

**SOUTHWEST RESEARCH INSTITUTE  
CALIBRATION LABORATORY  
MEMORANDUM**

**October 4, 2004**

**To:** BRITT HILL DIV20 B189

**From:** Walt Hill, Metrology Group Leader  
Institute Calibration Laboratory 

**Subject:** Status of Calibration Supplier

**Manufacturer/Model:** PCB PIEZOTRONICS 113A21

**Description:** PRESSURE TRANSDUCER

**Serial Number:** 10451

**Asset Number:** 009018

**Work Order Number:** 444060776

**Date Calibrated:** September 20, 2004

**Supplier:** PCB PIEZOTRONICS, DEPEW NY - A2LA - 716 684-0001

**Remarks:** Unit requested by custodian "as is". Look to WO #60771 for notes.

- Supplier is on the Approved Suppliers List (ASL).
- Supplier is not on the Approved Suppliers List.
- Calibration is ISO 17025 accredited.
- Calibration is not ISO 17025 accredited.
- There is no known supplier to meet ISO 17025 accreditation at this time.

Please notify the Institute Calibration Laboratory, extension 5215, of any discrepancies with the item or calibration documentation.

Attachment(s) 



# CALIBRATION CERTIFICATE

**Model:** 113A21  
**Serial #:** 10451  
**Description:** Pressure Sensor  
**Type:** ICP

**Date:** 9/20/2004  
**By:** Chris Schultz, Cal. Tech.   
**Station:** 907 Dyn. Med. Press. #1 (Test Procedure AT601-11)

**Sensitivity\*:** 19.36 mV/PSI  
 2.808 mV/kPa

**Temp:** 71 deg F [22deg C]  
**Humidity:** 34 %

**Linearity\*:** 0.3% FS  
**Uncertainty\*\*:** +/- 1.3 %

**Cert #:** 180087

**Bias:** 10.3 VDC

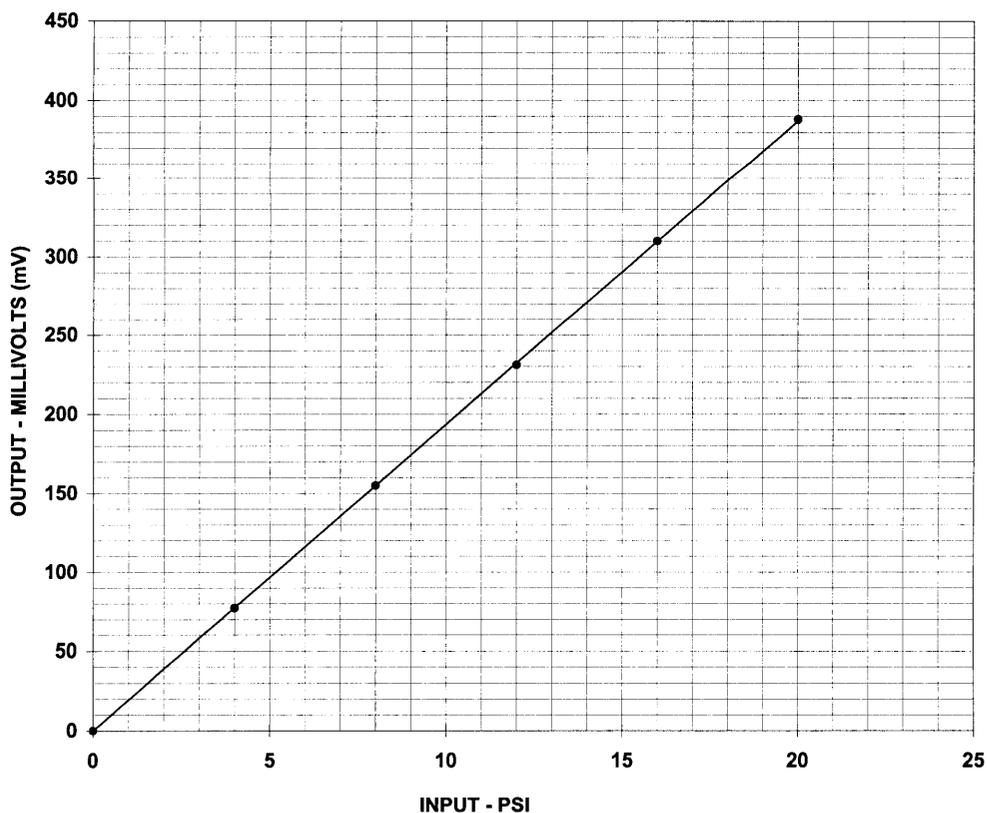
\* Zero based, least-squares straight line.

\*\* Measurement uncertainty represented using a coverage factor of k=2 which provides a level of confidence of approximately 95 %.

**Condition of Unit:**

**As Found:** Out of tolerance low sensitivity

**As Left:** Out of tolerance, customer accepts as is



**TEST DATA**

INPUT (PSI)	OUTPUT (mV)
4.00	77
8.00	155
12.0	231
16.0	310
20.0	388

**Notes:**

- 1 STATION #16
- 2 This certificate may not be reproduced, except in full without the written approval of PCB Piezotronics, Inc.
- 3 NIST traceability through PCB control # CA334.
- 4 This certificate may not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.



Cert. No. 1862.01



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