UNITED STATES DEPARTMENT OF ENERGY

POLYGRAPH EXAMINATION REGULATION

10 CFR Parts 709, 710 and 711

Docket No. CN-RM-99-POLY

Proposed Rulemaking

Public Hearing

Los Alamos National Laboratory

Administration Building, Main Auditorium

Los Alamos, New Mexico

September 17, 1999

SITTING: General Eugene Habiger, USAF (Ret.)
Presiding Official for the Hearing
Director, Office of Security and
Emergency Operations, SO-1
Lise Howe, Attorney, Office of General
Counsel, GC-73
William Hensley, Acting Director,
Office of Security Support,
Office of Defense Programs, DP-45

I N D E X

P R O C E E D I N G S

MORNING SESSION (9:00 a.m.)

GENERAL HABIGER: Good morning, ladies and gentlemen, and welcome.

I'm General Gene Habiger, Director of the Office of Security and Emergency Operations.

On behalf of the Department of Energy, and particularly Secretary Richardson, I would like to thank you for taking the time to participate in this public hearing concerning the proposed Polygraph Examination Program.

Secretary Richardson has personally asked me to be here today, to listen carefully to your comments and concerns, and to report back to him. Let me assure you that we take this issue, and your concerns, very, very seriously.

The purpose of this hearing is for DOE to listen to your comments on the Department's Notice of Proposed Rulemaking.

This is a time for us to listen and to understand your concerns. It is not a forum; I repeat, it is not a forum to debate the issues. We are here focused on what you have to say. Your comments are not only appreciated; they are absolutely essential to this rulemaking process.

The Department of Energy proposes regulations for the use of polygraph examinations for certain DOE and contractor employees, applicants for employment, and other individuals assigned or detailed to federal positions at DOE.

The proposed regulations describe the categories of individuals who would be eligible for polygraph testing and controls for the use of such testing, as well as for the prevention of unwarranted intrusion into the privacy of individuals.

These regulations are being proposed to comply with various Executive Orders which require the Department to protect classified information.

These regulations for the use of polygraph examinations for certain DOE and contractor employees are intended to protect highly sensitive and classified information and materials to which such employees have access.

This rulemaking also proposes conforming changes to regulations governing the Department's Personnel Security Assurance Program, known as PSAP, and the Personnel Assurance Program, known as PAP.

If you have not already read the Federal Register notice from August 18, 1999, I urge you to do so. Copies are available at the registration desk in

the front of the auditorium.

The comments received here today, and those submitted during the written-comment period which ends October 4, will assist the Department in the rulemaking process.

All written comments must be received by this date to ensure consideration by the Department.

The address for sending in comments is: Douglas Hinckley, United States Department of Energy, Office of Counterintelligence, CN-1, Docket No. CN-RM-99-POLY, 1000 Independence Avenue Southwest, Washington D.C. 20585.

In approximately 14 days, a transcript of this hearing will be available for inspection and copying at the Department of Energy's Freedom of Information Reading Room in Washington, D C.

The address is specified in the Federal Register notice, and is also available at the registration desk.

This transcript will also be placed on DOE's Internet web site, following the address: Home.doe.gov/news/fedreg.htm.

In addition, anyone wishing to purchase a copy of the transcript may make their own arrangements with the reporter, seated on my left.

This will not be an judicial or evidentiary hearing; It will be conducted in accordance with Section 553 of the Administrative Procedure Act, 5 U.S.C. Section 553, and Section 501 of the DOE Organization Act, 42 U.S.C. Section 7191.

In order to ensure that we get as much pertinent information and as many views as possible, and to enable everyone to express their views, we will use the following procedures:

First, speakers will be called to testify in the order indicated on the agenda.

Speakers have been allotted five minutes to deliver their inputs.

Anyone, anyone, may make an unscheduled statement after all the scheduled speakers have delivered their statements. To do so, please submit your name to the registration desk before the conclusion of the last scheduled speaker.

Questions for the speakers will be asked only by members of the DOE panel conducting this hearing.

We will be in session with this hearing until 1300 local hours. We'll reconvene at 1500 for the second session, and we will terminate the second hearing at 1800 hours local.

As I have said, the purpose of this hearing is to receive your comments and concerns on DOE's Notice of Proposed Rulemaking.

I urge all speakers to provide us with your comments, opinions, and pertinent information about the proposed rule.

Please remember that the close of the comment period is October 4, 1999. All written comments received will be available for public inspection at the DOE Freedom of Information Reading Room in Washington, D.C. The phone number for that Reading Room is (202)586-3142.

If you submit written comments, include ten copies of your comments. If you have any questions concerning the submission of written comments, please see Andi Kasarsky at the registration desk. She can also be reached at (202)586-3012.

Any person submitting information which he or she believes to be confidential and exempt by law from public disclosure should submit to the Washington, D.C. address a total of four copies; one complete copy with the confidential material included, and three copies without the confidential information.

In accordance with the procedures established in 10 CFR 1004.11, the Department of Energy

shall make its own determination as to whether or not the information shall be exempt from public disclosure.

We appreciate the time and effort you have taken in preparing your statements, and are pleased to receive your comments and opinions.

I would now like to introduce the other members of the panel.

Joining us today is Lise Howe, an attorney with DOE's Office of General Counsel; Lise?

And also Bill Hensley, Acting Director of Office of Security Support with DOE's Office of Defense Programs.

Before we begin to hear your comments, we thought it would be extremely valuable to provide you with a short briefing on polygraphs.

We are well aware that there is a lot of confusion and many misconceptions about this issue. Last week we held in-depth briefings at each of the labs; This morning's briefing provides some of that same material.

I would like to call first Dr. Andrew Ryan, Director of Research for the Department of Defense Polygraph Institute; and following Andy will be David Renzelman, Polygraph Program Manager for the Office of Counterintelligence,

Pacific Northwest National Laboratory.

Andy, you're up.

ANDREW RYAN: Thank you, General; and thank you for allowing me to speak to you from the Department of Defense Polygraph Institute.

I am here representing the Polygraph Institute, and will attempt to give you a very brief overview of the polygraph training program run by the Department of Defense at Fort Jackson, South Carolina.

As a teacher for many number of years, in the academic setting, I always like to start with definitions.

So, today I'd like to give you a brief definition of what we call a polygraph: The forensic science of looking at the relationship of stimulus, which is a test question, and the response, which is a physiological response, that we are recording with, now, computerized instruments, and comparing those results within the subject to, as you'll hear throughout, the control-type questions, basically looking at how the person looks when we know they are telling the truth, and when we know they are telling something that is not quite as candid.

So we call it the forensic science supporting intelligence and law enforcement, formerly

called psychophysiological detection.

In the federal government, DoDPI supports twenty-two federal agencies that have a polygraph program as part of their examination.

Twelve of these agencies conduct the type of security screenings that we are here to talk about today.

The Polygraph Institute is the sole training source. The sole purpose of that entity is to provide the training and research to support the entire polygraph community.

DoDPI, in addition to its basic-level training for the federal examiners, provides continuing-education training for our examiners, all of whom are required to have 80 hours of continuing education every two years.

So, we are not just responsible for the basic training; which takes 14 weeks, and 600 classroom hours, and a six-month internship with a federal agency, followed by a one-year probationary period, before they are actually released, if you will, to be a federal examiner.

After that period of time, they are then required to, as many of us are in the profession, continue their education through the continuing-

education requirement.

Each agency that we support has a quality-control program. You will hear a little bit more about the DOE quality-control program in just a minute.

Basically, the DoDPI responsibility is a Congressional mandate.

We also have a quality-assistance program at DoDPI, which then inspects the quality-control programs of all the federal agencies. So, in essence, we have two levels of quality control for every exam administered.

The DOE and DOD administer things differently, based on the policies and needs of the departments; but in every case every agency has their own quality-control program, which investigates or ensures that exams are correct and accurate.

In following that, we inspect each and every agency on a regular basis to ensure that their quality programs are also up to par.

We at the DoDPI produced the federal standards that now exist controlling the purpose and mission of every federal exam. We basically have outlined, like any other profession, what you do and how you do it.

We follow the standards of the ASTM. They have been in process with us in the last couple of years formulating a standard that will be a part of the American Society of Testing and Measurements that will include how to administer polygraph examinations.

We're here today to talk about the federal polygraph examinations, but we are aware that there is a private industry out there still administering polygraph exams.

That is one of the reasons the DoDPI is trying to set the standard, not just for the federal agencies, but hopefully to generalize over to the private world as well.

A little bit about our students at DoDPI.

We are located at Fort Jackson in Columbia, South Carolina; recently moved from Fort McClellan in Anniston, Alabama, because of a base closure. We have a brand-new, state-of-the-art facility.

We have a research division wing; a laboratory setup; We have instructional wings. We have pretty much a brand-new, state-of-the-art building that is equal to any of the labs you will find in most university settings.

All of our students coming to us have a minimum of a baccalaureate degree. Their instructors have a minimum of a master's degree.

In certain cases, our instructional staff is at the Ph.D. level, simply because we are seeking accreditation and ranking authority from the Department of Education to award a master's degree in forensic psychophysiology.

So the Department of Education now has, and we have, a dean of education at the DoDPI, who basically monitors our regulation process and makes sure all programs are run by Ph.D.-level scientists and terminal-degree people, who then monitor the master's-level people in the classroom.

The curriculum that we have established at the DoDPI, as I said earlier, is somewhere around 560, 600 classroom hours, plus the additional lab hours, equivalent to a master's degree program.

The curriculum designed at DoDPI has been designed over the years and is constantly being modified based on the research being conducted by our lab sites at DoDPI, as well as the support sites, the investigators that we have working for us across the country.

So, research basically drives our

curriculum.

Some of the partners that we have at DoDPI, in terms of strategic partnerships, are major universities. Probably our biggest partner would be the Johns Hopkins Applied Physics Lab. They produce a lot of the algorithms we currently use, under contract with us, and they also do a lot of the research for us.

In addition, we have contracts in sites located all across the country, which is primarily my job; which is to solicit new scientists in ongoing research in the area of polygraph.

I guess probably the issue we're most concerned about at DoDPI, as well as here, is the accuracy of the polygraph. It is not a physical science; it is dealing with a human being and human interaction.

We are trying to see if there is a way to predict whether someone is being entirely candid with us, in terms of measuring a physiological response following the stimulus, which is the test question.

Accuracy, as you know, can be defined in a number of different ways. We want to detect lies; the true positives; people who are being deceptive to our questions.

You will hear in just a moment the types

of questions being asked in this particular environment.

We want to know if we can detect those lies; We also want to know we can be sure to detect when someone is telling the truth.

In addition to that, we have to be cautious in our training and in our research to try to look at the types of errors that we are likely to make in this type of testing environment.

Calling a person deceptive when they are truthful is something we call a false positive; something we feel very sensitive to.

Calling someone honest when they are actually lying to us is something we call a false negative, and becomes a concern for research at DoDPI, because this is where we allow someone to slip through the cracks.

What do we find in terms of our research?

After decades of research, I guess the bottom line is that the polygraph is controversial. We hope to be able to explain today briefly some of the reasons why it continues to be controversial; but right now what we can say is, there is nothing that we can point to that says for an absolute fact there is a

marker in the nervous system somewhere that says, you are lying. We continue to look for that.

We are working with the autonomous nervous system now, and have been for a number of years.

DoDPI is also investigating the central nervous system in a number of ways to see if we can improve the results of any type of research we do, and that anyone does, so that they do not contain methodological flaws.

The issues we work with to try to determine the accuracy and utility of the polygraph are basically done in two different ways.

We conduct lab experiments at the DoDPI and at universities around the country. In a laboratory experiment we conduct in this case, the more relevant type of study, we do a mock screening study.

This means that we hire subjects, we recruit people, from the military environment that we're in, or we recruit people from the university environment where they are attending school.

Many of us remember having to be guinea pigs for psychology experiments.

The great power and strength of that type of examination is that we control what we call the

ground truth.

We can program the subject to be deceptive or to be truthful, so we know, as the experimenter, principal experimenter knows, in advance, how many subjects should come out to be deceptive and how many honest.

The examiners have never done that, and the experiments have never done that; but obviously the weakness of this laboratory type of studies is we don't have a way that we're aware of to create the ideal real-life situation with the subject and make them really feel like a criminal or a spy. It's very difficult to create that emotion.

The scenarios are designed to do the best they can. Field studies, the one we think would be most generalizable is when we go out to the field and try to conduct research, or we do analysis of exams that are administered in the field, and we try to look at comparing the field-study data with the lab data.

The strength of a field study, as you know, is this is real life. These people really are out there doing the behaviors that we are interested in.

The weakness, of course, is that we have very little ability to know absolute ground truth when

it comes to detecting someone who has not given us all the information.

A simple example might be an investigation of a crime. A police officer may investigate the crime and have a suspect, get his polygraph, and the test does not come out to have significant responses, or the suspect is not willing to confess, giving accurate significant responses; and the crime goes, at least for some period of time, unsolved.

Can we then say we have ground truth on this subject?

Until there are other types of forensic evidence, or a confession from the subject, we don't use those types of cases in our database.

Let me, if I can, brief you quickly on some of the careful studies we have done recently at DoDPI, and are supported through the DoDPI.

In a recent screening study, mock studies conducted in or out of the DoDPI, we have determined with 208 subjects, excluding inconclusive -- you'll hear more about that -- that all tests don't come out with absolute answers yes or no.

With throwing out the inconclusive, the decisions, across all these studies, the decisions were 93 percent accurate with the mock-guilty subject, those

programmed to be guilty, and the examiners in the blind situation found them to be guilty.

They were also 94 percent accurate, median accurate, with the mock-innocent people, programmed to be innocent.

Another example, I'll give you something outside the federal government.

We do have federal examiners that do go through quite extensive training, but there are non-federal examiners that go through private school. The DoDPI does not allow us to support extramural research unless the exams are administered sort of in the DoDPI way, so that we can generalize that back to our community.

In a study done outside of DoDPI, looking at non-federal examiners, and again excluding the inconclusive exams, we found that the accuracy for the deceptive studies was 72 percent -- a bit lower than in the lab -- and 87 percent for the truth subjects.

So we have some, if you will, some standards to work with in comparing the field versus the lab information.

As, I guess, a sample or example of something to use here, since I represent the DOD, not

the DOE, I'm going to give you some data of what we found in 1998 that was in a report to Congress on the DOD counterintelligence screening that we are talking about here today.

In 1998, we conducted screenings on 7,400 of our employees and contractors within the DOE, If not DOD. These are the results.

If I can take a little time to go over these, row by row, skipping around just a little bit, you'll notice at the top that out of the 7,461 people we tested, not a single person refused to take an exam.

The next row shows you that of the 7,461 subjects, 7,334, 98.3 percent of them, who took the exam were found to be truthful, in the first series of charts.

I'll skip a minute on the next row, the 110, and go down to the 2 people that we found to have tests we could not make an opinion on.

This simply means that, based on our scoring methods, where we have sort of a continuum of scores, we came in the middle of this, in the middle of the curve, if you will; and no opinion could be made from the physiological data.

Then we go to the four subjects in this case who were found to have a significant response, and

did not, even after questioning, as you'll hear the process in a minute, making admissions to why they thought they might be responding to this particular question.

We also had 11 subjects who had a significant response who later, working with the examiner, made some admissions to the behavior that might have been triggering this response.

And then after that we retested them, and we found significant responses again, which means to the examiner that we are not getting all of the information here.

I know one of the questions is, what happens to these people? Well, in the DOD, we have a policy to guide what happens. In DOE, you'll hear in a minute how we handle this type of reinvestigation or follow-up, if you will.

Let's go back up to the top, if I can, of the 110 subjects, which for the most part will be called the false positive in the first round.

The significant response, people who are called deceptive after talking with the examiner, talking about the admissions and the reason that they believe they had a response, they were retested, found to be no significant response on the retest, which

means the question actually changed to be more specific to what we were trying to investigate.

A bottom line from that kind of data basically says that in the DOD program, very similar to what's being offered here, 1 out of every 480 exams results in a false positive.

It does not allow for what happens eventually to the people, because there's an investigation, as you'll hear following this.

What do we know about the false-negative rate, the one that we are concerned with at DoDPI, trying to make sure people don't slip through the system?

We know in our DOD system, what we did find from this 1998 group of people is that four persons were found to be involved with foreign intelligence services, and it was discovered through the polygraph examination.

Three cases were discovered of deliberate sabotage to government defense systems.

Thirty-eight cases of hidden foreign-national contacts were discovered.

One hundred twenty-five instances were discovered of deliberate disclosure of classified information to unauthorized people.

So the polygraph not only is something that we are interested in finding out the accuracy of, reading the physiological response, but is of utility in helping us to protect our secrets.

Very briefly, accuracy in the federal government overall -- and I'm quoting four studies here that were done over the years -- the last few years, the information being across the studies, we have a mean inconclusive rate of about 10 percent.

These are exam subjects that will have to be followed up on.

We have a mean accuracy of deception at 78 percent; 78.2.

We have a mean accuracy of no deception indicated of 88.3; so we're better with the honest.

Mean excluding the inconclusives was found to be 85.6 across these four studies, and saving this 95 percent confidence interval.

One of the problems we have conducting polygraph research is we are constantly aware of trying to work around something called countermeasures, the attempt by the subject to defeat the polygraph exam, and/or the examiner, and the process involved.

Information about countermeasures is basically public knowledge. It's in booklets,

pamphlets, Web pages, about everything you imagine.

It basically teaches you methods, whether biofeedback or physiological maneuvers or some type of mental imagery you can do, to try to detract from the instrument measuring accurately.

What we do know about countermeasures is sometimes they have been successful against us; sometimes not.

Countermeasures are very difficult to apply and to research in a real-life setting. What we do know is that during the Cold War we found out a lot about countermeasures, because people were using them against us, to defeat our polygraph exam.

The Ames case is probably an example of someone who was taught by the Soviets how to use countermeasures and to defeat the process. We like to say that he actually did not defeat the test; he defeated the process.

He was able to talk his way through; obviously because he was used to, experienced with, taking the exams.

We train the federal examiners now at DoDPI in very extensive ways how to detect countermeasures.

We also use other types of technologies

and methods to detect countermeasures.

Just briefly, London and Krapohl just reported in the Polygraph Journal this year about a case where the subject was actually trained using the Williams process of countermeasures, and was not able to defeat it, the new federal standards.

Another issue that we're constantly concerned about and watching is foreign polygraph use.

A number of years ago, polygraph was thought to be an American technology, and only used inside of our borders.

What we do know now is, it is spreading. With the collapse of Communism, the polygraph has become worldwide. There are now 68 countries we are aware of using polygraph programs in their counterintelligence and security programs.

They have the capability of catching up with it, if you will. An increasing number of countries are using it in the intelligence and counterintelligence services across the world.

I'd like to end with this brief presentation of what polygraph is about, and how we try to support the federal program, with a quote out of a recent book from one of our most avid critics, if you will.

I'll just point out that even with the amount of information we get from David Lykken -- and he is helpful, because we get from him information how to improve our process -- he says that "In the hiring of policemen or CIA operatives," which I think can be generalized to people working with sensitive data, "then it might be thought that any improvement over chance," which I hope I show you we are at least over chance in our accuracy, "at all might be worthwhile. These are sensitive positions in which the person can do great mischief, and it may be in the public interest to use a screening procedure that reduces the number of undesirable candidates hired, even if this means also excluding a large number of acceptable people."

Thank you.

DAVID RENZELMAN: High-tech operation here.

My name is David Renzelman, and I'm employed by the Pacific Northwest National Laboratory, and I am paid by them.

I work for Edward J. Curran, Director of Counterintelligence, in Washington; and in addition I work for General Habiger. My job is a program manager and director of quality control.

What I'd like to do this morning is

briefly, should the polygraph program be implemented by DOE and should your position be one of those identified as being eligible and you get asked to take a polygraph test, describe the test so that you know what to expect. So I'll walk you through that process this morning.

During the testing process you're going to be required to be briefed, similar to this, either here or at the testing center or wherever the test is going to be administered.

It will be explained to you that there's nothing mystical about polygraph. It's a means and mechanism by which we can see, as is being recorded externally, what an individual is experiencing internally, as they listen to, think about and answer questions.

These questions are not surprise questions. They are agreed to between the examiner and the person taking the test before the test begins.

And this is critical. I will give you an example.

In the early '80s, when I was doing testing for the National Reconnaissance Office, before they had their own program, I was an agent with OSI with the Air Force.

We had some people with TRW, about 47 people in the auditorium, and I just wanted to know what everybody thought the word espionage meant; so I gave them a piece of paper and had them write it down.

And as I collected the papers and reviewed them after my briefing, I saw one person, a female Air Force captain, who said yes, I committed espionage, but I only did it twice. I was on travel both times. I'm very sorry that I did.

I told my husband, and we're going to marriage counseling now, and I promise never to do it again.

Now, had we not taken the time and effort to ensure that what espionage means to us means the same thing to the person taking the test, we would not have had communication. It could have caused a real problem on the results of that person's test.

So, our questions only target four areas.

First of all, we want to tell you we want to make sure that you have not committed espionage against the United States of America. That's a simple question.

You don't fall out of bed one day and become a spy; it takes planning, it takes a conscious

act, it takes an overt act. And then you disclose by some means or mechanism classified information to a foreign or a hostile government or entity, that could use that information to another government's benefit, and the detriment of our government.

We're interested, of course, in sabotage and terrorist activity.

Terrorist activity is ever-increasing, going on in places now from the post office to churches.

It would be nice to have a comfortable feeling that folks doing the work in those areas that may be tested are not involved in that sort of activity.

Thirdly, we're going to talk about unauthorized disclosure of classified information.

I have a mandate from Mr. Curran and General Habiger that we're not interested in what people commonly refer to as pillow talk.

Pillow talk is a slang term that is pretty much used in DOE to describe what happens when a husband goes home or a wife goes home and talks to their significant-other or spouse, or a friend or neighbor or somebody, about something that's classified.

By that we mean something that other person does not have a clearance for, access to, or need to know.

That's a couple of things; probably a security infraction, but that's not what I'm concerned about, and it's not terribly intelligent, because it shouldn't be done.

We phrase our questions to address the issues of unauthorized disclosure of classified information to foreign intelligence services for some entity that could use it in an effort to commit an act of espionage against the United States.

Lastly, we are concerned about unauthorized contact with representatives or members of a foreign intelligence service.

This has nothing to do with some exotic contact while a staff member may have been on a trip somewhere and met in a place that you don't care to disclose. I don't want to hear it.

As interesting as the story may be, it's none of my business, and we just would have to stop you before you continued with that tale.

We are interested in contact with foreign intelligence services.

All right. After the test is begun, one

would think, well, gee, that's only four questions.

Well, if I were to ask you a question about committing espionage against the United States and we see no physiological responses, and we're talking about three parameters -- respiration, electrodermal activity, and cardiovascular activity -- if we don't see that that question troubles you emotionally, and we don't see that on the paper, one would tend to think, well, it doesn't trouble us either.

And we're looking at, well, perhaps we don't need to ask any more questions about that.

So, we have diagnostic questions, that are designed to elicit your capability of responding physiologically should you intentionally tell a lie.

So, we would ask you from a list of authorized questions prepared by DoDPI, and we can't go beyond that list, but simple things like committing a traffic violation.

Most people who walk or cross the street or drive a car have at one time or another committed a traffic violation.

We ask people that sort of thing. If you can recall committing, say, for instance, a traffic violation, we would ask you not to tell us

about that traffic violation, because we don't want to hear it. We just want you to acknowledge that you've done that.

Then we're going to ask you to tell us a lie, when we ask you whether you did that during the test.

Simple thing; how hard is that? If you were speeding one time and came over a hill and there's a New Mexico state trooper and your heart started beating real fast and you experienced all that emotion, same thing kind of happens when you tell a lie, and you got caught by your mother, or those of you who are parents caught your kids.

Those are reactions of the autonomous nervous system that we all experience.

So now we have a situation where, if it doesn't trouble you when we ask you if you've committed espionage against the United States, but you can demonstrate that you do respond physiologically when you say no, I didn't commit a traffic violation, when we already knew you did, then we are satisfied that in our mind we don't need to address that issue any further.

Then we're going to ask a diagnostic along the lines of, are lights on in this room?

I don't like that, because I remember a test subject one time told me, gee, Dave, I don't know; I've got my eyes closed.

So I'll go with, are you sitting down, wearing shoes, in the state of New Mexico, or whatever. That's what we call an irrelevant question.

We know the answer to that, too.

We're looking for your physiological responses to those, to prepare you for taking this test, which takes about eight minutes. It.

Will take us maybe an hour, maybe longer. It depends on you. It depends on how you interact with us and how we feel that you're prepared. We're not going to go any faster than you are prepared to go.

And until we are convinced that the questions mean the same thing to you that they do to us, and that it's your answers to those questions, we're going to rehearse several times that they don't trouble you, and we'll ask you does it bother you in any way, shape or form.

And if you say no, then we proceed.

Then the data is completed and recorded and evaluated.

It doesn't stop there. Dr. Ryan had

alluded to quality control; that begins then and there. We will take a second examiner in the blind, to do an analysis of that same data. The data are compared, to assure that the opinions are based on the same criteria.

And it does not stop there. It then goes to a supervisory level, where it is done for the third time.

And DOE takes it one step further, and does not stop there; we go to the quality-control officials. I maintain that office, as well as program management.

Myself or a member of my staff will provide blind analysis on that. When we have those four levels of quality assurance, we can tell you then that that test was done.

When General Habiger came to take his test, he went through that process. It took a while for us to do that, and he said how did I do? We had to tell him we were not done, and that process was taking place.

We do that while you're there. We don't do it, send you home, and call you back here. It's an on-site, real-time, on-time process.

Should we need additional testing to

clear anything else, then, Dr. Ryan addressed false positives.

I don't know what a false positive is in real life, because you don't know ground truth. But if something bothers you, it's going to bother us, and it's our job to determine what is it that bothers you.

You say, I didn't commit espionage against the United States. Well, we can resolve that, and we can proceed.

The Secretary of Energy has told us, the General, Mr. Curran and me point-blank that the only guy that can approve your test is going to be the Director of Counterintelligence. He has the delegation of authority.

He then reviews and acts upon and retains the documentation on each of these kinds of examinations.

We provide independent quality assurance on all these tests. We record them all. Let me tell you why.

We have an audio/video recording in digital format, with an 8-millimeter camera, and it's focused on you during the whole testing process. It's turned on before you enter the room, and not turned off until the test is finished.

We want a permanent record of every word said both by us and by you, and every activity that takes place.

During the testing process, we take the data from the computer that you're providing during the testing process, and insert it digitally into that videotape, so that we can see those responses as if it were on a chart like you see in the movies.

So then we have a supervisor that is watching that test, as it is, live, and we can determine the testing process each step of the way.

Now, let's suppose that the test is over and there are no issues. That videotape is destroyed; and we do it by incineration. There's no reason to keep it.

On the other hand, in the event that you tell us something that warrants investigation, we keep that until the investigation is complete.

We only follow accepted and established formats and procedures.

The Secretary has told the General and Mr. Curran and myself specifically that adverse action cannot be taken against you solely based upon an adverse or what you'd call a positive polygraph test, meaning that there's an issue that we have yet to be

able to resolve where you didn't pass your polygraph test or whatever you want to call it. We can't do that.

Conversely, for those of you that do get through the testing process, and all but a minor few are going to, I can tell you from real-life experiences, that can be used in connection with you like it can be used in court, stipulated to by attorneys and accepted by the judge.

If, for example, there's circumstantial evidence that says you did that, but a polygraph test says you didn't, I have testified in court, testified in military court, state court, federal court, and it's stipulated between attorneys, and seen people who were let go where without that process they would have been convicted and still be in prison today.

All of our people, our graduates, have done fine.

I require them in addition to that to get an advanced degree. I don't believe a baccalaureate degree is sufficient. When they come on board as an a DOE examiner, they're required to go on and get that master's degree.

We're not going to teach them; they're going to know how to do it before the testing process.

All of our people, 1811 series, NIS agencies, CIA agencies, I have all of those on my staff. You are certified; and in order to retain that circumstances you have to have a minimum of 40 hours of continuing education annually.

State of New Mexico requires 20 for a licensed clinical psychologist.

DOE-examiner certification is more intense than DoDPI certification, because I want to be a step above everybody else.

We require full membership in the American Polygraph Association, and full membership in the American Association of Police Polygraph Examiners. We have a president.

I serve as director of quality control for one, and subchairman of quality control for the other.

One of our gentlemen is the chairman for the ethics committee, and another is the editor for the Journal.

We've been inspected and approved and certified for all of those agents you see on the screen.

We have the capability of complying with all provisions of the Americans with Disabilities

Act, whatever it may be, including administering examinations to folks who require assistance in wheelchairs or assistance for the hearing-impaired; and we have not encountered anything that we have not been able to successfully conduct.

There are two people whose names you should know who set the policy.

One is seated right here, and that's General Habiger.

When you take the guy who's been the guy in charge of the entire Strategic Air Command, and match him up with an Assistant Director of the FBI, which is what Ed Curran was and is now, and you put them together to protect our national secrets, if you will, I think we have the provision to make it a dynamite program.

It requires assistance; it requires cooperation. We have to work together to do it.

I think we're prepared to proceed. Should this process be approved, I can guarantee that if you are asked to take that test you'll be treated with dignity and respect, and that every effort will be made to verify that you are warranted in obtaining or retaining your access to the information that you have or should have or would have.

GENERAL HABIGER: Ladies and gentlemen, for the past 45 minutes we've been in transmit mode. We're going to take a break now for 20 minutes.

When we reconvene we'll be in the receive mode only, to listen to your concerns.

So we'll stand adjourned for 20 minutes.

Thank you.

(Recess taken)

GENERAL HABIGER: Ladies and gentlemen, let's go ahead and convene the public hearing.

It's now time to move on for the reason we're all here: To elicit your comments on the Notice of Proposed Rulemaking.

I'd like to call our first speaker to the podium, Mr. John Longer.

I would ask each speaker to state his or her name, whom you represent, before making your statement. Thank you.

JOHN LONGER: Thank you.

My name is John Longer, and I represent myself.

I will not waste your time today trying to convince you that your polygraph machines are useless. No; you have already made up your minds that these precious little machines are absolutely

wonderful.

However, I will make a few comments.

In reading over the proposed regulation, I missed the part where members of Congress are going to take a polygraph test along with us at the LANL labs.

If it's good enough for the little guy, isn't it good enough for our bosses? Why aren't the members of Congress taking the test? Every day in the news I hear the Republicans and Democrats accuse each other of selling out our national interests.

Well, your little box could clear the air once and for all!

Since you believe these tests to be so great, can we now save the taxpayers' money by just giving new hires the polygraph tests, and forget about background investigations?

Why, let's take the test another step forward, and go for true justice in this country. Take the polygraph to the federal prisons, and release everyone who passes the test.

(Laughter; applause)

If they pass, they are innocent, aren't they?

Surely the 99-point-something-percent

accuracy that you claim is a better rate than our court system can produce.

It is my understanding from statements made by proponents of the test that if an employee passes the polygraph test they are in the clear, but of course passing the test really doesn't mean much in light of past events.

As an example, I offer the reported story that Wen Ho Lee passed a polygraph test in November 1998.

If this reported story is true, why did you continue your investigation of this man? Didn't you trust your own machine?

I've also read accounts that other reported spies have passed a polygraph test. That included Aldrich Ames, a CIA operative.

Let me tell you what I think these tests will accomplish.

They will give Congress a good feeling about themselves, and allow them to brag to the voters that they did something.

They will make it harder to recruit top people to work for the Lab. We will now only be able to recruit those people interested in quasi-science.

They will increase the level of anxiety

in an already-stressed atmosphere at the Labs.

They will cause trouble for people who have nervous temperaments.

But most of all, they will allow the trained spy to go free!

Thank you.

GENERAL HABIGER: Thank you, sir, for your comments.

(Applause)

Ms. Betty Gunther?

BETTY GUNTHER: My name is Betty Gunther. I represent the University Professional and Technical Workers, Local No. 1663 of Los Alamos; and we would like to state our opposition to polygraph testing.

I'll read this, so it will be accurate.

The members of Local 1663 of the United Professional and Technical Employees of Los Alamos are very concerned about national security and the prevention of security leaks within our work areas and within the entire national defense program.

However, the members of UPTE, as well as many other Los Alamos employees, would like to express their strongest opposition to the polygraph testing of workers at Los Alamos National Laboratory in

particular, and all national laboratories in general.

Five minutes is not enough time to thoroughly present our concerns, but the following is an attempt to cover a vast number of concerns in the inadequate amount of time allotted for this presentation.

We at UPTE are very concerned about the scientific veracity of the polygraph as a means of detecting lying.

We will not go into the factual basis for that concern, since it has been well expressed in statements made to this body by the scientists and engineers of Sandia National Laboratory and Lawrence Livermore National Laboratory, and by speakers from DOE who have already spoken here today.

Their eloquent statements demonstrate clearly the inaccuracy of the polygraph as a means of detecting lies.

There is clearly a wide body of scientific information showing the polygraph is a poor indicator of lying.

DOE has defended itself against this statement by saying it is using a version of the polygraph developed by the Department of Defense, and which has never been tested except by Gordon Barland,

who has shown that only .002 of the 7,461 employees tested had "questionable" results.

We were not told quite what his credentials were, nor where to find published results of his work in refereed journals. This information is of the utmost importance, considering the fact that we are led to believe the form of test administered by Barland is the form likely to be used at LANL.

Importantly, his results differ significantly from those of other researchers in the field, and cannot be considered reliable until they can be reproduced by impartial scientists and shown in scientific journals to be reliably reproducible.

The workers at Los Alamos remain completely unconvinced by the studies apparently commissioned by the DOD itself and unverified by more impartial researchers.

In addition, it appears the DOD actually has a school devoted to the training of polygraph interrogators, called the Department of Defense Polygraph Institute. It is appalling that taxpayer money is being used to support a school to train people to administer a test which can be shown in the scientific literature to be invalid.

According to the background, Section 2,

of the proposed Rule 10 CFR Parts 709, 710 and 711 -- this is a quote -- "DOE believes that established procedures for polygraph testing, limitations of scope of questions, qualifications standards for polygraph examiners, and limitations on the use of polygraph examination results with regard to final adverse actions will be perceived as fair by most potential employees and will protect the legitimate interests of DOE employees."

This belief is based on no facts whatsoever. DOE does not claim to have surveyed potential applicants for employment at the National Laboratory to see how they view polygraphs, and assumes that it will protect the "legitimate," in quotes, interests of national laboratory employees.

One can only wonder which employee interests the DOE considers legitimate.

Among likely repercussions from "questionable" results on a polygraph examination:

One interest most national laboratory employees hold is being considered innocent until proven guilty. Americans hold this concept very dearly, and hope the DOE does as well.

Yet, being subject to inherently unreliable polygraph tests and being removed from

sensitive projects based on their results is not an example of being held innocent until proven guilty.

DOE and LANL argue that no one will lose a job because of the results of the polygraph alone. However, it does not specify what other issues combined with "questionable" results on a polygraph exam will cause the loss of a job.

Those of us who work here at LANL are aware that few employees are ever fired. Generally, those who lose their jobs at LANL lose them through Reductions in Force, RIFs, which are held periodically at LANL.

It is completely in keeping with LANL management practices that those who have "questionable" results on a polygraph or who have refused to take one will be on the next RIF list.

Management would argue that this loss of job was for budgetary reasons, not because of the polygraph; but undoubtedly those who have not passed polygraphs will be RIFed at a greater rate than those who have.

And there is good reason employees will be RIFed due to budgetary factors. Since approximately two-thirds of LANL's budget is devoted to the nuclear-weapons program, that leaves one-third of LANL's budget

to absorb workers who have had "questionable" polygraph results or who refuse to take the test, and must be removed from sensitive projects.

At first glance, that one-third appears to be a sizable percentage of a $1.2 billion budget with which to employ workers who have questionable results on polygraphs, or who refuse to take them.

But non-nuclear-weapons programs are already straining under the need to absorb foreign nationals who previously worked on nuclear-weapons programs at LANL and who have been forced out of them by recent changes in DOE policy.

Nor are workers like gears and bearings.

One worker, who has trained for years in the field of, say, computational physics, cannot be dropped into a non-sensitive program in, say, life sciences and expect to be productive.

It would take many years of retraining to make that employee productive again. During those years of retraining, that worker would be a likely candidate for RIFs and bad performance evaluations because of a lack of productivity for which he or she will not be responsible.

All of these adverse outcomes will be based on an inadequately tested test.

Basically, polygraphs are measures of biological responses to certain questions. Since scientists cannot show that the polygraph reliably indicates lying, it seems obvious that the polygraph itself could generate the kind of nervous reactions that would produce "questionable" results.

Dr. Wen Ho Lee, who was recently fired from LANL, passed his first polygraph examination; but when he was given another a few months later, he was found to be "deceptive."

Or was he just nervous? If the polygraph were reliable, the only way he could have failed the second polygraph is if he had committed espionage between the first and second polygraphs.

(Laughter)

But DOE does not maintain that his alleged espionage occurred in that brief period; it claims it happened many years before.

The fact that Dr. Wen Ho Lee lost his security clearance, and eventually his career of 21 years, and has had no charges of any kind filed against him, is not of comfort to most LANL employees.

Although DOE specifies that the results of polygraphs will be kept according to the Privacy Act of 1974, LANL workers are painfully aware that this is

a promise which the DOE is unable to keep.

In the case of Dr. Wen Ho Lee, the results of his polygraphs and many other aspects of his security investigation were published, first in the New York Times, and then in most news media throughout the world.

Of course, nobody will admit to having given out these results; but someone did. To his lifelong detriment, Dr. Lee was tried by the media.

Dr. Lee's security file was not only supposed to be protected, but was apparently classified. The leaking of his security information is a very significant security leak and, according to media sources, endangered the entire investigation.

DOE and other organizations which had access to Dr. Lee's security file need to clean up their own houses before they start trying to clean up leaks that cannot even be traced to LANL, or other scientific laboratories.

(Applause)

As David Renzelman of DOE explained in a recent presentation to LANL employees, the use of the polygraph as an investigative technique is basically an attempt to extract confessions. The subject is not allowed to have an attorney present, and is not read

the Miranda rights.

The subject registers certain skin and voice responses, but cannot know what causes these responses, since they are controlled by the involuntary nervous system.

So, when the investigator sees an unusual response, the subject will be questioned as to why his or her body registers such as response.

The person can only guess. If he or she hazards a guess, this will be noted; and the interrogator, who also doesn't know why the person registered such a response, will record the answer.

Whether or not this is an adequate explanation is up to the subjective opinion of the interrogator.

So, if the interrogator decides the question is inadequate, he or she will ask more questions. The answers to these questions will be noted, and more questions will be asked until a confession is extracted or the interrogator is convinced that the person is innocent.

These techniques sound like those of the KGB in a Grade-B movie and are, in fact, normal tools of dictatorships.

Mr. Renzelman assures us that any

confession of crime not related to DOE interests will be turned over to the proper authorities.

Success in the polygraph-testing program, according to Renzelman, will result in a confession without the presence of an attorney or the Miranda rights on the parts of some number of employees.

Since the person administering the test will not be a police officer, the subject basically does not have the rights afforded to common criminals in the United States.

The decision by DOE to polygraph employees of national laboratories is a mistake for many reasons. Polygraphs lack scientific validity, but have the power to destroy careers and personal lives, and have already done so.

DOE is unable to protect the privacy of those who have been polygraphed, and will treat employees in a manner worse than the treatment of common criminals.

The probable loss of job applicants, as well as seasoned employees, will result in damage to LANL and to other national laboratories, and will ultimately result in loss of quality of defense research as well.

Employees' morale will be devastated by being treated as criminals. DOE should not go forward with its plan to polygraph workers at Los Alamos National Laboratory.

The University Technical and Professional Local 1663 strongly opposes this program as an unfair labor practice, of negative value to the United States Defense Program; and we have the support of many LANL workers.

We urge DOE to find more sound methods to protect national security.

If the United States is to resort to the techniques of dictatorships in order to maintain its integrity, its citizens will soon find their interests have little to do with national-security interests.

(Applause)

GENERAL HABIGER: Ms. Gunther, thank you for your input.

Ladies and gentlemen, I would ask, in order for us to accommodate all the people who would like to speak, to limit your remarks to five minutes. I did not interrupt Ms. Gunther; she had a number of salient points.

But if you could stick to five minutes, I certainly would appreciate it.

Mr. George Chandler?

Thank you very much.

GEORGE CHANDLER: George Chandler. I represent myself.

Thank you, Betty.

Since I signed up to do this, I've been struggling to find how to do this in five minutes. Betty said a lot of the things I think; I'll go along with that. But also, in the paper this morning, I found the answer to my dilemma.

There on the front page was General Habiger responding to questions about the new agency; at least his comment was very quotable. "It's not about security; it's about politics."

And, General, polygraph testing is not about security; it's about politics.

(Applause)

You were broadcast on NPR this week after the Livermore hearing, saying that our goal here is to re-establish our credibility with Congress.

I don't think you're trying to find spies; and I can assure you that this system, this polygraph testing, is not addressing the real security problem that exists in the nuclear-weapons program. I think we should be doing that.

Your rule is based extensively on memos written by Lyndon Johnson; particularly, an executive memo from 1960.

Your rule turns that memo on its head. That memo was intended to prevent unwarranted intrusion into the privacy of individuals. That memo was intended to expand the Bill of Rights to federal workers, and by extension to contract employees like us.

Individual dignity is supreme in this nation, and it is individual dignity that we should be trying to protect.

That's two hundred years old. I would place that above any national security. We need to find other means to address these problems, and these kinds of violations.

John Browne asked us to be instructive when we came here. I'll try to do that.

We can't talk about security issues.

I'd like to have a classified, secure area where we could discuss security issues, because there are serious security issues in the nuclear-weapons program. I'm aware of some, and I'm sure there are others that I don't know about.

I'd like to talk about them. I can't in

detail here, but I will address a couple.

Classification rules are incomprehensible; they need to be rewritten.

When this whole thing started, John Browne wrote another of his memos, where did he go?

(People chuckling)

He said, "If you guys all know what's classified, let's protect it."

The fact of the matter is, we don't. You can't tell. The classification rules are so convoluted, incomprehensible, that you cannot tell what's classified and what's not. There needs to be a look at this. They need to be rewritten, and need to be made understandable, simplified, so that working scientists trying to protect national-security information can do so.

The perspective of violation of security regulations depends on who you are.

If you're the Secretary of Energy, or you're a Congressional staffer, and you commit a security violation, nothing happens. If you're some schmuck at the laboratory who makes a minor violation, you get time without pay; you get security infractions, reprimands. It's unfair.

(Applause)

It breeds cynicism about the security system, and cynicism undermines national security.

You need people who have confidence that their efforts, their strong efforts, to protect these things are being supported, and that if they make a minor mistake, that they will be supported in that.

I have a proposal. I'd like to propose that we have a forum, a national forum, among the weapons laboratories and the DOE and the DOD to discuss nuclear-weapons security, to decide what's classified and what's not classified, how we protect it, how interpretations of classification rules can be broadcast so that what's classified in one laboratory is classified in another, and vice versa.

You're in a unique position, General. You should think about what your legacy is going to be after you're gone.

You can change the way we protect our nuclear-weapons secrets in such a way that it truly protects those secrets; or you can install a cosmetic fix that's proposed here in the polygraph testing.

What do you want to be known for? Do you want to be known for having a real solution, or do you want to be known for implementing a political fix? The choice is yours, and I hope you make the right one.

Thank you.

(Applause)

GENERAL HABIGER: Thank you very much, Mr. Chandler.

Next speaker is Rhon Keinigs; and if I mispronounce that, please correct me, sir.

RHON KEINIGS: Keinigs.

The work we do at Los Alamos is vital to national security, and we work hard to ensure that certain information is not compromised. Improvements can be made. However, Congress is searching for a foolproof method of ensuring security, and none exists.

Polygraph screening is being implemented in the hope of improving security, when in fact logic indicates that the opposite will result. I have found no one who thinks polygraphing is a credible approach. Personally, I believe it will fail, for several reasons.

One, widespread polygraphing will seriously degrade the science base necessary to ensure the continuance of a reliable nuclear deterrent.

Two, polygraphing is an infringement of our constitutional rights to protection from unreasonable search.

And three, such a program has little if

any scientific merit.

If polygraphing proceeds, it will certainly erode the relationship between DOE and the Laboratory, a relationship that has been based upon trust and, historically, a unified sense of mission.

Degrading this environment will do unforeseen damage to our ability to ensure the reliability and safety of the nuclear stockpile.

If polygraphing is widespread, many committed employees will terminate their relationship with LANL, and many others who stay will no longer feel the sense of duty and purpose required for the job.

Recruitment of new staff, particularly in the weapons programs, will be seriously jeopardized. Such trends will weaken the science base that supports the primary mission of the Laboratory.

These very issues were emphasized in a letter authored by the chairman of the UC President's Council on the National Laboratories, and unanimously endorsed by the Council. In this letter, it was strongly recommended that widespread polygraphing not be pursued.

Agreeing to a polygraph is not part of the terms of employment at Los Alamos. Testing of this sort is an infringement of our constitutional rights as

citizens to protection against unreasonable search without probable cause.

Polygraphing is unreasonable in that it basically entails a probe of the nervous system, it is unscientific, and it could be considered a form of trial by machine.

Certainly a just cause for administering wide-ranging polygraphs has not been presented.

A preponderance of scientific evidence indicates that polygraphing used as a widespread screening tool is without merit.

In testimony given before the U.S. Senate Committee on the Judiciary, Dr. Drew Richardson of the FBI Science Laboratory recommended the FBI abandon widespread polygraphing.

This was based upon several factors, including that there is nearly universal agreement among scientists that polygraph screening is invalid. Another reason was the associated monetary costs of such a program.

Professor David Lykken of the University of Minnesota, writing in the scientific journal Nature, cites several credible field studies of the Control Question Test that indicate false-positive results of nearly 33 percent.

This test is a standard technique in specific-issue situations such as espionage. Yet we have recently been informed by Mr. David Renzelman, polygraph coordinator of DOE, that results obtained at the Polygraph Institute indicate false positives of less than 1 percent.

Obviously, polygraphing requires further validation. I ask, would Congress be satisfied if the stockpile was so poorly validated?

(Applause)

Los Alamos, Livermore and Sandia National Laboratories have been entrusted to certify the stockpile for the next 30 years; but we are being told to accept standards that are far lower than the standards by which we are expected to perform our jobs.

Members of Congress should rethink this problem, and explore a truly viable solution to improving security. The price tag of proceeding with the present program will be the undermining of the science base required to maintain the strongest national defense, and the immeasurable damage that could be done to many of the government's most conscientious employees.

The mission of the stockpile-stewardship program has as its ultimate and underlying purpose the

protection of the freedoms shared by all U.S. citizens, and that includes those of us working at the weapons laboratories.

As loyal Americans, we deserve better.

Thank you.

(Applause)

GENERAL HABIGER: Thank you very much, sir.

Next speaker is Peter Sheehey.

PETER SHEEHEY: My name is Peter Sheehey. I represent myself.

I'm a technical staff member in X Division at Los Alamos National Laboratory. I know the Constitution does not guarantee me the right to a job with a security clearance, but the Constitution and the laws we live by do provide a guide to reasonable treatment of people.

Polygraph test results are not accepted in a court of law, because there is reasonable doubt about their reliability.

I expected to give up a certain amount of privacy when I made a career commitment to doing classified scientific research; but no reasonable person will make such a commitment if his clearance and ultimately his job can be taken away solely on the

basis of polygraph test results of unknown and unproven accuracy.

Nothing in the proposed regulation prevents this; Section 709.25 specifically permits it, at the discretion of the Secretary or Secretary's designee.

Therefore, I urge you to include specific language in this regulation that "No clearance will be revoked solely on the basis of polygraph test results"; period.

Reasonable due process should be afforded employees by language such as "A worker will be confronted with the additional evidence leading to revocation of his clearance, and given the opportunity to refute it."

This language should be in Section 709.25, "Limits on Use of Results," replacing the language defining when polygraph results can be the sole basis for action against an individual.

I believe the Secretary of Energy already has the right to revoke security clearances in emergency situations, and I have no argument with that.

But to put such an exception in this polygraph regulation invites misuse of that power. It should not be considered an emergency when someone,

quote, "flunks" a polygraph test; at most, it should be considered cause for further investigation.

I do not object to some limited use of polygraph tests as an investigative tool, although many people see this as just another form of the third degree; that is, coercive interrogation.

Holders of security clearances expect their behavior to be monitored more closely than other employees, and I invite you to use appropriate means to do this.

In particular, you can monitor banking and charge accounts to look for any unusual financial or travel activities.

Polygraph tests are no substitute for such monitoring. If a suspicious pattern of behavior is seen, then perhaps a polygraph test could be part of the investigation.

But without probable cause, subjection to coercive interrogation is no way to treat loyal career employees.

(Applause)

Taking away a person's clearance without any tangible evidence of wrongdoing is wrong, counterproductive, and unacceptable to me and to many national defense workers.

Adoption of such a policy, without strong controlling language such as I've suggested, could decimate the National Laboratories and destroy their effectiveness as contributors to our national security.

If we do that, we will have handed a victory to our nation's enemies.

Copies of this statement have been sent to my Congressmen and Senators, and I urge any members of the audience who have strong feelings on this to do the same.

Thank you.

GENERAL HABIGER: Thank you, sir.

(Applause)

GENERAL HABIGER: Norman Delamater?

NORMAN DELAMATER: Good morning. My name is Norman Delamater. I'm representing myself.

I'm a staff member here at Los Alamos. I've been involved in classified research for upwards of fifteen years, so I speak to you with some experience.

I'm only the sixth speaker, and pretty much all my points have already been made. There are a number of points that roll down to similar arguments, but let me go ahead anyway here.

Your proposed rules will permit blanket testing of thousands of employees with no determination of probable cause. This would appear to be in violation of the Fourth Amendment to the U.S. Constitution.

Laboratory employees will also be denied legal counsel during any phase of the polygraph exam; Section 709.22.

General Habiger, I notice you have your lawyer Ms. Howe right next to you.

(Laughter; applause)

The DOE rule should allow legal counsel.

Laboratory and University of California policy, AM 702.09, would require employees to waive all legal rights against the university upon volunteering for any polygraph exam. Thus, innocent employees will not be able to seek redress in the courts in the event of false-positive negative consequences of the polygraph.

The DOE acknowledges in Section II that polygraphs are inaccurate. The scientific literature in this area quotes false-positive rates as high as 10 to 50 percent.

The literature also suggests that, while polygraph exams may be helpful in certain criminal

investigations, its use as a screening tool is not at all valid or proven to be accurate.

It's highly probable that hundreds of loyal employees here will be faced with false-positive results, and their consequences.

This really is reminiscent of the McCarthy era, when careers were ruined on unfounded allegations. The position of the government seems to be that one is guilty of espionage until proven innocent by polygraph.

I really am concerned that my rights as a citizen are being abused by this policy.

Trampling on the rights of citizens is a series matter, even in the national security. You have not struck a balance between the rights of citizens and rights of national security with these rules.

At the very least, DOE should request an academic study on the effectiveness of polygraphs in screening situations such as this.

The National Academy of Sciences might be commissioned to perform such a study as soon as possible.

The DOE claims in Section 709.23 that consenting to a polygraph exam is voluntary. This is an example of legal nonsense.

The examinations are obviously not truly voluntary, since the DOE proposed to require the examination to maintain an individual's security interests. If an employee would refuse the examination as a matter of principle, the result would be loss of clearance and eventually loss of job.

This is actually a violation of UC policy, again in the Administrative Manual 702.08, which states that refusal to take any polygraph examination could not result in an adverse job consequence.

Your Section 709.25 should be modified, as the previous speaker said, to state that no individual's Q clearance could be suspended or revoked; Rather, other evidence must be gathered by DOE the old-fashioned way: An investigation finding some probable cause.

The proposed regulations in Section 709.21 state that 48 hours' notice will be provided an individual prior to the polygraph exam.

That's inadequate. You need to change that; make it a two-week notice. I'm going to be away on a trip next week. If my notice came next month, I would be gone and wouldn't hear about it.

And also the extra time period for

allowing the individual, should he desire, to obtain adequate legal counsel to make preparations prior to the examination.

This is an interrogation. Our jobs depend on this. People are going to be nervous, and I do want to make sure I uphold my constitutional rights.

Section 709.4 is way too broad in describing who would be subject to a polygraph exam. Virtually everybody with a Q clearance is going to be subject to this. I would suggest really modifying your rule, making this only applicable to people with truly top-secret national security information.

The regulations 709.11 and 12 do not suitably restrict the question subject areas during the polygraph exam, and show that DOE is truly on a fishing expedition to unfairly interrogate employees under intimidating positions, with no legal counsel allowed for the employee.

Section 709-12 actually allows different questions for each individual based on pretest interrogations. If there is not a standardized set of questions to properly calibrate the test, how can you possibly claim you're going to have a false-positive rate of 1 percent? Everybody is going to have slightly different questions.

Section 709.31 and 32, regarding training of polygraph examiners: It is stated that polygraphers will have at least 40 hours of training. That's the minimum: 40 hours of training.

Am I to understand that my continuation as a loyal employee of the Laboratory here is to be in the hands of somebody with as little as one week's training as a polygrapher? That doesn't stand to reason.

(Applause)

Finally, in Section II, DOE acknowledges that approval of these polygraph regulations may make it more difficult for the Laboratory to recruit and maintain confident qualified people.

You bet it will! You bet it will make it more difficult!

(Applause)

I and some of my colleagues have already stopped recruiting new Ph.D.'s precisely because of the new conditions of official distrust and intimidation at this laboratory. You don't trust us; that's the bottom line.

Passage of these regulations regarding polygraph exams will not improve national security. Rather, national security will suffer as the national

laboratories become mediocre institutions, while the best and brightest scientists leave to find work elsewhere, in a more hospitable environment.

A credible stockpile-stewardship program is a technical challenge requiring the most capable scientists to achieve its goals.

You have to understand, stockpile stewardship is a difficult problem. We are doing nuclear testing. We have to understand everything from basic principles on up.

Real improvement in national security occurs as a result of the great science that our national laboratories produce; not from more security lectures, not from more barbed-wire fences to isolate us, and not from polygraphs.

My final personal statement is, I really am outraged at this humiliating and insulting treatment that I'm receiving by my government.

I find myself being labeled a traitor, and forced to prove my innocence to you. This is not the American way; this is nothing less than police-state tactics.

History will be the judge of your actions today, General Habiger. I hope you make the right decision, and reject polygraphs.

(Applause)

GENERAL HABIGER: Thank you for your input.

Next, William Chambers?

WILLIAM CHAMBERS: Good morning.

GENERAL HABIGER: Good morning, sir.

WILLIAM CHAMBERS: I am William Chambers. I'm representing myself.

I have more than a half-century of experience in national defense; as a combat veteran of the European Theater in World War II, a retired Los Alamos physicist and technical manager in the nuclear-weapons program, and a retired consultant to the Department of Energy and its national laboratories and contractors in nuclear-weapon-related activities.

I'm going to make a personal statement; but before I do, I'd like to say, as a current member of the board of the New Mexico Academy of Sciences, I would first like to present a brief statement prepared recently in the context of these hearings:

"The New Mexico Academy of Sciences believes that there is inadequate scientific basis supporting the efficacy and reliability of polygraph testing. The incidence of false-positive outcomes and the resulting harm to individuals make polygraph

testing an unfair and inappropriate tool in a free society," end quote.

Now I would like to present some of my own personal views, very personal views, on this matter, emphasizing that these are my own opinions, no doubt highly subjective, but based on considerable experience.

From 1950 to 1998, I held a Q clearance from the Atomic Energy Commission and its successors, and I continuously exercised the responsibilities associated with that implicit statement of trust.

In fact, the standard procedures for maintaining that clearance included -- and I'm sure still include -- a periodic investigation and review of my personal history by the appropriate government agencies, to ensure that the trust was still warranted.

I endorsed those procedures completely, and considered the trust to be, in part, an affirmation of my contributions to my country.

On the contrary, it now appears that I and my former colleagues are to be considered in a different class of citizens, the class that stands suspected of espionage for some unspecified enemy through some unspecified acts.

Allegedly, we can clear ourselves of

this charge by voluntarily submitting to an admittedly flawed polygraph device, and by completing a test successfully, as defined by the test administrators.

Personally, I object to being so characterized.

I object to the fact that the class of people selected for this dubious honor are just those previously considered by rigorous investigation to be the most trustworthy in the field.

In the more distant past, our work was typically born classified and, if declassified at all, was done so under the rules we helped develop.

In more recent times, under pressure from the Congress and various activists, enough weapon-related information has been declassified and disseminated, by DOE administrators, parenthetically, not by the weapon-design community, to provide on the Internet a surprisingly complete description of the entire U.S. nuclear-weapon design, development and testing program; both test devices and stockpile weapons.

I also object to the penalties already paid in national-security affairs since the inception of the polygraph proposal: Penalties in lost time and money, penalties in personnel confusion and lowered

morale, penalties incurred by the departure of key personnel.

I object to the far more serious penalties to be attached to the nuclear-weapons program in the future, when such a test may be applied to any who choose to enter the field.

Maintaining a national capability is already made more difficult, complex, by test-ban and budgetary considerations. Over time, the inability to attract the most competent people to the field because of the imposition of questionable loyalty tests will surely lead to a decaying technology in an uncertain future.

Finally, I object because I would expect that such a program would soon generate a new and rather large class of people, those who have unjustly failed the test, and those who have justifiably refused to participate.

I wish to place myself among those who refuse unless under force of court order, although it is unlikely that a retiree like me would even be asked to participate.

And, although I am clearly not a lawyer, a casual perusal of the U.S. Constitution suggests that there is not a court in the land that would issue such

a court order.

Thank you for the opportunity to be heard.

GENERAL HABIGER: Thank you, sir.

(Applause)

GENERAL HABIGER: Our next speaker is Susan Seestrom.

SUSAN SEESTROM: My name is Susan Seestrom. I'm representing myself.

I don't want to argue here today the scientific merits of the polygraph. My assumption is that we will have a polygraph program.

I am a laboratory manager and scientist. I feel it is my obligation to look at the proposed rules with respect to how they protect the rights of my employees.

The rules contain language about "adverse personnel actions," with the implication that to deny an individual access to information or involvement in activities is not an adverse personnel action.

It is important to point out that this laboratory has succeeded in helping keep the nation safe for the last 50 years because of the fact that first-rate scientists and engineers have devoted their

careers, scientific careers, to national security.

Depriving them of individual access to information is every bit as serious to them as depriving them of their job.

From this point of view, the most glaring omission in the proposed rules is the lack of any grievance process.

It is essential there be a formal grievance process, including both outcome and procedure of the exam. The grievance process should involve LANL peers and managers, UC representatives, and independent polygraph professionals.

Also missing are rules governing the length of the exam. In Section 709.13, leaving before the end of exam is regarded as the same as refusing to take it. Therefore, there need to be rules concerning the length.

Employees should also be protected by allowing legal counsel to be present during the exam.

Finally, I strongly urge DOE to reconsider use of polygraph exams at its national labs.

The nature of the enterprise in which we are engaged depends critically on having trust in the scientists and engineers who have devoted their careers to protect the nation.

This trust extends not only to the belief that they will not commit espionage, but it also includes relying on their technical and scientific judgment in certifying the safety and reliability of the nation's stockpile. This is not a factory, or an army base.

As a parent, I have learned that children will live up, or down, to our expectations. I therefore have a serious concern that installing a system that's based on a fundamental lack of trust for our employees will only do damage to our national security.

Thank you.

GENERAL HABIGER: Thank you, ma'am.

(Applause)

GENERAL HABIGER: Eric Nelson?

ERIC NELSON: Gentlemen, in cooperation with DOE, Los Alamos has made a commitment to strive for zero security and safeguard violations.

This commitment is part of LANL's "six zeros" policy, which includes similar goals for safety, environmental and ethics incidents.

It is an excellent policy, which recognizes that perfection cannot be obtained instantly; that training, practice and continuing

education are the tools to achieve these goals; and that disciplinary action is a last resort for those individuals that fundamentally refuse to cooperate.

Unfortunately, recent actions by DOE and lab management have turned LANL's laudable "six zeros" policy into a policy of zero credibility.

For example, two of my colleagues have cooperated with recent DOE and LANL security investigations concerning apparently minor infractions.

Despite their cooperation, they were harassed, threatened, and intimidated by DOE and Los Alamos. You revoked both of their clearances.

Distinguished, productive careers -- careers important to our nation's security and prosperity -- have been ruined unfairly, unnecessarily, and to our nation's detriment.

I wish I could be more specific about these cases, but I cannot. When the time arrives to share with the staff lessons learned from security incidents involving our loyal colleagues, we are told we have no need to know.

Imagine that. We, the individuals most responsible for improving and maintaining security, including avoidance of past mistakes, have no need to know!

This by itself is another glaring example of LANL's and DOE's incredibility. Not only are we injured and insulted, but we are also rendered ineffective in reducing the security incidents for which we are responsible.

This shameless behavior must be rectified before security policies and practice can have a net positive impact on individual behavior.

Allow me to suggest how this shameless behavior adversely affects the proposed polygraph examinations.

Numerous individuals have good cause to doubt statements that DOE is only looking for spies and saboteurs, that admissions of stupid mistakes will not be held against polygraph subjects, and that DOE and LANL will be equitable in its subsequent treatment of employees.

Many of these individuals will be cited for unresolved issues in the polygraph examination. At this point, such an individual will likely cooperate only superficially with the polygraph examiner's attempt to resolve the unresolved issues.

The examiner can threaten dire consequences for lack of significant cooperation, but the individual is no longer motivated to participate.

He or she is damned regardless of any further cooperation.

It is likely better to be cited for unresolved issues and the superficial charges manufactured during the subsequent investigation than to face certain prosecution for admissions made in an attempt to appease the polygraph examiner.

In this situation, both parties lose. The concerned, but loyal and trustworthy, individual is merely trying to minimize his or her losses. The DOE loses the talent and experience of the individual. The DOE further erodes its own credibility.

And finally, the DOE likely knows no more after the polygraph examination than it did before.

This situation strikes at the heart of the proposed polygraph tests. You are depending on the cooperation of trustworthy and loyal individuals in order to ferret out a few spies and saboteurs.

In the best of circumstances, this is merely a suspect strategy. Under current circumstances it is simply untenable, because you will be burdened with concerned individuals, those individuals who consider DOE untrustworthy, not themselves.

I have no confidence that you will be able to identify an actual spy in their midst.

I am confident that you will cause extensive and irreparable damage to the nation's common defense and security.

There are alternatives. It is possible for both DOE and its various stakeholders to win.

Regardless of the decision on polygraphs, DOE should abandon its adversarial attitude toward the national labs and its employees; adopt an open and candid atmosphere for discussion of security issues; refrain from seeking disciplinary action for every violation or infraction; turn them instead into lessons and reminders for the rest of us, the rest of us, who do have a need to know.

In the event that you foolishly and irresponsibly pursue these polygraph tests to the detriment of our nation's security, I suggest the following additions to Section 709.15.

First, DOE will not seek disciplinary action for admissions of security infractions or minor security violations during the polygraph examination.

Second, DOE will compile such admissions and combine them with other sources such as security audits in order to educate the authorized workforce

about the frequency, severity and manner of various security infractions and violations.

And third, the DOE will use such admissions only as a basis for developing effective strategies to mitigate the risk of future security incidence.

Gentlemen, thank you for your attention.

GENERAL HABIGER: I appreciate your input.

(Applause)

GENERAL HABIGER: Next speaker, Bill Beyer.

BILL BEYER: Thank you, Mr. Chairman. I am Bill Beyer, and I represent myself.

I wrote my talk last night without benefit of some of the numbers that, I think it was Andrew Ryan, gave this morning; and I must say I was very, almost shocked by some of those numbers.

If I read right, he was talking about 80 percent correctness, but that's 20 percent error; and if you're looking at 5,000 people, that's 1,000 people you're getting in trouble with, over this polygraph.

I probably misinterpreted things, and I'll appreciate seeing your material.

I've been a member of the Laboratory for

forty years; thirty years as a staff member, ten years retired, but active as a staff member. My wife worked for the Laboratory for thirty years.

So between us, we have given seventy years of devotion to this Laboratory.

I've never seen anything in this forty years as disruptive of Laboratory work as the last six months or so have been; and the proposed polygraph tests --

(Applause)

One wonders, we're all wondering, how he or she will fare, and we're wondering how our colleagues will fare; and we wonder when this is all going to end.

I oppose the proposed polygraphs in our laboratory, in our weapons laboratories. I'm not against them for certain uses in investigations. There, I think they're useful; but I oppose them for mass screening.

Let me start with a real spy, Ames, a man who betrayed his country in the worst possible way, and caused the execution of at least ten American agents in the Soviet Union by giving the Soviets their identities.

He was moved solely by greed. He was

paid at least a million dollars by the Soviets for this work.

So I guess the first question you ought to ask a person, an examinee, is, "Are you greedy?"

(Laughter; applause)

Ames, I understand -- and this might be wrong, but this is what I'm given to understand by people that are in the know -- passed his polygraph test with the CIA, because he was well-trained by the Soviets to pass a polygraph test.

For example, if he was asked if he ever betrayed his country, he would translate in his mind "country" into "Soviet Union," and then answered the question truthfully.

(Laughter)

There are other ways of defeating the questions, such as using certain drugs before the examination. I understand there are physical movements you can make; hypnosis; prior practice.

On the other side, how about the innocent who are found on the polygraph to be deceptive?

I can well imagine one of our staff, like Bill Chambers, having a long distinguished record of service to his country in war and peace; if he were

asked did he betray his country, I can imagine somebody like him becoming so angry that they would fail the question.

My father was a decorated officer, who served in the South Pacific in World War II. He was also a man with a terrible temper; and I think, with that temper of his, he would have failed a polygraph exam if they ever asked him a question about his loyalty.

I can imagine, but I don't know, that that anger may have caused a certain highly respected scientist to fail his polygraph test. I know that our former Director of Counterintelligence has said that there's not a shred of evidence to show any disloyalty there.

Other sources with false positives are surprised at the questions being asked, and concerned because he or she may have been thought guilty.

I don't know; how am I doing on time?

GENERAL HABIGER: Sir, I'll tell you you're over the time; but for you, sir --

BILL BEYER: All right.

So, I've already mentioned the possibility of having a large number of incorrect or failing polygraph tests, and the result which you would

have if you had a mass examination, using the polygraph for mass examination.

Finally, we seem to be going back to the bad old days of McCarthy. In the current atmosphere, we've had two first-class postdoctoral candidates teed off because of this atmosphere.

One of the victims in the McCarthy era was one of our first and one of our best directors, J. Robert Oppenheimer. I doubt if the nation would have obtained the bomb in World War II without his leadership.

But because of the atmosphere of McCarthy at the time, Oppenheimer lost his clearance and his reputation. Now we know that he was an innocent man who was found guilty at the time.

So, I apologize for being personal, but that's the nature of polygraphs.

(Laughter; applause)

GENERAL HABIGER: Thank you, sir.

Robert Kares?

ROBERT KARES: Good morning.

My name is Robert Kares; and while I am speaking here today as a private citizen, I am also a physicist in the weapons-science community here at Los Alamos National Laboratory, and so I have a direct

personal interest in the proposed polygraph-examination rules which are the subject of today's hearing.

The recent Notice of Proposed Rulemaking which appeared in Volume 64, No. 159 of the Federal Register, dated August 18, 1999, outlines the rules for an unprecedented program of counterintelligence-scope polygraph-testing of thousands of DOE federal and contractor employees.

On Page 45063 of that Federal Register volume, and I'm quoting here from the text of that volume, "DOE invites members of the public to comment on the balance it has struck in today's proposal between legitimate national-security interests and regulatory limitations to protect employees from inappropriate or imprudent use of polygraphic examinations and the results of such examinations."

That is indeed the central issue, since it is apparent from a careful reading of the proposed rules that affected employees have virtually no protections from inappropriate or imprudent use of polygraph test results under the rules as they are written.

I'd like to first consider Section 709.15 of the proposed regulations governing how DOE may use polygraph results.

In Paragraph 1 it is explained that if after a second polygraph examination unresolved issues still remain, and I quote here again from the text, "DOE must undertake a comprehensive investigation of the individual using the polygraph as an investigative lead," unquote.

However, in the following paragraph, 2, we then read that, and I again quote from the text, "After completion of the polygraph examinations, the Department will conduct an eligibility evaluation that considers polygraph examination results, the individual's personnel security file, and other pertinent information."

In other words, it would appear from this proposed wording that the eligibility evaluation may proceed before results from any new investigations are obtained, and a security clearance may be terminated as a result.

This demonstrates that under the proposed wording DOE may indeed terminate a clearance on the basis of polygraph test results alone, despite the assurances of the Secretary.

This point becomes even clearer in Section 709.25.

In Paragraph 1, we read that,

and I quote, "DOE believes that, while polygraph examinations are a useful tool, they should not constitute the sole basis for taking any action against an individual" -- against any individual -- "except when the Secretary or the Secretary's designee determines that permitting the individual continued access to protected information would pose an unacceptable risk."

In other words, polygraph results should not form the sole basis for taking action against someone unless the Secretary of Energy feels like it!

(Applause)

Given the fact that the Secretary is a political appointee subject to political pressures, the opportunities for abuses here are obvious; and I think we've already seen some.

So it would appear from the proposed wording that it is indeed possible for an individual's clearance to be terminated solely on the basis of a polygraph-examination result.

This circumstance, combined with the fact that the meaning of the key phrase "unresolved issues" is never clearly defined, leads to a situation in which the polygraph may easily be used as a weapon

against DOE federal and contractor employees if they become troublesome or unpopular with the Secretary because of their views.

It is clear that the rules as proposed afford employees little or no protection against inappropriate or imprudent use of polygraph test results.

This fact, combined with scientifically well-known unreliability and high false-positive rates for polygraph testing as it applies in large-scale screening application, is very deeply troubling to all of us in the weapons-science community who may have to undergo this procedure or risk losing our jobs.

I'd like to close on a personal note, since I find myself in a somewhat unusual situation.

Last week I was awarded a Distinguished Performance Award from the Laboratory for my work in the design and construction of the Data Visualization SuperCorridor, a key element of the Accelerated Strategic Computing Initiative, DOE's program to replace actual nuclear testing with computer simulation.

I helped to make this project the success that it is with a lot of hard work, and a very deep personal commitment.

I came to work every day feeling good because I was doing something that really contributed to the defense of the nation, and to protecting the rights of all Americans, including the right not to be hauled in and interrogated like a criminal without any evidence of wrongdoing.

(Applause)

Now I discover that I was protecting the rights of all Americans except my own rights.

So now I find myself in the strange position of being recognized by Los Alamos for my contributions to the national defense, while at the same time wondering just what's going to happen to my career.

I don't believe that the proposed regulations provide me with any real measure of protection against being falsely accused and destroyed at the whim of some unknown polygraph examiner applying a technology which is about as scientific as dowsing for water with a willow stick.

(Applause)

So I am seriously considering leaving the weapons program, and finding employment somewhere else, someplace where I can again expect to enjoy the complete rights guaranteed for every American under the

Fourth Amendment.

I'm a loyal and talented individual, as are all the other honest and loyal Americans who work here at Los Alamos to protect the rights of all American citizens.

You'll miss us when we're gone.

(Applause)

GENERAL HABIGER: Thank you.

James Theiler?

JAMES THEILER: Good morning, sir.

My name is James Theiler. I'm representing myself, and I'm one of those arrogant scientists you keep reading about in all those reports.

I came to Los Alamos nine years ago as a post-doctoral. I'm forty years old now, and I hope to be at Los Alamos for twenty years.

For me, the long-term health of Los Alamos is personally concerning, but I'm worried because I don't have a sense that this concern is shared by the ambitious politicians for whom Los Alamos is a sound bite or a steppingstone.

I'm afraid that wholesale polygraph testing will injure and in the long run wreck the national laboratories. This concerns me as a citizen, and concerns me as an employee.

The scientific reputation of this laboratory is one of the main reasons I came here, and the scientific excellence of my colleagues is one of the main reasons I'd like to stay.

I'm proud of the science that we do here, and I'm proud because the work we do here serves the security and well-being of our nation; but if this work becomes second-rate, then the security and wellbeing of this nation will not be served.

I do not share the DOE's confidence that polygraph examination will be perceived as fair by potential recruits whose other options include positions in academia and industry where they will be trusted and where they will be respected.

(Applause)

You know, I read through the Federal Register, and I'm also concerned about the so-called exculpatory polygraph examinations.

The Federal Register says, "Use of the polygraph examination when an individual requests one as a means of exculpation in order to resolve counterintelligence or investigation security issues hastens DOE's prompt resolution of such issues."

Now, I can almost understand the argument, because indiscriminate application of an

unreliable tool is still useful on the odd chance because it might actually ferret out a spy; never mind that it has never done before.

But if a spy is identified by legitimate investigation, it seems a little irresponsible to let him off the hook just because he can fool a polygraph.

(Applause)

I don't know if the DOE is using polygraphs because it's serious about catching spies, or just too lazy to conduct honest investigations.

(Applause)

The evidence indicates that polygraphs are ineffective and that polygraphs are unreliable.

But on a personal note, I also believe that polygraphs are immoral. They take invasion of privacy to an entirely new level. It's one thing to look into my bank account, to search my briefcase, to scan my computer files, and to interview with everybody I've known in the last ten years; but it's another thing to strap me up to a machine which claims to be able -- and I'm quoting from the DOE's own briefing -- to take a picture of my emotions.

I love working at Los Alamos. I love the science, the community, the public schools, the mountains.

I even like Santa Fe!

(Laughter)

But if I refuse to take a polygraph, if I refuse to be a party to what I consider a grotesque invasion of privacy, then I may not be able to stay here.

So for me, this is a serious risk, but it's a risk that I'm seriously considering; seriously.

What the DOE should consider is this: If I find polygraphs so offensive, but I'm willing to risk the position that it has taken a decade for me to establish, how can you imagine that to the idealistic young recruits these tests will be perceived as fair?

How can you imagine that the best and the brightest will not be deterred by this short-sighted policy?

Thank you.

GENERAL HABIGER: Thank you.

(Applause)

GENERAL HABIGER: Mr. Randy Baker?

RANDY BAKER: Good morning, and thank you.

My name is Randy Baker, and I represent myself. I have a head cold, so you have to excuse my voice.

A constant factor throughout the history of mankind has been the desire to seek out and identify the unknown enemy. Various methods have been used for this purpose, from the reading of entrails in the ancient Greek and Roman civilizations to the Salem witch trials in 17th-century America.

Today, we are faced with the modern equivalent of those practices; the polygraph exam as a mass screening device.

While today we scoff at the past practice of seeking truth from entrails, is the modern polygraph exam any more reliable when used as described in the proposed rule?

In the rule's background section, the statement is made that "DOE is aware of no scientific studies that establish that polygraph examination results are unreliable for use as an investigative tool."

I would phrase the question a different way: Where are the scientific studies that establish that mass polygraph examinations are reliable for use as a mass screening tool? DOE references no such studies, because none exist.

As a national laboratory, the claims we make are subject to outside scrutiny and the test of

reproducibility. This is the basis for our credibility with the DOE and the public.

Yet DOE expects us to submit to a program that has never undergone such scrutiny, and would most likely fail if it were. Thus, it is not surprising that DOE's hopes that their actions, and I quote here again, "will be perceived as fair by most potential employees" have not been borne out.

As a ten-year employee of this laboratory, I recognize the importance of protecting classified information. Sadly, the squandering of public money on misguided tools such as mass polygraph exams will divert resources from efforts that might make a real difference in improving security, such as more in-depth background investigations and improved cybersecurity.

Instead of wasting these resources, I ask that, pending investigation by an independent body such as the National Academy of Sciences, into the reliability of the polygraph as a mass screening device, the proposed rule be held in abeyance.

However, as a realist I recognize that given the current state of demagoguery in the U.S. Congress, and the resultant scurrying for political cover by the DOE, polygraph exams will likely be

imposed regardless of their validity.

The use of the polygraph exam as a mass screening device will undoubtedly result in the labeling of otherwise loyal Americans as deceptive.

While the director of this laboratory has stated that every effort will be made to place those so labeled in non-sensitive positions, the reality is that at Los Alamos such positions are almost non-existent.

As a nuclear engineer, I did a quick search of the available jobs at this laboratory that contain the word "nuclear." With one exception, they all required a Q clearance.

Thus, the denial of access to classified information is tantamount to the destruction of a career at this laboratory for most, if not all, of the people being screened.

(Applause)

Yet proposed Rule 709.25(a) permits this denial based solely on the result of a polygraph exam, even when all other investigations result in no evidence of questionable loyalty or actions.

If we must resort to the reading of entrails, I ask that we also do not, at least, resort to the burning of witches; and that the proposed

rule be rewritten to eliminate any punitive or adverse action based solely upon a polygraph exam.

Thank you.

GENERAL HABIGER: Thank you.

(Applause)

GENERAL HABIGER: Next speaker is David Sigeti.

Go ahead, sir.

DAVID SIGETI: I'm David Sigeti; I'm representing myself. I'm a scientist employed in X Division at the Laboratory.

I want to speak to you today about the negative consequences for national security that will follow from the institution of widespread polygraph examinations at the nuclear-weapons laboratories.

As other speakers have discussed, polygraph examinations will make the problems that the laboratories currently have with recruitment and retention of first-rate scientists much worse.

I believe that the Department of Energy is seriously underestimating the depth of opposition to polygraph examinations that exists among scientists at Los Alamos, and thus is seriously underestimating the negative consequences that polygraph examinations will have on recruiting and retention.

The fact is that the open opposition to polygraph examinations that you have seen is just the tip of the iceberg. The open opponents are by no means the employees who are most opposed to polygraph examinations, or most distrusting of the entire process.

Those who are most distrusting will never come forward in open criticism of this proposal. They are convinced that to do so would be to set themselves up as targets for intense and early interrogations.

They believe that these interrogations are likely to lead to losses of clearances and jobs due to false accusations made by interrogators who are primed to be suspicious of those who question the validity of their methods.

I am aware of these sentiments because, having been open about my concerns about polygraph examinations, many staff members have come to me and told me both their agreement with my concerns and that they will not say so publicly for fear of retaliation.

Please note that I am hearing this from top-notch scientists, whose work is vital to the laboratory's mission, and who can and will go elsewhere.

You will never hear a peep from these people about polygraph examinations. They will simply leave, taking their vital skills with them, and leaving the nation less secure when it proves impossible to replace them with scientists of equal caliber.

I want to give just one example of how serious this problem is.

I was talking recently with a Lab scientist who has an international reputation in his field. His area of expertise is vital to the Laboratory's mission, and his skills make him extremely attractive to other employers.

He told me that he believed that polygraph examinations would destroy the Laboratory as a scientific institution, and that he expected he would leave the Laboratory as a result.

When I suggested that he voice these concerns, he told me that he would not dream of doing so, because he was convinced that the entire process of soliciting comment from personnel at the Laboratory, what we're participating in right here, was intended to identify individuals who would be targeted for retaliation.

Now, obviously I don't agree with his suspicions on the comment process; I wouldn't be here

today if I did.

The point I want to make is that this scientist's comments show both the depth of distrust that scientists at the Laboratory have for polygraph examinations, and the invisibility of the full depth of this distrust to DOE.

I strongly urge the Department of Energy to re-evaluate the effects that this level of distrust is likely to have on recruitment and retention if widespread polygraph examinations are instituted.

For this reason, and for many other reasons that you have heard from other speakers, I urge DOE to drop its plans for widespread polygraph examinations.

If, however, these plans go forward, I urge DOE to adopt the following suggestions in the hope that the negative consequences for recruitment and retention can be reduced.

First, DOE should change the current proposal to include an unequivocal statement to the effect that no one's security clearance or access to classified information will be revoked based solely on the judgment of polygraphers that the individual is deceptive.

The current proposal contains an

all-purpose escape clause, that leads everyone who reads it to conclude that DOE is making no real commitment to protect individuals from the effects of false-positive results of polygraph examinations.

Second, DOE should provide a detailed, complete description of the examination process. This should include an identification of any test results that are truly objective, that is, any numerical results that do not depend on the judgment of the polygrapher.

DOE should provide a tabulation of all these results, without, of course, identifying the individuals involved.

The tabulated results should include an indication of whether the subject was judged deceptive, whether there were subsequent tests, and what the results of the subsequent tests were.

DOE's willingness to provide this information will help to convince scientists at the laboratories and elsewhere that it is willing to present its interrogation methods for open, scientific scrutiny.

Finally, the Secretary of Energy should commission an evaluation of DOE's polygraphy program by the National Academy of Sciences.

The NAS should examine the full range of issues involved; including the validity of the polygraph as a lie detector, the value of polygraphs in screening tests, the value of polygraph examinations in detecting and deterring espionage, and the negative effects of polygraph tests on national security due to effects on recruitment and retention of qualified personnel.

Thank you for your time.

GENERAL HABIGER: Thank you, sir.

(Applause)

GENERAL HABIGER: John Ambrosiano?

JOHN AMBROSIANO: My name is John Ambrosiano. I'm a computer engineer, representing myself, so please don't fire me or my supervisors.

(Laughter)

I have a brief statement. I want to thank the Department of Energy for the opportunity to speak here today.

Other speakers will offer various objections to the proposal being addressed here.

They will say that polygraph screening is unscientific and unreliable. They will talk about the unfairness of calling into question without probable cause the loyalty of dedicated Americans who

have been in positions of the highest trust for decades.

You will hear them warn about the damage that this policy is likely to inflict on the reputations of our national laboratories as places where our nation's brightest stars can make substantive contributions to both science and national security.

You will hear discussions of how all this is more likely to decrease security rather than enhance it.

I believe all of these arguments, and echo them, but I want to say something else.

As a scientist, I know I'm often focused on the technical merits of any argument. Technical people make judgments about ideas based on whether they believe it's a smart idea or stupid idea.

But today I want to be thinking as a citizen, and to argue against this proposal, because it is wrong.

Picture this: Unhappy about American foreign policies, including those towards China, driven by fear of foreigners, and motivated in some cases by political opportunism, members of our government have launched a full-scale probe to uncover espionage and subversion.

Using scare tactics based on the thinnest evidence, and citing national-security imperatives, they and their subordinates have created an atmosphere of fear in which government employees are automatically under suspicion.

Once accused, employees are required to prove their innocence; and if they cannot do so, they face the destruction of their careers and reputations.

Anyone who is not proven innocent by this is considered to be at risk to our national security; and, once branded as a potential traitor, may find that opportunities for employment are effectively gone. A climate of fear and distrust, lasting years, is the result.

If this scenario sounds bad, it is; because I've just described the McCarthy era.

When Lab employees in their frustration and dismay call the process you have proposed here McCarthyesque, it sounds like hype, or a cliche; but it is not. The analogy is quite strong.

I was only a child when the McCarthy hearings took place, and could not understand them at the time; but we all learned a collective lesson about that period, and we learned that it was wrong.

The McCarthy hearings have been called

witch hunts. Nobody conducting those hearings at the time thought of themselves as witch hunters. They did not see the parallel between accusations of demonic possession by hysterical young women and accusations of communist subversion, or the inference of guilt by association; but we see it clearly now.

It's likely that none of you and none of the people involved in this process see the analogy between McCarthy's inquisitors and a polygraph examiner making judgments about a subject's loyalty to his country based on the wiggle of a pen or a blip on a screen; but the parallel is there.

We know in our American souls that the Salem trials, the McCarthy hearings, and these proposed polygraph interrogations, are all wrong.

(Applause)

If you think this is a stretch or an overreaction, I can tell you that the process of dehumanizing our colleagues and the willing suspension of our most cherished American notions of justice has already begun.

The other day, a colleague of mine earnestly asked, "Isn't this a good thing, really? I mean, to restore public confidence in the Labs, shouldn't we prove our loyalty by taking the

polygraph?"

I pointed out that not since the McCarthy era have Americans been asked to take loyalty oaths.

I heard other colleagues say, believing the figures they've been told, that if people are hurt in this process it will only be a few people, and it will satisfy the public.

We call this human sacrifice.

(Laughter; applause)

And we know that it too is very wrong.

When pressed about these issues, DOE and Lab managers have eventually said, "There's nothing we can do; this is an act of Congress."

The McCarthy hearings were also an act of Congress. As Americans, this does not excuse us from our responsibility to say and do what is right.

And I just wanted to follow up briefly with a remark.

I intended that to be a pretty speech; I thought it was fairly pretty.

But, it was really intended to make a point; and the point is that when Americans are asked to give up their civil liberties they don't think of it as uncomfortable or inconvenient, they think of it as

wrong. They think of it as evil.

And they're willing to do it, provided you can demonstrate that a far greater evil will be prevented in the process.

You have not demonstrated that.

I want to thank you very much for bringing the polygraph experts that you have on hand with you, to help dispel our confusion about polygraphs --

(Laughter)

-- but this is like getting research on the health effects of tobacco from R. J. Reynolds.

(Laughter)

I won't belabor the point that people have already raised in the scientific community very thoroughly on this.

I also want to echo the very reasonable suggestion, made many times, that you commission the National Academy of Sciences to recommend a scientific opinion on this. If you do not, I can only wonder what you may be afraid of.

And then, finally, I want to extend a compliment to the Secretary. I heard you took the polygraph exam in the past.

I honestly and sincerely believe

that that was a very commendable step on his part; it demonstrates his commitment as a leader. But as a scientist, I also know that it's one piece of anecdotal evidence in a very large non-scientific study.

So, instead of saying, hey, what a guy, I think of it as a stunt; and I think, gee, the Secretary just dived off the roof into a big puddle of water and lived. What a guy!

Finally, I wanted to offer my condolences to you, General, because I know you haven't had dealings with the Laboratory before, and probably didn't know what to expect.

I don't know what you expected in the beginning, but I hope you realize by now that this laboratory and its sister laboratories did not develop the most awesome and destructive weapons on the planet by recruiting stupid people.

(Laughter; applause)

GENERAL HABIGER: Galen Gisler?

GALEN GISLER: My name is Galen Gisler. I represent myself.

I've worked for Los Alamos National Laboratory for almost eighteen years.

I object to the polygraph test, partly because I believe that in order for the Lab to fulfill

its mission we must recruit the very best minds in our country.

The past three summers, I've been blessed with the opportunity of working with some very talented high-schoolers. These kids are irrepressibly excited at coming here, experiencing a little of what the Lab has to offer, getting to know Lab scientists, and participating in scientific research.

They're delighted with what they see and learn here. They don't all start out being interested in science; but when they leave, many of them begin to consider science and technology careers.

Some of them return here as UGS employees, and several of them express interests in exploring career options here. They know that our mission is national security, and that makes the prospects here more interesting, as it does for us.

But if we were to tell these kids that a polygraph test would be a condition of work here, I know their interest would wane considerably.

But there are deeper reasons for my objection. A fundamental issue here is trust. We all work here under a condition of mutual trust and respect. We trust that our colleagues won't steal our ideas or our possessions, and that they will look after

our safety as we look after theirs.

We trust our colleagues, our superiors and our subordinates to be honest with us and fair in all our dealings; and in turn, we each earn the trust of others by our own honesty and fairness.

Those of us affected by the polygraph ruling have all been through a security clearance in which the fundamental assessment made is whether or not we are worthy of trust. These assessments are renewed periodically.

The polygraph would seem to be superfluous, if not insulting, on that basis alone.

But an even more fundamental issue is the concept of truth itself.

Science, the principal enterprise of this laboratory, is after all a seeking after truth; and we can't pretend to engage in that search without honesty, openness and trust.

Telling the truth about what we observe, about what we calculate, about what we do, about what we learn, being honest with ourselves and with our colleagues, is inculcated into every single one of us from the first science-fair experiment we ever performed, or the first science termpaper we ever wrote.

Science and truth are inseparable.

We all know that, if we lie about nature, we will certainly be found out eventually. There is no escaping truth. Truth is ultimately accessible to all.

Now we learn, however, that our employer cannot trust us to tell the truth. Though we must, perforce, trust our employer in all sorts of ways -- to pay us, to be fair with us, to safeguard our secrets and our safety -- we find that that trust is not returned.

This is deeply, deeply offensive.

VOICE FROM AUDIENCE: Hear, hear!

(Applause)

GALEN GISLER: I fear that I cannot recommend such an employer to others.

It is even morally troublesome to work for such an employer, myself.

GENERAL HABIGER: Thank you for your comments.

(Applause)

GENERAL HABIGER: Our final scheduled speaker is Joe Ruiz.

Thank you for coming today.

JOE RUIZ: Thank you.

I'm not sure if anyone has officially told you that Bienvenidos en la tierra de Nuevo Mexico means Welcome to the land of New Mexico; it's a pleasure to have you here.

My name is Joe Ruiz. I'm here today on behalf of Senator Bingaman, who provided his comments that have already been submitted to the record.

I would just like to submit briefly to the attendees a summation of the comments that he submitted.

I note that you were all with us yesterday, but I'd like to do it for the benefit of the attendees here today.

Senator Bingaman opposes this rule.

(Applause)

This proposed use of polygraphs goes far beyond what he sees as legitimate use of this investigative tool. He does not support the proposition that polygraphs should be used as a screening tool by the Department of Energy.

His opposition is based on five factors.

The first factor is that the proposed rule's basic premise, that screening polygraphs are effective in detecting guilty individuals, is not supported by scientific evidence.

Senator Bingaman believes that the Supreme Court said it best last year when it rejected the use of polygraphs in military courts-martial.

The Court said, and I quote, "There is simply no consensus that polygraph evidence is reliable. To this day, the scientific community remains extremely polarized about the reliability of polygraph techniques," close quotes.

The Court also pointed out that, and again I quote, "Although the degree of reliability of polygraph evidence may depend on a variety of identifiable factors, there is simply no way to know in a particular case whether a polygraph examiner's conclusion is at risk, because certain doubts and uncertainties plague even the best polygraph exam," end quote.

The Court's contentions are backed up by the views of knowledgeable scientists, and by a comprehensive review by the former Congressional Office on Technology Assessment.

And, of all polygraph techniques, screening polygraphs have the least scientific support. Thus, DOE's rule is fundamentally flawed from the start.

(Applause)

The proposed rule states that, quote, "DOE is aware of no scientific studies that establish that the polygraph examination results are unreliable for use as an investigative tool as DOE has today proposed to use them," close quote.

Senator Bingaman believes that this is inaccurate and inappropriate as a basis for rulemaking.

DOE bears the burden of proof for producing scientific studies that validate its approach in this rulemaking, particularly since there are ample scientific studies that call the validity of screening polygraphs into question.

(Applause)

It is not appropriate or reasonable in the rulemaking to leave the public ignorant of DOE's reasons for believing that its proposed rule will be effective; or, worse, to take the position that it is up to the public to prove false DOE's seemingly unsupported assertions.

The second reason for Senator Bingaman's opposition to the rule is that it takes what he believes is an unrealistic view of the problem of false positives.

He is concerned that people who are judged, and, quote, "failed" a polygraph screening will

not be easily cleared; and this will essentially require the person, or DOE, to prove a negative.

In his opinion, this will be particularly difficult to do, judging by the way DOE security issues have been treated over the last year.

The third reason for Senator Bingaman's opposition to the proposed rule is that its provisions are unacceptably vague on key issues, such as who will be subject to requirements of the rule.

DOE has listed a number of categories of personnel that might be eligible for polygraphs without much discussion as to why it believes that such categories present espionage risks.

DOE has explicitly postponed to a later date and, quote, "internal process," unquote, the development of criteria by which persons in these broad personnel categories would be selected for polygraph examination. These criteria should be in the rule so that the public can comment on them.

The fourth reason for Senator Bingaman's opposition is that the proposed rule in his view does not give sufficient consideration to the privacy and other legal issues that would result from DOE's proposed polygraph program.

The proposed rule does not adequately

protect the rights of innocent parties to counsel at the times when they need it the most in this polygraph process.

DOE has also proposed creating a permanent record system that may contain audio- and videotapes of employees sharing private information about themselves.

Such material, if not substantially related to counterintelligence, should not be retained.

The final reason for Senator Bingaman's opposition grows out of the proceeding itself.

He believes that the proposed counterintelligence polygraph program will make it much more difficult for the DOE laboratories to attract and retain the best and brightest scientific and technical talent.

These individuals have many options in today's competitive technology marketplace. The Chiles Commission characterized the DOE as being at war over personnel with the private sector.

Competing employers will certainly not subject individuals to polygraph screening, as this practice is forbidden in the private sector by the Polygraph Protection Act of 1988.

The DOE is thus instituting a new test

for current and prospective employees that will put its laboratories at an even greater competitive disadvantage with the private sector.

DOE's hope that its proposed rule, quote, "will be perceived as fair by most potential employees," unquote, is unlikely to be realized if these potential employees research the scientific literature on screen polygraphs prior to making the decision to accept employment.

Senator Bingaman's basic view is that this rule goes far beyond the use of polygraphs that he would support.

As a limited investigative tool, where suspicions already exist, there is reason to think that some polygraph techniques may be valid; but this proposed rule does not confine itself to these situations, where there is partial evidence of the validity of polygraphs.

Thus, Senator Bingaman would not support DOE issuing a final rule that substantially resembles this proposal.

If notwithstanding Senator Bingaman's opposition the DOE proceeds with this rule, Senator Bingaman recommends that it reconstitute and reconvene the Chiles Commission to conduct a formal study of the

rule's likely impact on the critical human resources needed to ensure the safety and reliability of the nuclear-weapons stockpile.

He would also recommend that the DOE seek review from the National Academy of Sciences --

(Applause)

-- on the weight of scientific evidence establishing the reliability of the types of polygraph screening it plans to implement.

Senator Bingaman believes the DOE should complete both studies before re-proposing a new rule that addresses what he sees as the deficiency of these proposal, and allows adequate public comment on the specifics.

Muchas gracias.

GENERAL HABIGER: Thank you, sir.

(Applause)

GENERAL HABIGER: Ladies and gentlemen, we'll take a ten-minute break, and we will reconvene in ten minutes.

Thank you.

(Recess taken)

GENERAL HABIGER: Ladies and gentlemen, I'd like to reconvene this public hearing.

Our first unscheduled speaker is

Labriano Lucero.

And help me with the pronunciation, if you can.

LABRIANO LUCERO: Good morning.

As you notice, I am deaf. I'm an employee here, and I've been working here for the last 25 years.

Within this time, as this is the first time we've faced anything like this, I have to agree with my colleagues: It is a mistrust of employees at the Lab.

A polygraph-initiated examination used for screening, to me, is an insult. To me, it is a way of looking at and using technology, not to make it accessible, but to make it inaccessible.

As I've seen how technology is used, especially in the media, as been stated before, the media is an area where the image of the Lab has suffered.

But at the same time, it's also an area where we're going to use media, where your personal image, whether videotape or audiotape, will suffer.

I have to state, the communication issue is critical for me. I have an interpreter here, Kim Corwin. But you have to realize I've been here 25

years; Mr. Corwin was hired two months ago.

Can you imagine the communication issues I've faced?

Can you imagine the trust or mistrust that I have in possibly being called to a polygraph exam without an appropriate interpreter, who is the top-skilled certified interpreter, which we require, which would be my right under the Americans with Disabilities Act, and my right as a human being?

And so, those are my concerns.

Thank you.

GENERAL HABIGER: Thank you, sir.

(Applause)

Glen Wurden?

GLEN WURDEN: My name is Glen Wurden, and I'm representing myself.

I'm a technical staff member and team leader for energy programs, specifically a research program on magnetic fusion.

It's a nuclear program; it's very closely allied with nuclear weapons, but it is not a nuclear-weapons program.

So the work that I do is completely open and unclassified, and yet I've held Q clearance for the last 17 years. I can go to any laboratory in this

country; indeed, any in the world. I came as an Oppenheimer fellow.

When I came here, I knew I had to be fingerprinted, voluntarily, at the local police department.

I knew I had to be investigated, voluntarily, by quasi-FBI investigators, a branch of DOE. It depends what year it is as to whether it's FBI or some other agency.

I did not come here to be polygraphed, voluntarily or involuntarily, by John Doe, Polygrapher.

My work today will continue tomorrow whether I have a clearance or not; but I do believe that a clearance is an essential thing for workers at this laboratory, so that when we work on different projects our joint skills and knowledge can be used by the nuclear-weapons program people, and the techniques that I develop, the measurements that I'm able to make, my knowledge and skill, can help nuclear-weapons programs in the long run.

And indeed, in an emergency situation, we have a pool of people here at the Laboratory who are trusted; and this polygraph testing scheme is an implicit lack of trust.

So when you want to find the spies that

might be in this laboratory, I don't think you're going to find them with a polygraph. I do know that you will chase away the brilliant scientists that you want to have at this laboratory, because they can work other places.

Thank you.

GENERAL HABIGER: Thank you.

(Applause)

GENERAL HABIGER: Thank you.

Tom Intrator?

TOM INTRATOR: Good afternoon. Thank you for taking the time to hear us.

I'm a scientist; I work on fusion research.

I don't have a particular axe to grind with a clearance, because I don't have one. However, I do have serious objections to the whole process here.

First of all, how did we get here?

I think that this whole polygraph issue is very reminiscent of the McCarthy era. I think that in the McCarthy era, as now, the hysteria started with the security pretext. There were some elements that were real, but it was actually about political careers.

The present political climate is not different.

I think, if you take a hard look at what's going on, you realize this may not be about security at all; this is about politics. And this is very disturbing to me. I don't think we're solving the problem that we think we're solving.

Secondly, I think we have a credibility problem, not only with DOE but with Congress. I don't believe the DOE assurances that I've heard here, because there's only four questions that matter.

I think this is the proverbial camel's nose under the tent. I think, as in the McCarthy era, there will be other questions that come up with a polygraph test, that I don't think are germane.

I think this is ripe for abuse, and I have a problem with it.

Not only is there a credibility issue with DOE and Congress; there's a credibility issue with the polygraph. As has been said several times before, the false positives could be 1 percent or 10 percent; or, if you look at Scientific American in the latest issue, it could be 40 percent.

There's a lot of discussion, a lot of disagreement, as to how real a polygraph result is. There is a need for a credible polygraph study, and I think a study of polygraphs which would give some

scientific basis for accepting or rejecting it as a tool, I think, is a very good idea.

I think, in addition, you ought to consider how many of us are going to refuse to take the polygraph test.

Are you willing to deal with civil disobedience on this scale? You ought to think about it. This could be your legacy.

And part of this is, how many of us are going to take a stand and leave over this issue? I came from the University of Wisconsin six months ago. I intended to stay here for the rest of my career. This is a first-class operation.

However, this is an issue over which I would leave; take my money, take my expertise. I could be out of here on this issue alone, because it means a lot to me.

So, General Habiger, I think, as has been said before, this is a historical moment for you and your colleagues.

You could preside over the devolution of this Lab into a third-rate operation, or you could exercise some common sense and choose another path. I think history will be the judge. The choice, of course, is up to you.

Thank you.

GENERAL HABIGER: Thank you for your comments.

(Applause)

GENERAL HABIGER: Bill Varnum?

BILL VARNUM: My name is Bill Varnum. I'm representing myself, and I work at the X Division here.

People have spoken very eloquently to a lot of issues, and I don't intend to repeat those; but I would like to bring up one issue.

You've now heard comments from three different laboratories; and from talking to people at the other laboratories, reading news reports, and listening this morning, 100 percent of those comments have been in opposition to the polygraph testing.

From the proposed rulemaking, we will have to take this test voluntarily. I think it is a stretch of logic to believe that a large number of us would be willing to take this voluntarily, which means that when we go to the polygraph we will be asked to sign a voluntary consent form, and if we do that we are obviously going to be lying to security officials, which is grounds for removing our clearance.

If we refuse the polygraph, our

clearance will be removed; and I don't think this situation will stand up in any court of law in the country.

I don't appreciate the situation at all.

Thank you.

GENERAL HABIGER: Thank you, sir.

(Applause)

We have no further unscheduled speakers at this time. We will stay in session. The panel will go back to a little holding room we have. If we have any additional unscheduled speakers, we will return.

In the event that we don't have any further unscheduled speakers, or even if we do, we will recess the hearing at 1300 hours, until we reconvene at 1500 hours.

Thank you.

(Recess taken)

GENERAL HABIGER: Ladies and gentlemen, the time is now 1300 hours local. We have no further unscheduled speakers for this session. In that event, I hereby declare this hearing closed, and we'll reconvene at 1500 hours local.

Thank you.

(Morning session closed, 1:00 p.m.)

AFTERNOON SESSION (3:00 p.m.)

GENERAL HABIGER: Good afternoon.

On behalf of the Department of Energy and Secretary Richardson, I'd like to thank each and every one of you for taking the time to participate in this public hearing concerning the proposed Polygraph Examination Program.

Secretary Richardson has personally asked me to be here today, to listen carefully to your comments and concerns, and to report back to him. Let me assure you that we take this issue and your concerns very seriously.

The purpose of this hearing is for DOE to listen to your comments on the Department's Notice of Proposed Rulemaking. This is a time for us to listen and to understand your concerns.

It is not, I repeat, it is not a forum to debate the issues. We are focused on what you have to say. Your comments are not only appreciated; they are absolutely essential to this rulemaking process.

The Department of Energy proposes regulations for the use of polygraph examinations for certain DOE and contractor employees, applicants for employment, and other individuals assigned or detailed to federal positions within the Department.

The proposed regulations describe the categories of individuals who would be eligible for polygraph testing and controls for the use of such testing, as well as for the prevention of unwarranted intrusion into the privacy of individuals.

These regulations are being proposed to comply with various Executive Orders which require the Department to protect classified information.

These regulations for the use of polygraph examinations for certain DOE and contractor employees are intended to protect highly sensitive and classified information and materials to which such employees have access.

This rulemaking also proposes conforming changes to regulations governing the Department's Personnel Security Assurance Program, also known as PSAP, as well as the Personnel Assurance Program, known to many as the PAP program.

If you have not already read the Federal Register notice from August 18 of this year, I urge you to do so. Copies are available at the registration desk, at the rear of the auditorium.

The comments received here today, and those submitted during the written comment period, which ends October 4, will assist the Department in

this rulemaking process.

All written comments must be received by this date to ensure adequate consideration by the Department.

The address for sending in comments is Douglas Hinckley, United States Department of Energy, Office of Counterintelligence, CN-1, Docket No. CN-RM-99-POLY, 1000 Independence Avenue Southwest, Washington, D.C. 20585.

In approximately 14 days a transcript of this particular hearing will be available for inspection and copying at the Department of Energy's Freedom of Information Reading Room in Washington, D.C. The address is specified in the Federal Register notice and is also available at the registration desk.

The transcript will also be placed on DOE's Internet web site at the following address: Home.doe.gov/news/fedreg.htm.

In addition, anyone wishing to purchase a copy of the transcript may do so by making their own arrangements with the transcribing reporter, seated here at the front of the auditorium.

This will not be an evidentiary or judicial type of hearing. It will be conducted in accordance with Section 553 of the Administrative

Procedure Act, 5 U.S.C. Section 553, and Section 501 of the DOE Organization Act, 42 U.S.C. Section 7191.

In order to ensure that we get as much pertinent information and as many views as possible, and to enable everyone to express their views, we will use the following procedures.

First, speakers will be called to testify in the order indicated on the agenda.

Speakers have been allotted five minutes for their verbal statements.

Anyone may make an unscheduled statement after all scheduled speakers have delivered their statements. To do so, please submit your name to the registration desk before the conclusion of the last scheduled speaker.

The last scheduled speaker for this afternoon is Ken Lagattuta. I probably butchered his name, and I'll let him correct me when he gets up to speak.

And finally, questions for the speakers will be asked only by members of the DOE panel conducting the hearing.

As I said, the purpose of this hearing is to receive your comments and concerns on DOE's Notice of Proposed Rulemaking. I urge all

speakers to provide us with your comments, opinions, and pertinent information about the proposed ruling.

Please remember that the close of the comment period is October 4, 1999. All written comments received will be available for public inspection at the DOE Freedom of Information Reading Room in Washington, D.C.

The phone number there is (202)586-3142.

If you elect to submit written comments, please include ten copies of those comments. If you have any questions concerning the submission of written comments, please see Andi Kasarsky at the registration desk at the rear of the auditorium. She can also be reached at (202)586-3012.

Any person submitting information which he or she believes to be confidential and exempt by law from public disclosure should submit to the Washington address a total of four copies: One copy complete with the confidential material included, and three copies without the confidential information.

In accordance with the procedures established at 10 CFR 1004.11, the Department of Energy shall make its own determination as to whether or not the information shall be exempt from public disclosure.

We appreciate the time and effort you

have taken in preparing your statements, and are very pleased to receive your comments and opinions.

I would now like to introduce the other members of our panel.

Seated to my immediate left is Lise Howe, an attorney with the DOE's Office of General Counsel. Lise?

And on my far left, Bill Hensley; and he's the Director of Office of Security Support with DOE's Office of Defense Programs.

Before we begin to hear your comments, we thought it would be extremely valuable to provide you with a short briefing on polygraphs.

We are well aware that there is a lot of confusion and many misconceptions about this particular issue. Last week we held in-depth briefings at each of the Labs. This afternoon's briefing provides some of that same material.

I would like to call first Dr. Andy Ryan, Director of Research from the Department of Defense Polygraph Institute; and Dave Renzelman, Polygraph Program Manager for the Office of Counterintelligence, Pacific Northwest National Laboratory, to provide that briefing.

Andy?

MR. RYAN: Thank you, General; and thank you again for having me here today to represent the Department of Defense Polygraph Institute.

I must start off with an apology; we don't seem to be projecting what's on the computer right now, so I'm going to have to ask you to imagine that you're seeing words on the screen for the moment.

As an instructor I guess for a number of years, starting at an academic institution, and before that in high schools and other places, I tend to always want to start with a definition.

I'd like to start with a definition of polygraph, if I could today, and describe polygraph as being the forensic discipline supporting intelligence and law enforcement.

What we do is we look for a stimulus/response kind of relationship. We provide a stimulus which we call a test item, and we look for a physiological response from the nervous system to see if there's a relationship between the two.

When we were talking about a polygraph test, we were talking about a number of different variables; and today I'm going to try to help you understand more about the test itself, and how we train our examiners, and the school they go through, and the

types of research we look at in support from DoDPI to get the answers you're most interested in, as well as myself.

Currently in the federal government there are 22 federal agencies that have polygraph as a program to support their missions. Twelve of those agencies have programs that conduct security screening examinations, similar to the ones being proposed by the DOE for Los Alamos and the other labs.

I'm not even projecting here.

The DoDPI is the only training institute for federal examiners nationwide. We train all of the federal examiners from all 22 of the polygraph programs.

The school consists of a new training facility actually located at Fort Jackson, South Carolina, that just opened up; had our ribbon-cutting in June of this year.

And we have a brand-new state-of-the-art facility, which has two missions, really; to conduct research, and to conduct instruction on the federal polygraph examination program.

Our students come to us with a minimum of baccalaureate degrees. Our examiners that work there as instructors and the support staff on the

research, we have six Ph.D. scientists working for us; all are there at the direction of the institute itself, and we are now being accredited or are being in the process of being accredited by the Department of Education to award a master's degree in psychophysiology.

Because of that requirement from the DOE, each of our program areas in the curriculum are supervised by Ph.D.-level people.

In addition to the basic level of instruction, which is some 600 classroom hours, six months of an internship following that, and an additional year of probation before an examiner is able to conduct an actual examination, we have continuing-education courses that are conducted year-round, either at the DoDPI or at sites most convenient to the agencies where we retrain or continue to train our examiners, because they have a continuing-education requirement, much like all other professions that have certification and licensure.

They have a requirement of 80 hours every two years; so it's quite intensive in terms of the training they have to go through.

Each of the federal agencies that we support have what's called a quality-control program.

You'll hear more about the quality-control program within the DOE when David Renzelman talks to you in just a moment.

But I'd like to say that the beginning of the quality program starts at DoDPI as we teach and instruct the examiners how to conduct exams in what we call the DoDPI method, the DoDPI way.

In addition to the quality-control programs at each agency, we at DoDPI have a Congressional mandate to have our own quality-control program that goes out and inspects each of the other quality-control programs.

So, on a routine, regular basis, we have a quality control unit that sends examiners out, inspection teams if you will, to go to each of the agencies and make sure that they're following basically the rules and procedures that we have prescribed at DoDPI.

A couple of reasons for that.

If they do it the way we are teaching, then we can support them in terms of expert testimony and anything else.

We have produced at DoDPI written examination standards. It's a federal examiner's handbook, if you will, that is given to each of the

examiners as they go through the school; and that basically gives them, if you will, a desktop manual to follow throughout their career.

In addition to that, in addition to seeking accreditation from the Department of Education, we're also working on standards, if you will, for conducting polygraph examinations outside of the federal government, because we are aware that there are private examiners and private schools that don't necessarily teach polygraph exams the way that we teach it, nor do they have the quality control that we have.

So we're working with the ASTM in creating standards for the outside examiners as well.

Each of our students, as I mentioned, comes to us with a minimum of a baccalaureate degree. The instruction at DoDPI is at the master's level. We are looking, as I said, to grant the master's degree soon in forensic psychophysiology.

The curriculum has been developed and proposed to the Department of Education, based on our research.

So as we define and describe the test format, how it's conducted and how the scoring will take place of the exam itself, the charts, if you will, that is all based on the research that we have, either

from internal research at DoDPI or external research when we fund research.

Also, in addition to the curriculum, any curriculum change, should we find through research that we find a better method or a better mousetrap, if you will, than the way that things are done now, we can modify that, we can change it for the better, we can have better instrumentation, better techniques, better interpersonal skills, and then the research drives that change in the curriculum itself.

There are a couple things in terms of accuracy which I know is of interest to all of us, because I'd like to talk about in terms of what we are looking for at DoDPI in training examiners and making the program better.

First, there is an area called the true positive, the one that we want to be very accurate with, and that's detecting the person who is not being quite candid or completely candid with us, the person who is telling us a lie or being deceitful. We call this deception, indicated by the exam.

So we want to make sure that we are able to detect lies as accurately as possible.

We also want to be very good at detecting the truth. Sometimes I don't know which is

easier, detecting truth or detecting lies; but that's also an interest of ours, in terms of we want to be very accurate with the honest people.

There are two types of errors that we are concerned with in validating our accuracy.

One is -- and I know this is a concern here -- the false-positive error. How many times do we actually call someone deceptive when in reality they are truthful?

It is an interest at DoDPI, it is an interest, part of our curriculum, to try not to make these types of errors; but we also have an interest in what we call the false-negative error, letting someone slip through the system. There are case studies, case examples I'm sure you're aware of, where this has happened.

So we have sort of a twofold mission. We're trying to lower both as you know, in an inverse relationship, and it's not easy.

There is nothing in the literature that can tell you absolutely what the accuracy rate is, the validity, reliability, and utility of polygraph. What we do know is that we have found no better way of doing what we do in terms of detecting deceit within the individual.

What we do know, in addition to that, is that every science, if you will, every methodological process, has its strengths and weaknesses; and one of the things that we do to try and I guess achieve this goal of knowing as close as we can the validity and other issues is, we conduct two types of research.

We obviously have the analog research being conducted at the DoDPI. As I mentioned, we have six Ph.D.-level scientists there, each in their own specialty, looking at ways to better do polygraph examination.

In a laboratory, you can imagine asking someone, a subject that we bring in, whether it be a military personnel on the base that you're located, or a paid subject we bring in through a contracting agency, or a student going through an introductory psychology course at a university nearby, or one of the university sites because we fund, it's very difficult to ask a subject to role-play or to pretend to be a spy.

What happens is we are trying to, in a mock scenario, mock-screen scenario, ask them to create the emotion that we are trying to measure with physiological measurements.

So that's a weakness in the analog

study.

The strength of the analog study is that we are programming our subjects to be either innocent or guilty, so we know what is called ground truth. We know that a certain percentage of our subjects are going to be truthful or attempt to be truthful on the exam.

We know that a certain percentage of them are going to be deceitful; they're told how to do that through their mock scenarios.

We look at kind of a Mission Impossible feed all the time; they have to go through all kinds of things to commit this crime, espionage, come back to the examiner and be examined. Of course, the examiner is doing it in blind.

So that's our strength with the analog study.

We want to compare the analog study to the field studies; and again, we have strengths and weaknesses.

The strength of a field study is we're out there in the real world, dealing with real subjects who do have the behaviors and have the experiences that we're trying to measure and to assess the truth of the subject.

The weakness, of course, in the field studies is that it's very difficult in most cases to know absolute ground truth.

If you could imagine, again, in a criminal setting, the only way we know absolute ground truth is when someone confesses to the crime, or we actually have other forms of evidence to prove the guilt of a certain person.

So when we're collecting our data, and we have what's called a confirmed case database, that database is then distributed to other people to write the algorithms for scoring and to help us in making this more accurate, we only allow those cases into that database that we have absolute ground truth on.

And we reject a lot of cases, because in a situation where no one has confessed or the crime is unsolved, or it's in some type of an investigatory process, we cannot put that in the database and call that ground truth.

So we have analog studies and field studies, and we have also data that say the analog studies have a certain accuracy rate or a certain validity and the field studies have another.

So I'd like to share with you, if I can, some of the most recent studies, empirical studies,

that we have conducted or supported at DoDPI.

In a recent study, we had 208 subjects go through a mock-screening scenario where they were actually asked to commit some type of espionage, excluding the inconclusives; and I'm sure you're aware by now an exam can come out either positive, negative, or we can't tell from the data that we have.

What happens to the inconclusives, you'll hear about in a moment.

But in that particular study, we found that we were 93 percent accurate with all of the subjects who were programmed to be guilty; we were 94 percent accurate with those that we programmed to be innocent.

There was a similar study using non-federal examiners, people that are trained in another way, another type of school, maybe not taught the DoDPI way; in some cases there's a lot of overlap, but we ask them to use our methods so that we can generalize our results out to the federal community.

And in this case, where this was a field study, the previous study was an analog study, we had 11 percent inconclusives; a little bit higher.

We found that 72 percent of the deceptively programmed subjects were identified by

these examiners, and 87 percent of the truth subjects were identified.

So there is some difference when you ask what is the validity, accuracy, of a polygraph; there is a difference, as we know, between the analog study and the field study. And I think you find this true in almost every science.

I'd also like to share with you, if I can, some of our data from the DoDPI.

As you probably imagine by now, we conduct these types of aperiodic examinations of our people, which include federal employees like myself as well as contract employees for DOD.

In fiscal year '98 -- wish you could see this nice little chart, to help answer a lot of our questions -- we administered this test to 7461 of our employees and/or contractors. Zero people refused to take the exam; Everybody was willing to take the exam.

Of the 7461, 98.3 percent of them were found, after the first series of charts, if you will, the exam, to be ground truth. 7334 were found to have no significant response, meaning there was nothing in the charts to suspect a reason to go any further.

Two people out of that population, if you will, were found inconclusive, because we could

not determine definitive results; so that goes as inconclusive. We have to find some other way to determine the truth in this case.

We did find four people who came up with a significant response. We would call these people deceptive.

They made admissions, when questioned by the examiner -- and you'll hear in a moment how this occurs -- very typically the examiner would say you had a response on this item, and we don't understand why we had this response, and it's discussed.

In these cases, four people did admit to the fact that there was something going on.

Additionally, we had 11 people who came out with a significant response, from the same population. They had been determined in the exam to be deceptive. After the question to try and understand what might be causing the response, it was not resolved.

They continued to have significant responses to the questions, even after they were refined.

These to the best of my knowledge, because we did it with a number of agencies in the community, are in the investigative process.

But importantly for this, I think what you need to know is if you're adding up the numbers -- I haven't got everybody there yet -- there were 110 people who were identified as having a significant response, and that they were then cleared.

So the false positive of 1 1/2 percent in this case turned out to be part of our true positive, people who were identified as being honest.

I guess you could call this a case study, because it's real data, and the data was just given to us in research, because we want to always keep abreast of it.

We do know we're finding about 1 out of over 480 exams produces a false positive, something that needs to be followed up on, not someone who was guilty and some action needed to be taken, but some action where follow-up information needed.

But also in that same type of process at DOD we found four people who were involved in foreign intelligence services; and this was discovered through the polygraph administration.

We found three additional people who had committed deliberate acts of sabotage against government defense systems, from other computers.

Thirty-eight cases of hidden foreign-

national contacts, and 125 instances of deliberate disclosure of classified information to an unauthorized person.

So a lot of the utility of polygraph is additional information that was derived in that follow-up question, if you will.

We need to be aware that polygraph is not, any more, a unique American technology. Several years ago, back in the '50s, I guess, we were the only country that used polygraph. Now we know that 68 countries internationally are using polygraph, and are using it in similar ways that we do, to protect our national security.

There's an increasing number of countries that are using it in intelligence and counterintelligence services.

It is one of the missions of DoDPI to follow the foreign usage, and how that is growing. I guess it would be safe to say that now they have to keep up with us, and we have to keep up with them.

One of the things we discovered early on in trying to assess whether other countries were aware of our techniques and our methods is that we were aware during the Cold War that there was something being done to defeat the polygraph, and we called this a

countermeasure.

There are a number of different ways of conducting countermeasures, ways to beat the exam, if you will. It is now basically public information, it's in the printed literature, it's on the Internet. You can go to the Doug Williams page, I think it's called, on the polygraph or something like that, and you can download all the information. It will basically teach you methods to defeat the polygraph.

Some of this might include visual imagery, hypnosis, biofeedback, flexing and tensing muscles, and all kinds of different things to try to give misreadings to the polygraph exam.

I think, for a lot of reasons, these types of countermeasures assume a lot of naivete on the examiner's part. This is something that we can now detect.

We have algorithms that are looking at countermeasures, because we have artifacts in the wave forms that don't make sense to us.

There are many uncertainties in trying to apply algorithms in real life, because you have to know exactly when to apply them. We ask different types of questions, and if you apply them globally basically what we get is a flat-line reading, and we

have to say, no opinion; something is going on here.

We do acknowledge that there have been cases where we've been defeated by countermeasures.

I guess one of the most famous ones was the Aldrich Ames case, by the CIA. It was found he was trained by the Soviets in how to defeat the polygraph. So we had basically a mole inside the agency taught how to beat the polygraph, even though he went through several of them.

In reality, going back and looking at the case, we found he didn't beat the machine, so to speak' he beat the system. He was trying to, I guess, work his way through the system with the examiner in the system that was in place.

Federal examiners at the DoDPI are being taught, as I mentioned, to detect countermeasures. We have technology, we have instruments; lots of ways of looking at how to detect if these things are taking place.

In terms of drugs, we do not know of any pharmaceutical way of having the autonomous nervous system respond differently to different questions when you have no idea or wind of what the questions are that are going to come about.

We do know there are drugs, medicines,

that can suppress the autonomic nervous system, but it does it globally; so then you go back to the sort of flat line.

Most recently, London and Krapohl published in the Polygraph Journal this year a case where we have documented evidence now, admission from the subject, who took the Williams information, who bought the book if you will, learned how to do the countermeasures and tried to apply them in a polygraph setting, and was unable to beat the polygraph examiner.

These are called our post-Ames methods; ways we learned to get around that.

I'd like to close with a quote from a recent book from one of our staunchest opponents, David Lykken from the University of Minnesota.

David is one of those people we look to to create more questions for us. The more criticisms we have, objective criticisms, the more we can basically modify our methods.

And I'm just going to paraphrase some of what he says.

Basically, he's saying those positions, he quotes, will be CIA operatives.

These are sensitive positions, in which the person can do great mischief; and it may be in the

public interest to use a screening procedure that reduces the number of undesirable candidates hired, even if this also means excluding a large number of perfectly acceptable people.

Thank you for your attention.

MR. RENZELMAN: I'm not sure what we have to do to get this computer working.

Was I successful?

MR. RYAN: No.

MR. RENZELMAN: Maybe it's our equipment.

My name is David Renzelman. I'm a contract employee with Pacific Northwest National Laboratory.

The agenda that you have indicates that I'm the program manager of the Office of Counterintelligence there.

That's not the case; I'm the polygraph program manager for the Department of Energy. I'm paid by Pacific Northwest National Laboratory, and I report generally to General Habiger, and also report to Mr. Curran.

Mr. Curran is Director of Counterintelligence, and General Habiger is Director of Office of Security and Emergency Operation for DOE.

What I would like to do is, should DOE implement a polygraph program that would affect you in the position that you have at this laboratory, I'd kind of like to tell you what to expect and what not to expect, what it can do and what it won't be doing, and generally assist you in making it an experience that would not be as miserable as it could be if you did not have this issue before you.

Polygraph is a mechanism to record externally on paper, via computer, how you're emotionally experiencing physiological responses when you listen to, think about, and answer questions that you and the examiner will agree to before the test is administered.

And I think that's critical; and I'll tell you why.

In the early days, when we were doing testing, I was with OSI, and we were doing testing for NRO to help them get their program started.

We were down at TRW, and there were about 47 people in the audience, and I thought it would be important for me to understand what everybody thought the term espionage meant to them.

They were given a piece of paper, and asked to write down what they thought espionage meant.

The one that I'll take with me to my grave was a woman who came back and said, yes, I've committed espionage, but I only did it twice. I was on travel both times, and I told my husband about it, and since then we've gone to marriage counseling, and I promised never to do it again.

(People chuckling)

Now, I shudder to think what would have happened had we not explained to this person what espionage really meant, and whether or not she had really done it, because the results of that test could have been adverse to her well-being.

The questions that we're going to ask are in different categories.

We have security questions. We want to ensure that you never engaged in espionage against the United States of America, so we're going to ask you that, pointblank: Have you ever engaged in espionage against the United States?

And you know what? You're not going to wake up some morning and fall out of bed and become a spy. This takes a series of actions on your part to be a spy and commit espionage against a country. I'm not going to go into that, but it's common sense.

We're going to ask you about sabotage,

which would include terrorist activity.

Terrorist activity in this country is getting more and more prevalent. We've had it from post offices to churches. It would be nice not to ever have it in the area of who we work with and design and do things like you people do, pertaining to nuclear weapons.

We want to make sure that there's been no illegal disclosure of classified information to a representative of a foreign or hostile government who could take that information and use it to their advantage, and our disadvantage.

General Habiger has told me, and Mr. Curran has told me, that we are not interested in inadvertent or improper conversation with a loved one or spouse, a friend or a neighbor.

That's two things. It's not terribly intelligent, and it's against your rules. They call it a security infraction; and we're not testing for that. Very simply put, they call it pillow talk.

Now, we don't care about that. No matter how interesting that story may be, we may have to record it to get it out of your life and talk about what we're really there for, which is, are you working for our government only?

That's what we care about.

Lastly, we're going to ask you a question about have you had any unauthorized contact with a foreign intelligence service.

We're not talking about some exotic relationship that you may have encountered on a trip to some foreign country. Regardless of how interesting that tale may be, we would not want to know about that, and would stop you before you could continue.

But we are interested if you've been contacted by a representative of a foreign intelligence service.

Now let's suppose we ask those questions and record the physiological data, and enter it in the computer on a piece of paper, three parameters -- respiration, electrodermal activity, and cardiovascular activity -- and we don't see physiological responses to those questions. One might think you were telling the truth, because it did not trouble you.

We would like to know you have the capability to respond physiologically if you were to tell an intentional lie. So we have a series of questions that we would ask you to lie about.

Very simply put, one of them that we're permitted to use is something that most of us can

relate to, and that's committing a traffic violation.

Most people who walk or drive a car have committed a traffic violation in their life. We would ask you, have you ever committed a traffic violation? Please acknowledge, yes or no.

Don't tell us about it; we don't want to know the details. But can you acknowledge that you did? And if you did, we're going to ask you, can you envision when you did it, and what it was? And if you can go along with that, that far, we're going to say, during the polygraph test, we want you to lie when we ask you if you did it, and say no. We're going to ask you to visualize it, think about it, and intentionally say no.

Now, what have we done? We've taken your psychological setting and have it focus on the area which is going to cause you some concentrated effort, because you're going to have to think about that, you know that you don't have to remember the truth it comes out automatically.

But you're going to have to think about lying to us about committing a traffic violation. You're going to have to see it make a conscious effort.

Your body's autonomic nervous system will record physiological data on that chart that we're

going to look at that can show us how you could respond if you were to lie.

And that is a comparison technique.

That is not really done by the people who write the books and put them on the Internet in the '80s or anything. I agree with the data that's on the Internet. That's apples; this is oranges.

That data was collected on students trying to pretend to steal a wallet. We're talking about real-life things here.

And if that happens, one would tend to think there's no need to test you any further about that question pertaining to espionage or any of the other subjects, and we would proceed.

Now, that sounds like a simple matter, and it only takes perhaps eight minutes to run a polygraph chart, Maximum, depending on you. The preparation time is to get you ready to do that.

The paper quoted me as saying last Wednesday that it takes about an hour to run the test. It takes about an hour to get you ready to run the first test. Then we have to look at the data after it's completed; then we have to analyze that data.

And that data is looked at by the examiner that ran the test, and he makes an opinion.

Then that examiner takes and gives it to second examiner, called peer review, who does not have the benefit of the opinion that the first examiner had.

And we don't stop there. That's called quality control, quality assurance.

If the two examiners see the same thing, it goes to the third level, called supervisory review.

And we record every examination on videotape; every one of them. And there's two methods that we do this. We have the audio/video camera of the person taking the examination that is being recorded running before the two people walk in the room, the examiner and person taking the test. Every word is recorded, every action is recorded.

Then we take the data from the computer, inject it into that same videotape so that we can see the physiological responses realtime, as the test is being conducted in the supervisor's office and in the quality-control office upstairs, realtime.

We know what's going on inside the room as it's taking place.

Then, that test is not completed until quality assurance has in the blind reviewed that test, compared the results of the first, second and third examiners. At that point in time, that test is

considered to be done.

The greatest majority of tests being conducted in this kind of testing are going to be no-issue tests. The videotapes of those tests are destroyed.

And there's only two people that would ever see those in the event there was ever a reason to do that, and that's the Director of Counterintelligence or myself.

They're kept in a secure area. Then, every 90 days we destroy them by incineration.

The only person that reviews the examinations that you're going to do is the Director of Counterintelligence; or, if it's under the auspices of General Habiger, it would be him. That's the results of the test, not the process of determining what the results were.

And of course I work for CN-1, and I provide independent quality assurance on all polygraph examinations.

We talked about videotapes, and I'll skip ahead of myself, and let me tell you that we adhere only to the procedures established by DoDPI.

Dr. Ryan talked about quality-control office. I am the quality-control program for DOE. We

get inspected by DoDPI, and I think that's terrific. It's called a biannual inspection; I'd like to be inspected every year, because I don't want to have to wait two years to find out I've been doing something wrong.

He and I talked about that today. I think it would be a great idea if I could be inspected annually, or even more often. I just believe in that.

But let me tell you about our first inspection we had by DoDPI, which was conducted a year ago in August.

DOE is the only federal agency with a polygraph program that had zero adverse findings. We did everything the way it was meant to be, and there are zero findings in our program. There is no other federal agency that can say that. I'm proud of that, and intend to keep that as high as it is.

The second paragraph is very important, and I would like you to pay attention to that.

The Secretary of Energy, emphasized again by General Habiger, and my head boss, Ed Curran, said adverse action based solely on the response of a polygraph test cannot be used against an individual before all other efforts available to the Department of

Energy have been exhausted; and they are extensive.

The idea is a verification process, not like we've heard it called a witch hunt or anything else; it's here to establish a feeling of assurance, a trust state, the confidence that the Department of Energy has in certain people in selected positions; not everybody in the program, but certain people yet to be determined that their positions or jobs would be of interest to a foreign government or an entity because they warrant that trust state and confidence.

And I think in my opinion, that that is a good process.

Our qualifications, we meet every day at DoDPI, and we have seen them.

They require a baccalaureate degree; we require graduate study, leading towards a graduate degree. I don't take people out of college and teach them how to be a polygraph examiner and let them learn on you. I don't do that.

We had ten examiners. I've acquired them from the CIA, I've got NSA, I've got NRO, I've got NIS, I've got MI, I'm got Army CID, an FBI agent coming on board, and the OSI, and that's it.

But every one of those people have at least tenure as federal investigator experience either

as an 1811, investigator with the federal government -- that's a GS job-rating service for federal experience, or they get it with the department -- or they have been with the Department of Defense, as a federal investigator for them.

And they have to have proven counterintelligence experience; then they have to be certified by DoDPI. Now, that requires a whole lot of things, but one of which is every year they have to have 40 hours of continuing education, every year, in order to retain that certification.

That's in addition to the 560 hours of the basic course, plus six months of an internship, followed by a year's probation, before they can be certified. That's pretty extensive qualifications, and we do that.

Then DOE gets it, and before they run their first test with us, regardless of the experience they had with another agency, they have to test our examiners. With a new examiner coming on, they are asked to test our examiners 25 times.

We do that so that we are convinced, sure, that every test they're going to run would be that I would want to have tested on me if my career, reputation should depend on it; and if I wouldn't let

them test me, I'm not going to let them test anybody in DOE.

We require full membership, and we're the only agency that does this, we require full membership in the American Polygraph Association and the American Association of Police Polygraph Examiners. These are the two national associations of polygraph examiners.

Our examiners hold leadership positions in both of these. I am the director of quality control for AAPPE, and the director of a committee for the American Polygraph Association.

We have one of our examiners as the chairman of the Ethics Committee for AAPPE. Another of my examiners is president of AAPPE, and another is the Journal editor for AAPPE.

And I'm saying we do quality control. We do quality control for major metropolitan police departments and agencies, some of which are very interesting.

I've had the pleasure of seeing some high-level, high-profile, polygraph tests in my career.

We've been inspected by everyone that can inspect us. We've asked the AAPPE, and they did; we've asked DoDPI to inspect us, and they did.

We've asked the Air Force NRO and Counterintelligence, and they did; and we have on record their written reports. Should you ever come down to our test center, you're welcome to see them.

But, there is no finer program in the federal government.

CN-1 coordinates all the DOE policy. I can't make policy; he does that. He's SO-1, and Ed Curran is CN-1. Those are the two main players for this thing. They make the policy, and they do it in conjunction with authorities of DoDPI.

It's not made up by DOE; It is accepted counterintelligence polygraph procedures, based on research.

But the two people that I think you need to know about that run this begin with General Habiger. He was the guy in charge of Strategic Air Command. You don't get more responsibility than that.

Then you've got Ed Curran, Assistant Director of the FBI. That's one heck of a start for DOE to get this program on the road and get it done right.

Curran is the guy they sent to the on-site inspection agency; Curran is the guy they sent over to the CIA to get the investigation program back

on track; and he's the one that supervised the Nicholson investigation, and others.

So between him and the guy who implemented the weapons that are built by DOE, I think we're off to a dynamic start, and we're here to make this as palatable for you as possible, should you be tasked to take the exam, should the program be implemented.

I can only assure you of one thing; if you are tasked to take that test, and you come down to do it, you will be treated with the utmost dignity and respect. Your test is as important to us as it is to you, and it will be done that way from the beginning to the end.

And we do not have any unresolved-issue cases on file in the Department of Energy, because we take every effort that we can to resolve those issues.

And that concludes my presentation.

GENERAL HABIGER: Thank you.

(Applause)

DAVID RENZELMAN: Thank you.

GENERAL HABIGER: Thanks, Andy; and thanks, Dave.

We've been in the transmit mode for the last 45 minutes, and now it's time for us to go to the

receive mode. I'd like to call the first speaker to the podium.

For the record, I would ask each speaker, please state his or her name, whom you represent, before making your statement.

First speaker this afternoon, Stirling Colgate.

STIRLING COLGATE: Good afternoon. My name is Stirling Colgate. I'm a senior physicist, and have been since, I guess, 1952, in the National Laboratories.

I've been performing work for the federal government or in the service of this country since I was seventeen. That's 56 years, two of which are out for undergraduate work; most of the time for the federal government.

All that time, I have felt trusted, strongly encouraged to perform my best; and because of it, I think I've done so, not just for myself, but for the laboratories, the country, our institutions, my colleagues, and humanity.

I think now we're faced with a universal distrust engendered by the establishment, not just to the polygraph test, but the general xenophobia of the procedures for security.

We all know that polygraph tests are unreliable in finding the truth. We also know that they're unreliable in finding lies. That combination, to me, means distrust.

I have to project a sense of trust when I attract a young person as a J. Robert Oppenheimer post-doc fellow to this laboratory. I think it would be extremely difficult to project that sense of trust in the future of their careers with the current levels of security activities.

Natural selection has continuously perfected the uncertainty of lies and truth for the human species; and has done so, I guess, for some four million years.

That's why it is so extremely, I think, such a deep instinct to reject a technology that tries to penetrate that sense of trust with specific uncertainty, namely the uncertainty of 5 percent, 1 percent, whatever you wish to put on it.

This perception of personal degradation has far greater impact upon our national success -- and I'm not using the word security; I'm saying our national success -- than any possible gain from deterring the possible transfer of technical data.

Now, what I'm going to say in these

few paragraphs has to do with the relative position of trying to make creative work in a national laboratory work, and to implement that creativity throughout our company, versus the requirements of security in a security agency, when an agent like Ames can cause dozens of deaths of our spies.

I think there's a vast difference, and I think the DOE should be in a position to act as a buffer between the misinformation of Congress on this issue and the scientific laboratories that protect the creative new thinking of our country.

I feel our greater security is derived from the universal, worldwide, the American culture of tolerance, diversity and generosity; and to be admired for that in this world is our power. It is not just the rockets; it is being able to get all of Europe to go along with us on something like the Yugoslav issue.

Secrets are a transient security.

Once you have done it, whatever it is, the first demonstration has unlocked the biggest secret of all: Nature. Nuclear weapons, Stealth airplanes, personal computers, integrated logic chips, Boolean algebra, are all examples of doing it once and the world follows.

Unfortunately, spy stories and a

general lack of technical knowledge necessary to understand those examples allows us to believe that secrets can be kept to our personal advantage. They just can't.

Our experience has shown time and time again that security based on such secrets is short-lived in a world that is universally populated by creative people; and I think I can say so because I know the heat.

The secrecy of military strategy certainly does have immense and overarching value, as the invasion of Normandy so dramatically illustrated.

However, the greatest security comes from thinking of the idea first. Our greatest national security is our culture, that nurtures that creativity, our tolerance for the outrageous, the diversity of our possibilities.

You know, so far we haven't sent any young kids who have busted into our computer systems to the Gulag to be hanged, to draconian jail measures. Instead we nurture them, bring them along, and foster their creativity. I think that's our job.

Nuclear-weapons secrets are presently a major case in point.

Once the fact of fission criticality was

established by Fermi at Stagg Field in '42, a nuclear weapon was inevitable. I understood it as inevitable when I was sixteen, just that type of information.

Stalin established a crash program in nuclear research within two months of Stagg Field, so much for the secret, while retreating towards Moscow. And Fuchs's information was significantly later.

The secrets of spy agencies are indeed very valuable information, and the most valuable information is who is a spy for us.

It is the defectors in our spy agencies who have done the most damage, such as the dozens of deaths of our people caused by Ames and others.

Rightfully, the spy agencies are paranoid about spies, and should be in that kind of activity.

But that same paranoia now politically applied to our major research laboratories is already greatly destructive to new and creative research.

If we wish to keep our country, the United States of America, strong, admired, tolerant and generous, we must reverse these security policies such as polygraph tests and foreign-national xenophobia.

I think we should further consider if we want to put our own spies in jeopardy.

Thank you.

(Applause)

GENERAL HABIGER: Thank you, sir, for your thoughtful input.

Our next speaker is Kevin Vixie.

Good afternoon.

KEVIN VIXIE: Good afternoon. I'm Kevin Vixie; I represent myself.

I have a few comments I've written, and then a couple of additional things I wrote as I was sitting there.

My fellow Americans -- and I address you as Americans because you are first of all Americans, and then employees of the Laboratory or employees of the Department of Energy -- I speak to you today as citizens of a country that does not believe that the end justifies the means.

I speak to you today as citizens of a country that has found prosperity to the degree to which it has followed principles asserting the fundamental rights and freedoms of all human beings.

I speak to you today as citizens of a country that, in spite of hypocrisy, in spite of gross failures, has been an inspiration to the entire world precisely because of its freedoms and its rights.

I speak to you today because the policy in question is not in harmony with those very freedoms and rights.

Polygraphic testing on a massive scale at the nuclear-weapons laboratories of this nation seems at first glance to be a justified inconvenience; but closer examination reveals that these tests not only lack the ability to reveal deception, they in fact provide psychologically abusive tools for interrogators who use them in invasive and manipulative environments.

A deeply healthy laboratory is a secure laboratory. Health, whether it is mental, emotional, social or organizational, is built upon trust.

Trust inspires trust; distrust invokes distrust. It is therefore a fundamentally flawed policy that attempts to assure security by approaching employees with an implicit attitude of distrust and suspicion.

A healthy laboratory, like a healthy body, recognizes danger through early signs of threat. An unhealthy body either sees no danger in those same signs, or attacks even healthy organs and cells, thereby destroying itself.

We should, as citizens of this country, insist that policies be put into place that permit the

employees to sustain an organization that promotes health of that organization and health of the individuals that make up that organization.

In this way, danger to the security of the Laboratory will be averted by the very nature of the organization, by the very nature of the contrast between individuals and policies that endanger security and those that pose no threat.

I urge each of you, as citizens of this country, to use all the means at your disposal to make known to those in Washington, and those who voted them into office, that this proposed policy is fundamentally flawed and in the end will have the opposite effect, in that it will seriously threaten the excellence and even the existence of the nuclear-weapons program.

And this at a time when the issues and threats are more subtle and more complicated than ever before.

I urge you as citizens to use the telephone, to use the fax machine, to use the post office, to use every means you can muster to make known your carefully considered opposition to this flawed means-to-an-end.

I urge you to remember that you are here at this laboratory for the express purpose of

preserving our freedoms and preserving our fundamental human rights.

I urge you to remember that you are citizens of the United States of America.

In closing, I want to add a couple of points.

It appears that you want us to accept the validity of the polygraph based upon authority, since there is no independent scientific evidence of the validity of the polygraph.

But this apparent expectation of yours is incoherent, because you have hired us precisely because we are exactly not the kind of people that accept something simply because someone says it's so.

(Applause)

Two, how is it that you have collected people to give you advice on difficult and subtle issues, implying that you hold their judgment and their ability to analyze complex situations in highest esteem, and then tell us that our virtually unanimous judgment that polygraphy is flawed is wrong?

That's all I have to say.

GENERAL HABIGER: Thank you, sir.

(Applause)

GENERAL HABIGER: I'd like to next call to the podium Chris Mechels.

CHRIS MECHELS: Good afternoon.

GENERAL HABIGER: Good afternoon, sir.

CHRIS MECHELS: My name is Chris Mechels. I'm vice-president of the Citizens for LANL Employee Rights. We claim to be the first and only real employee organization at Los Alamos.

Part of my interest, my personal interest, since about March has been actively defending Mr. Wen Ho Lee.

It is my belief on March 9 and since, and I've been very vocal about this, that Mr. Wen Ho Lee's rights were continuously and prominently violated by this Laboratory, by the University, and by the Department of Energy.

His rights as a University of California employee, his rights to due process, and his rights under Laboratory policy were all violated.

It appears from the evidence that people that have rights under University of California policy are confined to those with strong political support, such as he ex-Secretary Hecker. His rights were paramount; those of Mr. Wen Ho Lee counted for nothing.

One of the ways Mr. Lee's rights were

violated was in the use of the polygraph.

He was polygraphed, it is my understanding, twice. He was polygraphed in December; he was advised that he passed it. Whether indeed he had passed it, I don't know. They perhaps lied to him when they told him he had passed it; but he was advised in December that he had passed the polygraph.

Apparently his passing the polygraph was not acceptable. He was repolygraphed in February, and this time they got the answer that they needed, which was he failed the polygraph.

I consider that that use of the polygraph, when can anyone ever pass the polygraph if you must continue the polygraph until you successfully get the right answer, which in this case is, he failed it.

The other problem with Wen Ho Lee's case is the profound inequity that you're proposing of the actions upon the Chinese community and other such communities.

There are many Chinese who are now American citizens whose origins are in China or Taiwan. They have families in China.

What are you going to ask them to do? Go back ten years, and ask them who they've talked to

in China? That might be construed by someone in this country as being suspicious. This burden falls as a great inequity upon the Chinese.

And increasingly, we have staff from the Eastern bloc. It's a great inequity you're working against those people.

And it also works a great inequity against those who have been some of the most successful scientists at this laboratory, who have published the most and traveled the most to conferences. This seems to push people toward not publishing and not going to conferences; therefore, they won't have these suspicious contacts.

I don't think that's really what you want this laboratory to do, but that's the direction it's going.

I point out also that the Cox report has been to this point certainly discredited. The part I'm familiar with, on supercomputers, is a piece of trash. I'm a supercomputer expert. I helped designed the bloody things. It's a piece of trash. Trulock has been discredited; yet this destruction goes forth.

As a part of my activities in employee rights, I've represented many people in grievances. As part of that, I've had to learn a bit about the law,

because I had to oppose a lot of Laboratory attorneys.

If you bear with me for a second, I suggest to you that there is some California law that seems to imply that what you're proposing may not be legal under California law. The case I reference is Long Beach City Employees versus City of Long Beach. You can find that citation at 227 Cal. Reporter, Page 90.

This is a decision rendered by the California Supreme Court upon the subject of polygraphing in 1986, and what they determined was that it violated people's constitutional rights to privacy.

I totally agree with them. If we don't have a right to privacy, what rights do we have?

The right to privacy is, by the way, guaranteed under California's First Amendment very precisely, because they changed their constitution in 1974 to read "All people are by nature free and independent and have inalienable rights, among those enjoying life and liberty, acquiring, possessing and protecting property, and pursuing safety, happiness and privacy."

You come today and talk to us about violating our constitutional rights of due privacy.

There's no mistake about this. Your claim can only be that you can justify this based on recent information, because it hadn't been found previously necessary.

And you turn to where? The Cox report, a piece of trash; and you turn to Trulock, who is highly suspect; and use this to justify an attack upon the U.S. Constitution. I rather doubt that this is a sound approach.

The other thing I find illegal, and highly questionable, is that you propose to install this retroactively.

I say the only thing you can do that doesn't throw off a terrible odor is to say that from the day we start polygraphing, it's from that point forth that we will use it to screen; and you shouldn't be asking people about what's been going on for the last twenty years, because the rules were totally different.

So I suggest, furthermore, that you look at the effect of California law, because you've failed your obligation under Executive Order 12612 as soon as you involve California law.

I will close by saying because I believe that an attack upon the Constitution of this country is a direct attack upon this country. That is what you

are here today proposing, and I wish you would withdraw this terrible idea.

Thank you.

GENERAL HABIGER: Thank you for your observations, sir.

(Applause)

GENERAL HABIGER: John Pearson is next.

JOHN PEARSON: My name is John Pearson. I'm an employee of the Los Alamos National Lab, member of X Division.

I sat down to write this speech on Wednesday night, and I started thinking about all the invited scientific presentations I've given over the years; and I was wondering, how could I, in my five minutes, present the scientific case against the superstition of polygraphy so compellingly that the people that are pushing this nonsense would go back under the rocks they came out from.

Now, you all are going to think this is corny, but it's true. Just about that time, my nine year old daughter came in, sat down and started singing and playing The Star Spangled Banner on the piano; and it came to me that in all those talks I've given I've never once gotten to speechify like a politician.

I realized I could do it, and I wouldn't

have to insult your intelligence, and I won't have to lie to you.

So today I get my five minutes.

The polygraph interrogation of the men and women who are entrusted to ensure the safety and reliability of the United States nuclear stockpile is bipartisan political cynicism at its worst.

This fraud perpetrated in the name of national security will not help national security. This fraud will destroy the national laboratories, and they are the crown jewels of American scientific achievement.

The career bureaucrats and politicians will try to create the illusion that they've gotten tough on security at the national laboratories.

They'll trot the numbers out there for you, too. They'll tell you how many polygraph exams they performed last year. They'll tell you how many confessions they got. They'll tell you how many investigations they launched, and so on and so forth.

But the one thing they won't tell you, they won't tell you that they caught any spies. No lie detector has ever caught a spy, and none ever will. The machine's too easy to beat.

The CIA double agent Aldrich Ames paid a

half-million dollars cash for his house, staggered into work drunk each day, slurred his way through the CIA lie-detector test, and passed with flying colors; and how many widows do you suppose that polygrapher is responsible for?

I did mention that they would get some confessions, and you might be wondering what that's about.

Well, they'll badger some honest, hard-working scientist on the unauthorized-release-of-classified-information question.

If that scientist has been in business long enough, they'll answer something like, "I don't know; I might have slipped up once back in the late '70s, early '80s; I gave some presentations at American Physics Society meetings and I might have let a cross-section slip out; I'm not sure; I don't know."

Then before you know it the bureaucrats will tell the politicians, and the politicians will leak it to the New York Times, and the New York Times will pick up another Pulitzer Prize. There will be big headlines.

(Applause)

"Los Alamos scientist admits to rampant disregard for security, confesses to spilling

bomb secrets from 1976 through 1984," would go the headline.

That's the kind of claptrap they're going to get out of this fiasco, and they know it; and when they tell you differently, they're lying to you.

No big false positives? A scientist that's as nervous as a long-tailed cat in a room full of rocking chairs is going to sit down in front of that machine, and the needle will start bouncing and they'll accuse that scientist of treason, investigate everything else with a microscope, and come up empty-handed.

Then what are they going to do?

Well, they won't renounce it. They're going to yank his security clearance; and no matter what they tell you, that is the moral equivalent of firing him.

So what is this going to do to the morale at the national laboratories? It will bring about an exodus from the national labs the likes of which haven't been seen since Moses. Then who's going to certify the nation's nuclear stockpile? Politicians, I guess.

Now, I want to mention that, although nuclear-weapons work is the primary mission

here at Los Alamos, we do a lot of great unclassified science here, too; Human Genome Project, AIDS research, global climate modelling, bargain-basement super fiber-optic cables a hundred times faster than the ones we have now.

That's a little sample, and there's more on the wall back there.

There's a pipeline of brilliant young scientists straight from these great unclassified research programs right into the weapons program.

And the politicians are trying to shut that pipeline down; and if they shut that pipeline down, you're going to kill the laboratories.

And the politicians are actively trying to kill these research programs. They're trying not to fund LDRD this year.

So by attacking the Laboratory, they're attacking a great scientific institution with a 57-year history of distinguished achievements in all areas of science; and that will be the ruin of these national treasures of ours.

If the politicians and career bureaucrats succeed at this, they will do far greater damage to national security than anything their lie-detector test could ever have hoped to pick up.

Now, I don't have a problem with security. The thing is, there are far more effective means of improving security at the laboratories.

These include peer counseling on security for new hires, increased computer security, which is still not where it should be, surveillance and sting operations, and many others.

And, although these methods won't be painless, the major point in their favor is, they will actually have a chance at preventing espionage and diminishing the actual release of classified information.

And I'll tell you what: We'd be glad to work with security to develop measures that would work, and would not be a slap in the faces of the honest men and women to whom you've entrusted the nation's nuclear-weapons secrets for the last five decades.

(Applause)

GENERAL HABIGER: Thank you.

Bill Johnson?

BILL JOHNSON: Thank you, sir.

My name is Bill Johnson; I'm a staff member at the Laboratory. I am speaking to you here as a private citizen.

I'd like to describe to you my

concerns, concerns I know to be shared by many other Lab employees, regarding the potential of the proposed polygraph program for misuse, abuse and expansion into inappropriate areas of the personal lives of those subject to this program.

I refer here specifically to 10 CFR Section 709.11 and the provisions contained there.

At the present time we have been offered assurances, which are embodied in the section, that the questions that participants are asked will be sharply limited in number and scope, and will only be expanded on if the answers to the initial questions pose problems.

However, we have no assurances and no reason to believe that these limitations will continue to exist once the present cast of characters involved in the administration of the program, including yourself, sir, is replaced following the next election.

That is, we have no assurances and no reason to believe that the interpretation of Section 709.11 will continue to be narrowly focused.

Similarly, we have been offered assurances in this section that the personnel who are administering the test will be a small cadre of highly qualified individuals. We heard a presentation earlier

on that.

However, we have no assurances and no reason to believe that that cadre will continue to be small and highly qualified once it is realized how severe is the problem of throughput in this system.

The number of people involved in the system is potentially extremely large. As was cited in the presentation a few minutes ago, the number of qualified examiners is small, and so on.

There are other cases in which one has these assurances, and no reason to believe that they will continue to be valid in the future, if in fact they are valid at the present time.

To understand why these are concerns, I think it is useful to consider the PSAP program in its current incarnation.

I had originally prepared some remarks drawing parallels between PSAP as it's currently administered and the polygraph program as it's being proposed. In the interest of brevity, and to get back on schedule, I'll forgo some of the specifics here.

The key point, however, is that early assurances were given when PSAP was originally instituted at this laboratory regarding the quote-

unquote "value" of PSAP, in an attempt to persuade employees to enter the program voluntarily.

Yet, many, many employees have concluded that the representations made to them regarding the limitations on that program have not been borne out in practice as the PSAP program has evolved.

PSAP is not the program it was once touted to be.

It is larger, more consumptive of the time and energy of the participants, and in quite a few regards more intrusive than the thing that was described to employees in an attempt to get them to sign up.

Parenthetically, this more intrusive PSAP has already been a factor in driving employees away from jobs requiring PSAP certification, precisely conforming to the theme of diminished workplace efficiency that has already been articulated many times today.

Our experience with similar programs, in other words, has not given the employees of the Laboratory any assurance that the impact of the polygraph program on our lives will continue to be reasonably bounded, if in fact it ever is.

There is a real fear in the work force

that the regulations currently being proposed are just the tip of the iceberg, and that future elaborations of the program will become increasingly onerous and intrusive.

To counter that fear, at the present time, all that we have to go on is faith and the good will of the administrators of the program; and that is something you can't take to the bank. That check won't float.

I therefore put the following questions to the people on the podium here, and understand that I do so from a perspective of introspection, asking that you find answers within your own selves rather than expecting that answers be provided to us at this time.

And particularly to you, General Habiger.

You have been officer in the military for most of your life, an honorable man. You swore an oath to protect and defend the interests this country held dear even if it meant putting yourself in personal jeopardy. I respect that.

So are you -- and I direct this to the other people on the podium -- personally, and individually, willing to be held accountable if the assurances fail and if the program questions described

in 10 CFR 709.11 escalate to the point of a witch hunt?

If you are, what form will your accountability take, given that you hold a political appointment and that you may not be around if and when future abuses of this program occur?

And if you are not willing to be held accountable for those abuses, why not?

Those are my only remarks. Thank you for your time.

GENERAL HABIGER: Thank you, sir.

(Applause)

GENERAL HABIGER: Our last scheduled speaker, Ken Lagattuta; and help me pronounce that.

KEN LAGATTUTA: Close. Lagattuta.

GENERAL HABIGER: Thank you. Good afternoon.

KEN LAGATTUTA: Good afternoon.

I'm a technical staff member in X Division, where my job is to take ideas from areas of atomic and plasma physics and incorporate them into an analysis of problems of interest to the weapons program.

I've worked at LANL and in X Division for 13 years. Prior to that time, I was employed as an assistant professor in the physics department of the

University of Connecticut.

My views concerning the DOE's proposed polygraphing initiative for the three weapons labs, as described in entries in the Federal Register for August 18, are negative. They're very negative.

First, the justification offered as motivation for this drastic change in investigative procedure is unconvincing to me.

In particular, the current security flap surrounding the possible compromise of W-88 design information by unknown sources somewhere inside the weapons complex does not seem sufficient motivation for this drastic change.

Indeed, as admitted by the Rudman Committee, this breach, if it occurred at all, did not necessarily happen here, or at any one of its two sister laboratories.

Second, I note that the DOE's polygraphing initiative, as currently revealed to us, is not yet fully defined within a very important area.

The actual extent of the proposed program is uncertain as it affects individuals falling into Category 6 of Section 709.4.

That describes, quote, "positions that DOE has determined have a need to know or access

to information specifically designated by the Secretary or his delegatee regarding the design and operation of nuclear weapons," unquote.

It is unclear whether this is intended to be a blanket category for all of X Division, say, or even for all Q-cleared individuals.

Now, this has been commented on already, but it certainly is an area of uncertainty.

However, it does appear that this category will include people beyond those in special-access programs, since they are specifically mentioned earlier in 709.4 under Category 3.

Of course, people already in special-access programs have previously signed statements acknowledging their willingness to be polygraphed as a condition of their obtaining access, so there's no necessary change there.

But thirdly, and most importantly, the polygraphing protocol described in the Federal Register is unacceptably invasive of privacy, I feel.

To wit, Section 709.15, Part A, states, quote, "If following the completion of the polygraph test there are any unresolved issues, the polygraph examiner must conduct an in-depth interview of the individual to address those unresolved issues,"

unquote.

Now, this smacks to me of an interrogation; and indeed this is just how the usually many-hour-long post-polygraph interview has often been described.

It appears to me that the post-polygraph interview is the crux of the entire polygraph protocol, and is the part which is the most offensive.

During this interview, or interrogation, the interviewee, or suspect, is held in isolation by the examiner and induced to provide whatever information that the examiner suggests will help him to understand the nature of the suspect's polygraph responses.

Now, the suspect may be induced to reveal embarrassing information, painful personal information, or information which may even compromise his Fifth Amendment rights against self-incrimination.

This induced information being open-ended, and therefore unpredictable at the outset, the suspect is also being asked, generally, to give up his Fourth Amendment rights prohibiting unreasonable searches; and he is also asked to do this voluntarily.

Furthermore, according to present entries in LANL's personnel policy manual, he will

be required to sign a statement absolving LANL of any legal liability should there be negative consequences to himself as a result of having submitted to the polygraph examination.

He must also sign this legal waiver of LANL's financial responsibility to himself, voluntarily.

So to conclude, I note that the post-polygraph interview is probably usually the most effective part of the entire polygraph protocol, insofar as it might be expected to produce the most information with some security import.

One imagines, too, that essentially always this information would be of only microscopic significance, relating to the most trivial of transgressions, and containing nothing of true national-security significance.

It is unfortunate, therefore, that the DOE proposes to use such a large stick to beat such a small dog; and indeed, the interview or interrogation part of the polygraph protocol seems to be by far the most obnoxious element -- and there I repeat myself -- in their proposal.

So much do I object to this interrogation, or potential interrogation, that at

this date in my career, and after having already spent thirteen years at this laboratory, I will personally refuse to be polygraphed under this protocol if I'm asked.

(Applause)

GENERAL HABIGER: Thank you, sir.

(Discussion off the record)

GENERAL HABIGER: All right; looks like we're set.

Let's go ahead with our first unscheduled schedule, Mahavir Jain.

The podium is yours.

(Pause)

Mahavir Jain?

Okay; next unscheduled speaker, Gary Dilts.

You are, sir, the first one to bring a laptop to the podium of all the Labs. I congratulate you; it means you're high-tech.

GARY DILTS: No, sir; it means I'm unprepared. I just finished it, and didn't have time to print it.

General Habiger, my name is Gary Dilts, representing myself. I'm a computational hydrodynamicist with twelve years in X Division.

Thank you for hearing us today.

Paragraph C of Section 701.14 of the proposed rule says, or is entitled, "What are the consequences of a refusal to take the polygraph examination?"

It states that "If the individual is an incumbent in a position described in Section 709.4, Paragraph A, Parts 1 through 8, and refuses to take a polygraph examination, DOE may deny that individual access to the information or involvement in the activities that justified conducting the examination."

And that's a direct quote.

The probable intent is that my refusal will be equivalent to loss of my job.

I submit that the proposed rule is deficient with respect to the issue of countermeasures, and in fact their existence undermines the entire process.

It is widely known, and was admitted even in the technical presentation today, that effective countermeasures exist.

Will such countermeasures be allowed during the exams? If so, then I propose that the LANL general-employee training should include training in

the effective defeat of polygraph exams.

(Applause)

If not, exactly what countermeasures will be disallowed? Will examinees be tested for drugs, or strip-searched? Will a fiber-optic camera detect the position of the tongue? And how will counting backwards by sevens be prevented?

Nowhere in the rule is it stated what the consequences of applying countermeasures will be. Will they be retested?

If countermeasures are applied again, will the examinees be considered to have terminated the test, which the rule states is the same as refusing to take the exam? If applying countermeasures is deemed deceptive behavior, does it become an unresolved issue? If accused of applying countermeasures, what recourse will the employee have?

The net result, at best, will be losing your job; or at worst, suffering an FBI investigation.

The technical presentation indicated that polygraphers will be trained to detect the application of countermeasures.

Does this mean that DOE polygraphers will be able to ignore them, and they are a non-issue? What studies do you have that indicate that this is

possible?

How exactly are countermeasures detected? Were these techniques applied to Aldrich Ames? Surely it is entirely a matter of judgment by the examiner and his supervisors.

And herein lies the inherent unfairness of the entire polygraph procedure as proposed.

Any -- and I repeat, any -- truthful determination is open to the accusation of countermeasures, based entirely on the judgment of the polygraphers; and the examinee must then prove he or she is not employing them, which in most cases cannot be done.

You simply have to take the examinee's word, "I was not counting backward by sevens." But you might as well take their word on "I did not commit espionage."

The existence of countermeasures makes the, quote, "test," unquote, results entirely subjective.

In science, you learn that a chain of logical deductions is no stronger than its weakest link.

General Habiger, if you require polygraph data to validate our answer to the question

"Have you committed espionage against the United States," if you must require us to be connected to the machine when we answer the question, will it give the right yield when we stand before Congress or the Joint Chiefs of Staff to recertify weapon design?

(Applause)

General Habiger, I want to leave you with this question.

Is your trust in the answer to that primary question, which is the reason for the existence of this laboratory, and our sister labs, to rest on the opinion of highly trained, accomplished and experienced physicists and engineers, or a psychologist with a master's degree?

Thank you.

GENERAL HABIGER: Thank you, sir.

(Applause)

GENERAL HABIGER: Our next speaker is James Hill.

JAMES HILL: Good afternoon.

GENERAL HABIGER: Good afternoon.

JAMES HILL: My name is James Hill, and I'm speaking for myself.

I first came to Los Alamos in May of 1996 as a graduate student in X Division.

My doctoral advisor has been a consultant here for 35 years, and has seen more than 30 of his Ph.D.s take positions at Lawrence Livermore, Sandia, and Los Alamos within the weapons programs.

With such a distinguished lineage, there was something of an expectation that I, too, would make Los Alamos my professional home.

So we filed the paperwork, and I got started applying for a clearance.

I began by filling out the questionnaire for national-security positions.

For those of you not familiar with this, the QNSP is a fifteen-plus-page form in which the applicant reveals personal information like date and place of birth, parents' birth, schools attended, jobs held, military service record if any; whether the applicant is a drug user, an alcoholic, a madman, a felon, or a revolutionary; whether the applicant has filed for bankruptcy or has outstanding debts.

All of these questions I answered honestly, and I supported my answers with the names, addresses and phone numbers of people who could verify my responses.

I accepted this, and indeed welcomed this as a chance to demonstrate that I was a loyal

American who could be trusted with safeguarding our nation's most important, and perhaps most dangerous secrets.

In due time, my friends, relatives, college instructors, roommates, neighbors and former landlords were all contacted. They vouched for me, I was declared trustworthy, and I entered the secret world of nuclear weapons.

After completing my doctorate, I chose to go back to school for more education, but I was told by my group management that if I ever wanted to come back the door was open.

A year later I accepted that offer, and I have been a technical staff member here for ten months now.

On my badge, there's a 3. That means I hold a Q clearance; and besides serving as a way to verify my identity, the badge markings serve as a personal reminder of the trust our government has placed in me, and the responsibility I have to the people of this country to uphold that trust.

But now I find that that trust is insufficient. I find that my government, despite having thoroughly investigated my past and my character, wants to go fishing.

They want to subject me to a process which has the scientific validity of dowsing, and peering at the bowels of a sheep. On the results of that process my future hangs, without any sort of redress or protection provided to me by this proposed rulemaking.

Others have told you today that if you proceed with the plan to mass-polygraph, the Lab will lose its best and brightest, those who currently work for the Lab and those who someday might.

I might not be the best, and I know I'm not the brightest; but I am good and I am bright, and there's a chance I might be lost.

I categorically reject the notion that the privilege of working on some of the most intellectually demanding scientific problems of our time, and working on them in defense of my country, carries with it the price of being assumed to be a liar, a spy, or a traitor.

(Applause)

If there is so much as a hint or a rumor that I have betrayed the trust my country has placed in me, I will gladly cooperate with the investigating authorities, up to and including a polygraph examination.

Absent such compelling circumstances, I will refuse any and all offers to take a, quote, voluntary, unquote, polygraph examination under the rules now proposed. I do this though the price will undoubtedly be my clearance and, despite management guarantees, my job.

This spring's report of the Presidential Foreign Intelligence Advisory Board slammed the weapons complex pretty hard for security violations. Phrases like "culture of arrogance" and "willful disobedience" were thrown around.

It is entirely possible that you are interpreting today's objections to the proposed plan of mass polygraphy as just one more sign of that arrogant culture.

Let me assure you they are not. The thoughts shared here today, and at our companion labs earlier this week, are the legitimate protest of citizens whose concerns for national security are being dismissed in favor of a soundbite-friendly solution which threatens the work by threatening the people who do it.

Thank you for your time and attention.

(Applause)

GENERAL HABIGER: Thank you, Dr. Hill,

for your thoughtful input.

Ron Moses is next.

RON MOSES: Thank you, sir.

My name is Ron Moses; I have worked at the Laboratory for 23 years.

One of the previous speakers referred to Moses. I don't know that he expected to see Moses this soon.

(Laughter)

But getting down to something a little more serious, I obtained my first clearance for the AEC at about a year older than when Dr. Stirling Colgate received his. He said seventeen; I got mine at age eighteen.

I'm very experienced in dedicating my adult life to science. I am very experienced in the world of the security clearance, the AEC culture, the DOE culture; let's not forget the ERDA culture. These are things that were part of my culture growing up in an AEC town, Ames, Iowa, back in the '40s.

So these are things that I accept, I understand, and it's a part of my culture.

I am nevertheless deeply concerned with the polygraphing program at such a large scale in the DOE complex.

Let me emphasize: If I or many other people whom I know here at this laboratory had chosen to go into the intelligence community -- the CIA, you name it, NSA, whatever -- polygraphs are a part of the culture there. That is something that is understood. It has been understood by me for decades.

That's just part of the culture. It's a little bit of the thrill. You go in; Can you take it; Can you pass it? It's a part of that life.

Here in the Laboratory, there is an element of that. There are some places that you know, as well as I, that do involve intelligence, and a polygraph is essential. Once again, that is a part of the culture.

But if you go out of the weapons program, if you go into the wider program, the human genome program, where virtually everyone who is not a foreign national must have a Q or L clearance: If you go into that part of the Laboratory, there is a very different culture.

These people, myself included, are quite a different breed of cat, so to speak. There is a culture of intellectual adventure, intellectual freedom, academia. Let's face it; that culture is there.

There is arrogance to some extent. It is not a mean arrogance; it is a proud arrogance. It is an arrogance because I am here; I am an expert; I try to do my job extremely well. That culture is there.

The polygraph program is something that, in that culture, is seen as highly invasive. It's something that adds enormous concern.

My concern here today is not for me personally. If you add up my age, from my comments, I'm in my late fifties. I will take the polygraph. Yes, if I need to, I will take it. And I assume I will pass it; I certainly expect to.

But if I don't, I have enough confidence, enough credentials, enough diversity; I can walk away and be very well employed. So I am not concerned about myself personally.

I am concerned about the national laboratory system, the national weapons and defense programs. That is what deeply concerns me. Because a young person, like the young man, considerably younger than I, who just spoke, these folks come in; if they come in and take that exam and don't pass it, they don't have to live with it for a few years in their late fifties, sixties, et cetera, as somewhat of an

interesting anecdote.

That can influence their careers from, say, age twenty-five or thirty. Twenty-five, you've got forty years. That can influence their lifelong career. It's an enormous impact.

The best people that we see and attract to this laboratory, we want to get the very best. These are the people who have alternatives.

I know for a fact from discussions that I have had with other people that the polygraphing program, no matter how scientific it is, its very inherent nature of potential error, realistic potential error, this is going to be enough to turn away the lion's share of the best young people from this laboratory.

That is my concern: The young people will, by and large, go elsewhere. They have the alternatives.

We here at this laboratory, by and large, believe this. Most of us have arrived at this understanding individually, not collectively.

So my concern is because our national defense program is going to suffer greater damage with the polygraph program and the people it loses than it is going to suffer with the risk of information leakage

if the polygraph program is not there.

Thank you very kindly.

GENERAL HABIGER: Thank you, sir.

(Applause)

GENERAL HABIGER: Next I'd like to call Galen Gisler. This is his second visit to the podium; he spoke to us this morning.

Welcome back.

GALEN GISLER: Thank you.

Once again, I'm Galen Gisler, and I represent only myself.

After reflecting on all I heard today -- and thanks for the indulgence for allowing me to speak again -- I wanted to share with the panel and the audience a short parable from history of the road I think we might be going down.

Edward Gibbon wrote in the late 1700s a massive work entitled The Decline and Fall of the Roman Empire, in which he chronicled the many ways in which well-intentioned people contribute to the collapse of a civilization.

An example which offers great parallels to our own situation is the case of Greek fire, which was almost certainly the best-kept national defense secret of all time.

Greek fire was a chemical compound that could be propelled by catapult into an attacking naval fleet. It ignited on contact with water, and effectively made the Byzantine capital of Constantinople invulnerable to attack by wooden ships.

The stockpile of this compound was carefully guarded and maintained by those who might be called the Byzantine weapons scientists, and the secret of its formulation was passed on privately by word of mouth from tutor to apprentice over hundreds of years. Nothing was ever written down.

As soon as a scientist was perceived to be too much a free thinker, he was summarily executed, without benefit of defense or appeal.

I said "he" because they were exclusively male; but even that pronoun is not strictly speaking correct, because these individuals in order to be immune from personal entanglements were invariably castrated.

You can read about this in Gibbon's book, and it's well-footnoted with references to original documents.

This draconian technique for safeguarding classified material clearly worked. The secret of Greek fire died with the Byzantines; and

we do not to this day know precisely what compound they used.

But where are the Byzantines now? If they were so successful at protecting classified information, far more successful than we can ever hope to be, why are they not today the dominant superpower on this planet, as they were once?

We all know history well enough to remember in 1453 the fall of Constantinople due to Turkish artillery, against which the Byzantines had neither defense nor countermeasure.

We can only wonder how many of those executed freethinkers might have tried to warn their government about the possibility of technological surprise, and the dangers of too much constraint on the pursuit of science.

Thank you.

GENERAL HABIGER: Thank you.

(Applause)

GENERAL HABIGER: Jeff Hollander?

The podium is yours, sir.

JEFF HOLLANDER: My name is Jeff Hollander. I'm very low-tech here this afternoon, General Habiger. I'm nervous, but I'm going to tell the truth.

(Applause)

I'm here on my own as a private citizen. I am employed as a UC staff member in the NMT Division at the Los Alamos plutonium facility.

I first received, initially received, my Q clearance when I was twenty-three years old in 1972. I've had other clearances for several years now; I've been PSAPed to maintain my position at the plutonium facility.

I came here this afternoon on my own time to hear public comment on the issue at hand, and not intending to speak, and obviously was not on the agenda initially.

I was disappointed and surprised to discover that I would be lectured to about the polygraph without benefit of alternative perspectives or questions. I was annoyed.

Like, why are polygraphs not legally advisable evidence? Why did we not hear something like that?

I'm also disappointed because the regulation has not yet clearly defined what job categories will be polygraphed.

I see this as a less-than-forthright technique, since we cannot know who will be affected,

and therefore who should be notified to comment here or in writing. Therefore, I remain suspicious about the motives and validity of the entire process.

General, are you so sure that you know what is being done here? I am not. Table the process.

GENERAL HABIGER: Thank you.

(Applause)

Gary Sandine has the podium.

GARY SANDINE: Good afternoon.

My name is Gary Sandine, and I represent myself, and perhaps some others like me who aren't here today, and don't know about it. I appreciate having the chance to talk about this.

This is all quite extraordinary. I've only been here for two months now.

I got here, I just earned a master's degree in mathematics, and had a chance to come here for a year before I go get my Ph.D., and this is by far, the atmosphere now, is the best thing I could have done, without a doubt.

I'm having a great time here, and the people are incredible. And I hope that doesn't change, because I will go and finish my degree and, you know, without a doubt, if these things unfold as they could in their worst, I certainly won't be here.

I won't come back here; I'll make sure, because I have other things to do. And I'm, of course, beyond expendable. But there are more like me, and so on, and I'm just a specific example of that.

I had never heard a presentation like that which began this afternoon's session, either; and I have no doubt that the polygraphy training is done at the best that we can do now. I mean, I have no doubt with that.

But humans are complicated, and I don't even know what an emotion is, and I can be hooked up to a box and it can tell me what I'm feeling? I don't understand.

I don't mean to be cynical, but I can't help it.

(People chuckling)

Again, that type of science is hard, I think. Mathematics is surely much easier than that. I immerse myself in something I know nothing about; and when I'm done I know if I have it. I know without a doubt. And I have a hunch that polygraphy science is not that way.

And talk of certifications and so on, by yourself, I guess, I don't understand.

I'm not one to be offended, but these

are just some observations; I don't understand how such comments could be made to an audience like this, anyhow.

Along with, we have progressed enough to know how to beat the book than anyone could download off the Internet now; but I also kind of think anyone who is truly of danger does not have to download a book off the Internet to learn how to beat the polygraph. It's probably more advanced than that. I know nothing about it; I wasn't interested before this.

But again, if that's the best we can do, so be it.

And I know it looks good, too, in the newspaper stories, and so on, if it gives certain politicians a chance to say the right words, "I'm tough on security, and helped to institute polygraphy at the national labs," and so on.

If that needs to be, I'd understand, because things often seem to work that way; but to preserve the dignity of the many brilliant folks whom I have met here, I think there are some questions about having lawyers present at interrogations and so on that haven't been addressed.

And I understand the answer is no right now, and I'm not sure why; but there are some pretty

clear questions like that that people have made clear, and I think those should be addressed if these types of tests are going to be implemented at the national laboratories.

Thanks again for the time to speak. I appreciate it.

GENERAL HABIGER: Thank you, sir.

(Applause)

Andy?

Our next unscheduled speaker is Dick Burick.

Dick?

DICK BURICK: My name is Dick Burick.

I'm Deputy Director for Operations, and I'm representing the Laboratory this afternoon.

First of all, General, thanks to you and your team for coming here today to listen to the concerns of all our employees and other speakers. We genuinely appreciate that.

I'd also like to say thank you to all the speakers this morning and this afternoon for all the time and effort that you put in to give us some very thoughtful and considered suggestions.

General, I don't need to tell you, you listened to all these speakers; the anxiety levels are

very high. The employees' concerns are real; there's no question about that.

However, I know that, as I followed your career in the military, you're a very fair and insightful leader; and I'm confident that you will take what you heard today and go back home and incorporate it into the process to improve it and to do the very best, as far as being fair to the nuclear-weapons workers of all the laboratories.

Again, I thank you for coming here today.

GENERAL HABIGER: Thanks, Dick.

(Applause)

Ladies and gentlemen, that's the last of our unscheduled speakers.

However, the rules of engagement dictate, and I agree 100 percent, that we will remain in the area until 1800 hours local, which is our published time for this public hearing.

So we will go into a recess mode now until we have any additional speakers; and then if we have some, we'll reconvene. If we have no further speakers, we will recess this public hearing at 1800 hours.

Thank you very much.

{Recess taken)

GENERAL HABIGER: Ladies and gentlemen, the panel is hereby reconvened.

We have an additional unscheduled speaker, Michael Soukup.

The podium is yours, sir.

MICHAEL SOUKUP: Thank you, General, and ladies and gentlemen, for allowing me to speak.

My name is Michael Soukup, and I'm a computational scientist at Los Alamos. I've been here fourteen years.

I came out of the Air Force. I left as a major, and I wanted to come here and be a scientist; and so I did a massive career change.

During the time that I was in the Air Force, I had access to extremely sensitive information. I worked at the Air Force Weapons Lab, and for a while was a technical intelligence analyst there, and by virtue of that had access to this information.

At no time during my tenure in the Air Force -- and, by the way, I'm still a reservist in the Air Force, with the rank of major -- have I ever been polygraphed. People always trusted me to be careful with what I learned, and not to engage in anything that I shouldn't engage in.

Up until about a year and a half ago, I worked in the Weapons Design and Technology Group here at the Laboratory.

This group is the group that studies foreign nuclear-weapons design and testing efforts worldwide; and in a part-time role I assisted in the espionage investigation which has ultimately led I think to this hearing today.

I was a junior partner in that effort. I was not the leader of the effort; I was not in on the effort from the beginning.

But I was briefed into the various compartments that pertain to much of the investigation, and my job was to provide data to the counterintelligence people to aid them in their work. As I say, it was a part-time job.

I did not personally see any evidence that said that Los Alamos was a source of the leak of classified information about the weapons program, or any of our weapons.

GENERAL HABIGER: Let me just make sure you understand, this is an unclassified forum.

MICHAEL SOUKUP: That's correct; I do know that.

That's my belief. I did not know the

name of the individual who was the primary suspect; but again, I did not see anything that I felt indicated the Laboratory or any specific person here was the source of classified information going to China or any other country.

So I was very surprised, in any case, when the story began to break in February and March of this year about the so-called spy scandal.

And now we're in an attempt to beef up security; many of us are faced with taking a polygraph examination.

What bothers me about the polygraph examination is really the manner of application. You've heard an awful lot today about the scientific and technical validity of the polygraph. I don't think most people here believe it's a very valid tool, But I'm concerned about the application of it.

When I did a change of station at the CIA a few years ago, everyone had to take the polygraph. There was no discrimination. Didn't matter what your rank was; you had to take the polygraph. Oddly enough, I didn't have any heartburn with that.

But what I feel today is that some number of us, and we don't really know who we're going to be, will be asked to take this polygraph; yet the

Secretary of Energy apparently has the power to waive the polygraph for some people he deems fit to be waived from that requirement, and he can also apparently change the judgment, if I understand the reading in the Federal Register correctly.

Right there, that seems to me to open up a security hole, because some high-ranking person can get through the polygraph. He won't have to take it, he or she won't have to take it; and that's a potential vulnerability.

Presidential appointees don't have to take the polygraph, I believe, according to the Federal Register.

Again, as we've seen over the last 50 years, there have been high-ranking people in the United States government, and also in European governments, with access to nuclear-weapon information; and they've been found to be spies, traitors.

So the bottom line is that the test has already lost its validity as a security tool simply because there will be an awful lot of people who won't have to take it; and in any case, the results can be overturned at an administrative or managerial level.

That essentially is my concern about it. I don't think I've heard that expressed today; I've

only listened to the procession of these hearings on Labnet this afternoon.

But my concern is that the test is in a sense an eyewash exercise. If there are spies here, and our job is to try to detect or deter such spies, I don't think the program is really going to work as it's structured, as I understand it.

Thank you, sir.

GENERAL HABIGER: Thank you, sir.

(Applause)

Sir, I'll let you speak as soon as you sign at the desk. We need to get you on record here. This is a very formal process.

Give me about 30 seconds for Andi to come down and give me the piece of paper, and then you're on.

(Pause)

Bernie Foy? Is that your name, sir?

BERNIE FOY: Right.

GENERAL HABIGER: The podium is yours. Thank you.

BERNIE FOY: Thank you.

My name is Bernie Foy; I've been a technical staff member in the Chemistry Division here for ten years. I'd just like to make a few comments.

This morning, in one of the presentations, we saw a quotation from David Lykken's book, A Tremor in the Blood. This is one of the major books criticizing polygraph testing.

The quotation was used in the context of saying, gee, even the strongest critics of polygraph testing have acknowledged that maybe it can be used to some extent as a screening procedure.

Unfortunately, the quotation ended before the following sentence, and this comes immediately after that quotation.

"As we shall see later, however, there is reason to believe that many honorable people, very sort of straight arrows, that we should like to see in these sensitive positions, are especially vulnerable to failing and being eliminated by these screening tests."

So I would like to suggest that if polygraph testing is expanded at the national labs, you're going to be finding a lot of straight arrows, a lot of people who have trouble answering these questions that they've never had to answer before, and to have their loyalty being questioned in such a manner.

Let me also make a few other comments about the proposed rule.

In the background section of the proposed rule, it mentions that this polygraph testing is being motivated by Presidential Directive 61.

In fact, if you look at Presidential Directive 61, it does not mandate polygraph testing at the national laboratories.

In fact, what it says, in a paragraph near the end of the directive, where it's talking about the need for stricter measures at the national labs to protect security, it has the following sentence: "Such measures may include financial disclosure, reporting of foreign travel, the establishment of special access programs where appropriate, and use of polygraph and psychological screening."

Now, that language to me does not mandate polygraph testing; so this is a choice the DOE has made, which I think is not a wise choice.

I think the correct thing for DOE to do at this point is to undertake an exhaustive study of the validity and utility of polygraph testing at the national labs, and then report back to the President with its findings.

And I think, if that study is exhaustive and if it's scientifically defensible, that you will find that it is not of very much use in detecting

espionage at the national labs.

In addition, there is a statement in the background section of the proposed rule that says there are, quote, "no scientific studies that establish that polygraph examination results are unreliable."

That statement is incorrect, quite frankly incorrect. This book, which I'm sure you have heard about, A Tremor in the Blood, by David Lykken, a professor of psychology at the University of Minnesota, is a careful scientific critique of polygraph testing; and it has many, many references in the book that present clear scientific evidence that polygraph testing is unreliable.

The last thing I would like to say is that I would like to see, if polygraph testing does take place at the national labs, I think that the numerical scores resulting from tests on individuals should be publicized or published in an anonymous fashion, so that one can see the distribution of test scores that have resulted.

That way, when I take my test, and I'm told what score I have achieved on that test, I can compare myself with the distribution that has resulted from, say, some large number of tests before me.

That will allow me to understand if I'm

four standard deviations above the mean, if I'm close to the mean, whatever.

I think that kind of openness could be injected into this procedure, and give people a lot more confidence in it.

Thank you.

GENERAL HABIGER: Thank you, sir.

Our next unscheduled speaker, John Finn.

Good evening.

JOHN FINN: Thank you, General, for letting me talk at this late time of day.

My name is John Finn. I'm a technical staff member in a theoretical division, but I represent myself only.

A well-known example in statistics of how tricky things can be is the case of the situation of AIDS testing of a general population.

It's well-known that it makes no sense to test the general population, especially in a country like the United States where AIDS is rare, because a chance of a false positive is much greater than the chance of finding somebody with AIDS in the general population.

The only effective thing is to test the few people who have really high risk factors for AIDS.

My daughter was taking statistics in college, first-year course this spring; and after she had been in the class for a week, I said, "Here's an interesting thing you should bring up in class."

She said, "Dad, they told us that the first week. This is well-known."

I'm suggesting that the same thing applies to testing in this general weapons-research population, people who are not generally already under suspicion for something. It's about the same thing: The probability of a false positive is, if anything, higher with a lie-detector test, and the fraction of people working in defense work at this Lab that are actually spies is a very small fraction, if there are any at all.

When I take this conclusion coupled with the possibility that a real spy can be prepared by the bad guys or can be screened to be someone who takes detector tests very well, and couple that with the uncertainty of what happens to an employee who has an unresolved positive here, I just come to the conclusion that it's much more damaging to continue with the lie-detector test than not to.

Thank you.

GENERAL HABIGER: Thank you, sir.

A revisit to the podium from the earlier session, Kevin Vixie.

KEVIN VIXIE: I'm Kevin Vixie, and I'm speaking for myself. Also, although not officially, I want to speak on behalf of the students here at the Lab.

I came here a year and a half ago to finish my dissertation, and I found that the environment was maybe better than I expected. It was an incredible environment, in which I believe I can thrive.

I found that, being here as a graduate student, I had a better position than many friends who might be assistant professors other places.

I found that I could attract; as a student, I got a couple students to come. I've started various things, had visitors come; Incredible things.

Yet I know that much of that that I've done would be impossible if conditions in the Lab were what they seem they might be. At least it seems to me that this incoherence in the polygraph testing will have to be removed.

I believe at this point, as it stands, as it seems the test would be, I would refuse to take one; but I'm not unreasonable. Even though I don't

like these tests, if they were designed in such a way that I felt my rights as a citizen were protected, I would probably take them.

If I could have a lawyer present, if various things happened, I would probably take them. You know, I'll compromise. I don't believe that it makes sense for me to take some extreme position.

But it's not extreme to insist on my rights; because I understand what we're here for is to help with an activity that ensures everybody's rights.

And for students, I think it's really critical, because good students have options. I personally have friends who have left direct-funded post-docs because of conditions at the Lab. That was a big factor in their thinking.

That's not good. That's not good. I just don't like that.

I have a friend right now who's getting a Ph.D., who, ask anybody; I'm always talking up the Lab. I'd like him to come. He has reservations about working for the defense, and I keep telling him that that's the kind of people we need here, because we don't want people that just want to blow up the world.

We want people who have big reservations about doing this, and that way they'll be much more

careful.

And he's listening to me. But I know that if things proceed as they seem like they might, that's a lost case; I won't get him in here.

So I have those concerns, and I just want to make sure that you know that students, who I think are the lifeblood of the Lab, or any place, will be very deeply affected by this.

That's in addition to the other things, the foreign-nationals and the things like travel money. The idea that Washington thinks because travel money is just vacations, when for scientists going somewhere and making connections, one of the biggest possible contributors outside of the Lab that I've gotten to work with, the group we're working with, I met at a conference I went to in San Antonio.

I didn't give a paper, but I made this enormously valuable connection there that will remain with me.

So those kinds of things, that kind of misinformation that gets out there needs to be countered some way.

So, anyway, I just wanted to let you know those concerns.

Thanks.

GENERAL HABIGER: Thank you.

We don't have any additional unscheduled speakers at this time. We still have 19 minutes to go. We will again go into recess, and if we get any more speakers we will offer them the podium.

Thank you for your patience.

{Recess taken)

GENERAL HABIGER: Dr. Soukup has asked for a follow-up.

The podium is yours.

MICHAEL SOUKUP: Thank you.

My name is Mike Soukup, and I'm here representing myself, although I am employed by the Laboratory.

I just wanted to recap thing things I think are really important from what I know of the earlier proceedings of the hearings today.

There seem to be, in my view, three major objections to the polygraph program that's being set up.

One is because the tests are scientifically and technically invalid; and again, I think you've heard an awful lot about that today.

People are very concerned about the validity of the test. They believe it appears to be

largely subjective measurement, in the end, in the final analysis; and they're worried about putting their lives and careers on the line for such a test.

The second major concern seems to be what I was alluding to during my first visit to the podium a little bit ago.

That is because the program, as I understand it, in its structure, there seem to be a lot of holes in it. An awful lot of people will not have to take the test even though it's certainly possible they would have access to valuable information, and could be a spy or whatever.

And the fact that various people in government apparently do have the power to make their own determinations of who should or should not take the polygraph, and make a determination on the validity of the results, seems to me to be a major flaw in that program.

I think, if the idea is to deter a spy or find one, again, I think there you just have too many holes in that program; and I don't think there's any way that one can guarantee that one will weed out such people through the polygraph examination as the program is currently set up.

The third objection I hear -- and again

I think you've heard this probably a bit today, and I think it's worth recapping -- I think many people here, including myself, believe that the program is really motivated by bad politics, and a sense of hysteria in Washington over this alleged spy scandal.

And Secretary Richardson, I believe -- and I hope I'm not misquoting him -- tells us that we need to do these things to regain the faith of the American public in us, because we are competent, capable, secure, and because we're not a den of spies.

And I'm not so sure I really believe that the American public, nationwide, really believes that.

I think the bottom line, personally -- and again, many of my colleagues -- is that the tests are really politically motivated by national-level politics going on in Washington, and a sense of hysteria and almost McCarthyism from the early to mid-'50s.

Those are the three major points I wanted to make, and I think probably embody most of the objections to the test here. If I'm wrong on that, I'm sure I'll hear by Monday morning from phone calls and e-mail; but somebody's always got to get the last word in, and I always like to be the last guy to do it.

So, it's 6:00, 1800. Thank you very much.

GENERAL HABIGER: Thank you, Dr. Soukup.

Before we adjourn, let me on behalf of the entire panel thank the Los Alamos National Lab for their warm hospitality in putting on this public hearing.

It's a very important process we're going through. We gained some invaluable insights from the discussion today, the inputs today.

Obviously, there are some concerns. We'll take those concerns, obviously, into consideration. There are some procedural issues that have been raised regarding the language in the proposed ruling; we'll take those into consideration.

This is what America is all about. When the government says we're going to do something, the people get to speak; and you have participated, those of you remaining, in that process.

And so we thank you for your duty as American citizens. It is 1800 hours; we have no additional speakers. I hereby declare this hearing adjourned. Thank you.

(Hearing adjourned at 6:00 p.m.)

STATE OF NEW MEXICO
COUNTY OF SANTA FE

CERTIFICATE OF REPORTER

I, Janis T. Young, New Mexico CCR #10, DO HEREBY CERTIFY that I did report in stenographic shorthand the proceedings set forth herein; and that the foregoing is a true and correct transcript of said proceedings.

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