

Instrument Rating EPG 2018 Section 3.2 – Altimeter Setting Procedures and Altimeter Errors Questions

Question 14

Note: You will need to use the cold weather correction tables from the CAP GEN for this question:

The first step is to determine the altitude difference to which the correction needs to be applied. The correction needs to be applied to the difference in altitude between that of the altimeter setting station and the aeroplane.

However we only have the aircraft's indicated altitude which we know to be lower than 5,400' so any estimate of the cold weather correction that we calculate will be lower than the actual correction required and will therefore be a conservative estimate.

Altitude over which to apply the correction is $5,400' - 2,267' = 3,133'$. To estimate the correction we can use the tables as published to interpolate:

Aerodrome Temperature	Height above the elevation of the altimeter setting source (ft)		
	3,000'	3,133	4,000'
-20C	430	449	570
-27C		542	
-30C	570	582	760

So the correction required is 542' which puts the aeroplane at approximately

$$5,400' - 542' = 4,858'$$

So the clearance above the obstacle is $4,858' - 4,320' = 538'$