

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0047
CALIBRATION DATE: 15-Dec-11

WEBB GLIDER PRESSURE CALIBRATION DATA
2900 psia S/N 7689

COEFFICIENTS:

PA0 = -4.089559e-001	PTCA0 = -3.920083e+002
PA1 = 1.402270e-001	PTCA1 = -9.170461e-002
PA2 = -3.477050e-008	PTCA2 = -1.710339e-003
PTHA0 = -7.948463e+001	PTCB0 = 2.417600e+001
PTHA1 = 4.666586e-002	PTCB1 = -2.000000e-004
PTHA2 = -1.476473e-007	PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.73	-287.0	2199.0	14.73	-0.00
615.02	3997.8	2201.0	615.02	-0.00
1215.12	8289.5	2201.0	1214.99	-0.00
1815.18	12591.1	2204.0	1815.06	-0.00
2415.28	16902.5	2206.0	2415.21	-0.00
3015.22	21222.0	2206.0	3015.19	-0.00
2415.15	16902.9	2204.0	2415.26	0.00
1815.10	12592.4	2203.0	1815.24	0.00
1215.06	8290.4	2202.0	1215.11	0.00
615.02	3998.0	2200.0	615.04	0.00
14.73	-286.9	2202.0	14.74	0.00

THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
32.50	2418.30	-284.96
29.00	2342.10	-284.06
24.00	2233.00	-283.06
18.50	2114.10	-282.34
15.00	2037.80	-282.02
4.50	1810.20	-280.40
1.00	1734.10	-280.17

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

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

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

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

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

Date, Avg Delta P %FS

15-Dec-11 -0.00

