

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2333  
CALIBRATION DATE: 18-Aug-11

SBE 37 PRESSURE CALIBRATION DATA  
1450 psia S/N 1207

## COEFFICIENTS:

PA0 = -1.039500e-001  
PA1 = 6.854982e-002  
PA2 = -3.489008e-009

PTCA0 = -1.777163e+002  
PTCA1 = 1.071464e-001  
PTCA2 = -7.570134e-003  
PTCB0 = 2.499438e+001  
PTCB1 = -1.250000e-004  
PTCB2 = 0.000000e+000

## PRESSURE SPAN CALIBRATION

| PRESSURE<br>PSIA | INST<br>OUTPUT | TEMP<br>ITS90 | COMPUTED<br>PRESSURE | ERROR<br>%FS |
|------------------|----------------|---------------|----------------------|--------------|
| 14.70            | 36.9           | 22.9          | 14.71                | 0.00         |
| 314.96           | 4417.1         | 22.9          | 314.94               | -0.00        |
| 615.00           | 8795.9         | 22.8          | 614.93               | -0.01        |
| 914.98           | 13177.1        | 22.8          | 914.95               | -0.00        |
| 1215.01          | 17560.1        | 22.8          | 1214.96              | -0.00        |
| 1465.07          | 21215.2        | 22.8          | 1465.05              | -0.00        |
| 1214.96          | 17561.0        | 22.8          | 1215.02              | 0.00         |
| 914.94           | 13177.9        | 22.8          | 915.01               | 0.00         |
| 614.94           | 8796.5         | 22.8          | 614.97               | 0.00         |
| 314.97           | 4418.1         | 22.8          | 315.00               | 0.00         |
| 14.70            | 36.5           | 23.0          | 14.69                | -0.00        |

## THERMAL CORRECTION

| TEMP<br>ITS90 | INST<br>OUTPUT | TEMP<br>ITS90 | SPAN<br>MV |
|---------------|----------------|---------------|------------|
| 32.50         | 45.17          | -5.00         | 25.00      |
| 29.00         | 46.34          | 35.00         | 24.99      |
| 24.00         | 48.10          |               |            |
| 18.50         | 49.14          |               |            |
| 15.00         | 49.44          |               |            |
| 4.50          | 50.00          |               |            |
| 1.00          | 49.84          |               |            |

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

$$n = x * \text{PTCB0} / (\text{PTCB0} + \text{PTCB1} * t + \text{PTCB2} * t^2)$$

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

Date, Avg Delta P %FS

18-Aug-11 0.00

