

# 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: 0047  
CALIBRATION DATE: 10-Nov-09

WEBB GLIDER PRESSURE CALIBRATION DATA  
2900 psia S/N 7689

**COEFFICIENTS:**

PA0 = -3.921000e-001	PTCA0 = -3.921521e+002
PA1 = 1.401780e-001	PTCA1 = -1.174851e-001
PA2 = -3.452080e-008	PTCA2 = -1.098189e-003
PTHA0 = -8.050381e+001	PTCB0 = 2.417600e+001
PTHA1 = 4.748435e-002	PTCB1 = -2.000000e-004
PTHA2 = -3.237381e-007	PTCB2 = 0.000000e+000

**PRESSURE SPAN CALIBRATION**

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.68	-287.5	2149.0	14.67	-0.00
614.99	3998.4	2151.0	614.90	-0.00
1215.13	8291.8	2153.0	1214.90	-0.01
1815.13	12595.2	2155.0	1815.03	-0.00
2415.27	16907.6	2156.0	2415.12	-0.01
3015.21	21229.0	2156.0	3015.18	-0.00
2415.02	16908.1	2156.0	2415.19	0.01
1814.92	12595.7	2156.0	1815.10	0.01
1214.82	8292.0	2156.0	1214.93	0.00
614.80	3998.6	2154.0	614.93	0.00
14.67	-287.5	2156.0	14.68	0.00

**THERMAL CORRECTION**

TEMP ITS90	PRESS TEMP	INST OUTPUT
32.50	2419.90	-287.09
29.00	2343.20	-286.26
24.00	2235.20	-285.31
18.50	2115.30	-284.60
15.00	2039.50	-284.16
4.50	1813.00	-282.48
1.00	1736.70	-282.15

  

TEMP (ITS90)	SPAN (mV)
-5.00	24.18
35.00	24.17

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

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

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

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

Date, Avg Delta P %FS

10-Nov-09 0.00

