I Mina'trentai Sais Na Liheslaturan Guåhan BILL STATUS

BILL NO.	SPONSOR	TITLE	DATE INTRODUCED	DATE REFERRED	CMTE REFERRED	PUBLIC HEARING DATE	DATE COMMITTEE REPORT FILED	FISCAL NOTES	NOTES
73-36 (COR)	Frank Blas Jr. Christopher M. Dueñas	AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021.	9:37 a.m.	3/10/21	Committee on Public Safety, Emergency Response, Military and Veteran Affairs, Mayors Council, and Public Transit	4/5/21 2:00 p.m.	9/21/21 2:10 p.m.	Request: 3/10/21 Waiver: 3/17/21	

CLERKS OFFICE Page 1



I Mina'trentai Sais Na Liheslaturan Guahan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

September 17, 2021

The Honorable Therese M. Terlaje Speaker, 36th Guam Legislature 163 Chalan Santo Papa Hagåtña Guam, 96910

VIA:

The Honorable Amanda L. Shelton (Melt,

Acting Chairperson, Committee on Rules

Subject:

Committee Report on Bill No. 73-36 (COR) As Introduced

Håfa Adai Speaker Terlaje:

Transmitted herewith is the Committee Report on Bill No. 73-36 (COR) – V. Anthony Ada, Frank Blas Jr., Christopher M. Dueñas, James C. Moylan – "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

COMMITTEE ON RULES RECEIVED:

September 17, 2021

Committee votes are as follows:

b TO DO PASS

TO NOT PASS

TO REPORT OUT ONLY

▼ TO ABSTAIN

TO PLACE IN INACTIVE FILE

Sincerely,

Senator Jose "Pedo" Terlaje



I Mina'trentai Sais Na Liheslaturan Guahan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

COMMITTEE REPORT

Bill No. 73-36 (COR)

Introduced by V. Anthony Ada, Frank Blas Jr., Christopher M. Dueñas, James C. Moylan

"AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."



I Mina'trentai Sais Na Liheslaturan Guahan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

September 17, 2021

MEMORANDUM

To: All Members

Committee on Public Safety, Emergency Response, Military and Veterans Affairs,

Mayors' Council and Public Transit

From: Senator Jose "Pedo" Terlaje

Committee Chairperson

Subject: Committee Report on Bill No. 73-36 (COR) – As Introduced

Transmitted herewith is the Committee Report on Bill No. 73-36 (COR) – V. Anthony Ada, Frank Blas Jr., Christopher M. Dueñas, James C. Moylan – "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

This report includes the following:

- COR Referral of Bill No. 73-36 (COR)
- Notices of Public Hearing & Other Correspondence
- Public Hearing Agenda
- Public Hearing Sign-in Sheet
- Submitted Written Testimonies & Supporting Documents
- Committee Report Digest
- Bill No. 73-36 (COR) As Introduced
- Fiscal Note Waiver for Bill No. 73-36 (COR) from the BBMR
- Committee Vote Sheet

Please take the appropriate action on the attached voting sheet. Your attention to this matter is greatly appreciated. Should you have any questions or concerns, please do not hesitate to contact my office.

Si Yu'os Ma'åse'



GUAM CONGRESS BUILDING 163 CHALAN SANTO PAPA HAGATÑA, GUAM 96910 TEL 671-472-2461 COR@GUAMLEGISLATURE.ORG

March 10, 2021

MEMO

To:

Rennae Meno

Clerk of the Legislature

Attorney Ana Won Pat-Borja Legislative Legal Counsel

From:

Vice Speaker Tina Rose Muña Barnes

Chairperson, Committee on Rules

Re:

Referral of Bill No. 73-36 (COR)

Buenas yan Hāfa adai,

As per my authority as Chairperson of the Committee on Rules and subject to §6.01(d), Rule VI of our Standing Rules, I am forwarding the referral of Bill No. 73-36 (COR) – V. Anthony Ada, Frank Blas Jr., Christopher M. Dueñas, James C. Moylan – "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

Please ensure that the subject bill is referred to the Committee on Public Safety, Emergency Response, Military and Veteran Affairs, Mayors Council, and Public Transit, chaired by Senator Jose "Pedo" Terlaje.

I also request that the same be forwarded to the prime sponsor of the subject bill.

If you have any questions or concerns, please feel free to contact Mary Maravilla, Committee on Rules Director at 472-2461.

Thank you for your attention to this important matter.

Respectfully

Vice Speaker Tina Rose Muña Barnes Chairperson, Committee on Rules



FIRST NOTICE of Virtual Public Hearing - Monday, April 05, 2021 beginning at 2:00 p.m.

Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>
To: phnotice@guamlegislature.org

Mon, Mar 29, 2021 at 9:00 AM

March 29, 2021

MEMORANDUM

To: All Senators, Stakeholders and Media

From: Senator Jose "Pedo" Terlaje

Chairperson, Committee on Public Safety, Border Safety, Military and Veterans Affairs, Mayors'

Council, Infrastructure and Public Transit

Subject: FIRST NOTICE of Virtual Public Hearing – Monday, April 05, 2021 beginning at 2:00 p.m.

Buenas yan Hàfa adai,

Please be advised that the Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit, will convene a Virtual Public Hearing on **Monday**, **April 05**, **2021 beginning at 2:00 p.m.** via Zoom Conference platform on the following:

AGENDA:

. <u>BILL NO. 73-36 (COR)</u> – V. Anthony Ada, Frank Blas, Jr., Christopher M. Dueñas, James C. Moylan-"AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

Individuals wishing to participate in the Virtual Public Hearing to provide testimonies may contact the Office of Senator Jose "Pedo" Terlaje via email at senatorpedo@senatorjpterlaje.com or (671) 989-5301. The Virtual Public Hearing will broadcast on local television, GTA Channel 21, Docomo Channel 117/112.4 and stream online via I Liheslaturan Guåhan's live feed_ If written testimonies are to be presented at the hearing, the committee requests that copies be submitted prior to the hearing date and should be addressed to senatorpedo@senatorjpterlaje.com. Testimonies may be submitted via hand delivery to the Office of Senator Jose "Pedo" Terlaje at 777 Route 4 MVP Center Suite 101 Sinajana, Guam 96910; or to the mail room of the Guam Congress Building, 163 Chalan Santo Papa, Hagåtña, Guam; or via email to senatorpedo@senatorjpterlaje.com. In compliance with the Americans with Disabilities Act, individuals requiring special accommodations or services should contact the Office of Senator Jose "Pedo" Terlaje at (671) 989-5301 or by sending an email to senatorpedo@senatorjpterlaje.com.

Si Yu'os Ma'åse'

The Office of Senator Jose "Pedo" Terlaje

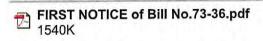
Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council, and Public Transit

36th Guam Legislature I Mina'trentai Sais na Liheslaturan Guåhan

777 Route 4, MVP Center - Units 101/102, Sinajana, GU 96910

Tel: (671) 989-5301/ 3218

Email: senatorpedo@senatorjpterlaje.com





I Mina'trentai Sais Na Liheslaturan Guahan • 36th Guam Legislature

Email: senatorpedo@senatorjpterlaje.com

Tel: (671) 989-5301/3218

March 29, 2021

MEMORANDUM

To: All Senators, Stakeholders and Media

From: Senator Jose "Pedo" Terlaje

Chairperson, Committee on Public Safety, Border Safety, Military and Veterans Affairs, Mayors' Council, Infrastructure and Public Transit

Subject: FIRST NOTICE of Virtual Public Hearing – Monday, April 05, 2021 beginning at 2:00 p.m.

Buenas yan Hafa adai,

Please be advised that the Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit, will convene a Virtual Public Hearing on Monday, April 05, 2021 beginning at 2:00 p.m. via Zoom Conference platform on the following:

AGENDA:

• <u>BILL NO. 73-36 (COR)</u> – V. Anthony Ada, Frank Blas, Jr., Christopher M. Dueñas, James C. Moylan-"AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

Individuals wishing to participate in the Virtual Public Hearing to provide testimonies may contact the Office of Senator Jose "Pedo" Terlaje via email at senatorpedo@senatorjpterlaje.com or (671) 989-5301. The Virtual Public Hearing will broadcast on local television, GTA Channel 21, Docomo Channel 117/112.4 and stream online via I Liheslaturan Guåhan's live feed If written testimonies are to be presented at the hearing, the committee requests that copies be submitted prior to the hearing date and should be addressed to senatorpedo@senatorjpterlaje.com. Testimonies may be submitted via hand delivery to the Office of Senator Jose "Pedo" Terlaje at 777 Route 4 MVP Center Suite 101 Sinajana, Guam 96910; or to the mail room of the Guam Congress Building, 163 Chalan Santo Papa, Hagåtña, Guam; or via email to senatorpedo@senatorjpterlaje.com. In compliance with the Americans with Disabilities Act, individuals requiring special accommodations or services should contact the Office of Senator Jose "Pedo" Terlaje at (671) 989-5301 or by sending an email to senatorpedo@senatorjpterlaje.com.

Si Yu'os Ma'åse'



SECOND NOTICE of Virtual Public Hearing – Monday, April 05, 2021 beginning at 2:00 p.m.

Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>
To: phnotice@guamlegislature.org

Fri, Apr 2, 2021 at 11:35 AM

April 02, 2021

MEMORANDUM

To:

All Senators, Stakeholders and Media

From:

Senator Jose "Pedo" Terlaje

Chairperson, Committee on Public Safety, Emergency Response, Military and Veterans

Affairs, Mayors' Council and Public Transit

Subject:

SECOND NOTICE of Virtual Public Hearing - Monday, April 05, 2021 beginning at 2:00 p.m.

Buenas yan Hafa Adai,

Please be advised that the Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit, will convene a Virtual Public Hearing on Monday, April 05, 2021 beginning at 2:00 p.m. via Zoom Conference platform on the following:

AGENDA:

• <u>BILL NO. 73-36 (COR)</u> – V. Anthony Ada, Frank Blas, Jr., Christopher M. Dueñas, James C. Moylan- "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

Individuals wishing to participate in the Virtual Public Hearing to provide testimonies may contact the Office of Senator Jose "Pedo" Terlaje via email at senatorpedo@senatorjpterlaje.com or (671) 989-5301. The Virtual Public Hearing will broadcast on local television, GTA Channel 21, Docomo Channel 117/112.4 and stream online via I Liheslaturan Guåhan's live feed_ If written testimonies are to be presented at the hearing, the committee requests that copies be submitted prior to the hearing date and should be addressed to senatorpedo@senatorjpterlaje.com. Testimonies may be submitted via hand delivery to the Office of Senator Jose "Pedo" Terlaje at 777 Route 4 MVP Center Suite 101 Sinajana, Guam 96910; or to the mail room of the Guam Congress Building, 163 Chalan Santo Papa, Hagåtña, Guam; or via email to senatorpedo@senatorjpterlaje.com. In compliance with the Americans with Disabilities Act, individuals requiring special accommodations or services should contact the Office of Senator Jose "Pedo" Terlaje at (671) 989-5301 or by sending an email to senatorpedo@senatorjpterlaje.com.

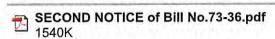
Si Yu'os Ma'ase'

The Office of Senator Jose "Pedo" Terlaje Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council, and Public Transit

36th Guam Legislature I Mina'trentai Sais na Liheslaturan Guåhan

777 Route 4, MVP Center - Units 101/ 102, Sinajana, GU 96910 Tel: (671) 989-5301/ 3218

Email: senatorpedo@senatorjpterlaje.com





I Mina'trentai Sais Na Liheslaturan Guahan • 36th Guam Legislature

Email: senatorpedo@senatorjpterlaje.com

Tel: (671) 989-5301/3218

April 02, 2021

MEMORANDUM

To:

All Senators, Stakeholders and Media

From:

Senator Jose "Pedo" Terlaje

Chairperson, Committee on Public Safety, Emergency Response, Military and

Veterans Affairs, Mayors' Council and Public Transit

Subject:

SECOND NOTICE of Virtual Public Hearing - Monday, April 05, 2021 beginning at 2:00 p.m.

Buenas yan Hafa adai,

Please be advised that the Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit, will convene a Virtual Public Hearing on Monday, April 05, 2021 beginning at 2:00 p.m. via Zoom Conference platform on the following:

AGENDA:

• <u>BILL NO. 73-36 (COR)</u> – V. Anthony Ada, Frank Blas, Jr., Christopher M. Dueñas, James C. Moylan-"AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

Individuals wishing to participate in the Virtual Public Hearing to provide testimonies may contact the Office of Senator Jose "Pedo" Terlaje via email at senatorpedo@senatorjpterlaje.com or (671) 989-5301. The Virtual Public Hearing will broadcast on local television, GTA Channel 21, Docomo Channel 117/112.4 and stream online via I Liheslaturan Guåhan's live feed If written testimonies are to be presented at the hearing, the committee requests that copies be submitted prior to the hearing date and should be addressed to senatorpedo@senatorjpterlaje.com. Testimonies may be submitted via hand delivery to the Office of Senator Jose "Pedo" Terlaje at 777 Route 4 MVP Center Suite 101 Sinajana, Guam 96910; or to the mail room of the Guam Congress Building, 163 Chalan Santo Papa, Hagåtña, Guam; or via email to senatorpedo@senatorjpterlaje.com. In compliance with the Americans with Disabilities Act, individuals requiring special accommodations or services should contact the Office of Senator Jose "Pedo" Terlaje at (671) 989-5301 or by sending an email to senatorpedo@senatorjpterlaje.com.

Si Yu'os Ma'ase'



Invitation for a Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. Monday, April 05, 2021

Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>

Thu, Apr 1, 2021 at 3:15 PM

To: jasonyoung@gmail.com, lpwebber@hotmail.com, lee@mdaguam.com, flytwa78@hotmail.com, hm.tran.rupland@gmail.com, heathertran88a@gmail.com, r.terorio671@gmail.com, matuawarrior@gmail.com, ronlsi@gmail.com, josephjr.santos@gmail.com, jaliota.roth@gmail.com, henry.rafan@live.com, raiortiz@gmail.com, poweredbyinnate@yahoo.com, acelive73@hotmail.com, bobh508@gmail.com, bobibb@hotmail.com, kgibb671@gmail.com, fdumanal@gmail.com, don_resvrreccion@yahoo.com, fjdaniel@yahoo.com, angeld671@gmail.com, marianofcruz@yahoo.com, jcruz@kuam.com, sharkhol@guam.net
Cc: Senator Tony Ada <senatorvanthonyada@gmail.com>, Daelene Waki <daelene@senatorjpterlaje.com>

Hafa Adai All,

Please see attached letter of invitation for the Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. on Monday, April 05, 2021. Kindly confirm your attendance to the hearing so we can send the Zoom link.

Thank you.

The Office of Senator Jose "Pedo" Terlaje

Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council, and Public Transit

36th Guam Legislature I Mina'trentai Sais na Liheslaturan Guåhan

777 Route 4, MVP Center - Units 101/102, Sinajana, GU 96910

Tel: (671) 989-5301/ 3218

Email: senatorpedo@senatorjpterlaje.com



4.5.21 Invitation.pdf 222K



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

April 01, 2020

Subject: Invitation for a Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. Monday, April 05, 2021

Buenas yan Håfa adai!

Please be advised that the Committee on Public Safety, Emergency Response, Military and Veterans' Affairs, Mayors' Council and Public Transit will be conducting a Virtual Public Hearing on Monday, April 05, 2021 beginning at 2:00 p.m., via Zoom Platform.

Bill No. 73-36 (COR) – V. Anthony Ada, Frank Blas, Jr., Christopher M. Dueñas, James C. Moylan – "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

I invite you to appear before this Committee and provide testimony. Please feel free to extend this invitation to other interested members of our community.

Testimonies should be addressed to Senator Jose "Pedo" Terlaje, Chairperson, Committee on Public Safety, Emergency Response, Military and Veterans' Affairs, Mayors' Council and Public Transit, and may be hand-delivered to my office at MVP Center Unit 102., 777 Rt. 4 Sinajana, Guam 96910, or via email to senatorpedo@senatorjpterlaje.com.

Individuals requiring special accommodations, auxiliary aids, or service, who plan to attend the public hearing should contact and submit their request to my office at 989-5301/3218. Please do not hesitate to contact me, should you have any questions or concerns. I look forward to your attendance and participation.

Si Yu'os Ma'ase

Senator Jose "Pedo" Terlaje



Invitation for a Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. Monday, April 05, 2021

Senator Pedo Terlaje <senatorpedo@senatoripterlaje.com>

Thu, Apr 1, 2021 at 3:15 PM

To: tonycruz671@gmail.com, mdarren@yahoo.com, jwadkins@eastwestrental.com, ejorallo@icloud.com, saldana228@gmail.com, fjv.fcf@gmail.com, erikwessling@gmail.com, jirvz21@gmail.com, louisjpaulino@gmail.com, josephfrape@yahoo.com, dadelossantos@flyapa.com, bignebs@yahoo.com, bryansurber@gmail.com, jrmvcampo@gmail.com, vincenttorch@yahoo.com, kevin.navarro90@yahoo.com, keith_kazuo@hotmail.com, jlwhp@yahoo.com, mjordanbaker@gmail.com, jdunderwood2@gmail.com, jimmyjam671@gmail.com

Cc: Senator Tony Ada <senatorvanthonyada@gmail.com>, Daelene Waki <daelene@senatorjpterlaje.com>

Hafa Adai All,

Please see attached letter of invitation for the Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. on Monday, April 05, 2021. Kindly confirm your attendance to the hearing so we can send the Zoom link.

Thank you.

--

The Office of Senator Jose "Pedo" Terlaje

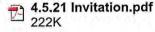
Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council, and Public Transit

36th Guam Legislature I Mina'trentai Sais na Liheslaturan Guåhan

777 Route 4, MVP Center - Units 101/102, Sinajana, GU 96910

Tel: (671) 989-5301/3218

Email: senatorpedo@senatorjpterlaje.com





I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

April 01, 2020

Subject: Invitation for a Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. Monday, April 05, 2021

Buenas yan Håfa adai!

Please be advised that the Committee on Public Safety, Emergency Response, Military and Veterans' Affairs, Mayors' Council and Public Transit will be conducting a Virtual Public Hearing on Monday, April 05, 2021 beginning at 2:00 p.m., via Zoom Platform.

Bill No. 73-36 (COR) – V. Anthony Ada, Frank Blas, Jr., Christopher M. Dueñas, James C. Moylan – "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

I invite you to appear before this Committee and provide testimony. Please feel free to extend this invitation to other interested members of our community.

Testimonies should be addressed to Senator Jose "Pedo" Terlaje, Chairperson, Committee on Public Safety, Emergency Response, Military and Veterans' Affairs, Mayors' Council and Public Transit, and may be hand-delivered to my office at MVP Center Unit 102., 777 Rt. 4 Sinajana, Guam 96910, or via email to senatorpedo@senatorjpterlaje.com.

Individuals requiring special accommodations, auxiliary aids, or service, who plan to attend the public hearing should contact and submit their request to my office at 989-5301/3218. Please do not hesitate to contact me, should you have any questions or concerns. I look forward to your attendance and participation.

Si Yu'os Ma'ase

Senator Jose "Pedo" Terlaje



Invitation for a Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. Monday, April 05, 2021

Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>

Thu, Apr 1, 2021 at 3:15 PM

To: edwin.flores@itehq.net, james.gts@gmail.com, tanresca@gmail.com, ellerypaz@gmail.com, hongi_999@hotmail.com, dunnman99@yahoo.com, paul_marieluarca@yahoo.com, pgrdalacio@yahoo.com, kareninkali@gmail.com, enewearguam@gmail.com, sablan1@gmail.com, ads0007467@gmail.com, v8toy@yahoo.com, mmorinaga2@me.com, killabee671@gmail.com, johnilao@jmiguam.com, jtflores671@outlook.com, ricksa@guam.net, gflores@gta.net, lfejeran@gmail.com, christineg_722@hotmail.com, junkc2009@gmail.com, jblas444@yahoo.com, gvmyers@hotmail.com, jraytaitano@gmail.com, jary@teleguam.net, fixer@firstshots.net, djr7445@gmail.com

Cc: Senator Tony Ada <senatorvanthonyada@gmail.com>, Daelene Waki <daelene@senatorjpterlaje.com>

Hafa Adai All,

Please see attached letter of invitation for the Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. on Monday, April 05, 2021. Kindly confirm your attendance to the hearing so we can send the Zoom link.

Thank you.

--

The Office of Senator Jose "Pedo" Terlaje

Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council, and Public Transit

36th Guam Legislature I Mina'trentai Sais na Liheslaturan Guåhan

777 Route 4, MVP Center - Units 101/ 102, Sinajana, GU 96910

Tel: (671) 989-5301/3218

Email: senatorpedo@senatorjpterlaje.com



4.5.21 Invitation.pdf 222K



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

April 01, 2020

Subject: Invitation for a Virtual Public Hearing on Bill No. 73-36 (COR) beginning at 2:00 p.m. Monday, April 05, 2021

Buenas yan Håfa adai!

Please be advised that the Committee on Public Safety, Emergency Response, Military and Veterans' Affairs, Mayors' Council and Public Transit will be conducting a Virtual Public Hearing on Monday, April 05, 2021 beginning at 2:00 p.m., via Zoom Platform.

Bill No. 73-36 (COR) – V. Anthony Ada, Frank Blas, Jr., Christopher M. Dueñas, James C. Moylan – "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

I invite you to appear before this Committee and provide testimony. Please feel free to extend this invitation to other interested members of our community.

Testimonies should be addressed to Senator Jose "Pedo" Terlaje, Chairperson, Committee on Public Safety, Emergency Response, Military and Veterans' Affairs, Mayors' Council and Public Transit, and may be hand-delivered to my office at MVP Center Unit 102., 777 Rt. 4 Sinajana, Guam 96910, or via email to senatorpedo@senatorjpterlaje.com.

Individuals requiring special accommodations, auxiliary aids, or service, who plan to attend the public hearing should contact and submit their request to my office at 989-5301/3218. Please do not hesitate to contact me, should you have any questions or concerns. I look forward to your attendance and participation.

Si Yu'os Ma'ase

Senator Jose "Pedo" Terlaje



Invitation for a Virtual Public Hearing on Bill No. 73-36 (COR), beginning at 2:00 p.m. Monday, April 05, 2021

Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>
To: Stephen Ignacio <stephen.ignacio@gpd.guam.gov>
Cc: Senator Tony Ada <senatorvanthonyada@gmail.com>

Thu, Apr 1, 2021 at 2:45 PM

Hafa Adai Chief Ignacio.

Please see attached letter of invitation below. Kindly confirm receipt of this email.

Thank you.

The Office of Senator Jose "Pedo" Terlaje Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council, and Public Transit

36th Guam Legislature I Mina'trentai Sais na Liheslaturan Guåhan

777 Route 4, MVP Center - Units 101/102, Sinajana, GU 96910 Tel: (671) 989-5301/3218

Email: senatorpedo@senatorjpterlaje.com

4.5.21 GPD Invitation.pdf 222K



I Mina'trentai Sais Na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

AGENDA

Monday, April 05, 2021 VIA Zoom Platform

- I. Call to Order
- II. Opening Remarks
- III. Item(s) for Discussion

2:00 p.m.

Bill No. 73-36(COR) Introduced by V. Anthony Ada, Frank Blas Jr., Christopher M. Duenas, James C. Moylan- "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

- IV. Closing Remarks/Announcements
- V. Adjournment



COMMITTEE ON PUBLIC SAFETY, EMERGENCY RESPONSE, MILITARY AND VETERANS AFFAIRS, MAYORS' COUNCIL AND PUBLIC TRANSIT



I Mina' Trentai Sais Na Liheslaturan Guàhan • 36th Guam Legislature

DATE	/ TIME:
	T TITLE

Monday, April 05, 2021 @ 2:00 p.m.

Zoom Platform

Public Hearing:

Bill No. 73-36 (COR) – V. Anthony Ada, Frank Blas, Jr., Christopher M. Dueñas, James C. Moylan – "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

PRINT NAME	SIGNATURE	AGENCY / ORGANIZATION	ORAL TESTIMONY	WRITTEN TESTIMONY	CONTACT NUMBER	EMAIL
Lee Webber	dhi-		√			
Kenneth Gibbons			1	1		
Darren Alvarez			1	1		
Ronbo Laguana			V			
Knox Williams		American Suppressor Association	1			
Martin Howard			1	1		
Hardy Vy			1	1		
Deborah Reyes			1			
Phil Diaz			1			
					-	
		7	10-41			
		2	- 1			

Kenneth Gibbons

April 4, 2021

Senator Jose Terlaje MVP Center, Unit 102 777 Rt. 4 Sinajana, Guam 96910

Subject: Bill No.73-36 (COR), The Hearing Protection Act of 2021

Dear Senator Terlaje,

My name is Kenneth Gibbons; I am a lifelong resident of Guam, a Federal Law Enforcement Officer of 20 years and a strong advocate of 2nd Amendment rights. I write to you today to express my support of Bill No.73-36 (COR), the Hearing Protection Act of 2021.

Suppressors are one of the most misunderstood tools in existence. The majority of Americans believe that suppressors fully silence the noise of a gunshot. This notion is unequivocally and empirically false. The primary root of this misconception comes from film, where agents like James Bond are able to use a suppressor to shoot without noise. While sometimes entertaining, Hollywood's depiction of suppressors does not have any basis in reality, giving the public at large an understandably false expectation of what suppressors actually do. Interestingly enough, many countries in Europe, including the United Kingdom, the very country that gives us James Bond, encourage their hunters to utilize suppressors in order to reduce noise pollution and help protect hearing.

On average, suppressors reduce the noise of a gunshot by 20-35 decibels (dB), roughly the same sound reduction as earplugs or earmuffs. Even the most effective suppressors on the market, on the smallest and quietest calibers (.22 LR) reduce the peak sound level of a gunshot to around 110-120 decibels. To put that in perspective, according to the National Institute for Occupational Safety and Health (NIOSH), that is as loud as a jackhammer (110 dB) or an ambulance siren (120 dB).

Firearm suppressors are legal to own in 42 states. Eliminating the restrictions on ownership of suppressors would make the firearm shooting experience in Guam safer by making it easier for owners to mitigate their risk of hearing damage. As Bill No.73-36 does not change Federal law, owners would still be required to submit a Form 4 application to the Bureau of Alcohol, Tobacco, Firearms, and Explosives, pay a \$200 transfer tax, pass an extensive FBI background check, notify their Chief Law Enforcement Officer, and wait an average of 6 to 18 months in order to lawfully obtain a suppressor.

So why would anyone want a suppressor? In two words: hearing protection. Firearms are so loud that any exposure to unsuppressed gunshots without adequate hearing protection can instantly cause permanent hearing damage.

SUPPRESSOR BENEFITS

- 1. HEARING PROTECTION: Suppressors reduce the noise of a gunshot by an average of 20-35 dB, which is roughly the same as earplugs or earmuffs. By decreasing the overall sound signature, suppressors help to preserve the hearing of recreational shooters, hunters, and hunting dogs around the world.
- 2. HUNTING: Most hunters do not wear hearing protection in the field because they want to hear their surroundings. Suppressors allow hunters to maintain full situational awareness while still protecting their hearing. The result is a safer hunting experience.
- 3. NOISE COMPLAINTS: Although it can still be heard, suppressed gunfire helps mitigate noise complaints from those who live near shooting ranges and hunting land.
- 4. ACCURACY: Suppressors reduce recoil, and help decrease muzzle flinch. These benefits lead to improved accuracy, better shot placement, and more humane hunts.

Today, there are over 2,150,000 suppressors in circulation. Law-abiding citizens in 42 states can own suppressors and hunters in 40 states are now allowed to use suppressors to help protect their hearing in the field.

CRIME:

Suppressors also suffer from one of the most common stigmas that a suppressor is the tool of an assassin or criminals. This too could not be further from the truth. The use of suppressors in crime is so low, that a white paper titled "Options to Reduce or Modify Firearms Regulations", Ronald Turk, the Associate Deputy Director and Chief Operating Officer of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) said:

"While DOJ and ATF have historically not supported removal of items from the NFA, the change in public acceptance of silencers arguably indicates that the reason for their inclusion in the NFA is archaic and historical reluctance to removing them from the NFA should be reevaluated. ATF's experience with the criminal use of silencers also supports reassessing their inclusion in the NFA. On average in the past 10 years, ATF has only recommended 44 defendants a year for prosecution on silencer-related violations; of those, only approximately 6 of the defendants had prior felony convictions. Moreover, consistent with this low number of prosecution referrals, silencers are very rarely used in criminal shootings. Given the lack of criminality associated with silencers, it is reasonable to conclude that they should not be viewed as a threat to public safety necessitating NFA classification, and should be considered for reclassification under the GCA."

It was in this same white paper that Turk goes on to say:

"Consistent with this low number of prosecution referrals, silencers are very rarely used in criminal shootings," "Given the lack of criminality associated with silencers, it is reasonable to conclude that they should not be viewed as a threat to public safety necessitating [National Firearms Act] classification, and should be considered for reclassification under the [Gun Control Act]."

Most criminals are simply not interested in suppressors because they do not actually silence a gunshot. Suppressors also add length and weight to their host firearm, which make them inherently harder to conceal. Furthermore, criminals know that using a suppressor in the commission of a crime will carry stiff Federal penalties. These Federal penalties will remain law even with the passage of this legislation.

In contrast, the use of knives (which are not regulated to the extent that suppressors are, or at all in some jurisdictions) in crimes far exceeds that of the use of suppressors in crime. According to statista.com there were 1,476 murders in the United States by use of knives or other cutting instruments in 2019, whereas there The ATF confirmed that silencers are rarely used in crimes despite their explosion in popularity. The agency has only recommended prosecutions for 44 silencer-related crimes per year over the past decade. That means roughly .003 percent of silencers are used in crimes each year.

Unlike many firearms issues, pro-suppressor reform has received a tremendous amount of bipartisan support across the country. In the past three years, three Democratic Governors have signed standalone pro-suppressor bills into law -Gov. Steve Bullock (MT) in 2015, Gov. Peter Shumlin (VT) in 2015, and Gov. Maggie Hassan (NH) in 2016.

By supporting this legislation, you are doing your part to give sportsmen and women who call Guam home the option to use suppressors, ensuring that future generations will no longer have to choose between their passion in the field or ranges and their hearing. For those who live near shooting ranges and hunting lands, suppressors will help make law abiding gun owners better stewards of their neighbors by reducing noise pollution and complaints.

For these reasons, I humbly ask that you support Bill No.73-36 (COR).

Sincerely,

Kenneth Gibbons



Testimony for Bill 73-36

Darren Alvarez

Mon. Apr 5, 2021 at 3:42 PM

To: Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>

Cc: Daelene Waki <daelene@senatorjpterlaje.com>

Suppressors Legislature Testimony

Good afternoon. My name is Darren Alvarez and I am a resident of Santa Rita. I've been living in Santa Rita for the last 11 years ever since I was stationed here as an active duty Marine. My family and I fell in love with Guam and after I left the Marine Corps decided to stay here and continue to work. I now work as a civil servant on Andersen Air Force Base. I took an afternoon of leave today so I could talk about the hearing protection act; the bill that we are looking at today. In regards to that I am also an NRA pistol and rifle firearms instructor and have been for 12 years. I have trained hundreds of citizens looking to learn and improve with a firearm. This is the second time I've come to the legislature in my time on Guam as a private citizen. The first was in 2014 when I worked with Senator Tony Ada and Senator Dueñas along with some local gun clubs and groups to help rewrite our concealed carry license regulations. That was successfully passed by the 32nd legislature and I'm hoping that this bill will also be passed.

This bill is ultimately about allowing firearm suppressors on Guam. Currently it is illegal to have a suppressor on Guam as most of us are aware. It is however allowed in 42 states in the United States making Guam slightly unusual. Now to give some information about suppressors which many of you know they are not truly a silencer as the movies depict. These devices do not make a gunshot into a whisper. At a minimum a suppressed firearm sounds at least as loud as the mechanical cycling of the firearm. In other words when you cock a firearm as hard as you can at minimum it's going to sound like that. As the text of the bill itself says it really only muffles the sound by about 30 decibels. It doesn't sound like much but every bit helps. I unfortunately suffer from significant hearing loss. Some of it is because I was a helicopter pilot with the Marine Corps and other parts are potentially from me being in combat and also as an avid gun shooter obviously I've been exposed to loud intense noise. Almost all of those events I was able to wear at least some hearing protection. Even with that, the time exposed to loud noises does significant damage to hearing. Unlike other physical injuries, hearing does not heal. Once it is gone, it is gone forever. You may not be able to see it as we are on zoom but currently I'm wea see ring hearing aids that were prescribed to me by my doctors so that I can hear correctly.

I have been shooting off and on for 30 years. Amazingly, COVID has had me shooting even more lately. I have been teleworking almost daily for the last year and I have found much of my time shooting as a hobby. I have even started hunting and got my first hunting license last year from the Guam Dept of Agriculture. A suppressor would significantly help me with my current and future hearing loss. It would also be appreciated by my neighbors who hear me target shooting near my neighborhood- obviously in a

safe manner.

Suppressors are even more regulated than pistols and they require quite the commitment to want to own one. After purchasing one from a licensed dealer, I will fill out paperwork which will be checked over, studied and validated by the ATF. It will include a felony background check exactly like what Guam requires before granting a firearms license. normally it will take anywhere from 8-10 months to get the final approval from the ATF before you can receive the suppressor you purchased.

With all that in mind I request that this body vote yes to the hearing protection act and amend Guam's law so that I may be able to own a suppressor thank you.

Respectfully

Darren Alvarez Maj USMC (retired)



Please vote yes for Bill 73-36 Hearing conservation suppressor bill

Darren Alvarez

Tue, May 11, 2021 at 7:34 AM

To: "senatorpedo@senatorjpterlaje.com" <senatorpedo@senatorjpterlaje.com>

Good morning, Senator Terlaje,

I wanted to take some time today to speak about the Hearing Conservation Bill 73-36. I appreciate your very thorough questions during the public hearing in April. As we spoke about on that day, this bill is ultimately about allowing firearm suppressors on Guam. Currently it is illegal to have a suppressor on Guam as most of us are aware. It is however allowed in 42 states in the United States making Guam slightly unusual. This also points to the lack of negative public safety impact if 42 other states allow suppressors. Now to give some information about suppressors which you may know they are not truly a silencer as the movies depict. These devices do not make a gunshot into a whisper. At a minimum a suppressed firearm sounds at least as loud as the mechanical cycling of the firearm. In other words when you cock a firearm as hard as you can at minimum it's going to sound like that. As the text of the bill itself says it really only muffles the sound by about 30 decibels. It doesn't sound like much but every bit helps. I unfortunately suffer from significant hearing loss. Some of it is because I was a helicopter pilot with the Marine Corps and other parts are from me being in combat and also as an avid gun shooter obviously I've been exposed to loud intense noise. Almost all of those events I was able to wear at least some hearing protection. Even with that, the time exposed to loud noises does significant damage to hearing. Unlike other physical injuries, hearing does not heal. Once it is gone, it is gone forever. This has affected me so much I now wear hearing aids so I can hear most conversations.

I have been shooting off and on for 30 years. Amazingly, COVID has had me shooting even more lately. I have been teleworking almost daily for the last year and I have found much of my time shooting as a hobby. I have even started hunting and got my first hunting license last year from the Guam Dept of Agriculture. A suppressor would significantly help me with my current and future hearing loss. It would also be appreciated by my neighbors who hear me target shooting near my neighborhood- obviously in a safe manner.

Suppressors are even more regulated than pistols and they require quite the commitment to want to own one. After purchasing one from a licensed dealer, I will fill out paperwork which will be checked over, studied and validated by the ATF. It will include a felony background check exactly like what Guam requires before granting a firearms license. Normally it will take anywhere from 8-10 months to get the final approval from the ATF before you can receive the suppressor you purchased.

With all that in mind I request that you vote yes to the hearing protection act and amend Guam's law so that I may be able to own a suppressor thank you.

Respectfully,

Darren Alvarez Santa Rita

Martin Howard



Dear Senator Terlaje,

I'm unable to attend the public hearing regarding the Hearing Protection Act, so I would like to submit this letter in lieu of a personal statement.

I am a 16 year Guam resident, retired U.S. Marine, former reserve Deputy Sheriff, and former federal law enforcement officer. I've been around gunfire since I was 7, so close to 50 years. I'm also an NRA Instructor, and a strong advocate for responsible gun use and training.

I suffer from moderate hearing loss, and, more significantly to my life, moderate to severe tinnitus, for which there is no cure. Tinnitus is the most common disability reported by the Veterans Administration, and it's very aggravated by noise. Billions of dollars have been invested in finding a viable treatment solution for this condition. And the U.S. military is moving more and more towards suppressors for all troops for the same reason we're discussing this. Hearing protection. Suppressors (there is no such thing as a silencer) reduce noise of gunfire to a more hearing safe level. That's all.

Guam has some of the most restrictive firearms laws in the entire United States. Few jurisdictions require firearms ID, and even fewer require gun registration. Given our already strict gun laws here, I do not understand why we should be prohibited from owning legally purchased suppressors, like residents of 42 of the 50 United States. We should have the same rights. As a responsible gun owner who has complied with the law covering ownership of firearms, why shouldn't I be able to own a suppressor to protect my hearing, or even just because I want one?

I would also like to point out, to those who are concerned that the legalization of suppressors would result in some kind of "crime wave" that, it's just not the case. While it's true that television often portrays criminals using suppressors, it's extremely rare. In all my years as a law enforcement officer, I saw exactly two suppressors on firearms used by criminals. Suppressors are very expensive, difficult to find, and make a firearm much less concealable.

What's crystal clear, is that laws prohibiting possession of suppressors only effect law abiding citizens, as is true for for every law related to firearms. Criminals don't care about laws.

Thank you.

Martin W. Howard Dededo

Hafa Adai Senators!

I'd like to begin by saying, yes, I am a firearm enthusiast, but it's not why I support this bill. I support it because I always viewed these items to be a likely source of new revenue for GovGuam that could provide a great deal of benefit. I know for those who are not firearm enthusiasts, this issue seems scary. The thought of a gun being able to fire off a bullet without being audible to anyone else is the common misperception, and you have Hollywood to thank for this. I challenge anyone who believes that "silencers" - which are really "suppressors" - can completely silence a gun, to actually stand next to a firearm as it fires off a round with a so-called "silencer." They will be very surprised that it will be louder than they thought, but not enough to damage the ears. This is not me using this reason to justify the ownership of suppressors; I'm just saying that the argument claiming suppressors will make guns undetectable is arguable. I understand we're talking about suppressors, but I have been trying to figure out how to ask legislature for the legalization of NFA items for quite some time now, so I was quite surprised to see this bill come up. I believe now is the appropriate setting. Please bear with me as these next few paragraphs will make a case for gun ownership first, but I am confident that you will see why I mention these as we go.

The first argument from the opposition would most likely be, "for what? Why do you need these suppressors?" To first answer this question, we need to first address why the need for gun ownership in the first place. Most gun owners get into the hobby because we understand that it guarantees the freedoms afforded to us by the U.S. constitution against a tyrannical government, should it ever choose to become one however unlikely that may be. In addition to that, the comforting sense of security is priceless for the owner when s/he feels at home knowing they have a fighting chance against any threat trying to trespass into their home, or if an assailant or group of assailants for whatever reason seeks to do them physical harm to them or theirs. To the gun-grabbers, these reasons seem paranoid, but the best argument I have heard compares a firearm to a fire extinguisher. You're not living your life expecting a fire at any given moment, but there's a peace of mind one can appreciate knowing it's there.

One thing I do wonder often, and second point to consider here is when talking about firearm issues, what our elders would think. I'm not talking about U.S. mainland elders; I'm talking about our elders in the Pacific. Let's not forget that Guam was the last U.S. territory to ever be lost to a foreign invading force in any war since. These occupation nightmares are still very clear with our manamko. Being occupied by a foreign invasion force is not something even U.S. mainlanders have experienced since the War of 1812 ended. We are all aware of the atrocities the Japanese soldiers committed on our manamkos during those times, and I wonder how much more different the situation would have been if they were armed as our people are now. By the way, you wouldn't know it by looking at me, but my late grandfather, Jose P. Iglesias originally from Yigo was 5th generation CHamoru. While he was alive, he never spoke of those days, but the small bits he did tell us was heart-wrenching. The reason why I bring this up is because I always wanted to ask him if he would agree with this. I'm not going to sit here and pretend I know the answer, but only the remaining surviving manamkos from those times would be able to

chime in on that more accurately than I ever could. Anyway, the memory of what he went through is one reason why I choose to be prepared.

The point as to why I bring up this line of reasoning is in response to those who subsequently argue, "we don't live in a time of war. What will your guns serve as a purpose?" I ask you, "have you seen the geopolitical situation we're in right now?" I don't think this is the right time to point out why I think that is, because it's a sensitive topic. All I will say is that if there were to be a foreign invasion, I'd like to have a fighting chance in hopes that we don't suffer as our manamkos did during the Japanese occupation. If it never happens, what do I lose anyway?

By now, the opposition might be saying that the bottom line is, more guns means more shootings. I think this is unfair. You will have shootings regardless in a country that allows gun ownership. I don't think guns will ever be removed go away in U.S.. So we might as well regulate them sensibly. The third thing to consider is the current gun ownership per capita of Guam. It's seems to be quite high. Ask any FFL dealer on Guam, and you will be floored by the number of guns this island buys for a population of 160K+. Arguably, we own more guns per person than the mainland U.S. does. U.S. mainlanders own 393 million guns out of 329 million people. That translates to 1.19 guns per person. The unofficial estimate is that there are about 500K guns on island, which would mean there are roughly 3 guns per person on Guam if accurate. So if there are this many guns on island, *knock on wood* why haven't we seen the crazy shootings that the U.S. has been increasingly experiencing? It just so happens I have a theory on that.

Ladies & gentlemen, I'm not here to tell you that you need to pass this law because "it's our right!" and what not. With all due respect to that crowd, I'm not down with that line of reasoning. I strongly believe there needs to be sensible legislation. In my opinion, the way the current gun laws are in Guam are more sensible than the laws in mainland U.S. in general. To buy a gun in Guam, you need to go through a federal background check when you apply for a firearms license with the police department. That takes a week to get approved, assuming you don't have a history of criminal activity or mental issues. Once you get your license, you may purchase your firearm. Once you purchase your firearm, you must register your firearm with the police department. At this point, the government knows who can have a gun, and what guns they might already have. You will get some enthusiasts who say that this is an infringement of our 2nd amendment rights because it will just make it easier to confiscate our firearms. Though I understand their concerns, I do not share them. I prefer our system because it checks whether or not a purchaser is a criminal before handing him/her a gun. Possessing a firearm without going through the legal avenues is an automatic 3 years or more in prison.

In comparison, you cannot say "gun laws of U.S." because each state makes their own gun laws. So there is no real way of saying "U.S. mainland gun laws." For instance, states like California & New York have the some of the most strict gun laws you will ever see in the U.S., but 30+ states across America only require a driver's license to buy a gun from an FFL dealer. Just a federal background check, no firearms license required; no firearm registration required. As frightening as that is, you'd be more shocked to learn that private sales are actually undocumented, but completely legal in most states. In most of those states, I could sell my firearm to a person like I was selling a toaster. As long as the sale takes place within my state

that allows it, I don't even have to ask for any ID or police clearance. This loophole allows Californians, for instance, who are not allowed to buy/own an AR15 to go to another state to buy one like they would a toaster from, say, a resident of Utah or Texas through a private sale, then bring it back to California without much trouble if they don't get caught. This is a convenient way for those who would not pass a background check to easily procure a firearm, and when they do, America then wonders how these mentally unstable people "legally" get a gun. In Guam, however, we require firearms license and re-registration for these private sales. This is where I personally feel relieved.

With this said, I ask the opposition when was the last time you saw an indiscriminate active shooter in Guam? As abhorrent as any violence is in Guam, almost all of the shootings that have occurred on Guam *knock on wood again* are trackable within the realms of human emotions. Like, you could never condone what certain shooters do to people, but you can see what lead them up to that point. In contrast, I don't care how angry, or jealous a person gets, why would s/he go into a mall, a school, movie theatre to take down as many random people as they can if they were NOT insane? *knock on wood one last time* Fortunately in Guam, our gun laws are sensible enough to ensure people who need psychiatric help are unable to get a firearm at all.

By now, I hope to lay down the foundation reasoning as to why I support the right to bear arms in the first place, but I do acknowledge the support for any NFA items such as suppressors are a harder sell. First of all, let me clarify that what most gun-grabbers identify as an "assault rifle," is usually not one as defined by the law. An AR15 is NOT classified as an "assault rifle." The "AR" in AR15 stands for Armalite Rifle – named after the original manufacturer; NOT "assault rifle 15." NFA items like full automatic firearms (actual "assault weapons"), short-barreled long guns (SBR or SBS), and suppressors are all heavily regulated across the United States. In states that allow residents to own Class III NFA items, it takes about 6 months to get approved by the federal government to buy any one of those things. On top of that, there's a tax stamp/registration fee for those. Guam could easily follow suit.

I know we're just talking about suppressors right now, but I personally think GovGuam could greatly capitalize on this particular topic by requiring a hefty tax stamp to own any NFA Class III items. For instance, a \$600 dollar registration fee to register a suppressor. Let's pretend every day, Guam has even just 10 people who register 1 suppressor each at \$600 dollars per. That translates to about \$180,000 a month in extra revenue for GovGuam. I can almost guarantee you that each person would love to also register a full automatic (about \$3K-\$4K or more), as well as a short-barreled long gun. Assuming each classification needs \$600 for registration, these 10 people alone could theoretically pay \$1,800 in registration fees to register their full-auto (\$600) short-barreled rifle (\$600) with suppressor (\$600). This translates to \$540,000 in revenue a month. For a population of 160K, I think 10 people registering as such everyday is probable. Personally, I wouldn't mind at all if the fee to obtain a "Class III Firearms License" is as high as \$1,000; valid for only 5 years. Assuming just the application for this license sees about another 20 people every day, that's an extra \$600K + the estimated \$540K; totaling about \$1.14 million every month in new revenue. This kind of money can be used to invest in growing our police forces, or whichever agency GovGuam sees fit. In other words, I'm

willing to compromise that "if you want to own these things, then there's got to be some immediate beneficial social trade-off first."

For Class III NFA items, I never supported prohibition; but I do support fair regulation. I will never agree to a complete banishment of our firearms. However, if you are willing to let me be with my freedom tools for the price of social infrastructure improvements, personally, I think it's a fair price. To my fellow firearm enthusiasts, I think it's time that we initiate compromise with the opposition. We need to strongly consider & acknowledge their concerns, and address them by agreeing to sensible firearm regulations. By the way, full disclosure, I personally brought in gun safes in 2013 because I will always always always push to get a strongbox if you have a gun. In fact, I think a strongbox should be required by law. This protects against theft of tools that are dangerous in the wrong hands, but more importantly, prevents our children from innocently getting their hands on mom or dad's firearm. It may ease some concerns if I told you that we move quite a bit of gun safes every month, which means our citizens are responsibly locking up something. Whether or not this is indicative with the amount of firearms in Guam, I really don't know.

In closing, I do think there are benefits for GovGuam to allow this kind of thing, and I do acknowledge the concerns of the opposition. It would be unfair for any gun-owner to write them off with no consideration whatsoever. Therefore, I propose that at the end of the day, if this potential law proves to be more detrimental to society, the legislature should be able to repeal it without much trouble.

Thank you for your time



Written Testimony to the Committee on Public Safety, Emergency Response, Military and Veteran's Affairs, Mayor's Council, and Public Transit

In Support of Bill No. 73-36

Objectives:

The American Suppressor Association fully supports Bill No. 73-36, Senator V. Anthony Ada's legislation that seeks to repeal the prohibition of firearm suppressors in Guam.

The prohibition of firearm suppressors in Guam is built on the misconception that suppressors can render the noise of a gunshot silent or inaudible. This could hardly be further from the truth as even the quietest suppressed gunshot is as loud as a jackhammer striking concrete. Suppressors are not a danger to society; rather, they are an effective tool that can help protect hearing.

In order to fully understand suppressors, it is imperative that you hear them for yourself. If possible, the American Suppressor Association would be happy to host an educational suppressor demonstration for any members of the committee or legislature at any time of your choosing.

Background:

Suppressor Basics

The terms "silencer" and "suppressor" refer to the same thing – a muffler for a firearm. Contrary to popular belief, no tool will ever be able to make a gunshot silent. Outside of the context of shooting, nothing will even be able to make them quiet. Guns are simply too loud.

On average, suppressors reduce the noise of a gunshot by 20-35 decibels (dB), roughly the same sound reduction as earplugs or earmuffs. Even the most effective suppressors on the market, on the smallest and quietest calibers (.22 LR) reduce the peak sound level of a gunshot to around 110-120 decibels. To put that in perspective, according to the National Institute for Occupational Safety and Health (NIOSH), that is as loud as a jackhammer (110 dB) or an ambulance siren (120 dB).

When a gun is fired, a controlled explosion of gunpowder propels the bullet through the barrel. Once the bullet exits the barrel, these hot gases are rapidly released into the atmosphere. The result is the muzzle blast, one of several primary noise sources associated with a gunshot. This is also the only noise source that suppressors abate.

Suppressors work by trapping and disrupting these gases, allowing them to slowly dissipate. It is the exact same science behind automobile mufflers, which should come as no surprise considering the muffler was invented by the same man who invented the firearm suppressor.

So why would anyone want a suppressor? In two words: hearing protection. Firearms are so loud that any exposure to unsuppressed gunshots without adequate hearing protection can instantly cause permanent hearing damage.

Hearing Conservation

According to Dr. William W. Clark, Director of the Washington University School of Medicine's Program in Audiology and Communication Sciences, "the most serious threat to hearing comes from recreational hunting or target shooting".¹ This is in large part because many people choose not to use traditional hearing protection devices.



Multiple studies have found that between <u>70 to 80% of hunters never wear earplugs or earmuffs</u>, and nearly half of all target shooters don't consistently wear traditional hearing protection.² Thus, it should come as no surprise that <u>for every five years of hunting</u>, <u>hunters become seven percent more likely to experience high frequency hearing loss</u>.³

In 2011, the Centers for Disease Control and Prevention (CDC) was commissioned to assess the level of noise exposure for federal government agents at an outdoor shooting range. The scientists assigned to the study found that "the only potentially effective noise control method to reduce students' or instructors' noise exposure from gunfire is through the use of noise suppressors that can be attached to the end of the gun barrel."

In a similar study from 2014 on noise exposure at shooting ranges, NIOSH recommended, <u>"if</u> feasible and legally permissible, attach noise suppressors to firearms to reduce peak sound pressure levels." ⁵

On October 21, 2019, the National Hearing Conservation Association (NHCA) wrote a letter to the American Suppressor Association outlining their support for suppressors as a tool to help curb preventable hearing damage. In the letter they stated, "although firearm suppressors do not completely eliminate the risk of [noise-induced hearing loss] from firearm noise, the risk can be significantly reduced...Therefore, NHCA supports the use of firearm noise suppressors as a form of an engineering noise control to reduce hazardous firearm noise exposures." 6

Sound Pressure Levels (SPLs)

Sound pressure levels are measured on a logarithmic scale, meaning that they increase in a nonlinear fashion. Every 3 dB increase doubles the sound pressure level; every 10 dB increase raises the SPL by a factor of 10. This means that 3 dB is twice as loud as 0 dB, the lowest threshold of human hearing. 10 dB is 10 times more intense, and 20 dB is 100 times more powerful. The following table illustrates the relationship between dB levels and the logarithmic scale:

Decibel Levels:	0	3	6	9	12	15	18	21	24	27	30	(+3)
Logarithmic Scale:												

In 1998, NIOSH established recommended exposure limits (REL) for occupational noise exposure. Per the NIOSH REL, workers can safely expose their ears to 85 A-weighted decibels (dB[A]) for an eight-hour time-weighted average in a given day. The REL utilizes the equal-energy rule, so "for every 3-dB increase in noise level, the allowable exposure time is reduced by half. For example, if the exposure level increases to 88 dB(A), workers should only be exposed for four hours. Alternatively, for every 3-dB decrease in noise level, the allowable exposure time is doubled, as shown in the table below."

Average Sound Exposure Levels Needed to Reach the Maximum Allowable Daily Dose of 100%

Time to reach 100% noise dose	Exposure level per NIOSH REL
8 hours	85 dB(A)
4 hours	88 dB(A)
2 hours	91 dB(A)
60 minutes	94 dB(A)
30 minutes	97 dB(A)
15 minutes	100 dB(A)



Sound pressure levels of suppressed gunshots begin to register around 110 dB for .22 Long Rifle, the smallest and quietest rimfire caliber that Boy Scouts use to earn the Rifle Shooting Merit Badge. At 110 dB the NIOSH recommended exposure limit is 1 minute and 29 seconds. As the size and power of calibers increase, so too do SPLs. At 130 dB, the SPL of the quietest suppressed hunting caliber rifles, the NIOSH REL is 0.8789 seconds.

According to Dr. Michael Stewart, Professor of Audiology at Central Michigan University, "[t]he level of impulse noise generated by almost all firearms exceeds the 140 dB peak SPL limit recommended by OSHA and NIOSH." For this very reason, he goes on to state that "it is not surprising that recreational firearm noise exposure is one of the leading causes of NIHL [Noise Induced Hearing Loss] in America today."

The SPL of most unsuppressed rifles and pistols range between 160 to 185 dB. At these levels, even earplugs and earmuffs are often incapable of providing complete protection. According to the National Hearing Conservation Association:

"Persons wearing conventional hearing protection are not without risk of NIHL when using firearms. The noise reduction of hearing protection devices varies considerably across users and may provide significantly less protection from noise than the labeled noise reduction rating (NRR) suggests. The National Institute of Occupational Safety and Health (NIOSH) has recommended the NRR of conventional hearing protection be derated by 25% for earmuffs, 50% for formable earplugs, and 70% for all other earplugs to correspond to existing real-world data. NIOSH research has demonstrated that as many as 50% of persons using earplugs fail to achieve 25 dB of noise reduction for their earplugs. However, using conventional hearing protection in conjunction with a suppressor can significantly reduce the risk of NIHL more than using either device alone". 6

Laws and Regulations

Suppressors have been federally regulated since the passage of the National Firearms Act of 1934. In order to purchase a suppressor, prospective buyers must live in a state where suppressors are legal, send in an application including fingerprints and passport photos to ATF, pay a \$200 transfer tax, notify their Chief Law Enforcement Officer (CLEO), and wait an indeterminate amount of time for ATF to process the application. As of today, wait times typically range from 6 to 18 months.

In 2011, the year that the American Suppressor Association was formed, there were 285,000 lawfully obtained suppressors in circulation in the 39 states where they were legal to own. A mere 22 of these states allowed their use while hunting. Since then, three states have legalized suppressor ownership and eighteen states have legalized the use of suppressors by hunters. No state has banned suppressors. Today, there are over 2,150,000 lawfully obtained suppressors in circulation in the U.S.

Bipartisan Support

In 2013, Montana Governor Steve Bullock (D) held the common misconception that suppressors could silence a firearm, which led him to veto suppressor hunting legislation in his state. However, once he became properly educated on the issue, he reversed course and urged the Montana legislature to legalize their use in the field. In a letter to the Speaker of the House from March 2015, he wrote:



"The public perception of suppressors as the same thing as silencers, where the assassin quietly dispatches his victim, no longer holds true. Suppressors mitigate the sound of a shot, but do not silence it. The use of suppressors for hunting, when hunters cannot wear ear protection because they need to be aware of their surroundings, can help protect against hearing loss. This is especially true for our younger hunters, even those who are not actually hunting but are accompanying their parent in the field.

I understand the concerns regarding the risks of increased poaching and do not take this lightly, but other states have not found this to be the case."

Gov. Bullock's change of opinion wasn't ideological, it was educational. Unlike many firearms issues, pro-suppressor reform has received a tremendous amount of bipartisan support across the country. In recent years, three Democratic Governors have signed standalone pro-suppressor bills into law - Gov. Steve Bullock (MT) in 2015, Gov. Peter Shumlin (VT) in 2015, and Gov. Maggie Hassan (NH) in 2016.

Public Safety

The use of suppressors by criminals is virtually nonexistent. According to a white paper titled "Options to Reduce or Modify Firearms Regulations", by Ronald Turk, former Associate Deputy Director and Chief Operating Officer of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), "silencers are very rarely used in criminal shootings. Given the lack of criminality associated with silencers, it is reasonable to conclude that they should not be viewed as a threat to public safety".

Most criminals are not interested in suppressors because they do not actually silence a gunshot. According to Ralph Clark, the CEO of ShotSpotter, the law enforcement tool that helps police identify and localize gunshots in cities and urban areas, suppressed gunfire can still be detected by their technology. Suppressors also add length and weight to their host firearm, which make them inherently harder to conceal.

Furthermore, criminals know that using a suppressor in the commission of a crime will carry stiff State and Federal penalties. At the Federal level, using a suppressor in the commission of a crime carries a 30-year mandatory prison sentence. Very few laws are more punitive than this.

Conclusion

For these reasons, the American Suppressor Association asks that you support Bill No. 73-36. Should any legislators want to learn more about suppressor technology, and if such a demonstration is legally permissible, ASA would be happy to host an educational suppressor demonstration at any time of your choosing.

Clark WW. (1991) Noise exposure from leisure activities: a review. J Acoust Soc Am 90(1):175–181.
Wagner A, Stewart M, Lehman ME. (2006) Risk patterns and shooting habits of recreational firearm users. In: Abstracts of the National Hearing Conservation Association Annual Conference 2006, Tampa, Florida. NHCA Spectrum 23(Suppl. 1):28.

³ Stewart M, Foley L, Lehman ME, Gerlach A. (2011) Risks Faced by Recreational Firearm Users. Audiology Today, March-April:38–52.
4 Chen L, Brueck SE. (2011) Noise and Lead Exposures at an Outdoor Firing Range — California. Health Hazard Evaluation Report HETA 2011-0069-

⁵ Brueck SE, Kardous CA, Oza A, Murphy WJ. (2014) Measurement of Exposure to Impulsive Noise at Indoor and Outdoor Firing Ranges during Tactical Training Exercises. Health Hazard Evaluation Report HETA 2013-0124-3208:14.
6 Blank A. (2019) National Hearing Conservation Association. Letter to Knox Williams: 1-2.



Oct 28, 2019

Mr. Knox Williams

American Suppressor Association



RE: H.R. 155/S.817 - 116th Congress: Hearing Protection Act of 2019-2020

Dear Mr. Williams

The National Hearing Conservation Association (NHCA) is aware of the introduction of H.R. 155 and its companion bill S. 817, both referred to as the "Hearing Protection Act" in the 116th Congress (2019-2020). The primary purpose of these bills is to ease restrictions on access to firearm noise suppressors making these devices more readily available to law abiding individuals.

Noise-induced hearing loss (NIHL) is a significant health problem among U.S. adults and children. Further, NIHL and tinnitus (ringing in the ears) resulting from firearm noise exposure are considerable public health concerns negatively impact the quality of life for individuals and their families in many ways: financial, social, and occupational.

Firearm noise suppressors can effectively and consistently reduce noise levels at the shooter's ear by approximately 7-32 decibels (dB) depending on several factors including firearm type, barrel length of the firearm, type of ammunition, and measurement location¹. For a given measurement condition, a suppressor will reduce the noise approximately the same amount each time the gun is fired. Although firearm suppressors do not completely eliminate the risk of NIHL from firearm noise, the risk can be significantly reduced. Please see enclosure 1 NHCA Position Statement: Recreational Firearm Noise developed by the Task Force on Prevention of Noise-Induced Hearing Loss from Firearm Noise and approved by the NHCA

¹ Lobarinas E, Scott R., Spankovich C, Le Prell CG. [2016] Differential effects of suppressors on hazardous sound pressure levels generated by AR-15 rifles: Considerations for recreational shooters, law enforcement, and the military, Int. J. Audiology. 55 Supp1: S59-S71.

National Hearing Conservation Association Page 2

Executive Council on March 16, 2017.

Persons wearing conventional hearing protection are not without risk of NIHL when using firearms. The noise reduction of hearing protection devices varies considerably across users and may provide significantly less protection from noise than the labeled noise reduction rating (NRR) suggests. The National Institute of Occupational Safety and Health (NIOSH) has recommended the NRR of conventional hearing protection be derated by 25% for earmuffs, 50% for formable earplugs, and 70% for all other earplugs to correspond to existing real-world data². NIOSH research has demonstrated that as many as 50% of persons using earplugs fail to achieve 25 dB of noise reduction for their earplugs³. However, using conventional hearing protection in conjunction with a suppressor can significantly reduce the risk of NIHL more than using either device alone.

The mission of the NHCA is to prevent hearing loss due to noise and other environmental factors in all sectors of society. Therefore, NHCA supports the use of firearm noise suppressors as a form of an engineering noise control to reduce hazardous firearm noise exposures.

Because suppressors can be an important hearing conservation tool in preventing NIHL in firearm users, the NHCA supports passage of the Hearing Protection Act bills.

Respectively,

Amy A. Blank

NHCA President

² NIOSH, [1998] Criteria for a Recommended Standard for Occupational Noise Exposure Revised Criteria 1998, DHHS (NIOSH) Publication No. 98-126.

³ Murphy WJ, Themann CL, Murata TK, [2016]. Hearing protector fit testing with off-shore oil rig inspectors in Louisiana and Texas, Int. J. Audiology. 55(11): 688-698.

NHCA POSITION STATEMENT

Recreational Firearm Noise

March 16, 2017

Michael Stewart, Deanna K. Meinke, Gregory A. Flamme, William J. Murphy, Donald S. Finan, James E. Lankford, and Stephen M. Tasko

National Hearing Conservation Association (NHCA)
Task Force on Prevention of Noise-Induced Hearing Loss from Firearm Noise

This document was prepared by The National Hearing Conservation Association (NHCA) Task Force on Prevention of Noise-Induced Hearing Loss from Firearm Noise and approved by the NHCA Executive Council, March 16, 2017. The judgments expressed here represent the best available evidence at the time of publication and shall be considered the position of NHCA and not the individual opinions of the contributing authors or their respective institutions. The contributing authors declare no conflict of interest.

EXECUTIVE SUMMARY

Recreational firearm use is a popular leisure-time activity in the United States today. Millions of Americans of all ages enjoy shooting sports including target practice, competitive shooting, and hunting. While participation in the shooting sports can be an enjoyable recreational pursuit, it can also put an individual at risk for noise-induced hearing loss (NIHL) and tinnitus resulting from unprotected exposure to high-intensity firearm noise. Almost all firearms generate impulse levels in excess of 140 dB peak SPL. Hearing loss may occur gradually over time due to repeated unprotected exposure to firearm noise. Hearing loss also may occur suddenly due to acoustic trauma from a single unprotected gunshot. The hearing loss is often characterized by normal or near normal hearing sensitivity in the lower frequency range with severely impaired hearing in the higher frequency range which results in difficulty hearing speech clearly.

NHCA developed this guidance document to assist hearing conservationists, audiologists, physicians and other hearing conservation professionals, in managing and mitigating the risk of NIHL associated with recreational firearm noise. Several strategies can be employed to reduce the risk of acquiring NIHL and associated tinnitus from firearm noise exposure. These include wearing hearing protection devices (HPDs), using firearms equipped with suppressors, choosing smaller caliber firearms, using subsonic ammunition, shooting in a non-reverberant environment, and avoiding shooting in groups. In addition, several commercially-available HPDs are specifically designed for the shooting sports. These include conventional passive earmuffs and earplugs, level-dependent devices that attenuate high level sound while providing audibility for lower level sound, and electronic devices that amplify low level sounds and attenuate high level hazardous sounds.

The key to preventing NIHL and tinnitus secondary to excessive firearm noise exposure is to educate firearm users about the auditory hazard associated with firearm noise and provide them with strategies to protect their hearing. Educational programs may be offered through hunter safety courses, hunting clubs, or during training. A special firearm noise topic section should be included in occupational educational training for individuals who use firearms as part of their jobs. Finally, clinical audiologists should educate their patients who use firearms regarding the hazards and ways to prevent hearing loss. Several educational tools are available on the National Hearing Conservation Association website including a hearing loss simulator, a tinnitus simulator, posters and slides of inner ear structures damaged by firearm noise, a hearing protection brochure, a hunting and hearing video and links to other educational resources. Firearm NIHL is almost completely preventable if necessary precautions are taken.

NHCA POSITION STATEMENT RECREATIONAL FIREARM NOISE

Michael Stewart, Deanna K. Meinke, Gregory A. Flamme, William J. Murphy, Donald S. Finan, James E. Lankford, and Stephen M. Tasko

National Hearing Conservation Association (NHCA)

Task Force on Prevention of Noise-Induced Hearing Loss from Firearm Noise

This document was prepared by The National Hearing Conservation Association (NHCA) Task Force on Prevention of Noise-Induced Hearing Loss from Firearm Noise and approved by the NHCA Executive Council, March 16, 2017. The judgments expressed here represent the best available evidence at the time of publication and shall be considered the position of NHCA and not the individual opinions of the contributing authors or their respective institutions. The contributing authors declare no conflict of interest.

Abstract

Recreational firearm use is a popular leisure-time activity in the United States enjoyed by millions of individuals across all age groups. Recreational firearms produce impulse noise levels that exceed 140 decibels peak sound pressure levels (dB peak SPL). Unprotected ear exposure to this high-level impulse noise can cause immediate and irreversible damage to delicate inner ear structures of both the shooter and bystanders in close proximity. This damage includes noise-induced hearing loss (NIHL) and tinnitus. The potential increased risk of NIHL and tinnitus associated with recreational firearms noise may not be evident to recreational shooters, or nearby bystanders such as instructors and spectators. NHCA developed this guidance document to assist hearing conservationists, audiologists, physicians and other hearing conservation professionals, in managing and mitigating the risk of NIHL associated with recreational firearm noise.

Recreational Firearm Prevalence in the United States

Recreational firearm use by civilians is prevalent in the United States. Americans own an estimated 270-310 million firearms (Jütersonke et al., 2007; Krouse, 2012), more than any other country in the world. Data collected by the U.S. Fish and Wildlife Service (2011) revealed that approximately 15.7 million individuals over the age of 16 years used several types of firearms (rifles, shotguns, pistols, muzzle loaders) for hunting purposes while approximately 7.1 million people participated in target shooting in preparation for hunting. According to the National Shooting Sports Foundation (2009), over 30 million Americans are actively involved in the shooting sports. Several states allow children 10 years of age and younger to use firearms for hunting when accompanied by an adult family member (National Shooting Sports Foundation, 2010).

Recreational Firearm Noise Sound Pressure Levels

Although firearms are used by millions of U.S. citizens for recreational activities related to the shooting sports, these individuals may not be aware that exposure to high-level firearm noise can be hazardous to their hearing. This need for awareness also extends to those that are exposed as nearby bystanders, e.g. instructors, spectators. Almost all firearms generate peak impulse noise levels that exceed the 140 decibel

peak sound pressure level (dB peak SPL) exposure limit mandated by the Occupational Safety and Health Administration (OSHA. 1983) and the A-weighted 140 decibel (dBA) limit recommended by the National Institute for Occupational Safety and Health (NIOSH, 1998) for adults in occupational settings. The World Health Organization (WHO, 1997) recommends a 120 dB peak SPL maximum exposure limit for children. Several studies involving the measurement of firearm noise have found levels between 160 and 170 dB peak

SPL for big bore rifles, pistols, and shotguns (Murphy and Tubbs, 2007; Flamme et al., 2009; Schulz, Murphy, Flamme 2013; and Meinke et al., 2014). Additionally, Meinke et al., (2013) found that some models of starter pistols can generate impulse levels exceeding 160 dB peak SPL at the shooters' ears. Many large bore firearms that generate peak noise levels above 160 dB peak SPL at the shooters' ear, closest to the muzzle, result in maximum permissible exposures (MPEs) of less than one shot when applying an Aweighted 8-hour equivalent energy level, L_{Acq8}, and a limit of 85 dBA (Meinke et al., 2014). Flamme et al., (2011) employed three different damage risk criteria (DRC) and also calculated MPEs of one or less for a variety of large bore rifles and shotguns at the bystander position (1 meter behind the shooter). In addition, some air rifles have been found to exceed the 120 dB peak SPL limit for children (Lankford et al., 2016). Despite the recognition that firearms, including air rifles, can produce hazardous sound levels that can permanently damage the auditory system, 38% of target shooters and 95% of hunters reported never wearing hearing protection while shooting when asked about the previous year (Nondahl et al., 2000).

Recreational Firearm Noise-induced Hearing Loss and Tinnitus

High-level impulse noise generated by recreational firearms is one of the leading causes of NIHL in the U.S. today. Several studies have found recreational firearm use can lead to NIHL (Prosser et al., 1988; Dancer et al., 1991; Kryter, 1991; Cox and Ford, 1995; Stewart et al., 2001; Stewart et al., 2002). Nondahl et al., (2000) reported that the risk of having a significant high-frequency hearing loss increased by 7% for every 5 years the study participants had hunted. The audiometric configuration of firearm NIHL is characterized by normal or near normal hearing sensitivity in the lower frequencies with a precipitous drop in the higher frequencies. Affected individuals often deny their hearing loss because they can easily hear the higher intensity, low-frequency vowel sounds in speech, but often do not hear the lower intensity, high-frequency consonants which are important for clarity of speech. The result is that they perceive others are mumbling when speaking. High-frequency hearing loss also makes it difficult to localize sound and to understand speech, especially in the presence of competing background noise, such as encountered when riding in a car or dining in a restaurant. The hearing loss worsens with continued unprotected exposure to firearm noise and ultimately impacts the speech frequency hearing range. Analysis of the 2011-2012 National Health and Nutrition Examination Survey (NHANES) data by Hoffman et al., (2016) found the prevalence of highfrequency (3000-6000 Hz) hearing loss to be 50%, 95% Confidence Interval (CI 40-59) among firearm users who reported having fired at least 1000 rounds in their lifetimes, 32% (95% CI 27-38) among firearm users reporting having fired fewer than 1000 rounds, and 26% (95% CI 24-29) among people who reported never having used firearms. The prevalence of speech-frequency (500-4000 Hz) hearing loss was also higher among people reporting having fired at least 1000 rounds (26% versus 11%), and these same individuals had higher odds of hearing impairment even after adjusting for age, gender, ethnicity, educational level, cardiovascular risk factors, and other noise exposures (Odds Ratio: 1.8; 95% CI 1.1-3.0).

The left ear of right-handed shooters often exhibits more hearing loss because it is slightly closer to and receives a direct exposure from the muzzle of a rifle or shotgun while the right ear is partially protected by the head shadow effect (Rasmussen et al., 2009). The opposite is true for a left-handed rifle shooter. An asymmetrical hearing loss is less evident among people only firing handguns or pistols. The hearing loss from firearm impulse noise is greater in those who work in noisy environments when compared to those who do not (Stewart, Konkle, and Simpson, 2001). In addition to NIHL, firearm noise exposure can also

lead to tinnitus (Smith et al., 2000; Olsen-Widen and Erlandsson, 2004; Stewart et al., 2009; Stewart et al., 2014). In fact, tinnitus is one of the early warning signs of NIHL (Griest et al., 1998).

Recreational Firearm NIHL and Tinnitus Prevention Strategies

Hearing Protection Devices (HPDs)

Fortunately, NIHL and tinnitus caused by firearm noise exposure are largely preventable with the use of appropriately fitted hearing protection devices (HPDs). HPDs may be earplugs or earmuffs. Murphy et al., (2012) measured the amount of sound attenuation or protection (impulse peak insertion loss) using an acoustic mannequin, fit with conventional HPDs (insert earplugs and earmuffs), and found impulse peak insertion loss values greater than 35 dB for 170 dB peak SPL firearm noise. The protected levels were less than the OSHA dB peak SPL and NIOSH 140 dBA exposure limit. Murphy and Tubbs (2007) also found peak impulse reduction values of approximately 30 dB using an acoustic mannequin with correctly fit earmuffs or earplugs. Moreover, they found insert earplugs used in combination with circumaural earmuffs ("double protection") provided approximately 50 dB of peak reduction, an effect greater than either earplugs or earmuffs alone. A subsequent study (Murphy et al., 2015) also reported more than 50 dB of impulse peak insertion loss when double protection was employed.

Appropriate use of HPDs can be effective in preventing NIHL caused by exposure to high-level impulses generated by firearms. However, HPDs must be worn properly and consistently by the recreational firearm user to achieve any benefits. Recent studies investigating the shooting habits of adult recreational firearm users noted that they do not consistently wear HPDs while hunting. Stewart et al., (2011) found over 70% of shooters reported never using HPDs while hunting and only 50% reported consistent use of HPDs during target practice. Stewart et al., (2009) also found only 40% of adult waterfowl hunters reported using HPDs consistently while target shooting and only 20% consistently wore HPDs while hunting ducks and geese. This particular population of recreational firearm users is at increased risk of NIHL because they often hunt in groups, in enclosed hunting blinds, and use large bore, semi-automatic weapons capable of rapid firing. Stewart et al., (2014) surveyed youth shooters 10-17 years of age and found results similar to adult recreational firearm users; 56% reported consistent use of HPDs while target practicing and only 16% while hunting. The majority of individuals in these studies were unaware of advancements in hearing protector design that overcome some of the conventional barriers toward wearing hearing protection in this population.

Because hearing protectors reduce the awareness of important environmental sounds, such as the approach of game, many recreational firearm users are reluctant to wear HPDs while hunting. However, several commercially available HPDs are specifically designed for the shooting sports that largely circumvent this problem. Electronic HPDs can provide mild amplification of ambient sound in quiet to allow the hunter to hear, but attenuate intense firearm impulse noise (and other high-intensity sound) by employing electronic peak clipping and passive attenuation when sound levels exceed a high-intensity threshold (Murphy et al., 2015; Murphy and Tubbs 2007). Electronic devices are available in a variety of styles including circumaural headphones, insert earplugs, custom in-the-ear devices, and behind-the-ear devices. Passive (non-electronic) level-dependent (also called non-linear) HPDs are less expensive than the electronic devices and allow softer sounds to be heard while attenuating high-level sound such as firearm noise via specially designed physical apertures and filters. These level-dependent HPDs provide increasing attenuation with increased sound level (Murphy et al., 2012; Murphy et al., 2016b; Fackler et al., 2017). These technologies allow hunters to monitor their auditory environment and allow target shooters to hear conversation and instructions at the firing range while providing hearing protection when guns are fired.

The noise reduction rating (NRR) listed on the packaging or in the manufacturer's specifications provides the consumer guidance when selecting hearing protection for shooting sports. For continuous or constant noise, the NRR informs the consumer about the potential performance of the protector when properly worn. For impulse noise, the attenuation will be similar to the NRR rating, but can be higher (Murphy et al., 2012; Murphy et al., 2015; Fackler et al., 2017). Some HPDs are designed with filters that provide increased attenuation with higher peak impulse levels. The attenuation for these types of filtered HPDs will not exceed



that for the same protector with the filter completely closed or blocked. Earmuffs tend to exhibit increased attenuation with increasing impulse level. An adequate seal in the ear (for earplugs) or over the ear (for earmuffs) is essential for optimal hearing protection and the wearer should evaluate both comfort and seal when choosing an HPD. Dual hearing protection (earplugs plus earmuffs) will provide the greatest protection. Electronic devices may also be worn in combination with passive HPDs providing the best audibility for soft sounds and greatest degree of hearing protection.

Firearm Noise Suppressors

Another device that may reduce the risk of acquiring NIHL is the firearm suppressor, which is commonly, and inaccurately, known as a silencer. Discharging a firearm produces a high-level acoustic impulse generated by the sudden release of gases that propel the projectile out of the barrel of the gun. A suppressor affixed to the end of the barrel can reduce the noise from the pressure of the escaping gases by coupling a chamber with a large volume to the muzzle of the firearm. In addition, a series of baffles within the chamber act as a muffler to further reduce the impulse noise level. Suppressors cannot reduce the noise caused by the supersonic flight of the projectile breaking the sound barrier once it leaves the barrel of the firearm. However, subsonic ammunition can be used to avoid this from occurring, thus reducing the overall SPL. Using subsonic ammunition in conjunction with a suppressor can collectively reduce firearm noise over either approach alone.

Recently, two studies have examined the effectiveness of firearm suppressors in reducing firearm noise. Lobarinas et al., (2016) measured firearm noise using a variety of AR-15 firearms with different calibers (5.56 mm and 7.62 mm), types of ammunition (sub and supersonic), suppressors, and barrel lengths. The authors found suppressors reduced peak sound pressure levels from 7 to 32 dB relative to various unsuppressed conditions at three microphone locations (right and left ear and at 1 meter left of muzzle). However, several measurement conditions using suppressors still yielded levels above 140 dB peak SPL, especially for guns firing supersonic ammunition and guns with shorter barrels. Murphy et al., (2016a) measured suppressed and unsuppressed firearm noise with two different rifles (.223 and .308 caliber) using subsonic and supersonic ammunition at three different microphone locations (shooter's right ear, left ear, and at the instructor's position 1 meter behind the shooter). Impulse levels for the subsonic ammunition ranged from 100 to 132 dB peak SPL in the suppressed conditions across microphone locations. The levels were 127 to 149 dB peak SPL for the unsuppressed conditions. Impulse levels for the supersonic ammunition ranged from 120 to 137 dB peak SPL in the suppressed conditions compared to 148 to 161 dB peak SPL for the unsuppressed conditions. The sound levels of firearm noise for supersonic ammunition can be reduced by approximately 30 dB with the use of suppressors. Coupling suppressors with subsonic ammunition can reduce levels further, compared to unsuppressed, supersonic ammunition conditions. Other suppressors not evaluated in the above studies and future technologically advanced suppressors may not provide the same reduction of firearm noise.

It is important to note that the use of a suppressor does not eliminate the risk of NIHL; it only reduces the risk by reducing the intensity of the sound emission. There currently are no standardized protocols to measure the degree of attenuation (noise reduction) firearm noise suppressors provide. This means that manufacturers cannot guarantee that noise suppressors make a firearm safe to use without the wearing of hearing protection; that is, manufacturers cannot guarantee that use of noise suppressors alone will prevent hearing loss.

To properly protect their hearing, consumers must regard attenuation data published by firearm noise suppressor manufacturers with caution, and wear hearing protection whenever shooting firearms, including when employing a noise suppressor device.

Choice of Caliber of Rifle, Pistol or Gauge of Shotgun

Most hunting rifles, pistols and shotguns produce dangerously high levels of impulse noise. Magnum calibers increase noise levels significantly. Using smaller caliber firearms for target practice can lower the risk of NIHL. Hunters must balance their choice of caliber with other factors, but a smaller caliber with an adequate effective range might be a smart decision. Consistent use of appropriate hearing protection must be stressed. The use of double hearing protection is especially important when shooting large bore firearms.

Muzzle Brakes (Ports)

Muzzle brakes (ports) can reduce recoil but generally at the cost of increased noise hazards. The associated opening in the barrel/port allow for the escaping gases to be ejected closer to the ear and also radiates more sound energy back toward the shooter. Consequently, muzzle brakes often increase the peak sound pressure levels measured at the ears of the shooter. This condition is exacerbated when using short barrels.

Shooting Environment

Almost any firearm can be hazardous to hearing, especially if it is capable of rapid fire or is fired in a reverberant environment, such as a hunting blind. Firing indoors in a room without sound treatment versus firing in open outdoor areas also increases the risk. Shooting in a reverberant environment will result in longer impulse durations and may contribute to higher sound pressure levels which can increase risk of hearing loss. When shooting in a small enclosed hunting blind, it is important to make sure the gun barrel is outside of the blind before firing. Sound treatments on the walls of indoor firing ranges can also reduce the risk of hearing loss.

Number of Shots Fired

The more shots fired, the higher the risk for NIHL. Each shot fired potentially contributes to the hearing loss. For example, waterfowl hunters who shoot hundreds of shots each season may be at greater risk of hearing loss than large game hunters who only fire their rifle a few times a season. Target shooting may present the opportunity for firing a large number of rounds, and hearing protection is essential during these sessions. HPDs can also improve accuracy by reducing flinching due to the lower noise level reaching the shooter's ears.

Hunting and Shooting in Groups

Waterfowl and upland bird hunters are high-risk shooting populations because they often hunt in groups, may fire multiple shots in a single hunt, and almost exclusively use rapid-fire, large-bore firearms. In this case, shooters are not only exposed to the high level impulse noise from their own firearms, but also to the impulses from nearby shooters. Increasing the distance between shooters and making sure both shooters and bystanders are wearing hearing protection are important to reducing exposure levels.

Handgun Use

Any caliber of handgun generates hazardous levels of impulse noise because the muzzle of a short barrel is closer to the ears than for a long gun. Big-bore pistols (for example, the .357, .44 caliber magnum and .50 caliber), can expose the shooter to impulse levels greater than 170 dB peak SPL. It is important to wear double hearing protection when firing big-bore handguns to prevent NIHL. It is also worth noting that shooting over a surface such as a table or bench versus standing over open ground will also increase the peak SPL reaching the ear (Meinke et al., 2014).

Educational Information for Firearm Users

TIPS FOR SHOOTERS TO REDUCE RISKS FOR HEARING LOSS

Keep hearing protection devices on hand and use them correctly.

Use earplugs and carmuffs together (double protection) when using large-caliber guns or when many shots will be fired.

Consider smaller calibers or gauges during target practice.

Choose a single-shot or bolt-action over a semi-automatic weapon to help reduce the numbers of shots and increase the quiet time between shots.

Avoid shooting in large groups, especially at indoor or enclosed firing ranges, and if you do be especially aware of those who may be shooting near you so you can have your cars protected when their guns discharge.

Select a firing range with noise control treatments on the walls and ceilings.

Choose firearms with longer barrels and no ports or muzzle brakes.

Consider using low-recoil (low-noise) ammunition.

Consider the use of a firearm suppressor for use in combination with HPDs, where suppressor use is legally permitted.

When hunting in a blind, make sure the muzzle is outside the blind before pulling the trigger.

Use well-fitted, nonlinear or electronic ear protection designed for hunting/shooting.

Hearing Healthcare

Hearing loss prevention programs for recreational firearm shooters should include annual audiometric testing and hearing protector fit testing to monitor hearing levels and make sure the hearing protection devices are providing adequate protection. Any reduction in hearing sensitivity or sudden onset of tinnitus (especially immediately after shooting) necessitates a hearing test, a re-evaluation of shooting habits and hearing protection device fitting. Other health issues (diseases) can cause hearing loss, so recreational shooters should never assume their hearing loss is solely from firearms. Shooters should be advised to see an audiologist whenever a hearing loss is suspected. There are practical rehabilitation approaches options available to shooters with hearing loss.

Hearing Aids

Audiologists are skilled in fitting hearing aids and also offer treatment and counseling for bothersome tinnitus. Hearing aids can help compensate for the loss of hearing but are unable to restore natural healthy hearing. Fitting amplification to individuals with precipitous hearing loss can be challenging especially when high frequency audiometric thresholds are severely impaired as in the case of NIHL. Recent availability of frequency shifting capability in advanced technology hearing aids that move sounds from areas of severely degraded hearing to areas of better residual hearing may offer some promise in remediation of this type of hearing loss. Sophisticated digital programing and other features can provide individualized tailoring of the hearing aid to the fit the person's needs and lifestyle. Sound therapy and counseling are also available to help individuals with tinnitus better manage their symptoms.

Resources

Several educational tools, effective in motivating firearm users to protect themselves from firearm noise, are available on the National Hearing Conservation Association website. These include:

NHCA EDUCATIONAL TOOLS

NIOSH hearing loss simulator.

A tinnitus simulator.

Posters and slides of inner-ear structures damaged by excessive firearm noise.

A brochure on hearing protection devices for shooting sports.

A hunting and hearing video.

Links to other educational resources.

Conclusion

Noise-induced hearing loss from high level firearm noise can be prevented by employing effective strategies aimed at reducing the sound level produced by the firearm and protecting the ears of the recreational shooter and bystanders.

References

- Cox H. & Ford GR. 1995. Hearing loss associated with weapons noise exposure-when to investigate an asymmetrical loss. *J Laryngol Otol*, 109(4), 291–295.
- Dancer A., Grateau P., Cabanis A., Vaillant T. & Lafont D. 1991. Delayed temporary threshold shift induced by impulse noise (weapon noise) in men. *Int J Audiol*, 30(6), 345-356.
- Fackler C.J., Berger E.H., Murphy W.J. & Stergar M.E. 2017. Spectral analysis of hearing protector impulsive insertion loss, *Int J Audiol*, 56, S13-S21, DOI: 10.1080/14992027.2016.1257869.
- Flamme G.A., Stewart M., Meinke D., Lankford J. & Rasmussen P. 2011. Auditory risk to unprotected bystanders exposed to firearm noise. J Am Acad Audiol, 22, 93-103.
- Flamme G.A., Wong A., Liebe K. & Lynd J. 2009. Estimates of the auditory risk from outdoor impulse noise II: Civilian firearms. *Noise Health*, 11, 231–242.
- Griest, S.E., & Bishop, P.M. 1998. Tinnitus as an early indicator of permanent hearing loss: A 15 year longitudinal study of noise exposed workers. AAOHN Journal, 46(7), 325-329.
- Hoffman, H.J., Dobie, R.A., Losonczy, K.J., Themann, C.L., Flamme, G.A. (2016). Declining prevalence of hearing loss in U.S. adults aged 20 to 69 years. JAMA-Otolaryn, Early Online, Retrieved December 15, 2016. doi:10.1001/jamaoto.2016.3527
- Jütersonke O., Krause K. & Muggah R. 2007. Guns and the city: Urban landscapes of armed violence in small arms survey. Graduate Institute of International Studies. Geneva, Switzerland: Cambridge University Press, pp. 47.
- Krouse, W.J. 2012. Gun Control Legislation. Congressional Research Service Report for Congress RL32842. Available at https://fas.org/sgp/crs/misc/RL32842.pdf. Retrieved on November 5, 2016.
- Kryter, K.D. 1991. Hearing loss from gun and railroad noise-relations with ISO standard 1999. J Acoust Soc Am. 90(6), 3180-3195.
- Lankford, J.E., Meinke, D.K., Flamme, G.A., Finan, D.S., Stewart, M., Tasko, S., Murphy, W.J. (2016). Auditory risk of air rifles. *Int J Aud*, 55(sup1), S51-S58.

- Lobarinas E., Scott, R., Spankovich C. & Le Prell, C. G. 2016. Differential effects of suppressors on hazardous sound pressure levels generated by AR-15 rifles: Considerations for recreational shooters, law enforcement, and the military. *Int J Audiol*, 55(1).
- Meinke, D.K., Murphy, W.J., Finan, D.S., Lankford, J.E., Flamme, G.A., Stewart, M., Soendergaard, J., & Jerome, T.W. 2014. Auditory risk estimates for youth target shooting. *Int J Audiol*, 53(S1), S16-S25.
- Meinke D.K., Finan D.S., Soendergaard J., Flamme G.A., Murphy W.J., Lankford, J.E., & Stewart, M. 2013. Impulse noise generated by starter pistols. *Int J Audiol*, 52(S1), S9-S19.
- Murphy W. J. & Tubbs R. L. 2007. Assessment of noise exposure for indoor and outdoor firing ranges. J Occup Env Hyg, 4(9), 688-697.
- Murphy W.J., Fackler C.J., Berger E.H., Shaw P.B. & Stergar M. 2015. Measurement of impulse peak insertion loss from two acoustic test fixtures and four hearing protector conditions with an acoustic shock tube. *Noise and Health*, 1-10.
- Murphy W.J., Flamme G.A., Zechmann E.L., Dektas C., Meinke D.K., et al, 2012. Noise exposure profiles for small-caliber firearms from 1.5 to 6 meters. Lay-language paper for the 164th meeting of the Acoustical Society of America, Kansas City, MO.
- Murphy W.J., Stewart M., Flamme G.A., Tasko S.M., Lankford J.E., Meinke D.K., & Finan D.S. 2016a. The reduction of gunshot noise and auditory risk through the use of firearm suppressors. 171st meeting of Acoustical Society of America, Salt Lake City UT.
- Murphy W.J., Graydon P.S., Strobel M. & Freeland K.L. 2016b. Impulse peak insertion loss for hearing protection devices with an acoustic shock tube. National Hearing Conservation Association, San Diego, CA.
- National Shooting Sports Foundation. 2009. 2009 NSGA shooting sports participation. NSSF Research Department. Newtown, CT.
- National Shooting Sports Foundation. 2010. Families Afield: An Initiative for the Future of Hunting.

 Retrieved from www.familiesafield.org/pdf/familiesafield_report.pdf
- NIOSH. 1998. Criteria for a recommended standard: Occupational noise exposure. (NIOSH Publication No. 98-126). U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.
- Nondahl D.M., Cruickshanks K.J., Wiley T.L., Klein B.E. & Tweed T.S. 2000. Recreational firearm use and hearing loss. Arch Fam Med, 9, 352-357.
- Olsen-Widen S.E. & Erlandsson S.I. 2004. Self-reported tinnitus and noise sensitivity among adolescents in Sweden. *Noise Health*, 7, 29-40.
- Prosser S., Tartari M.C. & Arslan E. 1988. Hearing loss in sports hunters exposed to occupational noise. Br J Audiol, 22, 85-91.

- Rasmussen P., Flamme G., Stewart M., Meinke D. & Lankford J. 2009. Measuring recreational firearm noise. Sound and Vibration. 14-18.
- Schulz T.Y., Murphy W.J., Flamme G.A., 2013. New Research Shows Firearms Users How to Keep Their Hearing Safe. Soldier Modernisation, 11(Summer/Autumn), 1-3.
- Smith P.A., Davis A., Ferguson M. & Lutman M.E. 2000. The prevalence and type of social noise exposure in young adults in England. *Noise Health*, 2, 41-56.
- Stewart M., Borer S. & Lehman M.E. 2009. Shooting habits of waterfowl hunters. Noise Health, 11, 8-13.
- Stewart M., Foley L., Lehman M.E. & Gerlach A. 2011. Shooting habits of recreational firearm users. Audiology Today, 23, 38-52.
- Stewart M., Konkle D.F. & Simpson T.H. 2001. The effect of recreational gunfire noise on hearing in workers exposed to occupational noise. Ear Nose Throat J, 80, 32-40.
- Stewart M., Meinke D.K, Snyders J.K. & Howerton K. 2014. Shooting habits of youth recreational firearm users. Int J Audiol, 53, S26-S34.
- Stewart M., Pankiw R., Lehman M.E. & Simpson T.H. 2002. Hearing loss and hearing handicap in users of recreational firearms. J Am Acad Audiol, 13, 160-168.
- U.S. Department of the Interior, U.S. Fish and Wildlife Service, U.S. Department of Commerce & U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.
- U.S. Occupational Safety and Health Administration. 1983. Occupational noise exposure; hearing conservation amendment; final rule (29 CFR 1910.95). Fed Regist, 48(46), 9738-9785.
- WHO. 1997. Strategies for prevention of deafness and hearing impairment. Prevention of noise-induced hearing loss. Geneva: World Health Organization.



Firearms Sales & Services

Email: jtmshooting@guam.net

April 5, 2021

Senator Jose "Pedo" Terlaje 36th Guam Legislature

Subject: Support for Bill 73-36

Hafa Adai Senator,

I am submitting this testimony in support of Bill 73-36 otherwise known as the HEARING PROTECTION ACT OF 2021. The title of this bill is the sole purpose of my support.

I am the owner of JTM Benchrest gun shop and Sportsland (Outdoor) Shooting Range located off of Route 3 NCS Dededo. Given our small island and the growing number of our people joining the firearm/shooting industry for various reasons, it seems ever more practical that Guam would enact such a law.

Since the rise in home invasions and violent crime started (again) several years ago, more and more people have taken responsibility for their own personal protection by first obtaining their Guam Firearms ID, taking firearms shooting and safety courses, and eventually purchasing their first firearm. The recent passing of the "Castle Doctrine" ensures a person's right to protect and defend themselves and their family in their own home. If a person discharges a firearm in an enclosed room or building such as a home or business in his/her defense of their property or family, the damaging effects to that persons hearing is immediately felt and could become permanent.

As a result of the increase in firearms ownership, more and more people have also begun to take interest in the shooting sports. Suppressors will help make the shooting sport more enjoyable as the noise levels of multiple firearms in close proximity to each other, is reduced. The sole purpose of the firearm suppressor is to reduce the sound of a discharged firearm to a manageable level where it will have less of a damaging effect on human hearing. However, it does not eliminate damaging sound levels completely. The suppressor reduces noise levels by about 25-30 decibels. The noise is still loud and can still be damaging to hearing depending on the caliber of the firearm used. The National Institute on Deafness and other Communication Disorders states that if a person is repeatedly exposed to noise levels of 85 decibels or more, noise-induced hearing loss can set in. The most popular handgun caliber in the United States is the 9mm. This is usually the first firearm caliber purchased by a new shooter. The noise generated by the 9mm is about 160 decibels. In comparison, a jet taking off produces about 140 decibels. Therefore, even if a person were to use a suppressor on a 9mm firearm, the reduction will be about 130 decibels. This means a person should still use ear plugs AND ear muffs together with the suppressor when shooting a 9mm firearm. This is ever more important for employees of shooting ranges, shooting instructors, and anyone else in similar occupations.

Furthermore, there is a process in obtaining a suppressor. A person interested in purchasing a suppressor must first be vetted through the local government and the federal government. The

Government of Guam currently requires a person to have a Guam Firearms Permit in order to obtain a firearm. This will also be required for the suppressor. Next, the individual will have to fill out an BATFE Form 4 which is submitted to the ATF through the seller (a federally licensed firearms dealer). The approval process takes an average of 6-9 months. The sale of suppressors is strictly tracked and monitored by the ATF through local dealers who wish to sell these devices. Accurate records on the purchaser must be maintained by the dealer. The process prevents convicted felons from purchasing suppressors from a dealer. Also, an owner of a suppressor cannot sell the device to another person without having first been approved by the ATF. Doing so will result in the seller being charged with a felony.

In closing, the benefits of a suppressor outweigh any of the "what if" scenarios a person may have against ownership. We cannot deny the use of a suppressor that is beneficial to the protection of human hearing because of the idea that it "can" be used in a crime. If this were the case, then any object is a potential weapon and should be treated as such.

Thank you for the opportunity to express my views and provide input to support this bill.

Respectfully, John J Sablan Owner, JTM Benchrest President/CEO, Sportsland Shooting Range

FROM THE DESK OF Erik Quintanilla Redmond

April 2, 2021 Honorable Jose "Pedo" Terlaje MVP Center Unit 102., 777 Rt. 4 Sinajana, Guam 96910

Dear Senator Pedo,

My name is Erik Q. Redmond, a resident of Santa Rita and an avid gun enthusiast. I am writing to express my unwavering support for Bill No. 73-36 (COR), AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021, as written.

This type of legislation is needed to encourage more training in the proper use of firearms. As you may know, the more you practice with and use your tools, the more proficient you become should you ever need exercise your right to defend yourself and your family. This proficiency is obviously critical for the safety of others around.

For the record, a silencer DOES NOT silence a gun. In layman's terms, I will use the analogy of a vehicle in a quaint, peaceful, quite, and tranquil neighborhood. Day in and day out the neighbors in this neighborhood drive their vehicles to and from their destinations. Imagine if each of these vehicles did not have a muffler on their engine, the noise from these vehicles will make the neighborhood unbearable as the noise pollutes the air. The compression of gas and air in the pistons as it ignites creates an explosion, this explosion travels through tubes and through a muffler (silencer/noise suppressor) which does not silence the engine, but muffles the noise making it bearable. This is similar to the how a firearm works. The firing pin strikes the primer which ignites the powder that creates combustion that expels noise - This is no different then what Bill 73-36 is doing, making the noise from firearms muffled so people in surrounding areas can live in peace, harmony, & tranquility.

Thank you for allowing me the opportunity to testify in support of Bill No. 73-36 (COR) and I thank the authors for introducing such important safety legislation.

Sincerely yours,
REDMOND.ER

FROM THE DESK OF

Thomas A. Camacho

April 1, 2021

Honorable Jose "Pedo" Terlaje MVP Center Unit 102., 777 Rt. 4 Sinajana, Guam 96910

Dear Senator Pedo,

My name is Thomas Camacho, a resident of Sinajana and an avid gun enthusiast. I am writing to express my unwavering support for Bill No. 73-36 (COR), AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021, as written.

This type of legislation is needed to encourage more training in the proper use of firearms. As you may know, the more you practice with and use your tools, the more proficient you become should you ever need exercise your right to defend yourself and your family. This proficiency is obviously critical for the safety of others around.

For the record, a silencer DOES NOT silence a gun. In layman's terms, I will use the analogy of a vehicle in a quaint, peaceful, quite, and tranquil neighborhood. Day in and day out the neighbors in this neighborhood drive their vehicles to and from their destinations. Imagine if each of these vehicles did not have a muffler on their engine, the noise from these vehicles will make the neighborhood unbearable as the noise pollutes the air. The compression of gas and air in the pistons as it ignites creates an explosion, this explosion travels through tubes and through a muffler (silencer/noise suppressor) which does not silence the engine, but muffles the noise making it bearable. This is similar to the how a firearm works. The firing pin strikes the primer which ignites the powder that creates combustion that expels noise - This is no different then what Bill 73-36 is doing, making the noise from firearms muffled so people in surrounding areas can live in peace, harmony, & tranquility.

Thank you for allowing me the opportunity to testify in support of Bill No. 73-36 (COR) and I thank the authors for introducing such important safety legislation.

Sincerely yours,

Thomas A. Camacho



Bill 73-36

Ray

Mon, Apr 5, 2021 at 6:47 AM

To: senatorpedo@senatorjpterlaje.com

April 1, 2021
FROM THE DESK OF
Raymond p. Guerrero
Honorable Jose "Pedo" Terlaje MVP Center
Unit 102., 777 Rt. 4
Sinajana, Guam 96910
Dear Senator Pedo,

My name is Raymond p. Guerrero a resident of Maina and an avid gun enthusiast. I am writing to express my unwavering support for Bill No. 73-36 (COR), AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021, as written.

This type of legislation is needed to encourage more training in the proper use of firearms. As you may know, the more you practice with and use your tools, the more proficient you become should you ever need exercise your right to defend yourself and

your family. This proficiency is obviously critical for the safety of others around.

For the record, a silencer DOES NOT silence a gun. In layman's terms, I will use the analogy of a vehicle in a quaint, peaceful, quite, and tranquil neighborhood. Day in and day out the neighbors in this neighborhood drive their vehicles to and from their destinations. Imagine if each of these vehicles did not have a muffler on their engine, the noise from these vehicles will make the neighborhood unbearable as the noise pollutes the air. The compression of gas and air in the pistons as it ignites creates an explosion, this explosion travels through tubes and through a muffler (silencer/noise suppressor) which does not silence the engine, but muffles the noise making it bearable. This is similar to the how a firearm works. The firing pin strikes the primer which ignites the powder that creates combustion that expels noise - This is no different then what Bill 73-36 is doing, making the noise from firearms muffled so people in surrounding areas can live in peace, harmony, & tranquility.

Thank you for allowing me the opportunity to testify in support of Bill No. 73-36 (COR) and I thank the authors for introducing

such important safety legislation.

Respectfully,

Raymond p. Guerrero

Sent from my iPhone 6s



Bill No 73-36 (COR) - Hearing Protection Act of 2021

 Mon, Apr 5, 2021 at 8:46 AM

Cc: Chris Duenas <senatorchrisduenas@gmail.com>, "senatorvanthonyada@gmail.com" <senatorvanthonyada@gmail.com>, "office@senatorfrankblas.com" <office@senatorfrankblas.com>, "officeofsenatormoylan@guamlegislature.org" <officeofsenatormoylan@guamlegislature.org>

Honorable Senator Jose "Pedo" Terlaje,

Happy Easter and I hope this email finds you well. I write in support of Bill No. 73-36(COR) - Hearing Protection Act of 2021 that allows for the change of Guam law to allow for silencers and/or suppressors on Guam. These silencers/suppressors allow for ordinary citizens to have access to an accessory that reduces the sound signature of a firearm but it does not as Hollywood movies incorrectly show eliminate the sound nor reduce it any where near what the movies portray. People will still hear the firearm. The ability to reduce the sound signature would allow firearms used in home defense to be more effective in defending ones home without the worry of damaging your hearing which can be so loud that it can disorient the user as well as the ones you are trying to protect in your household. Silencers and suppressors also allow for the reduction of pollution noise that occurs at firearms ranges as well as will aid in opening up firearms to others who are intimidated by the loud noise produced by firearms. Let's separate Hollywood and media sensationalism from fact. Silencers/Suppressors first and foremost again are not "quiet." They only reduce the sound signature of a firearm but do not eliminate it. Nor does the sound signature reduced to that of whisper like those of the movies. It is still loud and may still require hearing protection to prevent ear damage. Second, these items are heavily regulated and just like firearms require to be bought by a dealer and the buyer has to go through an extensive background check that takes as long as 9 mos to a 1 year. It requires a fee on top of an already expensive item (\$700-\$1000+ on average). This is not something that everyone will have either due to the high costs involved and/or the back ground check. It is an item that cannot be passed on to someone as each item is registered not by the Guam Police Department but by the ATF to an individual as such can item falls under the National Firearms Act (NFA). If there is a worry for an increase crime because of silencers, let's first acknowledge that criminal will do whatever they want and not follow the law. They will not obtain silencers/suppressor legally. So why punish citizens who will go through the legal process of owning one? Second, gun ownership has increased on Guam and yet gun violence and gun related crimes have not increased in proportion to gun ownership. The issue is not firearms but a much more deeper problem within our islands community. It is a cultural and spiritual problem that goes beyond firearms that is outside the scope of this bill. I encourage you and the rest of the senators reviewing this bill to not let emotions that have nothing to do with the facts and benefits that this bill hopes to provide to the law abiding citizens whom you serve and who have elected everyone in the 36th Guam Legislature. Thank you. Stay safe.

Sincerely,

Richard L.G. Nartia, Jr. Yigo - resident



Fwd: CONSTITUENT CALL: Testimony on Bill No. 73-36 (COR)

Evan San Nicolas <evan@senatorperez.org>

To: senatorpedo@senatorjpterlaje.com

Cc: Charlene Flores <charlene@senatorperez.org>

Tue, Apr 6, 2021 at 11:31 AM

----- Forwarded message ------

From: Evan San Nicolas <evan@senatorperez.org>

Date: Tue, Apr 6, 2021 at 11:24 AM

Subject: CONSTITUENT CALL: Testimony on Bill No. 73-36 (COR) To: SEN. JOSE P. TERLAJE <sen.terlaje@senatorjpterlaje.com>

Cc: Charlene Flores <charlene@senatorperez.org>

Hafa Adai Senator Pedo,

We wanted to pass testimony from a caller identified as "Sablan" on Bill No. 73-36 (COR).

"I stand against Bill No. 73-36 (COR), Guam's drug and violence issues are high and the passing of this bill will only increase these statistics. If this bill is passed it will enable gun violence on our island and harm our tourism. It is a danger to our island and we ask the Chairman, Senator Pedo Terlaje and his colleagues to put this bill on hold." -- Sablan

Kindly confirm receipt.

Si Yu'os Ma'åse',



Evan C. San Nicolas

Office Manager

Office of Senator Sabina Flores Perez
36th Guam Legislature • *I Mina'Trentai Seis na Liheslaturan Guåhan*Committee on Environment, Revenue and Taxation, Labor, Procurement, and Statistics, Research, and Planning

Tel: (671) 989-2968

Email: evan@senatorperez.org Website: www.senatorperez.org

Facebook: Senator Sabina Flores Perez

Si Yu'os Ma'ase',



Evan C. San Nicolas

Office Manager

Office of Senator Sabina Flores Perez
36th Guam Legislature • *I Mina'Trentai Seis na Liheslaturan Guåhan*Committee on Environment, Revenue and Taxation, Labor, Procurement, and Statistics, Research, and Planning

Tel: (671) 989-2968

Email: evan@senatorperez.org Website: www.senatorperez.org

Facebook: Senator Sabina Flores Perez



Support Bill 73-36, firearm suppressors / silencers

thomas tomasiak

Tue, Apr 6, 2021 at 2:04 PM

To: senatorpedo@senatorjpterlaje.com

Good afternoon Senator, my name is Thomas Tomasiak (2-may-c-yak) a police officer for the Guam Police Dept of 33 years and retiree from the US Army / Reserve.

As a gun owner, I support this bill for the use of suppressors and silencers. I lost partial hearing during my deployment in Afghanistan in 2009. I lost it while wearing ear-protection that was issued to me.

With a suppressor or silencer attached to the firearm I own, whether for training, personal range time, it will help in prevention from personal hearing loss.

If anything, if one wants a suppressor / silencer, I suggest the person should have a govguam firearms ID card to purchase 1.

Once again I support this bill.

Thomas M.Tomasiak

Sent from Yahoo Mail for iPhone

I MINA' TRENTAI TRES NA KONGRESSON MANHOBEN GUÅHAN 2021 (SECOND) Regular Session

Resolution No. 9-33 (COR) As amended on the floor

Introduced by:

Al Edrich C. Labang Chloe Lizama Nolan G.T. Flores Naomi Grace Perez

Relative to expressing the opposition *I Kongressun* Manhoben Guåhan to Bill No. 73-36 (COR), the "Hearing Protection Act" introduced in *I Mina'trentai Sais Na Liheslaturan Guåhan*.

BE IT RESOLVED BY I KONGRESSON MANHOBEN GUÅHAN: 1 WHEREAS, the increasing gun violence throughout the continental United 2 States should be reason enough for the loudness of guns to not be minimized or 3 silenced, and instead made recognizable; and 4 WHEREAS, by making gunshots harder to hear or see, silencers diminish 5 the effectiveness of law enforcement and gunshot detection systems; and 6 WHEREAS, silencers put law enforcement and the public at grave risk by 7 making it more difficult to identify nearby gunshots and locate an active shooter, 8 and they should not be widely available to civilians; and 9 WHEREAS, silencers enable criminals to elude law enforcement and raise 10 the risk of ambush attacks, in which a shooter may escape before the police are even 11 12 called; and WHEREAS, gun silencers allow the suspect to open fire while surrounding 13

1	areas may not be aware of an active shooter on premises; and
2	WHEREAS, gun silencers impact law enforcement officers when a
3	shooting occurs because it is harder to track down the shooter; and
4	WHEREAS, proliferation of silencers would also diminish the effectiveness
5	of gunshot detection systems, such as Shotspotter; and
6	WHEREAS, these systems are now deployed in nearly 100 cities, including
7	Chicago, New York City, and Washington DC. They provide police with real-time
8	alerts to illegal gunfire, enabling them to more safely respond to and investigate gun
9	crime; and
10	WHEREAS, the National Firearms Act (NFA) imposes certain obligations
11	on people who make, manufacture, sell, or transfer silencers; and
12	WHEREAS, there are instances where dangerous individual have managed
13	to circumvent the NFA and gain access to a silencer, and then used them in a targeted
14	mass shooting; and
15	WHEREAS, in February 2013, Christopher Dorner, a former LAPD officer
16	who was fired from his post, killed four people and injured several others while using
17	a gun with a silencer; and
18	WHEREAS, others did not heard the any gun shots because Dorner used a
19	gun suppression device; and
20	WHEREAS, gun suppressor devices are not effective at protecting a
21	shooter's hearing due to the fact that firearms produce an explosive sound that
22	exceed 140 decibels and silencers only suppress the sound by 28 decibels; and
23	WHEREAS, according to public health experts hearing loss occurs at 85
24	decibels; and
25	WHEREAS, gun silencers used by hunters may cause adverse effect to our
26	ecosystem by enabling overhunting; and

1	WHEREAS, the last mass shooting on Guam took place in February 26,
2	2001, at the Seventh-day Adventist Clinic, which resulted in seven (7) dead,
3	including the shooter, who was fatally wounded by police; and
4	WHEREAS, other mass shootings like Columbine High School in 1999,
5	Sandy Hook Elementary school in 2012, and Stoneman Douglas High School in
6	2018 all resulted in mass casualties; and
7	WHEREAS, recently, on March 16, 2021, a white gunman went to three spas
8	in Metro Atlanta, Georgia claiming eight lives, of which majority of the victims are
9	of Asian American descent. Furthermore, on March 22, 2021, another mass shooting
10	incident took place in a grocery store in Boulder, Colorado. The shooter killed ten
11	individuals including a police officer officer; and
12	WHEREAS, on June 14, 2019, the Virginia Beach shooter killed 12 people
13	at the municipal building using a silencer; and
14	WHEREAS, a survivor of the mass shooting states that if a suppressor
15	hadn't been used, employees within the building could've had more time to protect
16	themselves; and
17	WHEREAS, catastrophic mass shooting should be a great reason why
18	mufflers, silencers, or devices for deadening the sound of discharged firearms should
19	be prohibited; and be it further
20	RESOLVED, that I Mina'trentai Tres na Kongresson Manhoben Guåhan
21	does hereby, on behalf of the Youth of Guam, express its opposition to Bill 73-36
22	(COR), the "Hearing Protection Act," introduced in I Mina'trentai Sais Na
23	Liheslaturan Guåhan; and be it further
24	RESOLVED, that the Speaker and the Committee on Rules certify, and the
25	Legislative Secretary attest to, the adoption hereof, and that copies of the same be
26	thereafter transmitted to the Honorable Vicente "Tony" Ada, Senator of I
27	Mina'trentai Sais na Liheslaturan Guåhan and Sponsor of Bill 73-36 (COR); to the

- 1 Honorable Frank F. Blas Jr, Senator of I Mina'trentai Sais na Liheslaturan Guåhan
- 2 and Sponsor of Bill 73-36 (COR); to Honorable Christopher M. Duenas, Senator of
- 3 I Mina'trentai Sais na Liheslaturan Guåhan and Sponsor of Bill 73-36 (COR); to
- 4 Honorable James C. Moylan Senator of I Mina'trentai Sais na Liheslaturan Guåhan
- 5 and Sponsor of Bill 73-36 (COR); to the Honorable Jose "Pedo" Terlaje, Senator
- 6 and Chairman of the Committee on Public Safety, Emergency Response, Military
- 7 and Veteran's Affairs, Mayor's Council, and Public Transit, I Mina'trentai Sais na
- 8 Liheslaturan Guåhan; to the Honorable Amanda L. Shelton, Senator, Legislative
- 9 Secretary, and Chairperson of the Committee on Air Transportation, Parks, Tourism,
- 10 Higher Education, and the Advancement of Women, Youth, and Senior Citizens, I
- 11 Mina'trentai Sais na Liheslaturan Guåhan; to the Honorable Therese M. Terlaje,
- 12 Speaker, and Chairperson of the Committee on Health, Land, Justice, and Culture, I
- 13 Mina'trentai Sais na Liheslaturan Guåhan; to the Honorable Joshua F. Tenorio, I
- 14 Sigundo Maga'låhen Guåhan; and to the Honorable Lourdes A. Leon Guerrero, I
- 15 Maga'hågan Guåhan

DULY AND REGULARLY ADOPTED BY I MINA'TRENTAL TRES NA KONGRESSON MANHOBEN GUÅHAN ON THE 10TH DAY OF APRIL 2021.

Vice Speaker 1

Stephanie F.L. Lorenzo

Speaker

∆Kiàna Joy Yabut

Legislative Secretary



GUAM POLICE DEPARTMENT

DIPATTAMENTON POLISIAN GUAHAN

Government of Guam



LOURDES A. LEON GUERRERO Governor

JOSHUA F. TENORIO
Lieutenant Governor

Bldg. 13-16A Mariner Avenue, Tiyan
Barrigada, Guam 96913
P.O. Box 23909 Barrigada, Guam 96921
Telephone: (671) 475-8473 (Switchboard); (671) 475-8508 / 8509 / 8512
Fax: (671) 475-3222

STEPHEN C. IGNACIO Chief of Police

MANUEL R. CHONG, Major Acting Police Commander

April 20, 2021

The Honorable Senator Jose "Pedo" Terlaje Chairman, Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors Council and Public Transit 36th Guam Legislature MVP Center Unit 102, 777 Route 4 Sinajana, Guam 96910 Phone: (671) 969-3218

Subject:

Written Testimony

Re: Bill 73-36

Dear Senator Terlaje:

Buenas yan Hafa Adai! I am submitting this written testimony in regards to Bill 73-36 (COR) "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 60, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021". Also known as the "Hearing Protection Act of 2021. The Guam Police Department (GPD) submits the following concerns and suggestions.

The Guam Police Department's firearms examiners assigned to this roles for over 15 years have encountered numerous suppressors for examination and reports that no forensics aspects are affected by these devices.

Since the suppressors are identified as weapons in the National Firearms Act (NFA), they are required to have a serial number and registered with the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE). Dependent on an individual's intention to make, manufacture, transfer, import, or export a suppressor, the required forms for reporting the intent are listed as follows:

The Honorable Senator Jose "Pedo" Terlaje
Chairman, Committee on Public Safety,
Emergency Response, Military and Veterans
Affairs, Mayors Council and Public Transit
36th Guam Legislature
Subject: Written Testimony
Re: Bill 73-36 (COR)]
April 20, 2021
Page 2 of 5

- (A) ATF Form 1 Used by non-FFLs (individual, trust, etc.) to make NFA Items for their own personal use -- \$200 making tax owed;
- (B) ATF Form 2 Used by FFLs with manufacturing license to register NFA items they have made for sale -- no tax owed;
- (C) ATF Form 3 Used to transfer NFA items between FFLs -- no tax owed;
- (D) ATF Form 4 Used to transfer NFA item to non-FFL -- \$200 transfer tax owed;
- (E) ATF Form 5 Used to transfer NFA items to a government agency -- no tax owed;
- (F) ATF Form 6 Used for import of NFA items from outside the US (not needed for transfer into Guam from mainland US); and
- (G) ATF Form 9 Used to export NFA Items to a foreign country

In U.S. jurisdictions, allowing the use of suppressors is a violation of the National Firearms Act if the device does not have a serial number, or registered with the ATF using the respective form(s).

1. Enacting corresponding local statute governing the purchasing, ownership, and use of a suppressor and silencing device, hereafter referred to as a device.

Although there is a federal statute governing the purchase, possession, and use of the device, we argue there should be a corresponding Guam statute governing the same. Some states do not require the local/state registration of firearms, but on Guam we have long made this a requirement. All firearms need to be registered with the Guam Police Department. To assist in identifying legal ownership and possession, mandating a Guam registration of devices is crucial. Without this requirement there could be misuse and criminal use that cannot be regulated, enforced, and monitored. Following the current process, administered by the Bureau of Alcohol, Tobacco, and Firearms (BATF), people seeking to purchase, possess, or use devices need to complete the established federal process listed in the requirements of this proposed legislation. Completion of the process, which must be done for each individual device, is similar to the Guam process of having each individual firearm registered. Just like firearms purchases, possession, and use, we should enact a Guam statute related to the device. Since ownership of a device mandates an approved and completed federal process, which is evidence of legal federal purchasing, possession, and use, we suggest that a requirement of device registration on Guam demand a copy be provided upon registration as proof of legal federal purchase, possession, and use. Establishing a way to verify and prove validity of the federal documents should be considered and a process to verify should be done before a Guam approved registration can be completed. This could prevent counterfeit federal documents from being used to The Honorable Senator Jose "Pedo" Terlaje
Chairman, Committee on Public Safety,
Emergency Response, Military and Veterans
Affairs, Mayors Council and Public Transit
36th Guam Legislature
Subject: Written Testimony
Re: Bill 73-36 (COR)]
April 20, 2021
Page 3 of 5

illegally possess and use the device on island. An individual may not be able to legally purchase these devices without proper federal registration but individual exchange of the device could become possible on island if the federal documents cannot be verified during a registration process. Someone that has been approved and obtained the required federal approval could illegally transfer the device to someone with a counterfeit federal document, if there is no way to verify the federal documents.

 Enacting proposed Guam statute and amendments which address the requirement of a licensed and registered Federal Firearms License (FFL) dealer being the conduit for obtaining, through new ownership purchase, all devices coming to Guam.

Currently on island all newly-purchased firearms must be through a verified FFL dealer. This relates to firearms that are purchased from a dealer, manufacturer, or retail source. Proof of purchase is verified by documents provided by the FFL to GPD upon inspection and during the registration process. We suggest that this requirement be applied to the devices. This suggestion would assist in verifying legal purchases of devices coming to Guam and further assist in tracking and registering legal devices on island. This is perhaps the intent of the local statute related to new firearms purchased and brought to Guam.

3. Enacting proposed Guam statute and amendments to address the legal transfer of legally possessed devices to other legal federally approved individuals.

As detailed and mandated in the BATF requirements, a person may only legally transfer ownership of a device to someone who has also been completed the required process, been approved, and paid the federal tax stamp. Ownership cannot be done until the receiving party has completed this process and obtained the required documented approval. This federal requirement is done through a "Form 4 to Form 4" transfer. Following the current process, administered by the Bureau of Alcohol, Tobacco, and Firearm (BATF), people seeking to legally transfer devices need to complete the established federal process listed in the requirements of this proposed legislation. Completion of the process, which must be done for each individual device, is similar to the Guam process of having each individual firearm registered. Just like firearm transfers of ownership, we should enact a Guam statute related to transfers of these devices. Since ownership of a device mandates an approved and completed federal process, which is evidence of legal federal purchasing, possession, and use, we suggest that a requirement of device transfer on Guam demand a copy be provided upon registration as proof of legal federal transfer, possession, and use.

The Honorable Senator Jose "Pedo" Terlaje
Chairman, Committee on Public Safety,
Emergency Response, Military and Veterans
Affairs, Mayors Council and Public Transit
36th Guam Legislature
Subject: Written Testimony
Re: Bill 73-36 (COR)]
April 20, 2021
Page 4 of 5

A specific language in the Guam statute should require the federal BATF process be completed and approved, with proof of completion and approval, before any legal transfer of ownership can be approved and the device registered with GPD by the new owner. This will assist in trying to ensure device ownership is not transferred without the required federal approval on island.

4. Enacting proposed Guam statute and amendments to address the legal shipment of possessed devices to the island by military personnel, people relocating to Guam, and other legal owners that may bring the device to Guam.

Similar to current statutes and requirements for individuals bringing firearms to Guam, there should be similar statutes defining the time to register devices by people who move to Guam, or are visiting for a substantial time, and are in possession of devices that need to be registered as defined by the statutes.

5. Establishing a fee to register each device on Guam.

Similar to the registration of firearms, which is done through the GPD, we suggest a fee be identified and codified in the statute for the registration of each device. This fee will help with processing costs associated with the process. Currently the fee to register a firearm is \$49.00 per firearm. We recommend there be a similar fee to register devices on Guam. Registration should be for each device since federal statute requires an individual tax stamp and approval for each device. Essentially, each device is registered as equally as each individual firearm on Guam is registered with an associated cost to be paid for the completion of the process. We recommend a similar or increased cost per each individual device registered.

6. Proposed penalty for criminal use of suppressor/silencer.

- 1. Illegal manufacture of suppressor /silencer will be considered a felony.
- 2. Use of a suppressor/silencer in a commission of a crime is a felony.
- 3. Possession of an unregistered suppressor/silencer is a felony.
- 4. Possession of a suppressor/silencer without a firearms identification card is a felony.

The Honorable Senator Jose "Pedo" Terlaje
Chairman, Committee on Public Safety,
Emergency Response, Military and Veterans
Affairs, Mayors Council and Public Transit
36th Guam Legislature
Subject: Written Testimony
Re: Bill 73-36 (COR)]
April 20, 2021
Page 5 of 5

Therefore, the Guam Police Department will support a law that is consistent with the Federal requirements and acknowledges GPD's capacity to meet our mission in compliance with existing laws and administrative rules. Thank you for allowing us the opportunity to submit our views, and we respectfully request for the recommendation mentioned herein be considered and included in Bill 73-36.

Respectfully submitted,

STEPHEN CAGNACION Chief of Police

Attachments SCI:ABQ/RVS/scr

Application to Make and Register a Firearm

ATF Control Number	. 100				
o: National Firearms Act Division, Bureau of Alcohol, Tobacco	o, Firearms a	and Explosives, P.O. Box	5015, Portland,	OR 97208-5015	
Submit in duplicate. Please do not staple documents. See instr					
as required by Sections 5821 (b), 5822, and 5841 of the Nationa ndersigned hereby submits application to make and register the	l Firearms A	ct, Title 26 U.S.C., Chap	ter 53, the	1. Type of Application	(check one)
. Application is made by: Corporation Individu		Trade name (If any)		a. Tax Paid. Subm	it your tax payment of \$200 ion. The tax may be paid
Other Legal Entity Trust Governmer Entity	nt			by credit or debi Please complete	t card, check, or money order. item 17. Upon approval of
b. Applicant's Full Legal Name and Mailing Address (Type or prin	nt below) (See	e instruction 2d)			we will affix and cancel the
		3d. County/Parish		required Nationa (See instruction	l Firearms Act Stamp. 2c and 3)
				b. Tax Exempt beca	use firearm is being made on
		3e. Telephone Number		behalf of the Uni	ted States, or any department, blishment, or agency thereof.
		3f. E-mail address		by or on behalf or	use firearm is being made f any State or possession of the
3c. If P.O. Box is shown above, street address must be given he	ere			thereof, or any of	any political subdivision ficial police organization of nt entity engaged in criminal
c. If r.O. Box is shown above, sheet address mast ee g.ven ne				investigations.	
4. Description of Firearm (complete items a through k) (See in	struction 2j)	f Firearm to be made c	. Caliber or	d. Model (As marked	on firearm)
a. Name and Address of Original Manufacturer and/or Importer of Firearm (If any)	(See de	efinition 2k)	Gauge	a. Model (Mb market	
Importation and the second sec	If a desi item 4j	tructive device, complete	(Specify one)	e. Barrel length:	f. Overall length:
				g. Serial Number	
j. Type of destructive device (check one box): Firearm	Explosives	(If the Explosives box is	checked, compl	ete item 5 and see instruct	tion 2m)
If an explosive type destructive device, identify the type of e	explosive(s):				
k. Is this firearm being reactivated? Yes No (See	definition 1	k)	VINCENCE CO.	and the same	
5. Applicant's Federal Firearms License (If any) or Explosives License	cense or Perm	it Number 6. Special	(Occupational)	Tax Status (if applicable)	(See definitions)
(Give complete 15-digit Number)		a. Employe	er Identification	Number	b. Class
		FR.			
Under Penalties of Perjury, I Declare that I have examined true, accurate and complete and the making and possession of	the nrearm	ion, including accompan described above would r	ying document ot constitute a	s, and to the best of my k violation of Title 18, U.S	nowledge and belief it is .C., Chapter 44,
Title 26, U.S.C., Chapter 53; or any provisions of State or local 7. Signature of Applicant	ai iaw.	me and Title of Authorize	PALLS OF THE RESIDENCE OF THE PARTY OF THE P	700 pt 1 1 2-1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	9. Date
The space below is for	the use of the	he Bureau of Alcohol, To	bacco, Firear	ms and Explosives	making and registration of
The space below is for By authority of the Director, Bureau of Alcohol, Tobacco, Fire the firearm described above is:	earms and E			VIII STATE OF THE	s maxing and registration of
Approved (With the following conditions, if any)		Disappro	oved (For the f	ollowing reasons)	
Authorized ATF Official					Date
Aumonzed ATF Omeiar					
Previous Editions Are Obsolete		ATF Copy			ATF Form 1 (5320.1) Revised September 2019

MAKER'S CERTIFICATION (not completed by a	GOVERNME	NT EN	TITY)				
10. Law Enforcement Notification (See instruction 21) Each applicant is to provide notification of the proposed making and possession of the firearm described law enforcement officer in the agency identified below:	ribed on this Fo	rm 1 by	provid	ing a copy	of the completed	l form to the	he
Agency or Department Name Name and Title	le of Official						
Address (Street address or P.O. Box, City, State and Zip Code) to which sent (mailed or delivered)						-	
Information for the Chief Law Enforcement Officer				12. Photog	graph		
This form provides notification of the applicant's intent to make and register a National Firearms Acon your part is required. However, should you have information that may disqualify this person fro firearm, please contact the NFA Division at (304) 616-4500 or NFA@atf.gov. A "Yes" answer to ite 15.d. or 15.e. could disqualify a person from acquiring or possessing a firearm. Also, ATF will not sift the making or possession of the firearm is in violation of State or local law.	Sides		Tape plication.				
Maker's Questions (complete only when the maker is an individual)				 Photo must have been taken wit last year. 			
A maker who is an individual must complete this Section.				0 0			11 Cana
11. Answer questions 11.a. through 11.h. Answer questions 13, 15, 16 and 17 if applicable. For the applicant shall provide details on a separate sheet. (See instruction 7c and definitions)	any "Yes" ans	wer		Photo must have been taken view without a hat or head obscures the hair or hairling		ead coveri	covering that
	W.C. Yanki	Yes	No				days.
a. Are you under indictment or information in any court for a felony, or any other crime, for which could imprison you for more than one year? (See definition 1n)	the judge			3. On bac last 4 o	k of photograph f SSN.	print rull	name,
b. Have you ever been convicted in any court for a felony, or any other crime, for which the judge could imprisoned you for more than one year, even if you received a shorter sentence including probation? (c)	have See definition I n)	<u>M.1.</u>	l.E				
c. Are you a fugitive from justice? (See definition 1t)	Astronomic Orl						
 d. Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, narcotic dru other controlled substance? Warning: The use or possession of marijuana remains unlawful Federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside. e. Have you ever been adjudicated as a mental defective OR have you ever been committed to a new point of the state where you reside. 	under						
institution? (See definition 10 and 1p) f. Have you been discharged from the Armed Forces under dishonorable conditions?							
 g. Are you subject to a court order restraining you from harassing, stalking, or threatening your chaintimate partner or child of such partner? (See definition 1q) 	ild or an						
h. Have you ever been convicted in any court of a misdemeanor crime of domestic violence? (See	definition 1r)			-			
13. Social Security Number: (See instruction 2f) Date of Bi							
14a. Ethnicity Hispanic or Latino 14b. Race American Indian or Alas Not Hispanic or Latino Asian			Native I	and the state of t	Other Pacific Is	White	
15a. Country of Citizenship: (Check/List more than one, if applicable. Nationals of the United States of America Other Country/Countries (specify):	nes may check	0.5.71.)	(Bee ac	,,,,,,,			
	ntry of Birth						
13b. State of Birth	79.355					Yes	No
James Heitad States citizenshin?							
d. Have you ever renounced your United States citizenship?e. Are you an alien illegally or unlawfully in the United States?							
f.1. Are you an alien who has been admitted to the United States under a nonimmigrant visa?						110	
f.2. If "yes", do you fall within any of the exceptions stated in the instructions? Attach the docume	entation to the a	pplicati	ion		□ N/.	A	
16. If you are an alien, record your U.SIssued Alien or Admission number (AR#, USCIS#, or 194	+#):	••	Santa.	iui —			_
17. Have you been issued a Unique Personal Identification Number (UPIN)? (See instruction 2f)	Yes ☐ No	If yes	piease i	this form	to ATE a compl	eted conv	of thi
CERTIFICATION: Under penalties imposed by 18 U.S.C. § 924 and 26 U.S.C. § 5861, I cert form will be directed to the chief law enforcement officer (CLEO) shown in item 10, that the attached documents in support thereof, are true and correct to the best of my knowledge and completed depending on the type of applicant.	ify that, upon	submis	sion of	this form (ntained in	this certification and 2.d(3) for	n, and any the items	y to be
De	nte			-			
Signature of Maker	17.5						

can be listed on	the form attach a separ	ate sheet listing the a	dditional Resi	associated with the apploonsible Person(s)). Ple 1 application for each F	licant trust or legal entity ase note that a completed Responsible Person.	(if there are more R I Form 5320.23, Nati	esponsible Persons than ional Firearms Act	
Full Name	7.71 (0			Full Name				
20. Method of Pay	rment (Check one) (See	instruction 2i) (if po	aying by credi	t/debit card, complete th	ne sections below)	MAC:		
Check (Enclosed) Cashier's Check or Visa Money Order (Enclosed)			Mastercard	American Express	Discover	☐ Diners Club		
Credit/Debit Card N	lumber (No dashes)	and the same and		Name as Printed on th	e Credit/Debit Card	Expiration	on Date (Month & year)	
Credit/Debit Card	Address:							
Billing Address:	City:		State		Zip	Code:		
	The Marie Av	, ,_1,_,1,				Tax Amount:		
I Authorize ATF to	Charge my Credit/Deb	it Card the Above Ar	mount.					
		of Cardholder		Committee on the		Date		
Your credit/debit c	ard will be charged the	above stated amount	upon receipt	of your application. The	te charge will be reflecte t card noted above.	d on your credit/deb	oit card statement.	

If you are the current registrant of the firearm described on this form, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 3b, the executor should contact the NFA Division, Bureau of ATF, 244 Needy Road, Martinsburg, WV 25405.

Interstate Movement: If the firearm identified in item 4 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320.20 can be used to request this permission.

Change of Description or Address: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm in item 4, or any change to the address of the registrant.

Restrictions on Possession: Any restriction (see approval block on face of form) on the possession of the firearm identified in item 4 continues with the further transfer of the firearm.

Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of the firearm.

Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form is in accordance with the Paperwork Reduction Act of 1995. The information you provide is used to establish that the applicant's making and possession of the firearm would be in conformance with Federal, State, and local law. The data is used as proof of lawful registration of a firearm to the manufacturer. The furnishing of this information is mandatory (26 U.S.C. § 5822).

The estimated average burden associated with this collection of information is 4.0 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Privacy Act Information

- 1. Authority. Solicitation of this information is made pursuant to the National Firearms Act (26 U.S.C. § § 5821 and 5822). Disclosure of this information by the applicant is mandatory for any person (other than a manufacturer qualified under the National Firearms Act) making a firearm as defined in the National Firearms Act.
- 2. Purpose. To verify payment of the tax imposed by 26 U.S.C. § 5821; to determine that the making would not be in violation of law; and to effect registration of the firearm.
- 3. Routine Uses. The information will be used by ATF to make the determinations set forth in paragraph 2. In addition, to effect registration of the firearm, information as to the identification of the firearm, date of registration, and the identification and address of person entitled to possess the firearm will be entered into the National Firearms Registration and Transfer Record. No information obtained from an application, registration, or records required to be submitted by an individual in order to comply with any provision of the National Firearms Act or regulation issued thereunder, shall, except in connection with prosecution or other action for furnishing false information, be used, directly or indirectly, as evidence against that person in any criminal proceeding with respect to a violation of law occurring prior to or concurrently with the filing of the application. The information from this application may only be disclosed to Federal authorities for purposes of prosecution for viola tion of the National Firearms Act.
- 4. Effects of not Supplying Information Requested. Failure to supply complete information will delay processing and may cause denial of the application.

Definitions/Instructions

- 1. Definitions.
 - National Firearms Act (NFA). Title 26, United States Code, Chapter 53.
 The implementing regulations are found in Title 27, Code of Federal Regulations, Part 479.
 - b. Gun Control Act (GCA). Title 18, United States Code, Chapter 44. The implementing regulations are found in Title 27, Code of Federal Regulations, Part 478.
 - c. Firearm. The term "firearm" means: (1) a shotgun having a barrel or barrels of less than 18 inches in length; (2) a weapon made from a shotgun if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 18 inches in length; (3) a rifle having a barrel or barrels of less than 16 inches in length; (4) a weapon made from a rifle if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 16 inches in length; (5) any other weapon, as defined in 26 U.S.C. § 5845(e); (6) a machinegun; (7) a muffler or a silencer for any firearm whether or not such firearm is included within this definition; and (8) a destructive device, as defined in 26 U.S.C. § 5845 (f).
 - d. Person. A partnership, company, association, trust, corporation, including each responsible person associated with such an entity; an estate; or an individual.

Section A

e. Responsible Person. In the case of an unlicensed entity, including any trust, partnership, association, company (including any Limited Liability Company (LLC)), or corporation, any individual who possesses, directly or indirectly, the power or authority to direct the management and policies of the trust or entity to receive, possess, ship, transport, deliver, transfer or otherwise dispose of a firearm for, or on behalf of, the trust or legal entity.

Section B

Trust: Those persons with the power or authority to direct the management and policies of the trust includes any person who has the capability to exercise such power and possesses, directly or indirectly, the power or authority under any trust instrument, or under State law, to receive, possess, ship, transport, deliver, transfer, or otherwise dispose of a firearm for, or on behalf of the trust. Examples of who may be considered a responsible person include settlors/grantors, trustees, partners, members, officers, directors, board members, or owners. An example of who may be excluded from this definition of responsible person is the beneficiary of a trust, if the beneficiary does not have the capability to exercise the enumerated powers or authorities.

- f. Employer Identification Number (EIN). Required of taxpayer filing special (occupational) tax returns under 27 CFR § 479.35.
- g. Special (Occupational) Tax. Required by the NFA to be paid by a Federal firearms licensee engaged in the business of manufacturing (Class 2), importing (Class 1), or dealing (Class 3) in NFA firearms.
- Federal Firearms License. A license issued under the provisions of the GCA to manufacture, import or deal in firearms.
- i. ATF Officer. An officer or employee of the Bureau of Alcohol,

- Tobacco, Firearms and Explosives (ATF) authorized to perform any function relating to the administration of the NFA.
- j. Make. The term "make", and the various derivatives of such word, shall include manufacturing (other than by one qualified to engage in such business under the NFA), putting together, altering, any combination of these, or otherwise producing a firearm.
- Reactivation. The restoration of a registered unserviceable NFA firearm to a functional condition. This action incurs the making tax liability.
- Unserviceable Firearm. One which is incapable of discharging a shot by means of an explosive and incapable of being readily restored to firing condition. An acceptable method of rendering most firearms unserviceable is to fusion weld the chamber closed and fusion weld the barrel solidly to the frame.
- m. Maker. A person applying to make an NFA firearm.
- n. Prohibited Person. Generally, 18 U.S.C. § 922 (g) prohibits the shipment, transportation, receipt, or possession in or affecting interstate commerce of a firearm by one who: has been convicted of a misdemeanor or crime of domestic violence; has been convicted of a felony, or any other crime, pun ishable by imprisonment for a term exceeding one year (this does not include State misdemeanors punishable by imprisonment of two years or less); is a fugitive from justice, is an unlawful user of, or addicted to, marijuana or any depressant, stimulant, or narcotic drug, or any other controlled substance; has been adjudicated as a mental defective or has been committed to a mental institution; has been discharged from the Armed Forces under dishonorable conditions, has renounced his or her U.S. citizenship; is an alien illegally in the United States or an alien admitted to the United States under a nonimmigrant visa; or is subject to certain restraining orders. Furthermore, Section 922 (n) prohibits the ship ment, transportation, or receipt in or affecting interstate commerce of a firearm by one who is under indictment or information for a felony in any Federal, State or local court, or any other crime, punishable by imprison ment for a term exceeding one year. An information is a formal accusation of a crime verified by a prosecutor.

EXCEPTION: A person who has been convicted of a felony, or any other crime, for which the judge could have imprisoned the person for more than one year, or who has been convicted of a misdemeanor crime of domestic violence, is not prohibited from purchasing, receiving, or possess ing a firearm if: (1) under the law of the jurisdiction where the conviction occurred, the person has been pardoned, the conviction has been expunged or set aside, or the person has had their civil rights (the right to vote, sit on a jury, and hold public office) taken away and later restored AND (2) the person is not prohibited by the law of the jurisdiction where the conviction occurred from receiving or possessing firearms. Persons subject to this exception should mark "no" in the applicable box.

o. Adjudicated As a Mental Defective. A determination by a court, board, commission, or other lawful authority that a person, as a result of marked subnormal intelligence, or mental illness, incompetency, condition, or disease: (1) is a danger to himself or to others; or (2) lacks the mental capacity to contract or manage his own affairs. This term shall include; (1) a finding of insanity by a

Instruction (Continued)

court in a criminal case; and (2) those persons found incompetent to stand trial or found not guilty by reason of lack of mental responsibility.

p. Committed to a Mental Institution. A formal commitment of a person to a mental institution by a court, board, commission, or other lawful authority. The term includes a commitment to a mental institution involuntarily. The term includes commitments for other reasons, such as for drug use. The term does not include a person in a mental institution for observation or a voluntary admission to a mental institution.

EXCEPTION NICS Improvement Amendments Act of 2007: A person who has been adjudicated as a mental defective or committed to a mental institution in a state proceeding is not prohibited by the adjudication or commitment if the person has been granted relief by the adjudicating/ committing state pursuant to a qualifying mental health relief from disabilities program. Also, a person who has been adjudicated as a mental defective or committed to a mental institution by a department or agency of the Federal Government is not prohibited by the adjudication or commitment if either: (a) the person's adjudication or commitment was set-aside or expunged by the adjudicating/committing agency; (b) the person has been fully released or discharged from all mandatory treatment, supervision, or monitoring by the agency; (c) the person was found by the agency to no longer suffer from the mental health condition that served as the basis of the initial adjudication/ commitment; or (d) the adjudication or commitment, respectively is based solely on a medical finding of disability, without an opportunity for a hearing by a court, board, commission, or other lawful authority, and the person has not been adjudicated as a mental defective consistent with section 922(g)(4) of title 18, United States Code; or (e) the person was granted relief from the adjudicating/committing agency pursuant to a qualified mental health relief from disabilities program. Persons who fall within one of the above exceptions should mark "no" in the applicable box. This exception to an adjudication or commitment by a Federal department or agency does not apply to any person who was adjudicated to be not guilty by reason of insanity, or based on a lack of mental responsibility, or found incompetent to stand trial, in any criminal case or under the Uniform Code of Military Justice.

- q. Restraining Order. Under 18 U.S.C. § 922, firearms may not be sold to or received by persons subject to a court order that; (A) was issued after a hearing which the person received actual notice of and had an opportunity to participate in; (B) restrains such person from harassing, stalking, or threatening an intimate partner or child of such intimate partner or person, or engaging in other conduct that would place an intimate partner in reasonable fear of bodily injury to the partner or child; and (C)(i) includes a finding that such person represents a credible threat to the physical safety of such intimate partner or child; or (ii) by its terms explicitly prohibits the use, attempted use, or threatened use of physical force against such intimate partner or child that would reasonably be expected to cause bodily injury. An "intimate partner" of a person is; the spouse or former spouse of the person, the parent of a child of the person, or an individual who cohabitates or has cohabitated with the person.
- Misdemeanor Crime of Domestic Violence. A Federal, State, local, tribal offense that is a misdemeanor under Federal, State, or tribal law and has, as an element, the use or attempted use of physical force, or the threatened use of a deadly weapon, committed by a current or former spouse, parent, or guardian of the victim, by a person with whom the victim shares a child in common, by a person cohabitating with, or has cohabited with the victim as a spouse, parent, or guardian, or by a person similarly situated to a spouse, parent, or guardian of the victim. The term includes all misdemeanors that have as an element the use or attempted use of physical force or the threatened use of a deadly weapon (e.g., assault and battery), if the offense is committed by one of the defined parties. (See Exception in the definition of "Prohibited Person"). A person who has been convicted of a misdemeanor crime of domestic violence also is not prohibited unless; (1) the person was represented by a lawyer or gave up the right to a lawyer; or (2) if the person was entitled to a jury, was tried by a jury, or gave up the right to a jury trial. Persons subject to this exception should mark "no" in the applicable box.
- s. Alien Admitted to the United States Under a Nonimmigrant Visa. An alien admitted to the United States under a nonimmigrant visa includes, among others, persons visiting the United States temporarily for business or pleasure, persons studying in the United States who maintain a residence abroad, and certain temporary foreign workers. These aliens must answer "yes" to question 11.d.1 and provide the additional documentation required under question 11.d.2. Permanent resident aliens and aliens legally

admitted to the United States pursuant to either the Visa Waiver Program or to regulations otherwise exempting them from visa requirements may answer "no" to this question and are not required to submit the additional documentation under 11.d.2. An alien admitted to the United States under a nonimmigrant visa is not prohibited from purchasing, receiving, or possessing a firearm if the alien; (1) is in possession of a hunting license or permit lawfully issued by the Federal Government, a State, or local government, or an Indian tribe federally recognized by the Bureau of Indian Affairs, which is valid and unexpired; (2) was admitted to the United States for lawful hunting or sporting purposes; (3) is an official representative of a foreign government who is accredited to the United States Government or the Government's mission to an international organization having its headquarters in the United States; (4) is an official representative of a foreign government who is en route to or from another country to which that alien is accredited; (5) is an official of a foreign government or a distinguished foreign visitor who has been so designated by the Department of State; (6) is a foreign law enforcement officer of a friendly foreign government entering the United States on official law enforcement business; (7) has received a waiver from the prohibition from the Attorney General of the United States.

- t. Fugitives from Justice. Any person who has fled from any State to avoid prosecution for a felony or a misdemeanor, or any person who leaves the State to avoid giving testimony in any criminal proceeding. The term also includes any person who knows that misdemeanor or felony charges are pending against such person and who leaves the State of prosecution.
- 2. Preparation of Application and Payment of Tax.
 - a. Authority. As provided by 26 U.S.C. § 5822, any person (other than a qualified manufacturer of firearms (see paragraph h)) seeking to make a firearm must submit, in duplicate, a separate application on this form for each firearm. The applicant maker must furnish all the information called for, except as noted by instructions within, on this application form. Please note that the form now contains a 3rd (CLEO) copy of the form for use in compliance with instruction 2g and item 10 of the form.
 - b. Registration by Qualified Manufacturer. A person who has a Federal firearms license to manufacture firearms (Type 07 or 10) and who has paid special (occupational) tax to manufacture NFA firearms is exempt from the making tax and filing of the ATF Form 1 application. Such qualified manu facturer must report and register each NFA firearm manufactured by filing ATF Form 2, Notice of Firearms Manufactured or Imported, as required by 27 CFR § 479.103.
 - c. Payment of/Exemption from Payment of Tax. As provided in 26 U.S.C. § 5821, there is a \$200.00 tax on each firearm made, except as provided in 26 U.S.C. §§ 5852 and 5853, when an NFA firearm may be made without payment of the tax when made by, or on behalf of the United States or any State or political subdivision thereof. Documentation that the firearm is being made for a government entity, such as a United States government contract or a State or local government agency purchase order, must accompany the application. The reactivation of a registered unserviceable firearm is subject to the making tax.
 - d. Completion of Form (Note: If the applicant is a Federal firearms licensee except for a Type 03 license, items 10, 11, 12, 13, 14, 15, 16, and 17 are not required to be completed.)
 - (1) The applicant shall provide the applicant's full legal name to include middle and mailing address in item 3b. If a post office box address is used, the physical address shall be entered in item 3c. If the applicant is a trust or legal entity, show only the complete name of the trust or legal entity and do not include any individual names (such as names of trustees or corporate officials). The address shall be the location within the particular state where the firearm will be maintained for a trust or legal entity. In the case of two or more locations for a legal entity, the address shown shall be the principal place of business within the particular state (or principal office, in the case of a corporation).
 - (2) If the applicant is an individual, the entire Form 1 shall be completed except for items 18 and 19. In addition, the applicant must include his or her fingerprints on FBI Form FD-258 and his or her photographs (see instruction 2g).
 ATF Form 1 (5320.1)

Revised September 2019

- (3) If the applicant is other than an individual, e.g., a trust or legal entity such as a corporation, the applicant shall not complete items 11, 12, 13, 14, 15, 16 and 17. All other items must be completed including the signing of the Certification statement. See 2.d.5. for Responsible Person Requirements.
- (4) Documentation of entity existence: (a) If the applicant is other than an individual, the applicant must attach documentation evidencing the existence and validity of the entity, which includes complete and unredacted copies of partnership agreements, articles of incorporation, corporate registration, declarations of trust with any trust schedules, attachments, exhibits, and enclosures. (b) If the applicant entity has had an application approved as a maker or transferee within the preceding 24 months of the date of filing this application, and there has been no change to the documentation evidencing the existence and validity of the entity previously provided, the entity may provide a certification that the information has not been changed since the prior approval and shall identify the application for which the documentation had been submitted by form number, serial number, and date approved.
- (5) If the applicant is other than an individual, each responsible person (see definition 1e) for the trust or legal entity must include a completed ATF Form 5320.23, National Firearms Act (NFA) Responsible Person Questionnaire, with the submitted Form 1.
- (6) Item 18 (Method of Payment) is obscured on the ATF copy 2 (Registrant) and the CLEO copy. In addition, item 4g (serial number) is obscured on the CLEO copy. These fields do not require completion on these copies.
- e. Photograph and Fingerprints. An individual maker (including any Federally licensed collector who is an individual but not any other type of Federal firearms licensee) must (1) attach to each copy except for the CLEO copy in item 12 of the ATF Form 1, a 2 inch x 2 inch photograph of his/her frontal view taken within one year prior to the date of the application and (2) submit two properly completed FBI Forms FD-258 (Fingerprint Card with blue lines) with application. The fingerprints must be clear for accurate classification and taken by someone properly equipped to take them.
- f. Social Security and UPIN. The Social Security number and UPIN are not required. However, this information assists with the efficient completion of the NICS background check. Please be aware that refusal to provide this information may result in a delay in the NICS background check process.
- g. Signatures. All signatures required on ATF Form 1 must be original in ink on both copies. Exceptions: In the case of eforms on where a variance has been granted a Digital/Electronic signature may be used.
 - (1) if the applicant is an individual, the applicant shall sign the form;
 - if the applicant is a trust or legal entity, a responsible person of the trust or legal entity shall sign the form;
 - (3) if the applicant is a Federal firearms licensee, a responsible person of the Federal firearms licensee shall sign the form; or
 - (4) if the applicant is a government entity, a person who has a authority to sign for the entity shall sign the form.
- h. Law Enforcement Notification. The applicant must provide a copy of the Form 1 to the chief law enforcement officer (CLEO) who has jurisdiction over the area of the applicant's address shown in item 3b of the Form 1. In addition, if the applicant is other than an individual, a copy of the Form 5320.23, National Firearms Act (NFA) Responsible Person Questionnaire, for each responsible person must be provided to their respective chief law enforcement officer. The chief law enforcement officer is considered to be the Chief of Police; the Sheriff; the Head of the State Police; or a State or local district attorney or prosecutor.
- Remittance. If the application is subject to the \$200 making tax, please complete item 20 of the ATF Form 1. Please note that you may pay the tax by credit/debit card, check, or money order. The check or money order is to be made payable to ATF. <u>Do not send cash</u>.

- j Photocopies, Computer Generated Versions or Download Version.
 The form may be copied or downloaded (for example, from the ATF website (www.atf.gov)). The form does not have to be printed front to back.
- k. Description of Firearm and Markings. (1) Item 4a. If you are modifying an existing firearm, enter the name and location of the original manufacturer. If you are creating the firearm, enter the maker's name, city and state.
 (2) Item 4b. The types of NFA firearms are listed in the definitions; (3) Item 4c. Specify one caliber or gauge. If there is another designation, indicate the designation in item 4h. (4) Item 4d. Show the model designation (if known). (5) Item 4e and 4f. Specify one barrel length and overall length in items 4e and 4f as applicable. Note: if the firearm has a folding or collapsible stock, the overall measurement is to be made with the stock extended. (6) Item 4g. Do not alter or modify the serial number of an existing firearm. Enter the existing serial number or, if a new firearm, one you create. (7) Markings: The maker is required to mark the firearm with the maker's name, city and state as shown in item 3b. All markings are to be in compliance with 27 CFR 478.92 and 479.102.
- State or Local Permit. If a state or local permit or license is required before the
 making of the firearm, a copy of the permit or license must be submitted with
 the application. If the applicant is a trust or legal entity, when the State of
 residence or any responsible person requires a State or local permit or license,
 a copy of the permit or license must be submitted with Form 5320.23, National
 Firearms Act (NFA) Responsible Person Questionnaire.
- m. Compliance with explosives laws (18 U.S.C. Chapter 40) and regulations (27 CFR Part 555). If the application is for a destructive device utilizing explosive materials, check the Explosives box in item 4.j and provide the type(s) of explosives to be used. If the applicant is other than a government agency, item 5 must be completed with an explosives license or permit number issued to the applicant. If the applicant is other than an individual, such as a legal entity, and does not have an explosives license or permit, then a responsible person for the applicant must have a license or permit and enter the information in item 5. To comply with the explosives laws and regulations, any member of a legal entity must also be identified as a responsible person or employee possessor on the explosives licenser or permit. A trust cannot be issued an explosives license or permit.
- n. Submission. The maker shall submit 2 complete forms (ATF copy and registrant copy) with original signatures to the NFA Division at the address on the face of the form. The applicant shall direct a 3rd complete copy of the form to the chief local law enforcement officer (CLEO) as provided in instruction 2g and item 10.
- 3. Approval of Application. Upon approval of an application, the NFA Division will affix the NFA tax stamp (if any) to the application, cancel it, and return the approved copy to the maker. The approval of the application effectuates registration of the firearm to the maker; however, the firearm must not be made until the applicant has been approved.
- 4. Withdrawal of Application. The maker may withdraw the application prior to approval by the submission of a signed, written request to the Chief, NFA Division either by mail to 244 Needy Road, Martinsburg, WV 25405 or by emailing a signed copy to nfafax@atf.gov. The NFA Division will arrange for a refund of any tax paid.
- 5. Cancellation of Approved Application. An approved application may be can celled only if the firearm had not been made or modified. The maker must return the approved application with original tax stamp affixed with a written request for cancel lation, citing the need and that the making of the firearm did not take place. The NFA Division will arrange for a refund of any tax paid.
- Disapproval of Application. If the application is disapproved, the NFA
 Division will note the reason for disapproval on the application and return one
 copy to the maker. The NFA Division will arrange for a refund of any tax paid.
- Reason for Disapproval. 26 U.S.C. § 5822 provides that applications shall be denied if the making or possession of the firearm would place the maker in violation of law.
 - a. Violation of Law. Applications shall be denied if the making or possession of the firearm would place the person making the firearm in violation of law.

- b. Machineguns. 18 U.S.C. § 922 (o) provides that a machinegun may be made only for government use or export. An application will be denied unless the making meets these criteria.
- c. Persons Prohibited from Making a Firearm. The application will be disapproved if the maker is a person prohibited from possessing a firearm. For information regarding persons prohibited from possessing a firearm, refer to definitions 1n through 1t.
- 8. Inquiries. Information relating to the NFA and other firearms laws is available at the ATF Internet website at www.atf.gov. Any inquiry relating to the status of an application to transfer an NFA firearm or about procedures in general should be directed to the NFA Division at (304) 616-4500 or emailed to nfa@atf.gov. Please be aware that any dissemination by ATF of information relating to the application to register an NFA firearm must conform with the restrictions in 26 U.S.C. § 6103.
- 9. Penalties. Any person who violates or fails to comply with any of the requirements of the NFA shall, upon conviction, be fined not more than \$10,000 or be imprisoned for not more than 10 years, or both. Any firearm involved in a violation of the NFA shall be subject to seizure and forfeiture. It is unlawful for any person to make or cause the making of a false entry on any application or record required by the NFA knowing such entry to be false.
- Compliance with the Gun Control Act. Person must also comply with all relevant portions of the GCA.

U.S. Department of Justice

Bureau of Alcohol, Tobacco, Firearms and Explosives

Application to Make and Register a Firearm

ATF Control Number						
To: National Firearms Act Division, Bureau of Alcohol, Tobacc	o Firearms and Explo	sives PO Box	5015 Portland	OR 97208-5015		
(Submit in duplicate. Please do not staple documents. See inst.		517C5, 1.O. DOX	5015, 1 Ornand	, OK 37200 3013		
As required by Sections 5821 (b), 5822, and 5841 of the Nation undersigned hereby submits application to make and register the	al Firearms Act, Title 2		oter 53, the	1. Type of Application	on (Check one)	
2. Application is made by: Corporation Individ-	THE RESERVE AND ADDRESS OF THE PARTY OF THE PARTY.				mit your tax payment of \$200	
Other Legal Entity Trust Governme	ent			by credit or de	cation. The tax may be paid bit card, check, or money order te item 17. Upon approval of	
Bb. Applicant's Full Legal Name and Mailing Address (Type or pro-	int below) (See instruction	on 2d)		the application	, we will affix and cancel the	
	3d. Cou	nty/Parish		required Natio (See instructio	nal Firearms Act Stamp.	
				(See Instructio	n zc unu sj	
	3e. Tele	phone Number		behalf of the U	cause firearm is being made on inited States, or any department, tablishment, or agency thereof.	
	3f. E-m	ail address		by or on behalf	cause firearm is being made of any State or possession of the or any political subdivision	
3c. If P.O. Box is shown above, street address must be given h	ere			thereof, or any	official police organization of nent entity engaged in criminal	
4. Description of Firearm (complete items a through k) (See it	nstruction 2j)					
a. Name and Address of Original Manufacturer and/or Importer of Firearm (If any)	b. Type of Firearm (See definition 2))	Gauge	d. Model (As marke		
	If a destructive dev item 4j	rice, complete	(Specify one)	e. Barrel length:	f. Overall length:	
				g. Serial Number		
	LUADOR TOTAL	1.00				
j. Type of destructive device (check one box): Firearm If an explosive type destructive device, identify the type of		plosives box is	checked, compl	ete item 5 and see instru	ction 2m)	
k. Is this firearm being reactivated? Yes No (See 5. Applicant's Federal Firearms License (If any) or Explosives Li	e definition 1k) cense or Permit Number	6. Special	Occupational)	Tax Status (if applicable) (See definitions)	
(Give complete 15-digit Number)		a. Employe	er Identification	Number	b. Class	
		r.	uisa dogument	e and to the hest of my	knowledge and belief it is	
Under Penalties of Perjury, I Declare that I have examined true, accurate and complete and the making and possession of Title 26, U.S.C., Chapter 53; or any provisions of State or loc	al law.	above would i	ioi constitute a	violation of Title 18, U.		
7. Signature of Applicant	8. Name and Ti	tle of Authorize	ed Official		9. Date	
The space below is for	the use of the Dureau	of Alcohol To	hacco. Firear	ms and Explosives		
By authority of the Director, Bureau of Alcohol, Tobacco, Fir	earms and Explosives,	this application	n has been exa	mined and the applicant	's making and registration of	
the firearm described above is: Approved (With the following conditions, if any)		Disapproved (For the fo		ollowing reasons)		
7-2x = x () , = x (8 x A) = x =					Date	
Authorized ATF Official						
		2			ATF Form 1 (5320.1)	

MAKER'S CERTIFICATION (not completed by a GOVERNME.	NT EN	TITY)					
10. Law Enforcement Notification (See instruction 21) Each applicant is to provide notification of the proposed making and possession of the firearm described on this Fochief law enforcement officer in the agency identified below:	rm 1 by	/ provid	ing a copy of the completed for	rm to th	ne		
Agency or Department Name Name and Title of Official							
Address (Street address or P.O. Box, City, State and Zip Code) to which sent (mailed or delivered)			12. Photograph				
Information for the Chief Law Enforcement Officer This form provides notification of the applicant's intent to make and register a National Firearms Act (NFA) firearm on your part is required. However, should you have information that may disqualify this person from making or possible firearm, please contact the NFA Division at (304) 616-4500 or NFA@atf.gov. A "Yes" answer to items 11.a. through 15.d. or 15.e. could disqualify a person from acquiring or possessing a firearm. Also, ATF will not approve an applied the making or possession of the firearm is in violation of State or local law.	ossessir gh 11.h	action ng a . or	Affix a 2" x 2" Photogra No Stapling. Please Sides of Photo to the App	Tape olicatio	n.		
Maker's Questions (complete only when the maker is an individual)			last year.	ii withii	ii tiie		
A maker who is an individual must complete this Section.			2 Photo must have been take	n in ful	1 face		
11. Answer questions 11.a. through 11.h. Answer questions 13, 15, 16 and 17 if applicable. For any "Yes" and the applicant shall provide details on a separate sheet. (See instruction 7c and definitions)		T	Photo must have been taken in full factivities without a hat or head covering the obscures the hair or hairline.				
	Yes	No	3. On back of photograph prin	nt full r	name.		
a. Are you under indictment or information in any court for a felony, or any other crime, for which the judge could imprison you for more than one year? (See definition In)			last 4 of SSN.				
b. Have you ever been convicted in any court for a felony, or any other crime, for which the judge could have imprisoned you for more than one year, even if you received a shorter sentence including probation? (See definition In)							
c. Are you a fugitive from justice? (See definition 1t)							
d. Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, narcotic drug, or any other controlled substance? Warning: The use or possession of marijuana remains unlawful under Federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside.							
e. Have you ever been adjudicated as a mental defective OR have you ever been committed to a mental institution? (See definition 10 and 1p)							
f. Have you been discharged from the Armed Forces under dishonorable conditions?							
g. Are you subject to a court order restraining you from harassing, stalking, or threatening your child or an intimate partner or child of such partner? (See definition 1q)		11-10-1					
h. Have you ever been convicted in any court of a misdemeanor crime of domestic violence? (See definition 1r) Date of Birth:				_			
Date of Birth.							
14a. Ethnicity Hispanic or Latino 14b. Race American Indian or Alaska Native Not Hispanic or Latino Asian		Native I	Hawaiian or Other Pacific Islan	White der			
15a. Country of Citizenship: (Check/List more than one, if applicable. Nationals of the United States may check	U.S.A.)	(See de	finition Is)				
United States of America Other Country/Countries (specify):							
15b. State of Birth 15c.Country of Birth					=		
				Yes	No		
d. Have you ever renounced your United States citizenship?							
e. Are you an alien illegally or unlawfully in the United States?							
f.1. Are you an alien who has been admitted to the United States under a nonimmigrant visa?			L DY/A				
f.2. If "yes", do you fall within any of the exceptions stated in the instructions? Attach the documentation to the a	pplicat	ion	□ N/A				
16. If you are an alien, record your U.SIssued Alien or Admission number (AR#, USCIS#, or 194#):	**	. nováta					
17. Have you been issued a Unique Personal Identification Number (UPIN)? (See instruction 2f) Yes No	If yes	please I	this form to ATE a completer	l copy	of this		
CERTIFICATION: Under penalties imposed by 18 U.S.C. § 924 and 26 U.S.C. § 5861, I certify that, upon form will be directed to the chief law enforcement officer (CLEO) shown in item 10, that the statements, as a attached documents in support thereof, are true and correct to the best of my knowledge and belief. NOTE completed depending on the type of applicant.	submis applica a: See i	sion of ble, con instruct	this form to ATP, a completed in this certification, ar ions 2.d(2) and 2.d(3) for the	id any items t	o be		
Signature of Maker Date				W V 022			

can be listed on the form, attach a separate sheet listing the additional Responsible Person Questionnaire, must be submitted with the Form	associated with the applicant trust or legal entity (if there are more Responsible Persons that onsible Person(s)). Please note that a completed Form 5320.23, National Firearms Act 1 application for each Responsible Person.
Full Name	Full Name
	•

Important Information for Currently Registered Firearms

If you are the current registrant of the firearm described on this form, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 3b, the executor should contact the NFA Division, Bureau of ATF, 244 Needy Road, Martinsburg, WV 25405.

Interstate Movement: If the firearm identified in item 4 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320.20 can be used to request this permission.

Change of Description or Address: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm in item 4, or any change to the address of the registrant.

Restrictions on Possession: Any restriction (see approval block on face of form) on the possession of the firearm identified in item 4 continues with the further transfer of the firearm.

Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of the firearm.

Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form is in accordance with the Paperwork Reduction Act of 1995. The information you provide is used to establish that the applicant's making and possession of the firearm would be in conformance with Federal, State, and local law. The data is used as proof of lawful registration of a firearm to the manufacturer. The furnishing of this information is mandatory (26 U.S.C. § 5822).

The estimated average burden associated with this collection of information is 4.0 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

U.S. Department of Justice

Bureau of Alcohol, Tobacco, Firearms and Explosives

Application to Make and Register a Firearm

ATF Control Number	an with the St	15 1 : BOB	5015 D // 1	OD 07000 5	015		
To: National Firearms Act Division, Bureau of Alcohol, Tobac			x 5015, Portland	, OR 97208-5	015		
(Submit in duplicate. Please do not staple documents. See ins				l	A Marathan Z	7 1	
As required by Sections 5821 (b), 5822, and 5841 of the Nation undersigned hereby submits application to make and register the	nal Firearms Ac	t, 11tle 26 U.S.C., Cha	pter 53, the	1. Type of	Application (c	heck one)	
2. Application is made by: Corporation Individual	The state of the s	ade name (If any)		a. Tax	Paid. Submit	your tax payment of \$200	
2. Application is made by. Corporation Individ	dual Ju. 11	ado namo (a) any)				n. The tax may be paid	
Other Legal Entity Trust Governm	ient					ard, check, or money order.	
Entity	wint buland (San	instruction 2d)				em 17. Upon approval of	
3b. Applicant's Full Legal Name and Mailing Address (Type or page 1)	The state of the s	and the second second				will affix and cancel the Firearms Act Stamp.	
		3d. County/Parish			instruction 2c		
	_ 10	2 #1 1 - 1				e firearm is being made on	
	7.13	3e. Telephone Number	r	beha	If of the United	d States, or any department,	
				inde	pendent establi	shment, or agency thereof.	
				Tax	Exempt becaus	e firearm is being made	
	- 1	3f. E-mail address		by o	on behalf of a	ny State or possession of the	
						y political subdivision	
						ial police organization of	
3c. If P.O. Box is shown above, street address must be given be	here					entity engaged in criminal	
				inve	stigations.	mile a resolution of the resolution of the	
4. Description of Firearm (complete items a through k) (See	instruction 2j)			11 12 12			
a. Name and Address of Original Manufacturer and/or		Firearm to be made nition 2k)	 Caliber or Gauge 	d. Model	firearm)		
Importer of Firearm (If any)		uctive device, complete	(Specify	D		If Owerell length:	
	item 4j	ienve nevice, compicie	one)	e. Barrel le	ngtn:	f. Overall length:	
	The state of			7			
		10 1 1 2 2 2 1					
	Augusta establishment					ditional sheet if necessary)	
j. Type of destructive device (check one box): Firearm	Explosives (f the Explosives box is	checked, compl	ete item 5 and	see instruction	n 2m)	
If an explosive type destructive device, identify the type of		, me Explosition con a					
k. Is this firearm being reactivated? Yes No (Se	ee definition 1k)						
5. Applicant's Federal Firearms License (If any) or Explosives L		Number 6. Special	(Occupational)	Tax Status (if	applicable) (Si	ee definitions)	
5. Applicant's Federal Filearnis License (1) unly) of Explosives E	Accesse of a cities	rumor o. species					
(G) I to 15 Ji-is Neuroban)		a. Employ	er Identification	Number	b.	Class	
(Give complete 15-digit Number)		u. Dimpro,	44 (2000)		7.	7 7777	
					11.74		
Under Penalties of Perjury, I Declare that I have examined	d this application	n, including accompa-	nying document	s, and to the b	est of my kno	wledge and belief it is	
true, accurate and complete and the making and possession of	of the firearm de	escribed above would	not constitute a	violation of T	tle 18, U.S.C.	., Chapter 44,	
Title 26, U.S.C., Chapter 53; or any provisions of State or lo	cal law.					9. Date	
7. Signature of Applicant	8. Nam	e and Title of Authoriz	ed Official			J. Date	

MAKER'S CERTIFICATION (not completed by a GOVERNM	ENT EN	TITY)				
10. Law Enforcement Notification (See instruction 21) Each applicant is to provide notification of the proposed making and possession of the firearm described on this I chief law enforcement officer in the agency identified below:	orm 1 by	y providin	g a copy of the co	npleted fo	rm to th	ne
Agency or Department Name Name and Title of Official						-
Address (Street address or P.O. Box, City, State and Zip Code) to which sent (mailed or delivered)	-					
Information for the Chief Law Enforcement Officer		-				
This form provides notification of the applicant's intent to make and register a National Firearms Act (NFA) firear on your part is required. However, should you have information that may disqualify this person from making or firearm, please contact the NFA Division at (304) 616-4500 or NFA@atf.gov. A "Yes" answer to items 11.a. throw 15.d. or 15.e. could disqualify a person from acquiring or possessing a firearm. Also, ATF will not approve a an approve if the making or possession of the firearm is in violation of State or local law.	possessir ugh 11.h	ng a . or				
Maker's Questions (complete only when the maker is an individual)						
A maker who is an individual must complete this Section.		- ==				
 Answer questions 11.a. through 11.h. Answer questions 13, 15, 16 and 17, if applicable. For any "Yes" ε applicant shall provide details on a separate sheet. (See instruction 7c and definitions) 		1 11				
C. C.I	Yes	No				
a. Are you under indictment or information in any court for a felony, or any other crime, for which the judge could imprison you for more than one year? (See definition In)						
b. Have you ever been convicted in any court for a felony, or any other crime, for which the judge could have imprisoned you for more than one year, even if you received a shorter sentence including probation? (See definition 1))					
c. Are you a fugitive from justice? (See definition 1t)		-				
d. Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, narcotic drug, or any other controlled substance? Warning: The use or possession of marijuana remains unlawful under Federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside.	Ш					
e. Have you ever been adjudicated as a mental defective OR have you ever been committed to a mental institution? (See definition 10 and 1p)						
f. Have you been discharged from the Armed Forces under dishonorable conditions?						
g. Are you subject to a court order restraining you from harassing, stalking, or threatening your child or an intimate partner or child of such partner? (See definition 1q)		101				
h. Have you ever been convicted in any court of a misdemeanor crime of domestic violence? (See definition 1r,						
Date of Birth:						
14a. Ethnicity			frican American waiian or Other Pa	Cific Islan	White der	
15a. Country of Citizenship: (Check/List more than one, if applicable. Nationals of the United States may chec	k U.S.A.)	(See defi	nition 1s)			
United States of America Other Country/Countries (specify):						
15b. State of Birth 15c.Country of Birth					. 44	
					Yes	No
d. Have you ever renounced your United States citizenship?				327		
e. Are you an alien illegally or unlawfully in the United States?						
f.1. Are you an alien who has been admitted to the United States under a nonimmigrant visa?	linati	ion		N/A		
f.2. If "yes", do you fall within any of the exceptions stated in the instructions? Attach the documentation to the	аррисас	ion				
16. If you are an alien, record your U.SIssued Alien or Admission number (AR#, USCIS#, or 194#):	, TC	-loogo lio				
17. Have you been issued a Unique Personal Identification Number (UPIN)? (See instruction 2f) Yes N	cubmis	sion of th	is form to ATF, a	complete	d copy	of this
CERTIFICATION: Under penalties imposed by 18 U.S.C. § 924 and 26 U.S.C. § 5861, I certify that, upoform will be directed to the chief law enforcement officer (CLEO) shown in item 10, that the statements, a attached documents in support thereof, are true and correct to the best of my knowledge and belief. NOT completed depending on the type of applicant.	s applica E: See	able, cont instruction	ained in this certions 2.d(2) and 2.d	fication, a	ind any	o be
Signature of Maker Date						

18. Number of Responsible Persons (see definitions) associated with the applicant	t trust or legal entity
19. Provide the full name (printed or typed) below for each Responsible Person as can be listed on the form, attach a separate sheet listing the additional Respon (NFA) Responsible Person Questionnaire, must be submitted with the Form 1	ssociated with the applicant trust or legal entity (if there are more Responsible Persons than nsible Person(s)). Please note that a completed Form 5320.23, National Firearms Act application for each Responsible Person.
Full Name	Full Name

Important Information for Currently Registered Firearms

If you are the current registrant of the firearm described on this form, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 3b, the executor should contact the NFA Division, Bureau of ATF, 244 Needy Road, Martinsburg, WV 25405.

Interstate Movement: If the firearm identified in item 4 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320.20 can be used to request this permission.

Change of Description or Address: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm in item 4, or any change to the address of the registrant.

Restrictions on Possession: Any restriction (see approval block on face of form) on the possession of the firearm identified in item 4 continues with the further transfer of the firearm.

Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of the firearm.

Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form is in accordance with the Paperwork Reduction Act of 1995. The information you provide is used to establish that the applicant's making and possession of the firearm would be in conformance with Federal, State, and local law. The data is used as proof of lawful registration of a firearm to the manufacturer. The furnishing of this information is mandatory (26 U.S.C. § 5822).

The estimated average burden associated with this collection of information is 4.0 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Notice of Firearms Manufactured or Imported

of firearms as required by § 5841 of th	ational Firearms Act Division, 244 Needy Road, Martinsburg, WV 2 ne National Firearms Act, Title 26, U.S.C. Chapter 53.	25405. The undersi			100000000000000000000000000000000000000		Charles A. A. a. Const.	
Type of Notice A. Firearms on This Notice Arc: (Character)	eck one) Manufactured Reactivated Imported (con	nplete b & c)	b. Import Permi	t Number	c.	Permit Expir	ration Date	
2. Name and Address (Include trade na	me, if any)	3. Federal Firearn	ns License Numbe	r	4. Employer	Identification	on Number and Class	
		5. Federal Explosi	ives License/Perm	it Number	6. Telephone Number (Include area code) 8. Email Address (optional) 9. Number of Firearms Covered By This Notice			
		7. Type of Destruc	ctive Device:					
11. Marking variance information (see	nership Corporation instruction 3.d.). Enter the name, trade name (if any), city and State	If the type is Ex	plosives, complete of explosives bel					
of the manufacturer whose marking	s are being applied.				10. Date of I Release	, Reactivation or ns		
Marking Variance number: 12. Description of Firearm(s) (See instr	nuction 3)							
Type of	Additional			Leng	th (In.)	Serial Number		
Firearm (See definition 1c) a	Description (See Instruction 3e (3)) b	Caliber Gauge or Size	Model d	Barrel e	Overall f		erial Number Instruction 3e)	
	DECLARE that I have examined this notice of firearms manufacturing and belief, it is true, correct and complete.	red, reactivated or		\$1,200 min 10 min 10	ictions (If any)		NFA Control Number	
보고 그리고 아니라 하다. 그리고 아이들 아이들이 아이들이 아니는 아이들이 살아 아름답니다. 나는 사람들이 아이들이 아니는 아이들이 아니는	cter (or authorized official) Name and Title	14. Filing Date	By a Government Research Purpos Sample. (Note:	t Agency, (2) es, or (3) As) For Scientific a Model or Sale	or s		
15. Acknowledge of Receipt by ATF		16. Receipt Date	these restrictions Machinegun Ma May 19, 1986 (nufactured		ter 🔲		

OMB No. 1140-0012 (05/31/2020)

U.S. Department of Justice Bureau of Alcohol, Tobacco, Firearms and Explosives

Notice of Firearms Manufactured or Imported

Prepare in Duplicate. Submit to: The Nor firearms as required by § 5841 of the	ational Firearms Act Division, 244 Needy Road, Martinsburg, WV 2 he National Firearms Act, Title 26, U.S.C. Chapter 53.	5405. The undersi	gned hereby ser	es notice of	the manufac	cture, reacti	ation, or importation	
Type of Notice a. Firearms on This Notice Arc: (Ch	Manufactured Reactivated Imported (con	nplete b & c)	b. Import Permi	t Number	c. Permit Expiration Date			
2. Name and Address (Include trade na	me, if any)	3. Federal Firearm	s License Numbe	r	4. Employer	r Identificatio	on Number and Class	
		5. Federal Explosi	ves License/Perm	it Number	6. Telephone Number (Include area code)			
		7. Type of Destruc	ctive Device:		Email Address (optional) Number of Firearms Covered By This Notice			
11. Marking variance information (see	nership Corporation Instruction 3.d.). Enter the name, trade name (if any), city and State	If the type is Ex	plosives, complete of explosives bel					
of the manufacturer whose marking	s are being applied.	Account to the said	200		Date of Manufacture, Reactivation of Release From Customs			
Marking Variance number: 12. Description of Firearm(s) (See instr	uction 3) Additional			Leng	th (In.)			
Firearm (See definition 1c)	Description (See Instruction 3e (3)) b	Caliber Gauge or Size	Model d	Barrel e	Overall	, , , , , , , , , , , , , , , , , , ,	erial Number Instruction 3e)	
a								
UNDER PENALTIES OF PERJURY, I	DECLARE that I have examined this notice of firearms manufacturing and belief, it is true, correct and complete.	ed, reactivated or	2.5	A CONTRACTOR OF THE PARTY.	ictions (If any)		NFA Control Number	
	rter (or authorized official) Name and Title	14. Filing Date	Imported Under 2 By a Governmen Research Purpos Sample. (Note:	t Agency, (2) es, or (3) As	For Scientific a Model or Sal	or es		
15. Acknowledge of Receipt by ATF		16. Receipt Date	these restrictions Machinegun Ma May 19, 1986 (1	nufactured o		fter 🗆	14-	

Definitions/Instructions

- National Firearms Act (NFA). Title 26, United States Code, Chapter 53. The implementing regulations are found in Title 27, Code of Federal Regulations, Part 479.
- Gun Control Act (GCA). Title 18, United States Code, Chapter 44. The implementing regulations are found in Title 27, Code of Federal Regulations, Part 478.
- c. Firearm. The term "firearm" means: (1) a shotgun having a barrel or barrels of less than 18 inches in length; (2) a weapon made from a shotgun if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 18 inches in length; (3) a rifel having a barrel or barrels of less than 16 inches in length; (4) a weapon made from a rifle if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 16 inches in length; (5) any other weapon as defined in 18 U.S.C. § 5845(e); (6) a machinegun; (7) a mulfier or silencer for any firearm whether or not such firearm is included within this definition; and (8) a destructive device.
- d. Person. A partnership, company, association, trust, estate, or corporation, including each responsible person associated with such an entity, or an individual.
- Employer Identification Number (EIN). Required of taxpayer filing special (occupational) tax returns under 27 CFR § 479.35.
- f. Special (Occupational) Tax. Required by the NFA to be paid by a Federal firearms licensee engaged in the business of manufacturing, importing, or dealing in NFA firearms.
- g. Federal Firearms License. A license issued under the provisions of the GCA to manufacture, import or deal in
- ATF Officer. An officer or employee of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) authorized to perform any function relating to the administration of the NFA.
- Manufacturer. A person who has a Federal firearms license to manufacture firearms (Type 07 or 10) and who
 has paid special (occupational) tax (Class 2) to manufacture NFA firearms.
- Importer. A person who has a Federal firearms license to import firearms (Type 08 or 11) and who has paid special (occupational) tax (Class 1) to import NFA firearms.
- k. Manufacture. The creation of an NFA firearm, whether by the modification of an existing firearm or from
- 1. Reactivation. The restoration of a registered unserviceable firearm to a functional condition.
- m. Importation. The bringing of a firearm into the United States.
- Import Permit. ATF Form 6 authorized by ATF for the importation of firearms under 27 CFR Part 478.
- o. Unserviceable Firearm. One which is incapable of discharging a shot by means of an explosive and incapable of being readily restored to firing condition. An acceptable method of rendering most firearms unserviceable is to fusion weld the chamber closed and fusion weld the barrel solidly to the frame.

2. Machineguns

1. Definitions

a. 18 U.S.C. § 922(o) provides that machineguns may be made only for government use or export.

3. Preparation of Notice

- a. Authority. As provided by 26 U.S.C. § 5841, each manufacturer or importer shall file a notice to effect the registration of all firearms manufactured or imported. The notice shall be prepared in duplicate. See instruction 4 for specific procedures. The original notice shall be filed with the NFA Branch and the copy retained for the manufacturer or importer's records.
- b. Signatures. All signatures required on ATF Form 2 must be original in ink.

- c. Photocopies or Computer Generated Versions. Form 2 may be photocopied or a computer-generated version fin the same format and containing all required information) may be used. Form 2 is available as a fillable form which may then be downloaded from the ATF Internet website at www.atf.gov.
- d. Marking Variance. Is the firearm or are the firearms described on this Form 2 being marked under a marking variance where you will be applying only another manufacturers markings? If so, in item 11, enter the name, trade name (if any), city and state of the manufacturer whose markings are being applied to the firearm(s) and the marking variance number. Attach a copy of the approved marking variance to the Form 2.

c. Markings

- (1) Each manufacturer or importer is required to legibly identify each firearm manufactured or imported (see 27 CFR §§ 478.92 and 479.102) with a serial number, not duplicating any serial number placed by the manufacturer or importer on any other firearm
- (2) The manufacturer or importer must also identify the model (if any), the caliber or gauge, the name of the manufacturer (or the foreign manufacturer if not domestically manufactured), the city and State of the domestic manufacturer or the name of the foreign country for an imported firearm, and the city and State of the importer on the receiver, frame, or barrel.
- (3) If an existing firearm is being modified into an NFA firearm, the NFA marking requirements also apply. Much of the existing markings can be adopted. The existing serial number is to be adopted without change or alteration. The model and caliber markings may also be adopted unless the NFA manufacturer has changed the existing markings to reflect another model and/or caliber. Enter the original manufacturer information (name, trade name (f/any), city, State or country (f/offoreign manufacture), in item 12.b of the Form2.
- (4) Note that the NFA manufacturer or importer must also mark the firearm even when there are existing markings.
- f. Additional Description Field. In addition to the entry of the information relating to the original manufacturer (see instruction 1.e(3)), information further identifying the firearm, such as any additional markings, or the classification of the firearm shall be entered.
- g. Description of Firearm(s) (item 12). If there are insufficient lines in item 12 to enter all the firearms to be included on the notice, a supplemental sheet may be used and attached to the Form 2 being submitted. The supplemental sheet(s) shall be referenced to the Form 2 being submitted. A note shall be made in the bottom line of item 12 to reference that there is supplemental sheet or sheets attached. The format of the firearm information on the supplemental sheet shall be the same as in item 12.
- h. Preparation. All requested information must be entered in blue or black ink and must be legible. Illegible entries will be returned for correction. The return of the notice will delay the processing.

4. Filing

- The manufacturer shall file a separate notice for firearms manufactured or firearms reactivated during a single day by the close of the next business day.
- b. The importer shall file a separate notice for each permit on which firearms are imported during a single day no later than 15 days from the date the firearm was released from Customs custody.

c Cub-stades

- By Mail. The notice shall be filed with the National Firearms Act Division, Bureau of ATF, 244 Needy Road, Martinsburg, WV 25405
- b. Facsimile Transmission. Form 2 may also be submitted for approval via facsimile transmission (304) 616-4501 provided that the licensee has filed and affidavit with the NFA Division in accordance with ATF Industry Circular 89-6.
- c. Submission electronically. Importers and manufacturers who have registered to use ATF's eForms system may file Form 2 electronically via the eForms system.
- Receipt by NFA Division. Receipt of the notice by the NFA Division will effectuate the registration of the firearms.

Definitions/Instructions

- 7. Status Inquiries and Questions. The NFA Division telephone number is (304) 616-4500. Any inquiry relating to the status of a notice to register an NFA firearm or about procedures in general should be directed to the NFA. Please be aware that the information relating to the registration of firearms is defined as "return" or "return information" by 26 U.S.C. § 6103 and disclosure is generally prohibited to anyone other than the registrant. Information relating to the NFA and other firearms laws is also available at the ATF Internet website at www.atf.gov.
- 8. Penalties. Any person who violates or fails to comply with any of the requirements of the NFA shall, upon conviction, be fined not more than \$10,000 or be imprisoned for not more than 10 years, or both. Any firearm involved in a violation of the NFA shall be subject to seizure and forfeiture. It is unlawful for any person to make or cause the making of a false entry on any application or record required by the NFA knowing such entry to be false.
- Compliance With The Gun Control Act. All provisions of the GCA must be complied with, including the
 recordkeeping requirements for licensees.

Important Information for Currently Registered Firearms

If this registration document evidences the current registration of the firearm(s) described on it, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 2, the executor should contact the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405.

Change of Address: The registrant, if no longer a Federal firearms licensee, shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the address in item 2

Interstate Movement: If the registrant is no longer a Federal firearms licensee and any firearm identified in item 12 is a machinegum, short-barreled rifle, short-barreled shotgum, or destructive device, the registrant is required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320.20 can be used to request this permission.

Change of Description: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm(s) in item 12

Restrictions of Possession: Any restriction (stamped on the face of form) on the possession of the firearm(s) identified in item 12 continues with the further transfer of the firearm(s). Any machinegun manufactured or imported on or after May 19, 1986, may not be retained when the registrant is no longer qualified to manufacture, import or deal in NFA firearms.

Persons Prohibited From Possessing Firearms: If the registrant becomes prohibited by 18 U.S.C. § 922 from possessing a firearm, the registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Suite 1120, Martinsburg, WV 25405, in writing, immediately upon becoming prohibited for guidance on the disposal of the firearm.

Proof of Registration: This notice is the registrant's proof of registration and it shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This request is in accordance with the Paperwork Reduction Act of 1995. The information you provide as a qualified licensed firearms manufacturer or importer is to register, as required by law, firearms within the jurisdiction of the National Firearms Act, which have been lawfully manufactured or imported. The data is used to determine applicant's eligibility to register the firearms described. The furnishing of the information is mandatory (26 U.S.C. 5841c).

The estimated average burden associated with this collection of information is 45 minutes per respondent or recordkeeper depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be addressed to Reports Management Officer, Document Services Branch, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Application for Tax-Exempt Transfer of Firearm and Registration to Special Occupational Taxpayer (National Firearms Act)

				70.000	-					
ATF Control Number										
Transferee's Name and Add if any)	iress (as they appe	ar on the	Federal Fi	irearms License	e, incl	To: National Firearms Act Division Bureau of Alcohol, Tobacco, Firearms and Explosives 244 Needy Road, Martinsburg, WV 25				
								2b. Trans	feror's Telephone N	umber and Area Code
☐ Sole Proprietor		45.104.00	ership	7111E		_	oration			
i. Transferor's Name And Ad trade name, if any) •	dress (as they app	ear on the	: Federal	Firearms Licen	se, in	iclu	•	2c. Trans	feror's E-mail Addro	ss
		7	and the		1 0-		alitin.			
Sole Proprietor			ership	1) 44			oration	rad by Saat	ion 5812 of the Nati	onal Firearms Act to
he above-named and undersignansfer, without payment of tax	ned transferor and	special (od	ccupationa cribed belo	 taxpayer here taxpayer here 	oby m	cur	es application as requi pational) taxpaver ider	ied by Sect	e transferee in this a	oplication.
Description of Firearm (Con				ow to the speed	11 (00	- I		d. Mode	1	
Name and Address of Man	ufacturer and/or Im	porter	b. Type	of Firearm		_	c. Caliber, Gauge	7		
of Firearm (See instruction		instruction 1c)			or Size (Specify)	Length (Inches)	E. Of Barrel	F. Overall		
					-		g. Seria	Number		
Transferee's Federal Firear	rms License e 15-digit number)	(Can ingt	nution 2h)		5. a.		ransferee's Special (O		l) Tax Status	
	2 digits	2 dig		5 digits	- "		ampioyor raciniments	of Hamos		
First 6 digits	2 digits	z dig	gita	Juigna						
. Transferor's Federal Firea	¥1				7.	Т	ransferor's Special (O	ccupationa) Tax Status	
	e 15-digit number)	(Saa inet	ruction 2h)		a.		Employer Identification		b. Class	
First 6 digits		2 dig		5 digits		-				
. Consent to Disclosure of I application to the above-n	nformation to Transamed transferee.	sferee (See	e instructio	on 8). I do or d	o not	t (c	ircle one) authorize A	TF to provi	de information relat	ng to this
believe I am entitled to exem- ransferee named herein is qua	ntion from paymen	t of the tra	nsfer tax i	mposed by Sec	tion 5	811 ype	l, National Firearms A	ct (NFA),	on the firearm descri	bed above because the
ransferee named herein is qua JNDER PENALTIES OF PER	TIDV I DECLAR	E that I ha	ve examin	ed this applica	tion.	and	to the best of my kno	wledge and	belief it is true, com	ect and complete.
Original Signature of Trans	sferor (Or authori	zed officia	il)	ica inis appare	10	. N	Name and Title of Auth Print or type)	norized Off	cial	11. Date
								ا الماليس بيا		
	The Space	Below is	for the Us	se of the Burea	u of	Alc	ohol, Tobacco, Firear	rms and E	cplosives	The second second
By Authority of the Director, t	his Application has	been Exa	mined, and	I the Transfer a	nd Re	egis	tration of the Firearm	Described	Herein and the Inter-	state Movement of tha
	Approved (with the following conditions, if any)					☐ Disapproved (For the following reasons)				
									Date	
Authorized ATF Official									Date	
										1000 D 0 15

Application for Tax-Exempt Transfer of Firearm and Registration to Special Occupational Taxpayer (National Firearms Act)

ATF Control Number												
	1 / 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	F.J	Einamus Lissus	a ival.	dina tuada na		To be sub-	itted in dunlicate by	transferor of firearm		
Transferee's Name and Ad if any)	dress (as they app	ear on the	Federal .	r irearms Licenso	e, inclu	aing traae name	,	To: Nation Bureau and Ex 244 No	al Firearms Act Division of Alcohol, Tobacco, Firearms plosives edy Road, Martinsburg, WV 25405 eror's Telephone Number and Area Code			
☐ Sole Proprietor		Partn	ership		Con	poration						
2a. Transferor's Name and Ad trade name, if any)	dress (as they app			Firearms Licens	_			2c. Transi	eror's E-mail Addre	SS		
☐ Sole Proprietor		Partn	nership		Cor	poration		Labor.				
The above-named and undersign		- TOTAL ST. 1017	7.00	nal) taxpaver her	The second second	ALL CONTRACTOR OF THE PROPERTY	as requ	ired by Secti	on 5812 of the Nati	onal Firearms Act to		
transfer, without payment of ta	x, and register the	firearm de	scribed be	elow to the speci	al (occi	upational) taxpa	yer ide	ntified as the	transferee in this a	pplication.		
Description of Firearm (Complete items a through h, if applicable) Name and Address of Manufacturer and/or Importer of Firearm (See instruction 1c)						c. Caliber, or Siz	. Caliber, Gauge or Size	d. Model				
			35.55 46.45 46.75			(Speci)	y)	Length (Inches)	E. Of Barrel	r. Overall		
								g. Serial	Number			
4. Transferee's Federal Firearms License (Give complete 15-digit number) (See instruction 2b)						Transferee's Special (Occupational) Tax Status Employer Identification Number b. Class						
First 6 digits	2 digits	2 di	gits	5 digits								
6. Transferor's Federal Firea	rms License	10			7.	Transferor's Spe	cial (C	occupational)	Tax Status			
	e 15-digit number,	(See inst	ruction 2	b)	7.4	Employer Ident	O CAMPINE	Secretary Company	b. Class			
First 6 digits	2 digits	2 di		5 digits		773						
Consent to Disclosure of application to the above-n	amed transferee.			O	O				the first contract			
I believe I am entitled to exem transferee named herein is qua	lified under the NE	A to manu	ifacture, i	mport or deal in	that typ	be of meann.						
UNDER PENALTIES OF PEI 9. Original Signature of Trans	RJURY, I DECLAR asferor (Or author	RE that I had it is the state of the state o	ave exam al)	ined this applica	10.	Name and Title (Print or type)	of Aut	horized Offic	cial	11. Date		
	The Spac	e Below is	for the U	Jse of the Burea	u of Al	lcohol, Tobacco	, Firea	rms and Ex	plosives			
By Authority of the Director, t Firearm, When Applicable, to	his Application has	s been Exa	imined, ar	nd the Transfer a	nd Reg	istration of the F	irearm	Described I	Herein and the Inters	state Movement of that		
Approved (with the follow					☐ Disapproved (For the following reasons)							
Authorized ATF Official									Date			

1. Definitions.

- National Firearms Act (NFA). Title 26, United States Code, Chapter
 The implementing regulations are found in Title 27, CFR, Part 479.
- b. Gun Control Act (GCA). Title 18, United States Code, Chapter 44. The implementing regulations are found in Title 27, CFR, Part 478.
- c. Firearm. The term "firearm" means: (1) a shotgun having a barrel or barrels of less than 18 inches in length; (2) a weapon made from a shotgun if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 18 inches in length; (3) a rifle having a barrel or barrels of less than 16 inches in length; (4) a weapon made from a rifle if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 16 inches in length; (5) any other weapon as defined in 18 U.S.C. § 5845(e); (6) a machinegun; (7) a muffler or silencer for any firearm whether or not such firearm is included within this definition; and (8) a destructive device.
- d. Person. The term "person" means a partnership, company, association, trust, estate, or corporation, as well as a natural person.
- Employer Identification Number (EIN). Required of taxpayer filing special (occupational) tax returns under 27 CFR § 479.35.
- f. Special (Occupational) Tax. Required by the NFA to be paid by a Federal firearms licensee engaged in the business of manufacturing (Class 2), importing (Class 1), or dealing (Class 3) in NFA firearms.
- g. Federal Firearms License. A license issued under the provisions of the GCA to manufacture, import or deal in firearms.
- h. ATF Officer. An officer or employee of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) authorized to perform any function relating to the administration of the NFA.
- Transfer. Selling, assigning, pledging, leasing, loaning, giving away, or otherwise disposing of a firearm.
- Transferor. The registered owner of a firearm who is applying to transfer it.
- k. Transferee. The person acquiring the firearm.

2. Preparation of Application

- a. Authority. As provided by 26 U.S.C. §§ 5812 and 5852, any person seeking to transfer a firearm exempt from payment of tax must complete, in duplicate, a separate application on this form. The transferor must furnish all the information called for on this application form.
- b. The entity identified in item 4 must be the same as the entity identified in item 5. For example, if item 4 identifies a sole proprietor, item 5 cannot identify a corporation. This also applies for the completion of items 6 and 7.
- Signatures. All signatures required on Form 3 must be original in ink on both copies.
- d. Photocopies Or Computer Generated Versions. The ATF Form 3 may be photocopied or a computer-generated version (as long as it is in the same format and contains all required information) may be used. This form may also be downloaded from the ATF Internet website: www.atf.gov.
- e. Serial Numbers. When more than one firearm of the same description is being transferred and the serial numbers are in a consecutive series, the transferor may enter the beginning and ending numbers of the range in item 3g. If more than one firearm of the same description is being transferred, but the serial numbers are non-consecutive, the registrant may note item 3g to "see attached list of xxx serial numbers." Any attachment must be referenced to ATF Form 3.
- f. Estates. If the firearm is being transferred from an estate, as provided in 27 CFR §§ 478.56 and 479.42, of a Federal firearms licensee who has

- paid the special (occupational) tax under the NFA, item 2a shall reflect: the executor's name, title (executor (or executrix, administrator, administratrix) of the estate of (name)), and the executor's address. (See the ATF Internet website at www.atf.gov for additional information).
- g. Submission. All requested informtion must be entered in blue or black ink and must be legible. Send both copies of the ATF Form 3 and attachments to the address located in the upper right hand corner on the face side of the ATF Form 3. The return of the application or sending it to any other address will only delay the processing.
- h. Submission By Facsimile Transmission. ATF Form 3 may be submitted for approval via facsimile transmission ((304) 616-4501) provided the transferor filed an affidavit with the NFA Division in accordance with ATF Industry Circular 89-6.
- State Or Local Permit. If a State or local permit or license is required for the transferee prior to acquisition of the firearm, a copy of the permit must be included with the application.
- 3. Approval of Application. Upon approval of an application, the NFA Division will return an approved copy to the transferor for delivery with the firearm to the transferee. Since the approval of the application effectuates registration of the firearm to the transferee, the physical transfer of the firearm must be completed immediately; however, the transferor must not transfer the firearm until the application has been approved and received. If the physical transfer of the firearm cannot be completed immediately, the transferor must contact the NFA Division with the specifics.
- Withdrawal of Application. The transferor may withdraw an application prior to approval subsequent to a written request.
- 5. Cancellation of Approved Application. The transferor may cancel an approved application only if the physical transfer of the firearm has not been completed. The transferor must return the approved application with a written request for cancellation, citing the need and that the physical transfer of the firearm did not take place.
- Disapproval of Application. If the application is disapproved, the NFA
 Division will note the reason for disapproval on the application and return one
 copy of the ATF Form 3 to the transferor.
- 7. Reasons for Disapproval. 26 U.S.C. § 5812 provides that applications shall be denied if the transfer, receipt, or possession of the firearm would place the transferee in violation of law. If State or local law prohibits the receipt or possession of the firearm being transferred, the application will be disapproved.
- 8. Status Inquiries and Questions. Information relating to the NFA and other firearms laws is available at the ATF Internet website at www.atf.gov. Any inquiry relating to the status of an application to transfer an NFA firearm or about procedures in general should be directed to the NFA Division at (304) 616-4500. Please be aware that any dissemination by ATF of information relating to the application to register an NFA firearm must conform with the restrictions in 26 U.S.C. § 6103. The opportunity provided in item 8 to authorize ATF to disclose information is intended to enable ATF to respond to inquiries by the transferee regarding the application. The failure to complete item 8 will be considered a declination of authorization to release the information.
- 9. Penalties. Any person who violates or fails to comply with any of the requirements of the NFA shall, upon conviction, be fined not more than \$10,000 or be imprisoned for not more than 10 years, or both. Any firearm involved in a violation of the NFA shall be subject to seizure and forfeiture. It is unlawful for any person to make or cause the making of a false entry on any application or record required by the NFA knowing such entry to be false.
- Compliance With The Gun Control Act. All provisions of the GCA must also be complied with, including the recordkeeping requirements for licensees.

Important Information for Currently Registered Firearms

If this registration document evidences the current registration of the firearm(s) described on it, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 1, the executor should contact the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg WV 25405.

Change of Address: The registrant, if no longer a Federal firearms licensee, shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the address in item 1.

Interstate Movement: If the registrant is no longer a Federal firearms licensee and the fiream identified in item 3 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant is required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce.

Change of Description: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm(s) in item 3.

Restrictions on Possession: Any restriction (see approval block on face of form) on the possession of the firearm(s) identified in item 3 continues with the further transfer of the firearm(s). Any machinegun manufactured or imported on or after May 19, 1986, may not be retained when the registrant is no longer qualified to deal in NFA firearms.

Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited by 18 U.S.C. § 922 from possessing a firearm, the registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, immediately upon becoming prohibited for guidance on the disposal of the firearm.

Proof of Registration: This approved application is the registrant's proof of registration and it shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form is in accordance with the Paperwork Reduction Act of 1995. The information you provide will be used to apply to transfer firearms tax exempt from one Federal firearms licensee and special (occupational) taxpayer qualified to deal in NFA firearms to another qualified special taxpayer. The data is used to verify lawful transfer and registration of firearms. The information being furnished is mandatory (26 U.S.C. § 5812).

The estimated average burden associated with this collection of information is 30 minutes per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be addressed to the Reports Management Officer, Document Services Branch, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Privacy Act Information

- 1. Authority. Solicitation of this information is made pursuant to the National Firearms Act (26 U.S.C. §§§ 5812 and 5851). Disclosure of this information by the applicant is mandatory for any person (other than a manufacturer qualified under the National Firearms Act) making a firearm as defined in the National Firearms Act.
- 2. Purpose. To verify the tax exemption imposed by 26 U.S.C. § 5851; to determine that the transfer would not be in violation of law; and to effect registration of the firearm.
- 3. Routine Uses. The information will be used by ATF to make the determinations set forth in paragraph 2. In addition, to effect registration of the firearm, information as to the identification of the firearms, date of registration, and the identification and address of person entitled to possess the firearm will be entered into the National Firearms Registration and Transfer Record. No information obtained from an application, registration, or record required to be submitted by a natural person in order to comply with any provision of the National Firearms Act or regulations issued thereunder, shall except in connection with prosecution or other action for furnishing false information, be used, directly or indirectly, as evidence against that person in any criminal proceeding with respect to a violation of law occurring prior to or concurrently with the filing of the application. The information from this application may only be disclosed to Federal authorities for purpose of prosecution for violation of the National Firearms Act.
- 4. Effects of not Supplying Information Requested. Failure to supply complete information will delay processing and my cause denial of the application.

Application for Tax Paid Transfer and Registration of Firearm

ATF Control Number										
SUBMIT in DUPLICAT		Firearms Act Divi Alcohol, Tobacco		nd Explosiv	es, P.O. Box	5015, Portland,	OR 9720	08-5015		
Type of Transfer (Che \$5 \$2 Submit the appropriate The tax may be paid by c	00 tax payment with the redit or debit card, ch	ne application.	. Transferee's	Full Legal	Name and Ad	dress (Include tr	ade name	, if any) (See in	struction 2d)	
order. Please comple the application, we wi	ete item 20. Upon	approval of	Corpo	ration		Other Legal 1	Entity	Tay		
National Firearms Act st	amp. (See instruction	ns 2b, 2j and 3)	Indivi			Trust	77.7	2b. Co	unty/Parish	
3a. Transferor's Full Le (Executors: see ins		ss (Include trade r	name, if any)	3b. E-n	nail address		3c. Tra	nsferor's Telepho	one (Area Code and Number)	
				3d. If A	pplicable: De	cedent's Name, A	Address, a	nd Date of Dea	th	
					nber, Street, Cit Different from It		ode of Re	sidence <i>(or Fired</i>	arms Business Premises)	
below to the transferee.				7.0	ction 5812 of t	he National Firea		o transfer and r	egister the firearm describe	
 4. Description of Firearm (Complete items a through h) (See instruction 2n) a. Name and Address of Maker Manufacturer and/or b. Type of Firearm 					definitions 1c)	c. Caliber or	d. M	oder		
	orter of Firearm			Gauge		e. Ba	nrrel Length:	f. Overall Length:		
							g. Se	rial Number		
	Additional Description or Data Appearing on Firearm (Attach additional statements) Transferee's Federal Firearms License (if any) or Explosives License or Permit the complete 15-digit number) (See instruction 2c) First 6 digits 2 digits 5 digits 5 digits			a. its	Employer Id	entification Num				
					Annual Agency Commission of the Commission of th	Special (Occupa		b. Class	v)	
7. Transferor's Federa First 6 digits	Firearms License (If any) 2 digits	5 dig		Employer IC	lentification Num	loer	o. Class		
of the described firearm to Title 26, United States C	o the transferee and re	ceipt and possessic provisions of State	on of it by the	transferee ai	re not promote	wledge and belie ed by the provisio Title of Authoriz	ns or Thic	, 10, Ollited Dia		
	The	pace Below is for	the use of the	Bureau of	Alcohol, Tob	acco, Firearms a	nd Explo	sives		
By Authority of The Dir Described Herein and th	ector This Application	on Has Been Exam	ined, and the	Fransfer and	Registration	of the Firearm	Stamp	Denomination		
Englishment and The	e following condition					ed (For the follo	wing reas	ons)		
Signature of Authorized	ATF Official								Date	
Previous Editions Are C	Obsolete			ATF C	opy				ATF Form 4 (5320.4) Revised September 20	

Transferee Certification	_							
12. Law Enforcement Notification (See instruction 2f)								
The transferee is to provide notification of the proposed acquisition and possession of the firearm described on this	Form 4	by pro	viding a copy of the completed	form to the				
chief law enforcement officer in the agency identified below:								
Agency or Department Name Name and Title of C	fficial							
Address (Street address or P.O. Box, City, State and Zip Code) to which sent (mailed or delivered)								
Information for the Chief Law Enforcement Officer				A La				
This form provides notification of the transferee's intent to acquire and possess a National Firearms Act (NFA) fire you have information that may disqualify this person from acquiring or possessing a firearm, please contact the NI answer to items 14.a. through 14.h. or 18.d. or 18.e. could disqualify a person from acquiring or possessing a firear transfer or possession of the firearm is in violation of State or local law.	A Divis	sion at	(304) 616-4500 or NFA@att.go	v. A "Yes"				
13. Transferee Necessity Statement (See instruction 2e)	-01	2	Lines Dawa.					
I,, have a reasonable necessity to (Name and Title of Transferee)	posses	s the m	achinegun, short-barreled rifle,					
short-barreled shotgun, or destructive device described on this application for the following reason(s)								
snort-barreled snotgun, or destructive device described on this approach in the following reason(s)								
and my possession of the device or weapon would be consistent with public safety (18 U.S.C. § 922(b) (4)	and 27 (CFR § 4	178.98).					
Transferee Questions (Complete Only When Transferee is An Individual)								
14. Answer questions 14.a. through 14.h. Answer questions 16, 17, 18, 19 and 20, if applicable. For any "Yes"	answer	the trar	sferee shall provide details on a	separate				
sheet. (See instruction 7b and definitions)	Yes	No						
a. Are you under indictment or information in any court for a felony, or any other crime, for which the judge could imprison you for more than one year? (See definition 1m)								
b. Have you ever been convicted in any court for a felony, or any other crime, for which the judge could have imprisoned you for more than one year, even if you received a shorter sentence including probation? (See definition 1m,								
c. Are you a fugitive from justice? (See definition 1s)			15. Photograph					
d. Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, narcotic drug, or any other controlled substance? Warning: The use or possession of marijuana remains unlawful under Federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside.			Affix a 2" x 2" Photogra No Stapling, Tape Sides of 1					
e. Have you ever been adjudicated as a mental defective OR have you ever been committed to a mental institution? (See definitions In and 10)			Application.					
f. Have you been discharged from the Armed Forces under dishonorable conditions?			Photo must have been take last year.	n within the				
g. Are you subject to a court order restraining you from harassing, stalking, or threatening your child or an intimate partner or child of such partner? (See definition 1p)			Photo must have been take view without a hat or head					
h. Have you ever been convicted in any court of a misdemeanor crime of domestic violence? (See definition 1q)		_	obscures the hair or hairlin					
16. Social Security Number: (See instruction 2h) Date of Birth:			On back of photograph printed that 4 of SSN.	nt full name				
17a. Ethnicity Hispanic or Latino 17b. Race American Indian or Alaska Native		Black o	r African American	White				
Not Hispanic or Latino Asian			Hawaiian or Other Pacific Island	der				
18a. Country of Citizenship: (Check/List more than one, if applicable. Nationals of the United States may check	U.S.A.)	(See d	efinition Ir)					
United States of America Other Country/Countries (specify):								
18b. State of Birth 18c.Country of Birth								
7 on that is part.				Yes N				
d. Have you ever renounced your United States citizenship?				Thu				
e. Are you an alien illegally or unlawfully in the United States?								
f.1. Are you an alien who has been admitted to the United States under a nonimmigrant visa? f.2. If "yes", do you fall within any of the exceptions stated in the instructions? Attach the documentation to the	applicat	ion	□ N/A					
19. If you are an alien, record your U.SIssued Alien or Admission number (AR#, USCIS#, or 194#):	3 1 11111							
	No I	f ves pl	ease list					
20. Have you been issued a Unique Personal Identification Number (UPIN)? (See instruction 2h) Yes	ond I I	7 - D		m 4 (5320.4)				

CERTIFICATION: Under penalties imposed by 18 U.S.C. § 924 and 26 U.S.C. § 5861, I certify that, upon submission of this form to ATF, a completed copy of this form will be directed to the chief law enforcement officer (CLEO) shown in item 12, that the statements, as applicable, contained in this certification, and any attached documents in support thereof, are true and correct to the best of my knowledge and belief. NOTE: See instructions 2.d(2) and 2.d(3) for the items to be completed depending on the type of transferee. Date Signature of Transferee 21. Number of Responsible Persons (see definitions) associated with the transferee trust or legal entity 22. Provide the full name (printed or typed) below for each Responsible Person associated with the applicant trust or legal entity (if there are more Responsible Persons than can be listed on the form, attach a separate sheet listing the additional Responsible Person(s)). Please note that a completed Form 5320.23, National Firearms Act (NFA) Responsible Person Questionnaire, must be submitted with the Form 4 application for each Responsible Person. Full Name Full Name 23. Method of Payment (Check one) (See instruction 2j) (if paying by credit/debit card, complete the section below) Diners Club Cashier's Check or ☐ Visa Mastercard American Discover Check (Enclosed) Express Money Order (Enclosed) Name as Printed on the Credit/Debit Card Expiration Date (Month & year) Credit/Debit Card Number (No dashes) Address: Credit/Debit Card Billing Address: Zip Code: City: State: Tax Amount: I Authorize ATF to Charge my Credit/Debit Card the Tax Amount. Date Signature of Cardholder Your credit/debit card will be charged the above stated amount upon receipt of the application. The charge will be reflected on your credit/debit card statement. In the event your application is NOT approved, the above amount will be credited to the credit/debit card noted above. Important Information for Currently Registered Firearms If you are the current registrant of the firearm described on this form, please note the following information. Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 2a, the executor should contact the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405. Change of Address: Unless currently licensed under the Gun Control Act, the registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the address in item 2a. Change of Description: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm(s) in item 4. Interstate Movement: If the firearm identified in item 4 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320. 20 can be used to request this permission. Restrictions on Possession: Any restriction (see approval black on face of form) on the possession of the firearm identified in item 4 continues with the further transfer of the firearm. Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of the firearm. Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request. Paperwork Reduction Act Notice This form meets the clearance requirements of the Paperwork Reduction Act of 1995. The information you provide is used in applying to transfer serviceable firearms taxpaid. Data is used to identify transferor, transferee, and firearm, and to ensure legality for transfer under Federal, State and local laws. The furnishing of this information is mandatory (26 U.S.C. § 5812). The estimated average burden associated with this collection of information is 3.78 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco,

Firearms and Explosives, Washington, DC 20226.

Privacy Act Information

The following information is provided pursuant to Section 3 of the Privacy Act of 1974 (5 U.S.C. § 552(e)(3)):

- Authority. Solicitation of this information is made pursuant to the National Firearms Act (26 U.S.C. § 5812). Disclosure of this information by the applicant is mandatory for transfer of an NFA firearm, unless the transfer is otherwise exempt from tax.
- 2. Purpose. To insure payment of the tax imposed by 26 U.S.C. § 5811; to insure that the transfer would not be in violation of law; and to effect registration of the firearm.
- 3. Routine Uses. The information will be used by ATF to make the determinations set forth in paragraph 2. In addition, to effect registration of the firearm, information as to the identification of the firearm, date of registration, and the identification and address of person entitled to possess the firearm will be entered into the National Firearms Registration and Transfer Record. No information obtained from an application, registration, or records required to be submitted by an individual in order to comply with any provision of the National Firearms Act or regulation issued thereunder, shall, except in connection with prosecution or other action for furnishing information, be used, directly or indirectly, as evidence against that person in any criminal proceeding with respect to a violation of law occurring prior to or concurrently with the filing of the application. The information from this application may only be disclosed to Federal authorities for purposes of prosecution for violation of the National Firearms Act.
- 4. Effects of not Supplying Information Requested. Failure to supply complete information will delay processing and may cause denial of the application.

Definitions/Instructions

1. Definitions

- National Firearms Act (NFA). Title 26, United States Code, Chapter 53. The implementing regulations are found in Title 27, Code of Federal Regulations, Part 479.
- b. Gun Control Act (GCA). Title 18, United States Code, Chapter 44. The implementing regulations are found in Title 27, Code of Federal Regulations, Part 478.
- c. Firearm. The term "firearm" means: (1) a shotgun having a barrel or barrels of less than 18 inches in length; (2) a weapon made from a shotgun if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 18 inches in length; (3) a rifle having a barrel or barrels of less than 16 inches in length; (4) a weapon made from a rifle if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 16 inches in length; (5) any other weapon as defined in 26 U.S.C. § 5845(e); (6) a machinegun; (7) a muffler or silencer for any firearm whether or not such firearm is included within this definition; and (8) a destructive device.
- d. Person. A partnership, company, association, trust, corporation, including each responsible person associated with such an entity; an estate; or an individual.

Section A.

e. Responsible Person. In the case of an unlicensed entity, including any trust, partnership, association, company (including any Limited Liability Company (LLC)), or corporation, any individual who possesses, directly or indirectly, the power or authority to direct the management and policies of the trust or entity to receive, possess, ship, transport, deliver, transfer or otherwise dispose of a firearm for, or on behalf of, the trust or legal entity.

Section B.

Trust: Those persons with the power or authority to direct the management and policies of the trust includes any person who has the capability to exercise such power and possesses, directly or indirectly, the power or authority under any trust instrument, or under State law, to receive, possess, ship, transport, deliver, transfer, or otherwise dispose of a firearm for, or on behalf of the trust. Examples of who may be considered a responsible person include settlors/grantors, trustees, partners, members, officers, directors, board members, or owners. An example of who may be excluded from this definition of responsible person is the beneficiary of a trust, if the beneficiary does not have the capability to exercise the enumerated powers or authorities.

- Employer Identification Number (EIN). Required of taxpayer filing special (occupational) tax returns under 27 CFR § 479.35.
- g. Special (Occupational) Tax. Required by the NFA to be paid by a Federal firearms licensee engaged in the business of manufacturing (Class 2), importing (Class 1), or dealing (Class 3) in NFA firearms.
- Federal Firearms License. A license issued under the provisions of the GCA to manufacture, import or deal in firearms.

- ATF Officer. An officer or employee of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) authorized to perform any function relating to the administration of the NFA.
- Transfer. Selling, assigning, pledging, leasing, loaning, giving away, or otherwise disposing of a firearm.
- Transferor. The person selling or otherwise disposing of a firearm; including applying to transfer a firearm.
- 1. Transferee. The person acquiring the firearm.
- m. Prohibited Person. Generally, 18 U.S.C. § 922(g) prohibits the shipment, transportation, receipt, or possession in or affecting interstate commerce of a firearm by one who: has been convicted of a misdemeanor crime of domestic violence; has been convicted of a felony, or any other crime, punishable by imprisonment for a term exceeding one year (this does not include State misdemeanors punishable by imprisonment of two years or less); is a fugitive from justice; is an unlawful user of, or addicted to, marijuana or any depressant, stimulant, or narcotic drug, or any other controlled substance; has been adjudicated as a mental defective or has been committed to a mental institution; has been discharged from the Armed Forces under dishonorable conditions; has renounced his or her U.S. citizenship; is an alien illegally in the United States or an alien admitted to the United States under a nonimmigrant visa; or is subject to certain restraining orders. Furthermore, Section 922(n) prohibits the shipment, transportation, or receipt in or affecting interstate commerce of a firearm by one who is under indictment or information for a felony in any Federal, State or local court, or any other crime punishable by imprisonment for a term exceeding one year. An information is a formal accusation of a crime verified by a prosecutor.

EXCEPTION: A person who has been convicted of a felony, or any other crime, for which the judge could have imprisoned the person for more than one year, or who has been convicted of a misdemeanor crime of domestic violence, is not prohibited from purchasing, receiving, or possessing a firearm if: (1) under the law of the jurisdication where the conviction occurred, the person has been pardoned, the conviction has been expunged or set aside, or the person has had their civil rights (the right to vote, sit on a jury, and hold public office) taken away and later restored AND (2) the person is not prohibited by the law of the jurisdiction where the conviction occurred from receiving or possessing firearms. Persons subject to this exception should mark "no" in the applicable box.

n. Adjudicated as a Mental Defective. A determination by a court, board, commission, or other lawful authority that a person, as a result of marked subnormal intelligence, or mental illness, incompetency, condition, or disease: (1) is a danger to himself or to others; or (2) lacks the mental capacity to contract or manage his own affairs. This term shall include: (1) a finding of insanity by a court in a criminal case; and (2) those persons found incompetent to stand trial or found not guilty by reason of lack of mental responsibility.

o. Committed to a Mental Institution. A formal commitment of a person to a mental institution by a court, board, commission, or other lawful authority. The term includes a commitment to a mental institution involuntarily. The term includes commitment for mental defectiveness or mental illness. It also includes commitments for other reasons, such as for drug use. The term does not include a person in a mental institution for observation or a voluntary admission to a mental institution.

EXCEPTION NICS Improvement Amendments Act of 2007: A person who has been adjudicated as a mental defective or committed to a mental institution in a state proceeding is not prohibited by the adjudication or commitment if the person has been granted relief by the adjudicating/committing state pursuant to a qualifying mental health relief from disabilities program. Also, a person who has been adjudicated as a mental defective or committed to a mental institution by a department or agency of the Federal Government is not prohibited by the adjudication or commitment if either: (a) the person's adjudication or commitment was set-aside or expunged by the adjudicating/committing agency; (b) the person has been fully released or discharged from all mandatory treatment, supervision, or monitoring by the agency; (c) the person was found by the agency to no longer suffer from the mental health condition that served as the basis of the initial adjudication/commitment; or (d) the adjudication or commitment respectively, is based solely on a medical finding of disability, without an opportunity for a hearing by a court, board, commission, or other lawful authority, and the person has not been adjudication as a mental defective consistent with 922(g)(4) of title 18, United States code; or (e) the person was granted relief from the adjudicating/committing agency pursuant to a qualified mental health relief from disabilities program. Persons who fall within one of the above exceptions should mark "no" in the applicable box. This exception to an adjudication or commitment by a Federal department or agency does not apply to any person who was adjudicated to be not guilty by reason of insanity, or based on a lack of mental responsibility, or found incompetent to stand trial, in any criminal case or under the Uniform Code of Military

- p. Restraining Order. Under 18 U.S.C. § 922, firearms may not be sold to or received by persons subject to a court order that: (A) was issued after a hearing which the person received actual notice of and had an opportunity to participate in; (B) restrains such person from harassing, stalking, or threatening an intimate partner or child of such intimate partner or person, or engaging in other conduct that would place an intimate partner in reasonable fear of bodily injury to the partner or child; and (C)(i) includes a finding that such person represents a credible threat to the physical safety of such intimate partner or child; or (ii) by its terms explicitly prohibits the use, attempted use, or threatened use of physical force against such intimate partner or child that would reasonably be expected to cause bodily injury. An "intimate partner" of a person is: the spouse or former spouse of the person, the parent of a child of the person, or an individual who cohabitates or has cohabitated with the person.
- Misdemeanor Crime of Domestic Violence: A Federal, State, local, tribal offense that is a misdemeanor under the Federal, State, or tribal law and has, as an element, the use or attempted use of physical force, or the threatened use of a deadly weapon, committed by a current or former spouse, parent, or guardian of the victim, by a person with whom the victim shares a child in common, by a person cohabitating with, or has cohabited with the victim as a spouse, parent, or guardian, or by a person similarly situated to a spouse, parent, or guardian of the victim. The term includes all misdemeanors that have as an element the use or attempted use of physical force or the threatened use of a deadly weapon (e.g., assault and battery), if the offense is committed by one of the defined parties. (See Exception in the definition of "Prohibited Person"). A person who has been convicted of a misdemeanor crime of domestic violence also is not prohibited unless: (1) the person was represented by a lawyer or gave up the right to a lawyer; or (2) if the person was entitled to a jury, was tried by a jury, or gave up the right to a jury trial. Persons subject to this exception should mark "no" in the applicable box.
- r. Alien Admitted to the United States Under a Nonimmigrant Visa. An alien admitted to the United States under a nonimmigrant visa includes, among others, persons visiting the United States temporarily for business or pleasure, persons studying in the United States who maintain a residence abroad, and certain temporary foreign workers. These aliens must answer "yes" to question 16.d.1 and provide the additional documentation required under question 16.d.2. Permanent resident aliens and aliens legally admitted to the United States pursuant either the Visa Waiver Program or to regulations otherwise exempting them from visa

requirements may answer "no" to this question and are not required to submit the additional documentation under 16.d.2. An alien admitted to the United States under a nonimmigrant visa is not prohibited from purchasing, receiving, or possessing a firearm if the alien: (1) is in possession of a hunting license or permit lawfully issued by the Federal Government, a State, or local government, or an Indian tribe federally recognized by the Bureau of Indian Affairs, which is valid and unexpired; (2) was admitted to the United States for lawful hunting or sporting purposes; (3) is an official representative of a foreign government who is accredited to the United States Government or the Government's mission to an international organization having its headquarters in the United States; (4) is an official representative of a foreign government who is enroute to or from another country to which that alien is accredited; (5) is an official of a foreign government or a distinguished foreign visitor who has been so designated by the Department of State; (6) is a foreign law enforcement officer of a friendly foreign government entering the United States on official law enforcement business; (7) has received a waiver from the prohibition from the Attorney General of the United States.

s. Fugitives from Justice. Any person who has fled from any State to avoid prosecution for a felony or a misdemeanor, or any person who leaves the State to avoid giving testimony in any criminal proceeding. The term also includes any person who knows that misdemeanor or felony charges are pending against such person and who leaves the State of prosecution.

2. Preparation of Application

- a. Authority. As provided by 26 U.S.C. §§ 5811 and 5812, any person seeking to transfer a firearm must submit, in duplicate, a separate application on this form for each firearm. The transferor must furnish all the information called for, except as noted by instructions within, on this application form. Please note that the form now contains a 3rd (CLEO) copy of the form for use in compliance with instruction 2f and item 12 of the form.
- b. Transfer Tax Rates. The transfer tax is \$200.00 except when the firearm is an 'any other weapon' where the tax rate is \$5.00.
- c. Federal Firearms Licensees. If the transferor or transferee is a Federal Firearms licensee (FFL) under the GCA, the licensee's complete name, trade name (if any), and address shall be entered in items 2a or 3a of this form, respectively. The complete license number for each shall be entered in items 5 and 7 of the form and if the licensee is a special (occupational) taxpayer under the NFA, the licensee's employer identification number (EIN) shall be entered in item 6 and 8 of the form, along with the class of special tax paid. IMPORTANT NOTE: The business structure of the licensee shall be described consistently. For example, if the transferor is a sole proprietor, item 3a shall reflect the FFL information for the sole proprietor business and item 7 shall reflect the FFL number for that sole proprietor business. Item 8 will reflect the EIN for the sole proprietor business. If the special tax is paid as a corporation, then it is not valid for the transaction. Similarly, a corporation name shown in item 3a with the FFL number and EIN of a sole proprietor will not be valid for the transaction.
- d. Completion of Form (NOTE: if the transferee is a Federal firearms licensee except for a Type 03 licensee, items 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 are required to be completed).
 - (1) The transferor shall provide the transferee's full legal name to include middle and physical address (no Post Office boxes) in item 2aIf the transferee is a trust or legal entity, show only the complete name of the trust or legal entity and do not include any individual names (such as names of trustees or corporate officials). The address shall be the location within the particular state where the firearm will be maintained for a trust or legal entity. In the case of two or more locations for a legal entity, the address shown shall be the principal place of business within the particular state (or principal office, in the case of a corporation).
 - (2) If the transferee is an individual, the entire Form 4 shall be completed except for items 21 and 22. In addition, the transferee must include his or her fingerprints on FBI Form FD-258 and his or her photos (see instruction 2g).
 - (3) If the transferee is other than an individual, e.g., a trust or legal entity such as a corporation, the transferee shall not complete items 14, 15, 16, 17, 18, 19 and 20. All other items must be completed including the signing of the Transferee Certification statement by the transferee. See 2.d.5. for Responsible Person Requirements

- (4) Documentation of entity existence:
 - (a) If the transferee is other than an individual, the transferee must attach documentation evidencing the existence and validity of the entity, which includes complete and unredacted copies of partnership agreements, articles of incorporation, corporate registration, declarations of trust with any trust schedules, attachments, exhibits, and enclosures.
 - (b) If the transferee entity has had an application approved as a maker or transferee within the preceding 24 months of the date of filing this application, and there has been no change to the documentation evidencing the existence and validity of the entity previously provided, the entity may provide a certification that the information has not been changed since the prior approval and shall identify the application for which the documentation had been submitted by form number, serial number, and date approved.
- (5) If the transferee is other than an individual, each responsible person of the trust or legal entity (see definition 1e) must include a completed ATF Form 5320.23, National Firearms Act (NFA) Responsible Person Questionnaire, with the submitted Form 4.
- (6) Item 22 (Method of Payment) is obscured on the ATF Copy 2 (Registrant) and the CLEO copy. In addition, item 4g (serial number) is obscured on the CLEO copy. These fields do not require completion on these copies.
- e. Transferee Necessity Statement. Item 13 must be completed by the transferee if:
 - (1) the firearm to be transferred is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device;
 - (2) the transferor is licensed under the GCA to deal in such device or fire arm; and
 - (3) the transferee is not licensed under the GCA to deal in such device or firearm.
- f. Law Enforcement Notification. The transferee must provide a copy of the Form 4 to the chief law enforcement officer (CLEO) who has jurisdiction over the area of the transferee's address shown in item 2a of the Form 4. In addition, if the transferee is other than an individual, a copy of the Form 5320.23, National Firearms Act (NFA) Responsible Person Question naire, completed by each responsible person must be provided to their respective chief law enforcement officer. The chief law enforcement officer is considered to be the Chief of Police; the Sheriff; the Head of the State Police, or a State or local district attorney or prosecutor.
- g. Photographs and Fingerprints. An individual transferee, except if licensed as a manufacturer, importer, or dealer under the GCA, must (1) attach to item 15 of the ATF Form 4, except for the CLEO copy a 2 inch x 2 inch photograph of the frontal view of the transferee taken within 1 year prior to the date of the application and (2) submit two properly completed FBI Forms FD-258 (Fingerprint Card with blue lines) with the application. The fingerprints must be clear for accurate classification and taken by someone properly equipped to take them.
- h. Social Security and UPIN. The Social Security number and UPIN are not required. However, this information assists with the efficient completion of the NICS background check. Please be aware that refusal to provide this informatin may result in a delay in the NICS backgrund check process.
- Signatures. All signatures required on ATF Form 4 must be original in ink on both copies. Exceptions: In the case of eforms or where a variance has been granted a Digital/Electronic signature may be used.
 - (1) if the transferee is an individual, the applicant shall sign the form;
 - (2) if the transferee is the estate of a decedent where the firearm is being transferred to other than a beneficiary, the executor or administrator of the estate shall sign the form;
 - (3) if the transferee is a trust or legal entity, a responsible person of the trust or legal entity shall sign the form; or

- (4) if the transferee is a Federal firearms licensee, a responsible person of the Federal firearms licensee or such other employee of the Federal firearms licensee as authorized by a responsible person shall sign the form.
- j. Remittance. The applicant shall complete item 22. Please note that you may pay by credit/debit card, check, or money order. The check or money order is to be made payable to ATF. <u>Do not send cash</u>.
- k. Photocopies, Computer Generated Versions, or Downloaded Version. The form may be copied or downloaded (for example, from the ATF website (www.atf.gov)). The form does not have to be printed front to back.
- Estates, Trusts, and Other Transfers by Operation of Law. When a
 firearm is being transferred tax exempt from an estate by bequest or intestate
 succession (See 27 CFR § 479.90a), or by other operation of law to a
 beneficiary or other authorized recipient, ATF Form 5 is used to effect the
 transfer otherwise, Form 4 is used. See ATF Form 5 for additional
 information.
- m. Submission. The transferor shall submit 2 forms (ATF Copy 1 and Copy 2 (Registrant)) to the NFA Division at the address on the face of the form. All items on the form are to be completed except as noted in the instructions and any attachment included with the submission. The applicant shall direct the 3rd copy (CLEO) complete copy of the form to the chief law enforcement officer as provided in instruction 2f and item 12.
- n. Description of Firearm and Markings. (1) Item 4a. please provide the name and address of the maker, manufacturer or importer of the firearm. If there are additional makers, manufacturers, or importers, include this information in item 4h or on a separate sheet of paper. (2) Item 4b. the types of NFA firearm are listed in instruction 1c. (3) Item 4c. specify one caliber or gauge. If there are additional calibers associated with the description of the firearm, include this information in item 4h or on a separate piece of paper. (4) Item 4d. show the model designation (if any)(5) Item 4e. and 4f. specify the barrel and overall lengths as applicable. If there are additional barrel and overall lengths associated with the description of the firearm, include this information in item 4h. or on a separate sheet of paper. (6) Item 4g. enter the serial number of the firearm as it appears on the firearm. (7) If there are differences between the description of the firearm on the form in comparison to the physical description of the firearm or in the markings on the firearm, including the serial number, contact the NFA Division in regard to these differences.
- o. State or Local Permit. If a State or local permit or license is required for the transferee prior to acquisition of the firearm, a copy of the permit must be included with the application. If the transferee is a trust or legal entity, when the State of residence for any responsible person requires a State or local permit or license, a copy of the permit or license must be submitted with Form 5320.23, National Firearms Act (NFA) Responsible Person Questionnaire.
- 3. Approval of Application. Upon approval of an application, the NFA Division will return the approved copy to the transferor for delivery with the firearm to the transferee. Since the approval of the application effectuates registration of the firearm to the transferee, the physical transfer of the firearm must be completed immediately; however, the transferor must not transfer the firearm until the application has been approved and received. If the physical transfer of the firearm cannot be completed immediately, the transferor must contact the NFA Division with the specifics.
- Withdrawal of Application. The application may be withdrawn prior to approval by the submission of a signed, written request to the Chief, NFA Division either by mail to 244 Needy Road, Martinsburg, WV 25405 or by emailing a signed copy to nfafax@atf.gov.
- 5. Cancellation of Approved Application. The transferor may cancel an approved application only if the physical transfer of the firearm has not been completed. The transferor must return the approved application with the original tax stamp affixed with a written request for cancellation, citing the need and that the physical transfer of the firearm did not take place. The request shall be directed to the Chief, NFA Division, 244 Needy Road, Martinsburg, WV. 25405. The NFA Division will arrange for a refund of the tax paid.

- Disapproval of Application. If the application is disapproved, the NFA Division
 will note the reason for disapproval on the application and return one copy of the ATF
 Form 4 to the transferor.
- Reasons for Disapproval. 26 U.S.C. § 5812 provides that applications shall be denied if the transfer, receipt, or possession of the firearm would place the transferee in violation of law.
 - a. Violation of Law. Applications shall be denied if the receipt or possession of the firearm would place the person receiving or possessing the firearm in violation of law.
 - b. Persons Prohibited from Receiving a Firearm. The application will be disapproved if the transferee is a person prohibited from receiving a firearm. For information regarding persons prohibited from receiving a firearm, refer to definitions 1m through 1r.
- 8. Status Inquiries and Questions. Information relating to the NFA and other firearms laws is available at the ATF Internet website at www.atf.gov. Any inquiry relating to the status of an application to transfer an NFA firearm or about procedures in general should be directed to the NFA Division at (304) 616-4500 or emailed to nfa@atf.gov. Please be aware that any dissemination by ATF of information relating to the application to register an NFA firearm must conform with the restrictions in 26 U.S.C. § 6103.
- 9. Penalties. Any person who violates or fails to comply with any of the requirements of the NFA shall, upon conviction, be fined not more than \$10,000 or be imprisoned for not more than 10 years, or both. Any firearm involved in a violation of the NFA shall be subject to seizure and forfeiture. It is unlawful for any person to make or cause the making of a false entry on any application or record required by the NFA knowing such entry to be false.
- Compliance with the Gun Control Act. Persons must also comply with all relevant portions of the GCA.

Application for Tax Paid Transfer and Registration of Firearm

ATF Control Number		ordinar a v							
SUBMIT in DUPLICAT	E to: National l Bureau of	Firearms Act I Alcohol, Toba	Division acco, Firearms a	nd Explosi	es, P.O. Box	5015, Portland, C	OR 9720	8-5015	
1. Type of Transfer (Chec \$5 \$ \$20 Submit the appropriate to The tax may be paid by cre- order. Please complet the application, we will National Firearms Act star	no ax payment with the edit or debit card, che te item 20. Upon I affix and cancel	eck, or money approval of the required	Corpo	oration	Name and Ac	idress (Include tra	ide name, if any) (See instruction 2d) Entity		
3a. Transferor's Full Leg			Indiv	3.7.702	nail address	Irust	3c. Tra	nsferor's Telepho	ne (Area Code and Nu mber)
(Executors: see instr	ruction 2l)			3e. Nu	* * HE SAME IN				rh urms Business Premises)
The above-named and und below to the transferee. 4. Description of Firear					ction 5812 of			o transfer and r	egister the firearm describe
					definitions Ic)	c. Caliber or Gauge	e. Ba	rrel Length:	f. Overall Length:
h. Additional Description 5. Transferee's Federal I (Give complete 15-digit n First 6 digits	Firearms License (if a	ny) or Explosive		it Number 6	. Transferee's	s Special (Occupat dentification Numl		x Status (If any b. Class)
1 1 1-1-1-2						s Special (Occupat		The second secon	v)
7. Transferor's Federal	Firearms License (If any)		a	. Employer I	dentification Num	ber	b. Class	
First 6 digits	2 digits	2 digits	5 dig	gits					
Under Penalties of Perji of the described firearm to Title 26, United States Co 9. Signature of Transfe By Authority of The Dire Described Herein and the	o the transferee and to be; Chap 53; or any ror (Or authorized of The Sector, This Application Interstate Movement	receipt and poss y provisions of official) Space Below is on Has Been E. ent of that Firea	for the use of the	e Bureau o	O. Name and f Alcohol, Tol d Registration Transferee are	Title of Authoriz	nd Explo	al (Print or typosives Denomination	
Signature of Authorized	ATF Official								Date
					10.VL51				ATF Form 4 (5320.4)

Transferee Certification				_		
. Law Enforcement Notification (See instruction 2f)	-	-				
e transferee is to provide notification of the proposed acquisition and possession of the firearm described on this I	Form 4	4 by pro	viding a copy of the comple	ted form t	to the	
ief law enforcement officer in the agency identified below:		, o ₂ p.o	, to the sound			
gency or Department Name Name and Title of Off	fficial	_			_	
ddress (Street address or P.O. Box, City, State and Zip Code) to which sent (mailed or delivered)		_				
Information for the Chief Law Enforcement Officer		1 1000	Tay Tan Article Control	mer/cy	ari.	
is form provides notification of the transferee's intent to acquire and possess a National Firearms Act (NFA) firea u have information that may disqualify this person from acquiring or possessing a firearm, please contact the NFA swer to items 14.a. through 14.h. or 18.d. or 18.e. could disqualify a person from acquiring or possessing a firearn nsfer or possession of the firearm is in violation of State or local law.	A Divis	sion at (304) 616-4500 or NFA@atf	gov. A "Y	Yes"	
. Transferee Necessity Statement (See instruction 2e)						
I,, have a reasonable necessity to particle of Transferee)	posses	s the ma	chinegun, short-barreled rif	le,		
19/19/2019/2019/2019/19/19/19/19/19/2019/20						
short-barreled shotgun, or destructive device described on this application for the following reason(s)						
and my possession of the device or weapon would be consistent with public safety (18 U.S.C. § 922(b) (4) and	nd 27 (CFR§4	78.98).			
ransferee Questions (Complete Only When Transferee is An Individual)		was All				
Answer questions 14.a. through 14.h. Answer questions 16, 17, 18, 19 and 20, if applicable. For any "Yes" are	nswer	the tran	sferee shall provide details of	on a separa	rate	
sheet. (See instruction 7b and definitions)	Yes	No	THE RESERVE OF THE PARTY OF THE			
Are you under indictment or information in any court for a felony, or any other crime, for which the judge	103	110				
could imprison you for more than one year? (See definition 1m)						
Have you ever been convicted in any court for a felony, or any other crime, for which the judge could have imprisoned you for more than one year, even if you received a shorter sentence including probation? (See definition 1m)						
Are you a fugitive from justice? (See definition 1s)			15. Photograph			
Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, narcotic drug, or any other controlled substance? Warning: The use or possession of marijuana remains unlawful under Federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside.			Affix a 2" x 2" Photograph here.			
Have you ever been adjudicated as a mental defective OR have you ever been committed to a mental institution? (See definitions In and Io)			No Stapling. Tape Sides of Photo to Application. 1. Photo must have been taken within			
Have you been discharged from the Armed Forces under dishonorable conditions?						
Are you subject to a court order restraining you from harassing, stalking, or threatening your child or an intimate partner or child of such partner? (See definition 1p)			last year. 2. Photo must have been to	aken in fu	ıll face	
Have you ever been convicted in any court of a misdemeanor crime of domestic violence? (See definition 1q)	h lin 4		view without a hat or he obscures the hair or hair	ead coveri		
Date of Birth:						
			On back of photograph last 4 of SSN.	print full	name,	
'a. Ethnicity Hispanic or Latino 17b. Race American Indian or Alaska Native		Black or	African American	White		
Not Hispanic or Latino Asian		Native I	Iawaiian or Other Pacific Isl	lander		
a. Country of Citizenship: (Check/List more than one, if applicable. Nationals of the United States may check U	U.S.A.)	(See de	finition 1r)			
United States of America Other Country/Countries (specify):						
3b. State of Birth 18c.Country of Birth						
				Yes	No	
Have you ever renounced your United States citizenship?						
Are you an alien illegally or unlawfully in the United States?						
1. Are you an alien who has been admitted to the United States under a nonimmigrant visa?					1	
 Are you an alien who has been admitted to the Officed States under a holimanificant visit. If "yes", do you fall within any of the exceptions stated in the instructions? Attach the documentation to the ap 	pplicati	ion	□ N/A			
 Are you an alien who has been admitted to the Officed States under a holimanification visit. If "yes", do you fall within any of the exceptions stated in the instructions? Attach the documentation to the ap If you are an alien, record your U.SIssued Alien or Admission number (AR#, USCIS#, or 194#): 	pplicati	ion	□ N/A			

CERTIFICATION: Under penalties imposed by 18 U.S.C. § 924 and 26 U.S.C. § 58 to the chief law enforcement officer (CLEO) shown in item 12, that the statements, at and correct to the best of my knowledge and belief. NOTE: See instructions 2.d(2) at	861, I certify that, upon submission of this form to ATF, a completed copy of this form will be directed as applicable, contained in this certification, and any attached documents in support thereof, are true and 2.d(3) for the items to be completed depending on the type of transferee.
Signature of Transferee	Date
21. Number of Responsible Persons (see definitions) associated with the transf	feree trust or legal entity
22 Provide the full name (printed or typed) below for each Responsible Person	on associated with the applicant trust or legal entity (if there are more Responsible Persons than ponsible Person(s)). Please note that a completed Form 5320.23, National Firearms Act (NFA)
Full Name	Full Name
Important Informati	ion for Currently Registered Firearms
If you are the current registrant of the firearm described on this form, please note the	
	resulting from the death of the registrant identified in item 2a, the executor should contact the NFA
Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road,	Martinsburg, WV 25405.
Change of Address: Unless currently licensed under the Gun Control Act, the reg- Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to	o the address in item 2a.
Change of Description: The registrant shall notify the NFA Division, Bureau of A any change to the description of the firearm(s) in item 4.	lcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of
Interstate Movement: If the firearm identified in item 4 is a machinegun, short-U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in intersection.	barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 terstate or foreign commerce. ATF Form 5320. 20 can be used to request this permission.
Restrictions on Possession: Any restriction (see approval block on face of form)	on the possession of the firearm identified in item 4 continues with the further transfer of the firearm.
Persons Prohibited from Possessing Firearms: If the registrant becomes prohibit the firearm.	ited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of

Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form meets the clearance requirements of the Paperwork Reduction Act of 1995. The information you provide is used in applying to transfer serviceable firearms taxpaid. Data is used to identify transferor, transferee, and firearm, and to ensure legality for transfer under Federal, State and local laws. The furnishing of this information is mandatory (26 U.S.C. § 5812).

The estimated average burden associated with this collection of information is 3.78 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Application for Tax Paid Transfer and Registration of Firearm

ATF Control Number									
SUBMIT in DUPLICATE	to: National Firearms Ac Bureau of Alcohol, To	t Division bacco, Firearms an	d Explosive	es, P.O. Box 50	015, Portland,	OR 9720	8-5015		
The tax may be paid by cre order. Please complete the application, we will	x payment with the application dit or debit card, check, or mone titem 20. Upon approval of affix and cancel the require	y f d Corpo		Name and Addr	ess (Include tro			unty/Parish	
National Firearms Act stan	np. (See instructions 2b, 2j and 3	Individ	dual		Trust				7-77-
3a. Transferor's Full Lega (Executors: see instru	l Name and Address (Include action 21)	trade name, if any)	3b. E-m	ail address		3c. Tra	ansferor's Telepho	ne (Area Code and	Nu mber)
			3d. If A	oplicable: Deco	edent's Name, A	ddress, a	nd Date of Dear	h	
				ber, Street, City,		ode of Re	sidence (or Fired	erms Business Prei	mises)
below to the transferee. 4. Description of Firearn	ersigned transferor hereby mak	(See instruction 2n)					to transfer and r	egister the firearr	n describe
a. Name and Address of Impor	b. Type of F	rearm (see a	see definitions 1c) c. Caliber Gauge		e. Ba	arrel Length:	f. Overall L	ength:	
	irearms License (if any) or Exploramber) (See instruction 2c) 2 digits 2 digit	ter interior	a.		Special (Occupa ntification Num		x Status (If any b. Class	<i>)</i>)	
					1.1/0	tional) To	Status (If an	.)	
					Special (Occupa entification Num		b. Class	0	
7. Transferor's Federal I First 6 digits	Firearms License (If any) 2 digits 2 digits	ts 5 dig	91	Employer rac			U. Class		
of the described firearm to	ry, I Declare that I have exam the transferee and receipt and p de; Chap 53; or any provisions	ossession of it by the	transferee a	e not promotes	a by the provision	75 75 750			the transfe 14;
9. Signature of Transfer	or (Or authorized official)		10). Name and T	itle of Authoriz	zed Offici	ial (Print or typ	ne) 11. Datc	

	Transf	eree Certification					
	Law Enforcement Notification (See instruction 2f)						
	e transferee is to provide notification of the proposed acquisition and possession of law enforcement officer in the agency identified below:	n of the firearm described on this	Form	4 by prov	viding a copy of the complete	d form to	o the
Age	ency or Department Name	Name and Title of O	fficial				
Ado	dress (Street address or P.O. Box, City, State and Zip Code) to which sent (mai	iled or delivered)					
you	Information for the or some provides notification of the transferee's intent to acquire and possess a large information that may disqualify this person from acquiring or possessing wer to items 14.a. through 14.h. or 18.d. or 18.e. could disqualify a person from the provided in the firearm is in violation of State or local law.	g a firearm, please contact the NF	arm. N	sion at (3	304) 616-4500 or NFA@atf.go	ov. A "Y	hould 'es''
13.	Transferee Necessity Statement (See instruction 2e)	Transfer of the state of the st					
	I,(Name and Title of Transferee)	_, have a reasonable necessity to	posses	s the ma	chinegun, short-barreled rifle,		
	short-barreled shotgun, or destructive device described on this application	for the following reason(s)					
	short-parreted shotgun, or destructive device described on this application	tor the following reason(s)					
	and my possession of the device or weapon would be consistent with publi	c safety (18 U.S.C. § 922(b) (4) a	nd 27	CFR § 4	78.98).		
Tra	ansferee Questions (Complete Only When Transferee is An Individual)			7	ANT OF THE		
14.	Answer questions 14.a. through 14.h. Answer questions 16, 17, 18, 19 and 20	0, if applicable. For any "Yes" a	nswer	the trans	feree shall provide details on	a separa	ite
	sheet. (See instruction 7b and definitions)		Yes	No			
a.	a. Are you under indictment or information in any court for a felony, or any other crime, for which the judge could imprison you for more than one year? (See definition 1m)						
	Have you ever been convicted in any court for a felony, or any other crime, for wh imprisoned you for more than one year, even if you received a shorter sentence inc	ich the judge could have luding probation? <i>(See definition 1m)</i>					
	Are you a fugitive from justice? (See definition 1s)			1			
	Are you an unlawful user of, or addicted to, marijuana or any depressant, stin other controlled substance? Warning: The use or possession of marijuana under Federal law regardless of whether it has been legalized or decriming recreational purposes in the state where you reside.	remains unlawful					
e.	Have you ever been adjudicated as a mental defective OR have you ever been institution? (See definitions In and 10)	n committed to a mental					
	Have you been discharged from the Armed Forces under dishonorable cond						
	Are you subject to a court order restraining you from harassing, stalking, or the intimate partner or child of such partner? (See definition 1p)						
h.	Have you ever been convicted in any court of a misdemeanor crime of domes						
	Date of Bi	rtn.					
178	a. Ethnicity Hispanic or Latino 17b. Race Ameri	can Indian or Alaska Native		Black or	African American	White	
	Not Hispanic or Latino Asian			Native H	Iawaiian or Other Pacific Islan	nder	
188	a. Country of Citizenship: (Check/List more than one, if applicable. National	ls of the United States may check	U.S.A.) (See de	finition 1r)		
	United States of America Other Country/Countries (spec						
181	b. State of Birth	18c.Country of Birth					
_						Yes	No
d.	Have you ever renounced your United States citizenship?						
e.	Are you an alien illegally or unlawfully in the United States?						
f.1 f.2	. Are you an alien who has been admitted to the United States under a nonimal. If "yes", do you fall within any of the exceptions stated in the instructions?	nigrant visa? Attach the documentation to the a	pplica	tion	□ N/A		
	. If you are an alien, record your U.SIssued Alien or Admission number (AF						
	Have you been issued a Unique Personal Identification Number (UPIN)? (S		No I	f yes plea	ase list		

Signature of Transferee	Date	
21. Number of Responsible Persons (see definitions) asso	ciated with the transferee trust or legal entity	
can be listed on the form, attach a separate sheet listi	ch Responsible Person associated with the applicant trust or legal entity (if there are the additional Responsible Person(s)). Please note that a completed Form 5320. It with the Form 4 application for each Responsible Person.	e more Responsible Persons tha 23, National Firearms Act (NFA
Full Name	Full Name	

If you are the current registrant of the firearm described on this form, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 2a, the executor should contact the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405.

Change of Address: Unless currently licensed under the Gun Control Act, the registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the address in item 2a.

Change of Description: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm(s) in item 4.

Interstate Movement: If the firearm identified in item 4 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320. 20 can be used to request this permission.

Restrictions on Possession: Any restriction (see approval block on face of form) on the possession of the firearm identified in item 4 continues with the further transfer of the firearm.

Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of the firearm.

Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form meets the clearance requirements of the Paperwork Reduction Act of 1995. The information you provide is used in applying to transfer serviceable firearms taxpaid. Data is used to identify transferor, transferce, and firearm, and to ensure legality for transfer under Federal, State and local laws. The furnishing of this information is mandatory (26 U.S.C. § 5812).

The estimated average burden associated with this collection of information is 3.78 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

ATF Form 4 (5320.4) Revised September 2019

Application for Tax Exempt Transfer and Registration of Firearm

ATF Control Number					Internal Control Number					
Submit in duplicate to:			Firearms and E		es, 244 Needy R					
. Type of Transfer: tax exempt I believe that I am entitled to exthe payment of the Transfer Tax section 5811 (26 U.S.C. Chapte Firearm described herein for the reason (See Instruction 2b):	xemption from x Imposed by er 53) on the le following	2a. Transferee's	s Full Legal Nam	ne and A	Address (Include	trade name, if a	ny) (See inst	ruction 2k)		
transferred as a curio or orn Firearm is being transferred a Government Entity	ament	Other Lega	l Entity	=	orporation rust	Governm	ent Entity	2b. Count	y/Parish	
Firearm is being transferred heir or by operation of law Other (Specify)	to a lawful	3a. If Applicab	ele: Decedent's l	Name,	Address, and Date	of Death		,		
3b. Transferor's Name and Add	eoss Analyda trad	le name if any) (F	vecutors: see inst	ruction	2k)					
3c. Transferor's telephone (area c	ode and number)	3d. E-mail addr			nmber, Street, City, Different from Ite		de of Reside	nce (or Firearms B	usiness Premises)	
The above-named and undersig	ned transferor h	ereby makes app	lication as requir	red by S	Section 5812 of th	e National Firea	rms Act to t	ransfer and registe	er the firearm describe	
below to the transferee.		A STATE OF		501		19 11 16				
4. Description of Firearm (C					~	c. Caliber	d. Model			
n. Name and Address of Mak Importer of Firearm	cer, Manufactur	er and/or	b. Type of Fi	rearm (See definitions1c)	c. Caliber or Gauge	Length (Inches)	e. Barrel:	f. Overall:	
 Additional Description or sheet if necessary) 	Data Appearing	on Firearm (Atto	ach additional		(If "Yes," des	orm been rendere scribe the metholericeable. Use	d by which t	able as defined in the firearm has be	Definition 1m? en ☐ Yes ☐ No	
			Descrit Ma			Special (Occupation		A Marie of the Contract of the		
5. Applicant's Federal Firearm	s License (if any)	or Explosives Lic	ense of Permit Nu	moer	a. Employer Ide	C William Charles		. Class		
(Give complete 15-digit numbe		2 digits	5 digits	_	a. Employer ide	animeation run		. 0.000		
First 6 digits	2 digits	2 digits	Julgita							
			1					ALDER A. T.		
					8. Transferor's	The same of the sa				
7. Transferor's Federal Fire	arms License (I)	any)			a. Employer Ide	entification Num	ber b	. Class		
First 6 digits	2 digits	2 digits	5 digits	S						
	La la bad									
Under Penalties of Perjury, I of the described firearm to the Title 26, United States Code C	ransferee and re	ceipt and possessi	on of it by the us	nd to th ansfered	are not promotes	a by me provide				
9. Signature of Transferor (C	Or authorized of	ficial)			10. Name and	Title of Authoriz	ed Official	(Print or type) 1	1. Date	
	The Sr	ace Below is for	the use of the B	Bureau	of Alcohol, Toba	cco, Firearms a	nd Explosiv	ves		
By Authority of The Director, Firearm, When Applicable, to	This Application	n Has Been Exam	nined, and the Tra	ansfer a	and Registration o	f the Firearm De	scribed Her	ein and the Inters	tate Movement of that	
Approved (With the follow					Disapprove	d (For the follow	wing reason.	s)		
Signature of Authorized ATF	Official								Date	
	te			_					ATF Form 5 (5320.5) Revised September 2019	

	Fated
TRANSFEREE CERTIFICATION (not completed by a Government 2. Law Enforcement Notification (See instruction 2f)	ment Entity)
The transferee is to provide notification of the proposed acquisition and possession of the firearm described on this	Form 5 by providing a copy of the completed form to the
hief law enforcement officer in the agency identified below:	
Agency or Department Name Name and Title of Of	fficial
Address (Street address or P.O. Box, City, State and Zip Code) to which sent (mailed or delivered)	
Information for the Chief Law Enforcement Officer	oral resultate states as Continued
This form provides notification of the transferee's intent to acquire and possess a National Firearms Act (NFA) firearms are not have information that may disqualify this person from acquiring or possessing a firearm, please contact the NF inswer to items 14.a. through 14.h. or 18.d. or 18.e. could disqualify a person from acquiring or possessing a firear ransfer or possession of the firearm is in violation of State or local law.	FA Division at (304) 616-4500 or NFA@atf.gov. A "Yes"
3. Transferee Necessity Statement (Do not complete if the transferee is a government agency) (See instruction 2	2e)
I, , have a reasonable necessity to	possess the machinegun, short-barreled rifle,
(Name and Title of Transferee) short-barreled shotgun, or destructive device described on this application for the following reason(s)	
and my possession of the device or weapon would be consistent with public safety (18 U.S.C. § 922(b) (4) an	nd 27 CFR § 478.98).
Transferee Questions (complete only when transferee is an individual) 4. Answer questions 14.a. through 14.h. Answer questions 16, 17, 18, 19 and 20, if applicable. For any "Yes"	answer the transferee shall provide details on a separate
sheet. (See instruction 7b and definitions)	Yes No
a. Are you under indictment or information in any court for a felony, or any other crime, for which the judge could imprison you for more than one year? (See definition 1n)	
b. Have you ever been convicted in any court for a felony, or any other crime, for which the judge could have imprisoned you for more than one year, even if you received a shorter sentence including probation? (See definition In)	
c. Are you a fugitive from justice? (See definition 1t)	
d. Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, narcotic drug, or any other controlled substance? Warning: The use or possession of marijuana remains unlawful under Federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside.	15. Photograph Affix a 2" x 2" Photograph here.
e. Have you ever been adjudicated as a mental defective OR have you ever been committed to a mental institution? (See definitions 10 and 1p)	No Stapling. Tape Sides of Photo to the Application.
f. Have you been discharged from the Armed Forces under dishonorable conditions?	Photo must have been taken within the
g. Are you subject to a court order restraining you from harassing, stalking, or threatening your child or an intimate partner or child of such partner? (See definition 1q)	last year.
h. Have you ever been convicted in any court of a misdemeanor crime of domestic violence? (See definition 1r)	Photo must have been taken in full face view without a hat or head covering that
16. Social Security Number: (See Instructions 2h) Date of Birth:	obscures the hair or hairline. 3. On back of photograph print full name, last 4 of SSN.
17a. Ethnicity	Black or African American White Native Hawaiian or Other Pacific Islander
18a. Country of Citizenship: (Check/List more than one, if applicable. Nationals of the United States may check	(U.S.A.) (See definition 1s)
United States of America Other Country/Countries (specify):	
18b. State of Birth 18c.Country of Birth	Yes No
The state of the s	
d. Have you ever renounced your United States citizenship?	
e. Are you an alien illegally or unlawfully in the United States?	
f.1. Are you an alien who has been admitted to the United States under a nonimmigrant visa? f.2. If "yes", do you fall within any of the exceptions stated in the instructions? Attach the documentation to the a	application N/A
19. If you are an alien, record your U.SIssued Alien or Admission number (AR#, USCIS#, or I94#):	No. 16 Ilaaa mgaalda
20. Have you been issued a Unique Personal Identification Number (UPIN)? (See instructions 2h) Yes	No if yes please provide

21. Number of Responsible Persons (see definitions) associated with the tran	nsferee trust or legal entity
 Provide the full name (printed or typed) below for each Responsible Persons than can be listed on the form, attach a separate she National Firearms Act (NFA) Responsible Person Questionnaire, must be 	eet listing the additional Responsible Person(s)). Please note that a completed Form 5320.23
Full Name	Full Name

Important Information for Currently Registered Firearms

If you are the current registrant of the firearm described on this form, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 2a, the executor should contact the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405.

Change of Address: Unless currently licensed under the Gun Control Act, the registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the address in item 2a.

Change of Description: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm(s) in item 4.

Interstate Movement: If the firearm identified in item 4 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320.20 can be used to request this permission.

Restrictions on Possession: Any restriction (see approval block on face of form) on the possession of the firearm identified in item 4 continues with the further transfer of the firearm.

Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of the firearm.

Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form meets the clearance requirements of the Paperwork Reduction Act of 1995. The information you provide is used to apply the tax-exempt transfer of an unserviceable firearm to anyone other than a Federal firearms licensee who has paid the required special (Occupational) tax to deal in NFA firearms and to or from government agencies. The data is used to ensure legality of transfer under Federal, State and local law. The furnishing of this information is mandatory (26 U.S.C. § 5812).

The estimated average burden associated with this collection of information is 0.5 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Privacy Act Information

The following information is provided pursuant to Section 3 of the Privacy Act of 1974 (5 U.S.C. § 552(e)(3)):

- Authority. Solicitation of this information is made pursuant to the National Firearms Act (26 U.S.C. § 5812). Disclosure or this information by the applicant is mandatory for any transfer without payment of transfer tax as provided in 26 U.S.C. § 5852.
- 2. Purpose. To verify that the proposed transfer is exempt from transfer tax; to verify that the transfer would not be in violation of law; and to effect registration of the firearm.
- 3. Routine Uses. The information will be used by ATF to make the determinations set forth in paragraph 2. In addition, to effect registration of the firearm, information as to the identification of the firearm, date of registration, and the identification and address of person entitled to possess the firearm will be entered into the National Firearms Registration and Transfer Record. No information obtained from an application, registration, or records required to be submitted by an individual in order to comply with any provision of the National Firearms Act or regulation issued thereunder, shall, except in connection with prosecution or other action for furnishing information, be used, directly or indirectly, as evidence against that person in any criminal proceeding with respect to a violation of law occurring prior to or concurrently with the filing of the application. The information from this application may only be disclosed to Federal authorities for purposes of prosecution for violation of the National Firearms Act.
- 4. Effects of not Supplying Information Requested. Failure to supply complete information will delay processing and may cause denial of the application.

1. Definitions

- National Firearms Act (NFA). Title 26, United States Code, Chapter
 The implementing regulations are found in Title 27, Code of Federal Regulations, Part 479.
- b. Gun Control Act (GCA). Title 18, United States Code, Chapter 44. The implementing regulations are found in Title 27, Code of Federal Regulations, Part 478.
- c. Firearm. The term "firearm" means: (1) a shotgun having a barrel or barrels of less than 18 inches in length; (2) a weapon made from a shotgun if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 18 inches in length; (3) a rifle having a barrel or barrels of less than 16 inches in length; (4) a weapon made from a rifle if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 16 inches in length; (5) any other weapon as defined in 26 U.S.C. § 5845(e); (6) a machinegun; (7) a muffler or silencer for any firearm whether or not such firearm is included within this definition; and (8) a destructive device.
- d. Person. A partnership, company, association, trust, corporation, including each responsible person associated with such an entity; including each responsible person associated with such an entity; an estate; or an individual.

Section A

e. Responsible Person. In the case of an unlicensed entity, including any trust, partnership, association, company (including any Limited Liability Company (LLC)), or corporation, any individual who possesses, directly or indirectly, the power or authority to direct the management and policies of the trust or entity to receive, possess, ship, transport, deliver, transfer or otherwise dispose of a firearm for, or on behalf of, the trust or legal entity.

Section B

Trust: Those persons with the power or authority to direct the management and policies of the trust includes any person who has the capability to exercise such power and possesses, directly or indirectly, the power or authority under any trust instrument, or under State law, to receive, possess, ship, transport, deliver, transfer, or otherwise dispose of a firearm for, or on behalf of the trust. Examples of who may be considered a responsible person include settlors/grantors, trustees, partners, members, officers, directors, board members, or owners. An example of who may be excluded from this definition of responsible person is the beneficiary of a trust, if the beneficiary does not have the capability to exercise the enumerated powers or authorities.

- f. Employer Identification Number (EIN). Required of taxpayer filing special (occupational) tax returns under 27 CFR § 479.35.
- g. Special (Occupational) Tax. Required by the NFA to be paid by a Federal firearms licensee engaged in the business of manufacturing (Class 2), importing (Class 1), or dealing (Class 3) in NFA firearms.
- Federal Firearms License. A license issued under the provisions of the GCA to manufacture, import or deal in firearms.
- ATF Officer. An officer or employee of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) authorized to perform any function relating to the administration of the NFA.
- Transfer. Selling, assigning, pledging, leasing, loaning, giving away, or otherwise disposing of a firearm.
- Transferor. The person selling or otherwise disposing of a firearm; including applying to transfer a firearm.
- Transferee. The person acquiring the firearm.
- m. Unserviceable Firearm. One which is incapable of discharging a shot by means of an explosive and incapable of being readily restored to firing condition. An acceptable method of rendering most firearms unserviceable is to fusion weld the chamber closed and fusion weld the barrel solidly to the frame.
- n. Prohibited Person. Generally, 18 U.S.C. § 922 (g) prohibits the shipment, transportation, receipt, or possession in or affecting interstate commerce of a firearm by one who: has been convicted of a misdemeanor crime of domestic violence; has been convicted of a felony, or any other crime, punishable by imprisonment for a term exceeding one year (this does not include State misdemeanors punishable by

imprisonment of two years or less); is a fugitive from justice; is an unlawful user of, or addicted to, marijuana or any depressant, stimulant, or narcotic drug, or any other controlled substance; has been adjudicated as a mental defective or has been committed to a mental institution; has been discharged from the Armed Forces under dishonorable conditions; has renounced his or her U.S. citizenship; is an alien illegally in the United States or an alien admitted to the United States under a nonimmigrant visa; or is subject to certain restraining orders. Furthermore, Section 922 (n) prohibits the shipment, transportation, or receipt in or affecting interstate commerce of a firearm by one who is under indictment or information for a felony in any Federal, State or local court, or any other crime, punishable by imprisonment for a term exceeding one year. An information is a formal accusation of a crime verified by a prosecutor.

EXCEPTION: A person who has been convicted of a felony, or any other crime, for which the judge could have imprisoned the person for more than one year, or who has been convicted of a misdemeanor crime of domestic violence, is not prohibited from purchasing, receiving, or possessing a firearm if: (1) under the law of the jurisdiction where the conviction occurred, the person has been pardoned, the conviction has been expunged or set aside, or the person has had their civil rights (the right to vote, sit on a jury, and hold public office) taken away and later restored AND (2) the person is not prohibited by the law of the jurisdiction where the conviction occurred from receiving or possessing firearms. Persons subject to this exception should mark "no" in the applicable box.

- o. Adjudicated as a Mental Defective. A determination by a court, board, commission, or other lawful authority that a person, as a result of marked subnormal intelligence, or mental illness, incompetency, condition, or disease: (1) is a danger to himself or to others; or (2) lacks the mental capacity to contract or manage his own affairs. This term shall include: (1) a finding of insanity by a court in a criminal case; and (2) those persons found incompetent to stand trial or found not guilty by reason of lack of mental responsibility.
- p. Committed to a Mental Institution. A formal commitment of a person to a mental institution by a court, board, commission, or other lawful authority. The term includes a commitment to a mental institution involuntarily. The term includes commitment for mental defectiveness or mental illness. It also includes commitments for other reasons, such as for drug use. The term does not include a person in a mental institution for observation or a voluntary admission to a mental institution.

EXCEPTION NICS Improvement Amendments Act of 2007: A person who has been adjudicated as a mental defective or committed to a mental institution in a state proceeding is not prohibited by the adjudication or commitment if the person has been granted relief by the adjudicating/committing state pursuant to a qualifying mental health relief from disabilities program. Also, a person who has been adjudicated as a mental defective or committed to a mental institution by a department or agency of the Federal Government is not prohibited by the adjudication or commitment if either (a) the person's adjudica tion or commitment was set-aside or expunged by the adjudicating/committing agency; (b) the person has been fully released or discharged from all mandatory treatment, supervi sion, or monitoring by the agency; (c) the person was found by the agency to no longer suffer from the mental health condition that served as the basis of the initial adjudication/ commitment; or (d) the adjudication or commitment, respectively, is based solely on a medical finding of disability, without an opportunity for a hearing by a court, board, commission, or other lawful authority, and the person has not been adjudicated as a mental defective consistent with section 922(g)(4) of title 18, United States code; or (e) the person was granted relief from the adjudicating/committing agency pursuant to a qualified mental health relief from disabilities program. Persons who fall within one of the above exceptions should mark "no" in the applicable box. This exception to an adjudication or commitment by a Federal department or agency does not apply to any person who was adjudicated to be not guilty by reason of insanity, or based on a lack of mental responsibil ity, or found incompetent to stand trial, in any criminal case or under the Uniform Code of Military Justice.

q. Restraining Order. Under 18 U.S.C. § 922, firearms may not be sold to or received by persons subject to a court order that: (A) was issued after a hearing which the person received actual notice of and had an opportunity to participate in; (B) restrains such person from harassing, stalking, or threatening an intimate partner or child of such intimate partner or person, or engaging in other conduct that would place an intimate partner in reasonable fear of bodily injury to the partner or child; and (C)(i) includes a finding that such person represents a credible threat to the physical safety of such intimate partner or child; or (ii) by its terms explicitly prohibits the use, attempted use, or threatened use of physical force against such intimate partner or child that would reasonably be expected to cause bodily injury. An "intimate partner" of a person is: the spouse or former spouse of the person, the parent of a child of the person, or an individual who cohabitates or has cohabitated with the person.

- Misdemeanor Crime of Domestic Violence: A Federal, State, local, tribal offense that is a misdemeanor under the Federal, State, or tribal law and has, as an element, the use or attempted use of physical force, or the threatened use of a deadly weapon, committed by a current or former spouse, parent, or guardian of the victim, by a person with whom the victim shares a child in common, by a person cohabitating with, or has cohabitated with the victim as a spouse, parent, or guardian, or by a person similarly situated to a spouse, parent, or guardian of the victim. The term includes all misdemeanors that have as an element the use or attempted use of physical force or the threatened use of a deadly weapon (e.g., assault and battery), if the offense is committed by one of the defined parties. (See Exception in the definition of "Prohibited Person"). A person who has been convicted of a misdemeanor crime of domestic violence also is not prohibited unless: (1) the person was represented by a lawyer or gave up the right to a lawyer; (2) if the person was entitled to a jury, was tried by a jury, or gave up the right to a jury trial. Persons subject to this exception should mark "no" in the applicable box.
- s. Alien Admitted to the United States Under a Nonimmigrant Visa. An alien admitted to the United States under a nonimmigrant visa includes, among others, persons visiting the United States temporarily for business or pleasure, persons studying in the United States who maintain a residence abroad, and certain temporary foreign workers. These aliens must answer "yes" to question 16.d.1 and provide the additional documentation required under question 16.d.2. Permanent resident aliens and aliens legally admitted to the United States pursuant to either the Visa Waiver Program or to regulations otherwise exempting them from visa requirements may answer "no" to this question and are not required to submit the additional documentation under 16.d.2. An alien admitted to the United States under a nonimmigrant visa is not prohibited from purchasing, receiving, or possessing a firearm if the alien: (1) is in possession of a hunting license or permit lawfully issued by the Federal Government, a State, or local government, or an Indian tribe federally recognized by the Bureau of Indian Affairs, which is valid and unexpired; (2) was admitted to the United States for lawful hunting or sporting purposes; (3) is an official representative of a foreign government who is accredited to the United States Government or the Government's mission to an international organization having its headquarters in the United States; (4) is an official representative of a foreign government who is en route to or from another country to which that alien is accredited; (5) is an official of a foreign government or a distinguished foreign visitor who has been so designated by the Department of State; (6) is a foreign law enforcement officer of a friendly foreign government entering the United States on official law enforcement business; (7) has received a waiver from the prohibition from the Attorney General of the United States.
- t. Fugitives from Justice. Any person who has fled from any State to avoid prosecution for a felony or a misdemeanor, or any person who leaves the State to avoid giving testimony in any criminal proceeding. The term also includes any person who knows that misdemeanor or felony charges are pending against such person and who leaves the State of prosecution.

2. Preparation of Application

- a. Authority. As provided by 26 U.S.C. §§§ 5812, 5852, and 5853, any person seeking to transfer a firearm exempt from payment of tax must submit, in duplicate, a separate application on this form for each firearm. The transferor must furnish all the information called for, except as noted by instructions within, on this application form. Please note that the form now contains a 3rd (CLEO) copy of the form for use in compliance with instruction 2f and item 12 of the form.
- Exemptions from Transfer Tax. A registered firearm may be transferred without payment of the transfer tax if:
 - (1) it is unserviceable; (See definition 1m)
 - it is being transferred to or from the United States, or any department, independent establishment or agency thereof;
 - (3) it is being transferred to or from any State or possession of the United States or any political subdivision thereof, or any official police organization of such government entity; or
 - (4) it is being transferred to a beneficiary of an estate.
- c. Federal Firearms Licensees. If the transferor or transferee is a Federal Firearms licensee (FFL) under the GCA, the licensee's complete name, trade name (if any), and address shall be entered in items 2a or 3a of this form,

respectively. The complete license number of each shall be entered in items 5 and 7 of the form and, if the licensee is a special (occuptational) taxpayer under the NFA, the licensee's employer identification number (EIN) shall be entered in items 6 and 8 of the form, along with the class of special tax paid.

IMPORTANT NOTE: The business structure of the licensee shall be described consistently. For example, if the transferor is a sole proprietor, item 3a shall reflect the FFL information for the sole proprietor business and item 7 shall reflect the FFL number for that sole proprietor business. Item 8 will reflect the EIN for the sole proprietor business. If the special tax is paid as a corporation, then it is not valid for the transaction. Similarly, a corporation name shown in item 3a with the FFL number and EIN of a sole proprietor will not be valid for the transaction.

d. Completion of Form.

- (1) The transferor shall provide the transferee's full legal name to include middle and physical address (no Post office box) in item 2a. If the transferee is a trust or legal entity, show only the complete name of the trust or legal entity and do not include any individual names (such as names of trustees or corporate officials). The address shall be the location within the particular state where the firearm will be maintained for a trust or legal entity. In the case of two or more locations for a legal entity, the address shown shall be the principal place of business within the particular state (or principal office, in the case of a corporation).
- (2) If the transferee is an individual, the entire Form 5 shall be completed except for items 21 and 22. In addition, the transferee must include his or her fingerprints on FBI Form FD-258 and his or her photos (see instruction 2g).
- (3) If the transferee is other than an individual, e.g., a trust or legal entity, such as a corporation, the transferee shall not complete items 14, 15, 16, 17, 18, 19 or 20. All other items must be completed including the signing of the Transferee Certification statement by the transferee See 2.d.5 for Responsible Person Requirements.
- (4) Documentation of entity existence:
 - a. If the transferee is other than an individual, the transferee must attach documentation evidencing the existence and validity of the trust or legal entity, which includes complete and unredacted copies of partnership agreements, articles of incorporation, corporate registration, declarations of trust with any trust schedules, attachments, exhibits, and enclosures.
 - b. If the transferee entity has had an application approved as a maker or transferee within the preceding 24 months of the date of filing this application, and there has been no change to the documentation evidencing the existence and validity of the entity previously provided, the trust or legal entity may provide a certification that the information has not been changed since the prior approval and shall identify the application for which the documentation had been submitted form number, serial number, and date approved.
- (5) If the transferee is other than an individual, each responsible person of the trust or legal entity (see definition1e) must include a completed ATF Form 5320.23, National Firearms Act (NFA) Responsible Person Ouestionnaire, with the submitted Form 5.
- (6) Item 4g (serial number) is obscured on the CLEO copy. This field does not require completion on the CLEO copy.
- e. Transferee Necessity Statement. Item 13 must be completed by the transferee if:
 - the firearm to be transferred is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device;
 - (2) the transferor is licensed under the GCA to deal in such device or firearm; and
 - (3) the transferee is **not** licensed under the GCA to deal in such device or firearm.
- f. Law Enforcement Notification. The transferee must provide a copy of the Form 5 to the chief law enforcement officer (CLEO) who has jurisdiction over the area of the transferee's address shown in item 2a of the Form 5. In addition, if the transferee is other than an individual, a copy of the Form 5320.23, National Firearms Act (NFA) Responsible Person Questionnaire, completed by each responsible person must be provided to their respective chief law enforcement officer. The chief law enforcement officer is considered to be the Chief of Police; the Sheriff; the Head of the State Police; or a State or local district attorney or prosecutor.

ATF Form 5(5320.5) Revised September 2019

- g. Photographs and Fingerprints. An individual transferee, except if licensed as a manufacturer, importer, or dealer under the GCA, must (1) attach to item 15 of the ATF Form 5, a 2 inch x 2 inch photograph of the frontal view of the transferee taken within 1 year prior to the date of the application and (2) submit two properly completed FBI Forms FD-258 (Fingerprint Card with blue lines) with the application. The fingerprints must be clear for accurate classification and taken by someone properly equipped to take them.
- h. Social Security Number and UPIN. The Social Security number and UPIN are not required. However, this informatin assists with the efficient completion of the NICS background check. Please be aware that refusal to provide this informatin may result in a delay in the NICS background check process.
- Signatures. All signatures required on ATF Form 5 must be original in ink on both copies. Exceptions: In the case of eforms or where a variance has been granted a Digital/Electronic signature may be used.
 - (1) if the applicant is an individual, the applicant shall sign the form;
 - (2) if the applicant is the estate of a decedent or the firearm is being transferred by other operation of law, the executor or administrator of the estate shall sign the form or, in the case of other operation of law transfer, the person appointed to dispose of the property shall sign the form:
 - if the applicant is a trust or legal entity, a responsible person of the trust or legal entity shall sign the form;
 - (4) if the applicant is a Federal firearms licensee, a responsible person of the Federal firearms licensee must sign the form; or
 - (5) if the applicant is a government entity, a person who has authority to sign for the entity shall sign the form.
- j. Photocopies, Computer Generated Versions, or Downloaded Version. The form may be copied or downloaded (for example, from the ATF website (www.atf.gov)). The form does not have to be printed front to back.
- k. Estates, Trusts, and Other Transfers by Operation of Law. When a firearm is being transferred from an estate by bequest or intestate succession (see 27 CFR § 479.90a), or by other operation of law to a beneficiary or other authorized recipient, ATF Form 5 is used to effect the transfer. The executor, trustee, or other person appointed to dispose of property shall provide documentation of the legal status of the person entitled to receive property, and shall identify that person in item 2a. In the case of an estate, item 3e shall be completed to reflect the decedent's information. If the transfer is to someone other than to a person identified under operation of law, the transfer is subject to transfer tax and ATF Form 4 shall be used.
- Submission. The transferor shall submit 2 forms (ATF Copy 1 and Copy 2
 (Registrant)) to the NFA Division at the address on the face of the form. All
 items on the form are to be completed except as noted in the instructions and
 any attachment included with the submission. The applicant shall direct the
 3rd copy (CLEO) complete copy of the form to the chief law enforcement
 officer as provided in instruction 2f and item 12.
- m. Submission by Facsimile Transmission. ATF Form 5 may also be submitted (in situations where the application is not accompanied by fingerprints and photographs) for approval by facsimile transmission to (304) 616-4501 provided that the transferor has filed an affidavit with the NFA Division as provided by ATF Industry Circular 89-6.
- n. Description of Firearm and Markings. (1) Item 4a. please provide the name and address of the maker, manufacturer or importer of the firearm. If there are additional makers, manufacturers, or importers, include this information in item 4h or on a separate sheet of paper. (2) Item 4b the types of NFA firearm are listed in definition 1c. (3) Item 4c. specify one caliber or gauge. If there are additional calibers associated with the description of the firearm, include this information in item 4h or on a separate piece of paper. (4) Item 4d. show the model designation (if any). (5) Item 4e. and 4f. specify the barrel and overall lengths as applicable. If there are additional barrel and overall lengths associated with the description of the firearm, include this information in item 4h or on a separate sheet of paper. (6) Item 4g. (a) enter the serial number of the firearm. (b) When more than one firearm of the same description is being transferred and the serial numbers are in a consecutive series, the transferor may enter the beginning and ending serial numbers of the range. When more than one firearm of the same description is being transferred but the serial numbers are nonconsecutive, the transferor may

- note item 4g. to "see attached list of xxx serial numbers." Any attachment must be referenced to the ATF Form 5. (7) If there are differences between the description of the firearm on the form in comparison to the physical description of the firearm or in the markings on the firearm, including the serial number, contact the NFA Division in regard to these differences. (8) Item 4i. Answer "Yes" or "No".
- o. State or Local Permit. If a State or local permit or license is required for the transferee prior to acquisition of the firearm, a copy of the permit must be included with the application. If the transferee is a trust or legal entity, when the State of residence for any responsible person requires a State or local permit or license, a copy of the permit or license must be submitted with Form 5320.23, National Firearms Act (NFA) Responsible Person Questionnaire.
- 3. Approval of Application. Upon approval of an application, the NFA Division will return the approved copy to the transferor for delivery with the firearm to the transferee. Since the approval of the application effectuates registration of the firearm to the transferee, the physical transfer of the firearm must be completed immediately; however, the transferor must not transfer the firearm until the application has been approved and received. If the physical transfer of the firearm cannot be completed immediately, the transferor must contact the NFA Branch with the specifics.
- Withdrawal of Application. The transferor may withdraw an application prior to approval subsequent to a written request directed to the Chief, NFA Division, 244 Needy Road, Martinsburg, WV 25405.
- 5. Cancellation of Approved Application. The transferor may cancel an approved application only if the physical transfer of the firearm has not been completed. The transferor must return the approved application with a written request directed to the Chief, NFA Division, 244 Needy Road, Martinsburg, WV 25405 for cancellation, citing the need and that the physical transfer of the firearm did not take place.
- Disapproval of Application. If the application is disapproved, the NFA
 Division will note the reason for disapproval on the application and return one
 copy of the ATF Form 5 to the transferor.
- Reasons for Disapproval. 26 U.S.C. § 5812 provides that applications shall be denied if the transfer, receipt, or possession of the firearm would place the transferee in violation of law.
 - a. Violation of Law. Applications shall be denied if the receipt or possession of the firearm would place the person receiving or possessing the firearm in violation of law.
 - b. Persons Prohibited from Receiving a Firearm. The application will be disapproved if the transferee is a person prohibited from receiving a firearm. For information regarding persons prohibited from receiving a firearm, refer to definitions 1n through 1s.
- 8. Status Inquiries and Questions. Information relating to the NFA and other firearms laws is available at the ATF Internet website at www.atf.gov. Any inquiry relating to the status of an application to transfer an NFA firearm or about procedures in general should be directed to the NFA Division at (304) 616-4500. Please be aware that any dissemination by ATF of information relating to the application to register an NFA firearm must conform with the restrictions in 26 U.S.C. § 6103.
- 9. Penalties. Any person who violates or fails to comply with any of the requirements of the NFA shall, upon conviction, be fined not more than \$10,000 or be imprisoned for not more than 10 years, or both. Any firearm involved in a violation of the NFA shall be subject to seizure and forfeiture. It is unlawful for any person to make or cause the making of a false entry on any application or record required by the NFA knowing such entry to be false.
- Compliance with the Gun Control Act. Persons must also comply with all relevant portions of the GCA.

U.S. Department of Justice

Bureau of Alcohol, Tobacco, Firearms and Explosives

Application for Tax Exempt Transfer and Registration of Firearm

h. Additional Description or Data Appearing on Firearm (Attach additional i. Has the Firearm been rendered unserviceable as defined in Definition 1m?	ATF Control Number		U.S. (8-19-)			Internal Contr	ol Number			077
Deliver what I am entitled to exemption from the payment of the Transfer Tax Importance by section \$811 (26 U.S.C. Chapter 53) on the payment of the Transfer Tax Importance 12 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Submit in duplicate to:				osive	s, 244 Needy R	Road, Martinsbu	rg, WV 25	5405	
Tristerant is being transferred to a round or from a Government Entity Corporation Individual Trust Government Entity	I believe that I am entitled the payment of the Transfer section 5811 (26 U.S.C. Che Firearm described herein for reason (See Instruction 2b)	o exemption from Tax Imposed by apter 53) on the r the following):	2a. Transferee's	s Full Legal Name a	nd A	ddress <i>(Include</i>	trade name, if an	ny) (See in.	struction 2k)	
Firearm is being transferred to a lawful heir or by operation of law heir or by operation of law heir or by operation of law of Other (Specify) 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent's Name, Address, and Date of Death 3a. If Applicable: Decedent 3a. If Applicable: Dece	transferred as a curio or Firearm is being transfer	ornament				diamenta in	Governme	2b. County/Parish		
3c. Transferor's telephone (area code and number) 3d. E-mail address The above-named and undersigned transferor hereby makes application as required by Section 5812 of the National Firearms Act to transfer and register the firearm of the transferor. 4. Description of Firearm (Complete items a through t) (See instruction 2a) a. Name and Address of Maker, Manufacturer and/or Importer of Firearm (Complete items a through t) (See instruction 2a) b. Type of Firearm (See definitions lc) c. Caliber (Inches) g. Serial Number Length (e. Barrel: f. Overall Streams License (If any) or Explosives License or Permit Number (If "Nes," describe the method by which the firearm has been of the Secondary (Inches) Give complete 15-digit number) (See instruction 2c) First 6 digits 2 digits 2 digits 5 digits 7. Transferor's Federal Firearms License (If any) First 6 digits 2 digits 5 digits 10. Name and Title of Authorized Official (Print or type) Inder Penalties of Perjury, I Declare that have examined this spellcation, and to the best of my knowledge and belief it is true, correct and complete, and that the of the described firearm to the transferer and register the firearms and Explosives The Space Below is for the use of the Bureau of Alcohol, Tobacco, Firearms and Explosives Disapproved (With the following conditions, If any) Disapproved (With the following conditions, If any) Disapproved (With the following conditions, If any)	Firearm is being transfer heir or by operation of la		3a. If Applicab	ole: Decedent's Nar	ne, A	ddress, and Date	e of Death			
The above-named and undersigned transferor hereby makes application as required by Section 5812 of the National Firearms Act to transfer and register the firearm of the above-named and undersigned transferor hereby makes application as required by Section 5812 of the National Firearms Act to transfer and register the firearm of Description of Firearm (Complete Items a through I) (See Instruction 2n)	3b. Transferor's Name and A	ddress (Include trad	de name, if any) (E	xecutors: see instruc	tion 2	k)			KALLE II	0
A. Description of Firearm (Complete items a through i) (See instruction 2n) Description of Firearm (Complete items a through i) (See instruction 2n) Description of Firearm (See definitions ic) C. Caliber of Gauge C. Caliber of C. Caliber of C. Caliber of Gauge C. Caliber of C. Caliber	3c. Transferor's telephone (are	ea code and munber)	3d. E-mail addr				and the second s	de of Reside	ence (or Firearms E	Business Premises)
a. Name and Address of Maker, Manufacturer and/or Importer of Firearm Description of Data Appearing on Firearm Data Appearing on Firearm Data D		rsigned transferor h	ereby makes app	lication as required	by Se	ection 5812 of th	ne National Firea	rms Act to	transfer and regist	er the firearm describe
Importer of Firearm Importer Importer of Firearm Importer Important Importan	4. Description of Firearm	(Complete items a	through i) (See in	nstruction 2n)		1.0		d. Mode	l	
h. Additional Description or Data Appearing on Firearm (Attach additional sheet if necessary) i. Has the Firearm been rendered unserviceable as defined in Definition 1m² (If "Yes," describe the method by which the firearm has been	하게 그는 어디에게 어려면 어린 어린이 아이를 하면 살아야 한 이 나는 사람이 되었다면 하게 되었다면 하는데 그는데 그렇게 하는데 그렇게 하는데			b. Type of Firear	m (Se	ee definitions1c)	or	(Inches)		f. Overall:
5. Applicant's Federal Firearms License (If any) or Explosives License or Permit Number (Give complete 15-digit number) (See instruction 2c) First 6 digits		or Data Appearing	on Firearm (Atta	nch additional	i	(If "Yes," des	scribe the method	d unservice	eable as defined in the firearm has be	Definition 1m? en ☐ Yes ☐ No
Class Section Class Cl	5 Applicant's Federal Fires	rms I icense (if any)	or Explosives Lice	ense or Permit Numb	er 6				Language of the land of the land	
First 6 digits 2 digits 2 digits 5 digits 8. Transferor's Special (Occupational) Tax Status (If any) 7. Transferor's Federal Firearms License (If any) a. Employer Identification Number b. Class Under Penalties of Perjury, I Declare that I have examined this application, and to the best of my knowledge and belief it is true, correct and complete, and that the of the described firearm to the transferee and receipt and possession of it by the transferee are not prohibited by the provisions of Title 18, United States Code, Chap 44; Title 26, United States Code Chap 53; or any provisions of State or local law. 9. Signature of Transferor (Or authorized official) The Space Below is for the use of the Bureau of Alcohol, Tobacco, Firearms and Explosives By Authority of The Director, This Application Has Been Examined, and the Transfer and Registration of the Firearm Described Herein and the Interstate Movement Firearm, When Applicable, to the Transferee are: Approved (With the following conditions, if any) Date					100		The state of the s			
7. Transferor's Federal Firearms License (If any) First 6 digits 2 digits 2 digits 5 digits Under Penalties of Perjury, I Declare that I have examined this application, and to the best of my knowledge and belief it is true, correct and complete, and that the of the described firearm to the transferee and receipt and possession of it by the transferee are not prohibited by the provisions of Title 18, United States Code, Chap 44; Title 26, United States Code Chap 53; or any provisions of State or local law. 9. Signature of Transferor (Or authorized official) The Space Below is for the use of the Bureau of Alcohol, Tobacco, Firearms and Explosives By Authority of The Director, This Application Has Been Examined, and the Transfer and Registration of the Firearm Described Herein and the Interstate Movement Firearm, When Applicable, to the Transferee are: Approved (With the following conditions, if any) Disapproved (For the following reasons)	A CONTRACTOR OF THE PROPERTY O			5 digits						
First 6 digits 2 digits 5 digits Under Penalties of Perjury, I Declare that I have examined this application, and to the best of my knowledge and belief it is true, correct and complete, and that the of the described firearm to the transferee and receipt and possession of it by the transferee are not prohibited by the provisions of Title 18, United States Code, Chap 44; Title 26, United States Code Chap 53; or any provisions of State or local law. 9. Signature of Transferor (Or authorized official) The Space Below is for the use of the Bureau of Alcohol, Tobacco, Firearms and Explosives By Authority of The Director, This Application Has Been Examined, and the Transfer and Registration of the Firearm Described Herein and the Interstate Movement Firearm, When Applicable, to the Transferee are: Approved (With the following conditions, if any) Disapproved (For the following reasons)				1	8	. Transferor's	Special (Occupat	ional) Tax	Status (If any)	
Under Penalties of Perjury, I Declare that I have examined this application, and to the best of my knowledge and belief it is true, correct and complete, and that the of the described firearm to the transferee and receipt and possession of it by the transferee are not prohibited by the provisions of Title 18, United States Code, Chap 44; Title 26, United States Code Chap 53; or any provisions of State or local law. 9. Signature of Transferor (Or authorized official) 10. Name and Title of Authorized Official (Print or type) The Space Below is for the use of the Bureau of Alcohol, Tobacco, Firearms and Explosives By Authority of The Director, This Application Has Been Examined, and the Transfer and Registration of the Firearm Described Herein and the Interstate Movement Firearm, When Applicable, to the Transferee are: Approved (With the following conditions, if any) Disapproved (For the following reasons)	7. Transferor's Federal Fi	irearms License (I)	f any)	7-20-0	а	. Employer Ide	entification Num	ber	b. Class	
of the described firearm to the transferee and receipt and possession of it by the transferee are not promitted by the provisions of Title 16, Omited States Code Chap 53; or any provisions of State or local law. 9. Signature of Transferor (Or authorized official) The Space Below is for the use of the Bureau of Alcohol, Tobacco, Firearms and Explosives By Authority of The Director, This Application Has Been Examined, and the Transfer and Registration of the Firearm Described Herein and the Interstate Movement Firearm, When Applicable, to the Transferee are: Approved (With the following conditions, if any) Disapproved (For the following reasons)		Calledon er								
By Authority of The Director, This Application Has Been Examined, and the Transfer and Registration of the Firearm Described Herein and the Interstate Movement Firearm, When Applicable, to the Transferee are: Approved (With the following conditions, if any)	of the described firearm to the Title 26, United States Code	ne transferee and re e Chap 53; or any p r (Or authorized of	ceipt and possession provisions of State ficial)	on of it by the transi e or local law.	eree a	Name and T	Title of Authoriz	ed Official	(Print or type) 1	
Approved (With the following conditions, if any) Disapproved (For the following reasons)	By Authority of The Director	or, This Application	n Has Been Exam	the use of the Burdined, and the Trans	eau of fer an	f Alcohol, Toba d Registration of	cco, Firearms and f the Firearm Des	nd Explosi scribed He	ves rein and the Inters	tate Movement of that
Signature of Authorized ATF Official Date			The state of the s			Disapproved	d (For the follow	ving reasor	15)	
Signature of Authorized ATF Official	A									Date
	Signature of Authorized AT	F Official								T 757

	THE ANOTHER CERTIFICATION (see a second day by a Construction	unut E	es el es el			_	
2	TRANSFEREE CERTIFICATION (not completed by a Government Law Enforcement Notification (See instruction 2f)	nent E	muy)	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		_	
	e transferee is to provide notification of the proposed acquisition and possession of the firearm described on this	Form	5 by pro	viding a copy of the completed	form to	o the	
chie	of law enforcement officer in the agency identified below:						
Δα	ency or Department Name Name and Title of O	fficial	_		_	_	
ng.	oney of Department Familie						
Ad	dress (Street address or P.O. Box, City, State and Zip Code) to which sent (mailed or delivered)						
	Information for the Chief Law Enforcement Officer						
you	is form provides notification of the transferee's intent to acquire and possess a National Firearms Act (NFA) fire a have information that may disqualify this person from acquiring or possessing a firearm, please contact the NF wer to items 14.a. through 14.h. or 18.d. or 18.e. could disqualify a person from acquiring or possessing a firearn sfer or possession of the firearm is in violation of State or local law.	arm. I	ision at ((304) 616-4500 or NFA@att.go	v. A ")	hould Yes"	
13.	Transferee Necessity Statement (Do not complete if the transferee is a government agency) (See instruction 2	2e)					
	I, , have a reasonable necessity to	posses	s the ma	achinegun, short-barreled rifle,			
	(Name and Title of Transferee) short-barreled shotgun, or destructive device described on this application for the following reason(s)						
	and my possession of the device or weapon would be consistent with public safety (18 U.S.C. § 922(b) (4) and	d 27 C	FR § 47	8.98).			
						_	
Tr	Answer questions 14.a. through 14.h. Answer questions 16, 17, 18, 19 and 20, if applicable. For any "Yes"	answe	r the tran	sferee shall provide details on	a separa	ate	
14.	sheet. (See instruction 7b and definitions)						
		Yes	No				
	Are you under indictment or information in any court for a felony, or any other crime, for which the judge could imprison you for more than one year? (See definition In)						
b.	Have you ever been convicted in any court for a felony, or any other crime, for which the judge could have imprisoned you for more than one year, even if you received a shorter sentence including probation? (See definition In)						
c.	Are you a fugitive from justice? (See definition 1t)						
d.	d. Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, narcotic drug, or any other controlled substance? Warning: The use or possession of marijuana remains unlawful under Federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside.						
e.	Have you ever been adjudicated as a mental defective OR have you ever been committed to a mental institution? (See definitions 10 and 1p)			Affix a 2" x 2" Photograph here. No Stapling. Tape Sides of Photo to th Application.			
f.	Have you been discharged from the Armed Forces under dishonorable conditions?			Photo must have been taken within the last year.			
	Are you subject to a court order restraining you from harassing, stalking, or threatening your child or an intimate partner or child of such partner? (See definition 1q)						
h	Have you ever been convicted in any court of a misdemeanor crime of domestic violence? (See definition 1r)			2. Photo must have been tak			
	Date of Birth:	-		view without a hat or head obscures the hair or hairli		ng that	
				On back of photograph pr last 4 of SSN, and busines	int full	name,	
17	'a. Ethnicity			r African American Hawaiian or Other Pacific Islan	White nder		
10	a. Country of Citizenship: (Check/List more than one, if applicable. Nationals of the United States may check	U.S.A) (See de	efinition 1s)			
18	4. TO STOCK AND A STOCK STOCK TO THE SECRETARY OF STOCK S						
	10 Company of Birth				77		
18	b. State of Birth					L 37	
-					Yes	No	
d.	Have you ever renounced your United States citizenship?						
e.	Are you an alien illegally or unlawfully in the United States?						
_	 Are you an alien who has been admitted to the United States under a nonimmigrant visa? If "yes", do you fall within any of the exceptions stated in the instructions? Attach the documentation to the a 	applica	tion	□ N/A			
						9	
19	D. If you are an alien, record your U.SIssued Alien or Admission number (AR#, USCIS#, or 194#):	No 1	f ves nle	ase provide			
20	. Have you been issued a Unique Personal Identification Number (UPIN)? (See instructions 2h) Yes	.10 1	r yes pre	use provide		1	

r legal entity
I with the applicant trust or legal entity (if there are more additional Responsible Person(s)). Please note that a completed Form 5320.23, ith the Form 5 application for each Responsible Person.
Full Name
-

Important Information for Currently Registered Firearms

If you are the current registrant of the firearm described on this form, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 2a, the executor should contact the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405.

Change of Address: Unless currently licensed under the Gun Control Act, the registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the address in item 2a.

Change of Description: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm(s) in item 4.

Interstate Movement: If the firearm identified in item 4 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320.20 can be used to request this permission.

Restrictions on Possession: Any restriction (see approval block on face of form) on the possession of the firearm identified in item 4 continues with the further transfer of the firearm.

Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of the firearm.

Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form meets the clearance requirements of the Paperwork Reduction Act of 1995. The information you provide is used to apply the tax-exempt transfer of an unserviceable firearm to anyone other than a Federal firearms licensee who has paid the required special (Occupational) tax to deal in NFA firearms and to or from government agencies. The data is used to ensure legality of transfer under Federal, State and local law. The furnishing of this information is mandatory (26 U.S.C. § 5812).

The estimated average burden associated with this collection of information is 0.5 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Privacy Act Information

The following information is provided pursuant to Section 3 of the Privacy Act of 1974 (5 U.S.C. § 552(e)(3)):

- Authority. Solicitation of this information is made pursuant to the National Firearms Act (26 U.S.C. § 5812). Disclosure or this information by the applicant is mandatory for any transfer without payment of transfer tax as provided in 26 U.S.C. § 5852.
- 2. Purpose. To verify that the proposed transfer is exempt from transfer tax; to verify that the transfer would not be in violation of law; and to effect registration of the firearm.
- 3. Routine Uses. The information will be used by ATF to make the determinations set forth in paragraph 2. In addition, to effect registration of the firearm, information as to the identification of the firearm, date of registration, and the identification and address of person entitled to possess the firearm will be entered into the National Firearms Registration and Transfer Record. No information obtained from an application, registration, or records required to be submitted by an individual in order to comply with any provision of the National Firearms Act or regulation issued thereunder, shall, except in connection with prosecution or other action for furnishing information, be used, directly or indirectly, as evidence against that person in any criminal proceeding with respect to a violation of law occurring prior to or concurrently with the filing of the application. The information from this application may only be disclosed to Federal authorities for purposes of prosecution for violation of the National Firearms Act.
- 4. Effects of not Supplying Information Requested. Failure to supply complete information will delay processing and may cause denial of the application.

U.S. Department of Justice

Bureau of Alcohol, Tobacco, Firearms and Explosives

Application for Tax Exempt Transfer and Registration of Firearm

ump G () NY)	- A = 78050045550		Internal Cart	nol Number			
ATF Control Number	1 El	ow.	Internal Cont	roi Number			
Submit in duplicate to: Bureau	al Firearms Act Division of Alcohol, Tobacco, 1	Firearms and Expl				ALL STATE OF THE S	
1. Type of Transfer: tax exempt I believe that I am entitled to exemption the payment of the Transfer Tax Imposes section 5811 (26 U.S.C. Chapter 53) on to Firearm described herein for the following reason (See Instruction 2b): Firearm is unserviceable and is being	from 1 by the ng	s Full Legal Name a	nd Address (Include	e trade name, if ar	ny) (See instru	uction 2k)	
transferred as a curio or ornament Firearm is being transferred to or fror a Government Entity	Other Lege	ll Entity	Corporation Trust	Governme	ent Entity	2b. County	/Parish
☐ Firearm is being transferred to a lawf heir or by operation of law ☐ Other (Specify) —	heir or by operation of law						
3b. Transferor's Name and Address (Inclu	de trade name, if any) (E	xecutors: see instruct	ion 2k)				
Lances of Co. T	The second second		Number, Street, City If Different from Ite	y, State and Zip Co em 3a.	de of Residenc	e (or Firearms Bi	usiness Premises)
3c. Transferor's telephone (area code and nu							
The above-named and undersigned transfelow to the transferee. 4. Description of Firearm (Complete in	al la continue a months d	Parallel Manager DOLL	by Section 5812 of the	he National Firear	d. Model	nsfer and register	r the firearm described
Name and Address of Maker, Manu Importer of Firearm			m (See definitions1c)	c. Caliber or Gauge	Length (Inches)	e. Barrel:	f. Overall:
h. Additional Description or Data App- sheet if necessary)	earing on Firearm (Atto	nch additional	(If "Yes," de.	arm been rendered scribe the method serviceable. Use a	by which the	firearm has been	Definition 1m?
5. Applicant's Federal Firearms License ((if any) or Explosives Lice	ense or Permit Numbe	er 6. Transferee's	Special (Occupat	ional) Tax Sta	itus (If any)	
(Give complete 15-digit number) (See in				entification Numb	per b.	Class	
First 6 digits 2 digits	2 digits	5 digits					
		1					
			8. Transferor's	Special (Occupat	tional) Tax Sta	atus (If any)	
7. Transferor's Federal Firearms Licer	nse (If anv)			lentification Num		Class	
First 6 digits 2 digits	2 digits	5 digits					
THE RESERVE OF STREET							and that the transfer
Under Penalties of Perjury, I Declare of the described firearm to the transferee Title 26, United States Code Chap 53; or	and receipt and possessi	on of it by the transf	eree are not promote	d by the provision	.5 01 11110 10,		
9. Signature of Transferor (Or authori	zed official)			Title of Authoriz			. Date
By Authority of The Director, This Appl	The Space Below is for lication Has Been Exam	the use of the Bure ined, and the Transf	au of Alcohol, Toba er and Registration of	of the Firearm De	nd Explosives scribed Herein	s n and the Intersta	te Movement of that
Firearm, When Applicable, to the Transf Approved (With the following cond	The state of the s		Disapprove	ed (For the follow	ving reasons)		
Signature of Authorized ATF Official							Date
Previous Editions Are Obsolete		C	LEO Copy				TF Form 5 (5320.5) evised September 2019

_						_
12	TRANSFEREE CERTIFICATION (not completed by a Government Notification (See instruction 2f)	ient E	ntity)			_
	e transferee is to provide notification of the proposed acquisition and possession of the firearm described on this	Form	5 by pro	viding a copy of the completed	l form t	o the
	ef law enforcement officer in the agency identified below:	. 0	o oy pro	, amig a sop, as me somp	7 (7) 107 (7 777
Ag	ency or Department Name Name and Title of Of	ficial				-
Ad	dress (Street address or P.O. Box, City, State and Zip Code) to which sent (mailed or delivered)					
	Information for the Chief Law Enforcement Officer	-	. 1. 1. 1			
you ans	is form provides notification of the transferee's intent to acquire and possess a National Firearms Act (NFA) firear have information that may disqualify this person from acquiring or possessing a firearm, please contact the NF wer to items 14.a. through 14.h. or 18.d. or 18.e. could disqualify a person from acquiring or possessing a firear asfer or possession of the firearm is in violation of State or local law.	A Div	ision at ((304) 616-4500 or NFA@atf.go	ov. A "	hould Yes"
13.	Transferee Necessity Statement (Do not complete if the transferee is a government agency) (See instruction 2	e)		N. Saurovija sa		
	I,, have a reasonable necessity to	posses	s the ma	chinegun, short-barreled rifle,		
	(Name and Title of Transferee) short-barreled shotgun, or destructive device described on this application for the following reason(s)	_				_
	and my possession of the device or weapon would be consistent with public safety (18 U.S.C. § 922(b) (4) and	d 27 C	FR § 47	8.98).		
Tr	Answer questions 14.a. through 14.h. Answer questions 16, 17, 18, 19 and 20, if applicable. For any "Yes" a	mouve	r the trar	seferee shall provide details on	a senar	ate
14.	Answer questions 14.a. through 14.h. Answer questions 16, 17, 18, 19 and 20, if applicable. For any sheet. (See instruction 7b and definitions)		the trai	isteree shan provide details on	и вериг	
		Yes	No			
	Are you under indictment or information in any court for a felony, or any other crime, for which the judge could imprison you for more than one year? (See definition 1n)					
1	Have you ever been convicted in any court for a felony, or any other crime, for which the judge could have imprisoned you for more than one year, even if you received a shorter sentence including probation? (See definition In)					
	Are you a fugitive from justice? (See definition 1t)		10			
d.	Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, narcotic drug, or any other controlled substance? Warning: The use or possession of marijuana remains unlawful under Federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside.			15. Photograph	note sate	
e.	Have you ever been adjudicated as a mental defective OR have you ever been committed to a mental institution? (See definitions 10 and 1p)			Affix a 2" x 2" Photogr No Stapling. Tape Sides of Application.		
f.	Have you been discharged from the Armed Forces under dishonorable conditions?			755	an weithi	in tha
g.	Are you subject to a court order restraining you from harassing, stalking, or threatening your child or an intimate partner or child of such partner? (See definition 1q)			Photo must have been tak last year.		
h.	Have you ever been convicted in any court of a misdemeanor crime of domestic violence? (See definition 1r)			Photo must have been tak view without a hat or hear	en in fu	ll face
	Date of Birth:			obscures the hair or hairli 3. On back of photograph present as t 4 of SSN, and business	ne. int full	name,
17	a. Ethnicity Hispanic or Latino 17b. Race American Indian or Alaska Native Not Hispanic or Latino Asian			r African American Hawaiian or Other Pacific Islan	White nder	
18	a. Country of Citizenship: (Check/List more than one, if applicable. Nationals of the United States may check	U.S.A.) (See de	efinition 1s)		
	United States of America Other Country/Countries (specify):		<u> </u>			
18	b. State of Birth 18c.Country of Birth					L M.
-					Yes	No
d.	Have you ever renounced your United States citizenship?					
e.	Are you an alien illegally or unlawfully in the United States?					
f.1 f.2	 Are you an alien who has been admitted to the United States under a nonimmigrant visa? If "yes", do you fall within any of the exceptions stated in the instructions? Attach the documentation to the approximately. 	pplica	tion	□ N/A		7
	D. If you are an alien, record your U.SIssued Alien or Admission number (AR#, USCIS#, or I94#):					
20	. Have you been issued a Unique Personal Identification Number (UPIN)? (See instructions 2h) Yes	Vo I	f yes ple	ase provide		
20	o. Have you been issued a children and the same state of the same				Wirela D	2.1

Signature of Transferee	Date						
21. Number of Responsible Persons (see definitions) associated with the	transferee trust or legal entity						
22. Provide the full name (printed or typed) below for each Responsible Person associated with the applicant trust or legal entity (if there are more Responsible Persons than can be listed on the form, attach a separate sheet listing the additional Responsible Person(s)). Please note that a completed Form National Firearms Act (NFA) Responsible Person Questionnaire, must be submitted with the Form 5 application for each Responsible Person.							
Full Name	Full Name						

Important Information for Currently Registered Firearms

If you are the current registrant of the firearm described on this form, please note the following information.

Estate Procedures: For procedures regarding the transfer of firearms in an estate resulting from the death of the registrant identified in item 2a, the executor should contact the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405.

Change of Address: Unless currently licensed under the Gun Control Act, the registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the address in item 2a.

Change of Description: The registrant shall notify the NFA Division, Bureau of Alcohol, Tobacco, Firearms and Explosives, 244 Needy Road, Martinsburg, WV 25405, in writing, of any change to the description of the firearm(s) in item 4.

Interstate Movement: If the firearm identified in item 4 is a machinegun, short-barreled rifle, short-barreled shotgun, or destructive device, the registrant may be required by 18 U.S.C. § 922(a)(4) to obtain permission from ATF prior to any transportation in interstate or foreign commerce. ATF Form 5320.20 can be used to request this permission.

Restrictions on Possession: Any restriction (see approval block on face of form) on the possession of the firearm identified in item 4 continues with the further transfer of the firearm.

Persons Prohibited from Possessing Firearms: If the registrant becomes prohibited from possessing a firearm, please contact the NFA Division for procedures on how to dispose of the firearm.

Proof of Registration: A person possessing a firearm registered as required by the NFA shall retain proof of registration which shall be made available to any ATF officer upon request.

Paperwork Reduction Act Notice

This form meets the clearance requirements of the Paperwork Reduction Act of 1995. The information you provide is used to apply the tax-exempt transfer of an unserviceable firearm to anyone other than a Federal firearms licensee who has paid the required special (Occupational) tax to deal in NFA firearms and to or from government agencies. The data is used to ensure legality of transfer under Federal, State and local law. The furnishing of this information is mandatory (26 U.S.C. § 5812).

The estimated average burden associated with this collection of information is 0.5 hours per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Information Technology Coordination Staff, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Privacy Act Information

The following information is provided pursuant to Section 3 of the Privacy Act of 1974 (5 U.S.C. § 552(e)(3)):

- Authority. Solicitation of this information is made pursuant to the National Firearms Act (26 U.S.C. § 5812). Disclosure or this information by the applicant is mandatory for any transfer without payment of transfer tax as provided in 26 U.S.C. § 5852.
- 2. Purpose. To verify that the proposed transfer is exempt from transfer tax; to verify that the transfer would not be in violation of law; and to effect registration of the firearm.
- 3. Routine Uses. The information will be used by ATF to make the determinations set forth in paragraph 2. In addition, to effect registration of the firearm, information as to the identification of the firearm, date of registration, and the identification and address of person entitled to possess the firearm will be entered into the National Firearms Registration and Transfer Record. No information obtained from an application, registration, or records required to be submitted by an individual in order to comply with any provision of the National Firearms Act or regulation issued thereunder, shall, except in connection with prosecution or other action for furnishing information, be used, directly or indirectly, as evidence against that person in any criminal proceeding with respect to a violation of law occurring prior to or concurrently with the filing of the application. The information from this application may only be disclosed to Federal authorities for purposes of prosecution for violation of the National Firearms Act.
- 4. Effects of not Supplying Information Requested. Failure to supply complete information will delay processing and may cause denial of the application.

U.S. Department of Justice

Bureau of Aicohol, Tobacco, Firearms and Explosives

Application and Permit for Importation of Firearms, Ammunition and Defense Articles

Not fo	r use by Members of the U	nited Sta	tes Armed	Forces.								
For A	F Use Only No. (Valid for 24 months f	rom the da	te appearin	g in Item	19 below.) N		Applicant's O			E-n	nail Address (Option	ial)
remmi	140. (Valid for 24 months i	iom me di	ne appearn	g in rom	.,,	I I I I I I I I I I I I I I I I I I I	nui control ite					
Sectio	n I - Application (Submit i	n triplicat	e) - For Ap	plicant U	se							
			ns License		D	2.	Extension No	o. (Including 3	. Country	of Exporta	tion	
Licens	e No. (x-xx-xxx-xx-xx-xxxxx)		Expiration	n Date		23.00.00	,				
4. N	ame and Address of Custom	s Broker (Including 2	Zip Code)			5. Applicant	's Name and Ad	dress (Includ	ding Zip C	ode)	
				Land I		Н	1200				. \Box	
	heck here if permit is to be a			Broker.	10.1			re if permit is to d Address of For		The state of the s	nt.	
6. N	ame and Address of Foreign	Seller, if	any				7. Name and	Address of For	eigh shippei			
			/F C		(SC) SL-4	(DT) Differ	DI Distal. /DE	El Panahari (DI	n) Dastructio	o Dovice	(MG)-Machinegun)	
	cription of Firearms and An		Type	caliber	Quantity	Unit	U.S. Muni-	Model	Length	Overall		New (N)
	City and State		(Frame, Receiver;	Gauge	(Each type)	Cost (U.S.	tions Import		of	Length	No.	or Used (U
	or City and Country		SG, RI, PI,	or Size		Currency)	List Category		Barrel (Inches)	(Inches)		Usea (U
			RE,DD,MG) b.	c.	d.	e.	f.	g.	h.	i.	j.	k.
	a.		0.	-			1777					
us	1 1 1 1 1 1 1 1											
Firearms												
E			/	111								
	See Attachment							Description				
Defense Articles								Description				
e Art			1			-		9. Certificati	on of Origin	The item	s sought for importa	ition
fens								in block 8				
De	MAN CHANGE TO MAKE							a. Do not con	ntain parts or	compone	nts produced by or contain parts or com	_ 🗆
	See Attachment		115000					ponents m	anufactured		military technical	
		Core	(Ball		- 1			data or ass		nanta pro	duced by or for the	
_		Material (Lead,	Wad- cutter,					U.S. milita	ary or parts o	or compon	duced by or for the ents manufactured	
Ammunition		Steel	Shot, AP,					with U.S.	military tech	nical data	or assistance.	
ımu		etc.)	Tracer) (Rounds)								duced by or for the nufactured with U.S.	
An			12130110120					technical c	lata or assista	ance that w	vere sold abroad	
	See Attachment							Departmen		mmercial	Sale licensed by the	
10.5	pecific Purpose of Importati	ion. Includ	ling Final R	lecipient, l	f Known (Us	e additional s	sheets, if neces.	the first transfer of the second seco	72.5518.34702			
					30/1/01							
	re You Registered as an Imp ol Act of 1976				oort	12. If "Yes,	" Give Importe	er's Registration	No. and Exp	iration Da	ite (A-xx-xxx-xxxx)	
	the penalties provided by I		Yes Lha	No	ed this applic	ation includi	ing the docume	ents submitted in	support of i	t, and, to t	he best of my knowl	edge and
	, it is true, correct, and comp		ire that I ha	ve examin	cu uns appne	ation, moraci	5					77.496
13. N	Name of Applicant (Printed)		1	4. Signat	ure of Applic	ant		15. Title			16. Date	
Saction	on II - For ATF Use Only	(Please mi	ake no entri	es in this	section)							
17.	The Application Has Been E.	xamined a	nd the Impe	ortation of	the Firearms	, Ammunition	, and Defense	Articles Describ	ed Herein is	1/10-5	Carrieral and a vive	VI. I.
	Approved		Di	sapproved	for the Reas	on Indicated	Retu	med Without Acti	on for Additio	nal	ConditionallyAppro	oved
	Partially Approved for the Rendicated Here or on Attache		100		ttached Lette By Applicant	er Without Action	0 - 1 - 1 - 252 %	rmation Permit Required				
	Signature of the Director, Bu		a la				7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	v accompany to destroy			19. Date	
											I A Control	
Previ	ous Editions Obsolete										ATF Form 5330.3. Revised December	

Firearms (Continued)

Name and Address of Manufacturer City and State or City and Country	Type (Frame, Receiver, SG, RI, PI,	Caliber Gauge or Size	Quantity (Each type)	Unit Cost (U.S. Currency)	U.S. Munitions Import List Category	Model (required)	Length of Barrel (Inches)	Overall Length (Inches)	Serial No.	New (N) or Used (U
a.	RE,DD,MG, b.	c.	d.	e.	f.	g.	h.	i.	j.	k.
				J. J.						
lu lu										
				1 1						
										_
					h					
	0									
						_				
								-		
					1					

Defense Articles (Continued)	Description	Caliber or	Quantity	Unit Cost	U.S. Munitions Import
Name and Address of Manufacturer	Description	Canber or	(Each time)	(U.S. Currency)	List
City and State		Gauge or Size	(Each type)	(O.S. Currency)	Category
or City and Country		or Size	1/1 1/1/16	0.000	Category
City and Country	b.	c.	d.	e.	f.
a.	о.	G.	a.	C.	"
			100		
		-			
71					
		1			
				10.0	
		1 -			
			-		
				1 0	
				1	
			4		
-					
					1
-					
1					
		1			
			1	1	The state of the s

Manualition (Continued) Name and Address of Manufacturer City and State or City and Country	Core Material (Lead, Steel etc.)	Description (Ball, Wadcutter, Shot, AP, Tracer (rounds)	Caliber or Gauge or Size	Quantity (Each type)	Unit Cost (U.S. Currency)	U.S. Munitions Impor List Category
City and Country a.	b.	c.	d.	e.	f.	g.
						<u> </u>
						•
				ı		

Instruction Sheet for ATF Form 6 Part I (5330.3A)

(Submit in triplicate) (Detach this instruction sheet before submitting your application)

Paperwork Reduction Act Notice

This request is in accordance with the Paperwork Reduction Act of 1995. The purpose of this information collection is to allow ATF to determine if the article(s) described on the application qualifies for importation by the importer, and to serve as the authorization for the importer. This information is mandatory (18 U.S.C. 925(d), 26 U.S.C. 5844, 22 U.S.C. 2778).

The estimated average burden associated with this collection of information is 30 minutes per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be addressed to Reports Management Officer, Document Services, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Confidentiality is not assured.

General Information

- An approved ATF Form 6 Part I (5330.3A) is required to import firearms, ammunition, and defense articles into the United States or any possession thereof, except for certain exempt importations prescribed in 27 CFR Parts 447, 478 and 479. A military member of the U.S. Armed Forces who is on active duty outside the U.S., or who has been on active duty outside the U.S. during the 60-day period immediately preceding the intended importation, should complete ATF Form 6 Part II (5330.3B) to import sporting type firearms or ammunition for his personal use.
- 2. Any person engaged in the business of importing firearms or ammunition for resale must be licensed as an importer under the Gun Control Act of 1968 and, if he is importing firearms, ammunition, firearms parts or defense articles (other than sporting shotguns, shotgun shells, or shotgun parts) he must also be registered as an importer under the Arms Export Control Act of 1976. No permit to import such articles for resale will be issued until the importer is properly licensed and registered.
- 3. A Federal firearms licensee, other than an importer, may make an occasional importation of sporting firearms or ammunition (excluding surplus military) for himself or an unlicensed person in the licensee's State, provided that the firearms and ammunition are intended for personal use of the person for whom imported and not for resale. ATF Form 6 Part I (5330.3A) is used to obtain approval for such importation.
- 4. A permit is not required for a firearm or ammunition brought into the United States or any possession thereof by any person who can establish to the satisfaction of U.S. Customs and Border Protection (CBP) that such firearm or ammunition was previously taken out of the United States or any possession thereof by such person.
- A permit is not required for the return of a repaired firearm, or replacement firearm of the same kind and type, to the person in the United States who sent the defective firearm out of the United States for repair.
- 6. If you are a nonimmigrant alien, do not complete this form. A nonimmigrant alien entering the U.S. temporarily needs to submit an ATF Form 6NIA (5330.3D) (Application and Permit for Temporary Importation of Firearms and Ammunition by Nonimmigrant Aliens) to temporarily import his personally owned firearms.
- 7. An unlicensed person may obtain a permit to import sporting type ammunition (excluding tracer or incendiary) and firearm parts (other than frames, receivers, or actions) without engaging the services of a Federal firearms licensee, provided that the importation is for his personal use and not for resale.
- 8. A nonresident U.S. citizen returning to the United States or a nonresident alien immigrating to the United States, from a permanent residence outside of the United States, may complete and forward the enclosed ATF Form 6 Part I permit application without having to utilize the services of a federally licensed firearms dealer. The nonresident should include a statement, either on the application form or on an attached sheet, that the firearms are being imported for his personal use and not for resale, the date of return and that he is a nonresident U.S. citizen returning to the United States, or is a nonresident alien

immigrating to the United States. The firearms must accompany the nonresident U.S. citizen or nonimmigrant alien immigrating to the United States on entry into the United States, since once he is in the United States, and has acquired residence in a State, he may not directly import a firearm. He must engage the services of a federally licensed firearms dealer in his State of residence to import the sporting firearms (excluding NFA and surplus military) for him.

- Under Arms Export Control Act of 1976 regulations in 27 CFR 447.41(c), a permit is not required for the importation of:
 - a. U.S. Munitions Import List articles from Canada not subject to 27 CFR Part 478 and 479, except articles enumerated in Categories I, II, III, IV, VI(e), VIII(a), XVI, and XX; and nuclear weapons, strategic delivery systems, and all specifically designed components, parts, accessories, attachments, and associated equipment thereof.
 - b. Minor components and parts of Category I(a) firearms, except barrels, cylinders, receivers (frames) or complete breech mechanisms, when the total value does not exceed \$100 wholesale in any single transaction.

Preparation

- 10. The applicant shall prepare this form in triplicate. Required signatures must be in ink on all copies. Other entries must be in ink or be typewritten.
- 11. The application should be submitted approximately 60 days prior to the intended importation. All copies shall be submitted to:

Director
Bureau of Alcohol, Tobacco, Firearms, and Explosives
244 Needy Road
Martinsburg, WV 25405
Attention: Firearms and Explosives Imports Branch

- Any questions concerning the application should be referred to the Imports Branch at the above address or telephone (304) 616-4550.
- 13. If a licensee is applying to import an article for subsequent transfer to a known final recipient (e.g., an individual, commercial entity, or government agency), the licensee must complete items 1 through 16, and identify the final recipient by name and address in item 10.
- 14. Item 9, Certification of Origin: The purpose of this certification is to determine whether items sought for importation require retransfer authorization from the Department of State. Applicants should check block 9a if the articles sought for importation were produced for the civilian market and were not associated with the U.S. military. Applicants should check block 9b if the articles sought for importation contain parts or components produced by or for the U.S. military or manufactured with U.S. military technical data or assistance, and the articles were provided by the U.S. government to a foreign government through a grant or foreign military sales program. Applicants should check block 9c if the articles sought for importation contain parts or components produced by or for the U.S. military or manufactured with U.S. military technical data or assistance, and the articles were sold abroad pursuant to an export license issued by the Department of State authorizing a Direct Commercial Sale (DCS). NOTE: If block 9b is checked, a written retransfer authorization from the Department of State must be attached to the application or the applications will be denied. NOTE: If block 9c is checked, either a copy of the export license authorizing the DCS or a written retransfer authorization from the Department of State must be attached to the application or the application will be denied.

Approval

15. The Director will approve the application or advise the applicant of the reason for the disapproval. In some cases it may be necessary to request additional information or to have the firearm or ammunition sent to ATF for examination to determine the import status.

(INSTRUCTIONS CONTINUED ON REVERSE)

- 16. The permit is valid for 24 months from the date of approval. The approved a application will serve as the permit to import the article(s) described on the form.
- 17. After approval, the Director will retain one copy and forward the original to the applicant or his designated agent, along with copies of ATF Form 6A, Release and Receipt of Imported Firearms, Ammunition and Implements of War.

Release From Customs

- No amendments or alterations may be made to an approved permit, except by the Director.
- An approved ATF Form 6 Part I (5330.3A) which is unused, expired, suspended or revoked shall be returned immediately to the Director, Bureau of ATF, 244 Needy Road, Martinsburg, WV 25405 Attention: Firearms and Explosives Imports Branch.
- 20. For non-commerical imports, the ATF Form 6A, in duplicate with Section I completed, the approved permit, and any other necessary documents, must be presented to CBP officials handling the importation to effect release of the articles.

Prohibited Persons Under U.S. Law

21. The importer of a firearm should be familiar with the provisions of law governing who may lawfully possess a firearm in the United States. Generally,18 U.S.C. 922 prohibits the shipment, transportation, receipt, or possession in or affecting interstate commerce of a firearm by one who has been convicted of a crime punishable by imprisonment for a term exceeding one year; by one who is a fugitive from justice; by one who is an unlawful user of, or addicted to, marijuana, or any depressant, stimulant, or narcotic drug, or any other controlled substance; by one who has been adjudicated mentally defective or has been committed to a mental institution; by one who has been discharged from the Armed Forces under dishonorable conditions; by one who has renounced his or her U.S. citizenship; by one who is an alien illegally in the United States or is a non-immigrant alien admitted to the United

- States under a visa; by one who is subject to certain restraining orders; or by one who has been convicted of a misdemeanor crime of domestic violence. Furthermore, section 922 prohibits the shipment, transportation, or receipt in or affecting interstate commerce of a firearm by one who is under indictment or information for a crime punishable by imprisonment for a term exceeding one year.
- 22. For commerical imports, the CBP copy of the form 6A will be transmitted to CBP electronically through the Automated Commerical Environment (ACE). For more information on how to use ACE, visit the Trade Resoure Center at www.itds.gov or contact a CBP client representative at 1-571-468-5500.
- Licensed importers and AECA registrants are still required to file their copy of the form 6A with ATF within 15 days of release from CBP custody. This copy will have Section I and III completed. Section II is not required.

Forms

24. Federal firearms licensees must retain this form as part of their ATF required records permanently as prescribed by 27 CFR 478.129(d). Importers requistered under the Arms Export Control Act who do not also hold a Federal firearms license must retain this form as part of their ATF required records for at least the 6-year period prescribed by 27 CFR 44.34(b).

Additional Forms are available from:

ATF Distribution Center 1519 Cabin Branch Drive Landover, MD 20785-3816

Or by accessing the ATF website at http://www.atf.gov

Privacy Act Information

The following information is provided pursuant to Section 3 of the Privacy Act of 1974 (5 U.S.C. § 552(a)(e)(3)).

- Authority. Disclosure of the information requested on ATF Form 6 Part I (5330.3A) is mandatory pursuant to 18 U.S.C. 925 and Section 38 of the Arms Export Control Act of 1976 (22 U.S.C. 2778, 26 U.S.C. 5844) to obtain a permit to import firearms, ammunition, and implements of war.
- 2. Purpose. To determine if the article(s) qualifies for importation by the applicant.
- 3. Routine Uses. The information will be used by ATF to make determinations set forth in paragraph 2. In addition, information may be disclosed to other Federal, State, foreign and local law enforcement and regulatory agency personnel to verify information on the application and to aid in the performance of their duties with respect to the enforcement and regulation of firearms and/or ammunition where such disclosure is not prohibited by law. The information may further be disclosed to the Justice Department if it appears that the furnishing of false information may constitute a violation of Federal law. Finally, the information may be disclosed to members of the public in order to verify the information on the application when such disclosure is not prohibited by law.
- 4. Effects. Failure to supply complete information will delay processing and may cause denial of the application.

U.S. Department of Justice

Buresa of Alcohol, Tobacco, Firearms and Explosives

Application and Permit for Permanent Exportation of Firearms (National Firearms Act)

Chapte	r 53, Title 26, United States Code) (Subn	nit in Qu	adruplicate. See l	Instruction	s on Reverse	2.)					
	ntrol Number	~		10000 10500 W		Control Num	aber				
o: Dir	ector, Bureau of Alcohol, Tobacco, Fire	arms an	d Explosives, 24	4 Needy R	oad, Martin	isburg, WV	25405				
art 1 -	Application. The undersigned transfe d certified copy of written order or con	ror here	by makes applica	tion to ex	port the fire			erein. The	e applicat	tion is supported by the	
. Nam	e and Address of Foreign Consignee		A STEEL OF		2. Intende (Includ		per of Firearms Included in Application				
. Nan	ne of Exporter (And trade name if any)			5. A	ddress (Num	iber, street, c	ity, cou	nty, State, 2	zip code)		
	eral Firearms License (If any) (Give plete 15-digit number)	7. Er	nployer Identifica	tion Numb	er		8. E	xport Licer	nse Numb	er for this Shipment (If any)	
. Desc	cription of Firearm(s) (If additional space	is neede	ed, continue on a s	separate sl	eet using the	e format belo	ow.)				
Line No.	Type (Machine gun, destructive device barreled shotgun or rifle, etc.) (a)	1000	Caliber, Gauge or Size (b)	Moo (c)	leI	Length o Barrel(s) (d)	f	Overall Le	ngth	Serial Number (f)	
1											
2											
3											
4											
5											
Inder	penalties of perjury, I certify that I am	the lawf	ul possessor of th	ıe firearm	(s) describe	d on this for	m and	any accom	panying	sheets, and that	
have	examined this application and, to the b	est of my	knowledge and	belief, it i	true, corre	ect and comp	plete.				
0. Sig	gnature and Title (Owner or authorized o	fficial) (S	ee instruction 1c.,)					11. Date	e of Application	
Part 2 -	Permit (This portion to be completed b	y Bureau	of Alcohol, Toba	icco, Fire	rms and Ex	plosives)					
	is Application is: Approved Disapproved:						Ве		ess Proper	rred by this Transfer Will Evidence of Exportation e:	
4. Au	thorized ATF Official									15. Date	
	- Certification by Customs y certify that the described merchandi	en cover	ad by a chinner's	export d	claration o	n file in this	office	was laden	and clear	ed as described below:	
nereb	y certify that the described merchandi	ae, cover	ca by a snipper s	, export u	CIMI MITOR O	IIII	J,		VAVI VA	20 NO 144 DO SO 114 C 114 (1997) 111	
Laden I	n (Name and/or type of carrier)			Date	Cleared	I	Foreign	Destinatio	n		
Signatu	re of Customs Official		Y	Port	Of					Date	
	- Certification of Mailing by Parcel Pos										
certif ransfe	y that there has (have) been posted at t ror named in Item 5, Part 1, or the tra	his office nsferor's	today, parcel(s) authorized agen	addressed it, who ha	as indicate waived the	ed in Item 1, e right to wit	Part 1 thdraw	of this app same from	plication, n the mai	declared to be firearms by ls.	
	fice Name or Stamp		the state of the s		ostmaster, By					Date Posted	
Note: 1	Previous editions are oboslete.									ATF E-Form 9 (5320.9) Revised March 2018	

Instructions (See 27 CFR Part 479)

- Any person desiring to permanently export a firearm without payment of the transfer tax must submit ATF Form 9 (5320.9), in to the Director, Bureau of Alcohol, Tobacco, Firearms and Explosives, NFA Branch, 244 Needy Road, Martinsburg, WV 25405, for a permit providing for deferment of the transfer tax. No shipment may be made until that permit is received from the Director.
 - a. ATF Form 9 (5320.9) must not be submitted until a license for the exportation, if any, has been issued by the Department of State or Commerce. If no license is needed, please attach a statement to that effect.
 - b. Part 1 of ATF Form 9 (5320.9) must be completed by the applicant and submitted to ATF with a certified copy of a written order, contract of sale, or other evidence showing the firearm is to be shipped to a foreign destination. The exporter's written certification attesting to that fact must appear on the documentation. If the applicant wishes to transfer the firearm(s) tax free to another person who will export the firearm, the applicant must submit ATF Form 9 (5320.9) with documentation that the transfer is a part of the exportation process.
 - c. The form must be completed by typewriter or pen and ink; penciled entries are unacceptable. The signature in item 10 must be entered in ink on all four copies. Photostatic, facsimile or carbon copy signatures are not acceptable. Form 9 is available in a fillable format on the ATF website (www.atf.gov) and may be downloded and printed from that website. Form 9 may also be filed electronically via ATF's eForms system (www.atfonline.gov) by a person who registers and is qualified.
 - d. Applications approved by ATF will serve as the permit to export the firearm(s) described on the application.
 - e. In the event exportation is not effected, all copies of the form must be immediately returned to ATF for cancellation: (27 CFR 479.116).
- 2. When the firearms are to be exported by other than parcel post, two copies each of the permit and the Shipper's Export Declaration (Commerce Form 7525-V), and a copy of the State or Commerce Department license, must be submitted to the District Director of U.S. Customs and Border Patrol at the port of exportation, and must precede or accompany the shipment in order to permit appropriate inspection prior to lading. The Customs official, after execution of Part 3, will retain one copy of the permit and return one copy to the Director, Bureau of Alcohol, Tobacco, Firearms and Explosives, NFA Branch, 244 Needy Road, Martinsburg, WV 25405, as provided in Customs Manual Supplement No. 3284.02 dated March 12, 1979.
- 3. When the firearms are to be exported by parcel post, one copy of the permit must be presented to the postmaster at the office receiving the parcel. The postmaster will execute Part 4 of ATF Form 9 (5320.9) and return the permit to the exporter.
- 4. Proof of exportation must be furnished by the exporter to ATF within a 6-month period from date of issuance of the permit by ATF. Satisfactory evidence of exportation would be:
 - a. The certificate of exportation executed by a Customs official.
 - b. The certificate of mailing by parcel post executed by a postmaster.
 - c. A certificate of lading executed by a Customs official of the foreign country to which the firearm is exported.
 - d. A sworn statement of the foreign consignee covering the receipt of the firearm.
 - e. A return receipt or photostatic copy, signed by the addressee or an authorized agent of the addressee, if the shipment of a firearm was made by insured or registered parcel post.

NOTE: ATF receipt of the required documentation that the firearm(s) has/have been exported will relieve the exporter from the transfer tax liability. IF SATISFACTORY EVIDENCE IS NOT FURNISHED WITHIN THE STATED PERIOD, THE TRANSFER TAX WILL BE ASSESSED.

- 5. ATF Control Number box is only to be completed by ATF Personnel.
- 6. Internal Control Number box can be completed by the person desiring to permanently export the firearm. Any pertinent control information that person wants to an notate in this box pertaining to this exportation is allowed.

Action by U.S. Customs and Border Patrol

Upon receipt of an approved ATF Form 9 (5320.9), in duplicate, the Customs official may order such inspection as deemed necessary prior to lading of the merchandise. If satisfied that the shipment is proper and the information contained in the permit to export is in agreement with the information shown in the shipper's export declaration, the Customs official will, after the merchandise has been exported, execute Part 3 of ATF Form 9 (5320.9). One copy will be retained with the shipper's export declaration. Customs will forward the remaining copy to the Bureau of Alcohol, Tobacco, Firearms and Explosives, NFA Branch, 244 Needy Road, Martinsburg, WV 25405.

Privacy Act Information

The following information is provided pursuant to Section 3 of the Privacy Act of 1974 (5 U.S.C. 552a(e)(3)):

- 1. Authority. Solicitation of this information is made pursuant to the National Firearms Act (26 U.S.C. 5854). Disclosure of this information is mandatory for the exportation of a firearm exempt from transfer tax.
- 2. Purpose. To determine whether the proposed transfer qualifies as an exportation exempt from tax.
- 3. Routine Uses. The information will be used by ATF to make the determination set forth in paragraph 2. In addition, ATF will use the information to annotate the National Firearms Registration and Transfer Record. No information obtained from an application, registration, or records required to be submitted by a natural person in order to comply with any provision of the National Firearms Act, or regulations issued thereunder, shall, except in connection with prosecution, or other action, for furnishing false information, be used, directly or indirectly, as evidence against that person in any criminal proceeding with respect to a violation of law occurring prior to or concurrently with the filing of the application. The information from this application may only be disclosed to Federal authorities as provided in Section 6103, 26 U.S.C. (as amended by the Tax Reform Act of 1979).
- 4. Effects of Not Supplying Information Requested. Failure to supply complete information will delay processing and may cause denial of the application.

Paperwork Reduction Act Notice

This request is in accordance with the Paperwork Reduction Act of 1995. The information you provide is used to verify exportation of a firearm and justify removal of the firearm from the National Firearms Registration and Transfer Record (NFRTR). The information is required to show satisfactory proof that a firearm may be exported without payment of the transfer tax in a manner as prescribed by the Secretary of the Treasury. The furnishing of this information is mandatory (26 U.S.C. 5854).

The estimated average burden associated with this collection of information is 18 minutes per respondent or recordkeeper, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestion for reducing this burden should be addressed to Reports Management Officer, Document Services, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

MOSH ALFRIT

Preventing Occupational Exposures to Lead and Noise at Indoor Firing Ranges

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health





NIOSH

This document is in the public domain and may be freely copied or reprinted.

DISCLAIMER

The findings and recommendations in this document were developed by the National Institute for Occupational Safety and Health (NIOSH) in its role of conducting research and making recommendations to prevent work-related illnesses and injuries. They are designed to protect the health and safety of persons employed at firing ranges, and the health and safety of shooters who use the range in a job-related capacity, such as law enforcement officers or others for whom training in the handling of firearms is a condition or factor of employment.

Mention of any company or product does not constitute endorsement by NIOSH. In addition, citations to Web sites external to NIOSH do not constitute NIOSH endorsement of the sponsoring organizations or their programs or products. Furthermore, NIOSH is not responsible for the content of these Web sites.

ORDERING INFORMATION

To receive NIOSH documents or more information about occupational safety and health topics, contact NIOSH at

1-800-CDC-INFO (1-800-232-4636) TTY: 1-888-232-6348 E-mail: cdcinfo@cdc.gov

or visit the NIOSH Web site at www.cdc.gov/niosh.

For a monthly update on news at NIOSH, subscribe to NIOSH eNews by visiting www.cdc.gov/niosh/eNews.

DHHS (NIOSH) Publication Number 2009-136

April 2009

SAFER . HEALTHIER . PEOPLETM



Preventing Occupational Exposures to Lead and Noise at Indoor Firing Ranges

WARNING!

Workers at indoor firing ranges may be exposed to hazardous lead concentrations and noise levels.

Employers and firing range operators should take the following steps to protect their workers and shooters from exposure to hazardous lead concentrations and noise levels at indoor firing ranges:

- Provide workers and shooters with information about hazards and appropriate training to prevent hazardous exposures.
- Provide general information and specific hazard warnings through workplace postings and targeted training programs.
- State the precautions and hygiene practices required of the firing range workers and shooters.
- Train workers and shooters on the actions and means available to eliminate or limit potential exposures.
- Inform workers and shooters about symptoms that may indicate a health problem. Also inform workers that elevated lead levels can occur without overt symptoms and that a blood lead level test should be done if there is concern about an exposure to lead.

- Inform pregnant workers and shooters, or those considering pregnancy, about the possible adverse health effects to the fetus.
- 2. Establish effective engineering and administrative controls.
- If feasible, provide workers with cleaning facilities and lockers and develop a mandatory washing and hygiene program for shooters and workers to limit personal and take-home contamination.
- Install a well-designed supply air and exhaust ventilation system.
- Maintain and replace air filters regularly.
- Design and maintain the firing range structure to limit the transmission of harmful noise levels to adjacent areas.
- Incorporate effective administrative controls in the workers' schedules to limit their exposure time and ensure safe and clean working conditions.
- Provide workers and shooters with personal protective equipment and other protective measures.

- Provide a variety of hearing protection devices including earplugs and earmuffs.
- Provide skin protection, eye protection, and NIOSH approved respirators for workers involved in cleaning lead-contaminated surfaces and areas.
- Provide floor mats, knee pads, and shoe covers when necessary to limit transfer of lead to clothing.
- Provide workers with health and medical monitoring.
- Provide workers with initial and periodic medical monitoring as required by the OSHA lead standard (29 CFR 1910.1025(j)).
- Best medical management practices, from organizations such as the Association of Occupational and Environmental Clinics or those provided in the journal Environmental Health Perspectives [Kosnett et al. 2007] should be recommended for all lead-exposed adults (workers and shooters).
- Provide workers with audiometric evaluations as required by OSHA noise standard (29 CFR 1910.95(d)(e)(g)(h)).

For additional information, see *NIOSH Alert: Preventing Occupational Exposures to Lead and Noise at Indoor Firing Ranges* [DHHS (NIOSH) Publication No. 2009–136]. Single copies of the Alert are available free from the following:

1-800-CDC-INFO (1-800-232-4636) TTY: 1-888-232-6348 E-mail: cdcinfo@cdc.gov

or visit the NIOSH Web site at www.cdc.gov/niosh.

For a monthly update on news at NIOSH, subscribe to NIOSH *eNews* by visiting www.cdc.gov/niosh/eNews.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention National Institute for Occupational Safety and Health





Preventing Occupational Exposures to Lead and Noise at Indoor Firing Ranges

WARNING!

Workers at indoor firing ranges may be exposed to hazardous lead concentrations and noise levels.

Workers should take the following steps to reduce exposure to hazardous lead concentrations and noise levels at indoor firing ranges:

1. Stay informed.

- Understand the safety issues and health hazards associated with lead and noise exposures.
- Follow safe work practices identified by your employer or range operator.
- Participate in all safety training and health monitoring programs offered by your employer or range operator.

2. Protect yourself.

- Use double hearing protection (earplugs and earmuffs) whenever possible.
- Wear respirators and full protective outer clothing when performing range maintenance.
- Wear gloves and eye protection when using chemicals to clean weapons or firing range surfaces.



- 3. Use good work practices and personal hygiene.
- Wash hands, forearms, and face before eating, drinking, smoking, or contact with other people.
- Change clothes and shoes before leaving the firing range facilities.
- Wash clothes or uniforms used at the firing range separately from family's clothing.
- 4. Know and report symptoms.
- Common symptoms of lead poisoning in adults include nausea, diarrhea, vomiting, poor appetite, weight loss, anemia, excess lethargy or hyperactivity, headaches, abdominal pain, and kidney problems.
- If you suspect you may have been exposed to lead, even if you have no symptoms, ask about having a blood lead level test done.
- Exposure to high levels of noise can lead to hearing loss, tinnitus (ringing in the ear), stress, anxiety, high blood pressure, gastro-intestinal problems, and chronic fatigue.
- Report any of these symptoms to your employer or range operator.
- Seek medical attention when appropriate.

For additional information, see *NIOSH Alert: Preventing Occupational Exposures to Lead and Noise at Indoor Firing Ranges* [DHHS (NIOSH) Publication No. 2009–136]. Single copies of the Alert are available free from the following:

1-800-CDC-INFO (1-800-232-4636) TTY: 1-888-232-6348 E-mail: cdcinfo@cdc.gov

or visit the NIOSH Web site at www.cdc.gov/niosh.

For a monthly update on news at NIOSH, subscribe to NIOSH eNews by visiting www.cdc.gov/niosh/eNews.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention National Institute for Occupational Safety and Health





Preventing Occupational Exposures to Lead and Noise at Indoor Firing Ranges

WARNING!

Workers at indoor firing ranges may be exposed to hazardous lead concentrations and noise levels.

The National Institute for Occupational Safety and Health (NIOSH) requests help in preventing injury and illness in workers at indoor firing ranges in the United States. Workers are potentially exposed to hazardous amounts of lead and noise at these ranges. They include thousands of employees at the firing ranges as well as more than a million Federal, State, and local law officers who train regularly at these facilities. In addition to workers, 20 million active target shooters are potentially exposed to lead and noise hazards at indoor firing ranges.

This Alert presents five case reports that document lead and noise exposures of law enforcement officers and students. The Alert examines firing range operations, exposure assessment and control methods, existing regulations, and exposure standards and guidelines.

NIOSH requests that the recommendations in this Alert be brought to the attention of all firing range owners, operators, workers, and users as well as safety and health officials, industry associations, unions, and editors of trade journals.

BACKGROUND

The Bureau of Justice Statistics estimates that 105,000 Federal law enforcement officers and more than 1 million State and local police officers are employed in the United States [DOJ 2004]. These officers are required to train regularly in the accurate and proficient use of firearms. Indoor firing ranges have gained wide appeal among law enforcement agencies because they offer protection from inclement weather conditions and can be operated around the clock under controlled environmental conditions. The National Shooting Sports Foundation estimates that there are 20 million active target shooters in the United States. Of those, 13.8 million are rifle shooters and 10.7 million participate in handgun target shooting [NSSF 2006]. NIOSH estimates that 16,000 to 18,000 firing ranges operate in the United States. Some are operated without the benefit of sufficient environmental and occupational health controls in place to effectively protect the health of shooters and firing range personnel from the adverse effects of exposure to lead, noise, and other contaminants. The hazards from exposure to lead (airborne, ingestion, and skin), noise, and other contaminants at indoor firing ranges have been widely investigated [Valway et al. 1989; Novotny et al. 1987; Price 1989]. Some of these investigations have documented elevated blood lead levels and hearing loss—particularly among employees and instructors.

During the last 2 decades, NIOSH has performed numerous Health Hazard Evaluations (HHEs) of indoor firing ranges and documented the hazards of exposure to lead and noise among firing range operators, workers, and shooters. In 1975, NIOSH published a technical document titled Lead Exposure and Design Considerations for Indoor Firing Ranges to provide recommendations for reducing or eliminating hazards associated with indoor firing ranges [NIOSH 1975]. This Alert highlights the issues inherent in operating such facilities and addresses advances in exposure assessment methods, control technologies, and new regulations and exposure guidelines.

Although the scope of this Alert is specifically targeted at indoor firing ranges, overexposures to lead and noise at outdoor firing ranges have been documented in several studies [Tripathi et al. 1991; Goldberg et al. 1991; Murphy 2007]. Many of the recommendations that are outlined in this Alert can also be applied to protecting workers and shooters who use outdoor and covered firing ranges.

CURRENT REGULATIONS, RECOMMENDATIONS, AND OTHER GUIDELINES

The primary sources of exposure standards and guidelines for the U.S. workplace are the Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs) (29 CFR* 1910) and the NIOSH recommended exposure limits (RELs) [NIOSH 1992a]. Most employers are mandated to follow the OSHA standards; however, since current standards and regulations are based on outdated medical information, employers are encouraged to follow the most protective criteria.

OSHA Regulations

The Federal OSHA General Industry Lead Standard (29 CFR 1910.1025) establishes specific airborne lead exposure levels for employees working in areas where airborne lead is present. Lead exposure is determined through air sampling that measures the concentration of lead in the air (the number of micrograms of lead present in a cubic meter of air). The standard creates two levels of exposure, the action level and the PEL. The action level for airborne lead exposure is 30 micrograms per cubic meter (µg/m³) of air as an 8-hour time-weighted average (TWA). If it is determined that airborne lead concentrations exceed the action level for more than 30 days per year, an employer must provide a medical surveillance program to the worker consisting of biological monitoring and medical examinations and consultations. Should a worker's average blood lead level (BLL) meet or exceed 50 micrograms of lead per deciliter (µg/dL) of blood, the employer is required to temporarily remove

^{*}Code of Federal Regulations. See CFR in references.

the worker from the work area. The OSHA standard does provide for economic protection for such medically removed workers. Medically removed workers cannot return to jobs involving lead exposure until their BLLs are below 40 μ g/dL. Benefits must be provided during the period of temporary medical removal—i.e., the employee continues to receive the same earnings, seniority, and other rights and benefits he or she would have had if they had not been removed. The OSHA PEL for airborne exposure to lead is 50 μ g/m³ as an 8-hour TWA. The PEL is reduced for shifts greater than 8 hours using the formula:

maximum PEL in μ g/m³ = 400 / hours worked per day

If airborne lead levels exceed the PEL for more than 30 days per year, then an employer is required to implement additional monitoring and management activities.

Currently, 24 States and 2 territories administer and enforce their own occupational safety and health programs. A list of these "State Plan States" can be obtained by contacting the appropriate authority in the State where the firing range is operated or through the OSHA Web site at www.osha. gov. It is important to note that State Plans must be at least as protective as the Federal OSHA standards.

For noise exposure, the Federal OSHA standard for occupational noise exposure (29 CFR 1910.95) specifies a maximum PEL of 90 decibels, A-weighted (dBA), averaged over an 8-hour time period. Noise generated from weapons is classified as impulse noise. The OSHA standard states that exposure to impulse noise should not exceed 140 decibels (dB) sound pressure level

(SPL). The regulation uses a 5-dB exchange rate. This means that when the noise level is increased by 5 dBA, the amount of time a person can be exposed is cut in half. For example, a person who is exposed to noise levels of 95 dBA can be exposed to only 4 hours in order to be within the daily OSHA PEL. The OSHA standard has an action level of 85 dBA, which stipulates that an employer shall administer a continuing, effective hearing conservation program when the 8-hour TWA equals or exceeds the action level. The program must include exposure monitoring, employee notification, observation, an audiometric testing program, hearing protection, training programs, and maintenance of records. The standard also states that when workers are exposed to noise levels in excess of the OSHA PEL of 90 dBA (8-hour TWA), feasible engineering or administrative controls shall be implemented to reduce workers' exposure levels.

NIOSH Recommendations

The NIOSH REL for airborne lead is $50 \,\mu\text{g/m}^3$ as an 8-hr TWA; airborne concentrations should be maintained so that a worker's BLL remains below $60 \,\mu\text{g}$ lead/100 g of whole blood [NIOSH 1992a].

In addition to inhalation exposures, lead from contaminated surfaces and from firearms discharge can be transferred to people's skin, especially the hands. Lead-contaminated hands can contribute to ingestion while handling food, beverages, and other items that contact the mouth. Skin exposures often result from hidden hazards that are not anticipated or recognized, and hence are inadequately controlled. Controlling lead-contaminated surfaces (and skin contamination) is highly dependent on anticipation and identification of lead contamination on surfaces; strict attention and

adherence to personal hygiene practices; and appropriate administrative controls (e.g., hazard communication). Currently, there are no Federal occupational exposure limits for lead contamination of surfaces. However, NIOSH researchers have investigated surface and skin contamination from lead in a variety of occupational settings and developed two analytical methods for identifving lead contamination. NIOSH Method 9100 is a surface-wipe collection method that can be used to quantitatively determine surface lead concentrations to a detection limit of 0.1 µg per sample. Method 9105 is an instant qualitative wipe method that was initially designed to detect the presence of lead on workers' skin with a limit of identification of 15 µg per sample. The method is commercially available under the brand name Full Disclosure for Lead (US Patent 6,248,593) and can be used for identifying the presence of lead contamination on environmental surfaces [NIOSH 1994]. Both methods are practical and appropriate for identifying workplace surface lead contamination and evaluating the effectiveness of skin and surface decontamination for the purpose of reducing exposure risks. Both methods will detect the presence of lead contamination and lead from residues emitted from firearms usage.

NIOSH research shows that washing hands with soap and water is not completely effective in removing lead (and other toxic metals) from the surface of the skin [NIOSH 1992b; NIOSH 1996; NIOSH 1999]. To remove lead from skin, NIOSH researchers recently developed a novel and highly effective skin decontamination/cleansing method [Esswein and Boeniger 2005].

Regarding noise, the NIOSH REL for noise (8-hour TWA) is 85 dBA using a 3-dB exchange rate (see OSHA regulations in previous

section for an explanation of exchange rates). NIOSH also recommends that no exposure be allowed above 140 dB SPL [NIOSH 1998].

Other Guidelines and Best Management Practices

In addition to the standards and guidelines identified above, U.S. government agencies (including the Department of Defense), the firearm industry, and shooting-sports organizations have created guidance documents and best management practices for firing ranges. Furthermore, the U.S. government and several professional organizations have general guidance documents concerning occupational exposure to lead and noise.

U.S. Government Agencies/Military Industrial Hygiene Standards and Guidelines for Firing Ranges

The U.S. Department of Justice (DOJ), Immigration and Naturalization Service† published a document titled INS/NFU Firing Range Design Standard, which focuses on necessary considerations for both indoor and outdoor firing ranges that meet the needs of DOJ training criteria. These considerations include lead and noise exposure controls and evaluations of environmental, occupational health, and training issues at existing firing ranges. The standard is intended as a supplemental guide to the U.S. Border Patrol Facilities Design Guide [DOJ 2002].

The U.S. Environmental Protection Agency (EPA) Best Management Practices at Outdoor Shooting Ranges, while targeted for outdoor ranges, provides owners and operators of outdoor firing ranges with information

[†]Immigration and Naturalization Service is now called the U.S. Citizenship and Immigration Services and is part of the U.S. Department of Homeland Security.

on lead management and recommendations for reducing lead contamination [EPA 2005].

The U.S. military operates more than 3,000 indoor firing ranges. The U.S. Navy Environmental Health Center developed a reference guide titled Indoor Firing Ranges Industrial Hygiene Guide to provide firing range operators, industrial hygienists, safety professionals, and technicians with guidelines and recommendations on firing range operation and maintenance [USN 2002]. In addition, the U.S. Army Corps of Engineers published Design Manual for Indoor Firing Ranges in 1990 to provide guidance for new design considerations, retrofitting existing indoor firing ranges, and safety and maintenance requirements for Department of Defense range facilities [USACE 1990]. Although these publications discuss numerous issues involved with firing range operation, they do not represent a comprehensive listing of the material available from government agencies and the military.

Firearm Industry Guidelines

The National Association of Shooting Ranges (NASR), a division of the National Shooting Sports Foundation (NSSF), has developed a manual titled Lead Management and OSHA Compliance for Indoor Shooting Ranges [NASR 2004]. This manual addresses the potential of lead exposure at firing ranges and presents methods for managing exposures as well as compliance with the OSHA lead standard 29 CFR 1910.1025. This document was developed in partnership with OSHA and NIOSH.

Shooting Sports Organizations

The National Rifle Association (NRA) manual titled The NRA Source Book: A Guide

to Planning and Construction provides basic and advanced guidance to assist in planning, designing, constructing, and maintaining shooting range facilities [NRA 1999].

General Guidance Concerning Occupational Exposure to Lead and Noise from the U.S. Government and Professional Organizations

Department of Health and Human Services

The Department of Health and Human Services (DHHS) identified occupational lead exposure as one of the national health objectives. In its publication Healthy People 2010, the DHHS proposed the elimination of occupational lead exposures that result in workers having blood lead concentrations greater than 25 μ g/dL, and encouraged health departments to make elevated BLLs in children and adults a notifiable condition nationwide [DHHS 2000].

American Conference of Governmental Industrial Hygienists (ACGIH)

The American Conference of Governmental Industrial Hygienists (ACGIH) has adopted a threshold limit value (TLV) for lead of 50 μ g/m³ (8-hour TWA), with worker BLLs to be controlled at or below 30 μ g/dL. The ACGIH has designated lead a confirmed animal carcinogen [ACGIH 2006]. The ACGIH also states that evidence suggests exposure during pregnancy to BLLs in excess of 10 μ g/dL results in developmental effects such as depressed intellectual development in children [ACGIH 2001].

The ACGIH TLV for noise is 85 dBA (8-hour TWA) with a 3-dB exchange rate and 140 dB SPL as a maximum exposure limit. The ACGIH states that exposure to certain

chemicals may result in hearing loss. In settings where workers might be exposed to noise as well as organic solvents (e.g., toluene, styrene, or xylene), heavy metals (e.g., lead, manganese, or organo-tin compounds), or other compounds (e.g., n-butyl alcohol or carbon monoxide), periodic audiograms are advised and should be carefully reviewed. The ACGIH also states that evidence suggests noise exposure in excess of a C-weighted, 8-hour TWA of 115 dB or a peak exposure of C-weighted 155 dB to the abdomen of pregnant workers beyond the fifth month of pregnancy may cause hearing loss in the fetus.

Association of Occupational and Environmental Clinics

The Association of Occupational and Environmental Clinics (AOEC) has reviewed current literature concerning lead exposure and health effects [AOEC 2007]. The AOEC has determined that the evidence provided by current health effects studies calls for an update of guidance for professionals involved with medical assessment and treatment of lead-exposed workers. Among other provisions in their guidance, the AOEC has determined that current evidence supports the need for: 1) qualitative assessment of the need for inclusion in a medical surveillance program for lead workers in addition to inclusion in a medical surveillance program based on documentation of exposure to airborne lead at a concentration above the OSHA action level; 2) increased frequency of BLL testing; 3) removal from exposure to lead for workers with BLL of 30 µg/dL or more; and 4) education of workers concerning occupational exposure to lead and provision of necessary personal protective equipment and administrative measures to prevent both occupational and take-home exposure to lead.

Environmental Health Perspectives Mini-Monograph

The March 2007 edition of Environmental Health Perspectives included a Mini-Monograph on adult lead exposure. Recommendations in this document include the following: 1) medical surveillance for all lead-exposed workers should include quarterly BLL testing for individuals with blood lead concentrations between 10 and 19 µg/dL, and semiannual testing when sustained blood lead concentrations are < 10 µg/dL; 2) pregnant women should avoid occupational or avocational lead exposure that would result in blood lead concentrations > 5 µg/dL; 3) removal from exposure to lead for workers with BLL of 30 µg/dL or more or if a worker has a sustained BLL above 20 µg/dL; and 4) annual education of lead workers concerning occupational exposure to, and control of, lead hazards as well as ongoing access to health counseling regarding lead-related health risks to prevent both occupational and takehome exposure to lead [EHP 2007].

CASE REPORTS

Many studies have shown health risks to workers from lead and noise exposures at firing ranges. The five case reports presented here describe the causes of these exposures and methods for controlling them.

Case 1—Lead exposures of law enforcement trainees

Seventeen law enforcement trainees were studied for 3 months during firearms instruction at an indoor firing range to determine their risk from lead exposure [Valway et al. 1989]. BLLs were measured before training began and every 4 weeks during the

6 Firing Ranges

training. Airborne lead concentrations were measured three times during the instruction period. BLLs rose from a pre-training mean of 6.5 to 50.4 µg/dL post training. Mean airborne lead concentrations were greater than 2,000 µg/m³, more than 40 times the OSHA PEL of 50 µg/m3. During the study, two changes were made to the ventilation system. The first corrected the positive pressure inside the range that had allowed leadcontaminated air to flow from the range into other parts of the building whenever the range door was opened. The second change consisted of placing fins on the air supply grille to cause smoother air flow across the firing line and to decrease air turbulence. The adjustments resulted in a large decrease of airborne lead concentrations, depending on booth location. Airborne lead concentrations

dropped to below detectable levels in the control room and classroom after the first adjustment. Airborne lead concentrations were reduced substantially (94% to 97%) by using ammunition that had nylon-coated and copper-jacketed bullets.

Case 2—Lead exposures of school rifle teams

The Alaska Environmental Public Health Program initiated a statewide review of school-sponsored rifle teams after a team coach was found to have an elevated BLL of $44\,\mu\text{g/dL}$ [State of Alaska 2003]. The review initially examined six rifle teams using three indoor firing ranges. Thirty-six students and 35 adults (including family members and 6 coaches) participated in the blood lead



Figure 1. A law enforcement agency five-booth indoor firing range.

testing. Two teams used a firing range that observed a regularly scheduled cleaning procedure and had a written protocol for maintenance and lead concentration monitoring. The geometric mean BLL measurements for those two teams were not elevated $(1.3 \, \mu g/dL \, and \, 3.9 \, \mu g/dL, \, respectively)$.

One team used a firing range-multi-use area that for 11 years had not been evaluated for lead. The student shooters showed small but measurable lead exposure with a geometric mean of $8.1\,\mu\text{g}/\text{dL}$.

The other three teams used a firing range that was later documented to have extensive lead contamination. The teams showed elevated blood levels with geometric means of 27.9 μ g/dL, 12.0 μ g/dL, and 12.2 μ g/dL respectively. The coaches of the 3 teams had BLLs with a geometric mean of 12.4 μ g/dL; the highest level was 31 μ g/dL, which is above the level considered elevated (\geq 25 μ g/dL) for adults. That firing range was voluntarily closed and arrangements were made for a thorough environmental evaluation.

Case 3—Lead exposures of police officers

A NIOSH Health Hazard Evaluation [NIOSH 1997] was conducted in a five-booth indoor firing range to examine potential exposure to lead among 30 police officers who used the firing range for training and firearms qualification (Figure 1). The firing range, which was located in a police department building, was used by other area police departments as well. The firing range ventilation system was independent of the rest of the building, but most of the firing range's exhaust air was recirculated through 90% to 95% efficient filters before being directed back into the firing range. Users cleaned the firing range by dry sweeping and collecting shell casings

from the floor by hand. The bullet trap was cleaned every 2-3 years. Average airborne lead concentrations were 144 µg/m³ and 230 µg/m³ on 2 separate survey dates. Area airborne lead samples detected lead in the control room, in a hallway outside the firing range, and at the rooftop air handling unit. Inspection of the HVAC system on the first survey found several filters missing, but were in place during the second survey. NIOSH found that the firing range was under positive pressure, with the smell of gun smoke noticeable immediately when firing started on the firing range. The measurements of supply air and exhaust air-flow rates were much lower than designed and yielded an average air velocity of 25 feet per minute (fpm) or 0.127 meters per second (m/s) at the firing line. Pressure gauges on the HVAC system did not appear to be working properly. Smoke tests revealed backflow patterns even when no one was standing at the firing line. NIOSH recommended changes in the ventilation system, a standard operating procedure for maintenance, improved clean-up and personal hygiene practices, a written respiratory protection program, ammunition substitution, and BLL monitoring.

Case 4—Lead, take-home lead, and noise exposures of Federal law enforcement students

NIOSH and the National Center for Environmental Health (NCEH) participated in a series of collaborative evaluations of indoor and outdoor firing ranges and related facilities at the FBI Firearms Training Unit (FTU) [NIOSH 1991]. FTU facilities consisted of an indoor training range with 23 shooting booths, a one-booth firearms testing range, and seven outdoor training ranges. The evaluations included lead and noise exposures during firearms training among firing range

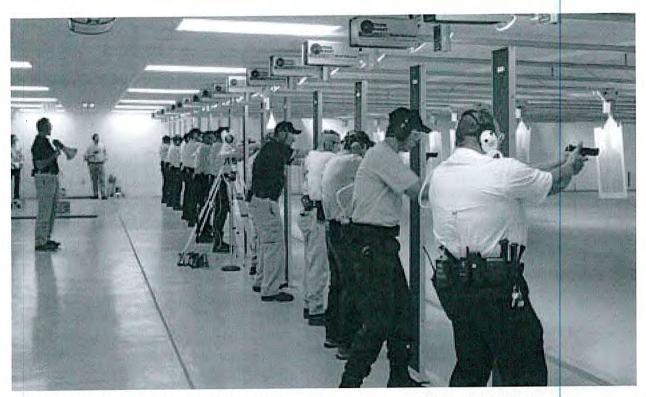


Figure 2. Noise and lead exposure assessment of law enforcement officers at a 20-lane indoor firing range.

technicians, gunsmiths, and firing range instructors. The evaluations also included the potential for take-home lead contamination of workers' vehicles and homes, and for exposure of their families.

Sixteen full-time firearms instructors spent approximately 30 hours per week on the firing ranges. Sixty-one personal breathing zone samples and 30 area samples were collected to measure airborne lead. Airborne lead concentrations ranged up to 51.7 µg/m³ for the instructors, 2.7 µg/m³ for firing range technicians, and 4.5 µg/m³ for gunsmiths. Shortterm exposures while the custodians cleaned the firing range were as high as $220 \,\mu\text{g/m}^3$. Results of carpet dust sampling collected in 14 dormitory rooms used by FBI students and 14 rooms used by non-students showed that significantly higher lead concentrations were found in the students' rooms (means of 214 μ g/g and 65 μ g/g respectively). The presence of lead in carpet samples suggests that FBI students unknowingly contaminated their living quarters with lead residues brought back to their quarters from the firing range.

The baseline and the most recent audiometric testing results were available for 14 of the 16 FBI instructors. Evaluations of the audiograms revealed that 9 of the 14 instructors (64%) had hearing losses that met the OSHA standard threshold shift criterion (i.e., changes relative to baseline of 10 decibels or more in the average hearing level at 2000, 3000, and 4000 Hz). Audiometric testing results were only available for one of the six firing range technicians, and this worker's results also met the OSHA standard threshold shift criterion. No audiometric testing results were available for the gunsmiths.

NIOSH recommended modifications to the indoor firing range ventilation system, improved personal hygiene practices, ammunition substitution, using double hearing protection devices, establishing a hearing conservation program for workers exposed to gunfire, and continued BLL monitoring.

Case 5—Noise exposures of Federal and local law enforcement officers

NIOSH investigators conducted live-fire noise exposure evaluations [Kardous et al. 2003; NIOSH 2003; Murphy 2007] of Federal and local law enforcement officers at indoor and outdoor firing ranges to characterize salient acoustic parameters associated with weapons noise and to provide guidelines for safe exposure (Figure 3). Measurements were conducted on a representative cross section of law enforcement firearms (the Beretta .40-caliber pistol, Remington 12-gauge

shotgun, and Bushmaster M4 .223-caliber assault rifle). Indoor and outdoor measurements were also obtained for the Smith and Wesson .357-caliber revolver, the Colt .45-caliber and 9-mm pistols, the Glock .40-caliber pistol, the Heckler & Koch H&K 53 and H&K 36 assault rifles, and Colt AR15 .223-caliber rifles. Measurements were conducted using a 1/4-inch Bruel & Kjaer model 4136 microphone, digital audio tape recorders with a 48 kHz sampling rate or were acquired directly to a computer laptop using 96 kHz data acquisition board. Analyses on the digitized waveforms were conducted using software tools built in Matlab. Peak sound pressure levels ranged from 155-168 dB SPL. Figure 4 shows the peak sound pressure levels generated from various weapons at an indoor firing ranges. A-weighted, equivalent (averaged) levels ranged from 124-128 dBA. Hearing protectors were

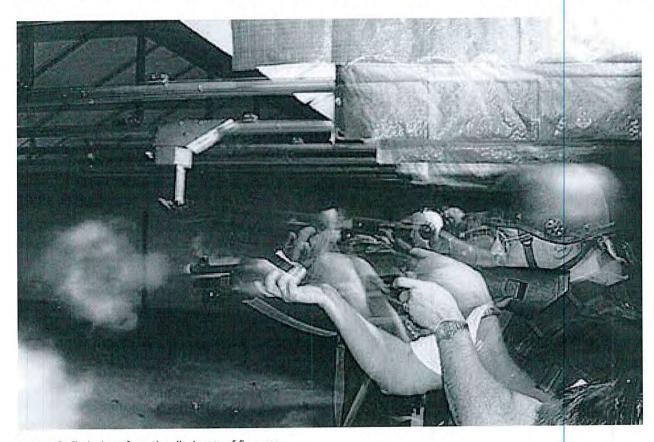


Figure 3. Emissions from the discharge of firearms.

evaluated using the *Institut de Saint-Louis* (ISL) artificial head mannequin built specifically for measuring impact and impulse noise. Earmuffs with safety glasses had a peak reduction of 18 dB. The mean peak reduction for earmuffs was 26 dB, while earplugs alone provided a mean peak reduction of 24 dB. The mean peak reduction for the combined earmuff and earplugs was 44 dB.

NIOSH recommended several noise abatement strategies and modifications to the firing range structure to reduce the transmission of airborne and structural borne sounds; the use of double-hearing protection to ensure maximum protection against impulsive noise, improper fitting and other incompatibility with other protective equipment; and the establishment of a hearing conservation program.

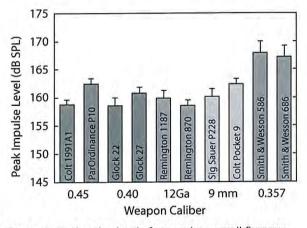


Figure 4. Peak noise levels from various small firearms.

CONCLUSIONS

The case reports described in this Alert suggest that employers, workers, and the general public may have an increased likelihood of exposure to lead through inhalation, skin contamination, and ingestion, and therefore the increased risks associated with the potential toxic health effects from lead. Numerous factors and routes of exposure can contribute to

workers' and patrons' exposures to lead. Environmental factors include the type of ventilation system used at the firing range, the types of ammunition used, and the length of time that shooting occurs. Exposure risk factors include the type and frequency of work practices conducted at the range, particularly those involving cleaning the firing range and other maintenance activities.

As demonstrated by the case studies, proper ventilation, good housekeeping practices, and basic personal hygiene practices will limit or eliminate the risk of lead exposure.

In addition to lead exposure, the discharge of firearms produces peak noise levels that exceed the occupational health limits of 140 dB SPL. The case studies illustrate the need to assess impulse noise exposure correctly by using proper sound measuring instruments and techniques, and the importance of using double hearing protection while shooting as part of an overall hearing conservation program.

Potential health problems from exposure to lead and noise can be reduced or prevented by following the recommendations outlined in this Alert.

RECOMMENDATIONS

Controlling exposures to occupational hazards is the fundamental method of protecting workers. Traditionally, NIOSH uses a hierarchy of controls as a means of determining how to implement feasible and effective solutions to reduce or eliminate workplace hazards. One representation of this hierarchy can be summarized as follows:

Elimination or substitution

Firing Ranges 11

- Engineering controls
- Administrative controls
- Personal protective equipment

Control methods high on the list above are potentially more effective and protective than those appearing lower. Following the hierarchy normally leads to the implementation of inherently safer systems that substantially reduce the risk of illness or injury. The elimination and substitution control methods are most effective at reducing hazards, but they are also the most difficult to implement within an existing process. If the process is still at the design or development stage, elimination and substitution of hazards might be inexpensive and simple to implement. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and are typically independent of worker interactions. Administrative controls and personal protective equipment are frequently used with existing processes where hazards are not particularly well controlled.

In addition to the previous control methods, employer and worker education and training are an essential part of any comprehensive management program.

Pursuant to OSHA's lead standard, worker exposure monitoring is covered under 29 CFR 1910.1025(d), and the medical surveillance provisions of the standard are covered at 29 CFR_1910.1025(j). Medical removal protection is covered in paragraph (k).

Controlling lead and noise hazards at indoor firing ranges may present unique and different challenges depending on several factors. These include appropriate design, construction, and maintenance of the range, appropriate and engineered ventilation systems, proper management, adequate and proper housekeeping and personal hygiene practices to limit exposures to lead.

Ammunition substitution

The substitution of less-toxic materials in the workplace is a primary preventive measure in occupational health. The primary sources of lead exposure at indoor firing ranges are lead bullets and cartridge primers. Lead fumes and dust are emitted from the exposed base of an unjacketed bullet due to contact with hot propellant gases and the physical effects of heat and friction acting on the bearing surface of an unjacketed bullet passing through the bore at high velocity. The use of jacketed (both base and bearing surface) or non-lead bullets are shown to reduce lead emissions at the firing range by as much as 80%.

It is important to note that product substitution is not necessarily an effective solution for indoor firing ranges due to certain training restrictions and operational requirements. Issues such as differences in trajectory, unknown reliability, increased cost of non-lead primers and bullets, and increased barrel wear can play a major role in determining whether substitution is a viable solution. Further, mixing spent lead bullets with metals from non-lead alternatives may render the material unfit for recycling and therefore require costly and otherwise unnecessary disposal of the spent ammunition as a hazardous waste.

Firing range operators should consider the following recommendations when assessing ammunition substitution:

- Use non-lead primers designed specifically for firing ranges. Cartridges already loaded with non-lead primers are commercially available for the most popular calibers.
- Jacketed or non-lead bullets should be used to help reduce lead exposure [NIOSH 1986: NIOSH 1995]. # When selecting copper-jacketed bullets, the firing range operator should ensure that the jacket covers the base and the bearing surface of the bullet. Some "full-metal jacket" bullets (sometimes called "ball ammunition") have a lead-exposed base that is not visible in a loaded cartridge. This type of bullet emits lead fume due to contact with hot propellant gases. Also, some companies manufacture half jacketed bullets that have a lead-exposed bearing surface. These bullets emit lead particles from the mechanical effects of passing through the bore. It is important to note that while some jacketed bullets present no airborne lead hazard, at the firing line, impact with the bullet trap may generate lead dust at the trap. This lead dust may present a source of lead exposure to workers performing range maintenance, cleaning of traps, and removing and disposing of spent bullets.
- Use jacketed lead bullets (as opposed to dip-coated copper plating) to minimize lead exposure in firing ranges. Most commercially available copper coatings are generally too thin or too soft to effectively isolate lead from the firing process.
- Zinc bullets should not be used without a careful assessment of safety hazards caused by their propensity to "bounce back" from the bullet traps in some firing

- ranges. Also, firing range operators should consider the potential for zinc bullets to damage concrete and steel surfaces in firing ranges. Operators might instead consider using frangible ammunition which can be be ideal for use with steel outdoor targets or portable "shoot houses."
- Firing range operators who depend on using lead substitutes for reducing lead exposure should ensure that firing ranges and firearms previously used with lead ammunition are appropriately cleaned and evaluated before being used in the firing range.
- Electronic simulation systems using guns equipped with lasers can provide an alternative solution for training new recruits in effective gun handling and marksmanship without using live ammunition.

Engineering controls

Ventilation is the most important engineering control for protection against primary lead exposure in indoor firing ranges (Figure 3). Well-designed supply air and exhaust ventilation systems have been shown to control exposures to lead fumes and dust in firing ranges [NASR 2004]. Monitoring and control systems that ensure proper operation of ventilation systems are also important parts of this engineering control. These systems check the operating parameters of the ventilation systems, alert firing range operators, and prevent use of the firing range when systems are not operating within specifications. When automatic control systems are not used to monitor the effective operation of the ventilation systems, OSHA requires that measurements that demonstrate the effectiveness of the systems in controlling exposure, such as capture velocity, duct velocity, or static pressure be made every 3 months. In addition, measurements of

^{*}NIOSH examined potential hazardous exposure to copper and zinc oxide ammunition substitutes and found levels to be far below the OSHA PEL.

the system's effectiveness must be made within 5 days of any change in the operation of the firing range, and/or engineering control which might result in a change in employee exposure to lead.

The following recommendations are based on NIOSH research and are intended to show the range of solutions that may be implemented by firing range operators, depending on cost and availability of resources [Crouch et al. 1991].

Lead

Supply Ventilation System Recommendations:

- Ensure that supply air systems are designed to distribute air evenly across the area of the firing range, floor to ceiling and wall to wall. If the supply air is not evenly distributed, air flow at the firing line will likely contain regions of reverse flow, causing lead and other contaminants to be carried back into the shooter's breathing zone.
- Introduce supply air as far up range as possible. A perforated wall plenum has been shown to provide uniform air distribution at the firing line. Perforated radial air diffusers mounted at ceiling height have been tested and demonstrated effective in meeting established industry and regulatory airflow criteria. Diffusers that produce jets of air can create turbulence at the firing line.
- Airflow along the firing line should be no more than 75 fpm (0.381 m/s) with a minimum acceptable flow of 50 fpm (0.254 m/s) [NIOSH 1976]. If it is desired to minimize fall-out of gun emissions downrange of the firing line, downrange airflow should be maintained at

- a minimum of 30 fpm (0.152 m/s) and should be evenly distributed.
- There should be no obstructions (e.g., target or ammunition storage cabinets) to the airflow between the supply air inlets and the firing line so that the supply air is distributed uniformly across the width (cross-sectional area) of the firing range.

Exhaust Ventilation System Recommendations:

The total or combined exhaust airflow for the firing range should always be greater than the total supply airflow to ensure the firing range is maintained under negative pressure, and to prevent migration of lead-contaminated air from the firing range to the surrounding environment. Exhausting slightly more air than supplied is a general recommendation for maintaining appropriate negative pressure in the firing range. If the building envelope is not sealed, negative pressure within the building can create undesirable drafts through unplanned air pathways entering through openings in the building structure. These drafts can result in back flow at the firing line, which defeats the purpose of the ventilation system. Unplanned pathways can also result in a higher mechanical operating cost (requiring additional heating or airconditioning). The magnitude of the negative pressure should be just sufficient to produce an inflow of air at openings such as windows and doors between the firing range and adjacent areas or surrounding environment. This can easily be evaluated using a chemical smoke tube to visually evaluate pressurization at doors, windows, etc. that are slightly open to the flow of air.

14. Firing Ranges

- The air should be exhausted at or behind the bullet trap. Some firing ranges are designed to have multiple exhaust points downrange to maintain downrange flow and desired velocities at the firing line.
- The exhaust system should be designed to provide minimum duct air velocities of 2500–3000 fpm (12.7–15.24 m/s) (Industrial Ventilation Manual, 24th Edition, Table 3–2) [ACGIH 2004]. Excessively high duct velocities are unnecessary, waste energy, and may cause rapid abrasion of ductwork.
- The ventilation system that serves the range area should be completely separated from any ventilation for the rest of the building. The exhaust air from the range should not feed into air supplies for offices, meeting rooms, or other businesses.

Air Filtration Recommendations:

- All air filtration systems should be installed in a location where they can be easily serviced.
- Air exhausted from the firing range should be appropriately filtered or the area near the outside vent be managed to prevent access and lead mobility in accordance with EPA best management practices [EPA 2005]. If lead-contaminated air is released outside the building and left unmanaged, the exterior walls of the building and surrounding grounds and waterways can become contaminated. Lead released outdoors can be re-aerosolized and result in subsequent contamination of the firing range or other buildings, and present unwanted hazards to humans if the range is in a populated area.
- The minimum filtration recommended is high-efficiency particulate air (HEPA) filtration or a minimum efficiency reporting

- value (MERV) of 18–19. The Institute of Environmental Sciences and Technology specifies that a certified HEPA filter must capture a minimum 99.97% of contaminants at 0.3 micron in size. This filter specification is also endorsed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
- All filters potentially exposed to lead-contaminated air should be equipped with side and face gaskets to eliminate filter bypass, and air passing between the filters and the filter racks. Filter racks should also be engineered and tested to ensure that leaks do not occur after installation.
- The filtration system should be located as close to the firing range as possible to minimize the distance that lead dust needs to travel in the exhaust system before it passes through the filter. Filter systems should always be located upstream of the exhaust fan to prevent contaminating the fan with lead.

Filter System Maintenance Recommendations:

- Filter end-of-service life is indicated by a high-pressure drop (more resistance to air flow) across the filter bank. Filters should be changed according to the static pressure guidelines provided by the manufacturer. Since pre-filters are the first to encounter contaminated exhaust air from the firing range, they will load fastest. Therefore, pre-filters require more frequent change-outs than HEPA-rated filters.
- by personnel trained in the removal and disposal of dirty filters and in lead safety. They should use appropriate personal protective equipment and environmental precautions. Loaded filters will likely contain lead in sufficient quantity to classify

Firing Ranges 15

the used filter as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 260-279). A Toxicity Characteristics Leaching Procedure (TCLP) test will determine whether the filter is a regulated hazardous waste under the RCRA regulation. If the filter does not meet the criteria of a hazardous waste, it can be disposed of as normal solid waste. However, if the filter does have sufficient lead to be considered a hazardous waste, there are two options: first is to recycle or reuse the filter, in which case it is not considered a waste (RCRA recycling exemption 40 CFR 261.4(a)(13)) and there are no hazardous waste handling procedures required. If the filter is not recycled, and it fails the TCLP, then it must be transported and disposed of properly in accordance with Federal. State and local regulations.

Control System Recommendations:

- A warning light should be added to warn shooters and the firing range operator that a critical system has been inactivated by a safety interlock system. Modern computer-operated firing ranges can incorporate specific warning indicators in the computer programming.
- Exhaust and supply fans should be interlocked so that all fan systems operate at the same time during active range use. Air flow from the fans should be monitored and interlocked with a critical firing range operating system to disable the firing range and alert the firing range officer when the air flow from any fan is inadequate.
- Filter access doors should be interlocked with the fan system to deactivate the fans when the door is opened.
- Pressure gauges on HVAC systems should be maintained and calibrated regularly.

- The pressure drop across each filter should be monitored and checked regularly.
- Exhaust air from the firing range should not be recirculated back into the range when economically feasible. However, exhaust air may be recirculated if a real-time particle detection system is installed downstream of the filter system. It must be demonstrated that the particle detection system is sensitive enough to detect any aerosol size range and number concentration combination of lead particles that might exceed the OSHA PEL. ANSI/ASHRAE Standard 62.1-2007, Ventilation for Acceptable Indoor Air Quality, [ANSI/ASHRAE 2007] provides dilution ventilation guidelines for recirculating clean and breathable air in an energy-efficient manner.

Noise

Effective noise control measures are imperative to reducing noise-induced hearing loss among firing range operators, employees, and users. It is important to understand that noise control of high intensity impulse sounds might help reduce overall noise levels inside a firing range and adjacent facilities, but it has limited effect on the noise exposure of the person firing the weapon. There is no noise control that alleviates the requirement for wearing hearing protection because the primary source of noise exposure is the weapon itself. Noise control measures should be compatible with ventilation requirements and meet fire and building codes. Noise controls typically address the primary two components of noise transmission—airborne and structural-borne sounds:

To reduce transmission of airborne sounds, no leaks can exist between the firing range and adjacent spaces. Small openings such as electrical outlets, spaces around doors, and joints at the walls,

16 Firing Ranges

ceiling, and floor should be sealed with insulation and/or weather stripping as needed. Ventilation ducts that provide a direct acoustic path into adjacent spaces can be fitted with acoustic absorptive materials, both to remediate vibrations in the walls of the duct and to absorb noise transmitted along the duct. Special care must be paid to the maintenance and handling of acoustic absorptive materials to prevent lead dust accumulation. The design of walls can minimize transmission of airborne sounds through combinations of gaps, absorptive materials, and different wall thicknesses.

To reduce the transmission of structuralborne sounds and vibration, acoustical absorptive materials should be applied to walls, windows, doors, ventilation ducts, and ceilings. Use special care when applying acoustical absorptive materials to prevent them from damage or becoming dust-laden. Typical metal or wooden stud construction has wall cavities that can be filled with insulation material. Walls that separate the firing range from adjacent parts of the building should be double thickness with offset studs. They should provide an air gap as well as insulation on the inside of one of the walls. The interior surface of firing range walls should be treated to minimize absorption of airborne particulates, to make cleaning easier, and to resist lead and nitrate penetration. Doors should be made of metal with a foam core to reduce vibration caused by impulsive noise. The entrance to the firing range should be a 4-6 foot passageway with self-closing doors at both ends. The passageway provides an additional gap to reduce noise emissions. Observation room windows should be designed to withstand bullet impacts and to maximize sound reduction. The

glass should be laminated and certified as bullet-impact resistant. If double panes of glass are used, then the glass that is in the firing range should be bullet-impact resistant and of a different thickness than the interior pane to increase noise reduction.

Recently, state-of-the-art systems and training equipment designed to reduce lead and noise exposures have been introduced and are gaining wide acceptance among firing range operators and law enforcement agencies. Specifically, new backstop systems are available that eliminate bullet fragmentation and airborne lead by capturing whole, intact bullets into their rubber media. These backstops also reduce noise exposures compared to steel backstops.

Work practice and administrative controls

When engineering controls are not feasible or are inadequate, supplemental work practice and administrative controls may be needed to limit noise and lead exposures. Work practice controls are procedures or actions firing range users can take themselves to ensure their own safety and health. Administrative controls, on the other hand, are those generally implemented by management or firing range operators to safeguard the shooters. The following work practice and administrative recommendations are offered:

Preventing the potential for lead exposure by ingestion and by avoidance of skin contamination and appropriate decontamination

- Eating, drinking, and smoking should be prohibited in the firing range.
- All personnel should wash their hands, forearms, and faces before eating, drinking,

smoking, or having any hand contact with the face or with other people. Hands should be washed with soap and water or cleaned with lead decontamination wipes after shooting, handling spent cartridge cases, or cleaning weapons. Wipes for cleaning skin without water are commercially available and should be used if access to soap and water is limited.

- Skin contact with spent cartridges should be avoided whenever possible. Disposable gloves should be worn when removing larger objects that cannot be removed with a HEPA vacuum cleaner.
- Floor and horizontal surfaces inside the firing range should be cleaned routinely with a detergent, or in some specific and tough cases, a cleanser designed for lead decontamination. EPA studies show that general all-purpose cleaners are adequate for both general cleaning and post-intervention cleaning [EPA 1997, Lewis et al. 2006].

Reducing lead contamination inside the firing range

- The ventilation system should be operating at all times while the firing range is in use and during clean-up.
- The firing range operator should require that all shooters immediately discontinue shooting and place their weapons in safe mode whenever the firing range operation is inactivated by a monitor. All nonessential persons should leave the firing range until the problem is fixed.
- Carpeting should not be used anywhere inside a firing range or in rooms adjacent to the range. Accumulation of lead dust in carpets is a health hazard, and accumulation of unspent primer in carpets is a fire hazard.

- The firing range should be equipped with automatic target retrieval systems to allow shooters to examine their performance without crossing the firing line.
- After use, the floor of the firing range should be thoroughly cleaned with an explosion-proof HEPA vacuum cleaner designed to collect lead dust. Dry sweeping should never be used in the firing range.

Preventing "take-home" lead exposure

- Shooters using a kneeling or prone position over lead contaminated surfaces should place a sheet of paper or other disposable material on the ground beneath them to minimize accumulation of leaded dust on their outer garments. Knee pads or mats may be used to reduce lead contamination but they should be cleaned after each use.
- Shooters and workers should shower, whenever possible, and change clothes at firing range facilities after performing maintenance or cleaning activities at the range.
- Provide workers with two lockers to allow them to separate street clothes from lead-contaminated work clothes.
- Workers' non-disposable outer protective clothing should be laundered by the employer or a contractor. It should not be laundered by the employee at home. Non-employees who take contaminated clothing home should bag the clothes before leaving the range. Contaminated clothing should be washed separately from the family's clothing.
- Leave shoes worn on the firing range at the range or bag them before leaving the range to prevent lead from being tracked into cars and onto home floors

18 Firing Ranges

and carpets. As an alternative, use stepoff cleaning pads at the exit of the firing range to help reduce the amount of lead contamination on shoes. Disposable shoe coverings can also be used while firing and cleaning, then discarded upon leaving the range.

Administrative control of noise and lead exposure can be accomplished by limiting the length of time shooters and employees use the firing range, by assignment and work rotation, and by providing quiet and clean lunch and break areas to give periodic relief from noise. The firing range should also be cleaned at least weekly.

Personal protective equipment

Provide personal protective equipment to workers and indoor range users to protect against the potential effects of exposure to lead and noise.

All workers and shooters should be required to use dual hearing protection devices (earmuffs and earplugs) when the range is in use. For shooters requiring improved communication, NIOSH recommends using electronic level-limiting or sound restoration earmuffs with passive earplugs. In addition to the electronic earmuffs, commercially available communication headsets exist that would permit the range master to transmit instructions via short range radio to the shooter's headset. Shooters should also be encouraged to wear eye protection in the form of safety glasses or goggles that are compatible with hearing and other head protection devices. NIOSH research has shown that wearing earmuffs on top of safety glasses created a leakage in the seal of the earmuff cushions with the ear and reduced the effectiveness and peak noise level reduction of the earmuffs. NIOSH recommends that shooters wear the safety glasses over the top of the earmuff cushions, or use glasses with a strap or low profile stem. Ideally, the safety glasses should be an integral part of the earmuff or other head protection devices. A training program in the appropriate use and fitting of hearing and eye protection should be implemented by firing range training staff.

- Personnel performing lead clean-up at the trap should wear appropriate NIOSH-certified respiratory protection and full protective outer clothing (which may be disposable). If respirators are part of the lead management plan, firing range operators must develop and implement a respiratory protection program that meets the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] and document it in writing.
- Personnel cleaning weapons should be encouraged to use chemical-resistant gloves and tight-fitting goggles for skin and eye protection against potential chemical hazards. Range operators should provide specific guidance about proper and appropriate use of skin and eye protection.

Employer and worker education

Firing range operators and employers should be fully aware of the potential for hazardous lead and noise exposures in their facilities, and they must communicate this information to workers to ensure safe and healthful working conditions.

Inform workers about the potential for exposure to lead, noise, and other toxicants and tell them the nature of the hazard.

- Provide general information and specific hazard warnings through workplace postings, training, and stating the precautions and hygiene practices required of firing range users.
- Train workers regarding the means available at the firing range to eliminate or limit exposure and the actions that limit potential exposures for themselves and fellow workers.
- Inform workers about symptoms that may indicate a health problem. Although not all exposed workers may show overt symptoms, common symptoms of lead poisoning in adults include nausea, diarrhea, vomiting, poor appetite, weight loss, anemia, excess lethargy or hyperactivity, headaches, abdominal pain, and kidney problems. Exposure to high noise levels can cause hearing problems, stress, poor concentration, insomnia, nervousness, anxiety, and depression. It can also cause accelerated heartbeat, high blood pressure, gastro-intestinal problems and chronic fatigue. Employers should advise employees to report these symptoms to their supervisors and physicians.
- Inform pregnant workers and shooters, or those considering pregnancy, about the possible adverse health effects to the fetus from exposure to lead and noise. A fetus can be poisoned in utero. Studies show that fetal blood contains approximately 80% of the blood lead concentration of the mother. Pregnant workers and shooters, or those considering pregnancy, also need to know about the increased chance of miscarriage at blood lead levels > 5 µg/dL. Evidence also suggests that exposure to peak sound pressure levels above 155 dBC can cause hearing loss in the fetus beyond the fifth month of pregnancy. The

evidence of whether the particular noise exposure associated with firing ranges is harmful to the developing fetus and warrants removal of the pregnant woman from exposure is ambiguous. This issue is further complicated because female workers may be exposed to lead and noise even before they know they are pregnant. Firing ranges might wish to establish guidelines for pregnant workers exposed to lead and noise.

Worker exposure and medical health monitoring

OSHA's lead standard requires each employer who operates a firing range to determine if any workers may be exposed to lead at or above the action level (30 $\mu g/m^3$ as an 8-hour TWA). Worker exposure is defined as that exposure which would occur if the workers were not using a respirator.

The results of initial and periodic monitoring determine whether subsequent is necessary. Monitoring also determines whether other protective provisions of the standard need to be implemented.

If the initial determination or subsequent determinations reveal workers' exposure to be at or above the action level but at or below the PEL, the employer is required to perform monitoring at least every 6 months. If the initial determination reveals that workers' exposure is above the PEL, the employer must perform monitoring at least quarterly. If any worker is determined by the initial monitoring to be exposed to lead below the action level, then no further monitoring is required for that worker, except where firing range operations or controls change that could result in additional exposure.

Exposure monitoring

- Monitoring procedures should be specifically defined to ensure consistency. Instrumentation, calibration, measurement parameters, and methods for linking results to worker records should be clearly outlined.
- Exposure assessment should be conducted under the direction of a certified industrial hygienist or other safety and health professional with appropriate training and expertise.
- Workers should be permitted and encouraged to observe and participate in monitoring activities as long as they do not interfere with monitoring procedures. Their participation will help ensure valid results.
- Monitoring should be repeated periodically to ensure continued effectiveness of worker protection measures and to help identify changes in noise controls, work practices, equipment, and maintenance procedures.
- Perform wipe sampling on surfaces in the firing range on a regular basis. Wipe sampling can provide information about how well these surfaces are being cleaned, whether lead is being transported from the firing range to other parts of the facility, and about the potential for lead exposure. See information about the NIOSH wipe sampling methods in *Current Regulations*, *Recommendations*, and *Other Guidelines* section of this Alert.
- Employers should notify workers of any hazardous exposure levels determined for their particular jobs and provide information about the health risks associated with such exposures.

Worker health monitoring

Blood lead levels are currently the best indicator of personal lead exposure. Workers potentially exposed to lead should therefore be monitored for the presence of lead in blood. This assessment is necessary to ensure that engineering controls, personal hygiene practices, and PPE are preventing lead exposure. It is recommended that the employer's medical monitoring program be supervised by a physician trained and experienced in occupational medicine.

- The OSHA general industry lead standard contains provisions for the medical monitoring of workers exposed to lead (29 CFR 1910.1025(j)). NIOSH supports using these provisions for firing range workers, especially those who routinely use or work at these ranges, but acknowledges that current understanding of health risks associated with lead exposure may require updated/additional provisions for medical surveillance. Recommendations from the March 2007 edition of Environmental Health Perspectives' Mini-Monograph on adult lead exposure and from the Association of Occupational and Environmental Clinics (AOEC) include the following elements:
 - Informing workers and shooters that levels of lead once thought safe are now known to be harmful. Advise that blood lead levels be kept below 10 µg/dL of blood.
 - Informing pregnant workers and shooters, or those considering pregnancy, about the possible adverse health effects to the fetus as well as the increased chance of miscarriage at blood lead levels > 5 µg/dL.

- Workers should be included in a medical surveillance program whenever they are handling or distributing materials with lead content that could potentially cause exposure through inhalation or ingestion.
- New employees and those newly assigned to work in areas with potential lead exposures should have a preplacement lead medical examination and a BLL test, followed by periodic BLL monitoring, blood pressure testing, and health status review.
- Monthly BLL testing is recommended for the first three months of employment in order to assess the adequacy of exposure control measures.
- Testing frequency can be reduced to every six months as long as BLLs remain below 10 μ g/dL or quarterly for individuals with blood lead concentrations between 10 and 19 μ g/dL.
- Any increase in BLLs of 5 μg/dL or greater should trigger a re-examination of control measures.
- Workers with BLLs of 30 μg/dL or more, or ones with a sustained BLL above 20 μg/dL should be removed from lead exposure.
- All lead-exposed workers should receive, annually, educational materials and prevention information about the health effects of exposure to lead from a clinician and the employer, and they should be provided necessary protections including protective clothing, clean eating areas, and hygiene measures such as wash facilities and/or showers to prevent both ingestion and take-home exposures.

The OSHA noise exposure standard (29 CFR 1910.95(d)(e)(g)(h)) requires the employer to establish a monitoring program and provide audiometric testing to all employees whose exposures equal or exceed an 8-hour TWA of 85 dBA under the action level monitoring criteria. All workers with regular exposure to weapons firing should undergo annual audiometric monitoring at test frequencies of 500, 1000, 2000, 3000, 4000, and 6000 Hz. Annual audiograms should be compared to a baseline audiogram to determine if hearing loss is occurring. If a standard threshold shift (STS), defined as a change in the pure-tone average of more than 10 dB at 2000, 3000, and 4000 Hz, occurs in either ear, the employer must follow certain procedures outlined in the standard, including notifying the affected employee in writing. Occupational exposure to lead can have an additive or potentiating effect on the auditory system and increase the potential for hearing loss. Pure-tone audiometric testing may conceal certain hearing difficulties caused by exposure to lead or other chemicals. Professionals who review the audiometric results should be alerted to this issue and should consider a referral for further testing and medical evaluation [Morata, 2007].

ACKNOWLEDGMENTS

The principal contributors to this Alert were Chucri A. Kardous, MS, PE; Bradley F. King, MS, CIH; Amir Khan; Elizabeth A. Whelan, Ph.D.; Randy L. Tubbs, Ph.D.; Michael E. Barsan, REHS-RS; Keith G. Crouch, Ph.D.; William J. Murphy, Ph.D.; Robert D. Willson, MS, CIH, Eric J. Esswein, MSPH, CIH, CIAQP; and Mark F. Boeniger, MS, CIH.

Sue Afanuh, Vanessa Becks, Diana Campbell, Gino Fazio, and Anne Votaw provided editorial and production services.

Please direct any comments, questions, or requests for additional information to the following:

W. Gregory Lotz, Ph.D.
Director, Division of Applied Research and Technology
National Institute for Occupational Safety and Health
4676 Columbia Parkway
Cincinnati, OH 45226

Telephone: 513–533–8462; or call CDC-INFO (1–800–232–4636)

TTY: 1–888–232–6348 E-mail: cdcinfo@cdc.gov

We greatly appreciate your assistance in protecting the health of U.S. workers.

Christine M. Branche, Ph.D.

pustine hom

Acting Director, National Institute for Occupational Safety and Health Centers for Disease Control and Prevention

REFERENCES

ACGIH [2001]. Documentation of the threshold limit values and biological exposure indices, 7th Edition. Cincinnati, OH: American Conference of Governmental Industrial Hygienists.

ACGIH [2004]. Industrial ventilation: a manual of recommended practice, 25th Edition. Cincinnati, OH:

American Conference of Governmental Industrial Hygienists.

ACGIH [2006]. 2006 TLVs and BEIs: threshold limit values for chemical substances and physical agents. Cincinnati, OH: American Conference of Governmental Industrial Hygienists.

AOEC [2007]. Medical management guidelines for lead-exposed adults, revised 04/24/07 [http://www.aoec.org/documents/positions/MMG_FINAL.pdf].

ASHRAE [2007]. ANSI/ASHRAE 62.1: Ventilation for Acceptable Indoor Air Quality. Atlanta, GA: American Society of Heating, Refrigerating, and Air Conditioning Engineers.

CFR. Code of Federal regulations. Washington, DC: U.S. Government Printing Office, Officer of the Federal Register.

Crouch KG, Peng T, Murdoch DJ [1991]. Ventilation control of lead in indoor firing ranges: inlet configuration and booth and fluctuating flow contributions. Am Ind Hyg Assoc J 52(2):81–91

DHHS [2000]. Healthy people 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office.

DOJ [2002]. Immigration and Naturalization Service. INS/NFU Firing Range Design Standard. U.S. Department of Justice.

DOJ [2004]. Law Enforcement Statistics. Washington, DC: U.S. Department of Justice, Office of Justice Programs. [www.ojp.usdoj.gov/]

EHP [2007]. Mini-Monograph. Environmental Health Perspectives, *115*(3): 451–492.

EPA [1997]. Laboratory Study of Lead-Cleaning Efficacy, March 1997 (EPA 747–R–97–002).

EPA [2005]. Best management practices for lead at outdoor shooting ranges. EPA-901-B-01-001. [www.epa.gov/region2/waste/leadshot].

Esswein EJ, Boeniger MF [2005]. Preventing the toxic hand-off. Occupational Hazards. September 2005, pp. 53–61.

Goldberg RL, Hicks AM, O'Leary LM, London S [1991]. Lead exposure at uncovered outdoor firing ranges. J Occup Med. 33(6):718–719

Kardous CA, Willson RD, Hayden CS, Szlapa P, Murphy WJ, Reeves ER [2003]. Noise exposure assessment and abatement strategies at an indoor firing range. Appl Occup Environ Hyg 18(8):629–636.

Kosnett MJ, Wedeen RP, Rothenberg SJ, Hipkins KL, Materna BL, Schwartz BS, Hu H, Woolf A. [2007]. Recommendations for Medical Management of Adult Lead Exposure. Environmental Health Perspectives, 115(3):463-471. [http://www.ehponline.org/members/2006/9784/9784.html].

Lalande NM, Hetu R, Lambert J [1986]. Is occupational noise exposure during pregnancy a risk factor of damage to the auditory system of the fetus? Am J Ind Med 10(4):427–435.

Levin SM, Goldberg M [2000]. Clinical Evaluation and Management of Lead-Exposed Construction Workers. Am J Ind Med 37(1):23–43.

Lewis RD, Condoor S, Batek J, Ong KH, Backer D, Sterling D, Siria J, Cheng JJ, Ashley P [2006]. Removal of Lead Contaminated Dust from Hard Surfaces. Env Sci Technol 40(2):590–594.

Morata, TC [2007]. Promoting hearing health and the combined risk of noise-induced hearing loss and ototoxicity. Audiological Medicine, 5(1): 33–40.

Murphy WJ, Tubbs RL [2007]. Assessment of Noise Exposure for an Indoor and Outdoor Firing Range. J Occup Env Hyg 4:688–697.

NASR [2004]. Lead management and OSHA compliance for indoor shooting ranges. National Association of Shooting Ranges, Newtown CT.

Niemtzow RC [1993]. Loud noise and pregnancy. Military Medicine 158(1):10–12.

Novotny T, Cook M, Hughes J, Lee S [1987]. Lead exposure in a firing range. Am J Public Health 77:1225–1226.

NRA [1999]. The NRA range source book: a guide to planning and construction. Fairfax, VA: National Rifle

Association, Range Department, Field Operations Division.

NSSF [2006]. National Shooting Sports Foundation. Newton, CT. [www.nssf.org/IndustryResearch/index. cfm]

NIOSH [1975]. Lead exposure and design considerations for indoor firing ranges. Cincinnati, OH: U.S. Department of Health, Education, and Welfare, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH HEW NO. 76–130.

NIOSH [1986]. Health Hazard Evaluation and Technical Assistance Report: Federal Reserve Bank. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health, NIOSH HETA Report No. 86–0269–1812.

NIOSH [1991]. Health Hazard Evaluation and Technical Assistance Report: FBI Academy, Quantico, VA. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health, NIOSH HETA Report No. 91–0346–2572.

NIOSH [1992a]. Recommendations for occupational safety and health: compendium of policy documents and statements. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and (NIOSH) Publication No. 92–100.

NIOSH [1992b]. Health Hazard Evaluation Report, Delaware County Resource Recovery Facility, Chester, Pennsylvania. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH HETA Report No. 91–0366–2453.

NIOSH [1994]. NIOSH Manual of Analytical Methods (NMAM®). 4th ed. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National

Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 94–113.

NIOSH [1995]. Health Hazard Evaluation and Technical Assistance Report: Colorado State Patrol Training Academy. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH HETA Report No. 95–0290–9221.

NIOSH [1996]. Health Hazard Evaluation Report, Standard Industries, San Antonio Texas. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH HETA Report No. 94–0268–2618.

NIOSH [1997]. Health Hazard Evaluation and Technical Assistance Report: Forest Park Police Department, Forest Park, OH. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH HETA Report No. 97–0255–2735.

NIOSH [1998]. Criteria for a recommended standard—Occupational noise exposure (revised criteria 1998). Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 98–126.

NIOSH [1999]. Interim Health Hazard Evaluation Report, Yuasa Inc. Sumpter South Carolina. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH HETA Report No. 99–0188.

NIOSH [2003]. Health Hazard Evaluation and Technical Assistance Report: Fort Collins Police Services, Fort Collins, CO. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH HETA No. 2002–0131–2898.

NIOSH [2004]. Research to Practice. www.cdc.gov/niosh/r2p/. Accessed June 20, 2006.

Price GR [1989]. Hazard from weapons impulses: Histological and electrophysiological evidence. J Acoust Soc Am 85(3):1245–1254.

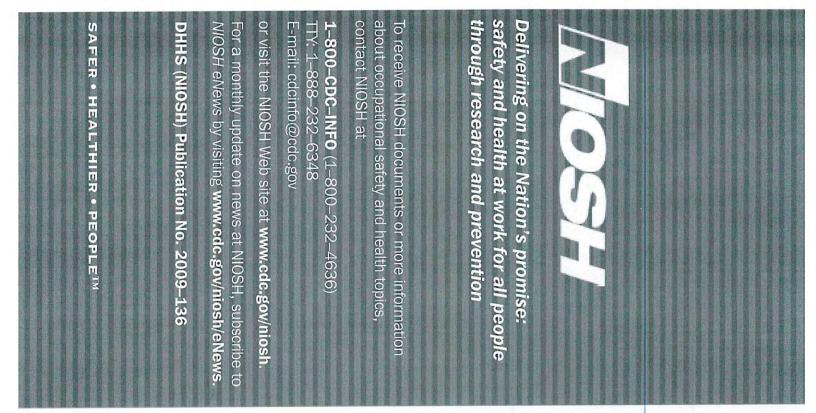
State of Alaska [2003]. School rifle teams exposed to lead at indoor firing ranges, Bulletin No. 1, Anchorage, AK: State of Alaska, Department of Health and Social Services, Epidemiology Bulletin.

Tripathi RK, Sherertz PC, Llewellyn GC, Armstrong CW [1991]. Lead exposure in outdoor firearm instructors. Am J Public Health. 81(6): 753–755

USACE [1990]. Design manual for indoor firing ranges. CEHND 1110–1–18, Huntsville, AL: U.S. Army Corps of Engineers.

USN [2002]. U.S. Navy Environmental Health Center. Indoor Firing Ranges Industrial Hygiene Technical Guide. Technical Manual NEHC–TM6290.99–10. Portsmouth, VA: U.S. Department of Defense, Department of the Navy.

Valway SE, Martyny JW, Miller JR, Cook M, Mangione EJ [1989]. Lead absorption in indoor firing range users. Am J Public Health, 79:1029–1032.



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226–1998

Official Business Penalty for Private Use \$300



NEWS CONTACT

DONATE

HARDWARE & AMMUNITION

Silencers

SHARE







By making gunshots harder to hear or see, silencers diminish the effectiveness of law enforcement and gunshot detection systems. Silencers are inherently dangerous devices that shooters can use to suppress the sound of gunfire and mask muzzle flash. These deadly accessories have been regulated effectively since the 1930s, yet the gun lobby has made concerted efforts to make it easier to buy and sell silencers. Silencers put law enforcement and the public at grave risk by making it more difficult to identify nearby gunshots and locate an active shooter, and they should not be widely available to civilians.

BACKGROUND

Silencers, also known as "suppressors," are inherently dangerous devices that criminals may use to suppress the sound of gunfire and mask muzzle flash. These dangerous accessories obstruct law enforcement efforts to quickly and effectively respond to active shooters, since silencers make it harder to recognize the sound of gunfire and locate the source of gunshots. Silencers enable criminals to elude law enforcement and raise the risk of ambush attacks, in which a shooter may escape before the police are even called.

Proliferation of silencers would also diminish the effectiveness of gunshot detection systems, such as Shotspotter. These systems are now deployed in nearly 100 cities, including Chicago, New York City, and Washington DC. They provide police with real-time alerts to illegal gunfire, enabling them to more safely respond to and investigate gun crime.¹

The National Firearms Act (NFA) imposes certain obligations on people who make, manufacture, sell, or transfer silencers. That law has been on the books since 1934 and has made it difficult for criminals and other dangerous individuals to obtain silencers. While these individuals can obtain access to other firearms too easily, it has been harder for them to obtain access to silencers.

When dangerous people have managed to circumvent the NFA and gain access to silencers, they've used them in targeted, assassination-style murders. For example, Christopher Dorner, a former LAPD officer who had been fired, murdered four people and wounded several others using a gun with a silencer in February 2013. He targeted law enforcement officers in what the Police Foundation described as a bizarre act of vengeance—a "gang-style hit" on individuals who were sitting in a car. Police were initially puzzled as to why no neighbors heard the 14 shots—it was because Dorner used a silencer.²

As described above, silencers present a serious public safety concern. They are also not a fully effective method for

protecting a shooter's hearing. Dual ear protection—muffs and plugs—is the gold standard for any professional shooter, including police and members of the Armed Forces. Public health experts warn that hearing loss can occur at 85 decibels. Firearms produce explosive sounds in excess of 140 decibels with the most effective silencers suppressing the sound of gunfire by only about 28 decibels. In contrast, noise reductions from muffs and plugs used together are in the 40 to 50 decibel range. The real reason the gun lobby wants to deregulate silencers is so that the industry can profit off their sale and the accessories required for their use—all at the expense of public safety.

SUMMARY OF FEDERAL LAW

Enacted in 1934, the National Firearms Act (NFA) comprehensively regulates "firearms," defined to include machine guns, silencers, and certain other weapons, but not traditional rifles, shotguns, or handguns. Each person or entity engaged in business as an importer, manufacturer, or dealer of NFA firearms, including silencers, must register with the Bureau of Alcohol, Tobacco, Firearms & Explosives (ATF) and pay a special occupational tax. More importantly, the NFA also requires anyone, even an unlicensed person, who is manufacturing, "making," importing, or transferring an NFA weapon to register it with ATF. The term "make" includes manufacturing by someone other than by a manufacturer registered under the NFA, putting together, altering, or otherwise producing a silencer. Any person who is not licensed as an importer, manufacturer, or dealer must pay a tax upon transferring or making an NFA weapon. The NFA requires ATF to maintain a central registry of all NFA weapons, including silencers, that are "not in the possession or under the control of the United States," i.e., silencers owned by state or local entities, as well as those legally owned by private persons, are included in the registry. To

For each registered silencer, the registry includes:

An identification of the silencer, including serial number; name and address of the manufacturer, maker, or importer, if known; model: and caliber, gauge, or size.

The date of registration.

The identification and address of the person entitled to possess the silencer.¹¹

Although the obligation to register a silencer at the time of a transfer falls upon the transferor, rather than the transferee, a person possessing a silencer must retain proof of registration and make it available to ATF upon request.¹²

There are currently over 900,000 silencers registered under the National Firearms Act. 13

The Gun Control Act of 1968 defines the term "firearm" much more broadly than the National Firearms Act. Silencers fall within both definitions. Gonsequently, silencers are also subject to regulation under the Gun Control Act. 15

SUMMARY OF STATE LAW

Eight states and the District of Columbia ban silencers. The list below does not include the large number of other states that have laws on the books that only ban those silencers not registered in accordance with the federal laws mentioned above.

California 16

Delaware¹⁷

District of Columbia 18

Hawaii¹⁹

Illinois²⁰

Massachusetts²¹

New Jersey²²

New York²³

Rhode Island²⁴

KEY LEGISLATIVE ELEMENTS

The features listed below are intended to provide a framework from which policy options may be considered. A jurisdiction considering new legislation should consult with counsel.

State law addresses gun silencers in the context of existing federal regulations, and with a view to the consequences if criminals were to use silencers.

SUPPORT GUN SAFETY

We're in this together. To build a safer America—one where children and parents in every neighborhood can learn, play, work, and worship without fear of gun violence—we need you standing beside us in this fight.

\$10

\$20

\$50

RELATED

HARDWARE & AMMUNITION

Assault Weapons

Assault weapons are designed for the battlefield and pose a serious public safety risk, making it easier for shooters to kill more people more quickly.

BACKGROUND CHECKS

Universal Background Checks

Universal background checks are essential to close deadly loopholes in our laws that allow millions of guns to end up in the hands of individuals at an elevated risk of committing violence each year.

HARDWARE & AMMUNITION

Large Capacity Magazines

l arge canacity magazines are often used in mass shootings because https://giffords.org/lawcenter/gun-laws/policy-areas/hardware-ammunition/silencers/#footnote_14_5660

they allow a shooter to keep firing for longer periods of time, increasing casualties and reducing victims' ability to escape or intervene.

Notes



- 1. ShotSpotter, "Seven New Cities Roll Out ShotSpotter Technology to Help Prevent Crime and Reduce Gun Violence," October 27, 2016, available at http://www.shotspotter.com/press-releases/article/seven-new-cities-roll-out-shotspottertechnology-to-help-prevent-crime-and. \$\mathcal{J}\$
- 2. Violence Policy Center, "Silencers: A Threat to Public Safety" (Feb. 2016), at http://www.vpc.org/studies/silencers.pdf (last accessed April 2017). J
- 3. Dept. of Health and Human Services, "NIOSH Alert: Preventing Occupational Exposures to Lead and Noise at Indoor Firing Ranges" (2009), at https://www.cdc.gov/niosh/docs/2009-136/pdfs/2009-136.pdf (last accessed April 2017). J
- 4. National Institute for Occupational Safety and Health, "Workplace Solutions: Reducing Exposure to Lead and Noise at Outdoor Firing Ranges" (2013) at https://www.cdc.gov/niosh/docs/wp-solutions/2013-104/pdfs/2013-104.pdf (last accessed April 2017). J
- 5. 26 U.S.C. § 5801 et seq.) J
- 6. 26 U.S.C. § 5802. J
- 7. 26 U.S.C. § 5841(b). J
- 8. 26 U.S.C. § 5845(i). J
- 9. 26 U.S.C. § 5811 et seq. J
- 0. 26 U.S.C. § 5841(a). The NFA refers to the Secretary of the Treasury, who delegated this responsibility to ATF. In 2003, ATF was transferred from the Treasury Department to the Department of Justice, and the Secretary's responsibilities under the NFA were carried over. See Bureau of Alcohol, Tobacco, Firearms & Explosives, National Firearms Act Handbook, at https://www.atf.gov/firearms/docs/atf-national-firearms-act-handbook-introduction/download. \$\mathcal{J}\$
- 11. 26 U.S.C. § 5841(a). J
- 2. 26 U.S.C. § 5841(e). J
- 3. Bureau of Alcohol, Tobacco, Firearms, and Explosives, Firearms Commerce in the United States: Annual Statistical Update 2016 (U.S. Department of Justice, 2016), available at https://www.atf.gov/resource-center/docs/2016-firearms-commerce-united-states/download. J
- 4. 18 U.S.C. § 921(a)(3). J
- 5. Note that ATF conducts a background check through the NFA registration process, so sales and transfers of firearms registered under the NFA are explicitly exempted from the Brady background check requirement. 18 U.S.C. § 922(s)(1)(E). J
- 6. CA Penal Code § 33410 et seq. J
- 7. Del. Code Ann. title. 11, §1444. J
- 8. D.C. Code § 22-4514. J
- 9. Hawaii Rev. Stat. §134-8. Ĵ
- 0. 720 III. Comp. Stat. 5/24-1(a)(6). J
- 11. Mass. Gen. Laws ch. 269, § 10A. J

© 2021 Giffords Law Center to Prevent Gun Violence. All Rights Reserved.



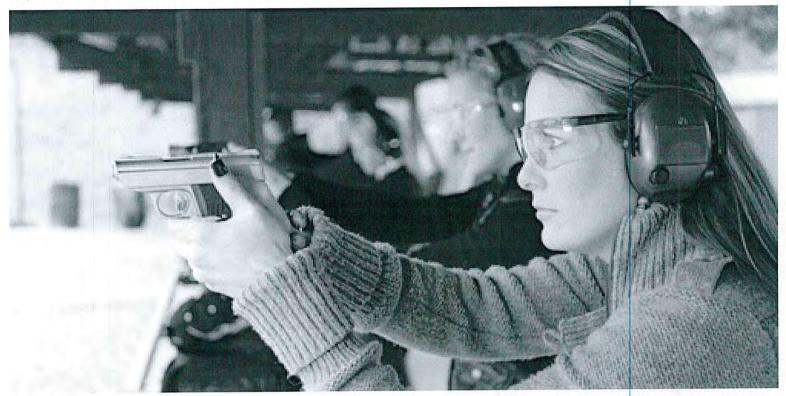
1 YOU HAVE ACCESS | The ASHA Leader | All Ears on Audiology | 1 Mar 2018

What to Know About Firearm Suppressors and Hearing Loss

Does a firearm suppressor always do enough to protect hearing? No. Should firearm users also wear hearing protection? Yes.

Michael Stewart, PhD, CCC-A

https://doi.org/10.1044/leader.AEA.23032018.18



More than 29 million Americans enjoy participating in target practice, hunting and other shooting sports (see sources below).

Indeed, U.S. citizens own about 310 million firearms, and numbers of female and young firearm-users have grown significantly in recent years (see sources). Along with this growth should come increased attention to safety, including that of our hearing.

While shooting sports can certainly be enjoyable, unprotected exposure to high-intensity firearm noise can also put people at significant risk for noise-induced hearing loss (NIHL) and associated tinnitus. Attaching a suppressor to the end of the barrel can reduce damaging noise, but may not lower it to hearing-safe levels.

This means that to effectively protect their hearing, recreational firearm users should always wear proper hearing protection devices on their ears, even when firearms are equipped with suppressors.

The cost of noise exposure

Almost all firearms generate peak impulse noise levels that exceed the 140 decibel peak sound pressure level (dB peak SPL) exposure limit mandated by the Occupational Safety and Health Administration (see sources). Big-bore firearms can generate noise levels of more than 165 dB, and guns with short barrels (handguns) and firearms fitted with muzzle breaks can elevate peak SPLs even further (see sources).

Hearing loss may occur gradually due to repeated unprotected exposure to firearm noise, or suddenly due to acoustic trauma from even a single unprotected, high-intensity gunshot. The resulting hearing damage is often characterized by normal or near-normal hearing sensitivity at lower frequencies, with a precipitous drop into the severe range at higher frequencies.

Those affected hear low-frequency vowels for audibility, but miss higher-frequency consonant sounds necessary for clarity. The result is a complaint clinical audiologists hear all the time from patients with this type of hearing loss: "I hear fine, but people mumble." Fitting amplification to these clients can be challenging, especially when high-frequency audiometric thresholds are severely impaired from extensive damage to outer and inner cells in the cochlea. Hearing aids with advanced technology that shifts frequencies from areas of degraded hearing to areas of better residual hearing may help remediate this type of hearing loss.

Recreational firearm users should always wear proper hearing protection with shooting activities, even when firearms are equipped with suppressors.

Hearing protection benefits

The most direct way to reduce the risk of firearm-related NIHL is to significantly attenuate the peak SPL reaching the ears. Using hearing protection devices (HPDs)—such as muffs and plugs—attaching a suppressor to the muzzle of the firearm, or using these tools in combination can provide protection from firearm noise.

HPDs reduce firearm noise to the ears, and suppressors reduce firearm noise at the source (gun muzzle). Although the amount of attenuation provided by a properly fitted HPD is approximately 30 dB, real-world attenuation can vary, depending on the physical fit (see sources).

Also, recreational firearm users do not consistently wear HPDs during target practice or, especially, during hunting activities (see sources). Suppressors installed on the muzzles of firearms can consistently

provide approximately 25 dB of attenuation for 100 percent of the shots fired (see sources).

Using a firearm suppressor will reduce the risk of acquiring noise-induced hearing loss, but not eliminate it.

How effective are suppressors?

When someone fires a gun, a sudden release of gases propels the bullet out of the gun barrel and generates a high-level acoustic impulse sound. Using standard high-velocity (supersonic) ammunition can break the sound barrier and further increase the SPL.

Attaching a suppressor to the end of the gun barrel can reduce the noise level by coupling a can-like device that has a chamber with a large volume to the muzzle of the firearm. Additionally, a series of baffles in the chamber further act as a muffler to reduce the impulse noise level.

However, suppressors cannot reduce the noise caused by the supersonic flight of the projectile breaking the sound barrier once it leaves the barrel of the firearm. Recent studies of suppressors fitted to larger-caliber firearms found that a reduction in peak SPLs of approximately 25–30 dB typically occurs when using standard high-velocity ammunition (see sources).

For example, a suppressor can reduce firearm impulse of 165 dB peak SPL to approximately 140 dB, which is still quite audible and potentially hazardous to hearing. Firearm users can further reduce firearm noise by using subsonic velocity (less than 1120 feet/second) ammunition. However, subsonic ammunition has significantly less range and energy than supersonic ammunition and is generally more appropriate for short-range target practice. Different types of firearms and ammunition produce different sound levels at discharge, and suppressors may be more or less effective at suppressing sound levels.

There is no standardized measurement protocol to assess the effectiveness of a suppressor. This means manufacturers cannot assure firearm users that they can adequately protect their hearing solely by using a suppressor. To effectively protect hearing, recreational firearm users should always wear proper HPDs, even when firearms are equipped with suppressors.

Proper hearing protection could include devices with a lower noise-reduction rating (NRR) than conventional plugs or muffs, and non-linear or moderately attenuating high-fidelity HPDs. Non-linear HPDs let soft and moderate sounds pass while attenuating loud (intense) sounds. Moderately attenuating high-fidelity HPDs provide less attenuation and uniformly reduce sound across the entire frequency range.

Other options are electronic HPDs (muffs, BTEs [behind-the-ears] or custom ITEs [in-the-ears] devices) which provide mild gain amplification to enhance hearing, but attenuate intense firearm noise when

the trigger is pulled. Thus, recreational firearm users can monitor noise while ensuring they protect their hearing when firing shots.

Bottom line: Using a firearm suppressor reduces the risk of acquiring NIHL, but does not eliminate it. Suppressors can significantly reduce the peak SPL of firearm noise, but the noise remaining may still be high-intensity, loud and potentially hazardous to hearing.

Could the Hearing Protection Act Boost Use of Suppressors?

People who purchase a suppressor for their gun must undergo an FBI background check and obtain a special federal license. Recent pending congressional legislation, the Hearing Protection Act, would make suppressors more readily available to law-abiding citizens by allowing purchase of these devices immediately after a same-day background check of a buyer, similar to the process for purchasing rifles or shotguns.

The Hearing Protection Act aims to ease restrictions on access to suppressor devices in hopes of a reduced NIHL risk. In a recent interview, Knox Williams, president of the American Suppressor Association, noted the importance of support for the bill by the medical and hearing conservation communities, since they "should have a vested interested in doing everything they can to promote safe practices that help protect hearing."

Many hearing conservationists believe that if the act becomes law, it will provide a valuable hearing conservation tool by allowing recreational firearm users to significantly reduce hazardous noise at the source.

Author Notes

Michael Stewart, PhD, CCC-A, is a professor of audiology at Central Michigan University. stewa1mg@cmich.edu

Additional Resources

We recommend

Bigger Caliber, Bigger Boom
Michael StewartPhD, The ASHA Leader, 2013
Firearm Suppressors and Public Safety
The ASHA Leader, 2018

Sound Attenuation from Earmuffs and Earplugs in Combination: Maximum Benefits vs. Missed

Information

Sharon M. Abel et al., Aviation, Space, and

Roar Aboard: Protecting Service Members' Ears on Aircraft Carriers

Jillian Kornak, The ASHA Leader, 2019

Sonic Youth

Robert L. Folmer, The ASHA Leader, 2013

Suppressors and Politics

The ASHA Leader, 2018

Environmental Medicine, 2006

In-Ear Audio Wearable: Measurement of Heart and Breathing Rates for Health and Safety Monitoring

EMBS Trans Biomed Eng, 2015

Active control of ultrasonic hearing in frogs.

Marcos Gridi-Papp et al., Proc Natl Acad Sci U S A, 2008

The Role of the Kurtosis Metric in Evaluating the Risk of Occupational Hearing Loss Associated with Complex Noise — Zhejiang Province, China, 2010–2019

Meibian Zhang et al., China CDC Weekly, 2021

New Vancomycin Guidelines mSystem, 2020

Powered by TREND MD

I consent to the use of Google Analytics and related cookies across the TrendMD network (widget, website, blog). Learn more

YES

NO





Semin Hear. 2017 Nov; 38(4): 267-281.

Published online 2017 Oct 10. doi: 10.1055/s-0037-1606323: 10.1055/s-0037-1606323

Leisure Noise and Hearing

Guest Editor, Elizabeth F. Beach, Ph.D.

PMCID: PMC5634813

PMID: 29026261

Prevention of Noise-Induced Hearing Loss from Recreational Firearms

<u>Deanna K. Meinke</u>, Ph.D., Donald S. Finan, Ph.D., Gregory A. Flamme, Ph.D., William J. Murphy, Ph.D., Michael Stewart, Ph.D., James E. Lankford, Ph.D., and Stephen Tasko, Ph.D.

Address for correspondence Deanna K. Meinke, Ph.D. University of Northern Colorado, Gunter Hall 1500, Campus Box 140, Greeley, CO 80639, Deanna.Meinke@unco.edu

Copyright © Thieme Medical Publishers

Abstract

In the United States and other parts of the world, recreational firearm shooting is a popular sport that puts the hearing of the shooter at risk. Peak sound pressure levels (SPLs) from firearms range from ~140 to 175 dB. The majority of recreational firearms (excluding small-caliber 0.17 and 0.22 rifles and air rifles) generate between 150 and 165 dB peak SPLs. High-intensity impulse sounds will permanently damage delicate cochlear structures, and thus individuals who shoot firearms are at a higher risk of bilateral, high-frequency, noise-induced hearing loss (NIHL) than peer groups who do not shoot. In this article, we describe several factors that influence the risk of NIHL including the use of a muzzle brake, the number of shots fired, the distance between shooters, the shooting environment, the choice of ammunition, the use of a suppressor, and hearing protection fit and use. Prevention strategies that address these factors and recommendations for specialized hearing protectors designed for shooting sports are offered. Partnerships are needed between the hearing health community, shooting sport groups, and wildlife conservation organizations to develop and disseminate accurate information and promote organizational resources that support hearing loss prevention efforts.

Keywords: Impulse noise, firearms, noise-induced hearing loss, hearing loss prevention, hearing conservation, hearing protection

Learning Outcomes: As a result of this activity, the participant will be able to (1) identify acoustic and behavioral factors that influence the risk of auditory damage from recreational firearm impulse noise exposures; (2) describe hearing loss prevention strategies for individuals exposed to impulse noise from recreational firearms.

¹Audiology and Speech-Language Sciences, University of Northern Colorado, Greeley, Colorado

²Department of Speech Pathology and Audiology, Western Michigan University, Kalamazoo, Michigan

³Division of Applied Research and Technology, National Institute for Occupational Safety and Health, Cincinnati, Ohio

⁴Department of Communication Disorders, Central Michigan University, Mount Pleasant, Michigan

⁵Allied Health and Communication Disorders, Northern Illinois University, DeKalb, Illinois

In the United States, millions of individuals across all ages shoot firearms for sport. Although less popular in other countries, recreational hunting or target shooting presents the most serious and immediate threat to hearing when compared with other leisure activities. Participation in firearm-related sport jeopardizes not only the hearing of the shooter but also others nearby (instructors, spectators, athletes). Although the potential for auditory damage from high-level impulse noise has been recognized for over a century, our understanding of the magnitude of the firearm-related risk, factors influencing the risk, and effective strategies to prevent hearing loss and tinnitus continues to advance. In this article, we draw from our own work and the extensive literature on recreational shooting to outline the risk of hearing damage from exposure to firearm noise, describe various factors that influence the risk, and detail protective strategies that shooters can adopt to minimize the risk.

Recreational Shooting

Civilians are estimated to own \sim 650 million firearms worldwide. 1 Firearms are used for sport while hunting, target shooting, competitive shooting, reenacting historical events, entertaining, fund-raising, scouting, and officiating in athletic events (i.e., track and field, swimming). It is estimated that ~46% of adult males and 13% of adult females in the United States have fired a gun at some point in their life (Flamme, unpublished analysis of data from the 2007 U.S. National Health Interview Survey). Increases in the number of U.S. women engaged in firearm-related sports were found between 2001 and 2013. ² The number of female hunters increased from 1.8 to 3.5 million (85% increase) and women target shooters increased from 3.3 to 5.4 million (60% increase). The number of individuals participating in firearm-related sports varies as a function of sport classification, geographical region, and tradition or culture. It is estimated that 83 to 97 civilian firearms per 100 persons are owned in the United States, $\frac{1}{2}$ and many are used for hunting purposes. In 2015, 14.8 million hunting license holders purchased permits in the United States. $\frac{3}{2}$ In 2010, 1.7 million youths were hunters. 4 A survey of Colorado and Michigan youth who hunt revealed that recreational shooting begins early in life: 57% of the youth began to shoot before the age of 8 years. $\frac{5}{9}$ over 20 million Americans participated in target shooting-related activities in 2011. $\frac{6}{2}$ Target shooting activities can be described as plinking (informal), sighting-in, training-related, equipment-related (ammunition, weapon), sporting clay/skeet/trap, tactical, and competitive. Geographically, the International Practical Shooting Confederation exemplifies the global popularity of dynamic target sport shooting with six worldwide geographical zones (African, Australasian, European, Pan-American, North American, and South American) and 100 national affiliates hosting shooting events at least annually. Regardless of the setting or the sport, it is the gunshot that poses the hazard to hearing.

The "BANG"

Once the trigger is pulled, a chain of events leads to the physical generation of a high-frequency, short-duration impulse waveform perceived by human ears as a single bang or gunshot (see illustration in Rasmussen et al $^{\rm Z}$). The waveform is generated by the firing pin hitting the cartridge, detonating the primer, which then combusts the gunpowder. The gunpowder combustion produces a large volume of gas, and the resultant pressure accelerates the projectile down the barrel of the gun, where it exits the muzzle. Some projectiles travel at supersonic speeds, producing a conical shock wave commonly called a sonic boom that expands outward from the location of the projectile tip, similar to the wake produced by a motorboat in the water. Once the hot compressed gases are released, a spherical blast wave initially centered on the muzzle will be produced. Turbulent airflow around and in front of the muzzle is created as the gas is ejected forward. Outdoors, in a nonreverberant environment, the duration of the recreational gunshot is extremely brief, typically less than 10 milliseconds.

Accurate acoustic measurement of a gunshot requires specialized hardware and software that is able to capture the rapid rise time and extreme magnitude of the pressure changes from ambient to peak and back to ambient air pressure. It is necessary to utilize a small-diameter precision microphone with sufficient dynamic range and frequency response capable of capturing the wide dynamic range of the impulse. A data acquisition system incorporating a high sampling rate is also necessary to preserve the details of the impulse waveforms. High-quality impulse recording allows the detailed resolution and analysis of the impulse waveform that permits identification of the different source mechanisms and quantification of auditory risk. The acoustic characteristics of the recreational firearms described in Table 1 were each measured by the authors using this type of specialized instrumentation rather than commercial or laboratory grade sound level meters.

The maximum peak sound pressure levels (SPLs) from firearms range from \sim 140 to 175 dB. $\frac{789101112}{12}$ $\frac{13}{13}$ The majority of recreational firearms (excluding small-caliber 0.17 and 0.22 rifles and air rifles) generate between 150 and 165 dB peak SPL. The general range of peak SPLs measured at the left ear of a right-handed shooter for various categories of recreational firearms are summarized in $\frac{78910111}{12}$ Pistols have shorter barrel lengths than rifles and shotguns and rank high in peak SPL due in part to the closer proximity of the muzzle to the ears. Shorter barrel lengths found in both youth firearms and assault rifles also increase the SPL measured at the shooter's left ear. $\frac{1111}{12}$ The left ear is reported due to the higher asymmetrical exposure from a rifle or shotgun gunshot and higher prevalence of hearing loss in the left ear of right-handed shooters, as addressed later in this article.

High-level exposure to impulse noise from recreational firearms also can be encountered by nonshooters, or those in close proximity to the shooter. This may be the situation for instructors, spectators, athletes, or other nearby shooters. Flamme et al measured the peak SPLs from 15 recreational firearms at the position of a bystander located 1 m to the left of the shooter in an outdoor environment. Instantaneous peak levels ranged between 149 and 167 dB and were considered to be unsafe exposures for the bystanders. Athletes and spectators near officials firing starter pistols are also at an elevated risk of noise-induced hearing loss (NIHL).

10 The use of electronic starting devices for signaling the start of athletic events may minimize auditory risk.

As Kardous et al point out, there is no universally accepted standard method for measuring impulse noise. ¹⁶ Readers are cautioned to critically evaluate the peak SPLs that are measured/reported using conventional sound level meters, including those adapted for impulse noise measurements (e.g., one-quarter- or one-eighth-inch microphones, peak setting, impulse setting) due to limitations related to the microphone sensitivity, temporal constants, filter effects, voltage supply, analog-to-digital sampling rate, and output/display mode. ¹⁷ ¹⁸ Meinke et al compared rifle gunshot peak SPLs from four commercial sound level meter models marketed specially for impulse noise measurements to a gold-standard research measurement system. ¹⁸ The researchers concluded that the use of a commercial sound level meter for firearm impulse noise measurements may underestimate auditory hazard for impulse sound levels at or above ~150 dB peak SPL. Noise dosimeters are known to have similar constraints in terms of accuracy due to microphone and electronic circuitry limitations for high-level impulses from weapons. ¹⁶ Noise dosimeters and commercial sound level meters clip the peak pressure measurement when impulses exceed the dynamic range maxima (typically 150 dB or less) of the instruments and incorrectly report the clipped (underestimated) value as the peak SPL. ¹⁹

In the past, these conventional sound level measurement limitations have likely contributed to the ceiling limit of 140 dB SPL referenced on noise thermometers used for educational purposes. Ideally, contemporary educational materials, infographics, and counseling tools should be updated to consistently reference

evidence-based unweighted peak SPLs when communicating the auditory risk from recreational firearms to the public. A few examples of correctly referenced firearm levels in noise thermometers are provided in Fig. 1.

Auditory Risk From Firearm Impulse Noise

Quantifying the actual risk to the auditory system based upon the acoustic characteristics of impulse noise is complex. Contemporary damage risk criteria have been categorized into three types: impulse waveform parameter-based, total energy within the impulse, and theoretical ear-based electroacoustic models of the auditory system. $\frac{20}{21}$ Waveform parameter-based damage risk criteria are typically quantified in terms of the peak amplitude, pressure wave, and envelope duration of the impulse. $\frac{22}{20}$ Other damage risk criteria reference the energy-based, integrated A-weighted 8-hour equivalent level, $\frac{23}{20}$ apply criteria derived from theoretical physiologically based ear models such as the Auditory Hazard Assessment Algorithm for Humans, $\frac{26}{20}$ or apply fatigue modeling to predict cochlear structure damage. $\frac{27}{20}$ These more complex approaches are typically utilized for research or military purposes and, once validated fully, could better inform health care providers and the public. In the meantime, the peak SPL measured at the ear level of the shooter is commonly referenced for quantifying auditory risk for clinical applications and educational interventions.

Definitive impulse noise risk limits for the human ear are also difficult to determine due to the safety considerations that limit present-day human research into this area. Consequently, animal studies utilizing the chinchilla (and other animal models) have been relied upon to explore the relationship between impulse noise exposure and hearing loss. $\frac{28}{29} \frac{29}{30} \frac{31}{31}$ Henderson and Hamernik determined that the critical boundary for impulse noise exposure for the chinchilla is ~140 dB peak SPL, but noted that the risk boundary is ultimately dependent upon the actual waveform characteristics. $\frac{31}{20}$ Research evidence also suggests that impulse noise is more damaging than continuous noise and that recovery is prolonged and less complete. $\frac{28}{29} \frac{29}{30} \frac{31}{31}$ Chan et al have modeled human recovery from temporary threshold shift measured at 2 minutes postexposure (TTS $_2$) using chinchilla auditory brainstem response data. $\frac{30}{20}$ The recovery window for a 25 dB TTS $_2$ is predicted to be within 43 hours, with a longer full recovery time for a 50 dB TTS $_2$ extending out to ~38 days.

Ultimately, four acoustic parameters of the noise source interact and determine the resulting hearing loss: (1) type of noise (continuous, impulse/impact, blast), (2) SPL, (3) duration and temporal pattern of the exposures (how long and how often), and (4) spectral composition. ³² More recently, there has been a growing interest in waveform kurtosis, a statistical measure of the relative peakedness or flatness of the noise distribution, which also may be useful in predicting hearing damage from impulse signals. ²⁸ ³³ ³⁴ The acoustic characteristics of a gunshot from a recreational firearm are generally described as impulsive, peak SPL greater than 140 dB, brief duration (<10 milliseconds outdoors), and high frequency, with spectral peaks between 400 and 2,000 Hz.

There are no mandated impulse noise regulations imposed on recreational firearm shooters. The World Health Organization recommends peak SPLs not exceed 140 dB for adults and 120 dB for youth. $\frac{35}{100}$ The U.S. Occupational Safety and Health Administration and the National Institute for Occupational Safety and Health USA incorporate a peak limit of 140 dB SPL for occupational noise exposures. $\frac{36}{100}$ The European Union incorporates a C-weighted peak limit of 137 dB SPL in recommended guidelines for adult workers. $\frac{38}{100}$ All of the rifles, pistols, and shotguns measured in $\frac{100}{100}$ exceed these peak SPL limits for both adults and children. The majority of air rifles, with the exception of the Gamo Whisper model pellet gun and the

Daisy Red Ryder Model BB gun, exceeded the 120 dB peak SPL limit for youth, but none exceeded the 140 dB peak SPL limit for adults. Without mandated noise limits, the organizations sponsoring shooting events and the individuals participating in or attending the events are responsible for hearing loss prevention.

Hearing Loss From Firearm Impulse Noise

As early as 1860, Toynbee recognized the pattern of asymmetrical high-frequency hearing loss (HFHL) in patients shooting firearms for sport. $\frac{39}{10}$ He also recognized the distinction between immediate hearing loss and tinnitus following shooting and gradual onset NIHL that was attributed to repeated exposures to impulse noise over time. $\frac{40}{10}$ Today, it is readily accepted that unprotected noise exposure from firearms can lead to permanent NIHL, as a result of direct mechanical damage or secondary physiological and biochemical inner ear effects from repeated gunshot exposures over time or from a limited number (including a single shot) of high-intensity exposures termed *acoustic trauma*. Tinnitus also can develop as a consequence of firearm noise exposure and should be considered an early warning sign of overexposure. $\frac{5}{41}$ $\frac{42}{42}$

The prevalence of bilateral high-frequency NIHL in sports shooters has been estimated by numerous epidemiologic and experimental studies over the years, comparing audiometric data from groups of individuals who engage in recreational shooting with a matched group who do not shoot for sport. $\frac{43}{4}$ $\frac{44}{45}$ $\frac{46}{10}$ In a 1966 study, sport hunters (n = 103) were found to have significantly worse hearing thresholds at 3 to 8 kHz (especially at 6 kHz) when compared with physician nonhunters (n = 21). $\frac{43}{2}$ Left ear hearing thresholds were significantly poorer than right ear thresholds. Updike and Kramer found significantly poorer hearing at 2, 3, 4, and 6 kHz when comparing the hearing thresholds of 60 recreational shooters with agematched nonshooters. 44 The greatest differences were found at 4 and 6 kHz, left ears were poorer than right ears, and older shooters had significantly greater hearing loss than younger shooters. Nondahl et al reported hearing threshold outcomes from males aged 48 to 92 years, who participated in baseline hearing tests (n =1,538) as part of a larger Epidemiology of Hearing Loss Study. 45 An HFHL was defined as a pure tone average of hearing thresholds at 4, 6, and 8 kHz greater than 60 dB hearing loss in the worse ear, in an effort to differentiate those with greater hearing loss and account for any asymmetry between ears. A history of target shooting and hunting were each associated with marked HFHL in men after adjusting for age and other factors. Hunting increased the risk of having a severe HFHL by 7% for every 5 years the men had hunted.

The most relevant current U.S. epidemiologic hearing data are based upon a comparison of audiometric data from the recent National Health and Nutrition Examination Survey (NHANES) 2011 to 2012 cycle to the 1999 to 2004 NHANES cycle for 20- to 69-year-olds. 46 The authors report that the overall prevalence of unilateral and bilateral speech-frequency hearing loss significantly decreased from 15.9% (28 million) to 14.1% (27.7 million) after adjustment for age and sex. Firearm use (recreational, job, or military) was reported by 45.7% of the population with 32.6% shooting < 1,000 lifetime rounds and 12.9% shooting \geq 1,000 lifetime rounds. The prevalence of both speech-frequency and high-frequency hearing impairment as related to firearm use is provided in Table 2. The prevalence of high-frequency hearing loss (37.1%) is greater than the prevalence of speech-frequency hearing loss (17.3%) in firearm users. When considering speech-frequency hearing impairment, bilateral hearing impairment (10%) is only slightly more prevalent than unilateral impairment (7.3%). However, differences in bilateral (24.8%) versus unilateral impairment (12.3%) are much larger for high-frequency hearing impairment. Bilateral hearing impairment is also more common than unilateral impairment when considering the number of lifetime rounds fired. Left versus right ear differences (asymmetry) were not analyzed separately in that study.

The increased prevalence of bilateral (better ear) speech-frequency hearing impairment and bilateral (better ear) high-frequency hearing impairment and higher odds ratios (ORs) related to firearm use are summarized in $\underline{\text{Table 3}}$, including relevant adjustments for all hearing impairment risk factors (age, sex, educational level, smoking, hypertension, diabetes, occupational noise exposure, and nonoccupational noise exposure). Heavy use of firearms ($\geq 1,000$ rounds fired) significantly increased the risk of speech-frequency hearing impairment in both the better and worse ears (unadjusted OR, 3.7: 95% confidence interval [CI], 1.7 to 5.7). When considering *all* of the noise exposure variables, firing 1,000 or more lifetime rounds retains a statistically significant association (OR, 1.8; 95% CI 1.1 to 3.0) and further emphasizes the public health risk that firearm use presents to the avid shooter's hearing.

Young adults or youth who shoot firearms are also at risk of NIHL. High frequency hearing loss and a notched audiometric configuration, especially at 6 kHz, is associated with recreational firearm use in 10- to 20-year-olds. $\frac{47}{48}$ In contrast, Henderson et al (who investigated trends in noise-induced threshold shifts in youth age 12 to 19 years using audiometric data from NHANES in 1988 to 1994 and 2005 to 2006) found that the use of firearms was not associated with a significant increase of noise-induced threshold shifts (OR, 1.43; 95% CI, 0.94 to 2.17) in a multivariable model adjusted for age, gender, race/ethnicity, and poverty/income ratio. $\frac{50}{100}$ Interestingly, firearm users were more likely to report using hearing protection regularly than other youth, which might account for this result.

Occupational and Firearm Noise Exposure

Clark estimated that 50% of U.S. industrial workers are exposed to gunfire noise from hunting or target shooting, $\frac{51}{2}$ Several studies have considered the additional contribution of recreational firearm noise exposure to occupational hearing loss in workers with equivalent occupational noise exposure. Significantly poorer high-frequency hearing has been reported in blue collar workers, farmers, manufacturing, railway. forestry, construction, and mining workers who use firearms, compared with respective cohorts who do not shoot. 52 53 54 55 56 57 58 59 60 61 62 Johnson and Riffle noted that hearing loss was 9 to 16 dB poorer at 3, 4, and 6 kHz for male workers with a positive history of shooting. $\frac{53}{2}$ No significant differences in hearing were evident for the small number of female shooters, and the authors attributed this to females primarily shooting small-caliber (0.22) firearms as compared with the larger-caliber firearms used by the males in the study. Forestry workers with exposure to firearm impulses had 9 dB greater hearing loss at 4 kHz and 10 dB greater hearing loss at 8 kHz than those with low exposure to shooting impulses. $\frac{58}{2}$ Over 90% of farmers report firearm use, 61 and Humann found that years of hunting and target shooting were associated with HFHL in a sample of 1,568 farmers. $\frac{62}{100}$ Becket et al used audiometric data to calculate binaural hearing impairment ratings in farm workers. 57 Years of hunting (but not target shooting) was associated with hearing impairment, which increased 0.16% per year of hunting. For construction workers who shoot, it is not only firearm use that puts them at risk of NIHL, but also their frequent participation in other nonoccupational noise-hazardous activities that increases their risk when compared with construction workers who do not shoot, 59

Asymmetrical Hearing Loss in Shooters

Asymmetry (5 to 30 dB) in hearing thresholds between the ear ipsilateral to the firearm and contralateral to it may be evident in shooters ($\underline{\text{Fig. 2}}$). The ipsilateral ear is the right ear of a right-handed shooter and, typically, the hearing loss is worse for the contralateral (left) ear. Taylor and Williams noted the left ear was 26 dB worse at 3, 4, and 6 kHz in hunters and only 4 dB worse in control subjects. $\frac{43}{2}$ Chung et al noted that 13% of workers shouldered their weapon on the left shoulder and asymmetry in pure tone thresholds were significant at 2 to 8 kHz for shooters with \geq 10 years shooting history. $\frac{52}{2}$ Sataloff et al compared the hearing loss between ears in left- and right-handed shooters using rifles or shotguns. They noted that 60% of the left-

handed shooters had more hearing loss in their right ear and 66% of the right-handed shooters had more hearing loss in the left ear. $\frac{63}{4}$ Agnew postulated that the asymmetrical hearing loss is due to the nature of the placement of the firearm when shooting. $\frac{64}{4}$ The shouldering of the firearm differs between right- and left-handed shooters when shooting rifles and shotguns.

A right-handed shooter will position the stock of the rifle or shotgun on the right shoulder and a left-handed shooter will position the stock on the opposite shoulder. This creates a head tilt resulting in exposure differences across ears due to the head-shadow effect. For a right-handed shooter, the head is tilted toward the right shoulder and the left ear is angled forward, closer to the muzzle blast. Fig. 3 illustrates the peak SPL differences simultaneously recorded by the authors at each ear with and without the head in place. Gunshots were generated with a 0.22 caliber Winchester Model 43 Hornet by a right-handed shooter. A difference of 9.8 dB is evident and attributed to diffraction of the impulse by the head for the left ear and shadowing by the head and shoulder for the right ear, without consideration for any potential effects of hearing protector attenuation. These measurements clearly support a difference in exposure between the two ears that may translate to asymmetrical hearing loss. However, the degree of asymmetry may vary with gun type, the use of hearing protection, and other directional and nondirectional noise exposures over time. A pistol shooter typically holds the firearm with both hands in a centered position and the head-shadow effect is minimized. There may be other factors that influence the (a)symmetry of hearing loss, including years of shooting, for honour products of the product of the right ears. The place of the pla

The Demand for Audibility

All recreational shooters, including those with hearing loss, demand audibility while engaged in their sport. Interpersonal speech communication is critical for establishing logistical plans, conveying instruction, and ensuring general safety, such as hearing a warning message or voice commands from a fellow shooter or range master. Hearing is needed to monitor the firearm assembly and function to determine if the action is fully engaged, a cartridge is loaded in the chamber, the hammer is set, a spent shell is ejected, or a safety mechanism activated. Hearing also may be used to recognize the timing of target launch and register the accuracy of a shot in terms of hearing the projectile physically impact the target. For hunters, the demand for auditory situational awareness extends to localizing the sound of wildlife (especially at a distance), monitoring the sound of their own body movements during silent approach, detecting hunting dog barks or beeper collar signals when on point, and calling to waterfowl and wildlife. Strategies to prevent NIHL and tinnitus must be considered in the context of the audibility demands of the shooter. Fortunately, the value of hearing is appreciated by most individuals experienced in shooting sports, and the motivation to protect their hearing is usually already established within the context of being physically safe and successful at their sport. It is advantageous to counsel younger or novice shooters regarding the value of their hearing as it relates to their general safety, firearm safety, and sport performance.

Hearing Protection Devices Designed for Use in Shooting Sports

Despite the recognition that firearms produce hazardous levels of sound that can damage the auditory system, 38% of adult target shooters and 95% of adult hunters report never wearing hearing protection devices (HPDs) while shooting in the past year. $\frac{45}{5}$ The inconsistent pattern of HPD use in youth recreational firearm users somewhat mimics the behavior of adults. $\frac{42}{5}$ 68 The majority (62%) of youth aged 10 to 17 years reported never wearing hearing protection while hunting (16%, always) and 15% never wore HPD while target shooting (56%, always). $\frac{5}{5}$ The increased use of HPDs while target shooting is likely related to the enforcement of shooting range rules and a lower reliance on the audibility of environmental sounds as compared with hunting sports. Additionally, the majority of recreational shooters are unfamiliar with

alternatives to conventional hearing protectors that provide minimal attenuation for low-level sounds but provide substantial protection for high-level impulses. It is encouraging to note that youth who shoot are more likely to report using hearing protection regularly than their peers. $\frac{50}{2}$

The attenuation of hearing protectors is commonly labeled (and marketed) with values obtained using continuous noise at hearing threshold levels in a laboratory setting (e.g., noise reduction rating). When products designed for impulse noise are tested under these conditions, the noise reduction rating is negligible (<10 dB) and the consumer is left misinformed. In reality, the attenuation of an impulse sound tends to increase with the level of the impulse for traditional earplugs and earmuffs. $\frac{69 \text{ } 70 \text{ } 71}{20 \text{ }}$ From a simplified perspective, auditory protection is dependent upon the proper fit of the HPD and sufficient attenuation for the peak SPL of the impulse.

Two types of hearing protectors have been developed to further address the need for situational awareness while shooting: electronic hearing protectors and small-orifice, filtered or valved passive protectors. Electronic HPDs rely upon a power supply and utilize circuitry to restore audibility for the wearer when sounds are below ~85 dB SPL and limit the long-term average output level to 82 to 85 dB SPL. These devices may include the option of amplification of low-level sounds, which may be highly advantageous for hearing-impaired sport shooters and for hunters to hear approaching game. The passive attenuation characteristics of the electronic protector (i.e., electronics turned off) will determine the attenuation for highlevel impulse sounds greater than 150 dB SPL. The circuitry is too slow to respond, and the high-level impulse signal is clipped when it is processed. For peak levels less than 130 dB SPL, electronic circuitry performance may be a significant contributor to the impulse levels measured under the protector, particularly in the case of devices designed to add gain or compress high-level signals. The Electronic hearing protectors come in a variety of styles, including circumaural earmuffs, universal-fit insert earplugs, custom-fit earplugs, and behind-the-ear devices connected to an earplug. An electronic, level-dependent, in-the-ear style protector may preserve sound localization in the horizontal plane better than an earmuff or behind-the-ear style electronic protector.

The second type of protector designed for high-level impulse attenuation utilizes a small-orifice filter or a mechanical valve. At low levels of sound pressure, audibility is maintained, and at high levels the acoustic pressure flow through the orifice becomes more turbulent and provides increased acoustic resistance. The flamme and Murphy caution that increased acoustic resistance does not necessarily result in adequate protection, and the ear may be exposed to 150 to 165 dB peak SPLs even when protectors are properly fit. Berger and Hamery demonstrated that mechanically valved hearing protectors may provide only 10 dB of peak noise reduction through peak SPLs of 170 dB, and of greater concern, amplified peaks below \sim 150 dB SPL. To Ongoing work is underway to standardize laboratory testing and performance characteristics of hearing protectors designed for auditory protection from impulse noise across a range of impulse levels (ANSI S12.42).

Dual hearing protection (earplug worn in combination with an earmuff) provides the greatest protection. $\frac{76}{10}$ Recreational shooters may find it advantageous to use a conventional earplug with electronic earmuffs. The choice of hearing protection also may vary as a function of shooting activity. It is much easier to comply with dual hearing protection use in a target-shooting range environment than when bird hunting in a heavily wooded area where earmuffs become entangled in brush. Regardless of the style of hearing protector, the fit of the protector is critical. Eyeglass temples, hats/caps, hoods that interfere with the seal reduce mean attenuation across test frequencies by 5 to 15 dB. $\frac{76}{2}$ It is also advisable to remind shooters that the HPD should be securely in place before shooting and that physical movement related to the force of the recoil may kick the earmuff off the ear. Wearer comfort is also an important consideration driving the choice of protector to assure adequate wear time.

It is common for shooters to recognize the need to use HPDs when shooting larger-caliber/gauge firearms and dismiss the need for protection when shooting smaller calibers, such as a 0.22 pistol/rife. This erroneous decision making arises from poor relative loudness judgments being made across gunshots from different firearms. The high probability that a recreational shooter has a hearing loss, combined with the brief signal duration of a gunshot, will often lead the shooter to underestimate the sound level of the impulse and perceive it to be innocuous. Reliance upon subjective judgments of auditory risk should be discouraged, and hearing protection should be used for all types of recreational firearms. It may be useful to use an analogy in which the comparative sound energy emitted by a single shot from a firearm at 140 dB peak SPL is equivalent to almost a full day exposure to continuous noise at 85 A-weighted decibels integrated with a 3 dB exchange rate. Firing 1,000 rounds would then incur the equivalent of 3 years of allowable noise exposure. In other words, the number of allowable shots adds up quickly over a lifetime of sport shooting. This may serve to put the risk in perspective for the shooter and help them recognize the cumulative risk of multiple shots and stresses the importance of routine use of hearing protection. Consistent use of hearing protection by adults is also an important aspect of mentoring health and safety behaviors for young shooters.

Factors that Influence the Risk of Noise-Induced Hearing Loss

Regardless of the sport, the use of hearing protection while shooting is essential. However, there are additional strategies that can be implemented to prevent NIHL and tinnitus from firearm use (see $\underline{\text{Fig. 4}}$).

Muzzle brakes (ports) are utilized to counter the physical effects of recoil (kickback) when a gun is discharged by redirecting the propellant gases perpendicularly relative to the barrel through slots, vents, holes, or baffles positioned at the end of the muzzle. The use of muzzle brakes should be avoided because they increase the noise hazard. Escaping gases are ejected closer to the ear and radiate more sound pressure backward toward the shooter, which increases the exposure measured at the shooter's ear. ¹⁵

The *number of shots* fired without hearing protection increases the risk of NIHL. Small game and waterfowl hunters may be at greater risk of NIHL due to shooting hundreds of rounds per season, in comparison to large game hunters who may only fire their rifle a few times during the season. ⁴² Target shooters and competitive shooters also increase their risk dependent upon their choice of caliber/gauge and the number of shots fired. Shooting in groups increases the auditory hazard to the ears of the shooter, because the exposures come from both their own firearm and from other, nearby shooters. ⁹ Increasing the distance between shooters and minimizing the number of shots fired reduces the risk of NIHL. Shooting at ranges during off-hours may lower the number of impulse exposures from nearby shooters.

Shooting in an enclosed, reflective, reverberant environment (indoors or hunting blind) increases the hazard to hearing. ²¹ ⁷⁸ Hunting blinds are permanent or portable structures used to camouflage the hunter within the natural environment. While hunting, shooting inside a blind may be inadvertent, or in the case of poachers, intentional to avoid visual detection. For historical reenactments or entertainment purposes, the shooting environment may be intentionally designed to replicate a scene, while neglecting the acoustic implications. Shooting from a bench or over a table also increases the peak SPL reaching the shooter's ear. ¹¹ Design considerations and acoustical treatments for indoor shooting ranges can help minimize the auditory risk. ¹³ ⁷⁹ ⁸⁰ Recreational shooters should be encouraged to shoot outdoors and, if shooting indoors, counseled to select ranges with acoustical treatments that help minimize the risk. Spectators should be located at sufficient distances to lower the peak levels below 140 dB and below 120 dB if children are present. Technological advancements in sports filming and projection may provide spectators with close-up viewing from a distance at shooting events.

Ammunition containing less propellant decreases impulse level. Small differences in peak SPL can be measured across most kinds of ammunition for recreational firearms. $\frac{8}{11}$ Subsonic or low-velocity ammunition (velocity less than 1,120 feet per second or 341 m/s) contains a lower propellant charge and lessens the speed of the projectile, eliminating the noise source caused by the supersonic flight of the projectile breaking the sound barrier once it leaves the barrel. Firing ammunition labeled as subsonic or low-velocity less than 1,120 feet per second (341 m/s) can lower peak SPL measurements by 10 or 15 dB. $\frac{81}{10}$ For hunters, the choice of ammunition is less flexible than for target shooters. The cost of ammunition may also be inversely related to the number of shots fired, with more expensive ammunition being used less often.

A firearm suppressor is designed to reduce the sudden release of pressure from the escaping gases (noise) by coupling a large-volume chamber to the muzzle of the firearm. Baffles within the chamber act to diffuse the energy of the blast wave propelling the projectile and reduce the sound levels of subsonic projectiles. Suppressors are often incorrectly called silencers because high-level sounds are still generated. Two recent studies have measured the peak impulse levels in suppressed and unsuppressed conditions using both subsonic and supersonic ammunitions measured at the left ear of the shooter. $\frac{1482}{2}$ Lobarinas et al found that suppressors (n = 14) coupled to AR-15 rifles (n = 15) reduced the mean peak levels by 18 to 22 dB relative to the unsuppressed condition. $\frac{14}{12}$ Murphy et al measured firearm noise with two different rifles (0.223 and 0.308 caliber) using subsonic and supersonic ammunition, with and without suppressors, and at three different microphone locations (shooter's right ear, left ear, and at the instructor's position 1 m behind the shooter). 82 Across microphone locations, peak SPLs for the subsonic ammunition ranged from 100 to 132 dB SPL in the suppressed conditions. The levels were 127 to 149 dB SPL for the unsuppressed conditions. Peak SPLs for the supersonic ammunition ranged from 120 to 137 dB in the suppressed conditions compared with 148 to 161 dB for the unsuppressed conditions. It appears that combining the use of suppressors with subsonic ammunition can further reduce the exposure, based on these preliminary studies on a limited number of firearms and suppressor combinations. The peak reduction afforded by the use of a suppressor does not always reduce the peak level below 120 to 140 dB, and marketing claims to the contrary should be considered with skepticism, especially in the context of firearms with short barrel lengths or when supersonic ammunition is fired. $\frac{1482}{1}$ The use of hearing protection is still recommended even when using a suppressor.

Education

The diversity of firearm-related activities and recreational firearm users necessitates the creation of unique public health messaging and interventions designed and evaluated for specific audiences worldwide. Understanding the unique shooting and audibility demands of each firearm-related sport will better inform training content. Health communication science is useful as a framework for developing, implementing, and evaluating hearing loss prevention programs for firearm users. The Dangerous Decibels [®] educational program has adapted its small-group classroom program to incorporate firearm-specific content in terms of acoustic trauma from a single shot, sound levels of various firearms, types of specialized hearing protectors for shooting sports, and modeling peer interactions at a shooting range (www.dangerousdecibels.org). 83

Partnerships are needed between the hearing health community, shooting sport groups, and wildlife conservation organizations to develop and disseminate accurate information and promote organizational resources that support hearing loss prevention efforts. The shooting sportsperson depends on informed health care providers and evidence-based product information to equip them to preserve their hearing and afford long-term opportunities to enjoy their sport(s) safely. Aim to be an informed resource in your community.

Disclaimer

The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the National Institute for Occupational Safety and Health.

References

- 1. Karp A.Small arms survey 2007. Available at http://www.smallarmssurvey.org/fileadmin/docs/A-yearbook/2007/en/full/Small-Arms-Survey-2007-Chapter-02-EN.pdf. Accessed August 23, 2017
- 2. National Shooting Sports Foundation Report. Women Gun Owners Newtown, CT: NSSF; 2015
- 3. United States Fish & Wildlife Service (USFWS).National hunting license report 2015. Available at https://wsfrprograms.fws.gov/subpages/licenseinfo/HuntingLicCertHistory20042015.pdf. Accessed August 23, 2017
- 4. Families Afield.An initiative for the future of hunting 2010. Available atwww.familiesafield.org/pdf/FamiliesAfield_Report.pdf. Accessed January 2017
- 5. Stewart M, Meinke D K, Snyders J K, Howerton K. Shooting habits of youth recreational firearm users. *Int J Audiol*. 2014;53 02:S26–S34. [PubMed: 24564690]
- 6. Southwick Associates. Target shooting in America report. 2011Available at https://issuu.com/nssfpublications/docs/nssf target shooting in america rep?e=2322682/5987375. Accessed August 23, 2017
- 7. Rasmussen P, Flamme G, Stewart M, Meinke D, Lankford J. Measuring recreational firearm noise. *Sound & Vibration*. 2009;43(08):14–18.
- 8. Flamme G A, Wong A, Liebe K, Lynd J. Estimates of auditory risk from outdoor impulse noise. II: Civilian firearms. *Noise Health*. 2009;11(45):231–242. [PubMed: 19805933]
- 9. Murphy W J, Flamme G A, Finan D Set al.Noise exposure profiles for small-caliber firearms from 1.5 to 6 metersPaper presented on October 22, 2012 at the 164th Acoustical Society of America Meeting, Kansas City, MO: 1–21
- 10. Meinke D K, Finan D S, Soendergaard J et al.Impulse noise generated by starter pistols. *Int J Audiol.* 2013:52 01:S9–S19. [PMCID: PMC4617326] [PubMed: 23373743]
- 11. Meinke D K, Murphy W J, Finan D S et al. Auditory risk estimates for youth target shooting. *Int J Audiol.* 2014;53 02:S16–S25. [PMCID: PMC4659434] [PubMed: 24564688]
- 12. Lankford J E, Meinke D K, Flamme G A et al. Auditory risk of air rifles. *Int J Audiol*. 2016;55 01:S51—S58. [PMCID: PMC4896309] [PubMed: 26840923]
- 13. Kardous C A, Murphy W J. Noise control solutions for indoor firing ranges. *Noise Control Eng J.* 2010;58(04):345–356.
- 14. Lobarinas E, Scott R, Spankovich C, Le Prell C G. Differential effects of suppressors on hazardous sound pressure levels generated by AR-15 rifles: Considerations for recreational shooters, law enforcement, and the military. *Int J Audiol.* 2016;55(01) 01:S59–S71. [PubMed: 26821935]
- 15. Flamme G A, Stewart M, Meinke D, Lankford J, Rasmussen P. Auditory risk to unprotected bystanders exposed to firearm noise. *J Am Acad Audiol*. 2011;22(02):93–103. [PubMed: 21463564]
- 16. Kardous C A, Willson R D, Murphy W J. Noise dosimeter for monitoring exposure to impulse noise. *Appl Acoust.* 2005;66(08):974–985.

- 17. Hamernik R P, Hsueh K D. Impulse noise: some definitions, physical acoustics and other considerations. *J Acoust Soc Am.* 1991;90(01):189–196. [PubMed: 1880288]
- 18. Meinke D K, Flamme G A, Murphy W J et al. Measuring gunshots with commercial sound level meters. *NHCA Spectrum*. 2016;33(01):26.
- 19. Kardous C A, Willson R D. Limitations of using dosimeters in impulse noise environments. *J Occup Environ Hyg.* 2004;1(07):456–462. [PubMed: 15238316]
- 20. Flamme G A, Liebe K, Wong A. Estimates of the auditory risk from outdoor impulse noise. I: Firecrackers. *Noise Health.* 2009;11(45):223–230. [PubMed: 19805932]
- 21. Flamme G A, Murphy W J.Brief high level soundsAmerican Industrial Hygiene Association, Falls Church, VA. In press 2018
- 22. MIL-STD-1474E.US Army. MIL-STD-1474E Department of Defense Design Criteria Standard—Noise Limits Washington DC: Department of Defense; 20151–117.
- 23. Atherley G RC, Martin A M. Equivalent-continuous noise level as a measure of injury from impact and impulse noise. *Ann Occup Hyg.* 1971;14(01):11–23. [PubMed: 5574682]
- 24. Smoorenburg G F. New York: Raven Press; 1992. Damage risk criteria for impulse noise; pp. 471–490.
- 25. Zagadou B, Chan P, Ho K.An interim LAeq8 criterion for impulse noise injury *Mil Med* 2016181(5, Suppl):51–58. [PubMed: 27168553]
- 26. Price G R, Kalb J T. Insights into hazard from intense impulses from a mathematical model of the ear. *J Acoust Soc Am.* 1991;90(01):219–227. [PubMed: 1880292]
- 27. Sun P, Quin J, Campbell K.Fatigue modeling via mammalian auditory system for prediction of noise induced hearing lossComp Math Methods Med2015. Available at: https://www.hindawi.com/journals/cmmm/2015/753864/. Accessed August 23, 2017 [PMCID: PMC4672119] [PubMed: 26691685]
- 28. Hamernik R P, Ahroon W A, Hsueh K D, Lei S F, Davis R I.Audiometric and histological differences between the effects of continuous and impulsive noise exposures *J Acoust Soc Am* 199393(4 Pt 1):2088–2095. [PubMed: 8473621]
- 29. Hamernik R P, Ahroon W A, Patterson J A., Jr Threshold recovery functions following impulse noise trauma. *J Acoust Soc Am.* 1988;84(03):941–950. [PubMed: 3183212]
- 30. Chan P, Ho K, Ryan A F.Impulse noise injury model *Mil Med* 2016181(5, Suppl):59–69. [PubMed: 27168554]
- 31. Henderson D, Hamernik R P. Impulse noise: critical review. *J Acoust Soc Am*. 1986;80(02):569–584. [PubMed: 3745686]
- 32. Humes L E, Joellenbeck L M, Durch J S. Washington DC: National Academies Press; 2006. Noise induced hearing loss.
- 33. Davis R I, Qiu W, Heyer N J et al. The use of the kurtosis metric in the evaluation of occupational hearing loss in workers in China: implications for hearing risk assessment. *Noise Health*. 2012;14(61):330–342. [PubMed: 23257587]

- 34. Zhao Y M, Qiu W, Zeng L et al. Application of the kurtosis statistic to the evaluation of the risk of hearing loss in workers exposed to high-level complex noise. *Ear Hear.* 2010;31(04):527–532. [PubMed: 20588120]
- 35. World Health Organization (WHO). Strategies for Prevention of Deafness and Hearing Impairment. Prevention of Noise-Induced Hearing Loss Geneva, Switzerland: World Health Organization; 1997
- 36. Occupational Safety and Health Administration. Occupational Noise Exposure, §29CFR 1910.95, Washington DC: U.S. Department of Labor, Occupational Safety and Health Administration *Fed Reg* 198348469738–9744.
- 37. National Institute for Occupational Safety and Health USA.Criteria for a Recommended Standard: Occupational Noise Exposure—Revised Criteria DHHS (NIOSH) Publication No. 98–126 Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health; 1998
- 38. Parliament E U.Directive 2003/10/EC of the European Parliament and of the CouncilTechnical Report 2003/10/EC, European Parliament, 2008. Am., 114:1955–1967
- 39. Toynbee J. Philadelphia, PA: Blanchard and Lea; 1860. The Diseases of the Ear.
- 40. Toynbee J. Philadelphia, PA: Blanchard and Lea; 1865. The Diseases of the Ear: Their Nature, Diagnosis and Treatment.
- 41. Griest S E, Bishop P M. Tinnitus as an early indicator of permanent hearing loss. A 15 year longitudinal study of noise exposed workers. *AAOHN J.* 1998;46(07):325–329. [PubMed: 9748912]
- 42. Stewart M, Borer S E, Lehman M. Shooting habits of U.S. waterfowl hunters. *Noise Health*. 2009;11(42):8–13. [PubMed: 19265248]
- 43. Taylor G D, Williams E. Acoustic trauma in the sports hunter. *Laryngoscope*. 1966;76(05):863–879. [PubMed: 5937909]
- 44. Updike C D, Kramer W L. Hearing loss in recreational shooters. *Hear J*. 1990;43(01):22–24.
- 45. Nondahl D M, Cruickshanks K J, Wiley T L, Klein R, Klein B E, Tweed T S. Recreational firearm use and hearing loss. *Arch Fam Med.* 2000;9(04):352–357. [PubMed: 10776364]
- 46. Hoffman H J, Dobie R A, Losonczy K G, Themann C L, Flamme G A. Declining prevalence of hearing loss in US adults aged 20 to 69 years. *JAMA Otolaryngol Head Neck Surg.* 2017;143(03):274–285. [PMCID: PMC5576493] [PubMed: 27978564]
- 47. Axelsson A, Lindgren F. Pop music and hearing. Ear Hear. 1981;2(02):64-69. [PubMed: 7227675]
- 48. Kramer M B, Wood D. Noise-induced hearing loss in rural schoolchildren. *Scand Audiol.* 1982;11(04):279–280. [PubMed: 7163773]
- 49. Holmes A, Kaplan H, Phillips R, Kemker F, Weber F, Isart F. Screening for hearing loss in adolescents. *Lang Speech Hear Serv Sch.* 1997;28:70–76.
- 50. Henderson E, Testa M A, Hartnick C. Prevalence of noise-induced hearing-threshold shifts and hearing loss among US youths. *Pediatrics*. 2011;127(01):e39–e46. [PubMed: 21187306]
- 51. Clark W W. Noise exposure from leisure activities: a review. *J Acoust Soc Am.* 1991;90(01):175–181. [PubMed: 1880286]

- 52. Chung D Y, Gannon R P, Willson G N, Mason K. Shooting, sensorineural hearing loss, and workers' compensation. *J Occup Med*. 1981;23(07):481–484. [PubMed: 6454768]
- 53. Johnson D L, Riffle C. Effects of gunfire on hearing level for selected individuals of the Inter-Industry Noise Study. *J Acoust Soc Am.* 1982;72(04):1311–1314. [PubMed: 7142588]
- 54. Prosser S, Tartari M C, Arslan E. Hearing loss in sports hunters exposed to occupational noise. *Br J Audiol*. 1988;22(02):85–91. [PubMed: 3390636]
- 55. Phaneuf R, Hétu R. An epidemiological perspective of the causes of hearing loss among industrial workers. *J Otolaryngol*. 1990;19(01):31–40. [PubMed: 2179575]
- 56. Kryter K D. Hearing loss from gun and railroad noise—relations with ISO standard 1999. *J Acoust Soc Am.* 1991;90(06):3180–3195. [PubMed: 1787253]
- 57. Beckett W S, Chamberlain D, Hallman E et al. Hearing conservation for farmers: source apportionment of occupational and environmental factors contributing to hearing loss. *J Occup Environ Med*. 2000;42(08):806–813. [PubMed: 10953818]
- 58. Pekkarinen J, Iki M, Starck J, Pyykkö I. Hearing loss risk from exposure to shooting impulses in workers exposed to occupational noise. *Br J Audiol*. 1993;27(03):175–182. [PubMed: 8241966]
- 59. Neitzel R, Seixas N, Goldman B, Daniell W.Contributions of non-occupational activities to total noise exposure of construction workers *Ann Occup Hyg* 2004. b;4805463–473. [PubMed: 15242844]
- 60. Stewart M, Konkle D F, Simpson T H.The effect of recreational gunfire noise on hearing in workers exposed to occupational noise *Ear Nose Throat J* 2001800132–34., 36, 38–40 [PubMed: 11209517]
- 61. Lankford J E, Meinke D K. Acoustic Injuries in Agriculture. In: Lessenger J E, ed., editor. New York, NY: Springer New York: Springer; 2006. pp. 484–491.
- 62. Humann M J. Hearing loss and task-based noise exposures among agricultural populations [PhD (Doctor of Philosophy) thesis]. University of Iowa, 2011. Available at: http://ir.uiowa.edu/cgi/viewcontent.cgi? article=2371&context=etd. Accessed August 23, 2017
- 63. Sataloff J, Hawkshaw M J, Sataloff R T. "Gun-shooting hearing loss": a pilot study. *Ear Nose Throat J.* 2010;89(01):E15–E19. [PubMed: 20155683]
- 64. Agnew J. Gunshots and hearing. Hear Instr. 1987;38:10–12.
- 65. Job A, Grateau P, Picard J.Intrinsic differences in hearing performances between ears revealed by the asymmetrical shooting posture in the army *Hear Res* 1998122(1–2):119–124. [PubMed: 9714580]
- 66. Berg R L, Pickett W, Linneman J G, Wood D J, Marlenga B. Asymmetry in noise-induced hearing loss: evaluation of two competing theories. *Noise Health*. 2014;16(69):102–107. [PubMed: 24804714]
- 67. Stewart M, Foley L, Lehman M E, Gerlach A. Shooting habits of recreational firearm users. *Aud Today*. 2011;23:38–52.
- 68. Nondahl D M, Cruickshanks K J, Dalton D S et al. The use of hearing protection devices by older adults during recreational noise exposure. *Noise Health*. 2006;8(33):147–153. [PubMed: 17851219]
- 69. Murphy W J, Flamme G A, Meinke D K et al. Measurement of impulse peak insertion loss for four hearing protection devices in field conditions. *Int J Audiol*. 2012;51 01:S31–S42. [PMCID: PMC4677999] [PubMed: 22176308]

- 70. Khan A, Fackler C J, Murphy W J.NIOSH In-Depth Survey Report: Comparison of Two Acoustic Test Fixtures for Measurement of Impulse Peak Insertion Loss (No. 350–13a)NIOSH EPHB Report No 312–11a.Cincinnati, OH: DHHS-CDC-NIOSH; 20131–40.
- 71. Murphy W J, Fackler C J, Shaw Pet al. Comparison of the performances of three acoustic test fixtures for impulse peak insertion loss measurements at an outdoor firing range. NIOSH Report number EPHB 350—14aNational Institute for Occupational Safety and Health, Cincinnati, OH: DHHS-CDC-NIOSH; 20141—45.
- 72. Borg E, Bergkvist C, Bagger-Sjöbäck D. Effect on directional hearing in hunters using amplifying (level dependent) hearing protectors. *Otol Neurotol.* 2008;29(05):579–585. [PubMed: 18520633]
- 73. Talcott K A, Casali J G, Keady J P, Killion M C. Azimuthal auditory localization of gunshots in a realistic field environment: effects of open-ear versus hearing protection-enhancement devices (HPEDs), military vehicle noise, and hearing impairment. *Int J Audiol.* 2012;51 01:S20–S30. [PubMed: 22264060]
- 74. Allen C H, Berger E H. Development of a unique passive hearing protector with level-dependent and flat attenuation characteristics. *Noise Control Eng J.* 1990;34:99–105.
- 75. Berger E H, Hamery P.Level dependency of various passive earplug designs 2008 J Acoust Soc Am 123(5), Pt. 2:3528-3758. Available at: http://asa.scitation.org/toc/pma/4/1?expanded=4. Accessed September 7, 2017
- 76. Murphy W J, Tubbs R L. Assessment of noise exposure for indoor and outdoor firing ranges. *J Occup Environ Hyg.* 2007;4(09):688–697. [PubMed: 17654224]
- 77. Wells L, Berger E H, Keiper R. Attenuation characteristics of fit-compromised earmuffs and various nonstandard hearing protectors. *Proc Meet Acoust.* 2013;19:1–8.
- 78. Stewart M, Flamme G A, Meinke D Ket al. Firearm noise in a hunting blind *NHCA Spectrum* 201128(Suppl II):47
- 79. Kardous C A, Willson R D, Hayden C S, Szlapa P, Murphy W J, Reeves E R. Noise exposure assessment and abatement strategies at an indoor firing range. *Appl Occup Environ Hyg.* 2003;18(08):629–636. [PubMed: 12851012]
- 80. Murphy W J, Zechmann E L, Kardous C A, Xiang N. Noise mitigation at the combat arms training facility, Wright Patterson Air Force Base, Dayton, OH. *J Acoust Soc.* 2012;132(03):2084.
- 81. Stewart M, Flamme G A, Murphy W Jet al. Effects of firearm suppressors on auditory risk *NHCA Spectrum* 201532(Suppl I):39
- 82. Murphy W J, Stewart M, Flamme G A, Tasko S M, Lankford J E, Meinke D K. The reduction of gunshot noise and auditory risk through the use of firearm suppressors. *J Acoust Soc Am*. 2016;139(04):1984. [PubMed: 29299940]
- 83. Wise S, Meinke D K, Griest S, Finan D S, Weber J E.Dangerous Decibels®: Program effectiveness for youth recreational firearm usersPoster presented at: AudiologyNOW! annual conference of the American Academy of Audiology; April 2016. Available at: http://asa.scitation.org/doi/abs/10.1121/1.4799992. Accessed September 7, 2017

Figures and Tables

Table 1

Rank-Ordered Range of Mean Unweighted Peak Sound Pressure Levels for Recreational Firearms Measured at the Left Ear of a Right-Handed Shooter $\frac{7}{8}$ $\frac{9}{9}$ $\frac{10}{11}$ $\frac{11}{12}$

Recreational Firearm Type	Peak Sound Pressure Level (dB)
Rifles (higher caliber than 0.22)	~159–174
Pistols (higher caliber than 0.22)	~148–171
Shotguns	~152–170
Starter pistols (blanks)	~148–165
Pistols (0.22 caliber)	~155–158
Rifles (0.17 and 0.22 caliber)	~140–144
Air rifles	~117–134

Figure 1

NOISE THERMOMETERS

3M

http://multimedia.3m.com/m ws/media/1074386O/decibelscale-noise-meter.JPG

Dangerous Decibels

http://dangerousdecibels.org/ education/informationcenter/decibel-exposure-timeguidelines/

Howard Leight

http://www.howardleight.com/hearing-protection/noise-thermometer

Open in a separate window

Examples of accurate noise thermometers to use for educational purposes.

Table 2

Prevalence of Hearing Impairment Related to Firearm Use, U.S. Adults Age 20–69 years, NHANES, 2011–2012*

	Prevalence	Speech-Frequency Hearing Impairment,* % (95% CI)		
Firearms, Including Use for Recreation, Job, or Military (NHANES 2011–2012), U.S. Adults Age 20–69 Y		Overall †	Unilateral ‡	Bilateral §
Not used	54.3	11.4 (9.1– 14.2)	6.0 (4.5– 8.0)	5.4 (4.3- 6.8)
Yes used	45.7	17.3 (13.6– 21.9)	7.3 (5.7– 9.5)	10.0 (7.3– 13.6)
<1,000 lifetime rounds fired	32.6	14.0 (10.6– 18.2)	6.0 (4.2– 8.4)	8.0 (5.8- 10.9)
≥1,000 lifetime rounds fired	12.9	26.0 (19.7– 33.4)	10.8 (8.4– 13.7)	15.2 (9.4– 23.6)
		High-Frequency Hearing Impairment, % (95% CI)		
Not used	54.3	25.9 (23.5– 28.6)	11.6 (10.1– 13.2)	14.4 (12.7– 16.3)
Yes used	45.7	37.1 (31.9– 42.6)	12.3 (9.4– 15.9)	24.8 (20.6– 29.5)
<1,000 lifetime rounds fired	32.6	32.2 (26.8– 38.2)	10.2 (6.3– 15.9)	22.1 (17.6– 27.4)
≥1,000 lifetime rounds fired	12.9	49.7 (40.2– 59.2)	18.0 (13.1– 24.2)	31.7 (22.5– 42.6)

CI, confidence interval; NHANES, National Health and Nutrition Examination Survey.

Note: Adapted from Hoffman et al. $\frac{46}{}$

^{*}Defined as pure tone average of thresholds at 0.5, 1, 2, and 4 kHz greater than 25 dB hearing loss.

[†]Refers to the sums of unilateral and bilateral hearing impairment, which means hearing loss in one or both ears.

[‡]Refers to the pure tone average in only one ear exceeds 25 dB hearing loss.

 $\ensuremath{^\S} Refers$ to the pure tone average in both ears exceed 25 dB hearing loss.

Defined as pure tone average of thresholds at 3, 4, and 6 kHz greater than 25 dB hearing loss.

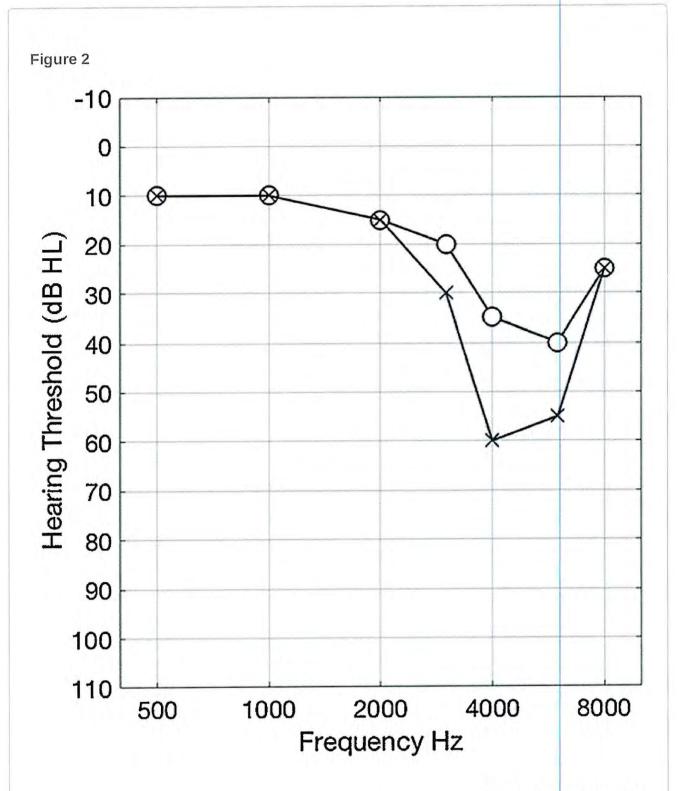
Table 3

Prevalence of Bilateral (Better Ear) Hearing Impairment Related to Firearm Use, US Adults Aged 20–69 years, NHANES, 2011–2012*

Hearing Impairment	Firearms, Including Use for Recreation, Job, or Military (NHANES 2011–2012), U.S. Adults Age 20–69 Y		Odds Ratio (95% CI)		
		Prevalence, % (95% CI)	Unadjusted	Adjusted for Age and Sex	Adjusted for All Variables
Bilateral (better ear) speech- frequency impairment	None	5.4 (4.3– 6.8)	1 [Reference]	1 [Reference]	1 [Reference]
	<1,000 lifetime rounds fired	8.0 (5.8– 10.9)	1.5 (1.1– 2.1)	1.4 (0.9– 2.1)	1.4 (0.8– 2.2)
	≥1,000 lifetime rounds fired	15.2 (9.4– 23.6)	3.1 (1.7– 5.7)	2.4(1.4– 4.2)	1.8 (1.1– 3.0)
Bilateral (better ear) high-	None	14.4 (12.7- 1 1 1 1 1 1 1 16.3) [Reference] [Reference]	1 [Reference]		
frequency impairment	<1,000 lifetime rounds fired	22.1 (17.6– 27.4)	1.7 (1.3– 2.2)	1.4 (0.9– 2.1)	1.2 (0.9– 1.9)
	≥1,000 lifetime rounds fired	31.7 (22.5– 42.6)	2.8 (1.6– 4.7)	1.5 (1.0– 2.5)	1.3 (0.7– 2.3)

CI, confidence interval; NHANES, National Health and Nutrition Examination Survey.

^{*}Adapted from Hoffman et al. $\frac{46}{}$



Open in a separate window

Example of an asymmetrical noise-induced hearing loss (NIHL) for a 50-year-old Caucasian man who shoots recreational firearms.

Figure 3



Open in a separate window

Illustration of head-shadow effect contrasting sound pressure levels measured for each ear for a right-handed rifle or shotgun shooter.

Figure 4

STRATEGIES TO PREVENT HEARING LOSS WHEN SHOOTING RECREATIONAL FIREARMS

- Always wear well-fit earplugs and/or earmuffs when shooting or when positioned near others who are shooting*
- Avoid the use of muzzle brakes (ports)
- Reduce the number of shots fired
- Shoot smaller caliber/gauge firearms when possible
- Shoot firearms with longer barrel lengths when possible
- Avoid shooting in groups, and if necessary, increase distance between shooters
- Avoid firing simultaneously with other nearby shooters
- Shoot outdoors or in a sound-treated indoor environment
- Avoid shooting over hard reflective surfaces such as benches or tabletops
- Shoot sub-sonic or low-velocity (<1120 fps) ammunition when feasible
- Utilize a suppressor

*The use of hearing protection is always warranted even when implementing the other listed strategies.

Open in a separate window

Strategies for protecting hearing.

Articles from Seminars in Hearing are provided here courtesy of Thieme Medical Publishers



REVISED EDITION

MAKE WAR LENTL lencers A THREAT TO PUBLIC SAFETY





By United Press. New York, Feb. 1.-That Maxim silencers can be bought by anyone on the open market became known here today for the first time in the invest

COPYRIGHT AND ACKNOWLEDGMENTS

Copyright © July 2019 Violence Policy Center

Violence Policy Center

1025 Connecticut Ave., NW Suite 1210 Washington, DC 20036

202-822-8200

The Violence Policy Center (VPC) is a national nonprofit educational organization that conducts research and public education on violence in America and provides information and analysis to policymakers, journalists, advocates, and the general public.

This publication was funded in part with the support of the Lisa & Douglas Goldman Fund.

For a complete list of VPC publications with document links, please visit http://www.vpc.org/publications.

To learn more about the Violence Policy Center, or to make a tax-deductible contribution to help support our work, please visit www.vpc.org.

INTRODUCTION

Silencers are devices that are attached to the barrel of a firearm to reduce the amount of noise generated by the firing of the weapon. By providing a larger contained space for the gases generated by the discharge of the gun's ammunition round to dissipate and cool before escaping, silencers reduce the sound generated by the weapon's firing.

Since 1934, silencers have been regulated under the National Firearms Act (NFA).¹ The NFA requires that transferees of silencers submit fingerprints and a photograph, pay a special tax, and undergo a background check. It also requires a "Chief Law Enforcement Officer" or CLEO to sign a statement confirming that a certifying official is satisfied that the fingerprints and photograph accompanying the application are those of the applicant and that the certifying official has no information indicating that possession of the silencer by the applicant would be in violation of state or local law. In January 2016, however, the Obama administration

MAXIM SILENCER FIGURES IN MURDER

By United Press.

New York, Feb. 1.—That Maxim sliencers can be bought by anyone on the open market became known here today for the first time in the investigation of a triple murder and suicide in which that instrument was used. Police officials prepared to bring the matter before the state legislature with a view to having the sale of the sliencer restricted.

Herman Auerbach

Herman Auerbach, formerly a wealthy realty dealer, killed his wife and his two daughters as they lay steeping in their Central Park, West, apartment, then killed himself. Loss of his fortune is believed to have caused Auerbach's action. He spared his 11-year-old son, Lester, sleeping in a disputer room. an adjoining room.

finalized a new rule that eliminates the CLEO sign-off requirement and replaces it with a requirement that local law enforcement need only be notified of the transfer of a silencer.

Hiram Percy Maxim is credited with patenting the first silencer in 1908. But a short time later their utility in crime was demonstrated in a tragic murder-suicide on Central Park West in New York City in 1915.

In the decades that followed, silencers were used by the Office of Strategic Services (OSS) during World War II for clandestine missions. Silenced handguns were also used in Vietnam for multiple purposes. According to a former Special Forces NCO, military units used suppressed pistols "for all sorts of sneaky ops, from dumping guards to out and out assassinations."2

In 1967, a new generation of silencers was developed by Mitch WerBell for Sionics, a company that specialized in counterinsurgency equipment. The acronym Sionics stood for Studies in Operational Negation of Insurgency and Counter Subversion. The company supplied silencers and similar items for covert operations by military and "CIA-type" clandestine organizations.3 These next-generation silencers were more efficient than their turn-of-thecentury predecessors and could effectively be used on battle rifles and Carbines. Today's military silencers are used by special operations units to reduce noise and muzzle flash.

- Examples of the types of firearms that must be registered under the National Firearms Act [26 U.S.C. §5845] include: machine guns; the frames or receivers of machine guns; any combination of parts designed and intended for use in converting weapons into machine guns; any part designed and intended solely and exclusively for converting a weapon into a machine gun; silencers and any part designed and intended for fabricating a silencer; short-barreled rifles; and, short-barreled shotguns. Also included are "destructive devices." These include Molotov cocktails, anti-tank guns (more than 50 caliber), bazookas, and mortars. "Any other weapon," which includes cane guns and other gadget-type firearms, such as "pen" guns, which fire a projectile by the action of an explosive are also regulated under the NFA.
- "The Ruger/MAC MKI: Vietnam's Silent Service," Small Arms Review, May 2005, accessed October 30, 2015 from https://www.smallarmsreview.com/display.article.cfm?idarticles=1873.
- "Sionics Incorporated," Small Arms Review, November 2011, accessed October 27, 2015 from https://www.smallarmsreview.com/display.articlecfm?idarticles=230. For more detail on Sionics and the use of silencers in Vietnam, see "Silencers: the NRA's latest big lie," Salon, December 30, 2012.

A relatively new priority for the gun lobby and firearms industry has been to expand the market for the legal use of silencers. In 42 states silencers are now legal. But the ultimate goal is to weaken federal law regulating the transfer and use of silencers. Legislation has been introduced in Congress to accomplish this goal. Misleadingly labeled the "Hearing Protection Act," the bill would remove silencers from the list of NFAregulated firearms and accessories, making them subject only to the regulations that currently apply to hunting rifles. In their public statements, proponents of the bill would like the public and policymakers to believe that silencers are innocuous devices used merely to protect the hearing of shooters, including children. But in fact, the campaign to deregulate silencers is merely



Barrett, manufacturer of 50 caliber anti-armor sniper rifles and AR-15-style assault rifles, also manufactures silencers

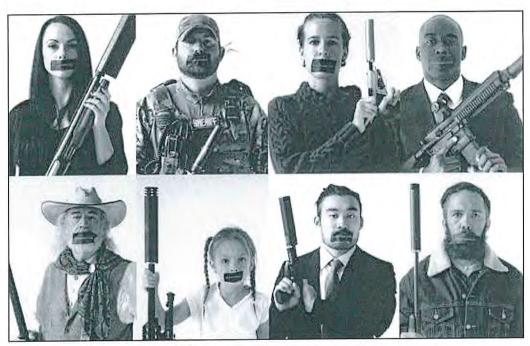
the latest attempt by the gun lobby and firearms industry, in the wake of declining household gun ownership, to market yet another military-bred product with little concern for its impact on public safety.⁴ In fact, because the "Hearing Protection Act" would allow silencers to be sold under the same standards as traditional hunting rifles, this would allow the gun industry to manufacture firearms with integral silencers, creating a whole new class of firearm that could be marketed to the general public.

The gun lobby's effort gained new strength following the election of Donald Trump in 2016. Not only was Trump the National Rifle Association's favored candidate (in 2017 Trump was the first president to address the NRA at its annual meeting since 1983 and has returned every year since) but his son, Donald Trump, Jr., has been a vocal advocate for easing civilian access to silencers. In a September 2016 promotional video from Utah-based SilencerCo posted on YouTube, the president's son, wearing no hearing protection, fires a pistol with an integral silencer and exclaims, "That thing is *awesome*." Later, in an interview with SilencerCo CEO Joshua Waldron, Trump Jr., promises that his father would sign a silencer bill if it passed Congress, arguing, "It's about safety" and later adding, "It's purely a health and safety issue."

In its 2017 catalog, SilencerCo states:

We're at the outset of a major movement. #FightTheNoise gives us all a chance to speak out against the oppression of a burdensome system and a public that accepts an inherent falsehood. Guns do not need to be loud, and those that enjoy the right to bear arms have the responsibility to stand up and call for decreased regulation and increased protection. Visit fightthenoise.org to find out how you can join the suppressed.⁶

- 4 See A Shrinking Minority: The Continuing Decline of Gun Ownership in America, Violence Policy Center, May 2015 (http://www.vpc.org/studies/ownership.pdf).
- 5 See https://www.youtube.com/watch?v=P_LOxq6j4FM.
- Visitors to the now-defunct fightthenoise.org website were greeted with a video that included numerous scenes of protest throughout time from around the world presumably from news reels interspersed with shots of firearms equipped with silencers, as well as a graffiti tagger, apparently intended to make the point that those in support of silencers are part of an oppressed protest movement.



SilencerCo 2015 catalog, back cover

SILENCERS HAVE BEEN USED IN CRIMES

The federal Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) reports that it traced 1,004 silencers in 2017.⁷ But silencers—both legal and illegal—have been involved in serious and sometimes deadly crimes that graphically illustrate the threat to public safety that making them widely available to the general public would represent.

MASS SHOOTING AT VIRGINIA BEACH MUNICIPAL CENTER

In May 2019, a disgruntled public works employee, DeWayne Craddock, killed 12 people and wounded six others in a mass shooting at the Virginia Beach Municipal Center. The shooter used two 45 caliber semiautomatic pistols and a silencer, all of which were purchased legally.⁸

FATHER AND SON DRUG TRAFFICKING CONSPIRACY

In February 2017, Justin Graham and his father Gary Graham were arrested by Rhode Island authorities on drug charges related to the importation and distribution of MDMA. Investigators also seized seven guns including an M-4 machine gun, a silencer, and three body armor vests. Both had prior criminal histories.⁹

TWO SEPARATE ROBBERIES AT WALGREENS

In February 2017, an armed robber using a silencer targeted a Walgreens in Orlando, Florida. The robber posed as a customer and stole a pack of disposable razors, a can of shaving cream, and a Hershey's Special Dark chocolate bar.¹⁰ In December 2014, Jin Ackerman used a gun equipped with a silencer to rob another Walgreens in Las Vegas, Nevada and shoot to death a clerk who had previously worked with the shooter. While committing the robbery, Ackerman said to the clerk, "Sorry Tony, but you know me," before pulling the trigger.¹¹

- 7 See https://www.atf.gov/docs/undefined/typesbystatecy2017xlsx/download, Firearm Types Recovered and Traced in the United States and Territories, 2017.
- 8 "Suspected Virginia Beach shooter used legally-bought gun suppressor," ABC News, June 4, 2019; "Gunman, 12 victims identified in Virginia Beach shooting," CBS News, June 1, 2019.
- 9 "R.I. father and son charged with drug trafficking," Providence Journal, February 9, 2017.
- 10 "Man uses gun with 'silencer' to rob Orlando store, police say," clickorlando.com, February 21, 2017.
- 11 "Armed robber shoots dead former co-worker during Walgreens robbery telling him, 'Sorry Tony, but you know me,'" Daily Mail.com, December 30, 2014.

MULTI-STATE DRUG TRAFFICKING RING

In January 2017, a task force of local and federal law enforcement agencies completed an investigation of a multi-state drug trafficking organization focusing on the distribution of methamphetamine and the possession and transfer of firearms in northwest Montana. Investigators noted that the large amounts of weaponry possessed by the conspirators was unique. As part of a plea agreement, 68 weapons and firearm accessories were forfeited to the government including assault rifles, a grenade launcher, and two silencers.¹²

ATTEMPTING TO PROVIDE MATERIAL SUPPORT TO ISIL

In August 2016, Justin Sullivan was charged with communicating with a leader of the Islamic State in furtherance of an attempt to provide material support to a terrorist organization. Sullivan told an undercover law enforcement agent that he wanted to obtain an AR-15 assault rifle and silencers to use in assassinations and mass shootings. Sullivan believed he could kill as many as 1,000 people in attacks on concerts, bars, and clubs. The undercover agent provided Sullivan with a silencer. Sullivan was also charged with murder for killing his 74-year-old neighbor.¹³

ARMED ROBBERY AND POINTING A FIREARM AT A LAW ENFORCEMENT OFFICER

In July 2016, Kevin Higgins was fatally shot by officers from the Sheboygan Police Department when the officers responded to a report of a robbery in progress at a bar. The suspect was dressed in camouflage clothing and armed with a DPMS A-15 assault rifle equipped with a silencer and a 30-round magazine. The suspect was killed as he brought the butt of the assault rifle to his shoulder and raised the muzzle of the gun toward the officer.¹⁴

ILLEGAL MANUFACTURE OF ASSAULT WEAPONS

In June 2016, Michael Giannone was charged in Connecticut with multiple counts related to the illegal manufacture of assault weapons out of his home including three counts of possession of silencers. He had previously been arrested on charges of firearm trafficking and assault weapon-related counts. Giannone had a business card reading, "No names, no numbers, no witnesses." After his first arrest, Giannone was seen on the grounds of a local school in possession of a firearm. A search of his home uncovered many firearms as well as tools to manufacture AR-15 assault rifles in his workshop.¹⁵

SUSPECT ATTEMPTS TO BUY SILENCERS IN FURTHERANCE OF TERROR PLOT

In January 2016, Samy Mohamed Hamzeh was arrested and charged after acquiring automatic firearms and a silencer in furtherance of a terror plot to commit a mass shooting at a Masonic Center in Milwaukee, Wisconsin. According to the FBI, Hamzeh explained, "We want two machineguns, you now have one, so we want two more, and we need three silencers, that's it. Find out how much all together these will cost, then we will march...each one has a weapon, each one has a silencer gun, the operation will be one hundred percent successful. I am telling you, to go without silencer gun, you will be exposed from the beginning." [emphasis added] Hamzeh's goal was to kill at least 30 people believing this would inspire other terror attacks in the United States, or in his words, "I am

- "Federal meth bust ends western Montana trafficking ring," kxlf.com, January 13, 2017; United States v. Neal Allen Maddox, Unites States District Court for the District of Montana, Plea Agreement filed May 25, 2016.
- "U.S. terror suspect awaiting trial for murder charged again for ISIS connection," washingtontimes.com, August 19, 2016; United States v. Justin Nojan Sullivan, United States District Court for the Western District of North Carolina, Superseding Indictment filed August 16, 2016.
- "Sheboygan Co. D.A. reveals officer-involved fatal shooting at Union Ave. Tap was justified," fox6now.com, July 29, 2016; Report of Investigation Officer Involved Death of Kevin S. Higgins, Sheboygan Police Department Criminal Investigation Case Report, Case Number C16-13843.
- "New Fairfield man arrested for making and selling illegal assault style weapons," fox61.com, June 21, 2016; "Man accused of making illegal assault weapons in his home faces judge," newstimes.com, August 15, 2016.



Liberty Suppressors 2017 catalog

telling you, if this hit is executed, it will be known all over the world...all the Mujahedeen will be talking and they will be proud of us...such operations will increase in America, when they hear about it. The people will be scared and the operations will increase...This way we will be igniting it. I mean we are marching at the front of the war."16

GANG-RELATED MURDER

In October 2015, gang member Xia Lin was convicted of murdering restaurant owner Quin-Jin Fang who was gunned down inside his car in the garage of his home in Alhambra, California. According to the prosecutor, Fang was shot three times in the head and twice in the chest with a .22 handgun equipped with a silencer. The motive is believed to have been related to an extortion scheme against Fang in which he was unwilling to pay.¹⁷

WHITE SUPREMACISTS PLOTTING ATTACKS ON BLACK CHURCHES AND SYNAGOGUES

Ronald Chaney III, Charles Halderman, and Robert C. Doyle were all white supremacists who plotted to shoot and bomb congregants at black churches and synagogues. In an effort to acquire weapons to use in the attacks, Chaney and Doyle met with an undercover FBI agent they believed to be an arms dealer and handled and inspected silencers in October 2015. They then placed an order for a machine gun, explosives, and a pistol equipped with a silencer. All pleaded guilty in 2016 and were sentenced to prison terms ranging from eight to 20 years.18

UNLICENSED "GHOST GUN" SILENCER OPERATION

In October 2015, eight men were charged in a federal indictment in Sacramento with unlawfully engaging in the business of manufacturing and dealing in firearms, including assault rifles and silencers lacking serial numbers. Undercover agents from the Bureau of Alcohol, Tobacco, Firearms and Explosives bought 67 guns and 38 silencers from the suspects. Another 71 guns and 62 silencers were seized following the execution of a number of search warrants and subsequent arrests. One of the defendants was also charged with distribution of MDMA, a controlled substance, according to court documents. At a news conference announcing the charges, ATF Special Agent in Charge Jill Snyder said, "Think about where those guns would be now if the buyer had not been an agent. The streets of Northern California are safer today." U.S. Attorney Benjamin Wagner added, "These are some of the most lethal weapons criminals can get their hands on. Manufacturing and selling them for profit, without complying with federal licensing rules, is both a serious crime and a serious threat to public safety."19

- United States v. Samy Mohamed Hamzeh, United States District Court for the Eastern District of Wisconsin, Criminal Complaint, January 26, 2016. 16
- "Gang member convicted of killing restaurant owner in his Alhambra home's garage," mynewsLA.com, October 22, 2015. 17
- United States v. Robert C. Doyle, United States District Court for the Eastern District of Virginia, Criminal Complaint filed November 9, 2015; "Last defendant sentenced for plotting white supremacist attack on churches," wtvr.com, July 13, 2016.
- "Indictment charges 8 Sacramento-area men with making illegal guns," Sacramento Bee, October 15, 2015.

CALIFORNIA WINERY MURDER-SUICIDE

In March 2015, Robert Dahl fatally shot and killed Emad Tawfilis, an investor in his Napa Valley winery, with a handgun outfitted with a silencer. Dahl was involved in a series of lawsuits, including a claim by Tawfilis that Dahl had misappropriated a \$1.2 million loan from him. According to the Napa County coroner, Tawfilis was shot five times, twice in the head and three times in the upper body.²⁰

ILLEGAL WEAPONS POSSESSION AND SOLICITING THE MURDER OF FEDERAL OFFICERS

Gun and explosives dealer and former president of the Alaska Machine Gun Association Chris Guy Mannino of Fairbanks, Alaska was in federal custody in 2016 after being found guilty of felony charges that included unlawfully possessing and transporting a machine gun equipped with a silencer when he was indicted on additional charges of soliciting the murder of federal officers. An FBI Special Agent investigating the case said, "[Mannino] had a hit list. He wanted to kill the FBI agent, the main witness in the weapons case, and the individual he initially hired as a hit man. He also wanted to kill a bankruptcy attorney and both ATF agents who investigated his case."21

CHRISTOPHER DORNER ATTACKS ON SOUTHERN CALIFORNIA LAW ENFORCEMENT

In February 2013, Christopher Dorner, a former police and naval officer, targeted Southern California law enforcement officers and their families in what the Police Foundation described as "one of the most bizarre and violent acts of vengeance against law enforcement officers this country has experienced." Dorner murdered four people and wounded several others and used silencers to help accomplish his deadly mission. According to a Police Foundation analysis of the attacks, Dorner killed Monica Quan and Keith Lawrence in a "gang-style hit" while they sat in their car in a parking structure.

Police were initially puzzled as to why no neighbors heard the 14 shots that were fired from a semiautomatic handgun. They later learned that Dorner had used a silencer on his 9mm Glock pistol. In the course of the manhunt, Dorner fired 29 shots at officers in a patrol car using an AR-15 assault rifle equipped with a silencer "to keep them from hearing the shots before they were hit." When police finally tracked Dorner to a mountain cabin, Dorner fired at law enforcement with a silencer-equipped assault rifle, making it more difficult for responding officers



Liberty Suppressors 2017 catalog

to pinpoint the origin of the gunfire. Dorner had acquired the silencers in Nevada using a "gun trust" to evade the restrictions of the National Firearms Act.22

^{20 &}quot;Murder-Suicide leaves fate of winery, lawsuits in question," Napa Valley Register, March 26, 2015.

[&]quot;Murder for Hire: Alaska Man Wanted Federal Agents Killed," www.fbi.gov, August 17, 2016; Federal Prisoner in Fairbanks Indicted for Soliciting the Murder of Federal Officers, press release, United States Attorney's Office, District of Alaska, November 21, 2014.

²² Police Under Attack: Southern California Law Enforcement Response to the Attacks by Christopher Dorner, Police Foundation. For more information on "gun trusts," see the Violence Policy Center backgrounder on the topic at http://www.vpc.org/fact_sht/NFA trusts.pdf.

SERIAL KILLER USES SILENCER TO TARGET VICTIMS

Israel Keyes, a confessed serial killer who murdered up to 12 victims, used a gun with a silencer to kill at least one of his victims, Bill Currier, in Vermont in June 2011. Currier was killed in a brutal home invasion and kidnapping in which his wife Lorraine was also killed after being sexually assaulted. Following his arrest, Keyes also confessed to planning to kill a couple in Alaska with a rifle outfitted with a silencer. He told police that he watched a young couple sitting in a car at night, but then a police officer approached, appearing to tell the couple that the park was closed. Keyes told investigators that he "[a]lmost pulled the trigger, even with him there," but when another officer arrived he abandoned his plan. "As soon as his backup showed up, I decided I better call it a night and got back on my bike and took off," Keyes said. Keyes killed himself in 2012.²³

ANTI-GOVERNMENT MILITIA CONSPIRACY TO MURDER A FEDERAL JUDGE

In 2011, anti-government militia member Lonnie Vernon and his wife Karen Vernon conspired to murder the Alaska district court judge who was presiding over a civil tax case filed against them in federal court seeking unpaid taxes. The Vernons also conspired to kill an IRS employee. In furtherance of the conspiracy, the government alleged that Lonnie Vernon possessed a pistol with a silencer. According to a federal indictment, Vernon and Alaska Peacemakers Militia leader Francis Schaeffer Cox engaged in a conspiracy to obtain destructive devices, including grenades, as well as unregistered silencers. Vernon and Cox were each sentenced to more than 25 years in prison.24

WORKPLACE SHOOTING IN OHIO

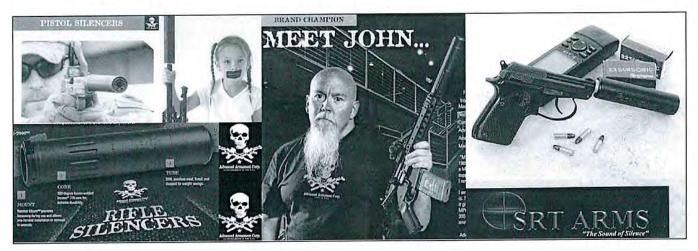
In January 2011, concealed carry permit holder Mark Langlois fatally shot 65-year-old Jim Schueler, Jr. as he sat eating his breakfast in his office at Forklifts of Toledo in Ohio where the two worked. Schueler was shot with a 9mm handgun at point-blank range. No one at the facility heard the gunshot and Schueler's co-workers originally assumed he had died of a heart attack. Police later surmised that the killer had used a silencer. Police determined that Langlois, who was convicted of murder, had legally registered multiple silencers with ATF.25

[&]quot;Israel Keyes targeted couple on Anchorage trail, police say," www.mcclatchydc.com, December 11, 2012; "U.S. Attorney Coffin: Currier Couple 'Fought to the End' Against 'a Force of Pure Evil," Sevendaysvt.com, December 3, 2012.

[&]quot;Alaska Couple Sentenced for Conspiracy to Murder Federal Officials," Treasury Inspector General for Tax Administration, Highlights 2013 Archive, February 5, 2013; "Fairbanks Residents Sentenced for Conspiracy to Murder Public Officials and Weapons Violations," press release, U.S. Attorney's Office, District of Alaska, January 9, 2013; "Foul-mouthed Alaska militia member gets a near-life sentence," Alaska Dispatch News, January 7, 2013.

State of Ohio v. Mark Langlois, No. L-11-1313, Ohio Ct. App. Nov. 22, 2013; "Langlois found guilty in boss' fatal shooting," Toledo Blade, November 19, 2011.

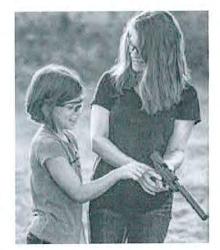
GUN INDUSTRY AGGRESSIVELY MARKETS SILENCERS



A collage of silencer catalog images

The gun industry, always looking for new marketing opportunities in the wake of declining household gun ownership, has embraced the manufacture and marketing of silencers for virtually any firearm imaginable. Firearm manufacturers are also producing silencer-ready guns. For example, Arsenal, Inc. offers a silencer-compatible AK-47 pistol. Other manufacturers, such as Glock and Beretta, also offer guns designed to accept silencers.

Silencers are also touted as a means to allow young children—who often are put off by the noise produced by firearms as well as the recoil generated when the weapon is fired—to use and possess guns.26 The 2017 catalog for Advanced Armament Corporation explains:



By reducing turbulence as the bullet exits the barrel and reducing sound and recoil-spawned user flinch in the process, silencers work to help tighten your shot groups. For new or younger shooters, using a silencer means being able to focus on marksmanship fundamentals and enjoy the overall shooting experience with considerably more comfort.

And as Donald Trump, Jr. acknowledged to SilencerCo CEO Joshua Waldron, one benefit of silencers was "getting little kids into the game, it greatly reduces recoil."

Silencers are also marketed for self-defense in the home. The 2017 catalog from Liberty Suppressors promises for one silencer model, "If there was ever a suppressor that is perfect for the nightstand, the Centurion would be it."

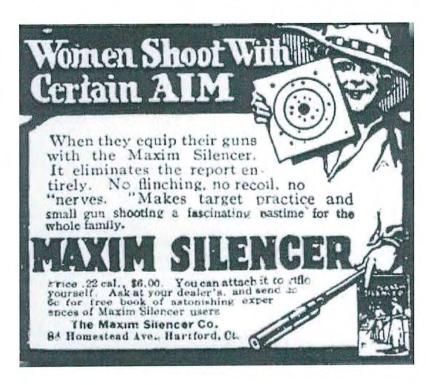
Present day manufacturers, however, are not the first to tout reduced recoil and noise as silencer attributes. Prior to enactment of the National Firearms Act of 1934 the exact same marketing claims were made by silencer

For more information on the gun lobby and firearm industry's marketing of weapons for children, please see the 2016 Violence Policy Center study "Start Them Young"—How the Firearms Industry and Gun Lobby Are Targeting Your Children (http://www.vpc.org/publications/start-them-young/).

manufacturers. A 1920 ad from Popular Science for The Maxim Silencer Co. promised to make shooting more enjoyable for women.

Another ad from the same era urged, "Maxim Silencer...For His Christmas Gift," and also promised to make shooting less noisy.





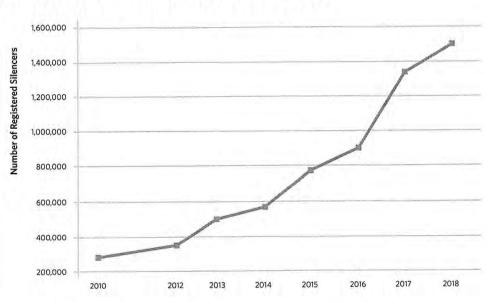
Despite the cheery tone of the ads, silencers were tightly restricted under the NFA in an effort to crack down on weapons used by gangsters.

THE BOOM IN FIREARM SILENCERS

In 2010 the number of legally registered silencers in U.S. was 285,087. By 2018 this number had grown to 1,489,791—an increase of 423 percent.²⁷

NUMBER OF REGISTERED SILENCERS IN THE UNITED STATES, 2010 - 201828

Year	Number of Silencers	
2010	285,087	
2012	360,534	
2013	494,452	
2014	014 571,750	
2015	792,282	
2016	902,805	
2017	1,360,023	
2018	1,489,791	



SILENCER BOOM'S ADMINISTRATIVE BURDEN ON THE FEDERAL BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES (ATF)

The massive increase in the number of silencers registered in the National Firearms Registration and Transfer Record (NFRTR) has put a tremendous burden on the resources of the federal Bureau of Alcohol, Tobacco, Firearms and Explosives, the agency charged with processing the applications to make and transfer silencers and other firearms regulated under the National Firearms Act.

ATF describes the impact on the agency's workload and resources in its FY 2020 budget request to Congress. "Keeping pace with the unprecedented increase in the volume of NFA weapon applications that has resulted largely from changes in state laws regarding silencers and other NFA weapons" is a "challenge," according to the agency. The budget document further details the burden associated with regulating silencers:

The growth in firearms commerce is an external challenge that has strained ATF's ability to meet the needs of the firearms industry and the citizens of the U.S. The significant workload increases are due, in large part, to changes in many state laws that directly affect ATF's regulatory workload. For example, from FY 2012 to FY 2016, ATF experienced a 260 percent increase in NFA weapon applications receipts. ATF's goal, reported to DOJ quarterly, is to process all NFA requests within 90 days. Only 2.6 percent of NFA tax paid applications met this standard

²⁷ Source: Federal Bureau of Alcohol, Tobacco, Firearms and Explosives. Includes all states as well as "Other U.S. Territories." Totals for "Other U.S. Territories" are: 18 in 2018; 18 in 2017; 18 in 2016; 18 in 2015; 16 in 2014; 16 in 2013; 16 in 2012; and, 15 in 2010. No data was posted by ATF for 2011.

²⁸ Source: Federal Bureau of Alcohol, Tobacco, Firearms and Explosives.

in FY 2018. NFA application receipts have far outpaced the number processed, leading to backlogs. One of the primary drivers for this increase is the changes in state laws that allow for the use of silencers (a NFA-regulated weapon) for hunting and sporting purposes. Even with the support of redirected industry operations personnel resources, ATF continues to struggle to meet performance targets, and wait time remains significant....

Market demand for NFA services continues to set annual records, which has resulted in a dramatic increase in workload over the past several years. In FY 2018, ATF received approximately 339,278 NFA registration applications and processed 322,692 NFA registration and transfer applications. Much of the increase from prior fiscal years can be attributed to changes in several state laws that allow for the use of gun silencers for hunting purposes.29

"BENEFITS" OF SILENCERS THREATEN PUBLIC SAFETY AND THE LIVES OF LAW ENFORCEMENT

Although proponents of deregulating silencers assert that hearing protection is their goal, silencer manufacturers, such as Advanced Armament Corp., tout numerous other "benefits of silencer use"—usually with an anti-personnel or law enforcement application:

- "By virtually eliminating muzzle flash, silencers prevent 'blooming' of night vision equipment and help preserve unaided night vision."30
- "A silencer helps a shooter maintain command and control by enabling team members to communicate during live fire exercises or in combat."31

The "benefits" most commonly cited by silencer manufacturers, however, remain sound reduction and increased accuracy and rate of fire by the shooter as the result of reduced recoil and improved stability of the weapon when firing.

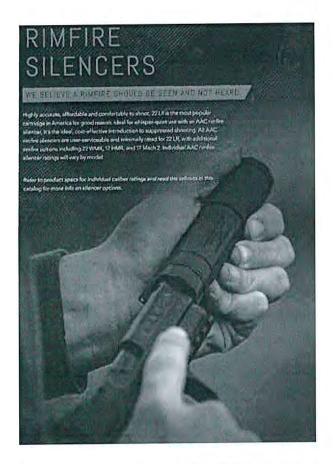
SILENCERS: A THREAT TO PUBLIC SAFETY

In the 2019 Advanced Armament³² catalog, text for the company's Jaeger 30 silencer ("not just a silencer, a hunt enhancer") states:

Silencers do more than provide the comfort of shooting without hearing protection. Reduced recoil. Enhanced accuracy. The elimination of muzzle-jump and flash that delivers quicker target acquisition for faster follow-up shots. Silencers eliminate sound to a whisper and help strike a perfect balance between keeping a rifle as light as possible and dealing with heavier recoil found with long-range, magnum cartridges.33



- Bureau of Alcohol, Tobacco, Firearms and Explosives, Congressional Budget Submission, Fiscal Year 2020, March 2019.
- Advanced Armament Corp. product catalog, 2013. 30
- Advanced Armament Corp. product catalog, 2013. 31
- Advanced Armament Corp. calls itself "The Silent Authority." 32
- Advanced Armament Corp. product catalog, 2019.





In another section of the catalog, a silenced pistol is below the headline "Rimfire Silencers: We Believe a Rimfire Should be Seen and Not Heard." The text reads:

Highly accurate, affordable and comfortable to shoot, 22 LR is the most popular cartridge in America for good reason. Ideal for whisper-quiet use with an AAC rimfire silencer, it's the ideal, costeffective introduction to suppressed shooting."34

Or as silencer manufacturer Gemtech Suppressors (owned by the same company as Smith & Wesson) summarizes:

Suppressors reduce percussion, noise, and recoil. This reduction results in a comfort level where the shooter can better focus on shooting fundamentals and achieve consistent shot placement.35

To enhance the effect of silencers, manufacturers market subsonic ammunition. Subsonic ammunition travels at speeds below the speed of sound to avoid the "crack" produced by a supersonic bullet. In the words of one silencer maker, "For the ultimate in discreet shooting, it is necessary to use subsonic ammunition with your silenced 9mm Luger host. Some ammunition manufacturers are now marketing ammunition specifically for suppressed use that is designed to be subsonic."36

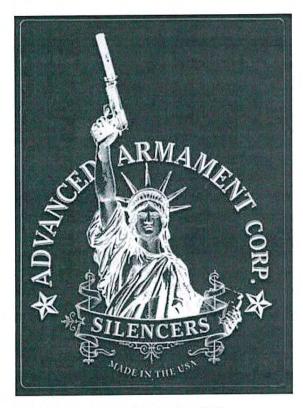
Silencers can also create the impression that gunfire is coming from the opposite direction which could create a significant hazard for law enforcement and other first

responders. An article in Tactical Weapons describes the phenomenon:

If you're being shot at and you can't hear the actual gunshot because it's suppressed and the only thing you hear is the ballistic crack, you'll think the fire is coming from exactly opposite from where it is. In the sandbox, this has caused Taliban to run towards the incoming fire, right at our guys, with obvious negative consequences for Hajii (soldiers' term for an Iraqi insurgent).37

In a civilian context, these "benefits" could help enable mass shooters and other murderers to kill a greater number of victims more efficiently.

- Advanced Armament Corp. product catalog, 2019.
- Gemtech Suppressors product catalog, 2019. 35
- 36 Advanced Armament Corp. (AAC), product catalog, 2019.
- The Science of Silencers," Tactical Weapons, March 2011.



Advanced Armament Corporation 2017



CONCLUSION

A ban on silencers for civilian use would enhance public safety. The explosion in the popularity of silencers has significantly increased the likelihood they will be used in crime. The advantages of using silencers, including reduced noise and increased accuracy, make them attractive to mass shooters, terrorists, and common criminals. In addition, the administrative burden placed on the Bureau of Alcohol, Tobacco, Firearms and Explosives diverts resources from the agency's more important regulatory and law enforcement responsibilities. Conversely, silencers serve no sporting purpose.



Violence Policy Center

1025 Connecticut Avenue, NW Suite 1210 Washington, DC 20036

WWW.VPC.ORG

WORKPLACE SOLUTIONS

From the National Institute for Occupational Safety and Health

Reducing Exposure to Lead and Noise at Outdoor Firing Ranges

Summary

The National Institute for Occupational Safety and Health (NIOSH) recently published recommendations for reducing exposure to lead and noise at indoor firing ranges [NIOSH 2009]. However, workers and users of outdoor firing ranges may be exposed to similar hazards. This follow-up document examines exposures at these ranges and recommends steps to reduce such exposures.

Description of Exposure Affected Population

According to the Bureau of Justice Statistics, more than 1.2 million Federal, State, and local law enforcement officers work in the United States [DOJ 2012, 2011]. These officers are required to train regularly in the use of firearms and may be exposed to hazardous levels of lead and noise if they train at outdoor ranges. In addition to law enforcement, NIOSH estimates that shooting ranges employ 40,000–60,000 workers, and that about 15% of the U.S. population, or 34.4 million people, participate in target shooting [NSSF 2010].

Exposure Sources

Several studies of outdoor firing ranges have shown that exposure to lead and noise can cause health problems, particularly among employees and instructors [NIOSH 2011; Tripathi et al. 1991; Goldberg et al. 1991]. Lead exposure occurs mainly through inhalation of lead dust, skin contact with lead from bullets, or ingestion (e.g., eating or drinking with contaminated hands) [NIOSH 2009]. Workers and shooters involved in shooting, cleaning operations, collecting casings, and handling spent bullets may also be exposed to lead.

Indoor vs. Outdoor Ranges

An estimated 9,000 non-military outdoor ranges exist in the United States, with millions of pounds of lead from bullets shot annually. Because outdoor ranges are typically built in an open area, lead and noise are more widely dispersed. Outdoor ranges need less cleaning and maintenance than indoor ranges. However, despite the natural ventilation of outdoor firing ranges, personal breathing zone lead levels can exceed the NIOSH recommended exposure limit (REL) and Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) [Mancuso et al. 2008]. Some outdoor ranges have ballistic baffles overhead and concrete walls and structures on the sides. The air in these spaces can become stagnant and lead to increased exposures.

Exposure Limits

Lead

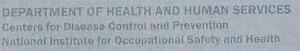
OSHA has established two different limits for airborne exposure to lead [29 CFR 1910.1025']. The action level for airborne lead exposure is 30 micrograms per cubic meter of air (µg/m³) as an 8-hour time weighted average (TWA). The OSHA PEL for airborne exposure to lead is 50 μg/m3 as an 8-hour TWA. For workers exposed to airborne lead above the action level for more than 30 days per year, OSHA requires blood lead monitoring every 6 months. If an employee's blood lead level (BLL) exceeds 60 µg lead/100 g of whole blood (or the average of the last 3 BLLs is greater than 50 μg lead/100 g), the employee must be removed from further exposure until BLLs decline to 40 µg lead/100 g or less.

The NIOSH REL for airborne lead is 50 μg/m³ as an 8-hour TWA.

The U.S. Department of Health and Human Services recommends that BLLs among all adults be reduced to $<10~\mu g/dL$ [DHHS 2011].

Noise

For noise exposure, the OSHA PEL is 90 decibels, A-weighted (dBA), and the action level is 85 dBA both as an 8-hour









^{*}Code of Federal Regulations. See CFR in References.

TWA using a 5-dB exchange rate [29 CFR 1910.95]. The OSHA occupational noise standard states that exposures to impulsive noise should not exceed 140 dB peak sound pressure level (SPL).

The NIOSH REL for noise (8-hour TWA) is 85 dBA using a 3-dB exchange rate [NIOSH 1998]. NIOSH also recommends that peak SPL not exceed 140 dB.

NIOSH Investigations

NIOSH conducted Health Hazard Evaluations that involved exposure to lead and noise to law enforcement officers and employees at outdoor firing ranges (Figure 1).

Lead

At a firing range in California, 16 personal breathing zone (PBZ) air samples and six surface wipe samples were collected for lead. The air samples did not exceed occupational exposure limits (REL or PEL) for lead. The highest lead exposure (15 $\mu g/m^3$) was measured on an instructor at the range. Exposures can vary depending on weather conditions (particularly wind speed and direction) and the shooter's proximity to the gun smoke source. The highest levels of surface contamination were on the firearms. Lead was also found on outdoor picnic tables where employees ate. Colorimetric wipe tests identified lead on hands, but employees had good personal hygiene practices; no lead was found on hand wipes after hand washing [NIOSH 2011].

Noise

NIOSH evaluated the noise exposure of a SWAT team in Fort Collins, CO, during training exercises. Hearing was tested before and immediately after training sessions. Noise measurements were made of firearms and of the protection offered by customized hearing protectors. Most officers did not show any change in hearing after shooting, but the oldest group did show mild hearing loss at higher frequencies. Firearm noise was between 159 and 169 dB, which was greater than the 140 dB peak limit for impulsive noise. Peak noise reductions from the ear plugs, ear muffs, and customized protectors were in the 30 dB range. Double hearing protection (plugs plus muffs) added 15–20 dB of additional protection [NIOSH 2003].



Figure 1. NIOSH exposure assessment of Federal law enforcement officers conducting a live-fire training exercise

Recommendations

Workers and shooters at outdoor firing ranges should take the following steps to protect themselves [NIOSH 2003, 2009, 2011]:

- Attend training, follow safe work practices, and participate in health monitoring programs.
- Report symptoms to your employer and get medical attention when needed:
 - Common health effects of lead poisoning in adults include reproductive effects, nausea, diarrhea, vomiting, poor appetite, weight loss, anemia, fatigue, hyperactivity, headaches, stomach pain, and kidney problems.
 - Exposure to high noise levels can cause hearing loss, tinnitus (ringing in the ear), stress, high blood pressure, fatigue, and gastro-intestinal problems.
 - If you suspect you have had high lead exposure, even if you show no symptoms, get your BLL tested.

■ Practice good hygiene:

- Wash hands and face with soap and water or clean them with lead decontamination wipes after shooting, handling spent cartridge cases, or cleaning weapons, especially before eating, drinking, or smoking. Wipes for cleaning skin without water are commercially available and should be used if access to soap and water is limited [NIOSH 2009].
- Change clothes before leaving the range and wash clothes separately from other family clothing.

■ Use personal protective equipment (PPE):

- Wear double hearing protection (earplugs and earmuffs) and eye protection when shooting.
- Wear a brimmed cap and tight-fitting clothes for protection against hot shells and ejected casings if the range's shooting stations are in very close proximity.
- Wear properly-fitted respirators and full protective outer clothing for maintenance activities that involve close contact with lead dust or spent bullets.
- Wear gloves and eye protection when using chemicals to clean firearms.

Employers should take the following steps to protect workers and shooters at firing ranges:

- Consider providing non-lead bullets and non-lead primers (often referred to as "green" or non-toxic" ammunition) [NIOSH 2011].
- If state law permits, consider providing noise suppressors for gun barrels [NIOSH 2011].
- Establish effective engineering and administrative controls:
 - Apply appropriate noise control measures, such as sound transmission barriers (i.e., walls, earthen berms), and absorptive materials such as acoustical treatments

- and natural vegetative (i.e., plants, trees, grass) buffers to limit noise in nearby areas [MN DNR 2003].
- If possible, use non-porous materials, coatings, or plastic covers on all contact surfaces to make them easier to clean.
- Limit the length of time that workers and shooters use the firing range: rotate assignments and provide quiet, clean, break areas.
- If you operate a range with ballistic or overhead baffles and wall structures, consider using fans behind the shooters and pointed down-range in order to provide sufficient air movement away from the shooters.
- Routinely clean the range using proper techniques and disposal methods. Do not use dry sweeping, wiping, or dusting. Use wet cleaning and HEPA vacuums only [NIOSH2011].
- Consider installing wind speed and direction meters.
- Post range safety rules and provide authority to range masters to enforce them.
- Provide workers and shooters with training and information about hazards:
 - Inform workers and shooters about the importance of hygiene in reducing potential lead exposures, post warning signs, and provide convenient washing facilities to encourage frequent hand washing.
 - Prohibit eating, smoking, chewing gum, or tobacco use in areas potentially contaminated with lead.
 - Inform pregnant workers and shooters about possible risks to the fetus.
 - Ensure that workers are aware of symptoms that may indicate a health problem.
 - Tell workers about participating in medical surveillance programs and getting their BLLs tested, even if they don't show symptoms.
- Review OSHA requirements for medical monitoring for lead (29 CFR 1910.1025(j)) and noise (29 CFR 1910.95(d)(e)(g)(h)).
- For best medical and lead management practices, consult the Association of Occupational and Environmental Clinics [Kosnett et al. 2007].
- To reduce lead contamination at your range, consult the EPA's Best Management Practices for Lead at Outdoor Shooting Ranges [EPA 2001].
- Establish a hearing conservation program [NIOSH 2011].
- Provide workers with protective equipment:
 - Provide and encourage the use of double hearing protection devices (earplugs and earmuffs) along with hygiene and cleaning kits.

- Provide skin protection, eye protection, and NIOSHapproved respirators[†] for workers who clean lead-contaminated areas.
- Provide knee or full body pads to limit transfer of lead to clothing.

References

- CFR. Code of Federal regulations. Washington, DC: U.S. Government Printing Office, Office of the Federal Register.
- DHHS [2010]. Healthy people 2020. Occupational Safety and Health Objective 7, Washington, DC: U.S. Department of Health and Human Services.
- DOJ [2012]. Federal law enforcement officers, 2008. Washington, DC: U,S. Department of Justice, Office of Justice Programs [http://www.bjs.gov/content/pub/pdf/fleo08.pdf].
- DOJ [2011]. Census of state and local law enforcement agencies, 2008. Washington, DC: U.S. Department of Justice, Office of Justice Programs [http://bjs.ojp.usdoj.gov/content/pub/pdf/csllea08.pdf].
- EPA [2001]. Best management practices for lead at outdoor shooting ranges. Washington, DC: U.S. Environmental Protection Agency [www.epa.gov/region2/waste/leadshot].
- Goldberg RL, Hicks AM, O'Leary LM, London S [1991]. Lead exposure at uncovered outdoor firing ranges. J Occup Med 33(6):718–719.
- Kosnett MJ, Wedeen RP, Rothenberg SJ, Hipkins KL, Materna BL, Schwartz BS, Hu H, Woolf A [2007]. Recommendations for medical management of adult lead exposure. Environ Health Perspect 115(3): 463–471.
- Mancuso JD, McCoy J, Pelka B, Kahn PJ, Gaydos JC [2008]. The challenge of controlling lead and silica exposures from firing ranges in a special operations force. Military Medicine 173(2):182–186.
- MN DNR [2003]. Outdoor shooting ranges: best practices. St Paul, MN: State of Minnesota Department of Natural Resources.
- NIOSH [1998]. Criteria for a recommended standard: occupational exposure to noise. DHHS (NIOSH) Publication No. 98–126 [http:// www.cdc.gov/niosh/docs/98-126/].
- NIOSH [2003]. Health Hazard Evaluation report: Fort Collins Police Services—Colorado. By Tubbs RL, Murphy WJ. NIOSH HETA No. 2002–0131–2898 [http://www.cdc.gov/niosh/hhe/reports/pdfs/2002-0131-2898.pdf].
- NIOSH [2009]. Preventing occupational exposures to lead and noise at indoor firing ranges. By Kardous C, et al. DHHS (NIOSH) Publication No. 2009–136 [http://www.cdc.gov/niosh/docs/2009-136/default.html].
- NIOSH [2011]. Health Hazard Evaluation report: evaluating noise and lead exposures at an outdoor firing range—California. By Chen L, Brueck SE. NIOSH HETA No. 2011–0069–3140 [http://www.cdc.gov/niosh/hhe/reports/pdfs/2011-0069-3140.pdf].
- NSSF [2010]. Modern sports rifle owners are most active shooters. Newton, CT: National Shooting Sports Foundation, Inc. [http://www.nssf.org/newsroom/releases/2010/041910.cfm].
- Tripathi RK, Sherertz PC, Llewellyn GC, Armstrong CW [1991]. Lead exposure in outdoor firing range instructors. Am J Public Health 81(6):753–5.

Acknowledgments

This document was prepared by Chucri A. Kardous and Susan Afanuh, National Institute for Occupational Safety and Health.

^{*}A written respiratory protection program should be developed and implemented that meets the requirements of the OSHA respiratory protection standard [29 CFR 1910.134].

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention National Institute for Occupational Safety and Health 4676 Columbia Parkway Cincinnati, OH 45226–1998

Official Business Penalty for Private Use \$300



For more information

More information about firing ranges and NIOSH HHEs on firing ranges can be found on the NIOSH firing range topic page:

http://www.cdc.gov/niosh/topics/ranges/

General information about noise and lead exposures can be found on these NIOSH topic pages:

http://www.cdc.gov/niosh/topics/noise http://www.cdc.gov/niosh/topics/lead/

To obtain information about other occupational safety and health topics, contact NIOSH:

Telephone: 1-800-CDC-INFO (1-800-232-4636) TTY: 1-888-232-6348 • E-mail: cdcinfo@cdc.gov

or visit the NIOSH Web site at www.cdc.gov/niosh

For a monthly update on news at NIOSH, subscribe to NIOSH eNews by visiting www.cdc.gov/niosh/eNews.

Reducing Exposure to Lead and Noise at Outdoor Firing Ranges

Mention of any company or product does not constitute endorsement by NIOSH. In addition, citations to Web sites external to NIOSH do not constitute NIOSH endorsement of the sponsoring organizations or their programs or products. Furthermore, NIOSH is not responsible for the content of these Web sites.

This document is in the public domain and may be freely copied or reprinted. NIOSH encourages all readers of the *Workplace Solutions* to make them available to all interested employers and workers.

As part of the Centers for Disease Control and Prevention, NIOSH is the Federal agency responsible for conducting research and making recommendations to prevent work-related illness and injuries. All *Workplace Solutions* are based on research studies that show how worker exposures to hazardous agents or activities can be significantly reduced.

DHHS (NIOSH) Publication No. 2013-104

I MINA'TRENTAI SAIS NA LIHESLATURAN GUÅHAN 2021 (FIRST) Regular Session

Bill No. 73-36 (COR)

Introduced by:

V. Anthony Ada
Frank F. Blas, Jr.
Christopher M. Duenas
James C. Moylan

AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021.

1 BE IT ENACTED BY THE PEOPLE OF GUAM:

- 2 Section 1. Legislative Findings and Intent. I Liheslaturan Guåhan finds that the
- 3 public perception of the effects of firearm silencers or suppression devices have
- 4 largely been exaggerated by movies and pop culture. In reality, the reduction of
- 5 noised produced by silencers and suppression devices is about 30 decibels (30 db).
- 6 ILiheslaturan further finds that June 19, 2017 article in the Washington Post utilized
- 7 the following analogy:
- 8 "How much is the noise reduced? By up to 30 decibels, depending on
- 9 the type of gun, ammunition and suppressor. Currently, gun control
- lobbies are claiming that if "silencers" are available, people will not be
- able to hear a mass shooting that is going on nearby. To test the claim,
- let's consider last week's attack on Republicans who were practicing
- 13 baseball in Alexandria.
- The criminal used a SKS rifle, with 7.62mm ammunition. Without a
- suppressor, the sound of a shot from such a gun is 165 decibels. This is
- more than twice as loud as a jet take-off, if you are 25 meters from the

jet. With a suppressor, the SKS would be about 140db. That's equivalent to being on an active aircraft carrier deck.

3

4

5

6

7

8

9

10

The would-be assassin also had a Smith & Wesson 9mm handgun. In handguns, 9mm is an intermediate caliber — smaller and quieter than larger calibers such as .44 or .45 (inches). Without a suppressor, the S&W handgun is about 157 to 160 db. With a suppressor, that handgun would be around 127 to 130 db. That's about the same as a jackhammer. Thus, the assertions that people will not be able to hear criminal gunfire are not well supported by physics, although the assertions are consistent with how "silencers" are portrayed in movies."

I Liheslatura further finds that suppressors are legal in 42 states and all but two of 11 these states (Connecticut and Vermont) allow their use for hunting. There are three 12 main reasons people own suppressors and silencers: reduction of noise pollution, 13 hearing protection, and safety training. Suppressors reduce noise by about as much 14 as earmuffs do. No one would ever suggest that a suppressor is an acceptable 15 replacement for muffs, but suppressors are a very good supplement to reduce the 16 sound the reaches the inner ear. Using a combination of a suppressor, earmuffs, and 17 ear plugs can reduce the perceived sound to around 100 to 125 decibels, the same as 18 a power lawn mower to a jackhammer. 19 Under federal law, purchasers of suppressors and silencers must go through the same 20 procedures as those required for the purchase of an ordinary firearm and several 21 more. Therefore, those with felony criminal records, history of mental illness or a 22 history of alcohol and substance abuse will be unable to secure clearance to purchase 23 these devices. 24

- 1 Suppressors are regulated under the National Firearms Act (NFA) of 1934, which
- 2 falls under the purview of the Bureau of Alcohol, Tobacco, Firearms and Explosives
- 3 (ATF). To legally purchase or possess a suppressor you must:
- Be at least 21 years of age to purchase a suppressor from a dealer.
- 2. Be at least 18 years of age to purchase a suppressor from an individual on a
 Form 4 to Form 4 transfer (contingent on state laws).
- 3. Be at least 18 years of age to possess a suppressor as a beneficiary of a trust or as a member of a corporation (contingent on state laws).
- 9 4. Be a resident of the United States.
- 5. Be legally eligible to purchase a firearm.
- 6. Pass a Bureau of Alcohol Tobacco Firearms and Explosives (BATFE)
 background check with a typical process time of 8 to 10 months.
- 7. Pay a one-time \$200 Transfer Tax.
- 8. Reside in one of the 42 states that currently allows civilian ownership of suppressors.
- 16 I Liheslatura further finds that ear plugs or ear muffs or both should be used at all
- 17 times even when using suppressor. These devices are generally effective in
- 18 conditions where noise levels are less than 105 decibels. Their effectiveness
- decreases with increase in the number of shooters on a firing range at any given time
- and the length of time one spends on the firing range.
- 21 It is the intent of *I Liheslatura* to remove the restrictions on silencers and suppressors
- 22 in Guam's firearm laws subject to the provisions of federal laws, rules, and
- 23 regulations. The combination of silencers/suppressors and traditional hearing
- 24 protection such as ear plugs and ear muffs will reduce the risk of noise-induced
- 25 hearing loss from firearms training and hunting.

1 Section 2. Short Title. This Act shall be known as the "Hearing Protection Act of

2 2021."

3

4 Section 3. § 60102 of Chapter 60, 10 GCA is hereby amended to read as follows:

5 "§ 60102. Ownership, etc., of Certain Firearms Prohibited.

6 The manufacture, possession, sale, barter, trade, gift, transfer or acquisition of any

7 machine guns, sub-machine guns, automatic rifles or any other firearm not a rifle

8 having a barrel length of sixteen (16) inches or greater or not a shotgun having a

barrel length of eighteen (18) inches or greater or a revolver or pistol having a barrel

length of more than twelve (12) inches is prohibited. Mufflers, silencers or devices

11 for deadening the sound of discharged firearms are also prohibited. Any person

violating this Section shall be guilty of a felony which shall be punishable for a term

of imprisonment of not less than three (3) years and a fine of not less than One

14 Thousand Dollars (\$1,000). Imposition of sentence shall not be suspended and the

offender shall not be eligible for parole nor work release until the term of

imprisonment prescribed herein has been completed nor may probation be imposed

in lieu of this portion of the offender's sentence. Provided, however, that in the case

of an offender not previously convicted of a felony, the court may sentence the

offender to not more than two (2) years imprisonment and the provisions of this

Section prohibiting probation, suspension, parole or work release shall not be

21 applicable to such offender."

22

15

16

17

18

20

23 Section 4. § 60103 of Chapter 60, 10 GCA is hereby amended to read as follows:

24 "§ 60103. Ownership, etc., Permitted.

25 Any person who qualifies under this Chapter may lawfully own, possess, use or carry

any rifle, shotgun, pistol or revolver not prohibited by § 60102 subject to the

- conditions and penalties provided in this Chapter. Mufflers, silencers or devices for
- 2 deadening the sound of discharged firearms are permitted provided that the
- 3 specifications, purchase, ownership and possession of the device complies with
- 4 applicable federal laws, rules and regulations."



Sinadót Jose "Pedo" Terlaje

I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

COMMITTEE REPORT DIGEST

I. OVERVIEW

Bill No. 73-36 (COR) was introduced on <u>March 09, 2021</u> by <u>V. Anthony Ada, Frank Blas, Ir., Christopher M. Duenas, James C. Moylan</u> and was subsequently referred by the Committee on Rules to the Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit on Wednesday, <u>March 10, 2021</u>.

The Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit convened a public hearing on Bill No. 73-36 (COR) on Monday, April 05, 2021 at 2:00 p.m. VIA Zoom Platform.

Public Notice Requirements

Public Hearing notices were disseminated via Email to all Senators and all main media broadcasting outlets on Monday, March 29, 2021 (5-Day Notice), and again on Friday, April 02, 2021 (48-Hour Notice).

Senators Present

Senator Jose "Pedo" Terlaje, Chairperson Senator Frank Blas, Jr., Vice Chairperson Speaker Therese M. Terlaje, Member Senator V. Anthony Ada, Member Senator Christopher M. Duenas Senator Joanne M. Brown Senator James C. Moylan Senator Telo T. Taitague

II. SUMMARY OF TESTIMONY & DISCUSSION

The public hearing was Called-to-Order at 2:00 p.m.

Senator Jose "Pedo" Terlaje: Good afternoon ladies and gentlemen, this virtual public hearing is now called to order, today's date is April 05, 2021 and the time now is exactly two o'clock in the afternoon. The committee on public safety and emergency response, military and veterans' affairs, mayor's council of Guam and public transit is conducting a public hearing today on bill number 73-36 COR. For the record and in conformance with section 8107 of chapter 8, title 5 GCA, the first public hearing notice was sent out on Monday, March 29, 2021 to adhere to the five working days requirement and the second public hearing adhering to the 48 notice 48 hours' notice was sent out on Friday, April 02, 2021 and in addition to these notices we also sent it out to uh social media outlets and post it on the Guam legislature website and we will begin with bill



Sinadót Jose "Pedo" Terlaje

I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

number 73-36 COR authored by Anthony Ada, co-sponsored by Frank Blas, Jr., Christopher M. Duenas, James C. Moylan and this is an act to amend section 60102 and 60103 of chapter 10, title 10 Guam code annotated, relative to removing the restrictions on ownership of suppressors and silencers from Guam law by enacting the hearing protection act of 2021. So, before we even start let me let me just announce and recognize some of the people that have signed up for this hearing uh first is Martin Howard and I think Mr. Howard you're gonna be the first one to testify because I know you have a prior engagement so we're gonna go with you first but then uh we go to uh Lee Webber, Kenneth Gibbons, Darren Alvarez, Ronbo Laguana, Knox Williams, Hardy Vy, Joseph Salas, Deborah Reyes and I would also like to recognize some of our members of the 36th Guam legislature Tony Ada who is the uh the author for this bill Senator Joanne Brown, Senator Jim Moylan and Senator Telo Taitague. So, we'll start with uh Martin Howard. Martin, you can go ahead and do your presentation on your testimony.

Martin Howard: Mr. Chair, thank you very much sir uh are you able to hear me?

Senator Tony Ada: Mr. Chairman? Uh, prior to Mr. Martin beginning his testimony can I go ahead and give my opening remarks sir on the statement.

Senator Jose "Pedo" Terlaje: Okay, Okay, tony go ahead go ahead.

Senator Tony Ada: Thank you, Mr. Chairman.

Senator Jose "Pedo" Terlaje: Uh, I was gonna have you do that once we do the introduction and okay that's okay go-ahead senator.

Senator Tony Ada: Okay, thank you Mr. Chair. Buenas yan Håfa Adai. Good afternoon everyone and thank you for being here on this uh zoom public hearing for bill 73-36 Mr. Chairman. Thank you so very much sir for having this public hearing. I want to begin my remarks by stating that there are in reality no such things as silencers as they are no devices that can make a firearm silent. Those movies that portray assassins using silencers they completely muffle the sound of the gunshots are complete fiction. As the legislative intent of this bill accurately describes these devices are for hearing protection while training or hunting and the use of external protection is always recommended. Training is an important component of firearm safety for any gun owner or prospective gun owner I fully support the second amendment and I believe that law abiding firearm owners understand the importance of training to be proficient with their firearms depending on the caliber of the ammunition a firearm produces between 140 to 180 decibels of sound when fired. When a suppressor is added to the firearm supersonic rounds average 130 decibels. Which is about the same as a military aircraft on takeoff and a subsonic round produces an average of 110 decibels which is the volume of a rock concert. Since prolonged exposures of 70 decibels are higher and single exposures to 120 decibels causes hearing loss even when a suppressor is used to lower the sound level the shooter it is recommended the shooters still wear



Sinadót Jose "Pedo" Terlaje

I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

external hearing protection such as ear plugs or earmuffs when using these devices. You know Mr. Jimmy May, in one of his comments mentioned that 30 decibels is the difference between ringing ears and ruptured eardrums. It's the difference between being able to have a loud conversation with your spouse and not being able to talk to your spouse for months without shouting. No one will ever be able to use a suppressor to hide the sound of any firearm. Additionally, these devices cost upwards of eight hundred dollars. That is more than the price of most firearms. There is also a two-hundred-dollar tax stamp that is paid to the federal government along with an extensive background check that could take anywhere from eight to twelve months. As these devices are legal in over 40 states, the largest consumer group for any for these devices are firing ranges and law enforcement training facilities. Firing ranges usually loan them or rent them to patrons while in their facilities and there is a smaller market for these devices among hunters. I ask everyone to consider the science rather than the in inaccurate portrayal of these devices by Hollywood. People are entitled to their opinions on the possession of firearms and the second amendment they are not however entitled to their own facts. It is a complete fabrication of facts for anyone to accept that these devices make any firearm more lethal. The truth is that these devices make firearms safer. Mr. Chairman, that is my opening statement I look forward to hearing the testaments and uh statements from those who are here to testify on bill 73-36. Thank you, Mr. Chairman.

Senator Jose "Pedo" Terlaje: Thank you very much Senator Ada. I also want to recognize our speaker of the 36th Guam legislature Therese Terlaje and also uh Chris Duenas just walked in. Chris, how are you? Can you hear me?

Senator Chris Duenas: very, very, yery, good lai senator. I wanted to make sure my hair was all in the right place, so I'm welcome I'm glad to be here.

Senator Jose "Pedo" Terlaje: uh my picture is kind of blurry so I can see a little bit of hair and then uh we're gonna start with some of the testimonies uh we're gonna start with uh Martin Howard he asked that uh he go first because he does have another engagement that he has to go to so uh Martin go ahead sir.

Martin Howard: Good afternoon, senator. Can you hear me, sir? Can you hear me?

Senator Tony Ada: yes, we can hear you.

Martin Howard: thank you um thank you uh for uh letting me speak first I just have an engagement with my kids that I attend to. uh but I sent a letter to uh the senator's office, but I'll guess I'll just read that it's going to sound very similar to Senator Ada's statement we seem to have the same opinion on this but at any way I'm a 16-year Guam resident, I'm a retired U.S Marine, a former Deputy Sheriff and a former federal law enforcement officer. I've been around firearms since I was about seven so that's almost 50 years now. I'm also an NRA Instructor and



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

I'm a strong advocate for responsible gun use and training. I suffer from modern hearing loss and more significantly to my life moderate to severe tinnitus for which there's no cure. Tonight, this is actually the most common disability reported by the Veterans Administration and it's aggravated by noise between the U.S Government and you know private companies they spent billions of dollars uh invested to find a viable treatment for this condition and I know at least the Marine Corps but the U.S Military in general is moving more towards suppressors for all troops for the same reason that we're discussing this here which is hearing protection. Uh suppressors and uh Senator Ada mentioned there's no such thing as a silencer they just reduce the noise of gunfire to a more safe hearing level that's all they do. Guam has some of the most restrictive firearm laws in the United States few jurisdictions require firearms ids and even fewer required gun registrations. Given our already strict gun laws here I don't understand why should we should be prohibited from owning legally purchased suppressors like residents of 42 out of the 50 United States. We should have the rights we should have the same rights as a responsible gun owner who is comply with the laws covering ownership of firearms why should not be able to own a suppressor to protect my hearing or even just because I want one. Uh, I'd also like to point out to those who are concerned about legalization of suppressors would result in some kind of a crime wave it's just not the case while it's true that television often portrays criminals using suppressors it's actually extremely rare in all my years of law enforcement, I saw exactly two suppressors on firearms used by criminals. Suppressors are quite expensive, they're not that easy to get, and they make a firearm much less concealable. What's crystal clear is that law is prohibiting uh possession of suppressors are only going to affect law-abiding citizens which is true for just about every law related to firearms. Criminals don't care about laws. That's pretty much it for my statement again sir I appreciate you giving me an opportunity to speak first so I can uh get out of here in a few minutes.

Senator Jose "Pedo" Terlaje: Uh, thank you very much Mr. Howard. Is there any senator that wants to post the question or remarks to uh to Mr. Howard. Go ahead um madame Speaker Therese Terlaje.

Speaker Therese Terlaje: thank you Mr. Howard. Thank you, Mr. Chair. I just wanted to know if you're going to leave early if I could get uh you are an instructor here on Guam right now and where do you do that? Is there a business or where is that done?

Martin Howard: uh yes ma'am I work a bit with Gina Garrido she has her own she's probably the most she's probably the busiest instructor on Guam. Uh, I only teach you know alongside her. I just I have my own business and I just don't have a lot of time uh, but I do uh engage quite a few people uh about you know firearms laws and I am a real estate broker so uh I have contact a lot of new people that come in and you know I can educate them on the firearms laws and I'm particularly interested in you know laws pertaining to self-defense.

Speaker Therese Terlaje: all right, okay. Uh, what is the name of Gina Garrido's business?



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

Martin Howard: I believe it's a g-shot small-lines training uh she's really easy to find online.

Speaker Therese Terlaje: all right, thank you very much. Thank you, Mr. Chair.

Chairman Jose "Pedo" Terlaje: Thank you, madam speaker. Is there anybody else that wants to post uh a question to Mr. Howard? If not, we'll just go on to the next one in line uh Mr. Lee Webber. Go ahead, sir.

Lee Webber: Oh, thank you, Mr. Speaker. Um, it's an honor to be here with you all today I my remarks are brief I suffer from severe tinnitus and hearing losses from uh explosions. I too served with the marine corps only I was the foreman of marines uh served with marine corps reconnaissance in Vietnam, came to Guam medevac here in 1968. Uh, I think that the legalization of uh suppressors is probably one of the most uh forward-thinking things I've seen happening lately. Um, it saves hearing and as Mr. Howard said one of the biggest problems is people have hearing loss just like I do uh uh, t they have uh tinnitus and tinnitus is a real severe issue because it can keep you awake at night depending upon how bad it is. Mine was created by gunfire and explosions in Vietnam uh I spent 63 days to siege at caisson so explosions were quite common uh and I think that adding uh suppressors to the ability for Guam shooters is a very good thing it will save people's hearing it and they do have to wear hearing uh protection on top of it uh but it it'll just lessen the probabilities of people running into tinnitus and having hearing losses and I can tell you having both of them uh if there were a way I could get rid of the tinnitus that's the one I'd get rid of first. I can always yell but I appreciate uh the fact that uh the senators are putting this forward and stand ready to answer any questions that any of you may have for me.

Chairman Jose "Pedo" Terlaje: Lee is that it?

Lee Webber: That's it sir.

Chairman Jose "Pedo" Terlaje: Is there any other is there any other senator that wants to post a question to Mr. Webber? If not would just go to uh before I do that I uh I just want to recognize Senator Frank Blas who just walked in. Uh, Senator Blas, thank you very much for joining us. Next in line uh we can go ahead and allow Kenneth Gibbons to make his presentation sir go ahead.

Kenneth Gibbons: Uh good morning sir and thank you for having me um I appreciate the opportunity to speak um however if I could defer my time to Mr. Knox Williams. I reached out to him when I found out that there was a public hearing on the legalization of suppressors on the island. Mr. Knox Williams is the president and the executive director of the American Suppressor Association. So, I believe his testimony and his expertise in this area would be greatly appreciated by everyone here if that's possible.



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

Chairman Jose "Pedo" Terlaje: Again, is there any other senator that wants to pose a question to Mr. Gibbons. If not, we will just go to the next person in line. Darren Alvarez sir go ahead.

Darren Alvarez: Uh, good afternoon this is Darren Alvarez uh I agree with Ken well I guess we'll get to uh Mr. Knox here soon enough. Um, good afternoon senators and citizens and everyone else uh my name is Darren Alvarez I'm a resident in Santa Rita, I've been living in Santa Rita for about 11 years, ever since I was stationed here as an active duty marine apparently there's a bunch of marines that want to talk about suppressors. My family and I fell in love with Guam and uh after I left the marine corps decided to stay here and continue to work. I now work as a civil servant on Anderson Air Force Base. I took an afternoon of leave today so I could talk about the Hearing Protection Act, which is the bill that we're looking at now. In regard to that I am also an NRA pistol and rifle firearms instructor and have been for 12 years. I've trained hundreds of citizens looking to learn and improve with a firearm. This is the second time that I've come to the legislature in my time in Guam as a private citizen. Um, that was first the first time was in 2014 when I worked with Senator Tony Ada, thanks sir and Senator Duenas along with some local gun clubs and groups to help rewrite our concealed carry license regulations. That was successfully passed by the 32nd legislature and I'm hoping that this bill will also be passed. This bill is ultimately about allowing firearms suppressors on Guam currently it's illegal to have them here. I think most of us are aware of that, but they are allowed in 42 states. So, some basic information a lot of people have already said the same stuff. Suppressors are not what they were in in the movies. They are not silencers; they do not make things into a whisper. At a minimum they have quite significant sound, and this simply only helps them with the hearing. As the text of the bill itself says it only muffles the sound about 30 decibels. It doesn't sound like very much, but every little bit helps. I unfortunately suffer from pretty significant hearing loss. Some of it was because I was a helicopter pilot with the United States Marine Corps and other parts are partially from me being in combat and also an avid gun shooter. Obviously, I've been exposed to loud intense noise almost all of these events I was able to wear at least some hearing protection but even with hearing protection you get hearing loss even with that you know sometimes it does damage hearing loss and unfortunately hearing is not something that heals. Once you've lost your healing or your hearing it's gone it doesn't come back. So, you may not be able to see it as we're on zoom currently I'm wearing hearing aids. I have these little suckers popped in the ears they were prescribed to me after I after I retired from the Marine Corps from my doctors so that I can hear correctly. I've been shooting off and on for over 30 years amazingly covid has actually had me shooting even more lately because we have to stay in their social distancing uh, I've been teleworking almost daily for the last year and I've found much of my time shooting as a hobby. I've even started hunting and got my first hunting license uh last year from the Guam Department of Agriculture. A suppressor would significantly help me with my current and future hearing loss it would also be appreciated by my neighbors who hear my target shooting near my neighborhood obviously in a safe manner. Suppressors aren't even more regulated than pistols and they require quite the commitment to want to own one. After purchasing one from a licensed



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

dealer, I'm going to fill out the paperwork which will be checked over, studied and validated by the ATF. It will include a felony background check exactly like what Guam requires before granting a firearms license. Normally, it'll take anywhere from eight to ten months to get that final approval from the ATF before you can receive the suppressor that you purchased. So, with all those things in mind I requested this body vote yes to the Hearing Protection Act and then Guam's laws so that I might be able to own a suppressor. Thank you.

Chairman Jose "Pedo" Terlaje: Thank you very much, Mr. Alvarez. Is there any other senators that wants to uh post a question to Darren Mr. Alvarez. If not, we'll go to the next person in line. We're gonna go with Knox Williams because uh I think he asked to go next because he does have another commitment to go to so we're gonna go ahead and recognize Knox Williams. Go ahead, Mr. Williams.

Knox Williams: Mr. Chairman, thank you very much for allowing me to be a part of this. My name is Knox Williams, I'm the president and executive director of an organization called the American Suppressor Association. This is our 10th year doing what we do and all we do is focus on pro-suppressor advocacy, so I've personally worked in about two to three dozen states we helped three states legalize suppressor ownership, we've helped 18 states legalize their use while hunting. So, to say that we're familiar with the issue is a fairly large understatement. Um, at the end of the day I mean just to kind of echo some of the sentiments from Senator Ada and everyone else this really is a commonsense piece of legislation that really does and would have a meaningful impact on people's hearing. Suppressors are one of the only tools that can reduce the noise of a gunshot at the source and we know through scientific studies and multiple peer reviewed pieces of studies as well that any exposure to a gunshot without proper hearing protection can and will lead to permanent irreversible hearing damage. Whether that's through single shot exposure or through time it it's not a question of if it will happen but rather to what extent. Um, I have a cutaway of a suppressor to kind of show what they actually do um but this is what it would look like um what you normally would see but on the inside I don't know if everyone can see it you basically have a muffler for a gun it's the exact same science because it was invented by the same man named Hiram Percy Maxim at the turn of the 20th century 1909 was when his patent was approved. But effectively you have the bullet travels this way and as it goes through the gases that propel it get trapped by what's called baffles and these baffles have dead space called expansion chambers that allow the gases to slowly cool. It's the same concept as if you have a balloon that you've blown up very tight and you pop it with a needle it's going to make a pop it's going to be an audible noise if you take that same balloon with the same gases inside it and simply untie the end you can let those gases disperse slowly and it's not going to make as much of an audible noise. That's the concept with a firearm suppressor you're allowing those hot gases to cool in a more controlled environment before they reach the outer and colder atmosphere. That's what really scientifically makes the noise diminished. Suppressors only muffle the noise that's caused from the muzzle blast so the actual gas is reaching the atmosphere as it propels it out of the end of the muzzle they do nothing for the action of a firearm so semi-



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

automatic firearms in order to operate um they're going to have unsuppressed gases siphoned off so they're generally going to be louder than say a bolt rifle um for hunting or like a 22 bolt rifle for recreational target shooting things like that um and it does nothing to diminish the noise of a firearm excuse me of the actual trajectory the bullet. So, the bullet is actually one of the loudest noise sources and I know Senator Ada made a quick allusion to subsonic ammunition that can reduce the noise somewhat significantly, but it does not by any stretch make it silent. The quietest suppressor on the smallest caliber which would be 22 long rifle which is what we used when we were boy scouts for our rifle merit badge reduces to about 110 decibels and to put that in perspective according to the national institute for occupational safety and health that's about as loud as a jack hammer striking concrete. In the context of shooting, it is much quieter but in the overall broad context it's still a fairly loud noise source. Loud enough that as multiple people have stated you should still wear traditional hearing protection like earplugs and earmuffs when you're using a suppressor on a firearm. To that end you know the biggest argument that we hear against suppressors is that it somehow constitutes a threat to public safety and that's simply not the case. How can something be loud enough that you should still wear earplugs and earmuffs but quiet enough that somehow people can't hear it. It just factually doesn't line up. In 2017, Ronald Turk who was the number two in charge at ATF and they've been um in charge of suppressor regulations since that was transferred over from the treasury and when ATF was stood up, they took control I believe in 1968. But, um he put out a white paper in 2017 and one of one of the main topics that he talked about was firing suppressors he did a deep dive into the federal regulations and ATF's own recommendations on where that should go, and he determined that they do not constitute a threat to public safety. Um, for in terms of experts talking about the issue that's straight from straight from the source. A couple other things that I think are worth noting um in addition to the heavy federal regulations which I think have been touched on pretty sufficiently but I'm happy to field any questions if any anyone has any. Um, according to Dr. William Clark who is the Director of the Washington University School of medicine's program and audiology. In one of his studies, he put out a statement that said and I quote the most serious threat to hearing comes from recreational hunting or target shooting. In other studies, we've pieced together that about 70 to 80 percent of hunters never wear hearing protection when they're in the field which is why there's a huge correlation uh with recreational shooters and hunter's um incidences of noise induced hearing loss and tinnitus. The CDC uh actually conducted a study in California where they were looking at how to reduce um noise induced hearing loss amongst their trainers and in that study, they said, and I quote the only potentially effective noise control method to reduce students or instructors noise exposure from gunfire is through the use of noise suppressors that can be attached to the end of the gun barrel. The National Institute for occupational safety and health issued a similar study in 2014 and in that they said, and I quote if feasible and legally permissible attached noise suppressors to firearms to reduce peak sound pressure levels. Um, again those are two very independent sources that came to the same conclusion that firearm suppressors are one of the most effective ways to really dampen that noise and make it a safer experience for people law-abiding citizens who have gone through a massive federal background check um paid the 200 dollar tax, waited the eight to



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

ten months and it's a variable it can range anywhere from we've heard you know recently about six months we hear people waiting 18 months. So, there's no rhyme or reason to it um it is just it's highly variable but that's why in 2019 a group called the National Hearing Conservation which is a private group that we've been working with for a while we've took them out and hosted some demonstrations with some of their members to educate them on fire suppressors they're completely independent of firearms all they do is work on studying and sharing data and research that the members involved with their association have come up with on noise induced hearing loss and tinnitus that is their sole purpose. They came out with a statement to us in a letter and I'd be more than happy to share that with everyone where they said, and I quote although firearm suppressors do not completely eliminate the risk of noise-induced hearing loss from firearms noise the risk can be significantly reduced. Therefore, the National Hearing Conservation Association supports the use of firearm suppressors as a form of an engineering noise control to reduce hazardous firearm noise exposures. Um, again these guys have no dog in the fight proverbially, but their intersection is prevention of preventable hearing damage and that's really what this bill seeks to do and what it would accomplish um for the people who chose to go through the process um and use suppressors. As was stated earlier as well noise pollution is a very big concern especially in urban areas, I personally have not been to Guam I would love to come out there and hope to have the opportunity at some point. So, I apologize that I don't and I'm not super familiar with the population density, but I'd imagine if it's anything like any other islands that I've been on uh the noise of gunshots travels pretty far and it's not a pleasant noise to hear if you're not out there shooting. Um, suppressors won't eliminate that noise, but they will certainly reduce it certainly reduce uh the sound level and the distance that it will carry. Um, it'll still be able to be heard but again it won't be nearly as unpleasant as unsuppressed gunfire, and which is a positive side effect from the noise reduction. One final thing that I'd like to note um is that when we say that suppressors can reduce between an average of about 20 to 35 decibels so calling it 30 decibels for a nice round number um sound pressure levels work on a lot of logarithmic scale they're not linear so you know 10 decibels is not twice as loud as five suppressors rather for every three decibels that you increase you're actually doubling the sound pressure energy um that enters your ears and that over time has a different scale that will affect basically your maximum daily exposure limit. According to OSHA the Occupational Safety and Health Administration any noise exposure over 85 decibels you can safely expose your ears to it for eight hours without requiring traditional hearing protection. As you double that you cut that time value in half. So, once you get up to 88 decibels that time gets cut down to four hours, at 91 decibels it's two hours, 94 it's an hour and up and up and up until you hit what's called kind of the line in the sand which is set at 140 decibels and that's the line at which any exposure above that sound level can and will lead to permanent hearing damage. Every single gun that you've ever shot that uses gunpowder exceeds that sound pressure level and when you talk about 30 decibels again that is a massive difference if you follow the logarithmic scale think about like sizing on computers you know kilobytes to megabytes to gigabytes it's the same sort of thing or the Richter scale is another example of a logarithmic scale. But 30 decibels actually translates to roughly a thousand times the sound energy level. Um, so to be able to cut that down by a



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

thousand is tremendous still keep in mind that it is a very loud noise but not transmitting that sound energy into your ears it also transmits through your cheekbones so ear plugs and ear muffs are only as effective as they can be because you're still going to have energy resonating through your bones which sounds crazy but it's true especially when you're talking about noises as loud as gunfire. Suppressors really are one of the only things that can help make shooting a truly safe experience from a hearing perspective. I know that's a lot to digest but again thank you all very much for allowing me to participate and I'd be more than happy to field any questions.

Chairman Jose "Pedo" Terlaje: Any questions for Mr. Williams? If not let me just go back to uh Mr. uh Gibbons because he wanted to say something that he probably is

Senator Telo Taitague: Mr. Chair, I do have a question for Mr. Williams.

Chairman Jose "Pedo" Terlaje: okay, go ahead.

Senator Telo Taitague: Okay, thank you Mr. Williams for taking the time out I'm not sure what state you're in right now but I greatly appreciate you bringing your um the information you have uh with you to us it's probably what midnight there or something so we'll try not to keep you too long. Um, a good information that you provided you know um I actually suffer from uh tinnitus as well and that's just years behind a drummer for many years but other reasons um I have a question with regards to the Olympic team the um their call I guess there's a particular the shooting team is that do they use this type of um uh silencers or you know uh suppressors when they're out shooting at the Olympic level.

Knox Williams: Well Senator and Mr. Chairman, um honestly I don't know um those guns that they use are so highly specialized that it's doubtful that they do um suppressors um don't alter the path of a bullet by much but they can and people can get very finicky on that um in fact generally they're going to help and improve accuracy to an extent largely because you don't have that that flinch and that anticipation of the noise of the gunshot but for Olympic shooters that's so highly specialized I don't honestly have an answer for that I apologize.

Speaker Therese Terlaje: No worries, you would you would think because these people train you know um many times during the week or you know day in and day out and having that exposure to you know the sound that loud sound it can be very damaging um for them so I was just wondering if you had any background with regards to the Olympic team uh using these because I think I think it's needed but I appreciate again uh the information you have but if there's anyone else that knows anything about the Olympic team utilizing any silencers I appreciate it but until then thank you Mr. Chair for the opportunity I just wanted to ask that question.



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

Chairman Jose "Pedo" Terlaje: Thank you very much senator. Let me just go back to Kenneth Gibbons uh because I know that you missed something when you first give the presentation go ahead Kenneth.

Kenneth Gibbons: Thank you senator, I appreciate you coming back to me. I did want to refer to Knox Williams because obviously as you've seen he does have a vast amount of knowledge on this topic and that's why I reached out to his organization. Anything that I'm going to say is just going to be echoing what everybody else has touched on um, but I'd like to say you know I am a lifelong resident of Guam, I'm a Federal Law Enforcement Officer with 20 years of service and I'm obviously a strong advocate for second amendment rights. I'm here today like Darren Alvarez the second time coming before Guam's legislative body. On behalf of firearms owners on Guam um to express my support for bill number 73-36, the Hearing Protection Act of 2021. You know and again I'd like to thank you Mr. Chairperson and the rest of the members of this committee for giving this bill the audience that it deserves. I'd also like to thank Senators Ada, Senator Frank Blas, Senator Chris Duenas and Senator James Moylan. I'd like to thank you for being brave enough to introduce legislation that will undoubtedly draw negative criticism not only from the public but from your fellow lawmakers. Far too often our elected officials choose to toe the line when it comes to issues that are difficult to address and because you've introduced this legislation um, I truly believe that you're an asset to our community and you exemplify what community leaders should be. I've already written um well I've submitted my written testimony in support of this bill to all members of the Guam's legislative body via email as early as this morning. Again, everything that I'm I submitted in my testimony echoes what everybody else has already said and the reason and if you notice that everybody's saying this is because these are the facts. There's no way around it that's the truth of this. It can't be spun by the media; it can't be spun um by Hollywood to be true or to be to be what Hollywood makes it to be okay suppressors also known as silencers do not make firearms silent. It's physically impossible okay and as far as their use in crime again echoing what Mr. Williams said as written by Ronald Turk the Associate Deputy Director and Chief Operating Officer at ATF. The use of suppressors in crime is so minimal that um let me go ahead and quote this. This is from the white paper consistent with this low number of prosecution referrals silence are very rarely used in criminal shootings. Given the lack of criminality associated with silencers, reasonable to conclude that they should not be viewed as a public as a threat to public safety necessitating the NFA National Firearms Act classification and should be considered for reclassification under the Gun Control Act. Basically, what he's saying is remove it from the National Firearms Act. Which, currently restricts it to the process that it is going through now where you submit your fingerprints, you submit a photo, you file your form 4, you pay your 200 tax, you wait anywhere from six to 18 months um where if they remove it from the NFA and is regulated under the Gun Control Act it would be as purchasing a regular firearm which again you still go through a criminal background check. Okay, um the reason they're not using crime is criminals simply aren't interested in suppressors because they do not actually silence the gunshot. They also add length and weight to their host firearm, which makes them difficult to conceal. Not only that, possessing a suppressor during a crime carries stiff



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

Federal Penalties. I think if I'm not mistaken the Federal Penalty for simple possession of a suppressor without proper license is 30 years. That's most that's more time than most crimes warrant if convicted. You know in contrast, the use of knives which are not regulated to the extent of suppressors are and not regulated at all in some jurisdictions. The use of knives and crimes far out far exceeds that of the use of suppressors in crime. According to statista.com there were 1,476 murders in the United States by use of knives or other cutting instruments in 2019 alone, whereas the ATF has confirmed that silencers are rarely used in crimes despite their explose explosive explosion in popularity. The agency has only recommended 44 silencer related crime prosecutions over the last decade. That roughly means 0.003 percent of silencers are used in crimes each year. Okay, that's again almost insignificant unfortunately criminals aren't going to follow any laws no matter how much legislation you throw in front of something to regulate it to outlaw it they're not going to follow the law they're criminals. Any legislation that you throw in front of this you're only affecting law abiding citizens. You know unlike many firearms issues pro-suppressor reform has received a tremendous amount of bipartisan support across the country. In the past several years, three Democratic Governors have signed standalone prosuppressor bills into law. Governor Steve Bullock of Montana in 2015, Governor Peter Shumlin of Vermont in 2015, and Governor Maggie Hat Governor Maggie Hassan of New Hampshire in 2016. Most recently, at the Federal level h.r. 95 the Hearing Protection Act was reintroduced to the 117th Congress on January 4th, 2021. Also, at the state level lawmakers from several states including Connecticut, Illinois, Maine, Massachusetts, New York, Rhode Island, and Vermont have all introduced pro-suppressor legislation. By supporting this legislation you're doing your part to give sportsmen and women who call Guam home the option to use suppressors, ensuring that future generations will no longer have to choose between their passion in the field or ranges and their hearing. For those who live near shooting ranges and hunting lands, suppressors will make law abiding gun owners' better stewards of their neighbors by reducing the noise pollution and complaints and that's for these reasons I humbly ask your support of bill number 73-36. Thank you.

Chairman Jose "Pedo" Terlaje: Thank you very much, Kenneth. Is there any uh senator that wants to post a question to um Mr. Gibbons or anybody else okay so I'm just gonna go down the line here I think the next one is uh my good friend Ronald Laguana. Go ahead, Ronald Sir.

Ronald Laguana: (Spoken in Chamorro, translated to English) Hi, can you all hear me? Hello and good afternoon everyone, okay! Wait let me talk about our island and how we can change it up a little bit. Senator Pedo, I know you understand, and you can speak to others that don't understand. I want to give a big thank you to all the Republicans that's here. Senator Tony Ada, Senator Jim Moylan, Senator Telo Taitague, Senator Chris Duenas, Senator Frank Blas, Senator Joanne Brown it's a good turnout and a big thank you and especially to the most highest Speaker Therese Terlaje that's here to represent the Democrats and Senator Pedo, and yes I do support this Bill No. 73 - 36 Lee, Martin, Darin and myself. This is the only ear that works, this other one is fake. I am a gun enthusiast and I love that I get this opportunity to protect our ears. I don't have



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

a problem with this. I support Martin, Lee, Knox, Ken and Darin to protect our ears and I support the 2nd amendment. That's the reason why I support this Bill to protect my children and my boys. Especially when they shoot at the target range as a hobby. That's all I want to say is a big thank you and I support this, Bill. And please Senator Pedo all your partners on the Democrat side know to support this Bill and let's stay together for the better. Thank you very much!

Chairman Jose "Pedo" Terlaje: Thank you very much, Ronald. Let me just break that vernacular into what Ronald had mentioned in English. He's talking about the protection of your eardrum and everything else that's basically what he was saying to us and he's supporting this bill. Thank you, Ronald. Next in line we want to go to uh Hardy Vy Tan Vy.

Hardy Tan Vy: Yeah, thanks for the opportunity to speak and uh senators as well uh there's not much I need to say because everybody else has already pretty much had said it better than I could have ever. The only thing I can I guess I can add is uh that uh well what I want to say is I've actually been trying to figure out how to uh pitch this idea also quite some time so it's quite happy to see um you know come up as a bill. I know it's kind of jumping ahead but I've always had my eyes on legalizing NFA items. You know I'm not one for prohibition but for fair regulation. I don't see how it can be done especially since uh most states in the U.S is already doing it you know we could easily follow suit. As already been mentioned with the uh long approval times and tax stamps and registration fees things that you know the reason why I kind of uh focus on this one also on the side sometimes is because I think there's some, I feel there's some benefits for Guam. Social and economic benefits in some way where you know that's extra revenue. Like I was just doing some rough estimates over the like a couple over the years at least like just let's say 10 people every day for example just registers this uh one suppressor every day no it's not it's not uh improbable for population 160,000 right. Even if the fee was like 600 bucks for the suppressors just throw a number out there don't do it it's not you know you don't have to use it. If it was 600 bucks 10 people you could pull in about 180,000 a month for the next revenue for Gov Guam. But, uh like what I mean by eyeing like NFA I'm talking about like the other NFA items that uh are also in that classification. Most of the time people who would get a would be willing to invest in the suppressor would also invest in other NFA items and I'm just gonna assuager that one person will probably most likely invest in three NFA items at any given time we should you could uh charge for about 600 a piece. For example, right so if just one suppressor it's already 180 thousand dollars a month extra revenue in a year it's about 2 million something. But if those same people were to actually invest in three NFA items that's a thousand eight hundred. They most likely willing to invest that's an extra what is that five hundred forty thousand I had a calculation. One point four one point something million a month times it by twelve a year I think there's some value in this to take this kind of money invest in the police forces that you know could definitely use this money. So, you know I'm in the camp for uh you know fair regulation if we were to own these I don't mind making the investment to improve social infrastructures and whichever agencies Gov Guam sees fit. That's basically all I gotta add. Thank you very much.



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

Chairman Jose "Pedo" Terlaje: Next in line. Mr. Hardy, thank you very much. We're going to go to Deborah Reyes. Deborah, go ahead ma'am. Is there anybody that wants to uh post a question to Mr. Hardy Tan Vy, if not oh uh the Speaker.

Speaker Therese Terlaje: Yes, thank you, Mr. Chair. Mr. Tan Vy, can you just um repeat for me maybe I missed it but so where does the money come from for the Government of Guam. You're saying in the sales or like.

Hardy Tan Vy: So, if we yeah if we if like the registration fees see I don't quite know exactly how the money is allocating Gov Guam I'm just throwing out some ideas there but like I'm just saying the uh I guess the funds collect or the fees collected from these registrations like I guess we would pay the local government because that's as far as I know like when I do purchase a firearm I pay a registration fee to the Gov to the Guam Police Department. After that I've never really looked into where the money goes but you know I mean if I'm gonna purchase a suppressor which is about 800 to almost thousand eight two thousand dollars at times then on top of that you know if you got the money to pay for a suppressor, I think you can make the investment for you know a decent uh registration fee. So, that way it's that there's some benefit also for the Government. I happen to like the way the Gov the uh Guam Laws are for guns here where we have licenses and registrations. You know I think I don't mind it and uh I think this with this system it's actually better than a lot of the U.S Gun Laws because it's not just U.S Gun Laws you can't just say U.S. Each state has their different laws that's why you have these uh issues there that you're seeing. But Guam actually is fairly sensible. So, you know if we could use the same system that's already existing just add another item like a new fee and have extra revenue that's just the general explanation.

Speaker Therese Terlaje: thank you, thank you. Thank you, Mr. Chair.

Hardy Tan Vy: Thank you.

Chairman Jose "Pedo" Terlaje: Okay, Deborah. Go ahead.

Deborah Reyes: Buenas yan hafa adai, thank you senators for having me and uh giving me this opportunity to speak today. I've prepared a statement if you don't mind, I'll just read it. Thank you for allowing thank you for the opportunity to speak today and express my support for bill 73-36 the Hearing Protection Act of 2021. My name is Deborah Reyes, I am a Firearms Instructor certified by the United States Concealed Carry Association and the National Rifle Association more commonly known as USCCA and NRA respectively. I am qualified to teach the introduction to firearm safety, home defense, and concealed carry weapons concepts. I am a Chief Range Safety Officer certified by the NRA and a Safety Officer certified by the International Defensive Pistol Association more commonly known as IDPA. I also serve as a President of the Marianas Practical Shooting Association or MPSA. Starting in 1994, my husband is all too frequent work-related



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

travel left me at home alone with the children. Because of his absence, he encouraged me to take a firearm safety class. I told him at the time that guns are not my thing and stood by this opinion for the next 20 years. I told him I did I did not always have an appreciation for firearms until very disturbing and horrific home invasions and carjacking started happening more and more frequently in Guam. My journey into the world of firearms started after the much-publicized 2012 kidnapping and rape of a crown bakery customer, the 2013 Piper home invasion in Nimitz Hill that left the victim almost lifeless and the home invasion and murder of Miss Mafnas in Barrigada Heights. All these crimes against women occurred within a 12-month time frame. Since then, there have been numerous crimes against women. I knew then that I had to do something to give myself and my children a fighting chance. The next few years led me to a series of local and off island firearms basics and advanced training courses in the defensive use of firearms. That paved the path for me to become an instructor which gave me the opportunity to help other women who share my concerns. In 2016, I received my first certification as a Firearms Instructor and began team teaching with my husband Phil. Unlike riding a bicycle, the safe use of a of a firearm is a perishable skill. Frequent practice and training with dry fire or no ammunition and live fire with ammunition is required to maintain your skill sets. Although we utilize electronic hearing protection devices, we find ourselves constantly exposed to high noise levels. Prolonging exposure to the blast from a firearm and in our case when at a at a public firing range multiple firearm can cause injury to our ears and subsequently hearing loss. Over the years we have encountered a significant number of people particular women in particular women who have expressed a desire to learn the proper and safe use of a firearm to help defend themselves and their families against possible attack. Unfortunately, apprehension and apprehension caused by the loud report or bang from the gun fire presents a major barrier and oftentimes results in these women not taking the next step in their quest leaving them and their families vulnerable. For the few that have overcome the fear caused by the loud bang from gunfire and have purchased a firearm the concern of ear injury and loss of hearing that may result from the defensive use of a firearm in a concrete home exists. Please understand that during a home invasion a defender will not have the time to put on hearing protection devices on themselves or their children. Suppressors are an accessory that can be left installed on a defensive firearm that will allow the firearms use while helping to protect against ear injury and prevent long-term hearing loss. Bill 73-36, if passed into law will provide us with the opportunity to choose. I understand that not every firearms owner will opt to purchase a suppressor. The high cost in depth background check, the additional training required for the safe use of a suppressor may be prohibitive to some. Senators, I implore you to give bill 73-36 your fair consideration. Please do not let the drama of Hollywood or the agenda and incorrect information presented by the Anti-Gun lobby make your decision for you. Thank you for the opportunity the opportunity to express my support for bill 73-36.

Chairman Jose "Pedo" Terlaje: Thank you very much, Mrs. Reyes. Is there any of my colleagues that wants to post a question or remarks to uh Mrs. Reyes. Okay, Senator Telo. Go ahead.



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

Senator Telo Taitague: Thank you very much, Mr. Chair. Thank you so much, Deborah for coming and testifying this afternoon. Greatly appreciated your story um it really says a lot. I mean within that uh time period that you um decided to take it upon yourself to protect yourself um and the reason behind it uh it's truly an issue that's been stemming on our island for a long time and it's very important. So, I just wanted to thank you for stepping up and giving us your story, I greatly appreciate it and your comments that thank you Deborah.

Deborah Reyes: Thank you.

Senator Joanne Brown: Mr. Chairman, I just wanted to inquire is anyone else uh there to testify or are we able to open any questions or comments.

Chairman Jose "Pedo" Terlaje: Senator Joanne, we have just one more we're just gonna allow them.

Senator Joanne Brown: Okay we can have that and then we can open up to either questions sir.

Chairman Jose "Pedo" Terlaje: you know time to ask questions and make remarks so we're just gonna go ahead and uh and call on to uh a Phil Diaz?

Phil Diaz: Yes sir, Senator.

Chairman Jose "Pedo" Terlaje: can you bring in your uh your okay your on now okay go ahead.

Phil Diaz: I'm sorry for um I'm not good IT person. I wish my kids were here to help me out. Sorry, I'm a retired police officer 27 years plus my military made it 30. Four years in the United States Marine and I just want to say this when we go shooting in both the Marine Corp, the Military and the Law Enforcement, we always wear earplugs when it's time to train to get certified on the firearm. However, not once do we have the time to use earplugs and even as a patrol officer, we don't have time we don't GPD never issued me a earplug out on patrol. So, for the 11 to 12 years I was not once issued by GPD earplugs and not once have I ever carried or known any Patrol Officers to carry earplugs. It's a moment of seconds when something happens and a gun owner in the house to defend his family does not have the time to fumble and look for earmuffs or earplugs and when you presented this bill Senator Pedo I was like wow I'm surprised and I agree with Ken Gibbons for all you senators to bring this up and to support it because you're going to have probably negative people from the anti-gunners which uh for me all the people who are not from here I wish they would just pay attention to their backyard because this is our island this is Guam and I wish Guam to be Guam. Like Senator Terlaje, I was not in favor of her but now I supported her because when she said we should maybe abide by the ATF rules and regulations that made me supported Senator Therese Terlaje as well and I will strongly support this bill and I hope you uh all you senators can get your other colleagues to make it one hundred percent supportive. Because, uh like I said the gun owner in the middle of the night someone



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

breaking in it's not going to look for earplugs or earmuffs and say wait, excuse me let me put on my earplugs and earmuffs so I don't deafen my ears when I shoot you there's no time. So, I strongly support this bill and I thank you all for the authors behind Pedo and I came in late because I'm watching my grandson so uh thank you again for your time and appreciate it and I hope this bill passes for the people of Guam. Thank you.

Chairman Jose "Pedo" Terlaje: Thank you very much and now ladies uh colleagues and ladies and gentlemen let me just go back to the senators whoever wants to make any uh remarks or whatever and we'll start out with uh Senator Joanne brown. Go ahead, Senator.

Senator Joanne Brown: Thank you very much, Mr. Chairman. I appreciate the comment opportunity to comment. You know I keep hearing about the Hollywood issue, and I don't think it's really a question of that if anyone has concerns or reservations. I mean dealing with reality in our community a lot of people have apprehension and of course you can look at this issue many different ways. But a lot of people have apprehension in relation to this issue. Probably because of the amount of crime that we have in our community and while I'm sure many of you will say well I don't see the direct connection between putting silencers on guns that will allow us to save our hearing uh there's apprehension about that. It's like legalizing marijuana during a time when we have a major drug issue in our community. So, I don't think it has much to do with Hollywood. Our fascination with watching movies and the impact of that. I think it might be helpful for committee members for those of you or if there there's a way to actually or a video that maybe we can reference on what the difference is in the sound of firing a weapon on its own and then what it sounds like with um a silencer attached to it. That might uh perhaps give us a little more information and awareness of what's involved with that. I think we're well aware that citizens in our community that are law abiding citizens will properly use their guns uh properly if the silencer is allowed. I'm sure law-abiding citizens will use that properly as well. But we also have a reality in this community of many individuals. Unfortunately, as we look at the paper every day, as we listen to the news, as we listen to talk radio every morning when we wake up of the amount of crime that's happening in our community and while many can say there's no direct correlation. It's always those individuals to get a hold of guns illegally and improperly, that create the problems in our community that we're dealing with. I mean to just you know recently hear of the murder over the weekend of a former mayor in our community. Those are the apprehensions that are happening and certainly it's even unfortunate which is coming more realities like we're living in the wild west and instead of having a civil community we have a situation now where unfortunately we as residents literally have to protect ourselves, our family, our property. You know we live at home in our own jail cell. I mean now we have to worry about fencing our house, we have to worry about having uh cameras in our homes, we have to worry about getting security systems installed, we have to worry gee you know do we have attack dogs that are trained uh in order to be able to feel a sense of safety of living here and that's a sad reality that we're dealing with in our community. So, I don't uh look at it as a question of being um you know that we're fascinated with watching movies and we see the connection between having a silencer and a



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

weapon that James Bond perhaps would use. As whether or not people our community have a sense of apprehension uh just because of the amount of crime that's happening and that we're almost having to be as our own citizenry here having to protect ourselves from each other and that's the reality. I mean I understand the logic of what's being brought forth. I'm probably inclined to support this piece of legislation. I don't think it's a question of being brave or not being brave. I think it's wanting to ensure law-abiding citizens in our community are safe as well and that's the unfortunate reality is that we don't have that happening now we see crime continuing to increase we see continued abuse out there uh and you know while yes guns and knives maybe knives are more prevalent. However, you know we can look at the statistics we can put that in front of us we can have different statistics that are provided for us to view. But I think that's a reality we need to come to terms with in looking at this or any other type of legislation that that's related to gun use in this community. So, I just wanted to put that out there because I think that if your your view for some of you that provided testimony you think that maybe some of us may not vote for it because we have an illusion to what we think silencers are uh and what impact that would have. Would that increase crime, or would it make it less detectable if someone were to use this in a crime. You know I I'm all for you know people having the ability to be armed I don't have any objection to that. You know I'm a daughter of a Veteran that served in Vietnam who also suffered from the similar hearing problems that a number of you have relayed and what it's like to have to live with those disabilities many many years after you've been in combat. So, I can appreciate all that. But I just wanted to put that out for clarification because uh we're not living in a world of illusion. I mean we're living here just like everyone else and we're experiencing the same challenges and harms that's coming to members of our community and I just think we need to put that out there. Rather than think that there's some other world of reality that we're living in. So, thank you, Mr. Chairman. I don't have any questions I think many of the members here that have provided testimony of certainly provided a lot of more information and enlightenment on this issue and I certainly appreciate their time today to come forth and provide testimony. Thank you very much, Mr. Chairman.

Chairman Jose "Pedo" Terlaje: Thank you very much, Senator. I'm going to uh I'm going to allow the co-sponsors of the bill to make their uh remarks also. Let me go with.

Lee Webber: Mr. Chairman, could I just add one thing really quickly.

Chairman Jose "Pedo" Terlaje: okay. Go ahead, Mr. Webber.

Lee Webber: uh, Mr. Williams brought up something I wasn't aware of uh and that was the hearing loss by a bone induction uh it's uh we're the representative for the Oceanic Technical Group and we uh sell service underwater hearing and communication devices and those are all bone induction and it's basically the bones right behind your ears. I didn't realize quite frankly that that that sound would get transferred in that way as well and I never thought about it until he brought it up and I know that if I put one bone phone on one left side you will hear the sound in both of your ears underwater. So, my that that logic tells me that the concussion that's from



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

gunfire damages those small cilia in your ears and if it does one it probably does both through induction. Thank you, Sir.

Chairman Jose "Pedo" Terlaje: Thank you, Mr. Webber. Next in line, I want to call on uh a Senator Frank Blas, Jr. to uh put out his remarks or whatever. Go ahead, Frank.

Senator Frank Blas, Jr.: Well, thank you. Thank you. Thank you, Mr. Chair. Pari, um obviously as a co-sponsor to the legislation I'm in full support of it. You know it's kind of interesting I've been sitting here listening or really trying to listen to the conversation with tinnitus with the ringing in my ear and um you know like Phil you know Diaz who and you know Senator Terlaje that uh I can appreciate that you know as many times as we were as we had to you know go to the firing range and yeah they're right you know you were never uh issued a earplug earplugs other than on the firing range and quite something sometimes you didn't even wear the earplugs in the package. But that's it is you know decades later uh I still suffer from the effects of uh you know the loud noise. I mean you know the firing off of the weapons the firearms and so uh I agree I mean and I yes you know I understand the consternation of a bill such as this because you the closest thing you think of silencers or suppressors on firearms is what you what you see produced by Hollywood and I can tell you that as a person who's actually had the fire weapon with a suppressor on it yeah and it's still very recognizable. It's just that it's not as loud okay and you can actually turn and talk to somebody afterwards. So, I'm in support of this and uh main sponsors to this legislation for giving me that opportunity uh to be able to co-sponsor this piece of legislation. Thank you, Mr. Chair. No, no, no, no questions to anyone just wanted to.

Chairman Jose "Pedo" Terlaje: Thank you, Primo. Thank you. Next in line. Let me go to um my favorite Senator Christopher Duenas. Sir, go ahead. I'm just going down the line here uh and then we'll go to uh James Moylan. Senator Moylan.

Senator Frank Blas, Jr.: I thought I was your favorite Senator.

Senator Christopher Duenas: Hey, thank you very much, Mr. Chairman. I think when it comes down to uh from my good friend uh Pari Pedo, Senator Pedo was he just likes my hairstyle so uh anyways um you know I'm thankful also to my good friend Ada for inviting me on to be a cosponsor of this legislation. I was hoping that you distinguished individuals subject matter experts were going to come forward to provide this information so that we can disseminate it to the public on exactly what the intention of this legislation is, and I was not let down. So, I thank each and every one of you that are in your professional capacities having served our country and having had to use firearms as part of their day-to-day operations and the other citizens uh who are gun enthusiasts and have uh you know had the pleasure of being able to both protect themselves uh to hunt if that was their sport or maybe just uh to gather uh you know for their families and so uh I just wanted to say I'm so glad you came forward so we can continue uh to educate the public. One other thing uh other than uh the fact that uh you know I'm very supportive of individual



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

rights, I also am an avid watcher of television. My favorite shows are crime shows and watching the bad guys get put away and one of the things I wanted to discuss that was discussed at length here is that uh criminals don't care about suppressors they don't care about legal uh issues they're criminals and they also if they really want to silence a weapon because I've seen this on many tv shows they will use crude devices as well they would they wouldn't even bother trying to get a a suppressor of the like. I've seen tennis balls and other types of crude devices that have been placed on weapons and that's what criminals do. So, I don't think we're in any way enhancing criminals. They're criminals and that's what they do. So, uh thank you uh Senator Ada, once again and thank you Mr. Chairman for recognizing uh me today and I want to listen to the rest of the conversation. Thank you very much.

Chairman Jose "Pedo" Terlaje: Thank you again, Chris. Next in line, I want to call on another favorite uh Senator of mine uh Senator Jim Moylan. Sir, go ahead.

Senator James Moylan: Thank you, Mr. Chairman. Thank you for the information very informative uh today and I uh of course you know we have our co-sponsors on these bills but we also um we need a magic number of eight. So, in addition to your Senators that you have here today I highly encourage the folks that give some testimony today to also contact the remainder of the Senators and ask for their support on this bill. I see no reason for objection of this bill and move it forward on onto session floor and get it passed as quickly as possible. So, thank you for your testimonies and please contact the other Senators that were not able to attend. Thank you so much. Thank you, Mr. Chairman.

Chairman Jose "Pedo" Terlaje: Thank you, Jim. uh you know I rise in support of this bill also so uh next in line uh I want to give our Speaker the uh the opportunity to give us her insight. Thank you.

Speaker Therese Terlaje: Thank you also Mr. Chair and all of those who testified today um very helpful testimony and you know I very much understand what you're saying about hearing loss and protection of hearing and I can see that uh that the bigger issue for those who are training regularly with um guns and that or you know at the training ranges where you know obviously there are repeated um shots being made um but I'm also reading other articles that talk about uh the use of silencers while they might not cut the entire noise down like some of you have said that they do distort uh somewhat and that um it makes it harder for to determine where the shot is coming from exactly. So, I'm thinking about you know use of guns in the jungle, near the beaches or even in the neighborhoods have some of you have described and even with the um well with law enforcement as it is today not always available in every one of our communities. You know wouldn't it be in the best interest of the community to know exactly where these gunshots were coming from and not for those uh the location of the gunshots to be distorted in any way. Especially you know because Guam is small and there are very few places you can shoot where you're going to be you know not close to somebody else. So, that's my question. It's about



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

the distortion of of you know where these shots are coming from and I guess yeah that's what these other articles are talking about. That that is the concern of the law enforcement uh when they are concerned not all are, but some are.

Chairman Jose "Pedo" Terlaje: Are you done, Speaker?

Speaker Therese Terlaje: Yes. I guess I'm asking if anyone um disagrees with what I've read yeah that says that these uh would they distort um the sound enough to make it uh not as easy to detect where the shots are coming from.

Chairman Jose "Pedo" Terlaje: I guess Kenneth wants to say something also. Go ahead, Kenneth. Mr. Gibbons.

Kenneth Gibbons: I understand your concerns and I've read those articles as well. The ability or the factor of distortion from a silenced gunshot. Yes, that does exist and that is most likely in the event of a single gunshot. Okay, um and at extreme distances. I'm not sure if you're aware that a single unsuppressed gunshot in a residential community, in an urban environment goes largely unnoticed any time it happens. A single unsuppressed gunshot will go largely unnoticed, okay. So, again being that suppressors do minimize the sound to not saying a hearing safe level but they do minimize sound or lessen the sound by 30 decibels multiple gunshots from a suppressed weapon you will hear you will be able to determine where that gunshot is coming from and if I'm not mistaken there's actually technology out there that's used by law enforcement in large metropolitan cities if I'm not if I recall correctly I think it's shot seek or shot finder. In large metropolitan cities like Chicago, New York, Detroit, they employ this technology it's actually microphones that are placed on the rooftops of buildings and even in a large metropolitan city with all the background noise this technology can pick up and determine the direction of a suppressed gunshot. So, your concerns of a suppressed gunshot you know distorting the noise and not being able to find the location I think that's largely unfounded.

Speaker Therese Terlaje: well, I'm not sure we have that technology right now so this bill intends to go into place immediately if passed and so yes that is a concern and I know I have not noticed that a single gunshot in the neighborhood would go unnoticed. I don't I think that that up to debate that doesn't sound accurate to me especially where I live. I think I hear gunshots and I can hear one or multiple. Mrs. Reyes, you had your hand up. Did you want to answer.

Deborah Reyes: oh, I'll I can speak after uh Mr. Williams he had his hand up.

Speaker Therese Terlaje: okay. Mr. Williams.

Knox Williams: Mrs. Speaker, thank you very much for allowing me to uh to help address your question. Um, several things and I think that that is an important question and to give the full



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

answer I think that the most effective way is to actually go out to a shooting range and hear firearm suppressors on a host firearm. I apologize that I can't be there to do that with you right now. Because I think it really is one of those situations where hearing it truly is believing it. Where it translates directly, and you really gain the firsthand knowledge and that tacit experience um to be able to understand that they don't distort it the way that um the media will lead you to believe. Um, I'll give you an analogy, so every year.

Speaker Therese Terlaje: I'm not talking about the media. I'm talking about you know the articles that your important articles.

Knox Williams: sure, the articles that you've.

Speaker Therese Terlaje: yes.

Knox Williams: Yes, ma'am.

Speaker Therese Terlaje: and so that's all I want to know is that you know is that uh is there some truth to that or are you saying there's absolutely no truth that the sound is being distorted enough that it makes it harder to detect where these gunshots are coming from.

Knox Williams: It reduces the noise certainly. So, in that capacity yeah, any noise reduction is going to make it like mildly less easy to identify but that by that same token um identifying gunshots is not something that you're just you know naturally born with. There are a lot of noises that sound similar to that. I myself live in Atlanta Georgia and a couple years ago there was a shooting about three quarters of a mile away from my house. I was watching tv at about 10 o'clock at night with my then girlfriend who I was living with. We heard about 10 to 15 shots in very quick succession. She thought they were fireworks. I immediately knew they were gunshots and that was just because I've been exposed to a lot of gunshots and she hadn't. So, in that regard gunshots often in urban areas especially do blend in with car backfires with any sort of loud concussive noise people often do think that their fireworks and get them confused. Um, and to Mr. Gibbon's point you know with a single shot perhaps but after with multiple gunshots you're absolutely going to be able to identify them. We host a hunt uh here at a property in Georgia every year where we have about 20 or so people come out and we do a hog hunt and it's on a property that's about 8,000 acres. So, roughly three quarters the size of Manhattan. I apologize for my ignorance I'm not sure how that translates to Guam but it's a very large piece of property at least by east coast standards out here. We spread everyone out throughout the property. The furthest folks are about an hour away from the lodge just given the way that we have to drive on the internal roads on the property and every single gunshot is heard by everyone on the property even though you're using suppressed firearms. So, to the extent that you know perhaps in a jungle you might not be able to hear and discern the noise of a suppressed firearm. I can say with firsthand knowledge that would be inaccurate in an urban environment where it does get clouded



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

and masked by other loud noises it's just not going to carry nearly as far and that's just by virtue of the fact that there are other noises competing with that so it's going to kind of blend in quicker than it would in a quieter environment if that makes sense. Um, another thing to Mr. Gibbons' point and you did address it you all do not have shot spider that's the name of the microphone array technology. But, based on uh their company's statements um their microphone arrays can identify suppressed gunfire so scientifically it doesn't mask it enough for technology to not be able to identify and pick up the direction and geolocate the noise based on it. It's whether or not you have a trained ear, and I would counter that the difference between someone who can identify suppressed gunfire uh versus unsuppressed gunfire. If you can identify one, you'll be able to identify the other.

Speaker Therese Terlaje: all right, well maybe you misunderstand my concern. My concern is that you know we all live here on Guam uh there are jungles near almost every one of us in our villages and our workplaces they're all around and I want to know where the gunshots are coming from. I want to be able to tell law enforcement. We all should be able to help them and point out which direction it was coming from. I want that to be easily discernible uh when we need it to be and not even more difficult to track these things and make sure that we can enforce our gun laws we that's really it and um so yeah, I am I'm surprised about um well anyways. Okay. Mrs. Reyes, did you want something to add, or I thought your hand was up earlier that's why I called you. But otherwise.

Knox Williams: May add one thing to that.

Speaker Therese Terlaje: sure.

Knox Williams: because I believe I believe I understand your question better now. Um, I think that that that did provide a bit of clarity for me. So, during my original testimony I alluded to the fact that a suppressor only muffles the actual muzzle blast of the firearm so right the gases that are actually projector pushing the projectile out of the barrel when they hit the open atmosphere that's the only noise source that suppressors actually contain and reduce. The noise of the actual bullet in air is roughly three decibels quieter than the noise of the muzzle blast. That does make it about half as loud as the actual muzzle blast. But it's still incredibly loud if you're talking about something in the neighborhood of 160 to 170 decibels of that actual bullet as it travels through the air that is absolutely identifiable um and the suppressor does nothing to reduce that. In fact, if anything it actually might increase it because the gas is propelling it or in a in a controlled environment for just a little bit longer and that generally increases the muzzle velocity which does have minor impacts on the noise of the actual bullet as it as it travels through the atmosphere. So, in that regard yes gunshots are still identifiable because one of the main noise sources is the actual sound of the bullet traveling through the air.



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

Speaker Therese Terlaje: Okay, so you're saying that these articles that say that it makes it difficult to detect the direction of the gun are more difficult to direct the detection of the gunshot. Those articles are all inaccurate.

Knox Williams: yes, ma'am. I would contend that most of those people haven't actually been around many suppressed firearms.

Speaker Therese Terlaje: Okay, all right. Thank you, Mr. Chair.

Chairman Jose "Pedo" Terlaje: Okay, so before I go back to the uh author of the bill is there anybody else that wants to uh okay Senator Telo. Go ahead.

Senator Telo Taitague: Um, thank you, Mr. Chair. It's a quick question. Mr. Knox, earlier you provided some data um regarding how many the percentage of these suppressors that are used in crime. What was that data you provided earlier and is that considered in most areas.

Knox Williams: Yes ma'am. So, I believe uh Kenneth Gibbons alluded to Ronald Turk's white paper. I also made an allusion to that very briefly but in that he studied the use of suppressors by criminals throughout nationwide and it was in reference to a bill that we helped draft along with the ATF it's called the Hearing Protection Act. It's trying to remove um suppressors from the purview the National Firearms Act transfer them to the Gun Control Act and treat them effectively like uh regular title one firearm. So, like rifles or shotguns where you anyone over 18 can purchase one after passing what's called a next check and filling out a form 4473. So, going through the same background check process. That was what it was in reference to um and during that um I don't I don't have his direct quote pulled up um I believe Kenneth Gibbons does, but it was effectively that these are so rarely used in crime. Registered suppressors are so rarely used in crime that it's basically statistically insignificant. Um, you're talking about individual instances out of at this point um nearly 2.2 million suppressors in circulation in the 42 states where they're legal to own. Where you can count on one hand the number of times that legally registered suppressors are being used in crime. Oftentimes, it's people who are going and purchasing what are called solvent traps or purchasing um you know devices that they can easily turn into a suppressor from China through wish.com and similar things like that but it's largely unregistered suppressors. At the end of the day the technology of a suppressor it's not rocket science and it's fairly easy to make a rudimentary suppressor on your own. This legislation will do nothing to prevent criminals. If they're going to break the law, they're going to break the law. All this legislation is seeking to do is to allow law-abiding citizens who are going through the process in order to legally obtain one you're giving them the option to do that. Again, it's not something that they have to do but something that they would be able to do which is why we very much support it.



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

Senator Telo Taitague: thank you, Mr. Knox. Mr. Gibbons, do you have those data because the stuff that I'm trying to get they're saying that one percent of these suppressors are used or any kind of crime uh happening and it's almost so minimal that it's very hard to even uh provide data uh with regards to this and that's why I was just wondering I thought I heard someone give some data so did you have any.

Kenneth Gibbons: Well, that data again is off that white paper from Ronald Turk the Associate Deputy Director Chief Operating Officer of the ATF um and that white that white paper is actually titled options to reduce or modify firearms regulations. You can actually pull up the complete white paper. I don't have the complete white paper in front of me. I was using sections of it for my testimony but pull the actual white paper google it I believe it leads you to the Washington post where they do have it.

Senator Telo Taitague: okay.

Kenneth Gibbons: and again, in that paper Turk goes on to say consistent with the low number of prosecution referrals silencers are very rarely used in criminal shootings. Okay, um within that paper so I pulled the data as far as crimes that involve knives off statista.com. The data that I pulled for silencer prosecutions was directly off the ATF website. If I'm not mistaken under the ATF website under resources, they have all their reports as far as crimes, registrations as far as the registration numbers. It's all on that website as well as the FBI's uniform code of criminal statistics.

Senator Telo Taitague: I appreciate that because the research I'm doing it's very hard to find any kind of data because it's hardly used in crimes so it makes it very difficult but there was um a video that was sent to a senate the Senators. I think I know I received it on YouTube kind of giving an example of the sound uh the difference of different uh guns. I don't know Mr. Chair if your office is the one that provided us that video, but it would show the sound of um what it sounds like on different guns with a suppressor and one without and you know I it was very hard to tell the difference you know you can still really hear that sound coming from. But, uh thank you Mr. Chair that was a just wanted to hear some data information appreciate it.

Chairman Jose "Pedo" Terlaje: I think Mr. Williams uh wants to share some of his thoughts. Go ahead, Mr. Williams.

Knox Williams: yes, sir. Thank you very much, Mr. Chairman. Um, so Senator to answer your question I've got the paper pulled up um and I'm going to read a direct quote from it where he addresses the statistics around suppressors that led to his conclusion in his white paper um and again this is Ronald Turk who at the time was the number two in charge at ATF. He wrote quote on average in the past 10 years ATF has only recommended 44 defendants a year for prosecution on silencer-related violations; of those, only approximately six of the defendants had prior felony



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

convictions. Moreover, consistent with this low number of prosecution referrals, silencers are very rarely used in criminal shootings. Given the lack of criminality associated with silencers, it is reasonable to conclude that they should not be viewed as a threat to public safety necessitating NFA classification and should be considered for reclassification under the Gun Control Act. So, that was his direct quote, and he has access had access to every all of the historical data anytime that a suppressor has ever been used in crime and that was the conclusion that he came up with. Keep in mind at this point there are over 2.2 million in circulation um and you're talking about you know 44 cases for prosecution that he could that he could find. Most of those are with illegally obtained and unregistered firearms suppressors. Um, so this bill would have no impact on people who are breaking the law in that capacity. It could only have an impact on people who are following law and of those 44 only a fraction of those people have done that.

Senator Telo Taitague: Thank you, Mr. Williams. Thank you, Mr. Chair.

Chairman Jose "Pedo" Terlaje: I guess Phil Diaz wants to uh share his thoughts also. Go ahead, Phil.

Phil Diaz: It's a basic uh topic uh like comparing apples and oranges. Okay, way back the Senator the legislature approved the drinking age to 21 because of the federal funds to help the uh I believe the highways or something to do with that and I just want to say that uh the people of Guam voted to be kept at 18 years old. I think you remember that all you Senators uh who lived in Guam all your life. But, raising it to 21 was uh I forgot which legislature was the one that just did it with all the people's uh vote on it and has there been any uh improvements, 2018 the highest uh what do you call that auto pedestrian death rate on Guam and year after year as a police officer and even as a retiree I still see the newspaper traffic fatalities, traffic fatalities, traffic fatalities, and I just want to say often do you hear of uh gun fatalities accidental which was way in the beginning uh until the Webber Law was created and after the Webber Law, has there any been any uh unsecured firearm after that. No, because the people of Guam are pretty uh resilient and you know when you pass a Law of the Webber Law. Then people started locking up their guns and because you know even my dad man, he had his own long 22 rifle ready. I know where he put it, we all know where he put it, and even showed us as teenagers growing up in case, we need to use it to defend the family. So, the Webber Law it changed all that and we adopted it to it and yes uh unfortunately uh Dededo and Talofofo, where the kids were playing and there was fatality out of it. After the Webber Law, it's improved but the uh raising the drinking age to me as a Law Enforcement hasn't improved. We still have fatalities every year. So, I just want to say now for all those uh who are against uh the public out there and fellow Officers who disagree with the uh the Hearing Protection Act uh you know you gotta look it into it you know and ask yourself uh what have we done for the safeguards of our streets of Guam. Because I can put up a lot of topic on how to safeguard the streets but none of uh everyone's gonna be against me. Because, I can say go to Bali there's no there's nothing allowed over four cylinder. So, why do we have V8 Hemi engines, why do we have uh turbocharged engines, why do we have uh even



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

motorcycle you're not allowed I think 400 cc, why do we have a Hayabusa, why do we have heart that's the Suzuki ring, why do we have uh Harleys of 1200 1400 cc's you know on island. But yet, we turn a blind eye on that and yet we still continue to have traffic fatalities. So, for all those out there who are so concerned about the silencers uh for their Hearing Protection Act you gotta think about it and uh like what uh I forgot the Speaker for off island and Mr. Gibbon mentioned it's a very low rate. But, uh like I said you can keep raising the drinking age there's still going to be traffic fatalities continuous and that's all I want to say. Thank you.

Chairman Jose "Pedo" Terlaje: Thank you very much, Phil. Uh, is there anybody else that wants to share their thoughts before I bring it back to uh the author of the bill. Anybody else if none. Senator Tony Ada, go ahead sir. Thank you very much.

Senator Tony Ada: Thank you, Mr. Chairman. Thank you again, Sir for having this public hearing on Bill 73-36. I appreciate all my colleagues is input and for their presence here today and also the those who have provided testimony on bill 73-36. To Mr. Williams, thank you for your expert testimony on this bill and you know hopefully uh we'll be able to get that white paper from you. If you'll be able to disseminate that to all 15 senators and that way, they can have a better understanding of where that white paper came from and uh the statistics that were used in it. To um all those that also gave public testimony, thank you. Mr. Chairman, I look forward to working with your committee sir as always and so we can move bill 73-36 onto the session agenda, sir.

Chairman Jose "Pedo" Terlaje: Thank you, Senator. This is a good bill and in closing I just want to uh thank uh everybody that participated in today's virtual public hearing on Bill number 73-36 COR and if you have any written testimony, you can email it to my office senatorpedo@senatorjpterlaje.com or hand delivery to my office at MVP Center, Unit 102 777, Route 4 Sinajana, Guam. The time now is currently 3:38 p.m. and the Community on Public Safety, Emergency Response, Military and Veterans Affairs, Mayor's Council of Guam and Public Transit is now adjourned. Thank you very much.

Senator Tony Ada: Thank you, Mr. Chairman. Thank you, colleagues.

Knox Williams: Thank you. Thank you.

Kenneth Gibbons: Thank you, everybody.

The public hearing was adjourned at: 3:38 p.m.

III. FINDINGS & RECOMMENDATIONS

The committee finds that silencers, more properly known as firearm suppressors, are heavily regulated under federal law. While allowing firearm suppressors on Guam would require



I Mina'trentai Sais na Liheslaturan Guåhan • 36th Guam Legislature Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit

registrants to register with the federal government and pay a \$500 fee. The committee finds that this money should rightful be remunerated back to the Government of Guam under Section 30 of the Organic Act. Additional language maybe necessary to address the remuneration of these fees back to Guam.

Central to the policy question posed by this bill is whether there is any safety value to a loud firearm and does that safety value outweigh the hearing loss that a lawful gun owner may have if they are to adequately practice shooting proficiency. Studies show that firearm suppressors are not adequate in reducing the volume of noise from a firearm for hearing protection and that ear protection and noise reduction work in tandem to provide adequate protection. Hearing loss is one of the most commonly cited service-related disabilities by military personnel and public safety personnel.

The committee finds a lack of scholarly research to say that noise at any volume provides additional safety in a general setting. There however there are examples cited by advocacy groups such as the Gifford's Project, run by former Congresswoman Gabby Giffords who was shot in the face at a campaign event, that firearm suppressors have lead to greater deaths because it prolongs the amount of time to realize that a mass shooter is in a facility. On May 31, 2019, a mass shooting occurred at a municipal building in the Princess Anne area of Virginia Beach, Virginia. The gunman, DeWayne Craddock, who was a disgruntled city employee, fatally shot 12 people and wounded four others. Because Craddock used a firearm suppressor, many employees thought the sound they heard was a nail gun being used for building renovations and did not know there was an active shooter until they received a text, after several people had already been killed.

The committee provides in this committee report additional research Senators may wish to review regarding that assertion.

The Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council and Public Transit hereby reports **Bill No. 73-36 (COR)** – V. Anthony Ada, Frank Blas Jr., Christopher M. Dueñas, James C. Moylan – "AN ACT TO *AMEND* §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE *HEARING PROTECTION ACT OF 2021.*" With a recommendation to report out only .



Guam Congress Building 163 Chalan Santo Papa Hagåtña, Guam 96910 Tel 671-472-2461 COR@GUAMLEGISLATURE.ORG

March 17, 2021

MEMO

To: Rennae Meno

Clerk of the Legislature

From: Vice Speaker Tina Rose Muña Barnes

Chairperson, Committee on Rules

Re: Fiscal Note Waiver for Bill No. 73-36 (COR)

Buenas yan Håfa adai.

Attached, please find the fiscal note waiver for the following bill:

Bill No. 73-36 (COR)

Please forward the same to Management Information Services (MIS) for posting on our website.

If you have any questions or concerns, please feel free to contact Mary Maravilla, Committee on Rules Director at 472-2461.

Thank you for your attention to this important matter.





BUREAU OF BUDGET & MANAGEMENT RESEARCH



OFFICE OF THE GOVERNOR
Post Office Box 2950, Hagåtña Guam 96932

LOURDES A. LEON GUERRERO GOVERNOR

LESTER L. CARLSON, JR. DIRECTOR

JOSHUA F. TENORIO LIEUTENANT GOVERNOR

MAR 17 2021

Vice Speaker Tina Rose Muña Barnes Chairperson, Committee on Rules I Mina'trentai Sais Na Liheslaturan Guåhan 36th Guam Legislature Guam Congress Building 163 Chalan Santo Papa Hagåtña, Guam 96910

Hafa Adai! Vice Speaker Muña Barnes:

The Bureau requests that Bill No. 73-36 (COR) be granted a waiver pursuant to Public Law 12-229 as amended for the following reason(s):

Legislative Bill No. 73-36 is seeking to amend §§ 60102 & 60103 of Chapter 60, Title 10, Guam Code Annotated, which would permit the ownership of suppressors and silencers by enacting the Hearing Protections Act of 2021.

The proposed amendment is administrative in nature and would not fiscally impact the appropriations for FY 2021.

Si Yu'us Ma'ase,

LESTER L. CARLSON, JR.



COMMITTEE ON PUBLIC SAFETY, EMERGENCY RESPONSE, MILITARY AND VETERAN'S AFFAIRS MAYOR'S COUNCIL, AND PUBLIC TRANSIT



I Mina` Trentai Sais Na Liheslaturan Guahan • 36th Guam Legislature

COMMITTEE VOTING SHEET

Senator Jose "Pedo" Terlaje Chairman Bill No. 73-36 (COR) – "AN ACT TO AMEND §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."

Senator Frank Blas Jr. Vice Chair Public Safety As Introduced by V. Anthony Ada, Frank Blas Jr., Christopher M. Duenas, James C. Moylan

Senator Clynton E. Ridgell Vice Chair

Vice Chair Emergency Response

Senator
V. Anthony Ada
Vice Chair
Military and
Veteran's Affairs

Vice Speaker
Tina Rose Muña Barnes
Vice Chair
Mayor's Council of
Guam

Senator Mary C. Torres Vice Chair Public Transit

COMMITTEE MEMBERS	SIGNATURE	TO DO PASS	NOT TO PASS	TO REPORT OUT	ABSTAIN	INACTIVE FILE
TERLAJE, JOSE "PEDO" Committee Chairman	विभिया	1				
BLAS, JR., FRANK Committee Member	EVOTE 9/14/21	1				
RIDGELL, CLYNTON E. Committee Member	9/14/21			1		lugar.
ADA, V. ANTHONY Committee Member	EVOTE, 9/14/21	/				
MUÑA BARNES,TINA Committee Member	9/15/21			/		
TORRES, MARY CAMACHO Committee Member						
SHELTON, AMANDA L. Committee Member						
SAN AGUSTIN, JOE S. Committee Member	EVOTE 9/14/21			/		
TERLAJE, THERESE M. Committee Member						

Legislative Secretary

Amanda L. Shelton Member

Senator

Joe S. San Agustin Member

Speaker

Therese M. Terlaje Member 777 Route 4 • MVP Center Suite 101 • Sinajana, Guam 96910

senatorpedo@senatorjpterlaje.com • Tel: (671) 989-5301/3218 • www.guamlegislature.org



Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>
Tue, Sep 14, 2021 at 4:50 PM To: "Frank F. Blas Jr." <office@senatorfrankblas.com>, Senator Clynt Ridgell <sen.cridgell@teleguam.net>, Senator Tony Ada <senatorvanthonyada@gmail.com>, Vice Speaker Tina Rose Muña Barnes <senatormunabarnes@guamlegislature.org>, "Mary C. Torres" <senatormary@guamlegislature.org>, Office of Senator Shelton Guam Legislature <officeofsenatorshelton@guamlegislature.org>, "Joe S. San Agustin" <senatorjoessanagustin@gmail.com>, Senator Therese Terlaje <senatorterlajeguam@gmail.com>

Hafa Adai Committee Members:

Please see the attached Committee Report for **Bill No. 73 - 36 (COR)** - V. Anthony Ada/ Frank Blas Jr./ Christopher M. Dueñas/ James C. Moylan, "AN ACT TO *AMEND* §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE *HEARING PROTECTION ACT OF 2021.*"

SILENCERS FROM GUAM LAW BY ENACTING THE HEARING PROTECTION ACT OF 2021."
Please indicate your preferred action, based on the following options.
To Do Pass;
To Not Pass;
To Report Out Only;
To Abstain; or
To Place in Inactive File.
Please submit your response <u>ASAP</u> . Your response will be logged into the Committee Vote Sheet for Bill No. 73 - 36 (COR), which will be filed with the Committee on Rules.
Si Yu'os Ma'åse'
Bill No. 73-36 (COR) Committee Report .pdf

The Office of Senator Jose "Pedo" Terlaje

Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council, and Public Transit

36th Guam Legislature I Mina'trentai Sais na Liheslaturan Guåhan

777 Route 4, MVP Center - Units 101/102, Sinajana, GU 96910

Tel: (671) 989-5301/3218

Email: senatorpedo@senatorjpterlaje.com



Senator Tony Ada <senatorvanthonyada@gmail.com>

Tue, Sep 14, 2021 at 8:39 PM

To: Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>

Cc: "Frank F. Blas Jr." <office@senatorfrankblas.com>, Senator Clynt Ridgell <sen.cridgell@teleguam.net>, Vice Speaker Tina Rose Muña Barnes <senatormunabarnes@guamlegislature.org>, "Mary C. Torres" <senatormary@guamlegislature.org>, Office of Senator Shelton Guam Legislature

<officeofsenatorshelton@guamlegislature.org>, "Joe S. San Agustin" <senatorjoessanagustin@gmail.com>, Senator Therese Terlaje <senatorterlajeguam@gmail.com>

To do pass

On Sep 14, 2021, at 4:50 PM, Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com> wrote:

[Quoted text hidden]



Joe S. San Agustin <senatorjoessanagustin@gmail.com>

Tue, Sep 14, 2021 at 8:42 PM

To: Senator Tony Ada <senatorvanthonyada@gmail.com>
Co: Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>, "Frank F. Blas Jr." <office@senatorfrankblas.com>, Senator Clynt Ridgell <sen.cridgell@teleguam.net>, Vice Speaker Tina Rose Muña Barnes
<senatormunabarnes@guamlegislature.org>, "Mary C. Torres" <senatormary@guamlegislature.org>, Office of Senator Shelton Guam Legislature <officeofsenatorshelton@guamlegislature.org>, Senator Therese Terlaje

<senatorterlajeguam@gmail.com>

To report out only [Quoted text hidden]



Frank Blas Jr. <frank.blasjr@senatorfrankblas.com>

Tue, Sep 14, 2021 at 8:53 PM

To: Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>

Cc: "Frank F. Blas Jr." <office@senatorfrankblas.com>, Senator Clynt Ridgell <sen.cridgell@teleguam.net>, Senator Tony Ada <senatorvanthonyada@gmail.com>, Vice Speaker Tina Rose Muña Barnes <senatormunabarnes@guamlegislature.org>, "Mary C. Torres" <senatormary@guamlegislature.org>, Office of Senator

Shelton Guam Legislature <officeofsenatorshelton@guamlegislature.org>, "Joe S. San Agustin"

<senatorjoessanagustin@gmail.com>, Senator Therese Terlaje <senatorterlajeguam@gmail.com>

To do pass

Sent from my iPhone

On Sep 14, 2021, at 4:51 PM, Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com> wrote:

[Quoted text hidden]



Clynt Ridgell <clyntridgell@guamlegislature.org>
To: Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>

Wed, Sep 15, 2021 at 9:19 AM

To report out only [Quoted text hidden]



Vice Speaker Tina Rose Muña Barnes <senatormunabarnes@guamlegislature.org>
To: Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>

Wed, Sep 15, 2021 at 9:33 AM

Cc: "Frank Blas Jr." <frank.blasjr@senatorfrankblas.com>, "Frank F. Blas Jr." <office@senatorfrankblas.com>, "Joe S. San Agustin" <senatorjoessanagustin@gmail.com>, "Mary C. Torres" <senatormary@guamlegislature.org>, Office of Senator Shelton Guam Legislature <officeofsenatorshelton@guamlegislature.org>, Senator Clynt Ridgell <sen.cridgell@teleguam.net>, Senator Therese Terlaje <senatorterlajeguam@gmail.com>, Senator Tony Ada <senatorvanthonyada@gmail.com>

To Report out only.
[Quoted text hidden]



Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com> Wed, May 26, 2021 at 5:10 PM To: "Frank F. Blas Jr." <office@senatorfrankblas.com>, Senator Clynt Ridgell <sen.cridgell@teleguam.net>, Senator Tony Ada <senatorvanthonyada@gmail.com>, Vice Speaker Tina Rose Muña Barnes <senatormunabarnes@guamlegislature.org>, "Mary C. Torres" <senatormary@guamlegislature.org>, Office of Senator Shelton Guam Legislature <officeofsenatorshelton@guamlegislature.org>, "Joe S. San Agustin" <senatorjoessanagustin@gmail.com>, Senator Therese Terlaje <senatorterlajeguam@gmail.com>

Hafa Adai Committee Members:

Please see the attached Committee Report for **Bill No.** 73 - 36 (COR) - V. Anthony Ada/ Frank Blas Jr./ Christopher M. Dueñas/ James C. Moylan, "AN ACT TO *AMEND* §§ 60102 & 60103 OF CHAPTER 10, TITLE 10, GUAM CODE ANNOTATED, RELATIVE TO REMOVING THE RESTRICTIONS ON OWNERSHIP OF SUPPRESSORS AND SILENCERS FROM GUAM LAW BY ENACTING THE *HEARING PROTECTION ACT OF 2021.*"

To Do Pass;	
To Not Pass;	
To Report Out Only;	
To Abstain; or	
To Place in Inactive File.	
Please submit your response <u>ASAP</u> . Your response will be logged into the Committee Vote Sheet for Bill No. 73 - (COR) , which will be filed with the Committee on Rules.	36

Si Yu'os Ma'åse'

Bill No. 73-36 (COR) Committee Report .pdf

The Office of Senator Jose "Pedo" Terlaje Committee on Public Safety, Emergency Response, Military and Veterans Affairs, Mayors' Council, and Public Transit

Please indicate your preferred action, based on the following options.

36th Guam Legislature I Mina'trentai Sais na Liheslaturan Guåhan

777 Route 4, MVP Center - Units 101/102, Sinajana, GU 96910

Tel: (671) 989-5301/ 3218

Email: senatorpedo@senatorjpterlaje.com



Senator Tony Ada <senatorvanthonyada@gmail.com>

To: Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>
Cc: "Frank F. Blas Jr." <office@senatorfrankblas.com>, Senator Clynt Ridgell <sen.cridgell@teleguam.net>, Vice Speaker
Tina Rose Muña Barnes <senatormunabarnes@guamlegislature.org>, "Mary C. Torres"
<senatormary@guamlegislature.org>, Office of Senator Shelton Guam Legislature
<officeofsenatorshelton@guamlegislature.org>, "Joe S. San Agustin" <senatorjoessanagustin@gmail.com>, Senator Therese
Terlaje <senatorterlajeguam@gmail.com>

To do Pass

On May 26, 2021, at 5:10 PM, Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com> wrote:

[Quoted text hidden]



Frank Blas Jr. <frank.blasjr@senatorfrankblas.com>
Thu, May 27, 2021 at 8:47 AM To: Senator Tony Ada <senatorvanthonyada@gmail.com>
Cc: Senator Pedo Terlaje <senatorpedo@senatorjpterlaje.com>, "Frank F. Blas Jr." <office@senatorfrankblas.com>, Senator Clynt Ridgell <sen.cridgell@teleguam.net>, Vice Speaker Tina Rose Muña Barnes <senatormunabarnes@guamlegislature.org>, "Mary C. Torres" <senatormary@guamlegislature.org>, Office of Senator Shelton Guam Legislature <officeofsenatorshelton@guamlegislature.org>, "Joe S. San Agustin" <senatorjoessanagustin@gmail.com>, Senator Therese Terlaje <senatorterlajeguam@gmail.com>

To do pass

Sent from my iPhone

On May 27, 2021, at 8:36 AM, Senator Tony Ada <senatorvanthonyada@gmail.com> wrote:

To do Pass
[Quoted text hidden]