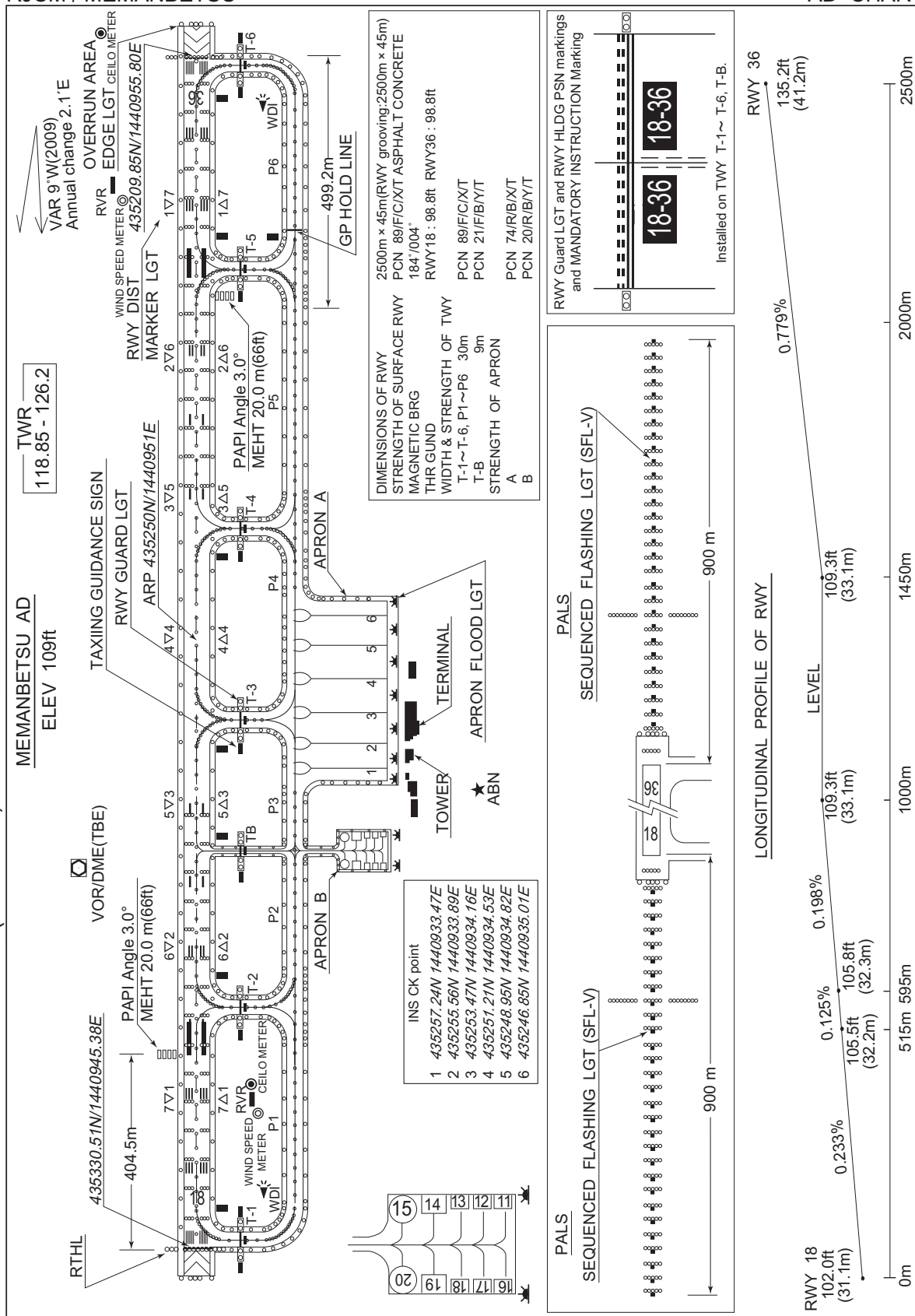


## RJCM / MEMANBETSU

## AD CHART



STANDARD DEPARTURE CHART -INSTRUMENT

RJCM / MEMANBETSU

SID

KUSHIRO FOUR DEPARTURE

RWY 18 : Climb RWY HDG to 600FT, via TBE R187/TCE R008 to TCE VOR/DME....

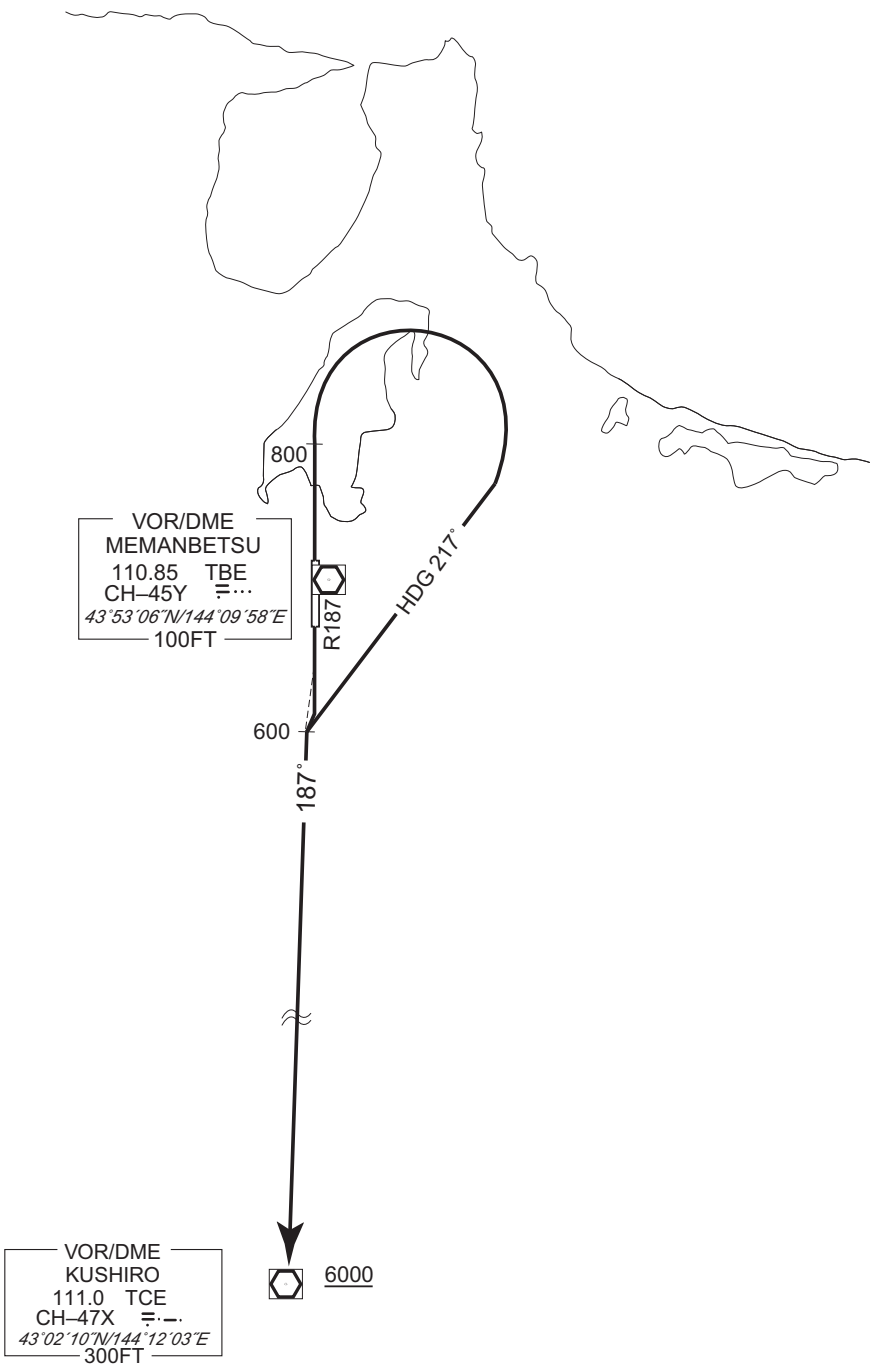
RWY 36 : Climb RWY HDG to 800FT, turn right HDG 217° to intercept and proceed via  
TBE R187/TCE R008 to TCE VOR/DME....  
...Cross TCE VOR/DME at or above 6000FT.

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

OBST ALT 3281FT located at 17.0NM 182° FM end of RWY18.

OBST ALT 4593FT located at 24.9NM 190° FM end of RWY18.

CHANGE : PROC renamed. PROC course. ALT restriction at TCE established. KUSHIRO VOR/DME(KSE → TCE). Note(OBST).



## STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU

SID

RUGMO TWO DEPARTURE

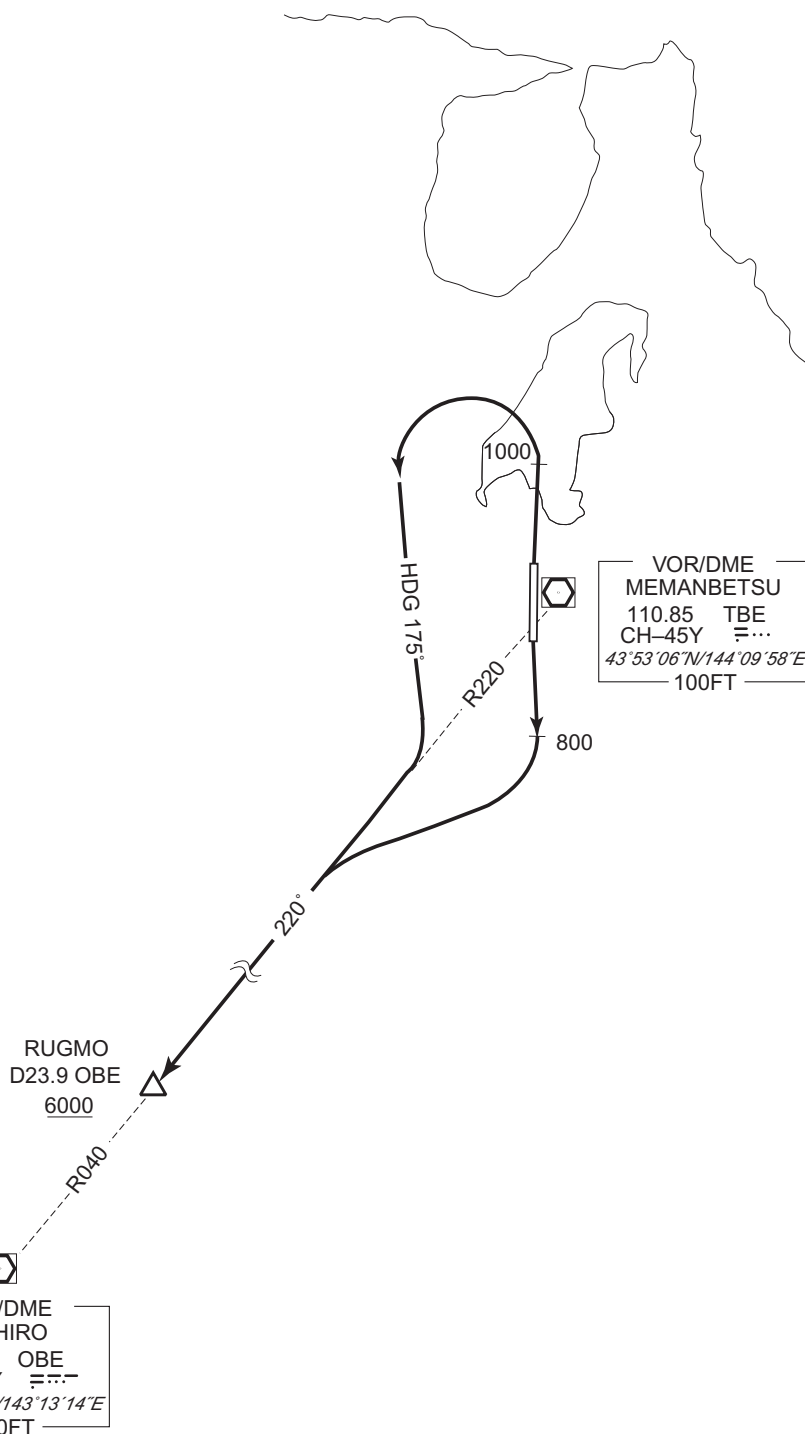
RWY 18 : Climb RWY HDG to 800FT, turn right climb via TBE R220/OBE R040 to RUGMO....

RWY 36 : Climb RWY HDG to 1000FT, turn left HDG 175° to intercept and proceed via  
TBE R220/OBE R040 to RUGMO....

....Cross RUGMO at or above 6000FT.

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

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

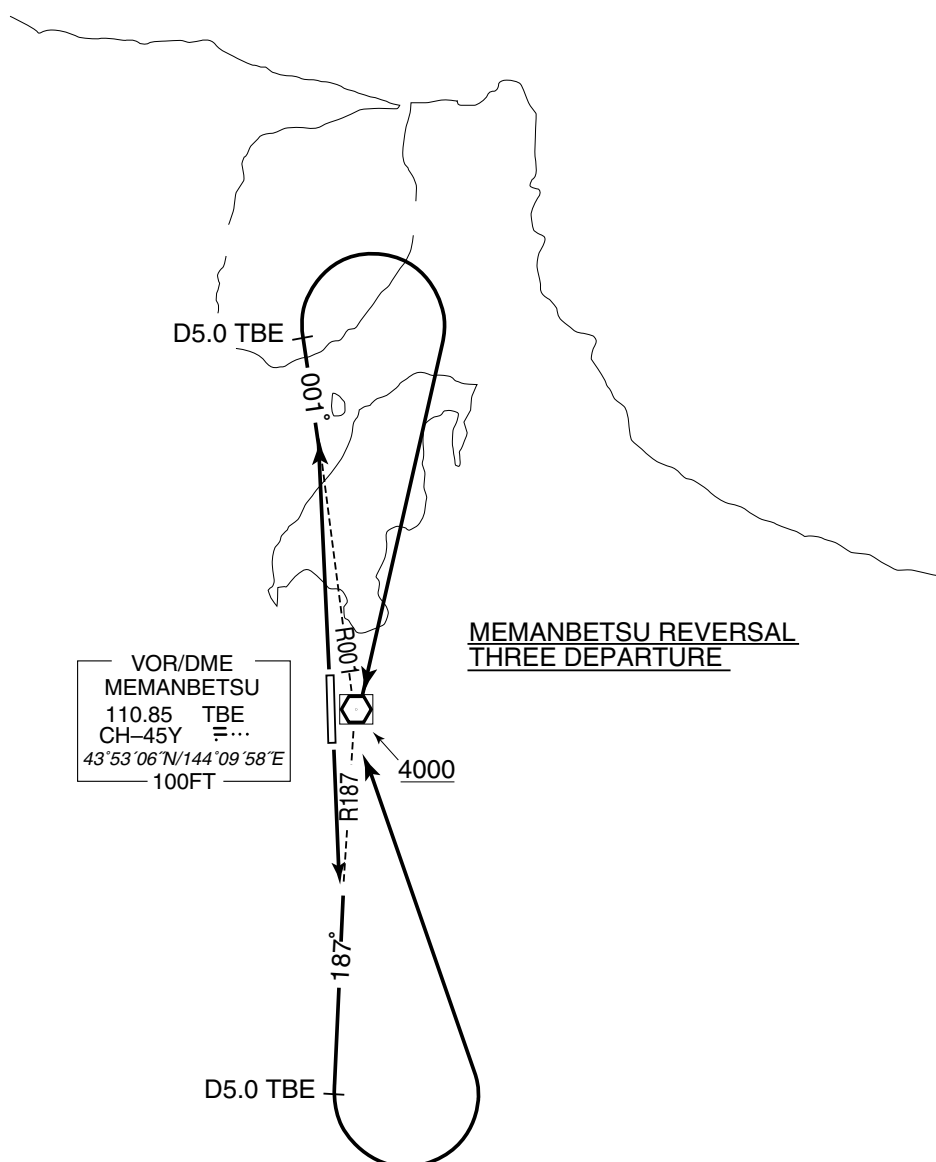


CHANGE : PROC renamed. Radial FM OBE.

## RJCM / MEMANBETSU

SID

....Proceed to TBE VOR/DME. Cross TBE VOR/DME at or above 4000FT.



STANDARD DEPARTURE CHART-INSTRUMENT

RJCM / MEMANBETSU

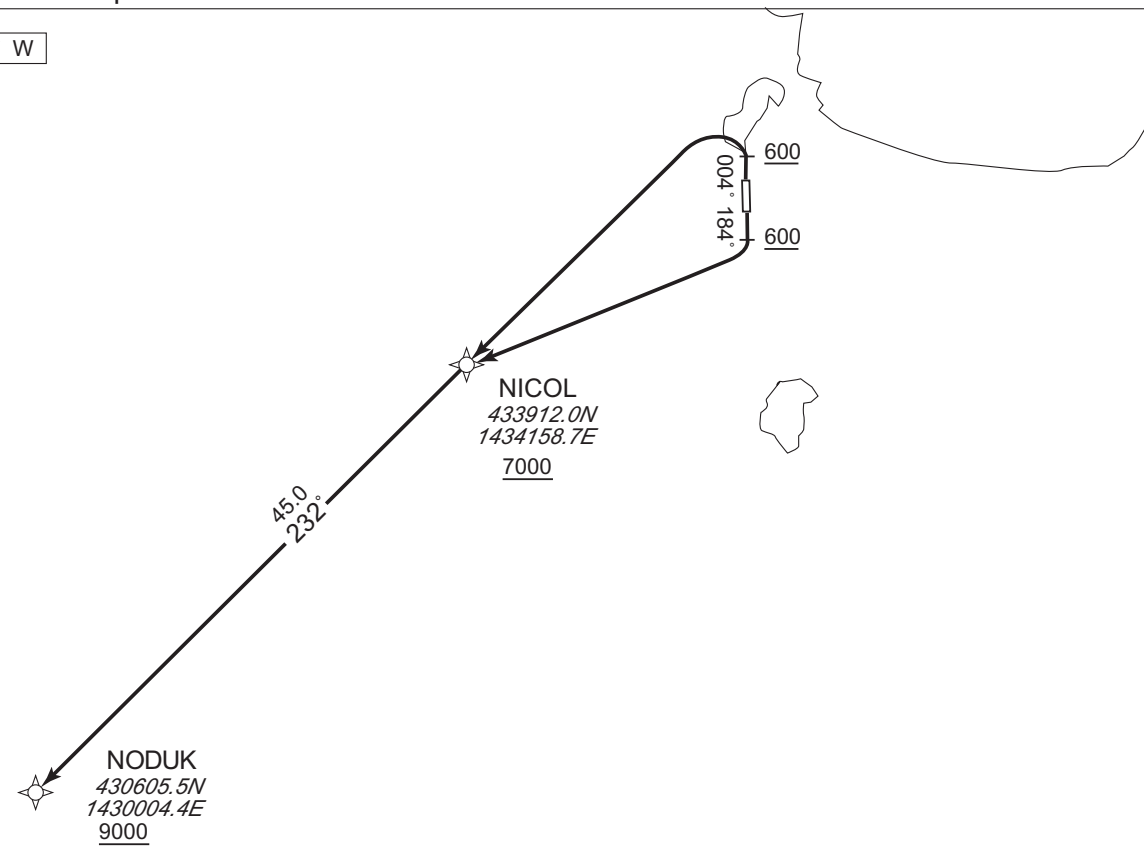
RNAV SID

NODUK ONE DEPARTURE

Basic RNP1

Note GNSS required.

VAR 10° W



RWY18: Climb on HDG184° at or above 600FT, turn right direct to NICOL at or above 7000FT, to NODUK at or above 9000FT.

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

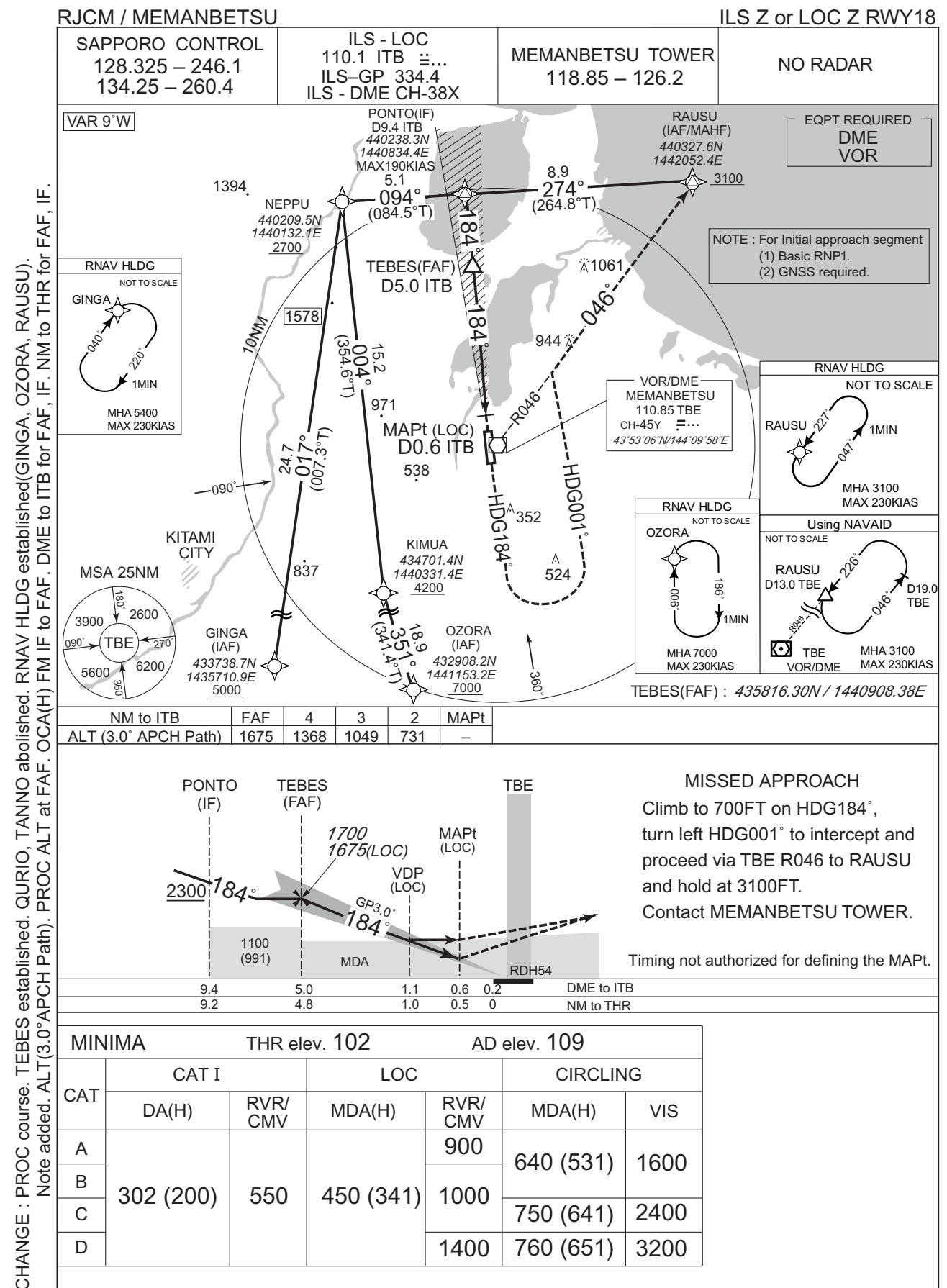
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001           | VA              | —                   | —        | 184 (174.7)   | -9.5               | —             | —              | +600          | —            | —              | Basic RNP1               |
| 002           | DF              | NICOL               | —        | —             | -9.5               | —             | R              | +7000         | —            | —              | Basic RNP1               |
| 003           | TF              | NODUK               | —        | 232 (222.9)   | -9.5               | 45.0          | —              | +9000         | —            | —              | Basic 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)   | -9.5               | —             | —              | +600          | —            | —              | Basic RNP1               |
| 002           | DF              | NICOL               | —        | —             | -9.5               | —             | L              | +7000         | —            | —              | Basic RNP1               |
| 003           | TF              | NODUK               | —        | 232 (222.9)   | -9.5               | 45.0          | —              | +9000         | —            | —              | Basic RNP1               |

CHANGE : New PROC.

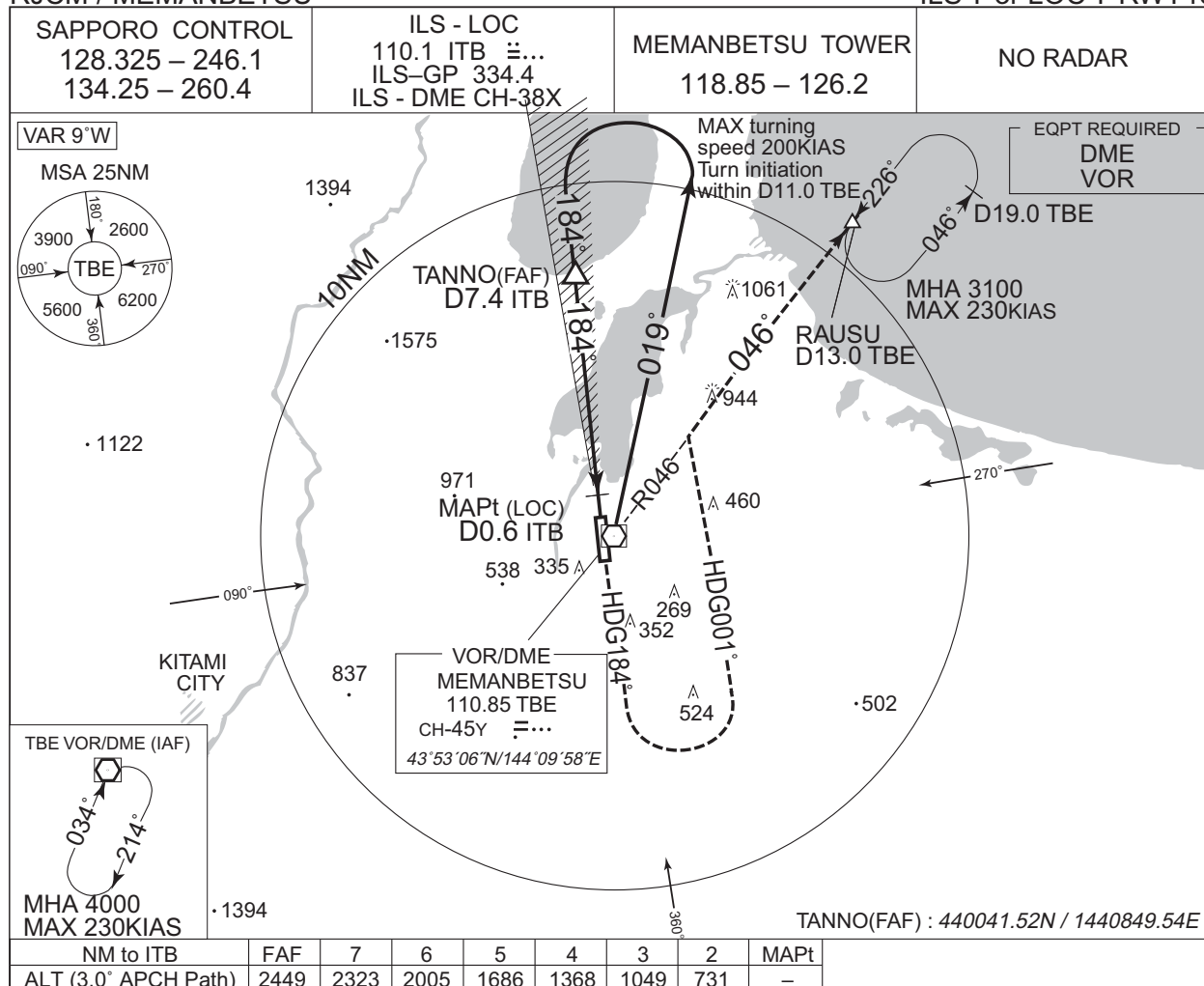
## INSTRUMENT APPROACH CHART



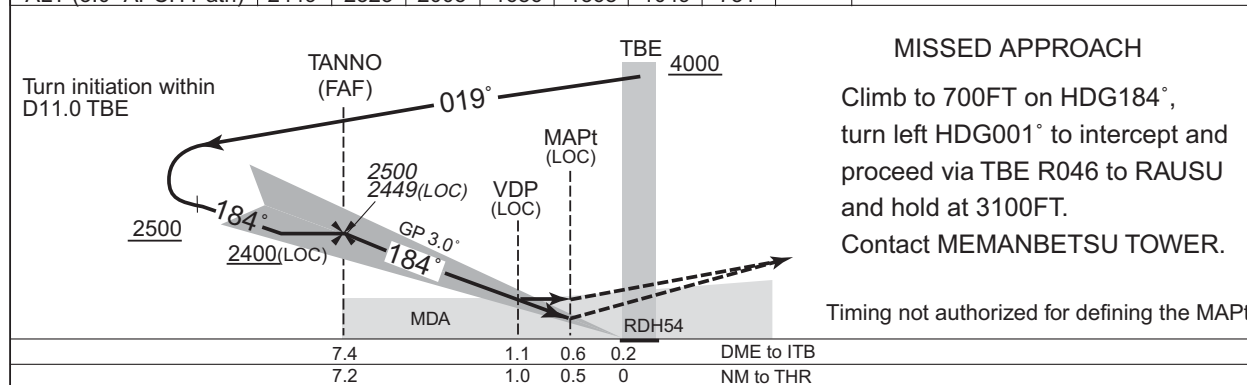
## INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

ILS Y or LOC Y RWY18



CHANGE : Description of VAR.

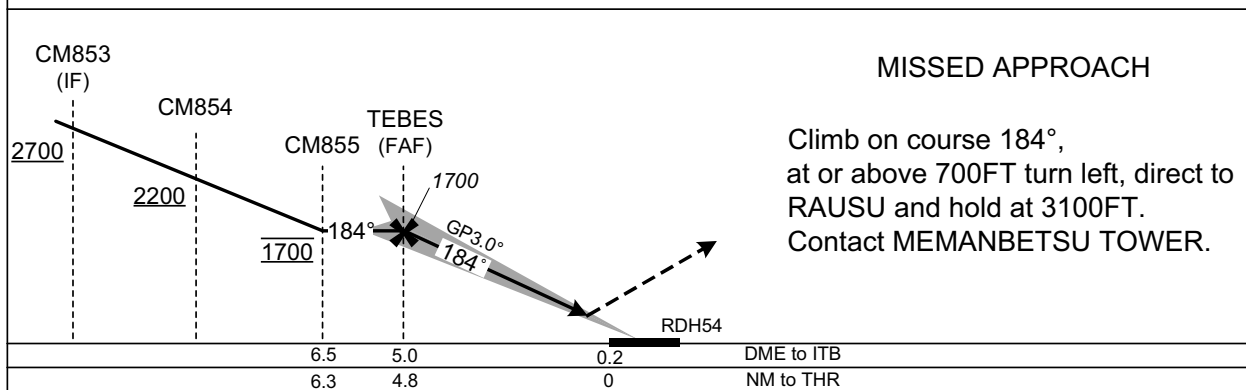
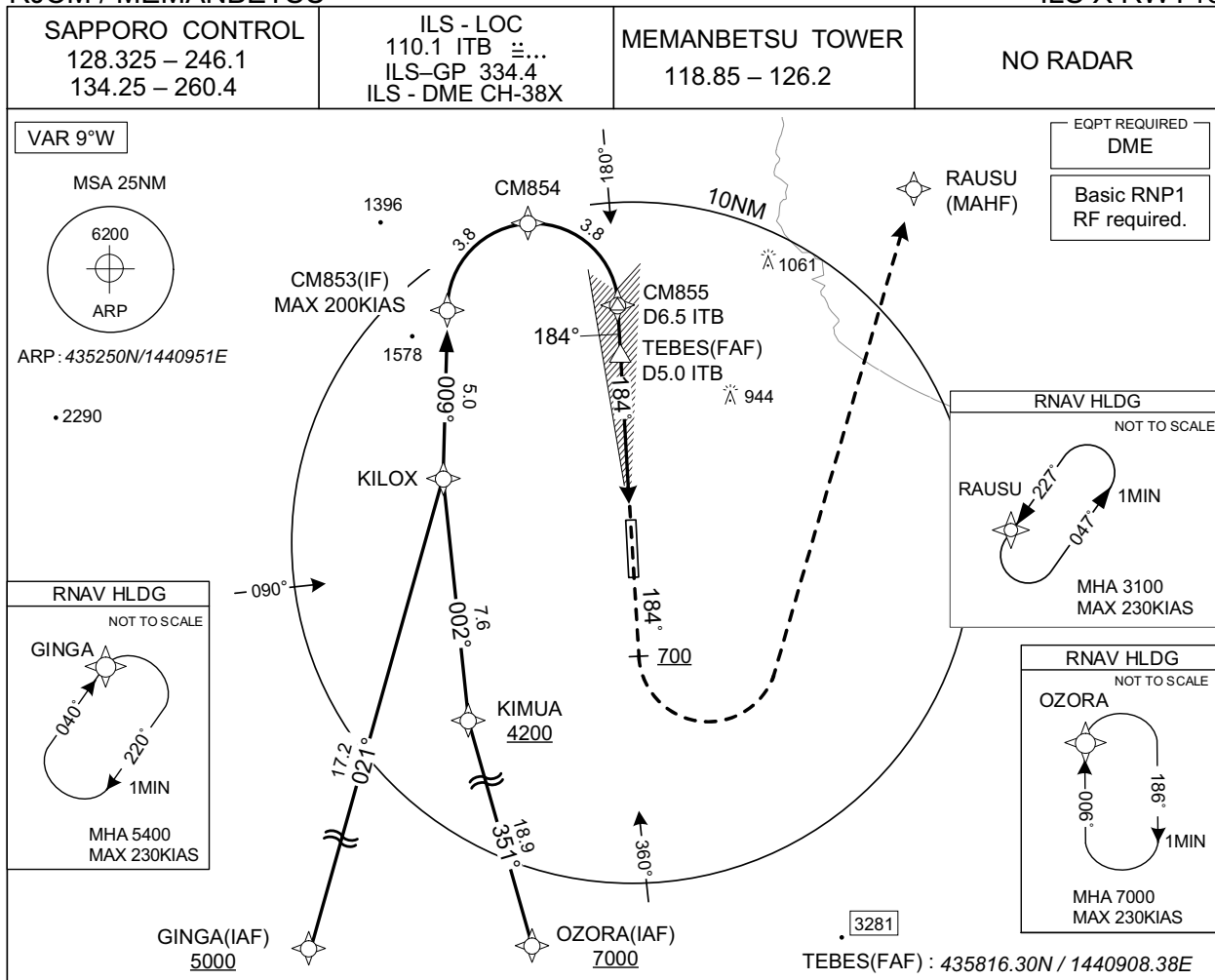


| MINIMA |           |             |           |             |           |           | THR elev. 102 |  | AD elev. 109 |  |
|--------|-----------|-------------|-----------|-------------|-----------|-----------|---------------|--|--------------|--|
| CAT    | CAT I     |             | LOC       |             | CIRCLING  |           |               |  |              |  |
|        | DA(H)     | RVR/<br>CMV | MDA(H)    | RVR/<br>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          |  |              |  |

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

ILS X RWY18



CHANGE : New PROC.

| 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      |           |               | 750 (641)    | 2400 |
| C      |           |               | 760 (651)    | 3200 |
| D      |           |               |              |      |



## 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         | —            | —              | Basic RNP1               |
| 002           | TF                                 | KILOX               | —        | 021<br>(011.9) | -9.6               | 17.2          | —              | —             | —            | —              | Basic RNP1               |
| 003           | TF                                 | CM853               | —        | 009<br>(359.2) | -9.6               | 5.0           | —              | +2700         | -200         | —              | Basic RNP1               |
| 001           | IF                                 | OZORA               | —        | —              | -9.6               | —             | —              | +7000         | —            | —              | Basic RNP1               |
| 002           | TF                                 | KIMUA               | —        | 351<br>(341.4) | -9.6               | 18.9          | —              | +4200         | —            | —              | Basic RNP1               |
| 003           | TF                                 | KILOX               | —        | 002<br>(352.2) | -9.6               | 7.6           | —              | —             | —            | —              | Basic RNP1               |
| 004           | TF                                 | CM853               | —        | 009<br>(359.2) | -9.6               | 5.0           | —              | +2700         | -200         | —              | Basic RNP1               |
| 001           | IF                                 | CM853               | —        | —              | -9.6               | —             | —              | +2700         | -200         | —              | Basic RNP1               |
| 002           | RF<br>Center:<br>CMRF2<br>r=2.51NM | CM854               | —        | —              | -9.6               | 3.8           | R              | +2200         | —            | —              | Basic RNP1               |
| 003           | RF<br>Center:<br>CMRF2<br>r=2.51NM | CM855               | —        | —              | -9.6               | 3.8           | R              | 1700          | —            | —              | Basic RNP1               |
| 001           | CA                                 | —                   | —        | 184<br>(174.7) | -9.6               | —             | —              | +700          | —            | —              | Basic RNP1               |
| 002           | DF                                 | RAUSU               | —        | —              | -9.6               | —             | L              | 3100          | —            | —              | Basic 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<br>(030.8)        | -9.5               | 1.0(-14000)         | R              | 5400                  | FL140                 | -230(-14000) | Basic RNP1               |
| Hold | OZORA               | 006<br>(356.7)        | -9.5               | 1.0(-14000)         | R              | 7000                  | FL140                 | -230(-14000) | Basic RNP1               |
| Hold | RAUSU               | 227<br>(217.0)        | -9.5               | 1.0(-14000)         | L              | 3100                  | FL140                 | -230(-14000) | Basic RNP1               |

Waypoint Coordinates

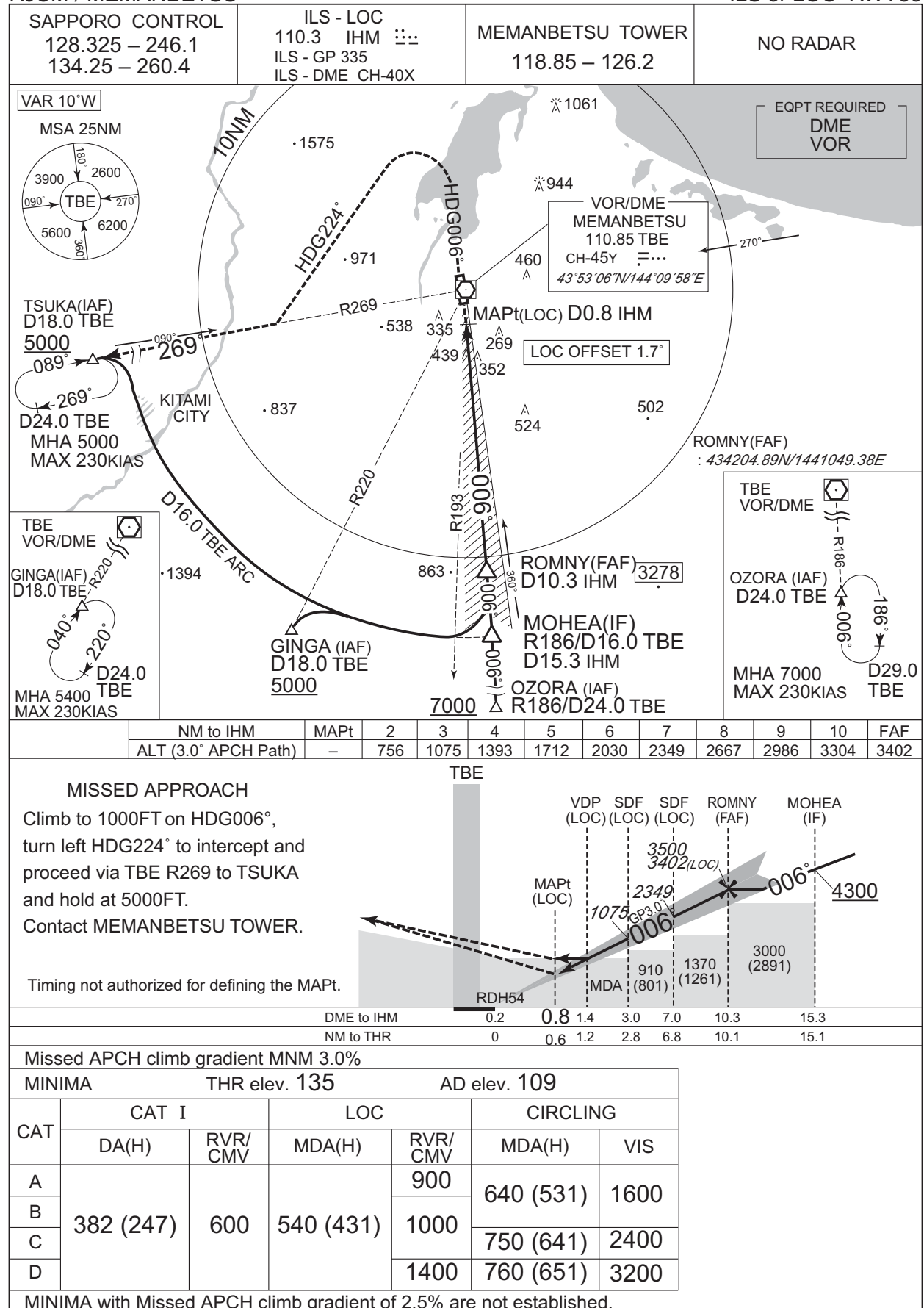
| Waypoint Identifier | Coordinates            | RF Arc Center Identifier | Coordinates            |
|---------------------|------------------------|--------------------------|------------------------|
| GINGA               | 433738.73N/1435710.93E | CMRF2                    | 435931.80N/1440529.11E |
| 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 : New PROC.

## INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

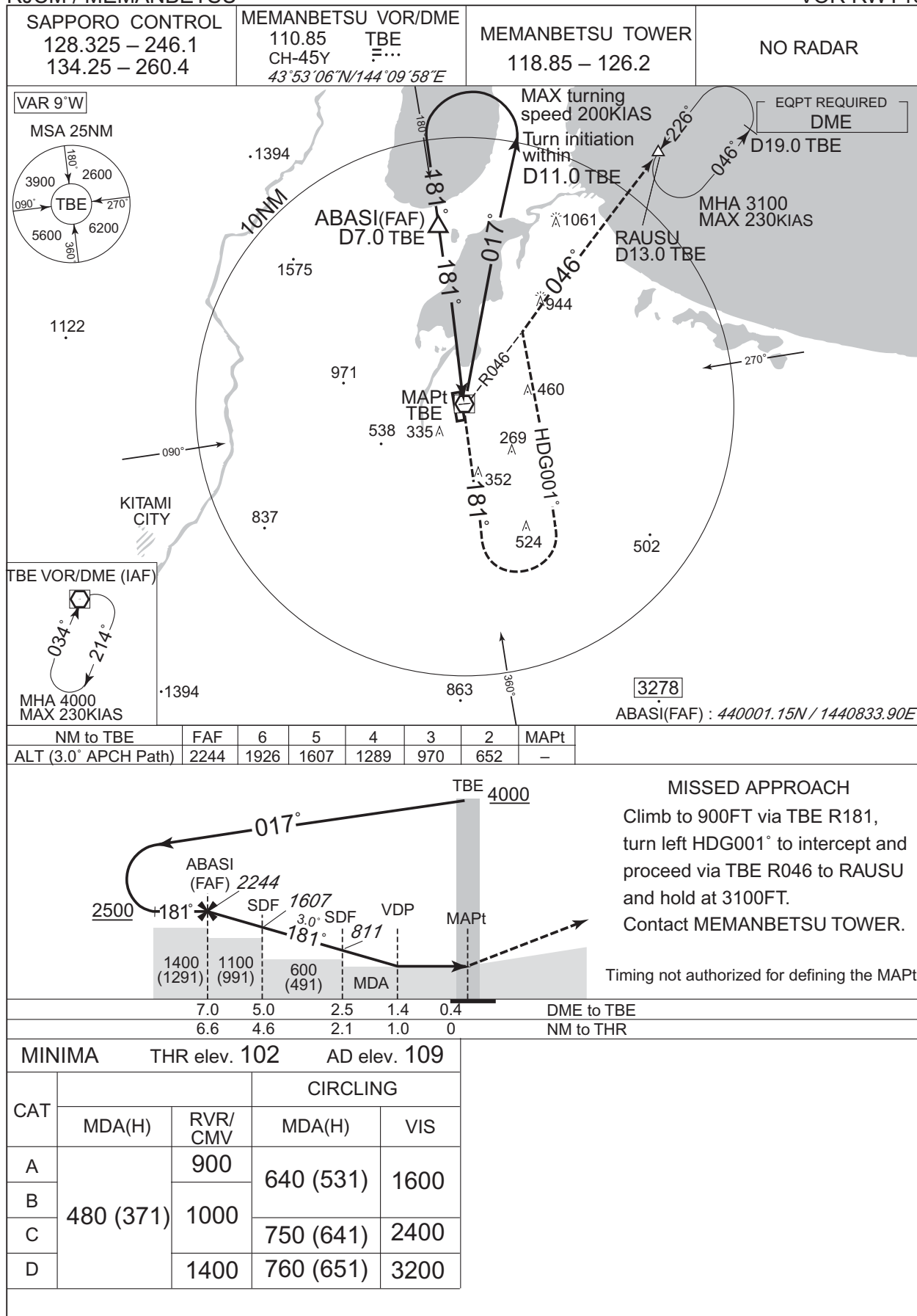
ILS or LOC RWY36



## INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

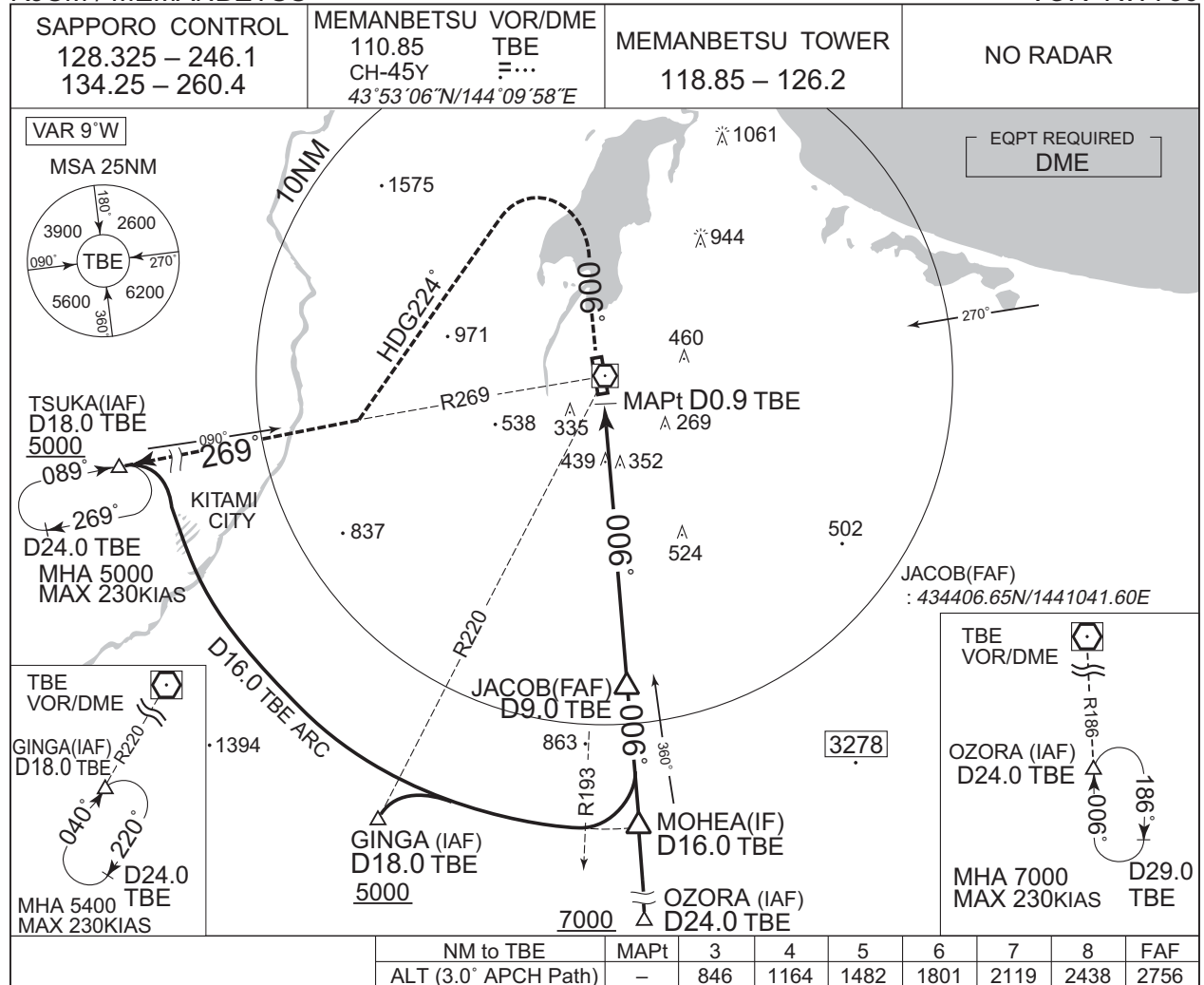
VOR RWY18



INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

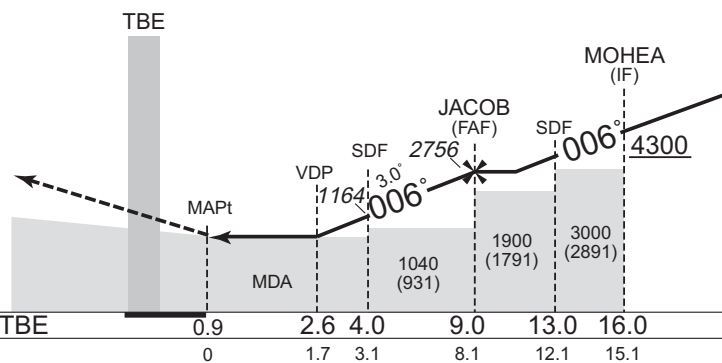
VOR RWY36



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 MEMANBETSU TOWER.

Timing not authorized for defining the MAPt.



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

## INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

RNP Z RWY18

SAPPORO CONTROL  
128.325 – 246.1  
134.25 – 260.4RNP APCH  
MSAS CH83687  
M18AMEMANBETSU TOWER  
118.85 – 126.2

NO RADAR

Baro-VNAV not authorized below -25°C

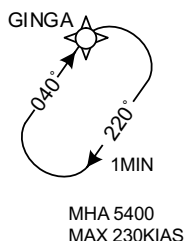
VAR 10°W

MSA 25NM

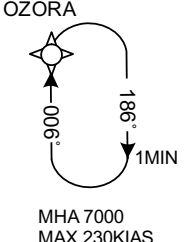


ARP: 435250N/1440951E

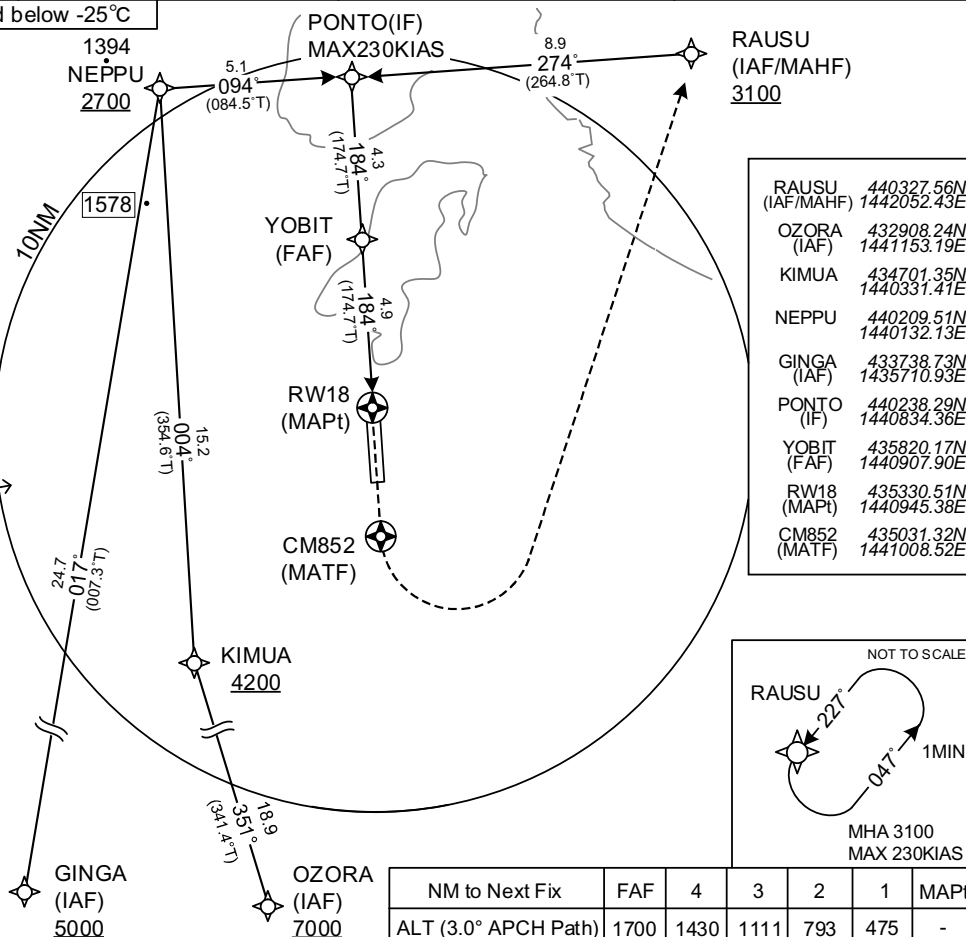
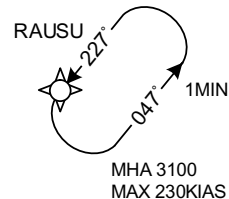
NOT TO SCALE



NOT TO SCALE

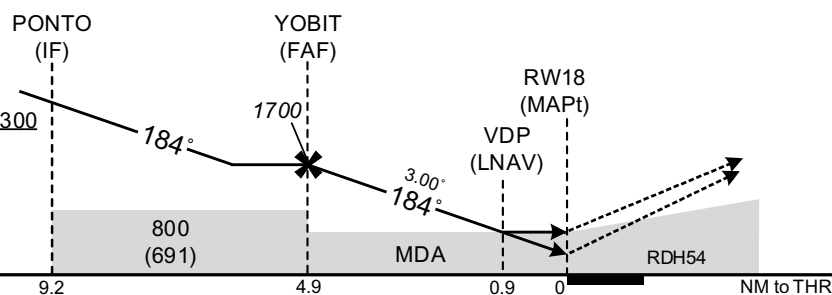


NOT TO SCALE



## MISSED APPROACH

Direct to CM852, turn left direct to RAUSU and hold at 3100FT.  
Contact MEMANBETSU TOWER.



Missed APCH climb gradient MNM 5.0%

| MINIMA |          |             | THR elev.102 |             |          |             | AD elev.109 |          |
|--------|----------|-------------|--------------|-------------|----------|-------------|-------------|----------|
| CAT    | LPV      |             | LNAV/VNAV    |             | LNAV     |             | CIRCLING    |          |
|        | DA(H)    | RVR/<br>CMV | DA(H)        | RVR/<br>CMV | MDA(H)   | RVR/<br>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) |             |              | 1400        |          | 1400        |             |          |
| D      | 379(277) | 1200        |              |             |          |             |             | 760(651) |

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

CHANGE : Missed APCH PROC for using VOR/DME abolished. HLDG PROC for using NAVAID abolished.

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 |
|----------------------------|------|

## RJCM / MEMANBETSU

RNP Y RWY18(AR)

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



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

Waypoint Coordinates

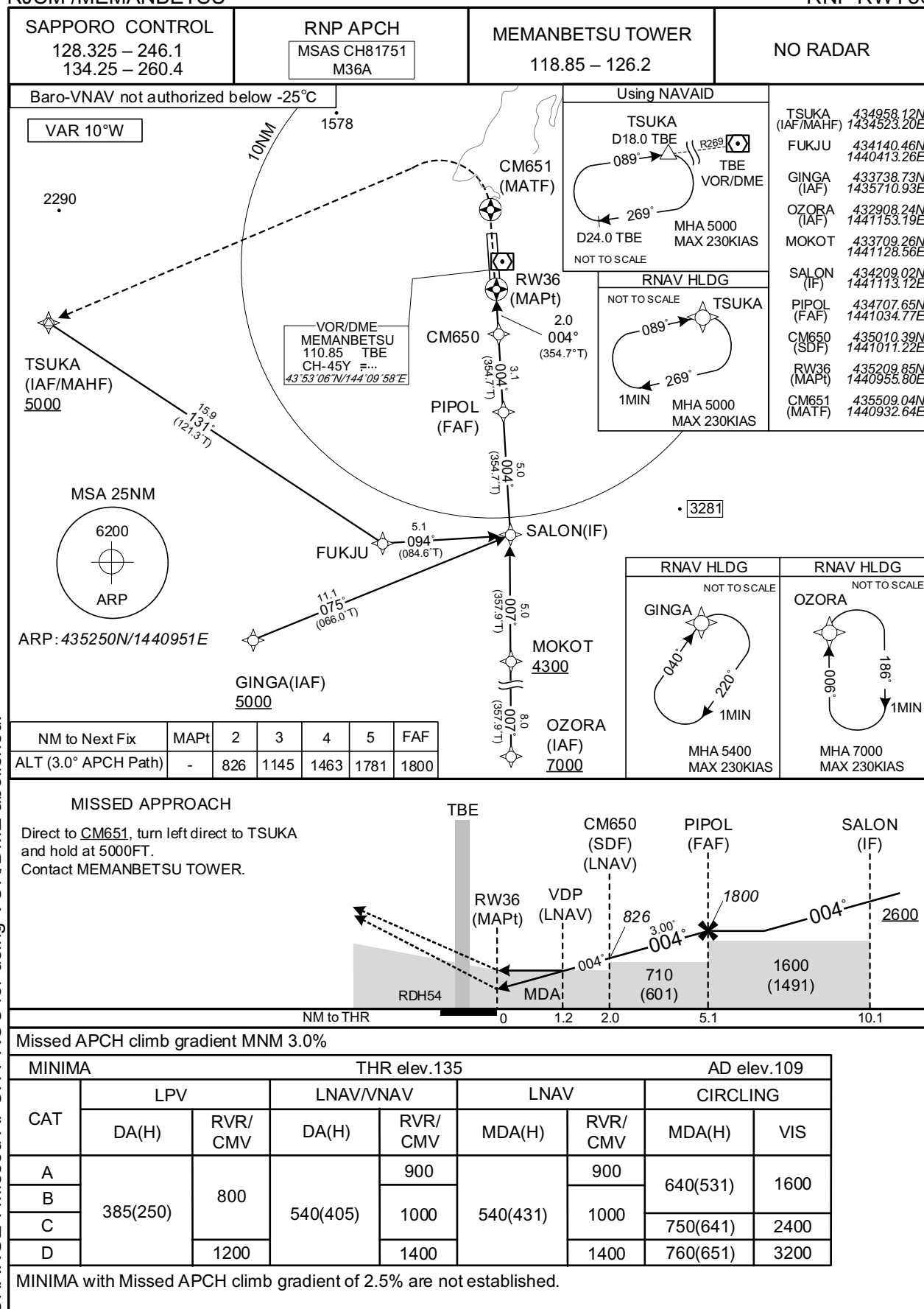
| Waypoint Identifier | Coordinates              | RF Arc Center Identifier | Coordinates              |
|---------------------|--------------------------|--------------------------|--------------------------|
| OZORA               | 432908.24N / 1441153.19E | CMRF1                    | 435524.66N / 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 : Missed APCH PROC for using VOR/DME abolished.

INSTRUMENT APPROACH CHART

RJCM / MEMANBETSU

RNP RWY36

**FAS DATA BLOCK**

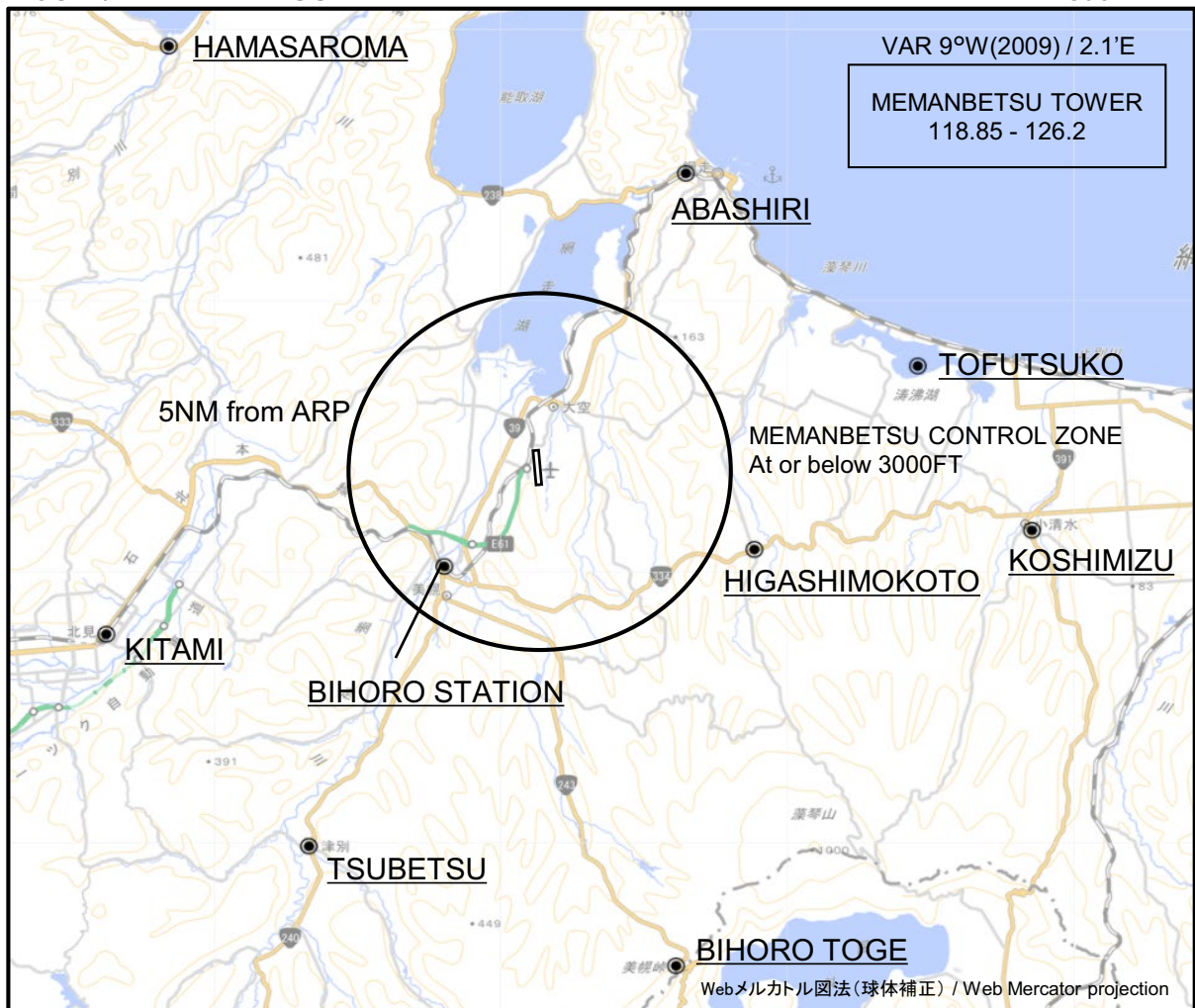
|                                  |               |                            |               |
|----------------------------------|---------------|----------------------------|---------------|
| Operation type                   | 0             | LTP/FTP ellipsoidal height | +00719        |
| SBAS 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



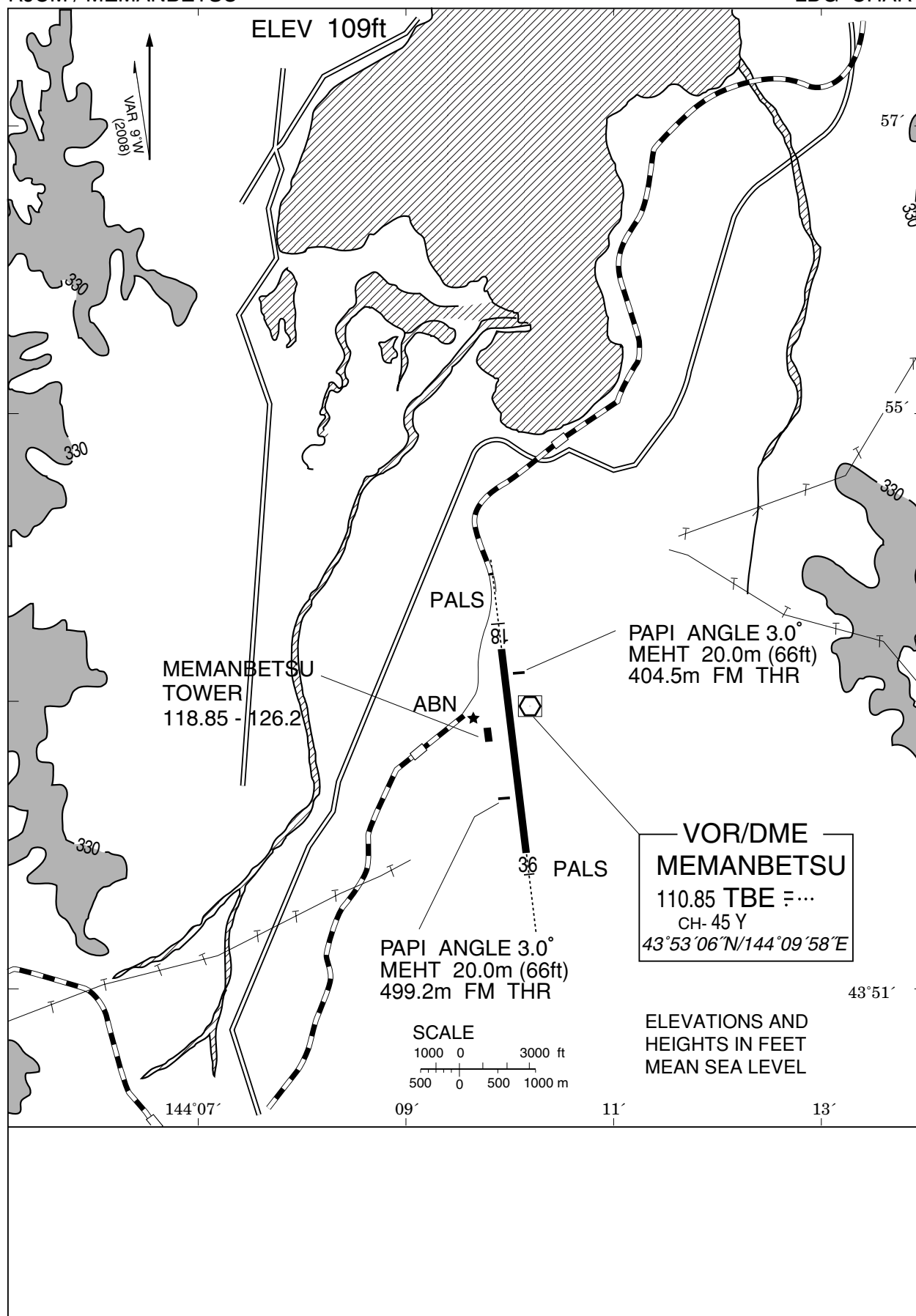
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE : Map updated. BRG/DIST from ARP.

| Call sign                  | BRG / DIST from ARP | Remarks         |
|----------------------------|---------------------|-----------------|
| 網走<br>Abashiri             | 025°T / 9.2NM       | JR駅<br>Station  |
| 湧湖<br>Tofutsuko            | 074°T / 10.5NM      | 湖<br>Lake       |
| 小清水<br>Koshimizu           | 097°T / 13.3NM      | 学校<br>School    |
| 東藻琴<br>Higashimokoto       | 110°T / 6.1NM       | 市街地<br>Town     |
| 美幌峠<br>Bihoro Toge         | 165°T / 14.4NM      | 峠<br>Pass       |
| 津別<br>Tsubetsu             | 210°T / 12.2NM      | 市街地<br>Town     |
| 美幌ステーション<br>Bihoro Station | 223°T / 3.7NM       | JR駅<br>Station  |
| 北見<br>Kitami               | 248°T / 12.4NM      | JR駅<br>Station  |
| 浜佐呂間<br>Hamasaroma         | 321°T / 15.5NM      | 佐呂間大橋<br>Bridge |

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LDG CHART



RJCM / MEMANBETSU

Minimum Vectoring Altitude CHART

