

**Tuesday, May 20, 1997 (afternoon)**

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLORADO

Criminal Action No. 96-CR-68

UNITED STATES OF AMERICA,

Plaintiff,

vs.

TIMOTHY JAMES McVEIGH,

Defendant.

REPORTER'S TRANSCRIPT

(Trial to Jury - Volume 105)

Proceedings before the HONORABLE RICHARD P. MATSCH,  
Judge, United States District Court for the District of  
Colorado, commencing at 1:45 p.m., on the 20th day of May,  
1997, in Courtroom C-204, United States Courthouse, Denver,  
Colorado.

Proceeding Recorded by Mechanical Stenography, Transcription  
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APPEARANCES

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Attorney at Law, Essmyer, Tritico & Clary, 4300 Scotland,  
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PROCEEDINGS

(Reconvened at 1:45 p.m.)

THE COURT: Please be seated.

(Jury in at 1:45 p.m.)

THE COURT: You'll resume the stand, please.

(Steven Burmeister was recalled to the stand.)

THE COURT: Miss Wilkinson, you may continue.

MS. WILKINSON: Your Honor, I believe you wanted to  
advise the jury that a defense exhibit had been entered into  
evidence.

THE COURT: Thank you. We did have a discussion about an exhibit that was mentioned in the cross-examination by Mr. Tritico, and it has now been received in evidence without objection, and I believe it was -- J400?

MS. WILKINSON: That's right.

MR. TRITICO: Yes, your Honor.

THE COURT: Thank you. You may continue.

MS. WILKINSON: Thank you, your Honor.

REDIRECT EXAMINATION CONTINUED

BY MS. WILKINSON:

Q. Agent Burmeister, before we broke, we were talking about the possibility of contamination. Would you agree that there's always some possibility of contamination when you're dealing with trace evidence?

A. I can't rule that out; that's correct.

Q. But is there a big difference between the possibility of contamination and actual contamination?

A. Yes.

Q. Let's talk about the clothing that was transported from Noble County Jail by the FBI to the FBI laboratory. If that clothing was in a paper bag and that paper bag was sealed in a box, the box was sealed and placed on an airplane, are you aware of any way that PETN -- that perhaps could have been in

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the airplane -- and I'm just asking you this as a hypothetical -- could have transferred through that box, transferred through the paper bag, and into the pockets of Mr. McVeigh's jeans?

A. I'm not aware of any way that it could have.

Q. And are you aware of any scientific studies that show that PETN can transfer in that fashion?

A. I'm not aware of any studies that have shown that.

Q. Speaking of PETN, are you aware of whether PETN is ever used in heart medication?

A. Yes.

Q. Tell us about that.

A. It at one time was used as a heart medication; but as far as I know, toxicologywise, it's not used for drug purposes anymore.

Q. Is that why you told Mr. Tritico that you believed there was no other way that Mr. McVeigh could have come into contact with PETN other than to be handling explosives?

A. Yes.

Q. You were also asked about the search of Mr. Nichols' residence, and I believe you told the jury that items from Mr. Nichols' residence had been bagged or boxed; is that correct?

A. Yes.

Q. And then placed in a vehicle and transported somewhere?

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A. Yes.

Q. Where were they transported to?

A. They were transported to Fort Riley, Kansas.

Q. And you didn't do any control swabs on that vehicle; correct?

A. That is correct.

Q. Some of those items were sent back to the laboratory for testing by you; is that right?

A. Yes.

Q. What were the results? Did you find any explosives residues on any of those items from Mr. Nichols' residence?

A. Some of the items were solid material that were identified as ammonium nitrate, but no other explosives residue were observed.

Q. So there you found full prills; those are the ones you're talking about?

A. Yes.

Q. But you found no trace evidence; is that correct?

A. That is correct.

Q. What would that tell about the likelihood of contamination in those transportation vehicles?

A. It didn't exist.

Q. Early on in the cross-examination, you were asked about several other experts, and Mr. Tritico asked you specifically about Dr. Lloyd from Great Britain; do you recall that?

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A. Yes.

Q. And he asked you whether you believe he was an expert in forensics; do you recall that?

A. Yes.

Q. What did you tell him?

A. I said, yes, he was.

Q. Do you believe he's an expert in explosive residue analysis -- forensics explosive residue analysis?

A. I think his experience is limited in the actual area of explosives residue analysis. I'm aware of his writings and his works that he's done; but as overall, I think it's limited to explosive residue analysis.

Q. Has he analyzed -- that you're aware of, has he analyzed your work in previous cases?

A. Yes, he has.

Q. Have you discussed that with him?

A. Very briefly.

Q. Did he analyze your work in the World Trade Center case?

A. Yes.

Q. And did he raise any issues with you about that, your work in that case?

MR. TRITICO: Objection, hearsay.

THE COURT: Sustained.

BY MS. WILKINSON:

Q. Let's turn to protocols, Mr. Burmeister. You told

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Mr. Tritico that certain protocols in the laboratory were not written down in April of 1995; is that right?

A. Yes.

Q. Does that mean you didn't have protocols in the laboratory?

A. No.

Q. Explain that, please.

A. During the course of our work, we have a lot of training and individuals who in the course of that training are advised of the procedures that we use; and during that training, the area of contamination is obviously a critical issue which is reinforced daily, and that's the area of learning and training, so it's not actually written down. People are -- develop a learned behavior, and that's through training.

Q. Do you observe your technicians and others when they're conducting tests for you on evidence?

A. Yes, absolutely.

Q. And do you, as part of your observation, determine whether they're following the proper protocols to avoid contamination?

A. Yes, they're -- the course of their work is under my supervision, so I am supervising their activities in the laboratory.

Q. Have you had conversations with persons in other units who handle evidence that you might test to advise them on procedures they can follow to avoid contamination?

A. Yes.

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Q. Specifically have you spoken to Brett Mills, who handled evidence in this case?

A. Yes, I have.

Q. And have you had discussions with him about the procedures he should follow to avoid contamination?

A. I've had conversations with him and others.

Q. Have you discussed with him whether he followed those procedures in this case?

A. Yes.

Q. Did you do that as part of your research effort to determine chain of custody of the evidence and to make a determination whether the explosive residue on Mr. McVeigh's clothes had been on those clothes prior to the seizure at Noble County or after the FBI seized the evidence?

MR. TRITICO: Objection, leading, compound question.

THE COURT: Sustained.

BY MS. WILKINSON:

Q. Mr. Burmeister, did you talk to Brett Mills as part of your chain-of-custody project?

A. Yes.

Q. Tell us what you did.

A. I approached Mr. Mills and asked him point-blank as to the procedures that he used when that evidence arrived and how it was processed and then packaged for delivery to the next unit for examination.

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Q. Did you review any documentation related to that?

Let me be more specific. Did you review any laboratory work sheets?

A. Yes.

Q. Did you review any chain-of-custody logs?

A. Yes.

Q. Now, if these procedures -- these protocols were written down, would that ensure you that the people are actually following them?

A. Just because it's written down doesn't always ensure that, no.

Q. And the protocol that you do have written down, the one that is Government's Exhibit 914, does that tell you every single step that you should take when testing evidence for explosive residue?

A. No, it's a -- it's at best a skeleton format for you to follow. It's the procedure to follow. Not to the letter.

Q. I'm sorry, go ahead. I interrupted you.

A. I said not to the letter. There's modifications that you may take.

Q. Mr. Tritico showed you Defense Exhibit J400, which is a series of documents. Do you recall that?

A. Yes.

Q. And this includes protocol Government's Exhibit 914; correct?

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A. Yes.

Q. Does it also include backup documentation with more details about how to operate each instrument?

A. Yes.

Q. What else is contained in Defense Exhibit J400?

A. Well, it has specific procedures on handling specific types of explosives. Essentially bulk explosives.

Q. And were these procedures in place back in April of 1995?

A. Yes.

Q. You mentioned bulk explosives. Can you tell us what procedures were in place for handling bulk explosives in April of 1995 in the FBI laboratory?

A. Anytime bulk explosives were processed or brought into the laboratory, an extremely small amount was brought in. A very minute amount was presented; and every time it was into a vial, a screw cap vial, in some sort of sealed container. That's the purpose of keeping the quantity down and in a sealed vessel.

Q. Why do you want to keep the quantity down?

A. Well, definitely for contamination and being able to control where that sample is going.

Q. Do you have any safety concerns about handling bulk explosives?

A. Yes. That's a -- this is a concern.

Q. And when these small samples are taken from the bulk

explosives, how are they stored?

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A. The samples themselves are placed into vials, and they're also placed into secure bunker-type facilities.

Q. During your testing of Mr. McVeigh's clothes and earplugs, you found residue or you identified PETN on certain of those items; correct?

A. Yes.

Q. Mr. Tritico asked you about a phenomenon where certain plastics can mimic the chemical characteristics of PETN; do you recall that?

A. Yes, I do.

Q. Are there different tests you can conduct to ensure yourself that you are not viewing those mimicking phenomenon?

A. Well, the chemical analysis that's conducted will give you a response. Obviously the next thing to do is to run a secondary instrumentation with an opposite-type technology. If I had a reproduction there, I'm confident that the actual explosive is present. The phenomena that we're talking about is a component within the plastic, and it has been shown to appear.

Q. Did that occur in this case?

A. No.

Q. How do you know that?

A. Because the cross testing always showed the explosive being present.

Q. What about EGDN, does it have that mimicking phenomenon in

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the instruments that you've used?

A. Not that I'm aware of, no.

Q. And you're not aware of any research that shows that, are you?

A. No.

Q. I'd just like to cover one last area. You went out to the crime scene on April 20, 1995; correct?

A. Yes.

Q. And at that time you didn't conduct an extensive search of the inside of what remained of the Murrah Building, did you?

A. No.

Q. Was your priority and the other law enforcement priority that day to recover prills inside the building or to recover survivors?

A. Primary efforts were to recover survivors.

MS. WILKINSON: No further questions, your Honor.

THE COURT: Do you have any recross?

MR. TRITICO: Yes, your Honor.

THE COURT: All right.

REXCROSS-EXAMINATION

BY MR. TRITICO:

Q. Agent Burmeister, did you meet with Miss Wilkinson over the

lunch break?

A. No.

Q. Did you meet with anybody from the prosecution team over

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the lunch break?

A. I was at a table adjacent to it, but didn't -- other than acknowledging, hello, but that's it, no.

Q. Did you meet with Miss Wilkinson last night?

A. No.

Q. You certainly met with her before you came in and testified yesterday and today; is that fair?

A. Yes.

Q. Now, you testified a moment ago that you know of no way that Mr. McVeigh could have gotten PETN other than from explosives; is that right?

A. Under the conditions we discussed, that's correct.

Q. Is PETN an organic compound that may be found in smokeless gunpowder?

A. No.

Q. Are you familiar with an article by R. S. Maloney and J. I.

Thornton, entitled "Color Test for D-I-P-H-E-N-Y-L-A-M-I-N" (sic)? How do you pronounce that?

A. Diphenylamine.

Q. Stabilizer and related compound in smokeless gunpowder?

A. I'm not aware of that particular article per se, no.

Q. Take a look, sir, if you would, at McVeigh Exhibit J44.

I'm sorry, J444. Should be right there in front of you. Do you see it?

A. I have J444.

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Q. There was an article attached to that that was not introduced into evidence earlier; is that correct? You see that article?

A. Yes.

Q. And look at the -- on the first page of the memorandum. Go back to the first page of the memo, please.

A. Sorry.

Q. The last paragraph -- on the first page, the last paragraph, you see that?

A. Yes.

Q. I have attached two papers for your information. The paper by Maloney and Thornton describes the ubiquitous nature of nitrates; is that correct?

A. Yes.

Q. That's the paper that is attached to the back of that memo; is that right?

A. Like I said -- well, it's attached here, yes.

Q. Is that the memo he's referencing?

A. I would presume referring to the Maloney that's the paper. But again, I don't remember receiving this particular document.

But again, I don't remember receiving this particular document.

Q. Have you ever read that document before?

A. I don't recall seeing this particular document.

Q. Do you know who Mr. Maloney and Mr. Thornton are?

A. No, I don't.

Q. Do they not work for the Federal Bureau of Investigations

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or had at one point?

A. The name Maloney and Thornton do not ring a bell with me.

Q. Do you know, sir, if -- of your own personal knowledge if PETN is contained in smokeless gunpowder?

A. I'm not aware of PETN being present in smokeless powder.

Q. Do you read the Journal of Forensic Science?

A. I have read it, yes.

Q. Do you consider that to be authoritative in the field of forensic science?

A. It's one of many journals that is available for people to print research articles, yes.

Q. Do you consider it authoritative in the field of forensic science?

A. There have been a variety of papers in that, and it's been cited as a literature source for articles that people have printed. I've referred to it in the past where certain articles have been printed, yes.

Q. Do you know what type of bullets Mr. McVeigh had when he was arrested?

A. No, I do not.

Q. Did you ever check?

A. No.

Q. You never tested the bullets, then, I take it?

A. That's correct. Yes.

Q. Are you aware that the bullets went to the firearms and

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tool mark section of the lab for analysis?

A. No, I'm not.

Q. Have you reviewed the lab reports on this case prior to the time that you testified?

A. The reports that have pertained to me, yes.

Q. Well, now, it was my understanding that the lab, in the end, produces just one report, signed off by the principal examiner; is that correct? In 1995, April of 1995?

A. Yes, that's a procedure that was used, yes.

Q. Were you the principal examiner on this case?

A. No, I was not.

Q. What was your title, auxiliary examiner?

A. Yes.

Q. Who was the principal examiner?

A. Special Agent Dave Williams.

Q. He's the person who would be responsible for producing the final report; is that correct?

A. Yes.



Q. And you have reviewed his work prior to coming in here to testify today; is that right?

A. I haven't reviewed his work, no. It wasn't my responsibility to review his work.

Q. Well, did he produce a report?

A. There was a report that was prepared, but I haven't reviewed it for accuracy for his part.

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Q. Oh, I see. You did not review the work product of the Federal Bureau of Investigation's lab prior to the time that you came in here and testified; is that correct?

A. You're asking about my work. I reviewed what I did. That's the part that I'm concerned about. I can't authoritatively review anybody else's work and render any opinion as to whether it's correct or not. That's their opinion.

Q. So your testimony is you did not read the full report that Dave Williams signed before you came to testify today?

A. I have reviewed it but not reviewed it for authenticity. That's not my area of expertise.

Q. Now, Ms. Wilkinson showed you what's in evidence as Government Exhibit 830.

THE COURT: I didn't hear you.

MR. TRITICO: 830, your Honor.

THE COURT: Thank you.

MR. TRITICO: May I publish this, your Honor?

THE COURT: Yes.

BY MR. TRITICO:

Q. Can you see that on the screen?

A. Yes, I can. It's a little out of focus, but -- perfect.

Q. How's that?

A. Good.

Q. Now, this is the photograph that was introduced and you

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went over where the crystals that you found on Q507 were located; is that right?

A. Yes.

Q. And to show that you knew where it was that you found them; right?

A. That's correct. Yes.

Q. Would you agree with me that no expert employed by -- for Mr. McVeigh can examine that photograph and obtain forensic results regarding the crystals that were on it?

A. I think a colleague forensic scientist can review this photograph and see the area in which these crystals are located and then subsequent photos which show magnification. This is a guide for anybody else who's going to look at that evidence.

Q. Sure. But even with the best forensic tools and the best microscope and the best forceps and the best scalpels, I can't

pull one crystal off that photograph, can I?

A. Not off the photograph, you're right.

Q. I can't do any testing on the crystals that you claim to have found on Q507; right?

A. The results can be reviewed, but -- at this point in time, there's no crystals for you to actually work with, that's correct.

Q. Now, you testified that you took Q507 to ICI Explosives and there were no crystals on it when you went there; right?

A. When I examined the evidence at ICI, the object forming

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under the microscope, I couldn't find any of the crystals in the area that I was looking at.

Q. Did you take to ICI a crystal that you had already pulled off of Q507?

A. No.

Q. ICI Explosives did no analysis of the crystals that were pulled off of Q507; is that correct?

A. No analysis on the ammonium nitrate crystals that were removed and tested when I tested it on Q507.

Q. The only ammonium nitrate that ICI Explosives analyzed for you was ammonium nitrate that you seized from the home of Terry Nichols; is that correct?

A. Yes.

Q. And those were prills that you found in the bottle that you testified about -- or the jar that you testified about yesterday; is that correct?

A. Well, it was a combination of prills as well as crushed crystalline ammonium nitrate.

Q. You crushed those at the lab, though, didn't you, prior to going to ICI?

A. No, this was crushed -- crushed ammonium nitrate that was seized during the search.

Q. Taken out of the bottom of one of the bottles?

A. It either was removed out of the bottle or the actual evidence itself.

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Q. Now, you testified on redirect examination before we broke for lunch that you've turned over all of the notes and the reports of the FBI lab to the defense; is that right?

A. All of my laboratory report notes, yes.

Q. That was done by the order of the Court, was it not?

MS. WILKINSON: Objection, your Honor.

THE COURT: Sustained.

BY MR. TRITICO:

Q. Now, I thought that you testified that there was some ancillary fires at the scene -- you had seen the evidence of the ancillary fires at the scene; is that right?

A. This I know from seeing video and photographs of the site of the actual day of the incident.

Q. And being there; right?

Q. AND BEING THERE, RIGHT?

A. Well, there was -- yes, there was demonstrated effects of fires on vehicles, but I had not seen the fires when I was there.

Q. Absolutely, I didn't mean to intend to implicate that you had. But you'd seen the evidence that the fires had been there; right?

A. Yes.

Q. And obviously they were out when you got there?

A. Yes.

Q. And you know that the Oklahoma City Fire Department and possibly others went out and extinguished those fires, do you

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not?

A. That's correct.

Q. Now, it's true, is it not, that firefighters often use ammonium-based products in their firefighting chemicals? Is that right?

A. There are some dry chemical firefighting extinguishers that contain ammonium phosphate.

Q. In looking over your notes, I find no reference to you calling the Oklahoma City Fire Department or any other fire department to determine what, if any, ammonium-based products they used in extinguishing any fires in Oklahoma City on April the 19th.

A. I haven't called them and I'm not aware of any extinguisher that contains ammonium nitrate.

Q. Did you check to see what ammonium-based products the Oklahoma City Fire Department may have used in extinguishing the fires?

A. No.

Q. Did you check with any other fire department who may have been on the scene extinguishing fires?

A. No.

Q. Now, you testified that . . . the cars that were burning that we were talking about was in the parking lot where Q507 -- where Agent Kelly claims to have found Q507; is that right? Or Mr. Kelly, I'm sorry.

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A. My recollection seems to be that the vehicles were more to the right some distance away. I don't think a vehicle was directly in that spot.

Q. Was it in the same parking lot?

A. It was some distance away; but in the same parking lot, yes.

Q. Now, you testified on redirect examination that you don't expect to find -- or words to this effect. And please, apologize -- let me apologize if I get it wrong. But you don't expect to find PETN at a blast site; right?

A. It would be unusual.

Q. Are you familiar with the crash of the TWA 800 flight that

blew up and crashed into the Atlantic Ocean?

MS. WILKINSON: Objection, your Honor. First of all, I don't think it's been established that it was a blast.

THE COURT: Well, I don't know that it's been determined. Maybe there's something I don't know. If that's an objection to the question, it's overruled.

BY MR. TRITICO:

Q. Are you familiar with that?

A. I'm sorry?

Q. The TWA 800 flight that blew up and crashed into the Atlantic Ocean.

A. Yes.

Q. PETN was found in the remains of the plane that was pulled

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from the ocean floor, was it not?

A. Yes, it was.

Q. That PETN stuck onto that plane under the saltwater for how long?

A. The piece that you're referring to . . . I apologize on my time as being not accurate, but I want to think that that piece might have been in the water for, say, three days before being recovered.

Q. Under the saltwater.

A. Yes. Might have been less than that. I'm not -- I'd have to check the actual log as to when that particular piece was recovered.

Q. Around three days; is that a fair --

A. Let's just safely say two or three days.

Q. Okay. That's fine. Now, you testified that Agent Whitehurst had done some contamination studies at the lab and that your area of the lab was not contaminated; is that right?

A. Yes.

Q. Was that study performed in May of 1995?

A. That could be the correct time frame, yes.

Q. Now, in that study, Agent Whitehurst found that glassware in the laboratory in the past has been determined to be contaminated with explosives residue even after a thorough cleaning with soap, water, and acetone, did he not?

A. That finding was well aware to me during my training. I

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knew exactly about that, and that's why steps were taken to prevent that.

Q. In the study on May the 8th, 1995, that's what he found, isn't it?

A. I'm not aware that that's what the finding was in that particular study.

Q. You in the lab -- I say "you." I'm referring to the lab in general at this moment -- in the explosives residue section, had no written protocol or procedure for regular monitoring of contamination in the lab, did you?

A. There's nothing written down of that; that's correct.  
Q. You made no regular testing to ensure that there was no contamination in the lab, did you?  
A. Well, samples are run on a daily basis casewise, and so that's a regular control monitor.  
Q. That's on a case-by-case basis; right?  
A. Yes.  
Q. You had no general scheme to test the lab for general contamination in April and May of 1995, did you?  
A. There was no written procedure of that; right.  
Q. The only time it was ever done was when Agent Whitehurst did it from time to time; right?  
A. Well, it was only that one time when it was done.  
Q. Oh, that's the only time that you're aware of, period, that you've been at the lab?

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A. No. It's been done before, but you're talking about that study that he put together. That's the only one that I'm aware that he put together and had done.  
Q. Now, Miss Wilkinson asked you a moment ago if you had a discussion with Brett Mills about the procedures he used; right?  
A. Yes.  
Q. Do you have any notes, record, memo, memoranda of the discussion that you had with Mr. Mills regarding his procedures for checking in the evidence, the clothes that came in that day?  
A. All contact was verbally, and Mr. Mills and I would discuss this type of activity as far as what to do for controlling of contamination. We -- it was -- we would routinely discuss that area.  
Q. So you did not make a contemporaneous memorandum detailing the conversation that you had with Mr. Mills?  
A. That's right. It was verbal.  
Q. I thought I understood you correctly, you feel that you do not need a written protocol because that is discussed verbally with the technicians and the examiners while they're in their training?  
A. During the training process, the procedures that we would use are transferred over to the particular technician. They are aware of what needs to be done. They also follow the

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direction of the examiner.  
Q. And so the answer is that you do not feel you need the protocol to be in writing; right?  
A. I don't have it in writing, yes.  
Q. Is the answer to my question that you did not feel that it needs to be in writing?  
A. I am currently putting it into writing; so now, today, it needs to be put into writing, and I'm currently putting it into writing.

writing.

Q. Why are you putting it in writing today?

MS. WILKINSON: Objection.

THE COURT: Sustained.

BY MR. TRITICO:

Q. Now, since you are currently putting it in writing -- one did not exist when you did the residue analysis on this case; is that right?

A. Nothing was written, that's right.

Q. Now, if you don't have written protocols detailing the way you do things in your lab from evidence collection to contamination to the procedures on each individual procedure -- machine in the lab, another scientist is without ability to review your work and know exactly what you did and how you did it; isn't that fair?

A. The other scientist is going to know the procedures. That particular person will not know the details of what you're

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referring to.

Q. And every lab can have different procedures in the way in which they're going to handle the testing of the evidence;

isn't that fair?

A. Yes.

Q. And another scientist, without knowing what your procedures are, is without ability to just look at the charts and know what you did; right?

A. They won't have any written document to read; that's correct.

Q. Because you make no contemporaneous notes about how you did each procedure, do you?

A. The notes that I write reflect how the evidence was processed and how it was received.

Q. But not contemporaneous notes about the procedure that you used in the testing, do they?

A. I think you can read the notes and follow the procedure that was used.

Q. You can't read the notes and determine what your performance criteria were with respect to each individual test, can you?

A. Some detailed material which is not contained in the writing; that's correct.

Q. You had no written protocol in April and May of 1995 detailing what the performance criteria were for each

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individual machine in the FBI lab, did you?

A. Can you rephrase that question? I'm not sure what you're -- state that one more time.

Q. I'll try.

A. Sorry.

Q. You had no written protocol or procedure detailing the

performance criteria for each machine in the lab, did you?

A. It was a -- there were procedures that would state that a standard had to be run for the instrument.

Q. Okay. And is that the procedure that you had in place -- the written procedure you had in place?

A. That's the -- that's the information to tell whether the instruments are operating properly.

Q. How about signal-to-noise ratio, did you have a procedure or protocol saying what the allowable signal-to-noise ratio was on any given machine?

A. It wasn't particularly written down for that kind of analysis, no.

Q. Now, another expert reviewing your work would not know what your signal-to-noise -- appropriate signal-to-noise ratio was on any given machine, would he?

A. The individual would know if we were seeing standards being run and could determine that information.

Q. Would he be able to know what your allowable signal-to-noise ratio was if it was not written down?

Steven Burmeister - Recross

A. Not an exact quantitative number; but on a qualitative nature, that individual would be able to determine that.

Q. When you run a standard through the machine, if I understand you correctly -- this is a pure sample of explosive. Let's take a GC/Chem. You run through a sample that should be a pure sample of explosives; is that right?

A. Yes.

Q. And on the GC/Chem, you run a standard through that covers EGDN, NG, nitroglycerine, DNT -- right?

A. Yes.

Q. What is DNT?

A. Dinitrotoluene.

Q. TNT; right?

A. Yes.

Q. PETN? Yes?

A. Yes. Sorry about that.

Q. And RDX; right?

A. Yes.

Q. What you get out after you run the standard through is you should get a chart that shows a hit for each one of the those on the chart; right?

A. You will see a chromatographic peak, which is an instrumental response to that particular material.

Q. And what you're looking for on the chromatographic peak is a nice, clean peak that lands right on the line, like No. 1 on

Steven Burmeister - Recross

the chart is EGDN, and so you should have a peak right on the No. 1 line on the chromatographic chart; right?

A. Well, I wouldn't just cut yourself to saying I have to have it right on that line, because there are some factors that can

come into play that can move it.

Q. Is that what you're looking for, though, on a good standard?

A. Yes. You would like to make sure that it's reproducible and in effect fall on the line that you're talking about.

Q. And then on the No. 2, you want a nice, clean peak at the No. 2 line; right?

A. Yes.

Q. And the same for the DNT and the TNT and the PETN; right?

A. Yes.

Q. And you want to have the peak above the level of the background noise on the bottom of the chart; right?

A. Yes.

Q. Now, what you do when you get a good standard run through like that, then you run your questioned sample through, or you may do it the other way around, and you compare the two chromatographic charts against each other; right?

A. That's correct, yes.

Q. And you want the peaks to look the same; right? Now, they may not be as high, but you want them relatively the same height and you want them to look the same; right?

Steven Burmeister - Recross

A. Well, the peak shape won't always look the same; but you want it to line up at that particular point.

Q. Right. And you want to have single peaks; right?

A. You would like to have single peaks. There are some that will thermally degrade and cause multiple peaks.

Q. When that happens on a standard, you should run a better standard through before you complete your test; right?

A. Not necessarily.

Q. If the peaks don't look alike -- let's say on the EGDN peak, your standard has two peaks on EGDN and your sample only has one. You don't really know what you're looking at, do you?

A. There are times where you can inject a large quantity of a standard, and it can degrade or break down into two peaks. That, I have seen.

Q. But if they don't look the same, you have nothing to compare them against, do you?

A. Again, you need to have backup information, another technique that would be run to cross-check that first result; but you're still getting an initial peak for that material.

Q. Initial peak on the sample -- the questioned sample run?

A. No, if you're referring to the standard.

Q. No, my question to you -- and maybe I'm not being clear, and I apologize. When you run the standard through and then

you run the questioned sample through, you compare the two against each other; right?

Steven Burmeister - Recross

A. Right.



Q. You're comparing the time it took that sample -- that compound to pass through the column and make the peak; right?

A. Yes.

Q. You're comparing the standard in the questioned sample, the relative peak height and the number of peaks, against each other; right?

A. There's a retention time that's being compared, yes.

Q. And you want the peaks to look the same, don't you? That's how you know what you're looking at.

A. Well, if you're trying to reproduce the peak shape, there is quantity in a particular sample can change the peak shape on any chromatography system. You can alter that concentration. That was one of the ways that is principally used to measure concentration or quantity, is the actual area underneath the peak. Used to cut the entire thing out of the paper and weigh it, but it's the peak shape that you're looking at. That's what you're referring to as "peak shape."

Well, the peak shape can change. It can be a thin spike, or it can be a broad spike; but it's the retention time at which that peak comes out. The retention time is measured at the peak of that.

Q. Okay. So referring to the GC/Chem like we've been talking about, in your opinion, what you're doing is comparing the retention time, not the relative peak height or the peak shape;

Steven Burmeister - Recross

right?

A. It's a combination of what you're talking about -- is a combination of the peak height, the retention time. All of those factors are considered.

Q. In April and May of 1995, the FBI lab did not make its own standards, did they?

A. We didn't -- in that time frame, no, we purchased all of our standards.

Q. From the manufacturer?

A. No. We . . . let me just back-step. The standard that was used was purchased from the manufacturer for the particular GC/Chemiluminescence technology, yes.

Q. You didn't know what the quantity of the explosives was in the standard that you purchased from the EGIS manufacturer, did you?

A. Yes. It came with package concentration numbers, yes.

Q. You ran no quantitative test on the standard to determine if what they told you was correct, did you?

A. Typically, we do not -- we do not run any quantitative results; and therefore, it was not quantitative.

Q. When you discussed the "also submitted" items and the other items with the three people from the Noble County Jail, did they inform you that Mr. McVeigh had bullets in either -- in his front pockets?

A. I don't have a recollection of that information at this

Steven Burmeister - Recross

time.

Q. Did you ever check to find out?

A. No.

MR. TRITICO: May I have a moment, Judge?

THE COURT: Yes.

BY MR. TRITICO:

Q. Is it true that the FBI Laboratory has compiled an array of 23 organic compounds that may occur in smokeless powders?

MS. WILKINSON: Object as to timing, your Honor.

THE COURT: Yes. Can you establish the time?

BY MR. TRITICO:

Q. In 19 --

THE COURT: Are you asking as of April or May of 1995?

MR. TRITICO: I think I better ask it that way, Judge.

THE COURT: Sounds right to me.

BY MR. TRITICO:

Q. As of April or May of 1995, was it true that the FBI Laboratory had compiled an array of 23 organic compounds that may occur in smokeless gunpowder?

A. I'm not aware of the list.

Q. Do you know that there is a list?

A. I don't know what list you're referring to.

Q. Okay. And if there is such a list, I take it by your testimony, you don't know when it was created?

A. Yes.

Steven Burmeister - Recross

MR. TRITICO: Thank you, sir.

Pass the witness.

THE COURT: Anything else?

MS. WILKINSON: Yes, your Honor.

THE COURT: Okay.

REDIRECT EXAMINATION

BY MS. WILKINSON:

Q. Agent Burmeister, you and Mr. Tritico just spent a long time talking about fancy charts you called chromatography?

A. Yes.

Q. Did you print all those out when you were doing the tests

in this case?

A. Yes.

Q. Did you print out the ones you did for the blanks?

A. Yes.

Q. Did you print out the ones you did for the standards?

A. Yes.

Q. Did you put those all into your notes?

A. Yes.

Q. And were those all provided to the defense?

A. Yes.

Q. Do you remember approximately how many pages of notes that you've compiled in this case?

A. I think the number is over 5,000.

Q. Now, you told Mr. Tritico that you were aware of no way for

Steven Burmeister - Redirect

Mr. McVeigh to have any contact with PETN other than from explosives; correct?

A. Yes.

Q. But you are aware that PETN at some point was used in heart medication; correct?

A. Yes.

Q. I'm going to show you what's previously been entered into evidence as 417, Government's Exhibit 417.

MS. WILKINSON: If I could have the ELMO, please.

BY MS. WILKINSON:

Q. You see that there? It says, "receiving screen form for Timothy McVeigh." You see that at the top?

A. It's a little out of focus, but I can do it.

Q. Hold on. I don't know if I can do this part here.

Oh. I'm sorry. Take it out of the plastic. They're telling me it will be a little better. Is that better?

A. Yes.

Q. You see that form?

A. Yes.

Q. Go down here to No. 12. You see that?

A. Yes.

Q. Can you read that to the jury, please.

A. "No. 12. Are you presently taking medication for diabetes, heart disease, seizures, arthritis, asthma, ulcers, high blood pressure, or psychiatric disorder? Circle condition."

Steven Burmeister - Redirect

Q. And what was the answer that was marked by --

A. No.

Q. Mr. Tritico also asked you about TWA 800. You're pretty familiar with that case, aren't you?

A. Very much so.

Q. Did you conduct the residue analysis where you found the PETN on that piece of the airplane?

A. Yes, I did.

Q. Did you do what you did in this case and conduct a contamination study to determine whether that PETN had been placed prior to the explosion?

A. Quite extensively.

Q. What did you determine?

A. That area of the aircraft was used by the FAA for general testing and training of bomb detection dogs; and one of the things they placed in that area was detonation cord, det cord.

Q. So did you make a determination that PETN had been placed there prior to the destruction that occurred to TWA 800?

A. That's my conclusion.

MS. WILKINSON: No further questions, your Honor.

MR. TRITICO: I have nothing further, your Honor.

THE COURT: All right.

MR. TRITICO: Oh, your Honor, I would like to have the witness subject to recall.

MS. WILKINSON: He'll be available, your Honor.

THE COURT: All right. You may step down for now. We may see you again.

Next please.

MR. HARTZLER: We'll call Linda Jones. Ms. Wilkinson will question her.

THE COURT: All right.

THE COURTROOM DEPUTY: Would you raise your right hand.

(Linda Jones affirmed.)

THE COURTROOM DEPUTY: Would you have a seat, please.

Would you state your full name for the record and spell your last name.

THE WITNESS: Linda Edwina Jones, J-O-N-E-S.

THE COURTROOM DEPUTY: Thank you.

MS. WILKINSON: Thank you, your Honor.

DIRECT EXAMINATION

BY MS. WILKINSON:

Q. Miss Jones, tell us where you live.

A. I live in Kent, in England.

Q. Were you born in England?

A. Yes, I was.

Q. How old are you?

A. I'm 45.

Q. Where are you currently employed?

A. I'm employed at the Forensic Explosives Laboratory, which

Linda Jones - Direct

is part of the Defense Evaluation and Research Agency, which is part of the Ministry of Defense in England.

Q. And where in England is your office located?

A. In Kent.

Q. What -- do you commonly refer to it as DERA? Is that the --

A. Yes, the Forensic Explosives Lab is part of DERA.

Q. What does the Forensic Explosives Lab of DERA do?

A. It carries out forensic investigations on behalf mainly of the British police forces and other agencies in incidents suspected of involving the criminal misuse of explosives.

Q. And do you and the others that are employed at the laboratory focus on explosive residue analysis?

A. That is part of our work, yes.

Q. What other work do you focus on there?

A. We examine devices suspected of being explosive devices that have been made safe; finds of materials and equipment, for example, suspected bomb factories; post-explosion scenes, and debris, and the residue analysis.

Q. What is your current title at the laboratory?

A. I am the Principal Forensic Investigator.

Q. Are you the only one with that fancy title?

A. Yes, I am.

A. Yes, I am.

Q. And what does it mean? What do you do?

A. It means I conduct some of the most serious investigations

Linda Jones - Direct

that occur on the mainland of Great Britain.

Q. And what type of work do you do specifically in conducting those examinations and investigations?

A. I examine devices that -- explosive devices that have been made safe -- well, in the four areas we mentioned. I conduct examinations of items recovered from finds of materials, post-explosion scenes, I visit scenes sometimes, and in the residue work.

Q. Other than visiting scenes and conducting examinations back at the laboratory, do you also write reports as to your conclusions?

A. That's right. I write reports for presentation in court which we call "legal statements."

Q. And are those statements sometimes read in court?

A. Yes, they are.

Q. If they're not read in court, are you sometimes asked to present evidence and testify as you're doing today?

A. Yes, I am.

Q. How many times do you think that you've testified in court about explosive residue analysis or explosives? Let's limit it --

A. Yes. My work generally, I'm guessing, I would think about perhaps 30.

Q. Now, as Principal Forensic Investigator at the laboratory, do you also supervise employees and train them?

Linda Jones - Direct

A. Yes, I do.

Q. Tell us about that.

A. I have people assigned to me on a case-by-case basis, some of whom are trained and are -- what we call junior casework reporting officers. They may be called to court in fairly minor cases, but I will take the lead on the serious cases. I supervise and direct their work. I also train them in the matters and procedures that they may use to carry out the work on my behalf.

Q. Is there an arm of the laboratory that also conducts research?

A. Yes, the Forensic Explosives Laboratory really has two prongs: the investigation side, of which I'm part, and also we have a research group.

Q. What type of research do they conduct?

A. Predominantly work in support of the investigation section, in terms of developing and improving the methods and techniques that we use.

Q. So I take it you use some of their research in your investigations.

A. Most definitely, yes.

Q. Let's turn to your educational background. And I recognize that your schooling system is a bit different from ours.

A. Yes.

Q. But if you could tell us what you did after graduating from

Linda Jones - Direct

high school.

A. After I left, I think, what you call high school at around age 16, I stopped my education for a few years then during my first period of employment.

Q. How were you employed?

A. I was employed as a trainee dispenser in a pharmacy.

Q. How long did you do that for?

A. About five years.

Q. What was your next job?

A. The next job, I joined the Ministry of Defense at a Ministry of Defense explosive manufacturing plant. This is manufactured, rather than improvised explosives. And I was employed as, I think, what you call a lab technician in the quality assurance, testing, and analysis of manufactured explosives, explosives intermediates, and explosives ingredients.

Q. Did you actually conduct tests on explosives and explosives compounds --

A. Yes, I did.

Q. -- when you were employed there?

A. Yes, I did.

Q. And did you focus on any certain area while you were there?

A. Chemical analysis with some, a minor part of, performance testing; but predominantly explosives, basic chemistry explosives analysis.

Linda Jones - Direct

Q. What type of explosives did you test when you were at the -- this explosives factory?

A. It was mainly RDX, TNT, HMX, HNS, which hasn't been mentioned here.

Q. Is that another high explosive?

A. It is, yes. Yes. It's not used on its own; it's in combination with other materials. But also propellants and various intermediates and ingredients.

Q. Now, during your time at the explosives or bomb factory, did you become familiar with the chemical properties of high explosives?

A. Yes, I did.

Q. How long did you work at the bomb or explosives factory?

A. Until -- let me think. I joined in 1973, and I moved in 1978; so, yeah, five years.

Q. Did you transfer to another area of the Ministry of Defense after that?

A. Yes, I did. I moved to headquarters; and I was engaged -- my next assignment was in investigating the interreaction of

plastics, rubbers, and adhesives with explosives.

Q. And during that time period, did you become familiar with plastics and explosives and their chemical properties?

A. Yes, I did.

Q. While you were with the Ministry of Defense at that time, did you begin further education?

Linda Jones - Direct

A. Yes, I did. The Ministry of Defense sponsored me to study for my degree, which was in chemistry.

Q. And when did you complete your degree in chemistry?

A. I think around 1981.

Q. At some point after completing that degree, did you become a member of the Royal Society of Chemistry?

A. Yes. In 1983, I think.

Q. What is the Royal Society of Chemistry?

A. It's a professional body which extends not only in the United Kingdom, it has members, international members which effectively patrols chemists that -- I think it has similarities with your American Academy of Forensic Science; that it sets some exams and vigilates on those exams. And it also accredits chemists as chartered chemists; and it's an indication that you are a responsible and professional person, qualified to practice chemistry, although you can practice

chemistry without the qualifications.

Q. Are you currently a part of the Royal Society of Chemistry?

A. Yes, I am.

Q. And what level are you at today?

A. I'm a fellow.

Q. What does that mean?

A. That's the highest category.

Q. And what type of requirements do you have to meet to become a fellow?

Linda Jones - Direct

A. You have to have come up really through their system and at a position of responsibility for approximately five years and be able to demonstrate that you've held a responsible position and have had an in-depth experience in practicing chemistry and also some management responsibility.

Q. Now, after you completed your education and you worked at headquarters for a while, did you transfer somewhere else?

A. Yes, in 1985 I transferred to the Forensic Explosives Laboratory.

Q. And that's where you are today?

A. Yes, I am.

Q. How did you begin, what was your position at the laboratory?

A. My first position was as a higher scientific officer. It was a sideways transfer. There was no change in my position. And as a higher scientific officer, I began being engaged in

forensic investigations.

Q. Did you undergo a period of training?

A. Yes, I did.

Q. For how long did you train before you were an examiner?

A. Before -- before I started writing legal statements and reports, it was -- I can't remember. It was probably around three years. Two to three years.

Q. Is that the normal time period that employees at your laboratory have to undergo for training?

Linda Jones - Direct

A. No. It's short, because most of our new recruits, we bring in straight from universities with their degrees, so they've had no previous or have little previous work experience. So it normally takes around five to six years for us to consider them adequately trained to present evidence to a court. My time was much shorter because of my in-depth previous explosives experience.

We train the new people in both forensic aspects and the explosives side.

Q. Now, since you joined the laboratory, have you worked on explosives-related investigations and cases?

A. Yes.

Q. Approximately how many explosives or explosive-related cases have you worked in your career?

A. I would say between 550 and 600.

Q. And as part of those investigations, do you sometimes get called out to bombing crime scenes?

A. Yes.

Q. Approximately how many bombing crime scenes have you been to?

A. Probably about a dozen.

Q. And where were they located, generally?

A. Yes. Most of them were in London, but not all of them.

Q. Now, how big were the bombs that you were investigating or that you have investigated over your career?

Linda Jones - Direct

A. The scene examination aside, anything from a few ounces of explosives to thousands of pounds.

Q. Have you ever encountered large-vehicle or truck bombs?

A. Yes, I have.

Q. Tell us about that.

A. I've encountered -- well, what I would term a large-vehicle or truck bomb would be something which contains thousands of pounds of explosives. And I've examined both truck bombs that have been recovered and been made safe for me to examine --

Q. Meaning before they blew up?

A. Before they blew up, yes.

Q. Okay.

A. And also the scenes when they have blown up.

Q. And do you have any experience with ammonium-nitrate-based explosives and explosive devices based on your work at the



explosives and explosive devices based on your work at the laboratory?

A. Yes. Most of those -- if not all -- of the thousands-of-pound bombs have been ammonium nitrate based.

Q. Because of that work, have you become knowledgeable about ammonium-nitrate-based explosives and their chemical properties?

A. Yes.

Q. Now, you've done that through viewing these devices or going to the crime scenes, correct?

A. Both.

Linda Jones - Direct

Q. Have you also done that by examining debris that was brought to you in your laboratory?

A. Yes.

Q. Have you conducted research or field tests also that involved ammonium-nitrate-based explosives?

A. Yes.

Q. And does your experience come from all of those things we just listed?

A. Yes, it does.

Q. Now, during your employment with the laboratory and the Ministry of Defense, have you also attended training courses in explosives?

A. Yes, I have.

Q. Briefly, what type of courses have you attended?

A. I've attended courses that have been run by the Royal Military College of Science in England on explosives handling, explosives properties and performance, safety aspects, and some range work, where I get to use the explosives and set up charges and set explosives off.

Q. Have you taught any courses in explosives?

A. Yes, I have.

Q. What type of courses?

A. Courses really concerned with forensic explosives matters for the police, the British military, people at our laboratory. Yes, I think that was probably the main.

Linda Jones - Direct

Q. Have you written any articles on the subject of forensic explosives?

A. Yes, I have.

Q. What have you written?

A. I've written a paper which was presented at the Centenary Nobel lecture to the Institute of Explosives Engineers in England, and that has been published in their journal. And I've coauthored a chapter for a book on forensic -- forensic science generally, which is to be published later this year.

Q. And the chapter that you wrote on, is it -- that you wrote -- is that focused on explosives?

A. On explosions, yes.

Q. Have you also presented a paper to the American Academy of

Forensic Scientists?

A. Yes, I have.

Q. And you mentioned the Institute of Explosives Engineers.

Are you a member of that?

A. Yes, I am.

Q. Since what time?

A. I think around 1988.

Q. Finally, for recognition for your work in explosives, have you recently received an award?

A. Yes, I have.

Q. What award did you receive?

A. Her Majesty the Queen has most graciously appointed me an

Linda Jones - Direct

Officer of the British Empire.

Q. Why don't you tell us what that means.

A. It's a very special award, and it's given in recognition to -- for -- well, in my case as an officer of the government, in recognition of the work I do in service of my country. It's also given to nongovernment people; for example, people that do a lot of charity work and give a lot of their time for free in support of worthy causes.

Q. Was it a recognition for one specific case or for your body of work?

A. No, for the work I've been doing predominantly, I think for around the last eight years.

Q. Let's turn to the work you've done in this case. Did there come a time after the bombing of the Murrah Building when you were asked to assist the United States in the investigation?

A. Yes.

Q. When was that?

A. Around March '96.

Q. What were you asked to do?

A. I was asked to act as a forensic explosives consultant.

Q. Go ahead.

A. To really -- to provide a second opinion on the crime scene.

Q. And because you were asked to do a second or independent analysis --

Linda Jones - Direct

A. Yes.

Q. -- were you given lab reports or documents showing the findings of other examiners concerning the explosion and the crime scene?

A. No.

Q. So that information was not shared with you so that you could do an independent analysis?

A. No, I haven't seen any reports of other people involved in the case.

Q. You have reviewed, though, Agent Burmeister's chemical analysis on Q507; is that right?

A. That's right. I haven't reviewed the report, but I've reviewed -- yes, I've reviewed Steven Burmeister's finding with respect to Q507 and some other of the trace evidence.

Q. But you've seen no reports about the blast damage or the type of blast?

A. No, none whatsoever.

Q. Or the size of the bomb?

A. No.

Q. Tell us what type of analysis you conducted in this case.

A. I reviewed video footage, photographs, charts and plans. I examined some items from the crime scene, and I was briefed by case agents as to the crime-scene management.

Q. You said you've inspected some of the debris from the crime scene?

Linda Jones - Direct

A. Yes.

Q. Did you come to the United States and actually look at some of the pieces that were recovered?

A. Yes, I did.

Q. Did you also determine or review where those pieces of evidence were recovered from the crime scene?

A. Yes.

Q. The model is in front of you. Have you used that previously to determine the location of certain truck parts that were recovered?

A. Yes, I have.

Q. Now, did you follow the same procedure in this case in reviewing documents and debris that you follow in some of your own cases in the laboratory?

A. In general, yes.

Q. For example, in every case that you work on, do you go to the crime scene when you're called over in Great Britain?

A. No, not always.

Q. So it's common practice for you to just receive some debris in your laboratory, review photographs, and things like that?

A. That's right. I tend to get invited to the crime scene when it's suspected of being something different, something out of the ordinary that we might not have seen before.

Q. As part of your analysis, did you also review plans and pictures of the Murrah Building after the bombing on April 19,

Linda Jones - Direct

1995?

A. Yes.

Q. Did you review plans and drawings of the building that were done prior to the bombing?

A. Yes.

Q. And did you study the structure generally and the damage caused to the structure from the bombing on April 19, 1995?

A. Yes, I did.

Q. Let's begin with your analysis of the building. What did you consider was significant in coming to your conclusions

you consider was significant in coming to your conclusions, which we'll get to in a moment?

A. Yes. What I considered was significant was the crater to the -- I'll say to the front of the building. I appreciate it's really the rear of the building. But the crater and the large -- what I think can be best described as a bite that had been taken out of the building, the arc really around the crater.

Q. Let's talk about the crater for a moment. What was significant about the crater to you?

A. In general, its size.

Q. And what did you notice about the size of the crater?

A. It was a big crater.

Q. Did you notice whether there was more than one crater?

A. There was one crater that I observed.

Q. Okay. Let me show you Government's photograph, Exhibit

Linda Jones - Direct

848.

Is this one of the photographs you used for your analysis?

A. Yes, I did.

MS. WILKINSON: Your Honor, we offer Government's Exhibit 848.

MR. TRITICO: No objection.

THE COURT: 848's received and may be published.

BY MS. WILKINSON:

Q. Miss Jones, do you see that on your screen?

A. Yes, I do.

Q. Do you see your pen up there?

A. Yes.

Q. Can you give it a try and show the jury what you noticed with this crater?

A. I'll give it a try, yes. You can see the crater in the photograph. It's large -- when -- you can get sort of a scale from it when you look at the size of the people around it and also the vehicles. It's of relatively irregular shape. We can't get much idea of the depth because of the rubble and the debris that's fallen into the crater. We can see the relatively undamaged remains of the street around the crater. And to the right-hand side of the photograph, we can see part of where the Murrah Building has collapsed and effectively slid towards the crater.

Linda Jones - Direct

Q. And does that tell you something about the type of damage and the type of device that was used?

A. In general terms, yes. I think overall my first impression of the building and the crater was that the damage had been caused by an explosive that would have a pushing and a heaving effect; for example, like the sort of explosive that would be used in quarrying, to give a general idea, yes.

Q. Let's look at a photo of the building. Show you

Government's Exhibit 854 --

MS. WILKINSON: Which I don't believe, your Honor, is in evidence yet.

BY MS. WILKINSON:

Q. Do you recognize that photo?

A. Yes, I do.

Q. Does that depict some of the characteristics that you were just describing?

A. Yes.

MS. WILKINSON: Government offers 854.

MR. TRITICO: No objection.

THE COURT: 854 received, may be published.

BY MS. WILKINSON:

Q. First, Miss Jones, can you tell the jury what they're seeing here?

A. What we've got here is the Murrah Building on the right, and you could see what I mentioned about the bite having been

Linda Jones - Direct

taken out of the building. You can see it best around the roof. The building has effectively slid down, and the crater is -- well, in this photograph be buried under the rubble here.

Another important point are the vehicles in the parking lot the other side -- directly opposite to the -- to the left-hand side of the photograph. We can't see them clearly here, but they've been shifted from their original positions. Again, the blast has been directed from the crater area into the Murrah Building and towards the parking lot.

Q. Now, you mentioned earlier this pushing and heaving phenomenon?

A. Yes.

Q. Can you tell us what that means.

A. High explosives, that are -- that is explosives which detonate, that set up this shock wave, rather than burn, the different detonation velocity explosives, in high-explosive category will exhibit particular types of characteristics and damage patterns. The damage here I would consider was most probably caused by a midrange high explosive.

Q. Now, before coming to court today, did you prepare a chart that shows the various categories of detonation velocities to illustrate the point you're discussing?

A. Yes, I did.

Q. Let me show you Government's Exhibit 695.

Do you recognize that?

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A. Yes, I do.

Q. Is that the chart you created?

A. It's the chart I helped prepare, yes.

MS. WILKINSON: Government offers 695.

THE COURT: To illustrate the testimony, I presume.

MS. WILKINSON: Just for demonstrative purposes, your

Honor.

THE COURT: All right. You may use it for that purpose. It's received. 695.

MS. WILKINSON: Yes, your Honor.

THE COURT: All right.

BY MS. WILKINSON:

Q. First you mentioned detonation velocities, and the jury has heard a bit about that, but could you tell us what you mean by detonation velocity?

A. The detonation velocity is the measure of the speed. It's the rate at which the energy is released from the explosive.

Q. You mentioned that there are different detonation velocities based on different types of explosives; correct?

A. Yes. We can really divide -- or for the purposes of today, we've divided the detonation velocities into three categories: high, medium, and low. Now, these are all -- the high explosives -- this is the shock wave we're talking about now and how fast it's going.

If we look at the highest category at the top of the

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chart, that's greater than 20,000 feet per second. That's -- all these velocities are in miles. They're traveling at miles a second, these shock waves. In the highest category, we can expect, for example, the shattering of metal. That's often termed a high-brisance explosive.

Q. What is brisance?

A. Brisance is really -- it's a combination of the speed at which the energy's released and also the amount of energy. So a high-brisance explosive will have a lot of energy being given out and it will be going very fast, so it will have a high shattering effect.

And explosives that fall into that category will be a lot of the military explosives; for example, your plastic explosive C-4 and Semtex. It's the sort of -- some of the explosives that come there are the ones that would be put into military shells. You want to shatter the casing when the shell explodes and items in the surroundings.

Q. Now, manufactured explosives are designed to do certain types of work; is that correct?

A. That's correct, they are.

Q. So these military explosives or other very high explosives that are meant to shatter, what type of work are they normally used for?

A. They can be used -- well, in the military they'll be used as shells for firing at tanks or other targets. They can also

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be used in some demolition work. You can -- it's all very clever. You can use them to almost cut surgically. You could have, for example, with a plastic explosive, you could roll it out like a putty and wrap it 'round a structure. When you set off that explosive, you can cut through, for example, like a

oil that explosive, you can cut through, for example, like a bridge support or a girder.

Q. Now, the next category you have is medium velocity?

A. Yes. These we're looking at around 9,000 to 20,000 feet per second. These explosives will have a slightly lower brisant effect. They will have a more sort of heaving and pushing effect.

And those sorts of explosives are often used in, for example, mining or quarrying when you want to -- somebody earlier, I think it was Mr. Burmeister, said that when you don't want to break your rock face into little, tiny pebbles, you want it to come down as a sheet. So those sort of midrange velocity explosives would include commercial explosives such as some dynamites, ANFO, or water gels.

Q. ANFO, of course, is a ammonium nitrate fuel oil?

A. Ammonium nitrate fuel oil.

Q. And would ammonium nitrate and nitromethane fall into that category?

A. Yes, they would.

Q. Let's move to the low range.

A. The low, roughly 6- to 9,000, they're relatively slow, but

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it's all relative. Those sorts of explosives could be used in, for example, underground coal blasting; and those again could include some commercial explosives such as some dynamites and some water gels.

Q. Now, if you went to a crime scene or you went to two experiments and one you used a large quantity of high explosives --

A. Yes.

Q. -- and you had some witness material around and another experiment you used a midrange-velocity explosive with witness material, would you see different damage characteristics and different damage patterns?

A. Yes, we could do, yes, I would expect so.

Q. And generally what differences would you see?

A. With the very high-velocity explosives, I would expect to see, for the same quantities, a shattering -- very much a shattering effect, whereas with the midrange, more a pushing and a heaving effect.

Q. If you had a vehicle as one of your pieces of witness material, what would be the difference if it was in relatively the same proximity to the explosive device?

A. I would expect with the high -- particularly high-velocity explosives, the vehicle might well be shattered into small pieces or would exhibit shattering, whereas the midrange, there might be likely to be more buckling and crumpling.

Linda Jones - Direct

Q. Now, in this case, did you examine photographs of the cars that were parked in the lot directly in front of the Murrah Building and the crater?

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A. Yes, I did.

Q. And did you notice certain characteristics or damage pattern to those vehicles?

A. Yes, I did.

Q. Let me show you Government's Exhibit 847.

Do you recognize this -- whoops -- now do you recognize that photograph?

A. Yes.

Q. And did you use this or did this assist you in your analysis of the vehicles in the parking lot?

A. It -- yes. These ones -- this is quite a way away. It's quite a distant one, but this is one of the ones I looked at, yes.

Q. Is this one of a series that you used?

A. Yes, it is.

MS. WILKINSON: Government offers 847.

MR. TRITICO: No objection.

THE COURT: Received, 847. You may publish.

BY MS. WILKINSON:

Q. Now, you just told us that this is from a rather far distance away; is that right?

A. Yes, it is.

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Q. What does it tell you about vehicles and the damage pattern?

A. Again, they've been pushed. Particularly, if we look at the photograph to the crane end of the building, we can see particularly the vehicles in that area have -- although I don't know where the vehicles were originally, I don't think they would have been parked in this way. They have been moved away from the direction of the Murrah Building.

Q. Okay. Let's look at a closeup, Government's Exhibit 827.

A. Yes.

Q. Do you recognize that photograph?

A. Yes, I do.

Q. And does this depict some of the cars as well as the street sign in that parking lot?

A. Yes, it does.

MS. WILKINSON: Government offers 827, your Honor.

MR. TRITICO: I think it's already in.

THE COURTROOM DEPUTY: It's in.

MS. WILKINSON: I'm sorry, it's already in. May I publish it?

THE COURT: Yes.

THE COURTROOM DEPUTY: It is.

BY MS. WILKINSON:

Q. Tell us what you notice about the damage pattern to these vehicles and to the street sign.

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A. If we consider the vehicles first, particularly -- I don't



know what you call this vehicle. So this vehicle here. Some of the things that I was particularly interested in with this vehicle is you can see it suffered penetrations through its body work; for example, here -- that's a bit off line, I'm afraid -- all these little -- there's lots of little holes that are from the outside of the vehicle to the inside. The hood has been bowed upwards.

Similarly, the vehicle to the left of the photograph, the hood has been pushed upwards. So again, the -- it's been pushed from the direction of the blast approaching it.

The sign: Again, its post has been bent. And what I particularly like about the sign is that it's been -- it's been -- it's been bent in a, almost a semicircle. Again, as the blast hit it, it's bent it 'round. And we've got that shrapnel damage. We've got the holes going through the sign from the printed side.

Q. Now, tell us what you concluded, by viewing the shrapnel damage on that vehicle and the street sign, about the blast?

A. I concluded that the blast had come from the direction which -- from the Murrah Building direction -- that, yes -- I'm sorry. Just that, yeah, it's come from the Murrah Building direction.

Q. And what causes that shrapnel damage to these vehicles?

A. When the bomb explodes or any bomb explodes, fragments from

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the bomb container and things close to the bomb are going to be shattered and projected at high speeds. And the shrapnel damage has been caused by those fast-moving fragments.

Q. Now, when you viewed the photographs of the cars in the parking lot, were you able to determine whether any of those vehicles had been damaged from the outside, that is, contained some explosive device -- I mean from the inside, or whether they had been damaged from the outside?

A. They all looked to me as if they had been damaged from the outside.

Q. Let me show you Government's Exhibit 850.

Do you recognize that photograph?

A. Yes, I do.

Q. Is this another photograph you used in your analysis?

A. Yes.

MS. WILKINSON: Government offers 850.

MR. TRITICO: I have no objection.

THE COURT: Received and may be published.

BY MS. WILKINSON:

Q. Tell us what you notice about the vehicles in the parking lot from this photograph.

A. Again, this is a closer-in shot from the ones we've already seen. And we can see again the vehicles have been moved away from the Murrah Building. Some of them are crumpled, some of them are burnt. The ones towards the left of the photograph,

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their body work is gone. But we've got a lot of crumpling of the roofs and the hoods; and in general, they're in a bit of a mess.

Q. And what does the crumpling signify?

A. Again, that's this -- rather this heaving and pushing effect, where the blast waves come out from the explosive and hit them, as we see here.

Q. Let me show you Government's Exhibit 852, closeup photograph of certain vehicles.

Do you recognize this photograph?

A. Yes, I do.

Q. And did you choose this photograph because it depicts a certain phenomenon?

A. Yes.

MS. WILKINSON: Government offers 852.

MR. TRITICO: No objection.

THE COURT: Received. Publish.

THE WITNESS: Again, this one is showing in more detail this pushing and heaving effect and the crumpling of the vehicles. What we can see is that the body panels -- well, we can choose any of them. For example, here, and this one that we haven't got the metal shattered, but we've got it crumpled and bent.

And this vehicle here has actually been flipped, and I think it's probably resting on another vehicle. So as the

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blast waves come out and move the vehicles -- and some of them have tumbled and come to rest on each other.

BY MS. WILKINSON:

Q. Okay. During your analysis, did you also come to learn that the Government has recovered what has commonly been referred to as Q507 in the parking lot area?

A. Yes.

Q. Did you examine Q507, which is also identified as Government Exhibit 664?

A. Yes, I did.

MS. WILKINSON: Your Honor, may I approach?

THE COURT: Yes.

BY MS. WILKINSON:

Q. Now, in -- as part of your analysis, did you review photographs and make efforts to determine where Government's Exhibit 664 or Q507 was recovered in the parking lot?

A. Yes.

Q. Let me show you what's been previously introduced as Government's Exhibit 665.

Do you recognize that photograph?

A. Yes, I do.

Q. And do you see Government's Exhibit Q507 or 664 in that photograph?

A. Yes.

Q. Can you circle it?

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A. I think it's here.

Q. Okay. Now, when --

MR. TRITICO: Excuse me, your Honor. Can we have that printed, please.

THE COURT: Yes. Just take a moment to get it.

Go ahead.

BY MS. WILKINSON:

Q. When you reviewed that photograph, Miss Jones -- look at it carefully -- did you determine whether Q507 was laying on the ground, or whether it was at an angle?

A. I'm afraid, I can't remember if it was this photograph -- oh, no. I'm sorry. I think I might have circled the wrong one.

Q. Would you like the original photograph?

A. Yes. That would be helpful, please.

Yeah. It's okay. I'm sorry, I'm --

Q. Did you circle the wrong area?

A. Yes.

Q. Let me let you take a look at the photograph, and then maybe that will help you with the computer screen.

A. Thank you. Oh, yes, thank you. Yes, I did circle the wrong one.

Q. Could you circle the right area?

A. Yes.

MR. TRITICO: Your Honor, may I have that one printed,

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also.

THE COURTROOM DEPUTY: Wait a second. Can you hold on a second.

MR. TRITICO: Yeah.

THE WITNESS: Thank you. Yes.

BY MS. WILKINSON:

Q. Now, from that photograph and from conversations with agents, did you determine how Q507 was found at the crime scene?

A. Yes.

Q. Was that of significance to you?

A. Yes, it was.

Q. Why?

A. It was important to me for a number of reasons. I was . . . I learned that crystals were found on Q507. And I wanted to establish the significance of those crystals with respect to the crime scene; so, yes, I was provided with -- I learned of various matters relating to its recovery and treatment.

Q. Did you also learn that it had rained on April 19, 1995?

A. Yes.

Q. And was that significant in determining whether residues of ammonium nitrate or other explosives could have been recovered at the scene?

A. Yes.

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Q. And was it important to you that Q507 was recovered in this position?

A. Yes.

Q. Why?

A. I was aware that the crystals on Q507 had been found on the nondecorative side, the wood side, rather than the yellow-and-red side; so it was important to me to know that the side the crystals were on were facing the ground and to some extent protected from the weather.

Q. Now, before we get into the analysis of the crystals, can you explain to the jury if this piece of the Ryder truck was on the panel of the truck how it would come to be that the crystals, ammonium nitrate crystals, from the explosive device would have been captured on that piece of evidence and thrown or blasted into that area.

A. The bomb inside the Ryder truck would have taken up a particular area. And if we think of the point at which the explosion started exploding, so that would be its initiation point -- if we imagine that, then some explosive will be relatively quite a long way from the center of the explosive.

Now, when the explosion goes off, it's all -- you won't see it, you won't see any of this happening. But from the point of initiation in the explosive, the shock wave starts to progress outwards. Now, some of the explosive on the out sides, or the furthest away from this point of initiation, are

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going to be traveling away from the center before the heat and the blast wave from the middle of the explosive -- it will really go, get ahead of itself.

And I think what's happened is as the Ryder truck blew apart, the sides of its box panel started to disintegrate, there was a possibility that any ammonium-nitrate-based explosive in the truck got embedded in the nondecorative face of Q507.

Q. And is that consistent with the explosive device being inside the Ryder truck, or outside the Ryder truck?

A. It's totally consistent with it being inside the box compartment of the Ryder truck.

MS. WILKINSON: Your Honor, I believe this would be a convenient --

THE COURT: All right.

MS. WILKINSON: -- breaking point.

THE COURT: Good. You may step down. We're going to be taking a recess.

Members of the jury, we will, as has been our regular practice, take the afternoon recess for this time for a period of 20 minutes, during which, of course, please continue to follow the cautions always given at recess of avoiding

discussion of anything connected with the case and avoiding anything outside the evidence, maintaining open minds, knowing that there's a ways to go.

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You're excused, 20 minutes.

(Jury out at 3:14 p.m.)

THE COURT: We're in recess.

(Recess at 3:14 p.m.)

(Reconvened at 3:33 p.m.)

THE COURT: Be seated, please.

(Jury in at 3:33 p.m.)

THE COURT: Ms. Wilkinson, continue, please.

MS. WILKINSON: Thank you, your Honor.

BY MS. WILKINSON:

Q. Ms. Jones, before we broke, you were talking a little bit about the detonation velocities of certain explosives.

A. Yes.

Q. Now, can the detonation velocities of explosives vary depending on how a device is constructed?

A. Yes, it will.

Q. Are you familiar with the term "improvised explosive device"?

A. Yes.

Q. What is that?

A. It's really not a manufactured explosive; something that someone has made up from other ingredients, something that someone has prepared themselves rather than bought off the shelf.

Q. Tell us how the construction of an improvised explosive

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device can affect the detonation velocity.

A. It would depend on the chemical makeup and mixing of the improvised explosive. It will depend on how much explosive there is, how it's contained, the shape of the explosive charge; it might be in a container, in a larger container; size, shape, the density, the size of the particles of the explosive. There will be perhaps several dozen different factors that will affect the detonation velocity.

Q. Now, different types of explosives need different initiation systems or boosters to have them detonate. Is that correct?

A. That's right, yes.

Q. We've heard some testimony on that. If there was an ammonium nitrate and fuel oil or ammonium nitrate and nitromethane device, would you need some type of booster to detonate it?

A. Yes. In almost all instances, yes.

Q. Could the booster affect the detonation velocity of the device?

A. Yes, it will.

Q. Could the amount of booster used affect it?

Q. Could the amount of booster used affect it?

A. Yes.

Q. And could the type of booster used affect it?

A. Yes.

Q. What about the initiation system? Would that have any

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impact on the velocity of detonation?

A. Probably less so, because the initiation would be setting off the booster. Yes, it could have an effect; but the initiation system is going to affect the booster, rather than the main improvised explosive.

Q. Now, when you go out to look at a crime scene or study debris from a crime scene to determine damage patterns, do you sometimes determine a range of velocity of detonation an explosive might have fallen into?

A. Yes. We don't -- we tend not to estimate numbers, but we speak in very general terms.

Q. And why do you estimate a range?

A. Because we can't -- because there is so much we don't know.

We don't -- we don't know, as we said -- we don't know specifically how the explosive was contained, at that stage what it was made of, how it was contained. All we can say is in general terms it might have been a high -- in the three categories we talked about earlier. It could be perhaps a high, a medium, or a low.

Q. When you go to a crime scene or you examine debris from a crime scene and photographs, do you look for certain damage patterns to make that determination?

A. Yes, we would.

Q. Do you also look to see if residues -- or try to collect residues from the scene?

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A. Yes, we certainly do.

Q. Now, in these post-blast investigations, is it common to find high-explosive residue at a bombing crime scene?

A. With the large explosive devices -- for example, the truck bombs that contain thousands of pounds of improvised explosive -- then it's fairly rare to find residues that we can specifically say have come from the explosive.

Q. Why is it so rare?

A. A number of factors. One, because there is so much damage that the -- the best pieces for residue recovery are going to be -- have come from fairly close to the explosive; so if you've got a very big bomb, those big -- those best pieces are likely to be shattered into very small pieces, and they may not be recovered or recognized.

There is also the complication that there is a lot of contamination of items by dirt and debris at the scene. For example, there will be a lot of dust. In general, a lot of dirt.

Q. And what about if a device functions properly? Would most of the explosive and the explosive components be consumed?

A. Yes, they will.

Q. Explain that, please.

A. Well, when -- when someone is designing a bomb, whether it's improvised or manufactured, you want to make best use of any available energy; so you will -- one would try and mix the

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bomb so that you get the most energy out from the materials you've got; and to get the most energy out, most of the explosives will be consumed.

Q. Are there certain components that can be used in an explosive that you would think would be even less likely to be recovered at a bombing crime scene?

A. If we talk about these large truck bombs, yes. There would be the boosters and the initiation system.

Q. Go ahead.

A. I'm sorry. In talking about the initiation systems, these are all components that contain explosives; because again, the booster and the initiation system are going to have a very small quantity of explosive in them compared with the big, main charge of explosive.

Q. So those are the types of items you think it would be even less likely to recover at a crime scene?

A. Yes.

Q. If detonation were used -- detonation cord were used as part of the booster or the initiation system, would you think it would be likely to recover PETN residue at a bombing crime scene?

A. I've yet to find it; and I know some of our big bombs almost certainly contained detonating cord.

Q. In fact, have you examined some of the truck bombs and other bombs that were rendered safe?

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A. Yes, I have; in England, yes.

Q. Have you determined whether detonation cord or PETN was used in those explosive devices?

A. Yes. I wouldn't like to say a hundred percent; but to the best of my recollection, all of them.

Q. So were you surprised when you learned that in the Oklahoma City investigation there was no PETN recovered or no EGDN or no RDX or any other high explosive like that?

A. No, I wasn't surprised in the slightest.

Q. Now, were you surprised when you learned that Agent Burmeister had recovered ammonium nitrate crystals from Q507?

A. I don't know if I was surprised. I was pleased for him. I -- I haven't found crystals, but as Mr. Burmeister explained, anything is possible; that it was a -- it was good. Yes, we --

Q. In your work, have you found ammonium ions and nitrate ions when you've studied bombing crime scenes?

A. Yes.

Q. Is that less significant than finding ammonium nitrate crystals?

A. Yes.

Q. What's the difference?

A. Again, the ions -- we can't necessarily say the ammonium and the nitrate come from the same crystal. If we find ammonium and nitrate together in one crystal, we know it's together.

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Q. As part of your analysis in this case, did you review Agent Burmeister's work on Q507 and all of his laboratory notes and chromatograms and all those charts that he made?

A. I don't know if it was all, but I examined a lot of them. I examined all his instrumental printouts and some notes that he made, yes.

Q. And are you familiar with the inorganic techniques he used to examine the crystals?

A. Yes, I am.

Q. And have you come to a conclusion about his analysis?

A. Yes.

Q. What conclusion have you come to?

A. I concluded that what Mr. Burmeister analyzed were ammonium nitrate crystals.

Q. And did that tell you something or assist you in your examination of the bombing crime scene in determining what type of device was used to bomb the Murrah Building?

A. In conjunction with other factors, yes, it did.

Q. Let's talk a little bit about those other factors. Did you analyze the parts of the Ryder truck that were identified by Mr. Paddock and the places where they were recovered?

A. I examined -- I examined them in comparison with the chart showing me where they'd been recovered, yes.

Q. And did you come to some conclusions based on where those parts were recovered?

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A. Yes.

Q. Did you come to some conclusions based on the type of damage you saw to certain pieces?

A. Yes.

Q. And have you selected some of those pieces and brought them into court today?

A. Yes.

Q. Would it assist you to use the model that's in front of you to explain to the jury the analysis that you did?

A. Yes, please.

Q. And are you familiar with Government's Exhibit 642, the model, in that it indicates through fiber optics and some colored dowels where these pieces were recovered?

A. Yes.

Q. Have you mentioned that model to the jury to assist?



Q. Have you reviewed that prior to coming to court?

A. Yes.

Q. And is it a fair and accurate representation of the pieces that were introduced into court?

A. Yes.

MS. WILKINSON: Your Honor, we'd ask that Ms. Jones be allowed to step down and use the fiber optics to explain to the jury her conclusions.

THE COURT: All right. You can move so that you can observe more closely.

MR. TRITICO: Thank you.

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MS. WILKINSON: Your Honor, I'm not sure how -- these fiber optics are rather small. I'm not sure how much the jury can see from the box, and I don't know if it would be permissible if Ms. Jones stayed on this side, for the jury to step down and look at the model.

THE COURT: No, I don't want the jury to leave the box.

MS. WILKINSON: Okay.

THE COURT: But you can stand up.

BY MS. WILKINSON:

Q. Ms. Jones, on this model there is indicated different lights that indicate different parts of the truck that were recovered. Is that correct?

Now, when I try and turn on these yellow lights -- can you see those?

A. Yes.

Q. Does that indicate where the truck parts that Mr. Paddock identified were recovered?

A. Yes, it does.

Q. Now, there is green parts in these areas here. Do you recognize those?

A. Yes.

Q. Are those portions of the panel of the truck that were recovered?

A. Yes.

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Q. And there is blue lights indicating pieces of plastic. Is that correct?

A. Yes.

Q. And there is one purple circle down here. Does that indicate the street sign that Mr. Burmeister recovered?

A. Yes, it does.

Q. Now, before you examined the damage pattern, you looked at the building, you told us. Correct?

A. Yes, I did.

Q. And you looked at the crater?

A. Yes.

... 100.

Q. Now, I'm going to remove the portion of the building that was damaged; and just show the jury briefly what you tried to indicate through the photos of what you concluded about the building damage.

A. Here we can see the crater, which as I explained was quite a big crater; and here is the bite that has been taken out of the building which effectively forms an arc around the crater.

Q. Now, did you determine that certain portions of the Ryder truck were recovered in certain areas?

A. Yes.

Q. And did that help you in coming to a conclusion as to where the truck was parked prior to the explosion?

A. Yes, it did.

Q. Tell us what pieces you considered.

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A. I considered the front axle that was recovered.

Q. Where was that recovered?

A. This -- the front axle had traveled about -- and it's very approximate from my recollection -- about 700 feet east of the crater and landed on 5th Street, almost directly in line with the crater.

Q. What other pieces did you consider?

A. I considered the rear axle, which had gone west along 5th Street and come to rest very approximately 600 feet from the crater and landed adjacent to the front entrance of the Regency Tower.

Q. Okay. And what did those two pieces tell you about the direction of the vehicle?

A. Those two pieces indicated to me that the Ryder truck had been positioned in the area of the crater and it had been pointing in an easterly direction -- its cab facing in an easterly direction towards North Robinson.

Q. Were there other parts that you considered that supported this conclusion?

A. Yes.

Q. What other parts did you consider?

A. I considered sections of four wheels that had been recovered from the truck.

Q. Do you recall generally where they were recovered?

A. Yes, vaguely. One of the driver's side front wheels had

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come to rest along North Robinson under a tree adjacent to the Journal Record Building.

A front and a rear wheel had been projected towards the Murrah Building. And we can see some -- indicated by some of these lights here.

There was a fourth wheel, which I think is this one which had gone generally along North Robinson and come to rest between the Firestone building and Saint Joseph's Rectory.

Q. What other parts did you consider in determining the damage

pattern and the direction of the vehicle?

Did you look at the debris generally found around the crater?

A. Yes, I did. Many of these little yellow lights indicate other fragments of the truck. They might be parts of the engine or the chassis -- I think you called them the frame rails, but the general metal construction of the truck. And they had been projected roughly radially from the crater.

Q. And were the engine parts and the other parts that you saw recovered consistent with the truck being parked in an easterly direction on 5th Street?

A. Yes, they were.

Q. I'm going to give you this little Ryder truck, and can you show -- park it right there behind the crater -- what direction you concluded the truck was parked in prior to the explosion?

A. I think it was -- should we put the crater back? Thank

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you.

I think it was parked roughly about here, pointing towards North Robinson; and I think it was parked roughly midway or perhaps slightly easterly of the center of the nine-story section of the federal building.

Q. Is that consistent with the damage patterns you saw to the Murrah Building?

A. Yes.

Q. Is that also consistent with the damage you saw to actual pieces of the Ryder truck?

A. Yes.

Q. Let me show you the rear axle. Did you examine that for general damage?

A. Yes, I did.

Q. Tell the jury what you noticed about the damage to the rear axle.

A. What I noticed about the damage to the rear axle is that -- well, the rear-axle housing -- is that it's a very substantial and heavy piece of metal; and it's been bent and twisted and buckled. It hasn't shattered into lots of pieces, but it's effectively been torn and twisted.

Q. What did that tell you about the type of explosive that was used at the Murrah Building?

A. It told me that it was a large quantity of explosive. This was likely to be sort of a midrange-velocity explosive, rather

Linda Jones - Direct

than one of these very high-velocity explosives.

Q. Was this bending and tearing on this piece consistent with the pushing and heaving that you've described for the jury?

A. Yes.

Q. If it had been a more brisant explosion, what kind of damage would you have expected to see on the rear-axle housing?

A. I think I would have expected to see more shattering.

Q. Did you also look at some of the frame rail --

A. Yes.

Q. -- that was recovered?

Okay. This is Government's Exhibit 787. Do you recognize that?

A. Yes, I do.

Q. Do you recall where that was recovered?

A. Yes. This was recovered -- let me just get my bearings.

In a northeast -- it had traveled in a northeasterly direction. And this piece had come to rest on the roof of the building opposite a row of stores on 6th Street, so it traveled from here, cleared these buildings, and landed on a building here.

Q. What did that tell you about the force of the explosion?

A. It was a large force.

Q. And what did you notice about this piece of evidence, Government's Exhibit 787, the frame rail?

A. Now, this piece would have originally been a C section.

Linda Jones - Direct

Turn it round. Yes, there we are.

These would have been the two sides, so it would have -- these would have been the two sort of short sides of the C. And we can see it's been flattened out, and it's also been buckled and twisted and bent; but it hasn't been shattered, as we explained with a high-brisant explosive. We've got sort of this mid velocity and bending and twisting and buckling.

Q. And again, what does that tell you about the type of explosive that was used in the bomb?

A. It was a mid-velocity, mid-performance high explosive.

Q. And again, a large quantity of explosive?

A. Yes, a large quantity.

Q. I show you another piece of frame rail, Government's Exhibit 720. Did you examine this?

A. Yes, I did.

Q. And tell the jury again what 720 is.

A. Okay. 720 is a small piece from a frame rail, which I think Mr. Paddock identified. It's come from a section of metal like that one we've just seen. This piece was -- would have originated much closer to the explosive than that piece. I think probably that was -- that was forward of the area of the box compartment that the explosive was over; so the sections of the frame rail that the explosive was over were -- most probably ended up at this sort of size or smaller.

Linda Jones - Direct

Q. And that's consistent with what you said that right underneath the seat of the explosion you would find small, little pieces?

A. That's right, yes.

Q. Now, were there certain pieces of the truck that you examined that had unique explosive damage?

examined that had unique explosives damage:

A. Yes, there were.

Q. And do you recall looking at Government's Exhibit 654?

A. Yes, I do.

Q. What is that?

A. Thank you. This is part of the rear latch from the roll-up door of the Ryder truck.

Q. Where was that recovered?

A. This was recovered inside the Regency Tower, inside a room on -- I think it was the 8th floor; so that had traveled from the crater -- the seat of the explosion here -- it had traveled up and across and actually entered the building.

Q. Was that rear latch on the back of the truck?

A. Yes, it was.

Q. Is that consistent again with your conclusion that the truck was parked in an easterly direction?

A. Yes.

Q. Did you obtain an exemplar from the next truck that Mr. Paddock brought into the courtroom showing the truck before any blast damage?

Linda Jones - Direct

A. Yes.

Q. I'm going to show you Government's Exhibit 655.

MS. WILKINSON: Your Honor, may I offer this for demonstrative purposes?

MR. TRITICO: No objection.

THE COURT: All right. It's received for that purpose.

BY MS. WILKINSON:

Q. Tell the jury what that is.

A. This is parts of the rear roll-up door from a Ryder truck, and it's the bottom of the door. This latch would be used to secure the door shut when the roll-up door is down.

Q. And did you determine whether Government's Exhibit 654 had come from this portion of the truck?

A. Yes, it had.

Q. Did you match it up?

A. Yes.

Q. Can you show the jury what portion it came from?

A. I hope so.

Right. It's that part of the latch here. We can see that U-shaped cutout, which I'm indicating here, corresponds with this one on the latch; so we've lost this lever. And what we've got -- that piece of plate there corresponds to the piece attached to the fiberboard, the plywood door.

Q. So this piece right here on the right was this flat piece

Linda Jones - Direct

of metal?

A. Yes, that's right. It would have been positioned like that.

Q. Now, what did you notice about the damage to that piece?

A. The damage to this piece -- if we look at the other side, it's got very particular damage. What we've got here are lots

of what I describe as pits and craters. They're little holes, some of which have got sharp edges and some of which have got fairly smooth edges.

Q. What causes pitting and cratering on a metal surface?

A. When a high-velocity -- a high explosive detonates, bits -- very small particles of the unconsumed explosive, but again away from the center of the charge, are going to be flung out traveling at sometimes miles a second but also fragments of the container that the explosive was in and the surroundings.

Now, a lot of these particles and fragments will be very, very small. I mean they'll be fractions of an inch. And this damage is caused by their impacting on the metal surface.

Q. Are they impacting at a very high rate of speed?

A. Yes. They'll be traveling at miles a second.

Q. And is that consistent, or inconsistent with the explosive device being inside the Ryder truck?

A. It's consistent, because this damaged face would have been against the rear door of the truck facing inside. Although it would have been on the outside of the vehicle, that face was

Linda Jones - Direct

pointing inside the truck.

Q. Is this also consistent with your analysis and Mr. Burmeister's analysis of Q507 of the crystals being pushed out and impelled into that piece of the box?

A. Yes, it is.

Q. Did you also examine another piece of evidence that had unique explosive damage?

A. Yes.

Q. I show you 771. Do you recognize that?

A. Thank you. Yes, I do.

Q. What is it?

A. This is part of a tie rod connector which would have been towards the front of the truck.

Q. Where was that piece recovered?

A. This was recovered inside Bentley's Carpet, which is in an easterly direction from the position of the crater.

Q. What did you notice about that piece?

A. Now, this piece would have originally been straight, and we can see that it's bent and buckled. But also, we've got again these characteristic pits and craters that have been caused by not only the particles but some of the hot gases in the blast waves that have washed over this piece of metal.

Q. What did that tell you about what type of device was used to bomb the Murrah Building?

A. Again, I concluded from that it was a high-performance

Linda Jones - Direct

explosive device but of generally midrange velocity.

Q. Tell the jury a little bit about the general damage pattern that you see here depicted by the fiber optics and what that tells you about the device.

A. The damage pattern indicates to me that, as we mentioned, the device was in the Ryder truck and the Ryder truck was pointing in an easterly direction towards Robinson.

The spread of the damage is consistent with the bombing, and the damage we've observed to some of the pieces is consistent with the bomb having been in the rear cargo compartment of the Ryder truck.

Q. Now, did you look at the photograph taken, with Mr. Paddock's assistance and the FBI laboratory, of the truck parts to determine where the device was placed in the truck?

A. Yes.

Q. Okay. Let me show you that.

I'm showing you 824A. Have you seen that?

A. Yes, I have.

MS. WILKINSON: Your Honor, this is a larger version of Government's Exhibit 824 which was previously admitted through Mr. Paddock. We'd offer 824A.

MR. TRITICO: May I have a few questions on voir dire about this photograph?

THE COURT: Yes.

VOIR DIRE EXAMINATION

Linda Jones - Voir Dire

BY MR. TRITICO:

Q. When you first saw this photograph, were there numbers written on it identifying different parts with Q numbers on it?

A. I don't remember, but I don't think so.

MR. TRITICO: I'll object to introduction of this photograph, your Honor.

MS. WILKINSON: Your Honor, these were on the smaller version that was previously admitted.

THE COURT: What is the smaller version?

MS. WILKINSON: The exact same --

THE COURT: No, no. What's the number of it?

MS. WILKINSON: 824.

THE COURT: The smaller version?

MR. TRITICO: I believe this is 824A.

MS. WILKINSON: 824A. The same photograph, just enlarged for demonstrative purposes only.

MR. TRITICO: I don't recall. I'll have to take Ms. Wilkinson's representation.

THE COURT: Well, take a look.

MR. TRITICO: I maintain my same objection.

MS. WILKINSON: They aren't there. We can use this same photograph, if he objects.

THE COURT: All right.

DIRECT EXAMINATION CONTINUED

BY MS. WILKINSON:

Linda Jones - Direct

Q. Ms. Jones, using Government's Exhibit 824, can you tell the jury what they're seeing here?

A. Yes. The white lines are effectively a skeleton of the truck. This section here represents -- let me be sure I've got this the right way around. This section here represents the cab area and the vehicle construction beneath the cab. Then this longer section is the construction of the cargo box.

And what's significant about this is that here's the rear axle; and really from the rear axle rearwards, we've got some fairly large pieces of the truck recovered and also quite a few of them.

Then if we look at the cab end or the cab compartment, again, we've got a lot of components here. We've got significant recoveries of the engine. We've got two front wheels; but then the bit in between, the bit of the box compartment towards the cab end that's forward of the rear axle -- there aren't many fragments at all. And that indicates to me, bearing in mind how detailed the search of the scene was -- that indicates to me that the bomb would have been placed in the rear cargo box forward of the rear axle.

Q. Did you come to any conclusions about the size of the device?

A. From the -- from all the aspects I examined, I concluded that the bomb was a very large bomb; and as a rough estimate, it would have been likely to have contained between very

Linda Jones - Direct

approximately 3,000 and 6,000 pounds of a mid-velocity-range explosive, high explosive.

Q. You can take your seat.

Did you also examine plastic fragments that were recovered at the scene?

A. Yes, I did.

Q. What did you conclude about those plastic fragments?

A. Some of them were damaged consistent with, for example, them having been close to an explosion.

Q. Did you consider your analysis or your review of Mr. Burmeister's analysis of Q507 and the identification of ammonium nitrate crystals in coming to any further conclusions about the type of bomb that was used to destroy the Murrah Building?

A. Yes. I concluded that the bomb most probably contained or certainly included an ammonium-nitrate-based explosive.

Q. Now, based on the residue analysis and the crime scene recovery, were you able to determine with any more specificity the type of ammonium-nitrate-based explosive that was used?

A. No.

Q. And is that common, or uncommon in these type of investigations?

A. It's from my experience -- it's fairly -- it's fairly uncommon to -- well, it is uncommon to find ammonium nitrate crystals. But to find that alone, I'm not surprised.



Linda Jones - Direct

Q. Now, you can't tell the jury what type of booster was used in this device, can you?

A. No.

Q. Can you tell them what type of initiation mechanism was used?

A. No.

Q. And is that typical in your post-blast, crime-scene investigations?

A. When we're talking about the explosive end of the bomb, that -- that's typical.

Q. If this was, as you say it is, a large ammonium-nitrate-based, mid-velocity, improvised explosive device inside the truck --

A. Yes.

Q. -- how difficult would it be for someone to construct that type of device?

A. Provided they had a basic knowledge of explosives and access to the materials, it would be fairly simple.

Q. How many people would it take to construct such a device?

A. One person could do it on their own; but more people could do it quicker.

Q. Now, if it was several thousand pounds, could one person build that device by themselves?

A. Yes.

Q. Now, as part of your experience going out to crime-scene

Linda Jones - Direct

investigations and in teaching others, are you familiar with evidence recovery procedures for pieces of evidence that might contain explosive residue?

A. Yes.

Q. And are you familiar with or do you have procedures for photographing that evidence when it's recovered?

A. That is something the police do in the United Kingdom.

The -- the forensic case officers don't carry out the photography; the police do, but there are procedures for them to do it.

Q. And what is your procedure in terms of recovering a piece of evidence that may have explosive residue on it before it's photographed?

A. The decision whether to photograph it or not or when to photograph it depends really on the scene, and it's -- there is no hard-and-fast rules. It depends on the particular scene.

Q. And why would in certain instances someone recover a piece of evidence and seal it or bag it prior to it being photographed in place?

A. The -- in terms of the forensic evidence collection, one of the overriding priorities at the scene is to preserve and protect any potential forensic evidence; so if, for example, the weather is bad -- it might be raining, often is in England;

it might be windy; there might be other factors; the area might

be being cleared, whatever, then a piece of evidence might be

Linda Jones - Direct

either bagged or removed from the scene before the photography. But where it's been located will be documented.

Q. Now, tell us, would you, after all your analysis that you conducted and your review of Agent Burmeister's work, what was your final conclusion about the type of device that was used to bomb the Murrah Building?

A. I concluded that there was one device. It was in the rear cargo compartment of a Ryder truck. That truck was parked towards the front, as we see in the model here -- towards the front of the building, positioned pointing towards North Robinson, slightly easterly of the nine-story section of the Murrah Building.

Q. And again, what type of device did you believe it to be?

A. I considered that it was -- it contained a mid -- midrange-detonation-velocity high explosive.

MS. WILKINSON: No further questions, your Honor.

THE COURT: Mr. Tritico.

MR. TRITICO: Yes, your Honor.

Your Honor, before I begin, I'll offer what's now been marked as McVeigh Exhibits ZZ665A and ZZ665B, which are the prints from the photograph she circled earlier.

MS. WILKINSON: No objection.

THE COURT: All right. They're received.

CROSS-EXAMINATION

BY MR. TRITICO:

Linda Jones - Cross

Q. Good afternoon, Ms. Jones.

A. Good afternoon.

Q. Now, you and I have never met before, have we?

A. No, we haven't.

Q. Now, I'm from Texas and you're from England; so we're going to do the best we can to speak to each other.

A. We will.

Q. But we may have a little problem; okay?

A. We'll do our best.

Q. How many times have you met with Ms. Wilkinson on this case?

A. I think on three occasions.

Q. When was the first time?

A. In 1996.

Q. And do you remember what month that was?

A. I think it was around September-time.

Q. Did you come here, or did Ms. Wilkinson come to you?

A. No, I came here.

Q. How long -- did you meet her here in Denver, or somewhere else?

A. No, I met her here in Denver.

Q. How long was that meeting?

A. I was here -- I can't remember. It was either five days or one week. It was around that time.

Q. At least five days?

Linda Jones - Cross

A. I think so, yes.

Q. And you worked on this case during that five-day period?

A. Yes.

Q. Is that the time when you also got debriefed by the special agent and looked at some photographs, or was this another time?

A. I'm not sure what debriefing by a special agent means.

Q. Well, I thought you testified on direct that you had been -- a special agent had told you about the investigation into the case.

A. From the scene management, yes, it was.

Q. That was the same time?

A. Yes.

Q. Okay. And that's when you looked at the photographs?

A. Some of them, yes.

Q. And did you look at Q507 on that first time you were here, the first trip?

A. Yes, I think I did.

Q. And did you review Mr. -- Agent Burmeister's reports at that time?

A. No.

Q. Okay. Is that -- is that what you did on the first trip?

A. On my first trip, I was briefed by the agents as to the scene management. I reviewed videos, charts and plans, some photographs, and some items from the crime scene.

Q. Okay. Let's talk about that for just a moment. Now, you

Linda Jones - Cross

reviewed some videos; right?

A. Yes.

Q. How many?

A. I can't remember. I would say sort of three or four.

Q. Did Ms. Wilkinson or the FBI provide you the videos to look at?

A. Yes.

Q. And you looked at the ones that they gave you; right?

A. Yes.

Q. And you reviewed some photographs?

A. Yes.

Q. Do you recall about how many?

A. Several hundred.

Q. Okay. And you viewed the photographs that they gave you; right?

A. Yes.

Q. Now, the briefing that you had from the special agent: Do you recall his name?

A. There were three agents involved during the week, so yes.

Q. Okay. Do you remember all their names?

Q. Okay. DO YOU REMEMBER ALL THREE NAMES.  
A. Yes.  
Q. Who was the first?  
A. I'm not sure what order they were.  
Q. Tell me who they were.  
A. The three agents that briefed me were Jim Norman, Jim

Linda Jones - Cross

Elliott, and Jeff Hayes.  
Q. Jim Norman. Who was the second one? I'm sorry.  
A. Jim Elliott.  
Q. Jim Elliott. And Jeff Hayes?  
A. Yes. I spent some time with them during the week. I think the actual scene -- predominant scene management side was covered by Jeff Hayes.  
Q. Okay. And those are the three that you've met with during the time that you've been working on this case?  
A. Some of the people, yes.  
Q. Have you met with any other FBI agents since you began working on this case?  
A. I've been introduced to a lot of agents. I --  
Q. Sure. I don't mean --  
A. Yes. I have met with a lot of people. They were the main ones that -- that have been working with me.  
Q. You were never briefed by Mr. Ron Kelly about the activities he took and what he did on the scene in April of 1995. Is that correct?  
A. No. That's correct.  
Q. Now, you said you spent most of the time with Mr. Jeff Hayes. Is that right?  
A. No. Mr. Jeff Hayes briefed me as to the scene management.  
Q. Okay. Was that the longest briefing that you had?  
A. No.

Linda Jones - Cross

Q. Okay. Let's talk about Mr. Hayes' briefing first. Did you make contemporaneous notes of your meeting with Mr. Hayes?  
A. I've made some notes, yes.  
Q. And those are the notes that were in your file?  
A. Yes.  
Q. Okay. Those are about two pages; right?  
A. Yes, probably.  
Q. Okay. How long was this meeting?  
A. I don't remember. An hour, I'm guessing.  
Q. About an hour?  
A. Perhaps, yes.  
Q. Did he show you what's called a 302, what the FBI calls a 302, which is like a witness statement or transcription of events and things like that?  
A. No.  
Q. Did he show you any notes that he took?  
A. No.  
Q. Did he show you any notes that Mr. Kelly took?

A. No.

Q. Did he show you notes taken by any FBI agent on the scene in April of 1995?

A. No.

Q. The briefing, then, I take it was basically just an oral presentation by Mr. Hayes?

A. Yes, that's right.

Linda Jones - Cross

Q. He showed you no documents, other than maybe the photographs?

A. The briefing was towards the end of my visit, when I had already reviewed the videos, the charts and plans, and so on.

Q. Okay. What was Mr. Hayes' job duties in April of 1995 in Oklahoma City? Do you recall?

A. I don't remember. I don't know if he -- yes. He must have told me, but I don't remember specifically.

Q. Okay. Did he -- was he in charge of the scene?

A. I don't believe so.

Q. Did he discuss with you the collection of evidence at the scene?

A. No, not -- not in detail.

Q. Did he discuss with you the forensic examinations that were conducted at the scene?

A. No.

Q. Did he discuss with you the search, if any, of the Murrah Building for uninitiated ammonium nitrate prills?

A. No. I don't think -- I don't think we specifically spoke of that.

Q. How about any of the other buildings in and around the Murrah Building? Did he discuss any searches of them for uninitiated ammonium nitrate prills?

A. No.

Q. You've been shown no evidence and no information during the

Linda Jones - Cross

time that you've worked on this case that any agent of the FBI ever looked for uninitiated ammonium nitrate prills in the Murrah Building; is that right?

A. That's correct. I haven't.

Q. Who is Dr. Robin Hiley?

A. He's a scientist at -- in the research wing of the Forensic Explosives Laboratory where I'm from.

Q. Do you know him?

A. Yes, I do.

Q. Do you respect his work?

A. Yes, I do.

Q. He has published some papers in the past about finding and searching for uninitiated ammonium nitrate prills after an ANFO explosion. Is that right?

A. Has he?

Q. Well, I'm asking you.

A. It's news to me. I mean, he has written a number of papers. I'm not aware of that one, but I'd be very interested if he has.

Q. Have you ever known him to work with anybody from the FBI lab in the area of searching for un -- I'll try that one more time.

A. Yes.

Q. Have you ever known him to work with anybody from the FBI lab in regards to searching for uninitiated ammonium nitrate

Linda Jones - Cross

prills after an explosion?

A. Not so far as I'm aware.

Q. Okay. Now, let me show you what is now in evidence as Government's Exhibit -- I believe -- let me see -- 848.

Do you still have the exhibits in front of you?

A. I'm sorry?

Q. Do you still have the Government exhibits in front of you?

A. I've got an exhibit -- well, I've got two.

Q. Okay. Let me show you what's already introduced into evidence as Government's Exhibit 695. Do you see that on your screen?

A. Yes, thank you.

Q. This is the exhibit you were discussing earlier detailing the potential detonation velocity of different explosives. Is that right?

A. Yes.

Q. Now, in the medium-range explosive, it says here 9,000 to 20,000 feet per second. Is that right?

A. That's what it says here, yes.

Q. Now, ANFO, ammonium nitrate fuel oil, doesn't reach 20,000 feet per second.

A. No, it doesn't.

Q. And it would be a misconception for anybody to believe that it does; right?

A. That's right.

Linda Jones - Cross

Q. Thank you.

THE COURT: Are you going to be using the equipment here that the jury has to have the monitor for?

MR. TRITICO: Oh, yes, I am.

Can we take a second to put it back? Maybe I can -- well --

THE COURTROOM DEPUTY: It will just take a second.

THE COURT: All right. We'll bring it in.

MS. WILKINSON: Your Honor, we can move the model back, get it out of the way.

THE COURT: All right.

Now, do we have -- is it 695?

MR. TRITICO: Yes, your Honor. 695.

Okay. Now we're hooked up

Okay. Now we're hooked up.

BY MR. TRITICO:

Q. Now, what I was asking you a moment ago is this is the medium-range explosion that says 9,000 to 20,000 feet per second of a detonation velocity. Is that right?

A. That's right, yes.

Q. Now, ANFO over here, ammonium nitrate and fuel oil, does not reach 20,000 feet per second?

A. No, it doesn't.

Q. That's what I was asking. It would be a misconception for anybody to assume that it would reach that high of a velocity?

A. It would, indeed.

Linda Jones - Cross

Q. Now, you reviewed the work that Mr. Burmeister did with respect to Q507; is that right?

A. His chemical analyses, yes.

Q. If I understood your testimony correctly, you don't know if you were given everything that he did; right?

A. No, I don't.

Q. Did they show you any chemical analysis done by a gentleman by the name of Roger Martz?

A. Not that I know of.

Q. Do you know Roger Martz?

A. I have met him, but I -- it might sound strange. I've met him, but I wouldn't say I know him.

Q. Would you agree with me, Ms. Jones, that when you're evaluating forensic chemical work done that you need to see all of the tests that's done on that particular item?

A. Not necessarily.

Q. It might be important to know if some of the tests are not consistent with the ones you're looking at. Do you agree with that?

A. I agree with that, yes.

Q. Did the FBI provide you any of the protocols, the written protocols, that were in place when the testing was done on Q507?

A. I've been provided with -- I can't -- I don't know its exhibit number, I'm afraid. I've been provided with a copy of

Linda Jones - Cross

the protocol -- almost the flowchart that we've seen here.

Q. Right. That's not a protocol in your mind, is it?

A. I -- I don't know quite how to answer that. To me, that's a flowchart of -- a route in -- a sequential analysis route.

Q. Sure, but a protocol should have more information; right?

A. Well, I don't know. I mean, "protocol" isn't a word I use. I don't know -- I don't know your definition of a protocol.

Q. Okay. Do you -- you don't use protocols in your lab?

A. I think what you're calling a protocol might equate to what we call a standard method or procedure.

Q. Okay. Now, is the standard method or procedure that you use in your lab in a written form?

A. Yes, it is.

Q. And it details -- let's say, for instance, a GC/Chem test.

A. Yes.

Q. It details every aspect of the GC/Chem testing, the standard that you use.

A. I wouldn't say it contains every detail. It's a set of instructions on how to set up the instrument and how to run the test, but the person using that standard method or procedure is not absolutely bound to do it that way.

Q. Well, the standard procedures that you use in your lab will have a section discussing the machine itself?

A. Yes.

Q. The ovens?

Linda Jones - Cross

A. Yes.

Q. The columns?

A. Yes.

Q. The injection syringe?

A. Yes.

Q. The gas carrier?

A. Yes.

Q. It will have a section on preparation of the machine before you put the samples in; right?

A. Do you mean --

Q. Detailing how to set the gas flow, if it needs to be set, and how to raise the temperature on the oven if you need to raise it a degree or two?

A. That's right, yes.

Q. Tuning and calibrating the machine: That will be detailed in your standards; right?

A. Yes, I think it is.

Q. Probably even have a section telling you how to tune and calibrate the machine if that's something that you need to do; right?

A. I'm not sure if that's in it, particularly in the GC/Chem one; but that general information, yes, would be put in.

Q. Now, the standards that you use in your lab would include a section on the parameters that you're going to utilize within that machine; right?

Linda Jones - Cross

A. Yes.

Q. Now, what's a parameter?

A. Again, I'm interpreting what -- interpreting what you're saying. To me, the parameters would be those you've already mentioned about the instrument conditions and perhaps the comparison -- with the running and the comparison of the unknown with the known standard.

Q. Exactly. And that would be like a variation in retention times; right? A maximum variation?

A. With the GC/Chem, yes.



Q. And you would have set out clearly in writing in your standards what the maximum variation in the retention time could be to call it an "identified" or a "consistent" or a "not identified"?

A. Yes, it does. But the -- the case officer or the forensic case officer is always allowed in their professional judgment to amend that for a particular instance, if they can justify it.

Q. Absolutely. And if you can justify it, you would clearly state that in your notes as to why you deviated from the standards. Right?

A. Yes, that's right.

Q. Okay. Now, you might have a section in your protocols dealing with the analytical procedure itself; right? In other words, what to do, preparation, cleaning, contamination issues?

Linda Jones - Cross

A. If we're talking about -- I presume we're talking now about residue, specifically residue analysis.

Q. Yes.

A. Yes, we do; but for -- I could perhaps clarify what we regard as residue analysis would be looking particularly for the organic explosives but at levels that are invisible to the naked eye.

Q. Sure.

A. So yes, for those sorts of analyses, we have got protocols on how to do things and so on.

Q. You might have a section in your standards or protocols dealing with the use of blanks in the machine and when one should be run through and what to use for a blank; right?

A. Yes, that's right.

Q. You might have a section on the blanks discussing what to do if the blank -- you run the blank through and it shows a hit on the GC/Chem; right?

A. Yes. Actually, I'm not sure that's in the protocol. I'm not sure that's specifically mentioned, but that's what the blank is for.

Q. And -- sure. And your standard would tell you -- or your protocols, if you will, would tell you a section on running the sample through, how to inject it, how to clean the injection area before you inject it: things like that?

A. Some aspects of that, yes.

Linda Jones - Cross

Q. And then your standard or your protocol will give you a section on what the machine is going to tell you at the end.

A. In terms of the standard, yes.

Q. Okay. And your protocol will include within it reference material cited in the protocol or the standard, if you will, so that if you have any questions, you know where to go?

A. I'm sorry. Could we run through that one again.

Q. Sure. I was talking in my "Texas fast." I'm sorry.

A. No, it wasn't so much that.  
Q. Your standard or protocol --  
A. Yeah.  
Q. -- might have a section included within it that cites reference material so that if you have any questions about the running of the machine or the testing --  
A. I'm sorry. Reference documents?  
Q. Okay. I'll go with that?  
A. Yes.  
Q. And that way you know where to go if you have any questions and you can go look it up?  
A. Yes.  
Q. Now, the purpose in having a protocol drafted in this fashion is so that the people that are operating the machinery in your lab know what to do, how to do it, and when to do the different things in the same order all the time; right?  
A. In terms of -- our example, the GC/Chem analysis, that one

Linda Jones - Cross

discrete test, yes.  
Q. And you have standards or protocols, if you will, for the other tests that you use in your lab?  
A. That's right. What we've got -- we've got -- what Mr. Tritico is describing as protocols, we've got those discrete sets of instructions for specific methods. What we haven't got is an overall one that we saw with Mr. Burmeister's protocol of the -- the flowchart of where to start and where to go next with the specific tests.  
Q. Okay. So you don't have -- let me show you what's in evidence as Government's Exhibit 914.  
A. Ah, yes.  
Q. Can you see the 914 on there?  
A. Yes, I can.  
Q. Okay. This is what you were talking about a moment ago. Is that right?  
A. That's right. Yes. This is Mr. Burmeister's protocol.  
Q. Yes. This is the flowchart.  
A. Yes. Yes.  
Q. Okay. Your -- you don't -- you don't have a flowchart?  
A. We don't, no.  
Q. You have a standard or a protocol for each machine in the lab; right?  
A. That's right. So we'd have -- we'd have a standard method for using the SEM. We'd have a standard method for the

Linda Jones - Cross

GC/Chem, the FTIR, and so on.  
Q. And when you have those type of standards or protocols, if you will, other forensic scientists can take your work, read your protocol, and know exactly what you did, or should be able to tell exactly what you did and how you did it; right?  
A. I would hope so, yes.  
Q. And of course, if you deviated from the protocol or the

Q. And of course, if you deviated from the procedure or the standard, you would document that and they would know that?

A. Yes.

Q. Okay. Did -- does your lab have standards or protocols, if you will, regarding contamination issues?

MS. WILKINSON: Your Honor, at this point I'm going to object. I believe that Ms. Jones only reviewed Q507, which doesn't have that invisible trace residue that she's talking about; so this stuff that he's talking about is totally irrelevant. She did not review Mr. McVeigh's clothing.

THE COURT: Objection is overruled.

BY MR. TRITICO:

Q. Does your lab have protocols or standards, if you will, on contamination issues?

A. Our trace explosives analysis is done in a separate suite of laboratories, and we have protocols for working in those -- in that suite of laboratories to minimize the chances of contamination.

Q. And these protocols are in writing?

Linda Jones - Cross

A. In writing, yes.

Q. And everybody who works there has read them and knows what they say?

A. Everyone who is authorized to work in the trace explosives facilities will have -- yes, will be proficient in their use.

Q. As a matter of fact, at your lab in the trace explosives facilities, you can't just come walking in. The door is locked; right?

A. Yes.

Q. And anybody that comes in, they have to follow a strict procedure before they come into the trace facility; right?

A. Yes.

Q. They have to wash their hands?

A. Yes.

Q. They have to be swabbed to ensure that they're not contaminated -- their hands, I mean.

A. Not visitors. Anybody that's actually working on case work swabs their hands.

Q. Visitors wash their hands?

A. Yes.

Q. Put gloves on?

A. Yes.

Q. They wear those Tyvex suits -- is what they call them here. I don't know what they --

A. Tyvex suit is better than a bunny suit.

Linda Jones - Cross

Q. Okay, bunny suit.

Now, what about their feet?

A. They would wear, again, Tyvex overboots.

Q. Okay. Do you have one of those things like a sticky mat that they step on before they come into the trace facility?

A. Yes, that's right, like a flypaper.  
Q. And everybody has to walk across that?  
A. Yes.  
Q. Did the FBI lab show you any standards or protocols from their lab dealing with contamination issues in this fashion?  
A. I don't recall so.  
Q. Have you been to the FBI lab?  
A. Briefly.  
Q. And did you see that type of control measures taken with respect to contamination when you were there?  
A. In the area I visited, no.  
Q. Okay. How about quality control at your lab? Do you all have a system whereby you make a general sweep, if you will, of the explosives trace facility to determine for general contamination from time to time?  
A. Yes, we do.  
Q. How often do you all do that?  
A. Some areas are done on a weekly basis, and other areas less frequently.  
Q. And that's done so that you know -- you know what the

Linda Jones - Cross

general contamination level is in the lab at any given time; right?  
A. The general background levels, yes.  
Q. Because every lab is going to have a problem with that; right?  
A. It depends -- it depends on the lab and the type of work they do.  
Q. I didn't mean to call it a problem. Every lab is going to have some general level of background contamination if they work in trace analysis?  
A. It depends on what trace they're looking for. But yes -- yes, I mean -- I wouldn't imagine all labs would have an explosive --  
Q. Correct.  
A. -- trace backgrounds. It's just that's our area of work, so that's what we've got to monitor for.  
Q. Sure. Now, the reason that you do the quality control or the general sweeps is so that you can keep the level -- keep it at a certain level; right?  
A. Not so much to keep it at a certain level. It's so we know what's there.  
Q. And have you set an arbitrary figure as to it can only get to 1 nanogram, if you will? If it gets above 1 nanogram, then we've got to either report it in our findings or shut down and clean?

Linda Jones - Cross

A. We have a scale, yes. We have a scale of generally -- not quite as you described, but that's the general principle, yes.  
Q. And if you find, for instance, that if it's reached the 1

nanogram, if that's yours, your lab shuts down, cleans up, and rechecks to make sure it's not above that level?

A. It's not quite that extreme. I can't remember the exact number. It's something like -- I don't know if we've explained what a nanogram is. A nanogram is a thousand millionth of a gram, which is pretty small.

Q. I didn't mean to indicate that's what it was.

A. Yes, but what I'm thinking of -- I can't remember. It's something like if we get more than 10 nanograms, we don't stop work but we do clean down and do another quality test. If we have higher levels than that, there are various levels that kick in different procedures generally as you describe.

Q. Now, to be able to do that -- and if that happens, do you report it in your findings?

A. I'm sorry?

Q. If you find that the background contamination level reached above your minimum --

A. It will be documented in the quality assurance records.

Q. And do you notify the people who are receiving the work from the lab that we may have had a background contamination that we can't account for?

A. Well, the cause is investigated. But we're quite a small

Linda Jones - Cross

unit, so we would -- there are only a few of us, so we would know. But yes, the case officers are informed.

Q. Now, when you were briefed by Mr. Hayes and the other two, Mr. Elliott and Mr. Norman, did they inform you that no PETN was found at the scene?

A. No.

Q. Did they inform you that no EGDN was found at the scene?

A. No.

Q. Did they inform you that no uninitiated prills of ammonium nitrate was formed -- found at the scene?

A. No.

Q. Did you have a meeting with Mr. -- Agent Burmeister?

A. Yes, I did.

Q. And did he inform you that no explosives residue was found at the scene? I'm not referring to Q507.

A. No. I'm thinking. Apart from Q507, that's correct.

Q. Did he inform you that he found no uninitiated prills of ammonium nitrate at the scene?

A. No, he didn't tell me that.

Q. How long did you meet with Special Agent Burmeister?

A. I would say perhaps a couple of hours.

Q. Did you discuss with him -- did you make contemporaneous notes of this meeting?

A. Yes.

Q. Did you discuss with him the search that he did on the

Linda Jones - Cross

scene on the two days he was there?

A. I don't recall so. We concentrated mainly on Q507. I'm

A. I don't recall so. We concentrated mainly on Q507. I'm not sure -- if we did, it was in general terms and not in great

depth.

Q. Now, most of your effort with Special Agent Burmeister was dealing with Q507; right?

A. Yes, it was.

Q. Did he go over with you a report from ICI Explosives?

A. No.

Q. Have you ever seen that?

A. Could you help me with which report you're thinking of.

Q. It's a report of some ammonium nitrate prills that were tested. Have you ever seen that?

A. No.

Q. Are you aware of any outside testing other than the FBI lab that was done on Q507?

A. No.

Q. When you looked at Q507, there were no crystals present on it; is that correct?

A. That's correct.

Q. Was Q507 brought to you, or did you come to it?

A. I came to it.

Q. You would have liked to have tested the crystals that were found on Q507, would you not?

A. No.

Linda Jones - Cross

Q. Okay. Let me show you what's been introduced into evidence as Government's Exhibit 665. Now, you looked at this a little while ago; right?

A. Yes, I did.

Q. Now, this is the photograph that you circled the wrong place on for Q507?

A. Yes, I remember that. Yes.

Q. It was kind of hard to tell where it was when you looked at the photograph?

A. When I was given the original photograph, it was easier.

Q. When you first looked at what's now Government's Exhibit 665 --

A. Yes.

Q. -- who was the agent with the FBI who showed it to you?

A. I can't remember.

Q. Somebody pointed out to you on the photograph when you looked at it that that's what they believed to be Q507; right?

A. I can't remember.

Q. That could have happened?

A. It could have done. I can't remember the order that things happened, whether I saw Q507 and then asked or was shown -- I don't know if I saw Q507 and then I asked where was it and I was shown this, or whether it happened the other way 'round.

Q. Now, Ms. Wilkinson asked you about estimating the velocity of detonation of an explosion. Do you recall that?

Linda Jones - Cross

A. Yes, I do.

Q. And you did not estimate a velocity of detonation with respect to this explosion, did you?

A. Not in terms of numbers.

Q. And that's because you can't do that, can you?

A. That's right.

Q. And would you consider it a bad forensic science or bad science for someone to estimate the exact velocity of detonation by looking only at the scene?

A. With an improvised explosive device, I would be very surprised if they could do that.

Q. Now, let me show you --

MR. TRITICO: May I retrieve an exhibit, your Honor, from under the table?

THE COURT: Yes.

BY MR. TRITICO:

Q. Government's Exhibit 654 is the latch; is that correct?

A. It is, yes.

Q. Can you see it?

A. Yes.

Q. Okay. Now, this part that's got the pitting and cratering on it that you discussed is what you told us was on the inside of the box wall. Is that right?

A. No, it was on the outside of the box wall.

Q. Facing in?

Linda Jones - Cross

A. Facing in.

Q. That's what I meant to say.

A. I'm sorry. Yes.

Q. Now, you don't know what happened to the box wall; right?

A. No, I don't.

Q. And if I understand you correctly, this was in your opinion propelled away backwards from the truck and landed into the Regency Towers. Is that right?

A. Yes.

Q. Was it your understanding that it went through a window?

A. It -- I'm not sure I've been told it went through a window. That's how I imagine it entered.

Q. How many crystals of ammonium were pulled off of Government's Exhibit 654?

A. I don't know.

Q. Did Special Agent Burmeister show you any testing with respect to Government's Exhibit 654 as it relates to crystals of ammonium nitrate?

A. I don't remember, but I don't think so.

Q. Now, you testified that in your work in Great Britain, you don't normally find traces of PETN, for example. Was that your testimony?

A. It depends on the type of bomb.

Q. So it can be done?

A. I've found PETN -- we have found PETN, but usually from

Linda Jones - Cross

relatively small bombs which contain PETN as part of a convention -- a manufactured explosive.

Q. But you have found PETN?

A. Yes. When PETN has been part of the main charge.

Q. You have found uninitiated prills of ammonium nitrate before, haven't you?

A. Not that I remember, no.

Q. Has anybody in your lab?

A. Not that I'm aware of, no.

Q. Have you discussed it with Dr. Robin Hiley?

A. No. Dr. Robin Hiley doesn't conduct scene examinations.

Q. Now, you've rarely found traces of explosives on the scene -- right -- in your investigations?

A. Are we confining this to the large truck bombs?

Q. Sure.

A. Or explosive scenes generally?

Q. No, I'll confine it to the large bombs.

A. In the large -- in the large truck bombs, I've never found any crystals. I have found ions.

Q. Just ions?

A. Yes. I've -- sorry, I just -- I've -- the only one -- I appreciate -- this isn't going -- you're not going to be using this, but one of the -- the only time I have recovered crystalline materials is when the bomb didn't explode properly and even the booster didn't explode; so I mean I got pounds --

Linda Jones - Cross

I got pounds of unconsumed explosive. But I think that's an example apart.

Q. Got more than you needed?

A. I'm sorry?

Q. Got more than you needed?

A. I certainly did.

Q. Was that a impoverished explosive device?

A. No.

Q. Sometimes impoverished explosive devices, ANFO in particular, don't explode completely. Is that fair?

A. That can happen, yes.

Q. And it depends on the mixing and how you did it?

A. That's part -- that's a factor.

Q. Depends on the ratio of the fuel oil to the ammonium nitrate?

A. That can -- that can contribute, yes.

Q. Too much fuel oil will make it not operate properly; right?

A. No. It's -- not so much it won't operate properly. It's that it -- you won't get -- you won't be maximizing your energy output for the materials that you're putting in.

Q. Will too little fuel oil be the same answer?

A. Yes, that's right. You won't be getting the optimum performance.

Q. Now, you said that you found ions --

^



A. Yes.

Linda Jones - Cross

Q. -- before.

And ion -- is that like a nitrate?

A. Yes. As Mr. Burmeister explained, it's, for example, ammonium ion and nitrate ion but not bound together, glued together in the same crystal.

Q. And when you find an ion like a nitrate ion, you really don't know where it came from; right?

A. No, but there are other factors I take into account in interpreting those findings.

Q. Sure. Are ions a part of a crystal?

A. They are formed when the crystal dissolves.

Q. So they make up the component parts of the crystal?

A. Yes, that's right.

Q. Okay.

A. But they're not ions when they're in the crystal. I'm sorry. This is technical, but I can't say that there are ions in the crystal; but you can make the crystal into ions.

Q. You couldn't tell if they have ions in them until you put them in a machine, break them down, and see what's in there?

A. Well, I know there are -- I know there are potential ions in there because I'm a chemist.

Q. Okay. You know they're potentially there, but you don't know till you test?

A. That's right.

Q. Okay. Okay. Now, is it true that in the last 10 years

Linda Jones - Cross

several major large truck bomb cases in Great Britain have been reversed because of the forensic science?

MS. WILKINSON: Objection, your Honor.

THE WITNESS: No. I'm sorry.

THE COURT: What's the objection?

MS. WILKINSON: Relevance.

THE COURT: Overruled.

BY MR. TRITICO:

Q. Is that true?

A. No.

Q. How about the Birmingham Six? Was that case reversed?

A. That was nothing to do with a large truck bomb.

Q. How about the Guildford Four?

A. That wasn't relating to a large truck bomb.

Q. How about the Maguire family?

A. That was nothing to do with a truck bomb. They were also 15 or more years ago.

Q. Great Britain does not have the death penalty, do they?

A. No.

MR. TRITICO: I thank you, ma'am.

I pass the witness.

THE COURT: Any redirect?

MS. WILKINSON: Just briefly, your Honor.

-----, -----  
THE COURT: All right.

REDIRECT EXAMINATION

Linda Jones - Redirect

BY MS. WILKINSON:

Q. Ms. Jones, Mr. Tritico asked you a series of questions about your protocols or standard procedures for trace analysis?

A. Yes, he did.

Q. Do you consider the crystals on Q507 trace evidence?

A. No.

Q. What do you consider it?

A. I wouldn't actually describe them as bulk, but they were -- from the photographs and the photomicrographs I've seen, they were visible. I consider a trace as something I can't see.

Q. And in your lab, will you follow different procedures, once you realized you had something visible like the crystals on Q507, than the procedures you follow in the trace unit?

A. Yes, that's right.

Q. You have reviewed Agent Burmeister's notes and chromatograms and charts that he did in relation to Q507; right?

A. Yes, I have.

Q. Were you allowed to ask any questions you wanted in this investigation and in your analysis of his findings on Q507 and the crime-scene evidence collection?

A. Yes.

Q. And did you ask questions about Q507?

A. Yes.

Q. Did you specifically ask about how it was recovered?

Linda Jones - Redirect

A. Yes.

Q. Did you send in questions to Agent Norman?

A. Yes.

Q. Was it your understanding that someone responded to those questions?

A. Yes.

Q. Who responded to those questions?

A. Ron Kelly responded to some and Steven Burmeister to others.

Q. And all of those documents: Did you put those into your notes?

A. Yes.

Q. Is it your understanding your notes were turned over to the defense?

A. That's my understanding.

Q. Now, in reviewing all of Agent Burmeister's work on Q507, how confident were you in the procedures that he followed?

A. Totally confident.

Q. And have you discussed with him his knowledge of the instruments that he used to analyze Q507? Maybe I didn't -- go ahead.

A. I'm sorry. I don't think I have, but I know Steven Burmeister is an excellent chemist; and I wouldn't expect to have to discuss the details -- those details with him.

Q. And did you review the blanks and the other methods he used

Linda Jones - Redirect

to determine that there wasn't contamination in the instruments that he was using to test Q507?

A. Yes, I did.

Q. And in your opinion, are those proper procedures to use to determine that the instruments are not contaminated?

A. Yes, they were totally sound.

Q. Okay. Now, Mr. Tritico showed you a piece of the door latch that was recovered and asked you about whether any residue was found.

A. He did, yes.

Q. And in Q507, you saw that there were crystals recovered; correct?

A. Yes.

Q. Is there a reason in your mind why it would be more likely that the wood portion of the Ryder truck would retain those crystals than the metal fragment?

A. Yes.

Q. Tell the jury why.

A. I think probably the wood -- as the wood was delaminating and shattering, the wood might well have flexed, so those little particles of ammonium nitrate could have been trapped in amongst the fibers of the wood; so really, the wood was a good receptor, a good surface to catch any residues, whereas the metal is a hard, flat surface and would be less amenable to trapping such crystals.

Linda Jones - Redirect

Q. You were also asked about the efficiency of an improvised explosive device if ammonium nitrate prills are used in it. Do you recall that?

A. Yes.

Q. And Mr. Tritico suggested to you some phrase called "an impoverished device."

A. Yes.

Q. Are you familiar with that phrase?

A. I interpreted his meaning. I think probably what he meant is that you haven't -- or I interpreted what he meant as not having enough fuel.

Q. Now, are there ways to compensate for the lack of fuel or the overabundance of fuel in an improvised explosive device?

A. Yes.

Q. And how would one compensate for that?

A. With the booster system.

Q. And does that mean you would add additional booster to the device?

A. You could do, yes.

Q. Would that cause the device to detonate properly?

A. It could do, yes.

Q. Now, if you had a device that was between 3,000 and 6,000 pounds, as you've opined in this case --

A. Yes.

Q. -- would 400 sausages of Tovex, Blastrite gel, be

Linda Jones - Redirect

sufficient to boost a device?

MR. TRITICO: Objection, leading. Calls for a speculation.

THE COURT: Sustained.

BY MS. WILKINSON:

Q. What would be sufficient to boost a device that was 3,000 to 6,000 pounds of an ammonium-nitrate-based explosive?

A. It would depend on -- it would depend on how the explosive was mixed and contained.

Q. Assuming that it was contained in the truck as you've described --

A. Yes.

Q. -- what type of booster would be required?

A. A cap-sensitive -- a cap-sensitive high explosive, of which Tovex is an example.

Q. What quantity or range of quantity would be required to detonate such a device?

A. Again, it depends how the -- how the 3- to 6,000 pounds is contained. If it was in a number of separate containers, it would be sensible to have at least -- I'm sorry. I don't know -- I don't know the weights, I don't know the packaging of typical explosives, booster charges that are available in the United States; but I would have said perhaps one booster sausage per container.

Q. And what if you didn't have it in a container? What if you

Linda Jones - Redirect

had all of that main charge inside the truck itself?

A. I don't know. It would depend on the booster charge.

Q. And approximately what size booster charge would you use for that if it wasn't contained in individual containers?

A. I would use several pounds.

Q. And that's all you would need?

A. Yeah.

Q. Within a range?

A. I was going to say this is -- yes. Yes, I mean you could use as much as you like. I'm trying to get a feel for the minimum. This is very, very much a guesstimate, but I would have thought 10 to 20 pounds would be sufficient.

Q. So if you had more than that, that would only assist in the detonation of the main charge?

A. Yes. That would give you added confidence that it was going to work.

Q. Now, if this device had ammonium nitrate and some fuel in

it --

A. Yes.

Q. -- would you believe that some containers were used to contain the fuel and the ammonium nitrate?

A. I would have expected so, yes.

Q. Now, you told us that you looked at some plastic fragments from the scene; is that right?

A. Yes, I did.

Linda Jones - Redirect

Q. Do you recall whether they were white or not?

A. They were very dirty, but I think they were originally white.

Q. And you said that your conclusion was that they had been in close proximity to the explosive device; is that right?

A. The damage is consistent with that, yes.

Q. Can you say how close to the explosive they were?

A. No.

Q. Now, when a device functions, an improvised explosive device, for it to detonate effectively, what ratio of the main charge and booster would you need? Again, you can give us a range.

A. Again, it depends very much on the size and shape. I -- off the top of my head, I don't think I can give a considered value.

Q. Now, in your analysis of the crime scene and of the debris recovered, do you have any reason to believe that the explosive device that was contained in the Ryder truck did not detonate effectively?

A. No. I think it detonated efficiently.

Q. And tell us why you believe that?

A. I believe that because of the damage patterns, the damage to the vehicle, the lack of residue. Everything that I have seen supports relatively -- relatively high-efficiency detonation.

Linda Jones - Redirect

MS. WILKINSON: No further questions.

MR. TRITICO: I have just a few.

THE COURT: All right.

RE-CROSS-EXAMINATION

BY MR. TRITICO:

Q. When you sent and asked for the questions to be answered, you got a response from a man by the name of Ron Kelly?

A. Part of the response was from Ron Kelly, yes.

Q. His response covered less than half a page; is that right?

A. I think it did, yes.

Q. He did not go into detail with you what he did on the scene in April of 1995, did he?

A. There was some detail. He answered my questions.

Q. But he didn't go into detail about his activities, did he?

A. Not so far as I remember, no. In terms of how the item was picked up and packaged and so on; but I don't know what he did

for the rest of the day.

Q. Ms. Wilkinson had asked you if you had looked at some plastics?

A. Yes, she did.

Q. You didn't see any test reports done by the lab on those plastics, did you?

A. No.

MR. TRITICO: I thank you, ma'am.  
I pass the witness.

Linda Jones - Recross

MS. WILKINSON: Just one question, your Honor.

THE COURT: All right.

MS. WILKINSON: May I ask it if from here?

THE COURT: Sure.

REDIRECT EXAMINATION

BY MS. WILKINSON:

Q. When you examined Q507, Ms. Jones, did you notice whether there was any burn damage to the piece?

A. I don't remember that there was any burn damage; and from looking at it today, the -- there isn't any burn damage.

MS. WILKINSON: No further questions.

MR. TRITICO: I have nothing further, your Honor.

THE COURT: You may step down.

THE WITNESS: Thank you, your Honor.

THE COURT: Are you going to excuse this witness?

MS. WILKINSON: Yes, your Honor. She needs to return to England for testimony, so if Mr. Tritico can let us know if she's excused . . .

MR. TRITICO: Yes.

THE COURT: All right. You're excused.

THE WITNESS: Thank you very much, your Honor.

THE COURT: Well, it's 5:00, so -- well, actually it's a minute -- what's a minute?

We'll recess at this time, members of the jury; and again, of course, I must remind you and caution you of the importance at this and all recesses of being very, very careful and avoiding anything that may appear in any newspapers, magazines, radio, television, any form of communication relating not only to the trial of this case but anything connected with it, anything that relates to the issues that are to be decided by you as the jury in this case, remembering you will decide it on the basis of what you hear and see in this room and nothing outside of the room.

So -- and in addition, of course, refrain from discussion among yourselves with respect to it. Let the matter rest each recess, and you'll come back to it at 9:00 tomorrow morning. You're excused until then.

(Jury out at 5:00 p.m.)

May I have counsel at the bench, please.

MR. JONES: That's just what we were going to ask, your Honor.

(At the bench:)

(Bench Conference 105B1 is not herein transcribed by court order. It is transcribed as a separate sealed transcript.)

(In open court:)

THE COURT: We apologize for this side bar conference. Generally, I don't do side bar conferences; but in this circumstance, where we are on the case, I decided to ask the lawyers about their estimates with respect to scheduling. And that's what we have been discussing, the scheduling of witnesses, anticipating that at sometime tomorrow the Government will rest its case and accordingly get ready for defense witnesses. So that's what we talked about.

The Court is in recess. 9:00 tomorrow morning.

(Recess at 5:11 p.m.)

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WITNESSES

Steven Burmeister

Redirect Examination Continued by Ms. Wilkinson 9837

Recross-examination by Mr. Tritico

Redirect Examination by Ms. Wilkinson

Linda Jones

Direct Examination by Ms. Wilkinson

Voir Dire Examination by Mr. Tritico

Direct Examination Continued by Ms. Wilkinson 9925

Cross-examination by Mr. Tritico

Redirect Examination by Ms. Wilkinson

WITNESSES (continued)

(Linda Jones)

Recross-examination by Mr. Tritico

Redirect Examination by Ms. Wilkinson

PLAINTIFF'S EXHIBITS

Exhibit	Offered	Received	Refused	Reserved	Withdrawn
655	9921	9921			
695	9891	9891			
824A					
847	9895	9895			
848	9888	9888			
850	9898	9898			
852	9899	9899			
854	9889	9889			

DEFENDANT'S EXHIBITS

Exhibit	Offered	Received	Refused	Reserved	Withdrawn
ZZ665A	9930	9930			
ZZ665B	9930	9930			

\* \* \* \* \*

REPORTERS' CERTIFICATE

We certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. Dated at Denver, Colorado, this 20th day of May, 1997.

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Paul Zuckerman

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Kara Spitler