AME 21216 -Score Sheet

A4 - Sensor Calibration

| Author name or NDID: | |
|-------------------------|--|
| | |
| Lab Section (Day/time): | |

For more details on any of the items below, please refer to the lab handout.

| Item and Description | Points Awarded | Possible Points |
|---|-------------------|-----------------|
| Technical Writing – Please address all questions from the lab handout in the paragraphs. | | 5 |
| Table containing RTD voltage, current, and resistance at both temperatures | | 2 |
| Table containing RTD measured parameters R_0 and α_T with manufacturer's parameters | | 3 |
| Plot of pressure P vs. transducer voltage V_{out} | | 3 |
| Calibration equation for pressure transducer | | 2 |
| Sensitivity coefficient for pressure transducer | | 1 |
| Plot of air speed <i>u</i> vs. flow rate <i>Q</i> with theoretical curve | | 4 |
| TOTAL | | 20 |

Guidelines for Deliverables

- All figures and tables are properly labeled (i.e. Figure 1, Table 1, etc.) with captions.
- All plots should be made in Matlab. Do NOT use excel to make plots.
- Axes on figures must be labeled with units, and plots with multiple data sets must include a legend.
- Note that any curve fit or theoretical curve must be plotted as a smooth, continuous line, and the equation for said curve must be included as a numbered equation in the main text with all the variables defined.
- Equations must be numbered, and the variables must be defined (i.e. "where c is the speed of sound.").
- Variables should be written in italics.
- Students, please **print and proofread** the hardcopy of your deliverables before you turn it in. Sometimes, equations and figures do not print correctly!