# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1245
CALIBRATION DATE: 16-Apr-12

SBE 37 PRESSURE CALIBRATION DATA
1500 psia S/N 193466

COEFFICIENTS:

| | | | |
|---|---|---|---|
| PA0 = | 4.765808e+000 | PTCA0 = | -3.762693e+001 |
| PA1 = | 6.012967e-002 | PTCA1 = | 2.957843e+000 |
| PA2 = | 2.497362e-008 | PTCA2 = | 1.982427e-002 |
| | | PTCB0 = | 3.000100e+001 |
| | | PTCB1 = | 5.000000e-004 |
| | | PTCB2 = | 0.000000e+000 |

PRESSURE SPAN CALIBRATION

| PRESSURE PSIA | INST OUTPUT | TEMP ITS90 | COMPUTED PRESSURE | ERROR %FS |
|---|---|---|---|---|
| 14.61 | 198.3 | 23.2 | 14.18 | -0.03 |
| 314.86 | 5190.8 | 23.1 | 314.95 | 0.01 |
| 614.97 | 10136.9 | 23.1 | 614.12 | -0.06 |
| 914.93 | 15076.0 | 23.1 | 914.09 | -0.06 |
| 1214.94 | 20000.2 | 23.2 | 1214.34 | -0.04 |
| 1515.00 | 24912.3 | 23.1 | 1515.11 | 0.01 |
| 1214.94 | 20017.9 | 23.1 | 1215.45 | 0.03 |
| 914.92 | 15101.1 | 23.1 | 915.62 | 0.05 |
| 614.92 | 10161.4 | 23.1 | 615.61 | 0.05 |
| 314.90 | 5197.5 | 23.0 | 315.38 | 0.03 |
| 14.62 | 207.4 | 23.0 | 14.77 | 0.01 |

THERMAL CORRECTION

| TEMP ITS90 | INST OUTPUT | TEMP ITS90 | SPAN MV |
|---|---|---|---|
| 32.50 | 252.00 | 0.00 | 30.00 |
| 29.00 | 236.03 | 30.00 | 30.02 |
| 24.00 | 215.97 | | |
| 18.50 | 195.03 | | |
| 15.00 | 182.83 | | |
| 4.50 | 151.01 | | |
| 1.00 | 134.72 | | |

x = pressure output - PTCA0 - PTCA1 * t - PTCA2 * $t^2$

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

pressure (psia) = PA0 + PA1 * n + PA2 * $n^2$