

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0040
CALIBRATION DATE: 07-Mar-13

SBE GLIDER PAYLOAD CTD
PRESSURE CALIBRATION DATA
44 psia S/N 3220328

COEFFICIENTS:

PA0 = -4.710467e-002
PA1 = 1.508545e-004
PA2 = -2.330397e-012
PTEMPA0 = -7.439549e+001
PTEMPA1 = 4.950412e-002
PTEMPA2 = -3.009803e-007

PTCA0 = 5.250392e+005
PTCA1 = -9.930179e+000
PTCA2 = -1.815185e-001
PTCB0 = 2.499462e+001
PTCB1 = -6.750000e-004
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.63	622032.0	1977.0	14.62	-0.02
24.94	690686.0	1979.0	24.94	-0.01
29.95	724014.0	1979.0	29.94	-0.01
34.95	757367.0	1979.0	34.94	-0.01
39.95	790773.0	1978.0	39.95	0.00
44.95	824205.0	1979.0	44.95	-0.00
39.94	790774.0	1979.0	39.95	0.00
34.94	757375.0	1979.0	34.94	0.00
29.95	724066.0	1980.0	29.95	0.01
24.94	690758.0	1980.0	24.95	0.02
14.63	622153.0	1980.0	14.64	0.02

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	2188	627203.40
29.00	2116	627208.90
24.00	2012	627314.80
18.50	1899	627441.00
15.00	1826	627533.50
4.50	1610	627620.60
1.00	1537	627676.30
TEMP (ITS90)		SPAN (mV)
-5.00		25.00
35.00		24.97

$$y = \text{thermistor output}; t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$$

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

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

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

Date, Avg Delta P %FS

07-Mar-13 0.00

