

CANADIAN

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CANADA'S NATIONAL FIREARMS ASSOCIATION

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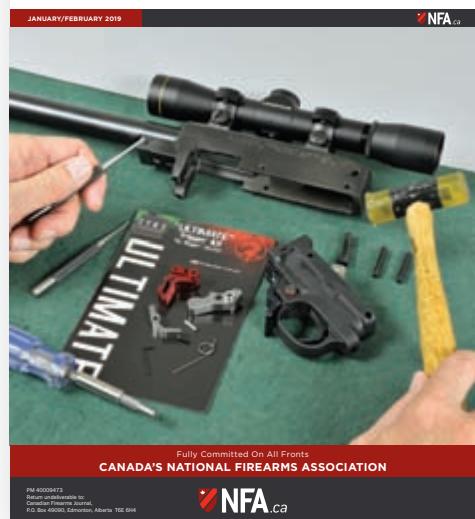
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MISSION STATEMENT

Canada's National Firearms Association exists to promote, support and protect all safe firearms activities, including the right of self defense, firearms education for all Canadians, freedom and justice for Canada's firearms community and to advocate for legislative change to ensure the right of all Canadians to own and use firearms is protected.

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On the Cover

January is one of the best months of the year to work on our firearms, and this issue's cover depicts that. The owner of this Ruger 10/22 is installing an aftermarket trigger that promises to improve the rifle's performance considerably. In this case, it's a TANDEM KROSS Ultimate Trigger Kit, which will take that heavy, gritty, factory trigger down into the two-pound range. When spring finally comes back to us, this rifle will be ready for the range and for varmint control. Not only will it be more shootable, but it'll have a cool-looking, flat-faced, red trigger. However, this is just one possible project. Be sure you take the cold-weather opportunity created by a Canadian winter to complete your own gun projects. ♦



Canadian Firearms Journal

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From The Editor's Desk

Al Voth

Thinking About The New Year

This issue of the *Canadian Firearms Journal* marks the start of 2019, a year that promises to be a watershed point for Canadian gun owners. What happens in the next 12 months will affect our right to own and use firearms for a long time. A primary reason is the federal election, which will be held this year. During the last election, firearms were essentially a non-issue, but not this year. Everything seems to indicate that the Liberals want to make licensed gun owners a scapegoat for their inability to address the real causes of crime. It all means that this is the year to get politically active, especially if you live in one of the federal ridings represented by a Liberal MP who has the potential to be tossed out.

As always, the *CFJ* will be a source of the hard data and the logical arguments you need to help convince your family, friends and neighbours that

any political party who thinks crime is caused by inanimate objects isn't fit to govern. Of course, besides keeping you informed we'll also keep you entertained with stories about the good people who use guns safely and responsibly. And whenever possible, we'll promote Canadian firearm manufacturers and businesses.

In this issue, you'll find an emphasis on winter activities, including winter firearms maintenance and DIY gunsmithing projects. Jeff Helsdon takes us through some winter maintenance of firearms, while Lowell Strauss looks at aftermarket triggers.

January and February are also good months to produce all that handloaded ammunition you'll need come spring, so we have some handloading advice for you as well. Bob Shell discusses the importance of feel when handloading for precision, and Eric Prevost provides

some tips for high-volume handloading.

Take particular note of Tim Fowler's encouraging story about a Canadian technical institution that has added gunsmithing courses to its calendar. The courses have been a complete success and debunk the idea that guns have no place in schools. In this case, we have students building precision rifles in an institution of higher learning. And I suspect those students are educating others, including faculty, about the enjoyment and value of firearms ownership. And speaking of precision, you'll also find a report on ELEY's barrel-testing program, which is now available in Canada. This will be of tremendous value to our Olympic athletes and any rimfire shooters who are interested in precision.

As always, your feedback on this publication's content is solicited, because it's your magazine. ♦





President's MESSAGE

Sheldon Clare

UN Marking, C-71 & Election Readiness

At time of writing, I am pleased to report that the efforts of the firearms-owning community, including your personal efforts, CSAAA concerns, and NFA lobbying have been successful in helping to delay the rightly maligned UN marking program for another two years. The problems with that program have been discussed in this publication for several years. Suffice it to say that this program would create an entirely unnecessary burden upon firearms importers, such that your access to firearms would be considerably reduced. As for Bill C-71, it is eventually going to pass in the Senate, the Liberal government simply has the votes in the Senate to make it pass. We have done what we can to ensure that key Senators are aware of this bill and will work to amend and delay it as long as possible.

It continues to astound me that so many well-intentioned individuals continue to mistakenly believe that firearms control and gun bans provide some sort of solution to criminal acts. In fact, what gun bans and gun control really do is provide an easy way for political entities and bureaucrats to appear to be "doing something," when all they are doing is making the situation worse. How is that? Simply put, safe storage laws are about preventing access to firearms for defence, and licenses are tax collection measures with the additional goal of building lists of firearm owners to make confiscation easier. As well, registration is purely to increase control on firearms, classify/categorize firearms and make them less accessible to ordinary people. None of those gun control efforts stop bad behaviour, nor do they prevent people from making poor choices.

Firearms ownership is becoming increasingly ideological. Firearms owners come from all political stripes; however, political parties are forc-

ing people to make uncomfortable choices. Ideally, all parties would be supportive of individual rights and freedoms, and not be a threat to firearms ownership and use. Sadly, that is not the case. Those parties and politicians who don't want you to own firearms are also likely to desire controls on other aspects of your personal life and society. Gun grabbers tend to be arrogant and garb themselves in a cloak of public safety. Their argument typically goes along the lines that if there weren't any more of gun X, or feature ABC, then the world would be rainbows, unicorns and candy, with no violence. The base premise to their naïve arguments is flawed in that they tend to believe that even the most ill-intentioned thug is likely to change her (or his) ways provided there are no more firearms.

To be blunt, as an inanimate object, firearms have nothing to do with ill behaviour on the part of people. People of ill intent will always find ways to carry out their activities. Laws have little to do with their actions or choice of weapons. Human history is resplendent with examples of mayhem carried out without recourse to firearms, and yet still with significant ability to harm. Blunt objects, sharp sticks, explosives and even bare hands have all been used to terrible effect by those of evil intent.

Denying people legal access to any type of firearm prevents no bad person from obtaining illegal access to firearms or other items usable as weapons. Instead, prohibitions merely encourage a widespread disrespect for the law among the law-abiding, who are quick to recognize themselves as being singled out for unfair punishment. When MP Robert Nault and other prominent Liberals make disparaging generalizations about firearms owners, they aren't kidding. They really do want your firearms, and they really don't care about criminal activ-

ity. What all politicians do care about is obtaining, maintaining and keeping political power. In that respect, you have some strength in the face of continued political efforts to undermine your ability to own and use firearms. You can vote, and you can work to support firearms rights candidates at the expense of gun-grabbers and social justice warriors.

The next federal election will need a focused and active effort from the firearms community – an effort aimed at removing the current government from office. We also must ensure that the next government does more than pay lip service to our concerns. It is up to each of us, as responsible members of our society, to make sure that we are involved in the political process. It is important that your activities and vote are strategic and well understood by the candidate who you choose to support. This next election will be one of the most important ones we have faced, as it may well decide the future of firearms ownership in Canada.

Your NFA is working hard to make sure that we obtain the best possible outcome. We are more focused and organized than ever before. Do what you can to build up our membership, and to get more good people informed about what is happening. Talk to local vendors and encourage them to include NFA materials with purchases of firearms and ammunition. Find like-minded people and get them signed up as members. Above all, get involved in politics. It is critical for each one of us to promote our firearms culture and to oppose those who would destroy it. If you can do something to promote the cause at least once a week, then you will help a great deal in achieving success.

We will be taking additional steps to organize for the next election. Contact the director(s) for your province or region to find out what you can do, and please help when we call you.

Message du Président

Sheldon Clare

Le marquage de l'ONU, C-71 et être prêt pour les élections.

Au moment d'écrire ces lignes je suis fier de vous dire que les efforts de la communauté des propriétaires d'armes à feu, vos efforts personnels, les inquiétudes de la CSAAA et le lobbying de l'ACAF ont réussi à retarder pour un autre 2 ans la mise en place de l'horrible programme de marquage des armes de l'ONU. Les problèmes en lien avec ce programme ont été discuté amplement dans cette publication depuis plusieurs années. En résumé, ce programme créerait un fardeau complètement inutile envers les importateurs d'armes, résultant à une réduction considérable de votre accès aux armes à feu. Le Projet de Loi C-71 va éventuellement passer au Sénat puisque les Libéraux ont le nombre de votes nécessaires pour qu'il passe sans problème. Nous avons fait tout ce que nous avons pu pour que les Sénateurs clés soient bien au courant du Projet de Loi, qu'ils travaillent pour l'amender et qu'ils le retardent le plus longtemps possible.

Je suis continuellement étonné de voir que tant de gens bien intentionnés puissent encore croire à tort, que le contrôle et les interdictions d'armes à feu apportent une solution pour réduire les actes criminels. En réalité, ces contrôles et interdictions sont une porte de sortie facile des entités politiques et des fonctionnaires pour leur donner l'apparence d'agir quand tout ce qu'ils font c'est d'empirer les choses. Comment ça? Les lois sur l'entreposage sécuritaire ont pour résultat d'empêcher l'accès aux armes pour se défendre et les permis sont une forme de taxe qui en plus permet la création de listes de propriétaires pour faciliter les confiscations éventuelles. De plus, l'enregistrement ne fait qu'augmenter le contrôle des armes à feu, leurs classifications et catégories tout en les rendant moins accessibles pour les gens ordinaires. Aucune de ces mesures ne réduisent les mauvais comportements et n'empêchent les gens de prendre de mauvaises décisions.

La possession d'armes à feu est devenue de plus en plus influencée par un courant idéologique. Les propriétaires d'armes

à feu sont issus de toutes allégeances politiques: Mais les partis politiques forcent les gens à faire des choix inconfortables. Idéalement tous les partis devraient encourager les droits et libertés individuelles et ne pas être une menace envers la possession d'armes à feu. Ce n'est malheureusement pas le cas. Les partis et les politiciens qui ne veulent pas que vous possédiez vos armes sont aussi susceptibles de vouloir contrôler d'autres aspects de vos vies personnelles et de la société en général. Les anti-armes sont généralement arrogants et feignent le motif de sécurité publique. Leurs arguments sont souvent que, si on interdit l'arme X ou l'aspect ABC, le monde deviendra sans violence, plein d'arcs-en-ciel, de bonbons et de licornes. Leurs arguments naïfs sont faussés au départ, car ils croient que même les malfaiteurs changeront leurs agissements s'il n'y a plus d'armes à feu.

Une arme à feu, un objet inanimé en soit, n'a aucun rapport avec les mauvais comportements humains. Les gens qui ont de mauvaises intentions trouveront toujours le moyen de les exécuter. Pour eux, les lois n'ont aucune influence sur leurs actions ou leurs choix d'armes. L'histoire de l'humanité est pleine d'exemples d'atrocités commises sans le recours aux armes à feu. Objets contondants, bâtons pointus, explosifs et même les mains nues ont servi avec grande efficacité par ceux qui avaient de mauvaises intentions.

Interdire l'accès de n'importe quelle arme à feu à des fins légitimes ne prévient pas quelqu'un d'y accéder illégalement et ceci s'applique à tous les autres objets pouvant servir d'armes. Les interdictions entraînent plutôt un non-respect généralisé des lois parmi ceux qui en étaient respectueux car ils s'aperçoivent rapidement qu'ils ont été injustement ciblés et punis. Lorsque le député Robert Nault et d'autres Libéraux bien connus font des déclarations méprisantes envers les propriétaires d'armes à feu, ils sont sérieux. Ils veulent vraiment vous enlever vos armes et les activités criminelles sont sans importance pour eux.

Ce qui est important pour les politiciens c'est d'obtenir, de maintenir et de garder le pouvoir politique. En ce sens, vous détenez une certaine force face aux pressions politiques continues pour diminuer votre capacité de posséder des armes à feu. Vous pouvez voter et travailler pour des candidats pro-armes contre ceux qui veulent vous les enlever et leurs guerriers de la justice sociale.

La prochaine élection Fédérale exigera que notre travail soit sans relâche et concentré - une pression pour déloger le Gouvernement actuel. Nous devons aussi nous assurer que le prochain Gouvernement apporte des solutions concrètes aux enjeux qui nous concernent. En tant que membres responsables de notre société nous devons participer activement dans le processus politique. Il est important que vos actions et votre vote soient stratégiques et bien compris par le candidat que vous choisissez. La prochaine élection sera une des plus importantes à laquelle nous ferons face, elle pourra déterminer l'avenir de la possession d'armes à feu au Canada.

Votre ACAF travaille fort pour que nous obtenions le meilleur résultat possible. Nous sommes plus organisés et plus concentrés sur notre objectif que jamais auparavant. Faites votre possible pour augmenter nos membres et informez le plus de bon citoyens que vous pouvez à propos des enjeux qui nous touchent. Demandez aux commerçants de distribuer la littérature de l'ACAF lorsque les clients achètent des armes et munitions. Trouvez des gens qui pensent comme nous et faites leur joindre l'ACAF. Mais surtout, impliquez-vous en politique. Il est primordial que nous fassions la promotion de notre culture des armes à feu et opposer ceux qui veulent la détruire. Si vous pouvez consacrer un jour par semaine à notre cause, vous aurez déjà contribué énormément pour que nous soyons vainqueurs.

Nous avons d'autres étapes à franchir pour nous organiser face aux élections. Contactez le(s) Directeur(s) de votre Province ou Région pour savoir ce que vous pouvez faire et je vous en prie, aidez lorsqu'on vous appellera. 



Vice-President's Message

Blair Hagen

Consultations To Confiscate



Canadians are made of tougher stuff and we love our right and cultural tradition of firearms ownership.

These Liberal proposals are particularly egregious and offensive, because what's really being targeted is the rights and property of Canadians. These are Canadians who are forced to hold firearms licenses and registrations, not actual criminals who don't care what the law is. The civil disarmament lobby doesn't quite look at it that way; your gun, my gun and our possession of them are viewed as an inherently suspicious activity. We are an unacceptable danger to public safety, which must be managed and legislated against until the practice can be ended in Canada.

The government's online Internet dialogue was started, ostensibly, to give Canadians their say. Information about it was disseminated on the various Internet gun forums, blogs, Facebook and other social media almost immediately. Over the past several weeks, I've had the opportunity to speak to hundreds of NFA members and firearms owners. Many have asked me if there is any point in participating in this dialogue. They ask, "Is the government really interested in hearing alternative views?"

What I've told them is, whether the government is serious or not, it's important to make sure the truth is heard. This is a hugely important issue that has serious ramifications on the rights and property of all Canadians, regardless of whether they own firearms or not. It is our civic duty to respond, and one Canadians who believe in freedom should take seriously. What has greatly impressed me is the widespread and enthusiastic participation in this process by Canadians who believe in our rights and freedoms nationwide. You have made your voices heard and have had an effect. It will become even more important to do so as this process goes forward.

In other news of importance, the UN small arms marking requirement has been delayed once again, until December 2020. You might remember that this requirement, signed onto by the Liberal government of Jean Chretien

During this last month, the government has been holding online Internet consultations on its "handgun and assault weapons ban" proposal. Round table discussions nationwide with stakeholders also took place. I attended one in Vancouver, and NFA counsel Guy Lavergne attended one in Montreal.

These consultations were precipitated by the demands of Toronto Mayor John Tory, during his re-election campaign, as a knee jerk and politically craven response to try and deflect criticism away from the out-of-control criminal gang violence in that city. They were repeated during civic elections in Montreal. Justifications for bans are currently founded on hearsay from certain police departments and law enforcement officials, about firearms stolen from or illegally transferred by firearms licence holders, and

these have not been substantiated by fact or statistics.

The inclusion of the words "assault weapon" shows just how loaded these consultations really are. Excuse me, I just couldn't resist the pun. "Assault weapons" are, of course, the new buzzword used for attacking the possession and ownership of semi-automatic rifles. It was used to justify the confiscation of property in Canada in the past and is being used again by the radical civil disarmament lobby to demand more confiscations of rights and property.

With the failure of the long-gun registration nationally, they have gone back to their old incremental approach. Categorize firearms and their owners, demonize them, and create the political conditions necessary to force governments to legislate against them. It's an old story.

almost 20 years ago, would require an additional serial number, unique to Canada, be stamped onto every firearm imported. This being in addition to the usual manufacturer's marks and serial numbers.

Apparently, the absolute necessity of this can only be appreciated by certain politicians, academics and high-level bureaucrats. The rest of us are far too unintelligent to understand the benefits for world peace by adding one more serial number to a firearm. Those of us who think about the future of the Canadian right and cultural tradition of firearms ownership worry greatly about this, because the treaty is aimed squarely at destroying firearms cultures in first-world nations like Canada and the United States.

Even though you may have purchased all the guns you ever intend to own, what about future generations? If firearms are no longer affordable, in combination with fees for licensing and registration, the practice of owning firearms will be

far less attractive, if not impossible.

The UN small arms marking requirement is, of course, designed to shut down domestic firearms importation, ruin the Canadian firearms industry and eliminate firearm wholesalers, distributors and retailers from coast to coast. It complements the licensing and registration requirements of the *Firearms Act* in reducing the number of firearms available to Canadians and their ability to afford them. The Canadian firearms industry is in no way prepared to meet the requirements of this marking program and is breathing a sigh of relief with this latest temporary reprieve.

It is still just possible for the average Canadian of even modest means to lawfully acquire, own and use firearms. The mandate of the government, the Canada Firearms Program and the UN Small Arms Programme of Action is to extinguish this Canadian cultural tradition and practice through economic, political, legal and bureaucratic warfare. That is the mandate of the civil disarmament

bureaucracy; to make firearms ownership in Canada unattractive, socially unacceptable, rare and ultimately politically inconsequential.

Warfare is a strong term. It conjures up images of death and bloody battlefields, but I can assure you this new kind of warfare has just as many ramifications on your future, your family's future, your culture, your beliefs and your values as the violent conflicts of the past. So, forgive the dramatic verbiage, I'm not often given towards that sort of thing, but we either stand and fight this now or else fade into the misty oblivion of globalist civil disarmament as mandated by the UN Small Arms Programme of Action. That is going to take fundamental political and legislative change, and the election of a government with the guts to do it.

I think Canadians are made of tougher stuff and love our right and cultural tradition of firearms ownership. I think you, the members of Canada's National Firearms Association, agree. ♡

The UN small arms marking requirement is, of course, designed to shut down domestic firearms importation and ruin the Canadian firearms industry.





Preserving Our Firearms Heritage

Gary K. Kangas

A Teenage, Sharpshooting Cowgirl



Having read an article in the *Bridge River Lillooet News* regarding a teenage cowgirl, Jade, who won multiple classes at a 1,000-yard rifle shoot in May of this year, I decided to follow up on the story. Turns out this event was hosted by the Tweedsmuir Park Rod & Gun Club, and I was introduced to a shooting discipline that I knew nothing about, even though I've been a shooter for 71 years.

Long-range rifle shooting is a North American frontier original. Its history dates back to the very beginnings of the French and English settlements and the acquisition of firearms by First Nations. As the story of the frontier era unfolded, hunting and long-range shooting became a theme. Frontiersmen and women always competed in rifle matches, but as technology improved, the distances began to grow longer and longer. By the late 1800s, long-range rifle shooting became a passion. Women shot along with men in an era where the female sharpshooter became very visible. Then the 20th and 21st century dawned, and now purpose-built rifles, handloaded ammunition, optics and sophisticated rests are an integral part of long-range competitions.

Jade is a teenage cowgirl from a ranching family in the BC interior who carries

on in the tradition of the female sharpshooters. She enjoys guns and shooting, having grown up with her sister, Megan, shooting .22-calibre rifles on their ranch. Having recently graduated from high school, she is now enrolled in a sustainable ranching program at a university in the British Columbia interior. Another sharpshooter in the family is Jade's aunt, Jessie, who is a competitor in long-range benchrest rifle competition.

Jade's long-range shooting adventure began in the spring of 2017 when her aunt Jessie invited her to compete in the Tweedsmuir Park Benchrest Match. Sister Megan comments, "In 2017, Jade did very well, but she did extremely well in 2018."

Quotes from the *Bridge River Lillooet News* of May 13, 2018, verify Megan's statement. "Jade finished the competition with a first in Junior 13 to 18 Boys and Girls Sporting category, another first in Junior Low Aggregate Group, a third win in the Junior High Aggregate plus a second in the Ladies Heavy Barrel. She finished fourth overall among 63 competitors and won a rifle, shotgun and a scope for her efforts."

The rifle Jade used was a 6mm Dasher fitted with a Nightforce scope and a handmade stock constructed by her coach, Lincoln Edward. Lincoln uses

stock blanks from various sources or Baltic birch available locally. Lincoln has built stocks for a number of custom rifles, and uses custom actions and Benchmark barrels imported from the US by Big Horn Sales in Houston, BC, and Corlane's Sporting Goods in Dawson Creek, BC. Besides building custom stocks for benchrest events, Lincoln is an avid outdoorsman and big-game hunter who uses many vintage-style, big-bore rifles for harvesting moose and elk.

The beginnings of benchrest shooting grew from varmint hunting, shooting very small game at long distances. The competitive part of the game, as we know it today, is credited to two men who began the competitions in 1967. While those early shooters used highly modified hunting rifles, the equipment and ammunition began to evolve. Eventually rifles were created specifically for benchrest. However, the goal is still the same: to shoot the tightest group possible at 1,000 yards. The game is precision in every respect, up to and including mental precision, and reading atmospheric conditions. The calibres typically used have 6mm, 7mm or .30 calibre bores, and these are divided into various classes.

The benchrest rifle matches at the



Jade with coach Lincoln Edward.



Junior winners, Tweedsmuir Park Long Range Match, May 2018.

Tweedsmuir Park Rod & Gun Club have been held since 1975 and have entertained competitors from across western Canada as well as the US. Although the gear is sophisticated, this is a very social game. Competitors assist one another, and if someone attends without a rifle, the participants will invite them to use

their equipment.

Although the guns are extremely accurate, it's important to remember the key variable still rests with the shooter who is pulling the trigger. Wind flags are placed on the range between the shooter and the target, allowing a skilled shooter to judge the amount of correc-

tion needed to place a precise shot. The shooter must carefully read the wind and visual effects of sun and cloud to compensate for the trajectory and drift of the bullets. Although it is a technology game, it still comes down to the human factor.

Competitors such as Jade and her aunt Jessie are carrying on the tradition of frontier women shooters. And our firearms heritage is being encouraged, coached and mentored by skilled marksmen such as Lincoln Edward. ♦

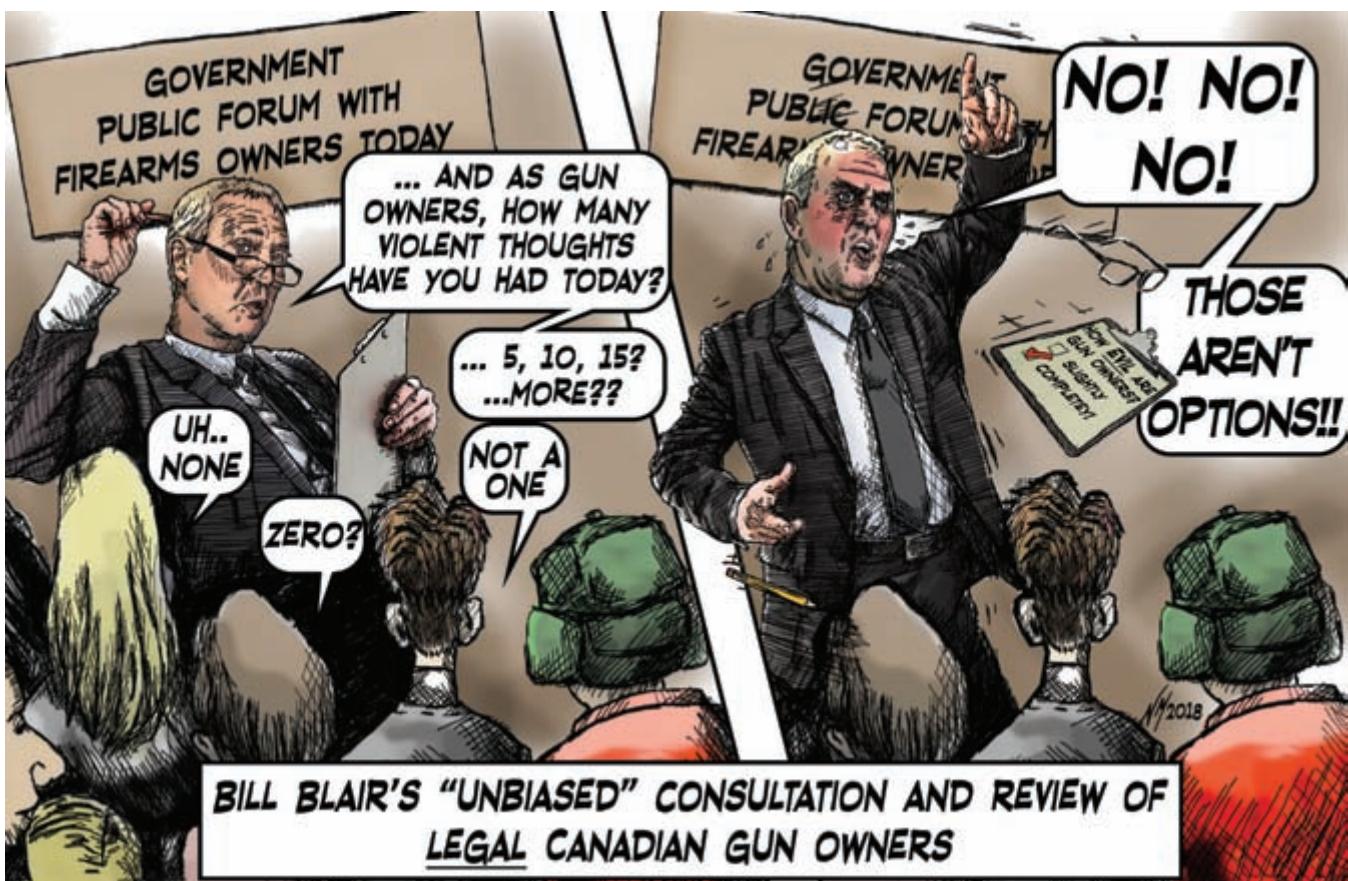
For more information see the following websites:

Tweedsmuir Park Rod & Gun Club:
www.tprg.ca

Benchrest Canada: www.benchrest.ca

Author's note: I wish to thank Lincoln Edward for his patience and fine tutorial on benchrest shooting.

Sources: Lincoln Edward, Wendy Fraser of the Bridge River Lillooet News, Megan Meservia.





Politics & Guns

Bruce Gold

Blaming Guns To Hide Failure



In this article, we look at the Marjory Stoneman Douglas High School shooting that started the latest anti-gun furor in the US. Here in Canada, it gave the Liberal Party the opportunity to piggyback on millions of dollars of anti-gun press coverage and provided the PR cover they needed to introduce C-71.

The underlying issue in this controversy is not really guns. It is the right of self-defence. In Canada, many see the issue of guns used for self-defence as radical and divisive. In practical terms, this is understandable. Canada is a peaceful country and most violence takes place within the criminal community. Virtually all law-abiding gun owners and virtually all legal guns will never be involved in

violence. Unfortunately, the antis basing the debate on a violent incident structure the debate around the issue of violence. To simply reject the self-defence part of the debate guarantees the debate will be completely one sided.

But we can learn from the British experience. When British gun owners accepted the dictate that gun ownership is only about sports, it allowed the government to frame the debate as a contest between your silly, unnecessary hobby and the latest high-emotion, high-profile shooting. The infinitesimal involvement of legal owners and legal guns in violence makes this a very dishonest approach to the issue. Unfortunately, it is an effective strategy

with a public largely ignorant of guns or existing gun laws, even if it's aimed where the problem isn't.

Traditionally self-defence was regarded as a fundamental human right. William Blackstone, in his *Commentaries on the Laws of England, Book III*; (1768) wrote that "defence of one's self, (if)...forcibly attacked in his person or property, it is lawful for him to repel force by force; and the breach of the peace, which happens, is chargeable upon him only who began the affray...It considers that the future process of law is by no means an adequate remedy for injuries accompanied with force; since it is impossible to say, to what wanton lengths of rapine or cruelty outrages of this sort might be carried."

This traditional approach sees self-defence as the opposing of unlawful violence with lawful violence in the preservation of public peace and safety. The statist approach insists that self-defence is strictly a matter for the state. The United Nations Human Rights Council has declared that only states have the right to self-defence and there is no human right to personal self-defence. The UN also insists that strict gun control by the state is a human right, (the fact that most member states are dictatorships may influence this view). Examining these views, we can see a continuum of rights from an absolute human right to an exclusive right of the state. As we cross this continuum, responsibility and authority shifts away from the citizen towards an all-powerful state, until even a citizen's life is not theirs to defend.

In Canada, there is a solid political consensus that the state has a monopoly on violence, both internationally and domestically. Statists rely on this political consensus to justify labelling self-defence as "vigilantism" and an infringement on the rights of the state. However, in practice, it is the government's policy to simply ignore the issue. For example, the Liberal proposals for new gun bans makes no mention of self-defence or how an armed public might deter crime and reduce violence.

Since the issue of lawful self-defence is so emotionally charged and traditionally so weighed in favour of the individual, the Liberals have adopted a policy of attacking the right indirectly. For example, charging a person with unlawful storage because they were able to engage in perfectly legal self-defence with a gun. A major part of the current gun debate resolves itself into a debate over controlling citizens and the right to self-defence by controlling the means of self-defence (guns, knives, etc.) One can have different opinions on how this difficult issue should be addressed, but it is unwise to follow the British example and cede to it by default.

THE PARKLAND SHOOTING

In February 2018, a student in Parkland, Fl., shot and killed 17 other students. This deadly mass shooting was followed by a massive anti-gun crusade supposedly organized on a national scale by a handful of high school students. In reality, the student initiative was quickly co-opted by anti-gun organizations who mobilized millions of dollars to support this "children's crusade." It was simply assumed that citizens could not be trusted with guns, or at least some types of guns, (in this case the AR-15, a common hunting rifle) therefore firearm rights should be sharply curtailed. The problem, as they saw it, was lax laws had resulted in the citizen having more autonomy than they could handle or deserved. The solution was greater state control and regulation. This crusade took it as a given that further restrictions on guns and the law-abiding was the key to crime control. Restricting criminals was scarcely an issue, since all the shooter's actions were already illegal. In essence, this agenda wished to move access to the means of self-defence further away from the citizen and place it more firmly under state control.

However, within days of the shooting, facts began to emerge revealing the non-stop failure of the state to protect the students. For starters, the students were in a gun-free zone with a 100 per cent ban on individuals with firearms and a total ban on all firearms. Calling for increased limits on personal possession and limiting types of firearms is more ideology than sanity, when total bans on both have utterly failed. Even when they only needed to be enforced in a small area, they failed.

It was also revealed that Cruz had a

long history of violence, threats and misconduct. On no fewer than 23 occasions, the authorities were contacted and alerted to the danger he represented. However, he was protected from legal consequences because he was Hispanic and therefore came under the Obama administration's policy of ending the "school-to-prison pipeline" by forcing schools to adopt a race-based disciplinary system. This required schools to have equal disciplinary statistics, regardless of different group behaviours. (The Progressive version of equity means equality of group outcomes in a society divided into identity groups. Any disparities in school discipline outcomes were assumed to be the product of racism and the fault of society.) Prior to the shooting, the Parkland school system had fully and enthusiastically adopted this restorative justice disciplinary program, an approach local law enforcement wholly supported. Cruz had been transferred back and forth from disciplinary schools six times in three years. The PROMISE program, (Preventing Recidivism through Opportunities, Mentoring, Intervention, Support, and Education) protected him from arrest and from a record that would have prevented him from legally purchasing his guns. This fact, (originally the authorities lied about his involvement) brings into disrepute the assertion that the authorities can, and will, successfully monitor individuals and act to prevent violence. In this case, the authorities had deliberately crippled their own ability, such as it was, to intervene by the adoption of a politically correct policy that favoured politically desired statistical outcomes above actual events. These statistics in turn were meant to be political ammunition to "prove" the pre-existence of a racist, discriminatory society and demonstrate the heroic Progressive accomplishment of achieving equity as top-down government intervention solved the problem.

Having failed in prevention, the authorities then failed catastrophically in their response. When the shooting occurred, there was an armed deputy on duty at the school. The deputy hid outside and did not intervene in any way. Backup in the form of three more deputies from the local police force soon arrived. They also stayed outside and did nothing to stop the shooter. It was only upon the arrival of police from another department that the building

was entered, only to find Cruz had fled. Notably, the Montreal Massacre, the rationale for Canada's harsh gun laws, also saw the police stand outside and do nothing whatsoever to stop the gunman or save the students.

CONCLUSION

Pushing gun control is often an effective and convenient way to distract public attention and conceal official failures in policy or practice. It is virtually guaranteed to garner the quick support of the press. Anti-gun groups, who use high-profile incidents to further their agenda, can also be counted on for support. Accordingly, attacking guns is popular with politicians and law enforcement officials looking for an easy solution to a difficult problem. The major drawback (besides government lies) is how it diverts essential resources away from where the problem is – gangs and criminals – and wastes those resources in a futile campaign against the law-abiding and their legal guns, where the problem isn't. The Parkland shooting is a classic case of government failure followed by a propaganda offensive to divert attention to firearms. A pattern so familiar that any anti-gun initiative is an almost certain indicator of serious levels of incompetence and failure that the government wishes to conceal. ♦

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ELEY'S ACCURACY DOMINATION

Rimfire barrel testing comes to Canada

BY AL VOTH





Slave stocks for rifles and custom grip panels for handguns are used to clamp firearms into a machine rest for testing.

Accuracy is a fickle mistress, and keeping her happy means paying attention to details. It's why we fuss so much about guns, sights and ammunition. But because their ability to tweak ammunition is so limited, rimfire competitors have an extra challenge. Unlike centrefire shooters, they don't have the ability to vary powder charges, try different primers, swap bullets and change cartridge length. A rimfire shooter's ammunition options are limited to trying different brands of ammunition, and then different lot numbers within whatever brand looks promising.

Serious competitors know that to win in rimfire matches, they need the absolute best-performing ammunition in their guns, and they'll do whatever it takes to get it. Unfortunately, there aren't many ammunition companies willing to make a serious investment in ensuring they receive it. Typically, they just sell you ammunition and wish you luck. A notable exception to this rule is ELEY, the famous British manufacturer of 22 Long Rifle ammunition, whose products dominate rimfire accuracy

events. They have now opened a barrel testing facility in Canada.

COMPANY BACKGROUND

Located in the UK, ELEY began making ammunition in 1828. They made their first rimfire cartridges in 1860, but their domination of that market didn't begin until the 1950s when they began a program to make quality ammunition for British competition shooters. They have recently added airgun pellets to their product line, but now the only ammunition they manufacture is 22 LR. Their ammunition so dominates the competition world that more Olympic medals have been won with ELEY than all other brands combined.

PRODUCT LINE

Although ELEY is best known for its famous Tenex line of match ammunition, the firm also markets a wide variety of "lesser" ammunition. After all, at close to \$30 for a box of 50 cartridges, Tenex is not the obvious choice for many shooting chores. Besides, Tenex is subsonic and some shooting chores

call for hollow point and/or supersonic loadings. That's why ELEY's catalog offers 18 different 22 LR loadings. Product lines such as Match, Edge, Club, Sport and Contact each have their own niche market and price point for competitive shooters. My personal favourite is the Club line, as I've found it shoots far better than I can hold, and at less than half the price of Tenex, it's my go-to practice and training round.

But ELEY also offers supersonic choices, including Action Plus and Force. These can be great choices for some training requirements, or for use in guns that require high-velocity ammunition to function reliably. Another favourite of mine is ELEY's High Velocity Hollow Point round. Its accuracy has been exceptional in every rifle I've tried it in, and it slays small critters with authority. There's even a subsonic hollow point for use in places where you want to make as little noise as possible.

BARREL TESTING

Besides making wonderfully accurate ammunition, ELEY supports shooters



by maintaining test ranges in the UK, Germany, Norway and the US (Texas) to which shooters can bring their firearms for accuracy testing. Machine rests, electronic targets and proprietary software are used to determine which ammunition lot number shoots best in a competitor's gun. Canada's Korth Group, located in Okotoks, Alta., near Calgary, has recently become an ELEY distributor and have taken the plunge into setting up a barrel testing facility in Canada as well. Their testing centre is now fully operational and ready to help shooters find the most accurate ammunition for their application.

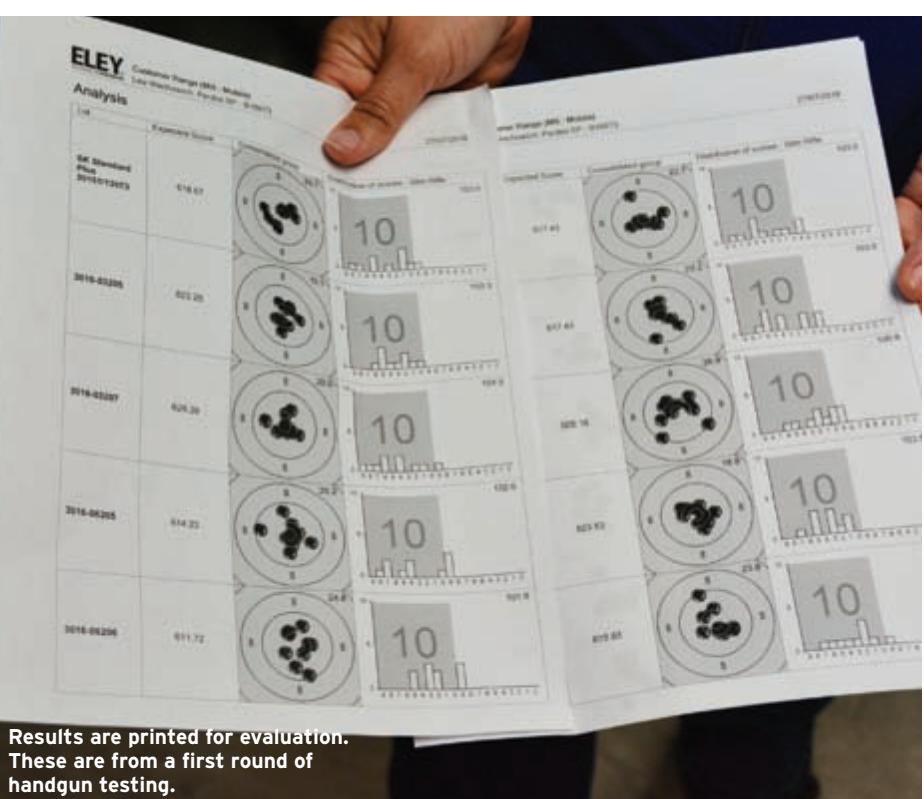
I'll admit that you'd have to be rather obsessed with accuracy to utilize ELEY's barrel testing system for either hunting or practice ammunition. But when the range bag is zipped open and the Tenex comes out, things get serious. This is when every shot counts, and those who trained and prepared the hardest will reap the rewards. Part of that preparation will now likely include having a barrel tested in the ELEY system.

In preparation for testing, the competitor's needs and wishes are discussed and a selection of ammunition and lot numbers is agreed on. Once the gun being tested is in hand, the tester fires 10-shot groups using the chosen ammunition. Of course, to achieve viable results, all human error must be removed, and so the firearm is clamped in a machine rest. At its core, ELEY's barrel testing system seems simple, just clamp the handgun or the rifle in a machine rest, shoot a bunch of different ammunition and see which is the most accurate. And while that's correct, it's the details that make the process more than what it appears to be.

First, a slave stock, machined from aluminum, is used for a rifle's clamping system. If a handgun is being tested, grip panels which match the gun's frame are used. The investment in these alone is significant, and while all common, match-quality firearms can be accommodated, they certainly don't have slave stocks or grip panels for every firearm.

With the gun held firmly and consistently, a target is needed, and paper doesn't cut it here. ELEY's system uses an electronic target equipped with sensors, which detect the passage of a bullet and transmit its exact X-Y co-ordinates to a computer. The location of each bullet is subsequently displayed on a screen for us humans to see, while the computer works its way through more complicated data.

Results are displayed on computer monitors as shooting progresses.





To ensure shooters have access to the ammunition they need, Korth has committed to carrying a large stock of ELEY products.

Most of us are used to evaluating accuracy based on group size, and that information is always available. However, group size is not necessarily the best way of determining accuracy, especially for international competitors who use the decimal scoring system. If you're not familiar with that system, see the sidebar for a brief explanation. With this type of scoring system, group size doesn't tell the entire story. ELEY's patented software recognizes this and predicts which ammunition will consistently result in the highest scores.

BEYOND BARREL TESTING

With the best lot number of ammunition for a competitor's firearm selected, this program goes further by ensuring the availability of the selected lot number to the shooter. After all, there's no point in finding the perfect ammunition if you can't find it in stock. This is called Premium ELEY and it's available only to competitors who use this barrel testing service. In my tour of Korth's facility during the demonstration I attended,

they showed me the stock of ammunition they have set aside for barrel testing and the Premium ELEY program, and it's huge.

The fee charged for barrel testing is \$299, and that includes return shipping. However, the entire fee is waived if a case (5,000 rounds) of Tenex is purchased. As I write this, pricing is \$25/box of 50 rounds for Tenex and \$15/box for Edge. If you're serious about rimfire competition, that kind of pricing and service makes this barrel testing program a no-brainer. To enquire about the program, call or e-mail Korth Group at 403-938-3255 or info@korthgroup.com.

ELEY's five barrel-testing facilities are magnets for serious competitors from all corners of the globe, and we're fortunate to have one here in Canada. Rimfire shooters in disciplines such as silhouette, biathlon, schuetzen, benchrest, ISSF and others will see higher scores as a result of its availability. And as a result, more Canadian athletes in all rimfire sports will be standing on the podium. ♦

DECIMAL SCORING

Decimal scoring provides a more accurate way to decide the best shooters in a competition. This is because traditional integer scoring is simply based on the value of the scoring ring the shot strikes. Values such as 10, 9, 8, etc. are generated by the shots striking the target. However, with decimal scoring, shooters will receive score values such as 10.4, 9.9, or 8.3. The pre-decimal number still reflects the value of the scoring ring struck, but the post-decimal number reflects the shot's proximity to centre within that ring. The highest possible value a single shot can score is 10.9. This maximum value is derived from an additional set of 10 subrings within the centre 10-point circle, increasing in 0.1 point value as the rings approach the centre of the target. Therefore, the maximum possible score for a ten-shot target would be: $10.9 \times 10 = 109.0$.

These decimal-valued subrings on the target are not visible and are applied by the software operating the electronic targets now used in international competition. Alternatively, there are some apps which will scan a paper target and generate a decimal score.





The long-action Carbonlight is a full pound heavier than the short action.

FEATHERWEIGHT ACCURACY

Testing the Sako Carbonlight

BY T.J. SCHWANKY

Sako has danced around the lightweight rifle market for a number of years. Previous offerings included the Finnlight and the A7, as well as versions of the T3 from their sister company, Tikka. But now they are tackling the light rifle market head-on with the Sako Carbonlight.

Aimed squarely at mountain hunters, the Carbonlight is available in three action lengths and ranges from an advertised weight of 5.3 pounds (2.4 kilograms) for the short action to 6.2 pounds (2.8 kilograms) for the long-action chamberings. This rifle is meant to compete squarely with rifles like the Kimber Mountain Ascent and a bevy of custom and semi-custom rifles. With a suggested list price of close to \$4,000, the Carbonlight is well out of the range of typical Winchester or Remington shooters. But then again, this is a rifle aimed at serious mountain hunters who want a high-quality, lightweight rifle and are willing to pay for it.

I tested the Carbonlight in 7mm Remington Magnum and in 7mm-08 Remington, and my first impressions

were that this was unlike any other rifle I'd shot from Sako. The heart of the rifle, and the reason for its name, is a true carbon fibre stock. Unlike many other offerings, the carbon pattern is not just stenciled on an injection-molded stock. Instead, those are actual carbon fibres visible on the exterior of the rifle's stock. Similar to the carbon fibre-reinforced polymer technology used in the automotive and aerospace industries, this material was used primarily to shave weight off the rifle. But after running several hundred rounds through both of these rifles, I can attest to the fact that recoil is very manageable for such a light gun. I suspect this is due in large part to the stock's construction, a feature I've noted in other carbon fibre stocks I've shot in the past. They just seem to have an inherent ability to reduce recoil. Interestingly, the Carbonlight's stock has an almost rubbery feel to it, a so-called Soft Touch surface, making it easy to grip in the cold and rain. It wasn't at all the texture I was expecting when looking at the rifle, but it turned out to be a pleasant surprise.

Currently only available in a right-hand version, the Carbonlight features a beefy, stainless Sako 85 action and stainless, fluted barrel. While most mountain rifles feature blind or floorplate magazines, Sako stayed with their dependable detachable magazine system on the Carbonlight. The magazine must be pushed in and the release pushed at the same time in order to release it, meaning there is virtually no way of accidentally popping the magazine out in the field and losing it. The rifle can be top loaded as well, for those really worried about removing the magazine. While it's an all-metal magazine, it's extremely lightweight and, in my opinion, a nice option on the rifle. I took both rifles along on several bighorn sheep outings in Alberta's Kananaskis Country, and as we are required to pass through numerous restricted areas, the rifle must be unloaded and reloaded several times. The detachable magazine made this a breeze and its double stack design holds five rounds in the 7-08 and four in the 7RM, versus the typical three in most blind magazines.



Despite its 20-inch barrel, the short-action Carbonlight produces impressive velocities.



Both rifles easily made the sub-MOA guarantee with factory ammunition.



On my scale, both rifles were about two ounces heavier than advertised, with the 7mm-08 weighing in at about 5.4 pounds and the 7RM at 6.4 pounds. Part of the weight difference can be attributed to the length of the action, but it's primarily due to the difference in barrel lengths. The 7RM sports a 24-inch barrel and the 7mm-08 a more modest 20-inch barrel. The 7RM also came standard with a removable muzzle brake.

After extensive shooting, I settled on using the brake at the range, but saw no need in a hunting situation, as recoil was definitely not excessive for a rifle of this weight. There was no point of impact shift with or without the brake, but the brake definitely tames the magnum down considerably. I likely wouldn't have missed it had it not come with the rifle, but I have to admit it is a nice standard feature.

Both rifle barrels have a 1:9.5-inch twist and the 7RM really liked the 162-grain Hornady ELD-X bullets I tried it with first. Using Hornady's Precision Hunter factory ammunition, I was able to shoot a .38-inch group at 100 yards with a 15x Zeiss Conquest HD5. This scope was equipped with a Rapid Z reticle and I suspect I could have tightened the groups up even more using a reticle with a finer crosshair. I had no trouble keeping groups inside 2.5 inches at 600 yards with the same set up. I tried the 150-grain ELD-X in the 7mm-08 first, and with the same scope it met the sub-MOA guarantee of the rifle. But I felt I could do better and did with the 140-grain SST in Hornady's Superfor-

mance factory ammunition, shooting a consistent .75 inches. Unfortunately, I didn't have any dies to handload for the 7mm-08 at the time of testing, but for a hunting application this still makes the 7mm-08 an effective 600-yard choice. It was a bit windy the day we tried the 7mm-08 at longer ranges, but it kept groups inside five inches at 600 yards. With an impact velocity of around 1,800 feet per second at 600 yards with the 7mm-08, this is as far as I'd shoot game with it anyhow. Even with the short barrel, the 7mm-08 produced muzzle velocities slightly higher than those published by Hornady and the 7RM was virtually dead on for published velocities.

On the bench and off the bipod, the 7RM was a pleasure to shoot and I experienced very little muzzle jump. The 7mm-08, on the other hand, while having pleasant recoil, demonstrated noticeable muzzle jump, likely because of the shorter barrel and lighter weight. The 14-inch length of pull fit me like a glove and I'm of the opinion it's one of the nicest factory stocks I've ever used. I would compare it to any of the high-end aftermarket stocks available. The trigger comes factory set at three pounds, a bit heavy for my liking. Sako triggers are easily adjusted with an Allen key, however, and I turned both down to 2.5 pounds, which helped tighten groups as well. The trigger is super crisp and has zero creep or travel, and that consumer adjustability is a nice feature.

Due to their unique dovetail design,

scope mounting options are limited for Sako rifles. So, I used traditional Sako Optilocks on the 7RM. But at nearly seven ounces, they do add considerable weight to the rifle. I saved a little over two ounces on the 7mm-08 by using Sako's one-piece ring mounts. If a person was really serious about shaving a bit more weight, you could have the receiver drilled and tapped by a gunsmith and utilize Talley lightweight one-piece rings. I like both of the Optilock options, but on a lightweight mountain rifle, saving weight is a consideration.

I took the 7RM on several early-season mountain hunts and the 7mm-08 came along on several late-season hunts, where both were exposed to some severe weather conditions. Despite being \$4,000 rifles, I felt no desire to baby or protect them. You are paying for function and not form in this rifle, and despite being subject to heavy snow and rain, I saw no shift in point of impact or in function of action, safety or trigger. This rifle is definitely built to withstand the rigors of mountain hunting, but that shouldn't come as any surprise to those already shooting Sako 85s.

For the serious mountain hunter in search of an off-the-shelf option, the Sako Carbonlight definitely deserves a look. While currently only listed in 7mm-08, 308, 270, 30-06, 7RM and 300WM in the Canadian catalogue, some dealers have brought in special-order chamberings and, as the popularity of this rifles grows, you can expect to see more options available. ♦





The Timney trigger was easy to install, mating perfectly with the old action.

TOP-SHELF TRIGGERS

Understanding a key mechanism to better shooting

BY LOWELL STRAUSS

I still remember squeezing a match trigger for the first time. It was on an Anschutz Match Model 1403 rifle with peep sights. Lying prone, I aligned the sights with the distant bullseye and pulled the trigger. BANG! The shot rang much sooner than I anticipated. And even more of a surprise was the hole cutting the target's 10-X ring. I fired four more shots and, to my amazement, a tiny cloverleaf group, smaller than a dime, greeted me as I rolled the target back for inspection. I went home proud as a peacock to show off my impressive target and previously unknown target shooting talent.

Growing up on a farm in Saskatchewan, my shooting experience to that point was with a Lakefield Mossberg

Mark II 22 LR and a .177-calibre Slavia air rifle. Not exactly precision firearms with match-quality triggers. But it's the trigger that is the heart of the shooter-rifle interface, a connection that makes a huge difference to rifle precision. That alone makes them worth a closer look.

TRIGGER TERMINOLOGY

Shooters and manufacturers describe triggers using terms such as: heavy, light, crisp, clean, spongy and gritty. And metaphors describing triggers abound. So, let's explore some of the jargon used around triggers.

The *break* of a trigger is the point at which it has moved the sear far enough to allow the hammer or striker to release its energy, driving the firing

pin forward to hit the primer. A trigger's break can feel crisp or soft – crisp is usually preferred for accurate rifle shooting. Some people describe a crisp trigger as "breaking like a glass rod," which sounds evocative, but leaves me puzzled.

Creep is the amount of travel before the trigger breaks. Creep is bad, as it can cause movement in the rifle by pulling it off target, even before the shot. A trigger that continues to move rearward after it disengages the sear is exhibiting *over-travel*. And like creep, trigger over-travel affects rifle accuracy due to extra movement (albeit minor) before the bullet leaves the barrel.

Lock time is the amount of time from when the sear is released until igni-



tion, and it is measured in milliseconds. Lock time is a function of firing mechanism design. A long lock time gives more time for the shooter to drift off target. Lock time decreases with lighter hammers or firing pins, more powerful springs, or shorter distances for moving parts.

Gritty and *smooth* are terms often used to describe trigger pull. Gritty triggers feel rough as they are pulled, often due to rough machining of the engagement surfaces. The opposite is a smooth-feeling trigger, or one that feels the same through its entire movement. *Trigger stacking* is when trigger weight progressively increases as the trigger is squeezed, as opposed to being consis-

tent. Gritty triggers are often heavy, compounding the effect of roughness. A talented gunsmith with the proper tools can smooth a gritty trigger. But a word of caution, attempting a trigger job at home may lead to a dangerous firearm.

In semi-automatic firearms and double-barrel shotguns with a single trigger, the trigger must *reset* before firing the next shot. Reset is the distance the trigger moves forward to reengage the sear. A short reset is desired for faster follow-up shots.

TRIGGER TYPES

Triggers have one simple job, and that's to initiate the firing sequence of

a firearm. Most have either a *single-stage* or a *two-stage* trigger. Of these, the single-stage trigger is the simplest. When a single-stage trigger is squeezed, immediate resistance is felt, and when enough force is applied, the sear disengages from the trigger, firing the rifle. Simple.

Two-stage triggers are more complicated and often found on military and target firearms. A two-stage trigger provides the shooter with tactile feedback, and because of its design can be more predictable, especially under the stress of combat or competition. A two-stage trigger has two separate movements (stages). The first stage has spring-loaded force working against



TriggerTech builds three models for the Remington 700, Primary, Special and Diamond, for hunting, target and competition. All models are available with either a curved or straight lever.

the trigger finger with no movement of the trigger on the sear. As the trigger is pulled back, it reaches a positive stop against the second stage. This second stage is the one that releases the sear, feeling much like a single-stage trigger. If, at any point in its movement, the decision to shoot is abandoned, the two-stage trigger will return to its original starting position when released.

Two-stage triggers can provide an advantage in any competitive discipline where the rules dictate a minimum amount of force is needed to fire the gun. For example, Olympic 10-metre air pistol rules require a minimum trigger weight of 500 grams. If the gun is equipped with a two-stage trigger,

shooters can adjust their trigger to put most of that weight into the first stage. With most of the pull weight in the first stage, it's possible to have the second stage set for only a few grams.

Another type of trigger is the set trigger. This type gives the shooter a quick choice as to how much force must be applied to the trigger to fire the gun. If the trigger is pulled conventionally, a normal amount of force is required. However, if the trigger is set, only a tiny amount of force is needed to discharge the gun. In a single-set trigger, this change is accomplished by pushing the trigger forward. A click is typically heard or felt as the mechanism engages, and pulling the trigger then requires much less force, perhaps as little as 25 to 50 grams (one to two ounces). A double-set trigger works on the same principle, but it has two triggers. The rear trigger's only function is to set the mechanism, while the front trigger fires the gun. Set triggers function like light single-stage triggers and are sometimes labeled as *hair triggers*.

Release triggers are another type of trigger and are perhaps the most specialized. As the name implies, they are designed to fire a gun when the trigger is released, not when it is pulled. Of course, the trigger must be pulled first, in preparation for firing. But then, as soon as it is released, the gun fires. The sole purpose of these triggers to defeat flinching. They do this by working to disrupt the learned, subconscious reflex which tells the shooter, "Pulling this trigger will result in pain." Release triggers, in effect, trick the subconscious by not firing the gun when the trigger is pulled, but rather when it is released. Their unusual nature makes them dangerous in untrained hands and guns equipped with them should be marked as such. Normally, they are only found on shotguns used in competition.

FACTORY TRIGGERS

Good triggers used to be reserved for target guns or high-end hunting rifles. Finding a good trigger on an average factory rifle was hit or miss. But times have changed, and shooters are demanding good triggers even in entry-level guns. In 2002, Savage introduced their two-stage Accu-Trigger. It is a user-adjustable trigger, adjustable from 1.5 to six pounds, that is safe even on

its lightest weight thanks to its unique safety blade. It also boasts a 1.6-millisecond lock time. Competition is a wonderful thing, and since then, most firearm manufacturers have upped their game by producing higher-quality triggers in everything from entry-level guns to high-end offerings.

AFTERMARKET TRIGGERS

Whether you're looking to improve an old military rifle or turn your hunting rifle into a tack-driver, one of the first upgrades many shooters consider is an aftermarket trigger. After all, trigger quality makes a profound difference in rifle accuracy, whether it's an entry-level or a high-performance gun. The beauty of aftermarket triggers is that, for most firearms, they are easy to install at home with minimal tools. Fortunately, there are several reputable companies building aftermarket triggers for firearms. Two that I have worked with are Timney Triggers and TriggerTech.

Timney Triggers was established in 1946 by Allen Timney, who built triggers for sporterized military rifles after the Second World War. Today, Timney produces more than 170 models of triggers for bolt-action and semi-auto rifles (including ARs) and shotguns. Chances are good they'll have a trigger for your rifle.

TriggerTech is a Canadian company that builds triggers for Remington 700 bolt-action rifles, AR-pattern rifles and crossbows. They build a drop-in trigger assembly featuring what they call Frictionless Release Technology for a zero-creep break and short over-travel. I've been running a TriggerTech in my Remington 700 for over a year now, and its performance is outstanding.

PROJECTS

Installing an aftermarket trigger is quick and easy, thanks to their drop-in design and the clear instructions these companies provide. To illustrate the process, I upgraded two of my rifles, an Izhevsk Armory-built Mosin-Nagant rifle and a favourite deer rifle, a Remington 700 chambered in 7mm-08.

Mosin-Nagant The Mosin-Nagant is an inexpensive military surplus rifle that's a hoot to shoot. Paired with surplus military ammunition, I

This Mosin-Nagant rifle is fitted with a drop-in aftermarket trigger by Timney Triggers. On the outside, it looks like the original. But with its lighter trigger weight, minimal creep and over-travel, the Timney trigger is far superior to the original military version.

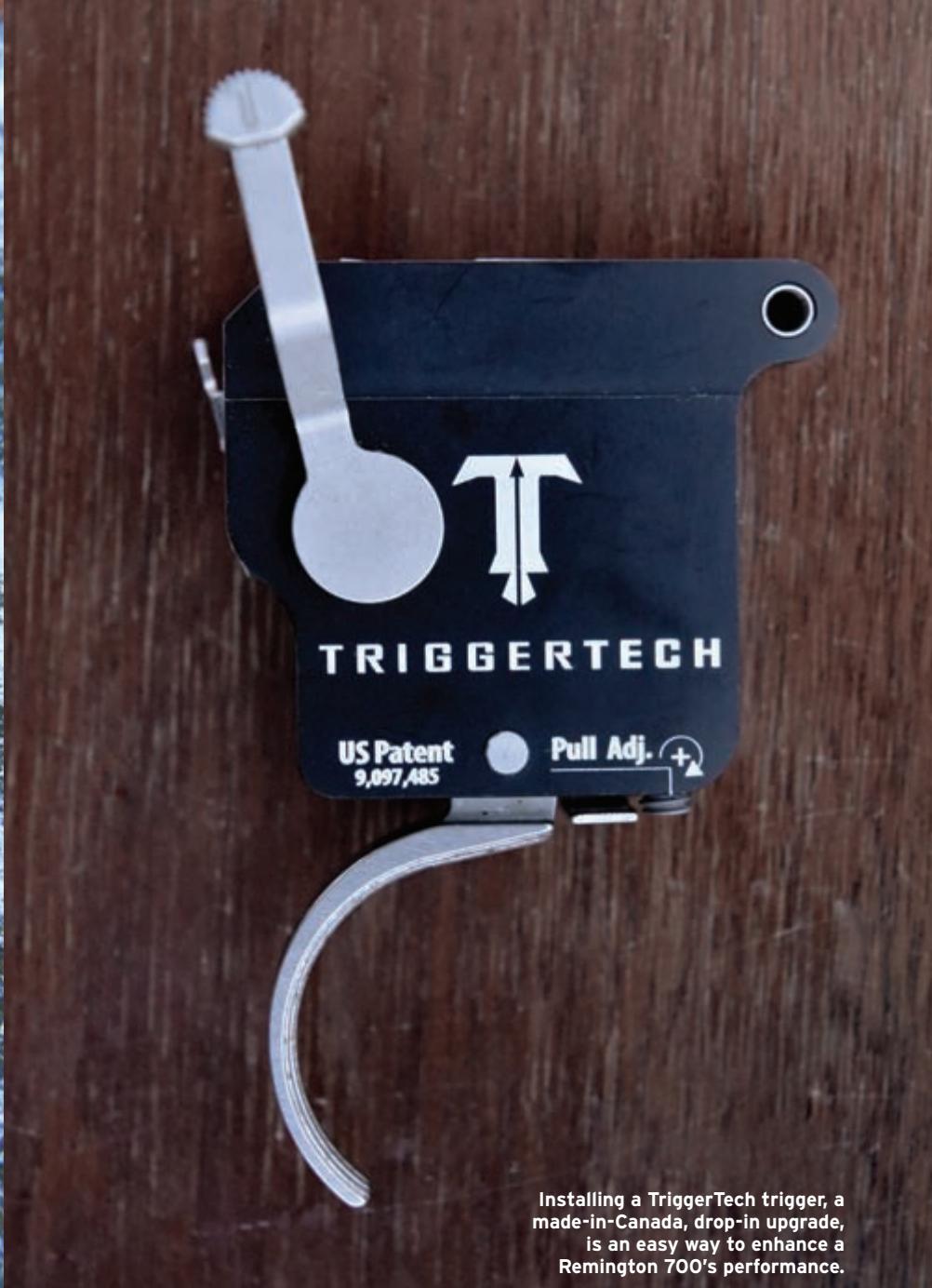


can ring steel without breaking the bank. But the Mosin-Nagant trigger, like many military rifles of this vintage, has creep and over-travel as long as the Russian winter. I knew adding a new trigger to this old warhorse would improve its accuracy and my shooting satisfaction. Turns out I was right. It took only 30 minutes from start to finish to install the new trigger and do some minor inletting on the stock to accommodate it. The Timney trigger came from the factory with a measured pull weight of 2.75 pounds, with minimal creep and overtravel. Its pull weight is adjustable up to three pounds or

down to 1.5 pounds, depending on your shooting style. The trigger is a huge improvement over the original 6.75-pound spongy trigger with excessive creep and overtravel. This trigger assembly includes a trigger-blocking side safety, another upgrade bonus. Is it a competition gun after this trigger upgrade? No, but it's certainly tightened my groups.

Remington 700 Despite its factory trigger and plastic injection-molded stock, my wife's Remington 700 SPS rifle, chambered in 7mm-08, is reliable and accurate. It constantly achieves sub-MOA accuracy with most factory

ammunition. Its trigger was good, but not great. The stock needed to go and while I was at it, I wanted a better trigger, too. TriggerTech builds high-quality triggers made right here in Canada and I was pleased with their performance on another one of my Rem 700 varmint rifles. The trigger was dead-simple to install with no modifications needed. The only tricky part about the TriggerTech install was trying to leave the bolt catch pin in place. Removing the rear pin too far causes the bolt catch to fall out, and it's a little tricky to reassemble. Otherwise, the installation involves driving out the two pins of the factory trigger



Installing a TriggerTech trigger, a made-in-Canada, drop-in upgrade, is an easy way to enhance a Remington 700's performance.

assembly and replacing them to hold the new trigger. The bolt release is fitted to the bolt catch with small pliers and the upgrade is complete. My wife appreciated the gift of this rifle in the first place, and now with these upgrades she gleefully takes this firearm out for practice and hunting whenever she can.

With any trigger replacement project, always be sure to test the trigger for function and safety. These are easy upgrade projects and well worth the effort involved. In the time you've taken to read this article, you probably could have installed a new trigger on your rifle.

TRIGGER QUALITY MATTERS

I guess you can say trying that first Anschutz trigger spoiled me. Now every rifle I try gets judged on its trigger, often before ever firing a round. Sure, most rifles are accurate, but it's the shooter's ability to consistently hit the target that matters, and that comes from good marksmanship and trigger control. An excellent trigger doesn't make a rifle inherently more accurate, but it makes it easier for shooters to achieve their best. Holding a rifle on target throughout the shot sequence, from trigger squeeze to lock time to bullet travel time in the barrel (shooter follow through) all affect

accuracy. A light trigger with minimal creep, a clean break and short overtravel gives the best opportunity for precision marksmanship. Think back to your best shooting experiences; are your favourite rifles those with good triggers? I know mine sure are! ☻

For more information about the triggers used here see:

Timney Triggers: www.timneytriggers.com

TriggerTech: www.triggertech.ca





RIFLE BUILDING 101

Inside a Canadian tech school's gunsmithing program

BY TIM FOWLER

Loyde Tober's fully custom 6.5 Creedmoor isn't the only special project he's been dreaming about. The gunsmithing program at the Northern Alberta Institute of Technology (NAIT), now in its third year of operation, has been a dream of Tober's for more than a decade. He is the chair of the CNC machinist program in the School of Trades at NAIT, where he also teaches his students to turn out perfectly tuned custom rifles. And if Tober gets his dream, the program will expand in the future to offer gunsmith certification.

BASIC MACHINIST SKILLS FIRST

Colonel Townsend Whelen said, "Only accurate rifles are interesting." And teaching students to produce interesting rifles is the goal of the gunsmithing program.

"Low and slow, to do it right," said Tober, about the operating philosophy of NAIT's gunsmithing program. So, before participants start in on expensive actions, bolts and barrels, they acquire manual machinist skills, as well as proficiency with the engine lathe. Pre-req-

uisites for the gunsmithing course are machine shop I and II, or completion of first-year machinist or millwright apprenticeship. For students new to machining, the pre-requisite work covers manual machining tool work and getting comfortable with the safe set up and use of the lathe. Students practice laying out work, cutting and precision measuring on bar stock before moving on to facing, rough and finish turning, knurling, boring and grooving – all skills required for completion of the gunsmithing course. All participants must hold a valid Firearms Possession and Acquisition License.

Once students demonstrate basic machining skill, they proceed with three successive segments delivered through Continuing Education: firearm acurization (GNSM 105), where students put newly-acquired machining skills to work truing actions and aligning bolts; firearm barreling (GNSM 107), where a student's custom barrel in the calibre of choice is turned, threaded, chambered and fitted to the action; and, firearm customization basics

(GNSM 110), where students bed their barrelled action to a stock or chassis of choice, make desired enhancements to stocks, actions, bolts and attach optics. The goal is to leave the program with a range-ready firearm, customized into the participant's dream rifle.

NAIT's machine shop has one of the best-equipped teaching facilities for machinist training in Canada, and expanding the course offering to gunsmithing-related projects makes good use of the school's equipment. Lab-workshops are equipped with precision measurement and manufacturing machines, from basic lathes to top-end CNC machines. This gives participants exposure to a variety of machining equipment and prepares them to do the work required on their project rifle. It also equips them for the range of tools and machinery they may encounter once they leave the program.

SECURITY IS PARAMOUNT

The Firearms Act and its associated regulations apply to NAIT, just like any gunsmithing or retail shop. NAIT's



Jeweling a rifle bolt as part of the NAIT gunsmith program.

legal, security and communications teams all had a part to play in developing the policy and processes for the gunsmithing program. Having firearms at a public institution's campus requires careful attention to safe access and egress, secure storage and licensed handling. Alberta's chief firearms officer engaged with NAIT to review and

approve plans for secure gun storage at every stage of the program, including safe and controlled movement of firearm actions and work in progress, from storage to the shop and back again.

PICK YOUR (DREAM) PROJECT

When Rachelia Pawluk found herself with a year between degrees, she

signed up for the gunsmithing program. Pawluk describes her project as a bush gun based on the 223 Wylde chambering. While machining her dream project gun will likely do little to build out her biology and psychology degrees, it may well help with her plans to be a CTS (career and technology studies) teacher when she completes her education degree at the University of Alberta.

For her rifle, Pawluk chose an Alberta-made Jury barrel in medium contour, chambering it in 223 Wylde, which will allow her to use 223 Remington or 5.56 NATO cartridges interchangeably in the firearm. At completion of the project, Pawluk will have a tuned Model 700 action, 18-inch barrelled tack-driver in 223 Wylde, topped with a 3-18X scope, settled into a Hogue stock. She plans to Cerakote the works when the project is complete.

"Shooting is like yoga, but with a quantifiable result downrange," said Pawluk.

Pawluk entered the pre-requisite machining courses with zero machining experience and found new skills in threading, turning, grinding and cutting. The first portion of her training was just getting comfortable with the use of machining tools and practicing on bar stock before progressing to the expensive parts: the bolt, action



Rifles completed by NAIT students.



For her rifle, Pawluk chose an Alberta-made Jury barrel in medium contour, chambering it in 223 Wylde.

and barrel. Pawluk was surprised by the versatility of the lathe and says it opened her mind to the understanding that with the right tools, one can manufacture almost anything.

Tober said, "We want to keep it simple for students. Measurement is a huge part of what we instruct. The majority of work in the classroom is spent on developing skills to work safely and accurately."

SAFETY IS SUPREME

"A gun is so simple," said Pawluk. "But firing a gun starts a controlled explosion right next to your face. You don't want that to go wrong. That's why I took such a long time to do things right."

Once participants learn the proper set-up and safe operation of the machines, they practice manufacturing parts to specifications. They start with diameters and lengths, then threads, and onto boring and counterboring – always practice, practice. Exposing students to multiple machine set ups is

critical because students will encounter a variety of different methods to attain the same result. Tooling used at NAIT is still basic because participants may not have the budget to buy sophisticated tools. All of this happens under the watchful eye of the instructor at a 12-to-one ratio of students to instructors.

PROGRAM EXPANDING

Until now, projects have been limited to Remington Model 700 actions, but starting next session, Savage, Howa, Tikka and Sako actions will be made available for custom projects. Participants have the choice of bringing their own material for projects or accessing one of the discounted suppliers for actions, barrels and components, should they choose. Now there are more options than ever before, and more paths to your dream rifle.

Danny Busse, a gunsmith of 30 years and current instructor in the course said, "It is interesting to see different ideas.

Everyone has their vision of the perfect rifle. Some want to build a rifle for a niece or nephew, some just want to build a rifle from scratch. This is their opportunity. That's a really nice aspect [of the course]. But no matter what the project, part of our job is to make it safe."

"The best way to spend a Saturday, hands down. If I can't be fishing or hunting, I love to be here because the students are fully engaged. They know at the end of this they are going home with their project. And they are super excited about [a rifle] that functions extremely well," said Tober. "Sometimes a student will send me a picture of a great target or there will be one in my mailbox with a question, 'How's this?'"

If you are a firearm owner who has a safe full of rifles, you probably also have the perfect rifle in mind – a dream rifle. Maybe next year is the time to make it a reality. NAIT has the tools, the instruction and the program to get your project on target. ♦





HIGH-VOLUME HANDLOADING

A survival guide to winter reloading sessions

BY ERIC R. PREVOST

Most precision and long-range rifle shooters will tell you that handloading is one of the keys to consistent accuracy. Selecting a specific powder and bullet combination, and then teaming it up with carefully selected brass and primers, can significantly increase accuracy.

However, not everyone who handloads is searching for one MOA groups at 500 yards. Some sport shooters, such as those participating in action shooting events, are simply searching for a reliable round for their competition pistols or rifles. Others enjoy a weekly day at the range and are seeking a safe plinking round that fills their need for volume shooting. For these shooters, handloading offers a significant financial benefit, as it reduces their overall ammunition cost.

While people handload for different reasons, those who reload bulk amounts of ammunition have different challenges than those reloading a few boxes of ammunition a year. Bulk handloading does not have to be a dull, repetitious activity that fills time between exciting visits to the range. With a few tips and tricks, it's possible to turn high-volume loading sessions into part of your enjoyment as a sport shooter.

TOOLS OF THE TRADE

The process of handloading cartridges does not change as one enters the reality of loading large quantities of ammunition. Brass is still cleaned, deprimed and resized. A new primer is inserted into the case and a precise measure

of powder is added before seating the projectile to the right depth. The difference lies in the speed and simultaneous co-ordination of these activities.

A primary means of increasing efficiency and speed during bulk reloading sessions is to reduce the number of individual actions that have to be completed. For example, if you are loading each cartridge individually on a single-stage press, you would have to pick up each piece of brass, load it into the press, deprime the brass, remove it and start the process all over again. Simple enough for 50 pieces of brass; however, for hundreds or thousands, this 10-second activity can turn into hours. And that's only for one part of the process. The less the hands have to manipulate any part of the handloading process, the more efficient the overall procedure will be. Which is why the key to success in bulk reloading is to have the right press. While manufacturers produce a variety of presses, high-volume handloaders need to focus their attention on progressive models that complete a number of tasks simultaneously.

The famous Dillon 650, 1050 and other brands and models of presses offer the handloader an opportunity to complete multiple steps in the loading process with a single pull of the press handle. In one stroke, these modern, progressive presses can deprime a case while simultaneously adding powder to another, seating a bullet in the next and applying a crimp to the last case. With all of these activities happening at the same



Automated case feeders cut down on the individual actions required and can increase production enough to be a worthwhile investment.

time, on multiple pieces of brass, these progressive presses can significantly increase a handloader's production rate. Add additional features to these marvels of handloading efficiency, such as an automatic case feeder or bullet feeder, and the handloader can take even more steps out of the equation.

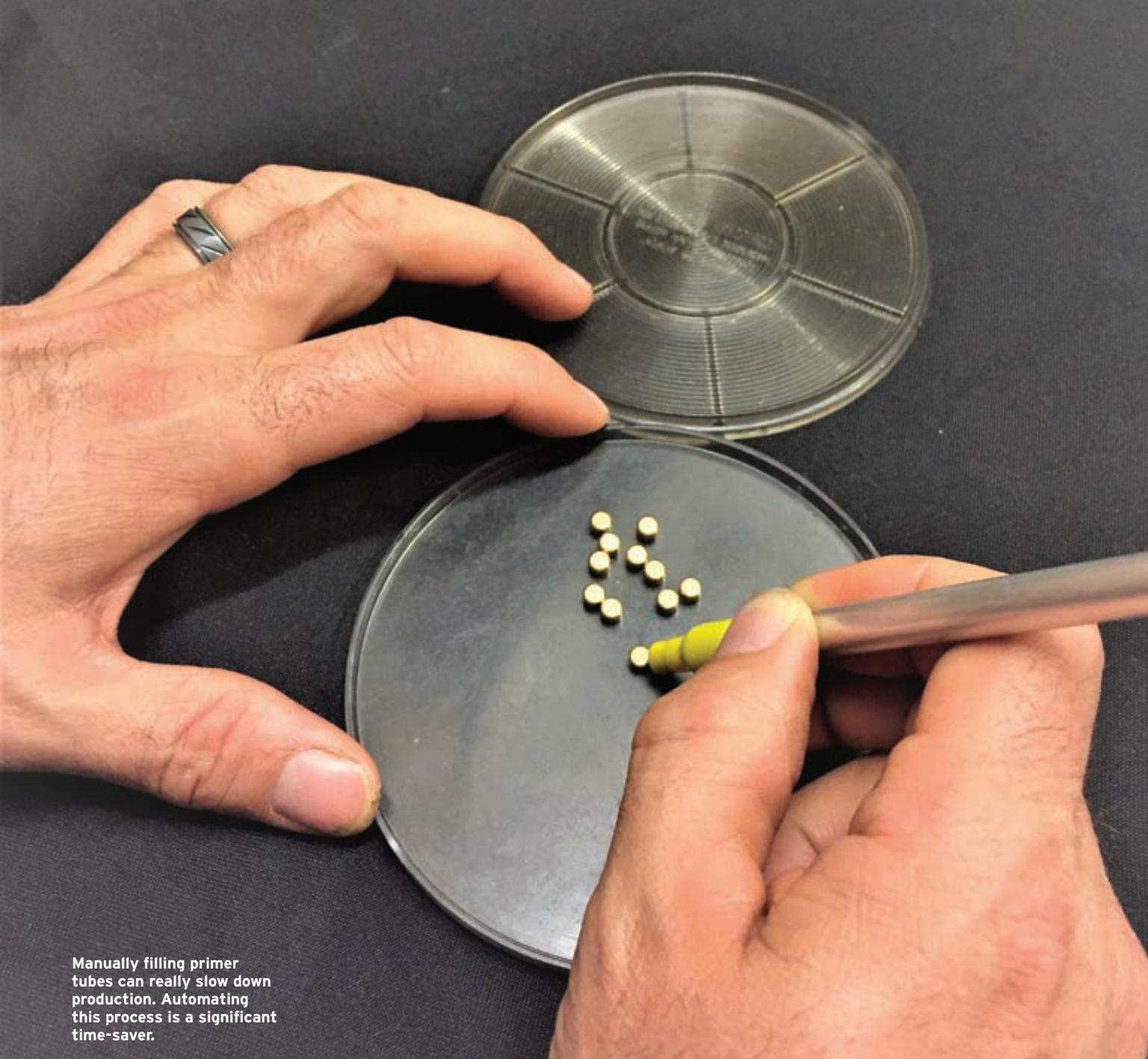
But not all handloading time savers come directly from the press. Sometimes the press can be a source of inefficiencies. Take the loading of primers into the press's feed system, for example. Many presses require the handloader to use primer flip trays to orient primers for individual pick up by tubes that are ultimately used to refill the primer feed system. This tedious and time-consuming task can be expedited by simple tools such as the Frankford Arsenal Vibra-Prime, or the Dillon RF100 primer tube filler. The Frankford Arsenal tool is hand held and uses vibration to quickly fill primer feed tubes, while the Dillon simultaneously flips primers and loads primer tubes in less than half the time.

But how much time do these additional features really save? As an example, take the simple task of placing a piece of brass onto the press. I timed this exercise several times to develop an average. From the time my right hand left the press, to the time I loaded a cartridge case onto the shell plate and placed my hand back onto the handle was approximately 2.5 seconds. Not a lot of time for one cartridge; however, for a handloader loading 12,000 rounds a year, this simple task adds approximately eight hours of additional time over the course of that year. That kind of time saving quickly makes the investment in a case feeder worthwhile.

QUALITY CONTROL

Handloading can be a safe and enjoyable hobby. But that doesn't mean there isn't some element of risk associated with the activity. There are numerous stories of handloading gone bad, with gruesome photos of personal injuries and damage to firearms. While horrific, these incidents are easily avoidable with attention to detail and careful planning.

One of the most important elements to handloading safety is to ensure that you have the right components for the load you are creating and have referenced a reliable reloading manual for powder charge, bullet weight and



Manually filling primer tubes can really slow down production. Automating this process is a significant time-saver.

overall length requirements. A safety element that I've added to my own routine is the completion of a checklist before every bulk reloading session. My checklist requires that I note the specific cartridge I am reloading, the right powder and projectiles, the correct primers, that the press has the proper dies in place and that my reloading bench is clear of anything not necessary for my work. By diligently completing the checklist before every session, I don't need to be worried that I'm forgetting an important element.

The final part of my checklist involves a detailed check of the press and a detailed review of the first 10 rounds produced. I check each cartridge to

ensure that the press is delivering the right powder charge, that each bullet is seated to the right depth and that primers and crimps are properly applied. These first 10 rounds are critical to confirm the press is set up for the upcoming session.

Ongoing quality control is a critical part of ensuring that your bulk hand-loading session is delivering safe and reliable rounds. One way of ensuring ongoing quality is to set a timer to go off at specific intervals. When it beeps, stop and take a sample of 20 freshly loaded cartridges and inspect them for any abnormalities. A case gauge is a great tool for this check.

In addition to external checks, it is

also critically important to do random powder charge checks. This can be done right on the press with products such as Dillon's powder check system. This system includes an easy set plunger, which activates an audible alarm if a case has too little or too much powder. But it's still important to complete additional verifications at random intervals to ensure that the powder checker is reporting correctly. Your smartphone's timer function is invaluable to making sure you are reminded of these important quality and safety checks.

STAYING FOCUSED

The most important part of a long reloading session is to stay on task, and



Good quality-control practices can ensure you don't end up with careless mistakes.



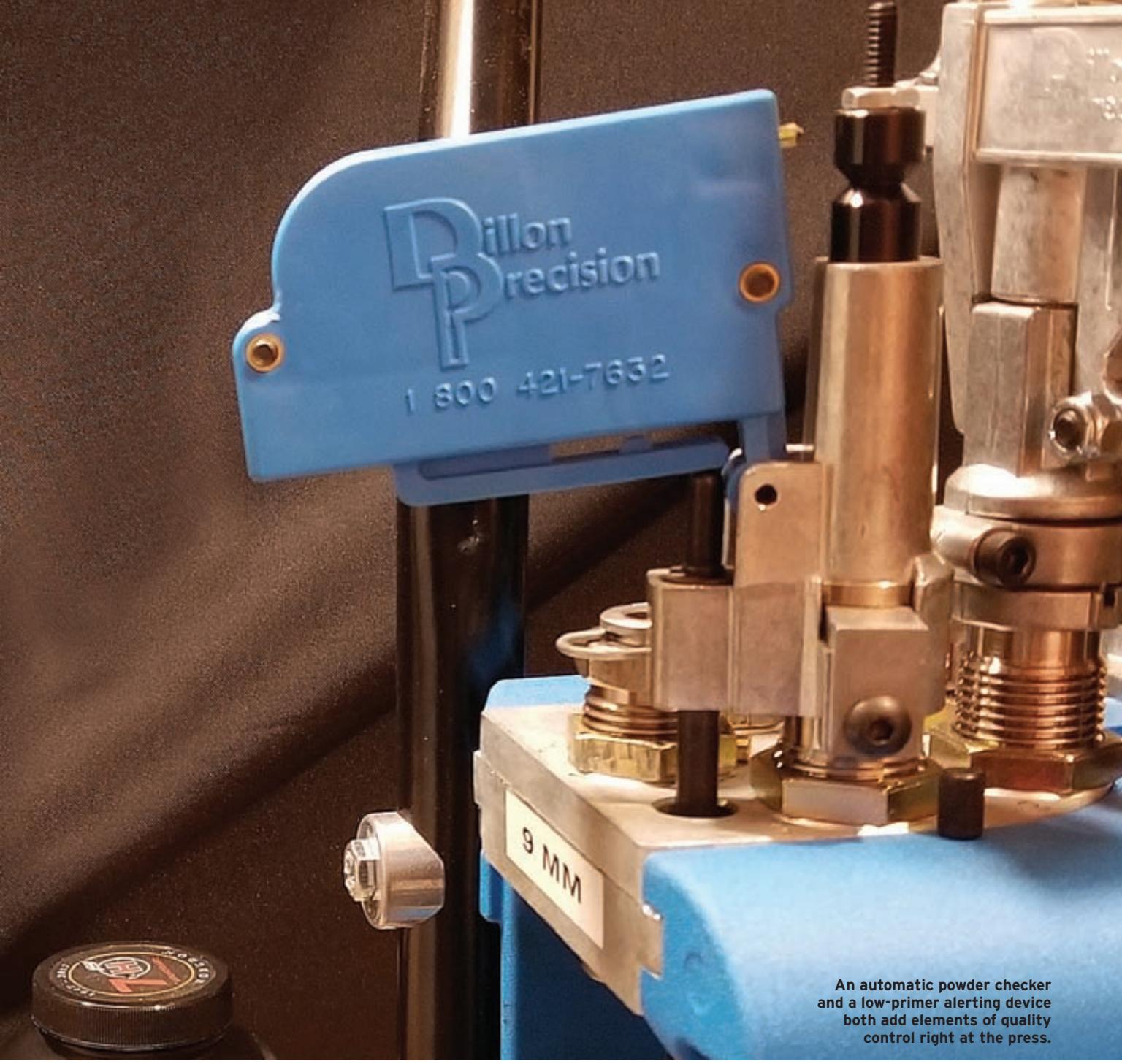
Cartridge gauges are a quick way to check if ammunition is properly dimensioned.

maintain focus on your quality-assurance process. Problems and mistakes are made through a lack of attention. But let's be honest, we live in an age of constant distractions, and for most of us the thought of pulling the handle on our reloading press hundreds of times over in a solitary room sounds as much fun as watching paint dry.

One of the most important parts of being a productive handloader is creating a place where you want to work. Don't banish your reloading activities to a dark corner of the basement, utility room, or garage. Take some time to develop a well-lit room, with a clean coat of paint and clean, warm flooring. Make your reloading space somewhere you are proud of, and where you want to spend your time. It's simple: if you want to be in the room, you will spend time there and load more rounds.

Now that you have a nice place to handload, keep the TV, computer and tablet out of view. While these devices provide hours of entertainment, they also provide hours of distraction. Remove the temptation to look up at the screen to catch the instant replay or check an incoming e-mail. These distractions can lead to dangerous mistakes.

But don't take all the fun out of your bulk loading sessions. Make some room for casual entertainment and background noise. Having some form of



An automatic powder checker and a low-primer alerting device both add elements of quality control right at the press.

sound system allows me to listen to my favourite music or podcasts. Again, the point is to create an environment that you enjoy being in, while reducing distractions that could impact the quality and safety of the loaded ammunition.

Lastly, it is also important to have all the tools, accessories and other items critical to your handloading session well organized and within reach. Additionally, having the right tools at hand for routine adjustments of dies, or emergency repairs of your press, will also serve to increase your efficiency. Many manufacturers, such as Dillon, have excellent tool kits and holders that

keep these tools close at hand.

Having to search through cabinets, shelves and toolboxes for your caliper, fresh batteries or primer flip trays will only add frustration and added inefficiencies to your loading session. Again, a checklist of your important equipment will help to ensure that nothing has been overlooked.

MAKING CENTS OF IT ALL

Handloading, for many, is part of the overall enjoyment of being a sport shooter. While significant personal satisfaction comes from winning a match with ammunition you have created, the

opportunity to shoot more because of the cost savings afforded by bulk handloading can't be ignored. Cost savings will vary based on the number of bulk components purchased, and the variable costs of these powders, bullets and primers. A variety of cost-calculating tools on the web can help you decide how much value you are getting out of your bulk handloading, but one thing holds true: the more you load, the more you save.

Whatever your reason is for handloading, taking extra care to make sure your high-volume loading sessions are enjoyable, safe and productive will give you even more time on the range. ♦



HANDLOADING BY FEEL

How a careful touch can detect potential trouble

BY BOB SHELL

There's a lot of advice available about how to handload ammunition properly, but not much of it includes information on the importance of feel when making ammunition. After all, it's never possible to see what is going on inside a reloading die, so we have to depend on feel for many of the functions we perform. At least, we do until someone starts making transparent dies. But once you learn how to feel your way through some handloading steps, ammunition production will be safer, and you'll produce a higher quality product. Everyone that handloads has methods which work for them but incorporating feel into the process will benefit all.

SIZING & DEPRIMING

Normally, after inspecting and cleaning brass, sizing and decapping is the first operation. Sizing reduces the case neck down to the correct size to hold a

bullet, while the case body is squeezed down a bit to enable chambering. Most dies deprime the case at the same time. The entire operation involves some resistance, and the amount depends on the size and brand of the case and the type of lubricant used (of course, if you're using tungsten carbide dies, no lube is required).

The resistance required to perform all of this resizing and depriming should always be mentally logged for future reference. Ideally, this resistance will be the same for all of the cases in a given batch. If it's too easy, you might have a split case or even allowed a completely incorrect case to slip in. If you encounter sudden excessive resistance during sizing, you may have forgotten to lube the case. Catch that error soon enough and you can usually reverse the case from the die. But if you ignore the extra resistance and force it, you'll quickly have a cartridge case stuck in a

die. That's a serious situation and you'll need a stuck case remover and some effort to remove it.

If you're working with military cases, especially of foreign manufacture, make sure that the primers are of the boxer type. Trying to decap a Berdan-type primer, which has no centrally located flash hole, with a conventional die will result in the die's decapping assembly getting bent and breaking the decapping pin. Again, if you're paying attention as the case enters the sizing die, you can feel the sudden resistance before damage occurs. This is just another place where feeling your way will result in less headaches.

Be aware that some brands of cartridge cases are more difficult to size than others, due to their construction being thicker and harder. Therefore, if you are mixing brands, this might account for some of the difference you're feeling. Also, previous loadings which ▶



Many handloaders prefer hand-operated priming tools, as it provides a better feel for the task.



Too much force was used to seat this primer, and it's obviously crushed.

Rifle primers (on the right) can be taller than pistol primers, so always use the correct primers for the cartridge.

were too hot or chambers which are oversized can cause excessive effort in the resizing operation. If you feel something unusual, always investigate the cause before proceeding further.

On the other hand, super light loads don't usually require much sizing, as there isn't enough pressure to expand the neck or body. For example, I use a load of five grains of Red Dot with a cast lead 86 or 100-grain bullet in the 30-06. The load sounds like a 22 RF, with no recoil, and is good out to 25 yards on edible small game. But the point is that sizing isn't even required, so I just use a decapper and put in a new primer. For such loads, old military or tired brass works fine, saving the newer brass for more serious work.

PRIMING

After sizing, priming is usually the next step. Seating a primer generates a little resistance, which is as it should be. But if the primer is difficult to seat, there may be a couple of reasons. First, the pocket might have some residue that needs to be cleaned out. Second, military cases frequently have a crimp in the pocket that needs to be removed. I use a reamer for that task, as I do a lot of military cases for various projects. There is a primer pocket expander/swage available, but I personally don't care for it. I've encountered some brands of foreign cases with pockets that are too small or shallow to easily seat a primer. I either avoid them or slightly ream out the pocket. You can decide if such cases are worth the effort to work with. If you use too much force to seat a primer, be aware that crushing it can adversely affect the performance of the ammunition.

Whenever primers insert too easily into an empty pocket, you should consider discarding the case. It's a sign that particular case has reached the end of its useful life. If you shoot maximum loads, this sign will manifest itself much sooner than if you shoot mild loads.

A little-known fact is that rifle primers are often taller than handgun primers. Most brass makes allowances for this. So, if the primers don't feel right, it may be that you are using the wrong primers. If you put rifle primers in a handgun case, they may stick out a bit. And if you attempt to force them in, that may damage the primer. On the other hand, putting a handgun primer in a rifle case may be too easy and the



Always pay attention to the effort required to seat bullets. A sudden variation indicates a difference in neck tension that can ruin accuracy.

primer may sit too deep in the case. Keep in mind that a rifle primer has a thicker cup because of the rifle's higher pressure and burns hotter because of the need to ignite more powder.

BULLET SEATING

Seating the bullet is also done by feel. You will notice some resistance, but that is normal. Always chamfer the inside of the case mouth, as this makes seating easier and more consistent. If the bullet seats too easily, you might have a split neck. Another possibility is the brass at the neck is too thin. I have used one brand of brass for the 8x57mm cartridge which has necks that are too thin, and as a result the bullets aren't held tightly enough. This will cause inconsistent velocities, among other problems, including bullets setting back deeper into the cases. I size those necks in a .318-inch die, which helps, but normally I will buy another brand of brass to avoid that headache. Another workaround is to size the neck again, after removing the decapping assembly.

And never dismiss the possibility that the bullets might be slightly undersize. It's not common, but it can happen. Also, the expander plug on the decapping stem might be too large, causing

loose fitting of the bullet.

CRIMPING

If you are crimping the bullets in place after seating, feeling your way through that process is vital too. Once you get used to how much effort is required to place the crimp, you'll quickly pick up on anything that is too light or heavy. Again, always stop to investigate. You might find cases which vary considerably in length; too short and no crimp is applied, too long and the case can even buckle under the force. However, as you learn to feel your way along, problems can be avoided. You can feel the case crimping into the bullet and, with experience, you can tell if the crimp is OK or not.

CUSTOM PROCESSES

If you do any work with wildcat cartridges, or create unavailable cartridge cases from common ones, learning to feel your way through some of this work is also important. For example, necking down cases to a smaller diameter will invariably cause the neck of the cartridge case to thicken. Frequently bullets are difficult to seat, and the extra resistance should be a sign that excess pressures can result when using such ammunition. This is especially

true when working with small calibres. Again, feel will indicate a problem, and in this instance the neck will have to be thinned in order to have good ammunition. Another sign of thick necks is that they may be difficult to chamber in a rifle. The remedy is to ream out the inside of the neck or turn it down from the outside. Sometimes I make 219 Zipper cases from 30-30 Win. brass. First, I size the brass in a 30-30 die, then after I size in a 25-35 die, and then I ream it and trim to length. Finally, it gets sized in the 219 Zipper die, and I get good cases without thick necks. Remember, when you neck down cases, the brass has to go somewhere, hence the need to thin necks. If you neck down only a small step, chances are you don't need to thin the necks, but check them out anyway.

There you have it, a short summary of some handloading processes for which you need to develop a feel. Paying attention to what you feel on the handle of a reloading press is important when loading ammunition. Making quality ammunition has enough challenges, so anything that you can do to give yourself an edge is always good. Until we get those transparent handloading dies, feeling is a great tool to have at the reloading bench. ♦





Teaching proper gun cleaning is an important part of learning about firearms.

WINTER MAINTENANCE

End-of-season gun care

BY JEFF HELSDON

Fifty years ago, gun care was straight forward, and swabbing the barrel with a solvent like Hoppe's #9 was a part of the cleaning regimen. Additionally, all guns were blued and wiping a gun down with an oily cloth was a given after every use.

Today, there are many different kinds of finishes on gun metal, and it isn't nearly as clear how to care for them.

But before looking at care and rust prevention, it's important to understand the difference between the various gun finishes.

First, before cleaning any gun, remember to ensure that it is unloaded. Check both the chamber and magazine.

And if the cleaning process is going to involve solvents, use rubber gloves and safety glasses. Consider that if the solvent is meant to dissolve gunpowder, copper fouling and/or plastic, it might not be good for your skin. And, it's so easy to splash into your eyes.

MODERN METAL FINISHES

The blued guns of yesteryear have a shinier look than the deep black, matte finish on guns of today. That difference results from how the surface is prepared prior to bluing. Instead of the metal surface being polished prior to bluing, today's guns are more likely to have been blasted with abrasives, thus

creating that matte finish. Although the appearance is different, the care is the same. The actual process for bluing varies slightly from manufacturer to manufacturer, but the one constant for care is a light coat of oil or a modern synthetic protective that should be applied after every use to keep rust at bay.

Camouflage finishes are popular for today's shotguns. While application methods vary, as does water resistance, most camouflage is a wrap placed over the base metal. But don't be fooled by manufacturer claims of water resistance — a light oil finish is often needed to keep rust away. Still, refer to the manufacturer's instructions for particular guns.



New pull-through options like Swab-Its or Hoppe's Bore Snakes are handy for cleaning while at the range or hunt camp.

Stainless steel is a common material of choice for extra weather resistance, and it does offer an extra level of corrosion resistance. However, wiping it down with a rust preventer is always a good idea. This is because stainless steel is rust resistant, not rust proof.

Cerakote is another common finish, being a baked-on ceramic paint. It's durable enough on its own to keep rust off firearms, and oil is not necessary.

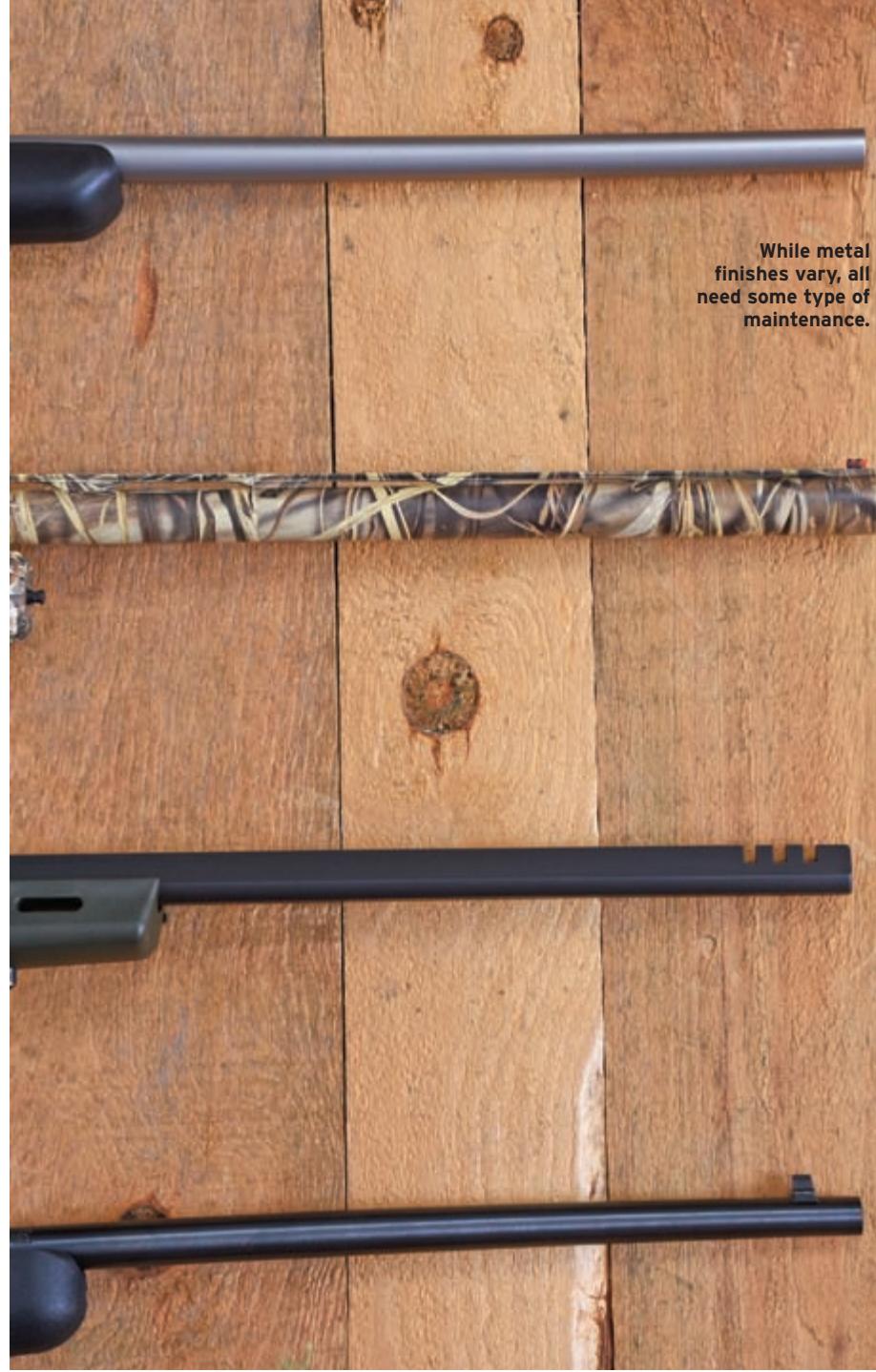
"Care for Cerakote is very simple. We recommend using a damp cloth to wipe down the surface," said Anthony Bujak of MDT, a BC company which

applies more Cerakote than anyone else in Canada. "Generally, a shot of compressed air beforehand helps to dislodge any dirt or dust that has built up on the surface."

As you can see, except for Cerakote, gun oil and/or cleaning solutions are universal. Vista Outdoors manufactures Hoppe's, Outers and M-Pro 7 gun-care products, and their communications manager, Kristen Veverka, explained, "Most cleaning solutions are designed for use on any of today's finishes. Just double-check manufacturer's recommendations prior to application."

THE BORE

Although there are some differences in bore materials, such as chrome-lined barrels, cleaning bores is similar if you're using modern, non-corrosive ammunition. With both rifles and shotguns, the traditional method is to use patches pushed through the bore with a cleaning rod. If the gun is particularly dirty, a copper brush attachment soaked in a solution can get things loosened up first. Follow that up with more patches as required, and then apply a protective patch that leaves a film of oil, or a modern, synthetic protectant



While metal finishes vary, all need some type of maintenance.

in the bore. And remember that any porting on a barrel should be scrubbed as well.

No matter what product is used, whenever possible, clean from the chamber end of the barrel, pushing debris out the muzzle. Visually inspect the barrel between steps for cleanliness and watch the patches to see how much powder or copper fouling is coming out. Hunters who use sabot slugs should consider an extra step after a lot of shooting, as the plastic sleeves that house the sabot can leave a residue in the rifling. A solvent specifically de-

signed to dissolve the plastic is recommended. But remember that while oil is a necessity, more is not better. Too much oil can cause problems in actions and barrels, as it may attract dirt and dust.

DEALING WITH A WET GUN

Hunting in the rain can be productive, but it can be hard on firearms.

"Water is the mortal enemy of firearms," Veverka said. "A thorough wipe down with an oil-coated rag or cleaning cloth with a rust inhibitor is recommended, as well as oil application to any parts that got wet."

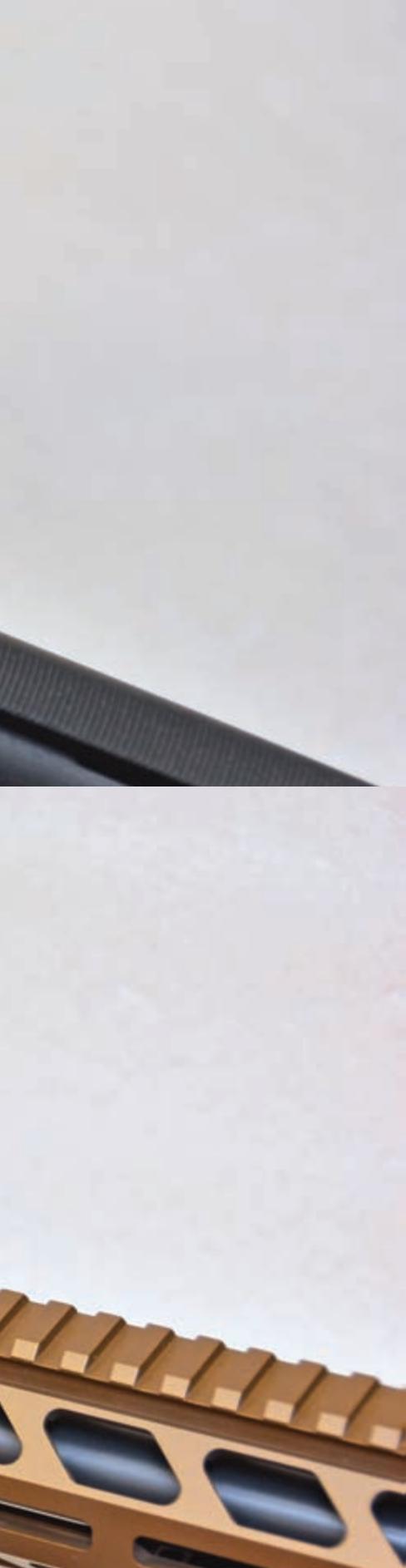
Shane O'Connell, service manager at Stoeger Canada, said if a gun has been submerged or soaked by rain or snow, a complete disassembly is the best remedy. This varies from gun to gun, but removing the barrel and choke tube is the first step with shotguns. Drying, cleaning and lubing of both the barrel and choke tube should follow.

With either a rifle or shotgun, the bolt should then be removed. After drying, cleaning and lubing of the bolt, complete the same for the receiver. Then, if water can be seen in the trigger assembly, remove it, then lube according to

Threaded parts, such as shotgun choke tubes or muzzleloader breech plugs, need extra attention to ensure they don't become seized in place.



Firearm components coated with Cerakote require little more maintenance than an occasional wipe with a rag.



the manufacturer's instructions. Always pay attention to how the gun was taken apart so the process can be reversed for reassembly.

O'Connell cautioned one area that is often overlooked is the recoil pad. It should be removed both to allow drying of any recoil reduction systems in the stock, such as Beretta's Kick-Off, and the pad itself.

"If put away damp or wet, the pads will begin to degrade over time and you may be met with an unpleasant surprise come next season/hunt," he said.

CHOKE TUBE CARE

Choke tubes need more care than just running a swab through for cleaning while they are installed in the barrel. Tubes should be removed occasionally, threads cleaned and a choke tube grease applied to the threads before reinserting. Ignoring this step can cause huge issues if the tube rusts in the barrel. Removing it might become a challenge, or even not possible.

SCOPE CARE

In most cases, the scope that sits on the top of the gun is the same black colour as the receiver under it. A natural assumption while oiling the receiver is the same treatment should be applied to the scope. But, not so fast.

"You don't really want to get any oil on the scope," said Jacob Edson, communications manager for Bushnell. "For the lenses, use a good glass cleaner and microfibre cloth. A soft lens brush can be a godsend in brush country. Most scope tubes are aluminum or magnesium, so you can just wipe them with a clean, wet cloth. Or, use that same lens cleaner." For this, pre-packaged lens wipes are handy, both at home and in hunt camp.

DON'T FORGET

Just because you brought your gun home and went through the routine maintenance steps, the task of gun care shouldn't be set aside until next season. If guns are stored in a basement for instance, ensure there is a dehumidifier to keep dampness in check. Even if the firearms are stored on a main floor, the humidity in a home can change as environmental conditions change.

"Firearms that are in storage should be monitored regularly. Environmental conditions can change if windows in a house are open, or it rains and the humidity changes within a residence. Firearms should be taken out

periodically and checked for any rust and wiped down," Everka said. "Also, prior to storage, they should be cleaned and maintained to the manufacturer's recommended guidelines to avoid any metal deterioration."

Gun care isn't complicated, and with a few simple steps your guns will become family heirlooms that can be passed down to future generations. And, really it hasn't changed that much in 50 years, becoming easier if anything. ♦

DISASSEMBLY

If the ability to take a gun apart is standing in the way of proper maintenance, perhaps it's time for gun owner's school. While disassembly might seem intimidating, I believe manufacturers are now designing guns for easier disassembly. And the first place to learn disassembly should be the owner's manual.

After a recent hunt in the rain, my Beretta A-400 Xtreme was wet enough that I saw drops of water throughout the action. I had often taken the forearm apart and cleaned the gas port, but I had never removed the trigger group and bolt. With the experience of having performed this task on a pump previously, I used the instruction manual as my guide and completed it. Also widely available are Internet videos detailing this process. Some manufacturers even have them on their website.

Besides either video or paper instructions, a few tools are needed for the job. With some guns, this might include screwdrivers, and for many shotguns a punch is needed to knock out the pins holding in the trigger group. When using screwdrivers, be careful not to mar the finish or the screw heads. Quality, hollow-ground screwdrivers will make the work easier, as will a set of gunsmith punches. You may also want to consider investing in a gun vise, as holding a gun in order to work on it can be a challenge.

O'Connell suggested a thorough, professional cleaning might be in order at the end of the season, but he prefers to do this himself.

"Personally, I have a hard time paying \$75 to \$100 for someone to clean my gun, when I can do it myself for \$10 in cleaning supplies that will last the year and take five to 10 minutes of my time," he said.



Team NFA

By Megan Tandy

Special Luggage



Megan Tandy is one of Canada's top biathletes.

When your luggage always includes a firearm, travel days tend to be interesting. My first international trip as a biathlete was to Maine, US, in 2006 as a member of the Canadian Junior National Team. Since then I have travelled to over 20 countries with my rifle and collected more than a few experiences along the way. While there have been several stressful travel moments, I am happy to report that I always ended up with my own rifle on my back for every race I have ever started.

My first travel trouble was as a junior. I was 19 years old and decided to extend a team training camp in Germany by a few days in order to have a custom stock made for my rifle. It was a great experience, until I realized there were three connections on my train ride to the airport for my trip home. Tight connections in foreign countries are stressful enough, but what do you do when you are travelling alone with a rifle case, a ski bag loaded with 15 pairs of skis and a large suitcase? Well I can

tell you what you don't do: Leave your suitcase alone while you run back down the stairs, through the passageway and up the stairs on the other side to collect the luggage you left behind. I had left my rifle and ski bag with some friendly English-speaking strangers and was relieved to find them waiting for me just as I had left them. The problem was on the other side. As I approached my suitcase, with rifle and ski bag in tow, I saw two policemen and a security guard standing around my suitcase. It seemed that the "weapon" and "ammunition" stickers from the airport had gotten their attention. Needless to say, I missed my train connection and sat in the small, cold train station office for 45 minutes trying to decipher from their phone calls whether I was going to jail. In the end, it wasn't that dramatic. Two new police officers arrived, checked my rifle and paperwork and even escorted me to my next train. Luckily, I still made my flight home to Canada on time.

Out of the hundreds of times I have

flown with my rifle, 95 per cent have gone smoothly. But, of course, it is the rare occasions where things don't go as planned that are the most memorable. My single worst travel experience was in Czech Republic. I had received a temporary rifle permit from Biathlon Canada, written in Czech of course, and was travelling from the international airport in Prague a few days earlier than the team with my four-year-old son. As it turns out, the specially issued rifle permit was only valid for a given number of days before and after the World Cup in question. So, travelling two days early meant that as far as the police at the airport were concerned, I had illegally brought a firearm over the Czech border without valid documents. Over the course of about two hours, many stressed phone calls and visits from multiple police officers, I was finally allowed to board the plane with my rifle, and a nearly \$2,000 fine. My son and I were kept in a small, locked waiting cell with limited opportunity to explain the circumstances to the officers. It was such a distressing experience that I haven't flown from Prague with my rifle since.

Even the best-organized systems don't always work flawlessly. Germany has very clear rules for travelling with firearms. Often firearm import forms are faxed to the airport where athletes are expected to arrive, and we assume that the necessary documentation will be waiting for us at the airport. Just last season, when our Canadian team arrived at the airport in Munich, Germany, en route to IBU Cup 1, only seven of the 10 athletes had rifle permits waiting for them at customs. Since they had arrived on a Sunday, no one at the airport was able to look into the missing permits, and they were forced to make the nearly seven-hour round trip back to Munich on Monday to pick up their rifles. As it turned out, the three missing permits had simply been faxed to the customs centre at the wrong terminal of the airport.

Naturally, every country has different firearm regulations, which range from easy-going Norway, where you

When your luggage always includes a firearm, travel days tend to be interesting.



Megan's gun case can hold more than her biathlon rifle, so she takes advantage of the extra space when travelling.



simply fill out a form with the address of your accommodation and type of rifle at customs, to countries like the US, Russia and South Korea where detailed applications need to be made weeks in advance. Not only that, but once you arrive you need to know the local regulations as well.

Russia and South Korea are the two countries where my rifle has been most strictly controlled. I have raced in both countries several times between 2009 and 2018 and the routine is always the same. We get issued a temporary rifle import document for the duration of the race week. Usually we don't even get a copy of the document – it is arranged by the World Cup organizing committee and there is someone with a hard copy of the list waiting to receive us at

the airport. On some occasions, rifles and serial numbers are checked at the airport before they are transported to a secure rifle room with lockers at the race site. On other occasions, we just have to trust the system and don't see our rifles or ammunition until we arrive at the race site for training the next day. In general, this works out all right, but I always find it nerve-racking to be travelling without a copy of my own documents and it is always a relief when I see my rifle safe and sound again.

There always seems to be a few athletes with trouble, including my teammate Julia Ransom, whose rifle went missing for the first three days of training during the Olympics in South Korea last winter. My rifle has only really gone missing once. In December 2008, snow

storms stopped all the flights into BC, and my rifle spent seven days in a luggage heap at Vancouver International Airport. I finally sought the help of our MLA, who had someone in Vancouver sort through the luggage to find my rifle in time to prepare for World Junior Championships that were happening just 10 days later.

Race locations where the rifles are kept securely can also be challenging. Generally, the process of arriving and leaving is much more controlled and time consuming – but really, that's just par for the course. The hardest part for me is not being able to dry-fire when I want to. A wet training day also means that athletes need to clean their rifles in the rifle storage room immediately after training. Usually a space is provided with shooting mats somewhere near the storage area for rifle maintenance and dry-firing, but it can get pretty crowded considering there are over 200 athletes at every event. During the PyeongChang Olympics last February, the race site was a 15-minute jog from our accommodation.

Most days our morning workout consisted of a run up to the race site, dry-firing and then running back to the Athletes' Village. This meant that when we went training in the evening, we were ready to shoot and could avoid the general chaos of the overheated rifle room. Our ammunition was stored separately and was only accessed by our coaches, who had to sign ammunition in and out for every training session, as well as record the exact number of bullets shot. Most of our shooting sessions ended with our coach saying something like, "I have seven more bullets. Who is going to shoot them, so I can record an even number of shots today?" Security scanners at the village entrance assured that no ammunition could be inadvertently brought into the Athletes' Village.

Travelling with special luggage is never boring. Over the years, I have learned that the most important things are to personally have copies of your rifle documentation and permits whenever possible, show up at the airport extra early, keep a cool head and, as always, be polite and patient with the airline staff and customs agents. Most trips I feel like I am better informed about airline firearm policies than the staff in charge of checking me in – but never underestimate the power of a friendly Canadian attitude, it can go a long way. 



Legal Corner

Guy Lavergne, Attorney at Law

Carrying A Firearm In A Wilderness Area



Carrying a concealed firearm, even a non-restricted shotgun for bear defence, is a criminal offence./Porter une arme dissimulée sur sa personne, y compris un fusil pour se protéger contre les ours, constitue une infraction criminelle.

Many of us will, at one time or another, feel the desire to carry a firearm when spending time in a wilderness area, usually due to the presence of bears, wolves or other predators.

However, before taking a firearm into a wilderness area, it is preferable to ensure that it is legal to do so. Many considerations apply, including those related to the type of firearm, and the location where you intend to take such firearm.

CARRYING A NON-RESTRICTED FIREARM (SHOTGUN OR RIFLE)

At the outset, I wish to point out that Nova Scotia¹, and potentially other provinces, prohibit carrying a firearm in a wilderness area, except in the course of a legal hunting or trapping activity. It is thus paramount to look into the applicable provincial

legislation. Also, discharge of a firearm may be prohibited in certain areas, under federal, provincial or municipal legislation. This may apply to urbanized areas, to the perimeter of an airfield, to roadways, or to other infrastructure. This also entails that it is illegal to carry a loaded firearm in such areas. Indeed, federal regulations² provide as follows:

"15. An individual may load a firearm or handle a loaded firearm only in a place where the firearm may be discharged in accordance with all applicable Acts of Parliament and of the legislature of a province, regulations made under such Acts, and municipal by-laws."

Further, Section 86 of the Criminal Code makes it a criminal offence to infringe that rule.

In other instances, mere possession of a loaded firearm in a wilderness area, outside of an authorized hunting

season or hours, may give rise to a presumption of poaching, under applicable provincial legislation³. However, these presumptions are usually rebuttable, which means that a person charged with poaching in such circumstances may prove that he had another valid reason for being in possession of a firearm in a wilderness area. To be successful, the circumstances must reasonably support the justification. Hence, it is advisable to be cautious.

Finally, the firearm may not be concealed. Carrying a concealed firearm, even for self-defense⁴, is a criminal offence⁵. Thus, the firearm must be visible at all times. Except for the aforementioned reservations, carrying a non-restricted firearm (shotgun or rifle) to defend against predators is not problematic, so long as the individual doing so is properly licensed.

CARRYING A HANDGUN

Many of us would prefer to carry a handgun as a defensive weapon against predators. Although this option does indeed exist, it is extremely limited in its scope and application.

As a rule, handguns and other restricted firearms can only be possessed and used in accordance with and at locations authorized by applicable legislation. Any infringement is a criminal infraction⁶. To be allowed to use, or even possess, a handgun in a wilderness area, one must apply for and obtain an authorization to carry (ATC). Applications are handled through and issued by the provincial Chief Firearms Officer. The *Firearms Act* provides for two instances where an ATC may be issued: i) the protection of life, or ii) in connection with a lawful profession or occupation⁷. The *Firearms Act* grants the Governor in Council the power to prescribe, through regulations, the circumstances in which an individual needs a handgun for those purposes⁸. That power has been partially used through the enactment of the *Authorizations to Carry Restricted Firearms and Certain Handguns Regulations*⁹ (the regulations).

LAWFUL PROFESSION OR OCCUPATION

The regulations provide for three sets of circumstances in which individuals may be authorized to carry a restricted firearm in connection with a lawful occupation or profession:

- (a) the individual's principal activity is the handling, transportation or protection of cash, negotiable instruments or other goods of substantial value, and firearms are required for the purpose of protecting his or her life or the lives of other individuals in the course of that handling, transportation or protection activity;
- (b) The individual is working in a remote wilderness area and firearms are required for the protection of the life of that individual or of other individuals from wild animals; or
- (c) The individual is engaged in the occupation of trapping in a province and is licensed or authorized and trained as required by the laws of the province.

The first category, (a), is not relevant to this article.

The second category, (b), is available to geologists, prospectors, wilderness tour guides and other individuals working

in wilderness areas. The applicant must prove that the use of a firearm is required for protection against wild animals. Once that demonstration is made, the individual may be authorized to carry a handgun for that purpose.

The third category, (c), is meant for trappers who carry out their trade in accordance with applicable provincial legislation. In that instance, the purpose of the ATC is to allow them to dispatch quarry that is caught in a trap, but still alive. Such an ATC is not meant for personal protection, although nothing would preclude a trapper from applying for an ATC under both (b) and (c).

In all instances, the Chief Firearms Officer may refuse the ATC for a "good and valid reason."¹⁰ However, the discretion of the Chief Firearms Officer is not absolute; a refusal must be for reasons rooted in public safety. Indeed, per the Supreme Court of Canada:

"The courts will interpret the words "good and sufficient reason" in and in line with the public safety purpose of the Act, ensuring that the exercise of discretion by the Chief Firearms Officer and the Registrar is always wed to that purpose¹¹."

Although the regulations do not expressly provide for it, Section 20 of the *Firearms Act* is broad enough to allow for the issuance of ATCs in connection with other lawful professions or occupations. However, in all such other instances, the applicant will have to demonstrate a need to carry a handgun, and the discretion of the Chief Firearms Officer will extend to the subjective appreciation of that need.

A final word of caution: ATCs issued in connection with a lawful profession or occupation are extremely restrictive. They only avail in the context of the activities related to that profession or occupation, both from a location and time perspective. In other words, they are not ATCs at large, but are specific to certain professional activities. Failure to observe those restrictions may lead to criminal charges.

THE PROTECTION OF LIFE

The regulations only expressly provide for one instance where an ATC may be issued for the protection of life:

"2. For the purpose of Section 20 of the Act, the circumstances in which an individual needs restricted firearms or prohibited handguns to protect the life of that individual or of other individuals are where

- (a) the life of that individual, or other individuals, is in imminent

danger from one or more other individuals;

- (b) police protection is not sufficient in the circumstances; and
- (c) the possession of a restricted firearm or prohibited handgun can reasonably be justified for protecting the individual or other individuals from death or grievous bodily harm."

Those three conditions must all be met simultaneously¹². On their face, they apply more to the urban jungle than to wilderness areas. Indeed, they refer to protection against dangerous persons, as opposed to wildlife.

Nevertheless, Section 20 of the *Firearms Act* appears to be broad enough to allow for the issuance of ATCs in other circumstances. If that interpretation is indeed correct, the applicant would have to demonstrate, to the satisfaction of the Chief Firearms Officer, that carrying a handgun for the protection of his life is indeed required, as opposed to merely desirable.

Given that, at the present time, only two ATCs are in effect in Canada for the protection of life, Chief Firearms Officers will likely reject the majority of such applications. However, in theory, circumstances such as the presence of grizzlies or other predators could be conducive to the issuance of an ATC for protection against wildlife, in a non-professional context. That being said, I do not know of any successful application. ↗

References

- ¹N.S. Firearm and Bow Regulations, s. 8(1)
- ²S. 15 of Storage, Display, Transportation and Handling of Firearms by Individuals Regulations (SOR/98-209)
- ³An example is s. 30.3 of the Act respecting the conservation and development of wildlife, RSQ, c. C-61.5
- ⁴R. v. Kerr, (2003) 12 C.R. (6th) 308
- ⁵S. 90 of the *Criminal Code*.
- ⁶S. 93 of the *Criminal Code*.
- ⁷S. 20 of the *Firearms Act*.
- ⁸S. 117 (c) of the *Firearms Act*.
- ⁹SOR/98-207
- ¹⁰S. 68 of the *Firearms Act*.
- ¹¹Re ; *Firearms Act*, (2000) 1 SCR 494, at paragraph 37
- ¹²Association canadienne pour la légitime défense c. Ministère de la sécurité publique (Québec) 2012 QCCAI 199



RUBRIQUE JURIDIQUE

Guy Lavergne, Attorney at Law

Le Port D'armes à Feu en Région Sauvage



Many of us will have a desire to carry a firearm when spending time in a wilderness area, usually due to the presence of large predators./ Plusieurs d'entre nous ressentent le besoin de porter une arme à feu lors d'un séjour en région sauvage, en raison des risques associés à la présence des grands prédateurs.

Plusieurs d'entre nous ressentent le besoin de porter une arme à feu lors d'un séjour en région sauvage, en raison des risques associés à la présence des ours, loups et autres prédateurs. Toutefois, avant de partir en forêt avec une arme à feu, il est grandement préférable de s'assurer de la légalité du geste que vous vous apprêtez à poser. Plusieurs facteurs entrent en jeu, dont le type d'arme à feu, et l'endroit où vous comptez aller.

PORTE D'UNE ARME À FEU SANS RESTRICTION (CARABINE OU FUSIL)

D'emblée il est important de noter que certaines provinces, dont la Nouvelle-Écosse, interdisent la possession d'une arme à feu en région sauvage, sauf dans le cadre d'une activité légale de chasse ou de piégeage. Il importe donc de vérifier la réglementation locale de votre province de résidence.

Par ailleurs, les différents paliers de

gouvernement interdisent de décharger une arme à feu dans certaines zones. Il peut s'agir de zones urbaines, des abords d'un aéroport, de routes ou d'autres infrastructures. Or, la réglementation fédérale interdit la possession d'une arme à feu chargée, dans de telles zones:

« 15 Le particulier ne peut charger une arme à feu ou manier une arme à feu chargée qu'à un endroit où il est permis de tirer au moyen de l'arme à feu selon les lois et règlements fédéraux et provinciaux et les règlements municipaux applicables. »

Par ailleurs, l'article 86 (2) du Code criminel édicte qu'une contravention à cette règle est une infraction criminelle.

Dans d'autres cas, la simple possession d'une arme à feu chargée, en région sauvage, en dehors des périodes ou des heures de chasse autorisées peut donner lieu à une présomption de braconnage, en vertu de la loi provinciale. Ces présomptions peuvent généralement être repoussées, c'est-à-dire que dans le cadre d'une accusation, la preuve peut généralement être faite, en défense, que le possesseur de l'arme à feu n'entendait pas s'adonner au braconnage. Encore faut-il que les faits soient compatibles avec un but autre que le braconnage. En conséquence, des précautions s'imposent.

Par ailleurs, l'arme à feu ne peut être dissimulée. Le fait de porter une arme dissimulée sur sa personne, même à des fins de légitime défense, constitue une infraction criminelle. Elle doit donc être visible.

Hormis ces réserves, le port d'une arme à feu sans restrictions (carabine ou fusil), à des fins de protection contre les prédateurs, ne semble pas causer problème, dans la mesure où son détenteur détient une permis d'armes à feu de la classe appropriée.

PORTE D'UNE ARME DE POING

Plusieurs personnes, préféreraient, pour des raisons d'encombrement moindre, porter une arme de poing, à des fins de légitime défense contre les

prédateurs. Cette option existe, mais de façon extrêmement restrictive.

En matière d'armes à feu à autorisation restreinte et prohibées, la règle est en effet que leur possession et leur usage n'est autorisé que dans la mesure et aux endroits prévus par la loi. Toute dérogation est une infraction criminelle. Pour pouvoir posséder, voire porter une arme de poing en région sauvage, une « autorisation de port d'arme » en bonne et due forme doit être demandée et obtenue du Contrôleur des armes à feu de la province de résidence de la personne concernée. La Loi sur les armes à feu prévoit que de telles autorisations de port d'arme peuvent être obtenues pour deux motifs, soit : dans le cadre d'une activité professionnelle légale, ou pour la protection de la vie. La Loi sur les armes à feu donne au gouvernement le pouvoir de définir, par règlement, dans quelles circonstances le port d'une arme de poing est requis.

Ce pouvoir a été exercé en partie dans la cadre du Règlement sur les autorisations de port d'armes à feu à autorisation restreinte et de certaines armes de poing (le « Règlement »)

DANS LE CADRE D'UNE ACTIVITÉ PROFESSIONNELLE LÉGALE

Ainsi, le Règlement prévoit trois types de circonstances, ou des individus ont besoin de porter une arme à feu à autorisation restreinte dans le cadre d'une activité professionnelle légale :

- a) L'individu « dont la principale activité est le maniement, le transport ou la protection d'argent liquide, d'effets de commerce négociables ou d'autres biens d'une valeur importante, et l'arme à feu est requise pour protéger sa vie ou celle d'autrui dans le cadre de cette activité »
- b) L'individu travaillant « dans une région sauvage éloignée, et l'arme à feu est requise pour protéger sa vie ou celle d'autrui contre des animaux sauvages »; et
- c) L'individu qui est « trappeur de profession et détient les autorisations et la formation requises par les lois de la province où il exerce cette profession »

La première catégorie (a) vise les agents de sécurité affectés au transport de valeurs. Elle déborde donc le cadre de discussion du présent article.

La seconde catégorie (b) vise, par

exemple, les prospecteurs, géologues, guides d'excursions touristiques et autres personnes travaillant en régions sauvages. Dans ce cas, la démonstration doit être faite par la personne qui en fait la demande que l'utilisation d'une arme à feu est nécessaire pour la protection contre des animaux sauvages. Une fois cette démonstration faite, l'individu en question peut-être autorisé à porter une arme de poing à cette fin.

La troisième catégorie (c) vise les trappeurs de profession, exerçant leur activité de piégeage conformément aux lois provinciales applicables. Dans ce cas, l'utilisation d'une arme de poing est aux fins d'abattage des bêtes prises dans les pièges et non à des fins de protection personnelle, bien qu'en théorie, un trappeur pourrait demander une autorisation de port d'arme, tant en vertu de (b) que de (c).

Dans chacun des cas, le Contrôleur des armes à feu de la province a le pouvoir d'autoriser ou de refuser l'émission de l'autorisation de port d'arme pour une raison valable. Toutefois, un refus doit obligatoirement reposer sur des motifs reliés à la sécurité publique. En effet, selon la Cour suprême du Canada :

« Les tribunaux interpréteront les mots «raison valable» des et en fonction de l'objet de sécurité publique, de sorte que l'exercice du pouvoir discrétionnaire du contrôleur et du directeur sera toujours lié à cet objet. »

Bien que le Règlement susmentionné ne le prévoit pas expressément, le texte de l'article 20 de la Loi sur les armes à feu est suffisamment large pour permettre que des autorisations de port d'armes à feu à autorisation restreinte soit émises pour d'autres activités professionnelles légales. Toutefois, et contrairement aux cas susmentionnés, l'individu qui demande une telle autorisation pour une autre activité professionnelle que celles mentionnées expressément au règlement, devra faire la démonstration de son besoin, et la décision du Contrôleur des armes à feu s'appliquera également à l'appréciation subjective de ce besoin.

Les autorisations de port d'arme à autorisation restreinte émises aux fins d'une activité professionnelle légale sont extrêmement restrictives. Elles sont limitées au cadre de l'exercice de l'activité professionnelle, tant d'un point de vue temporel que

spatial. Autrement dit, il n's'agit pas d'autorisations de port d'arme généralisées, mais spécifiques à l'exercice de la profession. Toute dérogation à ce cadre est susceptible d'entraîner une infraction criminelle.

POUR LA PROTECTION DE LA VIE

Le Règlement ne prévoit qu'une seule série de circonstances où le besoin de porter une arme à feu à autorisation restreinte est reconnu aux fins de protection de la vie:

« Pour l'application de l'article 20 de la Loi, un particulier a besoin d'une arme à feu à autorisation restreinte ou d'une arme de poing prohibée pour protéger sa vie ou celle d'autrui lorsque les conditions suivantes sont respectées :

- a) une ou plusieurs personnes mettent en danger, de façon imminente, sa vie ou celle d'autrui;
- b) la protection de la police n'est pas suffisante dans les circonstances;
- c) la possession d'une telle arme peut se justifier de façon raisonnable pour sa protection ou celle d'autrui contre la mort ou des lésions corporelles graves. »

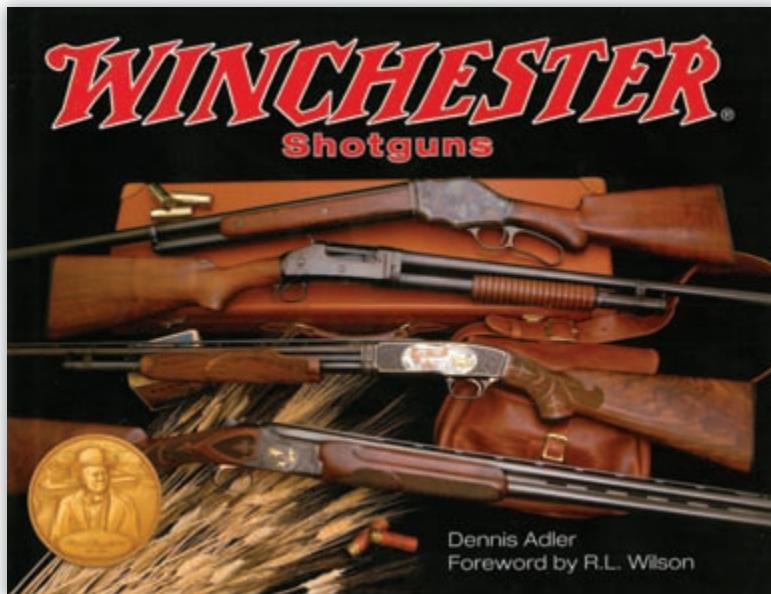
Ces trois conditions donc cumulatives et non alternatives. Elles doivent donc être toutes rencontrées. Elles semblent à prime abord s'appliquer davantage à la jungle urbaine qu'aux milieux naturels. En effet, il est ici question de défense contre les personnes, et non contre les animaux sauvages.

Toutefois, le texte de l'article 20 de la Loi sur les armes à feu apparaît être suffisamment large pour permettre que des autorisations de port d'armes à feu à autorisation restreinte soient émises dans d'autres circonstances. Le demandeur devra alors justifier du besoin de porter une arme de poing pour sa protection, et non seulement de son désir de ce faire. Puisque seulement deux autorisations de port d'armes à feu pour la « protection de la vie » sont présentement en vigueur au Canada, le contrôleur des armes à feu refusera vraisemblablement ce genre de demande. En théorie, des circonstances extrêmes, telles la présence de grizzlys ou d'autres prédateurs dans un milieu où la personne visée doit se trouver à des fins non-professionnelles, pourrait constituer un cadre adéquat pour l'émission d'une telle autorisation. Je ne connais toutefois aucun cas où une telle autorisation aurait été émise dans ces circonstances. 

NFA Book Shelf

Bill Rantz

WINCHESTER Shotguns



photograph their prized possessions for publication.

Adler divided *WINCHESTER Shotguns* into 11 chapters, which describe the development and production of early doubles, slide actions, side-by-sides, single shots, bolt actions, semi-autos and over/under shotguns. Over 400 high-resolution photographs of variations ranging from the well known to the virtually forgotten are provided. Notations placed with each photograph are used to stress the significance of the image's contents.

Chapter 12 is an unexpected bonus, as it boasts 40 full-colour pages of Winchester art advertising and sales brochures related to shotguns. Circulated through magazines and retail stores, these paper collectables reflect both the product and Winchester's marketing strategy of the day.

Of course, Oliver Winchester's primary concern was the production of lever-action rifles, such as the famous Henry, Models 1866, 1873 and 1876 Winchesters. But in 1879, he entered the shotgun market by importing and selling unmarked side-by-side shotguns from Birmingham, England. Higher-quality doubles were imported later and bore the name Winchester.

One day, during a conversation, R. L. Wilson and Dennis Adler noted that a definitive reference on the development and history of Winchester shotguns had never been published. That prompted Adler, a highly respected author who had previously written numerous books on collectable firearms and historic automobiles, to research and publish *WINCHESTER Shotguns*.

An ability to present information in richly worded text, supplemented by the highest-quality photographs, is a trademark of Adler's publications. *WINCHESTER Shotguns* maintains that tradition. Collectors, historians and gun dealers searching for information will be delighted with Adler's easy-to-read writing style. And as a coffee table-style book, it allows the reader to browse spectacular photographs at the flip of a page.

The production of a quality reference book such as this required access to collectors willing to share knowledge accumulated over many years. The firearms they possess are often rare, in pristine condition and securely stored in vaults away from dust and sunlight. Dave Riffle and Gary Reynolds are two who generously allowed Adler to

To avoid competition with Remington and Colt, Winchester changed strategy and manufactured the Browning-designed 1887 lever-action shotgun. Browning's next offering was the slide-action Model 1893 exposed-hammer shotgun, which, after several modifications, was marketed as the Model 1897.

Unfortunately, a business blunder related to royalty payments allowed the manufacture of Browning's A5 semi-auto shotguns to be licensed to F.N. of Belgium. Subsequently, Winchester did not enter the semi-auto shotgun market until 1911. Winchester's first hammerless repeating shotgun was patented by T. C. Johnson. Advertised in the January 1913 catalogue, the famous Model 12 was discontinued by Winchester in 1980. By then, over two million Model 12 shotguns had been produced in a wide variety of types, styles and grades.

In 140 years of shotgun production, Winchester has offered variations which are legendary, as well as models seldom encountered. Readers will appreciate Adler's superb job of identifying and including all models in *WINCHESTER Shotguns*. One item that caught my attention was that 395,168 Model 37A single-shot shotguns were manufactured at Cobourg, Ont., between 1973 and 1980.

WINCHESTER Shotguns is a premium-quality publication and a great addition to any book shelf. The current list price is \$40 plus shipping. Recently it has been offered, including an online preview, as an e-book for \$12 USD. ♦

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