

day values, a safe distance above the terrain/obstacle will be maintained on the corrected approach segment(s). Pilots may calculate a correction for each fix based on the fix altitude if desired.

NOTE—

Pilots may use Real Time Mesoscale Analysis (RTMA): Alternate Report of Surface Temperature, for computing altitude corrections, when airport temperatures are not available via normal reporting.

f. How to apply Cold Temperature Altitude Corrections on an Approach.

1. All Segments Method: Pilots may correct all segment altitudes from the IAF altitude to the MA final holding altitude. Pilots familiar with the information in this section and the procedures for accomplishing the all segments method, only need to use the published “snowflake” icon,  /CTA temperature limit on the approach chart for making corrections. Pilots are not required to reference the CTA list. The altitude correction is calculated as follows:

(a) Manual correction: Pilots will make a manual correction when the aircraft is not equipped with a temperature compensating system or when a compensating system is not used to make the correction. Use TBL 7-3-1, ICAO Cold Temperature Error Table, to calculate the correction needed for the approach segment(s).

(1) Correct all altitudes from the FAF/PFAF up to and including the IAF altitude: Calculate the correction by taking the FAF/PFAF altitude and subtracting the airport elevation. Use this number to enter the height above airport column in TBL 7-3-1 until reaching the reported temperature from the “Reported Temperature” row. Round this number as applicable and then add to all altitudes from the FAF altitude through the IAF altitude.

(2) Correct all altitudes in the final segment: Calculate the correction by taking the MDA or DA for the approach being flown and subtract the airport elevation. Use this number to enter the height above airport column in TBL 7-3-1 until reaching the reported temperature from the “Reported Temperature” row. Use this number or round up to next nearest 100 ft. Add this number to MDA or DA, and any step-down fix altitudes in the final segment.

(3) Correct final holding altitude in the MA Segment: Calculate the correction by taking the MA holding altitude and subtract the airport elevation. Use this number to enter the height above airport column in TBL 7-3-1 until reaching the reported temperature from the “Reported Temperature” row. Round this number as applicable and then add to the final MA altitude only.

(b) Aircraft with temperature compensating systems: If flying an aircraft equipped with a system capable of temperature compensation, follow the instructions for applying temperature compensation provided in the airplane flight manual (AFM), AFM supplement, or system operating manual. Ensure that temperature compensation system is on and active prior to the IAF and remains active throughout the entire approach and missed approach.

(1) Pilots that have a system that is able to calculate a temperature-corrected DA or MDA may use the system for this purpose.

(2) Pilots that have a system unable to calculate a temperature corrected DA or MDA will manually calculate an altitude correction for the MDA or DA.

NOTE—

Some systems apply temperature compensation only to those altitudes associated with an instrument approach procedure loaded into the active flight plan, while other systems apply temperature compensation to all procedure altitudes or user entered altitudes in the active flight plan, including altitudes associated with a Standard Terminal Arrival (STAR). For those systems that apply temperature compensation to all altitudes in the active flight plan, delay activating temperature compensation until the aircraft has passed the last altitude constraint associated with the active STAR.

2. Individual Segment(s) Method: Pilots are allowed to correct only the marked segment(s) indicated in the CTA list (https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/). Pilots using the Individual Segment(s) Method will reference the CTA list to determine which segment(s) need a correction. (See FIG 7-3-1.)