CALIBRATION RESULTS   S/N 116- 23
DATE 9/ 14/ 71

RANGE: -80 TO 250 C   SLOPE,KC/C 0.9855
PRESET, C   9445   CFZ -0.134
PRESET, F   4083

LINEARITY CORRECTION TO INDICATED TEMPERATURE
ALL DATA FOR DEGREES CELSIUS

TEMP.	ADD:	TEMP.	ADD:	TEMP.	ADD:
-80	-0.64	30	-0.01	140	0.03
-70	-0.45	40	-0.01	150	0.04
-60	-0.31	50	-0.02	160	0.04
-50	-0.20	60	-0.02	170	0.04
-40	-0.12	70	-0.02	180	0.04
-30	-0.07	80	-0.02	190	0.04
-20	-0.03	90	-0.02	200	0.03
-10	-0.01	100	-0.01	210	0.01
0	0.00	110	0.00	220	-0.01
10	0.00	120	0.01	230	-0.04
20	0.00	130	0.02	240	-0.08
				250	-0.12

RANGE: 0 TO 100 C   SLOPE,KC/C 0.9857
                       PRESET, C   9430
                       PRESET, F   4060

LINEARITY CORRECTION

TEMP.	ADD:	TEMP.	ADD:
0	0.00	60	-0.01
10	0.00	70	-0.01
20	0.00	80	-0.01
30	0.00	90	0.00
40	0.00	100	0.01
50	-0.01	110	0.02

CALIBRATION RESULTS   S/N 116- 42
DATE 9/ 14/ 71

RANGE: -80 TO 250 C   SLOPE,KC/C 0.9855
PRESET, C   9451   CFZ -0.139
PRESET, F   4092

LINEARITY CORRECTION TO INDICATED TEMPERATURE
ALL DATA FOR DEGREES CELSIUS

TEMP.	ADD:	TEMP.	ADD:	TEMP.	ADD:
-80	-0.60	30	-0.01	140	0.03
-70	-0.42	40	-0.01	150	0.03
-60	-0.28	50	-0.02	160	0.04
-50	-0.18	60	-0.02	170	0.04
-40	-0.11	70	-0.02	180	0.04
-30	-0.06	80	-0.02	190	0.03
-20	-0.02	90	-0.02	200	0.02
-10	-0.01	100	-0.01	210	0.01
0	0.00	110	0.00	220	-0.02
10	0.00	120	0.01	230	-0.04
20	0.00	130	0.02	240	-0.07
				250	-0.11

RANGE: 0 TO 100 C   SLOPE,KC/C 0.9856
                       PRESET, C   9434
                       PRESET, F   4067

LINEARITY CORRECTION

TEMP.	ADD:	TEMP.	ADD:
0	0.00	60	-0.01
10	0.00	70	-0.01
20	0.00	80	-0.01
30	0.00	90	0.00
40	-0.01	100	0.01
50	-0.01	110	0.02

HEWLETT hp PACKARD

CALIBRATION PROCEDURE FOR QUARTZ THERMOMETERS USING HP-2850 SERIES PROBES

(**CAUTION:** Excess Physical Shock will break Sensor Crystal. Do not drop or rap against hard surface. Do not subject to temperatures in excess of 250°C.)

The calibration chart on the opposite side is computed only for the Sensing Probe whose serial number is listed in the upper right-hand corner. The preset number listed is the setting for the scale factor trim switches on the rear of the HP-2801A Quartz Thermometers.

1. To ensure high accuracy, a periodic ice-point check should be made using a carefully prepared ice bath. (See Section 2 of Quartz Thermometer Handbook). Place Sensor probes in ice-bath until steady readings are obtained. If readings differ from zero, the following adjustment procedure may be followed, or the readings may be added to the indicated temperature in addition to the linearity corrections listed on the calibration chart.

2. To reset zero, press $T_1 - T_2$ pushbutton, remove forward screw in lid of each Sensor Oscillator, and using special screwdriver supplied, adjust trimmers for zero indication. Replace screws firmly in lids.

3. Press T_1 pushbutton and turn T_1 adjustment on rear panel for zero reading.

4. Repeat for T_2 position.

5. Because of hysteresis effects, more accurate adjustments can be made by cycling probe over temperature range of interest while noting readings on both increasing and decreasing half-cycles. The rear panel adjustments should then be set for equal deviations about the zero reading.

6. These steps will ensure the accuracy to within the published specifications. Higher accuracy can be achieved by calibrating the instrument against a certified Platinum Resistance Thermometer and Mueller Bridge in a stable temperature controlled medium. The calibration should always be carried through a complete cycle over the range of interest and readings taken while both increasing and decreasing the temperature.