

Statement of George W. Maschke Regarding Issues Surrounding the Use of Polygraphs
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My name is George W. Maschke, and I am a co-founder of AntiPolygraph.org, a non-profit website and grassroots network of individuals committed to polygraph reform. Specifically, we seek the amendment of the 1988 Employee Polygraph Protection Act to provide protection for all Americans by removing the governmental and other exemptions. I am also a captain in the United States Army Reserve, but it is strictly in my capacity as a private citizen that I address the Committee.

Each new spy scandal brings in its wake calls for improved security and, invariably, more lie detector, or polygraph testing. Indeed, the polygraph has become the very centerpiece of America's counterintelligence policy. The wisdom of our reliance on this purported technology is seldom questioned. Indeed, anyone who might raise a cautionary finger runs the risk of being seen as "soft on security." But with "more polygraphs" being confused for "more security" yet again as the FBI moves to expand its polygraph program in the wake of the Hanssen espionage case, it is necessary that such a cautionary finger be raised.

My interest in polygraphy was kindled when I applied to become a special agent with the Federal Bureau of Investigation in 1995, not long after Director Louis J. Freeh, in reaction to the Aldrich H. Ames espionage case, instituted the Bureau's pre-employment polygraph screening program. After I had passed all written tests, a supervisory special agent at the FBI field office where I applied was keen to have me start working with the Bureau in a support position pending agent hire. I agreed, and was hastily scheduled for a pre-employment polygraph exam. When my polygraph test was done, my polygrapher accused me of deception when I (truthfully) denied having disclosed classified information to unauthorized persons and having had unauthorized contact with representatives of a foreign intelligence service. I was absolutely dumbstruck. He was in essence accusing me of being a spy. We reviewed the questions again and my polygrapher ran yet another chart. This time, he told me he was certain I was lying.

The FBI dropped me like a hot potato and recorded my polygrapher's slander of me in an interagency database, essentially blackballing me with other agencies, too. There is no appeal process.

I was baffled at how the polygraph test, which I had always imagined to be an admittedly imperfect yet nonetheless science-based technology, had falsely branded me as some kind of subversive or spy. Upon researching the matter at my local university library, I was shocked and angered to discover that polygraph testing, on which we as a

nation place such great reliance, is not a science-based test at all, but is instead fundamentally dependent on trickery and has never been shown by peer-reviewed scientific research to be capable of distinguishing truth from deception at better than chance levels of accuracy under field conditions.

The trickery on which polygraph testing depends, while well-known to foreign intelligence services, is little understood by the American people and, I respectfully submit, their elected representatives. Let me explain. While numerous deceptions are employed in the polygraph process, the key element of trickery is this: the polygrapher must mislead the examinee into believing that all questions are to be answered truthfully, when in reality, the polygrapher is counting on the examinee's answers to certain of the questions (dubbed "probable-lie control questions") being untrue.

One commonly-used probable-lie control question is, "Did you ever lie to a supervisor?" While the examinee may make minor admissions, the polygrapher will strongly discourage any further admissions, warning the examinee, for example, that experience has shown that people who would lie to a supervisor turn out to be the same kind of people who would go on to commit espionage. But in reality, the polygrapher assumes that the examinee's denial will be a lie, or that the examinee will at least experience considerable doubt about the truthfulness of his or her denial.

The second category of questions are termed "relevant" questions. In counterintelligence screening, they will be about unauthorized disclosure of classified information, contact with foreign intelligence services, etc.

A third category of questions are termed "irrelevant" questions, the true answers to which are obvious, such as, "Is today Wednesday?" or, "Are we in Washington, D.C.?" The polygrapher falsely explains to the examinee that these questions provide a baseline that shows what it looks like when the examinee is telling the truth. But in reality, the irrelevant questions are not scored at all. They merely serve as a buffer between sets of relevant and "control" questions.

The polygrapher connects the examinee to the polygraph instrument, which records breathing, heart rate, blood volume, and perspiration rate (as a function of skin conductance or resistance), and asks a series of relevant, irrelevant, and "control" questions (all of which are reviewed with the examinee beforehand).

The polygrapher then compares the examinee's physiological responses while answering the "control" questions to those while answering the relevant questions. If the former are greater, the examinee is deemed truthful. If the latter are greater, the examinee is deemed deceptive, and a post-test interrogation will follow. If responses to both the "control" and the relevant questions are about the same, the test will be deemed inconclusive.

The well-socialized truthful examinee who reacts more strongly when truthfully denying a capital offense like espionage than when denying some common human failing is likely to be wrongly categorized as deceptive: a false positive.

Conversely, deceptive persons who understand the theoretical assumptions of the procedure may covertly augment their physiological responses to the “control” questions, producing a “truthful” chart and beating the test. It is a common misperception that one must believe one’s own lies or be a sociopath to beat a polygraph test. As the FBI’s top expert in polygraphy, Dr. Drew C. Richardson of the Laboratory Division, testified at Senate Hearing 105-431 in 1997, “If this test had any validity (which it does not), both my own experience, and published scientific research has proven, that anyone can be taught to beat this type of polygraph exam in a few minutes.”

There are numerous variations of polygraph screening tests, but all depend on trickery and all can be defeated by augmenting one’s physiological responses to the “control” questions. For more on polygraph testing, and to learn precisely how anyone—truthful or not—can pass a polygraph test, see *The Lie Behind the Lie Detector*, which I co-authored with Gino J. Scalabrini. It may be downloaded free from the AntiPolygraph.org website.

Polygraph screening, the key element of our national counterintelligence policy, is junk science. The polygraph screening process depends on those being “tested” being ignorant of the true nature of the procedure, which is clearly an unsafe assumption. Through the polygraph process, many many truthful persons have been and will continue to be wrongly branded as liars, while double agents (of whom Aldrich Ames is but the most prominent of many who have beaten the polygraph) escape detection. To strengthen our national security, we should not increase our reliance on pseudoscientific polygraph tests: we should abolish them.



George W. Maschke
AntiPolygraph.org