

# SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA  
 Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0819  
 CALIBRATION DATE: 09-Jun-09

SBE 37 PRESSURE CALIBRATION DATA  
 1500 psia S/N 192103

## COEFFICIENTS:

PA0 = 2.894624e+000  
 PA1 = 6.014070e-002  
 PA2 = 1.933631e-008

PTCA0 = 0.000000e+000  
 PTCA1 = 7.286994e-001  
 PTCA2 = 2.995728e-002  
 PTCB0 = 0.000000e+000  
 PTCB1 = 0.000000e+000  
 PTCB2 = 0.000000e+000

## PRESSURE SPAN CALIBRATION

| PRESSURE<br>PSIA | INST<br>OUTPUT | TEMP<br>ITS90 | COMPUTED<br>PRESSURE | ERROR<br>%FS |
|------------------|----------------|---------------|----------------------|--------------|
| 14.53            | 222.5          | 22.9          | 14.33                | -0.01        |
| 310.92           | 5134.7         | 22.9          | 310.25               | -0.04        |
| 607.28           | 10034.7        | 22.9          | 606.37               | -0.06        |
| 903.55           | 14925.2        | 23.0          | 902.83               | -0.05        |
| 1199.99          | 19805.9        | 23.1          | 1199.62              | -0.02        |
| 1496.43          | 24671.2        | 23.2          | 1496.39              | -0.00        |
| 1200.06          | 19819.6        | 23.2          | 1200.44              | 0.03         |
| 903.37           | 14948.8        | 23.2          | 904.24               | 0.06         |
| 607.06           | 10058.7        | 23.3          | 607.77               | 0.05         |
| 310.23           | 5147.6         | 23.5          | 310.95               | 0.05         |
| 14.52            | 230.8          | 23.6          | 14.74                | 0.01         |

## THERMAL CORRECTION

| TEMP<br>ITS90 | INST<br>OUTPUT | TEMP<br>ITS90 | SPAN<br>MV |
|---------------|----------------|---------------|------------|
| 32.50         | 262.10         |               |            |
| 29.00         | 251.68         |               |            |
| 24.00         | 241.16         |               |            |
| 18.50         | 230.28         |               |            |
| 15.00         | 222.61         |               |            |
| 4.50          | 212.50         |               |            |
| 1.00          | 205.29         |               |            |

$$n = \text{instrument output} - (\text{PTCA1} * t - \text{PTCA2} * t^2)$$

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

