1 2	CAMP CROFT RESTORATION ADVISORY BOARD MEETING	
3 4 5 6	PLACE:	Marriott Renaissance Hotel Spartanburg, South Carolina
7 8 9	DATE AND TIME:	Thursday, April 9, 2009 6:30 p.m. to 7:48 p.m.
10 11 12 13	REPRESENTATIVES:	Shawn Boone, Government Co-Chair US Army Corps of Engineers Charleston District
14 15 16 17		Spencer O'Neal US Army Corps of Engineers Huntsville District
18 19 20 21 22 23		Suzy Cantor-McKinney and Michael Winningham Zapata Engineering, P.A. 6302 Fairview Road, Suite 600 Charlotte, North Carolina 28210
24 25	BOARD MEMBERS	
26 27 28 29 30 31	PRESENT:	Gary Hayes John Holcomb George Mullinax Bill Shoolbred Jimmy Tobias
32 33 34 35 36	BOARD MEMBERS NOT PRESENT:	William B. Littlejohn, Jr. Fred Marler Emil Spieth Ronald Crawley

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P.C Ro <u>Sa</u> (80	D. Box 742 ebuck, South Carolina 29376 beta beta 64) 574-1455	
	Welcome by Mr. Tobias Project Update and History FUDS Program and Funding II Safety Briefing by Mr. O'Ne Sheriff's Department Munit Safety Briefing by Mr. O'Ne Certificate of Reporter REPORTED BY: Sa P.C. Ro Sa (8)	Welcome by Mr. Tobias

BY MR. TOBIAS:

- 2 I'll guess we'll call this meeting to order. I'd like to welcome everybody
- 3 that's here today for the Restoration Advisory Board meeting for April the 9th,
- 4 2009.

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- 5 We've got our agenda here. I think we've got a quorum for the Board. I'd
- 6 like to remind everybody to sign in.
- 7 So I guess we'll just start with the project update.

8 BY MR. WINNINGHAM:

- 9 What we want to do is --- my name is Mike Winningham. I'm one of the
- 10 project managers that was working on Croft. We also have Mr. Terry Farmer
- 11 here who is the site manager.
- We're sort of going to get back and recap of the history of Camp Croft.
- 13 It's been awhile since we've done that, and then we're also going to run into
- 14 what's sort of remaining in the OOUs and timelines, and then we'll turn it over
- 15 to the next individual, and I'm going to sort of keep it informal and stay seated
- 16 so I can drive. Hope nobody minds.
- Obviously, the history here, you know the camp was established back in
- 18 '41, 19,000 acres, which encompasses the state park and then outside of the
- 19 state park and up to the north here on the cantonment area. You know, roughly
- 20 200,000 men have come through the former Camp Croft.
- 21 In 1947, after the war, it was declared in excess, and then the War
- 22 Assets Department turned it back over to the state.
- This is being managed and worked under the DERP FUDS, which is the
- 24 Defense Environmental Restoration Program Formerly Used Defense Sites,
- 25 which was mandated back in 1986.

Since 1995, more than 15 million dollars (\$15,000,000) have been appropriated for the evaluation and restoration of the former Camp Croft site, which includes the park, the Wedgewood area, Dr. Lowry's place, etcetera.

Obviously, the reason we're here is for the munitions and explosives of concern.

Most of this area in here consisted of artillery, mortars, ammunition, explosives, which are obviously designed to cause harm back in World War II, so a bunch of training came in here, anything, like I said, from hand grenade training down to 105, 155s, 2.36 inch rockets, etcetera.

Now all you fine folks here were talking about doing next, which was the Restoration Advisory Board, which was also established in 1995, and it was to encourage partnership between members here on the Board making up of the community and the Government, in this case the US Corps of Engineers.

We meet quarterly here, I believe every year, and we search around and go through and we do like --- it is every year or every two years? Every two years, and then so here we are for our third quarter this year.

On the website for the Camp Croft website there's a slew of historical documents on there, everything from the 1984 site survey, the preliminary assessment studies, Archive Search Reports, plus the addendums or Supplementals for the ASRs; and then what I'm going to show next is a little bit of the history on the map here.

As you can see the various ranges that we talked about earlier from rifle ranges to combat ranges to moving armed targets. I don't know everybody remembers seeing this, but, as you can see, most of the area to the north here, and this is the cantonment area. I think Wedgewood is coming in right about

- 1 here, but this is sort of Dairy Ridge Road and everything this far to the south
- 2 is the west area.
- There have been two Time Critical Removal Actions, the 50 acre park
- 4 where they did the fitness trails and some of the horse trails, and then,
- 5 obviously, the 15 acre private property, which is out over on Red?
- 6 BY MS. CANTOR-MCKINNEY:
- 7 Red Hill.
- 8 BY MR. WINNINGHAM:
- 9 Red Hill?
- 10 BY MS. CANTOR-MCKINNEY:
- 11 Red Hill.
- 12 BY MR. FARMER:
- 13 Red Hill Road.
- 14 BY MR. WINNINGHAM:
- 15 Red Hill. Yeah, thank you.
- One of the Time Removal there was to do Removal Actions, as you see it's
- in this south part of the park both in the state park and up in the boundaries.
- 18 We found 36 60-millimeter mortars, 1 155 millimeter projectiles, rockets
- 19 2.36, 105 millimeter projectile and 14,000 pounds of scrap, and this is just off
- 20 the surface near one of the fitness areas. I think OOU6 was the area right
- 21 now.
- 22 After that it rolled into what they called the EE/CA, the Engineering
- 23 Evaluation/Cost Analysis, and that was done in the two phases, and that is due,
- 24 and we look at the historical information and you do additional data collection
- out in the field, whether its digital, geophysical mapping, algorithms, we do

- 1 collect site samples to evaluate the munitions that you find; and based on the
- 2 exposure to the public, you come up with some risk base; and then if it's like
- 3 then you come up with alternatives, cost analysis, do an Action Memorandum,
- 4 and then that you drives into whether or not you're going to be doing removals,
- 5 no further actions, institutional controls, etcetera.
- Then a little later we came in and did another one. When I say, "We," I
- 7 mean the Corps of Engineers came in there. So the Phase I was done in '96.
- 8 Phase II was '98, and then the two Action Memorandums were done immediately
- 9 after that, and they identified areas of concern that would require potential
- 10 actions; and under the Phase I, which was the one done in '96, there was eight
- 11 OOUs, which stands for Ordnance Operable Units, and there's eight units, and
- 12 then everything from 1A, which was no further action, to clearance to depths.
- 13 Some were surface clearance.
- Okay. I'm sure a lot of you folks remember when this was going on back
- 15 then; and then here are the areas that we've done. The yellowish color is the no
- 16 further actions ones, nothing was found there to be able be exposed and cause
- 17 a potential risk to public health.
- 18 The horse trails were done clearance to depth. Surface clearance areas
- 19 is that number two were the fitness areas in there, and, once again, as you can
- 20 see, most of them all again are below Dairy Ridge Road with the exception of
- 21 the Wedgewood area, which was an old grenade court, which is number three up
- 22 right in here. You can see pretty good on this picture here the Wedgewood
- area. The golf course is that big open area.
- Then when the Phase II finished up, they identified a bunch of other
- 25 sites, 19 sites, and then they also identified those based on the historical use

- of the sites and the contaminates or munitions of concern associated with that
- 2 site. They subdivided some of the sites, like OOU9, as sites A through E, and
- 3 then F through H, depending on where they were, whether they're a state park
- 4 or private property.
- 5 Then we have 10, 11, 12, and then OOU3 was expanded. Originally it was
- 6 just within the --- I don't know if you remember it was just within the
- 7 residential properties in there; and then as to the final stuff on the outside the
- 8 property, they expanded it, expanded OOU3 to include parts of the golf course
- 9 all terrain around the properties; and there's another map of all the areas.
- 10 Take a few minutes to look at that and enjoy that view.
- 11 The ones we're going to talk about that's sort of active right now is
- 12 OOU3, 11, 10, and 12. Those are the ones to talk about. You know OOU3 is,
- obviously, like I said before, it's the Wedgewood area. There's been various
- 14 activities there from 2000 through 2008 by various companies working for the
- 15 Corps of Engineers. During the Removal Actions there's been Mark II
- 16 fragmentation hand grenades that have been located and M15 White
- 17 Phosphorous grenades, as well as numerous hand grenades, grenade parts, smoke
- 18 canisters. A couple pits were done back in there, in --- Terry, refresh my
- 19 memory --- 2003?
- 20 BY MR. FARMER:
- 21 The pits?
- 22 BY MR. WINNINGHAM:
- 23 Yes.
- 24 BY MR. FARMER:
- Five.

- 1 BY MR. WINNINGHAM:
- 2 2005.
- 3 BY MR. FARMER:
- 4 Yeah.

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- 5 BY MR. WINNINGHAM:
- 6 And then just recently last year we did most of the area in 2007 was 7 digital geophysically mapped and some anomalies were investigated, and then 8 last year we finished the remaining grids within the golf course using digital geophysical mapping, finished those up, identified prioritized target list; and 10 when the opportunity comes, they'll go back out there and they'll intrusively 11 investigate those anomalies. They are the priorities that sort of are expected MK items.
- 13 OOU11, it's an 87 acre site. It's outside of the Camp Croft State Park. 14 Once again, there's grenades, mortars, rocket parts. It was subdivided into 15 four parts, 11A, which is 25 acres.
- 16 11B was 31 acres.
 - 11C, which is 17 acres, which is along Cedar Spring Drive; and that was another area we did last year where we did geophysical mapping and identified targets in there of interest to investigate at a future time. You know it has been partially developed. It's two or three homes on that particular area. One, I think, abandoned home to the south side of it.
 - Then OOU11D, which is 14 acres, most --- and that is also inside the golf course. I don't know if you remember its back --- I think it's off of Hole 14 just to the south in the woods area there; and out of the four sites in OOU11, the only one that's had any type of investigation so far has been 11C, and that's

- only been digital geophysical mapping and prioritizing the targets for future investigation.
- OOU10, 210 acres within the Camp Croft State Park area. This is areas identified during the Phase II EE/CA investigation to contain areas. It was also
- 5 divided up into four subparts.
- 6 10A, 157 acres. It's the one --- doesn't it run it up Dairy Ridge Road or
- 7 10A is the south? We've got another map, and then at the end here, if you
- 8 want, we can go look at the map over there.
- 9 10B, 37 acres; 10C, 11 acres; and 10D is five acres. That's the one up by
- 10 Dairy Ridge Road. Sorry. I've got it here in my notes. None of these have had
- any investigation on it other than what was done under the Phase II EE/CA
- 12 investigation, so there's been no follow on that investigation on these ones here.
- 13 OOU12, 94 acres outside the Camp Croft State Park. This is where live
- 14 UXO was found during the Phase II EE/CA. It was divided in two sections, 78
- 15 acres north of the Croft State Park on the southeast intersection of Dairy
- 16 Ridge Road and State 295, and, you know, that's all that gentleman's farm area
- 17 up there that's on the south side of Dairy Ridge right there; and then 12B is 16
- acres, and it's a lot further south down on the Forest Mill Road.
- 19 Once, again other than the initial investigation done under the Phase II
- 20 EE/CA, nothing else has been done to date since then.
- 21 A little quick snapshot here of what's been found. I'm starting with the
- 22 present time and working our way backwards. We did the DGM survey of 12
- acres of OOU3, 11 acres in 11C. OOU3 has 4,500 potential targets that are of
- 24 interest that will require future intrusive investigation. OOU11C has about
- 25 1,400 potential targets.

If you remember in 2005 and 2006, the 12 acres of OOU3 in the outside there was roughly 1,900 subsurface digs, of that 25 items for UXO, all grenades, both --- I think the majority of them were M15 White Phosphorous grenades, some practice, a significant amount of munitions debris and cultural debris. 2001, clearance of 00U6 hill down there, which was 24,000 digs, seven UXO, over 700 practice items, inert MD items, significant amount of scrap.

Technology is getting better. You know, it's able to do a better job of discriminating what's in the ground, and that's particularly showing on the last two go arounds there's some different algorithms we've been using that would us to prioritize these targets and take them then are the most MK like items that are out there. That doesn't mean that some of the other targets aren't, but it's --- the technology is getting better to where, you know, digging less and less and coming up with more.

It looks sort of like if you look back in 2001, we had 24,000 digs, 7 UXO items. In 2005 and 2006 we had 1,900 digs, 25 UXO items; and then, you know, hopefully this next time we'll have a hundred digs and a hundred UXO items.

The timeline hasn't changed much. We're still running the same. We started way back in '84 with the site survey. Some of you gentlemen have been through this timeline from the get go and some are new, and it's going to run through, and then hopefully, you know, complete in 2035, and God willing we'll all still be here looking at this.

And then safety, one of the big things, and I'm sure some other people have talked about there are three R's. If you recognize a military munition item or ordnance item, if you see it, you stop. You retreat. You don't move closer to take a better look at it. You don't attempt to move it, remove it, touch it. You

- 1 move away; and then the last R is report it. Report any suspected items, and in
- 2 here we call 911. Here's a picture of me right here with my hardhat on, so
- 3 three R's.
- The website for the Camp Croft information is at from all the reports,
- 5 maps. There's a GIS link up there. You can go up there and click on the various
- 6 areas and see what's been done.
- 7 Contact information, we've got that for you; and if there are any
- 8 questions, myself and/or Terry will try to answer them.
- 9 BY MR. HAYES:
- 10 I have a question about OOU12. Can you explain a little better where
- 11 those two sectors are?
- 12 BY MR. WINNINGHAM:
- 13 Let me go and ---
- 14 BY MR. HAYES:
- 15 It says, "12A is approximately 78 acres north of the State Park on the
- 16 southeast."
- 17 BY MR. WINNINGHAM:
- 18 Yeah, I'm going to refer to a little map up here.
- 19 Okay. We've got --- this is 12B down here.
- 20 BY MR. HAYES:
- 21 Okay. Where is that now?
- 22 BY MR. WINNINGHAM:
- Right here. This is Lake Craig. I don't know. I don't remember the name
- of this road that comes out this way and comes out this way. I know the
- 25 Wedgewood area is up here. 12A is up here, that 50 acres.

1 BY MR. HAYES: 2 State Park is on what road? 3 BY MR. WINNINGHAM: 12A is the --- this larger area here, and 12B is a little 16 acre along this 4 5 road down here. 6 BY MR. HAYES: 7 Okay. What road is that? 8 BY MS. CANTOR-MCKINNEY: 9 It might be easier to ---10 BY MR. WINNINGHAM: 11 Have you got the big map here? 12 BY MS. CANTOR-MCKINNEY: I do. 13 14 (REVIEWING MAP) 15 BY MR. HAYES: 16 Well, they already went in there. 17 BY MR. WINNINGHAM: Right. Yeah, the ditch under the Phase II EE/CA in there, but then it 18 19 was an area of where they found ---20 BY MR. HAYES: 21 I looked after that property. That's not Forest Mill Road. That's Forest 22 Mill Circle. 23 BY MR. WINNINGHAM: All right. This was under 12C --- 12A was one that was identified as 24 25 clearance to depth. Is that the one --- so we'd have to go back and dig the

- 1 EE/CA up to see exactly what they said what they found there why it qualified
- 2 for clearance to depth. I would imagine they found some type of munitions
- 3 debris or some type of forensic evidence, whether it's craters or firing points
- 4 or targetry maybe.
- 5 BY MR. HAYES:
- Well, they went in there and cut some trees down, and the trees were
- 7 young then, and that property is getting ready to be thinned soon, but they told
- 8 us they didn't find anything, because I look after that property; and, like I said,
- 9 that's on Forest Mill Circle. It's not Forest Mill Road as this pamphlet says.
- 10 Now which property is the 12A?
- 11 BY MR. WINNINGHAM:
- 12 12A is right at the far end of Dairy Ridge Road. This is Dairy Ridge Road
- 13 that's running out and it runs into --- this is 176 over here. This is ---
- 14 BY MR. HAYES:
- 15 295.
- 16 BY MR. FARMER:
- 17 295.
- 18 BY MR. WINNINGHAM:
- 19 295 is over here.
- 20 BY MR. HAYES:
- 21 It's on the right. They found something there?
- 22 BY MR. WINNINGHAM:
- Yeah, back based on the EE/CA analysis, they found some ---
- 24 BY MR. HAYES:
- They say what was found?

- 1 BY MR. WINNINGHAM:
- That required it to be clearance to depth, also.
- 3 BY MR. TOBIAS:
- That's close to where we had the fire.
- 5 BY MR. WINNINGHAM:
- 6 It's private property right now. I think it's someone's farm.
- 7 BY MR. TOBIAS:
- 8 The dirt road used came right up to the back of Dairy Ridge Road. You
- 9 could have thrown a rock to Dairy Ridge Road.
- 10 BY MR. WINNINGHAM:
- I believe it's somebody's farmland right now, isn't it? On the right side
- or, you know, the south side of Dairy Ridge Road, there's a lot of farmland on
- 13 that side. I was looking at it today, again.
- 14 BY MR. HAYES:
- 15 Okay. So they're a good ways apart.
- 16 BY MR. O'NEAL:
- 17 If there was a possibility that they were going to be using that as
- 18 farmland and digging, probably went in and said, "Okay. Clearance to depth.
- 19 We're going to try to clear it down to a level where we can make sure" ---
- 20 BY MR. WINNINGHAM:
- 21 Yeah.
- 22 BY MR. O'NEAL:
- Not certain but make sure that, you know, it won't hurt anybody out
- there when he's ploughing.
- 25 BY MR. HAYES:

1 Okay. 2 BY MR. WINNINGHAM: 3 Any other questions? 4 (NO RESPONSE) 5 BY MR. WINNINGHAM: 6 And I'm here all night, so. 7 BY MR. TOBIAS: 8 Well, that was real informative. 9 BY MR. WINNINGHAM: 10 It's been awhile since we looked at the history ---11 BY MR. TOBIAS: Yeah. 12 13 BY MR. WINNINGHAM: 14 --- and what's going on. 15 BY MR. TOBIAS: It seems like maybe the equipment is getting more precise, so that's 16 17 probably a good thing, if we ever get any funding, which leads me to you. 18 (Indicating to Mr. Boone). 19 BY MR. BOONE: 20 Nice seque. So our meetings have been just a little short lately, so I 21 wanted to give people something to chew on here. 22 What I have is more or less about the national program, and I see we 23 have a lot of regulars here. Is anybody really interested in knowing about this 24 stuff, or do we want to focus on Camp Croft only? 25 (NO RESPONSE)

1 Nobody cares? 2 BY MR. ZIMMERMAN: 3 How about focusing on Camp Croft only? I mean, just me speaking. 4 BY MR. BOONE: 5 Do I hear a second? 6 BY MR. JOHNSON: 7 If we didn't care, we wouldn't be up here. 8 BY MR. BOONE: 9 All right. I'll go through the presentation, and I'll try to make it quick so 10 that nobody gets sleepy, and we'll do it that way. 11 So we're --- of course we're talking about DERP-FUDS. It stands, it's an 12 acronym, of course, in true Army fashion. Next slide. 13 I'm not going to read to you here, but the goals, of course, are to clean up 14 contamination in a timely manner and to talk about property, the definition, is 15 kind of a legal jargon. Next. 16 Of course the purpose of the FUDS Program is to clean up environmental 17 damage. 18 The DERP Program is DoD wide, that includes active installations, that 19 includes BRAC sites and FUDS. FUDS is the formerly used defense sites, so 20 FUDS is just one part of the overall DoD Restoration Program. 21 Of course Army is the executive agent for FUDS, and we'll get into how 22 many properties there are in a few minutes. Next. 23 The law that requires the DoD to clean up sites is known as CERCLA, the 24 Comprehensive Environmental Restoration Compensation and Liabilities Act. It's 25 also known as the Superfund Law, but the funding that we use to do clean up

- 1 FUDS sites is not the same as the Superfund. The EPA administers the
- 2 Superfund, and, of course, the Army administers FUDS.
- 3 Of course we're only looking at DoD generated pollution on Formerly Used
- 4 Defense Sites; and we always work hand in hand with our regulators or try to to
- 5 get the right results for the best interest of the public. Next.
- 6 So there's three types of different projects that we might have. One
- 7 type is the hazardous and toxic waste. This is a range of different things from
- 8 old landfills, potential petroleum or other chemical spills, anything that is
- 9 hazardous or toxic that is not UXO or unexploded ordnance; and, of course, as
- 10 we all know here in Camp Croft we have ordnance issues, and the third is a clean
- 11 up of building and things.
- 12 For instance, there's a project in Dupont, South Carolina that has an old
- 13 cistern that poses a threat to people. It fills up with water, and potentially
- 14 somebody might get in it. It's a danger. So that was eligible to get a FUDS
- 15 cleanup. Next slide.
- 16 This is the funding that's been given FUDS since '92. I didn't want to put
- 17 the whole spiel on there, but you can see that it's more or less consistent over
- 18 time.
- 19 I think the last estimate, we just updated our estimates last month for
- 20 the entire program, but last year the estimate was in excess for the entire
- 21 nationwide program was in excess of 20 billion dollars. So just a little simple
- 22 math there, 250 million a year divided into 20 billion, you're looking at 80 years
- 23 worth of work at this level of funding. Next.
- So this is how the FUDS Program breaks down. You know, the
- 25 headquarters, USACE, of course, is known geographically. You have different

- 1 offices, and, of course, our centers of expertise where Spencer is from in
- 2 Huntsville. Next slide.
- This is just how the Corps of Engineers is broken down on a national
- 4 basis, and, of course, we're in the South Atlantic Division, and our headquarters
- 5 for the division is in Atlanta. Next.
- 6 Past Property Holders, of course, we're doing all of the services, and not
- 7 just farming or any specific one. Other defense agency property is a little
- 8 vague. Defense finance and accounting service, you know, they might have had
- 9 some issues at those places, but we try to be inclusive. Next.
- 10 Of course, the principal stakeholders, everybody interested in the FUDS
- 11 things, you're included. Next.
- 12 And everybody here could probably add a few things in the current uses
- 13 of the FUDS sites. Next.
- These numbers here are a little bit influx, because we're always finding
- 15 new things in the archives. We're always, of course, completing projects. So
- 16 take these, these aren't exact numbers, but they give you the idea of how big
- 17 the scope of the program is. Next.
- And this is how it breaks down by state. You can see that there is over
- 19 200 sites just in South Carolina alone. Next.
- So the property was occupied by the Department of Defense in the past.
- 21 How did it get to be a FUDS site? Well, first criteria is that it was used by the
- 22 Department of Defense in some manner. However, it's got to meet all these
- 23 other criteria, also.
- 24 First of all, it has to have some danger to the public, some issue of
- contamination that falls under the CERCLA law; and, again, I won't read to you,

- 1 so if you have any questions about these or any of the exclusions for sites, just
- 2 ask, and I will take questions at anytime. I don't see anybody nodding off, but
- 3 let me know. Next.
- These are some of the ways, again, that properties drop off the FUDS
- 5 list, and I won't read them to you. Go ahead.
- 6 So first thing is first. We inventory all the sites. Next.
- 7 Then we investigate them to see what the hazards are. Next.
- 8 And we clean them up. Next.
- 9 So this is the flow chart for CERCLA. Camp Croft is or was on this path,
- 10 because it was an ordnance project. So we mentioned the EE/CA. We've done
- 11 two, two things here, and we're --- we keep oscillating back here, back and forth
- 12 here for the different OOUs.
- This is the, I guess, traditional path for a cleanup under CERCLA, and the
- 14 Corps of Engineers has recently started to shift its policies and just naming all
- 15 these documents for the traditional way. For instance, we have a project in
- 16 Conway, South Carolina that is an ordnance site that we're currently doing an
- 17 RI/FS for. Next.
- So the end goal, of course, is to clean up the site. There's two ways we
- 19 can say that it's cleaned up. One way is to issue an NDAI, No DoD Action
- 20 Indicated; and the other is a NOFA, No Further Action.
- 21 An NDAI is different from a NOFA, as our esteemed DHEC
- 22 representative will tell you that NOFA is very difficult to get. So we mostly
- focus on the No DoD Action Indicated as an end goal. Next.
- So here's the different ways that we can reach an NDAI determination,
- and you can see that they come at different phases of the process. So we

- 1 might --- some of your OOUs don't need a response, so we might give them an
- 2 NDAI, and some of them do. They've been cleaned up to an acceptable level, so
- 3 we give them a different determination, but it's still for paperwork sake termed
- 4 an NDAI. Go.
- 5 These are just some of the recent initiatives that, you know, the big wigs
- 6 on the national level look at in order to try to streamline the process.
- 7 The regional contracting is one that affects Camp Croft specifically.
- 8 There are contracts for Zapata for the RAB, for the investigations and the
- 9 cleanups are all done at Huntsville where they have the expertise to talk the
- 10 talk and write the scopes of work to get the right people on the job.
- 11 The database thing has been a big issue for me, but I won't bore you with
- 12 the details of the database, so next.
- There's a number of things that influence the speed in which we work
- 14 through all of the projects nationwide. Of course, number one on the list is the
- amount of money that we get to execute the program; and when you saw the
- 16 number of projects that we have nationwide, there's a lot of competition for
- 17 that funding.
- 18 If any of you have any questions about these or want me to explain it,
- 19 anytime. Next.
- 20 And there's more, as you can see.
- If a project is highly visible if there's a lot of controversy over it,
- 22 there's an example down in Florida you might have heard about a Pinecastle
- 23 Jeep Range. They built this brand new school and a track and the whole nine
- 24 yards and they had no idea that this was a range. The next thing you know
- 25 they're pulling ordnance out of there. A congressman lived next door, and so

- 1 you can see that quickly resources go to that and are funneled away from other
- 2 things of lesser priority. Go.
- These are just some websites where you can find more general
- 4 information about FUDS. There's some of these sites where you can download
- 5 specific documents for specific sites, so --- but you can always call me or ask
- 6 me to find things for you. If you have a specific interest, that's what I'm here
- 7 for, so please, please use me. Next.
- 8 And that's pretty much all I have, unless somebody has questions.
- 9 (NO RESPONSE)
- 10 BY MR. BOONE:
- 11 All right.
- 12 BY MR. TOBIAS:
- 13 Well, I believe that everybody in here would agree that our specific
- 14 interest is to clean up Camp Croft.
- 15 BY MR. BOONE:
- 16 Yes, sir.
- 17 BY MR. TOBIAS:
- And I don't believe, you know, in my lifetime it's really ever going to
- 19 happen. You know, I think part we need to include in here is awareness to the
- 20 public should be included in some type of, you know, information.
- I know the Bomb Squad does a real good job, and the Sheriff's
- 22 Department does, but there's a lot of people that move in our community that
- 23 have no idea what they're moving into; and I don't know if the Board is negligent
- or if I'm negligent, but really I've got issues with people not knowing exactly
- 25 what they're getting into; and I know we're trying hard, but it's really hard when

- 1 you don't have any money and it goes to Florida, you know. The last time I
- 2 looked Florida has got plenty of money. We need a little bit of that spent up
- 3 here in South Carolina; and if you can do anything, I'd like to see is you tell the
- 4 people in Department of Defense that Spartanburg is just as important as
- 5 Florida.
- 6 BY MR. BOONE:
- 7 Yes, sir, and that's my job. That's --- that's what I do when I go to the
- 8 meeting and say, you know, "The people in Spartanburg are concerned. See,
- 9 they have this RAB, and they participate in the process," and that's exactly
- 10 what I do.
- 11 BY MR. TOBIAS:
- 12 And I'm sure it's a tough sell.
- 13 BY MR. BOONE:
- 14 You're welcome to come with me.
- 15 BY MR. TOBIAS:
- 16 Well, I guess we'll move on next the munitions safety briefing.
- 17 BY MR. O'NEAL:
- Actually it's on safety briefing. What I wanted to do, I'm an old Army
- 19 guy. I'm a beans and bullets kind of guy, so what I wanted to do today is sort of
- 20 show you some of the bullets. Okay. What these guys are pulling out. The
- 21 bullets, some of the things that you've heard mentioned in Mike's report were
- 22 the 60 millimeter mortars, the weapons, the different types of munitions that
- 23 are out there. What I wanted to do is sort of give you an overview of what
- 24 some of these things actually look like both in test form and most chances, you
- 25 know, when we pulled them out of the ground when they were all rusty.

- 1 So when you're out and people are in the community and they see these 2 things that know exactly what they're dealing with, and then, of course, we 3 definitely go back to the three R's, and I think I have some pictures here. 4 We're working toward it, so give us a second. 5 Do you want to take a break? 6 BY MR. TOBIAS: 7 No, we'll just move on to the Sheriff's Department, and then we'll call you 8 back. How about that? 9 BY MR. O'NEAL: 10 Okay. No problem. 11 BY MR. TOBIAS: 12 I'd like to see some of it just for general information. 13 Sheriff, do you have anything to report to us? 14 BY SERGEANT BEATY: 15 Ted Beaty. I'm a sergeant with the Sheriff's Office Bomb Squad. 16 We've had --- we've done some MK recoveries. We actually went to 17 Gaffney last week and got one that was picked up at Camp Croft and carried to 18 another county. We've had some grenades under houses down around the golf 19 course. They've probably been there for years and they've just never been 20 under the house to find them. We've had --- have we had anything since the 21 fire, the first fire? 22 BY MR. TOBIAS: We've had one since the first fire. 23
- There was another fire in that same general area a few weeks ago.

24

BY SERGEANT BEATY:

1 I was out with pneumonia. Brad tried to call me. I didn't answer the 2 phone, and then my lieutenant called a little bit later wanting to know why I was 3 down there working it by myself. I don't anything was recovered out of that, 4 but it was another fire in that area; and on the education part, what we're doing 5 as far as the education part, we're carrying some of the things that we're 6 recovering to the schools with us in the elementary school and junior high and 7 high school, and we're actually putting out a display and telling them where it's 8 coming from and how it looks when it's in the ground and trying to educate the 9 kids so that they'll make their parents aware if they're in that area. 10 BY MR. TOBIAS: 11 Children have always been a problem. 12 BY MR. HAYES: The first fire was at the cemetery? 13 14 BY MR. TOBIAS: 15 The first fire was off Henningston Road the way they went into it, but it 16 was ended up the fire was actually close to Dairy Ridge Road as the crow flies, 17 and there was a lot of rocket grenades and things like that I think they were 18 blowing up. 19 Now that land had been previously denied access to by the landowner. He 20 doesn't want the intrusion. So I ---21 BY SERGEANT BEATY: 22 I think he's ready now. 23 BY MR. HAYES:

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BY MR. TOBIAS:

Do you which landowner it is?

1 Yeah, I know who the landowner is. I don't know if I --- Harold Campbell. 2 BY MR. HAYES: 3 Okay. 4 BY MR. TOBIAS: 5 He's a big landowner. BY MR. HAYES: 6 7 So that was the first one. Where was the second one? 8 BY SERGEANT BEATY: 9 It was back towards Camp Croft a little bit and towards Dairy Ridge Road from that one from what I understand. 10 11 BY MR. TOBIAS: 12 But it wasn't as big. 13 BY SERGEANT BEATY: 14 No, and they got it out in a hurry. 15 BY MR. TOBIAS: 16 Right. 17 BY MR. HAYES: So its actually three. The one, the first one was over there around the 18 19 cemetery on Foster Mill Circle. 20 BY MR. TOBIAS: 21 That's right. 22 BY MR. HAYES: 23 And then it would be two and three. 24 BY MR. TOBIAS:

And we've had them, you know, through the years.

25

- Fire has always been apart of Croft. It's just become more aware now
 that the RAB has took a fire position and worked with the Sheriff's Office, and
- 3 they've got the nice bomb truck.
- 4 If you've never seen it, that thing is state of the art. They've got a very
- 5 dangerous job.
- 6 BY MR. HAYES:
- 7 The bomb truck, they had it out at the Deaf and Blind School one time we
- 8 had a meeting.
- 9 BY MR. TOBIAS:
- 10 Right. Right.
- 11 BY MR. ZIMMERMAN:
- 12 Yeah.
- 13 BY MR. TOBIAS:
- That's correct, but the real problem we've always had is children digging
- 15 that stuff up and taking it home, putting it under a house, putting it in their
- 16 attics, keeping it in their bedroom and not telling anyone, and that's going to
- 17 continue, I mean, I would imagine as long as they're out there playing in the
- 18 woods, and that's why, you know, I'd like to stress that funding is priority for
- 19 South Carolina, especially the Upstate.
- 20 BY MR. BOONE:
- 21 Well, besides the funding to do cleanups, there's things we can do, you
- 22 know, with the money that we get to just administer to this Board and things
- 23 like that. There's outreach that we can do, like have fliers, distribute fliers, go
- 24 with the Sheriff's Department to do presentations; and we're willing to work
- 25 with the Board, certainly, to come up with a plan for any specific actions that

- 1 you guys might have in mind to do that outreach for whether it's educating
- 2 children or educating the local government. Sometimes they need a little, you
- 3 know, encouragement. We're here for you.
- 4 BY MR. TOBIAS:
- 5 I believe it, and I appreciate it.
- 6 BY MR. SHOOLBRED:
- 7 Is there anything in the deed transfers that occur on home closings that
- 8 tell people that they're in an area that's possibly contaminated with ordnance?
- 9 Is there anything like that that occurs?
- 10 BY MR. BOONE:
- 11 There's no federal mandate for it, and, as far as I know, there's no state
- 12 mandate.
- 13 BY MR. SHOOLBRED:
- 14 Uh-huh (affirmative response).
- 15 BY MR. BOONE:
- I know that Horry County requires that each deed on that former Conway
- 17 Bomb and Gunnery Range is stamped with a big red circle that says, "This
- 18 property is located on a former bombing range."
- 19 BY MR. SHOOLBRED:
- 20 How did they implement that?
- 21 BY MR. BOONE:
- The County Board passed an ordinance that said, "You shall now stamp all
- 23 the deeds."
- 24 BY MR. TOBIAS:
- 25 County Council.

1 BY MR. SHOOLBRED:

- County Council. Okay, and then the area was pretty well --- the area that
- 3 that entailed was pretty well defined.
- This --- you know, the areas over in Camp Croft aren't so well defined,
- 5 but the whole area as a whole should have something that goes on --- on deeds
- 6 so that people know.
- 7 BY MR. BOONE:
- I agree, and we need to contact, you know, as a group contact the elected
- 9 officials and ---
- 10 BY MR. SHOOLBRED:
- 11 And that would go --- I think that would go a long way towards educating
- 12 people and their kids about --- and have parents warning their kids about
- 13 picking up ordnance, because, you know, that --- I'm sure there's a lot of people
- 14 down there that don't have any idea.
- 15 BY MR. TOBIAS:
- 16 That's the plus side to it.
- 17 BY MR. SHOOLBRED:
- 18 Well, ---
- 19 BY MR. TOBIAS:
- Well, then there's the negative side to it that people's property values
- 21 are going to plummet.
- 22 BY MR. SHOOLBRED:
- Well, yeah, that's --- yeah.
- 24 BY MR. TOBIAS:
- 25 You know, a lot of people might not like that, but what it will do ---

1 BY MR. SHOOLBRED: 2 That's true. 3 BY MR. TOBIAS: 4 --- it will create controversy that might generate money. 5 BY MR. SHOOLBRED: 6 For cleanup, yes. 7 BY MR. TOBIAS: 8 Clean it up. 9 BY MS. SLAYTON: 10 Do you know any representatives that live near Camp Croft? 11 BY MR. TOBIAS: 12 We've got two. We've got a state senator that lives just below the former park, and we've got a house of representative that lives just off the 13 14 former park. 15 BY MS. SLAYTON: 16 That's a start. 17 BY MR. TOBIAS: 18 That's a start. BY MR. SHOOLBRED: 19 20 Uh-huh (affirmative response). 21 BY MR. TOBIAS: 22 Okay. 23 BY MR. HAYES: Well, a lot of things to be done. It's like over at the trails, you know, I 24 25 hear all the time people are off the trails all the time. You know, they don't ---

- 1 they don't understand how dangerous it can be. You know, a lot of times when
- 2 I'm patrolling things or checking property, people come out of the woods out of
- 3 nowhere off the trail. "Oh, we just decided we're going to go this way."
- 4 "Well, you're going to get blown up," you know.
- 5 They say, "No, we didn't even know anything like this. We didn't know this
- 6 was a military park."
- 7 So people are going on the property, going to the state park and
- 8 wandering off the park onto other people's property, and they don't know that
- 9 it's a former military base.
- 10 BY MR. O'NEAL:
- 11 Okay.
- 12 BY MR. HAYES:
- They don't know it's dangerous.
- 14 BY MR. O'NEAL:
- 15 And, you know, too, I'm going to --- I don't mean to minimize the issue
- 16 that you have here, but you're not alone. I've got another site in Puerto Rico.
- 17 Okay, and they are having the same types of issues, but it seems that every
- 18 time I put signage out there, somebody decides they would prefer not to have
- 19 the signage out there because it reduces their property value or tourism or
- 20 whatever, so it's a double edged sword, and, you know, we have to be do due
- 21 diligence and make sure that everybody continues to understand that, you know,
- 22 there's a potential for some real bad things to happen if you continue to do
- 23 that; but some of the things that I'm going to show you are --- they're out
- 24 there on Google. We've also got some things out there on websites. You can
- 25 look them up.

I've got a class that I was going to speak with Shawn and see if he
wanted to have one of our UXO safety specialists come in and teach it. It's
called UXO 101.

4 BY MR. BOONE:

5 Okay.

6 BY MR. O'NEAL:

It tells you about every facet of what we find all over the country and then he specifies and gets to this specific area and shows you exactly what we had found, what Mike and those guys have reported back to us, so that we can be the identification piece a little bit more honed.

Some of the things I'm going to show you --- next slide.

Camp Croft, this map is from something I'm going to show you a little bit later. We've paid, we've got a group called TEC, which is down in St. Louis, and they do a lot of geophysical mapping, and it shows exactly where the firing points were, where things could have landed based on calculations that they had out there. Next slide.

These are some of the things that I pulled out of the historical data that I was able to come up with some pictures and wanted to show you guys. Some of the other stuff is out there. However, I didn't bring the whole caveat of the US Army's inventory pictures. These were things that I was pretty sure we're going to find in this area and we have found based on the reports. Next.

This is one of the weapons of choice that was used in the forties and fifties in most of the troops that came through here. Mike talked about 200,000 troops. This was the first piece of munition or government weaponage that they were taught with, the M1. The next slide.

Also, they had some people who were special MOSs that used to burn the machine gun, burning machine gun uses 50 cal. They usually this type of bullet, and what we normally find out in these sites is not the entire bullet, but we find just the cone portion of it or the slug of the cone portion of it; and some of the ways that these guys are able to go out there and find that, they use metal detectors.

They use geophysical mapping, and it's sort of like on the geophysical mapping, when we find an area that's been saturated with this type of stuff, it sort of shows up like we had one situation where it was roofing nails. It was a brand new community. They were out there, and, you know, of course, one thing is masked by another and miss scanning it, and then they a picture of it. It's one big red blob, and they say, "Oh, my God, we've got munitions all over the place," and actually it was roofing nails; but, as he said, technology is getting a lot better, and we're able to discriminate what those things are; but, you know, looking for something like that is like looking for a needle in a haystack when you're looking over acres and acres of land.

So it takes a lot of money, and, you know, it takes a lot of effort in order to get there, but we're getting better. Next slide.

This is one of the other munitions types that were used. This is the bazooka. You've seen them in the old John Wayne movies. You know, when you see the guy pops up out of the hole and he's got the --- okay. Well, this is the piece that you normally don't see, and these are the two pieces that we're actually looking for. There was an anti-tank rocket range out on Camp Croft. We're not sure how many rounds they fired. Who knows, but when we find them, this is what we're looking for.

Okay, and some of the things that you find is you'll be walking through
the woods or you'll be riding a horse, four-wheeler or whatever, and you'll see
fins. This is a dead give away. Practice the three R's. Teach the kids to
practice the three R's.

The fins will give it away, and also you probably won't see too many of these cart --- these weapons, devices, because they're pretty much inventoried those in the past onto the military system, but the pieces that did not explode are going to be these pieces. Those are the ones that Mike speaks of when he said that we found those at certain depths. Next slide.

Mortars, there's a long laundry list of mortars, and I was not able to come up with two of the other ones or three of the other ones that were out there, but these were popular ones in the forties and fifties that were utilized at this time. This is how they fired them, the mortar, too. They only had a crew of three guys. They --- you know, one guy set up the charge, you know, and how far do you want it to go? I want it to go a mile. Okay. We put that much mortar stuff in there, explosives in there in order to create the projectile.

There's three different types, and I'm going to take a look at 60 millimeters, 75 and 81 are the most popular. Next slide.

The 60, this is what it looks like coming out of the ground, the ones that we've been able to recover. This is what one looks like based on the government and what their inventory sheets are.

The tip is the --- come on, Mike, help me.

23 BY MR. WINNINGHAM:

24 Fuse, that's a point anti-fuse area right there.

25 BY MR. O'NEAL:

- And then the projectile back in this area and the fins that I was speaking of, see, you can barely see them, but normally when they go ahead down in the ground, that's the piece that's left, left to be seen.
- What we don't want to do is we don't want anyone investigating this to
 find the rest of it, so that's why we say we exercise the three R's. If you see
 any fins or anything of that type, and then get the correct people out there.
- 7 Next slide.
- The 75s, the 75s, as you can see, don't have fins. They have a different type of projectile.
- 10 BY MR. WINNINGHAM:
- 11 A cartridge.
- 12 BY MR. O'NEAL:
- 13 A cartridge.
- 14 BY MR. WINNINGHAM:
- And what you'll see more at the Camp Croft area. The one to the right
 there are the old powder train time fuse shrapnel and some shrapnel, and you'll
 find some ATs, and then some even had the little smoke canisters in them that
 they will check out the back and cause screening smokes for back in the days
 for troops to hide behind and shoot people.
- 20 BY MR. O'NEAL:
- 21 Next slide.
- There's the 81s. As you can see, this one has fins. This is an HE, which is
- 23 called High Explosives, okay, which has ---- would it be TNT?
- 24 BY MR. WINNINGHAM:
- 25 It could have TNT. It could have comp B.

BY MR. O'NEAL:

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- 2 Lots of nasty stuff.
- 3 So if you see fins or lucky enough to see the front of it or the side, lots
- 4 of people, they're color coded. Now over all this time, the color code, of course,
- 5 is rust, but if you see something of this shape, you know, exercise the three R's
- 6 and move out, get someone to come and take care of it.
- 7 This is a practice round that I was able to find in our inventory of photos.

BY MR. WINNINGHAM:

- And when they're both rusty, you're not going to be able to tell one from
- 10 the other. You know, they look exactly the same.

11 BY MR. O'NEAL:

- 12 Next slide.
- Okay. This project has been going on for some time, and one of the
- 14 things that we have had at our disposal is this group called the Topographical
- 15 Engineering Center, which is in Alexandria, Virginia, and what we've asked them
- 16 to do, we talked about GIS. Mike has called it geophysics. It's sort of like
- 17 being able to X-ray it underground in order to see the different types of
- 18 characteristics, either a big blob of some sort or metals or whatever. You can
- 19 isolate different areas so that you'll know exactly where the munitions are or
- 20 the very large pieces of metal or what have you.
- 21 What you're going to see out on the website of Camp Croft, and I actually
- 22 have a copy of the --- a hard copy and a cd, but it's a GIS based analysis of all
- 23 the photographs of the areas, and I kept speaking of big red blobs. It goes
- 24 through the history. It talks about what was fired there, where the location is.
- 25 These were actual photos from Camp Croft. It's kind of interesting for history

- buffs. It gets down to the nitty gritty and tells us about which locations were,
- 2 what was fired from or what type of training went on. It also shows us where
- 3 the different types of rounds were found, firing points, so on and so forth,
- 4 where the gas --- they did some gas training there, and it shows where the gas
- 5 chambers were located where they kept every piece of, you know, all the
- 6 storage locations.

We're going to put this out on the website so that you guys can take a look at it, use it like all the rest of the information. We're also going to take

8 look at it, use it like all the rest of the information. We're also going to take

9 out this very large map here that identifies all the OOUs that Mike was

speaking of earlier, and I don't know how well this is going to blow up once you

11 get it on your webpage or on your computer, but it also identifies all the OOUs

in the different areas cleanup areas, and I'm going to stick that out with my ---

I have an extra to put that out there, Shawn, in the group. We had been talking

about this. One of the things that we had talked about, also, is putting these

slides up here and sort of discussing some of those things that are identified in

16 here.

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It had some very good questions about actual spots and where things were located. The GIS helps us to zoom down to try to determine, okay, what side of the road it's on or where exactly is that, because they're aerial photos.

Next slide.

Now I have to put up my disclaimer. Okay. Everything represented in here is not exactly everything that was fired at Camp Croft. I just tried to give you an indication of some of the things that I've seen in the past, some of the things that we've seen in the past, the Corps of Engineers, especially in the ordnance and explosives area.

- We try to get as many pictures as we can. It's kind of dangerous to bring in audio/visual aids, so we take the pictures, and we have a very large database.
- 3 I have a group of safety specialists that are the CX, the center of expertise
- 4 that have a person that's there that has a class. If you guys are interested in
- 5 more of this stuff and want to see exactly your area, exactly what pieces that
- 6 were dug out or stats of that sort, we can bring him in. He'll teach the UXO 101
- 7 class. It helps for recognition on a lot of this stuff, but just let us know.
- 8 Speak to Shawn. Tell him, "Hey, I want to see that UXO class." We'll bring him
- 9 in. We can ride back up here together from Huntsville.
- 10 Incidentally, please keep in mind based on munitions represented, they're
- 11 all dangerous. Communicate. Communicate. Communicate, and teach the three
- 12 R's, because we are in an area that has some very dangerous stuff out there.
- 13 Sometimes children don't take that into consideration. They think it's kind of,
- 14 "Gee whiz," but, you know, you don't get to --- you don't get a redo is what I
- 15 teach my kids. You don't get a do over, and so report it. Tell them about it.
- 16 Don't take it. Don't hide it.
- 17 I have a story about a guy who took four 81s millimeter mortars. He took
- 18 them home, hid them in the garage. Mom didn't know about it. All of a sudden
- 19 she comes out. She's got a brand new table with four new table legs. She said,
- 20 "You better get that crap out of my house."
- Okay. They took it out to the barn. About two days later it exploded.
- 22 Okay. So they don't understand, but we need to educate those parents and as a
- 23 community.
- So if you have any questions of me, I'll be here for the rest of the
- 25 meeting. If you guys would like to see that, we don't have a problem bringing

- 1 him to you. We're trying to bring some new flavor. We've been going for a little
- 2 while at the RAB, and Shawn has charged us. We're trying to come up with
- 3 some interesting stuff. So we're trying to do something to peak your interest
- 4 and keep the Board fresh and new.
- 5 BY MR. TOBIAS:
- 6 Yeah, I applaud you for your efforts. It's been very informative. A lot
- 7 of that stuff Ted has recognized the first hand. The anti-tank rockets.
- 8 BY SERGEANT BEATY:
- 9 We're finding we've got tank mines that have been found down there and
- 10 stuff, and they've been HE.
- 11 BY MR. O'NEAL:
- Wow, pack a big boom.
- 13 BY SERGEANT BEATY:
- 14 Yeah, it was.
- 15 BY MR. HAYES:
- 16 How were they found?
- 17 BY SERGEANT BEATY:
- 18 Well, one of them was found by one of the people that would go in there
- 19 and scavenge and stuff and left it on the walking trail over in Clifton.
- 20 BY MR. HAYES:
- 21 And took it from there over to Clifton?
- 22 BY SERGEANT BEATY:
- 23 Yes, and left it on the walking trail.
- 24 BY MR. HAYES:
- Was he prosecuted?

1 BY SERGEANT BEATY: 2 We couldn't never prove that he was the one that did it but pretty sure it 3 was. 4 BY MR. HAYES: What was it you said you found stuff under houses? Was that lately or 5 6 was that older houses that ---7 BY SERGEANT BEATY: Oh, ---8 9 BY MR. HAYES: 10 --- were built before ---11 BY SERGEANT BEATY: 12 --- four weeks ago. 13 BY MR. HAYES: 14 How old is the house? **BY SERGEANT BEATY:** 15 It was some of those houses over there in the golf course. I don't know 16 how long they're ---17 18 BY MR. HAYES: So they were built after the golf course was built. 19 20 BY SERGEANT BEATY: 21 Fifty, 60 years old, probably. 22 BY MR. TOBIAS: Well, I think you'll find in that would be children putting them under the 23

crawlspaces in the houses that existed.

BY SERGEANT BEATY:

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- I had a cousin that lives down there that laughs about when they were
- 2 kids, they used to throw them at each other under the house playing war.
- 3 BY MR. HAYES:
- 4 Yeah, we used to go down to the swimming pool and walking in the woods
- 5 and find them.
- 6 BY SERGEANT BEATY:
- 7 I don't know if --- I know how much of the --- just probably wouldn't want
- 8 it, but if you all wanted to come to the Sheriff's Office for one of these
- 9 meetings, and you can set your stuff up, and then you can see what was actually
- 10 recovered, also, in our media room.
- 11 BY MR. WINNINGHAM:
- That would be good.
- 13 BY SERGEANT BEATY:
- 14 It wouldn't be a problem.
- 15 BY MR. O'NEAL:
- 16 That would be great.
- 17 BY MR. HAYES:
- 18 Do you keep a lot of it up there?
- 19 BY SERGEANT BEATY:
- 20 Yes.
- 21 BY MR. BOONE:
- How does the Board feel about that?
- 23 BY MR. HAYES:
- 24 It would be fine with me.
- 25 BY MR. SHOOLBRED:

1 Yeah, it would be fine with me. 2 BY MR. TOBIAS: 3 Educational. 4 BY MR. HAYES: 5 And save some money, wouldn't it, for renting the place? 6 BY MR. BOONE: 7 Yes, sir. 8 BY MR. SHOOLBRED: 9 Might even get some media to come out to see that. 10 BY MR. BOONE: 11 Did we finish our conversation right before Spencer's presentation about 12 public education and communication about ---13 BY MS. SLAYTON: 14 Do you have images of any of these things on the Camp Croft website? 15 BY MS. CANTOR-MCKINNEY: Excuse me. First of all, can you say your name, please, for the ---16 17 BY MS. SLAYTON: 18 Oh, I'm sorry. I'm Becky Slayton. I'm the Executive Director for the 19 Spartanburg County Historical Association. I'm interested in it from a 20 historical perspective, obviously, but also you're talking about communication 21 and education. That's kind of what we do. It has a two prong mission. One is 22 education. So I was just curious if it's on the website. 23 BY MS. CANTOR-MCKINNEY: 24 Well, ---

25

BY MS. SLAYTON:

1 That may be a great way for people to say, "Well, this looks like that I 2 saw in the woods." 3 BY MS. CANTOR-MCKINNEY: 4 The website doesn't have specific photos or a link to photos. The reports 5 of the clearances that have been done to date, all those reports are on the 6 website, and all of them will have appendices that have photos. You would have 7 to see from a safety perspective whether the Corps of Engineers would want a click on a link and to have pictures of munitions. I mean it's easy enough to do if 8 9 there's approval from them. 10 BY MS. SLAYTON: 11 That makes sense. 12 BY MR. O'NEAL: Then I can take that back. If that's what the Board wants to do, I mean 13 14 I think it would be great. I think that's a great idea. 15 BY MR. BOONE: I have seen at least one other site that has that on it. 16 17 BY MR. HAYES: There could be an interest in it. 18 19 BY MR. WINNINGHAM: 20 Can we get Sergeant Wolfe on the link? 21 BY MS. CANTOR-MCKINNEY: 22 I don't think we have ---23 BY MR. WINNINGHAM:

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Sergeant Wolfe up there?

BY MS. CANTOR-MCKINNEY:

1 We don't have the educational material. That was for another project.

2 BY MR. WINNINGHAM:

- 3 I mean that's been done for other sites, pamphlets and Sergeant Wolfe
- 4 for the school kids and stuff like that.

5 BY MS. JEFFRIES:

- 6 Sergeant Wolfe would also come visit the school kids, the elementary
- 7 kids, and he come in a costume and he has coloring books and crayons and that's
- 8 a great way to educate younger children.

9 BY MR. BOONE:

- 10 This is Glenn Jeffries. She's our new public affairs officer at the
- 11 Charleston District, so she knows a lot about it. The FUDS Program has a whole
- 12 book this thick with things for public outreach, information pamphlets. So, like
- 13 I said, we have the resources. It's just a matter of deciding how we want to
- 14 approach the problem and what we want to do about it.

15 BY MR. TOBIAS:

- 16 Well, that's good. I was going to tell Ted that Brad at the Forestry
- 17 Commission has offered their facility, you know, if you need a meeting place or
- 18 you want to do a demonstration. He's offered that several times. I thought I
- 19 would let you know that.
- If there aren't any further questions, I'm going to ask Suzy if we've got
- 21 enough to do an election now. There's just four of us.

22 BY MS. CANTOR-MCKINNEY:

Well, we still have a quorum.

24 BY MR. TOBIAS:

25 Do we?

- 1 BY MS. CANTOR-MCKINNEY:
- 2 Yes, quorum is 25 percent.
- 3 BY MR. HAYES:
- 4 When was the last election?
- 5 BY MS. CANTOR-MCKINNEY:
- The last election was --- the last election was March of '07. Jimmy
- 7 Tobias was elected, and it was effective in June of '07. So per the By-Laws, a
- 8 community co-chair can serve a one-year term, and if elected, serve a second
- 9 one-year term.
- 10 So Jimmy's second one-year term is coming to closure. If an election is
- 11 held tonight, then the new community co-chair will take effect and assume that
- 12 position at the next meeting.
- 13 BY MR. HAYES:
- So he was elected and the last election was when?
- 15 BY MS. CANTOR-MCKINNEY:
- 16 March of --- wait. No, I'm a year off. Yes. I'm sorry. That was his first
- 17 election.
- 18 He was nominated in February of 2008 for this current term, and that
- 19 took effect in our May 2008 meeting.
- 20 BY MR. HAYES:
- 21 And the first one was March '07?
- 22 BY MS. CANTOR-MCKINNEY:
- 23 March '07 and effective June '07, and the dates will be off a little bit.
- 24 We try to hold our meetings quarterly, but sometimes they shift by a month or
- 25 so.

1 BY MR. HAYES: 2 Now ---3 BY MS. CANTOR-MCKINNEY: 4 So it won't be exactly one year to date. 5 BY MR. HAYES: 6 Now I looked in the Minutes, and I couldn't find anything in the February 7 Minutes saying that we had an election then. The only --- the only election I 8 could find was for October of '07 in the Minutes. So none of these dates 9 coincide. 10 BY MS. CANTOR-MCKINNEY: 11 Those are the dates that I pulled out of the meeting Minutes. 12 BY MR. HAYES: Well, I couldn't find them, but I could find one for October '07. So 13 14 you're saying March '07. 15 BY MS. CANTOR-MCKINNEY: And ---16 17 BY MR. HAYES: 18 And so I was thinking that Jimmy was elected last right before the 19 election, and I said, "Well," you know, I was thinking then that would be good if 20 Jimmy wanted to put that he was chairman of this when he was running for the 21 state senate. That would be good for his election, and that's how I kind of 22 remembered that, but I couldn't find anything in the Minutes. 23 BY MS. CANTOR-MCKINNEY: 24 Well, I'll be happy ---25 BY MR. HAYES:

1 And it seem like it hasn't been that long ago. It doesn't seem like it's 2 been a year since we elected him. It seems like it was right before Christmas 3 or right before November, which that would be the only meeting before 4 Christmas last year was September. 5 BY MR. SHOOLBRED: 6 Well, when did we move to this building? 7 BY MR. BOONE: 8 I've been ---9 BY MR. SHOOLBRED: Because the last election was in at the School for the Deaf and Blind, I 10 11 think, and ---12 BY MR. BOONE: I have been ---13 14 BY MR. SHOOLBRED: 15 And I think that it was the last meeting there. BY MR. BOONE: 16 17 --- for a year in March, and we haven't had an election since I've --- for 18 the chair since I've been with the FUDS Program. 19 BY MR. HAYES: 20 When did you start? 21 BY MR. BOONE: 22 March '08. 23 BY MR. HAYES: Well, the last meeting was here in '09 in this building, and the meeting 24

before that was over at the Deaf and Blind School, right?

25

1 BY MR. SHOOLBRED: 2 We've been meeting here for a good while. 3 BY MS. CANTOR-MCKINNEY: We've been meeting here for the last three or four meetings. 4 5 BY MR. SHOOLBRED: 6 We've been meeting here three, three meetings at least. 7 BY MR. WINNINGHAM: 8 There's been at least three here, I believe. 9 BY MR. SHOOLBRED: So it was the last meeting at the Deaf and Blind School that we had the 10 11 election and Jim was election, and that was at ---12 BY MS. CANTOR-MCKINNEY: 13 That was in ---14 BY MR. SHOOLBRED: And that was four quarters ago, so that would have been a year ago. 15 16 BY MS. CANTOR-MCKINNEY: 17 We've been here the last two meetings, and I'd be happy to ---18 BY MR. HAYES: 19 Is this ---20 BY MS. CANTOR-MCKINNEY: 21 --- go back ---22 BY MR. HAYES: Is this place cheaper than the Deaf and Blind School? 23 24 BY MS. CANTOR-MCKINNEY:

The School for the Deaf and Blind does not rent to outside entities.

25

1 BY MR. HAYES: 2 So they changed that? 3 BY MS. CANTOR-MCKINNEY: 4 They changed their policies. So whatever the Board decides, I'd be happy to go back and --- I don't 5 know if we have online access to the website. We could review all the 6 7 transcripts. 8 BY MR. WINNINGHAM: 9 I think we do. 10 BY MS. CANTOR-MCKINNEY: 11 Or I can go back when I get back to the office and verify those dates and then notify the Board via email. 12 13 BY MR. TOBIAS: 14 Do you want to just postpone the election until the next time? 15 BY MS. CANTOR-MCKINNEY: And if we want to postpone it to our June meeting, ---16 17 BY MR. TOBIAS: 18 To see if we have ---BY MS. CANTOR-MCKINNEY: 19 20 --- if that is fine. 21 BY MR. TOBIAS: 22 --- some more people. 23 BY MR. HAYES: 24 Well, I make a motion we postpone until next time. Second? 25 BY MR. SHOOLBRED:

```
1
           Yeah, I'll second.
 2
           All in favor?
 3
     BY MR. TOBIAS:
 4
           All in favor.
     (ALL RESPOND)
 5
 6
     BY MR. TOBIAS:
           I'm not too good on Robert's Rule kind of like the County Delegation.
 7
 8
     BY MR. SHOOLBRED:
 9
           Now we're not that bad.
     BY MR. TOBIAS:
10
11
           No, we're not that bad, but I'm just not that great of a chairman ---
     BY MR. HAYES:
12
           Well, it's not really a majority.
13
14
     BY MR. TOBIAS:
15
           --- when it comes to --- when it comes to the Robert's Rules.
16
           So I'd like to take now an opportunity to ask anybody here have any
17
     questions of any of us or any of them?
18
     BY MR. ZIMMERMAN:
           I've got one.
19
     BY MR. TOBIAS:
20
21
           All right, Robin.
22
     BY MR. ZIMMERMAN:
23
           Concerning what Gary asked earlier.
24
     BY MR. TOBIAS:
25
           Okay.
```

BY MR. ZIMMERMAN:

1

- In that area down off of Forest Mill Circle, I guess what I've got to say
- 3 is more --- maybe more of a comment than a question about maneuver area four,
- 4 and that's where they trained during the Battle of the Bulge here in the forest
- 5 24 hours a day, training and everything else in the wintertime.
- 6 Now when you've got Mr. O'Neal saying ordnance hits the ground, goes in
- 7 the ground and goes in 17, 18 inches, 30 inches, however far it goes, after so
- 8 many years it shifts; and as Gary was saying, they're now starting to harvest
- 9 trees down there. I believe, and I may be wrong now. I'm not trying to be a
- 10 predictor of bad things, but I believe you're going to find a lot of ordnance in
- 11 those areas between there and Cowford Bridge Road, because those areas have
- 12 never been checked.
- 13 BY MR. TOBIAS:
- 14 Well, I know for a fact that those howitzer things are down there by the
- 15 creek. We ploughed them up in ---
- 16 BY MR. ZIMMERMAN:
- 17 Yeah
- 18 BY MR. TOBIAS:
- 19 --- doing the civil culture work for the forestry commission in the past,
- 20 but the problem is, Robin, there's no funding.
- 21 BY MR. ZIMMERMAN:
- 22 Yeah.
- 23 BY MR. TOBIAS:
- To clean it up. You know, that's what I'm trying, hopefully, that if we
- 25 started a campaign of awareness to the community, especially on children,

- 1 maybe we would get the eye of the legislature or the delegation and they would
- 2 approach the congressmen to fund ---
- 3 BY MR. ZIMMERMAN:
- 4 Yeah.
- 5 BY MR. TOBIAS:
- 6 --- Camp Croft and put it on a higher priority, because it is so much
- 7 recreation and interfaced with homes and businesses.
- 8 BY MR. ZIMMERMAN:
- 9 And you're right.
- 10 BY MR. TOBIAS:
- 11 That's the only way we'll ever get anything cleaned up.
- 12 BY MR. ZIMMERMAN:
- 13 Yes, sir. Also, and I know for a fact, Mr. O'Neal might be interested in
- 14 this, they fired 4.2 inch mortars out there, too.
- 15 BY MR. O'NEAL:
- 16 Wow.
- 17 BY MR. ZIMMERMAN:
- 18 75 millimeter howitzer with a bridge, 57 millimeter anti-tank gun,
- 19 because all that stuff has been found, and I just I've been saying it for years.
- 20 I don't want to beat a dying dog, but I do believe when they search many of
- 21 those areas, they're going to find thousands upon thousands upon thousands of
- 22 rounds of ---
- 23 BY MR. TOBIAS:
- I don't --- I don't doubt it.
- 25 BY MR. HAYES:

1 They're going to unload the mother load one day. 2 BY MR. ZIMMERMAN: 3 Yeah. 4 BY MR. HAYES: And that --- that part, you say, was down off of Cowford Bridge Road 5 6 down next to that cemetery down there. 7 BY MR. ZIMMERMAN: 8 Yeah. 9 BY MR. HAYES: 10 I don't think it's on any of our maps. 11 BY MR. ZIMMERMAN: 12 No, I don't think it is either. I'll be happy to send Mr. Boone and Mr. O'Neal maps I have of that area, 13 14 but I --- I just --- you know, all these years I've been coming here and been listening to this knowing --- well, you know who I'm talking about, Jimmy, but ---15 16 BY MR. TOBIAS: 17 But the problem is ---18 BY MR. ZIMMERMAN: 19 Jimmy Lancaster, every time he goes down there, he comes out with a 20 truckload full of stuff. 21 BY MR. TOBIAS: 22 Well, that's something maybe the Sheriff needs to deal with. 23 BY MR. ZIMMERMAN: 24 But I mean he does. 25 BY MR. TOBIAS:

1 But there's less people down there. 2 BY MR. ZIMMERMAN: 3 Yeah. 4 BY MR. TOBIAS: That's a real rural area. I mean I know Gary supervises the property, but 5 6 to me the priority would be more like Wedgewood. 7 BY MR. ZIMMERMAN: 8 Yeah. 9 BY MR. TOBIAS: --- subdivision where we're find phosphorous hand grenades. 10 11 BY MR. ZIMMERMAN: 12 Oh, yeah. 13 BY MR. TOBIAS: 14 You know, two inches under the ground. 15 BY MR. ZIMMERMAN: Yeah. 16 17 BY MR. TOBIAS: But none of it is going to happen if the Board doesn't step up and maybe, 18 19 along with the Corps, do some educational things to give it a higher priority to 20 make it an issue. 21 BY MR. ZIMMERMAN: 22 Yes. 23 BY MR. TOBIAS: And hopefully that will work to get your big mega pile cleaned up. 24 25 BY MR. ZIMMERMAN:

```
1
           Yeah.
 2
     BY MR. TOBIAS:
 3
           Which it's probably there. It's somewhere.
 4
     BY MR. ZIMMERMAN:
 5
           Oh, I'm sure it's there.
 6
     BY MR. HAYES:
           I've always heard there's hand grenade ranges people don't even know
 7
 8
     about.
 9
     BY MR. ZIMMERMAN:
           Yeah, because when that happened there in November and December of
10
11
     1944, I mean, they just went just wild training.
12
     BY MR. SHOOLBRED:
           That was so rural. Nobody was ---
13
14
     BY MR. ZIMMERMAN:
15
           Yeah.
16
     BY MR. SHOOLBRED:
17
           --- looking at it ---
18
     BY MR. ZIMMERMAN:
           Nobody.
19
20
     BY MR. SHOOLBRED:
21
           I mean nobody cared.
22
     BY MR. ZIMMERMAN:
23
           That was the true no man's land there.
24
     BY MR. SHOOLBRED:
25
           Yeah.
```

1 BY MR. ZIMMERMAN:

- I mean they even went over into Union County across Road 150 there,
- 3 firing the automatic rifles. They even --- they even had some life German
- 4 machine guns out there that they used to fire German ammunition during
- 5 training. I know that for a fact.
- 6 BY MR. TOBIAS:
- 7 I don't doubt they didn't have everything.
- 8 BY MR. ZIMMERMAN:
- 9 Yes.
- 10 BY MR. TOBIAS:
- I mean they were fighting World War II.
- 12 BY MR. ZIMMERMAN:
- 13 Yes.
- 14 BY MR. TOBIAS:
- But I think that this has been a really great meeting, and I want to
- 16 applaud the Corps of Engineers. It's been really one of our better meetings, I
- 17 think. It's been real informative, and I'm going to take some questions from the
- audience. If not, I guess we're going to adjourn.
- 19 So does anybody have any questions or comments?
- 20 (NO RESPONSE)
- 21 BY MR. TOBIAS:
- Well, I move we adjourn.
- 23 BY MR. HAYES:
- 24 I second.
- 25 (MEETING ADJOURNED AT 7:48 P.M.)

STATE OF SOUTH CAROLINA)	
)	CERTIFICATE
COUNTY OF SPARTANBURG)	

This is to certify that the within RAB meeting was taken on the 9th day of April, 2009;

That the foregoing is an accurate transcript of the meeting given;

That copies of all exhibits, if any, entered herein are attached hereto and made a part of this record;

That the undersigned court reporter, a Notary Public for the State of South Carolina, is not an employee or relative of any of the parties, counsel or witness and is in no manner interested in the outcome of this action.

IN WITNESS WHEREOF, I have hereunto set my Hand and Seal at Spartanburg, South Carolina, this 5th day of May, 2009.

Sandra Satterwhite

Notary Public for South Carolina My Commission Expires: 3/14/17

(SEAL)





Restoration Advisory Board April 9, 2009 6:30 PM

Marriott Renaissance Hotel Spartanburg, South Carolina

Meeting Agenda

WelcomeJimmy Tobias, Community Co-Chair
New Business Project UpdateZAPATA FUDS Program and FundingUS Army Corps of Engineers Munitions Safety BriefingUS Army Corps of Engineers Sheriff's Department Munitions ResponsesLt. Dyas Election of Community Co-ChairZAPATA
Old Business
RAB New Business Topics
Adjourn
Your attendance and participation are encouraged for the success of this important project!
Reminder: Comments/questions shall be limited to two minutes on topic of discussion.







The infantry replacement Training Center in Spartanburg, South Carolina was activated on January 10, 1941. It was a training facility for all phases of combat and encompassed approximately 19,000 acres.



By July 1945, nearly 200,000 men had trained at the facility named "Camp Croft."

In 1947, the camp was declared excess to the War Assets Administration, and parcels of the land were disposed of by sale or quitclaim to organizations, business interests, and former owners.



DERP-FUDS

The former Camp Croft restoration project is funded by the Defense Environmental Restoration Program - Formerly Used Defense Sites (DERP-FUDS), mandated by Congress in 1986.

Since 1995, more than \$15,000,000 has been appropriated for the evaluation and restoration of the former Camp Croft site.



Munitions and Explosives of Concern

Munitions and explosives of concern (MEC) consists of artillery, missiles, mortars, ammunition, and explosives designed to cause harm to individuals or damage to material.









Restoration Advisory Board

A Restoration Advisory Board (RAB) was established in 1995 to encourage partnerships between members of the community and the Government, and to serve as a forum for the discussion and exchange of information between the US Army Corps of Engineers, regulatory agencies, and the community regarding the munitions response activities at the former Camp Croft.

The RAB is comprised of individuals representing diverse community interests, and meets on a regular basis.





Historical Documentation

In 1984, the US Army Corps of Engineers conducted a site survey which concluded that there was a potential for surface and subsurface munitions at the former Camp Croft.

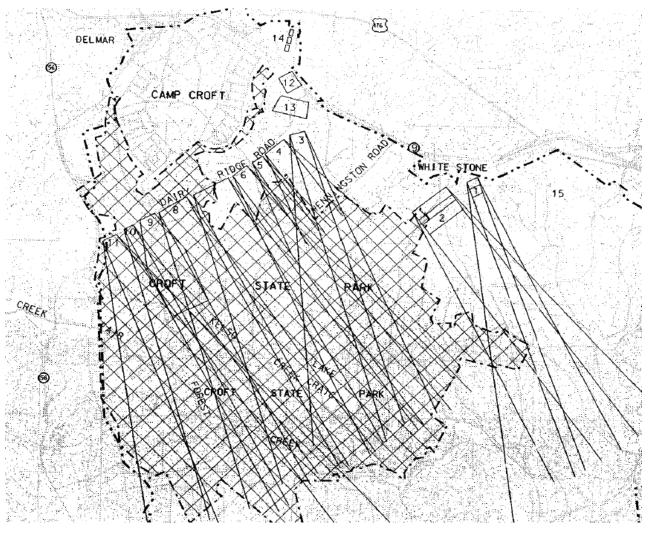
In 1991, the US Army Corps of Engineers, Charleston District, conducted a Preliminary Assessment Study which determined that the site was eligible for further investigation under the DERP-FUDS program.

The US Army Corps of Engineers gathered historical and anecdotal information on the past land use and munitions used at the former camp. This information is presented in the Archives Search Report (1993) and Supplemental Archives Search Report (1996).

This information was used to develop a priority ranking for subsequent evaluations.



Historical Documentation



LEGEND:

- 1. Rifle Auto. Rifle 200-300 yds
- 2. Rifle Auto. Rifle 200-300 yds
- 3. Landscape Target 600', 9 sets
- 4. AA Miniature Range 1080'
- 5. Pistol 600', 120 targets
- 6. 1000 inch machine gun range
- 7. Rifle Auto. Rifle field targets
- 8. Machine gun field targets
- 9. 60mm and 81mm mortar
- 10. 1000 inch AT
- Moving target AT
- 12. Grenade court
- 13. Bayonet court
- 14. Gas Chambers
- 15. Combat Ranges



Time Critical Removal Action

Two TCRAs were completed early in the project to surface clear all unexploded ordnance in areas readily accessible to the public. These areas included:

- 50 acres of Croft State Park, near the fitness trail
- 15 acres of privately-owned property



Time Critical Removal Action

Surface Clearance

Items found:

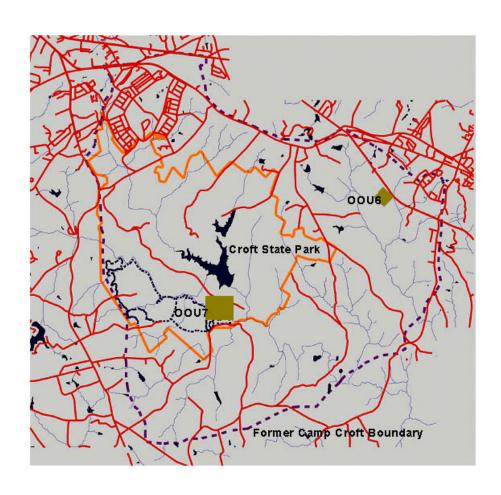
36 – 60mm mortar

1 – 155mm projectile w/ burster tube

3 – 2.36" rockets (expended)

1 – 105mm projectile

14,000 pounds scrap





Engineering Evaluation/Cost Analysis

The EE/CA process includes:

- Review of historical information
- Define data collection requirements
- Data collection
- Evaluation of risk based on:
 - Types of munitions (UXO, inert, scrap)
 - Depth of penetration
 - Sensitivity of the munitions
 - Likelihood of human exposure based on land use
- Documentation of Response Alternatives and Associated Costs
- Regulatory and Public Review/Comment Period
- Action Memorandum signed by the US Army Corps of Engineers



Two Engineering Evaluations/Cost Analyses have been completed for the former Camp Croft. Areas of investigation are divided into smaller, manageable areas referred to as ordnance operable units (OOUs).

The EE/CA identifies munitions concerns and presents risk reduction alternatives for each area of concern.

Phase I - January 1996

Action Memorandum dated February 1996

Phase II - January 1998

Action Memorandum dated March 1999



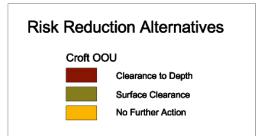
Action Memo Phase I EE/CA

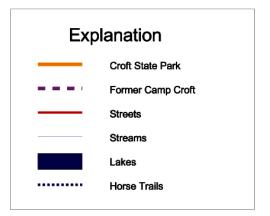
Identified 9 Ordnance Operable Units

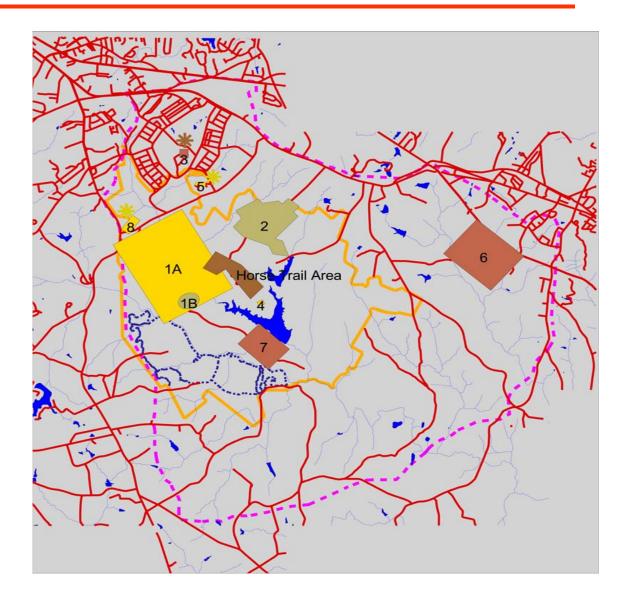
OOU1A	Croft State Natural Area / No Further Action
OOU1B	Croft State Natural Area / Surface Clearance/ Complete
OOU2	Croft State Natural Area / Surface Clearance/ Complete
OOU3	Wedgewood Subdivision / Clearance to Depth/Complete
OOU4	Croft State Natural Area / No Further Action
OOU5	Private properties / No Further Action
OOU6	Private property / Clearance to Depth/Complete
OOU7	Croft State Natural Area / Clearance to Depth/ Complete
8UOO	Croft State Natural Area / No Further Action



Phase I EE/CA OOUs









Action Memo Phase II EE/CA

Identified 19 additional sectors

OOU9A - E Croft State Natural Area / No Further Action

OOU9F - H Private property/No Further Action

OOU10 Croft State Natural Area / Surface Clearance

OOU11 Private property / Clearance to Depth

OOU12 Private property / Clearance to Depth

OOU3 (expanded) Private property / Clearance to Depth/Ongoing

Private properties in proximity to Henningston Road were not investigated due to Right-of-Entry refusal.



Phase II EE/CA OOUs

Risk Reduction Alternatives

Croft OOU

Clearance to Depth

Surface Clearance

No Further Action

Explanation

Croft State Park

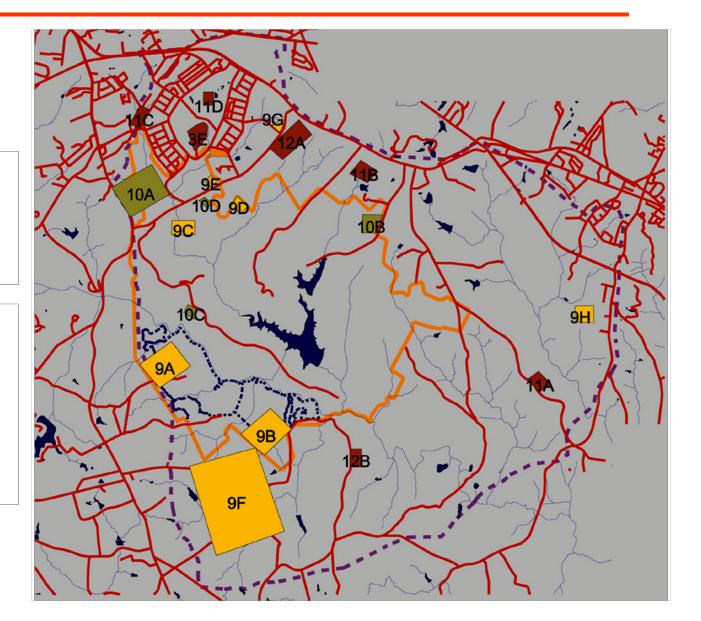
Former Camp Croft

Streets

Streams

Lakes

Horse Trails





Ordnance Operable Units (OOU3)

OOU 3 is located in the former cantonment area, north of the current Croft State Natural Area. Munitions debris associated with this site includes grenades. Ordnance removal, include subsurface clearance to a depth of four feet on private properties in the Wedgewood neighborhood, was conducted by various companies under contract to the US Army Corps of Engineers from 2000 through 2008. During the removal actions, MK II fragmentation grenades and M15 White Phosphorous grenades were recovered, as well as numerous practice hand grenades and grenade parts, suggesting that this area may have been a former hand grenade practice area.



Ordnance Operable Units (OOU11)

OOU 11 includes 87 acres outside of Croft State Natural Area. Munitions debris found in OOU 11 includes grenades, mortar rounds, and rocket parts. OOU 11 is subdivided into four sectors based on physical location. Sector 11A includes approximately 25 acres west of Croft State Natural Area on the west side of Whitestone Road. Sector 11B includes approximately 31 acres north of Croft State Natural Area southeast of the intersection between Route 295 and Henningston Road. OOU 11C includes approximately 17 acres and is located west of Cedar Springs Drive, due northwest of OOU 3. OOU 11C is partly residential and partly undeveloped, moderately wooded property, where M9 rifle grenade fragments have been found at depths of 13 inches below ground surface. OOU 11C is in a residential area adjacent to Kelsey Creek where other ordnance items, including MK II hand grenades, have been found. OOU 11D includes 14 acres and is located between Keltner Avenue and East Croft Circle, north of OOU 3. The area is privately owned and developed for use as a golf course. The area is a suspected former grenade range. Practice grenades at depths of three inches have been recovered in OOU 11D.



Ordnance Operable Units (OOU10)

OOU10 includes 210 acres of Croft State Natural Area where munitions debris was found during the Phase II EE/CA. Munitions debris found within the park was indicative of high order detonations include grenades, mortar rounds, and rocket parts. OOU10 is subdivided into four sectors based on their physical location. Sector 10A includes approximately 157 acres in the northwest corner of the Croft State Natural Area; Sector 10B includes approximately 37 acres in the northeast corner of Croft State Natural Area. Sector 10C includes approximately 11 acres along the entrance road to the park on the east side of Croft State Natural Area. Sector 10D includes 5 acres located near Dairy Ridge Road on the western side of the site. The property within OOU10 is administered by the South Carolina Parks Department.



Ordnance Operable Units (OOU12)

OOU12 includes 94 acres outside of Croft State Natural Area where live UXO was found during the Phase II EE/CA. OOU12 is subdivided into two sectors based on physical location. Sector 12A includes approximately 78 acres north of the Croft Natural Area on the southeast of the intersection between Dairy Ridge Road and State Route 295. Sector 12B includes approximately 16 acres located south of Croft State Natural Area and west of Foster Mill Road.



Snapshot of Field Results

Munitions response efforts are time and labor intensive.

- 2007 2008 DGM survey of 12 acres in OOU 3 and DGM survey of 11 acres in OOU 11C.
 - OOU 3 has ~4,500 potential targets requiring intrusive investigation
 - OOU 11C has ~1,400 potential targets requiring intrusive investigation
- 2005 2006 clearance of 12 acres in OOU3
 - 1,897 subsurface digs
 - 25 UXO
 - 75 lbs munitions debris (non-hazardous frag)
 - 574 lbs cultural debris (nails, metal stakes)
- 2001 clearance of 4 acres in OOU6
 - 24,019 subsurface digs
 - 7 UXO
 - 738 practice/inert munitions
 - 9,461 lbs scrap

Current technology is not able to determine whether subsurface metal is an unexploded munition or a horseshoe. Therefore, all items are considered potentially dangerous until inspected by qualified individuals.



Former Camp Croft Timeline

1984	1991	1993	1994	1995	1996	199	7	1998	1999	2000	
	9/93		8/94 ⇒1	95 3/95	1/96 6/9	96 → 3/97	12/97	1/98	1/98 -> 2/99	8/99 -> 6/00	>
Site Survey – Charleston District	Preliminary Assessment	Archive Search Report	TCRA Dr. Lowry Property	CIOII State	Final EE/CA Phase I	Phase I Removal Actions	Final Engineering Design OOU6	Final EE/CA Phase II	OOU6 Removal Action	OOU3 Wedgewood Geophysical and Intrusive Investigations	



Relations

Former Camp Croft Timeline

2001 2006 2007 2008 2009 2010 2011 2012 - 2020 2021 - 2030 2031-2035 2002 2003 2004 2005 12/99 - 6/00, 3/01 - 12/01 7/2002 -▶ 9/2004 10/04 -> 02/05 Continue Wedgewood Intrusive Investigations Complete OOU11 Complete OOU 12 Complete OOU10 OOU6 Removal and Develop SOW/award Wedgewood Technology contract for OOU's 3, Geophysical and Demonstration 11C, 11D. Intrusive Continue Community Investigations



SAFETY

UXO Safety Procedures

The Three R's

Recognize - Military munitions/ordnance becomes a danger only when it is disturbed. When you see and item, STOP.

Retreat - Do not move closer to get a better look! Never attempt to remove anything near it. Do not touch, move, or disturb. MOVE AWAY.

Report - Immediately report any suspected military munitions. Call 911.





Additional Information

Visit www.campcroft.com or the Information Repository at the Spartanburg County Public Library for project information and updates.

Whom can I contact for more information?

US Army Engineering and Support Center, Huntsville 256-895-1692

US Army Corps of Engineers, Charleston District 843-329-8123

Zapata Incorporated 888-242-8862 (toll free)





DEFENSE ENVIRONMENTAL RESTORATION PROGRAM FOR FORMERLY USED DEFENSE SITES (DERP-FUDS)





Goal. "To reduce, in a timely and cost effective manner, the risk to human health and the environment resulting from past Department of Defense activities at formerly used DoD properties."

Definition. A real property formerly owned/leased/ possessed by, or under the jurisdiction of the Secretary of Defense within the 50 states, territories, commonwealths, and possessions over which the U. S. has jurisdiction.





- DoD is correcting environmental damage through the Defense Environmental Restoration Program (DERP)
- FUDS are a part of this program:
 - Formerly managed by DoD (no longer in control of DoD)
 - Located in all states and territories of the U.S.
 - Range from privately owned farms to national parks
- Army is executive agent, Corps of Engineers manages FUDS program
- Over 9,000 potential properties; approximately 2,700 require investigation or response action





Characteristics of the FUDS Program

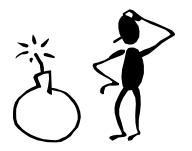
- The FUDS Program is not the EPA Superfund Program
- The FUDS Program cleans up only **DoD generated** pollution which occurred before transfer of property
 to private owners, or federal, state or local
 government owners
- The Department of Defense does not own the property that FUDS is cleaning up
- We do not certify that the property is clean
- We rarely have a project office on site
- We work hand in hand with current property owners and regulators on cleanup efforts







 Identification, Investigation, and Cleanup of Hazardous Toxic and Radioactive Waste (HTRW)



 Correction of other Environmental Damage - Ordnance and Explosives (OE)

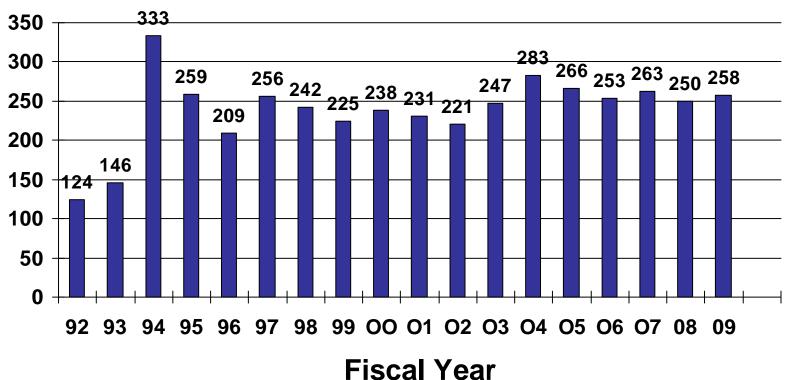


 Building Demolition and Debris Removal (BD/DR)





Fiscal Guidance Levels FUDS (in Millions of Dollars)





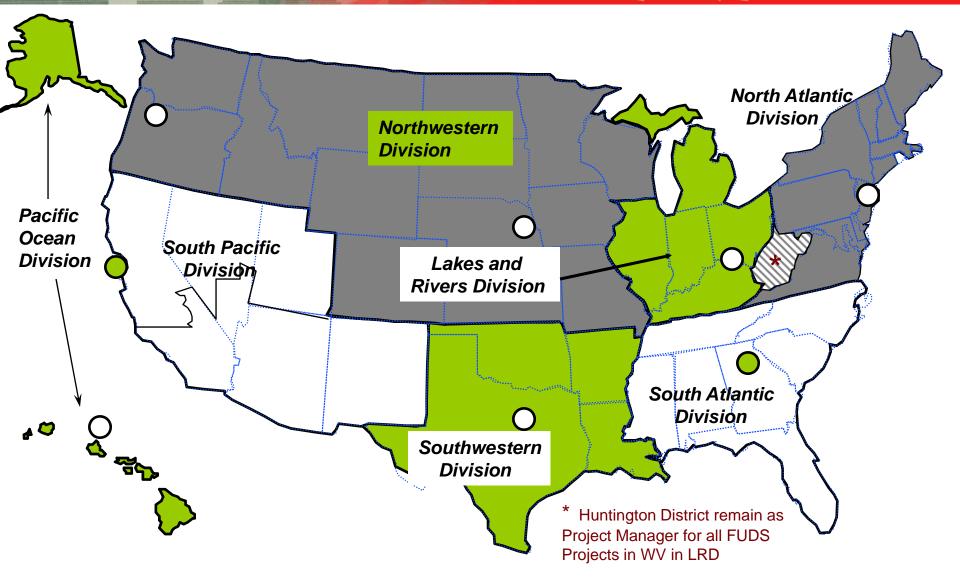


DERP-FUDS USACE Organization

- Program management is centralized at HQUSACE
- Program/project execution is decentralized:
 - -- 7 Geographic Divisions -- 18 Districts
- 10 designated Potentially Responsible Party (PRP) Districts
- 2 Centers of Expertise (CX):
 Hazardous Toxic and Radioactive Waste (HTRW)-CX in Omaha, NE & Ordnance and Explosives (OE)-CX in Huntsville, AL











Past Property Holders

- Army
- Navy
- Marine
- U.S. Army Corps of Engineers
- Air Force
- Defense Logistics Agency
- Other defense agency properties





The principal stakeholders are:

- Property Owners
- General Public and Communities
- Local, State and Federal Regulatory Agencies
- Tribal Governments
- Environmental and Public Interest Associations
- The United States Congress





• The current use includes:

- Privately Owned Farms
- Residential Areas
- Industrial Areas
- Schools
- Colleges
- National Parks
- Wildlife Areas



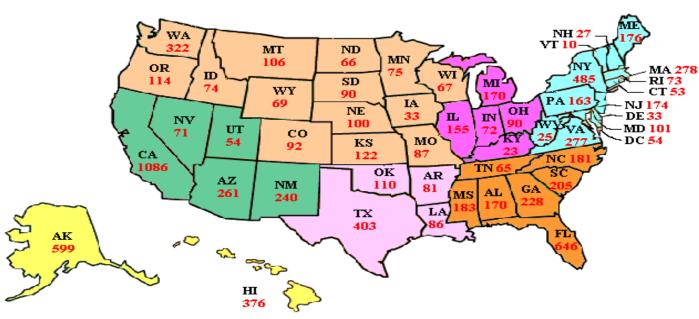


•	Total Properties in Inventory	9,182
•	Total Properties Eligible for FUDS Program	6,745
•	Properties Requiring Response Actions (29%)	2,827
•	Total Projects In Inventory	4,657
•	Projects Requiring Response Actions (48%)	2,159
•	Projects Completed	2,498

PROPERTY is the entire property formerly owned/used by DoD PROJECT is the individual area of potential hazard, differentiated by type of hazard (HTRW, OE, BD/DR) and is generally analogous to "operable unit"







Military Divisions

Great Lakes and Ohio River

---- North Atlantic

--- Northwestern

Pacific Ocean

South Atlantic

South Pacific

South Facine
Southwestern

Total Number of Properties: 9171

NOTE: Approximate numbers based on 11/07/00 database download. Subject to change.

Northern Mariana Islands (CN) CN 32 Palau (PT) PT 13

Puerto Rico (PR) PR 78

U.S. Virgin Islands (VI) VI 10

American Samoa (AS) AS 29

Guam (GM) GM 47





- Property is categorically excluded if:
 - owned by the United Services Organization (USO)
 - a recruiting center
 - a cemetery
- Property is ineligible under FUDS Program if:
 - outside the jurisdiction of the U.S.
 - excess to DoD but not yet transferred
 - Army, Navy, Air Force, DLA accepts full restoration responsibility or has initiated restoration activities
 - Defense Planning Corp property with Dept of Commerce CERCLA liability
 - Corps of Engineers Civil Works property, unless previously under military control
 - contaminated by act of war
 - no records of DoD activity are available
 - property is off-shore beyond 100 yards of mean high tides





- An eligible property would result in no DoD action (i.e., project is ineligible) if:
 - no hazard exists (such as sites where there were only barracks, office buildings)
 - hazard exists but is not DoD in origin
 - current owner refuses right of entry (reconsidered if ownership changes)
 - result of hazards from civil works (non-military) activities
 - investigation/cleanup initiated or completed by former or current owner
 - project involves asbestos-containing materials or lead-based paint, except when part of other proposed project
 - beneficial use of buildings or Underground Storage Tanks (USTs) by the past or current owners





PHASE 1--- INVENTORY

 Determine if the property was formerly used by DoD and, if contamination is present, that it resulted from DoD activity





PHASE 2 --- INVESTIGATION

 Conduct an investigation to determine the nature and extent of the contamination



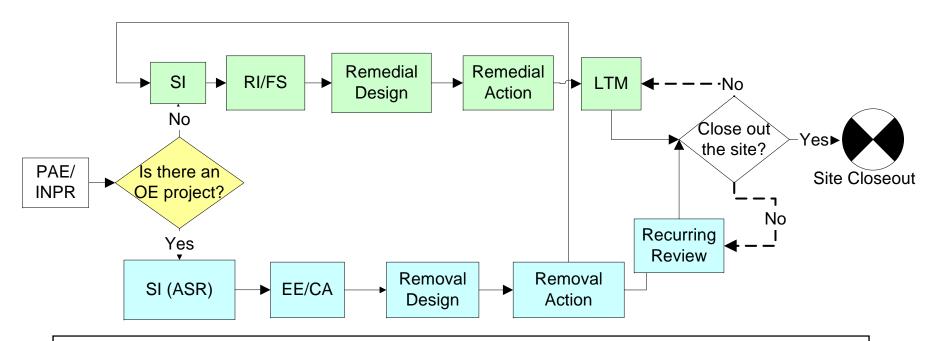


PHASE 3 --- CLEANUP

 Cleaning up the property to protect human health, safety and the environment







USACE FUDS response process is consistent with Comprehensive Environmental Response, Compensation and Liability Act of 1980/National Contingency Plan

SI = Site Inspection

RI = Remedial Investigation

FS = Feasibility Study

PAE = Preliminary Assessment of Eligibility

INPR = Inventory Project Report

ASR = Archive Search Report

EE/CA = Engineering Evaluation/Cost Analysis

LTM = Long Term Monitoring



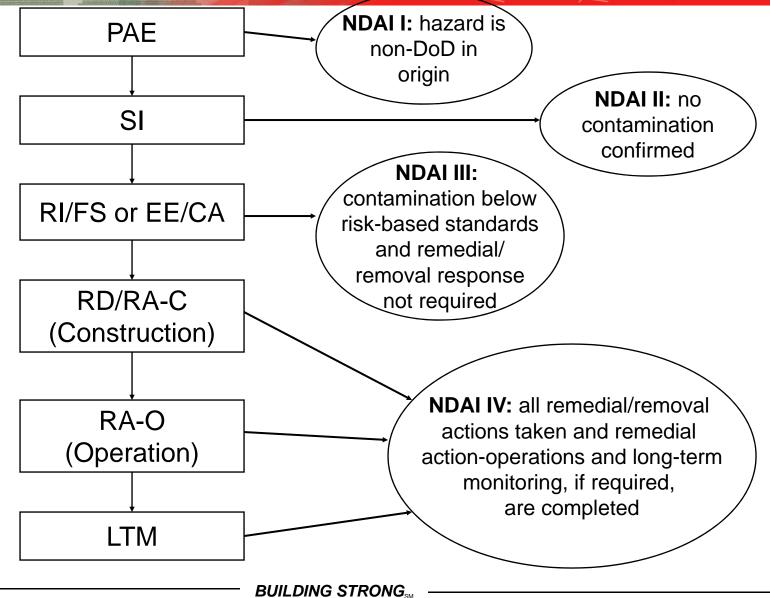


The End Goal

- NDAI indicates for FUDS programming purposes that no DoD liability remains at the site
- Term created to clarify difference between NOFA (no further action by any party) and no DoD action or further DoD action authorized
- Project Closeout follows NDAI and requires formal regulatory concurrence as appropriate











Management

- Increased Department of the Army oversight
- Defense Planning Guidance revisions
- New Measures of Merit
- Develop strategic business plan
- Increased stakeholder involvement
- FUDS Improvement Working Group

Execution

- Regional contracting
- Closeout properties
- Database improvements -- public access
- State Management Action Plans





Influences on Program Execution

- Inadequate program funding to satisfy stakeholders
- Congressionally mandated FUDS cleanup activities
- Regulators' emerging cleanup requirements for ordnance
- Increased influence by local development on level of cleanup at FUDS properties
- Long-term Potentially Responsible Party (PRP) payment impacts
- Increased interest to address natural resource damages and injuries





Influences on Program Execution

- Highly visible, controversial, and complex DoD program that affects many stakeholders
- Continue to have property/project growth due to new properties being discovered; results in continual increases in costs
- Regulatory/stakeholder and funding/schedule constraints control the pace of cleanup and closeout activities
- Increased emphasis on rendering properties "clean" of ordnance and explosives (big technological challenges)
- Program is not adequately funded to make significant progress against the current requirements and stakeholder demands





Stakeholder Access to FUDS Web Information

- Directly from HQ USACE
 - http://hq.environmental.usace.army.mil/programs/fuds/fuds.html
- HQ USACE links to all Districts and Divisions
 - http://www.usace.army.mil/organizations.htm
- FUDS Home page for the public at large to include project data and Geographic Information System (GIS) mapping capability
- Defense Environmental Restoration Program (DERP): Project Information Retrieval System (PIRS)
 - Real time document retrieval system for Corps of Engineers in support of its projects and programs
 - http://pirs.mvr.usace.army.mil/fuds/fuds.htm
- Defense Environmental Network & Information Exchange (DENIX)
 - Levels of access to DENIX given for various users: Public, state, DoD and international; requires log-in and password
 - http://www.denix.osd.mil/





The more you know about the FUDS program, the more productive our partnering will be...:



Visit our web site!

http://hq.environmental.usace.army.mil/programs/fuds/fuds.html









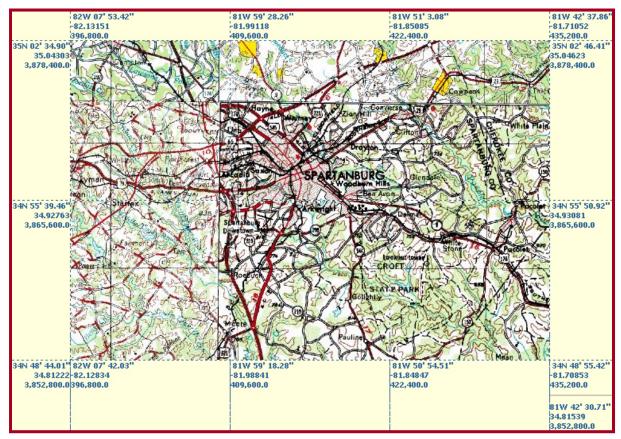
Potential Munitions Hazards

Spencer O'Neal

PM Huntsville Center

Camp Croft

 There are a number types of munitions used in Camp Croft training areas.



Training Weapons used on Camp Croft, SC

- M1 rifles
- Browning automatic rifles
- Antitank rockets
- Infantry mortars

M1 rifles

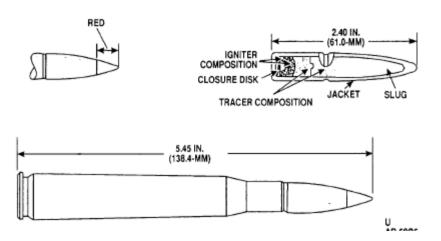
 M1 rifles were of common use during the 40's and 50's



Browning automatic rifles



CARTRIDGE, CAL, IBER .50, TRACER, M1



Antitank rockets



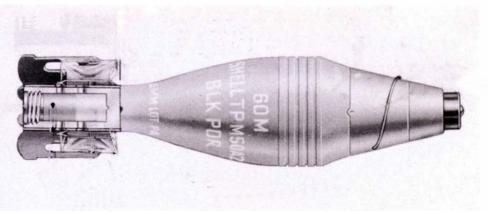
Infantry mortars

- Infrantry mortars come in various sizes and types
- 60 MM
- 75MM
- 81 MM



60 MM Mortars





75 MM Mortar





81 MM Mortar



81mm Mortar, HE, M43A1



81mm Mortar, Practice, M43A1

Camp Croft Army Training Facility

Spartanburg County, South Carolina

GIS-Based Historical Photographic Analysis











Photo Sources: www.campcroft.com, www.schistory.net/campcroft

Prepared for the US Army Corps of Engineers, Huntsville Engineering and Support Center, Huntsville, Alabama.



by
US Army Topographic Engineering Center
Operations Division, Hydrologic & Environmental Analysis Branch
7701 Telegraph Road Alexandria, Virginia 22315-3864



Questions?

- The presentation is not meant to Identify each possible type of munitions located in the Camp Croft Area but to help you Identify some of most likely types used during the time that the Camp was used.
- Please keep in mind that based on the munitions represented that munitions of any sort are dangerous and should not be remove relocated or handled by anyone except for professional EOD certified personal.