

Figure 19: Standard Configuration, Non-deiced Model 102E4AL

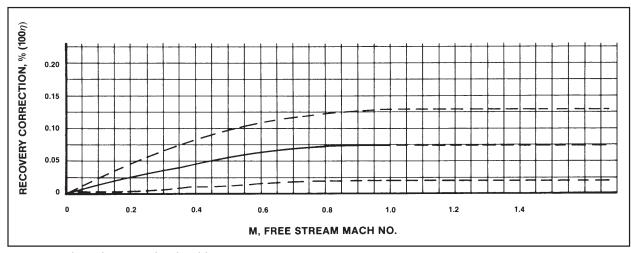


Figure 20: Wind Tunnel Data; Non-deiced Model 102 Recovery Corrections

TIME CONSTANT data for open wire elements is complicated to some extent by the fact that two time constants are involved in a precise definition of the transient shape. Prior literature presented two time constant values and the approximate equation of the transient for a step change of temperature. Flight test

personnel usually deal with ramp changes in temperature rather than step changes. Predictions of transient shapes for other than pure step or pure ramp (constant rate of change of temperature) changes require elaborate mathematical analysis. As discussed in 2.4 the time constant is simply an index of how rapidly the temperature