7–3–6. Examples for Calculating Altitude Corrections on CTAs

All 14 CFR Part 97 IAPs must be corrected at an airport. The following example provides the steps for correcting the different segments of an approach and will be applied to all 14 CFR Part 97 IAPs:

a. Missoula Intl (KMSO). Reported Temperature −12°C: RNAV (GPS) Y RWY 12.

1. All Segments Method: All segments corrected from IAF through MA holding altitude.

(a) Manual Calculation:

(1) Cold Temperature Restricted Airport Temperature Limit: −12°C.

(2) Altitude at the Final Approach Fix (FAF) (SUPPY) = 6200 ft.

(3) Airport elevation = 3206 ft.

(4) Difference: 6200 ft. – 3206 ft. = 2994 ft.

(5) Use TBL 7−3−1, ICAO Cold Temperature Error Table, a height above airport of 2994 ft. and −12°C. Visual interpolation is approximately 300 ft. Actual interpolation is 300 ft.

(6) Add 300 ft. to the FAF and all procedure altitudes outside of the FAF up to and including IAF altitude(s):

[a] LANNY (IAF), CHARL (IAF), and ODIRE (IAF Holding−in−Lieu): 9400 + 300 = 9700 ft.

[b] CALIP (stepdown fix): 7000 + 300 = 7300 ft.

[c] SUPPY (FAF): 6200 + 300 = 6500 ft.

(7) Correct altitudes within the final segment altitude based on the minima used. LP MDA = 4520 ft.

(8) Difference: 4520 ft. – 3206 ft. = 1314 ft.

(9) AIM 7−3−1 Table: 1314 ft. at −12°C is approximately 150ft. Use 150 ft. or round up to 200 ft.

(10) Add corrections to altitudes up to but not including the FAF:

[a] BEGPE (stepdown fix): 4840 + 150 = 4990 ft.

[b] LNAV MDA: 4520 + 150 = 4670 ft.

(11) Correct JENKI/Missed Approach Holding Altitude: MA altitude is 12000:

[a] JENKI: 12000 − 3206 = 8794 ft.

(12) Table 7−3−1: 8794 ft. at −12°C. Enter table at −12°C and intersect the 5000 ft. height above airport column. The approximate value is 500 ft.

(13) Add correction to holding fix final altitude:

[a] JENKI: 12000 + 500 = 12500 ft.

b. Temperature Compensating System: Operators using a temperature compensating RNAV system to make altitude corrections will be set to the current airport temperature (−12°C) and activated prior to passing the IAF. A manual calculation of the cold temperature altitude correction is required for the MDA/DA.

1. Individual Segments Method: Missoula requires correction in the intermediate and final segments. However, in this example, the missed approach is also shown.

(a) Manual Calculation: Use the appropriate steps in the All Segments Method above to apply a correction to the required segment.

(1) Intermediate. Use steps 7−3−6 a. 1. (a) (1) thru (6). Do not correct the IAF or IF when using individual segments method.

(2) Final. Use steps 7−3−6 a. 1. (a) (7) thru (10).

(3) Missed Approach. Use steps 7−3−6 a, 1. (a) (11) thru (13).

(b) Temperature Compensating System: Operators using a temperature compensating RNAV system to make altitude corrections will be set to the current airport temperature (−12°C) and activated at a point needed to correct the altitude for the segment. A manual calculation of the cold temperature altitude correction is required for the MDA/DA.