Calculation of barometric pressure (2 methods)

a. If a handheld barometer is available, record the current barometric pressure “inHg.” This value will need to be converted to mmHg using the following equation:

\[
\frac{ABS\ inHg}{0.0393701} = ABS\ mmHg
\]

Where:
- ABS inHg = The absolute barometric pressure from the handheld barometer (inHg)
- ABS mmHg = The absolute barometric pressure (mmHg)

b. If no barometer is available check the nearest weather station before you service the instrument for barometric pressure in mbar (Weather Bureau station is preferred http://www.wrh.noaa.gov/otx/). You will first need to convert from mbar to mmHg.

\[
0.75 \times BP_{mbar} = BP_{mmHg}
\]

Weather stations report a corrected barometric pressure, which is barometric pressure at sea level (BP). To convert the barometric pressure at sea level to barometric pressure at altitude BP’ Use the following equation:

\[
BP' = BP - 2.5\left(\frac{A_{ft}}{100}\right)
\]

Where:
- BP’ = Barometric pressure at altitude mmHg
- BP = Barometric pressure at sea level mmHg
- A_{ft} = Altitude in feet