

U.S. Department of Transportation Federal Aviation Administration

## InFO

Information for Operators

InFO 24001 DATE: 01/03/24

Flight Standards Service Washington, DC

## http://www.faa.gov/other visit/aviation industry/airline operators/airline safety/info/all infos

An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements, with relatively low urgency or impact on safety. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

**Subject:** National Weather Service (NWS) Real-Time Mesoscale Analysis (RTMA).

**Purpose:** This InFO supersedes InFO 15006. In addition, it provides information on the use of the NWS RTMA weather data when sensors on an automated weather system fail to report either temperature or altimeter setting at an airport.

**Background:** Automated weather observation systems provide surface weather reports at many airports in the United States. Systems such as the Automated Surface Observing System (ASOS) or Automated Weather Observing System (AWOS) have reliably provided reports at airports for over 30 years. Occasionally the sensors on these automated systems have been known to fail. Many airports utilize human weather observers to either back-up or augment these systems. However, at airports without a human weather observer to back-up or augment an automated system, the lack of temperature and altimeter setting reports due to failed sensors have led to delays, diversions, and cancellations in air carrier operations.

Over the past several years the Federal Aviation Administration (FAA) conducted research on the RTMA system through the NWS Environmental Modeling Center. The research provided variability and reliability of RTMA information for most elements of the Meteorological Aerodrome Report (METAR). The data indicates that altimeter setting and temperature data from an RTMA can be used in lieu of the missing METAR information if mitigation strategy is established.

**Discussion:** The NWS developed an alternative system for reporting temperature and pressure that operators, pilots, and aircraft dispatchers could easily use. The RTMA provides an hourly report of temperature and pressure at an airport, every hour, 24 hours a day. These reports are now available at approximately 540 Title 14 of the Code of Federal Regulations (14 CFR) Part 139 airports at which air carrier operations could be conducted. The airports with RTMA data availability are listed within areas depicted on the RTMA website; the website will be updated on or after January, 24 2024. The areas are: Alaska (akrtma), Guam (gurtma), Hawaii (hirtma), Puerto Rico (prrtma) and the 48 Contiguous United States (rtma2p5). Operators may begin using these reports with the approval of the Certificate Management Office.

**a.** Adjustments. The values found at the RTMA site are 95% accurate throughout the U.S. for both temperature and altimeter setting when utilizing the following mitigations. Temperature requires adding 4 degrees Celsius to the RTMA derived temperature. Altimeter setting requires increasing

the Minimum Descent Altitude or Decision Height value on the approach chart by 100 feet and increasing visibility required by ½ statute mile.

b. Procedures. Operators who use RTMA data are expected to develop and implement policies and procedures as soon as possible to ensure the pilot-in-command (PIC), and for part 121 domestic and flag operations, the aircraft dispatcher, have access to, or are otherwise provided with current RTMA temperature and altimeter setting reports. These reports should be available during the conduct of operations at any airport where altimeter setting or temperature is not being reported by an automated weather system or human weather observer and minimums are increased to account for variability in the data. The Operator should update their RTMA procedures in the General Operations Manual or Enhanced Weather Information System (EWINS) program revision if applicable. Procedures should be established for distribution of the data to the flightcrew via company dispatch and recording the use as required by 121 Subpart V Records and Reports.

**Note:** Refresh the web browser or reload the page to ensure the most current RTMA data is displayed.

- c. Regional RTMA Values. To view RTMA values, see below.
  - RTMA values for the 48 Contiguous United States are available at: <u>link</u>.
  - RTMA values for Alaska are available at: link.
  - RTMA values for Guam are available at: <u>link</u>.
  - RTMA values for Hawaii are available at: link.
  - RTMA values for Puerto Rico are available at: <u>link</u>.
- **d. Sample Table.** The table below is a sample portion of the RTMA values for the 48 Contiguous United States. Each row contains the Station abbreviation, the Latitude/Longitude, the temperature at two meters above ground, and the altimeter setting.

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*****
RTMA 2m-temperature (degrees Celsius) and altimeter setting (inHg)
COMPUTED: 1239Z 11 Dec 2023
VALID: 1239Z 11 Dec 2023 to 1339Z 11 Dec 2023
***************
                                            2m-T
station Lat Lon
                                                           ALT

      40.65
      -75.44
      2.14

      32.41
      -99.68
      4.77

      35.04
      -106.61
      -3.69

      45.45
      -98.42
      -8.35

      31.54
      -84.19
      2.21

      41.25
      -70.06
      13.71

      31.61
      -97.23
      0.94

                                                       29.81
KABE
KABI
                                                         30.13
                                                           N/A
KABO
                                                        29.96
KABR
                                                         30.15
KABY
                                                         29.49
KACK
            31.61 -97.23
                                          0.94
                                                          30.19
KACT
            40.98 -124.11 10.45
KACV
                                                          30.24
KACY
             39.46 -74.58
                                         2.89
                                                          29.76
             32.97 -96.84
                                           2.32
                                                             N/A
KADS

      32.97
      -96.84
      2.32

      31.33
      -92.55
      -1.90

      32.99
      -97.32
      1.89

      33.37
      -81.96
      3.03

      33.95
      -83.33
      1.04

                                                         30.27
KAEX
                                                           30.15
KAFW
                                                           30.08
KAGS
KAHN
                                                           30.12
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KAIA	42.05	-102.80	-4.22	30.04
KALB	42.75	-73.80	0.76	29.65
KALN	38.89	-90.05	-2.92	30.20
KALO	42.56	-92.40	-7.32	30.14
KALS	37.44	-105.87	-15.97	N/A
KALW	46.09	-118.28	3.45	30.19

**Recommended Action:** Directors of Operations, Dispatch and Operational Control Managerial Staff should ensure that the appropriate operator, pilot and dispatch personnel are trained in the access and use of RTMA temperature and altimeter setting in lieu of the missing element in the METAR.

**Contact:** Questions or comments regarding this InFO should be directed to Air Transportation Division at 202-267-8166.