

# RADAR MINS

20030

N1

## RADAR INSTRUMENT APPROACH MINIMUMS

### BISMARCK, ND

Amdt 3B, 26AUG10 (10238) (FAA)

ELEV 1661

### BISMARCK MUNI (BIS)

RADAR-1 126.3 298.9 **▽ ▲**

|     | <u>RWY</u> | <u>GP/TCH/RPI</u> | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u> | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u> | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u> | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u> |
|-----|------------|-------------------|------------|------------------------|---------------------|-----------------|------------|------------------------|---------------------|-----------------|
| ASR | 31         |                   | AB         | 2100/24                | 455                 | (500-½)         | C          | 2100/40                | 455                 | (500-¾)         |
|     |            |                   | D          | 2100/50                | 455                 | (500-1)         |            |                        |                     |                 |
|     | 13         |                   | AB         | 2100-1                 | 445                 | (500-1)         | C          | 2100-1¼                | 445                 | (500-1¼)        |
|     |            |                   | D          | 2100-1½                | 445                 | (500-1½)        |            |                        |                     |                 |
|     | 3          |                   | AB         | 2120-1                 | 459                 | (500-1)         | C          | 2120-1¼                | 459                 | (500-1¼)        |
|     |            |                   | D          | 2120-1½                | 459                 | (500-1½)        |            |                        |                     |                 |
|     | 21         |                   | AB         | 2120-1                 | 459                 | (500-1)         | C          | 2120-1¼                | 459                 | (500-1¼)        |
|     |            |                   | D          | 2120-1½                | 459                 | (500-1½)        |            |                        |                     |                 |
| CIR | ALL RWY    |                   | A          | 2180-1                 | 519                 | (600-1)         | B          | 2220-1                 | 539                 | (600-1)         |
|     |            |                   | C          | 2220-1½                | 559                 | (600-1½)        | D          | 2280-2                 | 619                 | (700-2)         |

Inoperative table does not apply to MALS Rwy 13

### DULUTH, MN

Orig-A, 30JAN20 (20030) (FAA)

ELEV 1428

### DULUTH INTL (DLH)

RADAR-1 125.45 233.7 **▽ ▲**

|              | <u>RWY</u> | <u>GP/TCH/RPI</u> | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u> | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u> | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u> | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u> |
|--------------|------------|-------------------|------------|------------------------|---------------------|-----------------|------------|------------------------|---------------------|-----------------|
| ASR          | 3          |                   | AB         | 1820-1                 | 400                 | (400-1)         | CDE        | 1820-1½                | 400                 | (400-1½)        |
|              | 9          |                   | ABCDE      | 1820/40                | 392                 | (400-¾)         |            |                        |                     |                 |
|              | 21         |                   | AB         | 1840-1                 | 420                 | (500-1)         | CDE        | 1840-1½                | 420                 | (500-1½)        |
|              | 27         |                   | AB         | 1880/40                | 459                 | (500-¾)         | CDE        | 1880/45                | 459                 | (500-¾)         |
| <b>ⓐ</b> CIR | ALL RWY    |                   | A          | 1880-1                 | 452                 | (500-1)         | B          | 1900-1                 | 472                 | (500-1)         |
|              |            |                   | C          | 1940-1½                | 512                 | (600-1½)        | DE         | 2400-3                 | 972                 | (1000-3)        |

Circling NA for CAT E SE of Rwys 3 and 27.

Rwy 3, 9, 21 helicopter visibility reduction below ¾ SM not authorized.

VGSI and descent angles not coincident.

For inoperative ALS, increase ASR S-09 Cats A/B visibility to RVR 5500, Cats C/D/E to 1½ SM.

For inoperative ALS, increase ASR S-27 Cats A/B visibility to RVR 5500, Cats C/D/E to 1½ SM.

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## RADAR INSTRUMENT APPROACH MINIMUMS

### MANDAN, ND MANDAN MUNI (Y19)

Amdt 5A, 18AUG16 (16231) (FAA)

ELEV 1994

RADAR-1 126.3 298.9 

|     | <u>RWY</u> | <u>GP/TCH/RPI</u> | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u> | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u> | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u>             | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u>                      |
|-----|------------|-------------------|------------|------------------------|---------------------|-----------------|------------|------------------------------------|---------------------|--------------------------------------|
| ASR | 31         |                   | AB         | 2440-1                 | 499                 | (500-1)         | CD         | 2440-1 <sup>3</sup> / <sub>8</sub> | 499                 | (500-1 <sup>3</sup> / <sub>8</sub> ) |
|     | 13         |                   | AB         | 2460-1                 | 522                 | (600-1)         | CD         | 2460-1 <sup>1</sup> / <sub>2</sub> | 522                 | (600-1 <sup>1</sup> / <sub>2</sub> ) |
| CIR | ALL RWY    |                   | AB         | 2460-1                 | 516                 | (600-1)         | C          | 2460-1 <sup>1</sup> / <sub>2</sub> | 516                 | (600-1 <sup>1</sup> / <sub>2</sub> ) |
|     |            |                   | D          | 2560-2                 | 616                 | (700-2)         |            |                                    |                     |                                      |

ASR S-13: Helicopter visibility reduction below  $\frac{3}{4}$  SM not authorized.

ASR S-31: Helicopter visibility reduction below  $\frac{3}{4}$  SM not authorized.

When BIS control tower closed, ASR NA.

When local altimeter setting not received, use Bismarck altimeter setting and increase all MDA 60 feet, increase all CAT C/D visibility  $\frac{1}{4}$  mile.


Circling to Rwys 4 and 22 NA.

### ROCHESTER, MN

Amdt 8A, 19JUL18 (18200) (FAA)

ELEV 1317

### ROCHESTER INTL (RST)

RADAR-1 119.8 251.125 

|     | <u>RWY</u> | <u>GP/TCH/RPI</u> | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u>             | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u>                      | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u>             | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u>                      |
|-----|------------|-------------------|------------|------------------------------------|---------------------|--------------------------------------|------------|------------------------------------|---------------------|--------------------------------------|
| ASR | 13         |                   | ABC        | 1640/24                            | 360                 | (400- $\frac{1}{2}$ )                | D          | 1640/50                            | 360                 | (400-1)                              |
|     | 31         |                   | ABC        | 1660/24                            | 356                 | (400- $\frac{1}{2}$ )                | D          | 1660/50                            | 356                 | (400-1)                              |
|     | 2          |                   | ABC        | 1680-1                             | 363                 | (400-1)                              | D          | 1680-1 <sup>1</sup> / <sub>4</sub> | 363                 | (400-1 <sup>1</sup> / <sub>4</sub> ) |
|     | 20         |                   | ABC        | 1680-1                             | 376                 | (400-1)                              | D          | 1680-1 <sup>1</sup> / <sub>4</sub> | 376                 | (400-1 <sup>1</sup> / <sub>4</sub> ) |
| CIR | ALL RWY    |                   | A          | 1720-1                             | 403                 | (500-1)                              | B          | 1780-1                             | 463                 | (500-1)                              |
|     |            |                   | C          | 1780-1 <sup>1</sup> / <sub>2</sub> | 463                 | (500-1 <sup>1</sup> / <sub>2</sub> ) | D          | 1880-2                             | 563                 | (600-2)                              |

When control tower closed, procedure NA.

For inoperative MALS R, increase S-13 and S-31 CAT D visibility to RVR 6000.

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**RADAR INSTRUMENT APPROACH MINIMUMS**

**SIOUX FALLS, SD**

Amdt 10B, 06FEB14 (18144) (FAA)

ELEV 1430

**JOE FOSS FIELD (FSD)**

RADAR-1 125.8 284.725 **T A**

|     | <u>RWY</u> | <u>GP/TCH/RPI</u> | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u> | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u>                     | <u>CAT</u> | <u>DA/<br/>MDA-VIS</u>             | <u>HAT/<br/>HAA</u> | <u>CEIL-VIS</u>                      |
|-----|------------|-------------------|------------|------------------------|---------------------|-------------------------------------|------------|------------------------------------|---------------------|--------------------------------------|
| ASR | 33         |                   | AB         | 1920-1                 | 498                 | (500-1)                             | CDE        | 1920-1 <sup>3</sup> / <sub>8</sub> | 498                 | (500-1 <sup>3</sup> / <sub>8</sub> ) |
|     | 3          |                   | AB         | 1940/24                | 516                 | (600- <sup>1</sup> / <sub>2</sub> ) | CDE        | 1940/55                            | 516                 | (600-1 <sup>1</sup> / <sub>4</sub> ) |
|     | 21         |                   | AB         | 1960/24                | 530                 | (600- <sup>1</sup> / <sub>2</sub> ) | CDE        | 1960/55                            | 530                 | (600-1 <sup>1</sup> / <sub>4</sub> ) |
|     | 15         |                   | AB         | 1960-1                 | 531                 | (600-1)                             | CDE        | 1960-1 <sup>1</sup> / <sub>2</sub> | 531                 | (600-1 <sup>1</sup> / <sub>2</sub> ) |
| CIR | ALL RWY    |                   | AB         | 1980-1                 | 550                 | (600-1)                             | C          | 1980-1 <sup>1</sup> / <sub>2</sub> | 550                 | (600-1 <sup>1</sup> / <sub>2</sub> ) |
|     |            |                   | D          | 2040-2                 | 610                 | (700-2)                             | E          | 2300-3                             | 870                 | (900-3)                              |

When control tower closed, ASR NA.

Rwy 15/33 helicopter visibility reduction below <sup>3</sup>/<sub>4</sub> SM not authorized.

For inoperative MALSR, increase S-3 Cat C/D/E visibility to 1<sup>3</sup>/<sub>8</sub> mile.

For inoperative MALSR, increase S-21 Cat C/D/E visibility to 1<sup>1</sup>/<sub>2</sub> mile.

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