

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF FRESNO

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EDWARD W. HUNT, in his official
capacity as District Attorney of
Fresno County, and in his personal
capacity as a citizen and taxpayer,
et. al.,

Plaintiffs,

vs.

STATE OF CALIFORNIA; WILLIAM
LOCKYER, Attorney General of
State of California; CALIFORNIA
DEPARTMENT OF JUSTICE; Does 1-100,
Defendants.

CERTIFIED COPY

No. 01CECG03182

Deposition of

MICHAEL FRANCIS GIUSTO

Friday, February 22, 2008

Reported by:

TRACY LEE MOORELAND

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21
22
23
24
25

INDEX

Examination by	Page
Mr. Davis	4

EXHIBITS

Deposition of MICHAEL FRANCIS GIUSTO
Friday, February 22, 2008

Number		Page
A	Bureau of Forensic Services mission, two pages	11

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1 BE IT REMEMBERED, that on Friday, February 22,
2 2008, commencing at the hour of 10:21 a.m., thereof, at
3 the offices of Phillips Legal Services, 350 University
4 Avenue, Suite 270, Sacramento, California, before me,
5 TRACY LEE MOORELAND, a Certified Shorthand Reporter in
6 the State of California, there personally appeared

7 MICHAEL FRANCIS GIUSTO,

8 called as a witness herein, who, having been duly sworn
9 to tell the truth, the whole truth, and nothing but the
10 truth, was thereupon examined and interrogated as
11 hereinafter set forth.

12 --oOo--

13 MR. BECKINGTON: Before we get started,
14 Mr. Giusto has brought a couple of pages here. What I'm
15 going to show counsel is just some pages that have been
16 printed from a document entitled Glossary by the
17 Association of Firearm and Toolmark Examiners.

18 MR. DAVIS: Thank you.

19 EXAMINATION BY MR. DAVIS

20 Q. Could you please state and spell your name for
21 the record.

22 A. Michael Francis Giusto, G-i-u-s-t-o.

23 Q. Have you taken any drugs or medications or
24 alcohol that's going to have any effect on your ability
25 to testify to the best of your ability?

1 A. No, sir.

2 Q. Do you have any physical impairments that might
3 affect your ability to testify?

4 A. No.

5 Q. Have you ever had your deposition taken before?

6 A. Yes, sir.

7 Q. How many times?

8 A. My career, probably somewhere around a half a
9 dozen.

10 Q. Those are all career-related depositions?

11 A. Yes, sir.

12 Q. When was the last one?

13 A. I'm going to estimate probably 10 years ago. I
14 don't remember exactly. It involved a criminal -- or I
15 think it was an officer-involved shooting or something.

16 Q. What were you called to testify about?

17 A. As a criminalist I had processed a shooting
18 scene and did some physical examinations.

19 Q. Of the firearms?

20 A. Yes.

21 Q. What were you examining the firearms for?

22 A. Function testing and determining which
23 particular expended components were fired from certain
24 guns, as well as -- that's both from the officers and
25 the suspect.

1 Q. Like bullets imaging to determine whether or
2 not this bullet came from that firearm?

3 A. Yes.

4 Q. Is that all you testified for in that matter?

5 A. No, it was also bullet trajectory
6 reconstruction, blood spatter interpretation, general
7 things relating to physical evidence at the scene.

8 Q. Did you have to identify the firearm?

9 A. Yes.

10 Q. What kind of firearm was it?

11 A. It was sidearms from the officers as well as
12 the suspect's shotgun.

13 Q. Do you know what kind of sidearms they were?

14 A. I don't remember offhand. There was probably a
15 mixture of, I think, like Glocks and SIGS. I don't
16 remember.

17 Q. Handguns?

18 A. Yes.

19 Q. Do you remember if any of them had threaded
20 barrels?

21 A. None of them did.

22 Q. What about the shotgun, do you remember what
23 kind of shotgun that was?

24 A. This was an old case. I don't remember. It
25 was either a Mossberg or a Remington. I don't remember.

1 Q. Before I go on to the next case, you understand
2 that everything you're saying holds the same weight as
3 if you were testifying in a court of law?

4 A. Yes, sir.

5 Q. Same penalty of perjury as if -- as if you make
6 a misstatement in a court of law as well?

7 A. Yes, sir.

8 Q. What's the second case that you --

9 A. I don't remember. We're talking depositions.
10 These were civil cases that resulted from criminal cases
11 that I had processed either the scenes or actually did
12 the examination of the physical evidence.

13 Q. Do you remember if any of them were assault --
14 do you know what an assault weapon under California law
15 is?

16 MR. BECKINGTON: Objection. Calls for a legal
17 conclusion.

18 Q. BY MR. DAVIS: Do you understand the question?

19 A. Yes. As I understand it, it's just basically
20 the ones that are listed under the 12276 section of the
21 Penal Code, the list.

22 Q. The list. That's all you know of at this time?

23 A. There's several categories. There's three
24 categories that were listed, those that are on the 12276
25 list and then there's those that are -- there's a

1 section that deals with the AK series rifles and the
2 AR-15 series rifles, and then there's also a third
3 category that looks at physical characteristics of guns
4 that would put them into the assault weapons category.

5 Q. Have you ever examined a firearm to determine
6 whether or not it's an assault weapon?

7 A. Yes.

8 Q. How many times?

9 A. I'm just going to estimate somewhere between a
10 half a dozen and a dozen times in my career.

11 Q. Were all of those listed guns, or were any of
12 them a Category 3 type based on features?

13 A. I believe all of them were strictly from the
14 list.

15 Q. And what did your examination of those firearms
16 entail?

17 A. In some cases they were on the list and they
18 were considered assault weapons.

19 I did one case that did deal with features, as
20 I remember, but this was -- we're talking over 10 years
21 ago when I was working at the DOJ lab in Stockton. I
22 was asked to render an opinion as to a particular gun,
23 and I determined that it was, in my opinion, not an
24 assault weapon based on the features. Like I say, it
25 was about 10 years ago.

1 The Deputy District Attorney from San Joaquin
2 County had asked me during trial if it was my opinion
3 that a particular rifle was an assault weapon, and I
4 told him no based on certain criteria, and he agreed
5 with me and withdrew the charges on that.

6 Q. Do you remember what features it was that he
7 claimed were -- made it an assault weapon?

8 MR. BECKINGTON: Objection. Misstates his
9 testimony. I don't believe he testified that the DA
10 said it was an assault weapon. I believe he said that
11 the DA asked him.

12 Q. BY MR. DAVIS: Do you remember which features
13 you examined in particular?

14 A. No. I really don't remember if it was
15 something to do with the magazine or -- I really don't
16 remember.

17 Q. Where are you currently employed?

18 A. I'm a senior criminalist with the California
19 Department of Justice. I'm assigned to the California
20 Criminalistics Institute as the assistant program
21 manager in the firearm and toolmark section.

22 Q. What is the firearm and toolmark section?

23 A. Well, this is a training facility for the
24 Bureau of Forensic Services, and we primarily do
25 training to law enforcement and forensic scientists in

1 California and actually across the country.

2 Q. Is there a mission for the Bureau of Forensic
3 Services?

4 A. There is a mission statement.

5 Q. What's the mission statement?

6 A. I don't have that committed to memory.

7 Q. I'm going to hand you a document entitled
8 Bureau of Forensic Services, obtained off the website.
9 Take a look at the first paragraph and let me
10 know if that's the current mission statement.

11 MR. BECKINGTON: I'll object to the question to
12 the extent it calls for speculation since the witness
13 does not have access to a computer at the deposition to
14 compare this particular document to see whether it is,
15 in fact, the current mission statement posted by the
16 Bureau.

17 But the witness can answer if he has an
18 understanding.

19 THE WITNESS: This appears to be the mission
20 statement or something very similar to our current
21 mission statement.

22 Q. BY MR. DAVIS: So the Bureau of Forensic
23 Services' mission is to assist -- includes assisting the
24 Department of Justice in determining -- in comparing
25 physical evidence from crime scenes or persons?

1 A. Yes, sir.

2 MR. DAVIS: Mark this as Exhibit A.

3 (Exhibit A was marked.)

4 Q. BY MR. DAVIS: Is the Bureau of Forensic
5 Services a subdivision of the California Criminalistic
6 Institute?

7 A. It's the other way around. CCI is basically
8 like the training division of the Bureau of Forensic
9 Services.

10 Q. And that's the department that you're within?

11 A. Yes, sir.

12 Q. Does CCI have a mission?

13 MR. BECKINGTON: I'm going to object. The
14 question is overbroad. Are you asking whether it has a
15 mission statement?

16 MR. DAVIS: A mission statement.

17 THE WITNESS: CCI does have a mission
18 statement. I have not committed that to memory. But
19 it's pretty much -- to summarize, its purpose is to
20 provide training to the forensic community, to all the
21 crime laboratories in California, and participate in
22 research and development in physical evidence,
23 criminalistics-related topics.

24 Q. BY MR. DAVIS: Do those topics include
25 firearms?

1 A. Yes, sir.

2 Q. Firearms examinations?

3 A. Yes.

4 Q. Do you teach topics on firearms examinations?

5 A. I do.

6 Q. Do you know which classes -- do you recall
7 which classes you teach?

8 A. Yes.

9 MR. BECKINGTON: Objection. Vague as to time.
10 Are you talking currently or --

11 MR. DAVIS: Currently.

12 THE WITNESS: Yes. The classes that I
13 personally teach include the following: Firearms
14 safety, that's our course No. E101; intro- -- it's the
15 firearm and toolmark introduction classes 1 and 2, so
16 that would be course Nos. E102 and E103. I also
17 coordinate and provide training on special topics, that
18 would be the 400 series, E400 series, and the factory
19 tours. I teach serial number restoration, course No.
20 E111. I'm involved heavily in the Firearms Academy.
21 That's a whole series of firearms classes put together.
22 That would be E600. And then I coordinate other classes
23 such as the technical writing or criminalists class,
24 A120 is the course number, as well as the head lamp
25 examination class, course No. M115.

1 There may be some others, but those are the
2 ones off the top of my head. Oh, and help coordinate
3 the identification criteria class, E201. I'm not an
4 actual instructor, but I coordinate and assist with the
5 exercises.

6 Q. BY MR. DAVIS: What is the E101 firearms safety
7 course?

8 A. That's a three-day class that's tailored to
9 providing instruction on the safe handling of firearms.
10 This class is targeted for the criminalist or forensic
11 scientist, latent print examiner, property controller
12 and evidence technician, basically anybody in law
13 enforcement or the crime lab that will handle a firearm.

14 The instruction covers the proper loading,
15 firing and unloading of a wide array of firearm actions
16 so that they can recognize whether or not a gun is
17 loaded before they process it for physical evidence.

18 Q. Is there anything else that the course
19 instructs the students on?

20 A. Well, the course includes nomenclature for
21 just -- not just for the gun but also the ammunition
22 components, safe handling practices, range rules and
23 techniques, shooting techniques, packaging of evidence,
24 basic things.

25 Q. What kind of nomenclature does the course

1 instruct students on?

2 A. Parts of the firearms so that they can look at
3 a gun and be able to name the major components, such as
4 the receiver or frame, the barrel, the optics that are
5 on it, safety devices, attachments to the barrel, stock
6 assemblies, grip assemblies.

7 Q. You said "attachments to the barrel"?

8 A. Yes.

9 Q. What kind of attachments?

10 A. Could be choke, compensators or muzzle brakes,
11 flash hidiers, silencers.

12 Q. How does it define flash hidiers?

13 MR. BECKINGTON: Objection. Vague and
14 ambiguous. Who do you mean by they?

15 Q. BY MR. DAVIS: During the course -- you
16 instruct it, correct?

17 A. Just the basic nomenclature so they know what
18 to call the parts. In other words, they're taught the
19 different parts of the gun so if they have to make notes
20 or document how they found the gun in its original
21 condition when they received it or found it at the
22 scene, you have to be able to articulate through their
23 documentation the actual description. That would
24 include settings on the muzzle or the choke settings if
25 it's an adjustable choke. Or if they see something

1 that's trace evidence or something adhering to a
2 particular part of the gun, they have to be able to name
3 that part or at least have a pretty good -- a general
4 description of what it is.

5 Q. You brought with you an Association of Firearm
6 and Toolmark Examiners Glossary, 5th edition, today?

7 A. Yes, sir.

8 MR. BECKINGTON: Just so the record is clear,
9 again, you've been handed copies of excerpts from it.
10 You don't have the whole manual.

11 Q. BY MR. DAVIS: Copies of excerpts from the
12 glossary, correct?

13 A. Yes. Correct.

14 Q. Let me hand you a copy. Take a look at the
15 definition of flash suppressor.

16 A. Yes.

17 Q. Is that the definition that the course uses
18 when instructing students on nomenclature?

19 A. I'm not sure if this is the class where we
20 would direct them to the final definition. We give
21 general definitions in the safety class. It's more of
22 an introductory class. These definitions in the AFTE
23 glossary would be used for those taking other firearms
24 classes like the E102 and E103 classes, introduction
25 classes.

1 Q. Okay. Move on to E102 then. What subjects are
2 covered in E102?

3 A. This class is designed for the criminalist that
4 will -- that's ultimately trained to become a forensic
5 firearm and toolmark examiner. This particular class
6 covers all aspects of nomenclature for the firearms and
7 ammunition, cycle of fire and the marks that the gun
8 components will impart on the ammunition components.

9 It takes the trainee up to the point where they
10 are -- they've evaluated the gun for operation,
11 preparing it for test firing, actually test firing and
12 obtaining the test components for comparison. It
13 includes the topics of obtaining expended bullets,
14 measuring the class characteristics and generating a
15 possible weapons list. So it takes them up to the point
16 where they're going to be doing the comparison but not
17 quite where they're actually comparing a lot of bullet
18 and cartridge cases.

19 Q. Would you say that it teaches them on the
20 testing procedures but not the examining procedures?

21 A. It's both actually. But they spend a lot of
22 time doing the preparation, preparing a gun for test
23 firing, test firing, and then taking those components
24 and just starting to intercompare, learning to use a
25 comparison microscope.

1 Q. How do you prepare a gun for test firing?

2 A. It's put first through a safety check, first
3 want to make sure that the gun is empty, and then the
4 characteristics of the gun are documented, how it's --
5 its condition, in other words, position of the safety,
6 residues on the barrel, halos on the cylinder face if
7 it's a revolver, this type of thing.

8 Q. What's a halo on the cylinder face?

9 A. A ring on the face that would indicate that
10 that particular chamber on that cylinder had been fired
11 since its last cleaning.

12 So what we train the students to do is look for
13 evidence on this particular firearm before they alter or
14 change it, before they test fire it. They also want to
15 evaluate is it a safe gun to fire. They will look at
16 safety function, they'll look at sear and disconnector
17 function, if those work or not, just general
18 characteristics like that.

19 Then once they determine that, they may even do
20 trigger-pull determinations.

21 Q. What is a "trigger-pull determination"?

22 A. Determining the amount of pressure needed to
23 depress the trigger to get the gun to fire.

24 Then the gun is loaded with ammunition and
25 they're taught how to mark and sequence and index the

1 test ammunition. They fire this into a bullet recovery
2 system such as a water tank or a cotton box, and they
3 recover the expended bullets as well as the cartridge
4 cases, and those are considered the test bullets and
5 test cartridge cases. And we teach them how to
6 intercompare those tests to look for the consistent,
7 repetitive individualizing features that that particular
8 gun imparts on those components.

9 Q. Why are all these procedures necessary?

10 A. Because ultimately these students are going to
11 be taught how to compare these expended test components
12 to evidence components to look for the same
13 individualizing features. They have to be able to
14 differentiate between class characteristics, that is,
15 design features of a gun, and individual
16 characteristics, those that are unique to a particular
17 gun, and subclass characteristics, which are those that
18 could be common to a group of guns made by a
19 manufacturer in a very short amount of time.

20 Q. You mentioned that this is the class where you
21 get a little bit more into detail on the nomenclature?

22 A. Yes. We talk about a lot of the terms that are
23 used in the AFTE glossary. The students are referred to
24 the AFTE glossary if they want to look up further
25 details about flash suppressor or compensator or muzzle

1 brake. Those types of terms are used.

2 Q. In the AFTE glossary are the definitions of
3 flash suppressor and compensator identical?

4 A. I believe they're different. Let's see. Flash
5 suppressor here in the AFTE glossary, 5th edition, it
6 says a muzzle attachment designed to reduce muzzle
7 flash, also referred to as a flash hider. So if you
8 look up the term flash hider, it has the same
9 definition, and it cross references that definition back
10 to flash suppressor.

11 Compensator, which would be on page 49 of this
12 glossary, is defined as a device attached to or integral
13 with the muzzle end of the barrel to utilize propelling
14 gases for counter recoil. Also called muzzle brake. If
15 you look up muzzle brake, it is defined as a device at
16 or in the muzzle end of the -- of a barrel that uses the
17 emerging gas behind the projectile to reduce recoil.
18 Also called a compensator.

19 Q. So under the AFTE glossary, a compensator and a
20 muzzle brake are identical?

21 MR. BECKINGTON: Objection. The document
22 speaks for itself.

23 Q. BY MR. DAVIS: Correct?

24 A. The definitions are worded different but
25 basically they say the same thing.

1 Q. And flash hider and flash suppressor basically
2 say the same thing?

3 A. Yes, sir.

4 Q. But they're not identical with each other,
5 meaning a flash hider and flash suppressor are not
6 identical to a muzzle brake and a compensator?

7 A. That's correct.

8 Q. Okay. What else does the E102 firearms and
9 toolmarks instruction course cover?

10 A. I think I pretty much covered -- it's cycle of
11 fire, what each component of a particular gun imparts on
12 the ammunition components that are cycled or fired
13 through it.

14 So basically that class takes the student up to
15 the point where they are generating a possible weapons
16 list from, let's say, a bullet in a no gun case or
17 they're looking at the test bullets and cartridge cases
18 from a particular gun and doing a preliminary
19 microscopic examination on the comparison scope. And
20 that's a one-week -- or five-day class.

21 Q. Have you ever taught any Department of Justice
22 Firearms Bureau agents or administrators in that course?

23 MR. BECKINGTON: I couldn't understand what you
24 said. Can you repeat that?

25 MR. DAVIS: Has he ever taught any Department

1 of Justice Bureau of Firearms employees essentially.

2 THE WITNESS: In the E102 class?

3 MR. DAVIS: Yes.

4 THE WITNESS: No, sir.

5 Q. BY MR. DAVIS: What about in the E101 course?

6 A. It's possible. I don't remember on that one.

7 The safety class, it's possible.

8 Q. Are these open to the public?

9 A. No. The classes that CCI puts on are put on
10 for the forensic science community and law enforcement
11 community.

12 Q. Only?

13 A. Only.

14 Q. What subject matter does the E103 firearms and
15 toolmark introduction 2 course cover?

16 A. That's the E103 class. That is a continuation
17 of the previous class we talked about. Basically it
18 gets into the actual manufacturing of firearm
19 components, how the components are made, such as how
20 barrels are made and rifled, how the extractors and
21 ejectors, the firing pins and breech faces, et cetera,
22 are machined. So we get into the actual manufacturing
23 of those components and what kinds of toolmarks are left
24 on those surfaces which may or may not be used for
25 identification purposes.

1 The class continues on and looks at not only
2 the comparison of the test bullets and cartridge cases
3 but then comparing those tests with evidence or unknown
4 bullets to the student. And so it gets them up to the
5 point where they're actually doing a comparison of these
6 components, evidence versus test, and it also involves
7 assessing toolworking surfaces for uniqueness.

8 Q. Do the markings on the firearm cause changes in
9 the evidence; for instance, when a bullet is fired out
10 of one gun, it differs from -- the markings on that
11 bullet will differ from another bullet that's fired out
12 of another firearm?

13 MR. BECKINGTON: I'll object to the question to
14 the extent it's overbroad and it's an incomplete
15 hypothetical.

16 Q. BY MR. DAVIS: Do you understand the question?

17 A. No. Maybe rephrase it, please.

18 Q. Do the markings from gun to gun create
19 distinguishing marks on bullets that are expelled from
20 them?

21 A. Yes.

22 Q. What kind of marks?

23 A. Looking at the rifling detail within the lans
24 and grooves impressions there are unique features. Each
25 barrel has unique characteristics.

1 Q. Each barrel?

2 A. Yes, sir.

3 Q. Even if they're manufactured by the same
4 manufacturer?

5 A. Yes.

6 Q. Even if they're close in production, meaning
7 consecutive, one is manufactured after the other, that
8 will have a different characteristic?

9 A. Sure. In a case like that you could have a
10 substantial subclass characteristic influence. Let's
11 say you have multiple barrels that were rifled with a
12 broach so you have cut rifling in the grooves. It is
13 possible to have a carryover of certain imperfections on
14 that broach carried over from one barrel to the next.
15 We call those subclass characteristics. But within
16 those characteristics we also have individual
17 characteristics, so we try to teach the students how to
18 evaluate subclass characteristic influence versus
19 individual characteristics.

20 Q. What are "individual characteristics"?

21 A. Those are characteristics that are unique to
22 that particular barrel and no other.

23 Q. Would that apply to any other component of a
24 firearm?

25 A. Pretty much. Again, we're only dealing with

1 components on a gun that would impart marks on cartridge
2 cases or bullets, so it would be the breech face,
3 chambers, firing pins, extractors, ejectors, barrels,
4 maybe a loaded chamber indicator, things like that.

5 Q. Is that the extent of firearms and toolmarks
6 introduction 2?

7 A. Pretty much. There may be some other topics
8 that we cover in there.

9 I know I cover also recognizing reloaded
10 ammunition. I do a block of instruction on that so that
11 the students can look at evidence ammunition to
12 determine whether or not those cartridges have been
13 reloaded, and if that's the case, then they know how to
14 handle those and evaluate those in a unique manner.

15 Q. I'm looking at the web page printout today and
16 it identifies that Tori (ph.) Johnson was the
17 instructor.

18 Are you currently the instructor?

19 A. We both -- we co-teach that.

20 Q. Together?

21 A. Yes.

22 Q. Okay. What is the E111 serial number
23 restoration course cover?

24 A. That's a three-day class that teaches the
25 students how to restore obliterated serial numbers in

1 various gun metal alloys, steel, stainless steel,
2 aluminum and zinc and other alloys.

3 It covers such techniques as magnetic particle
4 inspection or MPI -- it's a nondestructive Magnaflux
5 restoration technique -- it includes etching and other
6 techniques to enhance or restore numbers that have been
7 obliterated.

8 Q. Have any Bureau of Firearms employees taken
9 this course?

10 A. Not that I remember. I don't think they have.
11 I've been teaching every serial number class since the
12 middle of 1999, and I don't recall any Bureau of
13 Firearms personnel in that class.

14 Q. When I'm referring to Bureau of Firearms, I'm
15 also including the Fire --

16 A. Firearms division, yeah. I call them the same
17 thing. Use them interchangeably.

18 Q. What about the E103 course?

19 A. The E102 and E103 classes are set up just for
20 criminalists that are becoming firearms examiners, so
21 anybody outside of that classification would not be
22 allowed in the class.

23 Q. So no --

24 A. There may be some rare exception, but those
25 classes are set up only for criminalists or examiners

1 that are going to become firearm and toolmark examiners.

2 Q. Do you know if any Bureau of Firearms employees
3 are firearms and toolmark examiners?

4 A. I don't know of any.

5 Q. Do you know of any that are criminalists?

6 A. No.

7 Q. Can you tell me a little bit about the E201
8 toolmark comparison course and what that covers.

9 A. That's a one-week, five-day class that includes
10 all aspects of identification criteria, evaluating
11 toolmarks or assessing toolmarks for uniqueness. The
12 class goes beyond looking at class characteristics. It
13 looks at individual characteristics and subclass
14 characteristic influence. So all aspects of a gun or a
15 tool are examined, how the tool or the component was
16 made, what unique marks are on that component or tool.

17 Q. When you're saying "tool" or "component," are
18 you referring to a tool or component that's used to make
19 the firearm or a tool or component of the firearm?

20 A. Both. And we're also talking about hand tools
21 also, such as a pry bar that might be used in a burglary
22 or channel lock pliers that might be used to wrench off
23 a doorknob or bolt cutters when they cut through a piece
24 of, say, field fence. What is it about that tool that
25 we can assess? How is it unique from all other tools?

1 How can we assess uniqueness? And if we can't, then we
2 have to qualify our answers. This course deals with all
3 aspects of identification criteria.

4 Q. Does this course include firearms themselves?

5 A. Yes, sir.

6 Q. As tools?

7 A. Yes.

8 Q. What does --

9 A. Actually, when I say a tool, a firearm actually
10 is multiple tools. The barrel is a tool because it's
11 imparting its marks on the softer object, the bullet.
12 The firing pin itself is a tool. It imparts its
13 imperfections on the primer of a cartridge. So the
14 firearm is actually a combination of tools.

15 Q. Are you saying that a tool is an object that
16 imparts its marks on another object?

17 A. Yes. A tool is typically the harder of two
18 objects, and when they come into contact with each
19 other, the tool imparts its imperfections on the softer
20 material.

21 Q. Do you know of any Bureau of Firearms employees
22 that have taken this course?

23 A. None to my knowledge. That class is designed
24 for criminalists. When I say criminalists, that's any
25 professional within the discipline that's actually doing

1 firearm and toolmark comparison work.

2 Q. E420, special topics, firearms function and
3 design, what subjects are discussed in that course?

4 A. There's a number of different topics that are
5 covered. Those are basically one- or two-day
6 workshop-type classes. They include a series of
7 armor-type classes that deal with evaluating a
8 particular make and model, how to assess it for
9 function, maintenance, field stripping, detail
10 stripping, reassembly. And that class has been taught a
11 number of times.

12 As an example, I taught the Smith & Wesson
13 revolver armorers class, which would fall in this
14 category. It was a one-day class. It looked just at
15 Smith & Wesson double-action revolvers. And we have had
16 other classes that deal with just an 870 Remington
17 shotgun or just the AR-15-type rifle. Another class was
18 devoted just to the modern Smith & Wesson double-action
19 pistol.

20 Q. You mentioned earlier that you evaluate the
21 firearms for make and model. How do you evaluate for
22 make and model?

23 A. A lot of times the nomenclature is stamped
24 somewhere, permanently impressed on the firearm itself,
25 the manufacturer is listed or put on the frame or the

1 slide, so is the model number. And some also have the
2 caliber, but not always. There's combinations of
3 information. Depends on the age of the gun.

4 Q. Do you know why the make and model is stamped
5 on the side of the gun?

6 A. Now it's required by federal law.

7 Q. Do you know how long it's been required?

8 A. No, I don't.

9 Q. For firearms that were manufactured prior to
10 the requirement, how do you identify them for make and
11 model?

12 A. Compare the guns to known standards. We
13 maintain a reference collection in most of our DOJ crime
14 laboratories. We have ten full-service labs throughout
15 the state plus a DNA lab. And the ten full-service
16 labs, each one of those labs has some type of firearms
17 reference collection. So we can compare an unknown to
18 known guns that we have in the collection. We can also
19 refer to manufacturers' catalogs and the scientific
20 literature.

21 Q. Once you've determined that a firearm is a
22 certain make and model, do you generally keep an
23 exemplar with your reference library?

24 MR. BECKINGTON: Objection. Vague and
25 ambiguous as to "you"? Are you referring to the --

1 MR. DAVIS: I'm referring to CCI.

2 THE WITNESS: Not necessarily.

3 Q. BY MR. DAVIS: Has the CCI done that before?

4 A. We have, yes.

5 Q. Do you know which models you've done that
6 before with or that CCI has done that before with?

7 A. I'm not sure what you mean.

8 Q. Can you identify any of the ones that have been
9 kept as exemplars after --

10 A. You mean the actual guns themselves?

11 Q. Yeah.

12 A. Well, CCI has -- maintains a firearms reference
13 collection, but it's more of a training collection. In
14 other words, we have a lot of guns that are duplicate to
15 make and model so that -- when we do a firearm safety
16 class, we may need a dozen of a particular make and
17 model on the firing line.

18 But a true reference collection, they do exist
19 with the Bureau. We do have some of those exemplars in
20 the CCI reference collection, different makes and
21 models.

22 Q. But you're not familiar with which ones?

23 A. Yeah -- I mean, I don't have them all
24 memorized. We're talking close to a thousand guns in
25 the collection, in our collection at CCI alone. It

1 would include --

2 Q. AR-15s?

3 A. Yes, sir, AR-15s, M-16s, shotguns, pistols,
4 revolvers.

5 Q. Any assault weapons?

6 A. Yes, sir.

7 Q. Can you name some of them?

8 A. Yes. Some of them would include AR-15s, SKS
9 rifles with the detachable magazine. We have at least
10 one HK model 91 rifle, some AK series rifles, that
11 includes the Norinco series, the 56S series. We have
12 some Bushmasters, some MAC-10s, MAC-11s, SWD and RPB
13 Industries pistols, and a number of others.

14 Q. Do you have any Springfield Armory assault
15 weapons?

16 A. We have some rifles made by Springfield, but I
17 don't know that they're assault weapons. I don't know.

18 Q. Are they Springfield M1As?

19 A. I do have one or two M1As in our collection,
20 and I don't know who made them. I know one is a clone,
21 an aftermarket clone, but the other I don't know if it's
22 a Springfield or not. I can't remember.

23 Q. Do you know if there's devices attached at the
24 end of the barrels on those two?

25 A. There are.

1 Q. Do you know what kind of devices they are?

2 A. No. They're either compensators or flash
3 hidiers. I don't know.

4 Q. Never examined them?

5 A. Just a quick, cursory look.

6 Q. What does the E425 firearms factory tours
7 course cover?

8 A. That is a course set up only for the firearms
9 academy students, those that are participating in the
10 firearm and toolmark training curriculum.

11 We take the students to various manufacturing
12 facilities throughout the Southwest, Southern
13 California, Nevada, Utah and Arizona, and we go to
14 manufacturing facilities such as the Ruger factory in
15 Prescott, Arizona, the Bushmaster factory in Lake Havasu
16 City, and some other places. There is a broach company
17 in Los Angeles.

18 Q. Pioneer Broach?

19 A. Pioneer Broach. Barstow Barrel in 29 Palms,
20 California, the Surefire factory in Orange County, and
21 there's a number of other smaller companies that we've
22 toured so that students can see how things are
23 manufactured.

24 In some cases we can actually get samples.
25 We've been to Barry's Manufacturing in St. George, Utah.

1 They make bullets. They do the plating there. So we
2 get to see how these things are made.

3 Q. Is there anything in particular you're
4 instructing the students to look for during the courses?

5 A. Yes, they're instructed for methods of
6 manufacturing and the types of toolmarks that would be
7 imparted on the finished product, those toolmarks which
8 may or may not be unique to that part. In other words,
9 they're to look at these parts and assess them for
10 uniqueness or is there a potential for subclass
11 characteristics influence.

12 Q. When you say "methods of manufacturing," can
13 you give me some examples?

14 A. Oh, yeah. There's a lot of -- a lathe,
15 turning, there's milling, operations that leave milling
16 marks, there's the C and C machines.

17 Q. You're referring to the specific machines that
18 make the cuts on the different components?

19 A. Yes, sir.

20 There's drilling operations. Then there's the
21 finishing. There's the way that the parts are finished
22 or the way the -- let's talk about finish. The way the
23 parts are -- perhaps maybe they're beadblasted or
24 tumbled or something is done in that process to impart
25 unique characteristics on that particular part and how

1 it's finished, blued or parkerized or plated or whatever
2 the finish technique is.

3 Q. What kind of unique characteristics? Can you
4 give me some examples. You were saying that the
5 finish -- the way that it's finished might impart some
6 unique characteristics on certain components.

7 A. Sure. Let's take certain bolts in guns. Bolts
8 are tumbled, let's say, in a tumbling media to get the
9 rough edges off from a machine operation. Maybe they've
10 been heat treated, sandblasted or beadblasted and
11 tumbled, and the tumbling creates little, tiny,
12 microscopic pockmarks and nicks, that type of thing,
13 that are imparted into the bolt faces.

14 Q. And those marks might identify that bolt as
15 being from that manufacturer?

16 A. Well, the bolt design itself will tell you what
17 manufacturer made it, but the imperfections on that bolt
18 face could be used as a way of identifying that bolt as
19 having produced certain marks on a fired cartridge case.

20 Q. Any other examples of unique characteristics?

21 A. We look at mold marks, the metal injection
22 molded components -- we called them MIMed parts -- the
23 casting marks, diecast components. We look at all this
24 collectively. So when a student gets an actual gun in
25 for examination, they know how to assess it, perhaps

1 determine how it was made. And if they know how it was
2 made, then they can assess uniqueness or be cautious of
3 potential subclass characteristics influence.

4 They should be able to look at a barrel and
5 through the proper examination procedures, determine how
6 that barrel was rifled, that is, the spiral lans and
7 grooves, how it was imparted in that barrel to give it
8 uniqueness.

9 Q. By examining the tool that they used, such as
10 the broach?

11 A. We look at the broaches, but we also look at
12 the barrels, and they also have an opportunity to look
13 at consecutively-manufactured barrels, that is, a series
14 of barrels all made by the same tool. They're able to
15 look at the fired bullets from these
16 consecutively-rifled barrels to assess uniqueness.

17 Q. And they compare the differences between them?

18 A. Yes.

19 Q. Do you know of any Bureau of Firearms employees
20 that have taken that course?

21 A. None. There are none.

22 Q. What about the E420 course?

23 A. None that I'm aware of.

24 Q. What does the E470 special topics and
25 questioned documents course cover?

1 A. I'm not familiar with that one. Let's see that
2 one, please.

3 Q. Sure. I'm handing him a printout that I
4 printed out today from the CCI website.

5 A. This is questioned documents. This is not in
6 my discipline. I'm not familiar with that course.

7 Q. What about E600, Firearms and Toolmarks
8 Examiner Academy?

9 A. That's the academy that has a lot of our CCI
10 classes put together in a curriculum in a particular
11 order. So a student could sign up to attend -- we call
12 it an academy. It's actually a whole series of CCI
13 classes put together in a series of over, say, a year
14 and a half where the students will take these classes in
15 the pursuit of training of becoming a firearm and
16 toolmark examiner.

17 Q. Are they the same classes we've just discussed
18 today?

19 A. Yes.

20 Q. Are there any additional classes within E600?

21 A. No. Well, I take that back. Actually, it
22 would include, as I remember, the technical writing for
23 criminalists class. That's course No. A120. They're
24 expected to be able to write a decent report, and so we
25 have them take the A120 class.

1 Q. A120 class covers?
2 A. Just technical writing in general. Basic
3 English applied to criminalistics.
4 Q. What is forensic science?
5 MR. BECKINGTON: Objection. The question is
6 overbroad.
7 Q. BY MR. DAVIS: Do you understand the question?
8 A. Yes. It's basically the application of science
9 for the purpose of the law. It is answering questions
10 in a court of law using science.
11 Q. Why use science?
12 A. I'm sorry?
13 Q. Why use science?
14 MR. BECKINGTON: Objection. Incomplete
15 hypothetical and overbroad.
16 Q. BY MR. DAVIS: Do you understand the question?
17 A. Could you repeat that, please.
18 Q. You said it's an application of science for use
19 in a court of law.
20 A. Yes, sir.
21 Q. Why use science in a court of law?
22 MR. BECKINGTON: Same objections.
23 Q. BY MR. DAVIS: Do you know?
24 A. Why use science?
25 Q. Yes.

1 A. Yes.

2 Q. Why?

3 A. Science is the systematic body of knowledge
4 supported by fact. In many cases, in order to answer
5 certain questions in court, it requires, I believe, a
6 scientific approach.

7 Q. Why do you believe that it requires a
8 scientific approach?

9 MR. BECKINGTON: Objection. Overbroad.

10 THE WITNESS: Well, if we're dealing with,
11 let's say, physical evidence of a complex nature,
12 something outside the scope of what an average person on
13 the street would know about, it might require some
14 expert evaluation, somebody that's trained on a
15 particular topic to evaluate and compare and render an
16 opinion and make an interpretation. So if it goes
17 beyond just a lay witness' abilities, it might require,
18 you know, an expert to evaluate it.

19 Q. BY MR. DAVIS: What are criminalistics?

20 A. Criminalistics is that part of forensic science
21 that's a discipline used to evaluate and interpret
22 physical evidence using a scientific method.

23 Q. Would that include examination of, say, a flash
24 suppressor to determine whether or not it functions to
25 reduce flash?

1 A. It could.

2 Q. When could it?

3 MR. BECKINGTON: Objection. Incomplete

4 hypothetical.

5 Q. BY MR. DAVIS: Do you understand the question?

6 A. Not really.

7 Q. You stated that "it could."

8 A. It could if we had a procedure to do that.

9 Q. Is there a procedure that you know of to do

10 that yet?

11 MR. BECKINGTON: Objection. Vague and

12 ambiguous. Are you limiting your question to the

13 Department of Justice?

14 MR. DAVIS: I just limited it to whether he

15 knew of any.

16 MR. BECKINGTON: Anywhere in the universe?

17 MR. DAVIS: If he knew of any.

18 MR. BECKINGTON: Okay.

19 THE WITNESS: I don't know of any.

20 Q. BY MR. DAVIS: Do you know of any within the

21 Department of Justice?

22 A. No, sir.

23 You're talking about evaluating flash hiders or

24 suppressors?

25 Q. Evaluating any device to determine whether or

1 not, it can function to reduce or redirect flash.

2 A. I'm not aware of any procedures for that
3 purpose.

4 Q. Did you provide the -- does CCI provide expert
5 advice to local law enforcement agencies?

6 A. We do.

7 Q. Does that include evaluation of firearms?

8 A. Yes. But let me qualify that answer. CCI is
9 not set up to do actual evidence examinations because
10 our laboratory is not accredited through ASCLD-Lab, so
11 we direct any casework or lab analysis to another lab
12 within the Bureau of Forensic Services that is
13 accredited. We're primarily a training facility and to
14 do research and development, but we don't do the actual
15 comparisons, the actual examinations of actual evidence.

16 Q. Are you consulted with regard to drafting
17 regulations, "you" being CCI? Do you know if anybody
18 there is consulted?

19 A. Yes, John Rush, my supervisor, is consulted.
20 He does bill analysis.

21 Q. Do you know what kind of bills?

22 A. Anything pertaining to firearms,
23 firearms-related topics and possible impact on the
24 Bureau of Forensic Services.

25 Q. Has he ever consulted with you about these

1 bills?

2 A. On some rare occasions.

3 Q. Do you recall any?

4 A. No, not offhand. I take that back, I have a
5 vague recollection of one of them pertaining to
6 microserialized firing pins and NIBIN entries in
7 databases, that type of thing.

8 Q. You mentioned bill analysis. What about
9 regulatory analysis, any regulations or --

10 A. Seems to me several years ago I also have a
11 recollection of him asking me about the 50 BMG
12 cartridge.

13 Q. Do you remember what he asked about?

14 A. Dimensions of the cartridge.

15 Q. What did you tell him?

16 A. Well, I -- I had several examples of 50
17 Browning machine gun cartridges, cartridge collector,
18 and I provided measurements, various measurements of the
19 cartridge itself, which is rim diameter, neck diameter,
20 shoulder diameter, the case length, that type of thing.

21 Q. Did he ask about the chamber for a 50 BMG
22 cartridge?

23 A. I don't think we discussed chamber. We
24 discussed the dimensions of the cartridge itself.

25 Q. Anything else?

1 A. Not that I remember.

2 Q. What kind of quality assurance does BFS have?

3 A. The Bureau of Forensic Services, the crime
4 laboratory system has a QA manager, a quality assurance
5 manager, his name is Craig Anderson, and he oversees
6 that part of the Bureau.

7 Q. Do you know what his tasks include?

8 A. I don't know all of his tasks. I know some of
9 them.

10 Q. Can you tell me which ones you know.

11 A. Right now he's coordinating with the various
12 technical advisory groups within the Bureau of Forensic
13 Services and we're trying to standardize our technical
14 procedures and bring our technical procedures up to a
15 certain level for ISO standards for the accreditation
16 process.

17 Q. What are ISO standards?

18 A. That's getting really complex. You really
19 don't want to know. I'm sorry. There are certain
20 standards that are applied to the work that we do to
21 guarantee measurements are reliable and the chemicals
22 that we use are reliable. Basically it's a higher
23 standard that's applied to our technical procedures.

24 Q. And applied to all accredited procedures?

25 A. Yes.

1 Q. Earlier you told me you worked within CCI. How
2 long have you worked there?

3 A. I've been at CCI since March of 1999.

4 Q. Where did you work before that?

5 A. Prior to that I was in the BFS lab in the
6 Central Valley. It would be the Stockton lab.

7 Q. For how long?

8 A. I was there over 17 years.

9 Q. And before that?

10 A. Prior to that I was a lab technician, a
11 criminalistics laboratory technician, with the Bureau of
12 Forensic Services at the Santa Barbara laboratory, and I
13 was there about 11 months. I started there in the fall
14 of 1980.

15 Q. What were your duties at the BFS in Stockton?

16 A. The Stockton lab, as a criminalist. I examined
17 physical evidence. I did blood alcohol analysis and
18 interpretation, drug analysis, clandestine drug
19 laboratory chemistry, general crime scene processing and
20 interpretation, and a lot of firearm and toolmark
21 casework. Those were -- my primary duties there were
22 pretty much in firearms and toolmarks.

23 Q. Same things that we went over as far as the
24 courses?

25 A. Yes, sir.

1 Q. Anything else in addition to what we went over
2 with regard to the courses?

3 A. You're talking about what I did at the Stockton
4 lab?

5 Q. Yes.

6 A. I did shoe print comparisons and tire track
7 examinations, head lamp examinations to determine
8 whether or not they were on or off, general physical
9 evidence examinations.

10 Q. Did you ever do that with firearms?

11 A. Oh, yes, many times. That was one of my
12 routine assignments.

13 Q. When you say "many times," can you estimate?

14 A. Hundreds over 17 years.

15 Q. Did you ever testify in court on these issues?

16 A. Yes, sir.

17 Q. While you were at Stockton, can you estimate
18 how many times you testified in court.

19 A. In my career I've testified over 500 times as
20 an expert witness. In firearms, well over 100 times.

21 Q. Any of those involving assault weapons?

22 A. I believe so, yes.

23 Q. Do you have an estimate?

24 A. I don't know, maybe a dozen. I don't have an
25 actual number.

1 Q. Do you recall what the assault weapon testimony
2 involved?

3 A. The big focus was on the identification, that
4 is, matching cartridge cases and bullets back to a
5 particular weapon, and in some cases bullet trajectory
6 reconstruction, that is, determining where the shooter
7 was in relation to where the target material was hit.

8 Q. Anything else?

9 A. With respect to -- you're asking with respect
10 to --

11 Q. With respect to assault weapons only.

12 A. On occasion identifying them. I was asked to
13 render an opinion was this on the 12276 Penal Code list,
14 and I would make that determination.

15 Q. And that would involve looking at the make and
16 model stamped on the side?

17 A. Yes, sir.

18 Q. What are your duties at CCI?

19 A. As the assistant program manager I coordinate
20 training classes and teach classes.

21 Q. Do you ever develop any of the testing
22 procedures?

23 A. I'm on the firearms technical advisory group,
24 and I participate in the writing of the technical
25 procedures for the Bureau.

1 Q. Who is in the firearms technical advisory
2 group?

3 A. At this time it's headed up by John Rush. He's
4 my supervisor. We have other members on the technical
5 advisory group. Some of them include Don Dunbar from
6 the Chico lab -- these are all BFS labs -- Dave Barber
7 from the Santa Barbara lab, John Yount, Y-o-u-n-t, from
8 the Santa Rosa laboratory, and there's some other
9 members.

10 Q. Do you have the names of the other members?

11 A. Let's see. Michelle Nichols from the Riverside
12 lab, and we've also had participation from other
13 members, Nancy McCombs (ph.) from the Fresno laboratory,
14 Ron Nies from the Redding lab.

15 Q. Could you spell Nies?

16 A. N-i-e-s. Those are the ones I have in memory.

17 Q. You mentioned that you have developed testing
18 procedures in conjunction with this group?

19 A. Yes. Actually, I've been on the technical
20 advisory group since 1986. And we've had past members,
21 others have left the Bureau. Tori Johnson, Bill Matty,
22 Bill Coraza (ph.), who is now deceased.

23 Q. Could you spell Matty?

24 A. M-a-t-t-y.

25 Q. And you mentioned Bill Coraza?

1 A. C-o-r- -- I don't remember the exact spelling.

2 Q. Could you identify some of the testing
3 procedures that you developed in conjunction with this
4 group relating to firearms only.

5 A. Relating to firearms would be how to process a
6 firearm as received, how to evaluate that gun prior to
7 test firing. It would include documentation, test
8 firing the gun, how to choose the right ammunition,
9 indexing and sequencing the test cartridges,
10 intercomparing those test components and then comparing
11 those test components with the evidence components.

12 It includes topics such as measuring barrel
13 length, determining overall length, barrel length, just
14 about any aspect of that gun that we would need to know
15 for case evaluation.

16 Q. When you say "how to process a firearm," what
17 does that mean?

18 A. It would include looking at all aspects of that
19 gun with respect to physical evidence, looking at trace
20 evidence, fingerprints -- trace evidence could include
21 biological material, blood, tissue, that type of thing,
22 hairs, fibers, paint, anything that might be adhering to
23 that gun that might tell us something about the
24 environment that it was in or -- for whatever reason --
25 how to collect and preserve that information prior to

1 actually manipulating the gun and shooting it, looking
2 for evidence of recent firing, perhaps debris in the
3 barrel. As an example, cobwebs in the barrel, that
4 would be an indication that the gun was not recently
5 fired. Those are observations that the examiner would
6 check prior to test firing.

7 As an example, on the revolver, looking at the
8 cylinder face to see if there's any halos or flares that
9 would indicate which chambers had been fired recently
10 after the last cleaning. Things like that.

11 Q. And then you mentioned that as part of the
12 procedures that you guys have created, you guys being
13 the firearms technical advisory group, you evaluate the
14 gun. What do you mean by evaluate the gun?

15 A. The big thing is check it for safety. Is it
16 loaded? We don't want a loaded gun in the laboratory
17 stored in the locker or an evidence room. So it's
18 evaluated to see whether or not it's been rendered safe.
19 It's evaluated to make sure that physical evidence is
20 not lost or contaminated. It's -- and all the other
21 features of the gun.

22 Q. "All the other features of the gun" meaning?

23 A. Physical features, the outward appearance, the
24 make, serial, model number.

25 Q. Devices attached to it?

1 A. Devices attached to it, setting of the selector
2 switch or lever or safety. All those aspects are
3 evaluated, recorded and documented.

4 Q. And the documenting procedures, what do those
5 entail?

6 A. Those features would include looking at all the
7 aspects of that gun, how it was received, whether the
8 bolt or slide or action was in full battery, was it
9 partial battery, was it opened, how was it brought into
10 the laboratory, was it rendered safe with a nylon safety
11 strap through the action, does it have any features on
12 it, like as an example, an adjustable choke. What is
13 the setting of the adjustable choke, because later on if
14 we have to do a distance determination, we want to use
15 that same setting that it was found at the scene.

16 We would look for -- if it has a silencer,
17 let's say, we would look at that silencer and evaluate
18 it before we test fire it. Does it have gunshot residue
19 in it to show prior use?

20 Q. And then you test fire the gun?

21 A. Yes.

22 Q. Is that another procedure that the firearms
23 technical advisory group has come up with?

24 A. Well, we are writing up the technical
25 procedures and update those for -- these will be applied

1 to the examiners out in the different field labs.

2 Q. What do the test firing procedures include?

3 A. After we know that the gun will operate safely
4 and it will lock up properly and we have proper sear
5 engagement and proper disconnecter function, et cetera,
6 then we would fire that gun with test ammunition. The
7 test ammunition a lot of times has been marked ahead of
8 time with an index mark and a sequence mark.

9 And we fire that gun at least three times in
10 most cases, sometimes more, so that we have a series of
11 test bullets and test cartridge cases. And we know the
12 order in which these were fired, so we can look at these
13 microscopically and evaluate what kind of marks this gun
14 is producing and whether or not it's changing with the
15 shots.

16 Q. Comparison testing?

17 A. Yes.

18 Q. And do the procedures regarding the ammunition
19 include making sure that it's standardized ammunition?

20 A. No, I didn't say that.

21 Q. That was a question. Do you make sure that the
22 ammunition is identical from one shot to the next?

23 MR. BECKINGTON: Objection. I think the
24 question is getting vague and ambiguous. Are you asking
25 him strictly about testing protocols here?

1 MR. DAVIS: For the ammunition, correct.

2 MR. BECKINGTON: All right.

3 THE WITNESS: The ammunition is chosen based on
4 the expended evidence components. In other words, if
5 the expended ammunition from our crime scene is, let's
6 say, made by one company, we don't want to test fire
7 that gun with ammunition made by a different company
8 because of differences in metal hardness and different
9 characteristics. So we try to get ammunition of the
10 same type and load to do the test firing.

11 Q. BY MR. DAVIS: You mentioned indexing
12 procedures?

13 A. Yes.

14 Q. What are those?

15 A. For test ammunition, the cartridge, before it's
16 fired, is marked with an index mark that extends along
17 the longitudinal axis of the cartridge from the
18 cartridge case onto the bullet ogive, and that's an
19 index mark. So when that cartridge is loaded, each
20 cartridge is loaded so that the index mark is -- in my
21 case, when I do the example, it's always at the 12:00
22 position -- so that each test bullet and each test
23 cartridge case has an orientation mark, I know how it
24 was loaded. So it's a quick way to phase these
25 components onto the comparison scope.

1 Q. And you mentioned sequencing procedures.

2 A. Yes.

3 Q. What are those?

4 A. Those are the numbers that are placed on the
5 cartridge cases and bullets so that I know what order
6 those components were fired in the gun, so I can tell
7 which one was fired first, which was second, which was
8 third, et cetera.

9 Q. You mentioned intercomparing procedures.

10 A. Yes.

11 Q. What are those?

12 A. That's where we take the test components and
13 those are mounted on a comparison scope and you compare
14 the microscopic features, in this case, let's say, two
15 bullets. Compare test 1 with test 2, and then we
16 compare test 1 with test 3 so that we can see what that
17 particular gun is producing, that is, the consistent,
18 repetitive, individualizing features.

19 Q. I'm going to show you the California Assault
20 Weapon Identification Guide and their definition of
21 flash suppressor, which is on page 80. Take a look at
22 that.

23 A. Yes. It says for flash suppressor any device
24 designed, intended or that functions to perceptively
25 reduce or redirect muzzle flash from the shooter's field

1 of vision.

2 Q. That "or" makes the definition disjunctive with
3 one definition being any device designed and intended to
4 reduce flash, correct?

5 A. Yes.

6 MR. BECKINGTON: Objection. Objection. The
7 document speaks for itself.

8 Q. BY MR. DAVIS: In your opinion.

9 MR. BECKINGTON: Same objection. Are you
10 asking him to parse the grammar of the statement?

11 MR. DAVIS: I'm asking his opinion on the
12 question I just asked.

13 MR. BECKINGTON: I'll object that the document
14 speaks for itself.

15 Q. BY MR. DAVIS: In your opinion?

16 A. Could you rephrase that or ask it again.

17 Q. Does that "or" make that sentence disjunctive?

18 MR. BECKINGTON: Same objection.

19 THE WITNESS: I don't know what you mean,
20 "disjunctive."

21 Q. BY MR. DAVIS: If a flash supressor is designed
22 and intended to reduce flash but does not function, in
23 your opinion would that be a flash suppressor based on
24 that definition?

25 MR. BECKINGTON: I'll object to the question as

1 vague and ambiguous.

2 Q. BY MR. DAVIS: Do you understand it?

3 A. Yes. You're asking me if -- let me see if I
4 understand the question. I understand your question to
5 be if a device was made or intended to be a flash
6 suppressor but it doesn't actually do that, is it still
7 a flash suppressor?

8 Q. Under that definition in your opinion.

9 MR. BECKINGTON: Objection. Calls for a legal
10 conclusion.

11 THE WITNESS: Yeah, that is -- would require a
12 legal conclusion, and I'm a scientist. I don't know
13 that I could get into the legal stuff.

14 Q. BY MR. DAVIS: Is the first half of that
15 definition ending in "or" similar or identical to -- not
16 identical, but similar to the definition you brought
17 with you today?

18 A. This one here, the AFTE glossary?

19 Q. Yes.

20 MR. BECKINGTON: I'll object that the documents
21 speak for themselves.

22 THE WITNESS: The AFTE glossary says a flash
23 suppressor is a muzzle attachment designed to reduce
24 muzzle flash.

25 And in the Assault Weapons Identification Guide

1 it says any device designed, intended or that functions
2 to perceptively reduce or redirect muzzle flash from the
3 shooter's field of vision.

4 So it looks like the definition in the
5 Identification Guide has extra criteria that is not
6 listed in the AFTE glossary.

7 Q. BY MR. DAVIS: But they both include
8 "designed"?

9 A. Yes. Yes.

10 Q. We were discussing earlier the intercomparing
11 of bullets.

12 A. Yes.

13 Q. This definition includes a requirement, in
14 part, that a device function to reduce or redirect
15 flash.

16 A. Yes.

17 Q. How would you go about determining whether or
18 not a device functions to reduce or redirect flash?

19 A. In order to do that, in my opinion you'd have
20 to have some objective criteria that you could measure,
21 and an examination of this type would be very complex
22 and -- it would be very, very complex and require a lot
23 of expensive equipment.

24 If you were looking -- what you'd have to do is
25 test fire the gun with and without the device on it

1 using the same exact ammunition, same lot number, et
2 cetera, same load so that the ammunition would not be a
3 variable, would not contribute to variations in the
4 muzzle flash, and then you'd have to be able to somehow
5 quantitate the amount of light that's being disbursed
6 from the muzzle, and not only the amount of light but
7 the direction at which this light is -- the flash, the
8 flame is being directed. And the way to do this would
9 be with ultra high-speed video photography. That would
10 be one component. And then you'd also need some kind of
11 photoelectric device that could measure intensity of the
12 light given off.

13 Q. How much -- I'm not asking you to guess. How
14 much do you think the equipment for something like that
15 would cost?

16 MR. BECKINGTON: Objection. Calls for
17 speculation. And I would just caution the witness that
18 he should not guess to answer any question today.

19 Q. BY MR. DAVIS: Do you have an estimate?

20 A. I do have a very good estimate on that because
21 I participate just about every year at the Yuma proving
22 ground forensic test session. The U.S. Army allows us
23 as forensic firearms examiners to go there each year and
24 use their equipment when they have the time in their
25 schedule, and we get to participate and use one of their

1 ranges to participate in experiments, and one of them is
2 with Doppler radar and the other is with ultra
3 high-speed video photography.

4 I've been going there for a number of years,
5 and I asked the actual technicians about their
6 equipment. And when they have a couple of cameras set
7 up with their lights and everything and their trigger
8 devices that start the timer on this ultimate high-speed
9 video camera equipment, they told me that you're looking
10 at about \$1.2 million for this setup right here. And
11 over the years it's gotten more sophisticated with more
12 lighting, more cameras, so you're looking at at least a
13 million dollars for some of this equipment.

14 It could be done with probably a lot less money
15 if you had just one type of camera with a lot slower
16 speed, but we're photographing some of these experiments
17 at 5,000 frames per second. And there are cameras, much
18 better cameras, that can do a lot more in the way of
19 speed, so it depends on what you're trying to show.

20 Q. Would you consider going into a dark room and
21 just shooting a firearm with a muzzle device attached to
22 it a sufficient test?

23 MR. BECKINGTON: Objection. Incomplete
24 hypothetical and calls for speculation.

25 THE WITNESS: I'd have to know more detail.

1 Q. BY MR. DAVIS: To test whether or not a device
2 functions to reduce or redirect flash, is it sufficient
3 to just go into a dark room, test fire it, and observe
4 it yourself with your naked eye?

5 MR. BECKINGTON: Same objections.

6 THE WITNESS: Are you talking about two tests
7 where you've got one with the device and --

8 Q. BY MR. DAVIS: First one just going into a dark
9 room.

10 A. No.

11 Q. What about if you went in there with your bare
12 eyes into a dark room and test fired it and then took
13 the device off and test fired it again in a dark room?

14 A. That would be -- that might be an indication,
15 but it's pretty subjective because you have to realize
16 if you go into a dark room and you have your night
17 acuity set up, once you fire, that flash is going to
18 change your eye's ability to perceive that light. You
19 might have pupillary restriction or something. I don't
20 know.

21 It doesn't sound like a really objective way to
22 measure a device. It might give you some idea of what a
23 device might do, but as for objective criteria, you
24 don't have that.

25 Q. Have you ever heard the term SWAG?

1 A. Yes, I have.

2 Q. What does that term mean?

3 MR. BECKINGTON: Objection. Calls for
4 speculation as to what you're referring to.

5 Q. BY MR. DAVIS: What do you understand the term
6 to mean?

7 A. Scientific wild-ass guess.

8 Q. Would you consider that form of test a SWAG?

9 MR. BECKINGTON: Objection. Vague and
10 ambiguous. Also an incomplete hypothetical.

11 THE WITNESS: Yes.

12 Q. BY MR. DAVIS: Could you determine whether or
13 not a device functions to reduce or redirect flash
14 without a test?

15 MR. BECKINGTON: Objection. Calls for
16 speculation and incomplete hypothetical.

17 THE WITNESS: What you're asking me is can the
18 unaided eye detect or perceive subtle differences in
19 muzzle flashes? Is that what you're asking me?

20 Q. BY MR. DAVIS: Let's wait on that one.

21 Does ammunition have an effect on flash?

22 A. Absolutely.

23 Q. How so?

24 A. Different kinds of powder, smokeless powder,
25 have different burn rates. You have slow-burning

1 powders, fast-burning powders and everything in between.

2 And depending on the gun itself, the barrel
3 length, you could have some powders that continue to
4 burn where the whole charge isn't even burned until it's
5 actually blown out of the barrel and then it continues
6 to burn, and then you have some powders that burn very
7 quickly, are consumed within a very short amount of time
8 while the burning charge is within the chamber of the
9 gun. That would produce a different type of flash.

10 Q. Under that definition, would ammunition that
11 produces less flash be considered a flash suppressor in
12 your opinion?

13 MR. BECKINGTON: Objection. Vague and
14 ambiguous. Which definition are you referring to?

15 MR. DAVIS: The definition of flash suppressor.

16 MR. BECKINGTON: Which definition?

17 MR. DAVIS: I'm sorry, the definition in the
18 California Assault Weapon Identification Guide.

19 MR. BECKINGTON: Objection. Calls for a legal
20 conclusion.

21 THE WITNESS: I'm reading the definition again.
22 Any device designed, intended or that functions to
23 perceptively reduce or redirect muzzle flash from the
24 shooter's field of vision.

25 Well, I know there are flash suppressants that

1 can be added to smokeless powder that can reduce muzzle
2 flash. And I've never thought about it until today,
3 about ammunition actually being considered a flash
4 suppressor. But I know that suppressant has been added
5 to powders, military-type loads, to reduce the flash.

6 Q. BY MR. DAVIS: So it can function to reduce
7 flash, ammunition?

8 A. Yes, sir.

9 Q. In your opinion would the AFTE glossary
10 definition of flash suppressor include the same
11 ammunition?

12 MR. BECKINGTON: Objection. Document speaks
13 for itself.

14 THE WITNESS: The AFTE definition says a muzzle
15 attachment designed to -- it's very specific, muzzle
16 attachment designed to reduce muzzle flash, so that's
17 the -- it applies only to things that could be attached
18 to the end of the barrel.

19 Q. BY MR. DAVIS: So no?

20 A. So no.

21 Q. Can barrel length affect whether or not flash
22 is reduced or redirected from the shooter's field of
23 vision?

24 A. I believe so, but I haven't done actual
25 experiments. I don't have any objective criteria.

1 Barrel length certainly does have an impact on where all
2 that smokeless powder is consumed or burned.

3 Q. When compared to a 16-inch barrel, can an
4 18-inch barrel manufactured in the same design other
5 than length be considered a flash suppressor under the
6 Assault Weapon Identification Guide's definition of
7 flash suppressor?

8 MR. BECKINGTON: Objection. Calls for a legal
9 conclusion. Calls for speculation and vague and
10 ambiguous.

11 THE WITNESS: I would need some more detail.
12 Maybe rephrase it, please.

13 Q. BY MR. DAVIS: If you take a 16 -- let me
14 rephrase it.

15 If you start off with a 20-inch barrel and you
16 fire that gun --

17 A. Okay.

18 Q. -- you take that same barrel, cut two inches
19 off, it's now 18 inches. Would you expect the flash to
20 be greater?

21 A. It could be. It may not be, but it could, yes.

22 Q. So barrel length can affect flash?

23 A. Yes.

24 Q. In that situation would a shorter barrel --
25 would the shorter of those two barrels be deemed a flash

1 suppressor in your opinion under the Assault Weapon
2 Identification Guide's --

3 MR. BECKINGTON: Objection. Calls for
4 speculation.

5 MR. DAVIS: Can I finish?

6 -- under the Assault Weapon Identification
7 Guide's definition of flash suppressor?

8 MR. BECKINGTON: Objection. Calls for
9 speculation. Calls for a legal conclusion. I also am
10 going to object that I think you're misleading the
11 witness because you are not reading this in conjunction
12 with the statute 1226.1. I made an objection for the
13 record so that if it's ever before the court, it's clear
14 that you're focusing just on this. But it's misleading,
15 and your question is incomplete because you're not
16 reading it in conjunction with the statute.

17 MR. DAVIS: I'm asking him about the definition
18 that's reported in the Assault Weapon Identification
19 Guide, which is what consumers are supposed to use to
20 identify whether or not their device is a flash
21 suppressor.

22 MR. BECKINGTON: Okay. I'm making my
23 objections for the record. I think your question is
24 vague and ambiguous, incomplete and misleading and also
25 calls for a legal conclusion.

1 THE WITNESS: Certainly changing the barrel
2 length, shortening the barrel length, can increase
3 muzzle flash. If that could be applied to this
4 definition, then, yes.

5 (Recess taken.)

6 Q. BY MR. DAVIS: What does the word "permanent"
7 mean to you? How would you define it?

8 A. Permanent? Never thought about it. Not able
9 to change. Unchangeable. Lasts forever.

10 Q. Do you know what a high-capacity magazine is in
11 California?

12 A. In California my understanding is that it's a
13 magazine that holds more than 10 cartridges, only
14 because I -- I can't buy a magazine now in California if
15 it holds more than 10. It's kind of common knowledge
16 that it's a magazine that will hold 11 or more.

17 Q. If I had a 20-round magazine and wanted to
18 modify it so that I could permanently alter it so that
19 it could not accept more than 10 rounds, how could I do
20 that?

21 MR. BECKINGTON: Objection. Incomplete
22 hypothetical.

23 THE WITNESS: You could alter the magazine
24 by -- and I've never done this, but --

25 Q. BY MR. DAVIS: In your opinion.

1 A. In my opinion, you could put some kind of a
2 physical block at the bottom of the magazine and hold it
3 in there either by welding a block in there or driving
4 in a pin or something and then shortening the follower
5 spring, designing it in such a way that the top half of
6 the mag would only hold 10 or -- 10 cartridges or less.

7 Q. Would that be permanent in your opinion?

8 MR. BECKINGTON: Objection. Calls for
9 speculation and it calls for a legal conclusion.

10 THE WITNESS: I look at it in a different way
11 as a firearms examiner. When you say "permanent," what
12 some people may consider permanent may not necessarily
13 be if -- you know, I could go in with a milling machine
14 and mill out the physical block at the bottom or remove
15 a weld or whatever and restore that original device back
16 to its original capacity.

17 So in that case what somebody else may consider
18 permanent, I could look at and say, well, maybe we could
19 convert this back with some specialized tooling or
20 machining process. So what one person may consider
21 permanent, I may not consider permanent.

22 Q. BY MR. DAVIS: Would you consider that first
23 alteration that you described, where you weld the base
24 and cut the spring, permanent?

25 A. Like welding a block to the bottom of it or a

1 physical blockage, I suppose it could be. You have to
2 look at what's reasonable to restore it back to its
3 original condition. I don't know. I really don't know.

4 Q. Okay. In your opinion could an ordinary person
5 who doesn't have the same firearms education as you have
6 determine whether or not a device is a flash suppressor
7 as defined under -- in the Assault Weapon Identification
8 Guide just by examining the device itself?

9 MR. BECKINGTON: Objection. Vague and
10 ambiguous as to "ordinary person." And also calls for
11 speculation.

12 Q. BY MR. DAVIS: Without test firing it?

13 A. In my opinion anybody that doesn't evaluate it
14 with objective criteria I don't think could make that
15 determination.

16 MR. DAVIS: That's it.

17 MR. BECKINGTON: Okay. Do you want to propose
18 a stipulation?

19 MR. DAVIS: Yeah. I propose that we relieve
20 the court reporter of her duties with regard to this
21 deponent, that the original will be forwarded to you and
22 you'll have a chance to review it and advise me of any
23 changes, and a certified copy can be used at trial.

24 MR. BECKINGTON: And, again, the witness will
25 have at least 30 days in which to review and make any

1 changes he deems necessary, and I would advise you as to
2 any changes that would be made.

3 MR. DAVIS: So stipulated.

4 MR. BECKINGTON: So stipulated.

5 (The deposition adjourned at 11:57 a.m.)

6 ---o0o---

7 Please be advised that I have read the foregoing
8 deposition. I hereby state there are:

9 (check one)

10

11 _____ NO CORRECTIONS

12

13

14 _____ CORRECTIONS ATTACHED

15

16

17

18 _____
MICHAEL FRANCIS GIUSTO

19

20

Date Signed

21

22 Case Title: Hunt vs State of California

23 Date of Deposition: Friday, February 22, 2008

24 Job No.: 18240LR

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REPORTER'S CERTIFICATE

I certify that the witness in the foregoing deposition,

MICHAEL FRANCIS GIUSTO,

Was by me duly sworn to testify the truth, the whole truth, in the within-entitled cause; that said deposition was taken at the time and place therein named; that the testimony of said witness was reported by me, a duly certified shorthand reporter and a disinterested person, and was thereafter transcribed into typewriting.

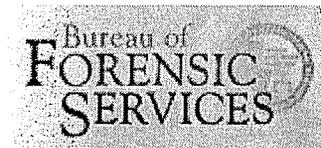
I further certify that I am not of counsel or attorney for either or any of the parties to said cause, nor in any way interested in the outcome of the cause named in said deposition.

IN WITNESS WHEREOF, I have hereunto set my hand this 6th day of March, 2008.



TRACY LEE MOORELAND, CSR 10397
State of California

Exihbit A



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 SEARCH

BUREAU OF FORENSIC SERVICES

Bureau of Forensic Services

BFS Home

Proposition 69 (DNA)

BFS Services

Toxicology

Resources

The Bureau of Forensic Services (BFS) is the scientific arm of the Attorney General's Office whose mission is to assist the criminal justice system. Forensic scientists collect, analyze, and compare physical evidence from crime scenes or persons. They also provide criminalistics, blood alcohol, and related forensic science information services to state and local law enforcement agencies, district attorneys, and the courts. BFS also offers specialized forensic science training to personnel who are practitioners in the field of forensic science through the California Criminalistics Institute (CCI).

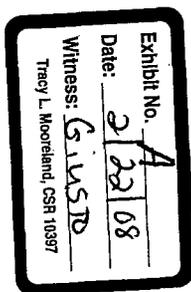
The Attorney General's Office champions the use of proven technology to fight crime that includes analyzing DNA evidence to produce crime-solving matches - improving from an average of one "cold hit" a year to one a day.



DNA Forensic Technology Solving Crimes

The Attorney General worked to eliminate the inherited huge backlog of DNA samples and pushed for improvements in a system that solved an average of one case a year. Today, the California Department of Justice operates the largest working DNA data bank in the country, processing more than 200,000 DNA samples from convicted felons and matching them to old, unsolved cases that now averages one case a day.

California's cold hit program has allowed local law enforcement agencies to clear their DNA evidence backlog of over 13,000 unsolved cases and propelled the number of "hits" from one a year to an average of one a day. A "hit" occurs when DNA evidence from an



unsolved crime sample matches a DNA profile from evidence in another case or an offender's DNA profile in the CAL-DNA Convicted Felons database.

Right now, DNA samples are collected from any person convicted of any felony and those arrested or charged with a homicide or sex offense. Starting January 1, 2009, Prop 69 requires that the Department of Justice begin taking samples for any adult arrested or charged with any felony offense. Expanding the DNA Database is an essential crime-fighting tool.

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