

100 MOMENTS

POLYGRAPH EXAMINATIONS

By Dennis Wilbur (1974-2001)

In 1921, the same year that the Bureau of Criminal Investigation (BCI) was formed, John Larson developed the first polygraph for police work that incorporated blood pressure and respiration.



1980S: JANICE BROKENS (1974-2001) AND DENNIS WILBUR (1974-2001) DISPLAY THE TRADITIONAL POLYGRAPH

The word polygraph comes from the Greek words *poly* and *graphos*, literally meaning many writings. It is so-called because of the multiple physical responses recorded on the instrument's chart. The polygraph is more popularly known as the lie detector. It should be noted that the polygraph merely records; the polygraph examiner detects a lie and verifies truthfulness.

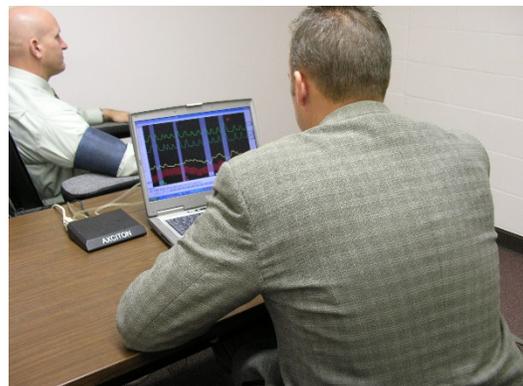
The maze of gadgetry that makes up the standard polygraph is composed of three major units. These are the cardiopneumograph, pneumograph, galvanograph, and kymograph. The sphygmograph, considered by most researchers to be the most

important and accurate component of the instrument, measures relative blood pressure changes in pulse rate and pulse-wave amplitude. This device is attached to the subject's upper arm.

The bands around the subject's stomach and chest are part of the pneumograph section. This measures the person's respiratory pattern at normal and records variations from the norm.

The third component—of which the hand electrodes are a crucial element—is the galvanograph. This device measures the galvanic skin reaction.

The theory of the polygraph is that the fear of punishment (or of being caught, or of the consequences) will make the person being examined fearful each time the examiner asks the “hot” question. This stress response is recorded in



2000S: MATT SAUER (1997-CURRENT) AND BRET BRAAFHART (1997-CURRENT) DISPLAY THE COMPUTERIZED POLYGRAPH

different indices: blood pressure, pulse rate, skin resistance, and breathing.

Now we must consider what the instrument is actually recording. We have already mentioned the parasympathetic nervous system, which is in charge of the body during the normal range of activities. As physical or mental stress increases, the sympathetic nervous system takes over to ready the body for fight or flight.

This is the essence of the theory of the polygraph. The instrument continuously records breathing, skin resistance, relative blood pressure, blood volume, and pulse rate. The examiner's job is to interpret the various changes in reading as they relate to the question being asked at the moment. An examination last approximately three hours.

Many studies have demonstrated levels of accuracy well above 90 percent.

In 1994, DCI started using computerized polygraphs. The computer polygraph operates the same as the old instruments but eliminates the need for ink. The computer polygraph also has a computer program that aids in the evaluation of the charts, however; the examiner determines truth or deception. This determination puts a lot of stress on the examiner as the investigator is looking to solve his/her case.

The examiner needs to be skilled in interview/interrogation as a deceptive determination leads to an interrogation that could last for hours.

Five types of examinations are conducted by the Division of Criminal Investigation (DCI) examiners. They include applicant testing, internal investigations, criminal/law enforcement, convicted subjects, and assistance to other agencies.

The first examiner was Robert Voss in 1958. The Department of Public Safety began using polygraph in the applicant process in 1962.

At present, the DCI has three examiners and fully-equipped polygraph rooms in Stockton, Council Bluffs, and Des Moines. Each examiner conducts approximately 150 examinations per year. Examiners may use county sheriff's offices and city police department's offices when needed.

The Division of Criminal Investigation has had 21 examiners during the last 63 years. Their names and years of service are listed below.

Robert Voss, 1958 to 1962

Leonard Murry, 1962 to 1969

Chuck Wood, 1969 to 1974

Gary Marker, 1974 to 1983

Ron Mower, 1975 to 1984

John Lang, 1977 to 1984

Robert Whitaker, 1984 to 1988

Dennis Wilbur, 1984 to 2001

Mel McCleary 1985 to 1990

Jeff Jacobsen, 1990 to 1996

Don Schreffler, 1990 to 2005

Larry Hedlund, 1996 to 2000

Steve Peterson, 2003 to 2018

Derron McDuffee, 2003 to 2004

Rick John, 2005 to 2007

Bret Braafhart, 2006 to 2015

Chris Adkins, 2007 to 2011

Dave Overton, 2011 to 2017

Derek Riessen, 2011 to Present

Brian Eyberg, 2018 to Present

Laura Myers, 2018 to Present

DENNIS WILBUR – 2021

2021 sees Dennis starting his 20th year of retirement. He spent a majority of his career with the BCI/DCI as a polygraph examiner. His 17 year tenure as an examiner (1984-2001) remains as the longest of any BCI/DCI polygraph examiner and accounted for all but 7 years of his time with the DPS.