METEOROLOGY

→PA=ELV-27x (QNHlocal+1013)

→TA=PA+27(QNHlocal-QNH)

- T.A. = I.A. + 27 x (QNH - 1013) + (0,004 x ISA dev x PA)→
- TA=IA+Xc → Xc= ISAcorrection x IA ISAcorrection= 4% each 10°C

→ISAtem=15-[(Height/1000)x2]

→QNH = QFE + (FE ÷ 27)

→QFE = QNH - (FE ÷ 27)

→IND ALT = TRUE ALT - (4 x thickness/1000 x ISA Dev)

→FL (If I have HPA)= 1660-550xLOG(hpa)

1)

Considering the North Atlantic route from the Azores to Bermuda, the mean height of the tropical tropopause during summer is approximately..

Tropopause Height=(16xCos(lat))x3280

- Summer+3000
- Winter-3000

→IF QNH is higher than 1013→ TA(+) is HIGHER than IA(-)

→IF QNH is lower than 1013←TA(-) is LOWER than IA(+)

→ Temperature COLDER than ISA= TA will be LOWER than IA

WIND

1) Ballot's.

→With your back UPPER wind, the cold air is to your left (northern hemisphere)

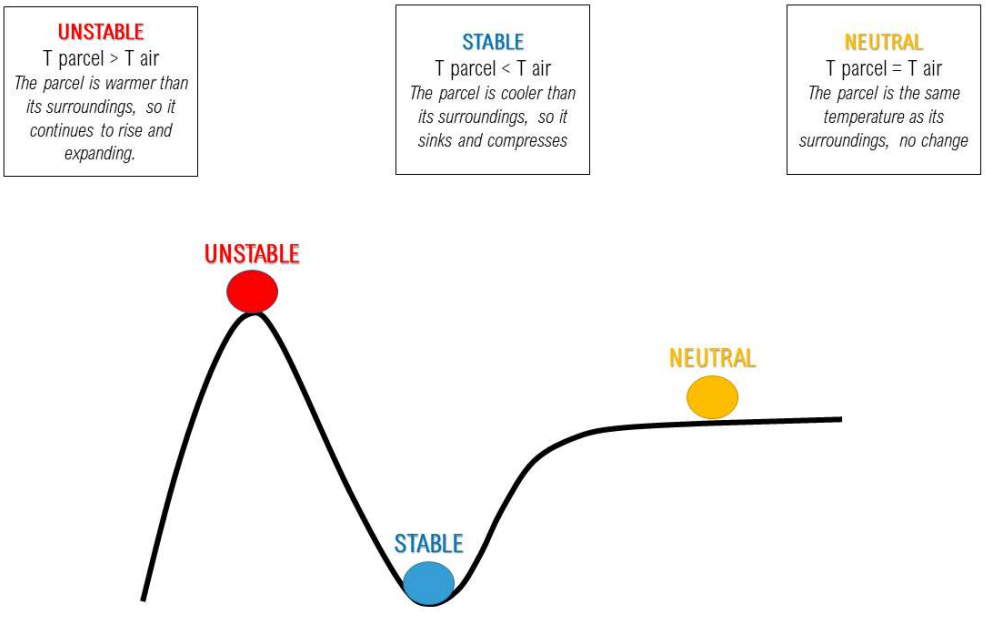
High on the left = Head wind

Low on the left = tail wind

→SH with your back upper wind the cold air is to your right....

2) Geostrophic wind depends:

- Density
- Earth's Rotation
- Geographic latitude



1)RH(Relative Humidity)=100-5(OAT-DW)

2) When the increasing the Air Temperature, the relative humidity will decrease

3) Td= T-(100-RH)/5 = Relative humidity given the Temperature and dewpoint