

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0092  
CALIBRATION DATE: 01-Apr-10

WEBB GLIDER PRESSURE CALIBRATION DATA  
508 psia S/N 2328477

**COEFFICIENTS:**

|         |                |         |                |
|---------|----------------|---------|----------------|
| PA0 =   | 2.025916e-001  | PTCA0 = | 4.581463e+001  |
| PA1 =   | 2.388295e-002  | PTCA1 = | 6.927444e-001  |
| PA2 =   | 2.771991e-009  | PTCA2 = | -1.389113e-002 |
| PTHA0 = | -6.622864e+001 | PTCB0 = | 2.553288e+001  |
| PTHA1 = | 5.004307e-002  | PTCB1 = | 2.575000e-003  |
| PTHA2 = | -5.567269e-008 | PTCB2 = | 0.000000e+000  |

**PRESSURE SPAN CALIBRATION**

| PRESSURE PSIA | INST OUTPUT | THERMISTOR OUTPUT | COMPUTED PRESSURE | ERROR %FSR |
|---------------|-------------|-------------------|-------------------|------------|
| 14.60         | 658.7       | 1763.0            | 14.61             | 0.00       |
| 104.83        | 4443.5      | 1768.0            | 104.85            | 0.00       |
| 204.82        | 8633.1      | 1767.0            | 204.84            | 0.00       |
| 304.83        | 12819.1     | 1766.0            | 304.84            | 0.00       |
| 404.83        | 17000.8     | 1767.0            | 404.83            | -0.00      |
| 504.83        | 21178.8     | 1766.0            | 504.83            | 0.00       |
| 404.84        | 17001.4     | 1768.0            | 404.84            | -0.00      |
| 304.84        | 12819.2     | 1767.0            | 304.84            | -0.00      |
| 204.84        | 8632.1      | 1768.0            | 204.81            | -0.01      |
| 104.85        | 4442.9      | 1770.0            | 104.83            | -0.00      |
| 14.60         | 657.7       | 1770.0            | 14.58             | -0.00      |

**THERMAL CORRECTION**

| TEMP ITS90   | PRESS TEMP | INST OUTPUT |
|--------------|------------|-------------|
| 32.50        | 1976.80    | 666.62      |
| 29.00        | 1907.60    | 667.37      |
| 24.00        | 1806.60    | 667.39      |
| 18.50        | 1696.50    | 667.05      |
| 15.00        | 1625.60    | 666.01      |
| 4.50         | 1415.90    | 661.64      |
| 1.00         | 1345.30    | 659.57      |
| TEMP (ITS90) | SPAN (mV)  |             |
| -5.00        | 25.52      |             |
| 35.00        | 25.62      |             |

$$y = \text{thermistor output}; t = P\text{TEMPA}0 + P\text{TEMPA}1 * y + P\text{TEMPA}2 * y^2$$

$$x = \text{pressure output} - PTCA0 - PTCA1 * t - PTCA2 * t^2$$

$$n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^2)$$

$$\text{pressure (psia)} = PA0 + PA1 * n + PA2 * n^2$$

Date, Avg Delta P %FS

01-Apr-10 -0.00

