

"Q. Have members of your family been physically harmed because of what you did?

"A. No.

"Q. Do you think members of your family are now in danger because of what you did?

"(No response.)

"Q. Is Mr. Fowler in danger because he is defending you?

"(No response.)

"Q. Did "Blackie" Hanson speak to you just before you shot Oswald?

"A. No."

INTERPRETATION OF THE TEST

A polygraph examination is designed to detect physiological responses to stimuli in a carefully controlled interrogation. Such responses may accompany and indicate deception. The polygraph instrument derives its name from the Greek derivative "poly" meaning many and the word "graph" meaning writings. The polygraph chart writings consist of three separate markings placed on a graph reflecting three separate physiological reactions. A rubber tube is placed around the subject's chest to record his breathing pattern on a pneumograph. That device records the respiratory ratio of inhalation and exhalation strokes. The second component is called a galvanic skin response which consists of electrodes placed on the examinee's fingers, through which a small amount of electrical current is passed to the skin. The galvanometer records the minute electrical skin response. The third component consists of a cardiograph which is a tracing obtained by attaching a pneumatic cuff around the left arm in a manner very similar to an apparatus which takes blood pressure. When the cuff is inflated that device records relative blood pressures or change in the heart rate.

From those testing devices, it is possible to measure psychological or emotional stress. This testing device is the product of observation by psychologists and physiologists who noted certain physiological responses when people lie. In about 1920, law enforcement officials with psychological and physiological training initiated the development of the instrument to serve as an investigative aid.

The polygraph may record responses indicative of deception, but it must be carefully interpreted. The relevant questions, as to which the interrogator is seeking to determine whether the subject is falsifying, are compared with control questions where the examiner obtains a known indication of deception or some expected emotional response. In evaluating the polygraph, due consideration must be given to the fact that a physiological response may be caused by factors other than deception, such as fear, anxiety, nervousness, dislike, and other emotions. There are no valid statistics as to the reliability of the polygraph. FBI Agent Herndon testified that, notwithstanding the absence of percentage indicators of reliability, an informed judgment may be obtained from a well-qualified examiner on the indications of deception in a normal person under appropriate standards of administration.

Ordinarily during a polygraph examination only the examiner and the examinee are present. It is the practice of the FBI, however, to have a second agent present to take notes. It is normally undesirable to have other people present during the polygraph examination because the examinee may react emotionally to them. Because of the numerous interested parties involved in Ruby's polygraph examination, there were present individuals representing the Commission and the Dallas district attorney, as well as two defense counsel, two FBI agents, the chief jailer, the psychiatrist, and the court reporter, although the assistant district attorney and one defense counsel left when Ruby was actually responding to questions while the instrument was activated. Ruby was placed in a position where there was a minimum of distraction for him during the test. He faced a wall and could not see anyone except possibly through secondary vision from the side. Agent Herndon expressed the opinion that Ruby was not affected by the presence of the people in the room.

Answer by Ruby to certain irrelevant control questions suggested an attempt to deceive on those questions. For example, Ruby answered "No" to the question "While in the service did you receive any disciplinary action?" His reaction suggested deception in his answer. Similarly, Ruby's negative answer to the query "Did you ever overcharge a customer?" was suggestive of deception. Ruby further showed an emotional response to other control questions such as "Have you ever been known by another name?" "Are you married?" "Have you ever served time in jail?" "Are your parents alive?" "Other than what you told me, did you ever hit anyone with any kind of a weapon?" Herndon concluded that