

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0990

CALIBRATION DATE: 18-Jan-11

SBE 39 PRESSURE CALIBRATION DATA

508 psia S/N 1256

## COEFFICIENTS:

PA0 = 3.432582e-002

PA1 = 2.406261e-002

PA2 = 1.799754e-009

PTHA0 = -6.630432e+001

PTHA1 = 4.972400e-002

PTHA2 = -8.756975e-008

PTCA0 = 1.868098e+001

PTCA1 = 2.002526e-001

PTCA2 = -6.228739e-003

PTCB0 = 2.501713e+001

PTCB1 = -1.775000e-003

PTCB2 = 0.000000e+000

## PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.72	629.6	1772.0	14.72	0.00
104.96	4372.3	1778.0	104.96	-0.00
204.97	8517.2	1779.0	204.95	-0.00
304.94	12660.6	1779.0	304.96	0.00
404.97	16802.2	1779.0	404.99	0.00
505.00	20939.6	1778.0	504.98	-0.00
404.99	16802.3	1779.0	404.99	0.00
305.00	12662.3	1779.0	305.00	0.00
205.01	8519.7	1779.0	205.01	-0.00
105.00	4373.5	1779.0	104.99	-0.00
14.71	629.1	1781.0	14.71	0.00

## THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	1306.30	643.50
4.50	1427.50	644.25
11.50	1569.00	645.01
18.50	1710.50	645.33
25.50	1852.30	644.70
32.50	1994.10	643.42

TEMP (ITS90)	SPAN (mV)
-5.00	25.03
35.00	24.95

$y = \text{thermistor output}; t = P_{\text{TEMPA0}} + P_{\text{TEMPA1}} * y + P_{\text{TEMPA2}} * y^2$

$x = \text{pressure output} - P_{\text{TCA0}} - P_{\text{TCA1}} * t - P_{\text{TCA2}} * t^2$

$n = x * P_{\text{TCB0}} / (P_{\text{TCB0}} + P_{\text{TCB1}} * t + P_{\text{TCB2}} * t^2)$

$\text{pressure (psia)} = P_{\text{A0}} + P_{\text{A1}} * n + P_{\text{A2}} * n^2$

Date, Avg Delta P %FS

18-Jan-11 -0.00

