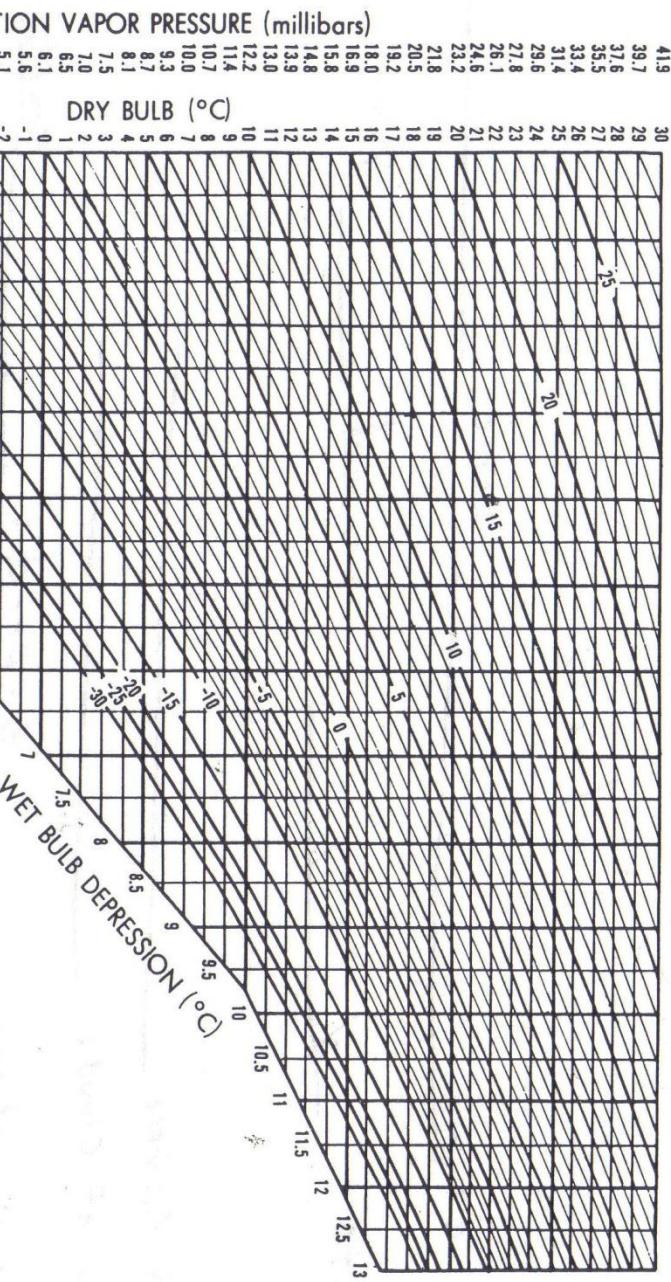


PSYCHROMETER

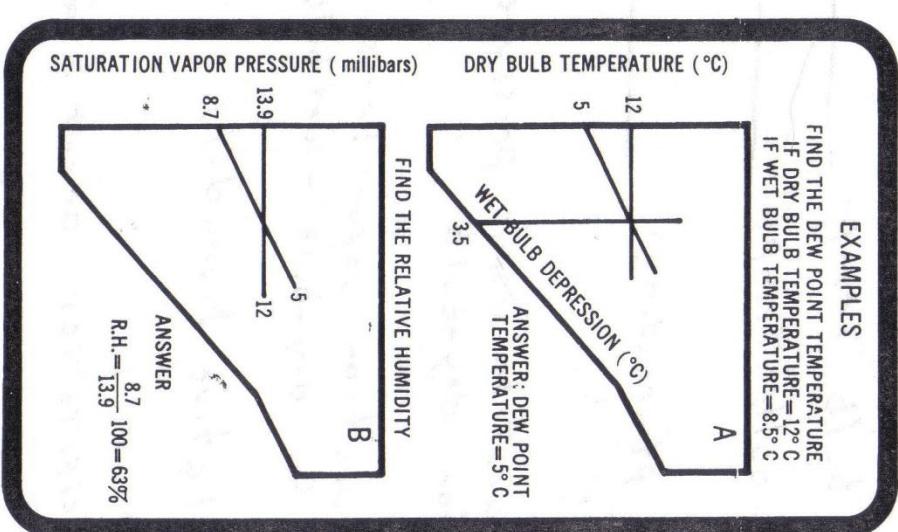


SATURATION VAPOR PRESSURE (millibars)

DRY BULB ($^{\circ}\text{C}$)

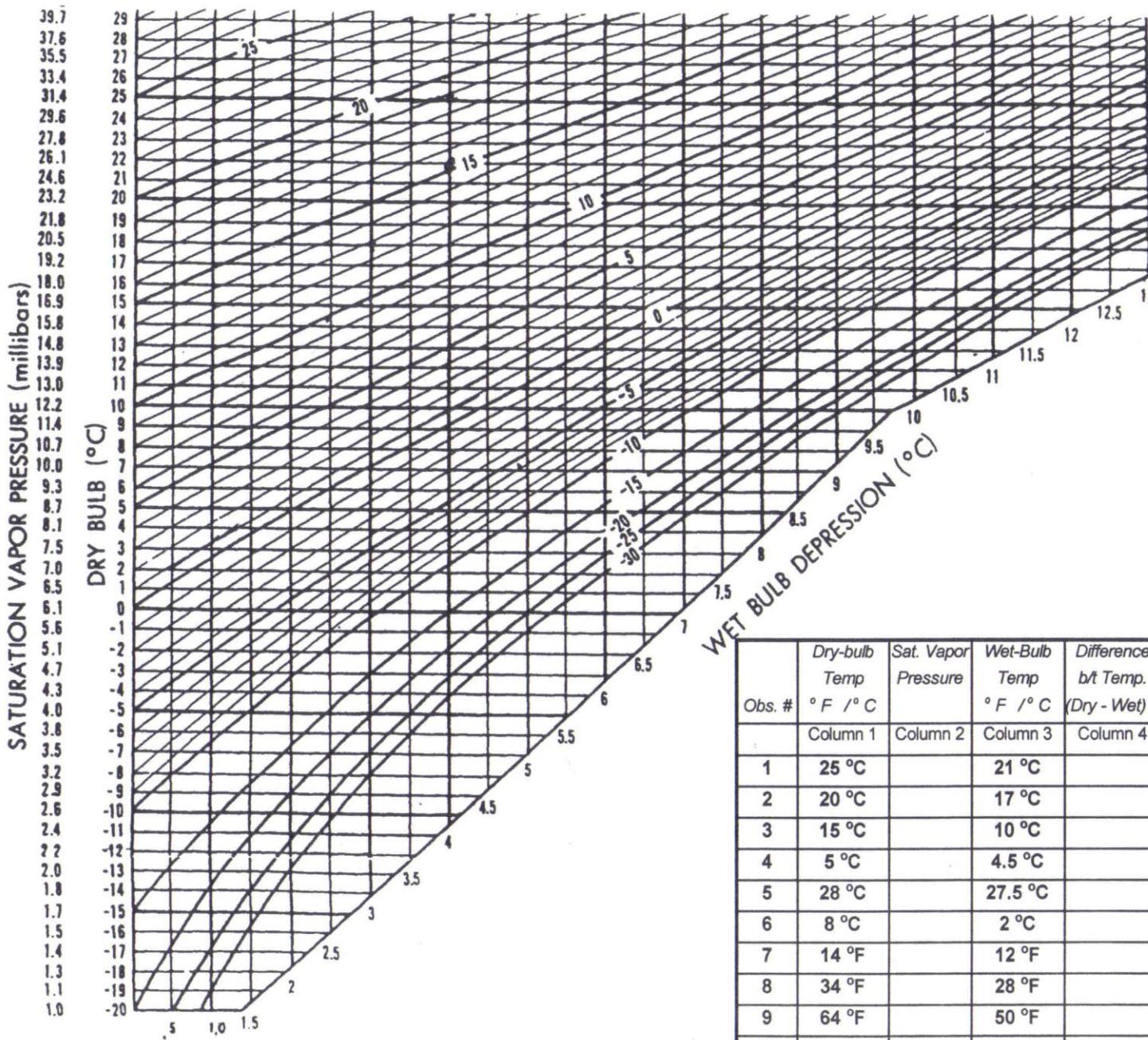
WET BULB DEPRESSION ($^{\circ}\text{C}$)

- To find dew-point temperature (See Example A): Find the dry-bulb temperature along the left side of the chart (12°C). Follow horizontal line to the vertical line for the wet-bulb depression (difference between dry-bulb and wet-bulb temperatures, or 3.5°C). Read the dew-point temperature from sloping line at this intersection (5°C).
- To find the relative humidity (See Example B): Read the value of the saturation vapor pressure for the dry-bulb temperature at left side of chart. (13.9 mb is saturation vapor pressure for air at 12°C .) Read the value of saturation vapor pressure for dew-point temperature also at left side of chart (8.7 mb is saturation vapor pressure for air at 5°C .) Divide the second value (8.7) by the first (13.9) and multiply by 100. Answer: 63% .



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Psychrometer Chart



To find: ***Relative Humidity***

- 1) Take reading of Dry bulb
 - 2) Take reading of Wet bulb
 - 3) Subtract the two and locate this new number on the chart.
 - 4) Locate the Dry bulb number on the chart and record that number and the number to the left of it.
 - 5) Follow the two numbers on the straight line to where they meet.
 - 6) Then follow the curved line.
 - 7) This line gives you a new number.
 - 8) Record this number and the number to the left of it.
 - 9) This new number is the Dew Point.
 - 10) Divide the dew point by the dry bulb number. Then multiply by 100. This will give you a percent (%).