

1 Q. Would that in any way indicate that the
2 person was still alive, or would it be just involuntary
3 muscle contractions?

4 A. It would most likely just be part of the
5 terminal event.

6 MR. FORTNER: That's all I have, Your
7 Honor. Thank you.

8 MR. HORAN: That's all I have, Your
9 Honor.

10 THE COURT: Dr. Barnhart, thank you for
11 your testimony. You may be excused. You
12 are prohibited from talking about the case
13 until we conclude this trial.

14 Neither one of your lawyers need her
15 again, in all likelihood?

16 Go back to Jackson. Just don't talk
17 about the case until we conclude.

18 A. Thank you.

19 THE COURT: And thank you for your
20 testimony.

21 How you jury members doing?

22 Call your next witness.

23 MR. HORAN: Lori Beall.

24 LORI BEALL,

25 HAVING BEEN CALLED AS A WITNESS BY THE STATE,
26 PRODUCED AND FIRST DULY SWORN, TESTIFIED AS FOLLOWS:

27

28 DIRECT EXAMINATION BY MR. HORAN:

29

1 Q. State your name, please.

2 A. Lori Beall. It's L-O-R-I, B-E-A-L-L.

3 Q. Ms. Beall, where are you employed?

4 A. At the Mississippi Crime Laboratory.

5 Q. In what capacity?

6 A. I'm a forensic scientist specializing in
7 firearms identification.

8 Q. Can you give us the benefit of your
9 educational background?

10 A. Yes.

11 I have a bachelor's degree from the University of
12 Southern Mississippi in criminal justice with a minor
13 in forensic science.

14 Q. Can you give us the benefit of any continuing
15 education outside of USM's undergraduate degree
16 relative to your position?

17 A. Yes. I completed an extensive two-year
18 training program at the Mississippi Crime Laboratory
19 specializing in firearm and tool mark examination and
20 identification.

21 Q. Do you stay abreast of ongoing developments
22 in that field?

23 A. Yes, I do. I'm a member of the Association
24 of Firearm and Tool Mark Examiners, and I'm also
25 certified by that association.

26 Q. Have you ever been qualified in that field of
27 firearms examination as an expert?

28 A. Yes, I have.

29 Q. Have you testified in the circuit courts in

1 the state of Mississippi?

2 A. Yes, I have.

3 Q. Have you testified in any other states or has
4 it been exclusively in Mississippi?

5 A. Just in Mississippi.

6 Q. And have you ever been disqualified in the
7 field of firearms examination?

8 A. No, I have not.

9 MR. HORAN: Your Honor, at this point in
10 time we would tender Ms. Beall as an expert
11 in the field.

12 THE COURT: Would you like to voir dire?

13 MR. FORTNER: No, Your Honor, I don't
14 have any objections.

15 THE COURT: The Court accepts Ms. Beall
16 as an expert in these specific fields.

17 Q. Ms. Beall, in this particular case, which was
18 Crime Lab Number 11-012102 -- okay?

19 A. Yes, sir.

20 Q. Did you perform any tests relative to
21 evidence submitted to you?

22 A. Yes, I did.

23 Q. First of all, what examinations did you
24 perform relative to -- let me hand you -- I'm just
25 going to show the -- I'm showing you Exhibit 37, and I
26 ask that you look at it and see if you can see anything
27 on either the box or inside that would give you a clue
28 as to identifying that exhibit.

29 THE WITNESS: Your Honor, could I

1 request some gloves before I handle it?

2 THE COURT: Yes, ma'am, they will be
3 retrieved for you as we speak.

4 Q. While he's doing that, I'm going to spin the
5 box around. This might be helpful to you.

6 THE COURT: If you need to stand, you
7 certainly may.

8 Q. You see the label on the rear of the box?

9 A. Yes, I do.

10 Q. Can you tell us basically what that label
11 shows you?

12 A. This is the Mississippi Crime Lab bar code
13 label which identifies it as Crime Lab case
14 Number 11-02102 (sic) as our Crime Lab submission 009
15 from Marion County Sheriff's Office.

16 THE COURT: From Marion County?

17 THE WITNESS: Yes, sir.

18 (Witness put on gloves).

19 First, Your Honor, I would like to
20 verify the firearm is safe.

21 THE COURT: You may.

22 THE WITNESS: Yes.

23 Q. I just wanted you to identify it. That has a
24 marking of 009, y'all's Crime Lab number?

25 A. Yes, sir.

26 Q. Are did you perform any tests relative to
27 that particular firearm?

28 A. There were two separate requests for that
29 particular firearm. The first request was to compare a

1 projectile and a cartridge casing to identify if it was
2 fired in that particular firearm.

3 Q. There was a projectile recovered and
4 submitted, I believe. And what was y'all's Crime Lab
5 number on that projectile?

6 A. If I may refer to my notes?

7 Q. Sure.

8 A. The projectile was Crime Lab submission 6.
9 And there was also 2, which included some lead
10 fragments.

11 Q. And was that the submission from the medical
12 examiner's office?

13 A. Yes, sir.

14 Q. And you compared the fragment submitted from
15 the medical examiner's office to this particular gun;
16 is that correct?

17 A. The lead fragments that were collected were
18 of no comparison value because they were extensively
19 mutilated. However, the intact projectile that I had I
20 did compare to known test fires from this particular
21 firearm.

22 Q. As to, I believe it's Exhibit -- I'm handing
23 you an evidence bag that has previously been marked for
24 identification as Exhibit 42. Could you look at that
25 and can you identify it by your Mississippi Crime Lab
26 label?

27 A. Yes. It also bears the Mississippi Crime Lab
28 case bar code label with the case number 11-012102, and
29 is Crime Lab submission 006.

1 Q. And did you have an opportunity to examine
2 those fragments that were submitted? I believe those
3 were submitted from the Sheriff's Department. Is that
4 correct?

5 A. Yes. The submission 6 of the Crime Lab was a
6 pretty much intact projectile that I had.

7 Q. And were you able to examine it and come to
8 some conclusion relative to it and the gun that I had
9 previously showed you?

10 A. Yes, I was. I was able to determine that it
11 bore the same class characteristics as this firearm,
12 being a 25 caliber, 6 lands and grooves, with a
13 directional twist of right.

14 Q. So you could include it as the type of
15 projectile that would be fired from that gun, but you
16 cannot tie it directly to that gun?

17 A. The class characteristics were consistent.
18 However, the individual characteristics were not there
19 to be identified.

20 *MR. HORAN: Your Honor, I ask at this*
21 *point in time the exhibit, which was*
22 *previously marked for identification, be*
23 *received into evidence.*

24 *THE COURT: Number 42?*

25 *MR. HORAN: Yes, Your Honor.*

26 *THE COURT: Without objections, I will*
27 *allow it. But I do have a question.*

28 *The projectile, the bullet she has just*
29 *testified to, the fragment, reasonably came*

1 from which exhibit number?

2 MR. HORAN: I'm sorry, Your Honor?

3 THE COURT: We've been talking about the
4 bullet fragment, Exhibit 42, now.

5 MR. FORTNER: I think it's 37, Judge.

6 THE COURT: Thank you.

7 MR. HORAN: Oh, from the gun, 37, yes.
8 There's no objection to the entry of 42,
9 right?

10 MR. FORTNER: No objection.

11 THE COURT: So Exhibit 42 is now listed
12 as an exhibit for evidentiary purposes.

13 (EXHIBIT 42 ENTERED)

14 Q. Just for the jury's benefit, that was marked
15 as the projectile that was recovered from the chair
16 itself?

17 A. That's what the description says on this
18 envelope, yes, sir.

19 Q. And then what was your testimony, ma'am,
20 concerning Exhibit 44, the -- if we can get back to...

21 I'm showing you Exhibit 44. Can you identify
22 that?

23 A. Yes. It also bears the Mississippi Crime Lab
24 bar code label bearing the same case number of
25 11-012012, Crime Lab submission 005.

26 Q. And did you perform any examination relative
27 to that -- that's the casing?

28 A. Yes, sir. That's a .25-06 caliber cartridge
29 casing.

1 Q. And you performed an examination as to that
2 relative to the gun I just showed you. I believe it
3 was Exhibit 37, I believe?

4 A. Yes, I compared it to test fires from the gun
5 in Exhibit 37 and verified that it was fired in that
6 firearm.

7 Q. And with reference to the fragments that were
8 submitted from the Crime Laboratory, the medical
9 examiner's office, do you have the submission on that
10 particular piece of evidence?

11 A. Metal fragments that were submitted were
12 Crime Lab submission 2.

13 Q. And were you able to determine anything
14 concerning them? I believe you testified -- concerning
15 them relative to this particular gun?

16 A. No, sir. They were extensively mutilated,
17 and they had no comparison value.

18 Q. In addition, you said you performed some
19 other tests concerning the .25-06 rifle that you
20 previously identified; is that correct?

21 A. Yes, I did.

22 Q. And what were those tests?

23 A. It was requested that I do a functional
24 reliability test on the firearm to make sure the gun
25 was functional as it was manufactured to be.

26 Q. And did you, in fact, do a functionality test
27 concerning that particular gun?

28 A. Yes, I did.

29 Q. What goes into the testing for functionality

1 of a firearm such is that?

2 A. The firearm is first test fired. We fire
3 four live rounds through the firearm into a water
4 recovery tank. Once it is test fired, then we do a
5 3-foot drop test with the manual safety on, to see if
6 it would discharge accidentally. Also we do a drop
7 test with the safety off, to see if it would discharge
8 accidentally. We also have special mallets that we
9 use. It's a rawhide mallet that we use. We also
10 chamber a live empty, which is just a cartridge that
11 has the projectile removed but the primer is still
12 intact, so we would know that it would go off. We
13 would chamber that live empty, take the rubber mallet,
14 put the safety on. We would hit the bolt in
15 question -- on this firearm it is a bolt action,
16 meaning it has a bolt that actuates the cartridge into
17 the chamber. Once that is actuated into the chamber,
18 if you hit the back of that bolt, the firearm would not
19 discharge accidentally with the safety on or with the
20 safety off.

21 Q. So you performed those tests on this
22 particular rifle, and there was no discharge or
23 accidental discharge relative to this gun, correct?

24 A. No, sir.

25 Q. Did it appear, based on your knowledge, to be
26 in good working order?

27 A. Yes, it was.

28 Q. Did you test, in any form or fashion, the
29 firing mechanism, i.e. the trigger and the poundage it

1 would take to fire that particular trigger, to pull and
2 make that trigger release the firing pin?

3 A. Yes. Part of the examination requires us to
4 do a trigger pull. What this involves is we have
5 National Rifle Association certified weights that we
6 use to verify the trigger pull. What this is, is you
7 have a bar that holds different pounds. The first one
8 that we use starts at 1 pound, and it rests on the
9 cocked trigger. Once the hammer is cocked, then you
10 rest it on the trigger and you add weight until the
11 trigger is released, firing the firearm.

12 Q. And you performed that test on this
13 particular gun; is that correct?

14 A. Yes, I did.

15 Q. And what was the poundage required to release
16 the firing pin?

17 A. Greater than 5 pounds.

18 Q. And in the scale of -- is that within norm
19 with reference to that particular gun?

20 A. According to technical data from this
21 particular firearm, it has an adjustable trigger. But
22 on this particular firearm, it was greater than
23 5 pounds. It can be adjusted up or down, but this one
24 had not been adjusted. It was at five.

25 Q. When you say up or down, what is the least
26 that one could adjust down to, to fire it?

27 A. The technical specs said 3 pounds, but it
28 could be adjusted down too.

29 Q. And this one was over 5 pounds?

1 A. Yes, it was.

2 Q. And, again, is that -- is there no range as
3 far as for safety reasons? Is that in a safe range
4 relative to a firearm in general?

5 A. The manufacturer specifications does not
6 recommend going any lower than 3 pounds.

7 Q. Okay.

8 Ms. Beall, with reference to various types of
9 ammunition that would be fired through that particular
10 gun or that type of gun, what are the different types
11 of projectiles that generally you would see fired
12 through that type of weapon?

13 A. It will be a rifle round, which is harder
14 than handgun ammunition. You could have a jacketed
15 hollow point, which there is a hole in the center of
16 the tip of the projectile. You could also have a
17 jacketed soft point, which has a lead tip on it or
18 sometimes it could have a plastic or nylon ballistic
19 tip. What these type of projectiles do, the hollow
20 point or the soft point, they can expand. The full
21 metal jacket is fully encased in copper, and it has
22 less of a capability of fragmenting upon impact.

23 Q. And the lead core or hollow point, when they
24 strike an object, a solid object such as a skull, what
25 is the reaction to the projectile itself, generally
26 speaking?

27 A. Once it hits the target, or in this case hit
28 the head, it would expand upon impact. And it is meant
29 for stopping power. So it's going to open up and

1 just -- it is meant for destruction, basically.

2 Q. And would it also oft times fragment?

3 A. Yes, it can, it will fragment.

4 Q. Into various sizes of fragments?

5 A. Yes.

6 Q. And when it does that, do they go off in
7 different angles, generally, or do you know?

8 A. Yes, because a projectile is spinning when it
9 hits the target. It can go in all different
10 directions. Because rifles are rifled; they have a
11 direction of twist. That's what keeps the projectile
12 going in a straight line. And once it leaves that
13 barrel, it still has that turn. Basically it's almost
14 like if you've seen a football thrown, it will go in a
15 spiral direction. So once it hits that target, it is
16 still moving. And if you think about an expanding
17 projectile, it will open up and it will be spinning and
18 tearing up whatever it hits.

19 Q. And fragmenting into different directions?

20 A. Yes.

21 Q. Ms. Beall, you also were submitted another
22 gun in this particular case; is that correct?

23 A. Yes, I was.

24 Q. And what was that?

25 A. It was a 20-gauge Benelli shotgun.

26 Q. What Crime Laboratory number was it given as
27 far as for the packaging?

28 A. It was Crime Lab submission 8.

29 Q. And you were also submitted a hull relative

1 to that gauge, a 20-gauge hull?

2 A. Yes. I was requested to compare that
3 20-gauge hull to the shotgun in our Crime Lab
4 submission 8.

5 Q. What was that submission number?

6 A. It was Crime Lab submission 7.

7 Q. So you compared 7 to 8?

8 A. Yes, sir.

9 Q. I'm handing you an envelope. Can you
10 recognize this?

11 A. Yes, I recognize it. It has our Crime Lab
12 case number 11-012102, and it is Crime Lab submission
13 007.

14 **MR. HORAN:** For the record, Your Honor,
15 that is Exhibit Number 41.

16 **THE COURT:** Thank you.

17 Q. And you compared that to Exhibit Number 36?
18 I'm not going to open it, but you see the Mississippi
19 Crime Lab number back there?

20 A. Yes, it does identify it as 11-012102,
21 Mississippi Crime Lab submission number 008.

22 Q. And the result of your examination of that
23 hull relative to that gun, what was your findings?

24 A. The shotgun hull in Crime Lab submission 7
25 was fired in the shotgun in submission 8.

26 **MR. HORAN:** Your Honor, I tender the
27 witness.

28 **THE COURT:** Mr. Tom.
29

1 CROSS-EXAMINATION BY MR. FORTNER:

2

3 Q. Ms. Beall, what date were you requested to do
4 the ballistics tests to compare these weapons with the
5 casings or fragments?

6 A. The first submissions came in on June 21st of
7 2011.

8 Q. And when did the next ones come in? Were
9 those the submissions for all the ballistics, or were
10 there subsequent ones?

11 A. There was another request that came in for
12 the functionality test. The firearm in Crime Lab
13 submission 9 was resubmitted for a functionality.

14 Q. When were you asked to test this .25-06 for
15 functionality?

16 A. I'm not sure of the exact date, but I know
17 that it was in January.

18 Q. January --

19 A. Of 2013.

20 Q. You mean within the last month?

21 A. Yes.

22 Q. And who made that request?

23 A. It was submitted by Jamie Singley of
24 Marion County S.O.

25 Q. And prior to January of 2013, no
26 Marion County sheriff's office or anyone else asked the
27 Crime Lab to look or do a functionality test on this
28 .25-06 rifle; is that correct?

29 A. No.

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MR. FORTNER: That's all I have, Judge.

Thank you.

MR. HORAN: No redirect.

THE COURT: Ma'am, you may step down.

We thank you for your testimony. You may be finally excused and go back to Jackson, but you can't talk about the case until we conclude.

A. Yes, sir.

MR. HORAN: Your Honor, could we have a short recess to discuss a matter?

THE COURT: Jury it is a good time to take a break. Please take a short recess. We'll try to take a 15-minute recess.

Don't talk about the case. Don't look it up.

(JURY OUT)

(OFF THE RECORD)

THE COURT: It is my understanding that the lawyers need to put some matters on the record before we call the jury in.

Is that correct?

MR. FORTNER: Yes, sir.

THE COURT: Is this proffered by the State or the defense?

MR. FORTNER: It is going to be proffered by the State, and I have an objection to it. We thought we might go ahead and air that out before you brought