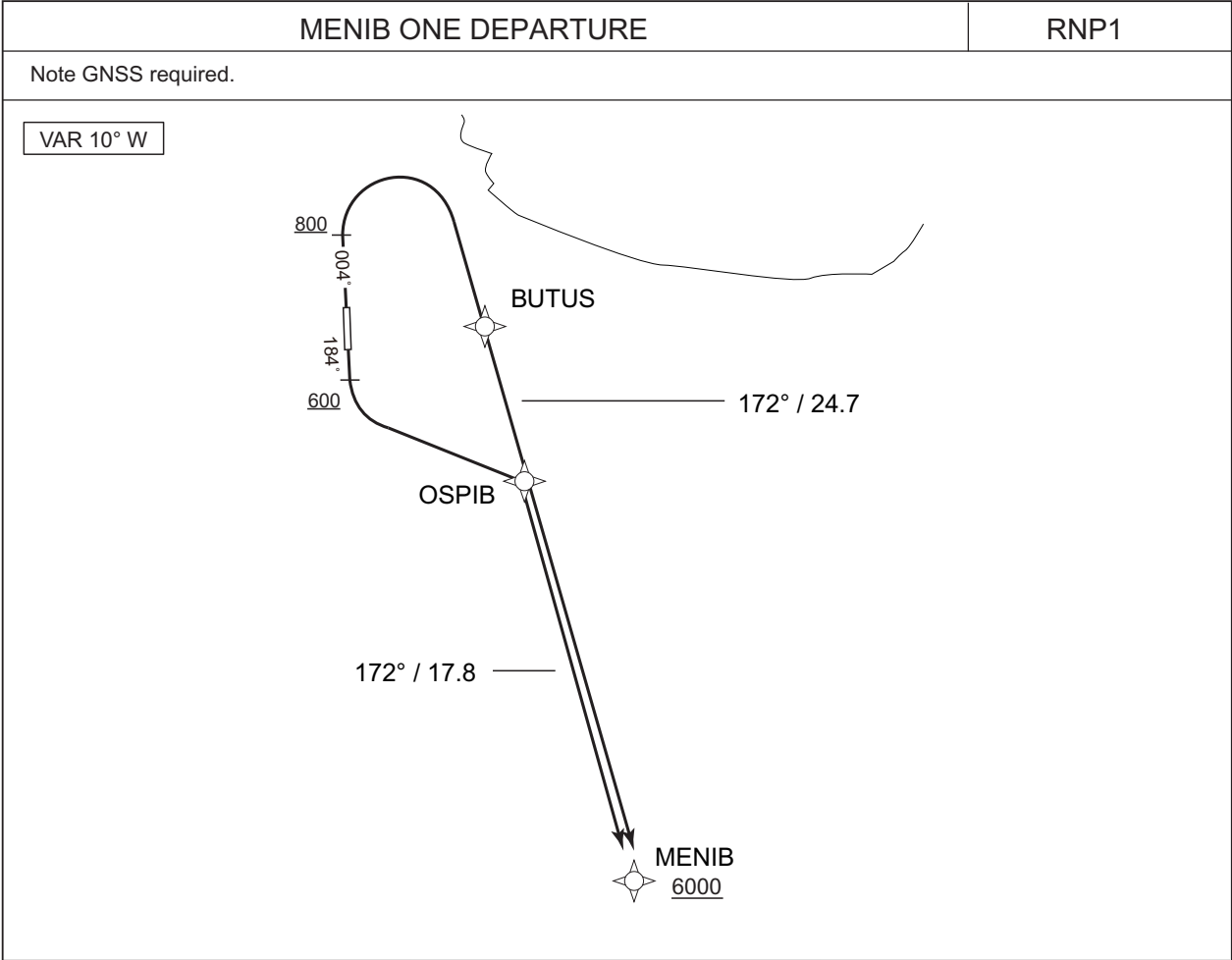


CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU

RNAV SID



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

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RNAV SID

Waypoint Coordinates

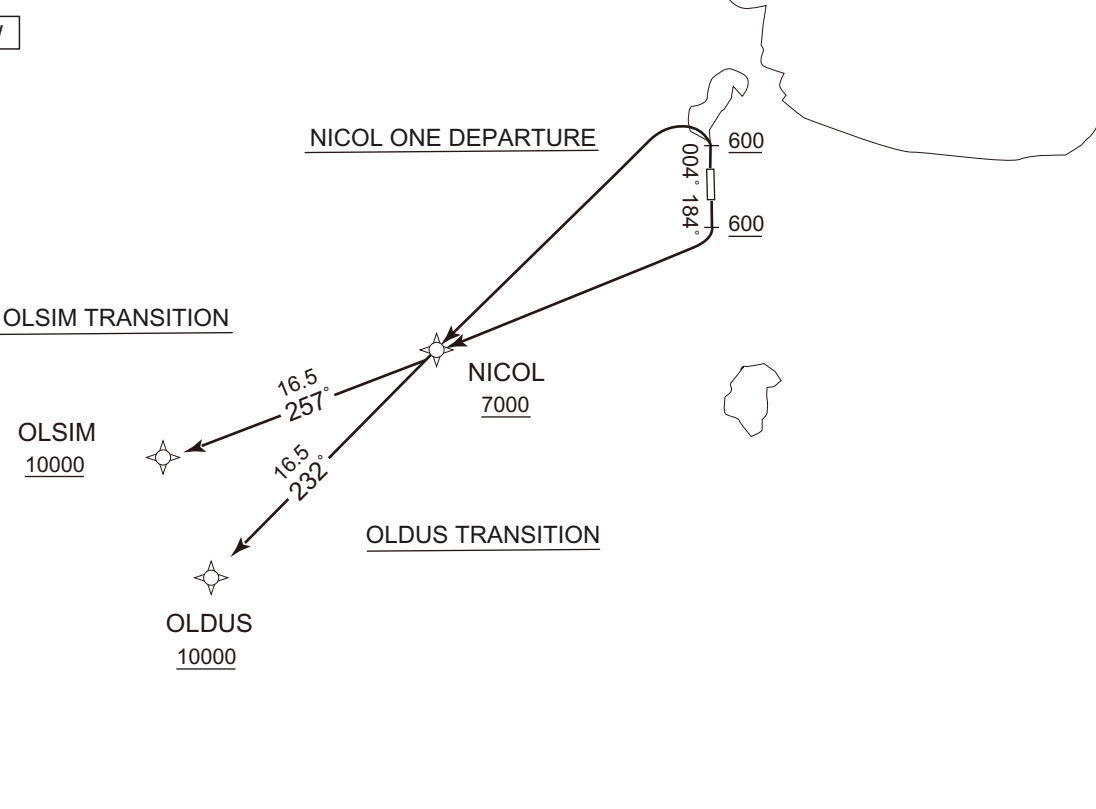
Waypoint Identifier	Coordinates
OSPIB	434628.5N / 1442055.9E
BUTUS	435301.9N / 1441802.1E
MENIB	432929.4N / 1442822.9E

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.		
<div><div>VAR 10° W</div></div>		
<div><div>NICOL ONE DEPARTURE</div><p>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.</p><p>Note RWY36 : 5.0% climb gradient required up to 600FT. OBST ALT 1181FT located at 6.3NM 312° FM end of RWY36.</p></div>		
<div><div>OLSIM TRANSITION</div><p>From NICOL at or above 7000FT, to OLSIM at or above 10000FT.</p><div><div>OLDUS TRANSITION</div><p>From NICOL at or above 7000FT, to OLDUS at or above 10000FT.</p></div></div>		

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

CHANGE : Waypoint Coordinates added.

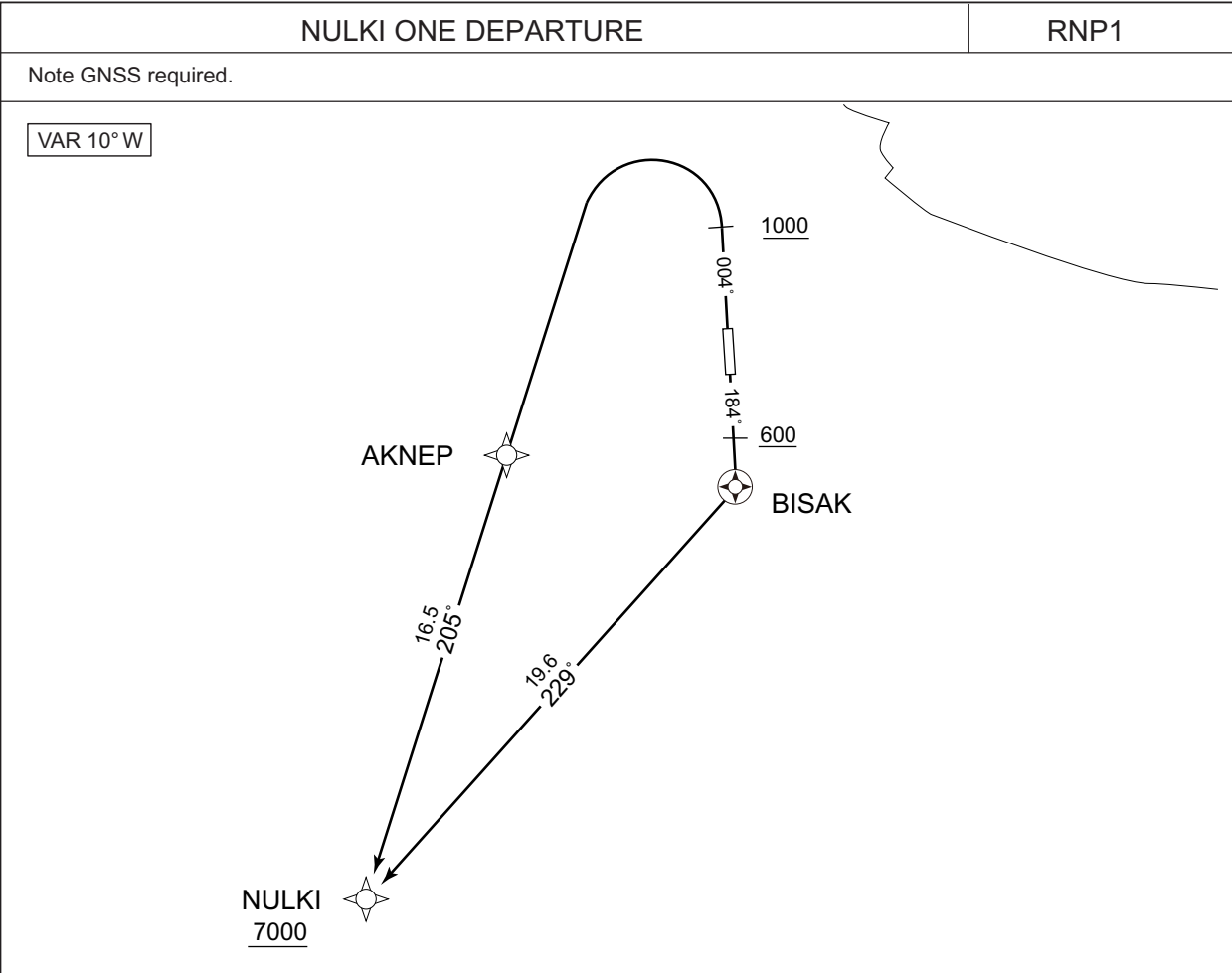
Waypoint Coordinates

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

STANDARD DEPARTURE CHART-INSTRUMENT

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RNAV SID



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

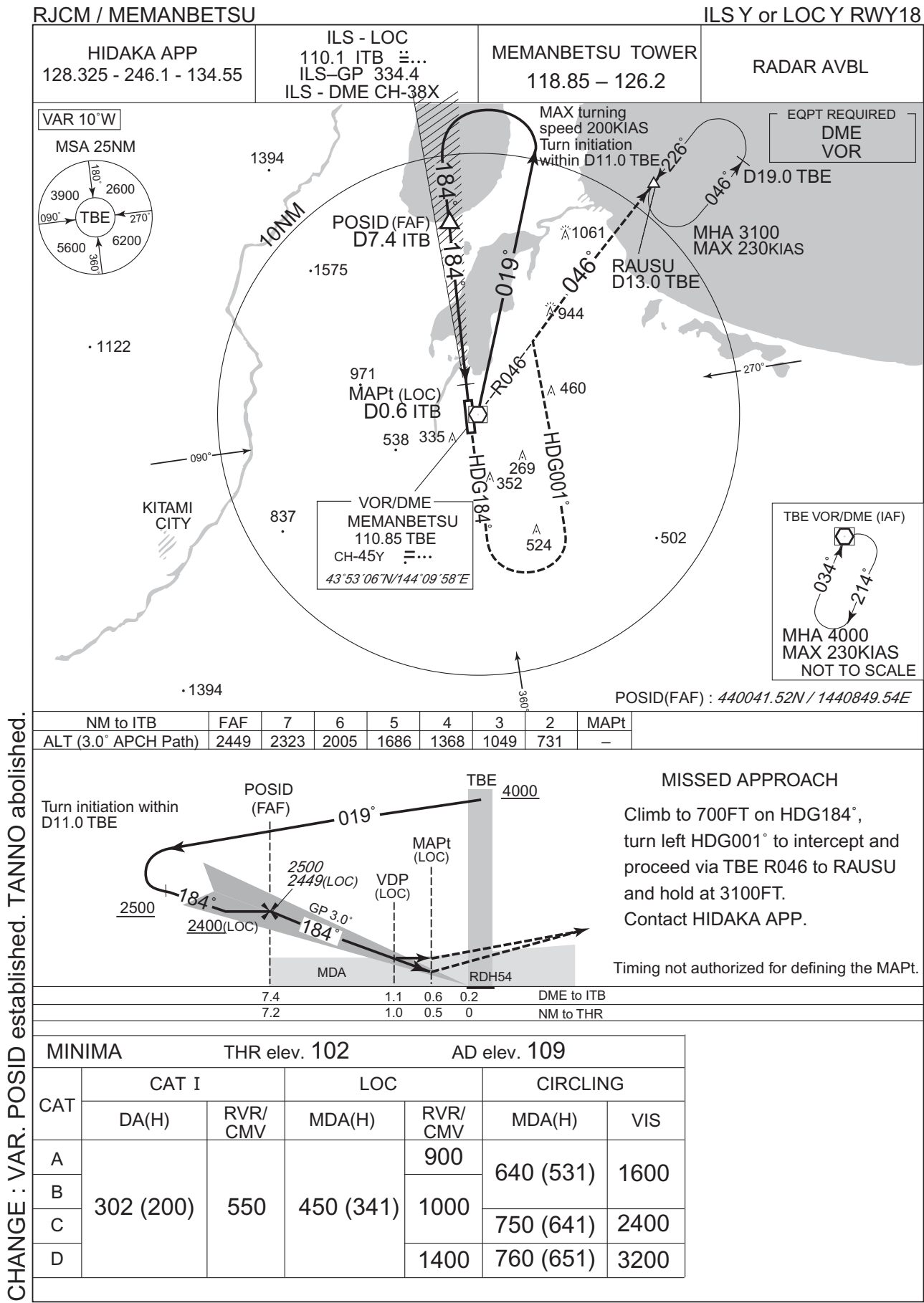
Waypoint Identifier	Coordinates
BISAK	434808.9N / 1441026.9E
AKNEP	434859.1N / 1435906.4E
NULKI	433301.6N / 1435313.7E

CHANGE : Waypoint Coordinates added.

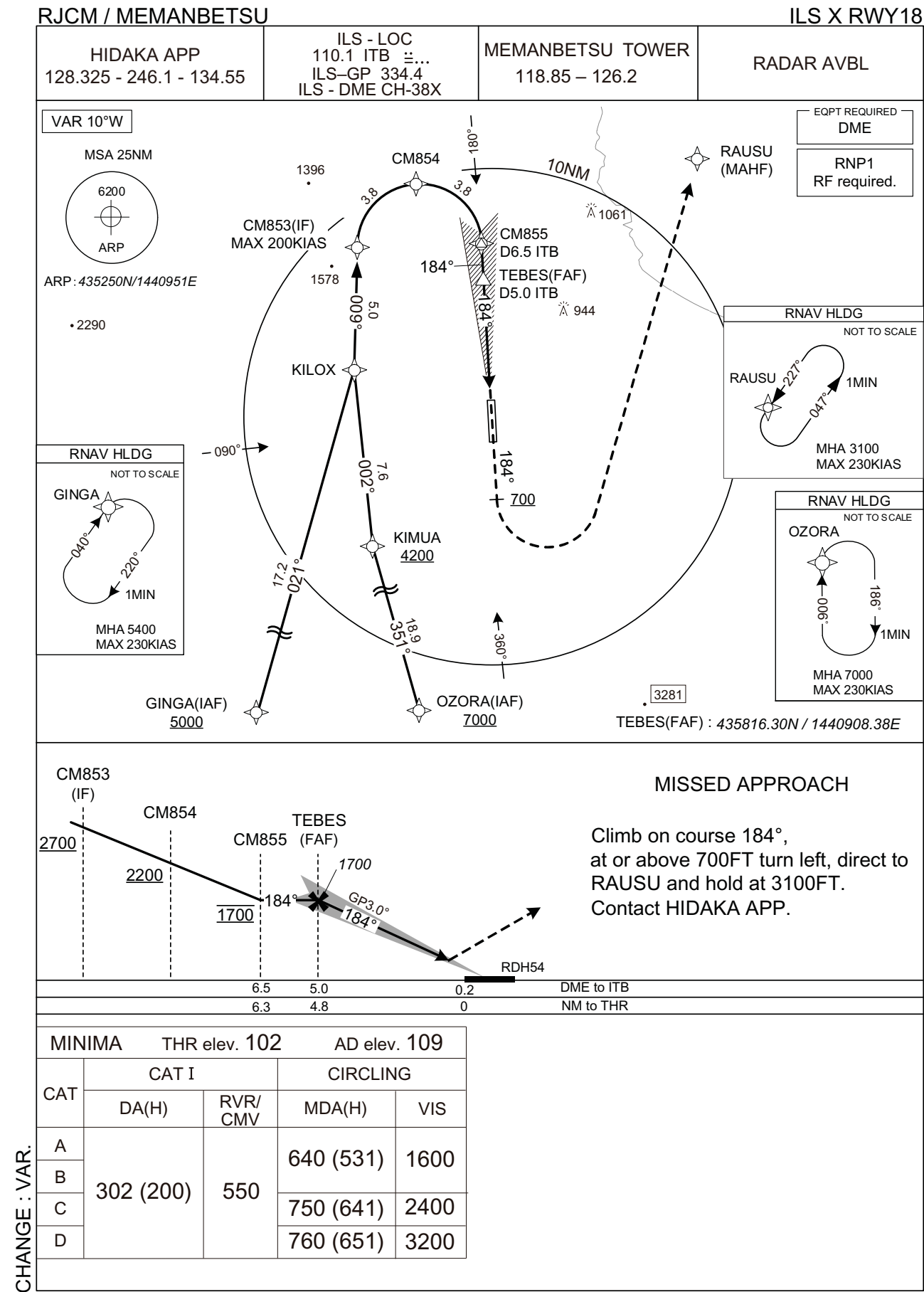
INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

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ILS X RWY18

Coding Table

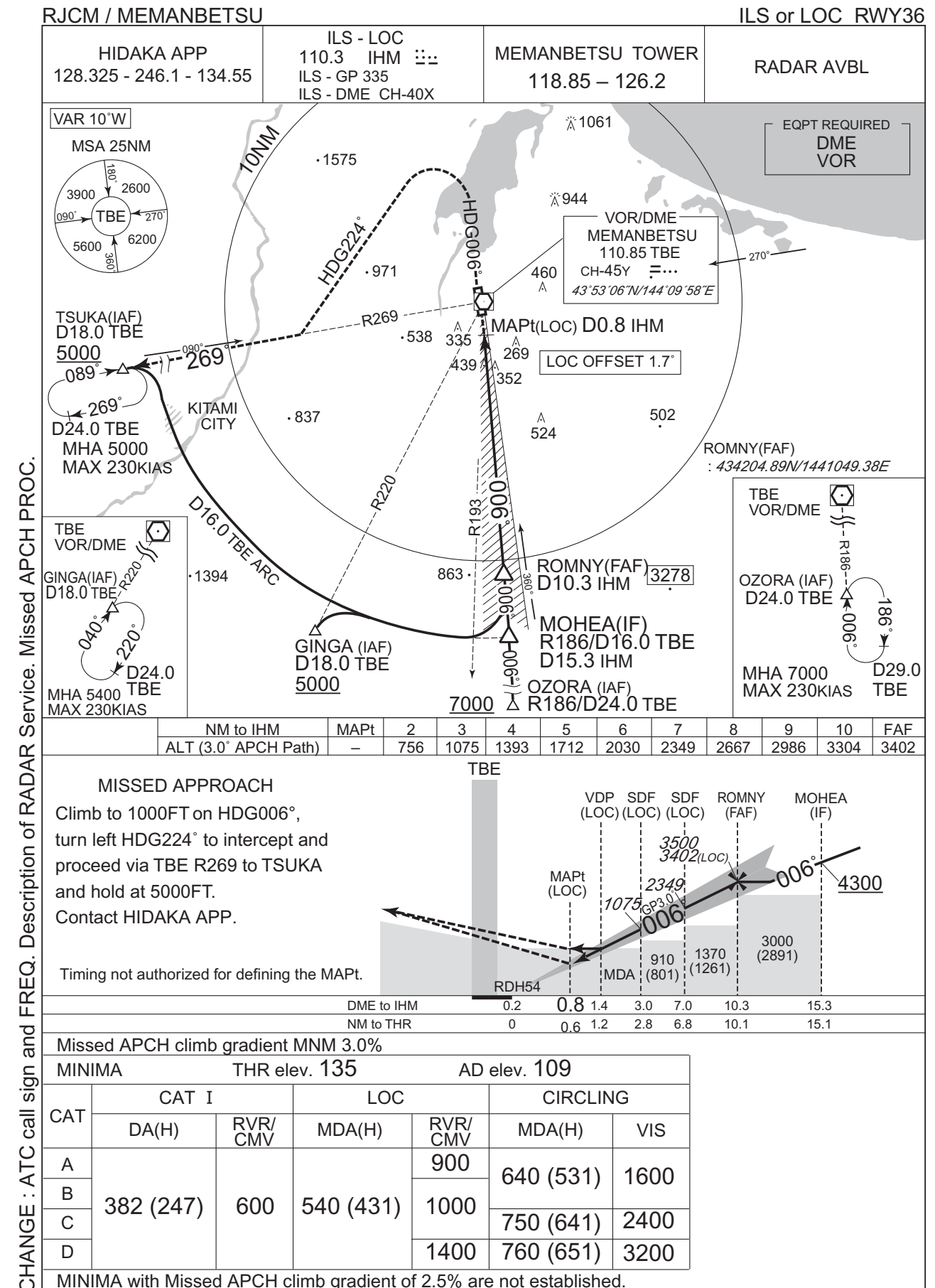
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	GINGA	-	-	-9.6	-	-	+5000	-	-	RNP1
002	TF	KILOX	-	021 (011.9)	-9.6	17.2	-	-	-	-	RNP1
003	TF	CM853	-	009 (359.2)	-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



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HIDAKA APP

128.325 - 246.1 - 134.55

MEMANBETSU VOR/DME

110.85 TBE
CH-45Y
43°53'06"N/144°09'58"E

MEMANBETSU TOWER

118.85 – 126.2

RADAR AVBL

VAR 10°W

MSA 25NM

1122

TBE VOR/DME (IAF)

MHA 4000
MAX 230KIAS

ABASI(FAF)
D7.0 TBE

MAPt
TBE

RAUSU
D13.0 TBE

MHA 3100
MAX 230KIAS

EQPT REQUIRED
DME

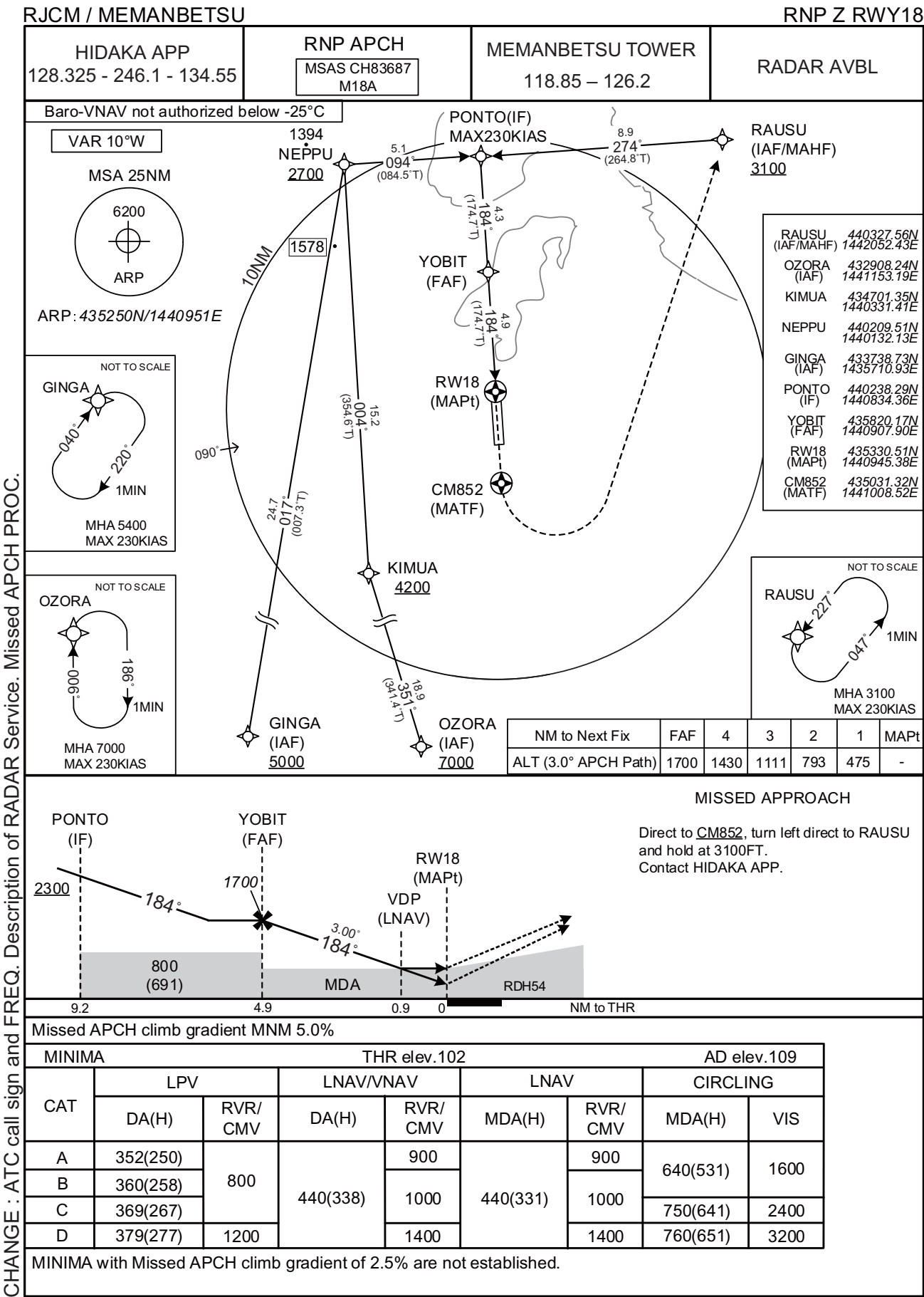
D19.0 TBE

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

Timing not authorized for defining the MAPt.

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

INSTRUMENT APPROACH CHART



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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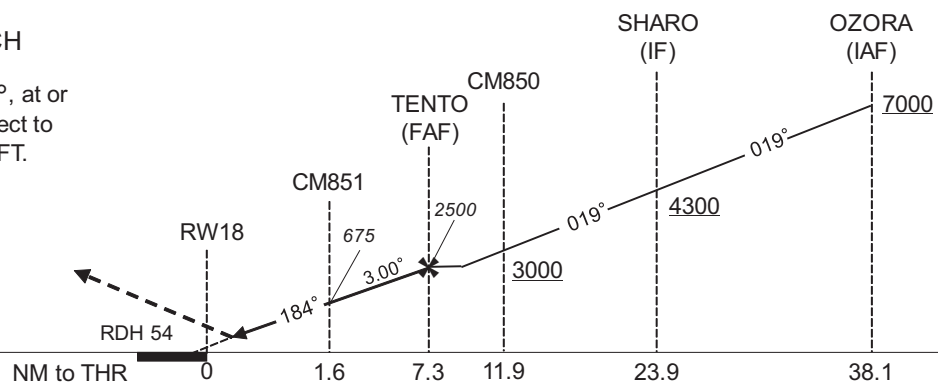
RJCM / MEMANBETSU

RNP Y RWY18(AR)

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



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%	
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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

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

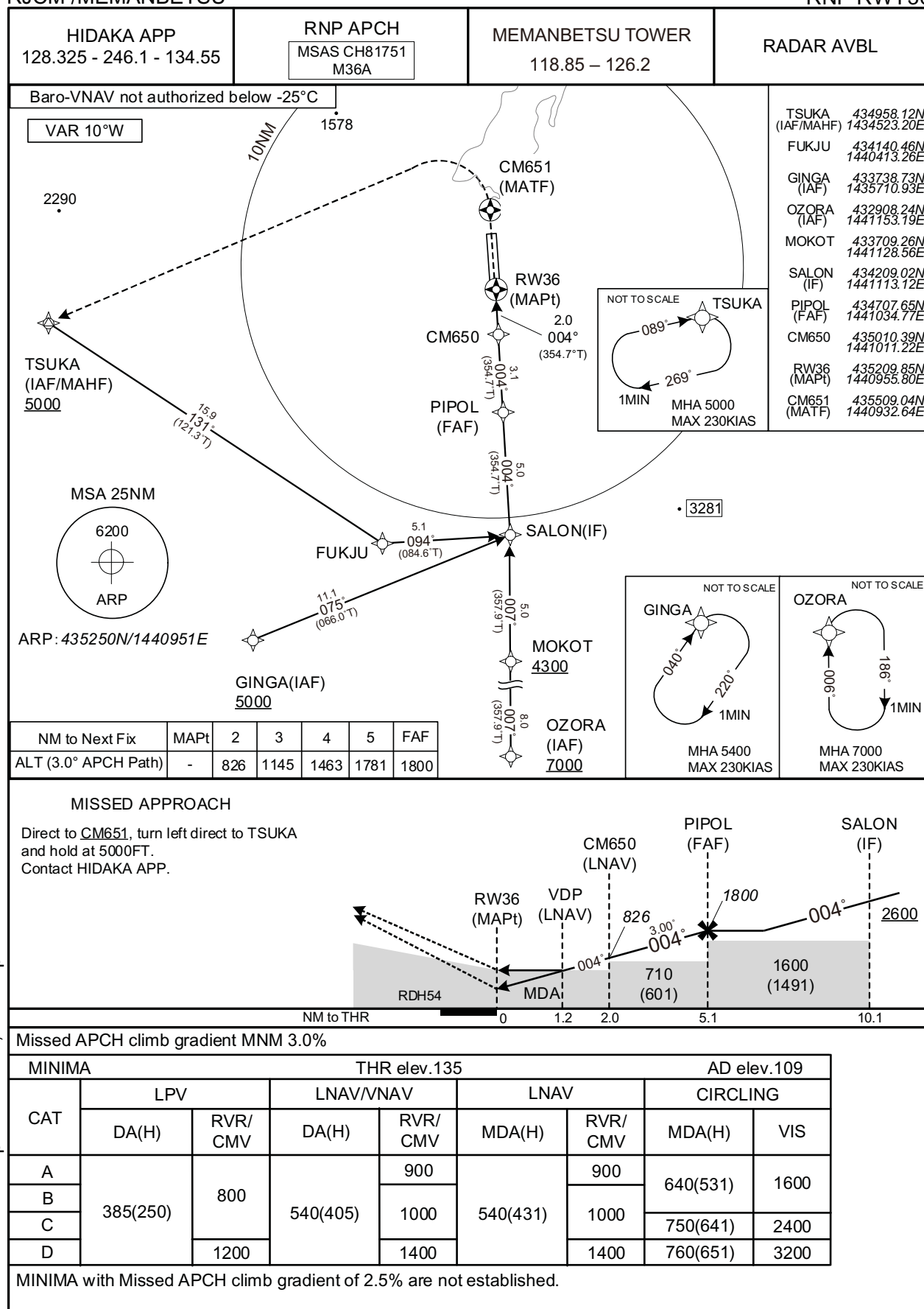
Waypoint Coordinates

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



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
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RJCM / MEMANBETSU

Visual REP



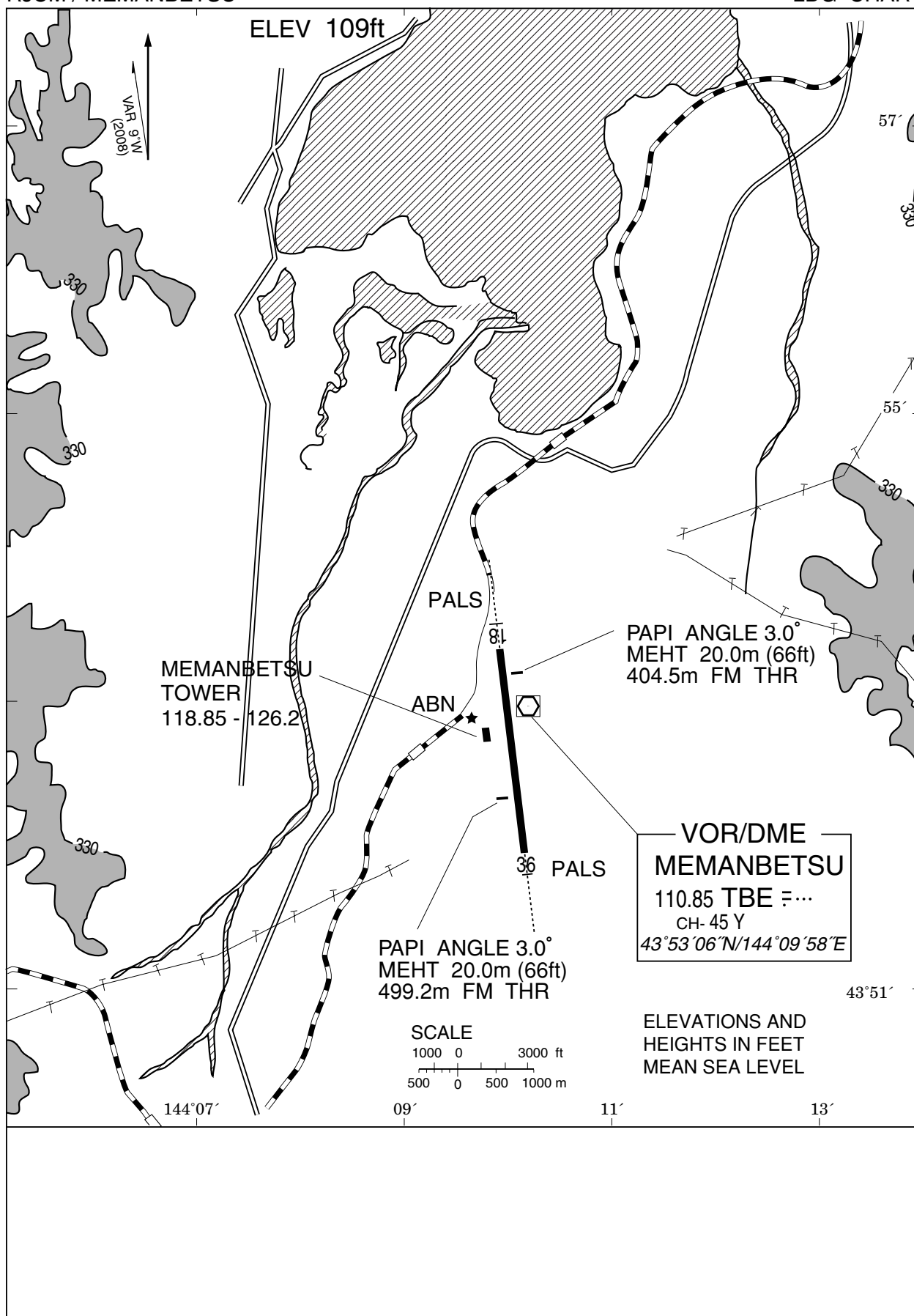
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

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

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LDG CHART



RJCM / MEMANBETSU

Minimum Vectoring Altitude CHART

