ISSUES SURROUNDING THE USE OF POLYGRAPHS

HEARING
BEFORE THE
COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE
ONE HUNDRED SEVENTH CONGRESS
FIRST SESSION
APRIL 25, 2001
Serial No. J–107–16
Printed for the use of the Committee on the Judiciary
## CONTENTS

**STATEMENTS OF COMMITTEE MEMBERS**

<table>
<thead>
<tr>
<th>Member</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grassley, Hon. Charles E., a U.S. Senator from the State of Iowa</td>
<td>87</td>
</tr>
<tr>
<td>Hatch, Hon. Orrin G., a U.S. Senator from the State of Utah</td>
<td>1</td>
</tr>
<tr>
<td>Leahy, Hon. Patrick J., a U.S. Senator from the State of Vermont</td>
<td>2</td>
</tr>
</tbody>
</table>

**WITNESSES**

<table>
<thead>
<tr>
<th>Witness</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capps, Michael H., Deputy Director for Developmental Programs, Defense Security Service, Alexandria, Virginia</td>
<td>5</td>
</tr>
<tr>
<td>Iacono, William G., Professor, Department of Psychology, University of Minnesota, Minneapolis, Minnesota</td>
<td>8</td>
</tr>
<tr>
<td>Keifer, Richard W., Past President, American Polygraph Association, Apopka, Florida</td>
<td>68</td>
</tr>
<tr>
<td>Smith, Jeffrey H., Partner, Arnold and Porter, Washington, D.C.</td>
<td>15</td>
</tr>
<tr>
<td>Zaid, Mark S., Esq., Counsel, Lobel, Novins and Lamont, Washington, D.C.</td>
<td>19</td>
</tr>
</tbody>
</table>

**QUESTIONS AND ANSWERS**

<table>
<thead>
<tr>
<th>Witness</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael H. Capps to questions submitted by Senator Leahy</td>
<td>95</td>
</tr>
<tr>
<td>Michael H. Capps to questions submitted by Senator Grassley</td>
<td>100</td>
</tr>
<tr>
<td>William G. Iacono to questions submitted by Senator Leahy</td>
<td>101</td>
</tr>
<tr>
<td>William G. Iacono to questions submitted by Senator Grassley</td>
<td>103</td>
</tr>
<tr>
<td>Richard W. Keifer to questions submitted by Senator Leahy</td>
<td>104</td>
</tr>
<tr>
<td>Richard W. Keifer to questions submitted by Senator Grassley</td>
<td>105</td>
</tr>
<tr>
<td>Mark S. Zaid to questions submitted by Senator Leahy</td>
<td>105</td>
</tr>
<tr>
<td>Mark S. Zaid to questions submitted by Senator Grassley</td>
<td>109</td>
</tr>
</tbody>
</table>

**SUBMISSIONS FOR THE RECORD**

<table>
<thead>
<tr>
<th>Witness</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mallah, Mark E., former Federal Bureau of Investigation Special Agent, statement</td>
<td>89</td>
</tr>
<tr>
<td>Maschke, George W., Co-founder of AntiPolygraph.org, statement</td>
<td>91</td>
</tr>
<tr>
<td>Renucci, Pascal, former government defense contractor employee, statement</td>
<td>92</td>
</tr>
<tr>
<td>Roche, William, Detective, statement</td>
<td>94</td>
</tr>
</tbody>
</table>
ISSUES SURROUNDING THE USE OF POLYGRAPHS

WEDNESDAY, APRIL 25, 2001

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The Committee met, pursuant to notice, at 10:03 a.m., in room SD–226, Dirksen Senate Office Building, Hon. Orrin G. Hatch, Chairman of the Committee, presiding.

Present: Senators Hatch, Specter, and Durbin.

OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM THE STATE OF UTAH

Chairman HATCH. I would like to welcome everybody to this Judiciary Committee hearing on issues surrounding the use of polygraphs as a counterintelligence screening tool. We have a number of distinguished witnesses with us here today, and on behalf of the Committee, I want to thank all of you for being here.

Earlier this year, we all became aware of a very disturbing situation at the FBI where one of its agents, Robert Hanssen, was accused of being a Russian spy. The alleged security compromises are vast and, if true, are severely damaging to our National security. In the wake of the Hanssen case, the FBI instituted new interim procedures to improve its internal security. FBI Director Freeh has appointed William Webster to lead a comprehensive internal security review at the FBI and to recommend more permanent measures to improve internal security.

The interim security measures already implemented include the use of polygraphs. Now, it is quite possible that the permanent changes to FBI’s internal security regime will include polygraphs in one way or another.

I see this hearing as an important first step in evaluating the changes occurring at the FBI. I expect to hear from Judge Webster in the future to discuss this ongoing evaluation and recommendation. I would also anticipate that, at the appropriate time, we would hear from Director Freeh concerning the decisions the FBI will make based upon the work of the Webster Commission.

The purpose of today’s hearing is to take the initial step of educating the Judiciary Committee on polygraphs, their accuracy and reliability, as well as the policy and potential legal issues that may arise from the use of polygraphs as a screening tool in the counterintelligence context. This should be helpful to members and staff as we evaluate whatever new internal security plan the FBI decides to implement.
There is a wide variety of opinions and research on the use of polygraphs. There are those who believe they are completely unreliable and actually detrimental to security. Others see polygraphs as an important tool in an overall security program. Today, we will begin to look at the science and policy behind the use of polygraphs as a counterintelligence tool.

For myself, I appreciate the complexities of this issue. As a former Chairman of the Labor Committee, or as it is now called, the HELP Committee, I have some experience with the use of polygraphs in private sector employment settings. Many members and I were concerned with the lack of uniform standards and the other abuses that were occurring with employment-related polygraphs in the private sector.

In 1988, with the assistance of my friend and then Chairman of the Labor Committee Senator Kennedy, we passed the Polygraph Protection Act of 1988. The Act banned the practice of making submission to polygraphs a condition of employment in most private sector settings. During the hearings we held on that bill, we heard many horror stories about how private employers were abusing polygraphs and the hardships to employees that occurred therefrom.

Significantly, however, the Act exempted Federal, State, and local government entities. Different considerations and controls may exist in the government context, particularly with respect to classified information, which require an independent analysis as to whether polygraphs, despite whatever limitations they may have, should remain a useful tool to be used by the government.

I know many people, including the members of our panel today, have strong and divergent views on that issue. I am looking forward to hearing the testimony and reading it and eventually evaluating the steps taken by the FBI to improve its internal security. Now, despite differing views on the approach, I know everyone here shares the goal of protecting our country’s most sensitive information and maintaining a vigorous and effective counterintelligence program.

At this point, I will put the statement of the distinguished Democratic leader on the Committee, Senator Leahy, into the record, without objection.

[The prepared statements of Senator Leahy and Senator Hatch follow:]

STATEMENT OF HON. PATRICK LEAHY, A U.S. SENATOR FROM THE STATE OF VERMONT

Today, the Committee will conduct a hearing on “Issues Surrounding the Use of Polygraphs.” No doubt this is a worthwhile subject for a hearing. This is, however, but one of the important issues that is raised by the arrest last February of FBI Special Agent Robert Phillip Hanssen on espionage charges. This Committee has oversight jurisdiction over the Department of Justice and the FBI and has both the duty and the responsibility to examine how the FBI exercises its critical national security and counter-intelligence missions. Yet instead of scheduling a comprehensive hearing to review the actions that the FBI has undertaken to protect our national security, Members of this Committee may read in press reports about interviews given by “senior bureau officials . . . to discuss their actions,” and about notes reflecting high-level meetings with the FBI Director “which were provided by the bureau” to the press. [See New York Times, April 22, 2001.]

The Hanssen case may be the most serious case of espionage in this nation’s history. According to allegations in a 100-page affidavit filed in federal district court in the Eastern District of Virginia, for more than 15 years Hanssen used his posi-
...tion in the FBI’s elite counter-intelligence unit to sell highly sensitive, classified information to the KGB. It is alleged that, over the years, Hanssen gave the KGB computer disks, volumes of documents and information about our government’s efforts to collect intelligence on the Soviet Union and the Russian Federation. Worst of all, information Hanssen allegedly provided to the KGB led to the execution of two of undercover agents who were working for the United States. The full extent of the damage done to this country’s security is not yet known and may never be known.

I appreciate that the allegations against Hanssen are the subject of a pending criminal investigation. Obviously, we must not do anything to interfere with the work of the grand jury or to prejudice the constitutional rights of Mr. Hanssen, who has not been convicted of, or as yet formally indicted for, any crime. Moreover, we should not do anything to distract the prosecutors and government agents responsible for investigating and prosecuting this matter from their duties in the case. Finally, any oversight examination done by the Committee must be exercised cautiously to avoid any appearance of undue political pressure and without the slightest implication that any Senator seeks to influence the outcome of a pending criminal matter or the discretion of a prosecutor or a judge.

That being said, there remains much about the Hanssen case that cries out for public oversight hearings by this Committee. It is simply astounding that a security breach of the magnitude described in the affidavit in the Hanssen case could have been allowed to go unnoticed under the very nose of one of this nation’s most elite law enforcement agencies for such an extended period of time. Further, according to press reports, a senior FBI investigator specifically warned that there could be a mole in the bureau’s own ranks over two years ago, but his views were rejected. The Hanssen case therefore raises serious questions about the FBI’s internal controls and security procedures and more generally about the FBI’s ability to objectively and accurately assess allegations of misconduct by its own agents.

This is not the first time that these concerns have been raised about the FBI. The debacles at Waco and Ruby Ridge, the allegations of former FBI chemist Frederick Whitehurst about the mishandling of evidence at the FBI crime laboratory and allegations that FBI agents illegally leaked confidential law enforcement information to informants, who were members of organized crime, are all still fresh in the public memory. After hearings on Ruby Ridge in 1995, the Subcommittee on Terrorism, Technology and Government Information, ably led by Chairman Arlen Specter, noted the tendency of the FBI, when investigating itself, to accord its own agents “undue deference” and to accept their stories at face value without a probing inquiry. (p. 1131). I cannot help but wonder whether a similar explanation accounts for the failure of the FBI to detect Hanssen’s alleged espionage for nearly 15 years, not to mention its rejection of the specific warnings of one of its own investigators about a mole within its ranks.

Questions of this sort, particularly when they arise repeatedly, tend to erode public confidence in the competence and integrity of law enforcement agencies and government institutions. In the end, the loss of the trust of the American people is a far greater threat to the FBI, and to our government generally, than the betrayal of a single agent.

I am aware that, in the wake of Hanssen’s arrest, FBI Director Freeh has asked for a review of the FBI’s security programs to be conducted by Judge Webster, who was the FBI Director during part of the time that Hanssen allegedly conducted his espionage activities. While I have great respect for Judge Webster, his prior position may cause some to question any conclusions and recommendations he may reach. I wrote to Judge Webster in February asking that he keep me advised of the progress of his examination, its expected completion date and his final conclusions and recommendations, if any, but to date have received no response.

Although an internal FBI review is appropriate, it is clearly no substitute for oversight hearings before this Committee, particularly given the FBI’s dismal record in investigating itself. In its report on Ruby Ridge, the Subcommittee on Terrorism, Technology and Government Information noted that “adequate and independent oversight of the FBI is crucial to avoid, at a minimum, the appearance of institutional bias within the FBI.” By definition, the responsibility of exercising adequate and independent oversight falls upon this Committee, not the FBI. I therefore do not believe that this Committee should defer fulfilling its oversight responsibilities until the FBI review is completed, whenever that may be.

Although, unfortunately, we will not be directly focusing on the Hanssen case today, we will be hearing testimony from some experts about the reliability of polygraph testing. Attorney General Ashcroft and others have expressed skepticism about any over-reliance on polygraph tests. I share their concerns. Historically, courts have almost always excluded polygraph evidence as unreliable. And, with a
few exceptions, that has generally remained true even after the Supreme Court’s decision in Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993), which gave federal trial courts greater discretion to admit scientifically novel evidence. In fact, in 1998, the Supreme Court upheld the constitutionality of a military rule of evidence that categorically excludes all polygraph evidence in court martial proceedings. See United States v. Scheffer, 523 U.S. 303 (1998). According to Justice Thomas, writing for the Court, “there is simply no way to know in a particular case whether a polygraph examiner’s conclusion is accurate, because certain doubts and uncertainties plague even the best polygraph exams.” Id. at 312.

The routine use of polygraph testing in government employment situations raises even more troubling issues. For example, let us assume that polygraph tests are accurate 90 percent of the time, as some experts claim. If the police are investigating a crime, and a suspect agrees to take a polygraph, the results of that test may be of some value to the investigation even if there is a ten percent chance that they may be wrong. However, if you polygraph thousands of employees of a government agency on a routine basis, the ten percent error rate will mean that even hundreds of innocent employees will generate results indicating—falsely—that they are giving deceptive answers. While I am not saying that all use of polygraphs should be prohibited, particularly in the sensitive area of national security, I am very concerned that the rights of these innocent employees be carefully protected. In particular, denying a person a government job solely on the basis on a polygraph and without any corroborating evidence of deception or other unsuitability for employment may result in wrongly excluding many qualified people from government service. The FBI itself has apparently shared these doubts about polygraphs because, unlike other national security agencies, it has not routinely polygraphed its own agents and employees who have access to classified information. Nevertheless, according to recent press reports, the FBI has now undertaken to polygraph 500 of its own agents in reaction to the Hanssen arrest. I would like to know more about the FBI’s recent about-face on polygraphs. I would also like to know whether the FBI plans to continue using polygraphs, as well as what other steps the FBI has taken or is considering taking as the result of the Hanssen case. Those are questions that will have to wait until another day and another hearing. Consequently, the record of this hearing will necessarily be incomplete. Moreover, until we begin meaningful and comprehensive hearings into the Hanssen case, the oversight responsibilities of this Committee will remain unfulfilled.

STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM THE STATE OF UTAH

I would like to welcome everyone to this Judiciary Committee hearing on issues surrounding the use of polygraphs as a counterintelligence screening tool. We have a number of distinguished witnesses here today, and on behalf of the Committee, I want to thank you for being here. Earlier this year, we all became aware of a very disturbing situation at the FBI where one of its agents, Robert Hanssen, was accused of being a Russian spy. The alleged security compromises are vast and, if true, are severely damaging to our national security. In the wake of the Hanssen case, the FBI instituted new, interim procedures to improve its internal security. FBI Director Freeh has appointed William Webster to lead a comprehensive internal security review at the FBI and to recommend more permanent measures to improve internal security. The interim security measures already implemented include the use of polygraphs. It is quite possible that the permanent changes to FBI’s internal security regime will include polygraphs in one way or another. I see this hearing as an important first step in evaluating the changes occurring at the FBI. I expect to hear from Judge Webster in the future, to discuss his ongoing evaluation and recommendations. I would also anticipate that, at the appropriate time, we would hear from Director Freeh concerning the decisions the FBI will make based upon the work of the Webster Commission. The purpose of today’s hearing is to take the initial step of educating the Judiciary Committee on polygraphs, their accuracy and reliability, as well as the policy and potential legal issues that may arise from the use of polygraphs as a screening tool in the counterintelligence context. This should be helpful to members and staff as we evaluate whatever new internal security plan the FBI decides to implement. There is a wide variety of opinions and research on the use of polygraphs. There are those who believe they are completely unreliable and actually detrimental to se-
curity. Others see polygraphs as an important tool in an overall security program. Today, we will begin to look at the science and policy behind the use of polygraphs as a counterintelligence tool.

For myself, I appreciate the complexities of this issue. As a former Chairman of the Labor Committee (or as it is now called the “HELP” Committee), I have some experience with the use of polygraphs in private sector employment settings. Many members and I were concerned with the lack of uniform standards and other abuses that were occurring with employment related polygraphs in the private sector. In 1988, with the assistance of my friend and then-Chairman of the Labor Committee Senator Kennedy, we passed the Polygraph Protection Act of 1988. The Act banned the practice of making submission to polygraphs a condition of employment in most private sector settings. During the hearings we held on that bill, we heard many horror stories about how private employers were abusing polygraphs and the hardships it caused employees.

Significantly, however, the Act exempted federal, state and local government entities. Different considerations and controls may exist in the government context—particularly with respect to classified information—which require an independent analysis as to whether polygraphs—despite whatever limitations they may have—should remain a tool for use by government agencies.

I know many people, including the members of our panel today, have strong and divergent views on that issue. I am looking forward to hearing the testimony and eventually evaluating the steps taken by the FBI to improve its internal security. Despite differing views on the approach, I know everyone here shares the goal of protecting our country’s most sensitive information and maintaining a vigorous and effective counterintelligence program.

Chairman HATCH. We have an excellent panel of witnesses with us here today. Michael Capps has been involved in the polygraph profession for over 26 years as an examiner, researcher, and educator. He is currently the Deputy Director for Developmental Programs for the Defense Security Service. Among his responsibilities is the oversight of the Department of Defense Polygraph Institute, for which he served over 5 years as Director.

Dr. William Iacono is the distinguished McKnight University Professor and Director of the Clinical Psychology Training Program at the University of Minnesota. He has served as a consultant regarding lie detection to various government agencies, including the U.S. Congress Office of Technology Assessment, the CIA, and the Department of Defense.

Jeffrey Smith is currently an attorney in the law firm of Arnold and Porter and is a former general counsel at the CIA. He recently chaired a review of counterintelligence methods at the CIA. It is good to have you here again, Mr. Smith. We appreciate it.

Mark Zaid is an attorney in private practice who has represented various government employees who have been affected by the use of polygraphs in the workplace.

Richard Keifer is a former President of the American Polygraph Association and has been involved in the use of polygraphs for many years.

We are grateful to have all of you here. We appreciate you taking time to be with us and to educate the Committee. We will turn to you first, Mr. Capps.

STATEMENT OF MICHAEL H. CAPPS, DEPUTY DIRECTOR FOR DEVELOPMENTAL PROGRAMS, DEFENSE SECURITY SERVICE, ALEXANDRIA, VIRGINIA

Mr. CAPPS. Good morning, Mr. Chairman. I have submitted a written statement for the record.
Chairman HATCH. We will put the complete statements from all of you in the record. If you can summarize in 5 minutes, we would appreciate it.

Mr. CAPPS. OK, sir. Essentially, what I have done is talked about the history of polygraph, that there are 24 government agencies or government programs and about 500 polygraph examiners within the government. The use of polygraph in the government involves the protection of the President, vetting of intelligence sources, protection of classified programs, confidential informant validation, part of counternarcotics, counterinsurgency, counterterrorism programs, screening of applicants in intelligence agencies, investigations of human rights, management of convicted sex offenders, investigation of food and drug tampering, location of assets concealed by convicted thieves and drug traffickers, and traditional criminal investigation.

We have supported the use of polygraph by allied nations. As a matter of fact, the Defense Department just in the last couple of years has paid for the training of Russians to protect nuclear weapons by the use of polygraph.

We have a consolidated training facility at the Department of Defense Polygraph Institute, where all Federal examiners receive their training. This training is taught at the master’s level, and now examiners can receive a master’s through the American School of Professional Psychology through their work at the Department of Defense Polygraph Institute.

The impact of the government polygraph programs is best understood in the context of how they are used, and the use, sir, is not just to render an opinion that affects someone’s employment because we do not render that opinion. The opinion is made by adjudicators or officials within the organization, not by polygraph examiners.

I think another issue has to do with the research. The research is in two areas, that of laboratory and that of field work. Critics argue that polygraph is an imperfect tool, and we agree that it is an imperfect tool. We agree that the validity is not 100 percent and never will reach 100 percent, but we believe that the system today without the use of polygraph would be more flawed than it currently is.

That is all I have at this time, sir.

Chairman HATCH. Thank you, Mr. Capps.

[The prepared statement of Mr. Capps follows:]

STATEMENT OF MICHAEL H. CAPPS, DEPUTY DIRECTOR FOR DEVELOPMENTAL PROGRAMS, DEFENSE SECURITY SERVICE

Mr. Chairman and Members of the Judiciary Committee, my name is Michael H. Capps. I am the Deputy Director for Developmental Programs for the Defense Security Service. Among my responsibilities is the oversight of the Department of Defense Polygraph Institute for which I served over five years as Director. I have been involved in the polygraph profession for over 26 years as an examiner, researcher, and educator. I was invited here today to respond to questions on issues surrounding the use of polygraphs.

The instrument we now call the polygraph was introduced into federal service in the 1940s and, in addition to its standard role in criminal investigations, was used in such noteworthy events as investigative support for the Nuremberg Trials, counterintelligence support to the then-new atomic weapons facilities and investigations of crimes in prisoner-of-war camps.
The U.S. government now has 24 polygraph programs, staffed with approximately 500 polygraph examiners. These men and women serve in all regions of the country and much of the world, in the military, intelligence, and law enforcement sectors. Current polygraph applications for the federal government include: protection of the President; vetting of intelligence sources; protection of classified programs; confidential informant validation; as part of counternarcotics, counterinsurgency, and counterterrorism programs; screening of applicants to intelligence agencies; investigation of human rights violations; management of convicted sex offenders; investigation of food and drug tampering; location of assets concealed by convicted thieves and drug traffickers, and; traditional criminal investigation. The U.S. government has supported the use of the polygraph among allied nations when mutual interests were at stake, such as when it supplied training and state-of-the-art polygraph equipment to Russia, to help them maintain security over their nuclear weaponry after the fall of Communism. It has, on numerous occasions, considered providing polygraph training for friendly governments, and the U.S. Department of Defense Polygraph Institute (DoDPI) regularly receives requests for polygraph training from these nations.

The DoDPI is the U.S. government’s consolidated training facility for polygraph examiners from all Federal agencies. To qualify for entry into the 13-week program, a candidate must be a U.S. citizen, be at least 25 years of age, hold a 4-year degree or demonstrate an ability to master graduate-level courses, have two years of investigative experience, have completed a background investigation to confirm a sound temperament and character, and be nominated and supported by his or her home agency. The DoDPI polygraph curriculum is taught at the master’s degree level, and provides a balance of a challenging academic load and technical skills practica. Those students who satisfactorily complete the DoDPI education program are released to their home agencies, where they serve internships, and remain subject to quality control and continuing education requirements for their entire professional careers as Federal polygraph examiners.

Validation of the polygraph technique has taken two forms: laboratory research, and field studies. During laboratory studies, volunteer participants are given polygraph tests regarding whether they committed a mock crime that has been scripted for them by the researchers. Some examinees are programmed to be innocent, and others guilty. Laboratory studies provide an excellent opportunity to investigate variables of interest to the researcher, because they can be controlled with certainty. The shortcoming of laboratory research is that mock crimes are not as emotionally engaging to the volunteer examinees as is the experience of a field polygraph examination, for which failure may have serious consequences for the examinees who are suspected of real crimes. Critics point out that laboratory studies may be prone to underestimating error rates for innocent examinees (false positives) because these examinees are less concerned about being accused of the pretended crime than would be an innocent person accused of a real crime. Proponents concede this point, but note that the laboratory studies also show high accuracy with the examinees who were “guilty” of the mock crime, an outcome that would not be expected in a simulated crime.

Field research of polygraphy is an approach that takes advantage of cases that occur as part of existing polygraph programs. Examinees are actual criminal suspects who face real world consequences for a failed polygraph examination. The examiners have practical experience in the administration of examinations with criminal suspects, something usually lacking in laboratory designs. Polygraph decisions can subsequently be compared to other evidence, such as confessions, DNA, or other forensic tests, to determine how closely the polygraph outcome matches ground truth. Unlike laboratory studies, in which ground truth is known in every case, the ultimate truth in the field setting is more elusive.
DoDPI administers an independent government-wide quality assurance program, to verify that the agencies conform to written policies in the preparation, conduct, reporting, and reviewing of their polygraph examinations. DoDPI quality assurance teams make scheduled site visits to each agency biannually. DoDPI inspectors do samplings of the work product of the participating agencies, and note deficiencies. DoDPI does not evaluate individual cases for accuracy of decisions, nor does it become involved in adjudicative issues as part of this quality assurance program. However, DoDPI does determine whether polygraph practices are consistent with relevant policies.

The impact of government polygraph programs are best understood in the context of the larger process of which they are a part. While polygraphy is valued by those agencies that use it, polygraphers are not involved in determining the action an agency takes based on the results of a polygraph examination. Rather, these decisions are the responsibility of adjudication officers, hiring officials, investigating officers, or other agency customers of the polygraph reports, who must weigh the results along with whatever information is available from other sources. Questions regarding hiring, investigation, or prosecution in which polygraph results may be a consideration, are better answered by those responsible for those decisions.

Counterintelligence screening of applicants and employees is one of the more controversial applications of polygraphy. Questions regarding the validity of this method are at the core of the debate. Critics argue that, as an imperfect tool, the polygraph wrongly classifies a percentage of both truthful and untruthful examinees, leading to grave consequences in both cases. I suggest that reducing the argument to this premise obscures a more relevant issue. First, let us agree that polygraphy is imperfect. Under the best of circumstances, errors occur. It is imperfect, like every personnel screening tool, including the personal interview, background investigation, credit check or employment check. However, a properly conducted polygraph screening program, with the level of oversight imposed on government polygraph programs, results in more adjudicable information than all other sources combined. If one takes the position that employment decisions should be made on methods that exclude polygraphy, we must agree that more errors will occur, not fewer. Second, there is a presumption that polygraph results dictate employment destiny. Typically, an adverse polygraph results triggers more investigative resources being brought to bear to help resolve the doubt. These resources could include an investigative interview, enhanced background investigation, or simply further polygraph testing. Only in a subset of cases where the polygraph results were initially unfavorable does the case remain unresolved, and even then, the ultimate employment action depends on decisions of those not involved in polygraphy.

Because of the complexity of the counterintelligence polygraph screening process, only a tentative estimate of accuracy can be stated. An error rate of perhaps less than 5% is projected for examinees who do not demonstrate a significant response in a strictly counterintelligence polygraph examination (not including suitability coverage), under the combined condition that the examinee cooperates with all polygraph processes, including retesting, does not try to manipulate the examination, and clearly understands the questions. Retesting serves to reduce errors for that category of examinees. The error rate for examinees who demonstrate a significant response to the polygraph may be higher; however, this can be mitigated if subsequent examinations are more focused on discrete issues as opposed to the broad and general questions asked during an initial screening examination. Limiting the number of retests for examinees who demonstrate a significant response to the initial examination could reduce this error rate to less than 20%. Retesting practices are policy issues, however, not scientific issues.

This concludes my prepared statement. I appreciate your willingness to entertain my comments, and I am now ready to answer your questions.

Chairman HATCH. Dr. Iacono?

STATEMENT OF WILLIAM G. IACONO, PROFESSOR, DEPARTMENT OF PSYCHOLOGY, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINNESOTA

Mr. IACONO. Mr. Chairman, members of the Judiciary Committee, I want to thank you for having me here to testify on this matter of great importance to our country’s security.

I wish to begin by making clear there is no distinctive lie response. Polygraph operators try to determine if someone is lying by comparing responses to relevant versus control or comparison ques-
tions. Relevant questions deal with issues related to being a traitor to your country, while the control questions deal with possible misdeeds from your past.

For example, the physiological response to the relevant question, “Have you committed espionage?” is compared to the response elicited by the control question, “Did you ever violate a traffic law?” Both questions are answered no. These tests are based on the idea that spies will be more physiologically aroused by the espionage question.

But scientific research suggests that criminals or spies can pass the test by artificially augmenting their response to the control question. When asked whether he violated a traffic law, a spy need only lightly bite his tongue or commence mental arithmetic exercises to pass this test. Polygraph operators have no way of detecting the use of these countermeasures, and detailed instructions regarding how to employ them can be found in libraries and on the Internet, for instance, at the website antipolygraph.org. Someone who is clever enough to be a spy should be clever enough to learn these simple techniques to beat a polygraph.

For an innocent person to pass, he must be more worried about answering a question about a traffic violation than about espionage. However, it is obvious to everyone which of these two questions is most important. Even though innocent, being asked about espionage is likely to be upsetting because your patriotism is being challenged and because your response to this question determines your future employment. The consequences of being physiologically aroused to a question about espionage are grave, even for innocent people. That is why they would be expected to fail polygraph tests in large numbers when the tests are scored in the standard way.

In fact, the best studies of polygraph tests using real life cases and published in top scientific journals find that innocent people fare little better than chance on these tests, with 40 percent or more failing on average. This explains why large numbers of FBI applicants fail pre-employment polygraph exams, even after they have been judged to satisfy most of the FBI qualifications to be an agent.

Surprisingly, however, when polygraphs are given to those already employed by the government, almost all of whom can be presumed to be innocent, very few individuals fail. This outcome is obtained because examiners understand that failing more than a handful of those with security clearances would be embarrassing to themselves and have potentially catastrophic consequences for government programs that depend upon having a stable, expertly trained workforce. In other words, post-employment polygraphs are not scored following standard procedures. Examiners make subjective judgments that find few workers deceptive.

In the absence of a scientific basis for their program, the government has turned to other arguments to justify polygraphs, claiming they have utility because they generate important admissions from employees. This argument has not been supported by data. Sworn statements of significant wrongdoing, firings, arrests, convictions, and list of spies uncovered as a result of polygraph tests have not been forthcoming.
The government also argues polygraphs have a deterrent effect, a claim with no empirical support that is certainly unlikely to be true as employees learn that virtually no one fails polygraphs.

At their invitation, I recently met with scientists at Los Alamos National Laboratory. I found them very concerned about protecting nuclear secrets. However, these scientists do not believe polygraph testing will accomplish this objective. They are worried because valued senior staff are retiring early and talented young prospects are turning away from lab employment rather than subject their careers and integrity to the polygraph equivalent of Russian roulette.

To conclude, polygraphs are unlikely to catch spies and are likely to have deleterious effects on the recruitment and retention of the best employees. To the extent that their value derives from admissions made during testing, these admissions will only be forthcoming if examinees believe the tests work. The success of the government program thus depends on examinees being ignorant of the procedure, an unsafe assumption, especially when those tested are the kinds of smart people we want as intelligence officers and weapons scientists. Even if polygraph testing were as accurate as the government claims, long-term harm to national security may outweigh any benefits. Thank you.

Chairman HATCH. Thank you, Mr. Iacono.

[The prepared statement and attachment of Mr. Iacono follow:]

STATEMENT OF WILLIAM G. IACONO, PROFESSOR, DEPARTMENT OF PSYCHOLOGY, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINNESOTA

Mr. Chairman, members of the Judiciary Committee, I want to thank you for having me here to testify on this matter of great importance to our country’s security.

I wish to begin by making clear that there is no distinctive lie response. Polygraph operators try to determine if someone is lying by comparing responses to Relevant vs. "control" or comparison questions. Relevant questions deal with issues related to being a traitor to your country while the control questions deal with possible misdeeds from your past. For example, the physiological response to the relevant question "Have you committed espionage?" is compared to the response elicited by the control question "Did you ever violate a traffic law?" Both questions are answered "no." These tests are based on the idea that spies will be more physiologically aroused by the espionage question. But scientific research suggests that sophisticated criminals or spies can pass the test by artificially augmenting their response to the control question. When asked whether he violated a traffic law, a spy need only curl his toes inside his shoe, lightly bite his tongue, or commence mental arithmetic exercises to pass this test. Polygraph operators have no way of detecting the use of these countermeasures, and detailed instructions regarding how to employ them can be found in libraries and on the internet. Someone who is clever enough to be a spy should be clever enough to learn these simple techniques to beat a polygraph.

For an innocent person to pass, he must be more worried about answering a question about a traffic violation than about espionage. However, it is obvious to everyone which of these two questions is more important. Even though innocent, being asked about espionage is likely to be upsetting because your patriotism is being challenged and because your response to this question determines your future employment. The consequences of being physiologically aroused to a question about espionage are grave even for innocent people; that is why they would be expected to fail polygraph tests in large numbers when the tests are scored in the standard way. In fact, the best studies of polygraph tests, using real-life cases and published in top scientific journals, find that innocent people fare little better than chance on these tests, with 40% or more failing on average.

This explains why large numbers of FBI applicants fail pre-employment polygraph exams even after they have been judged to satisfy most of the FBI qualifications to be an agent. Surprisingly, however, when polygraphs are given to those already employed by the government, almost all of whom can be presumed to be innocent,
very few individuals fail. This outcome is obtained because examiners understand that failing more than a handful of those with security clearances would be embarrassing to themselves and have potentially catastrophic consequences for government programs that depend on having a stable, expertly trained work force. In other words, post-employment polygraphs are not scored following standard procedures; examiners make subjective judgments that find few workers deceptive.

In the absence of a scientific basis for their program, the government has turned to other arguments to justify polygraphs, claiming they have utility because they generate important admissions from examinees. This argument has not been supported by data. Sworn statements of significant wrongdoing, firings, arrests, convictions, and lists of spies uncovered as a result of polygraph tests have not been forthcoming. The government also argues polygraphs have a deterrent effect, a claim with no empirical support that is certainly unlikely to be true as employees learn virtually no one fails polygraphs.

At their invitation, I recently met with scientists at Los Alamos National Laboratory. I found them very concerned about protecting nuclear secrets. However, these scientists do not believe polygraph testing will accomplish this objective. They are worried because valued senior staff are retiring early and talented young prospects are turning away from lab employment rather than subject their careers and integrity to the polygraph equivalent of Russian roulette.

To conclude, polygraphs are unlikely to catch spies and are likely to have deleterious effects on the recruitment and retention of the best employees. To the extent that such value derives from admissions made during testing, these admissions will only be forthcoming if examinees believe the tests work. The success of the government program thus depends on examinees being ignorant of the procedure, an unsafe assumption, especially when those tested are the kinds of smart people we want as intelligence officers and weapons scientists. Even if polygraph testing were as accurate as the government claims, long-term harm to national security may outweigh any benefits. Thank you.

---

ADDENDUM TO ORAL STATEMENT OF WILLIAM G. IAICONO

POLYGRAPH SCREENING OF FEDERAL EMPLOYEES AND JOB APPLICANTS

NATIONAL SECURITY SCREENING

In view of the federal Employee Polygraph Protection Act of 1988 (29 US Code, Chapter 22), which prohibits requiring employees or job applicants in the private sector to submit to polygraph testing, it is ironic that the federal government is the principal employer of polygraph examiners. Applicants for positions with the FBI, CIA, NSA, Secret Service, and similar agencies are required to undergo lie detector tests intended to supplement or substitute for background investigations. Current employees of some of these agencies, military personnel who hold high security clearances, and civil employees of defense contractors doing classified work may be required to undergo periodic tests for screening purposes. The Department of Defense conducted some 17,970 such tests in 1993. Most of these tests are referred to as counterintelligence scope polygraph tests by the government.

As a consequence of Public Law 106–65 (S. 1059) passed as part of the National Defense Authorization Act of 2000, potentially thousands of scientists and security personnel employed at U.S. weapons labs at Lawrence Livermore, Sandia, or Los Alamos must submit to polygraph tests as part of an effort to improve nuclear security. A relatively new procedure, the Test for Espionage and Sabotage (TES), or a nearly identical variant of this procedure, the Test for Espionage and Sabotage (TES), or a nearly identical variant of this procedure, the Test for Espionage and Sabotage (TES), or a nearly identical variant of this procedure, the Test for Espionage and Sabotage (TES), or a nearly identical variant of this procedure, the Test for Espionage and Sabotage (TES), is used.
As outlined in the recently promulgated Department of Energy (DOE) Rule 709.3 these counterintelligence polygraph examinations are to be limited to coverage of six topics:
1) espionage,
2) sabotage,
3) terrorism,
4) intentional unauthorized disclosure of classified information,
5) intentional unauthorized foreign contacts, and
6) deliberate damage or malicious use of a U.S. government or defense system.
Rule 709 has a number of interesting features that are similar to those governing the use of polygraph tests by other federal agencies and that are likely to stimulate law suits.4 These include the following:
• Prospective employees of the DOE or its contractors who refuse to take a polygraph cannot be hired and incumbent employees must be denied access to secret information.
• Using the results of a polygraph test as an "investigative lead" can result in an administrative decision that denies or revokes an employee's access to classified information and may lead DOE to "reassign the individual or realign the individual's duties within the local commuting area or take other actions consistent with the denial of access."
• These tests will be conducted at least every five years and also on an aperiodic basis.
• Public comment on the proposed regulations revealed widespread opinion that "that polygraph examinations have no theoretical foundation or validity." DOE decided, however, that "as a matter of law," the agency is mandated to conduct polygraph examinations, and "is no longer free to act favorably on comments arguing against establishment of a counterintelligence scope polygraph examination program because of information and claims about deficiencies in polygraph reliability."
The TES5 includes four irrelevant questions (e.g., "Do you sometimes drink water?" "Is today ___?"") and the following four relevant questions: "Have you committed espionage?" "Have you given classified information to any unauthorized person?" "Have you failed to notify, as required, any contact with citizens of sensitive countries including China?" "Have you been involved in sabotage?" The responses to the relevant questions are compared to the responses to four "directed lie" questions that serve as "controls" or comparisons by providing an example of a response to a known lie. The directed lies are questions that both the examiner and the examinee know will be answered falsely. These four questions are chosen from a list of acceptable alternatives, but may include any of the following, which the examinee is directed to answer "No": "Did you ever violate a traffic law?" "Did you ever say something that you later regretted?" "Did you ever lie to a co-worker about anything at all?" Examinees who show greater autonomic disturbance following the questions about espionage and sabotage, than they show following these directed lies, are classified as deceptive.
The field validity of counterintelligence scope polygraph examinations, including the TES, is unknown. However, the Department of Defense Polygraph Institute (DoDPI) has reported two laboratory studies of the validity of the TES.6 These both employed paid volunteers, 115 of whom were innocent while 60 others were each required to enact simulated acts of espionage or sabotage. Of the innocent subjects, 14 or 12.5% responded in the deceptive direction. Of the "guilty" subjects, 10 or 17% were misclassified as innocent.
It is obviously likely that innocent scientists or other persons with high security clearances would be more disturbed by the TES relevant questions asked during an official screening test than were these volunteers for whom the test carried no

3 Part 709 “Polygraph Examination Regulations” in Chapter III of Title 10 of the Code of Federal Regulations.
4 In anticipation of the DOE regulations, attorneys representing government employees and employee prospects have indicated a desire to sue the government based on adverse employee decisions made as a result of polygraph examinations.
5 Because the government has published information only on the TES, we will refer to this procedure in the remainder of this section.
6 DoDPI Study 1, supra note 33; and Department of Defense Polygraph Institute, Psychophysiological Detection of Deception Accuracy Rates Obtained using the Test for Espionage and Sabotage: 27 Polygraph, 68–73 (1996). Because inconclusive polygraph tests are typically repeated until they yield a conclusive verdict, inconclusive outcomes are not included in the calculation of accuracy rates in this study.
threat to their reputations or careers.\footnote{Field studies based on actual espionage cases are needed to determine how the TES works in real life when innocent persons reputations and careers are on the line. Such studies do not exist. However, there are studies of the accuracy of real life criminal polygraph tests that have been published in top journals such as Nature and the Journal of Applied Psychology. These journals routinely reject over 85% of submitted articles. The studies published in these journals indicate that approximately 43% of innocent subjects fail the polygraph when the decision is based on physiological responses to relevant and control questions. (For more details, see W.G. Iacono and D.T. Lykken, The Case Against Polygraph Tests in D. Faigman et al., Modern Scientific Evidence: The Law and Science of Expert Testimony. St. Paul, MN: West Publishing, 1997.)} The disturbance produced by the directed-lie questions, on the other hand, might be expected to be no greater in real-life than in simulated conditions of testing. Therefore, when innocent, loyal government employees with top secret classifications are subjected to the TES, one might expect many more to be classified as deceptive than the 12.5% suggested by the DoDPI studies. The actual rate of falsepositive diagnoses is probably close to the 43% level indicated by the real-life studies referred to in footnote 7.

When DOE scientists are subjected to the planned TES (or TEST), these data indicate that large numbers of innocent employees would be classified as deceptive if the test scores were relied upon. DOE’s polygraph examiners avoid any such disastrous result because they know that the base rate of splying (the proportion likely to be spies) among such a highly screened and dedicated group is likely to be tiny. Consequently, they cannot fail 43% or even 12.5% of scientists without undermining their own credibility, creating a personnel management nightmare, and wreaking havoc on employee morale. Therefore, subjects who are more troubled by “Have you committed espionage?” than by “Did you ever say something that you later regretted?” are invited by the examiner to explain why they might have responded in this way. If the respondent’s answer and demeanor satisfy the examiner, his “fail” is converted to a “pass.” Thus, by permitting the polygraph operator to be the ultimatearbiter, relying on whatever clinical skills or intuitions s/he may (or may not) possess, the frequency of false-positive diagnoses is kept to a low value. Nevertheless, if as few as 2% of the 10,000 workers potentially covered by Rule 709 receive final diagnoses of “deception indicated,” 200 highly trained but probably innocent scientists would be implicated as spies in the first round of testing.\footnote{The Department of Defense Polygraph Program report to Congress for Fiscal year 2000 illustrates how polygraphers adjust the outcomes of their tests to minimize failing anyone [Department of defense Polygraph Program Annual report to Congress, Fiscal Year 2000, Office of the Assistant Secretary of Defense (2000; available at http://www.fas.org/sgp/othergov/polygraph/dod-2000.html). For fiscal year 2000, 7,688 individuals were given counterintelligence scope polygraph tests but demonstrated “no significant physiological response to the relevant questions and provided no substantive information.” In other words, some undetermined number provided a substantial physiological response but passed because they did not make incriminating revelations. An additional 302 individuals produced significant physiological reactions and provided “substantive information.” Of these, 194 received “favorable adjudication” with the remaining 8 cases still pending decisions, with no one receiving “adverse action denying or withholding access” to classified information. These data confirm that the government goes to extreme lengths to ensure no one fails these tests, but the also demonstrate that the tests have no utility.} Although the controversy surrounding the DOE polygraph screening program has been focused on the high likelihood that innocent individuals will be judged to be spies, there is little evidence that the program will actually catch spies. The laboratory studies of the TES, which reported only 83% accuracy in identifying persons “guilty” of committing mock-espionage, overestimate accuracy for the real-life guilty in two important ways.

First, consistent with real life screening test practices that help to keep the number failing these tests low, these studies did not conclude that deceptive polygraph tests were in fact failed if, during a post-test interview, an examinee offered information that reasonably justified why the test might be a false positive outcome. However, the design of the studies allowed only innocent test subjects this opportunity to “talk their way out of” a failed test because guilty people were instructed to confess as soon as the examiner confronted them with their deceptive test results. We do not know how many guilty individuals would have been mistakenly judged “false positives” had they been allowed to try to “explain away” the outcome of their examinations. Second, these DoDPI studies did not account for the likelihood that real spies would use countermeasures to defeat the TES.\footnote{Hontis et al. have shown that 50% or more of guilty subjects in laboratory studies can defeat a polygraph test by engaging in countermeasures such as lightly biting the tongue, curling toes} DOE scientists are not simplistic:

Continued
if one or two are in fact spies, surely both they and their foreign handlers would have
sense enough to be prepared to bite their tongues after each directed-lie question. Thus it is to be expected that the only weapons-lab scientists, with their highly specialized skills, who fail the projected DOE polygraph screens, will be truthful, honorable people who cannot offer a plausible excuse for failing their polygraphs. The most likely result of Rule 709 will be their ruined reputations and the government’s loss of skilled, dedicated employees.

Besides the facts that these tests are not justified on scientific grounds and that they are clearly biased against truthful employees, there is no evidence that personnel screening tests have any true utility.10 No spy has ever been uncovered because of a failed polygraph test. Although the government has argued that the admissions individuals make when undergoing these tests provide valuable information, there is no evidence documenting that vital or even important information has been uncovered as a result of polygraph tests. It is possible that employee screening has a deterrent effect in that knowledge that one must pass such tests may discourage would-be spies from seeking employment, and it may discourage the currently employed from entertaining thoughts about becoming a spy. However, there is no evidence to support such an assertion. Given the ease with which individuals can learn to defeat these tests coupled with the fact that almost no one is judged to have failed them,11 it is unlikely that they have any serious deterrent effect.

OPINIONS OF DOE NATIONAL LABORATORY SENIOR SCIENTISTS REGARDING EMPLOYEE SCREENING

Concerned that national laboratory employees must submit to periodic lie detector tests, a panel of the more senior national laboratory scientists and engineers undertook a detailed appraisal of the existing literature relating to the nature and validity of polygraph screening methods. Sandia’s Senior Scientists and Engineers (“Seniors”) provide a service to the Laboratories as independent, experienced, corporate evaluators of technical issues. They are available as a group to assist Sandia management with technical reviews of particularly significant issues and programs. Implementation uses subpanels of the Seniors (helped as necessary by other Sandia staff) to conduct the initial, detailed review of issues or programs. The reports of the subpanels are then made available for review by all other Seniors prior to submission to management. The report of the subpanel studying polygraphs and security at Sandia was circulated in the fall of 1999.12 These Seniors, whose expertise is in physics, chemistry, and/or mathematics, do not pretend to be psychologists, psychophysiologists, or psychometricians. But they do know how to read research reports and to evaluate statistical evidence and probability. In their Executive Summary, they concluded that:

1) There were no adequate studies to support polygraph screening

2) It is impossible to predict what error rates to expect

3) Polygraph testing could drive away existing innocent, talented workers who have provided value to national security programs, and it would deter prospective, talented employment candidates from considering a career in the national laboratories

4) Because few spies are likely to be detected, real subversives may be more likely to become insiders particularly if over-reliance on polygraph testing leads to reduced emphasis on other security and counterintelligence methods.

inside one’s shoes, or doing mental arithmetic when control questions are asked. Skilled examiners could not determine when countermeasures were being used. Charles R. Honts et al., Effects of Physical Countermeasures on the Physiological Detection of Deception, 70 J. Applied Psychol. 177, 177–187 (1985); Charles R. Honts et al., Mental and Physical Countermeasures Reduce the Accuracy of Polygraph Tests, 79 J. Applied Psychol. 252, 252–259 (1994).

10 In the Clinton Administration’s Joint Security Commission Report (“Redefining Security,” A Report to the Secretary of Defense and the Director of Central Intelligence, February 28, 1994, Joint Security Commission, Washington, D.C. 20505 ; available at http://www.fas.org/sgp/libra/index.html, it is noted that “the most important product of the polygraph process is more likely to be an admission made during the interview than a chart interpretation.” While senior officials at the CIA and the NSA acknowledge the controversial nature of the polygraph process, they also strongly endorse it as the most effective information gathering technique available in their personnel security systems.”

11 See footnote 8 summarizing the DoD Fiscal year 2000 report.

Personnel screening cannot be scientifically justified. If the polygraph charts obtained from security screening tests were scored objectively, large numbers of innocent employees would be expected to fail. They do not because the tests are scored subjectively, with few failing. Claims that these tests have deterrent value are not supported and are unlikely to be true as government employees learn that virtually no one fails these tests (see footnote 8). Claims that they have utility due to admissions made during testing are not supported by empirical evidence (again, see footnote 8). There is no evidence they catch spies, and it is likely that spies can learn to use countermeasures to defeat them. When bright, talented government workers and employee prospects come face to face with the requirement that now or in the future they will have to pass repeatedly a test that is the equivalent of playing Russian roulette with their careers, they are likely to opt for other careers. Over the long term, employee morale is likely to suffer, as will the nation’s national defense as the best and brightest employees are lost to government employment.

Chairman HATCH. Mr. Smith?

STATEMENT OF JEFFREY H. SMITH, PARTNER, ARNOLD AND PORTER, WASHINGTON, D.C.

Mr. SMITH. Mr. Chairman, it is good to be back up in the Senate this morning and I commend you and the Committee for taking up this extremely important issue.

The arrest of Robert Hanssen proved once again that no government is immune from espionage or treachery. The arrest of Aldrich Ames sent a shockwave through the CIA. The arrest of Robert Hanssen did the same to the Bureau. It is important, I think, to learn the right lessons from the Ames and Hanssen cases and not the wrong ones.

I have been privileged over the years to look at these issues a number of times as Chairman of the Joint Security Commission, as Chairman of the special panel that looked at what went wrong with the Ames case at the CIA, as General Counsel of the CIA, and again more recently for Director Tenet. All of these reviews point to the importance of a thoroughly professional counterintelligence service and one cannot, and I know this Committee will not, examine the polygraph solely by itself without looking at the broader issues of our counterintelligence programs.

The key to any intelligence officer is integrity. The first responsibility of an intelligence officer is to, obviously, prevent Pearl Harbors, and key to that, key to analysis, key to operations, is always integrity. And how one maintains integrity of an intelligence officer in a world that is shrouded in deception and steeped in secrecy is a very difficult issue. The job of a counterintelligence officer is to try to find an intelligence officer before he or she loses their moral bearings and engages in espionage. A polygraph can be an important tool in that, but it is by no means the only answer.

As my colleague, Dr. Iacono, pointed out, polygraph is not perfect. Innocent people have failed them and guilty people have passed them. As the Senate Select Committee on Intelligence report on Mr. Ames, he passed two polygraph exams while he was actively conducting espionage for the Soviet Union. At the same time, the polygraph has produced important results and many of those are classified. Some, we might be able to talk about this morning. But it is certainly true that the polygraph has resulted in important admissions and disclosures directly related to intelligence activities as well as ordinary crime.
In my view, there are three key elements that any polygraph program must have. First, the examiner must be a trained and experienced investigator with a long-term career opportunity at his or her employment agency. It should not be a dead-end job. Second, the agency must have procedures that will vigorously protect the rights and dignity of all employees. And third, no adverse personnel action should be taken solely on the basis of a polygraph examination.

The FBI is now under pressure to make greater use of the polygraph. If it chooses to do so, it must do so wisely. Many of the reforms made in the wake of the Ames case improved counterintelligence efforts. Chief among these was greater cooperation with the CIA and the FBI.

Other changes had a dark side. According to reports in the Washington Post, the FBI and the CIA reviewed the polygraph records of a large number of CIA employees and identified many who seemed to have problems. Under procedures required by law adopted in 1994, those cases were referred to the FBI, which subsequently opened criminal investigations. In some cases, the CIA identified and dealt with serious problems. Other cases revealed nothing more than a significant physiological response to a polygraph question. Many of these cases languished for long periods at the FBI before finally being returned to the CIA, where the officer could at least resume his or her career. More recently, CIA has implemented procedures to protect careers while these investigations proceed, but I remain concerned that we are still taking actions against individuals based solely on, in the absence of corroborating evidence, solely on significant physiological response to a focused counterintelligence question.

If we are going to use the polygraph, Mr. Chairman, we have to use it right. If we had never begun to use the polygraph, a strong case could be made that we should not now start. But we are doing it and we have to use it using procedures that adequately balance the rights of the individual against the rights and the need to protect national security information. Thank you, Mr. Chairman.

Chairman HATCH. Thank you, Mr. Smith.

[The prepared statement of Mr. Smith follows:]

STATEMENT OF JEFFREY H. SMITH 1, ARNOLD AND PORTER, WASHINGTON, DC

Mr. Chairman, it is a pleasure to appear before the Committee this morning, and I commend you for convening a hearing on this extremely important subject.

The arrest of Robert Hanssen proved, once again, that no organization of this government is immune from espionage or treachery. Seven years ago, the arrest of Aldrich Ames sent a shock wave through the CIA. The recent arrest of Hanssen has done the same to the Bureau. Despite the pressure we all feel to respond quickly in order to prevent future counterintelligence breaches, it is important for us to learn the right lessons from both the Ames and Hanssen cases. In this regard, I commend you, Mr. Chairman, Senator Specter and the other members of this Committee for the leadership you are showing with respect to counterintelligence matters and for your desire to explore the complex policy and technical issues related to the use of the polygraph for counterintelligence purposes.

I was privileged to serve as Chairman of the Joint Security Commission created by then-Secretary of Defense Les Aspen and Director of Central Intelligence Jim Woolsey in 1993 and 1994 to look at the security procedures of the government. Our final report made many recommendations, including several focused on counterintel-

---

1 Partner, Arnold & Porter, Washington, DC. Former General Counsel, CIA, and former General Counsel, Senate Armed Services Committee.
ligence and the polygraph. When Ames was arrested, Director Woolsey asked me to chair a special panel that looked at what went wrong in the Ames case. For that purpose, former Secretary of Defense Harold Brown and former National Security Adviser General Brent Scowcroft joined our Commission. Our review, as well as others in the Executive Branch and Congress, led to a number of important changes. I believe these efforts have produced marked improvement in counterintelligence. Probably the most important change was vastly better cooperation between the FBI and CIA. But the Hanssen case shows how far we still have to go.

Our intelligence agencies are our first line of defense—our early warning system. Their most important job, at the end of the day, is to ensure there are no more Pearl Harbors. They must also provide unvarnished analysis to the President, Congress and other policymakers. It is imperative that their analysis be unaffected by policy considerations. On occasion, they are also required to carry out dangerous covert actions to achieve a national objective.

In all roles—collection, analysis, and operations—the integrity of the individual officer is the single most important quality he or she must possess. Officers must maintain that integrity in a world of secrecy and deception. Secrecy and deception are integral aspects of intelligence and counterintelligence activities. It is absolutely imperative for intelligence officers, whether they be at the CIA, in the military services, or at the FBI, to maintain their ethical and moral bearings so that they can be scrupulously honest when dealing with their colleagues, conducting their analysis, and engaging in operations. In all professions integrity is important, but in few professions is integrity more critical than in the fields of intelligence and law enforcement. When an officer fails to maintain his or her integrity or loses his or her bearings, the consequences can be disastrous—as happened with Aldrich Ames and Robert Hanssen.

Counterintelligence must identify officers who fail to maintain integrity or who have lost their bearings before they cause disastrous consequences. Counterintelligence is very hard work in any society—and it is especially hard work in a democratic society. We are an open society and correctly pride ourselves on being a trusting people. We have a healthy suspicion of authority, and we are leery of secrecy and uncomfortable with deception.

The need for integrity points to a related, and I believe, critical point. We live in the Digital Age, in which information technology is diffusing into all areas of our public and private lives. Yet technology, by itself, cannot deliver security. At the end of the day, counterintelligence is all about people.

As you have observed, Mr. Chairman, we cannot consider the use of the polygraph without an appreciation of the larger context of how we are organized to conduct counterintelligence and recruit people to do counterintelligence.

Mr. Chairman, I fear that the United States has not adequately recruited, promoted, and rewarded the very best counterintelligence officers. Too often, counterintelligence and security officers are not widely admired within their organizations. I wonder, for example, how many graduate students in Russian studies at our top universities are approached by the CIA and FBI. In contrast, the British counterintelligence agency, MI5, recruits heavily at Britain's best universities. We should be doing the same. Our intelligence agencies are hampered by the low government salaries and, in some instances, by the academic community's general skepticism toward the intelligence community stemming from our country's experience in the 1960s and 1970s. But counterintelligence is inherently fascinating and, in my view, the CIA, the FBI, and the military services should be seeking to recruit counterintelligence officers at the very best universities in the country.

Even when our intelligence agencies succeed in recruiting the best and the brightest, many of them do not pursue a position in counterintelligence. The CIA has been successful in recruiting some of our top graduate students of Russian affairs to become analysts of Russia, but it is much harder to persuade them to become counterintelligence or security officers.

We pay a grave price for this. In my experience, counterintelligence work is some of the most important work available in government. We need government leadership at the highest levels to strengthen our counterintelligence services.

As this Committee knows, Director Freeh and Director Tenet have recently announced a number of significant changes in the counterintelligence organization and policies of our government. Those changes, known as "CI-21," for "Counterintelligence in the 21st Century," are a dramatic improvement and should be of great benefit. But the key remains people.

Having described the counterintelligence landscape, let me now turn to the specific issue before us today: the polygraph.

At the outset, let me say that the polygraph is only one tool available to American counterintelligence. It must be considered along with all the other measures we take
to protect ourselves and our secrets. Many elements contribute to a strong and effective counterintelligence program, beginning—as I have discussed—with the quality of our personnel and extending through a determined effort to penetrate the intelligence services of our adversaries.

The polygraph is a simple instrument measuring certain physiological responses following a set of questions asked by an examiner. The basic theory is that when a person knowingly lies, he or she will have a measurable physiological response— for example, a change in breathing, heart rate and galvanic skin reaction.

However, the polygraph is not perfect. Honest people have “failed” polygraph examinations while dishonest people have “passed” them. The polygraph is intrusive and may be abused. If misused, the polygraph can cause morale to deteriorate and ruin the careers of innocent people. Perhaps most importantly, it can lead to overconfidence—as it did at the CIA before the arrest of Ames.

A well-administered polygraph program must contain several important safeguards:

First, the examiner must be a trained and experienced investigator with long-term career opportunities at his or her employing agency.

Second, the agency must have procedures that will vigorously protect the rights and dignity of all employees.

Third, no adverse personnel action should be taken solely on the basis of the results of a polygraph examination.

The FBI is now under pressure to make greater use of the polygraph. If it chooses to use the polygraph, it must do so wisely. The polygraph is only one tool in an effective counterintelligence program. Many in the CIA felt that there could never be a spy at the Agency, in large part because the officers were routinely polygraphed, even before the Ames incident. Unfortunately, they were wrong.

No amount of technology can substitute for strong management that is alert to individuals who are behaving in a way that suggests the need for investigation. With respect to Ames, his alcoholism and poor performance should have been a red flag for management to pay close attention. The CIA has now instituted management practices to pick up on such signals.

Many of the reforms made in the wake of the Ames case improved counterintelligence efforts. Chief among these was greater cooperation between the CIA and FBI—and a recognition that the CIA was not immune to having a spy in its midst.

Other changes, however, had a dark side. According to reports in the Washington Post, the FBI and CIA reviewed the polygraph records of a large number of CIA employees and identified many who seemed to have problems. Under procedures required by a law adopted in 1994, those cases were referred to the FBI, which subsequently opened criminal investigations. In some cases, the CIA identified and dealt with serious problems. Other cases revealed nothing more than a “significant physiological response” to a polygraph question. Many of these cases languished for long periods at the FBI before finally being returned to the CIA, where the officer could at last resume his or her career. More recently, the CIA has implemented procedures to protect careers while investigations proceed. This is an example of the kind of sophisticated policy that is needed to balance the rights of individuals against the need to protect national security.

In deciding whether to expand the use of the polygraph, we should also note that the number of people with knowledge of sensitive counterintelligence investigations far exceeds the number of current employees. Justice Department lawyers, officials at other agencies, military officers, and White House/NSC staff often have access to highly classified information. As this Committee knows, certain Members of Congress and the senior staff of the intelligence oversight committees are, by law, kept “fully and currently informed” of sensitive matters as well. Are we prepared to polygraph these persons as well?

If we had never begun to use the polygraph, a strong case could be made that we should now start. But we already are using it, and it has proven to be a very valuable tool. It has directly led to valuable information in many investigations—in cases involving both applicants for employment and current employees. It is also a significant deterrent.

But much work still lies ahead. Agencies must constantly struggle to find the right balance between the rights of individual citizens and the needs of national security. Further research must be done to improve the instrument and techniques employed. For example, I am encouraged by research into computerized polygraphs that would eliminate much of the subjective aspect of “interpreting” the results.

The polygraph is an effective tool in the effort to preserve our security, but it has a cost. Our goal must be to make that cost—in terms of innocent lives harmed—zero. To achieve that goal, we should make sure that our management practices and
personnel policies are geared toward attaining the highest level of counterintelligence.

Thank you, Mr. Chairman. I look forward to answering any questions that you and the Committee may have.

Chairman HATCH. Mr. Zaid?

STATEMENT OF MARK S. ZAID, ESQ., COUNSEL, LOBEL, NOVINS AND LAMONT, WASHINGTON, D.C.

Mr. Zaid. Thank you, Mr. Chairman. Distinguished members of the Committee, I appreciate the opportunity to appear before you. This is obviously an extremely important and timely topic in the wake of Agent Hanssen’s arrest on espionage charges, but there’s been a knee-jerk reaction that something more must be done to protect our national security interests. I agree with the sentiment, but the FBI has prematurely caved in to public pressure to expand its polygraph program in order to quell the flames of this more recent outcry. Yet, this will likely have the same effect as throwing gasoline on the embers of a dying fire.

For the last 2 years, I have represented unsuccessful applicants for Federal employment who have fallen victim to polygraph policies. Two lawsuits are pending against the FBI, DEA, and Secret Service. I also routinely represent or advise Federal employees and contractors who run into problems of security matters, which often times involves polygraphs.

With my testimony, I wish to emphasize five key points. The Federal Government’s use of polygraph examination is based more on a perception of insecurity on how best to address difficult security problems than one based on reason or logic. The policy has driven the science rather than the other way around. Each year, Federal agencies are accusing Americans falsely of crimes or of lying on various matters, and as many as 66 percent of those who are actually guilty of these acts go undetected.

Second, most Federal polygraph examinations are screening tests for applicants or for routine reinvestigations of current employees, yet there are no known studies that support the validity of these types of tests. Even the government’s own experts have condemned the use of screening tests.

Third, there is a lack of standardization pertaining to the use of polygraph screening throughout the Federal Government. Depending upon the agency, polygraphers routinely have demonstrated abusive and threatening conduct which improperly stimulates a person’s physiological responses, and there are very few, if any, legitimate avenues to seek redress against the polygraphers.

Four, though Attorney General John Ashcroft recently admitted that the false positive rate is 15 percent, there is little or no due process accorded applicants for Federal employment who have fallen victim. An inconclusive or unfavorable finding automatically results in your job offer being rescinded and these results will be disseminated to other agencies. In addition to concerns of false positive results, current Federal employees are prone to be victimized by retaliatory polygraph exams, and an inconclusive or unfavorable result very often will lead to career-ending damage for that employee, even though no guilt has ever surfaced or evidenced.
You'll often hear about the utility value. Nobody questions the utility value. People have confessed at polygraphs. The question is, is it the device that is doing it or the method of interrogation? I have got law enforcement clients who will tell me stories of how suspects will confess, persuaded to confess because of the use of a lie detector, but the lie detector was the police car antenna that some other officer honked the horn every time an answer was given and told the suspect they were lying, or a photocopying machine that had a piece of paper in it that said, “you are lying” once the print button was pushed.

Let me briefly address two agencies where some major problems are at. Mr. Smith referenced some of the problems at the CIA. There are at least 300 employees who have been in polygraph limbo since the Ames case who have only shown significant physiological responses but no evidence of wrongdoing has ever emerged. The FBI has taken these cases, most of the times with contempt, because there is very little information to investigate. But during this time, these people are not promoted and they are never given overseas assignments, and for people, especially within the Directorate of Operations, that is a career-ender for those individuals.

Sometime in 1997 or 1998, CIA polygraphers actually reported to the Justice Department's Public Integrity Section that they were instructed by CIA management to fail certain employees. They also revealed that they were taught how to sensitize examinees during pre-testing interviews so as to create the likelihood of false positives. As far as I know, these allegations have never been investigated.

There is also evidence that the CIA uses polygraphs as a means of retaliation against employees who file EEO complaints or grievances. Within one to 2 months of filing these complaints, these individuals all of a sudden have an acceleration of their routine security investigations, sometimes one or 2 years in advance of when they are scheduled, and as we all know, usually, it is 5 years. Most of the time, it is seven or 8 years.

The Secret Service has been the agency I have received the most complaints about. Their polygraphers have been abusive, hostile, arrogant, banged their fists on the table, slapped their thighs, and routinely yell or scream at examinees. They ask personal questions about marital infidelities and even sexual relations with animals.

Some key points, as the time runs out: Most agencies fail to tape record or audiotape polygraphs. That would protect both the session and the examinee, one would think. There is evidence of bias of polygraphers that affects the test. Mr. Smith mentioned the Aldrich Ames case and the fact that he passed two exams, which shows there was not much in the way of deterrent value. In the 1980's, about 30 Cubans defected to the United States to the CIA. All passed polygraph examinations, and it was later found out that they were all double agents for the Cuban government.

In closing, the late Senator Sam Irvin Jr. once stated that polygraph testing smacks of 20th century witchcraft. Dr. William Marsten, the Harvard psychologist who many consider to be the father of the modern polygraph, also created the popular comic book character Wonder Woman. It is no coincidence that her magic lasso requires those who feel its bind to tell the absolute truth. To dis-
cover if Robert Hanssens, other Robert Hanssens, exist within the Federal Government, we may as well put our faith in Wonder Woman's magic lasso as much as the polygraph. Thank you.

Chairman HATCH. Thank you, Mr. Zaid.

[The prepared statement and attachments of Mr. Zaid follow:]

STATEMENT OF MARK S. ZAID, ESQ., 1 LOBEL, NOVINS AND LAMONT, WASHINGTON, DC

Mr. Chairman, distinguished members of the Committee, thank you for the opportunity to appear before you and offer my comments on issues surrounding the federal government's use of polygraphs. I applaud the Committee's interest in this topic.

This is, of course, an extremely important and timely topic. In the wake of the arrest of FBI Special Agent Robert Hanssen on espionage charges, there has been a knee-jerk reaction that something more must be done to better protect our national security interests. I fully agree with that sentiment. However, every time a spy is caught, or a lapse in security is detected, a public outcry for change erupts. And each time this occurs there are those who lobby to expand the use of polygraph examinations as the means by which to expose those who would betray our nation, steal our secrets or commit crimes while a federal employee. We must not react so quickly to these understandable concerns. Unfortunately, the FBI has already caved in to public pressure and expanded its polygraph testing in order to quell the flames of this more recent outcry. Yet, expanding polygraph use is more akin to throwing gasoline on the embers of a dying fire. Even when assuming the utility of the device, the polygraph machine causes far greater harm to our country than we derive a benefit.

For nearly the last two years I have represented unsuccessful applicants for federal employment who have fallen victim to the government's polygraph policies. Presently, there are two lawsuits, which are the first of their kind, pending against the Federal Bureau of Investigation ("FBI"), the Drug Enforcement Administration and the United States Secret Service ("USSS") that challenges their use of pre-employment polygraph examinations. I also routinely represent or advise current federal employees or government contractors within the law enforcement, military and intelligence communities who encounter difficulties in security matters, which often times involves polygraph examinations.

My testimony today will address the existing policy issues surrounding the use by the federal government of polygraphs for screening purposes, the manner in which federal agencies utilize the device and the consequences that arise from its use. I will also briefly summarize the legal issues in the two pending civil lawsuits.

Overview Of Testimony

With my testimony, I wish to emphasize six key points. In listening to today's testimony, this Committee should not be under the mistaken impression that

1 Of Counsel, Lobel, Novins & Lamont, 1275 K Street, N.W., Suite 770, Washington, D.C. 20005. Tel. No. (202) 371-6626; Fax No. (202) 371-6643; E-Mail: ZaidMS@aol.com. Mr. Zaid specializes in litigation and lobbying on matters relating to international transactions, torts and crimes, national security, foreign sovereign and diplomatic immunity, defamation, the First Amendment, and the Freedom of Information/Privacy Acts. Additionally, Mr. Zaid serves as the Executive Director of The James Madison Project, a non-profit organization with the objectives of reducing secrecy, promoting government accountability, and educating the public on national security matters. The views expressed by Mr. Zaid are his own and do not necessarily reflect the views of any organization or entity with which he is or has been affiliated.

2 For example, following the Walker family espionage cases in 1985, Defense Secretary Caspar Weinberger appointed a commission to study the problem of protecting classified defense information against espionage. The commission recommended expanded use of the polygraph as a counterespionage tool. "Defense Officials Urge Efforts to Counter Espionage", Aviation Week and Space Technology, Dec. 2, 1985, at 24.

3 See Croddy et al. v. FBI et al., Civil Action No. 00-0651 (Mar. 15, 2000 D.D.C.)(EGS); John Doe 96 et al. v. FBI et al., Civil Action No. 00-2440 (Oct. 11, 2000 D.D.C.)(EGS). The defendants have filed Motions to Dismiss in both cases, and the parties are awaiting the scheduling of oral arguments or a decision from the Court. Copies of the pleadings in these cases can be found at the following websites: www.нополиграф.com, www.stopoligragh.com and www.antipoligraph.org. Additional information regarding polygraph policies can be found at 7www.jamesmadisonproject.org and www.fas.org/fpplothergov/polygraph/index.html.
science will determine the outcome of the policy. Rather the current federal polygraph programs require a difficult policy examination of the unequal balance between harm and benefit. My key themes unequivocally tilt that balance against utilizing the device.

• The federal government’s use of polygraph examinations is based more on a perception of insecurity on how best to address difficult security problems than one based on reason or logic. The policy has driven the science rather than the other way around. Even if one operated under the assumption that the polygraph protagonists’ science is more accurate and that the device has a certain degree of utility, there is still ample room for abuse and error to occur, which it does. Each year federal agencies falsely accuse thousands of honest and trustworthy Americans of lying or having committed criminal acts. And many of those who are truly guilty of such offenses go undetected by the device. When considering this dispute as more a matter of policy, rather than debating the science or utility, one must conclude the polygraph causes more harm to our society than benefit.

• The overwhelming majority of federal polygraph examinations that are administered are screening tests either for applicants or are part of security reinvestigations for current employees. Yet, there are no known studies that support the validity of these types of tests. Indeed, even the government’s own experts have condemned the use of screening tests.

• There is a lack of standardization pertaining to the use of polygraph screening examinations throughout the federal government. Depending upon the agency, polygraphers routinely have demonstrated abusive and threatening conduct which improperly stimulates an examinee’s physiological responses. Moreover, there are no legitimate avenues available to challenge the conduct of a polygrapher. Oversight of polygraphers is not a high priority. Few agencies truly police the polygraph police.

• Though the government acknowledges the existence of false-positive rates as high as 15%, there is little or no due process accorded applicants for federal employment who have fallen victim to polygraph abuse. An inconclusive or unfavorable finding automatically results in the loss of a conditional job offer. Moreover, federal agencies will disseminate polygraph results to other federal, state or local agencies without hesitation thereby stigmatizing these individuals on a continuing basis.

• In addition to concerns of false-positive results, current federal employees are prone to be victimized by retaliatory polygraph examinations. Indeed, evidence exists that some agencies instruct their polygraphers to intentionally fail employees or generate false-positive results. An inconclusive or unfavorable polygraph result for an employee very often signifies career-ending damage, even though no collaborating evidence of their guilt may ever surface.

• There are alternative methods available other than polygraph examinations that will at least provide an examinee with a reasonable opportunity to respond to any allegations that arise from suspicious conduct.4

WHAT ACTUALLY IS A POLYGRAPH?

A modern polygraph machine measures respiration at two points on the body; on the upper chest (thoracic respiration), and on the abdomen (abdominal respiration). Movements of the body associated with breathing are recorded such that the rate and depth of inspiration and expiration can be measured. The polygraph machine also measures skin conductance or galvanic skin response. Electrodes attached to the subject’s fingertip or palm of the hand indicate changes in the sweat gland activity in those areas. In addition, the polygraph measures increases in blood pressure and changes in the heart rate. This measurement, known as the cardiovascular measurement, is obtained by placing a standard blood pressure cuff on the subject’s upper arm. Finally, the polygraph may also measure, by means of a plethysmograph, blood supply changes in the skin which occur as blood vessels in the skin of the finger constrict due to stimulation.

A polygraph examiner purports to interpret these readings while asking a series of questions. The examiner forms an opinion of the subject’s truthfulness by allegedly comparing the physiological reactions to each set of questions. A number of ex-

4It is beyond the scope of this hearing to truly and properly address this very important question, but some examples include having counterespionage experts train security investigators, requiring all employees to file detailed annual financial disclosures and the creation of databases that examine employees’ personal foreign travel, foreign contacts and outside activities. Obviously, the necessary balance to ensure some adequate level of personal privacy must be taken into consideration, as well as precautions to prevent abuse and allow for challenges.
trinisf factors, however, affect polygraph validity. Because the examiner must formulate the questions, supplement the data with his own impression of the subject during the exam, and infer lies from a combination of the data and his impressions, the level of skill and training of the examiner will effect the reliability of the results. A polygraph examiner’s interpretation of polygraph results is not, in fact, true evidence of conduct. It is merely the opinion of an individual with no knowledge about any of the facts surrounding the subject matter of the questions.

The results of the modern lie detector stretch back to antiquity. Like modern methods, early techniques to ferret out lies often relied on the behavior exhibited by liars—sweaty palms, dry mouth, shifting gaze, racing pulse. In China, for example, suspected liars were fed a handful of dry rice. If they could spit it out, the thinking went, they were telling the truth. If the rice stuck to their tongue, they must have something to hide.16

PAST CONGRESSIONAL POSITIONS AGAINST POLYGRAPH USE

This hearing, of course, is not the first time the Congress has directed its attention to polygraph policies. Congressional representatives and Committees have consistently derided the use of polygraph examinations. Some examples follow.

The late Senator Sam J. Ervin, Jr., once stated about polygraph testing that (false positives) is highest when the polygraph is used for screening purposes. Why then do [employers] have such blind faith in these devices? In my opinion, it is directly related to the role of science and technology in our society—the cult of the ‘expert’. There is an increasing belief that anything scientific must be more reliable and rational than the judgment of men. There is no necessity for these infringements of freedom and invasions of privacy; but even if there were a necessity for them, I believe that every citizen should answer like William Pitt: ‘Necessity is the plea for every infringement of human liberty. It is the argument of tyrants; it is the creed of slaves.’

In 1964, a subcommittee of the House Government Operations Committee concluded that there was no adequate evidence to establish the validity of the polygraph. In 1974, a House Committee chaired by Congressman Moorehead recommended that polygraph usage “be completely discontinued by all government agencies for all purposes.” In 1979, the Oversight Subcommittee of the Select Committee on Intelligence of the U.S. House of Representatives was notified that polygraph testing was a central component of the preemployment screening process for applicants for positions in most federal law enforcement and intelligence agencies. Approximately 75% of those denied security clearances by the CIA or NSA resulted from the polygraph. Based in part on this information, the subcommittee urged the director of the CIA to institute research on “the accuracy of the polygraph in the pre-employment setting and to establish some level of confidence in the use of that technique.”

To date, no credible research supporting the use of preemployment polygraph screening has been published.

In November 1983, the Office of Technology Assessment issued a report entitled “Scientific Validity of Polygraph Testing: A Research Review and Evaluation”. The report concluded that “the available research evidence does not establish the scientific validity of the polygraph test for personnel security screening” and that the “mathematical chance of incorrect identification of innocent persons as deceptive (false positives) is highest when the polygraph is used for screening purposes.”

Particularly in light of this report, additional hearings were held and The Employee Polygraph Protection Act of 1988, 29 U.S.C. § 2001 et seq., was ultimately enacted. It generally prohibits the private sector from using polygraphs in preemployment screening and sharply curtails the permissible uses of the polygraph in specific-incident investigations. Prior to the enactment of this legislation, it was estimated that a minimum of 400,000 truthful employees were wrongfully labeled deceptive and suffered adverse employment consequences each year. The federal gov-

---

7 See Us of Polygraphs as “lie detectors” by federal agencies; Hearings Before a Subcommittee of the Committee on Government Operations, 88th Cong. (1964).
9 Lykken, supra note 6 at 161.
10 A copy of the report can be found at http://www.nopolygraph.com/polysad.htm.
ernment, however, exempted itself from the provisions prohibiting preemployment testing.

On September 29, 1997, Dr. Drew C. Richardson, a FBI Supervisory Special Agent, testified before the Senate Judiciary Committee and condemned the use of the polygraph machine. He testified, in part, that “[w]ithin the Bureau, polygraph examiners who have little or no understanding of the scientific principles underlying their practice, report to mid-level managers who are largely ignorant of polygraph matters. These mid-level managers in turn report to executives, who have real problems for which they seek needed solutions (e.g., the need to protect national security from the danger of espionage, and the need to hire employees with appropriate backgrounds). These executives are left unable to evaluate that polygraph is not a reliable solution and do not comprehend that ignorance and mis-information are built into their own command structure.”

Most recently, the FY2000 Intelligence Authorization Act asserted that “polygraphing has been described as a ‘useful, if unreliable’ investigative tool.” The Senate Intelligence Committee instructed the Central Intelligence Agency (“CIA”) and FBI to assess “alternative technologies to the polygraph” and report back to the Committee within ninety days.

THE FEDERAL GOVERNMENT’S USE OF POLYGRAPH SCREENING TESTS

The majority of those circumstances where a polygraph is utilized is in the screening of federal applicants for employment or a current federal employee. The questions will typically differ between applicants and current employees. The former will have to respond to lifestyle questions (drug usage, sexual activities), while the latter is predominantly limited to counterintelligence questions (unauthorized disclosure of classified information, contact with foreign personnel). Depending upon the agency, the format of the test will also differ.

There are no peer-reviewed scientifically accepted studies that demonstrate the validity of such screening tests. Even the government’s own experts agree on this point. Thus, unlike an investigation into a specific crime, there is no particular reason why a screening examination is being administered in that no specific allegation is being explored that has a perceived basis of merit. The tests are nothing more than fishing expeditions.

Applicants For Federal Employment

Federal agencies use the polygraph machine in preemployment settings in order to indiscriminately weed out individuals and avoid the need to conduct an in-depth background investigation. This permits the agency to avoid spending time and resources on individuals they may possibly later seek to reject from employment. As a result, however, thousands of innocent individuals are falsely labeled drug users, drug dealers, terrorists and/or spies without any reasonable opportunity to ever clear their name. After receiving a false-positive reading that falls outside an

12 See http://antipolygraph.org/hearings/senat...richardson-statement.shtml.
15 As Spinoza, one of the greatest Western thinkers and philosophers, wrote more than 300 years ago in his famous treatise “Ethica ordine geometrico demonstrata” (otherwise known as “Ethics x1677): “He who would distinguish the false from the true, Must have an adequate idea of what is false and true.”
16 For example, the FBI has asserted in correspondence that the “polygraph is an effective investigative tool which can save many investigative man-hours, decrease the overall cost of investigations, and provide valuable investigative leads or information which could not otherwise be developed due to lack of evidence or other noteworthy information.” Copies on file with the author.
17 For example, according to an October 28, 1997, letter sent by Donald Kerr, the Assistant Director of the FBI’s Laboratory Division, to Senator Charles E. Grassley, between March 1994, and October 1997, “the FBI conducted approximately 16,200 preemployment polygraph examinations. Of those, 12,930 applicants (80 percent) passed and continued processing; 3,270 applicants (20 percent) were determined to be withholding pertinent information. When these individuals were interviewed about their unacceptable performance in the polygraph session, 1,170 (36 percent) admitted to withholding substantive information.” See http://www.nopolygraph.com/kerr.pdf. While the FBI’s definition of “substantive” is unknown, based on the above FBI figures up to 64 percent of those individuals (2,100) who were deemed deceptive by the polygraph exami-
agency’s defined acceptable parameters, the applicant is simply left out in the cold while the agency continues to maintain the posture that the applicant is a liar. The applicant’s conditional offer of employment is immediately rescinded.

Although applicants and employees will be told their polygraph results will be kept confidential, the information is often shared with other intelligence and law enforcement agencies, whether that be federal, state or local. Sharing is permitted through the routine use exception of the Privacy Act. Not only does this result in irreparable harm to these applicants, but it denies the federal government’s access to qualified and capable employees. Yet when it suits the federal government’s needs, an agency will not hesitate to overlook an otherwise deceptive polygraph reading or denounce the polygraph as unreliable.

Current Federal Employees

The extent to which current federal employees are subject to polygraph testing, and the consequences from an inconclusive or deceptive reading, vary from one agency to another. Those agencies that do conduct polygraph testing of their employees, particularly from within the intelligence community, typically conduct routine counterintelligence examinations every five years or so. Depending upon the results, employees may face adverse personnel actions, loss of their security clearance or administrative limbo.

More detailed examples are below.

UTILITY VERSUS POLICY

In debating the need for the polygraph, you will often hear how successful the device has been in enticing examinees to confess to all sorts of crimes or acts. There is no significant dispute that use of the polygraph has indeed led to confessions. The question is what prompted the confession? The answer is that it is often not the polygraph as a device, but the method of interrogation that led to the confession. The perceived false notion that polygraph machines accurately detect lies can lead to the extraction of confessions from those who are either not that bright, as with many criminals, or who simply genuinely believe in the utility of the device. Law enforcement personnel throughout this country all have stories of how suspects have been persuaded to confess because of the use of a “lie-detector”. Yet, the device was nothing more than a police car antenna (a law enforcement officer would honk the horn after the individual provided a “false” response) or a photocopying machine (which would print out a piece of paper that indicated the suspect was “lying”).

The scientific community, as well as the government, admits to the existence of false-positives, identifying someone as guilty when they are really innocent, though the figures vary. Still, in announcing the FBI’s intention to expand its polygraph program, Attorney General John Ashcroft admitted in a press conference that the false-positive rate is 15%. Yet, despite knowing that innocent persons will be falsely accused, no adequate protections exist in any agency to address this obvious problem. Moreover, the existence of false-negatives, i.e., guilty individuals who pass as innocent, significantly contributes to the failure of the government’s polygraph policy.

---

18 See 5 U.S.C. § 552a(b)(3).
19 On February 3, 1997, James K. Murphy, the Chief of the FBI’s Laboratory’s Polygraph Unit in Washington, D.C. and a FBI polygraph examiner since 1978, submitted a declaration to the United States Military Court, Mid-Atlantic Region, Norfolk, Virginia, in the case of United States v. Ens Patrick J Jacobson, USN. He stated that “[i]t is the policy of The Department of Justice to oppose all attempts by defense counsel to admit polygraph results as evidence and to refrain from seeking the admission of favorable examinations which may have been conducted during the investigatory stage of a case . . . The FBI uses the polygraph as an investigative tool and cautions that the results should not be relied upon to the exclusion of other evidence or knowledge obtained during the course of an investigation . . . This policy is based upon the fact that, a) the polygraph technique has not reached a level of acceptability within the relevant scientific community, b) scientific research has not been able to establish the true validity of polygraph testing in criminal applications, c) there is a lack of standardization within the polygraph community for training and for conducting polygraph examinations.” See www.nopolygraph.com/murphy.pdf. The following year, the Department of Justice told the U.S. Supreme Court that polygraph evidence should be inadmissible because of its inaccuracy. United States v. Scheffer, 523 U.S. 303 (1998). Thus, a serious inconsistency exists between the government’s use of polygraphs in criminal cases and its extensive use of polygraphs to make vital security and preemployment determinations.
20 Which is governed by internal agency regulations and Executive Order 12,968, 60 Fed.Reg. 40245 (August 7, 1995)(establishing appellate framework to challenge denial of security clearances).
cies. Those who successfully generate a false negative response, of course, have avoided being caught. Yet, those who unfortunately generate a false-positive fall victim to an unending process of scrutiny when they have done nothing wrong.

Former FBI Special Agent Mark Mallah’s experiences illustrate the problem. In January 1995, he was asked to undergo a polygraph test. The examination was a routine national security screening. Special Agent Mallah was not under suspicion at the time. However, following the examination, he was accused of “deception” with respect to the question on unauthorized contact with foreign officials. Two weeks later, he was instructed to report to Washington, D.C. where he underwent two additional consecutive days of polygraph examinations and lengthy interrogations. The polygraphers continually insisted that he was being deceptive, but Special Agent Mallah continually denied the accusations. He was then placed on administrative leave with pay pending further investigation.

The FBI conducted a major and intrusive investigation which included the raiding of his home and seizure of personal belongings. For a two month period, he was even placed under twenty four hour surveillance, seven days a week. The FBI interviewed numerous friends, acquaintances, former roommates, colleagues, and members of his family. The FBI even accused one of his friends of being an accomplice and administered a polygraph test, which the individual “passed”. Special Agents showed up unannounced and surprised his wife at her place of work, and asked to interview her right then and there. When she was eventually interviewed, the FBI asked her to also take a polygraph, which she declined to do. The FBI asked both of Special Agent Mallah’s brothers to take a polygraph test. One agreed, and he “passed.” Another Special Agent told one of Special Agent Mallah’s friends that there was “significant evidence” against him. This same agent told Special Agent Mallah’s brother he was certain that he was guilty.

After five months of investigation, he returned to work as a Special Agent entrusted with a “top secret” clearance, a weapon and a badge. Yet, despite his re-instatement, the “problem” still existed. In October 1995, the FBI wrote that he was “the subject of a security reinvestigation involving your inability to resolve issues relating to your associations with foreign nationals . . . as well as your susceptibility to coercion as a result of your concealment of these matters.” No specifics were ever provided, and Special Agent Mallah still denies to this day that these allegations had any merit. Finally, the investigation was terminated in September 1996, nearly two years after it began. The final outcome was a letter of censure and a two week suspension for a trivial administrative issue and a minor discrepancy in his FBI employment application. The letter of censure was silent about unauthorized contacts with foreign officials, which was the alleged national security issue that launched the investigation in the first place. Even though he had been finally exonerated, in disgust with what occurred, Special Agent Mallah voluntarily resigned from the FBI with a clean record.

CURRENT FEDERAL USE OF POLYGRAPH EXAMINATIONS

Polygraph examinations are administered throughout the federal government, primarily by those agencies within the law enforcement and intelligence communities. Those agencies that are more heavily utilizing the device now include the FBI, USSS, CIA, Drug Enforcement Administration, National Security Agency, Department of Energy, Department of Defense, Bureau of Alcohol, Tobacco and Firearms, Defense Security Service, and the U.S. Marshall’s Service. Of course, polygraph use applies not only to federal employees, but also to independent contractors as well.

“

The polygraph . . . has achieved a new status in the world of counterintelligence in the past five years. The CIA and the FBI have polygraphed at least 40,000 job applicants and employees in their search for drug users and would-be spies. According to intelligence and law enforcement officials, the polygraph has become the nation’s number one tool for safeguarding national security against penetration by foreign agents.”

Though polygraphers for federal agencies all receive the same initial training at the Department of Defense’s Polygraph Institute, the manner by which a polygraph is administered will vary between agencies. Of course, the abuses that occur also vary between agencies. Some examples are detailed below.

Federal Bureau of Investigation

The FBI has had a long history with the polygraph. In the late 1930s, J. Edgar Hoover, the icon director of the FBI, frowned on its use because of a
misidentification of a kidnapping suspect in Florida. It was generally prohibited after this episode for decades, except for use in limited circumstances. Throughout the tenures of different directors, the question of polygraphing current employees every five years on areas of espionage and sabotage routinely arose. Indeed, Judge William Webster considered expanding the program in 1978. The proposals were always rejected. In the wake of the Aldrich Ames case, the current FBI Director, Louis Freeh, also rejected implementation of routine polygraph examinations of employees.

However, the FBI did modify its policy in March 1994, to polygraph any applicant for a full-time position with the FBI, no matter the individual’s level of responsibility. The FBI’s polygraph screening focuses exclusively on counterintelligence issues, the sale and/or use of illegal drugs, and the accuracy and completeness of information furnished by applicants in their employment applications. It has been estimated that approximately 20%–40% of all FBI employee candidates each year fail the polygraph examination, typically due to responses to the drug use question.

In the wake of the Hanssen case, the FBI has recently expanded its polygraph screening program. By Memorandum dated March 16, 2001, the FBI announced that beginning March 28, 2001, it would institute counterintelligence-focused polygraph examinations to employees who occupied certain assignments or occupations. It was estimated that approximately 500 employees would be polygraphed over the next sixty days. Id. at 3. With respect to those employees who experience trouble with the polygraph, the Memorandum noted:

Experience has shown that most FBI employees taking the counterintelligence-focused polygraph examination successfully complete the test. However, there may be a very small number of employees whose tests are either inconclusive or are indicative of deception. Polygraph examiners will attempt to fully resolve all unexplained responses through the effective use of thorough preand post-test interviews. If, upon completion of a thorough examination, there is still an inconclusive or deceptive response, it will be considered “unexplained”. Consistent with existing policy, no adverse action will be taken based upon the polygraph results alone. However, more extensive investigation will be initiated to resolve the unexplained test results.

Id. Those employees who refuse to take the test will be subjected to administrative actions which may include transfer, a finding of insubordination and disciplinary action or a reevaluation of the employee’s security clearance. Id. at 3–4. Those who may encounter trouble with the FBI’s polygraph will certainly take no comfort in knowing of the experiences of Special Agent Mallah. Nor are the FBI’s assurances that no adverse actions will be taken based solely upon the polygraph results necessarily binding. The same assurances are falsely provided to applicants.

The FBI has noted in correspondence that it “uses the polygraph as an aid to investigation and considers it highly reliable when used by a competent and ethical examiner. It is one part of the screening process and is designed to address issues that may not be resolved by more traditional investigative methods.” Donald Kerr, the Assistant Director of the FBI’s Laboratory Division, informed Senator Charles E. Grassley by letter dated October 28, 1997, that the polygraph “is not a substitute for, but merely one component of, a thorough and complete background investigation”. Yet, an applicant who fails, or registers inconclusive during, a polygraph examination is automatically excluded from employment and their conditional employment offer is immediately rescinded. No background investigation is conducted to

23 FBI chief Freeh to explain polygraph death in wake of spy charges, Knight Ridder Newspapers, April 28, 2001.
24 Michael Kortan, an FBI spokesman, said FBI leaders worry that more polygraphs would generate more lawsuits and scores of agents would be placed in investigative limbo after “false positive” readings—failing the polygraph out of nervousness when the person is telling the truth.” Id.
25 When the FBI implemented its polygraph program in 1994, that year’s special agent class had already begun its training. It has been alleged that approximately half the class failed resulting in the FBI waiving the polygraph requirement until the next class.
26 Copy on file with the author.
27 Id.
28 Problems with the FBI’s polygraph examinations extends beyond new applicants. Many former FBI Special Agents, including those who had distinguished careers, have failed polygraph examinations when trying to either re-enter the FBI or attain a consulting arrangement. In solely considering the results of the polygraph machine to arrive at its suitability determination, the FBI literally accuses its former agents of having committed crimes while on duty with the FBI; acts that if true have still gone unpunished.
verify the information, nor is the applicant provided a formal opportunity to challenge the polygraph results.\textsuperscript{29}

Some of the specific concerns regarding the FBI’s polygraph program includes:

- The FBI neither tape records or videotapes their examinations, thereby precluding examinees an opportunity to challenge the conduct of the polygrapher or identify potential errors in the examination.
- FBI polygraphers have demonstrated significant bias in their perceptions of applicants, which affects the manner in which the test is administered and the results achieved. For example, one FBI polygraph examiner, Special Agent H. L. Byford, stated in an e-mail dated August 6, 1999, that “if someone has smoked marijuana 15 times, he’s done it 50 times . . . .Those who have any doubts about how many times they used are going to fail. Those who are certain that they only tried it once or three times or five or whatever, will pass . . . .I got to tell you though, if I was running the show, there would be no one in the FBI that ever used illegal drugs.” The FBI’s present drug use policy allows marijuana use so long as it was not during the last three years or more than fifteen times, or if usage of any illegal drug(s) or combination of illegal drugs other than marijuana, was not more than five times or during the last ten years.\textsuperscript{30}

I have included with my testimony copies of several sworn declarations executed by former FBI applicants who detail their ordeals at the hands of FBI polygraphers. See Exhibit “1”.

\textit{Central Intelligence Agency}

The call for the FBI to expand its polygraph program is often heard amidst statements that the CIA routinely polygraphs its employees. The intended message is that the CIA must then be more security conscience than the FBI, and that since the policy seems to be working over at the CIA, the FBI should follow suit. The fact, however, is that CIA’s use of the polygraph is fraught with abuse and problems.

In the wake of the Aldrich Ames fiasco in 1994, the CIA vigorously implemented an intensive polygraph review. The result has been that in excess of 300 employees remain in polygraph limbo. These individuals registered a significant physiological response to a security question but there is little or no collaboration to support suspicion of wrongdoing. Many of these cases are referred to the FBI for further investigation where they are typically viewed with contempt, and accorded low priority because there is little to investigate. Yet, for the employees, this serves as the kiss of death to their career. No promotions will be granted, and no overseas assignments will be permitted. For a CIA employee within the Directorate of Operations, falling into this limbo is essentially the end of their career.\textsuperscript{31}

Unfortunately, there is little that can be done to remedy this situation. The CIA makes it very difficult for these employees to retain legal counsel, and even more impossible for legal counsel to actually accomplish anything. The CIA will not release the governing regulations, primarily because it asserts the documents are classified. And even if counsel maintains a security clearance, the CIA will not permit access. On these types of issues, the CIA plays by its own rules.

\textsuperscript{29} However, the FBI official policy, as set forth in various correspondence, is that “[a]ny applicant who does not successfully pass an initial polygraph examination may request to be afforded a second polygraph examination; however, certain criteria must be met.” Copy of correspondence on file with author. While the criteria is not publicly known, the FBI policy on this issue is contained in a Buairtel dated May 1, 1995, captioned “Special Agent Selection System (SASS) Polygraph Policy”. Although applicants to the FBI have been notified by letter that the “FBI’s policy regarding additional polygraph examinations is consistent for all applicants”, there is absolutely no rhyme or reason to the manner in which the FBI grants retests. It is essentially an arbitrary process.

\textsuperscript{30} Another recent example of the influence of polygrapher bias involves David Tenenbaum, an engineer for the Army Tank and Automotive Command in Michigan, Tenenbaum, a devout Jew, became a suspect in 1996 of spying for Israel. Based on an alleged confession made during a polygraph examination, the FBI searched Tenenbaum’s home but discovered nothing. It was later determined that the “confession” was “nothing more than the polygraph examiner’s opinion. The polygrapher . . . had concluded that because of devout religious beliefs and his strong affinity towards Israel, he would have provided restricted information to the Israelis based on his belief that the U.S. government should freely share information with one of its closest allies.” “Government facing charges of racism”, San Jose Mercury News, Oct. 13, 2000. Although no charges have ever been filed against Tenenbaum, his security clearance access was suspended.

\textsuperscript{31} Scientists employed at nuclear laboratories in the United States face similar problems in light of the Department of Energy’s desire to expand polygraph testing in the wake of the Wen Ho Lee case. While failure of the test alone allegedly will not result in termination of the employee’s position, the individual will be transferred to work on less sensitive projects—a transfer that effectively destroys the careers of most scientists.
Thus, it is not surprising that in 1997–98, CIA polygraphers reported to the Department of Justice's Public Integrity Section that they were instructed by CIA management to “fail” certain employees. Additionally, they revealed that they were taught how to sensitize examinees during pre-testing interviews so as to create the likelihood of false positives. Notwithstanding these sensational allegations, there is no evidence either the CIA or Department of Justice ever conducted an investigation.

Yet, the CIA’s mistreatment of one of its former staff attorneys, Adam Ciralsky, provides further support for these allegations. The CIA fired Mr. Ciralsky and revoked his top-secret security clearance, in part, because he allegedly exhibited a “lack of candor” about relationships with associates who may have been tied to Israel. Official CIA records, however, revealed that the CIA tried to manipulate Ciralsky’s polygraph tests so as to transform demonstrably “non-deceptive” results into “deceptive” results. A CIA memo, written two weeks before Ciralsky’s final polygraph, stated that CIA Director George Tenet “says this guy is outta here because of lack of candor . . . Subject is scheduled for [another] poly . . . Once that’s over, it looks like we’ll be waving goodbye to our friend.” Thus, official records indicated that the CIA was set to base Ciralsky’s dismissal on the outcome of a polygraph examination that he had yet to take. In fact, Ciralsky underwent and successfully completed counterintelligence polygraphs in 1993, 1996 and 1998, at which times his answers were consistently deemed to be “strongly non-deceptive.” Yet when Ciralsky submitted to CIA polygraph examinations in August and October 1997, he was accused of “deception” with regard to issues and events which pre-dated, and hence were covered by, his earlier polygraphs.

Moreover, evidence exists that the CIA uses polygraph examinations as a means of retaliation against those employees who file EEO complaints or grievances. Within one to two months of filing such complaints, many employees have experienced a significant acceleration of their “routine” security reinvestigations, sometimes more than one to two years ahead of schedule. CIA employees typically will not face a periodic security reinvestigations until five years have passed, and because of budgetary and staff constraints many investigations do not occur until seven or ten years later.

United States Secret Service

Of all the agencies I have dealt with, I have received the most complaints concerning the conduct of USSS polygraphers. The stories I have been told have been genuinely consistent. The polygraphers have been abusive, hostile, arrogant, banged their fists on the table, slapped their thighs and routinely yell or scream at examinees. Questions have been asked regarding marital infidelities and sexual relations with animals.32 I have included with my testimony copies of several sworn declarations executed by former USSS applicants who detail their ordeals at the hands of USSS polygraphers. See Exhibit 32.

Although polygraph sessions are audiotaped, ostensibly in order to allow challenges to the manner in which examinations were conducted, the USSS steadfastly refuses to release the audiotapes, whether pursuant to the Freedom of Information Act, 5 U.S.C. § 552 (a) or through the legal discovery process.

Examples Of Other Systemic Problems Associated With Polygraph Testing That Occur Throughout The Federal Government

Many of the problems associated with polygraph testing are not isolated at one particular agency. Rather, they are endemic of the culture that exists within the federal government. Beyond those already identified above, these problems include:

• Those agencies that administer multiple polygraph exams to an individual, whether an applicant or a current employee, sometimes utilize the same polygrapher. Oftentimes, even when a different polygrapher is utilized, the polygrapher is aware of the prior test results. This taints the objectivity of the examination.

• Polygraph examiners receive only 12–14 weeks of training from the Defense Department’s Polygraph Institute, yet are expected to become experts in understanding human physiological responses that scientists have been studying for years without fully unlocking the secrets. Sheila Reed, a former research psychologist at the Defense Department’s Polygraph Institute who was responsible for developing and standardizing the test format and operator's manual currently used by several federal agencies, told the National Journal “that govern-
ment-trained examiners don’t understand psychology, physiology, and electronics, and that their procedures are ‘unethical’. In addition, she said, her preliminary research at the institute showed that polygraph examiners do have biases that can affect results.  

- Applicants are often ‘tricked’ into appeasing polygraphers’ allegations of deception only to then be penalized by the agency for having ‘lied’ on their applications. For example, agencies will require an applicant to state the specific number of times marijuana had been used. Given that oftentimes the usage occurred years before, it may be understandably difficult to come up with an exact number. If “deception” is indicated in response to a drug usage question, the polygrapher will persuade the applicant to admit to additional usage (which is not inconsistent with what the applicant told the recruiting agent). The applicant then loses his/her conditional offer of employment for “lying” on their application.

- The fact that individuals have failed polygraph examinations at one federal agency yet contemporaneously successfully passed a polygraph examination regarding the same issues at another agency.

THE POLYGRAPH’S FAILURE TO EXPOSE SPIES

Today, the outcry for increasing the use of polygraph examinations arises in the context of catching spies. Suspected spy Robert Hanssen was acknowledged never to have taken a polygraph examination during his entire FBI career. Yet, even if he had, the overwhelming likelihood is that this smooth operator would have passed. False-negative responses occur at a frequency far greater than false-positives. One of the most comprehensive studies conducted by the government of security screening polygraph examinations revealed a rate as high as 66%.  

In 1986 and 1991, Aldrich Ames, the former CIA official turned-spy, convinced his polygraph examiners that the deceptive readings he was allegedly displaying were easily explained away. As a result, Ames “passed” his tests. While the Ames case is indicative of wide-ranging problems that can arise solely through examiner conduct, it more importantly reveals that the polygraph had little deterrent value, at least for Ames, who had started his spying in 1985.

Even worse, during the 1980s, approximately thirty Cubans who served as spies for the CIA passed extensive polygraph examinations. Following the subsequent defection of a Cuban intelligence officer and his debriefing, it was revealed that all of the CIA’s “Cuban agents” were actually double-agents working for the Cuban Government. Each and every one of them had defeated the CIA’s polygraph examinations.

In fact, it is a simple feat to defeat the polygraph, which undermines the entire purpose of utilizing it to determine the truth. The very persons most likely to be the subject of a polygraph examination can use any number of techniques to “truthfully” lie by using countermeasures. For those less skilled in the art of spycraft, various instructions on how to defeat the polygraph are publicly available in books and on the Internet.

LEGAL ISSUES SURROUNDING POLYGRAPH CHALLENGES

The controversy surrounding polygraph reliability is not a subject unknown to the courts of this land. From the Supreme Court’s decision upholding a blanket ban on the admissibility of polygraph evidence in military courts because “there is simply no consensus that polygraph evidence is reliable,” United States v. Scheffer, 523 U.S. 303, 309 (1998), to the Ninth Circuit Court of Appeals decrying that the polygraph machine has developed the “misleading reputation as a ‘truth teller,’” United States v. Marshall, 526 F.2d 1349, 1360 (9th Cir.), cert. denied, 426 U.S. 923 (1976), step by step courts have limited the use of this alleged scientific device.

Surprisingly, in the wake of statutory prohibitions regarding the use of the polygraph as a screening device and continuing examples of its fallibility, federal agencies have increased their use of the device. The majority of applicants who are

33 Poyan, The Analyst, Sept. 9, 2000, at 2801.
34 Barland, G.H. et al., "Studies of the Accuracy of Security Screening Polygraph Examinations" (Department of Defense Polygraph Institute, Fort McClellan, Alabama, 1989) at iii. The 1983 report issued by the Office of Technology Assessment noted false-negative results approaching 30%.
36 For example, for $47.45 you can order “How to Sting the Polygraph” written by Douglas William, a former police polygrapher, which instructs you on ways to beat the polygraph. See http://wwwpolygraph.com.
The Privacy Act does not permit challenging agency actions or “opinions,” and the government is taking the position that polygraph results are nothing more than the “opinion” of the polygrapher. The Office of Special Counsel does not have jurisdiction to hear claims against many of the agencies that utilize polygraph examinations, such as the FBI, CIA or NSA, and it has yet to accept for investigation even one polygraph complaint.

Applicants for federal employment

The two lawsuits that are now pending seek injunctive, declaratory and monetary relief for eleven plaintiffs pursuant to the Administrative Procedure Act, 5 U.S.C. § 701 et seq., the Federal Declaratory Judgment Act, 28 U.S.C. § 2201, and the Fifth Amendment to the Constitution of the United States. The first Complaint was filed on behalf of seven individuals on March 15, 2000. The second Complaint was filed for four individuals on October 11, 2000. Both complaints assert that the government is violating the plaintiffs’ due process and privacy rights, as well as disregarding applicable agency regulations in rescinding employment offers based solely on polygraph results. The claims can be summarized as follows:

- Applicants who “fail” polygraph tests are effectively stigmatized and precluded from obtaining federal employment in their chosen career field.
- The plaintiffs have lost out on other federal employment opportunities because of prior false-positive results.
- No due process protections exist to enable examinees to challenge false-positive polygraph results.
- Federal agencies will unhesitantly disseminate polygraph results to other agencies due to the routine use exception within the Privacy Act. In any event, the applications for law enforcement or intelligence positions at most federal agencies require admitting whether the applicant had previously sat for a polygraph examination, and the results.
- Applicants are questioned on personal matters unrelated to the work they would perform if hired.

At this early stage in the litigation, the government has asserted the extreme position that applicants have no constitutional protections, that agency decisions to use polygraphs and then base suitability decisions upon the results are within their unchallengable discretion and that the only available relief exists through amending personnel records through the Privacy Act or reporting the alleged misconduct to the Office of Special Counsel. Unfortunately, these latter two suggested remedies offer nothing of the sort.37

---

37The Privacy Act does not permit challenging agency actions or “opinions”, and the government is taking the position that polygraph results are nothing more than the “opinion” of the polygrapher. The Office of Special Counsel does not have jurisdiction to hear claims against many of the agencies that utilize polygraph examinations, such as the FBI, CIA or NSA, and it has yet to accept for investigation even one polygraph complaint.
The government’s Motions to Dismiss both lawsuits have now been fully briefed, and the plaintiffs are awaiting the scheduling of oral arguments or a decision from the Court.38

CONCLUSION

No matter the science that may tend to support it, no matter the perceived utility that may be derived from it, the fact of the matter is that the use of polygraphs by the federal government consistently leads to false accusations of wrongdoing against innocent persons, and no adequate protections exist to prevent this from occurring. Moreover, the device routinely fails to identify those individuals who truly are committing criminal acts.

If the government truly wants to expose spies from within its ranks, it may wish to consider another creation of Dr. William M. Marston, the Harvard psychologist who many consider to be the father of the modern lie detector and the first to realize its commercial possibilities in the 1920s.39 Marston, under his pseudonym “Charles Moulton”, is probably more famous for having created the popular comic book character Wonder Woman. It is no coincidence that her magic lasso requires those who feel its bind to tell the absolute truth. To discover if other Robert Philip Hanssens exist among its ranks, the federal government may as well put its faith in Wonder Woman’s magic lasso than to rely on the accuracy of the polygraph. Both are derived from notions of science fiction.

Our judicial system is designed to free ten guilty people in order to protect one innocent person from being punished. Continuing use of the polygraph stands that very principle on its head, and disgraces the honor and loyalties of many otherwise trustworthy and dedicated Americans. The utilization of polygraph examinations for screening purposes should, therefore, be stopped.

38 Time, unfortunately, did not permit a full legal analysis into issues surrounding use of the polygraph throughout the United States. Upon request, I would be more than willing to provide the Committee a detailed legal analysis of legal challenges asserted in the state and federal court systems, as well as an analysis of federal regulations governing polygraph examinations.

39 In 1915, Marston devised a primitive lie detector based on blood pressure. He was one of the first to realize the lie detector’s commercial possibilities. In 1938, Look magazine described how Marston sometimes used his lie detection techniques in marital counseling. He also showed up in full-page ads testifying to the close shave offered by Gillette razors. “New Facts about Shaving Revealed by Lie Detector,” “Are polygraph tests lying to us?”, Baltimore Sun, November 3, 2000.
DECLARATION OF ERIC CRODDY

The undersigned hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this Declaration on personal knowledge. This Declaration is submitted in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. I am a plaintiff in this matter.

3. I have never used illegal drugs or abused prescription drugs.

4. I have never sold drugs of any type.

5. In late 1997, I underwent a polygraph examination at the FBI's field office in San Francisco, California. Although I have never used illegal drugs, I was accused of lying about whether I had violated the FBI's guidelines with regard to drug use. The polygrapher attempted to get me to confess to drug use, which I refused to do. As a result, I was subsequently notified by letter that I failed the polygraph and my conditional job offer was rescinded.
STIGMATIZATION CAUSED BY THE POLYGRAPH RESULTS

6. I am in the process of applying for employment as a federal law enforcement officer. Ironically, although I am probably one of the few people my age who has never experimented with illegal drugs, I will have to reveal the fact that I failed the drug questions on an FBI polygraph examination. The FBI will also release this finding to any agency for which I seek employment. This will obviously seriously impact my chances of obtaining federal employment, if not eliminate it outright.

I do solemnly affirm under the penalties of perjury that the contents of the foregoing paper are true to the best of my knowledge.

Date: September 29, 2000

[Signature]

Eric Croddy
DECLARATION OF JOHN DOE#1

JOHN DOE#1, pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. I am a plaintiff in this action. My identity is known to this Court and the defendants.

THE POLYGRAPH RESULTS INACCURATELY INDICATE THAT MY PAST DRUG USE HISTORY IS OUTSIDE THE ACCEPTABLE PARAMETERS OF THE FBI'S HIRING POLICIES AND PRACTICES

3. I used marijuana approximately ten (10) times from 1985 - 1988. I use the word "approximately" because I cannot accurately recall each instance in which I took a puff from a marijuana cigarette, but I am confident that my uses of marijuana were not greater than 10 times.

4. The last time I used marijuana, and the only time I used any illegal drug during college, was in January 1988; I was nineteen years old. My uses of marijuana were infrequent, experimental, and due mainly to poor judgment as a result of social drinking during high school at a young age.
5. I used cocaine once in 1985 during the fall of my senior year in high school. I was seventeen years old. Again, this one use of cocaine was prefaced by irresponsible use of alcohol as a teenager. Had it not been for my youthful indiscretion, I would have never experimented with cocaine. I have never done so since then, and I never will.

6. I have never purchased or sold any illegal drugs. I do not currently use illegal drugs. In fact, I have not taken any illegal drugs since January 1988, when I was nineteen years old. I am now thirty-two.

7. I do not have, nor have I ever had, any kind of substance abuse problem or addiction.

8. I disclosed all of the above facts to the FBI well in advance of my polygraph examination. I am currently completely within the FBI's guidelines on experimental drug usage, and I was completely within the FBI's guidelines on experimental drug usage when I was polygraphed.

9. I have reiterated this fact to the FBI in writing numerous times since my polygraph test in June 1996. Any background investigation of me would support everything I have stated here. All I have ever wanted was for the FBI to take the time to investigate my background - not rely on the results of a machine whose validity is so widely questioned by experts inside and outside of the FBI.

**STIGMATIZATION CAUSED BY THE FBI'S POLYGRAPH RESULTS**


11. The Chapel Hill and Raleigh Police departments actually conducted background investigations on me as part of the application process. I passed two Voice Stress Analysis tests (detection of deception exams) with the Raleigh Police Department during two
separate application processes. My statements concerning my drug usage were part of that test for deception.

12. On the written application for all the law enforcement agencies that I applied to after failing the FBI polygraph exam, I was required to disclose that I had applied to other law enforcement agencies (which has only been the FBI) and that I was not hired. Both the Chapel Hill and Raleigh police departments asked me about my experience with the FBI. I had to specifically disclose to them during my interviews that I failed the FBI’s polygraph exam. In each interview setting, my polygraph exam became a point of contention or concern to my interviewers. I was asked if I lied. I was asked what I had lied about. I was asked why I failed. Based on these questions, I believe my failing the FBI’s polygraph exam negatively stigmatized me and adversely affected the decisions of law enforcement agencies not to hire me.

13. Furthermore, if I apply to other law enforcement agencies, whether state, local or federal, I will be required - and even if not, it would be prudent - to reveal the fact that I failed prior FBI polygraph examinations on the drug usage questions. In any event, at some point the FBI will notify these other agencies that I failed their polygraph examination. Since I did not lie to the FBI, the fact that the FBI will inform prospective employers that I failed the polygraph will always stigmatize me.

I do solemnly affirm under the penalties of perjury and upon personal knowledge that the contents of the foregoing paper are true to the best of my knowledge.

Date: September 28, 2000

[Signature]
DECLARATION OF JOHN DOE#2

JOHN DOE#2, pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to

2. I am a plaintiff in this action. My identity is known to this Court and the

3. As an applicant for employment with the Federal Bureau of Investigation ("FBI"),

I was required to truthfully reveal my past drug usage. As part of the formal written

application process an applicant must answer two questions regarding past drug usage: 1)

Have you used marijuana more than 15 times total or during the last 2 years, and 2) Have

you used any other illegal drug or combination of illegal drugs more than 5 times or during

the last 10 years. I answered both questions with the answer "no" throughout the written

application process.

4. When undertaking my first polygraph examination on or about October 20, 1998, I

was asked these questions again and instructed to reveal all past drug usage with times
and dates of drug usage, as well as identify the type of drug was used. I informed the FBI polygrapher that I recalled having used marijuana 5 times in my life. The occasions were as follows:

1) May or June of 1984 - shared a single marijuana cigarette with 3 others at a high school graduation party.
2) Between March and April of 1985 - shared a single marijuana cigarette with two others while drinking at a bar.
3) July 1985 - shared a single marijuana cigarette with other coworkers after work.
4) November 1988 - Smoked a marijuana cigarette after my discharge from the Army. It was a tradition for the outgoing servicemen to smoke marijuana as a way of bucking the system.
5) March 1989 - Smoked marijuana with friends at a college party.

I also noted that there was a one time incident in which I technically experimented with cocaine sometime during the later part of 1985. While at a house watching a football game, several coworkers, who unbeknownst to me used cocaine on a regular basis, had cocaine. As a curiosity I dipped my finger in the cocaine and tasted it. I also rubbed it around on my gums but was too scared to actually take it. Since this one-time "experiment" had occurred more than ten years earlier, I was not required to have noted this on my written application.

5. I also honestly revealed to the FBI that, like so many other college students, I had been around illegal drugs on some occasions while in college at parties. I had seen cocaine on 3 other occasions and marijuana several times. However, beyond what I described above, I did not participate in any other drug usage.

6. When pushed by the polygrapher, who was apparently trying to ascertain a number that I would supposedly be comfortable with for the purposes of the polygraph, I said I certainly could have forgotten a time or two smoking marijuana since I never kept a diary. However, I had no recollections of any other occasions. However, based on the assurances of the polygrapher and just to be safe, I settled with the number 7.

7. No further drug admissions were made. No other drug usage incidents existed.
8. By letter dated November 4, 1998, from Charles S. Prouty, Chief, Bureau Applicant Recruiting and Selection Section, Administrative Services Division, FBI, I was notified that my conditional offer of appointment had been rescinded because the results of my polygraph examination were not within acceptable parameters. Following my request, I was permitted to undergo a second polygraph examination on or about February 12, 1999. However, by letter dated February 26, 1999, from Patrick M. Malloy, Chief, Special Agent and Support Applicant Unit, Administrative Services Division, FBI, I was again notified that the results of the polygraph examination were not within acceptable parameters.

9. The FBI's interpretation of my polygraph results is entirely inaccurate and unfounded. If the FBI had pursued a background investigation of mine, it would have revealed that my past drug usage was well within the acceptable parameters and that I truthfully provided the information.

10. Throughout my professional career, I have had to submit to numerous drug tests. I was administered random drug tests throughout my military experience in the United States Army from 1986-89, including a brief time period when I was in the National Guard in Florida. I also submitted to two drug tests in 1994 to attain my current full-time and part-time positions. In April 2000, I submitted to a drug test as an applicant with the Bureau of Alcohol, Tobacco and Firearms ("ATF"). I have never failed a drug test.

STIGMATIZATION CAUSED BY FAILED POLYGRAPH EXAMINATIONS

11. The failed FBI polygraphs have foreclosed my opportunities for federal employment as a criminal investigator. In March 1999, I applied for a position with the ATF, and I was granted an interview in November 1999. At that time I was questioned about my past drug usage. I provided the same answers I previously provided to the FBI during its application process. I was notified I passed the interview in April 2000, and I was then scheduled for a physical and drug test. After both tests were completed and processed, I was scheduled to undergo a polygraph examination on May 31, 2000.
12. I attended the polygraph examination with high hopes of passing and clearing up the past problems I encountered with the FBI's test. My pre-polygraph interview was conducted by ATF polygrapher Vince Noble. As with my earlier polygraph examinations, I answered all questions truthfully. I also revealed the two alleged failed polygraphs with the FBI and detailed my past drug usage. Additionally, I also discussed my participation in the current lawsuit so that there would be no surprises if this was revealed later. I was told by Mr. Noble that the lawsuit was irrelevant and would not harm me in any way. In fact, to put me at ease he stated he had filed a lawsuit against the federal government. I did not attempt to deceive anyone and was hoping for a fair opportunity.

13. After completing the pre-polygraph interview, I was seated in the lobby while the polygrapher was apparently preparing the questions for my polygraph examination. After a few moments passed, Mr. Noble came to get me and I was again taken into the polygraph room. Upon sitting down he indicated that he and his supervisor, Special Agent Eduardo Fernandez, had called ATF headquarters in Washington, D.C. regarding my failed polygraphs with the FBI. I was explicitly told that headquarters instructed Mr. Noble to terminate my polygraph proceedings at that moment pending further investigation. When I asked what they needed to investigate, they told me that they were investigating what I had told the FBI versus what I had told them. I stated that I was prepared to take the polygraph at that moment and why not utilize their honesty machine to save us all a lot of time. However, no polygraph test was administered.

14. I was informed that a decision would be made by ATF headquarters in Washington. As of this writing, I have yet to received any kind of response. All attempts to find out the status of my application have been handled with the same answers, "the legal team is reviewing your case and a decision will be forthcoming". It appears clear to me that my past alleged polygraph failures have negatively stigmatized me in my pursuit for employment with the ATF.

I do solemnly affirm under the penalties of perjury and upon personal knowledge that
I do solemnly affirm under the penalties of perjury and upon personal knowledge that the contents of the foregoing paper are true to the best of my knowledge.

Date: September 28, 2000

[Signature]

John Doe
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ERIC CRODDY et al.

Plaintiffs

v.

FEDERAL BUREAU OF
INVESTIGATION et al.

Defendants

Civil Action No. 00-0651 (EGS)

DECLARATION OF JOHN DOES

JOHN DOES, pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to

Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. I am a plaintiff in this action. My identity is known to this Court and the

defendants.

THE POLYGRAPH RESULTS INACCURATELY INDICATE THAT MY PAST
DRUG USE HISTORY IS OUTSIDE THE ACCEPTABLE PARAMETERS OF
THE DEA AND FBI'S HIRING POLICIES AND PRACTICES

3. I last used marijuana more than 14 years ago when I was sixteen years old. I know
this because I was at a party to celebrate my sixteenth birthday and the fact that I had just
acquired a new car. I ended up at a party where marijuana was being smoked by various
kids at the party. I recall being passed a "joint" and I reluctantly took a single puff. As far
as I could tell, it really had no effect on me. Later that same night, I again took a single
puff off a joint when the party relocated elsewhere. The effects from it never hit me and I
remembered thinking "what's the big deal?".
4. I recall the next occasion was approximately three months later while attending a junior prom. I was in a limousine and a person passed me a "joint". Unfortunately, I used poor judgment and decided to take a "puff". I did this a second time that same evening while riding home from the event in the same limo. When I was sixteen there were many social situations where marijuana was being used, as was typical in the early 1980s. Since I was not a "user", I declined many other offers to use marijuana. However, I do vaguely recall that were three or four other occasions where I took single "puffs" off a joint.

5. I can definitively recall that ceased all experimentation with marijuana prior to New Year's Eve 1986. I recall that I was at a New Year's Eve party and marijuana was being smoked. I was offered a "puff" from a "joint" and unequivocally declined, recalling that I made a conscious decision that I would no longer submit to the peer pressures of smoking marijuana. That decision was almost like a New Year's Resolution to me. My parents had always vociferously warned me of the dangers of drugs and alcohol. I felt ashamed and embarrassed that I had tried marijuana at all. I decided at that point that I would never be pressured into any further drug experimentation.

6. I never again have in any way, style or fashion, used marijuana or any other illegal drug. I would also adamantly point out that, other than the above incidents, I have never experimented with any other illegal drugs. I find it astonishing and insulting that someone with my background - a current law enforcement officer, a former undercover narcotics officer and a former DEA Special Agent Trainee - has to defend the few times I experimented with marijuana more than a decade ago when I was sixteen, and distinguish between whether puffing a joint more than once but on the same night constitutes one or two occasions.
7. On or about November 13, 1995, I underwent a polygraph examination by Special Agent Jimmy Fox from the Atlanta Division of the Drug Enforcement Administration ("DEA"). During the pre-interview, I explained that I was not entirely comfortable with the exact number of times I had experimented with marijuana, as so many years had passed. Although I was assured as a result of my interview that no problems would arise, I was accused of lying on the drug usage questions during the polygraph examination. On or about December 24, 1995, I received a letter from the DEA stating I would not be hired. There is no doubt in my mind that this decision was based on my polygraph results, particularly because I have reviewed documents from my DEA file.

8. In 1996, I was also polygraphed by the Federal Bureau of Investigation ("FBI") for a position as a support employee with the Special Surveillance Group ("SSG"). Soon after starting the test, I was told I had failed the questions on drugs. Approximately two months later, in or around May or June 1996, I received a letter from the FBI stating that I had failed the polygraph.

**STIGMATIZATION CAUSED BY FAILED POLYGRAPHS**

9. I am in the process of applying for employment as a federal law enforcement officer with the United States Secret Service. During the application process I will be required - and even if not, it would be prudent - to reveal the fact that I failed prior DEA and FBI polygraph examinations on the drug usage questions. Additionally, the records of my failed DEA and FBI polygraph examinations will be provided to other law enforcement agencies by the DEA and FBI. Since I did not lie to these agencies, the fact
that they will inform prospective employers (i.e., United States Secret Service) that I failed the polygraph will stigmatize me.

I do solemnly affirm under the penalties of perjury and upon personal knowledge that the contents of the foregoing paper are true to the best of my knowledge.

Date: September 28, 2000

John Doe®5
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ERIC CRODDY et al.,

Plaintiffs

v.

FEDERAL BUREAU OF
INVESTIGATION et al.,

Defendants

Civil Action No. 00-0651 (IGS)

DECLARATION OF JOHN DOE#4

JOHN DOE#4, pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. I am a plaintiff in this action. My identity is known to this Court and the defendants.

THE POLYGRAPH RESULTS INACCURATELY INDICATE THAT MY PAST DRUG USE HISTORY IS OUTSIDE THE ACCEPTABLE PARAMETERS OF THE HIRING POLICIES AND PRACTICES OF THE FEDERAL BUREAU OF INVESTIGATION AND SECRET SERVICE.

3. I experimented with marijuana for a period of about 5-6 months during my freshman year in college (October 1986 - March 1987). While I am not certain of the exact amount of times that I did smoke marijuana, since this occurred more than one decade ago, I am certain that it is within the guidelines set forth by the Federal Bureau of Investigation ("FBI") and United States Secret Service ("USSS"). I stated on my employment applications with both the FBI and USSS that the number of times was around seven (7). I was asked several times during the application process if I wanted to change the number, but I was comfortable with my answer as being as accurate as I honestly could be. Other than this usage, I have never used any illegal narcotics or abused
prescription drugs.

4. During the polygraph exam with the USSS I nevertheless and reluctantly modified my answer at the urging of, and with reassurances by, the polygraph examiner. During the initial round of testing, Special Agent Hutzell based his questions on the information indicated on my application (around 7 times). He stated that I was being deceptive and that I was having trouble with the drug question. At this point he suggested that maybe I smoked less than ten (10) times, which is true, and adjusted the question regarding drugs to "less than 10 times" during the second round of testing.

5. Again, Special Agent Hutzell said I was having trouble and being deceptive in my answers. He accused me of being a drug user and perhaps even dealing drugs. I emphatically denied his accusations. Special Agent Hutzell then moved close to me and said the following (paraphrased): "At this point we've reached a point in the road where you can either run into a roadblock or a barrier. I can help you out with the roadblocks, but there's nothing I can do about a barrier. If there's something you want to tell me, then you should think about it now." He suggested that I change the number of times I smoked pot to "under 15", which is still consistent with what I originally stated (around 7 times). I did so and then he ended the testing saying my results were inconclusive but that it did not look good.

6. I also "failed" the FBI's polygraph exam, although that test was much shorter, far less confrontational, and had its questions posed in a different fashion. For example, the polygraph examiner asked the drug question based on the established FBI guidelines ("Are you within the drug use guidelines established by the FBI?").

7. I have passed every drug test that I have ever taken (about four). The tests were for the military when I was applying to flight school through the U.S. Air Force and New Hampshire Air National Guard.
STIGMATIZATION CAUSED BY THE POLYGRAPH RESULTS

8. The FBI was informed of my having failed the USSS polygraph exam, and I believe this was taking into account when the FBI rescinded my conditional job offer.

9. I am also in the process of applying for employment as a federal law enforcement officer. At some point during the application process I will have to reveal the fact that I supposedly failed polygraph examinations with both the FBI and USSS. Both of these agencies will also reveal to other agencies that I failed the tests. As a result, my chances of attaining employment in the law enforcement arena will be significantly diminished, if not eliminated altogether.

I do solemnly affirm under the penalties of perjury and upon personal knowledge that the contents of the foregoing paper are true to the best of my knowledge.

Date: September 28, 2000

John Doe #4
UNIVERS STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ERIC CRODDY et al.,

Plaintiffs

v.

FEDERAL BUREAU OF
INVESTIGATION et al.

Defendants

Civil Action No. 00-0651 (EGS)

DECLARATION OF JOHN DOE "E"

JOHN DOE "E", pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. My identity is known to the government.

3. In 1983, I entered active duty in the U.S. Army as an interrogator with a secret clearance based on a National Agency Check. After completing training at the Military Intelligence school at Ft. Hasbrouc, Arizona, and Arabic language training at the Defense Language Institute in Monterey, California, I served as a strategic debriefer in the Federal Republic of Germany, where I debriefed refugees coming from the Middle East.

4. After completing my enlistment in 1987, I went through the Army ROTC program and was commissioned as a second lieutenant in the Army Reserve, Military Intelligence branch, in 1989. After a Special Background Investigation, I received a top secret clearance and was authorized SCI access. In 1991, during the Gulf War, I was mobilized and detached to the Federal Bureau of Investigation. I performed counterintelligence duties at the Washington Metropolitan Field Office at Buzzard Point and at the Los Angeles Field Office.
5. In 1993, after the World Trade Center bombing, I was again mobilized and
detached to the FBI and performed counterintelligence duties at the New York
Metropolitan Field Office.

6. In early 1995, favorably impressed by my two tours of duty with the FBI, I applied
to become an FBI Special Agent. After passing the initial entry tests and scoring well on
an Arabic language test, I received a phone call from Supervisory Special Agent Sue
Chainer on May 10, 1995. She wanted to hire me as soon as possible as a contract linguist
pending agent hire. I agreed to begin working 20 hours a week, and she told me that she
would arrange a polygraph examination for me. On May 11, 1995, the chief recruiter at
the Los Angeles Field Office, Special Agent Mike Hilliard, called me to schedule an
interview for agent hire on June 9, 1995 at the FBI's San Francisco Field Office.

7. On May 15, 1995, I reported to the Los Angeles Field Office for a
pre-employment polygraph examination. In the pre-test phase, my polygrapher, SA Jack
Trimarco, falsely represented to me that the FBI had a new polygraph technique without
control questions. He then proceeded to administer a probable-lie control question test.
One of the probable-lie control questions SA Trimarco used was, “Did you ever drive
while under the influence of alcohol?” or something very similar, but I had never driven
under the influence of alcohol.

8. After the in-test phase, SA Trimarco falsely accused me of deception in denying
having released classified information to unauthorized persons and having had
unauthorized contacts with representatives of a foreign intelligence agency. The FBI
peremptorily terminated my application for employment based on the polygrapher’s
opinion, and SSA Chainer's offer to hire me as a contract linguist was withdrawn.

9. Without my knowledge, the FBI reported this information to the U.S. Army. I
know this because in two January 1999 interviews, U.S. Army Intelligence Special Agent
David DeStefano explicitly mentioned it to me. In fact, the purpose of his visit was
specifically to investigate the information the FBI reported to the Army. On
December 13, 2000, the U.S. Army Central Personnel Clearance Facility sent me a letter notifying me of its intention to revoke my SCI access and my security clearance. The accompanying Statement of Reasons twists information that I provided to FBI Special Agent Trimarco during my pre-employment polygraph examination to portray me as a disloyal subversive. I am challenging the Army’s decision.

I do solemnly affirm under the penalties of perjury and upon personal knowledge that the contents of the foregoing paper are true to the best of my knowledge.

Date: February 2, 2001

John Doe “E”
EXHIBIT "2"

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ERIC CRODDY et al.,
Plaintiffs

v.

FEDERAL BUREAU OF
INVESTIGATION et al.,
Defendants

Civil Action No. 00-0651 (EGS)

DECLARATION OF JOHN DOE#5

The undersigned hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this Declaration on personal knowledge. This Declaration is submitted in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. I am a plaintiff in this matter. My true identity is known to the defendants and this Court.

THE POLYGRAPH RESULTS INACCURATELY ACCUSE ME OF PAST DRUG USE AND PREVENTED MY HIRING BY THE SECRET SERVICE

3. I have never used illegal drugs or abused prescription drugs.

4. I have never sold drugs of any type.

5. On or about October 13, 1998, I was administered a polygraph examination by Special Agent Rob Savage of the United States Secret Service. I was specifically accused of deception in the area of drug usage and serious crimes. A second polygraph examination was conducted on or about October 30, 1998, by Special Agent Ignacio Zamora. I was told again that I was being untruthful in the area of drug usage and serious crimes. Both Special Agents Zamora and Savage told me they believed, based solely on the polygraph results, that I was withholding information. I was not.
6. By letter dated January 7, 1999, from Donna Burgess, Chief, Special Agent and
Office of Investigations Branch, I was notified that I was not selected for a position as a
Special Agent of the USSS. I believe this decision was solely based on my polygraph
results.

STIGMATIZATION CAUSED BY THE
SECRET SERVICE'S POLYGRAPH RESULTS

7. I am in the process of applying for employment as a federal law enforcement
officer. During the application process I will have to reveal the fact that I supposedly
failed two earlier USSS polygraph examinations. Even if not required, I would still reveal
this fact so as to be up front at all times. Of course, my USSS files are available for review
by any law enforcement agency that would ask for them from the USSS. Since I did not lie
about my past drug usage - as there is none - to the USSS, the fact that the USSS will
notify my prospective employers that I failed the polygraph regarding past drug usage will
stigmatize me, particularly as a law enforcement officer.

I do solemnly affirm under the penalties of perjury that the contents of the foregoing
paper are true to the best of my knowledge.

Date: September 25, 2000

John Doe
UNIVERSITY OF DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ERIC CRODDY et al.

Plaintiffs

v.

FEDERAL BUREAU OF
INVESTIGATION et al.

Defendants

Civil Action No. 00-6651 (EGS)

DECLARATION OF DARRYN MITCHELL MOORE

The undersigned hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this Declaration on personal knowledge. This Declaration is submitted in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. I am a plaintiff in this matter.

THE POLYGRAF RESULTS INACCURATELY ACCUSE ME OF PAST
DRUG USE AND PREVENTED MY HIRING BY THE SECRET SERVICE

3. I have never been used illegal drugs or abused prescription drugs.

4. On or about October 5, 1999, I underwent a polygraph examination in the Atlanta Field Office of the United States Secret Service ("USSS"). Special Agent Clarence Jecif, who conducted my polygraph, accused me of being a drug dealer and drug user. I was told I failed the examination and that I was "****ed up."

5. On or about October 26, 1999, I underwent a second polygraph examination that was conducted by Special Agent Motts. After 20 minutes I was informed I had failed and was again accused of having used drugs.

6. By letter dated November 19, 1999, from Donna Burgess, Chief, Special Agent and Office of Investigations Branch, USSS, I was notified that I was not going to be hired by the USSS. This decision was clearly made solely because of my polygraph results.
7. In September 1986, I applied for a position with the Atlanta Police Department in Atlanta, Georgia. During the hiring process I was required to submit to a polygraph examination. The polygrapher asked questions on whether I used or sold illegal drugs. I responded saying no. The exam lasted for 3 hours, and I passed. The police department hired me three weeks later after conducting a full background investigation.

8. During the application process for a position of Special Agent with the Drug Enforcement Administration ("DEA"), I submitted to a urine test in 1998. The results were negative.

9. Prior to resigning from the police department to pursue a career in television news, I submitted to a drug test for FOX News in Chattanooga, Tennessee in May 1999. I was given a urine test and passed.

STIGMATIZATION CAUSED BY FAILED POLYGRAPH EXAMINATIONS

10. On or about September 14, 1998, I submitted my initial application to the DEA. I passed all phases of the applicant process: written test panel interview (December 3, 1998); psychological examination/drug test (December 4, 1998); medical examination (December 7, 1998 and December 15, 1998); physical task test (February 10, 1999); psychological interview (February 18, 1999); polygraph examination (March 11, 1999); background investigation (March 17, 1999 – completed by Special Agent Eldridge Earles); and a suitability review (May 1999). However, a little more than two weeks after Special Agent Jorif told me that I had failed my USSS polygraph examination, I was notified by the DEA that I was not chosen for a Special Agent position.

11. On April 19, 1999, I applied for the position of Special Agent with the Bureau of Alcohol, Tobacco and Firearms ("ATF"). A year later April 17, 2000, I received confirmation from ATF that I qualified for the position and I would have to take the TEA Exam, which was administered on July 19, 2000. I received written notice of the results on or about July 24, 2000, that indicated I passed the test. Although I was told I would be
scheduled for a panel interview at one of ATF's field division offices, I have not yet had an interview scheduled.

12. In or around February 2000, I applied for the position of Postal Inspector with the United States Postal Inspection Service ("USPIS"). After being informed that I met the necessary qualifications, I was scheduled to take a written examination on June 20, 2000, which I passed. As of this date I have not heard anything further from the USPIS.

13. On September 14, 2000, I requested an application to apply for a Special Agent position with the Internal Revenue Service, and I intend to submit an application.

I do solemnly affirm under the penalties of perjury that the contents of the foregoing paper are true to the best of my knowledge.

Date: September 25, 2000

Darryl Mitchell Moore
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ERIC CROODY et al.,
Plaintiffs
v.
FEDERAL BUREAU OF
INVESTIGATION et al.,
Defendants

Civil Action No. 00-0651 (EGS)

DECLARATION OF JOHN DOE "C"

JOHN DOE "C", pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. My identity is known to the government. I served honorably and with distinction as a Marine Corps Officer for five years, thirteen months of which were overseas, seven of them in a hostile environment. I worked with the poor in a southern city for a year as a full-time Volunteer. Before entering the accounting profession, I spent two years teaching and counseling troubled boys. I have spent the better part of my adult life serving my country and community.

3. In 1997, I applied for a position as a Special Agent of the United States Secret Service ("USSS"). In August 1997, I was administered a polygraph examination at the New Orleans field office by Special Agent Finn Alldberg, who informed me that he believed I was trying to deceive him about my involvement with illegal drugs and serious crimes. I protested the results as being inaccurate.

4. As a result of my protest, I was administered a second polygraph in September 1997, by Special Agent John Lowe. I was led to believe by Special Agent Lowe that I
“failed” the second exam as well. By letter dated March 5, 1998, I was advised that I was no longer a candidate for employment. No reason was provided. Considering that I passed all other parts of the application process and that a background investigation was never started, it is a safe assumption that I was refused employment solely because of the polygraph results.

**STIGMATIZATION CAUSED BY FAILED POLYGRAPH EXAMINATIONS**

5. At the same time I was pursuing employment with the USSS, I was also involved in the application process with the United States Marshal’s Service (“USMS”). Coincidentally, just days after I was excluded from USSS employment, the USMS notified me by letter dated March 9, 1998, that I was given a conditional offer of employment as a Deputy U.S. Marshal. However, by letter dated December 18, 1998, I was notified by the USMS that I was no longer under consideration for the position.

6. I was specifically informed by the USMS that I was denied employment with their agency because of my failing the USSS polygraph examinations. By letter dated July 14, 1999, Joseph E. Tolson, Team Leader, Background Suitability Human Resources Management, wrote:

> You were the subject of a pre-employment background investigation completed by the U.S. Marshals Service on June 1, 1998. On the USMS Pre-interview Checklist you reported submitting an application for employment with the United States Secret Service (USSS) in September 1996. In [sic] inquiry into the status of your application revealed that you failed two polygraph examinations and the USSS discontinued processing your application. Information was obtained that your response to involvement or participation in serious crimes and drugs were deceptive. It was further discovered that you denied using any illegal drugs when you were being process [sic] for employment with USSS in 1996.

****

Based on your failure to disclose using a controlled substance in 1992 during the 1995 USSS applicant processing, the deceptive determination by the USSS Polygraph Examiner after two tests and
your admission of using a controlled substance precluded an approval for employment.

7. By letter dated July 23, 1999, I challenged the erroneous decision of the USMS. I explained that during the USSS pre-polygraph interview, without any prompting or coercion, I had revealed to Special Agent Ahlberg that while attending a fellow Marine officer’s wedding in Cleveland, Ohio in June of 1992, I received from a friend of mine (a former Marine officer himself) medication that a doctor friend of his had prescribed for the specific purpose of mitigating hangover symptoms. I did not and still do not know the name of this medication. I took it the day of the wedding before drinking alcohol. It was not advertised as providing, nor did it provide, any hallucinatory or mind-altering effects; it simply lessened my headache the next morning. The use of this medication was unplanned and unsolicited; it was a spontaneous and isolated occurrence. I had not indicated this on any of the USSS forms because I just did not think that this event qualified as illegal drug use as defined on the forms or by common definition. However, in the spirit of full disclosure, and to ensure that it would not cause me any reactionary problems on the polygraph, I disclosed this event in the pre-exam interview. Special Agent Ahlberg’s reaction indicated that he regarded this as a benign, harmless event that did not qualify as illegal drug use. In fact, he minimized it and quickly dismissed it. After being told that I was deceptive on drug use, I brought this incident up again. Special Agent Ahlberg again dismissed it, indicating that it was a harmless and irrelevant event. Based on this information, I requested that the USMS reconsider my application.

8. Although the USMS eventually conceded that I had not withheld information from the USSS, by letter postmarked March 2, 2000, I was notified that my application would not be reconsidered. Mr. Tolson wrote:

The USSS Polygraph Examination Unit substantiated that you were given two pre-employment polygraph examinations and that they were conducted by different examiners at intervals. Both USSS Polygraph Examiners deduced you were deceptive to questions (a) “Have you ever committed a serious crime?” and (b) “Are you
intentionally withholding information regarding your use of illegal
drugs[2] listed above. The issues of consistently testing deceptively
to the same questions on both polygraph examinations remain a
concern to the agency.

9. Mr. Tolson also affirmatively notified me that I could appeal his decision to the
Merit Systems Protection Board.

10. I was also offered a conditional appointment as a Special Agent with the U.S.
Customs Service in June or July 1999. By letter dated April 19, 2000, the U.S. Custom
Service's Personnel Security Branch notified me that I was found unsuitable for
employment. I believe my failing the two USSS polygraph examinations played a
significant role in that decision.

I do solemnly affirm under the penalties of perjury and upon personal knowledge that
the contents of the foregoing paper are true to the best of my knowledge.

Date: October 2, 2000

John Doe
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ERIC CRODDY et al.,

Plaintiffs

v.

FEDERAL BUREAU OF
INVESTIGATION et al.,

Defendants

Civil Action No. 00-0651 (EGS)

DECLARATION OF JOHN DOE "A"

JOHN DOE "A", pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. My identity is known to the government.

THE POLYGRAPH RESULTS INACCURATELY ACCUSE ME OF PAST DRUG USE AND PREVENTED MY HIRING BY THE SECRET SERVICE

3. During 1999, I was an applicant for the position of Special Agent with the United States Secret Service ("USSS"). After having been conditionally offered the position, my offer was rescinded by letter dated December 28, 1999, after the polygraph phase of the application process. On April 7, 2000, I was specifically informed by the polygrapher, Special Agent Nick Stein, that I failed the polygraph. I was told that I was showing deception on the questions regarding the illegal use of drugs, honesty on the application, and the honesty and integrity (control) questions.

4. I have never taken an illegal drug, abused prescription medicine or committed a serious crime. I was completely honest, candid, and forthright on my application.
THE POLYGRAPH EXAMINATION INCLUDED INAPPROPRIATE AND OFFENSIVE QUESTIONS

5. During the pre-interview portion of the polygraph exam, I was asked if I had ever had sex with an animal.

STIGMATIZATION CAUSED BY THE POLYGRAPH RESULTS

6. I may apply for employment as a federal law enforcement officer in the future. Undoubtedly, I will have to reveal the fact that I was accused of lying by the USSS and that I failed the polygraph examination. Even if I do not reveal this stigma, the USSS will release the information to the agencies for which I seek employment. As a result, I will probably never be hired.

I do solemnly affirm under the penalties of perjury and upon personal knowledge that the contents of the foregoing paper are true to the best of my knowledge.

Date: September 29, 2000

[Signature]

John Doe "A"
UNIVERS STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ERIC CRODDY et al.,

Plaintiffs

v.

FEDERAL BUREAU OF INVESTIGATION et al.

Defendants

Civil Action No. 00-0651 (EGS)

DECLARATION OF JOHN DOE "B"

JOHN DOE "B", pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross Motion for Discovery.

2. My identity is known to the government.

3. During 1998, I was an applicant for the position of Special Agent with the United States Secret Service ("USSS"). Although I was provided a conditional offer of employment, this offer was rescinded by letter dated January 7, 1999, because of my polygraph results.

THE POLYGRAPH EXAMINATION INCLUDED INAPPROPRIATE AND OFFENSIVE QUESTIONS

4. On August 25, 1998, I was administered a polygraph examination by Special Agent Ignacio Zamora. I was informed that I failed that portion of the test concerning illicit drug use, despite the fact that I was truthful in all my statements. I was provided another opportunity to take the polygraph exam on November 3, 1998, at which time the test was administered by Special Agent John Savage. I was again told I was lying about my past drug use when I was not.
5. During both examinations I was asked by Special Agents Zamora and Savage whether I had ever committed a felony. Both Special Agents specifically asked whether I had ever had sex with an animal. Of course I answered no.

I do solemnly affirm under the penalties of perjury and upon personal knowledge that the contents of the foregoing paper are true to the best of my knowledge.

Date: September 28, 2000

[Signature]

John Doe "B"
UNIVERSAL DISTRICT COURT
FOR THE DISTRICT OF COLOMBIA

ERIC CRODDY et al.
Plaintiffs

v.

FEDERAL BUREAU OF INVESTIGATION et al.

Defendants

DECLARATION OF JOHN DOE "D"

JOHN DOE "D", pursuant to 28 U.S.C. § 1746, hereby declares as follows:

1. I am a person over eighteen (18) years of age and competent to testify. I make this declaration on personal knowledge and in support of the plaintiffs' Opposition to Defendants' Motion to Dismiss and Cross-Motion for Discovery.

2. My identity is known to the government.

3. During 1998, I was an applicant for the position of Special Agent with the United States Secret Service ("USSS"). Following written and verbal testing, I was given a conditional offer of employment. I underwent a polygraph examination conducted by Special Agent Ignacio Zamora on May 26, 1998. Although the examination lasted 4-5 hours, we did not complete it and I was asked to return on May 28, 1998. Throughout both examinations Special Agent Zamora tried to intimidate me and repeatedly yelled.

4. Special Agent Zamora asked me a lot of questions about drugs. I have only smoked pot two times in my life, and it was four years before I took the polygraph examination. Special Agent Zamora intimated to me that there was basically no way I could have only smoked twice. When he asked where I was when I smoked, I told him
once was in a friend's dorm room, and the second at a Grateful Dead concert. He then
responded that if I went to a Grateful Dead concert then I was a pothead and would
definitely have smoked more than two times. This is completely untrue and I denied it.
Special Agent Zamora also questioned whether I had ever done anything to embarrass my
family, including having pre-marital sex. I said I had had pre-marital sex, but that would
not embarrass my family. He told me that it would have embarrassed his family.

5. On June 2, 1998, I was informed that I had failed the polygraph by Special Agent
James Smith. Special Agent Zamora contacted me on July 21, 1998, and asked if I was
still interested in employment. I said I was and we scheduled another polygraph
examination. The second examination occurred on July 29, 1998, and was administered
by Special Agent Raleigh Robinson, who said he was the "fix it man." He said they sent
him special cases that needed a second chance. Throughout the test, he would stop the
recorder and tell me stories of people who lied on the first test, then came clean with him
and are now happy productive employees of the USSS. They ran the gamut of people
who were heroin users, people who were the get-away drivers for liquor store robberies,
liars, cheaters, whatever. One story in particular got my attention. Special Agent
Robinson told me the story of a police officer in Georgia who had barnyard sex with a pig
or sheep or some other animal. After each "story" ended, he told me how brave the person
had to be to tell him the story, and then ask if something like that happened to me. I
denied I had ever done any of these acts.

6. On August 31, 1998, I was told my application was terminated and that I failed the
polygraph test.

7. During the polygraph interview process, I was asked if I had ever had sex with an
animal. I was completely shocked and taken aback by this question. In fact, I believe my
internal physiological reaction was significant enough to have thrown off the actual
exam, particularly because now I really did not know what to expect as far as questions.
Mr. KEIFER. Thank you for the opportunity to appear before the Committee, Mr. Chairman. My name is Richard Keifer. I'm currently an independent polygraph examiner residing in Orlando, Florida. Until I retired in 1996, I was a special agent of the FBI and a past manager of their polygraph program. I have also served as the President of the American Polygraph Association.

I believe in the protection of individual rights, the monitoring of the government, and the protection of national security. I have
used the polygraph in every manner in the counterintelligence arena. That includes the testing of new applicants, transfers from other agencies, defectors, illegals, double agents, spies, and in internal investigations to cover the same. It is my opinion the polygraph is necessary to preserve and protect our individual rights by the prevention and detection of espionage.

Responsible critics have hypothesized theoretical weaknesses, but have no working experience to support their assertions. I have, over time, carefully listened to critics and looked for problems they predicted in practice and have, in fact, implemented policies and procedures to avoid potential problems. While some errors occur, the case against polygraph is overstated. While the critics sometimes portray polygraph examiners in unflattering terms, the truth is, the quality and the abilities of each individual examiner is the critical difference and is what makes these programs work.

I have provided the Committee with a statement for the record, which I would now like to read during my time period.

Espionage is occurring in government agencies. Polygraph is one of several tools available that can be used as an internal control to prevent espionage and to identify spies. It is my opinion that in a security screening polygraph examination, Robert Hanssen would have reacted with greater than a 99 percent. Because, statistically speaking, others taking the test may also react but not be guilty, other internal control measures, such as FBI investigative resources, would need to be coupled with the polygraph results before certifying espionage activity. Evaluating whether or not security screening should be implemented requires an understanding of what the predicted polygraph outcomes would be and evaluation of what has already occurred in existing programs and the costs involved.

A realistic appraisal of the polygraph requires an understanding of its capabilities and limitations. When making decisions based on polygraph results, one must factor in the confidence levels of the various outcomes. Security polygraph examinations must be objectively conducted and evaluated. The examiners must be able to determine the effectiveness of the official testing and know when retesting is warranted.

For example, false positives can occur. This is when people react to the question but are, in fact, telling the truth. The skill of the examiner is essential in recognizing the possibility of a false positive and the need to take additional measures, such as retesting. Polygraph is not a perfect science, but in my opinion, it is a very valuable tool to ferret out those who would commit espionage against the United States.

How much confidence can we have in a single security polygraph examination? Confidence starts with validity. An estimate of validity can be established from laboratory studies and by projecting the experiences of actual testing. Next, you need to estimate the base rate, or the percentage of the population that bears the characteristics we are seeking, in other words, spies. Prior studies indicate the polygraph has an accuracy range between 90 and 99 percent. Estimates of the number of spies in any organization vary. My estimate in 1994 was there might be a maximum of three spies in a population of 10,000.
Based on the results of scientific studies, when conducting a screening polygraph, you have a high confidence, 99.99 percent confidence, your decision is clear, is correct. In other words, the error rate with people who pass the test is minuscule. On the other hand, when a person registers deceptive or specific reactions, the confidence in that outcome decreases to approximately 2.9 percent. This occurs because, statistically, a large percentage of deceptive reactions will be false positives on an initial test.

In the interest of time, I will skip ahead on my paper and state that I assumed on the initial examination, five to 10 percent of the population would not successfully complete it and would require re-examination, which I believe will resolve a substantial number of these cases and reduce the percentage of false positives. On the unresolved, substantial resources would have to be expended to clear up.

Countermeasures was mentioned. That is overstated. I believe the laboratory overstates the effectiveness of countermeasures. The psychological dynamics of actual testing, as well as anti-countermeasures used in the field, are overlooked when assumptions are made regarding how effective a countermeasure would be. Also, in order for countermeasures to be effective, they must remain classified.

There has been criticism in the past that polygraph screening programs just routinely pass everyone and that the effort is symbolic, only to create a false sense of security. Experts in the field of polygraph have spent considerable time conducting studies and have determined various statistical probabilities based on scientific modalities. Therefore, by analyzing a specific polygraph program's prior testing results and comparing these results to the statistical probabilities, one could determine if a polygraph program was effective or ineffective.

Conclusion: The use of the polygraph is an aid to investigations and not a substitute for investigations as a well established policy. To solve an extremely difficult investigative and security problem requires the use of internal controls and the use of all investigative tools. I believe a well-managed polygraph program is part of the solution to that problem. Thank you very much.

Chairman HATCH. Thank you so much.

[The prepared statement of Mr. Keifer follows:]

STATEMENT OF RICHARD W. KEIFER, PAST PRESIDENT, AMERICAN POLYGRAPH ASSOCIATION, APOPKA, FLORIDA

Espionage is occurring in government agencies. Polygraph is one of several tools available that can be used as an internal control to prevent espionage and identify spies. It is my opinion that in a security screening polygraph examination, Robert Hansen would have reacted with greater than 99% certainty. Because, statistically speaking, others taking the test may also react but not be guilty, other internal control measures, such as FBI investigative resources, would need to be coupled with the polygraph results before certifying espionage activity. Evaluating whether or not a security-screening program should be implemented requires an understanding of what the predicted outcomes would be, an evaluation of what has already occurred in existing programs, and the costs involved.

A realistic appraisal of the polygraph requires an understanding of its capabilities and limitations. When making decisions based on polygraph results, one must factor in the confidence levels of the various outcomes. Security polygraph examinations must be objectively conducted and evaluated. The examiners must be able to determine the effectiveness of the initial testing, and know when retesting is warranted.
For example, false positives can occur. This is when people react to the question, but in fact are telling the truth. The skill of the examiner is essential in recognizing the possibility of a false positive, and the need to take additional measures, such as retesting. Polygraph is not a perfect science but, in my opinion, it is a very valuable tool to ferret out those who would commit espionage against the United States.

HOW MUCH CONFIDENCE CAN WE HAVE IN A SINGLE SECURITY POLYGRAPH EXAMINATION?

Confidence starts with estimates of validity. An estimate of validity can be established from laboratory studies and by projecting the experiences of actual testing. Next, you must estimate the base rate, or the percentage of a population that bears the characteristic we are seeking. Prior studies indicate that the polygraph has an accuracy rate between 90% and 99%. Estimates of the number of spies in any organization vary. My estimate in 1994 was there might be a maximum of 3 spies in a population of 10,000.

Based on the results of scientific studies, when conducting a screening polygraph, you will have high confidence (99.99%) on decisions to clear people. In other words, the error rate on those who pass the test is very miniscule. These conclusions are labeled no deception indicated (NDI) or no specific reactions (NSPR). On the other hand, when a person registers deceptive (DI) or specific reactions (SPR) on the exam, the confidence level decreases to 2.9%. This occurs because statistically, a rather large percentage of the deceptive reactions will be false positives on the initial test. The benefit of polygraph screening, at this point, is that you will identify a smaller pool of people who “potentially” could be committing espionage. It is then possible to concentrate your security resources by applying other internal control measures, such as investigation, to the smaller group who reacted on the test. Additional polygraph testing and investigation should reduce the number of potential spies even further. Actual testing results should help us identify how many unresolved cases exist and the costs of resolving them.

Traditionally, reexaminations have been part of clearing those who react on their first examination, and are presumed to effectively reduce the number of false positives. The DOD annual report suggests that most of these reactions are cleared through admissions. It is likely a number of security violation type of admissions would be made and would be resolved. It is also likely a number would not, however skilled interviewers might still might uncover the spy. In my opinion even with high validity assumptions, 5 to 10% of your population will not successfully complete the initial examination. Subsequent reexaminations should resolve a number of cases and reduce these percentages. Substantial resources would have to be expended on any unresolved cases.

COUNTERMEASURES

The danger from countermeasures, while real, is overstated. I believe laboratory studies overstate the effectiveness of countermeasures. The psychological dynamics of actual testing, as well as anti-countermeasure methods used in the field, are overlooked when assumptions are made regarding the effectiveness of countermeasures. In order for the anticountermeasure methods to be effective, they must remain classified.

POLYGRAPH PROGRAM EFFECTIVENESS

There has been criticism in the past that polygraph-screening programs just routinely pass everyone and that the effort is symbolic only to create a false sense of security. Experts in the field of polygraph have spent considerable time conducting studies and have determined various statistical probabilities based on scientific modalities. Therefore, by analyzing a specific polygraph program’s prior testing results and comparing these results to the statistical probabilities, one could determine if that specific polygraph program is effective or ineffective.

CONCLUSION

The use of the polygraph as an aid to investigations and not a substitute for it is a well-established policy. To solve an extremely difficult investigative and security problem requires the use of internal controls and the use of all investigative tools. I believe a well-managed polygraph program is part of the solution.

Chairman HATCH. I am going to turn over the Committee to Senator Specter, who will ask my questions and other questions, as well. I just want to thank each of you for being here. Because of
my schedule, I am going to rely on Senator Specter and Senator Durbin to ask the appropriate questions, but this has been a very interesting hearing for me and we, appreciate all of you being here.

Senator Specter, I turn the time over to you.

Senator SPECTER. [Presiding.] Thank you very much, Senator Hatch, Mr. Chairman. Let us set the time clock for 10 minutes as a guide to our rounds.

I regret not being here earlier. I chair the Subcommittee on Labor, Health, Human Services, and Education and had attempted to have this hearing set for 11, so we may have to re-cover some of the ground.

Mr. Keifer, you testify that polygraph results are accurate 90 to 99 percent of the time, is that correct?

Mr. KEIFER. That is correct.

Senator SPECTER. And what is your basis for that statistical conclusion?

Mr. KEIFER. I have looked at the results of the research done by the Department of Defense and I have also made a projection based on my experiences in real testing in terms of discovering errors and working backward. In other words, I have spent time looking at how many mistakes we have made.

Senator SPECTER. Starting with the Department of Defense, what is their scientific study and empirical result?

Mr. KEIFER. Yes.

Senator SPECTER. What is it?

Mr. KEIFER. They have several involving the test for espionage and sabotage, and the latest one, I think, showed a 98 percent accuracy rate in the detection of innocent people.

Senator SPECTER. In the detection of innocent people?

Mr. KEIFER. Yes. It was less accurate in the detection of spies. That is a laboratory study.

Senator SPECTER. Well, how accurate was it in the detection of spies?

Mr. KEIFER. I think it was correct around 80 percent of the time, and I have those figures in my briefcase, sir.

Senator SPECTER. How do you know that it is accurate 80 percent of the time?

Mr. KEIFER. How do I know that that study is accurate 80 percent of the time, or real——

Senator SPECTER. What is the basis for professional judgment that the polygraph is reliable 80 percent of the time?

Mr. KEIFER. It is experience in conducting tests and being involved in over 20,000 FBI investigations.

Senator SPECTER. You have been in 20,000 examinations?

Mr. KEIFER. Either conducting them or reviewing them.

Senator SPECTER. When you conduct or review an examination and a person does not display any indicators of unreliability, then you conclude that the person has answered the questions correctly?

Mr. KEIFER. I would have a high confidence in that conclusion, yes.

Senator SPECTER. Now you say a high confidence. Is that different from a conclusion that the person was honest in the answers?
Mr. Keifer. It is. You have to make a decision. You know there could be some error in it. In the case of clearing on a polygraph, it is very little and very comfortable in making that decision.

Senator Specter. Well, I do not see how you come to the conclusion on 80 percent because of the difficulty of knowing whether the person has told the truth. The person may not have told the truth and may pass the test and there is no evidence or extrinsic way of determining that the person has, in fact, told the truth. The person may have concealed information.

Mr. Keifer. If we are talking about the counterintelligence type of test, where you are trying to uncover espionage, there is very little data out there on how many people are actually committing it. I mean, you have a very small number, and so you would almost—only a lot of investigation would uncover those people. If you have other areas where you are testing where the base rate or frequency of the event is much greater, then you are likely to obtain information from them to help verify your decisions.

Senator Specter. Well, I want to come to your point that you estimate there are three spies in a population of 10,000, but before coming to that, I am trying to come to grips with the validity of a conclusion that a polygraph is reliable 90 to 98 percent of the time. I just do not see how you get there. You measure the responses. There are some indicators of deception. If a person passes it, they may have been lying to you. The only way you would know that is if you know the person’s background and have some comprehensive way of establishing whether the person did or did not do the things they represented.

Mr. Keifer. First, in the laboratory study, you know the correct answers, all right, so whatever you get on a polygraph, you can validate against whatever role that person was in the study.

Senator Specter. How do you know the correct answers if you are—

Mr. Keifer. Well, in a study, they are preassigned. Certain people are assigned to be guilty and lie. Others are not deceptive and then they are sent in blind for an examiner to test and evaluate to see if he can find out what role they are playing in the study. Then the question becomes, how much do those studies replicate real-life testing?

What we did in the FBI, since it is difficult to establish, is, one, you would have some deceptive results verified by confessions. Some you would not. We conducted an error study where we canvassed everybody in the FBI to report any error that you have ever noted on a polygraph or even think was made because we wanted to get to that very bottom-line question, how accurate is it in real-life testing? The results of that error study came back at less than a percent they thought we were making mistakes on.

In experience over years, you get feedback oftentimes if you are making errors in cases. I have not received the feedback from any source that that number of errors, a significant number of errors is being made in polygraph testing.

Senator Specter. I do not know what the absence of the feedback shows, but let me turn to you, Mr. Capps. What is your professional judgment as to the accuracy of polygraph examinations?
Mr. CAPPS. In a specific issue test, where we are testing for a single issue—did you steal that missing document?—the research demonstrates that it is about 90 percent accurate. When we are talking about screening, we are talking about less accurate. Let me try to give Mr. Keifer some help——

Senator SPECTER. To stick with specific issues——

Mr. CAPPS. Yes, sir?

Senator SPECTER.—what is the scientific basis for a conclusion of 90 percent accuracy?

Mr. CAPPS. There are a number of studies, sir, that have been published in both scientific and trade journals where hundreds of subjects have been studied over a period of years, primarily in field examinations where they are based on confession or in laboratory studies, as well.

If I may, let me explain the laboratory study just a bit. What we might do in a laboratory study is recruit people out of a newspaper—by newspaper to participate in the study. We would ask them to meet someone who they believe is a case officer. The case officer would tell them to go to a Federal building to go into a particular office to go to a classified computer, or computer they believe is classified, to take a disk from that computer that says "classified" on it and then to destroy that disk and put it in an envelope. So there is some degree of realism in what they are told to do.

We know what group has been programmed to do this. This is the deceptive group. And then we have another group who is not told to do those things, so this is the truthful group. So we have ground truth in the laboratory studies where we can determine who is supposed to be deceptive and who is not supposed to be deceptive.

So when Mr. Keifer talks about an 80 percent accuracy rate, he is talking about based on that type of scenario.

Senator SPECTER. Mr. Zaid, what is your thinking about these studies and the representation of 90 percent accuracy?

Mr. ZAID. I obviously do not agree with them, Senator Specter. You have studies, of course, that go the other way. But I think the key issue here is to look in the screening context. When we are talking about exposing espionage or sabotage or counterintelligence issues, we are talking about a screening format test.

The Defense Department Polygraph Institute has done very few studies on this, and the studies that have been done, including this major study in 1989, actually reflects that screening methods do not work, that up to 66 percent of those who are actually lying or guilty are not found and that a great number of innocent people are accused. The government scientists or the government experts that have worked on these studies have almost consistently and unanimously said that screening tests do not work and should not be used.

Senator SPECTER. Mr. Keifer, do you disagree with what Mr. Zaid interprets that 1989 study to be? Are you familiar with the 1989 study that he referred to?

Mr. KEIFER. I have seen that study. The results speak for themselves. I think it is dated and I do not think it reflects current methodology in the field.
Senator SPECTER. Nineteen-eighty-nine is dated?

Mr. KEIFER. In terms of what—there is more recent research out on it.

Senator SPECTER. Well, has the methodology changed in the intervening 12 years?

Mr. KEIFER. Different types of testing—there are different formats for different types of testing and some of those have changed over time. I am aware of the results of that study and there—it does not speak well of the screening.

Senator SPECTER. You are aware of the study and it does not speak well for what?

Mr. KEIFER. Well, there is very low accuracy rates they attained in that study, but I haven't reviewed that one recently.

Mr. ZAID. Senator, if I could just add one quick thing about Mr. Hanssen's case, as Mr. Keifer said about the 99 percent that he would have shown deception, you know, it is easy to look back in retrospect, but let us take a moment to take a look at that. If Mr. Hanssen had taken a screening test at some point during his career and showed either deception or an inconclusive reading, there would have been a further background investigation or check into his activities.

Now, from what at least has been reported publicly, it does not look like anything would have been found out. Mr. Hanssen has been sort of an enigma compared to other spies like Mr. Ames, who, if you had done a background check into his financial, you would have found out certain things. So he might as well have just fallen into the same false positive rate, which, as I think you were in the room when I said it, Attorney General Ashcroft says that there is a 15 percent false positive rate.

Innocent people, current Federal employees, will be accused of wrongdoing, and as a result, they are going to be put into administrative limbo, and I think no matter how many times you want to say or how many studies you want to cite that says, well, that will ultimately be cleared up, if you think that does not impact on these people's career, then you are just on another planet here. The problem is, there are no safeguards within the system. It might be on paper, but in reality, there are no safeguards to protect those who are falsely accused. So you need to balance this.

Senator SPECTER. I would like to come back to you, but the red light has been on during the course of your answer. Let me yield now to Senator Durbin. Go ahead, Mr. Zaid.

Mr. ZAID. That was actually the conclusion of it, sir.

Mr. IACONO. Senator Specter, if I may, I could make a comment on this.

Senator SPECTER. Go ahead.

Mr. IACONO. I just have here the Department of Defense Annual Report to Congress for Fiscal Year 2000, and the test that is being discussed is being used to detect espionage and sabotage is called the TES, the Test for Espionage and Sabotage, and reading from the government's report, it says there have been two previous research studies on the test, which indicated that the test had an accuracy rate in the range of 80 to 90 percent. However, the sample sizes were rather modest. The subsequent study with a larger sample did not produce accuracies as high.
That is reading right from the government’s own report. I do not know if Mr. Capps could explain what the lower accuracies are. I do not know what they are. But the government’s own data supports accuracy rates of 80 to 90 percent, and then a subsequent larger study apparently did not fare as well. This was——

Senator SPECTER. Did the subsequent larger study specify what the accuracy rates were?

Mr. IACONO. In this report, there is no discussion of the study at all, just that sentence that explains that the results apparently were disappointing.

But what I would like to say in addition is that these studies that we are talking about are laboratory studies and I think it is ill advised to make conclusions about the accuracy of polygraph testing in the field based on laboratory work. There are several reasons for this, but one has to do with the fact that in real life, the stakes are very different than they are in a laboratory study, where a volunteer research subject is told to pretend they are engaging in an act of espionage and then we try and determine whether or not they are doing it.

In real life, if somebody is engaging in espionage, they are going to be clever enough to figure out how to do that well, and probably if they understand that they may have to pass a polygraph test, clever enough to figure out how these tests work and what they can do to foil the outcome of the test. Because a polygraph test involves two types of questions, a relevant question and a control question, all a spy would need to do is learn how to augment the response, physiologically augment the response to the control question, and this can be done by doing simple things, such as thinking stressful thoughts or biting your tongue right before you answer this question. And there are published research studies in top scientific journals that show that people can learn how to adopt these techniques and fool experienced polygraph examiners, who not only cannot tell they are guilty in beating the test, but also they cannot tell they are using these procedures.

It is also the case that in real life, when people are confronted with the accusation of espionage, this is a threatening, arousing accusation. So an innocent person in real life is not anything like an innocent person in a laboratory study. If you are in a laboratory study and you are told you are suspected of make believe espionage, this is not a threat to you. It is not a threat to your career. But in real life, when you undergo one of these tests, you are, in effect, being accused with something that is very important to you. It is a threat to your patriotism and to your well-being by implication that you might be found guilty.

Just as when you are justly accused of something, you blush, your heart races, your palms sweat, but when you are unjustly accused of something, you blush, your heart races, your palms sweat. A polygraph test can measure these types of things, and an unjust accusation can produce the same type of arousal as a just accusation that is met with a denial, and that is why innocent people in real life are more likely to fail a polygraph test than they are in laboratory studies.

So I think it is very important if we are going to talk about the accuracy of these tests that we talk about them with situations
that are very similar to those in real life or that ideally would involve real life cases and not make believe cases in laboratory settings.

Senator Specter. Senator Durbin?

Senator Durbin. Thank you very much, Mr. Chairman.

It is interesting, as I reflect on the larger issue here, that I think throughout the course of human history, we have always been looking for a test of truthfulness. In primitive times, it might have been a physical test, whether you could endure some sort of a test of your survival as to whether or not you were truthful or blessed or whatever the characterization might be. Historically, when it comes to our system of jurisprudence, the test is whether or not a jury believes it or not, and now I think we have found in more modern times that we look for an objective, mechanical means to determine a person’s voracity.

As an attorney, I never advised clients to take a polygraph. I just did not believe in them. I still do not. They are largely inadmissible in most courts of law. I think the Federal Supreme Court has ruled, and others have, as well, that they are not admissible. Perhaps State and local courts can reach other conclusions, and there are a variety of reasons for that.

I guess some feel that if a jury saw a polygraph test, they would think, well, that is really the good measure of truthfulness and we do not have to reach our own conclusion, and some who just question whether the science is reliable at all.

I take it, Dr. Iacono, you speak about the fact that this is so subjective, that polygraph testing is subjective, that the examiner is really establishing the parameters of the questions, what is truthful, what is not, what is a physiological response that is worthy of note and what is not. I have always thought the same thing. Though we tend to say that this is an objective test, there is a lot of subjectivity involved in it. Is that the point that you were making in your testimony?

Mr. Iacono. Yes, it is. There is a lot of subjectivity. In fact, a lot of people would disagree that it should even be designated as a test, because a test, at least as psychologists use this term, would refer to a standardized procedure that leads to an objective outcome, and polygraph testing is not standardized and it is not objective.

There is one aspect of a polygraph test where there is an effort made at standardization and this is in the actual scoring of the physiological data. But the scoring of the physiological data alone does not often determine the outcome of the test, that is, what the examiner’s verdict is as to whether the person is truthful or deceptive.

And, in fact, we have done studies—I have done studies myself where we have compared the examiner’s verdict to what the actual physiological data says in the polygraph charts. What we have done is had the charts blindly scored by people who are unaware of the case facts and then make a determination using the standard scoring procedures of whether the person appeared truthful or deceptive and then compared that to the actual examiner’s verdict, and we found substantial variation between the two. The examiners often play hunches and go against what is in the charts.
We can tell from the government's own testing policy—again, in this Annual Report to Congress, it is pointed out that the government gave almost 8,000 counterintelligence scope polygraph tests, and out of these 8,000, only 200 people, approximately, yielded significant responses to relevant questions. This is a minuscule number, and despite what Mr. Keifer said, there is basically no evidence that polygraph testing is anywhere close to 90 percent accurate. Ninety percent would be the upper limit that even staunch scientific proponents of polygraph would argue in terms of accuracy, and many people would see the accuracy as substantially less than that.

If the test was 90 percent accurate and you test 8,000 people, then you would have to have closer to 800 people failing the test, but we only get a couple of hundred. So we know that examiners, when they are giving these people these tests, they are making adjustments to how they are interpreting the data that they get from the polygraph tracings and determining that a lot of people are, in fact, probably truthful when the charts would actually indicate that they are not.

Senator Durbin. Mr. Keifer, let me ask you as a follow-up, if these tests are generally not admissible in court because of the fact that courts have questioned whether or not they are reliable, should we then subject a person's career or the suggestion to the American people that we are establishing a safeguard for their security to the, I guess, the reliability of the test?

Mr. Keifer. If your question is, should we use a polygraph to uncover a spy, my answer is yes.

Senator Durbin. Of course, we would like to uncover spies. The question is, is this test a reliable way to uncover a spy if, in fact, most courts have said you do not bring it in the courtroom, we do not think that it is reliable enough to be brought in the courtroom. And yet, we are really putting a lot of faith in it, are we not, in terms of determining whether a person can or should continue to be working for the government, should be entrusted with the most important secrets—

Mr. Keifer. Polygraph is one of the tools that should be used to make that determination. It should not be the only tool.

Senator Durbin. But, let me ask you, if you are going to use this tool, how much confidence can you have in a test that has so much subjectivity involved in it? Do you concede the point that the examiner has a great deal of subjectivity in choosing the questions, measuring the responses?

Mr. Keifer. I would like to explain that or offer explanations for that.


Mr. Keifer. Tests are generally standardized and the protocols of administering those tests are fairly uniform. There will be some individual variability by any given examiner during a test, and it is suggested that that is causing a lot of errors and problems in the testing. I do not think so. There are fairly uniform procedures used by examiners throughout the field.

Senator Durbin. So you really discount the subjectivity of this in terms of the intensity of the questions, the types of questions, the repetition of questions? You say this is all fairly standard?
Mr. KEIFER. If you take the area of counterintelligence screening, which is what I think we are talking about here today, yes, it is a very standardized type of testing and the questions are pretty uniform. If you go into another area of criminal-specific testing, the examiners are given greater leeway to formulate individual questions.

Senator DURBIN. Let me ask Mr. Zaid, if I might, if he could follow up on these questions in reference to what do you think might be acceptable parameters of error in this testing if we are going to rely on it.

Mr. ZAID. You have identified some of the key problems, Senator. For applicants, a polygraph is the sole determinative factor. You flunk your polygraph—these are people not just who are applying to the agencies, all of the agencies, but have been given conditional job offers. They have already gone through a battery of tests, interviews. They are generally the top of the crop. Many times, they are law enforcement from State agencies or even other Federal agencies, highly recommended, but they have to go through a drug test, the psychological test or psychiatric test, running, et cetera, and a polygraph, and then a background investigation. If you fail the polygraph, you are out. That is the end of it.

Now, it is a little bit different for current employees because there are regulations that forbid adverse personnel actions directly on the basis of the polygraph. But as I mentioned before, that does not necessarily mean that as a legal matter, it is not an adverse personnel action. They stay at the same pay grade. They can stay in their job. But the fact is, their career is over, and many times they often resign. And I have in my written testimony specific examples of polygraph abuse, where people have been investigated for years at a time, finally are exonerated, but quit in disgust because they are so disenchanted with the government.

The one Supreme Court case that I think you are mentioning, the Scheffer case, which was an Air Force case, Justice Thomas actually, and I cannot remember the other justice who made the comment, but were somewhat disenchanted by the government's inconsistency, because the Justice Department came into that case and advocated against use of the polygraph. The defendant in a criminal case wanted to admit it because he passed. It was good for him, obviously. But the Justice Department came in and provided testimony, sworn affidavits from the FBI, that polygraphs were unreliable, they should not be used, and Justice Thomas was, like, well, how do you reconcile that, then? You are using this to make these security determinations on people's careers, yet when it is against your interest, you argue against it. And that is really the staunch problem here.

Obviously, everybody wants to root out spies. We all want to protect our Nation's security. But we are doing so at the cost of harming very loyal and truthful individuals who work for our government at the same time.

Senator DURBIN. Mr. Chairman, I thank you for this hearing. I have not thought about this issue a lot since I practiced law, but it has come up more and more and I think part of it has to do with our concern over national security. I think part of it has to do with
the fact that we are looking for a quick fix here. We are trying to find some machine that is going to solve our problem. I do not think this is the machine. Thank you.

Senator Specter. Thank you very much, Senator Durbin. Do any of you gentlemen know if any courts have ever admitted polygraph results? Mr. Keifer?

Mr. Keifer. Yes. The Federal courts in New Mexico.

Senator Specter. Anything else?

Mr. Keifer. The Galbraith decision.

Senator Specter. In New Mexico?

Mr. Keifer. Yes. I am not sure what Federal district it is in New Mexico, but it is admitted in Federal court.

Senator Specter. The Federal court admitted a polygraph?

Mr. Keifer. Yes, sir.

Senator Specter. In how many cases, if you know?

Mr. Keifer. It is the Galbraith decision is the one that admitted it. I do not know any subsequent where it was used. I do not know one way or the other, if they did or——

Senator Specter. And the reasoning of the court was that the polygraph was sufficiently reliable as an evidentiary matter to come into evidence?

Mr. Keifer. Yes, Senator. That was the holdings.

Senator Specter. Mr. Smith, you have had a very long career with the general counsel at the CIA, and served on national security studies. Based on your experience with the so-called Blue Ribbon Commission, what is your judgment as to the accuracy of polygraphs in counterintelligence screening?

Mr. Smith. I do not have a number, Senator, as to what the percentage of accuracy is. I defer to the others on this panel that have studied it. I personally am skeptical about the degree of accuracy. It is only a useful tool, and I do not think—frankly, I am not sure that we will ever be able to come up with a definitive number as to the actual accuracy.

Senator Specter. A useful tool? In what way?

Mr. Smith. It is a useful tool as an aid to interrogation, and as I said in my opening statement and believe very strongly, I do not believe that any adverse personnel action should be taken solely on the basis of the results of a polygraph exam.

Senator Specter. Is it a useful tool beyond the frequent occurrences where someone is given a polygraph and the person breaks down and confesses because of a view that the polygraph is going to expose him or her?

Mr. Smith. In my experience, Senator, what typically happens is if in a polygraph examination a person responds to a question and the examiner says, “I have noticed a reaction to this question, is something bothering you?”, sometimes the person will admit to something which is valuable from either a criminal or counterintelligence point of view. Sometimes, they will not. Sometimes that then leads to subsequent investigation.

Senator Specter. Well, if the person makes an admission, that is obviously beneficial, providing there is further investigation to corroborate the admission. I have seen that happen with some frequency as District Attorney of Philadelphia, and there the polygraph was useful because it scared people into telling the truth, in
effect. But beyond that, what is its utility in an interrogation, Mr. Smith?

Mr. Smith. I do not believe it has any utility beyond precisely that, Senator.

Senator Specter. Mr. Keifer, how do you respond to what Mr. Iacono, Professor Iacono, has said about the very substantial differences between a real life situation and a test situation?

Mr. Keifer. I agree with him, that those differences could be significant, but I disagree with the conclusions he is drawing about what would occur in real life testing based on the experiences I have had in that testing. I have found that when you have implemented a screening type of polygraph situation, people do not come into the room feeling like you have challenged their loyalty. They come in more with an attitude of, “I am willing to do what it takes to help uncover a spy.” And so you do not have this body of fearful, innocent people who are going to be reacting in great numbers and thus becoming false positives.

Senator Specter. On the testing, where you set up what is, in effect, a contrivance, or did I misunderstand the kind of tests you have?

Mr. Keifer. I am sorry, I did not understand.

Senator Specter. When you say you have controlled circumstances where people are instructed to do something and then they are questioned about it, that is not a real life situation where the person has done something and is tested on it. He——

Mr. Keifer. That is absolutely correct. There are different psychological dynamics.

Senator Specter. So that is sort of a game. Here, you are going to do X, Y, and Z, and then you are going to be tested on it. It does not really matter what comes out of it.

Mr. Keifer. I think it may be predictive of what you can occur or find in actual testing. I think it is a predictor. I mean, I do not think real life testing will be less accurate than a study.

Senator Specter. I am skeptical of that, and, of course, the purpose of the hearing is to try to get you experts to tell us what your experiences have been. But I am skeptical of it because if you say to a person, you are going to go through these activities, then we are going to bring you back in and find out if you tell the truth on what happened on these activities, it does not matter much to them. They are really playing a game. They are guinea pigs, in effect.

Mr. Keifer. It depends——

Senator Specter. There are no serious personal consequences as to what their answers are.

Mr. Keifer. That is correct. There is no personal consequences, but the effort in those studies is to make it appear as realistic as possible. That is why it is dangerous to sometimes project that the validity of polygraph should be based on those kinds of studies and not take into account actual testing experience.

Senator Specter. Well, if you give a polygraph to a person and they pass it, and you later find out that what they told you was a lie, then you have a statistic where the polygraph did not work. If they pass it and you have no more feedback, they could have been telling the truth or they could have been lying. It is just not
possible to know everything in that person’s background as to whether they told you the truth. If they fail a polygraph and you later investigate and find out that they did not commit an offense, then you know that it is inaccurate.

Mr. KEIFER. There may be other ways of verifying that. There may be other people tested in the same case, one of which may be deceptive and you may uncover the truth there that would validate those people who you claim do not react.

Senator SPECTER. You may or may not be able to find out the facts to show that it is accurate. When you emphasize the quality of the polygraph examiner, that is a very important point. You are the President of the Association.

Mr. KEIFER. Former.

Senator SPECTER. Former, Past President of the American Polygraph Association. There are doubtless all levels of competency as you go to move away from, say, the chief polygraph examiner for the FBI, who presumptively is very well qualified, to some assistant polygraph examiner in Wichita, Kansas. I do not mean to disparage Wichita. I just pick out my hometown, place of birth.

Mr. CAPPS, you are with the Department of Defense and you are an expert here. How do you evaluate the studies which have established reliability at 90 percent?

Mr. CAPPS. Sir, we will never know the validity of polygraph because, as Dr. Iacono said, the level of emotionality, if I am quoting you right, the level of emotionality in laboratory studies is not what we would experience in a real field setting and we could never——

Senator SPECTER. You tend to downplay the validity of laboratory studies?

Mr. CAPPS. Yes, sir. Yes, sir, I do.

Senator SPECTER. Well, what is your professional judgment as to how accurate polygraphs are?

Mr. CAPPS. There is really no way to make that determination because the level of emotionality is less in a laboratory and we can never really know true ground truth in a field setting. We can only approximate that.

Senator SPECTER. So you do not think there is a level of reliability that you can depend on?

Mr. CAPPS. I think that polygraph, based on the multitude of studies that have been published in scientific and trade journals, has a very high degree of validity, but as to determine what that number is, I have no idea.

Senator SPECTER. Why do you think there is a high degree of reliability?

Mr. CAPPS. Because it has been replicated so many times with consistent results. Those studies have been replicated many times.

Senator SPECTER. The studies have been replicated?

Mr. CAPPS. Yes, sir.

Senator SPECTER. But how about the emotionality factor, the word you use? It is present in all those studies.

Mr. CAPPS. Yes, sir. What that means, simply, is that we should not get high levels of correct decisions on deceptive people because they should not be responding at high levels. We do, in fact, in
many cases get high levels in deceptive people and even higher levels on truthful people.

Senator Specter. Well, if you get higher levels of emotionality on truthful people, then they do not pass the test.

Mr. Capps. As a matter of fact, sir, when people on this panel have been talking to you about false positives, the DoD report to Congress simply does not show that to be true. When we test 8,000 people a year and we only have five or six at the end of that 8,000 testing that have been determined to be deceptive with no reportable information——

Senator Specter. Well, how do you know the others are not deceptive? You have a few shown to be deceptive, but that does not answer the question as to whether those not shown to be deceptive are, in fact, not deceptive.

Mr. Capps. You are right, sir. What I am saying is we are not calling people deceptive in large numbers like has been inferred here today.

Senator Specter. Would you amplify that last statement? I did not understand it.

Mr. Capps. Yes, sir. The DoD report to Congress demonstrates that we are not calling people deceptive in large numbers, like some members of the panel have inferred is happening.

Senator Specter. OK. We are not calling them deceptive, but we do not know whether they are deceptive or not. You are not calling them deceptive unless you are sure, which is fine. That is the presumption of innocence and that is the American way. But that does not deal with the reliability of the polygraph because there may be a lot more deceptive people out there that you are not catching.

Mr. Capps. That is true, sir.

Senator Specter. Mr. Keifer, what is the name of that case again in New Mexico in the Federal court?

Mr. Keifer. Galbraith.

Senator Specter. Galbraith. Do you have a citation on it?

Mr. Keifer. I can give it to you.

Senator Specter. Can you? Do you know of any other court which has admitted polygraph, Mr. Zaid?

Mr. Zaid. It has varied, Senator, and I am trying to remember the facts in that specific case. Some States have per se bans on admissibility. The military has a per se ban. The Scheffer case I mentioned in 1998 from the Supreme Court——

Senator Specter. My question was, do you know of any cases where they have admitted the polygraph?

Mr. Zaid. It has, and I will give you—off the top of my head, case names, I do not have. I have it at the office. I will be glad to send it to your staff.

Senator Specter. I would like to see them. I would like to do a review of those cases to see what the rationale of the court was.

Mr. Zaid. Well, many of the cases are when both parties agree, the prosecution and the defense, when both parties stipulate. Then courts have said, well, I am not going to stand in the way and we will allow it in.

Senator Specter. That is not very persuasive. The issue is, to what extent have courts admitted polygraphs on the determination of sufficient reliability to be evidentiary.
Mr. Zaid. Not nearly—I want to say very rarely, but I will say that most courts typically do not allow the admissibility.

Senator Specter. I would like to know if you have specific cases.

Mr. Zaid. I will be happy to send that to your staff later today.

Senator Specter. I have seen a fair number of polygraphs. Two stand out in my mind. We had a very celebrated citizen of Philadelphia named Frank Rizzo, who was the police commissioner, and he got into an argument, which I will not go into the details of, and there was a lie detector test administered by the Philadelphia Daily News, and the commissioner and later—I guess he was mayor at the time—was a very assertive, very confident fellow, and he said, “If the machine says you lied, you lied.” And he took a polygraph and it said he lied. It was a gigantic, front-page story.

And he brought along his chief assistant, who also failed a polygraph. It is the only case I know of where a witness brought along a corroborating liar, although I am not sure he was a liar. I just know the polygraph said he was a liar. I knew Frank Rizzo and I would say he was telling the truth.

The other polygraph experience I had was Jack Ruby’s polygraph. Have any of you gentlemen looked at Jack Ruby’s polygraph tapes? You have, Mr. Keifer? What do you think?

Mr. Keifer. There was almost no reaction throughout those charts. In the format used at the time, they would have concluded that he was being truthful.

Senator Specter. Do you think he was being truthful?

Mr. Keifer. That was an early stage polygraph. I could not make a determination from those charts, but I respected that examiner’s opinion.

Senator Specter. You respected the examiner?

Mr. Keifer. Yes.

Senator Specter. You knew Bel Herndon?

Mr. Keifer. Yes, I did.

Mr. Zaid. That is part of the problem, Senator, respecting the opinions of the examiner. You heard one statement earlier that—in fact, it is true, the polygraph examiners are not the ones who make the decisions. They just provide what their evaluation is and then someone up in management makes the decision based on that evaluation. But everyone defers to the examiner. So if there is a subjective problem with the examiner, which everyone seems to admit that there can be, it does not make a difference because the opinion is accepted nonetheless.

Senator Specter. The management at the FBI did not agree with the examiner. The management at the FBI disagreed with the examiner. Bel Herndon was the chief polygraph examiner, was he not, Mr. Keifer?

Mr. Keifer. Yes, he was.

Senator Specter. Is he still alive today, do you know?

Mr. Keifer. I lost touch with Bel several years ago. I think he is still in the area. I hope so.

Senator Specter. Well, it was quite a polygraph examination when Jack Ruby’s testimony was taken. He did not give the Chief Justice a chance to preside. He just started right off, saying, “How do you know I am telling the truth? I want a lie detector test.” The Chief Justice, whose composure was not always perfect, said, “Well,
of course, Mr. Ruby. If you want a lie detector test, we will give you a lie detector test.”

And the Chief Justice regretted that commitment, and it was decided that the only way the commitment would not be honored would be if Mr. Ruby withdrew his request for a lie detector test. And I had been present at most of the deposition, so I was sent down to be with Mr. Bel Herndon when the polygraph was administered. I was instructed to give Mr. Ruby a chance to withdraw his request if he wanted to, but not to put any words in his mouth, because even at that point, we knew people would be looking at what we were doing.

And Mr. Ruby had his own list of questions that he wanted asked. It was not a very good format, because it lasted for 12 hours. You do not recommend that generally, do you, Mr. Keifer?

Mr. Keifer. Not generally.

Senator Specter. To have a 12-hour polygraph. But Bel Herndon, who was the top of his profession, said he was telling the truth, not involved with Oswald and not involved in the assassination. The matter then went to the Federal Bureau of Investigation and the word the Warren Commission came out with was that the polygraph was not reliable, not to be considered, and it was generally thought that that word came from management, and the management was Director J. Edgar Hoover. But we decided to publish the polygraph and all the tapes and all the charts and let history decide what the facts were.

Gentlemen, thank you very much for coming in. We are trying to get a handle on this issue. The Hanssen case is a very important one and what the FBI is going to be doing in the future and the other Federal agencies and the intrusiveness and the impacts on reputations, the impacts on career are very, very substantial.

We are going to seek some way—last year, one of the appropriations bills had a direction to have a study of the polygraph, to see if we cannot come to grips with its reliability with a little more certainty so we can know how effective it is and how intrusive it is and make a public policy determination.

Mr. Smith?

Mr. Smith. Senator, I value what the Committee is doing here. Mr. Zaid made a couple of comments, if I could have 30 seconds to respond.

Senator Specter. Sure. Take your time. I will be glad to listen to you longer. This is one hearing where the Committee is prepared to stay.

Mr. Smith. I appreciate that.

Senator Specter. That does not happen very often, either.

Mr. Smith. This is a very difficult issue, and I do not know that I have the right answer. Mr. Zaid did say that there were some 300 CIA employees whose careers are still in limbo and they are not being promoted. That is not correct. Those individuals were identified after the Ames case. Many of them were referred to the Bureau. They stayed there much too long, but that situation has now been resolved, and George Tenet, they have all been cleared out.

George Tenet has adopted recently a number of procedures to try to reduce the risk of that sort of thing happening in the future to zero so that people, when they do stumble on a polygraph, if that
is the only thing that happens, their careers are not put on hold. They can be promoted. They can take overseas assignments and so on. But it took, in my judgment, much too long for those procedures to be put in place, but George Tenet——

Senator Specter. Mr. Smith, when you were at the CIA, did you take a polygraph?

Mr. Smith. I did.

Senator Specter. Did you have any hesitancy about it?

Mr. Smith. Yes.

Senator Specter. Do you think it was an infringement on your civil liberties?

Mr. Smith. No, I did not think that. I was nervous about it because I had had access to top secret codeword information for many years in other jobs and——

Senator Specter. You were nervous about it?

Mr. Smith. Of course.

Senator Specter. Sufficiently nervous to have all this emotional-ity?

Mr. Smith. No.

Senator Specter. By the way, is that a word, Mr. Capps?

Mr. Capps. Yes, sir, it is.

Senator Specter. Is it? OK.

Mr. Smith. I was concerned about it. I passed, but was clearly concerned about it. It does have a deterrent effect. I am convinced of that.

Senator Specter. A deterrent effect?

Mr. Smith. It does have a deterrent effect.

Senator Specter. In what way?

Mr. Smith. It has a deterrent effect for current employees. Ames, I think even in your interview with him, may have admitted that he was very concerned about the polygraph, even though he got through it.

Senator Specter. I never had an interview with Ames.

Mr. Smith. I misunderstood that, Senator. I thought you did meet with him after he was convicted.

Senator Specter. No. I never did.

Mr. Smith. I apologize. He did, and others who have been convicted of espionage have expressed concern about it. It is not a perfect deterrent, but it does operate to some extent as a——

Senator Specter. As a deterrent, meaning that if you know you are going to have a polygraph in the future, you are not going to do something bad?

Mr. Smith. That, I believe, yes.

Senator Specter. Well, that is a point. Have you had a polygraph, Dr. Iacono?

Mr. Iacono. No, I have not.

Senator Specter. Are you prepared to take one?

Mr. Iacono. I would—I am not prepared to take one, no, because I do not feel that they are useful. In fact, I would be interested in knowing how people who administer polygraph tests feel about testing people who are thoroughly familiar with the procedure, including understanding countermeasures and what the point of the questions is and how it is used as a prop to attempt to get admissions and these sorts of things.
Senator Specter. Mr. Keifer, you have taken polygraphs?
Mr. Keifer. I took one, yes, sir.
Senator Specter. Just one? Were you nervous?
Mr. Keifer. As nervous as I would be before any type of test, yes.
Senator Specter. Before any type of what?
Mr. Keifer. Any type of testing.
Senator Specter. Any type, like coming before the Judiciary Committee?
Mr. Keifer. That would be an excellent example.
[Laughter.]
Senator Specter. Mr. Zaid, you have never taken a polygraph, have you?
Mr. Zaid. I have not. I have observed my clients taking polygraph tests.
Senator Specter. But you are prepared to take one?
Mr. Zaid. So long as nothing was riding on the results of it, I have no problems with it.
[Laughter.]
Senator Specter. You are prepared to be part of a contrivance, prepared to be part of a test if you are adequately paid?
Mr. Zaid. I would even probably do it for free, which is strange for a lawyer to say.
Senator Specter. At your hourly rate?
Mr. Zaid. I am sorry?
Senator Specter. At your hourly rate?
Mr. Zaid. It is less than Mr. Smith’s, at least, at this point, but I am a little younger.
[Laughter.]
Mr. Zaid. But I would love to see——
Senator Specter. And more than mine.
Mr. Zaid. I would love to see what happens, if I could pass or fail a polygraph.
Senator Specter. Mr. Capps, have you taken a polygraph?
Mr. Capps. Yes, sir. I have taken four and I am due for one now.
Senator Specter. Are you?
Mr. Capps. Yes, sir.
Senator Specter. Will this hearing substitute for it?
Mr. Capps. I certainly hope so.
Senator Specter. Do you get nervous when you take a polygraph?
Mr. Capps. Absolutely.
Senator Specter. Well, gentlemen, thank you very much for coming in, for submitting your statements.
We are going to put into the record a statement from Senator Grassley, and he has some questions which we will be submitting to you for the record.
[The prepared statement of Senator Grassley follows:]

STATEMENT OF HON. CHARLES E. GRASSLEY, A U.S. SENATOR FROM THE STATE OF IOWA

Today we highlight an extremely complex and delicate subject—the use of polygraph examinations on our federal employees as a means to ensure the integrity of our nation’s classified materials.
We sit here today in the wake of one of the most serious breaches of security in the history of our nation—that involving the espionage allegations surrounding FBI Supervisory Special Agent Robert Hanssen. As unconscionable as it is to contemplate such a traitorous act, it is equally unconscionable for most Americans to contemplate how this could have happened in the first place.

All Americans suffer when our nation loses sensitive or classified information through the efforts of foreign espionage. But it is particularly deplorable when these efforts are found to be facilitated by our own personnel. How can we expect the American people to place their trust in our federal agencies when their trust is betrayed by the very people charged with their protection?

So today, as a consequence of these despicable acts, we once again find ourselves in the midst of a problem in search of a solution: how can we obtain the greatest degree of assurance in the integrity of our personnel with classified access? At issue is the question of whether the polygraph examination should be made part of the security program. I think that all will agree, if this is the solution, then we have opened up a whole Pandora's box of problems that must be properly addressed for it to be considered fair and effective.

We have heard much about the need to review the security procedures at those agencies charged with safeguarding our nation's secrets—and I know that the Webster Report will have much to say about this issue at the FBI. Many have argued for the need to remove the human element from these procedures. This argument flows from the idea that our senior-most personnel, and consequently, those with the most classified access, are routinely considered to be above suspicion. Much to our detriment, we have learned the fallacy of this notion. In response, we have recently seen Director Freeh react with an interim policy change that will subject in-service FBI personnel to periodic polygraph examinations. I anticipate that we will find similar recommendations from the Webster Report when it is completed.

In the past, I have expressed reservations regarding the use of the polygraph, particularly in the context of its use during pre-employment screening, and I have cautioned against its use as a sole determinant of a person's guilt or innocence.

I have also been critical of the duplicitous positions that the FBI has taken in regard to their application of the polygraph exam in the context of its administration in both pre-employment screening and criminal investigations. The FBI will tell you that the polygraph examination is only one of many components to their pre-employment screening process. This would lead one to the false conclusion that one could fail a pre-employment polygraph examination with the FBI and still be hired, if all other factors are in order. Make no mistake about it, the failure of a polygraph examination during a pre-employment screening is an automatic disqualifier, notwithstanding any other factor.

The dirty little secret that the FBI will never tell you is: behind their policy governing the application of the polygraph during pre-employment screening is the concept of "acceptable loss." Any polygraph examiner, or for that matter, anyone who has done any research on the subject, knows that there is an error rate to the examination; yet, the prevailing sense at the FBI is, with a never-ending stream of applicants for job openings, losing a few due to examination error is simply the cost of doing business.

Further, and by their own admission, the FBI has repeatedly gone on record to mitigate their reliance of the polygraph examination as a tool in the course of their criminal investigations. My reaction to this is, if this is the way that the FBI feels about the use of the polygraph in their criminal investigations, how can we then have confidence in their application of the polygraph for the national security screening of their own employees? Should we also infer that the concept of "acceptable loss" applies in this instance as well?

It is my understanding that the FBI's interim policy in this matter is to use the polygraph examination in conjunction with, and as a complement to, their comprehensive employee security updates. Are we being asked to once again take a leap of faith that the polygraph will not be the sole determinant of an employee's guilt or innocence? How can we be sure that the real agenda will not be the same as it is with pre-employment screening?

And, I also won't that by instituting the routine use of polygraph examinations for the national security screening of employees, this will be at the expense of the other investigative tools involved in a security review. And that an over-reliance of the polygraph may lull the agency into a false sense of security.

As post-incident investigations have proven in the alleged activities of Agent Hanssen and many other espionage losses involving our own personnel, clues of suspicious behavior were there to be found; yet, their activities continued unabated, in some cases for several years. Some may accuse me of having the benefit of 20/20 hindsight, but it is clear that if the FBI had followed up on information available
to them in their routine security updates, they could have put an end to this breach years sooner, and without the need for a polygraph examination.

To simply say that this is the right thing to do; that this policy is unfortunate but necessary, plays into the notion that the FBI knows their business better than we do. I know too well the history of an agency who's private and public faces are all too often at odds with each other.

To be sure, with our national security interests at stake, it is critical that we find the best way to identify illegal behavior within the ranks of the FBI. But I disagree that the polygraph is the panacea for this problem, and I look forward to reviewing the FBI's comprehensive policy in this matter at the earliest opportunity.

Senator Specter. We have a number of statements from individuals who were not called as witnesses and wanted to have their statements submitted for the record, so they will be submitted en bloc.

[The statements follow:]

Statement of former Federal Bureau of Investigation Special Agent Mark E. Mallah

THE INVESTIGATION

In January 1995, the FBI asked me and the other agents in the Foreign Counterintelligence division to take a polygraph test. It was to be a routine national security screening to ensure that no one was supplying information to foreign intelligence services. When the test ended and the examiner surveyed my charts, he thought they indicated “deception” on unauthorized contact with foreign officials. He questioned me about it, and I told him that I had never had any unauthorized contacts, not even close. The charts would be reviewed by headquarters, he advised, but he believed they would judge them “deceptive.”

About two weeks later, the FBI instructed me to report to Washington, DC for additional polygraph testing. At this point, I had no idea of the scale of the investigation unfolding. Two consecutive days of polygraph examinations and lengthy interrogations ensued. The examiner erroneously insisted that I was deceptive on unauthorized foreign contacts and even on other unrelated matters. The FBI placed me on administrative leave with pay, pending further investigation.

A major investigation followed—“major” in the sense that it was a top priority case commanding extensive resources. Believing the FBI would objectively review the facts and have no choice but to exonerate me, I cooperated eagerly. After a full day of polygraphs, interrogations, and a three hour train ride home, FBI Agents appeared at our home that same night and asked for our consent to search it, which my wife and I provided. This unleashed a search team of about seven agents, many in raid jackets. The search lasted about three hours and ended well after midnight. I allowed the FBI to take detailed financial records, appointment books, personal calendars, daily “to-do” lists, my innermost thoughts expressed in personal diaries, personal correspondences, and numerous other items. Following the search and for about two months afterward, I was under surveillance twenty four hours a day, seven days a week. For at least a week during that time, a small airplane circled above our home every morning, then buzzed above me wherever I went. The FBI interviewed numerous friends, acquaintances, former roommates, colleagues, and my family. The Bureau accused one friend of being an accomplice and gave him a polygraph test, which he “passed”. They showed up unannounced and surprised my wife at her place of work, asking to interview her right then and there. She agreed to be interviewed later. During her interview, the FBI asked her to take a polygraph, which she declined, since she did not trust the device. The FBI asked both of my brothers to take a polygraph test. one agreed, and he “passed.” An Agent told one of my friends that there was “significant evidence” against me. This same agent told my brother he was certain that I was guilty.

Five months into the investigation, I returned to work as a Special Agent, again entrusted with a “top secret” clearance, a gun, and a badge. The reinstatement seemed to mark the end of the investigation, and my vindication, but it did not. As soon as I returned, the Special Agent in Charge (SAC) for Counterintelligence told me that the foreign contacts issue was still “unresolved.” Unresolved” despite the FBI having had unlimited access to every aspect of my personal and professional life for the prior five months.

After my reinstatement, I inquired regularly into the status of the investigation, i.e. when it would finally end. In response, FBI Headquarters wrote to me in October 1995, the investigation now eight months old. They stated that I was “the sub-
ject of a security reinvestigation involving [my] inability to resolve issues relating to [my] associations with foreign nationals as well as [my] susceptibility to coercion as a result of [my] concealment of these matters." I answered that my being entrusted with a "top secret" clearance belied their conclusions. How could I hold a “top secret” clearance and at the same time be “susceptible to coercion” as a result of concealing such serious matters? I also noted that after eight months of investigation, the FBI had yet to produce one speck of information as to just exactly who these foreign nationals were that they kept citing, what information I had supposedly compromised, when I had supposedly compromised it, and in what manner I had supposedly done so. Judging from their letter, the FBI sought to impose on me the burden of disproving their accusations, details about which they never provided.

No specifics were ever provided, as they were non-existent in the first place. The investigation continued, and I resumed my inquiries. After inching through various stages of the bureaucracy, it concluded in September 1996, 20 to 21 months after it began. The final outcome was a letter of censure and a two week suspension for a trivial administrative issue and a minor detail from my FBI employment application. Most significantly, the letter of censure was silent about unauthorized contacts with foreign officials, the national security issue which launched the investigation and was its raison d’être. Investigators produced of course zero corroboration for any issue which the polygraph deemed me “deceptive.”

Shortly after the investigation, I voluntarily resigned from the FBI with a clean record. If I were to re-apply for a position with the FBI in the future, I would receive a positive recommendation for reinstatement, the most favorable status possible.

A DISTURBING EXPERIENCE

The experience was highly disturbing on a personal level for all the obvious reasons— it was invasive, my reputation was under constant assault, my career completely undermined, my integrity placed under suspicion, and I was definitively accused of sins which run completely against my values. This was, to say the least, a stressful and challenging odyssey.

Perhaps even more disturbing are the larger implications. Nothing more than unsubstantiated polygraph charts launched a major investigation which squandered a vast amount of resources. I estimate that the FBI spent far in excess of $1 million dollars on the case. This would be an acceptable price of protecting national security if the polygraph had a history of accuracy and success, and my case was just an unfortunate exception. But in all its history, the polygraph has not detected one single spy. Ever. It is batting .000. Worse than that, it lulled the intelligence community into a false sense of security in the Aldrich Ames case, a CIA employee ultimately convicted of espionage. He “passed” the polygraph, and continued spying thereafter.

With the polygraph’s dismal record, with the entire weight of outside scientific expertise convinced that polygraph screening does not work and is prone to accusing innocent people, with nothing more than self-serving theory behind it, the FBI, its Polygraph Unit, and other government practitioners should be held accountable to Congress for “uses and abuses of the lie detector,” to quote the subtitle of Dr. David Lykken’s book, A Tremor in the Blood. I found this lack of accountability, this freedom to level unsubstantiated charges and instigate a furious accusatory process without having to answer for the results, both irresponsible and chilling. My experience is not unique. Other individuals within the FBI and in the intelligence community have had their lives needlessly rocked by the whimsical dance of the polygraph’s pens, not to mention the dozens of unsuspecting applicants whose aspirations are ambushed by the machine. More are certain to come.

THE POLYGRAPH AND THE ALTERNATIVES

The polygraph’s susceptibility to error is well established by scientific research. Its recordings do not measure truth or deception. They measure fluctuations in blood pressure, respiration, and sweat response. Period. The examiner then interprets those fluctuations in an attempt to infer truth or deception. Since no physiological pattern is known to be unique to deception, but could also represent anger, fear, anxiety, embarrassment, and other emotional states, the interpretations and inferences of the examiner are notoriously prone to error. Entrusting it with the protection of our national security is delusional.

Sound and objective investigation is the best way to safeguard against the risk of espionage. Spies and others who pose security risks are generally not stable, well-adjusted people. They are troubled and leave tracks.
Many desire more money and a grander lifestyle than their salary allows, such as Aldrich Ames, owner of a $540,000 home purchased with cash, and a large drinking problem. They might have a need not only for money but to feed their ego, such as John Walker. Even those supposedly in it for ideology get paid. Asset checks, credit checks, reference checks, periodic interviews of associates and friends, good source development, and other investigative techniques are far more trustworthy indicators of a security risk than a polygraph machine.

CONCLUSION

Whether it is screening applicants or screening employees, the polygraph is a failure. I suspect that its days as a screening tool are deservedly near an end. If the experience I endured leads to its elimination as a screening device, then I will have considered it all worthwhile.

Statement of George W. Maschke, Co-founder of AntiPolygraph.org

My name is George W. Maschke, and I am a co-founder of AntiPolygraph.org, a nonprofit 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 preemployment 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 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 coauthored 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.

Statement of Pascal Renucci, former government defense contractor employee, San Francisco Bay, CA

I was formerly employed with a government Defense contractor in the San Francisco Bay Area. Due to the nature of the work, one of my supervisors initiated a security clearance application on my behalf in mid-1999.

The clearance process began by my completing a security form. One of the questions on this form is past drug history. I answered truthfully by indicating a one-time experience smoking marijuana after my father died of pancreatic cancer. I explained on the form that I thought the marijuana might help with the extreme grief I was feeling that night. A few months after submitting the form, I was told that the investigating agency, the CIA as it turns out, wanted me to submit to a polygraph to verify the veracity of my stated drug history. As I was truthful on the form, I voluntarily consented to the polygraph. I reasoned that since I am hiding nothing,
one would hope the polygraph should be uneventful and pass without incident. The day the polygraph was administered, one of the most traumatic days of my life, I discovered very painfully how erroneous my reasoning was.

My visit to the polygraph office began with the examiner explaining security clearances and the background investigation process, while establishing a tone of dominance in the conversation. Gradually, he steered the topic towards illicit drug use and asked that I recount the events leading to my use of marijuana a few days following my father’s death. After doing so, he and I agreed on a set of polygraph examination questions. The most salient question being whether I had ever used marijuana more than five times, the truthful answer being negative since I had only used marijuana once. So far, nothing objectionable had transpired.

He proceeded by fastening the various polygraph appendages to my body. All of these were benign with the notable exception of the blood pressure cuff strapped around my arm with excessive tightness. I felt extreme discomfort immediately as the artery feeding blood to my arm was being choked. No medical practitioner has ever fastened a blood pressure cuff on my arm so tightly. I informed the examiner that the strap was much too tight and requested that it be loosened. He sternly replied that a very accurate measurement of blood pressure was necessary. Therefore, loosening the cuff was unacceptable. I retorted with my mounting feeling of pain, to which he most assertively repeated his earlier denial. Feeling intimidated, I became quiet. As the pain in my arm grew even worse, I noticed that the color of my hand was becoming indistinguishable from the purple stone on my college ring. I brought up the issue once more, and the examiner, apparently annoyed, moved the strap from my arm to my lower leg. Though it was a great relief physically, I was becoming more unsettled by his demeanor.

Before beginning the testing procedure, he instructed me not to take any deep breaths. I immediately had difficulty complying since I was already tense from the previous exchange about the blood pressure cuff, and actually very much so needed to take a deep breath- Nonetheless, I forced myself not to breathe-in deeply. He posed a few preliminary questions including where I lived and the day of the week it was. Soon after the beginning of questioning, he criticized the shallowness of my breathing. With an annoyed tone, he then told me to breathe normally, which confused me given his initial breathing instructions. This episode, combined with the earlier one about the cuff, left me so nervous that I even incorrectly stated the day of the week it was during questioning. He was upset by this mistake, and though I apologized profusely to assuage the tension, I felt no better or calmer. When the preliminaries were completed, he cycled through the actual test questions several times. As stated before, the key issue was whether or not I had used marijuana more than five times. The events following this questioning form the basis for the bulk of my complaint.

After the polygraph ended, the examiner rose from his chair and angrily shouted that the test results could not have. I was inexpressibly shocked upon hearing this, As I was sitting in the polygraph chair in utter disbelief, the examiner continued with a loud, endless tirade about how I have been lying and that I should confess to other times I had used drugs. I answered that there were no such other times, and if there were, I would have told him about it in the first place. He then said something to the effect “No, I know you wouldn’t tell me Pascal.” My jaw dropped in indignation as he made me feel like a criminal in a police investigation. The examiner’s manner of speaking to me smacked of a police-drama show on TV.

Similar exchanges ensued for quite some time. I would maintain that I had in fact told him of absolutely any and all involvement I had with drugs, however, he would keep insisting I was not telling him “something”. At one point, he shook his head and made comments suggesting that my “story” about using marijuana after my father dying was ridiculous. I was extraordinarily upset hearing such characterizations. The circumstances arising from my father’s death were being mocked and I was being accused wrongly of dishonesty. I felt insulted beyond words. The examiner was adamant in his fallacious convictions and I was physically drained from spending several hours there already. Finally, I became exasperated and asked to leave, as the situation was hopelessly deadlocked. However, the examiner continued to argue ominously with me for a good while longer, and then just left the room. I was hoping to be released, but dared not leave the room until being told I could, as I was petrified by this stage.

After ten or fifteen minutes elapsing (with the polygraph sensors still attached), a different man walked into the room, introduced himself as the head polygraph examiner, and removed the sensors. I hoped he would just tell me I could leave. Instead, he firmly asserted “You’re being deceptive and untruthful,” which I answered was not the case, which in turn fueled the same type of back and forth arguing as
with the first examiner. It became apparent that he was following the first examiner's lead. He indicated that the polygraph waveforms looked as though I "shot up last night" with some drug, adding that my wearing a long sleeve shirt made him suspicious. I reacted by starting to unbutton my sleeves to show him the puncture-free skin on my arms, but he told me stop before I could pull-up my sleeves. I found his statements as offensive as those of the first examiner.

He began to argue that since I completed both an undergraduate and a graduate degree successfully, and that since I was doing well professionally, then I was probably not an inveterate drug user. Indeed, that much is true. He continued by stating that the US Government is not concerned about small amounts of drug use, so I should admit to whatever other drug use I did, so that they could know they could trust me. Just as with the first examiner, I replied that if there were any other drug use, I would have told them, but there was no such other use. I indicated that I understood the stated US Government's position on drugs. but the fact was that I had told them everything. He and I were hitting the same brick wall as with the first examiner. He was making no mention of my being able to leave, and though I was never physically restrained or told I could not leave. I was becoming genuinely frightened of my ultimate fate in this place. I repeated yet again my desire to leave. He threatened that all of my security clearance processing would be terminated if I left. By then, obtaining the security clearance was the least of my concerns, and as such, I asked to leave once again. He exited the room, and shortly thereafter, yet another man walked in.

This final man introduced himself as the general manager of the office, and basically reiterated what the previous man said about my clearance processing being terminated if I left. He then gave me a form to sign, which I did. I do not recall the specific content of this form and was never given a copy of it. However, I do clearly recall that by then, I would have been willing to sign a form indicating I was President Kennedy's assassin, if it meant I would be let out of there. Finally, after enduring five hours of hell and signing the form, this last man showed me the door.

Without question, this was the most demeaning and insulting experience of my life. My integrity had never been so baselessly attacked and defiled. I felt bullied, mugged, and violated. I was so upset and traumatized by the five-hour ordeal that I almost got myself killed driving back home from not paying attention to the road. Moreover, I could not sleep at all that night, despite my laying in bed over ten hours.

After this experience, I am completely dumbfounded by my government's quasieclusive reliance on polygraph junk science. When prompted to submit to the polygraph, I gladly consented since I had nothing to hide. I thought to myself that nothing could go wrong. Now, I know first hand that the polygraph is a sham as a scientific tool. No physiological pattern is unique to lying. Being nervous, tense, or not breathing right are invitations to examiners accusing one of deception, and subsequently harassing and abusing one to no end. If the polygraph genuinely worked, there would not be such massive controversy surrounding it, the National Academy of Sciences would not be tasked with an 18-month study of it, and the Employee Polygraph Protection Act would not exist. Our government's reliance on this tawdry trinket has already cost this country a great deal, as Aldrich Ames has already attested. It is my sincere hope that a thorough investigation into polygraph principles, into the abuse that examiners subject innocent people to, and into the mistakes committed due to polygraph results will finally awaken our government into realizing that this toy has no place in national security investigations.

---

Statement of Detective William Roche, Northern California

My name is William Roche. I am a police detective in Northern California. I graduated second in my police academy; I have received numerous commendations for my community service as well as my criminal investigations. Based on my achievements, I was selected by my peers to be our agency's officer of the year.

In the area of criminal investigations, the ability to effectively interview and interrogate someone will take many phases. A legitimate phase is to use a ruse during the course of an investigation to have a person believe you have more knowledge about the crime than you actually do.

Ally, whether it's a mother saying she has eyes in the back of her head, or on the many occasions investigators have told suspects a hidden video camera captured them committing the crime.
Often times to enhance these ruses, props are introduced. It is not uncommon to have suspects put their hands on computer screens, or even grab the antenna of a patrol car, and then tell the person the item is a lie detector that will determine if the person is telling the truth.

It is the belief of the unknown and the ignorance of the person that causes them to make admissions.

The polygraph is nothing more than a technical looking prop for investigators to use when interviewing suspects.

To make a determination on guilt, innocence, hiring suitability or compliance with probation terms based on polygraph results alone is irresponsible. In a recent case before the United States Supreme Court, a criminal defendant wanted to use polygraph test results, which showed favorably for him as evidence in his criminal trial, however, the United States Government argued against this request stating the polygraph is too prone to counter measures.

The Justices took note of the Governments position on the case and wrote there is much inconsistency between the Governments extensive use of polygraphs to make vital security determinations and the argument it makes here, stressing the inaccuracy of these tests.

Based on polygraph results alone, it would be negligent to deny an innocent job applicant of a career, or clear a child molester of wrongdoing, only to have him strike again because the charts “zigged” when they should have “zagged.”

To give polygraph results any credibility in an investigation or hiring decision, without the support of an admission or confession, is reckless and slander.

Not only can polygraph results be manipulated by the examinee, but also by the polygraph examiner.

The polygraph monitors a person breathing and heart rate. As we all know, the ability to manipulate this is very easy. Imagine a Doctor telling you that you have serious disease just seconds before he monitors your heart rate. The results would obviously not be accurate measurement.


Before the Secret Service agents would administer the polygraph exams, they interrogated and agitated me. At times even yelling and making threatening gestures to the point I moved my head in fear of being struck. I still remember my hands trembling out of pure anger as the electrodes were being strapped to my fingers. This occurred for 13 hours over the course of two days.

Even though the behavior of the agents was outside their standards in training, my conditional job offer, as well as my dream, was taken away from me.

However, in my research I learned polygrapher’s manipulating polygraphs is all too common.

With no recording devices, there is nothing to prevent a polygrapher from stimulating the person. If society thinks police profiling through traffic stops is an issue, imagine the vulnerability of a criminal defendant or applicant for a job where polygraphists are allowed to inflict their personal biases into the examination.

Remember though, even a professionally administered polygraph is only 50% accurate, but at least there is 50% chance of passing, where there is virtually none when it is conducted unethically.

In conclusion, imagine the next time you are walking through an airport metal detector. Suddenly the alarm goes off. You know you have done nothing wrong, but instead of researching the issue, you are labeled a security risk and escorted from the airport banished from ever flying again.

That same scenario is played out in real life everyday with the polygraph. Please, you have the power to stop this and protect your citizens. I have a web site where I have compiled my information. It is located at stoppolygraph.com.

Thank you for your time and consideration.

Senator Specter. Thank you all very much.

[Whereupon, at 11:23 a.m., the Committee was adjourned.]

[Questions and answers follow:]

QUESTIONS AND ANSWERS

Responses of Michael H. Capps to questions submitted by Senator Leahy

Question 1: In Mr. Kifer’s testimony, he refers to “prior studies” indicating that the polygraph has “an accuracy rate” of between 90 percent and 99 percent: Is there any report in the peer-reviewed scientific literature establishing that polygraph
screening has a higher accuracy rate than 90 percent? If so, could you please identify that study?

Answer: In the testimony of Mr. Richard W. Kiefer before your Committee, Mr. Kiefer indicated that polygraph testing had an accuracy rate of between 90 percent and 99 percent. There are no research studies involving counterintelligence polygraph screening examinations that support an overall accuracy of 90–99 percent. When addressing specific issue examinations a significant body of literature demonstrates that polygraph decisions for criminal investigations have an error rate often percent or less. In the U.S. Supreme Court case U.S. v. Sheffer (523 U.S. 303 (1998)), numerous laboratory and field studies were identified by the Committee of Concerned Social Scientists as Amicus Curiae in Support of the Respondent as “high quality laboratory studies of the control question test.” The Committee of Concerned Social Scientists reported the following:

In nine laboratory studies, 91 percent of the subjects were correctly identified when inconclusive opinions were excluded.

In five field studies the accuracy reported for correctly identifying the guilty was 95 percent; the innocent were correctly identified in 75 percent of the examinations.

In five field studies using the original examiner’s opinions, the accuracy rate for correctly identifying the guilty was 97 percent; the innocent were correctly identified in 98 percent of the examinations.

Question 2: Mr. Keifer opines that; if Robert Hansen had been given a polygraph examination, he would have “reacted with greater than 99% certainty.” Yet we know that Aldrich Ames was not caught even though he was given two polygraph examinations while he was at the CIA and that other guilty people passed polygraph tests. Is there any reliable basis to estimate the probability that a particular person would or would not pass a polygraph test?

Answer: There is no body of research that allows one to predict with certainty the outcome of a given polygraph examination. Estimating the probability that a particular person would or would not pass a polygraph test, a priori is not currently possible. Research indicates (Raskin, 1988) that with the levels of oversight imposed on government examiners which require standardized polygraph procedures and standardized numerical evaluations an accurate polygraph decision is usually the result.

While it is widely publicized that Aldrich Ames was not identified as a spy as a result of his polygraph testing, it is seldom stated that during the conduct of his two polygraph examinations, significant responses to the relevant questions did occur. House Intelligence Committee Chairman Representative Dan Glickman related that Ames had been detected as deceptive in two of his answers (New York Times, August 10, 1994). Similarly, then-CIA Director James Woolsey (New York Times, March 8, 1994) acknowledged that the CIA had failed to follow-up on Ames’ failure on two polygraph questions.

Question 3: Everyone acknowledges that “false positive” polygraph examinations can occur in which innocent people will show deceptive reactions. In addition, Mr. Keifer estimates that “there might be a maximum of 3 spies in a population of 10,000.” Assuming for the sake of argument that Mr. Keifer’s estimate of the frequency of espionage is correct:

a. Is it likely that if you give polygraphs to 10,000 people in order to catch the three spies, you will get hundreds of false positive responses?

Answer: As in other forensic disciplines, false negatives and false positives do occur in polygraph testing. However, based upon government research and statistics routinely collected by DoD, the occurrence of false positives in counterintelligence scope polygraph examinations is not believed to occur in significant numbers. Research has shown that using a two-step process can mitigate these results. In this process, the examination proceeds from the multiple issue questions asked during the initial phase of testing to a single-issue test format during the subsequent phase. These additional testing phases are administered on an as needed basis to clear up issues to which the examinee showed significant responses. This methodology is consistent with Meehl and Rosen’s “successive hurdles” approach (1955), which serves to lessen the adverse effects of imperfect validity and unbalanced base rates. This approach is similar to medical diagnostic screening strategies wherein tests with high sensitivity are given to the population of interest followed by testing those with positive results using procedures that have better specificity.

Using DoD statistics for fiscal year (FY) 2000 as an example, 7,890 examinations were conducted involving counterintelligence scope polygraph examinations. Of the 7,890 examinations, 7,688 were evaluated as no significant response (non-deceptive) and 202 were evaluated as significant response (deceptive). Of the 202 evaluated
significant response, 191 individuals made admissions to the relevant issues tested. Through additional polygraph testing, all relevant issues were resolved favorably for the examinee, i.e., they were able to maintain their clearance.

Of the 202 individuals who exhibited significant responses and/or provided substantive information, 194 received a favorable adjudication, three were still pending adjudication and five were pending investigation at the time of the DoD report, and none received adverse action denying or withholding access.

Using these statistics, the greatest possible number of false positive outcomes for the entire FY is eight. This is a possible false positive rate of less than one percent.

*Does not include NSA or NRO

b. Assuming that the three spies all fail their polygraph tests, they would be only three out of perhaps hundreds of employees who failed the test. How are investigators going to be able to find the three real spies and not unfairly cast suspicion on all of the innocent employees who have false positive results?

Answer: Federal polygraph programs are designed to assist the investigator in identifying persons who merit further investigation prior to granting or denying access to sensitive information. In this context, the polygraph technique has shown itself to be the most efficient method for providing investigative leads for the adjudicator. However, it is important to remember that the polygraph technique is only one of the steps used in personnel screening.

Polygraph examinations during tech significant responses occur to the counterintelligence questions are provided to adjudicators. Based upon the information gathered through all sources of the personnel screening process, agency adjudicators may decide to take no action, conduct a more thorough background investigation, or to forward the information for investigation.

In FY 2000 based on information gathered during DoD polygraph examinations, adjudicators made determinations of the security worthiness of 7,890 persons. As demonstrated by DoD statistics, 202 individuals were identified as significantly responsive to relevant questions relating to security issues, and 191 of these persons provided substantive information that allowed adjudicators to make informed decisions about referral for investigation or granting the clearance. Only eight persons out of 7,890 were possible subjects of investigations; five were referred for investigation. These statistics also indicate that persons who show significant responses during a polygraph examination usually are not involved in espionage but committed security violations of some kind.

Question 4. Do you believe it is appropriate to exclude someone from government employment without any independent corroborating evidence of deception or other information indicating that the applicant is unqualified for the position, solely because that person failed a polygraph? If not, what specific steps should be taken to insure that this does not occur?

Answer: Federal agencies should not exclude an applicant for employment solely because he/she reacts to relevant questions during a polygraph examination. Polygraph examinations are investigative tools, and sole reliance on them, or any other single tool, may not result in the level of decision accuracy equal to that of an adjudicative process that considers multiple sources of information. The polygraph examination consists of a set of standardized procedures designed to resolve issues during an applicant’s screening examination. If at the end of the polygraph testing an applicant continues to demonstrate significant responses to counterintelligence issues and provides no information that would disqualify him/her from consideration, the polygraph decision should be provided to the adjudicators. The adjudicators should seek to verify information gained during the polygraph examination through the background investigative process. Once all information is gathered and provided to the adjudicator, an employment decision should be made for the best-qualified applicant. The criteria to determine the best qualified should not overly rely on any single tool, including polygraph testing.

Question 5. If someone is told that they have failed a polygraph test, is it more likely that that person will have an adverse physiological reaction if the same questions are asked in a subsequent polygraph test?

Answer: The effect of telling a person they failed a polygraph examination cannot be stated with certainty. In the absence of definitive research, field practices have some of the steps used in this factor. Subsequent to initial polygraph testing, if a person reacts significantly to a relevant question, the person is advised of this outcome in a positive, professional manner. The individual is correctly informed that a given question has not been resolved and the examiner solicits an explanation. A relatively short-lived, positive confrontation seldom has deleterious affects upon subsequent polygraph testing. The concern of most persons is that once an individual has been told that the individual had problems with the espionage question he/
she will become sensitized to that question and will consistently and significantly respond to that question regardless of his/her veracity. Government research, DoD statistics, and the daily practical experience of federal polygraph examiners involving counterintelligence scope polygraph testing do not support this intuitive position.

The FY 2000 DoD statistics demonstrate that 199 persons required more than two series of questions to complete their examinations. During this same time a total of 66 examinations required more than one day to complete. In both of these instances, a positive confrontation would have occurred between the examiner and the subject of the examination. As indicated in the DoD statistics, even though persons are confronted about issues arising as part of the screening examinations, the vast majority (all but eight of 191) successfully completed the polygraph process. Research also supports the position that after a person has been found deceptive during initial polygraph testing, subsequent testing results in non-deceptive opinions being appropriately rendered. Research indicates that the error rates for examinees that demonstrate significant responses during initial testing can be mitigated if subsequent examinations are more focused. This occurs because the initial testing of a screening examination involves broad and general questions while subsequent series are able to focus the examinee on more direct issues.

**Question 6**: Can chemical substances affect the results of a polygraph test? Is there a comprehensive list of prescription drugs and other substances that are known to alter the results of polygraph tests?

**Answer:** Virtually all polygraph examinations require that the examinee demonstrate the ability to respond to at least one question. To effectively alter the results of a polygraph examination, a chemical substance would have to demonstrate a differential effect. That is, the substance would have to suppress responses to some questions but not to others. To the best of our knowledge, no substances with this quality exist. No known drug is capable of selecting only certain questions on which to exert an effect.

The studies listed below indicate that specific drugs (alcohol, propranolol, diazepam, and methylphenidate (meprobamate), and trasior) do not influence the results of polygraph examinations. Only the Waid, Ome, Cook, and Ome (1981) study suggests a drug effect, and this result is not supported by subsequent research. Moreover this study used a testing format rarely used outside of the laboratory and not at all by federal polygraph programs.


**Gatchel R.J., Smith J.E., and Kaplan N.M. (1983).** The effect of propranolol on polygraphic detection of deception. Abstract of unpublished manuscript, University of Texas Health Science Center, Dallas, TX 75235.


The Department of Defense Polygraph Institute funded the Cail-Sirota and Lieberman (1995) study. This study resulted in establishing a database relating to drugs and their influence on the outcomes of psychophysiological detection of deception examinations. The Department of Defense Polygraph Institute lesson plan titled, “Pharmacology Drugs and Psychophysiological Detection of Deception Testing,” dated January 2001, provides a list of drugs that examiners could expect to encounter and the drug’s effects upon the individual.

**Question 7**: Is there any research indicating whether certain personality types have an easier time passing polygraph tests?

**Answer:** There is no research to indicate that the effects of personality variables are consistent for the various polygraph techniques. Personality is not an explicit component in any of the theories of polygraph, and it is not viewed as an important factor by field practitioners, which may explain why it has rarely been the focus of investigation in polygraph research. Some researchers have reported on the influence of demographic and psychological variables in their polygraph validity studies. Refer to attached Table for a summary of those effects.
Question 8: Is there any research indicating whether certain ethnic or social groups have an easier time passing polygraph tests?

Answer: Since the 1960s, university and government researchers in the U.S. and elsewhere have conducted research on ethnicity and the polygraph. The trend has been that there are no meaningful differences in accuracy, but the research evidence has not eliminated ethnicity entirely as a factor. For example, desert-dwelling Bedouins have shown a dampened responsiveness in one channel but not in another channel. Similar results were found for Icelandic criminals. To date, among the population typically afforded polygraph testing in the U.S., an effect for ethnicity alone has not been shown to be reliable.

Question 9: How do you insure that routine polygraph tests do not probe into purely private matters? Are there any questions that are off limits? What safeguards exist to prevent the release of private information?

Answer: Agencies provide written guidance to examiners that prohibits examiners from probing issues that are not related to the matter under inquiry. Individual agency policy requires that all questions asked during polygraph examinations must be reviewed with the examinee before the examination questions asked must be of special relevance to the subject matter under inquiry. Questions probing a person's thoughts or beliefs that are not related directly to the matter under inquiry are prohibited. The probing of a person's beliefs (such as religious beliefs and affiliations, beliefs and opinions on racial matters, and political beliefs and affiliations of a lawful nature) and questions that have no security implication are prohibited.

The federal polygraph standards state that all relevant questions must pertain directly to the matter under investigation or to the issue(s) for which the examinee is being tested. The federal polygraph standards also require that all questions asked during the data collection phase of the examination be reviewed with the examinee prior to the initiation of the examination.

The rights of the individual examinee are a primary consideration of the Quality Assurance Program, which is a program administered by the Department of Defense Polygraph Institute. This program verifies that each participating agency complies not only with their agency policies but also adheres to the federal polygraph standards. The Quality Assurance Program assures compliance through the use of biennial on-site inspections in which the agency's quality control procedures, policies, and the samplings of the examinations conducted by that agency are reviewed. During the inspection process a random sample of between 50 to 100 polygraph examinations is reviewed. As part of the examination review, the notes produced by the examiner during the examination are scrutinized to ascertain what issues were discussed with the examinee during the conduct of the examination. Any discrepancies are noted and corrective action recommended to the agency.
Responses of Michael H. Capps to questions submitted by Senator Grassley

*Question 1:* Let's say that an employee polygraph exam ends with a deceptive result with no admission of guilt. How do agencies deal with this situation? How about an inconclusive result? *Answer:* My understanding is that policies concerning the use of polygraph vary across agencies. I cannot state with certainty how individual agencies express and carry out certain policies.

### Table 4. Ethnic Influence on Detection of Deception

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Variable</th>
<th>Increase</th>
<th>Decrease</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guðjohnsson (1979)</td>
<td>Criminality (high)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Buckley, &amp; Senese (1991)</td>
<td>Gender</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Cixrow, Parks, Lucas &amp; Thomas (1972)</td>
<td>Gender</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Furedy, Davis &amp; Guervich (1988)</td>
<td>Gender</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Horn &amp; Hodes (1982a,b)</td>
<td>Gender</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Barland &amp; Raskin (1975)</td>
<td>Intelligence</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Kugelmass (1968)</td>
<td>Intelligence</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Guðjohnsson &amp; Haward (1982)</td>
<td>Introversive</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Staller, Hackett &amp; Eiselt (1987)</td>
<td>Introversive</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Bradley &amp; Kloho (1987)</td>
<td>Machiavellianism (high)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Raskin &amp; Hare (1978)</td>
<td>Psychopathy</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Patrick &amp; Iacono (1989)</td>
<td>Psychopathy</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Heckel, Borkaw, Sainberg, &amp; Wiggins</td>
<td>Psychotic/ Delusional</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Buckley &amp; Senese (1991)</td>
<td>Race</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Windel &amp; Hagan (1975)</td>
<td>Race</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ballou &amp; Holmes (1979)</td>
<td>Socialization</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Horns, Raskin &amp;</td>
<td>Socialization</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Kircher (1985)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Guðjohnsson &amp; Haward (1982)</td>
<td>Socialization</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Wald, Orne &amp; Wilson</td>
<td>Socialization (low)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Question 2: My understanding is that most examiners within the ranks of federal law enforcement are non-supervisory or journeyman level personnel. Can we expect these agents to adequately administer polygraph examinations to Senior Level officials within their own agency?

Answer: Based upon their training and experience, senior field examiners are capable of conducting valid examinations of senior agency personnel. If a well-trained examiner uses a standardized polygraph procedure, very accurate results can be expected (Raskin, 1988). It is noted that DoDPI is the U.S. government’s consolidated training facility for polygraph examiners from all federal agencies. To qualify for entry into the program, a candidate must be a U.S. citizen, be at least 25 years of age, hold a 4-year degree or demonstrate an ability to master graduate-level courses, have two years of investigative service, have completed a background investigation to confirm a sound temperament and character, and be nominated and supported by his or her home agency. The DoDPI polygraph curriculum is taught at the master’s degree level and provides a balance of a challenging academic load and technical skills practice to students who satisfactorily complete the DoDPI education program are released to their home agencies where they serve internships and remain subject to quality control and continuing education requirements for their entire professional careers as Federal polygraph examiners.

Question 3: Will there be adverse consequences for employees who refuse to take a polygraph examination?

Answer: My understanding is that policies concerning the use of polygraph vary across agencies. I cannot state with certainty how individual agencies express and carry out certain policies.

Question 4: If there are to be adverse consequences for not taking the exam, will this create an uncooperative emotional condition that could affect the results of an exam?

Answer: To my knowledge there has never been any research to address this issue.

Question 5. FBI regulations prohibit the use of the polygraph as a “substitute for logical investigation by conventional means” (FBI Poly. Reg. 13–22.299(2)). Does this mean that, if all other factors are in order, the failure of a polygraph examination in the context of a national security update will not necessarily result to an adverse action?

Answer: I am not familiar with the policies and practices of the FBI and cannot provide information responsive to this question.

Responses of William G. Iacono to questions submitted by Senator Leahy

(Questions have been shortened and paraphrased)

Question 1: Is there any report in the scientific literature establishing that polygraph screening has a higher accuracy rate than 90%?

No. If anyone says this is true, they are likely to be either misrepresenting the scientific literature or citing nonscientific opinion from polygraph or police trade journals.

Question 2: Regarding the likelihood that Robert Hansen would have reacted with greater than 99 certainty had he taken a polygraph, is there any reliable basis to estimate the probability that particular person would or would not pass a national security screening polygraph?

No. The claim that Hansen could have been detected with greater than 99% certainty is impossible to support using any credible scientific data. Besides the fact that these tests are not capable of such accuracy, Hansen probably would have been smart enough to learn how to use countermeasures to defeat any test he took. As I mentioned in my oral Senate hearing testimony, information about countermeasures can be obtained at libraries, from books (e.g., David Lykken’s “A Tremor in the Blood”), and the internet (at http://iantipolygraph.org/pubs.shtml).

Question 3A: Given that there are 3 spies per 10,000 people, is it not likely that if you give polygraphs to 10,000 people in order to catch three spies, you will get hundreds of false positive responses.

If the charts were scored according to government standards so that individuals responding more strongly to relevant questions would be deemed to have failed the polygraph, it is likely that there would be over 2,000 false positives. The only reason such high rates of false positives are not currently in evidence is that government
examiners, fully aware of the high rate of false positives, pass most of those whose charts indicate a failed polygraph to avoid the embarrassment and chaos that would follow if large numbers of individuals failed.

**Question B:** Given that the three spies failed tests are included among, those of hundreds of innocent people who failed the test, how are investigators (illegible) to find the three real spies and not unfairly cast suspicion on all of the innocent employees who have false positive results?

There is no way these dual objectives can be attained. The only way to be certain all three spies would fail the tests would be to fail every single person who takes one. Likewise, false positives can be eliminated by passing everyone. If the test was 90% accurate (very unlikely) and none of the spies would be caught at the expense of passing 10% of the innocent, it would be very difficult to identify the few spies failing. It would be even more difficult to do so without negatively impacting the careers of the 1,000 innocents failing. It would be very difficult to identify the few spies in this large group. It would be even more difficult to do so without negatively impacting the careers of the 1,000 innocents in their lives being turned upside down by the type of thorough investigation that would be needed to resolve conclusively every failed polygraph.

**Question 4:** Should someone be excluded from government employment solely because the person failed a polygraph?

**Answer:** No. The vast majority of those who fail are not guilty of any offense that should preclude employment. Using these invalid tests to deny them employment is a violation of their civil rights and it deprives the government of highly qualified employees. It is also cost ineffective because often polygraph tests are administered after lengthy, costly procedures have been completed and the determination made that the applicant is likely to be suitable for employment.

What specific steps should be taken to make sure no one is denied employment for failing a polygraph test?

A law passed by Congress is required because current law does not prohibit this from occurring.

**Question 5:** If someone is told they have failed a polygraph, is it more likely a person will have an adverse reaction to a second polygraph?

**Answer:** No. The vast majority of those who fail are not guilty of any offense that should preclude employment. Using these invalid tests to deny them employment is a violation of their civil rights and it deprives the government of highly qualified employees. It is also cost ineffective because often polygraph tests are administered after lengthy, costly procedures have been completed and the determination made that the applicant is likely to be suitable for employment.

**Question 6:** Can chemical substances affect the results of a polygraph, and is there a comprehensive list of substances known to affect polygraph results?

**Answer:** There is no list of substances known to affect polygraph tests because there is very little research on this question. There are hundreds of drugs that could influence test outcomes, only a few of which have received any study at all. The effects of (illegible) drugs have received no research attention. I have published three papers (illegible) of propranolol, diazepam, meprobamate, and alcohol were (illegible) types of polygraph tests (but not a screening-type test). None of the drugs enabled guilty individuals to pass their test. For a drug to affect directly polygraph outcome, it must attenuate the response to the relevant question while having no comparable effect on the control question. It is unlikely that many drugs could be expected to have such a selective effect. However, there are ways drugs may indirectly affect polygraph outcome. For instance, the effects of drugs that specifically affect the physiological measures that compose polygraph tests have received little attention. Sweat glands (GSR channel) and cardiovascular activity (cardio or blood pressure channel), for example, are both innervated by neurons that use the neurotransmitter acetylcholine. Drugs that block this neurotransmitter (there are many) may greatly attenuate the likelihood that the GSR and cardio channels are responsive enough to be useful distinguishing the size of response between relevant and control questions. This would leave the outcome of a test to be determined primarily by respiratory activity. Respiration is the least reliable of the three channels that compose a polygraph test, and is under voluntary control, thus making it easy to manipulate. Hence, the use of these drugs could confer an advantage a guilty person taking a polygraph.
Question 7: Is there any research showing that certain personality types have an easier time passing a polygraph?
Answer: There is research investigating a subtype of antisocial personality disorder called psychopath. Psychopaths are skilled liars who experience no remorse for their antisocial behavior. Two studies have found that psychopaths do not have an easier time passing polygraphs when the outcome of the test is based on the physiological data. However, the government's own data indicate that many individuals who fail the physiological test nonetheless are passed by their examiners because they convince them they have done nothing seriously wrong. Impression management through lying is exactly what psychopaths are good at. Hence, there is good reason to believe they could pass screening tests.

Question 8: Is there any research showing that certain ethnic or social groups have an easier time passing a polygraph?
Answer: There are no investigations examining how ethnicity of the examinee affects his or her physiological responses. Nor is it known how the ethnic biases of an examinee tested by a polygrapher of different ethnicity affect the physiological data. However, as noted above, whether a person passes a test depends on the subjective judgment of the polygrapher. If the polygrapher holds racial stereotypes or has ethnic biases, these attitudes will affect how the polygrapher decides the outcome of the test.

Question 9: How do agencies deal with a polygraph that ends in a deceptive result with no admission of guilt?
Answer: Government data from the DOD annual reports to Congress reveal that typically no formal action is taken against employees in this position when they take counterintelligence scope polygraphs. However, left unanswered is how the careers of these persons are affected by such an outcome. Do they get good assignments and are they promoted? Jeffrey Smith, former CIA General Counsel, has noted that in the CIA (CIA testing is not included in the DOD annual reports to Congress) there have been many employees whose careers were put on hold as a consequence of deceptive polygraphs. What ultimately has happened to these people's careers?

Question 2: How about an inconclusive result?
Answer: Inconclusive results require additional testing until the examiner is willing to make a deceptive or truthful verdict.

Question 3: Can we expect journeyman level polygraphers to adequately administer polygraphs to senior officials in their own agency?
Answer: No. Examiners are only human. They know they cannot fail a superior without corroborating evidence of wrongdoing. The only way to get around this problem would be to guarantee polygraphers job security and career advancement no matter how they call cases. This would be bad policy, however, because it would formally establish polygraphers as a type of judge/jury that answers to no one.

Question 4: Will there be adverse consequences for employees who refuse to take polygraphs?
Answer: By law, they can be denied access to classified data. This can have a substantial effect on their careers, and likely would involve re-assignment to other jobs for which the employee is qualified. Doe has admitted, however, that if such jobs do not exist within commuting distance of an employee's current job location, termination of employment may result.
Question 5: If there are adverse consequences for not taking the exam, will this create an uncooperative emotional condition that could affect the results of the exam?

Answer: Yes. The polygraph profession’s code of ethics requires that exams not be given without an individual’s consent. Government workers cannot voluntarily give consent, and the consent forms DOE examiners use no longer contain the word “voluntary.” Being forced to take an exam is likely to make examinees overly anxious, increasing the likelihood of false positive outcomes.

Question 6: Regarding the FBI, will failing a national security update polygraph when all other factors are in order result in an adverse action?

Answer: This is a question for the FBI to answer, but I would encourage the government to conduct the following study: Identify all individuals who have had deceptive outcomes on polygraph tests. Then match them to a group of employees of similar rank and qualifications. Following the paths of both groups for five years and determine if the members of the two groups experience similar career advancement. I am worried that those in the failed group will be disproportionately likely to quit and find their careers stalled. Such a study could be done no using DOD data from all the people tested with counterintelligence scope polygraph tests.

Responses of Richard W. Keifer to questions submitted by Senator Leahy

Answer 1: The Department of Defense Study DOD P 194-R-0009 provides an accuracy of 98% with programmed guilty and 83.3% programmed innocent. Testimony at the hearing was provided indicating laboratory studies might not generalize to real life testing.

Answer 2: Confidence levels can be established to estimate the probabilities that you will get certain results in certain populations. Therefore an estimate of the accuracy of any individual can be established. Studying the results of actual testing can then check the reliability of these estimates. The key word is “reacted”, and I am confident Hansen would have reacted. Whether or not he would have been identified as a spy is up to the agency to determine. The use of Ames not being caught on a polygraph is a good example of the difficulty of espionage cases. It is my understanding that was identified during polygraph testing as having problems and was cleared by the CIA’s adjudication process.

Answer 3: My assumptions of 3 in 10,000 was used in 1994 as a model for the conduct of examinations for the FBI so we could anticipate results and define resources we would need to manage the program. Your assumption in 3a. is correct regarding the first polygraph examination. It is my opinion that reexaminations will reduce the false positives and it is my understanding from agencies that conduct this testing this is the case. Because some agencies could be lax, and simply “pass everyone”, and independent audit must be conducted. How investigators uncover the real spies and not unfairly cast suspicion on the false positives is the same problem these investigators face with the entire agency. The polygraph has reduced the numbers in that pool significantly. What you know with 99.9% confidence is the spy is in that pool.

Answer 4: For pre-employment polygraph examinations, I do not believe anyone should be excluded based solely on the results of the polygraph. The use of the polygraph as an aid to investigations and not a substitute for it is a policy I support. To ensure this policy is in effect I would establish written policies for each agency and audit their results. Since a polygraph report is part of their personnel file, I would have the report state that reactions were noted or not noted. Deception or non-deception is a conclusion about what these reactions mean. Most agencies have written guidelines in these matters.

Answer 5: Being told you have failed questions could cause reactions to further testing on the same questions. If interrogated in a strong manner, and if innocent, a sensitization could occur. There are methods that are effective in retesting and I use them frequently.

Answer 6: The key to polygraph is that we are monitoring relative differences between reactions. Ever, if a drug stabilized blood pressure and minimized that change possible in blood pressure, it would do so throughout the entire test. The relative comparisons between questions are still there. Study to date show drugs do not affect the accuracy of the polygraph. I don’t have the research available but I believe it was conducted by Dr. Drew Richardson of the FBI and some may be available at the DODPI. If drugs are suspected they are easily detected.
Answer 7: There is research by Raskin and Hare on prison populations of diagnosed psychopaths that indicates they are detectable at approximately the same levels as the general population.

Answer 8: See Department of Defense studies regarding race and gender difference in polygraph testing. It appears there are no relative differences in rates of detection. Further, polygraph is used in Israel, Singapore, Japan, Mexico, and Canada.

Answer 9: To ensure polygraph does not probe into private matters, you could record sessions. I believe the privacy concern should outweigh the burdensome records keeping requirements now in place. Written policies have been in effect my entire government career in the FBI Manual of Instructions regarding prohibited questioning. These questions ranged from religion, sexual preference, union activities, etc. Management rigorously enforced these privacy concerns.

Responses of Richard W. Keifer to questions submitted by Senator Grassley

Answer 1: Deceptive with No Admissions of Guilt or an inconclusive result. I have been in the private sector since 1996, and am not certain what individual agencies do now. I am certain most individuals would initially be offered a reexamination. If these individuals continued to react I would suspect the employees past work product and these would be closely reviewed, and checked against internal investigative records for suspicious patterns. What additional proactive investigative steps would then be conducted, I do not know. There should be a defined adjudication process in place. Some agencies do a modest amount of investigation, and if they can't resolve the matter, refer these cases to the FBI for adjudication.

Answer 2: Most examiners in law enforcement are GS 12 and GS 13's. These agents now conduct investigations of corruption involving the highest levels of the government and also conduct internal investigations. I believe the examiners need to be assigned in a separate administrative division to maintain their independence. Examiners should not test anyone they know. Audit and compliance will insure the correct policies are being followed.

Answer 3: Will there be adverse consequences for not taking the examination, and would this create an uncooperative condition that could affect the results of an examination? From my past experience I would think there would be administrative consequences to anyone who refuses to follow agency policies. Therefore people could be ordered to take an examination. I believe these conscientious objects should be prepared for the consequences. Internal security cannot be perceived as a game. If any testing was conducted, a recorded record should be maintained. Noncooperation could influence the results but may not. I would then judge these matters on a case-by-case basis.

Answer 4: Regarding FBI Regulations. I am not a current FBI employee. FBI Polygraph Reg: 13–22.299(2) was the standard that was used in criminal specific testing and is a policy I support. I do not know what policies are now in effect in applicant and security testing. In the area of employee testing there is an important distinction between those who react to questions and those who are concluded to be deceptive. I would interpret the history of the use of the polygraph in the FBI and our current knowledge of the capabilities and limitations of the polygraph to mean that adverse action will not necessarily result.

Responses of Mark S. Zaid to questions submitted by Senator Leahy

Question 1: In Mr. Kiefer’s testimony, he refers to “prior studies” indicating that the polygraph has “an accuracy rate” of between 90 percent and 99 percent. Is there any report in the peer-reviewed scientific literature establishing that polygraph screening has a higher accuracy rate than 90 percent? If so, could you please identify that study.

Answer: Almost every available polygraph study conducted pertains to specific incident criminal investigations (i.e., identifying the thief who embezzled funds). This question properly addresses the most significant aspect affecting current federal polygraph policies. The Congress needs to be most concerned about the reliability/validity of polygraph screening tests. It is these types of tests that are administered
every year to thousands of applicants for federal employment, as well as tens of thousands of current federal employees who undergo routine security investigations. The primary purpose of the applicant screening test is to determine suitability while the security screening test is designed to expose espionage. However, there is absolutely no scientific evidence that either a of screening test is reliable or valid. The few studies that exist prove that screening tests should be stopped immediately.

The largest study of polygraph tests used for national security screening ever conducted—"Studies of the Accuracy of Security Screening Polygraph Examinations"—was published in 1989 for the Department of Defense’s Polygraph Institute Down ("DoDPI") by Gordon H. Barland, Charles R. Honts and Steven Barger. Although the report was never classified, the government declined to publish it in the open literature. Indeed, when the results were first made known to the respective agencies involved there was tremendous pressure to classify the entire report. One of the authors, in fact, was forbidden by his parent agency from publishing or presenting the results. As a concession to the agencies involved, the association of the agency names with their performance data was classified. A copy of the report is at http://truth.boisestate.edu/raredocuments/bhb.html.

The study reports on three mock espionage experiments using different polygraph screening techniques. In Experiment One, 94% of the innocent subjects were cleared, but only 34% of the guilty subjects were identified as deceptive. Thus, the false negative rate (i.e., guilty individuals being declared innocent) was a staggering 66%. Experiment Two correctly classified only 79% of those who were innocent and 93% of those who were guilty. Finally, Experiment Three identified 90% of the innocent subjects and 81% of the guilty subjects. It is important to note that the examiners used in these experiments were trained federal polygraphers who regularly conducted periodic national security tests for their agencies. Following this primary study, four follow-up studies were conducted by the Department of Defense. The results of each supported and strengthened the findings of the primary study.


With respect to specific incident polygraph studies, from which Mr. Kiefer derives his statistics from, there have been many studies regarding the reliability of the polygraph when used in this manner. The resulting figures have varied widely. Though somewhat dated, let me recommend one report in particular for review. In November 1983, the Office of Technology Assessment ("OTA") issued a report entitled “Scientific Validity of Polygraph Testing: A Research Review and Evaluation". The OTA compiled the results of six prior reviews of polygraph research, ten field studies, and fourteen analog studies that it determined met the minimum scientific standards. The results were as follows:

1) Six prior reviews of field studies:
   - average accuracy ranged from 64% to 98%.
2) Ten individual field studies:
   - correct guilty detections ranged from 70.6% to 98.6% and averaged 86.3%;
   - correct innocent detections ranged from 12.5% to 94.1% and averaged 76%;
   - false positive rate (innocent persons found deceptive) ranged from 0% to 75% and averaged 19.1% ;
   - false negative rate (guilty persons found nondeceptive) ranged from 0% to 29.4% and averaged 10.2% .
3) Fourteen individual analog studies:
   - correct guilty detections ranged from 35.4% to 100% and averaged 63.7% ;
   - correct innocent detections ranged from 32% to 91% and averaged 57.9% ;
   - false positives ranged from 2% to 50.7% and averaged 14.1% ;
   - false negatives ranged from 0% to 28.7% and averaged 10.4% .


The agencies have since been identified as the Army INSCOM, the Air Force Office of Special Investigations, the National Security Agency and the Central Intelligence Agency.
tests in the private sector. Prior to enactment, it was estimated that each year at least 400,000 honest workers were wrongfully labeled deceptive and suffered adverse employment consequences. However, the federal government was exempted from the legislation.

Given that there are no studies that support either the need or usefulness of this exemption, the Committee should consider legislation to have it removed.

**Question 2:** Mr. Kiefer opines that, if Robert Hanssen had been given a polygraph examination, he would have “reacted with greater than 99% certainty.” Yet we know that Aldrich Ames was not caught even though he was given two polygraph examinations while he was at the CIA and that other guilty people have passed polygraph tests. Is there any reliable basis to estimate the probability that a particular person would or would not pass a polygraph test?

**Answer:** Mr. Kiefer’s statement was worded perfectly for use in live testimony in order to generate shock value, but it has absolutely no basis in fact. It is no more based on reality than the magic of pulling a rabbit from a hat. Indeed, as described above, the only government studies available on screening examinations reveal that guilty individuals are far more likely to escape detection than even an innocent person will be falsely accused as high as 66% of the time.

However, more than anything Mr. Kiefer’s statement illustrates the enormous significant dangers that exist with respect to polygraph screening and the negative impact it can have on federal employees. Mr. Kiefer served as a distinguished Special Agent of the Federal Bureau of Investigation for more than two decades, including many years as a polygrapher, and is a former past president of the American Polygraph Association. Based on my experiences, his strong bias is quite typical of government polygraphers in general. With that type of obvious bias revealed publicly, it is not unreasonable to assume that such an attitude during an examination would have negative consequences on many innocent individuals simply because the polygrapher personally believed something was suspect.

In any event, for purposes of my response, let us presume Mr. Kiefer’s statement is accurate and Mr. Hanssen would have registered deceptive in a routine screening examination. What then would have occurred? Based on all publicly available information concerning Mr. Hanssen’s case—and as my legal practice substantially involves national security matters, I am following the investigation very closely—there is little, if any, incriminating evidence that would have been discovered through a follow-up investigation. The overwhelming evidence against Mr. Hanssen was obtained directly from a foreign source or agent. Unlike other spies such as Aldrich Ames, Harold Nicholson, or Edward Howard, there was no suspicious evidence of significant debt, serious employment disputes, drug or alcohol abuse or marital difficulties that would likely have prompted additional investigations and the exposure of espionage activities. Therefore, even if Mr. Hanssen had registered deceptive and there is no scientific basis to conclude this to be so, the result would have likely been no more indicative of a truthful result as that of a false positive.

While it appears so simple to discuss Mr. Hanssen’s case in retrospect, we cannot use the knowledge we possess now in order to analyze the possible scenarios that could have occurred had a polygraph examination been administered. For all anyone knows, a deceptive reading five, ten or fifteen years ago would have meant Mr. Hanssen was being falsely accused of something he never did, as occurs every year to federal employees and applicants, and his career would have unfairly suffered as a result.

**Question 3:** Everyone acknowledges that “false positive” polygraph examinations can occur in which innocent people will show deceptive reactions. In addition, Mr. Kiefer estimates that “there might be a maximum of 3 spies in a population of 10,000.” Assuming for the sake of argument that Mr. Kiefer’s estimate of the frequency of espionage is correct:

a. Is it not likely that if you give polygraphs to 10,000 people in order to catch the three spies, you will get hundreds of false positive responses?

b. Assuming that the three spies all fail their polygraph tests, they would be only three out of perhaps hundreds of employees who failed the test. How are investigators going to be able to find the three real spies and not unfairly cast suspicion on all of the innocent employees who have false positive results?

**Answer:** Attorney General John Ashcroft recently admitted that there exists a 15% false-positive rate. “Spy-Wary FBI Agrees to Polygraphs”, Los Angeles Times, Mar. 2, 2001. Based on this figure, up to 1,500 individuals will be falsely accused of espionage. Even applying the most conservative false-positive figures, say 1%, then 100 individuals will be stigmatized in order to catch three spies. This hypothetical scenario became a reality at the Central Intelligence Agency following the arrest of Aldrich Ames in 1994. Approximately 300 employees had their careers put
on hold, some for as long as six years, until they were finally exonerated of any wrongdoing. Some have likely never recovered from the experiences, nor will they.

Given existing policies at the federal agencies, it is virtually impossible to ensure that unfair suspicion will not be conferred on individual employees during a witch hunt for a spy. This is the essence of the public policy balance that this Committee must address. Is it fair and appropriate to knowingly ruin innocent careers while on a fishing expedition for a spy who likely will never be exposed by the polygraph? In my opinion, it is not.

Question 4: Do you believe it is appropriate to exclude someone from government employment, without any independent corroborating evidence of deception or other information indicating that the applicant is unqualified for the position, solely because that person failed a polygraph? If not, what specific steps should be taken to insure that this does not occur?

Answer: Obviously, I do not. Indeed, this is the very issue that is being litigated in Croddy et al. v. FBI et al., Civil Action No. 00–0651 (Mar. 15, 2000 D.D.C.) (EGS) and John Doe #6 et al. v. FBI et al., Civil Action No. 00–2440 (Oct. 11, 2000 D.D.C.) (EGS). Federal agencies routinely rescind conditional job offers based solely on polygraph results. I would respectfully refer you to the pleadings in these two cases for further discussion of the relevant legal analysis. Copies can be found at the following websites: www.nopolygraph.com, www.stopolygraph.com and www.antipolygraph.org. Based on my experiences, I would recommend that either screening eligibility tests are eliminated or that a requirement be imposed that a background investigation must first be conducted to collaborate any polygraph results before the information can be considered in the employment decision.

Question 9: How do you insure that routine polygraph tests do not probe into purely private matters? Are there any questions that are off limits? What safeguards exist to prevent the release of private information?

Answer: Although the American Polygraph Association, the Employee Polygraph Protection Act and many state licensing laws prohibit inquiry into such areas as religious beliefs or affiliations, beliefs or opinions regarding racial matters, political beliefs or affiliations, beliefs, affiliations or lawful activities regarding unions or labor organizations and sexual preferences or activities, there are few prohibitions imposed upon the federal government. For example, the United States Secret Service routinely questions applicants on sexual behavior, both lawful (premarital sex) and unlawful (sexual involvement with animals).

The only means by which to ensure certain areas of inquiry are forbidden is to require the federal government to comply with the Employee Polygraph Protection Act. While some exceptions may be necessary, no agency should be permitted to question individuals on topics that do not reasonably relate to the skills needed to adequately perform the position in question.

With respect to the release of private information, there are essentially no existing safeguards. The extent to which a federal agency can disseminate polygraph results to other federal, state or local agencies is governed by the Privacy Act of 1974, 5 U.S.C. § 552a et seq. The sharing of information is explicitly permitted under the Act’s routine use exception. Id. at § 552a(e)(3).

For example, the FBI maintains a system of records—JUSTICE/FBI–002—within its Central Records System that pertains to applicants for employment with the FBI. The system includes all records and information relevant to an applicant’s investigation, personnel inquiry, or other personnel matters. The FBI may disclose all personal information and records—even if inaccurate—from this system as a routine use to any federal agency where the purpose in making the disclosure is compatible with the law enforcement purpose for which it was collected, e.g., to assist the recipient agency in conducting a lawful criminal or intelligence investigation, to assist the recipient agency in making a determination concerning an individual’s suitability for employment and/or trustworthiness for employment and/or trustworthiness for access clearance purposes, or to assist the recipient agency in the performance of any authorized function where access to records in this system is declared by the recipient agency to be relevant to that function.

The result of this ability to freely share information, individuals who falsely registered deceptive on one agency’s polygraph examination may have that information used against them by another agency, without ever being given an opportunity to challenge the underlying allegation of deception. Unfortunately, the enactment of additional legislation will be required to minimize the extent to which a federal agency can disseminate information pertaining to polygraph examinations. Current law is clearly inadequate.
Responses of Mark S. Zaid to questions submitted by Senator Grassley

Question 1: Let’s say that an employee polygraph exam ends with a deceptive result but with no admission of guilt. How do agencies deal with this situation? How about with an inconclusive result?

Answer: Unfortunately, it is difficult to provide a precise answer to this question as procedures differ from agency to agency. Typically, however, should either of the situations occur above, the agency will initiate further investigation into the individual’s background and activities. Oftentimes, the employee may be transferred to a non-sensitive or less sensitive position and may even have promotions withheld. On paper, the employee may very well not suffer an adverse personnel action. By this I mean, they will continue to hold employment and remain at the same pay grade.

The most recent example describing this type of circumstance is that of the FBI. By Memorandum dated March 16, 2001, the FBI announced it would institute counterintelligence-focused polygraph examinations to employees who occupy certain assignments or occupations. With respect to those employees who experience trouble with the polygraph, the Memorandum noted:

Experience has shown that most FBI employees taking the counterintelligence-focused polygraph examination successfully complete the test. However, there may be a very small number of employees whose tests are either inconclusive or are indicative of deception. Polygraph examiners will attempt to fully resolve all unexplained responses through the effective use of thorough pre-and post-test interviews. If, upon completion of a thorough examination, there is still an inconclusive or deceptive response, it will be considered “unexplained”. Consistent with existing policy, no adverse action will be taken based upon the polygraph results alone. However, more extensive investigation will be initiated to resolve the unexplained test results.

However, realistically, an employee in this situation will unequivocally suffer the equivalent of an adverse personnel decision. Some agencies, such as the CIA and FBI, have taken years to finally resolve a false-positive or inconclusive polygraph result. Some employees may be suspended with pay, which is not always considered an “adverse action”. Employees at the CIA who found themselves in such a position were not permitted to attain overseas assignments. This is often the end of a career for individuals employed within the Directorate of Operations. Scientists under contract at the Department of Energy who experience polygraph problems will find themselves transferred to other positions, which often would negatively impact upon their careers. In my written testimony, I described the situation of FBI Special Agent Mark Mallah. In his case, it took approximately two years of intensive and intrusive investigation before he was finally exonerated. He was so disgusted by how he was treated, he resigned in protest. Unfortunately, Special Agent Mallah’s reaction is not unusual, and the U.S. government has lost many fine employees strictly because of false polygraph results.

Question 3: Will there be adverse consequences for employees who refuse to take a polygraph examination?

Answer: Again, this can differ from agency to agency. However, most agencies will react in a similar manner. For example, the FBI Memorandum referred to above states that those employees who refuse to take the test will be subjected to administrative actions which may include transfer, a finding of insubordination and disciplinary action or a reevaluation of the employee’s security clearance.

Question 5: FBI regulations prohibit the use of the polygraph as a “substitute for logical investigation by conventional means” (FBI Poly. Reg: 13–22.299(2)). Does this mean that, if all other factors are in order, the failure of a polygraph examination in the context of a national security update will not necessarily result in an adverse action?

Answer: Again, by viewing this question solely by the legal definition of “adverse action” (such as those actions that can be appealed to the Merit Systems Protection Board, 5 U.S.C. § 1201.3), the conclusion would be accurate. However, as I described above, reality dictates otherwise. For all intents and purposes, the employee does suffer “adverse consequences”, though it might not legally be in the form of an “adverse action”.

This question, however, does raise a larger issue. If such a prohibition exists with respect to employees, why should applicants receive any less consideration? How “logical” is that? There is no question that FBI applicants who have received a conditional offer of employment, but who then fail their polygraph examination (or register inconclusive) are not afforded the opportunity of a background investigation.
Their job offer is immediately rescinded. More than that, the polygraph result is maintained in that individual's personnel file, and will be freely disseminated as permitted by law. One polygraph examination may stigmatize an individual throughout the federal government thereby precluding their future employment and contribution to the United States.

There is something inherently wrong and unfair with the current federal polygraph policies that are implemented throughout the different law enforcement and intelligence agencies of our government. Without intervention by this Committee, there is little chance these policies will ever change.

I trust this additional information proves to be useful. I would be happy to elaborate further upon any question, or respond to additional inquiries.