Monthly Progress Report

Period Ending Jamuary 31, 1956

Project UST 1-002-D

Cigarette Smoking Characteristics and Technique (Bonanno)

Project UST 1-002-D-3 -

Measurement of Temperature of Burning Coal and Gigarette Smoke (Books, De Santis, Bonanno)

UST 12717

A. Swanary

A number of tests involving varying conditions were performed to measure the temperature of mainstream cigarette smoke. Two preliminary experiments were conducted to measure the temperature of mainstream smoke using a cold junction at 29°C. The cigarettes were smoked to a 30 mm but length and the Brown instrument was calibrated for 0 to 1 millivolt input. There were no temperature differences recorded on the chart up to a 30 mm butt length. Temperature measurements were obtained beyond a 30 mm butt length for an additional puff or two before the recorder went "off-scale".

It was decided to change the cold junction from 25°C. to 15°C. in order that temperature measurements could be more easily obtained for mainstream smoke for a 30 mm butt length. A series of four tests showed that the maximum temperature of mainstream smoke for eigerettes burned to a 30 mm butt length ranged between 24-28°C.