NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.305

National Policy

Effective Date:
6/1/15

Cancellation Date:
6/1/16

SUBJ: Real-Time Mesoscale Analysis: Alternative Report of Surface Temperature Provided by the National Weather Service

1. Purpose of This Notice. This notice provides information regarding an alternative report of surface temperature provided by the National Weather Service (NWS). This alternative report is known as a Real-Time Mesoscale Analysis (RTMA).

2. Audience. The primary audience for this notice is Federal Aviation Administration (FAA) certificate-holding district offices (CHDO), including a Flight Standards District Office (FSDO) or certificate management office (CMO), principal operations inspectors (POI), and Aviation Safety Inspector – Aircraft Dispatchers (ASI-AD) assigned to certificate holders who are authorized to conduct Title 14 of the Code of Federal Regulations (14 CFR) part 121 and/or 135 operations. The secondary audience includes Flight Standards Service (AFS) divisions and branches in the regions and in headquarters (HQ).

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Air carriers (operators) can find this notice on the FAA's Web site at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background.

a. Failure of Automated Temperature Sensors. 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 surface weather reports at airports for over 25 years. Occasionally, the sensors on these automated systems have been known to fail. The majority of the failures have been related to temperature sensors. Many airports utilize human weather observers to either back up or augment automated weather systems. However, at airports without a human weather observer to back up or augment an automated system, the lack of temperature reports due to failed sensors has led to delays, diversions, and cancellations in air carrier operations.

b. Alternative Reports of Surface Temperature. In response to the issue of missing surface temperature reports, the FAA solicited the assistance of the NWS in developing an alternative report of surface temperature that certificate holders, pilots, and aircraft dispatchers could easily use. The NWS responded by developing an RTMA surface temperature report which provides a simple hourly report of surface temperature at an airport every hour, 24 hours a day. RTMA surface temperature reports are now available at approximately 540 14 CFR part 139 airports at which air carrier operations could be conducted.

5. An RTMA Satisfies the Regulatory Requirements for Surface Temperature at the Airport of Operation. RTMA surface temperature reports are provided by the NWS; therefore, they fall under the category of "Weather Reports Prepared by the NWS." A certificate holder does not require additional operations specification (OpSpec) authorization to use an RTMA.

6. An RTMA Surface Temperature Report is Intended for Use as an Alternative During Automated Temperature Sensor Failure with No Human Backup. The NWS and the FAA have worked in partnership to make the RTMA available to certificate holders as an alternative report of surface temperature in the event of an ASOS or AWOS sensor failure with no human backup or augmentation. When temperature is being reported by an ASOS, AWOS, human weather observer, or automatic terminal information service (ATIS), these reports of surface temperature take precedence over the temperature reported in an RTMA.

7. Part 135 Operations at Airports without Weather Facilities. For part 135 operations that do not require weather facilities or weather reports at the airport of operation, part 135 certificate holders and operators may use an RTMA surface temperature report (where provided) at an airport that does not have an automated weather system, a human weather observer, or when the sensors on an automated system fail to report temperature. Information regarding part 135 operations at airports without weather facilities is located in FAA Order 8900.1, Flight Standards Information Management System (FSIMS), Volume 3, Chapter 26, Section 2.

8. Where to Access RTMAs. RTMAs are available at the following Web site: http://nomads.ncep.noaa.gov/pub/data/nccf/com/rtma/prod/airport_temps/. To ensure you access the most current RTMA, you may need to clear the cache memory on your computing device or refresh your browser (e.g., Windows, ctrl F5, Mac/Apple R or command R or Linux F5, etc.) when accessing RTMAs throughout a particular day. Samples of RTMAs are included in Appendix A of this notice.

9. Action. Certificate holders may begin using RTMA surface temperature reports immediately at airports that are experiencing an ASOS or AWOS sensor failure with no human backup or augmentation. POIs and ASI-ADs must work with certificate holders who conduct part 121 and/or 135 operations to ensure each certificate holder adopts policies and procedures governing the use of the RTMAs, as soon as possible, but no later than 30 days from the publication of this notice. The 30-day window is intended to allow certificate holders the time to develop procedures, while allowing them to use RTMAs immediately if necessary, due to automated temperature sensor failure with no human backup.

a. Inform Certificate Holders. POIs and ASI-ADs with oversight responsibility of certificate holders who conduct part 121 and/or 135 operations must inform the certificate holders, for whom they are responsible, of the availability of the RTMA and the contents of this notice. Information to certificate holders regarding the use of an RTMA has also been provided via Information for Operators (InFO).

b. Require Certificate Holders to Have Policies and Procedures. In accordance with 14 CFR part 119, § 119.43, part 121, §§ 121.135 and 121.539, and part 135, § 135.23, as applicable, POIs must ensure that certificate holders have policies and procedures in place, as soon as possible, that describe the use of an RTMA as an alternative report of surface temperature. Certificate holders must include information for pilots, aircraft dispatchers, and the appropriate operational control personnel.

c. Ensure Information is Available to the Pilot in Command (PIC). RTMA surface temperature reports are currently available via the Internet. Certificate holders are responsible for ensuring their pilots have access to, or are provided with, all current RTMA surface temperature reports during the conduct of operations at any airport where temperature is not being reported by an automated weather observation system or human weather observer. POIs must make each certificate holder aware of this responsibility.

(1) Part 121 Domestic and Flag Operations. Each certificate holder must inform its pilots and aircraft dispatchers of the availability of RTMA surface temperature reports. In accordance with § 121.601, aircraft dispatchers must directly provide the PIC with RTMA surface temperature reports any time temperature sensors at the airport of operation (origin, destination, or alternate airport) fail to report temperature and there is no human backup. Section 121.601 requires the dispatcher to provide the PIC with all available current weather reports, before and during flight. In accordance with §§ 121.687 and 121.695, RTMA surface temperature reports must be included in or attached to the dispatch release and retained accordingly.

(2) Part 121 Supplemental Operations. In part 121 supplemental operations, the responsibility of obtaining available and current weather reports falls on the PIC. However, the RTMA is currently only available via the Internet. The Director of Operations must ensure the PIC has access to current RTMA surface temperature reports, or the Director of Operations must directly provide the PIC with current RTMA surface temperature reports any time temperature sensors at the airport of operation (origin, destination, or alternate airport) fail to report temperature and there is no human backup. The Director of Operations may delegate this function; however, he or she may not delegate his or her responsibility for ensuring the PIC has a current surface temperature report in accordance with part 121 regulatory and aircraft performance requirements. In accordance with §§ 121.689 and 121.697, RTMA surface temperature reports must be included in or attached to the flight release and retained accordingly.

(3) Part 135 Operations. When weather reports at the airport of operation are required for part 135 operations, the certificate holder is responsible to ensure the PIC is able to obtain current RTMA surface temperature reports any time temperature sensors at the airport of operation (origin, destination, or alternate airport) fail to report temperature and there is no human backup.

10. Disposition. We will incorporate the information in this notice into Order 8900.1 before this notice expires. Direct questions or comments concerning this notice to the New Program Implementation Branch (AFS-240) at 202-267-8166.

John Barbagallo
Deputy Director, Flight Standards Service

Appendix A. Sample RTMA Surface Temperature Reports

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*********************************************************
********** RTMA temperature in degrees Celsius at
select station locations COMPUTED: 0743Z 18 May 2015
VALID: 0743Z 18 May 2015 to 0843Z 18 May 2015
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station    Lat     Lon          T

KAVP      41.33   -75.73      17.67
KLAN      42.77   -84.60      21.37
KSEA      47.45  -122.30      14.54
KEFD      29.60   -95.17      26.08
KMMH      37.62  -118.83       2.26
KSPS      33.98   -98.50      18.56
KGGG      32.35   -94.65      21.09
KAIA      42.05  -102.80       6.46
KCAK      40.92   -81.43      20.07
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