NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

N JO 7210.907

Effective Date:
March 29, 2018

Cancellation Date:
September 13, 2018

SUBJ: Altimeter Requirements

1. Purpose of This Notice. This notice revises the requirements for facility altimeter equipment and altimeter comparison checks.

2. Audience. This order applies to all FAA and FAA-contract personnel, FAA Technical Operations, Limited Aviation Weather Reporting Stations (LAWRS) personnel, Non-Federal Observation (NF-OBS) Program personnel, as well as United States Coast Guard (USCG) personnel, as a component of the Department of Homeland Security and engaged in taking and reporting aviation surface observations.

3. Where Can I Find This Notice? This notice is available on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices/ and on the air traffic publications website at http://www.faa.gov/air_traffic/publications/.

4. Explanation of Policy Change. This change revises the requirements for facility altimeter equipment and altimeter checks.

5. Procedures. FAA Order JO 7210.3. Amend the following paragraphs to read as follows:

1−2−4. ABBREVIATIONS

Title through SWAP, no change

Abbreviation	Meaning
SAWS	Stand Alone Weather System
SWAP	Severe weather avoidance plan
SWS	Surface Weather System

No further changes to paragraph

2−10−3. ALTIMETER REQUIREMENTS

a. At least two sources of altimeter setting information, or an approved pressure standard, are required in a TRACON, radar approach control (RAPCON), terminal radar approach control in tower cab (TRACAB), combined center/RAPCON (CERAP), radar ATC facility (USN) (RATCF), tower cab, and a FSS that takes weather observations and/or provides Local Airport Advisories (LAA). When two or more facilities are located on the same airport, the requirement may be reduced to one source of altimeter

setting information per facility. Aircraft altimeters must not be used in reporting altimeter settings.

NOTE−
Stand-alone RADAR approach control facilities (TRACON, RAPCON, RATCF, CERAP) not associated with a control tower are only required to maintain altimeter settings for those airports under their jurisdiction.

b. Each of the following systems is considered to be one (1) source of altimeter setting information for the purposes of this paragraph:

1. Automated Surface Observing System (ASOS)
2. Automated Weather Observing System (AWOS)
3. Stand Alone Weather Sensor (SAWS)
4. Surface Weather System (SWS)
5. Digital Altimeter Setting Indicator (DASI)
6. Altimeter Setting Indicator (ASI)

c. ASOS, AWOS, SAWS, and SWS systems are considered approved pressure standards for the purposes of this paragraph.

No further changes to paragraph

2−10−4. COMPARISON CHECKS

a. Comparison checks against another source of altimeter setting information are not required for ASOS, AWOS, SAWS or SWS.

NOTE−
ASOS, AWOS, SAWS, and SWS are equipped with a minimum of two (2) and as many as three (3) digital pressure transducers.

b. Facilities equipped with ASI or DASI:

1. Compare the reading of each ASI daily with a collocated ASOS/AWOS/SAWS/SWS or with the altimeter setting issued by an associated facility with a commissioned ASOS/AWOS/SAWS/SWS that is located either on the airport or within the distances set forth in subparas c and d.

2. When the differences between the two altimeter settings exceed 0.05 in. Hg. at nonprecision approach locations or 0.02 in. Hg. at precision approach locations, remove the instrument from service and notify Technical Operations personnel. When all ASI instruments in the facility are found to exceed the tolerances, report the altimeter setting as *missing*.

3. When the difference is less than the tolerances specified in subpara 2 above, the value (+ or −) is applied as the correction factor to determine the operational altimeter setting.

(a) On dial−type display ASIs, post the correction factor directly on the face of the instrument. Use the same comparison procedures and determine the correction factor for each instrument in the facility.

(b) On DASI systems, local facility procedures must be developed in coordination with the associated Technical Operations (Tech Ops) office to make routine comparison checks with ASOS/AWOS/SAWS/SWS and adjust the DASI to display the correct altimeter setting.

NOTE−
Facilities that have DASI equipment that is not FAA owned or maintained must accomplish the procedures in paragraph 2-10-4, b1, b2 and b3(a) monthly.

c. At ASI or DASI locations that are not collocated with a commissioned ASOS/AWOS/SAWS/SWS, make a comparison against the altimeter setting issued by an adjacent facility with a commissioned ASOS/AWOS/SAWS/SWS.

1. At locations where precision approaches are conducted, the facility used for comparison must be located within 10 NM, and at both locations the wind speed must be 12 knots or less with no gusts above 15 knots.

2. At all other locations the distance must not exceed 25 NM, and at both locations the wind speed must be 15 knots or less with no gusts above 20 knots.

3. The difference in elevation does not exceed 100 feet at precision approach locations and 200 feet at all other locations.

4. The station's temperature at both locations must be within 30 degrees Fahrenheit of the standard atmosphere temperature for the station's elevation.

NOTE−
The following formula may be used to determine the standard atmosphere temperature for station elevation:

T = Standard Temperature is 59°F H = Field Elevation. 0.0036 Standard Atmospheric Temperature change per foot. H x 0.0036 = Standard Temperature for station elevation.

EXAMPLE−
1. *Tower A field elevation 600 feet: 600 x 0.0036 = 2.16*°F *of change, is rounded to 2*°F.
59°F − *2*°F = *57*°F *standard temperature for Tower A adjusted for elevation.*

2. *Tower B field elevation 700 feet: 700 x 0.0036 = 2.52*°F *of change, is rounded to 3*°F.
59°F − *3*°F = *56*°F *standard temperature for Tower B adjusted for elevation.*

If both sites are between ± 30°F *{87*°F *and 27*°F *for Tower A and 86*°F *and 26*°F *for Tower B} a comparison check is appropriate for temperature.*

5. Do not use altimeter setting values when the difference exceeds ± 0.02 in. Hg. at precision approach locations or ± 0.05 in. Hg. at all other locations.

d. An approved pressure standard is required for routine altimeter setting comparison checks at all facilities that exceed the requirements of subpara c.

No further changes to paragraph

3-1-1. BASIC EQUIPMENT

1. At terminal facilities where certified information display system (IDS) equipment is installed, the IDS must be the display source for the time, DASI, RVR, wind (including wind shear ribbon display terminals), and weather data from ASOS, AWOS, SAWS, SWS, etc.

No further changes to paragraph

6. Distribution. This notice is distributed to the following ATO service units: Air Traffic Services, Mission Support Services, System Operations, and Safety and Technical Training; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

7. Background. Over the past 10 years, the FAA has deployed Standalone Surface Weather Sensors (SAWS) and is currently deploying Surface Weather Systems (SWS). SAWS and SWS both have multiple pressure sensors and are approved as an airport pressure standard without a comparison to other altimeter equipment just as an automated weather observation system (ASOS/AWOS). Since some altimeter equipment (e.g. DASI, SWS) can also interface directly with terminal automation systems, these changes will help ATCT and TRACON facilities use the same altimeter setting for airports within their jurisdiction.

Original signed by Sharon Kurywchak

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2/26/2018
Date Signed