RESTORATION ADVISORY BOARD

FORT McCLELLAN, ALABAMA

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Taken before SAMANTHA E. NOBLE, a Court Reporter and Commissioner for Alabama at Large, at Building 141-A, Basement Conference Room, Fort McClellan, Alabama, on the 21st day of April, 1997, commencing at approximately 6:30 p.m.

R E P O R T E R ' S I N D E X

MR. CHARLES TURNER: Y'all ready to get started? Let's call the roll, even though we don't need a quorum to do business.

I'm here. Mr. Levy is here. Mr. Anderson is here. Mr. Brown? Mr. Conroy? Dr. Cox? Mr. Cunningham is here. Mr. Elser is here. Ms. Harrington? Mr. Hood? Mayor Kimbreau? Ms. Longstreth? Mr. Miller is here. Mr. Conroy is here. Mr. Parks is here. Mr. Moore? Mr. Thomassy is here. Mr. Reedy is here and Mr. Johnson is here.

Did I miss anybody? Well, good.

Lisa was kind enough to do some minutes for us. They look right to me.

Anybody got any additions, questions, deletions?

MR. RON LEVY: Site tour, in terms of those folks who are identified correct? Set to go tomorrow.

MR. JAMES MILLER: One question, where do we meet at?

MR. RON LEVY: Right here.

MR. CHARLES TURNER: Right here out by this door, by the stairway?

MR. RON LEVY: Right in front, yes.

MR. ELSER: That's 1:00, right?

MR. RON LEVY: Right.

MR. PETE CONROY: Where do we have the minutes, Charles?

MR. BART REEDY: When is that, tomorrow?

MR. CHARLES TURNER: These are minutes right there in your hand.

MR. PETE CONROY: Good.

MR. CHARLES TURNER: The membership is well outnumbered by guests this evening. So, rather than direct my attention right now to them, I'm going to direct it to y'all. And we appreciate you coming.

We have realized the errors of our ways and relaxed our strict set of bylaws and hope to proceed in a more relaxed fashion. If you've got a question, just blurt it out or raise your hand.

Sam Noble, our court reporter, would like to know what your name is, so, at some point, please, identify yourself.

But again, thank you all for

coming. We've got a guest speaker tonight. And Mr. Levy is going to introduce the speaker to you.

MR. RON LEVY: Yes. We have had a lot of interest in the unexploded ordnance side of the house. Kelly Rigano from Army environmental center is going to talk to us about unexploded ordnance technology. Kelly?

MS. KELLY RIGANO: Okay. I think it might help if we dim the lights a little bit. As stated, I am here to talk about unexploded ordnance.

I always like to start out with a few pictures to get us in the right frame of mind. I work at the Army Environmental Center. I've worked for the Army for twelve years and I've worked for the Army Environmental Center for five years, now. And I have worked in that time on unexploded ordnance.

Here we go, that's a little better --

MR. CHARLES TURNER: Can I interrupt you just one second. If y'all can't see, move your chairs, feel free to move your chairs around so that you can.

I'm sorry, Ms. Rigano, go ahead.

MS. KELLY RIGANO: What I do within the Army Environmental Center, within our environmental technology division, is work on unexploded ordnance and technology, detection of unexploded ordnance, such as UXO, characterization of UXO and remediation of UXO.

Let me hasten to add, I have not been directly involved with actual clean up efforts. The Army Environmental Center does not perform the clean ups of UXO on a broad basis.

I look to, in many cases, the Corps of Engineers as one of the prime users of the technology that I analyze. It was felt that it was appropriate for me to stand before you today, though, so I can share with you what I know about the state of the art, technology-wise. I can come to you and explain a little bit more about unexploded ordnance and how technology deals with unexploded ordnance.

I have an overall program within the Army Environmental Center, and as such, I have certain objectives for this program. Obviously, there is a need to improve the management, the characterization, and the remediation of UXO sites on

all of the ranges: BRAC, as you're well aware of, formerly used defense sites, active sites, test ranges, property that doesn't even reside within the government and never has actually been a formerly used defense site.

I want to establish more capable and reliable and cost effective methods for UXO characterization and remediation. As you'll learn a little bit more in my presentation, I would say the technology is still somewhat in its infancy in regard to dealing with UXO issues and problems.

Want to provide complete information and tools for the planning and decision making. Along those lines, the program that I do work on can be broken into these very specific areas. I've overseen some very major technology demonstrations, which I will detail more fully for you later in my presentation. Doing more in the area of information management and decision analysis. And the other as stated, I don't need to detail them further for you. You can look at those.

I work very closely with other government organizations such as the Navel EOD

Explosive Ordnance Disposal Technology Division. They serve as, in a sense, my technical right hand, providing program management and technical expertise. I also deal with the Air Force, Wright (phonetic) Laboratories at Tindell (phonetic) Air Force Base. Just trying to get across that we coordinate in a variety of manners, with many different agencies. I've just named two of them for you.

I thought I would begin by showing you a few pictures of the way UXO characterization is traditionally done. You look at men out in the field with some type of manual systems, man-portable systems, traversing lines and putting many flags in the ground. This is pictures -- these are pictures from Fort Meade.

I thought I'd also provide a little bit of background information for you regarding technology, a few specifics. There are five major sensors that can be employed for UXO detection. When I talk about UXO detection, I'm primarily talking about subsurface UXO detection and not really mine detection.

They really can be classified as

two different problems, subsurface detection is a little bit different than the mine detection. Mines, especially many of them today, now are plastic. And that's in a sense a whole other ball of wax. Not what we're dealing with with most of the UXO items that reside within the United States.

Five major detection sensors: Passive magnetometers, active electromagnetics, ground penetrating radar, infrared sensors, and then a combination of these sensors, multiple sensor approaches.

I had to smile when I looked at this chart a few minutes ago -- and I want to apologize to you, also. I gave a very similar presentation to them down in Panama. And so, this is the one chart that I missed when I scrubbed all my charts for presentation. I don't think you care whether these technologies are applicable for use in Panama, so, I apologize for that.

You will be able to look through the presentation hand outs, to spend a little bit more time, if you desire, about the specifics of these sensors. I don't know that there is any need for me

to go into a great deal of detail for you right now.

MR. RON LEVY: Did you have a question, Mark.

MR. MARK ANDERSON: Yes, I do.

MS. KELLY RIGANO: Yes.

MR. MARK ANDERSON: Have these technologies been through any kind of proof of concept? Were they used in the humanitarian mine clearing in Cambodia or anything like that?

MS. KELLY RIGANO: Well, some of them, some of these types of sensors certainly have been employed in that manner. When you think of these sensors, you also need to think that they can be employed on different types of platforms, man-portable platforms, vehicular platforms, airborne platforms. So, any of these sensors can be employed on any of those types of platforms.

When you're specifically looking for mines, for instance, you very well may use some active EM types of technologies. I'm just giving you broad brushed, the types of sensors.

I will show you many commercially available systems and how they have fared during

testing. And I think that will address some of your concerns.

MR. PARKS: Please, ma'am, what do you mean by limited by vegetation? Four of them has got that on that.

MS. KELLY RIGANO: That's correct.

MR. PARKS: Is that grass or --

MS. KELLY RIGANO: That can be grass, trees, certainly, yes, vegetation, any type of vegetation. If there is some type of ground cover, it does affect the sensor.

In many cases, to perform surveys, trying to utilize some of these sensors, much of that vegetation would need to be removed.

MR. JAMES MILLER: Are you telling us that you have those type of sensors or are they going to be using those type of sensors?

MS. KELLY RIGANO: All of these sensors have been tested on different types of commercially available systems. And I will get into more details about those for you, momentarily.

Not to say that for an application for UXO, all of these sensors work well. You wouldn't

even want to touch them with a ten foot pole.

MR. RON LEVY: James, are you talking about Fort McClellan using those?

MR. JAMES MILLER: Yes.

MR. RON LEVY: Decision in terms of what we're going to do have not been made. She's just giving us an overall briefing.

MR. JAMES MILLER: Of what they have available?

MS. KELLY RIGANO: Yes.

MR. RON LEVY: Yes.

MS. KELLY RIGANO: My intent was to help provide information, then decision makers can better use to make the decisions that need to be made regarding UXO clean up, characterization, that type of thing. As I said, a final option is to use a combination of several of these sensors.

And as I see technology progressing over the year, more technologies, more systems, are utilizing multiple sensors. And that can, of course, increase your probability of detection and reduce your false alarms. So, there are very significant benefits to using multiple sensors.

As I said, all of these sensors can be employed on different types of operational platforms. And really what ends up being the optimum is possibly a combination of the three top -- really, the two, vehicle towed and man-portable.

And again, and I'll tell you in just a minute, based on different demonstrations that we've conducted over the past few years, airborne technology has not proved to be successful for UXO characterization, whatsoever.

The man-portable in combination with vehicular towed can be optimum. In some circumstances, you are limited by terrain and you may be forced to just employ man-portable. It's all going to depend on your very specific circumstances.

What I've been speaking about for the past few minutes has been the detection, the characterization technologies. I also wanted to spend several minutes about remediation, digging the rounds up.

The way it's traditionally done, again, is a man is getting out there and he's digging in the dirt. It can be very labor intensive.

Obviously, with a man that close to your ordnance items, there are more risks to your workers.

When you step back, you look at manually operated excavators or other heavy equipment and then the next step up is remote operated, autonomous, tele-robonic type of equipment, again, excavators and heavy equipment.

MR. CHARLES TURNER: Ms. Rigano, how many casualties have y'all had interrogating UXO?

MS. KELLY RIGANO: I do not have the statistics which you're specifically talking about. But I think the number is very low. I do not know of any that, for instance, the Huntsville formerly used defense site clean up entity, if you will, are quoting, as far as remediation. Ones'ies (phonetic) and twos'ies (phonetic), if at all.

When you talk about UXO remediation, there can be UXO remediation on sites such as yours, a BRAC property, but you can also have UXO remediation on active training ranges, where you have military personnel going out and performing military clean up efforts, that type of thing. And I think there along the way have been some type of small

number of military accidents, over the years, maybe going across property that wasn't as safe as it -- and they shouldn't have been going across it, that type of thing.

I think that the DoD explosive safety board may have better statistics along those lines. And I can help you in making contact with them to get more details.

MR. CHARLES TURNER: Thank you.

MS. KELLY RIGANO: But very small.

MR. RON LEVY: Kelly, are you aware of any clean up, not EOD operations, but clean up, either at a BRAC installation or accessing of property, where somebody was killed?

MS. KELLY RIGANO: No, I'm not aware of any, no, I'm not.

MR. RON LEVY: Okay.

MR. FERN THOMASSY: A couple of things. One, from what I've seen, certainly, the active EM and the magnetometer, really, are the only two technologies that are reliable right now.

In utilizing them, what is the process? Do you go in, utilize them to make your best

determination, then do the remedial action to some base depth and then declare that property clear, usable, for what purposes? What restrictions still remain today with the type of remedial action you do on a property after it's been handled?

MS. KELLY RIGANO: I don't know that I'm fully able to address the full process as you're asking about. Step one, characterize the site in some form. The way -- the best way it can be done now is to collect data and you can then have some target maps, which you deal with, as opposed to that earlier picture that I showed you where there is just a lot of flags out on the ground.

You collect all the data that your sensors are processing. You analyze, you post-process that data. You then have a target map of your site.

The next step then may or may not be to dig in the dirt, regarding what you find. You may dig down to a certain level. Very large UXO items, very large two thousand pound bombs could go as deep as thirty feet. I don't know that the reuse of the property would dictate you ever digging up a thirty foot buried two thousand pound bomb. It's not

hurting anything, if it's in place and not disturbed.

It does go hand in hand with your reuse. Are you going to clean up? To what degree? What is your reuse? They have to be thought of together to make all of your decisions. And sometimes that can be very hard.

What comes first, the chicken or the egg? The decision for property reuse or your clean up? The DoD explosive safety board has certain guidelines right now, based on one foot, four foot, and ten foot, which I can share with you, get you copies of, about clean up standards, if you will. A lot of people --

MR. MARK ANDERSON: Please, please.

MS. KELLY RIGANO: I have a copy and will get copies made for you.

MR. MARK ANDERSON: All right.

MS. KELLY RIGANO: That one foot, four foot, and ten foot standard is still, as I understand it, in draft form.

Other than this, there has been no DoD published standards for clean up. The work that I reference, that I had that little mistake on that

earlier chart was for an effort that I, in conjunction with other agencies, worked on for Panama. And we looked at the site. We performed a hazard assessment of that site, based on types of ordnance, the density of ordnance, all the historical knowledge that we had. We then worked with EOD experts to quantify that risk, that hazard assessment.

And now, a decision maker can look at these hazard assessments, pretty colored maps, and better also make decisions about reuse and clean up. Is that, in a sense -- I think that's about the best I can to fully address what you're asking.

I know that the Corps of Engineers, once again, Huntsville division, does do actual remedial efforts for formerly used defense sites. And they contract routinely for these efforts. And in coordinating with them, we may be able to provide you a little bit more specific information along those lines.

MR. FERN THOMASSY: What I'm driving at is: It sounds as though most of what you can do right now, even with some digging, is clear an area to be utilized by foot traffic in the future.

Which probably makes it a refuge or a hunting area. But there is little or no way right now, that you can clear an area for industrial use and construction.

MS. KELLY RIGANO: I wouldn't say that.

MR. FERN THOMASSY: Okay. Are there examples --

MS. KELLY RIGANO: I don't really agree with that.

MR. FERN THOMASSY: Are there examples of that having been done?

MS. KELLY RIGANO: I don't really agree with that. I know that, for instance, at Aberdeen Proving Ground, there have been surveys, characterization efforts, significant digging. Whenever any building goes on on Aberdeen Proving Ground, the men with the magnetometers are out there, sweeping the area, prior to any digging events being undertaken.

So, it does not preclude any future development. You would have to do some significant sweeps. You may have to do sweeps -- one sweep and then dig down a certain number of feet and then do

another sweep to see if there is something even further buried.

But I wouldn't think that no development could take place on any site like that. I do not believe that to be the case, at all.

MR. FERN THOMASSY: It could be done on an exception basis, but a very, very expensive intricate process is what you're talking about.

MS. KELLY RIGANO: Possibly.

MR. FERN THOMASSY: Right now, that's the best you --

MR. CHARLES TURNER: Ms. Rigano, I've got a bunch of questions along the lines of his. Would you prefer that we hold them until you're finished with your --

MS. KELLY RIGANO: This is your forum, it's up to you. I don't mind, at all.

MR. CHARLES TURNER: Well, in that case then, what is the current status of the technology -- we've been told before that identifying buried UXO that could be pretty deep would be difficult on a slope to begin with. So, is there technology that you're aware of that's being developed

that could address that?

MS. KELLY RIGANO: Well again, when you have terrain dependencies, I think you're looking at having to employ a manual system, if you have severe terrain limitations.

MR. CHARLES TURNER: How deep can you go on a slope? How deep will the current technology permit you to go down, say on a first sweep?

MS. KELLY RIGANO: It's going to depend on a lot of your ground characteristics. Just because it's on a slope doesn't really make any difference versus if you're on flat terrain.

MR. CHARLES TURNER: It just makes the getting to it more difficult.

MS. KELLY RIGANO: That's correct.

MR. MARK ANDERSON: Are you talking about making it a man-portable --

MS. KELLY RIGANO: Yes.

MR. MARK ANDERSON: -- sensor of some type?

MS. KELLY RIGANO: Yes.

MR. RON LEVY: What is the damage

that's done to the land?

MS. KELLY RIGANO: If a significant UXO surface restoration or surface -- UXO characterization/restoration effort is undertaken, the first step is typically to perform a surface sweep, to pick up the debris, to pick up any UXO items that are on the surface.

That entails men walking on the ground, picking up a lot of these things that you find. If there is very high brush, weeds, that would entail possibly burning that, clear cutting. A very significant effort in itself.

MR. RON LEVY: What about -- and again, we're talking magnetometer type work -- what about soils that tend to have high iron ore content, do you not get false readings?

MS. KELLY RIGANO: You certainly can, yes.

All of the Hawaiian Islands, that there is significant dollars for clean up of this island, has just the characteristics that you're talking about. And there are some real problems with -- given that, magnetometers are one of the optimum

sensors to find metallic objects, you have the limitations that they may not be able to be successfully employed in that environment.

So, it is again terrain or geographic or geologic constraint (inaudible).

MR. BART REEDY: The mag and the EM, both, don't both of those -- do both of those not eliminate the halo effect from the high iron?

MS. KELLY RIGANO: I'm not --

MR. BART REEDY: Both of them still have the halo effect of a small piece reacting and looking like a large piece.

MS. KELLY RIGANO: That can be an issue. A lot of that can depend on the post-processing and how it's examined, also.

MR. CHARLES TURNER: Ms. Rigano, I've got one more question on this same subject.

MS. KELLY RIGANO: Sure.

MR. CHARLES TURNER: Are you familiar with the DoD Draft Range Rule?

MS. KELLY RIGANO: Sure.

MR. CHARLES TURNER: Under technology development -- I'm going to read from it --

finally, fully recognizing the limits of today's technology to reliably find subsurface UXO, DoD is committing resources to develop, in concert with the private sector, new and emerging technologies that would improve the ability to locate and eliminate UXO. Therefore, DoD sees a pressing need for additional research in these areas.

Do you know what resources they're talking about? I mean, is that actually money?

MS. KELLY RIGANO: When it's being referred to resources there, yes, they are talking about money. I will say that it's limited. There are two major DoD programs for -- very developmental programs. It's called SR -- Strategic Environmental Research and Developmental Program. And then ESTZP, Environmental Certification Technology -- Environmental Security Certification Technology Program.

These two programs take -- started -- the first program SERDP starts at the basic very research and development part of a program. The Environmental Security Certification Program looks at the latter development and the application and the

testing of it.

Both programs fund environmental technologies of which UXO is a piece. So, there are several million dollars, I think, for several years, for SERDP and ESTCP combined.

MR. CHARLES TURNER: One of the things we were thinking of -- I'm also associated with the reuse authority -- is that if we could get somebody, some group that does UXO work now, to come here and like to try and develop a center of excellence for UXO. See, we've got all this UXO they could work on and develop technology -- maybe they could work at developing technology to clean it up and in the meantime, start cleaning up the mess we've got here.

Would that -- would that be something that might fit under this -- what I just read and what you just talked about?

MS. KELLY RIGANO: Well, I'm not completely sure. I think that other places have had similar ideas, as you're just suggesting, Jefferson Proving Ground for one. Also a base closure site with fifty thousand acres of significant UXO

concentrations.

I don't know that I'm really able to answer your question, if we build it, will they come, that type of mentality, I'm not sure. I know that the contractors in many cases are able to obtain or even utilize just pieces of metal, signifying or representing UXO, and they don't have as great a need to have access on a routine basis that you're talking about.

Now, certainly, there are certain applications, certain circumstances for contractors who want to go out on a site, but they have many sites across the country that they seem to be able to go to.

MR. CHARLES TURNER: Okay. Thank you.

MR. MARK ANDERSON: I got about a million questions that just float out of that last one. But the research programs that you're doing right now, are there any APDs scheduled for this FY or next?

MS. KELLY RIGANO: Next. Why don't you let me go through the remainder of my presentation, because what I am going to talk about

are the demonstrations that my agency and I have overseen for the past three years about technology.

MR. MARK ANDERSON: But before you go from that one, how is the money currently allocated?

MS. KELLY RIGANO: The money for these demonstrations that I am going to talk about --

MR. MARK ANDERSON: I'm sorry. Not for the demonstrations. I'm specifically referring to the research program.

MS. KELLY RIGANO: The ESTCP and the SERDP programs come down through Environmental Security.

MR. MARK ANDERSON: Okay. We're meeting with them day after tomorrow.

MS. KELLY RIGANO: For three years, there has been some significant congressional funding and interest in the area of unexploded ordnance technology. I think the impetus for this started back in '92/'93 as a result of Jefferson Proving Ground being closed, another significant UXO site.

The Indiana delegation did push for and it did occur that there be some significant funds,

as I talked about, being devoted for assessment of technology. And we're talking about -- when you look at these three years of programs, on the order of almost ten million, almost ten million, almost five million, so, significant funds.

Other than this, there have been no funds, other than small dollars in the ESTCP and SERDP programs. There is no institutional funding line for UXO technology. It's a recognized concern.

When we started the Jefferson Proving Ground program, we decided that it would be best to create a test site by implanting inert ordnance on this test site. We established one hundred and twenty acres that we could bring commercially available government owned technology, whatever was available, out to this test site to characterize our test sites or perform remediation demonstrations.

As I think I've been alluding to, our program at JPG, as has much of my work over the past years, been directed as seeking safer, more economical technology and more effective technology for UXO characterization and remediation.

As I have highlighted in blue, our demonstrations have been result oriented. We've established metrics and criteria to examine existing technologies.

Up until this point, there has been no base line. There have been many contractor claims as to what technology can and can't, but there has never been a baseline for performance nor has there been a comparison of technology. And that's what this program has done.

Over the past few years, we've demonstrated over sixty-five technologies. For three years in a row, we've gone to Jefferson Proving Ground. But also, back here -- let's see, I should have also -- I also have written down a set of live site demonstrations here in the middle here.

When I say "live ordnance site demonstrations," we took optimum performers from our phase one demonstration period and we went to different sites across the country. We had five different sites that contained live ordnance, Eglin Air Force Base, a different portion of Jefferson Proving Ground, Yuma Proving Ground in Arizona, South

Carolina, Charleston, the name is escaping me, and McCord Air Force Base.

So, we tried to get different geographic and geological differences for these technologies to also assess their performance.

MR. MARK ANDERSON: I got another question.

MS. KELLY RIGANO: Yes?

MR. MARK ANDERSON: That stops with '95. What's -- how much money did you get for '96 and '97?

MS. KELLY RIGANO: We did not have tests -- we did not have any funding in '96. Although you will see the fiscal years here, the money came through so late in the fiscal year, the testing did not really occur until the following year.

MR. MARK ANDERSON: I understand.

MS. KELLY RIGANO: So, we had testing the summer of 1994, the summer of 1995, and the summer of 1996. The testing that was completed in the summer and fall of 1996, we now have the report that will be published within the next several weeks. And I will be more than happy to share that with you.

We make all of these reports open and available to anyone who is interested in obtaining them.

What I will do today is give you in a nutshell some of the significant results from all of the phases of demonstrations that we have conducted.

To briefly summarize the demonstrations, we have looked at all of the different types of sensors, we've looked at multiple sensors and multiple platforms being utilized. We've looked at the different types of remediation systems.

I always like to put up a few pictures to give people the visual ideas of what we're talking about. And the reports that I do have available give little sections and chapters dealing with all of these different types of technologies. I didn't think it may be necessary to go into the specifics of every picture that you see here, but this does give you an idea of the broad range of technologies that you see.

Some are very interesting. Some were not as commercially ready as they could have been. We saw a lot of duct tape in fact out on some of our first demonstrations. I think the

demonstrators learned a lot themselves by coming out to a test such as what we had out at Jefferson Proving Ground.

What I don't have is a picture of our airborne technologies. An oversight on my part. I apologize. You would see a picture of a helicopter or a small fixed wing airplane.

MR. FERN THOMASSY: What do they use airborne, infrared or ground --

MS. KELLY RIGANO: Yes --

MR. FERN THOMASSY: -- or ground penetrating?

MS. KELLY RIGANO: Yes, both, and neither was in any way successful. One even did try and hang a magnetometer from a boom, and that -- I think part of the problems, especially with our airborne systems was incredible navigation areas. To pinpoint a spot right on the ground when you're flying and towing a sensor, they didn't even have all their navigation problems worked out.

So, you kind of have to step back and say, is it a sensor problem, is it a vibration problem? You're going to have a lot more vibration

with an airborne platform. Is it a navigation issue?

And we did not go into depth on those questions. That was not the intent of these demonstrations. When I said it was a results oriented test, I meant we wanted to know primarily what is the detection rate for these systems, what are the false alarm rates, can they characterize the ordnance, can they classify it as to size, can you give us a depth. Not, why didn't they work. I didn't -- I was not able to answer the whys, because I didn't have enough time or resources to do that, also.

But I did feel it critical to answer the overall detection rates and false alarm rates questions.

I don't like the way this is showing up with a sleeve.

MR. BART REEDY: PD stands for positive --

MS. KELLY RIGANO: Probability of detection. I'll show you some pretty graphs. Maybe in fact I'll put this one up right now.

Overall, first and foremost, you want to be able to detect your ordnance. When our

demonstrators started out, during our first phase at Jefferson Proving Ground, our demonstrator probabilities of detection were on the order of fifty to sixty -- well, I guess, almost sixty-five percent. Let's call it sixty-five percent for the highest demonstrators.

So, that demonstrator could only find sixty-five percent of the ordnance that we had implanted out on the site. And you can see, the little black dashes are what represent our phase one demonstrators. And many are grouped very low, below ten percent.

You can't just ask the question, what is your probability of detection. Hand in hand with probability of detection is the false alarm rate. How many false alarms are you also detecting when you detect ordnance? And here, we have a number of false alarms per hectare, because that's what we utilized out at Jefferson Proving Ground, hectares. A hectare, I think, is on the order of two and a half acres.

You can see that we are having, also, significant numbers of false alarm rates. Our optimum performers, we want to be up in this corner,

high detection rates, very low false alarm rates.

When you're talking about some of these demonstrators, you're finding numerous, numerous false alarms for every ordnance item that you detect. Translated into -- that might be a lot of holes that you're digging that you don't uncover an ordnance item. It might be a can. It might be some nails. It might be some building material.

You can see from our demonstrations, phase two performance are the little blue triangles, a nice increase in detection capabilities. The red represents our phase three detection capabilities.

Have the systems truly increased in their performance capabilities? To some degree. As I said earlier, I think some of it is an education benefit from these programs. Several of our demonstrators did demonstrate in all three phases. You say, why did you have the same demonstrator back again. They convinced us in their proposals that they had made significant changes to their system to warrant a retest. So, we wanted to retest them.

Again, talking about navigation,

when we looked at our demonstrators, way back during phase one, they would give a point on the ground, but they could be as much as a meter off with the -- of one meter radial error.

So, plus or minus one meter, they could have been off on that spot on the ground that they listed on the data sheet that they handed us. Significant. Think of the hole you could be digging if you were a meter off on either side.

That has been reduced to a half a meter for our demonstrators during the phase three. So, that's been a significant change.

MR. FERN THOMASSY: What technology is represented by those three blocks up there in the upper left hand corner or are they a variety?

MS. KELLY RIGANO: They are either magnetometer or EM base or a combination thereof.

MR. CHARLES TURNER: How did the golf cart do?

MS. KELLY RIGANO: I don't remember offhand what their specific performance was. But they -- I'm not sure.

MR. MARK ANDERSON: What that's

showing, I guess, is that the more sensitive the detector, the more likely it is also to have some type of reading of something that may not be actually a munition.

MS. KELLY RIGANO: It's really a trade off. Where do you set your sensitivity reading? It's not a case of how sensitive necessarily, but where do you set that threshold? And if you set it in one direction, you may be getting so many more false alarms than you really want to see. If you set it to low, then you're not finding as many ordnance items as you need to be.

During the first two phases of the demonstrations, our technologists came out to the site and were asked to go over their plots of land. And on these plots of land, we had buried the inert ordnance that I talked about, all different sizes and types, from very small items up to very large items.

So, we were not giving these systems a lot of historical benefit about the site. It wasn't just that this is an old artillery range, you're only going to find artillery items out here, it was everything.

We did change these for phase three. We created scenarios, four sites where we then had the smaller -- small items on one, your medium items and large items, if you will. We were able to have our demonstrators select which situations, which scenarios they felt were most appropriate for their systems. And this is where they could tweak their systems a little bit more. If they were looking for big, deep items, they could screen out all of the small debris and trash in the first few inches and not even pay attention to it.

That could also be a little bit of a reason why you see a little higher detection rate. They were scenario driven.

MR. PARKS: What did your real world, where you went to those five sites show?

MS. KELLY RIGANO: Very good question. When we took our best demonstrators from phase one, the little black lines again, to our different sites across the country, we wanted to ask that very question. How do they perform in the different environments.

We knew that ground penetrating

radar, for example, would not work very well in the JPG environment, because of the very clay type soils that were there. High moisture content ground, penetrating radar does not work very well with that.

So, we took it out to Yuma Proving Ground. Very dry. We thought, this is one of the best places for ground penetrating radar to work. Let's see how it does.

We didn't see those changes, those environmental changes. What we saw were the best demonstrators at JPG were the best demonstrators on the other sites.

And again, this could be an educational process. Those systems that did perform best at JPG were the most furthest developed. For instance, it could be numerous things that enter into that equation. But we did not see the differences that we were first expecting.

Yes, sir?

MR. BART REEDY: The phase three was: They had different scenarios. Could you speak to that with like, this is an area of two thousand pound bombs?

MS. KELLY RIGANO: We have -- and I have it well documented in the report. But, yes, the scenarios, they had a lot of information about what they could expect to find out on those sites.

MR. BART REEDY: So then, the number of -- the chart there contains both a junk yard, if you will, of UXO detection, false alarms, plus a well grouped or sieved group of sites, two kinds of -- two kinds of demonstrations on the same chart?

MS. KELLY RIGANO: Yes, in a sense. They were still the same type of false alarms out on all of those sites. But, yes, they are -- there is that difference that you're talking about, that's correct. We told them more information about --

MR. BART REEDY: Could you tell me what the -- were there three? I thought you said three different scenarios.

MS. KELLY RIGANO: Yes, three scenarios.

MR. BART REEDY: Could you speak to that, briefly?

MS. KELLY RIGANO: We had an

artillery range, we had a bombing range, and we had small, small things. I've got some more documentation in my briefcase that I can share with you that will do a little bit more adequate job in explaining what you're asking. And I'll share that with you in a few minutes.

MR. CHARLES TURNER: How is blast in place as a detection and elimination technology?

MS. KELLY RIGANO: When you're talking about blowing in place, that's usually on the site of the remediation. You have to find it before you can blow it in place. When you're talking about blowing it in place, it's because you don't feel that it's safe to move and so you want to get rid of it right in place and that's why you blast it.

MR. CHARLES TURNER: We want to put a highway through, and it's going to go right over a range, and we wondered if we couldn't just go -- go through that range, instead of spending a bunch of time looking for it, we know it's there, if you could put a bunch of explosives in the ground and just go ahead and blow up whatever is there?

MS. KELLY RIGANO: I don't think

that would be feasible for you.

MR. MARK ANDERSON: Recon by fire.

MR. CHARLES TURNER: Is it not effective?

MS. KELLY RIGANO: I think that you would be talking about a tremendous amount of explosives. I think that setting something off like that may have extreme environmental detriments. I don't know that you would ensure that you would be having all of those UXO items in that trail go off.

MR. MARK ANDERSON: Run the risk of them being sensitized.

MR. CHARLES TURNER: I mean, if an explosion is not going to set them off, what will?

MR. HARRY THOMAS: Well, an explosion would set off everything that was in the crater and you would be able to see the stuff that's in the crater. But are you going to crater every square inch of the thing all the way through?

MR. CHARLES TURNER: Yes, if that's what it takes to get the highway built, we will.

MS. KELLY RIGANO: I'm not speaking with a lot of knowledge to address your question here,

but I don't know that it would even be possible.

MR. CHARLES TURNER: We need the highway pretty bad is why I'm --

MR. BART REEDY: Charles, we may have to build you a bridge.

MS. KELLY RIGANO: I don't think that clearing a twenty foot or thirty foot swatch through some property would be any great problem for you to do that, nor any great, great expense.

MR. CHARLES TURNER: Did you hear that, Ron?

MR. RON LEVY: Charles, you're scaring me.

MS. KELLY RIGANO: I mean, I think you could do that easier than you could trying to set off explosives all the way around that --

MR. RON LEVY: I could just see everything flying out.

MS. KELLY RIGANO: That's a novel approach. I have not heard that one.

MR. RON LEVY: I mean, that's how they clear surface. That's how they clear surface mines, where they shoot, what it's called fast can

(phonetic)?

MR. HARRY THOMAS: You're talking about --

MR. MARK ANDERSON: Mik-lick (phonetic) mine clearing line charge.

MR. RON LEVY: But it's for surface. So, things that are buried deep, I mean --

MR. CHARLES TURNER: Well, I wasn't talking about, you know, thirty feet down.

MR. RON LEVY: Well, I mean, if they go make some of those big cuts out there --

MR. FERN THOMASSY: We used to use fuel air explosives.

MR. HARRY THOMAS: Plus, in those situations, you're not worried at all about other environmental damage that you may cause. You're talking about war time situation where you're killing people and destroying stuff, so you're not just worried about incidental environmental damage.

MS. KELLY RIGANO: I just don't think you could blanket go in there --

MR. PARKS: You blew the woodpecker up.

MR. CHARLES TURNER: Yes, the woodpecker might take some hits.

MS. KELLY RIGANO: And you could never set it off all at once, either.

MR. RON LEVY: You would have so many lawsuits and foundations being shook right off the --

MR. CHARLES TURNER: But it would be cool.

MR. BART REEDY: I like the idea, Charles.

MR. RON LEVY: I would like to see it, that's for sure.

MR. CHARLES TURNER: We can sell tickets.

MR. FERN THOMASSY: Charles, that eastern bypass was the basis for my original question, and she answered it. The way you're going to have to go through there is lay out that area. And then intricately, they're going to go through and they're going to clear the surface and then they're going to clear down to the depth that they have to put a footer and they have to dig and they have to expose machinery

and people until they can get all the way through. And I believe that's what we've got to push for the Army to do in regards to that.

MR. MARK ANDERSON: The way I read the existing munitions rule -- now, not the range rule, but it could wind up being a management by exception, that you dig until you find one and then you clear it and then you continue digging. Now, that's the way that thing is written right now.

MR. CHARLES TURNER: I think my solution is faster and easier.

MR. BART REEDY: And certainly more dramatic.

MR. CHARLES TURNER: The surface stuff, you can knock it out in an afternoon.

MR. MARK ANDERSON: If we could tie it into another air show, it would be --

MR. CHARLES TURNER: I'm sorry, Ms. Rigano. Go ahead, please.

MS. KELLY RIGANO: We talked about detection rates. I tried to address for you the false alarm rates, significant.

There's a real world example. I'll

talk about Fort Meade for just a second. A fellow who works in my office has worked down at Fort Meade, doing UXO characterization and clean ups. And he has got some significant contracts to do clean ups on property, cleaning up the surface, cleaning up to six inches and cleaning up to eighteen inches.

He gave me some astounding statistics, at least for Fort Meade. One out of every ten thousand items that was picked up was ordnance related. Ordnance related, that could have been a fin. One out of every ten thousand ordnance related items was hazardous.

Now, that's some significant clean up that has occurred. And was it really warranted, based from a risk standpoint?

MR. RON LEVY: Say that again, Kelly, one out of --

MS. KELLY RIGANO: One out of every ten thousand items that were picked up or you dug up off say down to eighteen inches, was ordnance related. It could have been a rocket. It could have been a tail fin. It could have been a piece of ordnance that was not in any way detrimental to anyone.

Of those ordnance items, ordnance related items that were picked up, one out of ten thousand was hazardous.

MR. BART REEDY: Chris, you're an amateur statistician. What's that, one out of a hundred thousand was a live round?

MR. PETE CONROY: Was hazardous.

MS. KELLY RIGANO: Yes.

MR. DEAN HUTCHENS: I don't know if you know, Kelly. What was the density breaker --

MS. KELLY RIGANO: I do not know that, unfortunately. I mean, they were picking up debris right and left, so, obviously --

MR. DEAN HUTCHENS: Yes. There's probably lots.

MS. KELLY RIGANO: -- to get contracts we want to do that.

From this, this is part of the risk management, the risk assessment. That's part of the range rule. It will be part of the range rule. As to how do you deal with these sites? Do you have to go through on these sites and walk it every inch of the way? Does a clean up to eighteen inches really buy

you more hazard reduction than a clean up to six inches for instance?

Very good questions. I don't stand here today with all of those answers. But we are trying to look at those questions and get answers to them.

MR. RON LEVY: Again, it comes back to the reuse of the property and what the reuse is --

MS. KELLY RIGANO: As I understand it, the property, most of the property at Fort Meade is being used for relatively open access, as far as hiking and fishing, wildlife use, that type of thing, not developmental use, high developmental use.

MR. PETE CONROY: Of your demonstration areas, how many of them were on thirty-five, forty-five or steeper degree slopes?

MS. KELLY RIGANO: The demonstration areas at Jefferson Proving Ground were very flat. Again, this was just a test site for us. And it wasn't necessarily representative of many real world sites. And even that gave a lot of our contractors problems. And that's why I say there has been a tremendous knowledge awakening, if you will,

because some demonstrators, especially during phase one, had trouble on our little golf course, if you will. Now, it wasn't just as smooth as a golf course, but you don't get much flatter than what we had out there.

MR. PETE CONROY: And also, on the demonstration areas, what degree -- to what degree was there naturally occurring ferrous material? You were saying it's clay type soils, so, I wouldn't guess much, but --

MS. KELLY RIGANO: The soils were clay --

MR. PETE CONROY: Was there naturally occurring iron?

MS. KELLY RIGANO: No.

MR. PETE CONROY: Was it --

MS. KELLY RIGANO: No.

MR. PETE CONROY: -- mainly trash --

MS. KELLY RIGANO: Yes, yes. What we did to prepare the site is we conducted a surface sweep, we had EOD units walking over the surface of this site, picking up trash and debris off of the

surface. We also did a characterization of the property, ourselves. And then we brought in all our demonstrators.

We had dug several holes where we thought there might have been inert ordnance -- where we thought there might have been UXO on this test site that we prepared. Demonstrators also found numerous anomalies, which we had not implanted anything there. So, we went out and dug many more holes after the fact, if you will, to find out was there truly UXO in those holes, were there debris. And I don't think we really found any other UXO. We did find fence lines, a lot of old building debris, that type of thing, farming equipment, old farming equipment around.

MR. MARK ANDERSON: On the subject of risk, actually you triggered something with me. Fort Meade, do you know what the historical use of it was? Had they done significant firing there?

MS. KELLY RIGANO: I'm not able to address that. I'm sorry.

MR. MARK ANDERSON: That's okay.

MS. KELLY RIGANO: I can get that for you.

MR. MARK ANDERSON: It would actually be -- well, you know, they did some things out at (inaudible), not to far from there, so, we know that they may have ammunitions. But I wonder, you know, a hundred years worth of firing?

MS. KELLY RIGANO: No, I would not say that, at all. It's been relatively light use. What specifically was out there, I could not address it for you.

MR. MARK ANDERSON: That would have an impact on our ability to assess the risk. You know --

MS. KELLY RIGANO: Certainly.

MR. MARK ANDERSON: -- obviously, if we're talking one in a hundred million, that's one thing, but if they only had five years with the firing and the ranges were identified, that's a big difference.

MS. KELLY RIGANO: Sure, sure.

Moving on, as I said, we analyzed our demonstrators for also their localization and their characterization abilities. We talked already about how their radial errors has decreased and their

depth error has also decreased. You're seeing about a .4 average depth error.

So, of course, there still are errors, both high and low, as to where those ordnance items, those anomalies really are located, in the -- up and down.

As far as characterization, when we talk about characterization, it's broken into the two types, the size, are our demonstrators able to estimate the size of that subsurface item very accurately? We're saying about fifty percent of the time.

MR. BART REEDY: And that's the seeded areas?

MS. KELLY RIGANO: Yes, yes, these are based on our test scenarios, our control test site.

This is another big one. They're not able to discriminate. They cannot distinguish ordnance and non-ordnance targets from each other. And this is where we're trying to focus the efforts for the future, research and development, technology enhancement, and the ability to discriminate.

If you can collect data and have one hundred thousand targets but can post-process that and in analyzing that data, decide that three/quarters of those things, those anomaly points that you've just collected are not hazardous ordnance items, then you've just realized a significant savings. You don't have to even go in and examine some of those.

MR. RON LEVY: From the anomaly pattern -- Kelly, from the anomaly pattern, though, can you not attempt to make a differentiation? I mean, you can look at the pattern that's being put out and maybe attempt to say, well, that looks like a --

MS. KELLY RIGANO: And that's where the work is keying in on. You're talking about a target data base, a signature data base for different ordnance items. There are many different ordnance items. And when they go into the ground, they can look very different. They can be rotated differently. They can break apart. There are so many different, different things that can happen that we don't have all those answers, yet.

But that's where many of the contractors are going. Signature data bases that you

compare the data that you gather off your site to that target data base, if you will.

MR. FERN THOMASSY: Do you have anything out there on a scientific base that really gives you hope that can be turned into technology to do this differentiation between ordnance and non-ordnance items?

MS. KELLY RIGANO: Well, we are seeing some strides in that, certainly. But can I stand here today and say --

MR. FERN THOMASSY: Yes.

MS. KELLY RIGANO: -- we're going to have it all in five years?

MR. FERN THOMASSY: No, I'm not asking --

MS. KELLY RIGANO: I don't know that, either.

MR. FERN THOMASSY: No. What I was asking, what are some of the science items out there that show promise?

MS. KELLY RIGANO: Well, maybe one thing to do would be to look at some of these. These are the phase three demonstrators, in order to address

your question.

Some of the companies are trying to make strides in doing some of that discrimination and false alarm reduction. Our top performer from phase three was a company that we had never seen nor heard of prior to phase three, which that in itself was a surprise to us.

They came up with, I think, the highest detection, almost the highest detection rate, .94, and they had the lowest false alarm rate. They are doing something along those lines. They are starting to discriminate. They are making those attempts.

We will move forward. I just don't know where that line, that limiting line is.

MR. CHARLES TURNER: Now, was that the highest performer from all five sites, including Eglin and JPG?

MS. KELLY RIGANO: No. This is just our phase three performers, our phase three statistics.

MR. CHARLES TURNER: Okay. So, phase three was conducted at JPG?

MS. KELLY RIGANO: Yes, it was. This is just the JPG site.

MR. CHARLES TURNER: And that's fairly flat terrain --

MS. KELLY RIGANO: Yes.

MR. CHARLES TURNER: Sandy soil?

MS. KELLY RIGANO: Clay.

MR. CHARLES TURNER: Clay.

MS. KELLY RIGANO: Clay content, high clay content.

MR. FERN THOMASSY: And that's not a new science. That's EM and magnetometer.

MS. KELLY RIGANO: Yes.

MR. FERN THOMASSY: Combined?

MS. KELLY RIGANO: Combined.

MR. FERN THOMASSY: A unique way --

MS. KELLY RIGANO: Combined and so forth.

MR. FERN THOMASSY: -- hooking up a computer and analyzing data.

MS. KELLY RIGANO: That's correct. The little numbers in parenthesis are the scenarios that they visited. Several of these systems only went

to one of the scenarios. Some went to all three. This company down here, you see, SC&A and then you see ADI. Well, ADI was one of our demonstrators.

SC&A gathered data from several of the contractors and did additional post-processing. And so you're able to see that SC&A for ADI, they didn't do all that great. ADI by themselves had a pretty good detection rate.

But now, if you compare SC&A for Geometrix, they did better for Geometrix. So, Geometrix would probably like to hire SC&A. ADI would not.

So, that was just something interesting, a company just dealing with the data processing.

And let's see, one or two other pictures that I'll leave you with. When we went out to Jefferson Proving Ground for our live site demonstration, we did a surface clearance also, on about a hundred and fifty acres, one hundred to one hundred and fifty acres before we would allow our demonstrators to set foot on that property from a safety standpoint, and conduct a surface clearance

prior to looking for the sub-surface ordnance.

This is about a seven to nine ton pile of ordnance debris, scrap. Of course, the hazardous items were blown in place. But this just is a nice graphing to say, we collected an awful lot of ordnance related debris out there at JPG. So, if anybody thinks they've got problems, I don't think anybody has got problems quite as bad as JPG.

I always like to leave you with the thought that once we are able to answer and address all of the problems associated with ordnance in the ground, we can start dealing with the ordnance in the trees. Okay.

MR. CHARLES TURNER: Before we riddle Ms. Rigano with additional questions, do y'all feel like taking a break? Why don't we take five or ten minutes.

(WHEREUPON, there was a brief recess.)

MR. CHARLES TURNER: Let's come back to order, please. Let's get started.

MR. RON LEVY: Y'all, take your seats, please.

MS. KELLY RIGANO: You may be

getting tired of me, but I just had one other thing that I thought you might find interesting. This was something that Mark had brought up about funding and what's really being applied to UXO technology.

There has been some efforts that have been ongoing over the past year. I'm not sure if you're familiar with them or not. One of them has been a general officer steering committee to look at UXO.

The reason that this was put into place, this general officer steering committee, GOSC group, was at the request of Congress. And it was the result of a GAO report that came out several years that said, DoD, you're a little bit fractured in regard to UXO. There seems to be some duplication of effort in regard to who is doing what with UXO. Take a look at it and figure out how to better manage UXO technology.

The GOSC brought together three sub-groups, one of which dealt with requirements, one of which dealt with detection technology, and the other which dealt with remediation technology. For each of these groups, we looked at five different

areas.

When you think of UXO, you can think of it in five different areas. Demining explosive ordnance disposal, EOD, counter mine, UX -- I have it kind of written out -- environmental UXO remediation, and active range clearance.

What I wanted to put this slide up for you about -- why I wanted to put this slide up was to look at the dollars associated with this. These are fiscal year '97 dollars, about a hundred and eighteen million dollars. You can see that eighty-six million of them are going to counter-mine, another fourteen to de-mining. And you see UXO, environmental UXO, eight point five.

You follow those lines down through environmental security and equipment and you find SERDP and ESTCP, the two programs that I talked to you earlier about. And over here you also see, four million to the Army Environmental Center. And this is the fiscal year '97 Congressally directed UXO program at JPG.

Mark asked me about that at the break and I had neglected to mention to you that there

is an effort ongoing. We will have have demonstrations again next summer in this.

But we do not expect that this funding will continue. I see that this is the last year for that Congressional funding. And this just highlights for you how the money is broken out.

And you see that there is not a lot of resources being employed to UXO technology per se. We're relying very much on private industry and some of the enhancements and developments that they're making with their own technologies. And we want to hire the best companies to do the jobs for us. So, that's where we've stood.

MR. PETE CONROY: Can we get copies of some of the overheads that you haven't provided, if we give you a call?

MS. KELLY RIGANO: Sure.

MR. MARK ANDERSON: That one in particular.

MS. KELLY RIGANO: Someone made this up, but I don't know that he would appreciate my handing it out, but he gave it to me, so --

MR. FERN THOMASSY: So, in the

department of defense technology, UXO has a broader term than that associated with unexploded ordnance that is lying around on ranges. Unexploded ordnance also has a military --

MS. KELLY RIGANO: Certainly --

MR. FERN THOMASSY: -- meaning, and that's why counter-mine is a sub element of it.

MS. KELLY RIGANO: Yes, that is correct.

MR. FERN THOMASSY: Yes.

MS. KELLY RIGANO: That is very true. One has --

MR. MARK ANDERSON: One thing that's not clear on the thing that they're showing up there, but it's clear over here on the far left is -- can you pull that over?

MS. KELLY RIGANO: Sure.

MR. MARK ANDERSON: No. Look at where --

MS. KELLY RIGANO: This?

MR. MARK ANDERSON: No, the other way. Go the other way.

MS. KELLY RIGANO: I'm sorry.

MR. MARK ANDERSON: Look at the status of the programs. Looks like those two programs you're talking about are in 6.3 and 6.4.

MS. KELLY RIGANO: Yes.

MR. MARK ANDERSON: So, you're actually in prototyping and development, at that point.

MS. KELLY RIGANO: That's correct. And the reason that you do -- and I may point out, the reason that you see this Congressionally directed technology demonstration program in the 6.2 area, it really should fit in the 6.4 area, but the money comes down to 6.2. In a sense, the only way we can get money, the only way money can be directed like this is in a 6.2 line. So, that's why it falls there. But it really is that type of program.

So, right, 6.1, sure don't see much going on. These are the two areas that are the most parallel. The active range clean up and the environmental and UXO remediation is where our interests lie. And there is certainly no basic -- SERDP in a sense tried to cover a little bit of 6.1 and 6.2.

A lot of acronyms on here. I don't know that I know them all, but I would be happy to share some of them if you have any specific questions of what I do know.

As I was talking about this general officer steering committee, there will be a readout on their final report at the UXO conference, for those of you who are attending. The final report has been completed and should be distributed within the next week or two, as I understand it.

I have dealt in the requirements -- well, actually, I've had a part in providing feed back for all of the three subgroups from the environmental remediation perspective. What really, I think is being done, is that the GOSC has now sat back and looked and said, well, we realize some of these problems, we realize some of our management issues. Let's create a management oversight group. And that's what they are doing to deal with more UXO technology.

They may be highlighting -- I think they are, highlighting some of the issues in regard to is there sufficient funding being directed at technology. What happens as a result of their

highlighting that, I do not know.

Also, for your awareness, there has been a defense science board that has been put into place over the past, I'd say, six to nine months. They also have a report that's due within the next month. I will have a person providing a report also at the UXO conference. And they were looking at many of the same issues dealing with technology, dealing with policy, dealing with risk, those types of things.

And I'm not as familiar with what their report products would look like. So, they're just two things that you may be interested in also taking a look at.

MR. RON LEVY: Just as a matter of record, there are a number of us going to attend that UXO forum in Nashville: Bart, myself, Chris, Lisa, Paul James from my office, Pete is going, Gary Harvey is going.

MR. CHARLES TURNER: I'm going, Rob Richardson is going, L. Z. Johnson is going.

MR. MARK ANDERSON: And I'm going.

MR. RON LEVY: And Mark. And I just say that as a matter of record. There is a lot

of interest and there are quite a bit of folks that are attending. And I really believe the more we know, the better we're able to handle the issues that are here.

MR. CHARLES TURNER: Can RAB fund some of the membership going?

MR. RON LEVY: I don't believe I can do that, no. We can bring people here, but sending people on trips like that, I think is not within DoD's policy for use of RAB monies.

MR. CHARLES TURNER: Whenever I get a no from Ron, I always look at Lisa to see if she's --

MS. LISA KINGSBURY: He's telling the truth.

MR. CHARLES TURNER: No, who will tell me yes.

MR. MARK ANDERSON: She's really brave.

MS. LISA KINGSBURY: We can bring them here. If you find somebody at the forum you want here, we can bring them.

MS. KELLY RIGANO: One last thing

that we really didn't spend any time talking about is the contracting for UXO services. And that's another ball of wax. One that I'm not as familiar with as many people are, because as I said earlier on this evening, I do not deal with actual clean up efforts.

But I know there are significant problems, if you will, with how to contract for a UXO restoration or characterization effort, everything from what technology should be used. If you put into a scope of work you're going to use the best available technology, what does that mean? How do you contract for all of this? Significant problems. I know many contractors are very frustrated with the contracting process. And it's just another ball of worms, can of worms, if you will, dealing with the contracting for these types of things.

MR. RON LEVY: We -- I'm sorry. I didn't mean to interrupt you. Are you open for some questions, now, I think?

MS. KELLY RIGANO: Yes, certainly, please.

MR. RON LEVY: First off, the BRAC clean up team is very interested in the UXO business.

We've got a meeting scheduled Friday at 900 hours in this room with the Alabama Department of Transportation and local reuse authority members, to talk about UXO issues that are attendant to the eastern bypass, particularly for them to talk to the BCT and express -- the community express their desires on focusing on that, as a clean up issue.

So, that's coming up. But really what I wanted to ask you about was: One of the things that the community has got in their draft concept now is a retirement community. And it's generally centered in an area of an old mortar range on -- off of -- range sixteen, off of the back of the MP school and such.

From a technology standpoint -- first off, let me just kind of set it up. There is some ruggedized (phonetic) terrain in there and some wooded areas. Most of the area where they shot into is fairly level and open. But from a technology standpoint, how would you approach that?

MS. KELLY RIGANO: Well, you can utilize different types of technology for the different constraints that you have, if you will. I

know that several companies have both their vehicular systems and they supplement it with their man-portable systems to be able to do full coverage of your site.

The way that we are trying to provide guidance to different sites to think about characterization and clean up would be to create a tiny little site right on their own property.

You can use the JPG results to be your first cut at who is the best contractors. You can compare contractors based on that data. But to know how specifically they would perform on your site with your very site characteristics, you may, as a first step, want to hold a little mini demonstration from which you would do a down select to do your further efforts.

We are well aware of, as I say, numerous contractors doing commercial efforts and as is the Huntsville Corps of Engineers.

MR. RON LEVY: Give us some examples of the commercial efforts that you're talking about.

MS. KELLY RIGANO: The companies?

MR. RON LEVY: No. The commercial

areas -- the land they were trying to be cleared for commercial development.

MS. KELLY RIGANO: I think it would be best if we spoke with Huntsville to talk about the actual properties there.

MR. RON LEVY: Actually, we are. We have a project manager with Huntsville and they're going to be part of this meeting. But we really have not gotten into any specifics.

How does -- I mean, you're familiar with the EECA term, right?

MS. KELLY RIGANO: Enviromental --

MR. RON LEVY: Engineering, evaluation, and cost analysis.

MS. KELLY RIGANO: Yes, of course.

MR. RON LEVY: How does that fit into the process from what you were talking about?

MS. KELLY RIGANO: I'm not sure. There are certainly cost figures that can be associated with certain levels of UXO characterization or remediation.

MR. RON LEVY: Our understanding of the EECA process is there is some sampling involved,

as well.

MS. KELLY RIGANO: As I --

MR. RON LEVY: And we're talking about sampling, we're talking technology.

MS. KELLY RIGANO: Sampling is, I think, the real way of the future, as far as -- especially, as far as delineating the boundaries of what you have and where you need to concentrate your efforts.

Huntsville employs sampling for their clean ups and characterizations, as I understand it. So, it certainly is one of the tools.

If you've got a large area of question, if you will, then some appropriate sampling, as opposed to characterizing on a flip-by-flip basis, that area, that's what you would want to look at.

MR. PARKS: If they gave you a description of all the land and the topographical or whatever it is, can you recommend contractors that would fit that particular land?

MS. KELLY RIGANO: Well, I think that almost by looking at some of the available reports that I have, you can pull from that who would

be the best demonstrators for you. I can certainly try to help with that to some extent. Again, not being very familiar with the contracting mechanisms, how you need to deal with some of these contractors, I'm not fully able to address maybe all the questions you would have along those lines.

MR. RON LEVY: Ms. Goodman came through here back in -- when was that, June, last year?

MR. DEAN HUTCHENS: August, last year.

MR. RON LEVY: And correct me if I'm wrong, Charles, but the community asked her what kind of support they could get from a UXO standpoint, as it relates to McClellan. And I think her answer was that she would certainly like to see McClellan used maybe as a test bed for some of the technology. Is that not correct, Charles?

MR. CHARLES TURNER: As best I can --

MR. RON LEVY: Have you heard anything about that? Is any of your ----

MS. KELLY RIGANO: No.

MR. RON LEVY: I mean, as close as we are to Huntsville and what's going on there.

MR. CHARLES TURNER: She's coming back in June, so we'll ask her again.

MS. KELLY RIGANO: Who is coming back?

MR. CHARLES TURNER: Ms. Goodman.

MR. PETE CONROY: I've heard she's actually transferred over to the department of interior.

MR. RON LEVY: I don't think she's leaving any time soon, though.

MR. PETE CONROY: Okay.

MS. KELLY RIGANO: I know that Huntsville does have a very small test site that they utilize. Also, I think right on some of their own property.

MR. RON LEVY: Those other programs, SERDP, what was the other --

MS. KELLY RIGANO: SERDP and ESTCP.

MR. RON LEVY: Who are those programs under, in terms of --

MS. KELLY RIGANO: ESTCP is under

Ms. Goodman's office. She has a doctor Marcusie (phonetic) who runs the ESTCP projects. On many of those projects --

MR. RON LEVY: So, it's not worked through Huntsville is what you're telling me?

MS. KELLY RIGANO: That's correct. Several -- I should say -- several of those projects have or will demonstrate out at JPG, for example. For the SERDP program, the one or two ground penetrating radar projects are in their infancy and I do not know where they will be doing their testing.

I know that there are some type of test sites available at (inaudible), also. And GPR, you may want to keep in more of a Yuma environment, if you will.

MR. RON LEVY: You need to keep McClellan in mind when you start to look at varying terrain for testing purposes, because we've certainly got it all.

MR. CHARLES TURNER: Absolutely.

MS. KELLY RIGANO: I hate to beat a dead horse, but a lot of it just boils down to the funding again. I don't have a lot of funding that I

can deal with to work on technology. And that's an issue for us. The Congressional program is the major thing that I'm going to be working on over the next two years. I have some other site efforts, also, but my dollars flow more into enhancing the technology and providing educational materials and services, more so than establishing your test sites, if you will.

MR. RON LEVY: Anybody got anymore questions? I don't want to keep anybody too much longer. I think we want to move into the rest of the program.

MR. CHARLES TURNER: Ms. Rigano, thank you so much for coming and talking to us.

MS. KELLY RIGANO: Sure.

MR. CHARLES TURNER: We've all gotten a lot out of it and hope we'll see you again soon.

MS. KELLY RIGANO: I'm certainly happy to stay after and answer anymore questions that you may have.

MR. RON LEVY: That was great. I really did get a lot out of it.

MR. CHARLES TURNER: I agree.

I've got a seven year old down the hall who needs to get home and get in bed, so I'm going to swoop. But Fern is going to -- and Ron will take us through the rest of the meeting. And if the majority is for it, then so am I.

So, y'all just have at it.

MR. FERN THOMASSY: Maybe I missed it when we started. But did we ever approve the minutes from the last meeting?

MR. CHARLES TURNER: If you had been at the last meeting, you would realize that approving the minutes is no longer required.

MR. FERN THOMASSY: I saw the change to the -- the bylaws have been suspended for the next three months.

MR. CHARLES TURNER: All we're doing is just making sure that they're accurate to have a short, concise summary of what went on.

MR. FERN THOMASSY: Okay.

MR. CHARLES TURNER: But as far as -- in getting the Roberts' Rule of Order out of the meetings, we've decided --

MR. FERN THOMASSY: It's out.

MR. CHARLES TURNER: -- it was out. Bye everybody. It's good to see y'all.

MR. RON LEVY: I don't believe the charter is --

MR. FERN THOMASSY: Membership doesn't have any reports.

MR. RON LEVY: Or the community relations, so, we can skip through those. Old business --

MR. FERN THOMASSY: Do you have anything to discuss regarding the --

MR. RON LEVY: Oh, you do?

MR. MARK ANDERSON: I have one item that could fall under the category of community relations. I have got an invite from the Army Engineering and Support Center in Huntsville to come up and get a detailed, all afternoon briefing on the technologies, much, you know, much more in detail than what we got here today.

And I'm taking with me a couple of folks from the LRA and a guy who has a background in environmental engineering. Basically, I'm opening it up to other members of the board. If anybody else

wants to go, as well, you know, ride with me. We're going on the 8th of May.

And, you know, the purpose is just fact finding, go up and learn what we can so that we're a little bit smarter when the meeting in June rolls around.

MR. RON LEVY: I would like to, but I've got another meeting that day.

MR. FERN THOMASSY: Speaking of the meeting in June, that's what the old business is. And one of the first things is an agenda for that meeting. And, of course, I've heard from a couple of people that we wanted to get some reports on the UXO conference that's going to be held up in Nashville. And we have several people from this organization going. That's a rough element of the agenda.

Did you at the last meeting discuss the agenda and any additional items that you were going to put on it?

MR. RON LEVY: We didn't, no.

MR. FERN THOMASSY: No. Okay, there is two parts to it. We want to have questions that we want to ask the DERTF. Is the intention

there? Was the intention of the board to go ahead and generate questions to make use of those people when they come to the Anniston area or what?

MR. RON LEVY: Let me take it from there, Fern. Sue, would you get up and just talk a little bit about the questions that --

MS. SUE ESTES: The questions that they want us to have, the twenty questions, would be the twenty questions that y'all would most like to ask the DERTF. And the reason we do it ahead of time is so hopefully they'll have some answers when they come in here for you guys.

And what we would like to do is possibly -- we've heard some questions tonight that we think we can use about UXO and other things. But come up with twenty questions that y'all would like to ask at this meeting and hopefully get some answers for you.

MR. FERN THOMASSY: And this is old business --

MS. SUE ESTES: We talked about it last week.

MR. FERN THOMASSY: What did we --

MS. SUE ESTES: Month.

MR. FERN THOMASSY: What did we do about it last month?

MR. RON LEVY: We tabled it for this meeting.

MR. FERN THOMASSY: Did we ask the members to bring questions in?

MR. RON LEVY: I don't think so.

MR. FERN THOMASSY: I didn't see it as part of the minutes.

MR. MARK ANDERSON: If I could make a suggestion. Particularly -- and Rob Richardson is gone, now -- but they are packaging some stuff for presentation to the Congressman to be asked to Ms. Goodman in advance. It may behoove us to ask them for a copy of that at the May meeting. And if those questions haven't been answered by then, then we re ask the questions if it's something that we consider significant.

MR. FERN THOMASSY: I think we ought to do two things. One, I would like to ask the current members if there is anybody who has any questions that they think should be asked of that

board. And if so, state them, tonight. Based on what they may have thought of or have been discussed in the past. And certainly, any of those who are here, observing and participating with us in this, if you have those questions and thoughts, please, put them forth this evening.

Is there anybody who would like to add anything at this point?

MS. SUE ESTES: Can I say, at least, we probably need the questions from the LRA before the May meeting.

MR. FERN THOMASSY: Yes.

MS. SUE ESTES: Because these questions are due to Ms. Goodman on the 23rd of May. So, that won't give us any time to know whether we have the same questions.

MR. FERN THOMASSY: When --

MR. RON LEVY: 19 May would be the next meeting.

MR. FERN THOMASSY: There is enough time to bring them. But I would ask, number one, that each of us go through, put our thinking caps on, between now and the 19th, generate those questions.

If you can do it, please, get it to Lisa and Ron earlier. But have them.

And secondly, I would ask in the letter that you put out to the next meeting, a reminder that each person should bring a question or questions with them to the meetings, in order to support this agenda that we're (inaudible) and so that you can go ahead and provide those to the chairman of the DERTF.

MR. BART REEDY: Mr. Thomassy, do you think it would do any good, in order to generate questions, to maybe throw out some possible ideas and topics for -- there is a lot of folks that aren't here right now.

MR. PARKS: The funding is going to be one.

MR. MARK ANDERSON: How about no seed money for basic R&D and UXO technology? There is no 6.1 or 6.2 dollars, at all, in fiscal year '97.

MR. BART REEDY: The point I'm trying to make is this, Mark: There is a letter going out to the RAB, saying there is a meeting coming up, right?

MS. LISA KINGSBURY: Right.

MR. BART REEDY: Please prepare a question to the DERTF. And that might be a little open ended. Here are some possible topics, you know, issues, you know, just some bullet items, maybe.

MR. FERN THOMASSY: I think what we're saying is add some categories or some general topics --

MR. BART REEDY: Just start people brainstorming is all I'm suggesting.

MR. FERN THOMASSY: And funding would be one area. The other would be the various clean up programs that we're going to have to go through -- where is the, by the way, the final report?

MR. RON LEVY: The EBS?

MR. FERN THOMASSY: Beg your pardon?

MR. RON LEVY: The environmental baseline study?

MR. FERN THOMASSY: Yes, the baseline study.

MR. RON LEVY: The draft final is out.

MR. BART REEDY: It's under review.
MR. RON LEVY: It is under review.
MS. LISA KINGSBURY: Kind of tricky.
MR. BART REEDY: It just hit the floor.
MR. FERN THOMASSY: But where are we going to go from there? What are the additional studies and investigations that have to be done? What are the additional processes we're going to have to go through to get to a clean up that's going to allow this committee to use the property?
MR. PARKS: So, this thing is just limited to UXO, right?
MS. SUE ESTES: No.
MR. PARKS: The one topic that you're going to discuss?
MS. SUE ESTES: No. You can ask questions about anything having to do with the clean up. It does not have to be UXO.
MR. FERN THOMASSY: Time frames would be another category of questions. How long does it take to get things done? How long has it taken at

other bases to get from the position that Fort McClellan is in to actual reuse where clean up was required? What parallel can you generate? You ask the board questions like that.

And I think if that's put into the letter -- can you generate that from --

MS. LISA KINGSBURY: From the transcript.

MR. GARY HARVEY: And if I can add, some of the flavor ought to be, this is a national level conference, too, so you want to kind of talk about things you're talking about and like Mark is talking about, the seed money. This isn't a local type meeting, although there are local issues. But you want things that have a national flavor to them, too.

MR. MARK ANDERSON: Maybe to hit Bart's issue is: We would talk about things like funding, technology, policy, risk, remediation funding, separate from the technology.

MR. RON LEVY: One thing y'all need to understand -- and you know, if you're asking questions that I've given you material on and you

haven't bothered to look at it and you're saying, you know, what's going on with the funding, and I've given quite a bit of stuff out and people are still asking the same questions about funding that I've answered before, it makes them wonder whether or not, you know, we're doing our job in getting this information out to you.

You know, a lot of folks got copies of the EBS and although I didn't get a whole lot of comments back -- I actually got very -- I don't know I got any from the RAB members.

My next question was: How many actually sat down and read it? Yes, I know there are a number of you, but there are others that did not.

So, I don't want to -- the DERTF to think that, you know, we have not been providing the information to the community we have. You've got to participate and you've got to do something before you just, you know, blurt out a question that should have been answered a long time ago, especially about funding as it relates to the RAB.

MS. LISA KINGSBURY: I think they're talking about funding as it relates to UXO.

MR. PARKS: You know, like funding for the eastern bypass. Where's the money coming from and when is it going to start?

MR. RON LEVY: That's a different issue.

MR. PARKS: That's the type of question we're --

MS. SUE ESTES: Well, I think you want to make sure the funding is going to continue, that the funding continue, not stop. They've funded now, but are they going to continue the funding?

MR. RON LEVY: That's not what I'm talking about.

MS. SUE ESTES: Reassurances.

MR. RON LEVY: I'm talking about other things that we put out --

MR. MARK ANDERSON: Understand that you've given us kind of apples and oranges, there, too, because the seventy-seven million that you've got earmarked over the next several years is for things that you know, CERCLA and those type of things, but none of it covers UXO right now, because we don't know what the scope of it is. We don't know how to clean

it up. How to survey it, that type of stuff.

MR. RON LEVY: Well, I mean, I can't get -- I really can't explain some of that. I can't get down to specifics because of the contracting requirements.

But I give you information here. I mean, you could present things to the DERTF that you should be asking Fort McClellan and the base clean up team, in a lot of cases. And I don't want the impression that we just couldn't get it out of them.

Your issues really need to be beyond what we should be able to provide you here, because there's a lot of guidance --

MS. SUE ESTES: Should be national issues.

MR. RON LEVY: There is a lot of guides and policy out right now.

MR. GARY HARVEY: That's why some of the questions need to be -- see which is more appropriate and get some samples in. Mark, on the funding, is right on with what we know, we, the Army have told the RAB, there is not much 6.1, 6.2 money and that's where it all starts. So, that funding

issue wouldn't embarrass anybody on the RAB.

MR. RON LEVY: I agree. From a technology side, which I don't control, that is a whole different story. But when you start to ask how much funding is coming to McClellan, the next -- I mean my next question is: What are we looking at cleaning up, because we really haven't looked at the end use and we haven't looked at the issues.

Now, we have identified some monies in our funding process. God knows really what it's going to, but it was all based upon just pulling a number out of the sky right now, because we really don't know what to focus on, yet. It's coming, and we're starting to look at that.

But again, we're still new in this process. And to say, you know, how come McClellan is only getting four million? Why aren't they getting twenty million for UXO clean up? I tell you, well, what the hell are you cleaning up?

I hope you understand, you know, where I'm coming from. Because a lot of people keep asking me, how much money do you need? And I don't know. We don't know, at this point.

That's what I mean by the funding process. We need to really nail it down. And we're still doing a lot of things. But the concept is still in a draft form. When it gets finalized, we'll have a better idea.

We're working on the eastern bypass. We're focusing on that. That will give us a better idea. But truly, we have not developed our clean up plan. We're still moving towards that.

The only legal requirement we had for meeting mandatory was the environmental baseline survey. There is no other regulatory deadlines that I'm aware of that says you have to clean up by such and such a date, there is no such a thing.

Granted we want to do it as fast as we possibly can. That's what this whole fast track is about. But I don't think we want to just jump into something and say, we need more money when we can't justify what it is we need it for.

MR. FERN THOMASSY: We need to take a look at the questions. We would like to have close to twenty, and that's what we're shooting for. I don't think we're going to see those questions until

the next meeting.

Are there anymore comments on the mechanism that we're going to use to get these questions? Anymore suggestions?

The other item that we wanted to discuss was old business was the agenda for that June meeting, itself. We've already mentioned that we want to get back a report from those that have attended the UXO conference up in Nashville. I know Mark, at least, informally to me, had volunteered to do that. Who else was going up? You were.

MR. RON LEVY: Uh-huh. Be glad to.

MR. FERN THOMASSY: And Bart and Chris. Do we want to get a combined report, rather than a bunch of individual reports?

MR. BART REEDY: I would suggest realistically the most informative piece of information you're going to get out of us would be in the format of a briefing, as opposed to, you know, a report, just a briefing --

MR. FERN THOMASSY: Correct. And that's what we were expecting.

MR. BART REEDY: Yes.

MR. FERN THOMASSY: To open it up.

MR. BART REEDY: We'll be glad -- we'll be tickled too death to share all that with you. Pete said he was going.

MR. RON LEVY: We have -- you know, we've got the May meeting. And then in the June meeting is when the DERTF is occurring. So, if we do this, we'll have to do this for the next meeting.

MR. FERN THOMASSY: For the DERTF meeting, which is going to be the back-brief from those who have attended that conference. Let me suggest this and see how you feel.

Would you and Bart like to go ahead and provide the briefing and then we can add to that the comments of those who are members of the board that are in the audience, rather than have each individual give a briefing that has attended it?

MR. BART REEDY: I'm sorry, Mr. Thomassy, I was writing -- I was making a note to myself. I missed the prelude to what you just said.

MR. FERN THOMASSY: The suggestion is, you two, Chris and Bart, give the briefing.

MR. BART REEDY: On the UXO.

MR. FERN THOMASSY: You know, it could be five minutes, it could be fifteen minutes, it could be half an hour --

MR. BART REEDY: Sure, we can do that.

MR. FERN THOMASSY: Put it together on what the conference was about, what you felt were pertinent issues.

MR. BART REEDY: And you want that when?

MR. FERN THOMASSY: On the 17th. And that would be given back to us, from you who attended it, and then those in the audience who attended it can add to it.

MR. GARY HARVEY: As part of the meeting?

MR. FERN THOMASSY: No. I'm talking about -- on the 28th, so I'm talking about -- this is part of the agenda for the meeting on the 17th of June.

MR. CHRIS JOHNSON: Well, I think the problem with that is that we've already got presentations to give.

MR. FERN THOMASSY: On the 17th?
MR. CHRIS JOHNSON: Yes.
MS. SUE ESTES: No. Your presentation is at the DERTF that we talked about.
MR. GARY HARVEY: To the RAB.
MR. BART REEDY: Chris?
MR. CHRIS JOHNSON: Okay. Never mind. I understand. Never mind. I got it.
MS. SUE ESTES: Different presentation.
MR. FERN THOMASSY: Just for us as --
MR. BART REEDY: Yes, we'll be tickled to.
MR. FERN THOMASSY: And the things we were going to do so that we were planning ahead with what we were going to do on June the 17th.
MR. RON LEVY: We talking about -- we got two regulars, briefing the RAB on a conference or a --
MR. BART REEDY: Yes, that's all it is.
MR. RON LEVY: -- or a forum. And

then opening discussion on --

MR. FERN THOMASSY: There are other members who have attended who could add to what these people have presented formally to us: You, Mark, --

MR. MARK ANDERSON: Charles.

MR. FERN THOMASSY: -- Charles --

MR. MARK ANDERSON: Pete.

MR. FERN THOMASSY: -- Pete, I heard were going up as well.

MS. LISA KINGSBURY: I've got something to throw out to you. I'm going to try to get Huntsville -- you guys said you wanted to get UXO smart. I'm going to try to get Huntsville at the next meeting. You may want to discuss the eastern bypass.

Maybe I can have Barge Wagner (phonetic), who are the contractors for D.O.T., come down and speak on the eastern bypass at the June RAB. I'm just throwing that out.

MR. RON LEVY: And let me tell you, that's what I would envision. We're talking a Fort McClellan specific issue that we're going to be discussing. And assuming we took the eastern bypass as an issue and we discussed that at the June RAB, I

would feel more comfortable with that, because it's Fort McClellan. They want to see how the RAB is working, as it relates to clean up issues at Fort McClellan.

MR. FERN THOMASSY: That's all right. But we still want the back-briefing from the UXO conference, which is going to be held on the 28th of May. So, that will be the first time we'll be able to get it, 28 to 30 May.

MR. RON LEVY: But you -- again, what are we talking about for time period on Huntsville talking? Is that the -- that's the same day.

MS. LISA KINGSBURY: No. Huntsville will be at the next --

MR. FERN THOMASSY: 19 May.

MS. LISA KINGSBURY: -- 19 May RAB meeting, to get these guys UXO smart. And then I was thinking that maybe if you guys decide that I could get Barge Wagner in here on the June meeting.

MR. FERN TOMASSY: Uh-huh.

MS. LISA KINGSBURY: And you can be smart enough to ask questions of Barge Wagner on the

eastern bypass.

MR. RON LEVY: Barge Wagner is the contractor for D.O.T. that's doing the EIS on the bypass.

MR. FERN THOMASSY: Barge Wagner is not going to be able to answer questions regarding UXO.

MR. RON LEVY: No, but they'll talk about the eastern bypass.

MR. FERN THOMASSY: And those are the only two topics you need for that meeting.

MR. MARK ANDERSON: That would be enough.

MS. LISA KINGSBURY: That will cover it.

MR. FERN THOMASSY: That's plenty. But it also merges very well, too, two topics that are right on top of each other; the eastern bypass and the issue about UXO.

MR. RON LEVY: I guess, from an agenda standpoint, that's probably pretty good.

MR. GARY HARVEY: That's good. I mean, number one, if you're going to keep -- like the

LRA is going to pound somebody on the UXO somewhere down the line. If you've got members going to the UXO conference, they ought to report back to the RAB of what went on. You're only talking about fifteen minutes, and then do the bypass.

MR. RON LEVY: You and Chris have a problem with doing that?

MR. BART REEDY: No.

MR. RON LEVY: Yes, sir, let's do it. If we've got an agreement, let's do that.

MR. FERN THOMASSY: Okay. And then there are others who will have attended the conference who could chime in and add to the quick review that you two men have given.

MS. LISA KINGSBURY: Sounds like you got an agenda.

MR. FERN THOMASSY: I think that's an agenda.

MR. RON LEVY: Now, we know what we're going to do about the twenty questions, we're going to bring them up at the next -- or bring them forward at the next meeting, after we've thought about it.

MR. FERN THOMASSY: Yes.

MR. MARK ANDERSON: And if you've got any questions in the --

MS. LISA KINGSBURY: I'm going to send out a reminder.

MR. FERN THOMASSY: And send out a reminder, maybe a few days earlier than you normally do, and ask people to get those questions in to you if they can by telephone or fax. But certainly by the 19th at the meeting.

MS. LISA KINGSBURY: Okay.

MR. RON LEVY: Okay.

MR. FERN THOMASSY: Any other discussion on the agenda or the questions?

Any new business?

MR. RON LEVY: Yes, I've got just one point. Instead of me sending out a formal letter to all the RAB members, just a flyer, I think, should do the trick. You don't really need a signed letter from me saying, your next meeting is such and such. How about just a straight flyer that says the meeting is at a certain time and certain place? Does anybody have any problem with that?

MS. LISA KINGSBURY: And I'll have a reminder on the flyer.

MR. FERN THOMASSY: No. I'm just wondering what did our --

MR. RON LEVY: We took it out. No votes required.

MR. FERN THOMASSY: Yes, that was for three weeks, right?

MR. RON LEVY: Three meetings.

MR. FERN THOMASSY: Are we going to continue -- three meetings. Are we going to continue to do that?

MR. RON LEVY: I think we were going to bring it back up --

MR. FERN THOMASSY: I think is what you're asking, so we may want to amend the minutes. Is that what you're proposing?

MR. RON LEVY: Uh, since there is no vote required, just a consensus, at this point.

MR. FERN THOMASSY: For the next three months.

MR. RON LEVY: Right. And then after that, we'll --

MR. FERN THOMASSY: And that's what I'm saying, to sustain that and keep it that way, we should amend the bylaws. So that might be a point of discussion under old business for the next meeting. Because with whatever flyer you put out, you're going to put out that --

MS. LISA KINGSBURY: Reminder.

MR. FERN THOMASSY: -- agenda and the minutes of the old meeting.

MS. LISA KINGSBURY: Right.

MR. FERN THOMASSY: Past meeting.

MS. LISA KINGSBURY: Right.

MR. FERN THOMASSY: So, I assume you would want that as a topic for the May 19th meeting so we can amend the --

MR. RON LEVY: It's not part of the bylaws -- --

MR. FERN THOMASSY: -- the bylaws.

MR. RON LEVY: It's not part of the bylaws, now.

MR. FERN THOMASSY: There was something in here about the notification. I have to find it in here.

MR. RON LEVY: I don't think it said anything about a formalized letter.

MR. FERN THOMASSY: Notice, each notice of a meeting required, whether regular or special, shall be sent to each member's address, first class postage prepaid. Each notice shall describe the time and place of the meeting announced and with which shall be enclosed an agenda of the matters discussed. Just a notice.

So, what you're saying is: You just want to get away from having to sign it as a formal letter?

MR. RON LEVY: Yes, sir.

MS. LISA KINGSBURY: Ron is tired of signing those letters every month.

MR. RON LEVY: I don't have a signature pen.

MR. FERN THOMASSY: Doesn't require a signature in the first place.

MR. RON LEVY: That's right. That's all I'm asking is -- we'll send a notice out.

MR. FERN THOMASSY: Any new business? Would anybody like to adjourn.

MR. BART REEDY: I have --

MR. RON LEVY: Go ahead.

MR. BART REEDY: I have a question. A fine one to ask or to talk. There doesn't seem to be very many folks here, as far as the RAB members. Has it been -- membership kind of been tailing off a little bit?

MR. RON LEVY: That's one of the reasons we took --

MR. FERN THOMASSY: That's one of the reasons they got a quorum last time to suspend the bylaws for three meetings.

MR. BART REEDY: Mr. Thomassy, is there any -- is there a move, any kind of action to get, you know, to get everybody back to the table or to find out why they aren't showing up?

MR. RON LEVY: That's one of the things I was going to bring up. It's not -- we've still got some members we lost that we needed to replace and we never did get to a decision about the applications that -- we did get -- we all agreed that the applications are okay, but we never developed the decision on how we were going to send the applications

out or when we were going to send the applications out. It's still open, it's still out there. So, there's nothing been done.

MS. LISA KINGSBURY: We only got the application approved by the RAB just last month, because we haven't have a quorum since Novmber.

MR. FERN THOMASSY: Yes.

MS. LISA KINGSBURY: And that threw us back a lot.

MR. BART REEDY: I'm kind of thinking out loud. Has anybody contacted, for example, Ms. Longstreth? You know, is she --

MS. LISA KINGSBURY: Ms. Longstreth called. Her daughter moved to Atlanta and she's busy, helping her move.

MR. BART REEDY: Okay.

MS. LISA KINGSBURY: She did call. Ike Brown also called. Mike Moore called. Dr. Cox called. Those were the only calls, though.

MR. RON LEVY: That's what we're running into. I mean, people are attending, but they're missing a meeting every so often and it tends to leave for short.

MR. FERN THOMASSY: But at the last meeting, you approved the applications. Now, what are you going to do with them?

MR. RON LEVY: That was an issue.

MR. FERN THOMASSY: There were several suggestion. One I had made before, how did you bring this board together to begin with and how did you send the applications out, originally? Why not use that same process?

MR. RON LEVY: Well, part of the discussion from the past was whether we were going to go after low income minority individuals. And if we followed the same process, that really wouldn't target them. So, we need to open the discussion back up. And that's what I was hoping is how are we going to do this, in terms of targeting, you know, the low income, the minority folks for a RAB.

And we really didn't get to a decision on how we were going to do that. Although we talked about it -- I mean, there was quite a lengthy discussion about that. And Ms. Longstreth and Ms. Harrington had made some suggestions, but we never did follow through on any of those, because I'm not sure

anybody -- everybody had agreed to that.

MS. LISA KINGSBURY: I need -- we can put it on old business next month, if y'all want to --

MR. RON LEVY: I would like to -- I would like to do something. I mean --

MR. MARK ANDERSON: Yes, I don't want to wait a whole other month to get applications out. Shoot, if that's all we've got to do, let's post a notice in the paper and at least get it started. You've also got the thing that Ms. Harrington and Ms. Longstreth talked about was going to the social sororities and things like that. I have a mailing list for those that we used during the election. So that's -- we've got addresses that are available to us to be able to do it.

MR. RON LEVY: I would like to be able to get a decision, even though we're not talking about a quorum here, to go ahead and do that over the next month. Get a mailing out, put something in the newspaper so we can at least start collecting applicants back in. Target some of the sororities, as you mentioned. You know, we can -- we're always --

we're always going to -- we're going to come back to a decision. You, know, we'll get all the applicants in and we can review the applicants.

Maybe we can get a review committee of some sort or it becomes part of the membership committee, anyway, to go through the applicants, and maybe try taking that point to target what's in there from a minority standpoint.

MR. FERN THOMASSY: One of the things you'll need along with that is a cut off date for the applications. One of the considerations I would throw out is looking around the first of June, so you can get through another meeting before that date is complete, in case there is anybody at the next meeting that has additional ideas on what to do with that application.

MR. RON LEVY: Yes, I don't have a problem with that. I just want to get on with this.

MR. FERN THOMASSY: Any discussion?

MR. MARK ANDERSON: The longer we wait, the more -- I don't want to say we get smarter about stuff, but we just put new people that much farther behind and we have to spend more time

educating them.

MR. FERN THOMASSY: Any discussion on the application or the dates?

MR. ELSER: I just suggest we use the same system that we used when we started this program. Send out the application --

MR. FERN THOMASSY: That's one suggestion, added on to possible use of newspapers or other mechanisms of getting information out that applications are being taken. And I brought up the idea of a cut off of 1 June or some date close to that. Any further discussion on that? Anybody want to make a motion?

MR. BART REEDY: When is grade school out?

MR. CUNNINGHAM: End of May.

MR. ELSER: 28th, 29th of May.

MR. MARK ANDERSON: 23rd of May, I think.

MR. BART REEDY: It's been such a long time since I had kids in school, is that -- do you have any feel -- would that cause people a problem? Is that problematic, having school in and --

MR. FERN THOMASSY: I don't think so.

MR. BART REEDY: Okay.

MR. MARK ANDERSON: 22 May is when it's out.

MR. HARRY THOMAS: One thing, if you don't get the applications back until the first of June, then you're got going to be able to make any decision on these people until either when the DERTF is here or after they're gone in July.

MR. FERN THOMASSY: That's okay.

MR. GARY HARVEY: But you'll be a month ahead --

MR. FERN THOMASSY: That's okay. We're not focussing, I don't believe, on having this done by the DERTF or having people here for that. It's too late to focus on that.

MR. RON LEVY: It' the not the DERTF that's driving us, it's just, you know, reapplying our membership.

MR. FERN THOMASSY: We just need to do something.

MR. RON LEVY: So, I understand

that we, the environmental office here at Fort McClellan, will work that and get the applications out, based upon -- are we talking about a system like we used before or are we going to go and also try to target some audiences?

MR. FERN THOMASSY: That's what we had discussed. And what I had done was asked of the regular members -- of which I think there is only five of us here now -- a motion. Do I hear a motion?

MS. LISA KINGSBURY: You don't have bylaws here.

MR. RON LEVY: You don't need a quorum, you don't need a vote.

MR. MARK ANDERSON: It sounds good to me.

MR. FERN THOMASSY: All right, since we've suspended the bylaws, then I think what we've discussed at this point is to go ahead and send the applications out, using the information we had when we first put this board together, and expanding it to get that information into the newspaper or newspapers in the surrounding area. Getting that out as soon as possible, with a cut off date close to and

around the first of June.

MR. BART REEDY: Mr. Thommassy, are you --

MR. FERN THOMASSY: Let you figure that, Ron --

MR. RON LEVY: We can do that.

MR. FERN THOMASSY: Are you going to send it out?

MR. RON LEVY: We can do that.

MS. LISA KINGSBURY: Fern, you may want a longer cut off date. It's going to take me a couple of weeks to get my stuff together and get those out.

MR. FERN THOMASSY: Do you want to make it the 17th?

MS. LISA KINGSBURY: I've got (inaudible) --

MR. FERN THOMASSY: That way we can focus on the DERTF.

MR. BART REEDY: I would suggest -- I"m just going to throw this out here on the table.

MR. FERN THOMASSY: Yes.

MR. BART REEDY: I would suggest

that we might want to, some way or another, increase the saturation, to try -- of the minority community, maybe try and get that --

MR. FERN THOMASSY: How about a usable mechanism? Do you have any suggestions?

MR. BART REEDY: Yes.

MR. GARY HARVEY: Mark has got a mailing list.

MR. MARK ANDERSON: I've got a study from the environmental justice folks at Clark University.

MS. LISA KINGSBURY: You've got that stuff?

MR. MARK ANDERSON: Yes. And I've got a list for NAACP, SCLC and so on that we can do a mail out.

MR. FERN THOMASSY: Any other discussions or any other suggestions along that line? Is that what you were looking for, Bart?

MR. BART REEDY: Yes, sir.

MR. FERN THOMASSY: We'll provide that to Lisa and Ron.

MR. MARK ANDERSON: Yes.

MR. FERN THOMASSY: I'm trying to come to a conclusions, but I'm not trying to cut it off. If there is more that needs to be expanded upon because of the minority issues that are involved in it --

MR. RON LEVY: Just understand that we're putting an applicant pool together and that's really all we're doing, at this point. There has not been any selection that's associated. That will become a part of either the charter membership committee or whatever the RAB decides, separately.

MR. FERN THOMASSY: We use as a shooting date then the middle of June, since Lisa needs the time, on or around the 15th of June, which would be the cut off.

MR. RON LEVY: Well, I will tell you that Lisa doesn't need to do it all. I've got a public affairs office here and they can help out, as well. So, don't just stick that on Lisa.

MR. FERN THOMASSY: Talking about the cut off date for the application.

MS. LISA KINGSBURY: Mid-June.

MR. FERN THOMASSY: Is mid-June all

right? So, anybody -- we'll go with that. And since we suspended the bylaws, we don't even need to vote on that.

MR. RON LEVY: No, we don't.

MR. FERN THOMASSY: We've done and you're legal.

Further discussion? Any other points on the applications or how they're going to be handled? Going to use the old mailing list, the old process, plus what Mark gives them, plus a couple of newspapers. Certainly, the Anniston Star. Any others? Jacksonville?

Any other discussion on other new business?

MR. CUNNINGHAM: I have some extracts I have taken from the April 21st issue of the Army Times. You might find interesting.

I would invite anyone that wants a copy of this to go by and pick it up. But what it talks about is England Oaks. England Air Force Base in Louisiana was converted by one of the companies into a retirement center. And they are now advertising in the Air Force Times and other places,

and they are very successful with this.

I called the one eight hundred number and talked to a lady there in the office. And I have a memo here that describes some of the salient points relative to that.

Now, this has nothing to do with RAB, but it is an example of how the -- a base under BRAC can be re -- very quickly reoriented to civilian utilization.

MR. GARY HARVEY: As an add on to that, those very same people you're talking about, California Lutheran, they have been out here and done tours and they are interested in the property. Rob and L. Z. Have been dealing with them quite a bit.

MR. CUNNINGHAM: Right. So, you're welcome to come by and pick up a copy of this if you want it.

That's all I have.

MR. FERN THOMASSY: Anybody else? Then I propose we adjourn this meeting.

(WHEREUPON, the meeting was concluded.)

C E R T I F I C A T E

STATE OF ALABAMA)
CALHOUN COUNTY)

I, SAMANTHA E. NOBLE, a Court Reporter and Notary Public in and for The State of Alabama at Large, duly commissioned and qualified, HEREBY CERTIFY that this proceeding was taken before me, then was by me reduced to shorthand, afterwards transcribed upon a computer, and that the foregoing is a true and correct transcript of the proceeding to the best of my ability.

I FURTHER CERTIFY this proceeding was taken at the time and place and was concluded without adjournment.

IN WITNESS WHEREOF, I have hereunto

set my hand and affixed my seal at Anniston, Alabama, on this the 26th day of April, 1997.

SAMANTHA E. NOBLE
Notary Public in and for
Alabama at Large

MY COMMISSION EXPIRES: 11-14-97.