Tool for Reading Psychrometric Charts

The problem:
Develop an improved, more direct method of obtaining data from psychrometric charts.

The solution:
Make a three-legged, clear plastic tool as shown in the drawing, so that the angles of each leg correspond with the angles of psychrometric chart construction for each of the three required scales. Taper the reading edges, uppermost surfaces on two of the legs and the left surface on the vertical leg, to the chart contact surface.

How it's done:
Align the upward extending leg of the tool with the wet bulb temperature scale and the left side of the downward leg with the dry bulb temperature scale of the psychrometric chart. At the intersection of these (continued overleaf)
two chart locations, follow the horizontal line to the right scale of the chart and read grains of moisture per pound of dry air directly.

Notes:
1. Design and use of this tool will be of interest to air conditioning, heating, aerospace, chemical, and meteorological industries.
2. A similar tool can be used with any three-variable type chart. In general, a suitable instrument can be constructed to assist in reading almost any complicated chart.
3. No further documentation is available. Inquiries may be directed to:
   Technology Utilization Officer
   Kennedy Space Center
   Kennedy Space Center, Florida 32899
   Reference: B69-10527

Patent status:
Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546

Source: Frank T. De Angelo of The Boeing Company under contract to Kennedy Space Center (KSC-10358)