

The Joint Federal/Provincial Commission into the April 2020 Nova Scotia Mass Casualty MassCasualtyCommission.ca

Commission fédérale-provinciale sur les événements d'avril 2020 en Nouvelle-Écosse CommissionDesPertesMassives.ca

Public Hearing

Audience publique

Commissioners / Commissaires

The Honourable / L'honorable J. Michael MacDonald, Chair / Président Leanne J. Fitch (Ret. Police Chief, M.O.M) Dr. Kim Stanton

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II Appearances / Comparutions

Ms. Amanda Byrd Commission Counsel /

Conseillère de la commission

Ms. Jennifer Cox Commission Counsel /

Conseillère de la commission

Mr. Matthew McLellan Counsel / Conseiller

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1	Halifax, Nova Scotia
2	Upon commencing on Tuesday, May 3rd, 2022, at 9:32 a.m.
3	REGISTRAR DARLENE SUTHERLAND: Good morning. The
4	proceedings of the Mass Casualty Commission are now in session, with Chief
5	Commissioner Michael MacDonald, Commissioner Leanne Fitch, and
6	Commissioner Kim Stanton presiding.
7	COMMISSIONER STANTON: Hello, and welcome. Bonjour, et
8	bienvenue. We join you from Mi'kma'ki, the ancestral and unceded territory of the
9	Mi'kmaq. Once again, we start by remembering those whose lives were taken or were
10	harmed, their families, and all those affected by the April 2020 mass casualty in Nova
11	Scotia.
12	This week in public proceedings, we will continue to make progress
13	in our work, building on our understanding of what happened and exploring how and
14	why it happened. You can read more about the progress we have made to date and the
15	steps we anticipate taking next in the Commission's work in the Commission's Interim
16	Report which was published yesterday on our website. Our Interim Report is now
17	available for your viewing, and it was submitted to the Governments of Canada and
18	Nova Scotia in advance of the May 1st due date.
19	The report is a required step in our mandate and shares an
20	overview of the work we are doing on behalf of Nova Scotia's Nova Scotians and
21	Canadians. Because our work is still underway, the Interim Report does not include
22	findings or recommendations. Please hear us when we say, we have and we will
23	continue to hear from witnesses. This includes six witnesses this week, starting with a
24	technical witness today, and ending the week with the RCMP officers who responded to
25	the mass casualty.
26	Last week, we broadened our focus and proceedings to explore the
27	causes, context, and circumstances that may have contributed to the mass casualty.
28	We held the first of what will be many roundtable discussions, hearing from a range of

- 1 people with knowledge and experience about police paraphernalia and police
- 2 impersonation. We have also shared eight commissioned reports on our website, with
- more to follow. These independently prepared reports analyse public policy, academic
- 4 research, and lessons learned from previous mass casualties. You can expect to hear
- 5 more from roundtables, small group sessions, and commissioned reports as we
- 6 continue to explore the how and the why and dig down into the work that we have done
- 7 to date. These activities will take place alongside our ongoing fact-finding work to
- 8 determine what happened.
- 9 Later today, Commission Counsel will make brief presentations
- about two of the commissioned reports focussed on the history of gun control in Canada
- and relationships between mass casualty shootings and masculinity. We will hear from
- a technical witness, Benjamin Sampson, who is a firearms scientist. This type of
- witness is a witness that Participants also identified as helpful. We are pleased he can
- 14 join us today.
- 15 But first, Commission Counsel, Amanda Byrd, will share a
- presentation on the Foundational Document focussed on firearms. Thank you very
- much and thank you for joining us today.
- 18 --- FOUNDATIONAL DOCUMENT FIREARMS:
- 19 --- PRESENTATION BY MS. AMANDA BYRD:
- 20 **MS. AMANDA BYRD:** Commissioners, Participants, and people of
- Nova Scotia, Canada, and beyond, I am Amanda Byrd, Commission Counsel, and one
- of my responsibilities is to gather the evidence on the parts of the Commission's
- 23 mandate regarding firearms.
- I just have one bit of housekeeping before I get started. Last week,
- we entered as an exhibit Christine LaMarche's interview, COMM50865, as Exhibit 1030,
- in error. COMM50865 had been previously marked as Exhibit P1017. Therefore,
- 27 Exhibit 1030 may be used for another document being tendered. Thank you.
- Commissioners, I would now like to mark four documents as public

1	exhibits.
2	COMMISSIONER MacDONALD: Thank you.
3	MS. AMANDA BYRD: The first is the Legislative Brief on
4	Firearms, COMM18403.
5	REGISTRAR DARLENE SUTHERLAND: It's Exhibit 1030.
6	EXHIBIT NO. 1030:
7	Legislative Brief on Firearms, COMM18403
8	MS. AMANDA BYRD: The next is the Firearms Foundational
9	Document.
10	REGISTRAR DARLENE SUTHERLAND: One-zero-nine-nine
11	(1099).
12	EXHIBIT NO. 1099:
13	Firearms Foundational Document
14	MS. AMANDA BYRD: And its supporting material.
15	REGISTRAR DARLENE SUTHERLAND: So exhibited.
16	MS. AMANDA BYRD: The CBSA Firearms Policy Summary.
17	REGISTRAR DARLENE SUTHERLAND: Two-one-zero-six
18	(2106).
19	EXHIBIT NO. 2106:
20	CBSA Firearms Policy Summary
21	MS. AMANDA BYRD: And its supporting materials.
22	REGISTRAR DARLENE SUTHERLAND: So exhibited.
23	MS. AMANDA BYRD: And the transcript of the Mass Casualty
24	Commission Interview of David Andow.
25	REGISTRAR DARLENE SUTHERLAND: Two-one-zero-sever
26	(2107).
27	EXHIBIT NO. 2107:
28	Mass Casualty Commission Interview of David Andow

MS. AMANDA BYRD: Thank you.

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This presentation will provide a brief overview of the applicable legislation regarding the acquisition, possession, transfer, import and use of firearms at the time of the mass casualty in April 2020. It will also include a summary of material reviewed by mass casualty Commission Counsel to date relating to the perpetrator's access to, possession of, and use of firearms. This presentation will discuss the firearms recovered from the Mazda3 the perpetrator was driving at the time of his death, the ammunition and accessories that were also recovered from the vehicle, other firearms recovered by the RCMP after the mass casualty, and other firearms that the perpetrator may have possessed. I will also discuss the perpetrator's use of these items during the mass casualty. Reference is made during this presentation to the homicides of the victims by the perpetrator on April 18th and 19th, and to forensic evidence recovered with respect to the victims. The slides also contain images of the five firearms the RCMP recovered from the stolen Mazda3. The information included in the discussion of the use of firearms in the homicides and during the mass casualty may be disturbing. There are a few terms that you will hear more than once during this presentation that relate to firearms, the first are automatic and semi-automatic firearms. An automatic firearm is capable of discharging projectiles in rapid succession during one depression of the trigger; and a semi-automatic firearm has a mechanism that operates to complete any part of the reloading cycle that's necessary to prepare for the discharge of the next cartridge after one cartridge has been discharged. Over-capacity magazines for handguns are generally magazines with a capacity that is greater than 10 rounds. For centre-fire long guns, over-capacity magazines are generally magazines with a capacity of five rounds -- more than five

The sear is part of the trigger assembly and holds back the

- firearm's hammer, striker, or bolt until the trigger is pulled. Select-fire weapons have a
- 2 second sear to take over in automatic mode. The auto-sear device is used to enhance
- a firearm's trigger mechanism and turn a semi-automatic firearm into a fully-automatic
- 4 firearm.

- And finally, a CTC laser point grip is an accessory manufactured by
- 6 Crimson Trace, which is an American manufacturer of firearm accessories. Crimson
- 7 Trace laser sights are activated by pressure pads, which are naturally depressed with a
- 8 normal shooting grip.
 - I'll now provide a very brief overview of some of the laws
- 10 surrounding firearms in Canada.
- 11 Canada's *Criminal Code* describes three types of firearms. These
- are "prohibited", such as certain handguns, fully automatic firearms, and sawed-off
- rifles; "restricted", such as handguns, certain rifles and semi-automatic firearms, and
- "non-restricted", such as ordinary hunting rifles and shotguns, which are often referred
- to as "long guns). Restricted and prohibited firearms require additional safety training,
- they must be registered, and their use may be limited to certain activities such as target
- practice or as part of a collection. It is a crime to possess a firearm without a licence
- and, in the case of restricted and prohibited firearms, without a registration certificate.
- The *Criminal Code* and the *Firearms Act* both contain provisions
- regarding the transfer of firearms, firearms-related devices and ammunition. "Transfer"
- is given a broad definition in the *Criminal Code* and includes selling, giving or delivering.
- Firearms can only be transferred from individual to individual under
- the authority of the *Firearms Act* or other Acts or Regulations of Parliament. And under
- 24 the *Firearms Act*, the transferee or the person receiving the firearm must have a licence
- for the type of firearm being transferred.
- The Regulations Prescribing Certain Firearms and Other Weapons,
- 27 Components and Parts of Weapons, Accessories, Cartridge Magazines, Ammunition
- and Projectiles as Prohibited, Restricted or Non-Restricted, which I will refer to in this

- presentation as simply "the Regulations", contain a list of firearms, components and ammunition that are restricted, prohibited and non-restricted.
- The list that was applicable at the time of the mass casualty in April
 2020 was amended in May of 2020. The amendments banned over 1,500 models and
 variants of firearms and contain a transition period of two years for owners of newlyprohibited firearms to take steps to comply with the new rules.

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- The *Firearms Act* is Canada's primary legislation that governs the possession, licensing, transport and storage of firearms. It created a licensing scheme through which individuals can obtain a Possession and Acquisition Licence, also known as a PAL.
 - The *Firearms Act* also allows for the appointment of a Chief Firearms Officer in each province and sets out the powers of the Chief Firearms Officers and their agents to inspect gun storage, demand compliance, and seize firearms. Chief Firearms Officers are also responsible for issuing firearms licences.
 - The *Firearms Act* also contains provisions that make some people ineligible to hold a firearms licence or registration certificate. This includes where they have been convicted of certain crimes under the *Criminal Code*, have a history of domestic violence and making online threats, or are subject to a prohibition order regarding possession of firearms.
 - And I'll speak briefly about the Canada Border Services Agency, or CBSA. It is the federal agency that regulates the border and, for our purposes, it regulates the border with respect to international firearms smuggling.
- In addition to legislation such as the *Criminal Code*, the
 Regulations, the *Firearms Act*, and the *Customs Tariff* regarding firearms, the CBSA
 also has its own policies that relate specifically to firearms. The policies that were in
 place at the time of the mass casualty are discussed in further detail in the *CBSA Firearms Policy* summary marked as an exhibit this morning
 - Border Services Officers, or BSOs, know which firearms are

- prohibited or restricted, and use the classification in the *Criminal Code* for this purpose.
- 2 BSOs also have internal resources they can consult if they are uncertain about a
- 3 particular firearm's classification.
- 4 CBSA can also flag people or vehicles as "high risk".
- I will now turn to the subject of the perpetrator's access to,
- 6 possession and use of firearms, beginning with a general overview of what witnesses
- told the RCMP in their statements after the mass casualty about their awareness.
- 8 Some of the witnesses said they were aware the perpetrator did not have a firearms
- 9 license, but others said they assumed he did have a licence and others simply did not
- 10 know.
- Lisa Banfield told the RCMP the perpetrator had "military style"
- guns" and that he had two handguns, one black and one silver. Ms. Banfield said she
- believed one of the handguns was "a Glock".
- Family members told the RCMP that the perpetrator had a
- "massive" handgun, a shotgun, an assault rifle and 9 millimetre handguns.
- Friends and acquaintances of the perpetrator said the perpetrator
- had a shotgun, 9 millimetre handguns, laser sights, a .357 magnum, hunting rifles and a
- 18 "sniper rifle".
- Neighbours also said the perpetrator had a 9 mm pistol, a semi-
- automatic pistol, a 12-gauge shotgun, a long-barreled rifle, a Ruger Mini-14 and a
- 21 stainless steel Smith and Wesson.
- Denturists, dental professionals and clinic patients reported that the
- perpetrator had "a big chrome handgun, an assault rifle, a big military gun and a
- 24 shotgun".
- 25 I'll just remind you that these were statements that were to the
- 26 RCMP after the mass casualty event.
- 27 Several witnesses also reported that the perpetrator had hiding
- 28 places for firearms at the Portapique residence and the warehouse.

1	The evidence currently available to the Commission indicates that
2	prior to the mass casualty, there were two, and potentially three, separate occasions on
3	which police received information of concern regarding threats made by the perpetrator
4	and his potential access to firearms. Further detail about these complaints can be
5	found in the Foundational Document marked as an exhibit this morning, but I will
6	provide a brief overview of them now.
7	In June of 2010, police received a complaint from the perpetrator's
8	father that the perpetrator had told his uncle he was going to drive to his parents' home
9	and kill them.
10	The investigating officer from Halifax Regional Police, Sergeant.
11	Poirier, spoke to the perpetrator's father, who said he was "still convinced" that his son
12	had weapons in the cottage in Portapique, although the last time he had seen them was
13	five years prior. Without recent knowledge of the weapons, a Public Safety Warrant
14	could not be obtained.
15	Sergeant Poirier spoke to Lisa Banfield and to the perpetrator. Lisa
16	Banfield reported that there were no weapons in the residence, and the perpetrator said
17	that he only had a pellet rifle and two inoperable antique muskets
18	The file was closed on August 26th, 2010, as the complainant, the
19	perpetrator's father, did not contact Sergeant Poirier after the initial contact and
20	Sergeant Poirier was unable to reach him. Furthermore, an RCMP officer, Constable
21	Wiley, who knew the perpetrator from a prior incident in which the perpetrator had
22	complained about the theft of tools from the Portapique residence, told Sergeant Poirier
23	that he would attempt to speak to the perpetrator about the complaint. In a statement to
24	the RCMP on May 28th, 2020, Constable Wiley said he had not seen weapons or a gun
25	rack in the perpetrator's Portapique residence.
26	On May 4th, 2011 Criminal Intelligence Service Nova Scotia, or
27	CISNS, issued an Officer Safety Bulletin to all police agencies regarding the perpetrator.
28	The bulletin stated that information had been received that the

1	perpetrator "wanted to kill a cop" and was in possession of at least one hand gun and
2	potentially several long rifles.

In a subsequent report after the mass casualty, the Truro Police officer who authored the bulletin, Cpl Densmore, said the information came from an unknown individual who approached him during the course of his duties.

Brenda Forbes, a former neighbour of the perpetrator's, told the RCMP in a statement on May 14th, 2020 that she had reported her belief that the perpetrator had illegal weapons to the RCMP in the summer of 2013 when complaining about an incident of domestic violence involving the perpetrator and Lisa Banfield.

The records provided to the Commission from the RCMP indicate that the RCMP has a different account of this complaint, including its content.

The complaint and the different accounts of it are discussed in detail in the Foundational Document.

I will now discuss the firearms recovered from the stolen Mazda3.

Please be advised that the upcoming slides do contain photographs of the firearms.

This list represents the firearms recovered from the Mazda3 on the left, which we know were used during the mass casualty, and on the right, there are other firearms that were discussed by witnesses or were recovered by the RCMP at other locations after the mass casualty. I will be discussing each of these firearms in turn.

I will briefly address the legal classification of each firearm, but it is important to note that by virtue of the fact that the perpetrator did not have a firearms license, all of the firearms were in fact illegal and illegally obtained.

In addition to the firearms, a large amount of ammunition was recovered, both from scenes in the form of fired bullets, fragments, or expended cartridge cases, and from the Mazda3.

This is a photograph of the Glock 23, serial number HZY270, recovered by the RCMP from the Mazda3 after the mass casualty. In this photograph,

- you can see that a laser grip is attached to the firearm. A magazine is also shown in 1 2 this photograph on the right-hand side. The Glock 23 was a semi-automatic pistol that used .40 calibre 3 ammunition. Under the Criminal Code and the Regulations, the Glock 23 was a 4 prohibited firearm because it was a handgun that had a barrel that was equal to or less 5 than 105 millimetres in length. 6 7 When the Glock 23 was recovered, a magazine loaded with six of 8 12 possible rounds was seated in the firearm and there was one round in the chamber. 9 This magazine was a prohibited device, as it was capable of containing more than 10 cartridges of the type for which it was originally designed, and 10 it was designed for use in a semi-automatic handgun. 11 The Glock 23 was traced to the United States and sourced to Bob 12 and Tom's Gun Shop in Maine. 13 It was originally transferred or sold to the gun shop on April 11th, 14 2006 and was then purchased by an individual on April 14th, 2006. 15 The purchaser sold the firearm back to the gun shop on November 16 15th, 2009 and it was subsequently purchased as a used item by Sean Conlogue, a 17 friend of the perpetrator's who lived in Maine, on November 21st, 2009. 18 The perpetrator obtained the Glock 23 from Mr. Conlogue. In his 19 statement to the RCMP on May 20th, 2020, Mr. Conlogue said the perpetrator told him 20 he had taken this firearm, along with a Glock 36, without Mr. Conloque's knowledge or 21 permission sometime in 2017 or 2018. 22 23 This is a photograph of the Ruger P89, serial number 30437738, 24 which was recovered by the RCMP from the Mazda3 after the mass casualty. You can see in this photograph that a CTC laser grip is also 25
 - recovered by the RCMP, the hammer was cocked. The trigger for this firearm required

The Ruger P89 was a 9mm semi-automatic pistol. When it was

attached to this firearm.

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- 1 a light pull for firing.
- The Ruger P89 was a restricted firearm because it was a handgun
- that did not meet the criteria for a prohibited firearm.
- When the P89 was recovered, an empty 15 capacity magazine was
- seated in it. The safety was off and one round was in the chamber, which ejected when
- 6 the action was opened.
- 7 The magazine was a prohibited device because it was capable of
- 8 containing more than 10 cartridges of the type for which it was originally designed, and
- 9 it was designed for use in a semi-automatic handgun.
- The Ruger P89 was manufactured by Sturm Ruger in the United
- 11 States from 1992 to 2007.
- The Ruger P89 the perpetrator had was sold to Moulton's Gun
- Shop in Lincoln, Maine, on August 26th, 1992 and was then purchased by an individual
- on January 26th, 1993.
- A different person owned this firearm in 2004 and sold it sometime
- prior to 2008 to an unknown buyer through Uncle Henry's magazine, which is a
- periodical distributed in Maine.
- The firearm was later purchased by Sean Conlogue, who said he
- purchased it for about five to \$600 from Bob Berg.
- The ATF reviewed Mr. Berg's records and did not find a record of
- 21 Mr. Conlogue having purchased this firearm from him.
- Mr. Conlogue told the ATF in a phone interview on May 7th, 2020
- that he had given the perpetrator a Ruger. Mr. Conlogue said he gave the firearm to the
- perpetrator sometime between 2015 and 2018 as a sign of gratitude for the
- perpetrator's help with tree removals and other odd jobs at his residence.
- Mr. Conlogue said he assumed the perpetrator could take a firearm
- into Canada because he was a Canadian citizen and did not ask the perpetrator about
- 28 how he would get the firearm across the border.

1	This is a photograph of the Colt Carbine, serial number LE048361,
2	which the RCMP recovered from the Mazda3 after the mass casualty.
3	In this photograph, you can see a bumpy ridge across the top of the
4	firearm. That is an apparatus called Picatinny rails and is used to mount accessories on
5	a firearm.
6	The Colt Carbine was a 5.56 calibre semi-automatic rifle and is of
7	the design that is commonly known as an AR-15.
8	When the firearm was recovered, the selector switch was set to fire.
9	There was not an auto sear present in the firearm, that area of the
10	firearm was not milled, and the selector switch could only move between "safe" and
11	"fire".
12	As no links or drop-in sear were observed, that would have allowed
13	the firearm to fire in fully automatic mode.
14	At the time of the mass casualty, the Colt Carbine was a restricted
15	firearm under the Regulations. It became a prohibited firearm under the Regulations
16	that came into effect as of May 1 st , 2020.
17	When the Colt was recovered from the Mazda3, there was a loaded
18	overcapacity magazine seated in the magazine wells that contained 25 of a possible 30
19	rounds.
20	This magazine was a prohibited device because it was capable of
21	containing more than five cartridges of the type for which it was originally designed.
22	The Colt was originally purchased on May 13th, 2009 from
23	Battlefield Adventures in Ventura, California. The purchaser transferred the firearm to
24	an individual named Gary Sewell on April 2 nd , 2018. Mr. Sewell subsequently arranged
25	for a man named Don Dematteis to sell the firearm for him at a gun show that took
26	place in Houlton, Maine from April 27th to 28th, 2019.
27	The perpetrator attended the gun show and saw the firearm there
28	on April 27th, 2019. The firearm was purchased for him by an individual named Neil

- Gallivan on either April 27th or 28th, 2019. Mr. Sewell told the RCMP in his statement
- on May 21st, 2020 that he believed he received around \$1,100 for the firearm.
- In his statement to the FBI and the ATF on June 3rd, 2020, Mr.
- 4 Dematteis said that there is a waiting period when purchasing a firearm at a gun show,
- but ordinarily a form is filled out when a firearm is being sold to someone who does not
- 6 have a curio and relic licence. In this case, Mr. Dematteis said that because the sale of
- the Colt Carbine was a private sale from Mr. Sewell to the purchaser of the firearm,
- which Mr. Dematteis merely facilitated, he did not believe Mr. Sewell had any
- 9 responsibility to fill out the form or do a background check.
- 10 With respect to border crossings, on April 25th, 2019, the
- perpetrator exited Canada at the Woodstock, New Brunswick border and entered Maine
- at Houlton with Lisa Banfield. The perpetrator then crossed the border alone into
- 13 Canada on April 27, 2019 and crossed back into Maine alone approximately 15 minutes
- later. The perpetrator and Ms. Banfield then returned to Canada together from Houlton
- through the Woodstock, New Brunswick border crossing on May 2nd, 2019.
- Witnesses told the RCMP that the perpetrator would disassemble
- firearms and roll them up in the tonneau cover of his truck to transport them across the
- border. The witnesses told the RCMP this after the mass casualty.
- This is a photograph of the Ruger Mini-14 that was recovered from
- the Mazda 3. In the photograph, you can see that a shoulder strap is attached to
- 21 this firearm, and on the left side of the photograph is a cartridge magazine.
- The Ruger Mini-14 was a .223 calibre semi-automatic rifle. The
- safety for the firearm was off and one round ejected from the chamber when the action
- was opened while the RCMP was examining this firearm. At the time of the mass
- casualty, the Ruger Mini-14 was not specifically mentioned in the *Regulations*, but it
- became a prohibited firearm when the new *Regulations* came into effect on May 1st,
- 27 2020.

When the Mini-14 was recovered, there was an over-capacity

- 1 magazine seated in it containing 24 of a possible 30 rounds. This means the magazine
- was a prohibited device because it could contain more than five rounds.
- The Mini-14 was manufactured by Sturm Ruger in the United
- 4 States beginning in 1975. This particular firearm was sold or shipped to Marr's Leisure
- 5 Products Inc. in Winnipeg, Manitoba on December 14th, 1988.
- The Canadian National Firearms Tracing Centre was in possession
- of the ledgers of Marr's Leisure Products Inc. at one time, but the ledgers were
- 8 destroyed on November 1st, 2012 by order of the Director-General of the Canadian
- 9 Firearms Program of the era. Further tracing on this firearm was therefore impossible,
- but we know that the Mini-14 at one time belonged to the perpetrator's friend, Tom
- 11 Evans.
- According to the statement provided by Stephen Parks to the
- 13 RCMP on May 21st, 2020, when the perpetrator called to tell him that Mr. Evans had
- died, the perpetrator asked about the Mini-14. At the time, Mr. Parks had the Mini-14
- locked in his gun cabinet. The perpetrator asked Mr. Parks to give him the firearm. Mr.
- Parks told the RCMP that since he had no ownership of the firearm and was not sure
- whether Mr. Evans or the perpetrator owned it, he gave the firearm to the perpetrator.
- 18 Mr. Parks believed he gave the firearm to the perpetrator in early 2010.
- This is a photograph of the RCMP Issue Smith and Wesson Model
- 5947[sic] issued to Constable Heidi Stevenson which was recovered by the RCMP from
- 21 the Mazda 3 after the mass casualty. On the left side of the photograph is a cartridge
- 22 magazine.
- The firearm was a 9mm pistol. When it was recovered, it was
- loaded with a 15-capacity magazine containing 13 rounds, plus one round in the
- 25 chamber.
- The perpetrator stole this firearm along with two magazines after he
- shot Constable Stevenson during the events at the Shubenacadie cloverleaf on April
- 28 19th.

1	I'll speak now about some of the other firearms. I'll start with the
2	.357 Magnum.
3	A man named Don Johnson told the RCMP in a statement on May
4	18th, 2020 that he sold the perpetrator a .357 Magnum in around 2015 or 2016. Mr.
5	Johnson described the firearm as chrome or silver in colour, with a wooden handle, and
6	did not recall whether it had a serial number. Mr. Johnson said the perpetrator paid him
7	\$800 for the firearm.
8	The Mass Casualty Commission does not currently have evidence
9	to suggest that this firearm has been recovered.
10	After the mass casualty, the RCMP recovered a Remington Arms
11	Model 870 Wingmaster 12-gauge shotgun from the burned remains of the perpetrator's
12	warehouse in Portapique.
13	The firearm was originally transferred or sold to Remington's
14	subsidiary, Remington Arms GmBH, in what was then West Germany on January 4th,
15	1985. The subsidiary liquidated in 1988. As the firearm was traced to an inactive and
16	out-of-business foreign entity, records availability was undetermined and further trace of
17	this firearm was not possible.
18	Additionally, subsequent to the coming into force of the Ending the
19	Long-gun Registry Act in 2012, individuals no longer had to register their non-restricted
20	or non-prohibited firearms, and the Act also provided for the destruction of existing
21	records in the Canadian Firearms Registry for those firearms. The Commission does
22	not currently have evidence to suggest where or how the perpetrator obtained this
23	firearm.
24	In his statement to the RCMP on May 8th, 2020, the perpetrator's
25	father said he thought the perpetrator may have had a small Beretta handgun. The
26	Commission does not currently have evidence to suggest that this handgun has been
27	recovered.
28	Robert Doucette, an acquaintance of the perpetrator, called 911 on

- the morning of April 19th, 2020. In his call, he reported that the perpetrator had an
- 2 illegally-obtained Barrett .50 calibre sniper rifle that the perpetrator had purchased in the
- 3 United States. The Commission does not currently have evidence to suggest that this
- 4 firearm has been recovered.
- Sean Conlogue told the RCMP the perpetrator had taken a Glock
- 6 36 from him without his knowledge or permission in 2017 or 2018, at the same time he
- took the Glock 23. The Commission does not currently have evidence to suggest that
- 8 this firearm has been recovered.
- The RCMP seized a black 40 mm handgun at the Blair residence
- after the events. This firearm was found on top of the wood pile on the front deck. The
- firearm had a warning stamp on it that also said it was "Made in Taiwan by Aftermath".
- On the rubber grips of the firearm, there was a circular imprint with a skull head emblem
- and the words, quote, "Special Operations Command Miami, FL", end quote, on both
- sides. The slide was pulled back and there was no magazine in the firearm. The
- 15 Commission currently does not have evidence to indicate whether this firearm belonged
- to the perpetrator, whether he fired it during the mass casualty, or whether forensic
- 17 firearms testing was performed on it.
- The RCMP recovered several firearms from the residence of Sean
- McLeod and Alanna Jenkins after the mass casualty. These firearms were all badly
- damaged by fire, but they were all were classified as non-restricted firearms. As they
- were long guns and they were unregistered, it cannot currently be known with any
- certainty whether they belonged to Sean McLeod and/or Alanna Jenkins, both of whom
- had firearms licenses, or whether the perpetrator brought them to the residence and
- abandoned them there.

- 25 I'll talk a little bit about the accessories that were recovered. I
- spoke about the CTC laser grips. Those were on both the Glock 23 and the Ruger P89.
- 27 They emit a laser pointer when hand pressure is applied.
 - In addition to the five magazines that were seated in the firearms

- recovered from the Mazda3, the RCMP recovered eight other magazines from the
- vehicle. These were: two Ruger P89 magazines that contained 15 rounds of
- 9 millimeter Luger ammunition; one empty 30-round capacity 5.56-calibre magazine;
- 4 one 5.56-calibre magazine that contained 31 rounds; one magazine containing 22
- 5 .223-calibre rounds; two empty RCMP Smith & Wesson magazines, one empty, one full,
- 6 both 15-capacity; and one Ruger Mini-14 magazine that contained five rounds of
- 7 .223-calibre ammunition. Apart from the Ruger Mini-14 five-capacity magazine, and
- 8 aside from the RCMP magazines, all of these magazines were over-capacity, and they
- 9 were prohibited devices.

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With respect to ammunition, in addition to the recovered magazines, the perpetrator had rounds of unused ammunition in the Mazda3, and had a box that contained loose ammunition. The RCMP recovered a shoulder carry strap for the Mini-14, which you saw earlier; a carry strap for the Colt Carbine; and a beige ammunition pouch from the Mazda3. There was also a flashlight attached to the Colt Carbine.

I am now going to discuss the perpetrator's use of firearms during the mass casualty. This discussion includes disturbing information about the homicides of the victims by the perpetrator on April 18th and 19th, and contains information about forensic evidence recovered with respect to the victims.

Before I get started, I would like to briefly explain some of the language that is used in the discussion that is to follow:

In the RCMP's forensic firearms analysis in respect of the mass casualty, a projectile, fragment, or casing may be referred to as, quote, "neither identified nor eliminated", end quote, as having been fired by a particular firearm depending on the investigation. In other cases, other firearms known to be at the scene are ruled out or positively identified as the firearm from which a projectile, fragment, or casing was fired. The analysis depends on the evidence and inconsistencies or consistencies in specific toolmark identification.

1	The Commission has adopted the phrase "neither identified nor
2	eliminated" from the forensic firearms analysis reports. Where projectiles, cartridges, or
3	fragments were positively identified or ruled out as fired from a particular firearm, we
4	have included that information. I would like to note that the Commission does not
5	currently have information regarding forensic firearms evidence associated with Lillian
6	Campbell, and that is why I will not be presenting information with respect to
7	Ms. Campbell.
8	Lisa Banfield: Lisa Banfield told the RCMP that the perpetrator
9	retrieved the Glock 23 from a spare room at the Portapique residence, which he then
10	used to shoot into the ground on either side of her outside of the warehouse on April
11	18th. The Commission has not received forensic evidence to suggest that bullets,
12	fragments, or casings were recovered from the ground at the warehouse that may have
13	been fired from the Glock 23.
14	Lisa McCully: A bullet recovered from Lisa McCully's body was
15	neither identified nor eliminated as fired from the Glock 23, but was not fired from any of
16	the other firearms that were recovered from the Mazda3. And Lisa McCully's DNA was
17	found on the Glock 23.
18	Corrie Ellison: A bullet recovered from the ground at the scene of
19	Corrie Ellison's death was neither identified nor eliminated as fired from the Glock 23,
20	but it was not fired from any of the other firearms that were recovered from the Mazda3.
21	During Corrie Ellison's examination by the medical examiner, a projectile with a copper-
22	coloured metal jacket was recovered from between his T-shirt and sweatshirt. The
23	Commission's review of currently available evidence does not indicate that this projectile
24	was tested for the purposes of forensic firearms analysis.
25	Jamie Blair and Gregory Blair: A fired bullet recovered from
26	Gregory Blair's body was neither identified nor eliminated as fired from the Glock 23, but
27	was not fired from any of the other firearms. A bullet that was located in Greg Blair's
28	clothing was neither identified nor eliminated as fired from the Glock 23.

1	The bullet fragments recovered from Jamie Blair's body were
2	neither identified nor eliminated as fired from the Colt Carbine. They were not fired from
3	the other firearms, and Jamie Blair's DNA was found on the Colt Carbine.
4	One fired bullet jacket fragment recovered from the Blair residence
5	was neither identified nor eliminated as having been fired from the Colt Carbine, but
6	was not fired from the other firearms.
7	Fourteen expended cartridge cases that were recovered at the
8	scene were confirmed as having been loaded in the Colt Carbine, and there were not
9	fired from the Ruger Mini-14, and were neither identified nor eliminated as fired from the
10	Colt Carbine. Five expended cartridge cases recovered at the residence were
11	confirmed as having been fired from the Glock 23.
12	Frank and Dawn Gulenchyn: An expended cartridge case
13	recovered from the residence was confirmed to have been fired from the Glock 23.
14	Joy Bond and Peter Bond: A bullet fragment recovered from Joy
15	Bond's body was neither identified nor eliminated as fired from the Colt Carbine, but
16	was not fired from the other firearms, and Joy Bond's DNA was found on the Colt
17	Carbine. Two .223 casings recovered at the scene were neither identified nor
18	eliminated as fired from the Colt Carbine, but they were not fired from the other rifle, the
19	Ruger Mini-14.
20	John Zahl and Elizabeth Thomas: Two expended cartridge cases
21	that were recovered at the residence were neither identified nor eliminated as fired from
22	either the Colt Carbine or the Ruger Mini-14.
23	Emily Tuck, Aaron Tuck, and Jolene Oliver: Bullet fragments
24	recovered from Emily Tuck's body were neither identified nor eliminated as fired from
25	the Colt Carbine, but were not fired from any of the other firearms. One additional fired
26	bullet jacket fragment recovered from Emily Tuck's body was neither identified nor
27	eliminated as having been fired from the Mini-14 or the P89 or the P89 was not fired
28	from any of the other firearms. A bullet fragment recovered from Aaron Tuck's body

- 1 was neither identified nor eliminated as fired from the Colt carbine. It was not fired from
- any of the other firearms. A bullet fragment recovered from Jolene Oliver's body was
- neither identified nor eliminated as fired from the Colt carbine, but it was not fired from
- 4 any of the other firearms.
- 5 Eight expended cartridge cases and five fired bullet jacket
- 6 fragments that were recovered at the residence were neither identified nor eliminated as
- 7 fired from the Colt carbine, but they were confirmed as having been loaded in it. These
- 8 cartridge cases were not fired from the other rifle, the Ruger Mini-14.
- 9 Andrew MacDonald. A partial bullet recovered from Andrew
- MacDonald's vehicle was neither identified nor eliminated as fired from the Glock 23.
- 11 The bullet was not fired from the P89, the Colt, or the Ruger Mini-14.
- Sean McLeod, Alanna Jenkins and Tom Bagley. Two expended
- cartridge cases recovered from inside the burned residence of Sean McLeod and
- Alanna Jenkins were neither identified nor eliminated as fired from the Glock 23. One
- expended cartridge case recovered from the ground outside of the residence was
- neither identified nor eliminated as fired from the Colt carbine but was confirmed to have
- been loaded in it. One additional expended cartridge case recovered from the scene
- was confirmed to have been fired from the Ruger P89.
- 19 Kristen Beaton and her unborn child. A bullet recovered from
- 20 Kristen Beaton's body was neither identified nor eliminated as fired from the Glock 23.
- 21 Three expended cartridge cases and three fired bullets recovered from the scene were
- confirmed to have been fired from the Glock 23.
- Heather O'Brien. A bullet recovered from Heather O'Brien's body
- was neither identified nor eliminated as fired from the Glock 23. Three expended
- cartridge cases and one fired bullet recovered from the scene were fired from the Glock
- 26 23.
- 27 Constable Chad Morrison. An intact bullet found in Constable
- 28 Morrison's bulletproof vest was neither identified nor eliminated as fired from a Glock

- 1 23. Two intact bullets located in the front passenger door of Constable Morrison's
- vehicle were also neither identified nor eliminated as fired from the Glock 23. An
- 3 expended cartridge case that was recovered near the intersection of Highway 2 and
- 4 Highway 224 was fired from the Glock 23.
- 5 Constable Heidi Stevenson. Four 9-millimetre casings located at
- the Shubenacadie cloverleaf where Constable Stevenson was killed were neither
- 7 identified nor eliminated as fired by either the Ruger P89 or Constable Stevenson's
- 8 RCMP-issued Smith and Weston. Ten expended cartridge cases that were recovered
- 9 from the scene were neither identified nor eliminated as fired from the Colt carbine but
- were confirmed to have been loaded in it. Eight additional expended cartridge cases
- 11 recovered from the scene were neither identified nor eliminated as fired from either the
- 12 Colt carbine or the Ruger Mini-14.
- Joey Webber. Two fired bullet jacket fragments recovered from
- Joey Webber's body were neither identified nor eliminated -- thank you -- as fired from
- the Mini-14. These fragments were not fired from any of the other firearms, and Joey
- Webber's DNA was found on the Mini-14. Four 9-millimetre casings, as I said earlier
- that were located at the scene where Joey Webber was killed, were neither identified
- nor eliminated as fired by either the Ruger P89 or Constable Stevenson's RCMP-issued
- Smith and Weston. Those 10 expended cartridge cases that were located at the scene
- 20 were neither identified nor eliminated as fired from the Colt carbine but were confirmed
- to have been loaded in it. And eight additional expended cartridge cases were neither
- identified nor eliminated as fired from either the Colt or the Ruger Mini-14.
- 23 Gina Goulet. Bullet jacket fragments recovered from Gina Goulet's
- body were neither identified nor eliminated as fired from the Ruger P89. The fragments
- were not fired from any of the other firearms. Eight expended cartridge cases and two
- 26 fired bullets recovered from Gina Goulet's residence were confirmed to have been fired
- from the Ruger P89.

This concludes the presentation on firearms. Thank you,

1	Commissioners and all.
2	COMMISSIONER MacDONALD: Thank you so much, Ms. Byrd,
3	for your presentation. It was a very difficult one and we certainly greatly appreciate your
4	presenting it to us in these circumstances. Thank you.
5	Be appropriate at this time to take a break of 15 minutes.
6	REGISTRAR DARLENE SUTHERLAND: Thank you. The
7	proceedings are now on break and will resume in 15 minutes.
8	Upon breaking at 10:29 a.m.
9	Upon resuming at 10:48 a.m.
10	REGISTRAR DARLENE SUTHERLAND: Welcome back. The
11	proceedings are again in session.
12	COMMISSIONER MacDONALD: Thank you very much. We will
13	now hear from Commission Counsel, Jen Cox, who will present and summarize briefly
14	two commissioned reports.
15	Ms. Cox?
16	SUMMARY PRESENTATION BY MS. JENNIFER COX:
17	MS. JENNIFER COX: Good morning, Commissioners, public,
18	families, and Counsel.
19	This morning, first off, we're going to tender the report of Dr. Blake
20	Brown, The History of Gun Control in Canada. Madam Registrar, it's 0053823, so if that
21	could be so marked.
22	REGISTRAR DARLENE SUTHERLAND: That's Exhibit 2108.
23	EXHIBIT No. 2108:
24	Report of Dr. Blake Brown, The History of Gun Control in Canada
25	MS. JENNIFER COX: And the purpose of my presentation here
26	this morning is to just walk you through the contents of the report itself, so that you have
27	some familiarity with it. Of course, the Participants have now had an opportunity to
28	review the report, and this is basically for the public, so that you have an understanding

of the general contents of the report.

weapons.

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2 So with respect to Mr. Brown, Dr. Brown is a professor of history and the Chair of the Department of History at Saint Mary's University. He's also an 3 adjunct professor at the Schulich School of Law at Dalhousie University and a member 4 of the College of New Scholars of the Royal Society of Canada. His main field of 5 research of Canadian legal history, and he has authored or co-authored three books, 6 7 Arming and Disarming: A History of Gun Control in Canada, A Trying Question: The Jury in Nineteenth Century Canada, and A History of Law in Canada, Volume One: 8 Beginning to 1886. 9 So the subject matter of Mr. -- or Dr. Brown's report -- I apologize, 10 Dr. Brown; that is the second time I've done that. 11 The report includes a history of the evolution of the firearms 12 technology in Canada; a legal history of the firearms regulation in Canada; and an 13 overview of the historic influences on regulation. 14 15 So first we're going to talk a little bit about the evolution of firearms technology, and we are going to refer to long guns in the first instance. 16 So the report provides an overview of the evolution of firearms 17 technology from the 1800s to the present. And in the 1800s, the long guns were 18 generally single-shot, smooth-bore firearms loaded through the muzzle, which were 19 slow to load, and they were also inaccurate beyond 100 metres, and often misfired. 20 So at that point in time, the technology or the long-gun technology 21 was quite archaic and the ability to do much with a gun in a very short period of time 22 23 obviously was very limited because of the technology that was present at the time. 24 Then into the late 1800s, we look at semi-automatic rifles being developed. Although the Canadian military and civilians still continued to use bolt-25 action rifle designs well into the 20th century, and the Canadian military in the 1950s 26 through '80s starts to issue the C1A1 semi-automatic rifles as standard infantry 27

1	I think it's interesting for people to know that the Canadian military
2	used bolt-action firearms as its standard infantry rifle in World War I, World War II, and
3	the Korean War. So the semi-automatic rifles didn't become something that the military
4	in Canada used until after the 1950s.
5	In the mid 1980s, we see the Canadian military adopting the C7
6	with the "select fire" capability as standard infantry weapon, being able to be used in the
7	single-fire, semi-automatic, or fully automatic mode. And we heard a little bit about
8	select fire from my co-counsel, Amanda Byrd, earlier but the select fire capability is the
9	ability to move from a automatic to a semi-automatic weapon, essentially.
10	With respect to the long guns, we see in 1970, semi-automatic,
11	centre-fire rifles that accept large-capacity magazines, often based on military designs,
12	enter the civilian market, such as the AR-15. We also need to remember the centre-fire
13	which is the type of ammunition that the gun can take. And that's important in terms of
14	understanding how much damage the individual weapon can inflict.
15	From 1970 to 1980, the Canadian retailers and gun owners often
16	referred to firearms such as the AR-15, the Mini-14, the FN-FAL as "assault rifles." And
17	you'll see on the screen, the assault rifles advertisement, which was from the Calgary
18	Herald on the 11 th of May, 1986. And an assault rifle at that time was considered:
19	"a semi-automatic, centre-fire firearm capable of
20	receiving a large-capacity magazine that was often a
21	civilian version of a gun originally designed for military
22	service."
23	And without the select fire capability, that means that the gun could
24	not fire automatically, only semi-automatically. So that's important in terms of
25	understanding firearms, is whether it can fire semi-automatically or automatically, and
26	that's what the select fire capability does.
27	In 1976, the Calgary Herald also so there's a number of
28	references in the report with respect to the newspaper reports over the years.

1	Nineteen seventy-six (1976), the Calgary Herald, January 5", the
2	seller was selling an AR-15 semi-automatic assault rifle. In 1978, the Montreal Gazette
3	published an advertisement for an FN-FAL semi-automatic assault rifle, and in 1982 the
4	Edmonton Journal spoke of an assault rifle, including an AR-15 and a Ruger Mini-14,
5	which was an Edmonton company that sold firearms advertising them as assault rifles.
6	So just to give you some history as to where some of the language
7	may have originated; this was in the seventies, obviously, and early eighties.
8	In the early 1990s, the firearms community adopted the term,
9	"modern sporting rifles". This was shortly after the École Polytechnique massacre in
10	1989, and in 1994, the US Congress passed an assault weapons ban, which caused
11	the word, "assault weapon" to be something that was controversial.
12	In Canada, the number of modern sporting rifles is unknown
13	because many of the classified non-restricted firearms are not registered, so estimates
14	in Canada are that there's between 150,000 and 518,000, out of a total 12.7 million
15	legal and non-legal firearms, just to give you some sense of what kind of ammunition we
16	may have here in Canada.
17	Handguns. So handguns as opposed to the long guns. So we
18	heard a little bit about the long guns this morning from my colleague, Ms. Byrd. The
19	handguns also, you know, were very rudimentary in their early days. They had the
20	manual loading of ammunition, which was the muzzle loaded, so you're loading it in the
21	front of the gun as opposed to the back of the gun. And the early designs also had the
22	revolving cylinder with five or seven rounds of ammunition, which most of us know as a
23	revolver.
24	The development of the semi-automatic handguns increased the
25	rate of fire for handguns, allowing handguns to carry more ammunition, and made them,
26	obviously, faster to reload. And then at the same time in the late 1800s, we were
27	seeing more inexpensive, mass-produced revolvers; so those are the ones with the
28	cylinders on the top with the five or seven rounds of ammunition.

1	And this is when we started to see safety concerns with respect to
2	handguns starting to evolve so, again, the late 1800s because there were no legal
3	limits on who could buy a handgun and few limits on when they could be carried. And,
4	of course, they were smaller than a long gun so something that you could conceal fairly
5	easily.
6	So the timeline of the firearms legislation somewhat correlates to
7	the development or the advancement of technology of firearms. There are a number of
8	key legal terms and concepts, which Ms. Byrd has already talked about this morning in
9	fairly significant detail, that are also noted in this document. But the prohibited device,
10	the prohibited firearm, the restricted firearm, and the non-restricted firearm are key
11	pieces of lingo for Canada and that is how we classify our firearms now in Canada.
12	With respect to the registration, there is a centralized registry
13	system for firearms created; and I'll speak a little about that as we go through in terms
14	of the history of that, but that's what registration means is where are the firearms
15	themselves registered. And you did hear my colleague, Ms. Byrd, speak a little bit
16	about that as well this morning.
17	The Firearms Acquisition Certificate. So in 1977 that became what
18	you were needing to have if you wanted to purchase a gun, and that required the formal
19	background check before you could actually purchase and register a handgun, only.
20	That Firearms Acquisition Certificate is now a PAL, Possession and
21	Acquisition Licence, but that was Firearms Acquisition Certificate was the original
22	form of background checks and others for the individuals looking to obtain handguns.
23	There's also some other words in here: Legislation and Orders in
24	Council. And part of the concepts with Dr. Brown's report are that there are sort of a
25	piece-meal approach in Canada to how we legislate or regulate firearms, and that is
26	because we have both a legislation, which is the Firearms Act and the Criminal Code,
27	and of course, for all the lawyers in the room, that makes a whole lot of sense to us, and
28	then there's the Orders in Council that are issued by the Governor in Council, which is a

- little bit different -- sorry, Governor General. That's a little bit different and that's subject
- to the government at the time that allows the Order in Council to be issued.
- So we have two different sort of schemes that are creating laws in
- 4 Canada currently, and it's important to understand those. Not only do we have the
- 5 *Criminal Code*, the Firearm's Legislation, but we also have the Orders in Council that
- are being issued by the government of the day. And we'll talk a little bit about that
- 7 history as well as we go through this.
- 8 So from 1877 to 1934, I talked a little bit about handguns becoming
- 9 a concern because they were more accessible and they were easily concealed. It led to
- a series of legislative restrictions. So in 1934 was the first legislation creating handgun
- 11 registration.
- So handguns were the first type of firearms that were regulated in
- 13 Canada. And again, it was 1934. And that tracking system or registration system had
- the data from the firearm, the type of firearm, the owner, and the purpose. There was
- no centralized system for tracking or keeping this information, but that was the first thing
- in Canada where they started to keep track of the firearms themselves. And it was
- important to know the purpose for which the individual was seeking the firearm because
- it was important for the purposes of the legislation to understand if it was for defence of
- 19 property, for example.
- We also know in 1951 that the centralized registry system for
- 21 handguns became a requirement. The RCMP was required, by 1951, to maintain the
- centralized registry system for handguns. Again, only handguns in 1951. And the
- 23 quote from Mr. -- Minister of Justice Stuart Garson at the time emphasized that
- 24 handguns were particularly dangerous firearms and thus needed to be regulated
- closely. So this was the sentiment in 1951. And again, it was only for handguns.
- The next major piece of legislation was in 1969. The Parliament
- passed a criminal law reform bill that included provisions related to the classification of
- 28 firearms.

1	50 this is when we first start to see lifearms classified as not
2	restricted, restricted, or prohibited, which is what Ms. Byrd spoke about already this
3	morning.
4	This also gave provisions for the Governor in Council to declare
5	firearms as restricted or prohibited by issuing an Order in Council. And again, this is
6	what I spoke about a little bit earlier. The Order in Council is the government of the
7	day can so whoever is in power can have the Governor in Council declare firearms
8	restricted or prohibited, whereas legislation or laws have to go through the
9	parliamentary process. So those of us who are lawyers know that it goes through
10	several readings in the House of Commons, and then it goes to the Senate, and then it
11	gets Royal Assent, which is a long process, and sometimes that takes the whole sitting
12	of the Government to have those pieces of legislation pass, where a Governor in
13	Council or an OIC is a little bit quicker to have. So that was the first time that we start to
14	see that, and again, it's 1969.
15	Nineteen seventy-seven (1977), the Criminal Law Amendment Act.
16	So we're now seeing the Firearms Acquisition Certificate, which I've mentioned already,
17	which requires the formal background check.
18	The restricted weapon definition includes a weapon not prohibited
19	with a barrel length of less than 18.5 inches. Automatic weapons are prohibited, except
20	for grandfathering, and the power of the Governor in Council is expanded at that point in
21	time. So 1977.
22	And we also have an Order in Council restricting five semi-
23	automatic firearms, including the AR-15 in 1977.
24	In 1979 and 1980, the Order in Councils that were issued in those
25	years reduced, so moved some of the restricted weapons off the list from 1977. So
26	there were less restricted weapons in 1979 and 1980 than there were in 1977.
27	Nineteen ninety-one (1991), there was some Criminal Code
28	amendments. There is more background information required for the Firearms

- 1 Acquisition Certificate. And this is when we start to see the storage and transportation
- 2 guidelines of firearms. So you would probably have heard the word "careless storage".
- 3 So that's, you know, the gun cabinets, the trigger locks. Those types of things are all
- 4 required as a result of some of the legislative amendments.
- In 1994, we see the *Criminal Code* amendment in response to the
- 6 Montreal massacre. So we see background checks being increased. There's a
- 7 mandatory 28 day waiting period for that Firearms Acquisition Certificate. So a cool off
- 8 period. And that's the first time we see that. We also see the prohibition of large
- 9 capacity cartridge magazines for rifles. So in 1994, that is a *Criminal Code*
- 10 Amendment.
- Prior to that, we saw the Order in Council expand the number of
- restricted and prohibited weapons. So in other words, there were more added to the
- 13 list.
- In 1994, another 23 firearms are designated to imitate army and
- police firearms. So they are prohibited because of their designation.
- Nineteen ninety-five (1995), we see some more *Criminal Code*
- amendments. There are increased penalties for crimes using a firearm, which currently
- in Canada, if you use a firearm in the commission of a crime, there are specific
- penalties in the *Criminal Code* in relation to first, second, third offence. And those are
- fairly significant crimes in Canada. So you can face upwards of 14 years in a federal
- 21 penitentiary if you are convicted of any of those types of crimes.
- 22 With respect to classification, the Governor General -- Governor in
- 23 Council prohibition is expanded. So the Governor in Council is permitted to now look at
- reasonable for use in Canada for hunting and sporting purposes. Before the discretion
- was with respect to whether it was used -- commonly used in Canada for hunting or
- sporting purposes. And again, when we talk about the Governor in Council prohibition
- or the ability to issue an Order in Council, the -- and this is -- exists in the debates
- before the House of Commons. The reason for including this reasonable use, in the

- opinion of the Governor in Council, was so that there was no potential loopholes,
- because one of the loopholes that could have existed prior to this amendment was an
- individual could bring a new firearm into Canada and create a shooting event because it
- 4 would -- the previous wording was "commonly used in Canada for hunting or sporting
- 5 purposes." So they could create a shooting event and then say that they were -- the
- 6 firearm was not prohibited or not restricted because it was being used in a hunting or
- 7 sporting purpose -- for a hunting or sporting purpose. So that was the purpose of
- 8 allowing that particular piece of the *Criminal Code* to be amended.

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- In 1995, we also see the *Firearms Act* come into play. So that is the universal licensing system. Most of us are now familiar with that. And it also was when long guns then needed to be registered. So handguns were already needing to be registered in 1950. Now in 1995, we add the long guns.
- In 2012, the long gun registry was eliminated. So my colleague, this morning, indicated that the long gun registry was eliminated in 2012. So it's no longer a requirement in Canada to register a long gun, unless it's within the provisions of the restricted, prohibited categories.
 - In 2015, there was another Order in Council that removed two semi-automatic rifles from the prohibited list. So it took two of the semi-automatic rifles away in 2015.
- And then in 2015, there was a new piece of legislation called the *Common-Sense Firearms Licensing Act*. The purpose of the *Common-Sense Firearms Licensing Act* was to amend the *Criminal Code* to allow changes to what was defined as a restricted and prohibited firearm and to permit firearms prescribed by the Order in Council, so we talked a little bit about already, as either non-restricted or restricted. So in other words, the *Common Sense Firearms Licensing Act* apparently overrode the existing Orders in Council and provisions of the Governor in Council. So it was essentially moving back from regulating firearms.

- more legislation. It repealed portions of the *Common-Sense Firearms Licensing Act*.
- 2 So 2015, and then four years later, part of it was repealed.
- And then finally, as my colleague has mentioned this morning, we
- 4 have the Order in Council banning several specific models of semi-automatic centre-fire
- 5 firearms, May 1st, 2020, very shortly thereafter the mass casualty here in Nova Scotia
- of April 2020. The types of firearms that were prohibited were semi-automatic action
- with sustained rapid-fire capabilities. So they were tactical and military design with a
- 8 large magazine capacity. They were modern in their design, and there were a number
- 9 of them present in the Canadian market at the time.
- So one of the things that Dr. Brown does in his report too, as well,
- is he talks about what were the influences on regulation. So we talked a little bit about
- the design of firearms and how they have evolved, but there has also been events in
- 13 Canada's history, and internationally, that have influenced firearms regulation.
- Public concern over semi-automatic firearms and handguns began
- to sort of rise in 1970. So the first indication of that in Dr. Brown's report is in 1970s the
- 16 FLQ were in possession of semi-automatic rifles, and that raised concern. In 1976, a
- 13-year old boy mail-ordered an AR-15 semi-automatic rifle from an Edmonton gun
- dealer. And in the Alberta paper that talked about it:
- "We don't need AR 15 rifles..."
- The columnist wrote:
- "...around any more than we need tanks for the
- people".
- So there was some conversations taking place in 1976 in Alberta,
- 24 at least, as a result of that 13-year old boy mail-ordering an AR-15 semi-automatic rifle.
- We also have in Canada the criminal use of the semi-automatic
- rifles. And of course, the 1989 École Polytechnique massacre in Montreal, where 14
- women killed and more than a dozen others were injured. In 2005, an HK 91 semi-
- automatic rifle in Mayerthorpe Alberta killed four members of the RCMP. And in 2017, a

- semi-automatic Vz 58 rifle and a 9-millimeter semi-automatic pistol at the Islamic
- 2 Cultural Centre of Quebec City were used, and six people were killed there.
- And of course, there are many other examples in Canada, these
- 4 are just a few, that were noted in Dr. Blake's [sic] report in terms of the things that may
- 5 have influenced regulation. And of course, if we look back, there were some changes to
- the laws shortly after 1989 in Canada.
- 7 The semi-automatic rifles being used outside of Canada, there's
- 8 some very well-known tragedies that are known to most of us. The Sandy Hook
- 9 Elementary shooting, where there were 27 fatalities in 2012, that was as a result of an
- AR-15 type rifle. The 2016 Orlando Nightclub shooting, where there were 49 fatalities,
- a semi-automatic rifle as well. A 2017 Las Vegas music festival shooting in Nevada,
- 58 fatalities, an AR-15 type rifle, an AR-10 type rifle. 2011, a 22 July shooting in
- Norway, 67 fatalities, a semi-automatic Ruger Mini-14 rifle was possessed. And the
- 20192 Christchurch Mosque shooting in New Zealand, 51 fatalities, and there were
- several firearms, including two semi--automatic automatic rifles.
- And these are the things that Dr. Brown sets out in more detail in
- his report. These are just some of the examples he's provided that I've pulled out for
- the purposes of explaining the contents of the report.
- In addition, from 1973 to 2020, there are various public opinion
- polls that are noted in the report that speak about people's opinions in relation to guns,
- in particular, in Canada. So those are things that may have influenced regulation of
- 22 guns and firearms in Canada.
- There has been a substantial debate with respect to the
- terminology, whether it's an assault style firearm, semi-automatic centre-fire rifle. There
- is the word "assault-style rifle" in this report because that has been referred to in some
- of the literature, or the public opinion polls, the advertisements, even the House or the
- legislative debates of the time. But the important part to remember here is that a semi-
- 28 automatic centre-fire rifle that can receive a detachable magazine can be something

- that is very lethal in a very short period of time because of the type of ammunition that it takes, and if it's a detachable magazine that means it can be loaded very quickly.
- So these are the concerns in terms of the public safety that if you've looked through the material and what was discussed as time has gone on, that's a lot of what Dr. Brown brings forward in his report as to how did we get to this point in time.
- And there are other words that can be used, so military-style rifles, modern sporting rifles, black rifles, assault weapons, assault rifles, lots of different terminology.

So as we can see, the firearms technology has evolved since the 1800s from very simple manual frontloading weapons, I imagine the situation where you put the gunpowder in the top of the gun and you push it down with the -- with the, I'm not sure what the proper word would be, but the "stick", to, you know, situations where we now have modern, you know, multi magazines and automatic weapons.

And the Canadian governments have tended towards enacting legislation and Orders in Council. So there is two different types of legislation or regiments in Canada that have appeared to respond into concerns that were raised either in relation to public safety. So in debates, events that have happened, people's concerns with respect to the public safety have generated changes to the laws in Canada over the past 150 years, and there have been a range of factors that have influenced it.

So as we talked about, the technology, the advance in technology, the ability to do harm in a very short period of time, the criminal events in Canada or internationally, and of course, public opinion has had an influence on this, and that's something that can be determined by looking at a number of the documents that existed over the years, and that's partly what Dr. Brown sets out in his report.

So the public can now see the Commission report at the masscasualtycommission.ca under "Documents, Research and Commissioned Reports", and this is one of the commissioned reports that will be discussed later on

1	when the Commission roundtables take place.
2	And that's the end of that particular presentation.
3	COMMISSIONER MacDONALD: Thank you so much.
4	MS. JENNIFER COX: So the next presentation is in relation to a
5	second commissioned report. And before we go too far I want to make sure I get that
6	marked as an exhibit as well.
7	So the report is titled, Mass Shootings and Masculinity.
8	It is written by Dr. Tristan Bridges and Dr. Leigh Tober, COMM
9	Number 0055671, Madam Registrar.
10	REGISTRAR DARLENE SUTHERLAND: That's Exhibit 2109.
11	EXHIBIT No. 2109:
12	Commissioner Report: Mass Shootings and Masculinity -
13	COMM 0055671
14	MS. JENNIFER COX: 2109 exhibits. Wow.
15	So Dr. Tristan Bridges is a sociologist from the University of
16	California in Santa Barbara. His areas of research include a focus on gender studies,
17	including studying shifts in the meaning and practices associated with masculinities. He
18	studies this dynamic in diverse settings and contexts. One of these is a project on mass
19	shootings in the United States that has involved collecting new data and critically
20	considering how we should define incidents as mass shootings in the first place.
21	Dr. Leigh Tober is also a sociologist at the Department of Sociology
22	in the University of California, Santa Barbara, and her research focusses on the ways
23	we navigate difficult pasts and events. Her dissertation research focussed on World
24	War II official and popular memory in Ireland. And her current research involves data
25	collection on mass shootings in America, including the analysis of media coverage of
26	these horrific events as well as official responses to these shootings.
27	Dr. Bridges and Tober are collaborating on a research project
28	currently, focussed on mass shootings in America.

This particular commissioned report provides information about the
rates of gun ownership, gun-related homicides and mass shootings in the United States
and some internationally. It talks about gun culture as an important determinant, so an
important factor in the rates of gun violence, and suggests that gun cultures vary
between countries and even between the united states.

It's really important I think for everyone to remember that although the report refers to mass shootings, this is the terminology that's actually used within the United States scholarly and political -- or policy literature. And the Commission here has chosen to refer to this as the mass casualty in recognition of the broad range of harms that have -- we here in Nova Scotia have experienced over a wide geographic area. So you'll see the word or hear the word "mass shootings" but this is the terminology that we're using from the United States.

The paper or the commissioned report speaks to the challenges with defining mass casualty and mass shooting. Because there is a lack of scholarly consensus as to what is a mass casualty and mass shooting, the data that's in relation to these events is not being collected. Data variables such as how many victims or shooters, how many locations, or what may have precipitated the shooting can impact whether something is considered a mass casualty, and this is important for the purposes of studying and learning from what mass casualties -- the social problem of a mass casualty.

This lack of information and the gaps in data and the subsequent scholarly research can make it really difficult to properly assess what steps could be taken to prevent it without knowing all of the details of any sort of mass shooting or mass casualty. And what was surprising to me when I read this report was how this data is difficult and is not actually consistently gathered, even in the United States.

So one of the things that the research also does is questions why mass shootings are overwhelmingly committed by men, so it talks about that in this commissioned report, why men commit mass shootings in the United States much more

commonly than other parts of the world, and these aspects will be discussed more in July again at the round tables.

There is agreement with respect to the statistics in the United States, and most of the data that has been used for this report is the United States because that is the most available research material and the number of mass casualties or mass shootings in the United States far outweighs any place -- other place in the world. But there is statistics and research to show that the mass shootings are more common than -- in the United States than any other nation and there's no disagreement about that. That's been in increase since 2000.

So this graph shows two different things: the frequency of mass shootings and the rates of mass shootings between 1983 and 2013. And the question is, is it -- should we be looking at rates or should we be looking at frequency. And the problem with rate is that it's based on the number of events or incidents based on the population of 100,000 or 1,000,000 people. So it depends on how many people live there and how many incidents have happened to get the rate, but that sometimes can affect a place like Nova Scotia, for example. We have a fairly low population, but if we have several incidences in a very short period of time but don't normally have them, we automatically have a higher rate of shootings as compared to perhaps Ontario which has a much greater population. So frequency as opposed to rates is actually a better metric because more meaningful information of the actual events can be obtained. We're less likely to have random events or random spurs of events impact the data. And it's important to actually get the real event and understand the incidents so that you can look at the social problems that underlie it.

So correlations and limitations. Some of the material that's in the report talks about the fact that there are studies that have shown that a country's rate of gun ownership increase the odds that it would experience a mass shooting. So that is Adam Lankford, an article that was read for the International Journal of Comparative and Implied Criminal Justice in 2015. We also see in the report a comparison of

- 1 Canada and the United States, illustrates that the focus only on the rate of gun
- 2 ownership is insufficient because here in Canada we have a fairly high rate of gun
- ownership. And it notes that all but five other nations in the world have more than
- 4 Canada, but we have a similar number of mass shootings to nations with a much lower
- 5 gun ownership rate. So the argument in the material is that guns and gun scholars alike
- 6 argue that the firearms ownership rates don't fully explain gun violence. It's but one
- 7 factor.

masculine.

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And understanding gun culture is also part of the report. So what does gun culture encompass, what are the meanings attributed to guns with specific cultural settings, explaining that firearms take on different meanings for different groups even within a single society. And in many societies, firearms are gendered as

Firearms policy should account for the cultural significance and the meanings of firearms, and the reason for that would be the meaning attributed to guns can look like how many members of the society or population own guns; therefore, you want to address that why and how when you are developing policies that will address public safety, because ultimately, that's what this is all about, is what's -- what are the

tools we need to put in place to address the -- any public safety concerns.

And there have been shifts in gun culture. So early in the United States history there was, you know, the emphasis on hunting and recreation and that was why you had a firearm, and that ideology has now shifted to armed self-defence. There also has been different gun cultures that exist within the same nation, which may help explain the variation of gun violence in different united states with similar rates of gun ownership and we're going to see that in the next slide. We'll talk a little bit about -- or I'll talk a little bit about what the graph shows for how gun violence varies between United States.

So on the screen you'll see, on the very left, you'll see at the top, it says Arkansas -- so they're initials, Arkansas, Montana, and Wyoming. And you'll see

- that they have a very high rate. So the numbers that go up on the left-hand side, those
- are the rates of gun ownership. So they have almost between 60 and 70 percent gun
- ownership in those states, but yet have very few, if no mass shootings, because at the
- 4 very bottom you'll see the zero. And if we look at the very bottom of the slide, it says
- 5 "The Frequency of Mass Shootings". So it goes from zero, to 50, to 100. So Wyoming,
- 6 Montana, and Arkansas are between sort of zero and perhaps 10, if that.
- 7 Whereas on the other side of the graph, we see Illinois and
- 8 California. So on the very right-hand side, you'll see Illinois, a dot, IL, and then you see
- 9 another one that says CA, California.
- The rates of gun ownership in those states are somewhere in the
- neighbourhood of 30 percent, but yet the mass shootings are in the range of 200 to 260.
- And this occurred over a five-year period. So these statistics were gathered from a
- 2013 to 2019 window. But that just goes to show you that rates of gun ownership don't
- necessarily dictate the number of mass shootings. And this is the United States only,
- so it's a very wide difference in the United States.
- So the paper looks at access to firearms rights and legislations as
- factors, but not the only things that contribute to gun violence. It's important to pay
- attention to that gun culture. And because firearms ownership and access to firearms
- are regulated by government, it's important for the government to include that gun
- culture in their conversations, because it may not be just a legislative focus. It may be
- something else. And that's not spoken to in the paper, but the paper -- or the
- 22 Commissioned Report speaks to the various factors that can be considered and should
- be considered, particularly the gun culture, which does vary between nation and nation,
- 24 and also within societies. Firearms policy can also attend to the culture significance and
- 25 meanings of a nation or society.
- And there will be more discussions, and more in-depth, in July, so
- 27 that there will be sort of a more fulsome discussion about the factors and how to best
- address the social problem of mass casualties and shootings in relation to these cultural

1	factors.
2	This particular Commissioned Report is available to read in full at
3	the MassCasualtyCommission.ca website under "Documents, Research, and
4	Commissioned Reports". And that is the conclusion of the second Commissioned
5	Report, Commissioners and Participants.
6	COMMISSIONER MacDONALD: Thank you very much, Ms. Cox.
7	MS. JENNIFER COX: So
8	COMMISSIONER MacDONALD: Go ahead.
9	MS. JENNIFER COX: I'm just wondering if this is an appropriate
10	time for break for lunch?
11	COMMISSIONER MacDONALD: Yes. I was just discussing that
12	with Commissioner Stanton and Commissioner Fitch. Excuse me. We will break then.
13	Thank you again, Ms. Cox. And we'll break until 12:45. Thank you.
14	MS. JENNIFER COX: Thank you.
15	REGISTRAR DARLENE SUTHERLAND: Thank you. The
16	proceedings are now on break and will resume at 12:45.
17	Upon breaking at 11:35 a.m.
18	Upon resuming at 12:50 p.m.
19	REGISTRAR DARLENE SUTHERLAND: Welcome back. The
20	proceedings are again in session.
21	COMMISSIONER MacDONALD: Thank you.
22	Ms. Cox will be joining us to call the witness.
23	Ms. Cox?
24	MS. JENNIFER COX: Good afternoon, Commissioners, public,
25	Participants. We're going to have Benjamin Sampson, a firearms scientist from the
26	forensic lab in Ontario speaking to us about ballistics this afternoon.
27	But before we get to Mr. Sampson, who is attending virtually today,
28	I have a couple of documents that the Participants have been provided with, but I'd like

1	to have marked as exhibits, please.
2	The first one would be COMM0056433, which is Mr. Sampson's
3	Statement of Qualifications and the second is COMM0056434, which is a PowerPoint
4	presentation with a number of pictures that Mr. Sampson will be referring to today.
5	REGISTRAR DARLENE SUTHERLAND: And those are marked
6	Exhibits 2125 and 2126.
7	EXHIBIT No. 2125:
8	COMM0056433 - Mr. Sampson's Statement of Qualifications
9	EXHIBIT No. 2126:
10	COMM0056434 – PowerPoint presentation containing
11	multiple pictures
12	MS. JENNIFER COX: And, Mr. Sampson has indicated,
13	Commissioners, that he would like to give oath on the bible. So if we could have the
14	oath administered?
15	BENJAMIN SAMPSON, Sworn:
16	EXAMINATION IN-CHIEF BY MS. JENNIFER COX:
17	MS. JENNIFER COX: And Mr. Sampson, if you could just spell
18	your name for the record, please?
19	MR. BENJAMIN SAMPSON: Yes. First name Benjamin, B-E-N-J-
20	A-M-I-N. And Sampson, S-A-M-P-S-O-N.
21	MS. JENNIFER COX: Okay. And Mr. Sampson, perhaps you can
22	tell us a little bit about yourself, and particularly what your title is and who you work for?
23	MR. BENJAMIN SAMPSON: Yes. I am a forensic scientist in the
24	Firearms and Toolmarks Unit of the Physical Sciences section at the Centre of Forensic
25	Sciences here in Toronto, Ontario. I have a Bachelors of Science in Mathematics and
26	Physics, and also a Bachelors of Technology in the Investigation of Crime and Police
27	Management.
28	Some of my daily duties include the examinations of firearms and

- firearms components, also ammunition and ammunition components. I do trajectory
- 2 analysis and distance determination. And I also provide expert testimony in the courts
- 3 in Ontario.
- 4 MS. JENNIFER COX: And, Mr. Sampson, how long have you
- 5 been a forensic scientist for?
- 6 **MR. BENJAMIN SAMPSON:** Yes, my forensic scientist career
- 7 spans over 22 years now. Six of those were in Cape Town, South Africa, and the last
- 8 15 plus years are here in Ontario, in Toronto, Ontario.
- 9 MS. JENNIFER COX: And you said you worked for the Centre of
- 10 Forensic Sciences?
- MR. BENJAMIN SAMPSON: That is correct, ma'am.
- MS. JENNIFER COX: And the acronym is CFS; right? We often
- refer to it as CFS?
- MR. BENJAMIN SAMPSON: That is correct, ma'am.
- 15 **MS. JENNIFER COX:** And can you talk a little bit about CFS in
- terms of who it is in relation to Ontario and then the justice system in Ontario?
- 17 MR. BENJAMIN SAMSPON: Yes. So the Centre of Forensic
- Sciences is a branch of the Public Safety Division, which is part of the Ministry of the
- Solicitor's General, which is part of the Ontario Provincial Government.
- MS. JENNIFER COX: And can you talk a little bit about the
- 21 accreditation of CFS?
- MR. BENJAMIN SAMPSON: So CFS is an accredited full service
- forensic testing laboratory accredited by ANAB, where the ANAB acronym stands for
- 24 ANSI National Accreditation Board. And what ANSI stands for, the American National
- 25 Institute of Standards.
- MS. JENNIFER COX: Okay. And how does that -- CFS get that
- 27 accreditation?
- MR. BENJAMIN SAMPSON: Yes, so ANAB is a non-

- 1 governmental organization that set forth a list of regulations, and requirements, and
- 2 standards that the CFS must adhere to. And then CFS is assessed for conformance on
- 3 an annual basis.
- 4 **MS. JENNIFER COX:** And how do they assess that conformance?
- 5 Can you give me some examples of the things they look at?
- 6 **MR. BENJAMIN SAMPSON:** Yes. So the accrediting organization
- or the accrediting board will literally come and do assessments of the policies and
- 8 procedures to see if we do what we say we are going to do in terms of the testing that
- 9 we perform and the examinations that we perform.
- MS. JENNIFER COX: Okay. And you said that CFS falls under
- the Solicitor General in Ontario. Do you work for the Ontario government?
- MR. BENJAMIN SAMPSON: That is correct.
- 13 **MS. JENNIFER COX:** Okay.
- MR. BENJAMIN SAMPSON: As employees of the Centre of
- Forensic Sciences, we are all members of the Ontario Public Service.
- MS. JENNIFER COX: Okay. And are you influenced by the
- 17 government in your work?
- MR. BENJAMIN SAMPSON: To the best of my knowledge, no. I
- 19 have never heard of that, no.
- 20 **MS. JENNIFER COX:** Okay. So when you come before the court
- and you provide testimony, is that influenced by anybody?
- MR. BENJAMIN SAMPSON: No. I understand my obligations to
- 23 the court to -- is to provide objective and impartial opinion evidence that is within my
- 24 expertise.
- MS. JENNIFER COX: Okay. So one of the things we want to talk
- a little bit today is about the services CFS provides, so the scope of the service that you
- 27 provide as a forensic scientist. So I'm wondering if you could just explain a little bit
- about what that is, what that service looks like.

1	MR. BENJAMIN SAMPSON: Yes. So the CFS, as I mentioned
2	earlier, is an accredited full-service forensic testing lab that provides forensic
3	examinations in different areas, like, biology, chemistry, toxicology, firearms, and
4	documents.
5	MS. JENNIFER COX: And your role as a ballistics services is to do
6	what?
7	MR. BENJAMIN SAMPSON: Yes. So, our main purpose is to
8	support any firearm-related investigations in Ontario, and that is including coroner's
9	inquest as well.
10	MS. JENNIFER COX: Okay. And you have a process a referral
11	process; is that correct?
12	MR. BENJAMIN SAMPSON: That is correct.
13	MS. JENNIFER COX: Okay. I'm wondering if you could explain to
14	us how that works, how you get referrals from forensics?
15	MR. BENJAMIN SAMPSON: Yeah. So let me preface that by
16	saying that every submission of evidence aimed to answer specific questions by the
17	investigating officers, so this submissions will always depend on the case acceptance
18	guidelines of the specific laboratory. So here at CFS, we have an online submission
19	portal that provides three different streams of examination within the firearms unit,
20	depending on the request from the investigating officers.
21	MS. JENNIFER COX: Okay. So you get these referrals primarily
22	from law enforcement or police officers; is that correct?
23	MR. BENJAMIN SAMPSON: Primarily, yes, but Crown attorneys
24	and defence attorneys have the same opportunity to make a referrals or submissions to
25	the Centre of Forensic Sciences.
26	MS. JENNIFER COX: And when those referrals are made, do the
27	forensic identification officers know how to make those referrals? Are they trained to
28	make those referrals?

1	MR. BENJAMIN SAMPSON: Yes. As part of our duty at CFS, we
2	do provide training to the forensic identification officers or the police officers, so that
3	they have a better understanding of how the online submission portal process works.
4	MS. JENNIFER COX: Okay. And you said that there were a
5	number of options when the referral is made. Can you maybe talk about those options?
6	MR. BENJAMIN SAMPSON: Yes. As I mentioned, there are three
7	different streams of examinations within the firearms unit. The first stream is what we
8	call a RAISE, R-A-I-S-E, where RAISE stands for the Rapid Assessment for IBIS
9	Selection Examination, and those are for cases involving fired bullets and fired cartridge
10	cases where the only request is to identify linkages to other shooting incidents.
11	The second stream is what we call S-F-I where that stands for the
12	Suspicious Firearms Index. And those are for cases involving only firearms where the
13	only request is to determine whether the gun can be identified to other shooting
14	incidents.
15	And then the third stream is what we call the Full Examinations.
16	Those are for cases that do not fall in the RAISE or SFI categories. A Full Examination
17	will be completed on all the evidence and then a comprehensive report will be issued in
18	that third and last stream.
19	So the investigating officers or submitting officers, they have
20	choices to make, depending on the evidence that they have and depending on the
21	questions that they want answers.
22	MS. JENNIFER COX: Okay. And you rely on them, to some
23	degree, to give you the questions they wanted answered; correct?
24	MR. BENJAMIN SAMPSON: That is correct, ma'am.
25	MS. JENNIFER COX: And you mentioned IBIS, so the first option
26	or referral, can you explain that a little bit more? First off, what does IBIS stand for?
27	MR. BENJAMIN SAMPSON: Yes, IBIS stands for the Integrated
28	Ballistic Identification System. IBIS is a database that we populate with images of the

- fired bullets and the fired cartridge cases, and those fired bullets and fired cartridge
- cases, or the images of those fired bullet and cartridge cases, are then compared to
- everything that we have on IBIS and everything that will ever be put on IBIS.
- 4 Also, there are several other cities in Canada that also have IBIS
- 5 system, and there is a network between these IBIS systems in Canada that we call the
- 6 Canadian Integrated Ballistic Identification Network.
- 7 MS. JENNIFER COX: And is there an international network as
- 8 well?
- 9 MR. BENJAMIN SAMPSON: There is an international network
- available, but with a little bit more hoops to jump through, a little bit more paperwork to
- get comparisons to internationals.
- MS. JENNIFER COX: Okay. And are there times when you do
- need to do international referrals?
- MR. BENJAMIN SAMPSON: Yes, that is absolutely possible and
- that happen every now and again.
- MS. JENNIFER COX: Okay. And what would be the criteria for
- the international referral? Like, is it the investigative team providing you with
- 18 information?
- 19 MR. BENJAMIN SAMPSON: Yes. Again, those type of questions
- and request would probably come from the investigating officers. For example, if they
- submit a firearm and they have good reason to believe that it was possibly stolen
- somewhere in the United States of America, then they can ask for a IBIS comparison to
- 23 a specific city or to the country.
- MS. JENNIFER COX: Okay. And when you get referrals,
- sometimes you have routine referrals and more complex referrals; is that correct?
- MR. BENJAMIN SAMPSON: That is correct, ma'am.
- 27 **MS. JENNIFER COX:** Okay. And how do you deal with the more
- 28 complex referrals?

1	wir. BENJAWIN SAWPSON: Yes. The more complex referrals we
2	deal with in consultation with the investigating officers. Sometimes it is necessary to
3	triage the different type of examinations, especially if we're dealing with a lot of
4	evidence. It is probably and most often the better strategy to take them in stride, like, in
5	step by step and perform the examination like that.
6	MS. JENNIFER COX: And so how do you do that? How do you
7	triage?
8	MR. BENJAMIN SAMPSON: Yes. If we have a very complicated
9	case, we would probably ask the investigators or the submitters, depending case to
10	case, that first submit, for example, just the cartridge cases, and we would do an
11	examination on that and provide a report. And then we would ask for now submit the
12	fired bullets at a later stage, we would examine those, provide the report on that, and
13	maybe a third and fourth is to submit any firearms and/or any clothing that need to be
14	examined for this determination.
15	MS. JENNIFER COX: Okay. So once the referral has been
16	submitted, so we have one of the three options that we talked about already, how do the
17	how does the evidence come to you?
18	MR. BENJAMIN SAMPSON: Yes. So one of the last steps of our
19	online submission portal, once the submitter has made a request to submit his evidence
20	that request will be approved, and with that approval, instructions will be sent as to how
21	that evidence can be submitted to the Centre of Forensics Sciences.
22	MS. JENNIFER COX: And just so I'm clear, the referrals that
23	you're receiving are those from outside of Ontario or just from Ontario?
24	MR. BENJAMIN SAMPSON: Most well, I would say all of them
25	in the last 15-plus years were from in the province in Ontario. Since we are
26	employees of the Ontario Public Service, we normally just service any crime-related,
27	firearm-related crimes in the Province of Ontario.
28	MS. JENNIFER COX: Okay. And are you ever hired as a private

expert to do this work?

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2 MR. BENJAMIN SAMPSON: No, ma'am. **MS. JENNIFER COX:** Okay. So I'm going to just take you to the 3 slide, so Exhibit 2126 is what's it's been identified, and there's -- the first slide has a 4 picture of a bullet on it, and I'm wondering if we can perhaps -- so it would be the 5 second slide. 6 7 Can you see that, Mr. Sampson? It says unfired cartridge on the left hand side? 8 9 MR. BENJAMIN SAMPSON: Yes, I can. MS. JENNIFER COX: Okay. I'm wondering if you can just 10 describe that a little bit? 11 MR. BENJAMIN SAMPSON: Well, this is what I call an unfired 12 cartridge. This is a single unit of ammunition. Every cartridge for the modern firearm 13 have four main components. The first component, starting from the top, is the bullet, or 14 the projectile, and that normally consists of a copper jacket on the outside and a lead 15 16 core on the inside. The second component is the cartridge case, where the cartridge case is the container for all the component. The third component is the gunpowder that 17 we would find on the inside of the cartridge case, and the fourth component is the 18 primer located in the centre of the headstamp area. It is the smallest part, but it's 19 probably the most important part to start the firing process. 20 MS. JENNIFER COX: Okay, and let's just start there. Maybe you 21 can explain in laymen's terms, what does the primer actually do? How does that work? 22 23 MR. BENJAMIN SAMPSON: Yeah. So the primer is the part of 24 the cartridge that the firing pin of the gun is going to strike. When the firing pin of the firearm strike that primer, it's going to create a small spark that's going to move through 25 the cartridge case to the gunpowder and ignite that gunpowder there. That is why I say 26 the cartridge case, the primer is probably the most important because without that part, 27 the gunpowder cannot ignite and then your firearm cannot fire. 28

1	MS. JENNIFER COX: Okay. So once the powder ignites, then
2	what happens after that?
3	MR. BENJAMIN SAMPSON: So once that powder ignites, there is
4	literally an explosion taking place inside that cartridge case. There's a build-up of
5	gasses and a build-up of pressure, and that will force the bullet, then, out of the case
6	and down the inside of the firearm.
7	MS. JENNIFER COX: And after it leaves the barrel of the firearm,
8	what happens?
9	MR. BENJAMIN SAMPSON: So after the bullet leaves the barrel
10	of the firearm, and the bullet exits the barrel, but there is some of the gunpowder, some
11	burned gunpowder, some unburned gunpowder, and some smoke that also exits at the
12	same time, and the bullet eventually will go on to strike a target.
13	MS. JENNIFER COX: And so with the copper jacket and the lead
14	core, so as we're looking at this diagram, what goes and hits the target?
15	MR. BENJAMIN SAMPSON: Well, the bullet will go on and hit the
16	target. But because of that velocity that the bullet leaves the barrel, depending on the
17	target that it strikes, it is totally possible for that bullet to either fragmented, in other
18	words, pieces of it breaks off, and it's even possible for that lead core to separate from
19	the copper jacket, thus leaving it leaving the bullet in two parts, the jacket and the
20	core.
21	MS. JENNIFER COX: Okay. And if we can go to the next picture,
22	which would be the third slide. Can you see that, Mr. Sampson?
23	MR. BENJAMIN SAMPSON: I can. This slide, the header is Bullet
24	Frag, Bullet Jacket Frag and Fire Cartridge case.
25	MS. JENNIFER COX: Right, right.
26	MR. BENJAMIN SAMPSON: We see two pictures on the slide.
27	The picture on the left-hand side have several images. The top image is that of an
28	unfired bullet. The image on the bottom left is a fired bullet fragment. I call it a fragment

- because we do not have all of that fired bullet. Also, from that image, you can see that
- there's a difference in colour on the inside and on the outside. On the inside, we have
- that lead core, and on the outside we have a shiny bullet jacket.
- The other two images on the left-hand picture are those of bullet
- 5 jacket fragments. Again, fragments because we do not have all of that bullet jacket.
- Then on the photo, the picture on the right-hand side, we have two
- 7 images. One, it shows the difference between an unfired cartridge case and a fired
- 8 cartridge case. The one on the right-hand side have a firing pin indentation in the
- 9 middle of the primer, and that is the time that it was fired.
- MS. JENNIFER COX: So that's the circle in the middle of the
- image on the right, the very far right?
- MR. BENJAMIN SAMPSON: Correct, ma'am.
- 13 MS. JENNIFER COX: If we can go to the next picture. I'm just
- going to go through a few of these pictures, just so everybody knows what you're talking
- about, Mr. Sampson, when you -- when you talk about different things.
- So this will be Number 4. Can you see that?
- 17 **MR. BENJAMIN SAMPSON:** I can, yes, ma'am.
- 18 MS. JENNIFER COX: And can you just describe a little bit about
- the Picatinny rail?
- 20 MR. BENJAMIN SAMPSON: Yes. So on this slide, we have three
- 21 different pictures. The picture on the left-hand side shows five different Picatinny rails.
- You can see that they come in different lengths and in different diameters. The
- 23 Picatinny rail always makes me think about train tracks, and it is described as
- something that you can attach to your firearm, and in turn, it provides a mounting
- 25 platform for other firearms accessories, like scopes, or flashlights, or laser sights.
- MS. JENNIFER COX: Okay. And what we see in the picture in the
- 27 middle is a picture of a laser; correct?
- MR. BENJAMIN SAMPSON: Correct. What we see in the middle

is a laser sight, which we describe as a device that you can attach to a firearm to a yoke 1 2 with target acquisition. It projects a beam onto the target that provides a visual reference point. 3 MS. JENNIFER COX: Okay. And if we can go to Number 5. Can 4 you see that, Mr. Sampson? 5 MR. BENJAMIN SAMPSON: I can. 6 7 **MS. JENNIFER COX:** Okay. Can we quickly go through that? MR. BENJAMIN SAMPSON: Yes. 8 9 Again, there are three pictures on this slide. The one on the left-10 hand side shows what a detachable cartridge magazine would look like. A detachable cartridge magazine is the container or the unfired cartridges. 11 The picture in the middle shows almost nothing is visible when that 12 detachable cartridge magazine is fully inserted into the hand grip of that firearm. 13 And then the last pictures an -- a high-capacity magazine, which is 14 a magazine capable of holding more than the standard number of rounds provided by 15 the manufacturer. And that is what it would look like if you insert a high-capacity 16 magazine then into the hand grip of the firearm. 17 **MS. JENNIFER COX:** So it would be sticking out of the bottom of 18 the -- of the gun. 19 MR. BENJAMIN SAMPSON: That is correct, ma'am. 20 **MS. JENNIFER COX:** Okay. So let's talk a little bit about the 21 22 ballistic services themselves, the standard service that you provide. 23 MR. BENJAMIN SAMPSON: Yes, ma'am. 24 **MS. JENNIFER COX:** So once the firearms come to you, what is the process? What is it that you provide? 25 MR. BENJAMIN SAMPSON: Yes. 26 So in the examination of a firearm, we examine that firearm for the 27 calibre, we determine the make and model of that firearm. We determine what is the 28

1	condition of the firearm. We do a visual inspection and also a mechanical assessment.
2	We measure the overall length of the firearm as well as the barrel
3	length, and that is going to assist us with the classification in terms of the Canadian
4	Criminal Code.
5	Once we established that the firearm is in safe working condition,
6	we generate test fires with that firearm using pristine ammunition from the CFS
7	Ammunition Reference Collection. And then, at a later stage, those test-fired bullets
8	and cartridge cases will be sent to IBIS or to be uploaded onto the IBIS database.
9	MS. JENNIFER COX: So one of the things you said was a
10	mechanical inspection of the firearm. What does that involve?
11	MR. BENJAMIN SAMPSON: Yes.
12	It is important to determine whether that firearm is in working
13	condition or not and, if it's not in working condition, what is wrong with the firearm and
14	how easy would it be to repair that firearm to firing condition. Using what kind of tools
15	would be an important factor as well.
16	If the firearm is in working condition or, I should say, it is important
17	that the firearm is in working condition before I attempt to test fire that firearm because
18	at the end of the day, I don't want that firearm to blow up in my face. So we have to
19	make sure that it is safe and in working condition before we generate test fires with that
20	firearm.
21	MS. JENNIFER COX: So what does that inspection actually look
22	like? Do you take it apart and have a look at it?
23	MR. BENJAMIN SAMPSON: Yes. It's both external and internal.
24	We do disassemble the firearm to make sure that, for example, the barrel is not cracked
25	and now unsafe.
26	So yes, disassembly of the firearm, inspecting the the different
27	parts of the firearm before we eventually get to the test firing process.
28	MS. JENNIFER COX: Okay. And before you do the test fire, are

- there other things you do once the fire -- instead of -- well, in addition to the firearm, are
- there other things that you're recording, inspecting? What are the other things you're
- 3 looking at when your package comes in?
- 4 MR. BENJAMIN SAMPSON: Yes.
- In many instances, it's not just the firearm that is submitted.
- 6 Sometimes there are fired ammunition components, too, fired bullets, and fired cartridge
- 7 cases or fired cartridges, and sometimes there are unfired ammunition components that
- 8 also examine -- submitted.
- 9 So we will examine all the evidence in the submission. We will --
- we will take photos. We will put the details down on our worksheets and then, if
- necessary, we would do microscopic comparisons between the examined fired bullets
- and/or cartridge cases to the test fires from the firearm that were created or generated
- by myself.
- MS. JENNIFER COX: So the purpose of the test fire is -- what's
- the purpose of that?
- MR. BENJAMIN SAMPSON: The purpose of test firing the firearm
- is to generate known samples from that firearm. By test firing that gun, I generate test-
- fired bullet and test-fired cartridge cases that I now know comes from this specific
- 19 firearm.
- I can then use those knowns and compare it to any unknown bullet
- 21 and unknown cartridge case from the crime scene to see if they originated from that
- 22 firearm.
- MS. JENNIFER COX: And when you do the test fire, it's not just
- one test fire, is it?
- MR. BENJAMIN SAMPSON: No. At CFS, it is policy to generate
- at least three test-fired bullets and three test-fired cartridge cases with the firearm.
- 27 MS. JENNIFER COX: And when you're looking for a marking, I
- think you've talked about this, but I just want to make sure we've covered it, where can

the marking appear?

1

2	MR. BENJAMIN SAMPSON: Yes.
3	So the markings on the outside the markings on the bullet will be
4	on the outside of that bullet, and those markings will come from whatever may have on
5	the inside of the barrel. The cartridge cases are marked with other parts of the gun.
6	For example, I've already mentioned the firing pin of the firearm will mark the cartridge
7	case, the breach face of a firearm would mark the cartridge case. There's chamber
8	marks from the firearm on the cartridge case and also from the extracted and ejected
9	from the firearm.
10	They all have the potential of leaving marks on the cartridge case.
11	MS. JENNIFER COX: And so this would be the case even if
12	ammunition wasn't fired; right? If it was put in the gun but never fired?
13	MR. BENJAMIN SAMPSON: If ammunition were put in the gun
14	and not fired, you will not have the firing pin impression because we did not fire them.
15	But there will potentially still be markings from the breach face, the extractor, the
16	ejector. They might not be as prominent as the fired markings, but it is possible that
17	they might still reproduce on just cycled ammunition.
18	MS. JENNIFER COX: Okay. And I was just going to ask you that.
19	So I've heard you say the term "cycling through", so that's the
20	ammunition going being loaded into the into the firearm or into the cartridge;
21	correct?
22	MR. BENJAMIN SAMPSON: Yes. When we cycle a round of
23	ammunition through a firearm, that means we load into the firearm and then we extract
24	and eject it out of the firearm again without shooting it.
25	MS. JENNIFER COX: Okay. And so when you talked about
26	extracting or extractor, that means something that's on the firearm that allows you to
27	take the ammunition out of it; correct?
28	MR. BENJAMIN SAMPSON: That is correct, ma'am.

1	WIS. JENNIFER COX: And when we talk about breach lace
2	because you mentioned that, can you explain that a little bit more?
3	MR. BENJAMIN SAMPSON: Yes.
4	If we look back at the image of the unfired cartridge case versus the
5	fired cartridge case, that area that was visible in that photo is what we call the head-
6	stem area, so the breach face of the firearm is a flat surface that will press against that
7	headstamp area, so that is why the breach face have the opportunity to make markings
8	on that head-stem area.
9	MS. JENNIFER COX: The head-stem.
10	MR. BENJAMIN SAMPSON: Correct.
11	MS. JENNIFER COX: Right.
12	And there's a couple of options when you are examining firearms of
13	ammunition. One is it matches or that's not the right word. It's identified to match
14	go with the gun or the or the ammunition? Is that correct?
15	MR. BENJAMIN SAMPSON: Yes, ma'am. When we do the
16	microscopic comparisons, they are mainly all conclusions that we potentially can reach.
17	The first one is it is an identification. And that means that we
18	conclude that this bullet or this cartridge case comes from this firearm.
19	The second conclusion would be an elimination. And elimination
20	means that this bullet did not come from this firearm.
21	The third possibility would be an inconclusive finding, where that
22	means that I am unsure whether this bullet came from this gun or not.
23	And then the fourth possible conclusion would be that the item that
24	I'm examining is too damaged to it is of no value for microscopic comparison.
25	So those are the four major conclusions that we potentially can
26	reach.
27	And maybe at this point in time, I should just mention that those
28	conclusions of mine will always be within the limits of practical certainty. That's the

1 limitation of my statement.

2 **MS. JENNIFER COX:** So when it comes to determining where ammunition may have originated, so you might not be able to identify the firearm within 3 the reasonable certainty, but can you identify what firearm it was not? So can you 4 determine different models? When you look at the ammunition, the fired ammunition, 5 can you determine what type of gun actually -- or firearm actually fired the bullet? 6 7 MR. BENJAMIN SAMPSON: It will always depend on the type of 8 markings that -- the markings that are visible on that fired bullet and fired cartridge case. At the end of the day, that is what we use to determine whether they come from a 9 specific gun or not. 10 And sometimes it will be possible to eliminate other firearms, and 11 sometimes it is not possible. It all -- it's going to depend on the condition of that piece of 12 evidence. 13 **MS. JENNIFER COX:** Okay. And let's talk about the process of 14 eliminating firearms. How can you eliminate firearms? 15 MR. BENJAMIN SAMPSON: Yes. To eliminate firearms, we will 16 have to determine what are the class characteristics of that firearm? And when I say 17 class characteristics, the example that I want to use is on the inside of the barrel of the 18 firearm, there are five grooves that twist to the right-hand side, which means that if we 19 20 now fire a bullet through the inside of that barrel, it's going to mark that bullet with five groove impressions that goes to the right-hand side. 21 If we find a bullet on a crime scene that has six grooves that twist to 22 23 the right-hand side, then we know that that class characteristics are different, which 24 means that that bullet could not have been fired from that specific firearm. MS. JENNIFER COX: Okay. But just because you have those 25 grooves, even if the grooves match, or were similar, that wouldn't give you enough to 26 positively say that the firearm and the ammunition were the same; right? So they 27 wouldn't allow you to -- those grooves wouldn't be enough for you to say with any 28

1	certainty that the ammunition came from the firearm; right?
2	MR. BENJAMIN SAMPSON: No. We would need more than just
3	class characteristics
4	MS. JENNIFER COX: Okay.
5	MR. BENJAMIN SAMPSON: to determine whether a bullet
6	came from a specific gun. We're going to need all the class characteristics to be in
7	agreement and we're going to need individual characteristics to be in agreement as well
8	before we can determine if the bullets were fired from a specific firearm.
9	MS. JENNIFER COX: Okay. And can you think of situations in
10	your 22 years of doing this work where the condition of either or the firearm or the
11	ammunition that was presented to you for testing was not suitable? Can you think of
12	why it might not have been suitable for testing?
13	MR. BENJAMIN SAMPSON: Yes. As I've explained earlier, when
14	that bullet when a bullet leaves the barrel of the firearm, depending on the firearm,
15	that bullet can exit at speeds greater than five, six, 700 metres per second.
16	So with that speed, depending on the target that it strikes, that
17	bullet can be totally destroyed or be fragmented, or depending on the target, if you fired
18	it into water, you might get a pristine bullet back. But if you fire it into a road surface,
19	that will totally destroy or fragment that bullet. And at that point, the chances are great
20	that the pieces would be of no identification value.
21	MS. JENNIFER COX: Okay. So I'm going to go to back to the
22	slides again. And I'm going to go to the last slide, which I think is number 7. Can you
23	see that, Mr. Sampson?
24	MR. BENJAMIN SAMPSON: Yes, I can.
25	MS. JENNIFER COX: Okay. So I want to ask you a little bit about
26	how to determine how far the firearm was from the target. Is that the right words?
27	MR. BENJAMIN SAMPSON: That are the right words. Yes,
28	ma'am.

1	MS. JENNIFER COX: Okay. So in the picture we see on the
2	lefthand side, a picture of a firearm. And I'm wondering if you can just explain what we
3	see here, and then we'll talk a little bit more about the specifics of this.
4	MR. BENJAMIN SAMPSON: Yes. So as we can see from the first
5	picture, the picture on the left-hand side, the bullet is not the only thing that exits the
6	barrel at the time of discharge. You can see that there's the bullet, there is some
7	smoke, there is some soot, there is some burnt gunpowder, and some unburnt
8	gunpowder that exits that barrel. And all of those things in front of the gun, that is what
9	we call firearms discharge residue, and that is what we examine for during distance
10	determination.
11	MS. JENNIFER COX: So in the middle slide, what is it that we see
12	there?
13	MR. BENJAMIN SAMPSON: Yes, so the middle picture gives us
14	an illustration of what the firearms discharge residue might look like at different
15	distances. As you can see, the smaller pictures at the bottom, firearms discharge
16	residue at contact, so right by the muzzle of the firearm, are dense and dark and has a
17	really small diameter. And the further away from the muzzle of the firearm, the deposits
18	are less dense and less dark and the diameter is exponentially bigger than what it was
19	at contact.
20	So that is how we or that is what we use to determine what
21	how far was the gun away from the target at the time of discharge.
22	MS. JENNIFER COX: And on the right, the very right, what does
23	that picture represent?
24	MR. BENJAMIN SAMPSON: Yes, that picture on the right-hand
25	side is there just to give you an idea of what firearms discharge residue might look like
26	on a white target surface. That specific one was fired at six inches away from the
27	firearm. There it's clear, you can see the bullet hole, we can see a pattern around the
28	bullet hole, and that blackening that we see there is the firearms discharge residue that

we might find on the primary target. 1 2 MS. JENNIFER COX: Okay. And as we're looking at this, this is a white target. Is there a way to look at things when they're on a dark target? 3 MR. BENJAMIN SAMPSON: Yes. So white targets, it's easier to 4 examine because if it's there, it's visual -- it's visible, like we can see in that photo. If we 5 work with a darker clothing and you cannot see a dark deposit from the firearms 6 7 discharge residue, we have infrared photography to our disposal that I can use to 8 visualize that firearms discharge residue on dark clothing. 9 MS. JENNIFER COX: And is there another mechanism besides the infrared technology? 10 MR. BENJAMIN SAMPSON: Yes, we can almost -- we can also 11 use a chemical process to make the firearms discharge residue visible. 12 **MS. JENNIFER COX:** So when you set up the test and the panels, 13 how do you determine how far the panels are away from the firearm? 14 15 **MR. BENJAMIN SAMPSON:** So if we examine a primary target, a piece of clothing, and we find firearms discharge residue at and on it, we then use the 16 firearm and the ammunition combination found at the crime scene. We then generate 17 test panels at different distances. And we do that because we don't know what the 18 distance is going to be, and then we going to compare my distance panels that I 19 generated and compare it to what the firearms discharge residue on the primary target 20 looks like. By doing that, I will get a sense of how far the firearm could have been at the 21 time of discharge. 22 23 **MS. JENNIFER COX:** And that's an approximate distance; 24 correct? MR. BENJAMIN SAMPSON: Yes. When we report on distance 25 determination, the answer will always be a range. A typical answer would be the 26 firearm -- the muzzle of the firearm was between 6 inches and 12 inches away from the 27 target at the time of discharge. We do that because my testing conditions here at the 28

- lab will always be different than the conditions at the crime scene. In the lab, I'm never
- 2 going to deal with wind, or snow, or rain, but those kind of factors all can influence the
- deposit of that firearms discharge residue on the primary target.
- 4 **MS. JENNIFER COX:** What are the other things that can influence
- 5 your visualization of the target? Does it matter what the firearm has hit, what the target
- 6 actually is?
- 7 MR. BENJAMIN SAMPSON: Yes, the chemical of the target, that
- 8 is going to influence the amount of firearms discharge residue that's going to exit the
- 9 bell. The bigger the caliber, the more firearms discharge residue that might exit. With
- smaller calibers, less firearms discharge residue exit the muzzle of the firearm.
- Firearms discharge residue will only deposit on the primary target.
- So if there was something in between, like, a window, then all the discharge residue will
- be on the window and nothing will be on the primary target, if the clothing were on the
- other side. So those are some of the -- or some of the things that can influence the
- 15 deposit.
- MS. JENNIFER COX: What about the pattern that you see on the
- actual target? So does it matter if it's a car or a piece of Gyprock? Does it change the
- 18 pattern?
- 19 MR. BENJAMIN SAMPSON: Yes. The surface will definitely play
- 20 a role. As I said, firearms discharge residue will deposit better on clothing in
- comparison to a fired -- in comparison to a window or the outside surface of a car, for
- example, because I think the opportunity is bigger for the firearms discharge residue to
- just fall off from windows and car surfaces.
- MS. JENNIFER COX: And what about when the target is a human
- being? Does that change? Is it difficult to assess?
- 26 MR. BENJAMIN SAMPSON: It is possible for the firearms
- discharge residue to embed itself in the skin. Those -- that will probably only happen if
- the firearm is really close to the skin and not as much when the human skin is further

1	away from the firearm.
2	MS. JENNIFER COX: And so when we hear the word stippling, is
3	that actually the firearms discharge visible on the skin?
4	MR. BENJAMIN SAMPSON: That is correct. Stippling would be
5	some of that burned gun powder that actually embeds itself into the skin, and that then -
6	- because it's embedded in the skin, it will not fall off and that is what we refer to as
7	stippling.
8	MS. JENNIFER COX: Okay. I'm going to go back to the slides,
9	and this is number six. Can you see that, Mr. Sampson?
10	MR. BENJAMIN SAMPSON: Yes.
11	MS. JENNIFER COX: Okay.
12	MR. BENJAMIN SAMPSON: I can, ma'am.
13	MS. JENNIFER COX: Can you explain just briefly what those
14	slides are?
15	MR. BENJAMIN SAMPSON: Yes. So trajectory analysis in short
16	is where we try to determine a possible position of a shooter at the time of firing. Our
17	involvement in trajectory analysis is normally at the crime scene. When the crime scene
18	can be anything from a car, a house, walls in the house, and/or windows, we evaluate
19	and we identify bullet entrance holes and bullet exit holes and then use that information
20	to work backwards to determine a possible position of the shooter at the time of firing.
21	MS. JENNIFER COX: So when we look at this picture here, there's
22	two different pictures, but if we look at the one on the left, there's a number of rods in it
23	looks like a car seat.
24	MR. BENJAMIN SAMPSON: Yes, ma'am.
25	MS. JENNIFER COX: What are those?
26	MR. BENJAMIN SAMPSON: So what we see in the photo on the
27	left-hand side, those yellow rods we refer to as trajectory rods, and we use trajectory
28	rods to connect the entrance holes to the exit holes. And it is possible to connect one

rod to another to make it longer, and it's also possible to attach lasers to those trajectory 1 2 rods to work ourselves backwards to better visualize maybe a possible position of the shooter. 3 **MS. JENNIFER COX:** And do the diameter of the trajectory rods 4 vary? 5 MR. BENJAMIN SAMPSON: Yes. These trajectory rods are not 6 7 always yellow. They can come in different colours. That different colour normally means that it is of a different diameter. We can appreciate that because different 8 caliber bullets have different diameters, so we want to use the trajectory rods closest to 9 the diameter of the hole. 10 **MS. JENNIFER COX:** And if you didn't use the right rod, what 11 would be the impact of that, just so we understand that? 12 MR. BENJAMIN SAMPSON: Yes. If we don't use the right 13 trajectory rod in the right bullet hole, there is a chance that the measurement of 14 15 uncertainty, the error could be great or greater when we try to determine the possible position of the shooter. 16 **MS. JENNIFER COX:** And so if it was too small, for example, that 17 would mean it would move; right? 18 MR. BENJAMIN SAMPSON: Correct, ma'am. 19 20 **MS. JENNIFER COX:** Okay. And are there other variables that can affect a trajectory analysis? 21 MR. BENJAMIN SAMPSON: Yes. As I said earlier, like, the 22 23 muzzle velocity of the firearm, that has the potential of influencing the trajectory 24 analysis. Maybe the target itself has the potential of influencing trajectory analysis, the caliber of the bullet, like, the nose profile of that bullet, and other factors, like, if there is 25 no exit hole and just an entrance, that could influence our trajectory analysis as well. 26

say about trajectory analysis, Mr. Sampson?

27

28

MS. JENNIFER COX: Okay. Is there anything else you'd like to

1	MR. BENJAMIN SAMPSON: No, I don't think so, ma'am.
2	MS. JENNIFER COX: Okay. I want to move on to the reports that
3	you provide now at CFS. So once you've done your examination, you provide different
4	types of reports, and I'm wondering if you can just explain for the Commissioners and
5	the audience what are those or what those reports are and what they're about.
6	MR. BENJAMIN SAMPSON: Yes. So at the CFS, we have pretty
7	much three "main reports" or possible reports that we author. The first one that I want
8	to mention is what we call a full report or a comprehensive report. That is where we do
9	a full examination of all the exhibits that were submitted and then we author a
10	comprehensive report with our expert opinion. The second one that I want to mention is
11	sometimes we are asked to provide letters of opinion to courts. And the third one that I
12	mention is what we call a notification letter. And the notification letter would accompany
13	those RAISE cases and those SFI cases that were submitted.
14	MS. JENNIFER COX: And the way that you prepare those reports,
15	so in other words, what you put in them and some of the degree of uncertainty, are
16	those based on any standards?
17	MR. BENJAMIN SAMPSON: Yes. There are definitely some
18	standards that we have to adhere to and they are all set out in our policies and
19	procedures, and requirements as set out by our accreditation.
20	MS. JENNIFER COX: Okay. So those are all the questions that I
21	have for you, Mr. Sampson; however, some of the Participants may have some
22	questions for you. So we would like to take a break, so we can speak to the
23	Participants about their questions potentially.
24	So, Commissioners, I'm not sure how long you would like to.
25	COMMISSIONER MacDONALD: Well, thank you very much, Mr.
26	Sampson, and as Commission Counsel Cox has indicated, that procedurally, what we
27	do after we hear from a witness in their with their main evidence is to take a break
28	and allow the Counsel, the lawyers, to chat about whether or not there are any further

- questions to be asked, and if so, who asks them in an orderly fashion and so on. So, 1 2 again, thank you for making yourself available and we would ask you to kindly stand by. We'll break for approximately 20 minutes. 3 Counsel, if you need more time, just let us know. 4 And if you could stand by, Mr. Sampson, we'll be back just as soon 5 as we're ready. Thank you. 6 7 **MS. JENNIFER COX:** Thank you. MR. BENJAMIN SAMPSON: Will do that. 8 9 REGISTRAR DARLENE SUTHERLAND: Thank you. The 10 proceedings are now on break and will resume in 20 minutes. --- Upon breaking at 1:49 p.m. 11 --- Upon resuming at 2:23 p.m. 12 REGISTRAR DARLENE SUTHERLAND: Welcome back. The 13 proceedings are again in session. 14 **BENJAMIN SAMPSON, Resumed:** 15 **COMMISSIONER MacDONALD:** Well, thank you very much, 16 Counsel, as usual, for your collaboration. I understand that Mr. McLellan, Mr. Matthew 17 McLellan will have some questions for our witness, and Mr. Sampson I think is on 18 standby. 19 Hello again, Mr. Sampson. Thank you. 20 MR. BENJAMIN SAMPSON: Yes. sir. 21 **COMMISSIONER MacDONALD:** Thank you again as well. Mr. 22 23 Matthew McLellan will have some questions for you. He represents -- his law firm 24 represents many of the families involved in the mass casualty and has just, I understand, a few questions for you. So if you don't mind, Mr. Sampson. 25 Mr. McLellan, you go right ahead. 26
- 27 --- CROSS-EXAMINATION BY MR. MATTHEW McLELLAN:
- MR. MATTHEW McLELLAN: Good afternoon, Mr. Sampson.

1	MR. BENJAMIN SAMPSON: Good afternoon, sir.
2	MR. MATTHEW McLELLAN: So as Chief Commissioner
3	MacDonald mentioned, I have just a couple questions. It's going to be fairly brief.
4	Could you describe, potentially, the visual difference you would
5	expect to see between a bullet that's expended from a gun as opposed to one that
6	maybe had exploded or was expended in a structure fire?
7	MR. BENJAMIN SAMPSON: Can you just repeat that question,
8	please?
9	MR. MATTHEW McLELLAN: Yeah, no problem. So the visual
10	difference, or what you would expect to see, the difference in what you would expect to
11	see on a bullet that was fired from a gun if that's compared to one that, say, just
12	exploded in a structure fire, so it was not fired out of a gun but was still an expended
13	round.
14	MR. BENJAMIN SAMPSON: Yes. So I think visually there would
15	be a difference. A fired bullet in the normal sense of the word would have the rifling
16	characteristics on the outside of that bullet. In other words, I expect to see all five, six
17	land and groove impressions that either twist to the left or twist to the right, and that's
18	depending on what type of firearm it is. If a firearm or if a bullet that had literally just
19	cooked off because of heat and came out of the cartridge case, I don't expect that to
20	have the rifling characteristics because it is not going to make it down the barrel of the
21	gun. So in there would be the big difference for me between a cooked off bullet and a
22	bullet fired from a firearm.
23	MR. MATTHEW McLELLAN: Okay. And just to follow up on that,
24	could you I guess would you expect to see any visual difference in the casing as
25	opposed to the actual bullet?
26	MR. BENJAMIN SAMPSON: Yes. Again, the casing, because it
27	would not have been fired, there would no there would not be a firing an impression
28	on the back of that primer. It will even be possible that that whole primer, that small,

1	little piece has came out of the cartridge case, but the primer will not have that firing
2	indentation on it.
3	And then obvious from the obvious, like, if it's burnt, it will
4	probably be black on the outside, and, you know, a totally discolouration.
5	MR. MATTHEW McLELLAN: And just one final question, can you
6	speak to whether there would be, we'll say, an auditory difference in the sound of a
7	bullet that explodes as opposed to one that is fired out of a gun?
8	MR. BENJAMIN SAMPSON: I think that is outside my area of
9	expertise, the sound that it would make. But I think from a logical standpoint, a fired
10	round would just have this loud sound that we are all familiar with. When it is just
11	cooked off, that explosion is not there because there's no containment, so the sound
12	would be I'll expect it to be way less softer.
13	MR. MATTHEW McLELLAN: And that's all my questions, so thank
14	you very much.
15	MR. BENJAMIN SAMPSON: You're very welcome.
16	COMMISSIONER MacDONALD: Thank you, Mr. McLellan.
17	And thank you, Mr. Sampson. We very much appreciate your
18	willingness to help us with the important work we're doing and for making yourself
19	available today, so thank you.
20	MR. BENJAMIN SAMPSON: Very welcome, Commissioner.
21	COMMISSIONER STANTON: Yes, thank you, Mr. Sampson, and
22	all of the Counsel, Commission Counsel for your presentations on the foundational
23	documents focussed on firearms and for the two commissioned report precis on history
24	and sociology of guns in Canada and beyond. Thank you, Participants and the
25	Counsel. I realize it was a bit chilly in the room today, so thanks for bearing with us with
26	the new venue as we adjust to our different surroundings. And thanks too, to the
27	members of the public and media for your continued interest and engagement.

28

As you can see, we're continuing to build on our understanding of

1	what happened during the mass casualty with a broader exploration of the related
2	issues that may have contributed and that are set out in our mandate. The layered
3	approach we're taking is critical to ensuring that the findings and recommendations we'll
4	bring forward in our final report are informed by both the facts and by a sound
5	knowledge of relevant issues, research, policies, and lessons learned from prior mass
6	casualties.
7	Tomorrow, we'll be hearing from a witness, Corps Sergeant
8	Major Alan McCambridge. He'll talk to us about the procurement, lifecycle, and
9	destruction or disposition of uniforms. It's a follow-up on our discussions last week of
10	police paraphernalia. We'll also reserve time to hear more Participant submissions
11	tomorrow. And as always, we encourage you to access the many documents and
12	resources available on our website, including the Interim Report, Foundational
13	Documents, and source materials, commissioned reports, and the archive of earlier
14	proceedings. You can also find information about a range of wellness and mental
15	health support services on our website or through our dedicated mental health team,
16	members of whom are here in the room, if you choose to attend proceedings in person.
17	Thank you, we'll see you back here tomorrow morning at 9:30.
18	REGISTRAR DARLENE SUTHERLAND: Thank you. The
19	proceedings are adjourned until May the 4th, 2022 at 9:30 a.m.
20	Upon adjourning at 2:30 p.m.
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CERTIFICATION I, Sandrine Marineau-Lupien, a certified court reporter, hereby certify the foregoing pages to be an accurate transcription of my notes/records to the best of my skill and ability, and I so swear. Je, Sandrine Marineau-Lupien, une sténographe officiel, certifie que les pages ci-hautes sont une transcription conforme de mes notes/enregistrements au meilleur de mes capacités, et je le jure. Sandrine Marineau-Lupien