

CANADIAN

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MARCH/APRIL 2023

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BY AL VOTH




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

Our cover this issue shows regular contributor to the CFJ, Kevin Wilson, checking an abandoned bear den. As a professional wildlife monitor, he carries a Kimber 1911 in 45 ACP under the authority of a wilderness carry permit (ATC). In his line of work, potentially dangerous encounters are common. Since he is responsible for crew safety, a sidearm is deemed to be critical personal protective equipment (PPE). 



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From The Editor's Desk

Al Voith

The "Legitimate Use" Spin



The month of March is still winter in my part of Canada, but in others it's the start of spring, with new flowers and green grass popping up everywhere. That difference exists because we live in a large country with a widely varying climate and topography. The people are all different too, with even more variations than the weather. A good national government governs for all of them, not just a select few. Unfortunately, that's not the case with today's Liberal government.

Their pollsters tell them any type of gun control will play well in Canada's big cities, amongst people who have no idea what Canada's firearm laws look like. And if those people can be scared, they can be manipulated, and therefore the Liberals have seized on guns as the scare topic of choice to keep themselves in power. They've made a deliberate decision to sacrifice the rights and property of legitimate firearm owners in order to benefit themselves. Keeping power seems to be all that matters, with the predictable effect being the polarization of Canadians and the fracturing of the country.

Of course, the Liberals deny this completely and at every opportunity tell the media they aren't banning any hunting rifles. Although, Trudeau did


recently admit that some hunting rifles will be caught up in the ban. Which was followed by assurances there are lots of other hunting rifles which will remain legal. Have you noticed the emphasis on hunting rifles and shotguns? As if that is the only legitimate use for firearms? No Liberal has mentioned there are lots of other guns which can still be used for target shooting, collecting or (gasp) self-defence. Only hunting.

The implication is clear: with self-defence, collecting and sport shooting eliminated as legitimate uses of firearms, hunting becomes the only reasonable use for guns. I think that's a clue as to what the next round of prohibitions will target. Think all modern hunting rifles and shotguns are safe? Not a chance. I can hear the political spin masters already. "No one needs a detachable magazine on a hunting rifle, a single shot is all that's necessary. Hunting is a heritage activity so muzzleloaders like the pioneers used is all they need. And a scope? Why, those are only for snipers, they should be banned. Give the poor animals a chance."

Hunting is a great activity, but it's not the only perfectly acceptable use for firearms. However, the debate over C-21, as I'm hearing it, is leading the public steadfastly in that direction. Competitive shooting (and not just Olympic shoot-

ing), collecting, plinking and self-defence are completely legitimate uses for firearms. So, don't get caught in the trap of thinking that if you're defending hunting guns, you're defending all firearms. It is a trap, and the Liberals will gladly let you step into it. When they and the media talk about not banning hunting guns, it's because they want the public to believe hunting is the only legitimate reason to own a firearm.

This also plays into the big-city idea that hunting is a barbaric and cruel activity which no civilized society should participate in. And if you live in downtown Vancouver, Montreal or Toronto, and think meat comes from Safeway, it's easy to believe that. Then, if we do away with hunting, not only does the barbaric activity cease, but we save animals and get rid of guns too. It's a clean sweep for civilization. That would be an easy sell in Canada's big urban cities.

Of course, a good government would consider the values, activities and lifestyles which exist across the entire country, governing for the good of all and standing up for the minorities. A corrupt government would spread fear and misinformation among a small majority, and use it to stay in power, sacrificing anyone and anything necessary to achieve the goal of power. Just like what's happening now.. 



President's Message

Rick Igercich

A Legislative Landslide

I'm writing this two weeks after we flipped our calendars over to the year 2023, and it is crystal clear that as law-abiding Canadians, we are facing an assault on our rights and freedoms, the likes of which we have never seen before.

In Canada, firearms ownership has a long history of being part of political platforms, always a contentious issue, always a topic for debate and always under attack. But on March 20, 2018, with the introduction of Bill C-71, the conversation turned to an all-out assault on Canadian firearms owners. This was followed with the May 1, 2020, Order in Council, which was followed by the tabling of Bill C-21 on Nov. 22, 2021, which came to a head with the G46 amendment of the same bill.

As law-abiding firearms owners, we have continuously been feeling the impact of these political moves courtesy of Justin Trudeau's Liberals. Here is a summary of what's happened over the past few years.

The Liberal's Bill C-71, which is now law, requires that all long gun transfers go through a license validation check of the buyer. This law also places limitations on where restricted firearms may be transported. I believe this bill is the start of another long gun registry, a twin to the one that previously failed.

The May 1, 2020, OIC was underhandedly put into place about two months after the Emergencies Act was lifted. The Liberals used agenda-driven information obtained from Public Safety Minister Bill Blair, who pressured RCMP Commissioner Brenda Lucki to disclose the types of firearms used in the Nova Scotia tragedy, while the investigation was in its infancy. This then led to the banning of 1,800 types of firearms, with Liber-


als using OIC powers which were never intended for this type of action.

The Liberal barrage continued and gathered steam as a result of the criticism they were receiving from an ever-growing list of troubling events, like the implementation of the Emergencies Act during the trucker's protest, the misinformation that was spread about the tragedy in Nova Scotia and the Bitcoin scandal that involved several of their MPs. To create a diversion from the scandals plaguing the Liberal Party, they decided to table Bill C-21. This bill is, hands down, the greatest assault against Canadian law-abiding firearms owners to date. The bill marks the end of transferring ownership of all handguns in Canada, with very few exceptions made for Olympic athletes and a few others. It has also, by ministerial decree, placed a ban on the importation of all handguns for the civilian market into Canada. To add to the barrage, at the 11th hour Trudeau's Liberals decided to add amendment G46, which in turn bans another large group of hunting rifles and shotguns, including their variants. And just when we thought it was all over, they decided to attach the original OIC as part of the same amendment, with no mention of any sort of buyback or compensation.

So, where does this leave law-abiding Canadian firearms owners? As of this writing, it appears that the marriage between Trudeau and Jagmeet Singh is crumbling, along with several Liberal backbenchers challenging the prime minister's attacks on law-abiding Canadians. There is talk of a mid-March federal election. With any luck, these relationships will continue to deteriorate and we can all have our voices heard at the ballot box in the spring.

Here at Canada's National Firearms Association, we are meeting the attacks on several levels. Since the onset of Bill C-71, our legal team has been working diligently to uncover any gaps or holes in Liberal policy. We are also preparing for the possibility of a spring election. We will continue to use all our social media platforms and look for opportunities for face-to-face conversations to inform voters and politicians alike across Canada about the real facts, not those fabricated and pushed by the mainstream media which has been bought and paid for by the Liberals. Our lobbyist is well positioned in Ottawa and constantly speaking to members of parliament and senators from all parties, giving them fact-based information instead of the lies which have been circulating by way of left-wing channels throughout Canada.

As law-abiding firearms owners, we are facing uncertain times. I can assure you that we at Canada's National Firearms Association are digging in deep and preparing to fight for our livelihoods, our freedoms and our rights to possess those items which we have legally purchased. It is time for all Canadians to stand up and push for what they believe in. Make your voice heard, write to your MPs, talk to your friends and neighbours about this government's unchecked ability to seize their personal property. Today, it is firearms being banned; we must ask, what will be next?

We are very grateful for all the support that has been offered by our members and non-members alike. We continue to ask that you join us in the fight by donating to the NFA. Your donations will make a difference in the quest to return the rights of law-abiding Canadians. 

Message du Président

Rick Igercich

Raz-De-Marée Législatif

Je vous écris deux semaines après le début de l'année 2023, et il est parfaitement clair qu'en tant que Canadiens respectueux des lois, nos droits et libertés sont attaqués comme jamais auparavant.

Au Canada, la possession d'armes à feu a toujours fait partie des plateformes politiques, a toujours été un enjeu controversé et un objet de débat, et a toujours été critiquée. Cependant, le 20 mars 2018, avec le dépôt du projet de loi C-71, la discussion est devenue une attaque directe contre les propriétaires d'armes à feu. Cela a continué avec le décret du 1 mai 2020, suivi du projet de loi C-21 le 22 novembre 2021, qui a atteint son point culminant avec l'amendement G46 à ce même projet de loi.

À titre de propriétaires d'armes à feu respectueux des lois, nous subissons continuellement les répercussions des mesures politiques des libéraux de Justin Trudeau. Voici un résumé de ce qui s'est passé ces dernières années.

Le projet de loi C-71 des libéraux, qui a maintenant force de loi, exige que toutes les cessions d'armes d'épaule soient soumises à une vérification de la validité du permis de l'acheteur. Cette loi impose également des limites quant aux endroits où les armes à feu à autorisation restreinte peuvent être transportées. Je crois que ce projet de loi annonce un autre registre des armes d'épaule, similaire à celui qui a déjà échoué.

Le décret du 1 mai 2020 a été surnoisement adopté environ deux mois après la levée de la Loi sur les mesures d'urgence. Les libéraux ont utilisé de l'information biaisée obtenue par le ministre de la Sécurité publique, Bill Blair, qui a fait pression sur la commissaire de la GRC, Brenda Lucki, pour qu'elle divulgue les types d'armes à feu utilisées lors de la tragédie en Nouvelle-Écosse, alors que l'enquête en était à ses débuts. Cela a

entraîné l'interdiction de 1,800 types d'armes à feu, les libéraux ayant recours aux pouvoirs du décret qui n'ont jamais été prévus à cette fin.


L'attaque des libéraux s'est poursuivie et s'est intensifiée en raison des critiques découlant d'une série d'événements troublants, comme le recours à la Loi sur les mesures d'urgence pendant la manifestation des camionneurs, la désinformation sur la tragédie en Nouvelle-Écosse et le scandale des Bitcoins qui a impliqué nombre de leurs députés. Pour détourner l'attention des scandales accablant leur parti, les libéraux ont décidé de présenter le projet de loi C-21. Ce projet de loi est sans conteste la plus grande attaque contre les propriétaires d'armes à feu respectueux des lois à ce jour. Il marque la fin du transfert de la propriété de toutes les armes de poing au Canada, avec de très rares exceptions pour les « athlètes olympiques » et quelques autres. De plus, il impose, par décret ministériel, l'interdiction de l'importation de toutes les armes de poing sur le marché civil au Canada. En outre, les libéraux de Justin Trudeau ont décidé à la dernière minute d'ajouter l'amendement G46, qui interdit un important groupe de fusils de chasse, ainsi que leurs variantes. Et alors que nous pensions que c'était terminé, ils ont décidé de joindre le décret original dans le cadre du même amendement, sans aucune forme de rachat ou d'indemnisation.

Alors, que vont faire les honnêtes propriétaires d'armes à feu? Au moment d'écrire ces lignes, il semble que le mariage entre Justin Trudeau et Jagmeet Singh bat de l'aile, alors que des députés libéraux d'arrière-ban contestent les attaques du premier ministre contre les Canadiens respectueux des lois. Il pourrait y avoir des élections à la mi-mars. Avec un peu de chance, cette relation continuera à se détériorer, et nous pour-

rons tous faire entendre notre voix aux bureaux de vote au printemps.

L'Association canadienne des armes à feu contre ces attaques à divers niveaux. Depuis l'imposition du projet de loi C-71, notre équipe juridique travaille sans relâche pour démontrer les lacunes de la politique libérale. De plus, nous nous préparons à l'éventualité d'élections au printemps. Nous allons continuer à utiliser toutes nos plateformes de médias sociaux et à discuter face à face pour informer les électeurs et les politiciens de tout le Canada des faits réels, à l'encontre des soi-disant vérités fabriquées par les médias grand public achetés et payés par les libéraux. Notre lobbyiste est bien placé à Ottawa et parle constamment aux députés et aux sénateurs de tous les partis, leur donnant de l'information fondée sur des faits au lieu des mensonges qui circulent par l'intermédiaire des chaînes de gauche partout au Canada.

Les propriétaires d'armes à feu respectueux des lois font face à une grande incertitude. Je peux vous assurer que l'Association canadienne des armes à feu travaille fort et se prépare à défendre notre mode de vie, nos libertés et nos droits de posséder les biens que nous avons achetés en toute légalité. Il est temps que tous les Canadiens défendent ce en quoi ils croient. Faites-vous entendre, écrivez à votre député, parlez à vos amis et à vos voisins de ce droit que s'arroge le gouvernement de confisquer leurs biens personnels. Aujourd'hui, les armes à feu sont confisquées. La question est : quelle sera la suite?

Nous sommes très reconnaissants du soutien de nos membres et non-membres. Nous continuons à vous demander de vous joindre à nous en faisant un don à la NFA. Vos dons feront une différence dans le rétablissement des droits des Canadiens respectueux des lois. 



Vice-President's Message

By Blair Hagen

It's Time

As of this writing, the universal outrage by Canadians directed at the Trudeau Liberal's Bill C-21 gun confiscation bill has caused not only Conservative MPs, but now also NDP and even certain Liberal MPs, to question C-21 and stall its progress in Parliament. There's no question that Justin Trudeau wants to disarm Canadians and confiscate lawfully owned property instead of targeting violent recidivist criminals who terrorize the streets of Canadian cities.

Why? Because Trudeau believes violent criminals are victims of society, and that Canadians who own and use firearms lawfully and responsibly are the danger to public safety. We've all been living in a crazy, upside down, bizarre Canada since Trudeau was elected in 2016, but now he has gone too far. The rights, freedoms and property of every Canadian are in danger. If Trudeau can confiscate firearms, what other property is next? Where does it end?

The outrage and blowback from Canadians have stopped him, for now, but we need to keep the pressure on the Conservatives, NDP and even the Liberals to stop their mass gun confiscation and their flagrant contempt for the property rights of Canadians.

Despite what many of the readers of Canadian Firearms Journal undoubtedly think, not all Liberal or NDP MPs live in cities like Toronto or other comfortable urban ridings, where the day's main challenge for the gentle voter folk is finding parking for their smart cars at Starbucks or breaking in that new yoga mat. Some of them actually represent ridings comprised of -- yes, you guessed it -- regular Canadians with regular jobs, regular lives and regular challenges. Those lives are also getting more challenging day by day thanks to the ever increasingly irresponsible actions of Trudeau's very

old, corrupt and incompetent Liberal government which has badly damaged the economy, society and culture of Canada.

Many of them own firearms. When Bill C-21 was announced, the handgun freeze was imposed and the insane gun banning amendments to C-21 floated, millions of Canadians sat up and took notice. They contacted not only their CPC MPs, but also their Liberal and NDP MPs. Yes, a Liberal or NDP member of parliament representing an urban riding in Canada would probably have responded, "Too bad, so sad. Don't waste my time." The truth is that many others cannot.

There are still places in Canada where MPs have a direct and daily connection to their communities, actual face time, daily, with their constituents. When those constituents say, "It looks like the Liberals are going to take our guns. What are you gonna do about it?" They have to take that seriously, regardless of whether they like guns or not, because it will have a direct impact on that MP's re-election fortunes. A sizeable number of backbench Liberal and NDP MPs are in this position now.

Liberal overreach on guns is nothing new. The whole C-68 long gun registry boondoggle of the 1990s was a result of Liberal hubris and believing their civil disarmament plans were actually supported by Canadians. With back-to-back majority governments and the absence of any viable opposition in Parliament, they could believe this, but the failure of the long gun registry dogged them to the end, and ultimately contributed to their grandly deserved defeat in 2006.


It's different now, in 2023. As Trudeau's government flails directionless in response to massive inflation, a tanking economy, international ridicule and the seven-years-long at-

tack on the basic rights and freedoms of Canadians, he grows increasingly desperate for something, anything, to give to his bought-and-paid-for mainstream media to attack the resurgent Poilievre Conservatives and undermine their electability. And that is going to be, once again, guns.

It worked the last time. Erin O'Toole backtracked and flipfopped on the firearms issue in the 2021 election and lost hundreds of thousands of votes in an election he should have won. Will that work again? The present CPC leader, Pierre Poilievre, seems to be cut from a different bolt of cloth than his predecessor. If Poilievre holds firm on core CPC policy and values, on issues like firearms law reform, the stupid and avoidable mistakes of the 2021 Conservative election campaign will not be resurrected for the electoral benefit of Trudeau's Liberals. Fool me once, shame on you. Fool me twice? Shame on me.

It's funny. Many federal politicians and politicians in Canada fail to learn the hard lessons of the past. Many think they can mold or recreate Canadian politics, values and society according to their own imaginations, and that voters will react in joy and wonderment to the rainbows and unicorns of Utopia coming out of their giant brains.

Others know where they came from, know where they are going, know their parties and constituents and hold true to their principles and values. They ultimately are the successful ones, remembered by Canadians as some of the few elected representatives who actually stood by their principles and did the right thing. Canadians will support them and grant them the privilege of governing this great nation. And withdraw that privilege when they fail to do so.

Trudeau has failed on all counts. For the good of every Canadian, even his few remaining blinded and misguided supporters, he must go. For Canada to achieve its true potential in the future and regain its respected reputation among the family of free-thinking, rights-and-freedoms-celebrating nations, he will be defeated. It's time. 



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Bruce Gold

Understanding C-21

It's now clear we're dealing with a radical government determined to eradicate traditional Canada and replace it with a "post-national state" of its own design. The current attack on law-abiding gun owners is a direct attack on a firearms community rooted in our history and distinctive northern culture.

Evidence of this animosity towards centuries of tradition and a \$9 billion industry can be found in the statements of prominent Liberals like Allan Rock who, as minister of justice stated, "I came to Ottawa with the firm belief that the only people in this country who should have guns are police officers and soldiers." Or in the pronouncement of Foreign Affairs Minister Lloyd Axworthy who stated, "Canada will be one of the first unarmed countries in the world," and "disarming the Canadian public is part of the new humanitarian social agenda." At the Liberal CPAC, April 9, 2021, Minister Blair accused gun owners (the gun lobby) of engaging in hate speech so often that special red flag laws were needed and that "not every person who's in the gun lobby is an extremist, but everybody who's extremist is in the gun lobby," implying that the gun community requires repressive policies because it's a refuge for hate and violence.

In February 2018, a survey commissioned with Hill+Knowlton Strategies, and taken just after the Parkland shooting in the US, found that 83 per cent of Canadians favoured "banning personal possession of military assault weapons and sniper rifles by civilians." Also, 62 per cent wanted to ban handguns. Support for stricter gun control was highest amongst NDP supporters at 58 per cent, with 50 per cent support from Liberals and 34 per cent support from Conservatives.

The survey concluded that, "Gun control presents an untapped oppor-

tunity for Justin Trudeau and his team to grow and solidify the voting base that gave them a majority in 2015." This seemed to represent a perfect wedge issue with support from their own party, vote stealing from the NDP and a vote-splitting wedge against the Conservatives.

The Liberals followed up by commissioning Hill+Knowlton Strategies to perform a massive survey called Reducing violent crime: A Dialogue on Handguns and Assault-style Firearms, Engagement Summary Report. Some 134,917 questionnaires were completed, and written submissions and focus groups were conducted in this massive survey. As one can see from its title, it simply assumed that further restrictions would automatically "reduce violent crime." It also mandated the use of the scare term "assault-style" to mislead by incorrectly describing semi-automatic hunting and sporting rifles.

Further indication of bias was a mandate letter stating it was to "lead an examination of a full ban on handguns and assault weapons in Canada, while not impeding the lawful use of firearms by Canadians." This seeming impossibility was achievable because once the chosen firearms were banned, they would be illegal, so that would not impede "lawful use." Despite the careful tilting of the playing field, the survey was a disaster. When asked if more should be done to limit access to handguns, 81 per cent said, "No." And regarding limiting access to assault weapons, 77 per cent said, "No." This was a massive rejection of the crime control through more gun control of the law-abiding agenda. On the plus side, it found strong support for more gun control in the Liberal's big city base.

THE OIC FIASCO

Their next move was to secretly create an Order in Council to ban some 1,500

models of firearms (the RCMP has quietly prohibited thousands of additional models and variants since). This was sprung on the firearms community on May 1, 2020, criminalizing tens of thousands who had committed no crime. This political move was firmly based on public misconceptions. First, "assault-style" was a non-existent category. Actual military assault rifles have been banned for decades, as have magazines over five rounds. It also rested on the public belief that semi-autos were rare and exceptional when semi-automatic sporting rifles are actually very common and have been since the 1950s.

The governor in council's authority to reclassify firearms depended on their having the opinion that these firearms, in sporting use by the hundreds of thousands for over half a century, were not "reasonable for use in Canada for hunting or sporting purposes." The Liberals doubled down on the fear tactic by saying they had "no other purpose except to kill large numbers of people." This was a painfully obvious lie since they have been legally and safely used for other purposes by the hundreds of thousands for decades.

The OIC's public consultation was the reducing-violent-crime survey. The OIC's description of the 77 per cent that did not want more restrictions was, "Many participants expressed their views that a ban on assault-style firearms was needed." The impact on firearms businesses, hunting, sports shooting, etc. was acknowledged, then dismissed with the comment, "may see in the short term a decrease in profits." They also repeated the half truth that "these firearms are sometimes used for hunting or sport shooting" when that was their regular, everyday use. There was also the lie that these firearms, explicitly designed for legal civilian use, were "built with the intent to be used

by the military."They claimed these firearms needed to be gotten "off the street" when they were never there in the first place, and it would have been illegal if they had been.

AFTER THE OIC PRESS RELEASE

They began the confiscation with the lie that a confiscation was a buyback. There was no actual plan beyond virtue signaling and it was seven months before they could find a company to design but not implement the program. The amnesty for the newly criminalized was for two years, but it had to be extended another 18 months since no program was in place. This is what an urgent public safety issue that demands confiscation of private property looks like.

The registration certificates for the restricted guns were nullified. Thus, a legal right to appeal enacted by parliament and written into the law (Section 74 of the Firearms Act) was removed by a simple declaration. The legal principle that a government must follow the law and not rule by decree established by Magna Carta (1215) was violated so the Liberals could avoid scrutiny of their actions.

Court challenges to the OIC soon turned ugly for the Liberals, with

courts in Alberta (Court of Queen's Bench of Alberta Canada (Attorney General) v Smykot, 2022 ABQB 61) and Ontario (Ontario Superior Court of Justice, R. v. M.C. et. al. 2022 ONCA 6299) found that nullification of registration certificates, which was supposed to strip owners of the legal right to appeal, had no basis in law.

Alberta, Saskatchewan, Manitoba, Ontario and New Brunswick have stated they will not pay for this confiscation from the law-abiding, and the overstretched RCMP has stated it does not have the staff, funding or resources to do the job. Tens of thousands of gun owners and businesses remain in limbo.

ANOTHER PRESS RELEASE: HANDGUNS

The Liberals made several attempts to get municipalities to impose a handgun ban, without success. It was popular in some cities until they realized how impractical and problematic it would be. In October 2022, they imposed a national confiscation plan on all handguns in Canada.

This was marketed as a freeze on sales and transfers; however, it was actually a confiscation since all handguns would be seized after the owner's death. The identical treat-

ment of small handguns, about 50 per cent of all handguns, under the 1995 Firearms Act had no impact at all on gun violence.

THE NEW C-21

The Liberals have dealt with the OIC fiasco by bringing in Bill C-21, which short-circuits the legal problems by putting the ban into legislation. They again avoided scrutiny by introducing a ban on all semi-automatic rifles at the very last stage of the process, when little debate was possible. All of the lies and misnaming identified above were repeated. Their current tactic is to "compromise" on some listed guns, while leaving their very broad definition in place. The secretive methods for determining variants and the evergreen policy of continuous reclassification will then continue the purge. They can also push for a compromise to just ban handguns and some semi-autos, which will please their voting base.

At no point will this attack on law-abiding gun owners reduce violent crime. If that had ever been their objective, they would have cracked down on violent criminals, where 100 per cent of the effort would land where the problem actually is.



Nathaniel Milijour

Preserving Our Firearms Heritage

Gary K. Kangas

Firearm Innovations 1600 To 1900

The early history of firearms is a murky affair, with many competing ideas of who invented something first. However, it's worth visiting that history to understand where our modern designs came from and to understand our firearms heritage.

The flintlock mechanism that's still in use today by black powder shooters appeared in the early 1600s and reigned supreme until the early 1800s, or for about 200 years.

The 1800s proved to be a century of sweeping changes. In 1812, Swiss gun maker Samuel Pauly invented a breech-loading cartridge for use in a shotgun with fixed barrels and a removable breech block to accept the cartridge. The cartridge had a brass base with a fulminate charge attached to a paper cartridge containing powder and shot. The gun was fitted with a fire piston to ignite the fulminate. However, Pauly's shotgun was viewed with suspicion and fear of accidental ignition due to its design.

The percussion cap followed a decade later in 1822, with Pauly's shotgun cartridge modified in 1823 with a nipple to hold a percussion cap by French inventor Henri Roux. This was the precursor to a modern shotgun shell. Other creative individuals were developing all manner of cartridge types and firearms, such as the needle gun. The needle gun used a paper cartridge containing fulminate and an anvil at the base of the bullet. The long firing pin, hence the name needle gun, pierced through the powder all the way to the bullet, where it ignited the charge.

The early and mid-1800s was a time of transformation and creativity, opening a new epoch. The telegraph was invented, photography was developed, the concept of the internal combustion engine was percolating, the first trans-Atlantic cable was installed and the concept of the telephone was on the horizon. The information age and the



Le Faucheux 7mm pinfire revolver and ammunition (top), with a Colt 22 CB cap Derringer and ammunition.

modern industrial world emerged.

The firearms world was changing rapidly as well, with the invention of the percussion cap opening the door to reasonably reliable firearms. The pepper box revolving pistol gave way to revolvers with self-contained paper cartridges. The next breakthrough was the pinfire cartridge, created in the early 1830s by Casimir Le Faucheux. His new creation was perfect for use in converted shotguns. Muzzleloading shotguns were modified by removing the breech from the barrels and attaching it to a hinge frame and the barrels bored for the pin fire cartridge. The modern shotgun was born.

In 1845, Nicolas Flobert manufactured the rimfire cartridge. The Sharps big bore rifles, designed by Christian Sharps, began to be manufactured in 1848. The Sharps fired a paper cartridge inserted in the breech. Closing the breech cut the rear of the cartridge off and a percussion cap firing through

a channel ignited the charge. Horace Smith and Daniel Wesson's involvement with the Volcanic Arms Co. led to the formation of Smith & Wesson Firearms Co. In 1857, Smith & Wesson began production of their .22 rimfire revolver, progressing to a .32 rimfire revolver.

The engineer at the Volcanic Arms Co. was B. Tyler Henry who, in 1860, would start manufacturing the now famed Henry Rifle. The early rimfire cartridges were manufactured of soft copper, with the priming compound in the rim. The rimfire, with its soft case, could be detonated by dropping the cartridges or by accidentally pinching the rim. Later, rimfire cartridges began to be manufactured of brass, which is a much harder material, eliminating detonating issues.

Big bore rimfire rifles became available in 1860 with the introduction of the Spencer lever-action rifle created by Christopher M. Spencer. It was a robust, reliable firearm in .50 calibre,



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which was adopted by the US military. A Spencer sporting rifle in .46 calibre was also made available. Not far behind, in 1860, B. Tyler Henry marketed the Henry lever-action repeating rifle, a 16-shooter chambered in .44 Henry flat rimfire. The next innovative rifle was the Ballard, introduced in 1862 chambered in .44 rimfire.

In 1865, cartridge rifles begin to appear in volume. The US government converted the Springfield musket to a .58 calibre rimfire using a process conceived at the Springfield Armoury, by master armourer Erskine S. Allin. The operation was quite simple, cutting the Springfield musket barrel, threading it, then chambering it for a .58 calibre rimfire cartridge, then attaching a breech block with a hinge closure that included a thumb latch release and a ratchet operated extractor designed by Allin.

In 1866, American inventor Jacob Snider produced a breech-loading fire-arm action to convert the 1853 Enfield muskets to metallic cartridge. The rifles were converted in the Royal Small Arms Factory in Enfield, England. The barrels were cut and threaded to the new hinged breech block with a manual extractor. The converted muskets were chambered for the new centrefire .577 calibre ammunition created by Edward Boxer. The Boxer primer he developed is still in use today. The US military Sharps rifles were converted in 1868 with a firing pin breech block and automatic ejector for the Boxer primed .50 calibre US cartridge.

Percussion handguns could not be converted to cartridge until 1871 because Smith & Wesson held the bored-through-cylinder patent of Roland White, which expired in 1870. When the patent expired, every maker

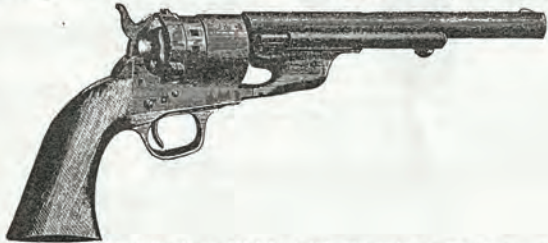
TOP: Conversion of an Enfield muzzleloader to accept early centrefire cartridges.

began converting their revolvers to either centrefire or rimfire ammunition, and a multitude of independent gunsmiths began doing a roaring business in conversions. Colt, Remington, Manhattan, Spiller & Bur, even Civil War revolvers such as the Le Mat were being converted. The conversion of revolvers was a lucrative trade well into the 1880s, even though new revolvers using centrefire and rimfire ammunition were being marketed, the large frame versions, since 1871. Most percussion revolver designs were perfect for conversion, and these conversion units were marketed until the stock of percussion revolvers was exhausted. By then, many manufacturers were producing well-designed, reliable, robust revolvers in both single and double action, making the conversion of older, well-worn percussion revolvers not viable.

The 1880s and 1890s would usher in the dawn of the new century with

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COLT'S,
METALLIC CARTRIDGE,
Army Six Shot Revolving Pistol.




.44 Calibre, Weight 2 lbs. 11 oz., Weight of ball 212 grains or 88 to the pound.
The Drawing is one-half the size of the Pistol.
PRICE \$16.

COLT'S,
METALLIC CARTRIDGE,
Navy Six Shot Revolving Pistol.

.38 Calibre, Weight 2 lbs. 11oz., Weight of ball 140 grains or 80 to the pound.
The general appearance of the Pistol is the same as that of the Army Pistol. See cut above.
PRICE \$15.

ORIGINAL ADVERTISEMENT

Smith & Wesson and its strong, durable and user-friendly double-action revolvers, Colt with both single-action and double-action revolvers, Mauser with its semi-auto pistols, Fabrique National manufacturing reliable semi-auto pistols, Hiram Maxim inventing the modern machine gun and improved, powerful, strong lever-action rifles marketed by Winchester and Marlin. Bolt-action rifles led by Mauser and Enfield with stripper clip loading accompanied by box magazines and smokeless powder were changing the world's firearms.

Many of these features are utilized to this day as part of our firearms heritage. 

Sources:

Wikipedia, Guns International, The History of Smith & Wesson, Mike Venturino





A felt marker is highly visible but temporary way to mark brass for indexing.

INDEXING CASES

A secret to precision reloading?

BY DARRELL MAY

One of the goals of handloading precision ammunition is perfectly concentric cartridges. This is where the brass and bullet are aligned perfectly, in a perfectly cut chamber, to fire down a perfectly rifled barrel -- for each perfect shot. In reality, of course, perfection is virtually non-existent. (With the exception of my loving wife, who is perfect in every way. I know this because she told me.)

The fact of the matter is there will always be some imperfections in our reloaded ammunition, however small. There is a theory, however, that if the imperfections are always the same, this should result in better accuracy than if they are not. Let us suppose, for example, that a bullet, when chambered, is not concentric by just a slight degree. So, rather than the tip facing exactly down the centre of the bore, it actually faces at a fractional angle. So, when fired, it will engage the rifling a little out of "perfect." Now assuming a batch of ammunition was reloaded with the same tools and equipment, we >



Notching rims is a permanent method of indexing cases, but it's not very visible.

can assume the next round to be fired will also have this imperfection. If we could ensure that in each round the imperfection is oriented in the same place, it stands to reason this would lead to better precision than rounds which orient in different positions.

Thus, the practice of indexing our brass cartridge cases. The idea is to have each piece of brass enter the sizing die, the seating die and the rifle chamber in the same orientation. Doing this ensures our inevitable imperfections are always the same in each step of the process. And the process is fairly simple, albeit time consuming to those who don't regularly practice it.

For my precision rifles, I start this process with the first batch of virgin brass. I pick a spot on the headstamp and mark all brass the same. For instance, on Remington cases I may use the little hash mark between the 'R' and the 'P,' or the '7' on some 7mm WSM cases. It doesn't matter, just as long as they are all the same. Now, presuming my dies are adjusted to

their final position, each of these cases enter the sizer with the index mark facing me as I perform the sizing operation. Therefore, if there is any non-concentric error as part of the sizing operation, it is in the same position on each round.

Once they are primed and powdered, the same applies as they enter the seating die. And finally, this index point always faces the same way as they enter the rifle chamber. I find that up is the easiest.

The actual marking of the cases can be done in a couple ways. I tend to mark them with a felt pen. However, this takes some time, especially since I always clean my brass after sizing, so then I must mark each one again to load it. If they have been tumbled clean since the last reload, I shortcut this a bit by simply looking for the symbol on the headstamp as I size. Then after washing, I go through and mark them all prior to priming and loading.

Another method is to use a cutter wheel on a Dremel tool, or simply a

file, and cut a notch in the rim of the case. Then it is permanent and will also be a constant reminder to orient the case at each step of the hand-loading/shooting cycle. When at the bench shooting, a larger mark may be desired, especially by those of us with older eyes, but the felt pen mark can easily be added at any point during the loading process.

Now, I did not invent this process in any way. But I decided to write about it because I associate and shoot with more precision shooters than in the past and am surprised so many people are unaware of this technique. With any luck, this procedure may, if only in some small way, pay some dividends in your precision shooting. 🏆

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EMPTY SHELVES

Preparing for the next shortage

BY JUSTIN FOSTER



The last two years have been nothing short of difficult in many regards. For me, relieving the stress associated with these times is best done with weekly visits to my local shooting range. However, I quickly found ammunition and reloading components were in short supply. Like many, the thought that I would run out of ammunition kicked in and I was guilty at times of panic buying to make sure I had enough to get me through the year.

This was a double-edged sword as supply dwindled and prices skyrocketed.

I never got myself into financial trouble like I heard some have, but I must say there were occasionally some surprising credit card statements at the end of the month. Those statements were a quick reminder to use strategies for not only managing my financial situation, but also my stress level. Shooting is supposed to be a fun pastime that builds skills, relieves stress and makes friends, not adds stress by giving you financial hardship. If you're putting yourself in bad shape financially to participate in a stress-relieving hobby, are

you actually relieving any stress?

ESTIMATING NEEDS

By now I have lived through a couple of shortages, but this one is unlike any other I have seen. Like all of them, this one too will come to an end, but I would be remiss if I didn't acknowledge that another shortage will happen eventually. Whether it is another perfect storm scenario like the one we are currently in or a more familiar short-term shortage, how can we better prepare ourselves to manage the empty shelves? >

First, you need to be honest with yourself and what your needs are. Are you a hunter who only shoots one box of ammunition a year, or are you a competition shooter competing every other weekend? An honest evaluation will not only help manage the stress and finances revolving around your shooting, but it will also help with the overall shortage situation. If people didn't buy more than they needed, this problem might be a lot less significant.

Let's take, for example, the average hunter. While I wish the average hunter shot more and became more proficient with their rifle, the truth of the matter is most hunters don't shoot more than 100 rounds a year -- and that's a generous estimate. That's only five boxes of factory ammunition, or for handloaders, one tray of primers, a pound or two of powder and a box of projectiles. If somebody wanted to be extra prepared, that could even be doubled and still not equal what a lot of people have purchased for themselves in their panic and fear. Unfortunately, the shortage frenzy has been hyped up by salespeople and the media, which has led many to believe they will never see another box of ammunition ever again. This is why we have hunters who never shoot more than 100 rounds a year with stockpiles to the ceiling.

If you're a competitive shooter, you certainly do need more ammunition and components, but I would argue the average competitor doesn't need 50 bricks of primers for a single shooting season. I consider myself a high-volume shooter, and if I at-

tended all 22 local rifle matches, at a round count of 70 rounds per day, I would need 1,540 rounds. Add in some practice days and a budget of 2,000 rounds a year seems reasonable for my competition rifle.

Like most competitors, I am a handloader, and as such we need to break our annual needs down into component types. Let's use my example of 2,000 rounds for the season: There are 7,000 grains in a pound of powder, so if my load requires 45 grains of a given powder, I am able to get enough for 155 rounds out of a single pound. In order to have enough for 2,000 rounds, I need just under 13 pounds of powder.

More easily calculated, primers are often bought in bricks of 1,000 or in trays of 100. So, I would need two bricks or 20 trays.

Projectiles are similar and commonly bought in boxes of 100 or often seen in a 500-count box for bullets commonly shot in higher volumes. Therefore, I would need 20 smaller boxes or four boxes of 500.

Now granted, this is just for one rifle which I shoot competitively, but using this method for all a person's firearms creates a component



A yearly supply of components for the average hunter's handloads



BELOW: Enough components to assemble a 2,000-round supply for the average competition shooter.



ABOVE: The use of storage containers offers ideal protection and organization for handloads.

RIGHT: Proper storage of primers and powder is paramount. Use of crates with a gasket seal helps prevent premature deterioration of components.



management plan. Then, by keeping a component inventory, a shooter can save significant money and stress by always knowing exactly what's needed and when. This will help curb panic buying and prevent spending funds on items already in stock or on items redundant to one's needs. This is especially useful if there are multiple firearms you handload for, as it can become tough to remember exactly what components are in reserve.

A GUN FUND

Most of us can't afford to purchase all those components at once, even if they were readily available, so the need to strategically accumulate and plan a budget is crucial. For the competitor or enthusiast shooting those higher volumes, consider creating a gun fund. Assess your financial situation and come up with a number you can realistically and comfortably afford to save each paycheck, putting that amount aside. Every time you visit a local gun shop, check and

see if they have what you need. If you see something on your list, you will have a fund sitting there, waiting to be used. If nothing is available, then your fund can survive to see another day. I have found this form of budgeting very useful, as it helps curtail panic buying.

PROPER STORAGE

Let's say you're reflecting on what I've said here and realize you've purchased way too much. You don't want to sell any of it, so proper storage is of the utmost importance. Not only for security measures, but also for the well-being of components which are climate sensitive, like powder. In Canada, we can get some wild temperature and humidity swings, sometimes within the same day, but often in the same week. Keeping your powder and primers in a cool, dark place that maintains a stable humidity range is crucial. Powder can last an extremely long time when taken care of and stored correctly, but a brand-new pound of powder

can also be quickly ruined if not taken care of properly.

If you decide to assemble all of your components into handloads as you buy new stock, make sure you store those handloads as if they were an open tub of powder. Companies like MTM Case-Gard make great boxes to protect and efficiently store handloads. If humidity is of concern, find a storage solution with a gasket to properly protect primers and powder and seal out any moisture. The MTM crates are a great fit for this role.

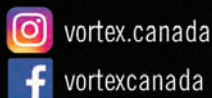
Whether this is your first shortage or this is just the worst shortage you have experienced, rest easy knowing this will all come to pass. The only thing we can do now is to learn from all of this and be proactive enough to weather the next one. There is a fine line between hoarding and being prepared. Remember, we are all in this together, and if we all left a piece of pie for the next person, it might help lessen the severity of the painful situation we are all in. 🍷

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Firearms are stamped with the name of the cartridge they are chambered for, but it's commonly referred to as calibre.

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GUN WORDS

Getting common firearm terms right

BY T.J. SCHWANK

Spend any time on social media and you'll shake your head at the number of posters trying to talk the talk about firearms but really having no clue what they are saying. Sure, there are lots of terms that over time have come to mean other things, but, in most cases, it becomes downright confusing. When asking for or offering advice, it's important to provide the proper information, using the correct terms. Let's take a look at some of the most commonly misused and misunderstood terms.

CALIBRE

The calibre of a firearm denotes the internal diameter of the bore of the barrel. In the case of a rifle barrel,

it's the distance between the lands. Calibre does not mean the type of cartridge the firearm is chambered for, although this is one of those terms that is quickly losing its true meaning. Look at virtually any firearm manufacturer's page and they will list the "calibres" their firearms are chambered in. In truth, they are listing the cartridges their rifles are chambered for and not the calibre, but this is one of those terms that has become so muddled that it's often hard to know what people are talking about.

A 6.5x55, 260 Remington, 264 Winchester Magnum, 6.5 Creedmoor and 6.5 PRC are in fact all the same calibre. The diameter of the bore of the barrel for each is identical and

each uses the identical diameter bullet. But ask most people what calibre they shoot, and they will invariably tell you what cartridge. To me, it's an argument not worth having. But where this gets confusing is when people say they are shooting a 6.5 or a 270 or a 300 and ask a question about it on social media. My question back is always, "Which one?" Other than if you are talking about a 30-06 or a similar classic, it's important to include which 6.5 or 300 it is so people can answer your question correctly. Just the other day, I saw a post with a person asking what muzzle velocity people were getting with their 6.5. This includes more than a dozen options, so feel free to say calibre when

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referring to a cartridge if you like, but at least be specific about which one.

CLIP VERSUS MAGAZINE

In the same vein of arguments not worth having, the terms clip and detachable box magazine have become interchangeable, despite the two being very different. A clip is a device that holds several rounds, typically on a metal strip, and is used to load a fixed magazine rapidly. The clip is positioned above an open chamber and typically slid into a slot on the receiver or bolt and the cartridges pushed down into the magazine. By having several loaded clips in reserve, soldiers could reload their firearms rapidly, rather than having to insert each cartridge individually. Clips were often disposable and only used once.

A detachable box magazine, on the other hand, allows the entire magazine to be removed from the firearm. Like the clip, these too speed up reloading time if the shooter carries several, but they are much more expensive to manufacture and are typically not disposable. These replaced the fixed magazine and clip combination with a single unit. While the clip was pretty well confined to use in the military, detachable box magazines are found

on many hunting and sport shooting rifles. You don't have to spend much time on Google to find all kinds of retail outlets and even some gun manufacturers selling replacement "clips" for rifles when, in fact, it's detachable magazines they are selling. This is another distinction in terms that may well be lost to the Internet. It's not one to let raise your blood pressure, anyhow.

BULLETS

Bullets are the pointy thing at the end of a cartridge. It is not another term for the entire cartridge, nor will it ever be. If you are looking for loaded ammunition, say so. Don't say you are looking for bullets unless you are just looking for the pointy things. And it's important to know which bullet you shoot. I am shocked at the number of hunters that have no idea which bullet type they shoot. They know the manufacturer and when asked which bullet they are using, the typical responses are Hornady or Barnes. Each of these companies makes several different bullet types and just saying the manufacturer's name does little to narrow it down. I once had someone tell me they were shooting the red-tipped ones from Hornady. Hornady makes over

a dozen different bullet styles with a red tip. Bullets are becoming highly specialized these days and selecting the proper one is important.

Bullets also come in different weights and are measured in grains. As important as knowing what style of bullet you are shooting, so too is knowing what weight. And no, if you switch between bullet brands or styles, even of the same weight, you won't have the same zero. Each time you switch bullets, you need to re-zero your rifle, contrary to what you often read on the Internet. And just because one person has had good luck in their rifle with a certain brand and style of bullet or ammunition, doesn't mean you will too. Each rifle is unique.

SEMI-AUTOMATIC/AUTOMATIC/AUTOLOADER

While the media is certainly guilty of not understanding these terms, it's shocking how many gun owners don't totally understand them either. For a firearm to be automatic, it needs to fire several rounds in rapid succession with a single pull and hold of the trigger. Conversely, a semi-automatic firearm requires the trigger to be pulled for each round fired. Some rifles have both automatic and semi-automatic capabilities and are typically referred

Here we have clips on the left and detachable magazines on the right.





On the left are bullets, on the right are cartridges.

to as selective fire.

The most confusion typically stems from the term auto-loading. This is a term most often used for shotguns and, quite simply put, it means a semi-automatic shotgun. They fire a single round and then load the next automatically with each pull of the trigger. They function identically to a semi-automatic rifle, but for some reason the term auto-loader was applied to shotguns, rather than semi-automatic.

Assault rifles, in their truest definition, as defined by the US Army, are "short, compact, select-fire (i.e., both semi-automatic and full-automatic) weapons that fire a cartridge intermediate in power between submachinegun and rifle cartridges." Many gun owners believe that assault rifle was a term invented by the media, but that's not true. Certainly, it has been manipulated by them and our current government, but the term does exist. It's important to understand it.

Repeater or repeating firearm is another term often used incorrectly. Simply put, it's a firearm with a magazine capable of holding multiple rounds. Most often it is a firearm that is reloaded between shots with a mechanical process such as with the use of a lever or bolt. This term was first used extensively in the mid-1800s when lever-action rifles gained in popularity and replaced single-shot rifles and muzzleloaders. Conversely, a single-shot rifle has no magazine

and requires a round to be inserted manually into the chamber after each shot. Where it gets confusing for some is that a bolt-action rifle, for example, could be either a repeater or single-shot, but not both, depending on whether it has a magazine or not.

MINUTE OF ANGLE (MOA)

This is a term often associated with accuracy, but few people really understand it, thinking that a one-inch group equals a one MOA group. A true minute of angle is 1/60th of a degree or precisely 1.047 inches at 100 yards. This is typically rounded down to one inch for ease of calculation. What many people don't understand is that since MOA is actually an angle, it increases proportionally with distance. At 200 yards, one MOA is two inches, and at 1,000 yards it's 10 inches. So, a one-inch group at 100 yards represents one MOA accuracy. A 10-inch group at 1,000 yards is still one MOA accuracy.

While important for measuring accuracy, many scopes have turrets that are calibrated to MOA. On a scope's MOA turret, one click typically represents .25 MOA. So, if you are one inch left on the target at 100 yards, you'd need to turn your turret four clicks or one MOA to the right to move bullet impact one inch. At 400 yards, if you were that same one inch left, now you'd only need to turn the turret one click for one MOA of movement. At 800 yards, one click would equal two inches of movement. If you are going to talk in MOA, you need

to understand what it means.

The list of misused and misunderstood terms is endless, but these are some of the most common. If you are going to talk the talk, it's important to understand the talk. And while we are talking the talk, here are six more things that gun owners should never say on the Internet:

My cartridge is so fast there's no drop in the first 300 yards. (Actually, gravity starts acting on your bullet the instant it leaves the barrel.)

Heavy bullets are less affected by the wind. (Ballistic coefficient determines wind drift, not weight, all other things being equal.)

My cartridge is so fast that the bullet rises above the barrel. (No, it doesn't.)

My rifle has zero recoil. (The law of action and reaction states that for every action there is an equal and opposite reaction.)

The bullet was going so fast, it penciled right through the animal without expanding. (The higher the velocity, the more rapid and violent the rate of expansion on expanding hunting bullets.)

And one I just heard today: Bullet stability increases downrange. The poster indicated that he's seen bullets keyhole through a target (hit sideways) at 100 yards, but then stabilize and become extremely accurate after 200 yards. (A bullet will never be more stable in its flight path than the moment it leaves the muzzle.)

My head hurts. I think I'll stop there! 🍷



BITS THAT FIT

Screwdrivers for firearm work

BY JEFF SMITH

A topic of discussion I have regularly noticed being ignored by new gun owners is the assembling of a selection of basic tools to service that new gun. Magazine articles, online message boards and many face-to-face interactions talk about action style, sights, intended use and calibre. At some point the topic of a cleaning kit is covered, but what about tools? That usually comes after the neophyte has grabbed the household tool kit and ended up with an oh-crap moment, sending them on a quest to find out why it happened and how to fix it.

CARE & PRECISION

Firearms are devices which, like most equipment used in today's world, have very close tolerances. These close tolerances allow the gun to be built to exacting standards that keep the user safe while providing for a smooth interaction between the moving parts. Most of these parts are held together by specialized machine screws designed for use on guns. Like most machinery, they require special tools to assemble, repair or customize.

Extensive or deep cleaning a firearm also often requires a bit of disassembly, depending on the action type.

Have you ever picked up a used rifle or shotgun to assess it for purchase or just to admire it? Have you noticed damaged screws or deep scratches or gouges in the finish or, worse yet, into the metal itself around the screw? I'll wager you have seen these and other types of damage as well. Known as "buggered" screws, these are an indication a previous owner did not use the correct tool; in this case, a screwdriver designed to correctly fit the screw. Commonly encountered damage includes a deformed slot but can also include scratches or gouges in the metal, plastic or wooden components.

Screwdrivers specifically designed for firearms are one of the first tools an owner should purchase. The common slot-type household screwdriver is created with a wedge or double grind. This grind is cheap to create and is meant for the majority of uses around the house. While it's possible to slide this bit into a gun screw and it will appear to fit, do not be fooled, this

is a disaster just waiting to happen due to potential slippage. A correctly designed gun bit is hollow ground from hardened steel to close tolerances between the screw's slot and the driver bit. This design ensures the bit snugly fits the entire slot from all angles. This correct fit places the torque at the base of the screw's slot where it is strongest, significantly reducing the risk of damage to the screw or worse. A sheared off screw head is a nightmare!

SCREW HEAD TYPES

Commonly encountered screws include standard slotted head, Phillips, hex and torx. Occasionally you may encounter Robertson's as well. These, along with Phillips, are used mainly to secure recoil pads to stocks, although some less expensive scope rings see the use of Phillips.

Slot heads are often used to assemble the action, particularly on older rifles and shotguns. They are also regularly encountered on early scope rings and recoil pads. The hex head screw (a.k.a. Allen key) is seen



TOP: Damaged screw on a Win 94, likely caused by an ill-fitting screwdriver.

on many newer firearms where it is used to attach accessories to the gun, such as collapsible stocks, handguards and scope bases. It's also popular for primary action screws in bolt-action rifles. The torx head is the most recent design and usually seen in high-end scope bases and rings. A very strong design, it allows higher torque to be applied, such as when attaching bases. It's also used to as the primary action/stock screws on certain firearms due to the high torque required.

SCREWDRIVERS

There are several common types of screwdrivers available, with the simplest being the fixed bit type where it's not possible to change the bit on the shank. The other common type is a handle which has either a clip or a magnetized receptacle at the end of the shank, allowing the use of interchangeable bits. Each type of driver has its pros and cons. I use both types, as do most gun cranks. A third type of driver is the torque regulating type. This is a crucial tool to include on your bench.

Fixed blade: These are usually sold as a basic set of six or eight slotted drivers designed to cover most slot head screws encountered on older guns. They provide a strong shank with a precisely ground slot and are an excellent choice as a starter kit for most gun owners. In the unlikely event these get damaged, it can mean purchasing an entire new screwdriver, although the high-end makers often offer a lifetime warranty. I am most familiar with the excellent sets made by Grace. They feature a comfortable hardwood handle with a hardened steel shank. Another well known and respected maker is Forster. Their drivers feature a plastic handle. Brownells also makes fixed bit drivers. They have



RIGHT: A hollow ground firearm bit and (bottom) a standard wedge ground bit.

one of the widest selections of bit sizes and types available and also use plastic for the handle.

Interchangeable bits: These sets usually include a single handle with a receptacle at the end designed to accommodate various sized and shaped bits. These are a great option for the

owner of multiple types of guns, where a vast array of screws can be encountered. If you only own one or two firearms, these can be a great option as you can purchase a handle and only the bits required to service your gun. As well, you can build a gun-specific kit to take to the range or on trips. Brownells seemingly dominates this segment of the market, offering dozens of interchangeable slotted



A set of classic Grace gun screwdrivers.

bits, including a set designed with very narrow bits to fit some European shotguns. If you require a slotted bit of an unusual size, these bits can be ground to fit. As well, they offer Phillips, hex, torx and Robertson. Additionally, there are truly custom bits designed to fit scope rings or other unique parts. Just add the size handle you prefer. A well-known supplier of interchangeable bit kits is Weaver. Other suppliers include Brownells, Real Avid and Chapman, with the latter making smaller kits designed to keep in your range bag. The bits used in Chapman sets are securely held in place by a unique system that snaps them into place. They also offer replacement bits.

Torque limiting: Another screwdriver worthy of serious consideration is one which allows tightening screws to a set torque force. In gun work, this is universally described as inch-pounds. In use, the driver is usually set to a recommend force and when the screw is tightened, the internals of the driver will slip when the recommended force is achieved, making it impossible to overtighten the screw. These screwdrivers are most valuable for mounting scopes, as manufacturers suggest specific settings for rings and bases. If the screws are too loose, the scope will move in the rings, ruining accuracy, whereas over-tightening scope rings will lead to damaging the scope by crushing the tube. Another use for torque-limiting drivers is in the installation of




ABOVE:
A set of Wheeler firearm drivers and interchangeable bits.

LEFT: An adjustable torque wrench, such as this Wheeler F.A.T. Wrench, ensures screws are tightened to their optimum values.



rifle stocks. Ruger Model 77 rifles, for example, have a front angled action screw with a set torque suggestion. This pulls the action into the stock correctly. If not mounted properly, accuracy issues will arise. Weaver offers a couple of screwdrivers that provide torque-setting ability. The Firearm Accurizing Torque (F.A.T.) Wrench is also a popular tool many home gunsmiths use. It even comes with correctly ground bits that fit most ring screws.

Every home gun bench or range kit should contain a set of screwdrivers such as the ones discussed in this article. Using the correctly ground bit and taking time to do the job correctly can allow anyone to complete a gun project without damaging the screws or worse, the finish on an expensive firearm. 



BARREL SWAPPING A TIKKA RIFLE



Adding versatility to your rifle has never been easier

BY BRECON SATCHWELL

What if you had a bolt-action rifle, with multiple barrels you could install yourself depending on what's best for the current hunting season or shooting activity? That's a switch barrel rifle. It allows a rifle's owner to use a single action and multiple barrels for a variety of purposes.

First, we need to understand that there are different ways barrels are attached to bolt-action receivers. Some have barrel nuts which act as a jam nut against the action face, locking the barrel in place, thus creating proper headspace between the barrel and the chamber. Savage is the most commonly known manufacturer to use this system. The other common system is the shouldered method, as used by Remington, Tikka, Sako and many others. These are barrels which are simply screwed into the action, tightening in place against a shoulder situated on the barrel. Headspace is controlled by the shoulder's location and the depth to which the chamber is cut.

In reality, any action can be a switch-barrel rifle if you have the tools and the knowledge, with some of them being much easier to work on than others. Some shooters in F-class and benchrest just hand tighten barrels

and can spin them on and off with ease, depending on which one shoots better. Some competitors even use a practice barrel and a competition barrel. However, for the sake of this article, I am going to focus on Tikka rifles and pre-fit barrels. A pre-fit barrel is one the barrel maker has produced, complete with a chamber, to such tight tolerances that it should be capable of being screwed onto an action and the headspace will be correct.

Personally, I run a Tikka T3x switch-barrel rifle and find it amazing. Tikka barrels can be ordered with the barrel nut method for headspacing. They can also be ordered as shouldered pre-fits or shooters can have a barrel fitted by a gunsmith. Luckily, due to the tight tolerances that Tikka/Sako holds in the factory, you can also fit most barrels from one Tikka onto another (T3/T3x). I have purchased, headspaced and shot more than six different barrels on the pictured action.

TOOLS

There aren't many tools required to do a pre-fit barrel swap of a Tikka rifle, but some of them are specialized and it can't be done without them. As always, consult a gunsmith if you're

unsure. Below are the basic items required to make this project possible.

Barrel vise: A few options exist for this; you can get a style that has inserts to match the diameter of the barrel and get a firm grip on it when tightened down. An example of this is the SAC (Short Action Customs) Bravo barrel vise. Another example is a Viper barrel vise, which I currently have and use and it has worked great. But if you're going after a slim barrel, such as the T3x Stainless Lite model, I highly recommend either having an insert made or using an insert style barrel vise. On heavier barrels, say the Varmint, CTR or Tactical models, a Viper vise will do just fine as it is able to grip the larger outside diameter barrels. I also advise you get a thin piece of leather to place around the barrel, as this will help avoid damaging the barrel if the vise isn't tight enough and it slips during the removal or install process.

Action wrench: With action wrenches, there are again a few options. First, there are internal action wrenches, which are built to slide into the action along the bolt raceway and fit snugly so they can be used for the removal and torquing of the new barrel. These work great for installing new barrels or

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An assortment of items needed to start the barrel-switching process.




removing barrels you have been previously installed, as they are likely not as tight as factory barrels. The second style is external action wrenches. These look a little more like Thor's hammer than a gunsmithing tool, but they do work extremely well.

There are a few different head styles, as not all actions are the same, but with a Tikka T3x we have flat sides to clamp against. I got mine from a Canadian machinist/gunsmith in Alberta. For some unknown reason, Tikka torques factory barrels on with such force that most people tend to give up and put relief cuts into the barrel to get them off. Of course, the old barrel becomes scrap at that point, which isn't very helpful when trying to build a switch barrel rifle.

Torque wrench/breaker bar: With torque wrenches, it's fairly simple. Mine is a standard mechanic's torque wrench from Canadian Tire. A breaker bar can also be helpful, depending on the degree of tightness you chose to use on your rifle. As stated, some shooters like it hand tight, others use a torque specification, and some use an indexing mark usually located on the bottom of the action lined up with a mark on the barrel. These marks are

best set when using headspace gauges.

Headspace gauges: These are an important part of any switch-barrel rifle project. The main three gauges are go-gauge, no-go-gauge and field-gauge. A go-gauge indicates a headspace which isn't too small. With this gauge installed in the chamber, you should be able to close the bolt without any issues or resistance. Next is the no-go-gauge, which is used to indicate if the headspace is too large. With this gauge installed, the bolt should not close. However, it is possible for a bolt to close on the no-go-gauge, but that doesn't actually mean the action is a total loss. This could be caused by wear on the chamber, bolt face or lock-up system. The ultimate check is a field-gauge. These gauges are SAAMI or CIP maximum spec for that chamber. If a bolt closes on a field gauge, then the rifle is considered unsafe to fire and should be taken to a gunsmith to see what has caused the lack of proper headspace and be repaired prior to use.

Rubber mallet: This can be a rubber mallet from your local hardware store, just soft enough that it won't damage anything but can still provide a solid dead blow if required. 

THE PROCESS

When switching barrels on a rifle, it's good to clear off a large work area (in my case, the kitchen table) so I do it when I'm home alone and won't catch too much flak. This allows having all the tools and components in one place and handy for each step in the process.

STEP 1: Clear the table and lay out all tools required for the process, including the barrels and rifles.

STEP 2: Mount barrel vise to table so it won't move. I use woodworking clamps, but bolting down works the best.

STEP 3: Place the rifle's barrel in the barrel vise and tighten slightly; this will allow the removal of the scope and stock from the rifle's action. Scope removal isn't required, but I choose to do this so it won't be damaged.

STEP 4: Once everything is removed, slide the barrel further into the vise, as close to the action as possible. This provides a larger bearing surface for the vise to grab, to prevent slippage.

STEP 5: Insert the internal action wrench into the action until it contacts the front of the action.

STEP 6: Place a torque wrench on the internal wrench and apply pressure until the action breaks loose.

STEP 7: Optional for people breaking a factory barrel free. This is easier with two people. While applying pressure to the internal action wrench, using the box end wrench placed on the flats of the action, place pressure and apply blows to it with the mallet. The constant torque from the internal wrench and dead blows from the external are usually enough to break a factory barrel free. Penetrating oil helps.

STEP 8: Once the action is broken free, remove the tools and unthread the action from the barrel by hand, being careful not to damage anything.

STEP 9: Remove the barrel from the vise and replace with the barrel you are switching to and tighten it into the vise.

STEP 10: Hand tighten action onto new barrel in vise.

STEP 11: Torque the new barrel to the desired torque setting or index marking as discussed with barrel maker or gunsmith.

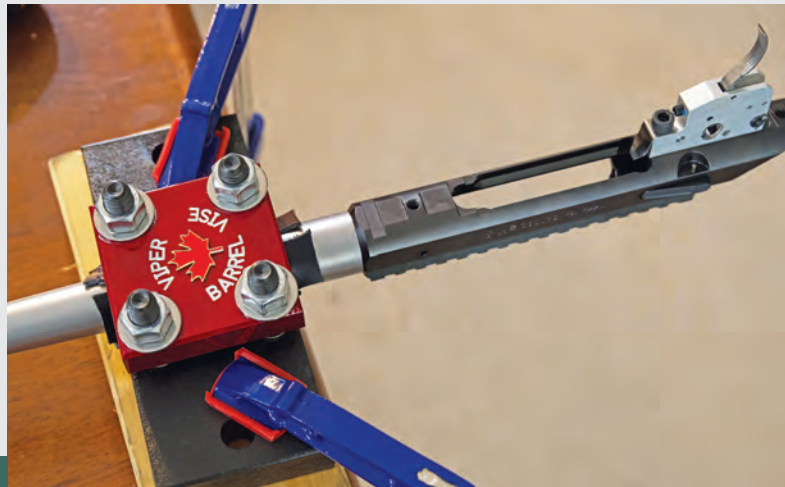
STEP 12: Check the rifle's chamber with the headspace gauges to confirm it's safe.

STEP 13: Install the stock, bottom metal and scope using manufacturer torque specifications.

STEP 14: Once everything is confirmed to be as per spec, double check it.

STEP 15: Take the rifle to the range and enjoy the new barrel.

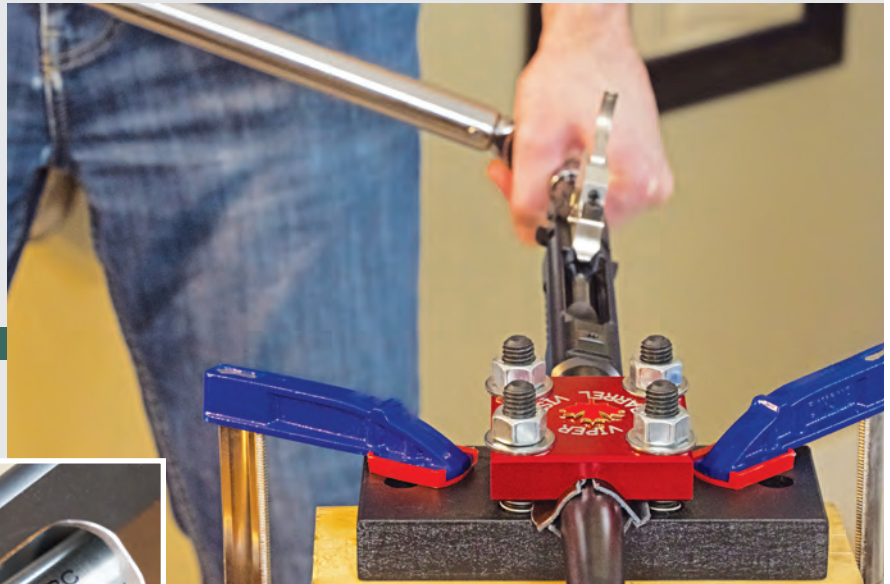
Hopefully this article has provided you with some knowledge and insight on how to create an amazing switch barrel rifle. Enjoy, have fun, and when in doubt contact your local gunsmith for advice.



A



B



C



D

A| The action should be slid as close to the vise as possible.

B| With an internal action wrench inserted, the action can be unscrewed from the barrel.

C| Once a new barrel is installed, a torque wrench is used to tighten the assembly.

D| Chamber dimensions must be checked with go and no-go gauges prior to shooting.



SMALLER SLUGS

Hunting with the 20-gauge slug gun

BY JEFF HELSDON

There was a time, not long ago, when the 12 gauge was the standard for slug gun hunters. But times are changing. Driven by advances in sabot technology, the 20 gauge is gaining ground on its larger counterpart.

To understand where ammunition technology is, it's necessary to take a step back in time. It used to be slugs in North America were all of the Foster type, where the rifling was on the slug, which was shot through a smooth bore. The commonly known exception to that was the Challenger, which was a Brenneke-type slug and was somewhat of an improvement on the Foster design.

Things changed in the 1980s when

sabot slugs hit the market. These slugs borrowed on sabot technology used in military artillery. Essentially, a sabot slug is a high-technology bullet that is housed in a plastic sleeve, or sabot. Sabots are shot through a rifled barrel, with the rifling passing its spin on to the sabot, which rotates the bullet within it. The end result is a rifled shotgun barrel which metamorphoses a shotgun into a pseudo-rifle, gaining accuracy and range. These advances in bullet technology also allowed the 20 gauge to come into its own.

THE TECHNICAL STUFF

One of the most popular slugs became the Remington Accu-Tip. In 20 gauge,

the Accu-Tip uses a .45 calibre bullet. This 260-grain bullet is pushed out of a 3-inch shell at a velocity of 1,900 feet per second. It has a muzzle energy of 2,084 foot-pounds and still has 1,192 foot-pounds at 100 yards. For comparison, the 12-gauge Accu-Tip produces a muzzle velocity of 1,850 feet per second in a 2¾-inch shell using a 385-grain slug with a diameter of 0.58 inches. Energy is 2,926 foot-pounds at the muzzle and 1,677 at 100 yards.

Looking at the same bullet diameter in a rifle, a 45-70 Government shoots a 405-grain bullet at 1,600 feet per second muzzle velocity in Remington Core-Lokt. It's still moving at 1,384 feet per second at 100 yards. Muzzle >

energy is 2,302 foot-pounds, but it's more efficient than a 20 gauge at 100 yards, hitting with 1,723 foot-pounds. If you're not convinced yet, no one ever questioned the suitability of a 45-70 Gov't as a deer round.

The number thrown around for years as what's needed to ethically kill a deer has been 1,000 foot-pounds of energy. The Accu-Tip ballistics keep it over that threshold until north of 125 yards. However, the design of a bullet also plays into the equation for an ethical kill, and I have heard of people reaching out to 200 yards with it.

The 20 gauge also has less recoil. Although there is science to recoil, with the numbers showing a 20 gauge's recoil is about 50 to 70 per cent of that of a 12 gauge, felt recoil considers the weight of the gun and effectiveness of the recoil pad. Therefore, the science says the 20-gauge sabot slug is more than capable, and able to do the job with less of a wallop to the shoulder than a 12 gauge.

THE MANUFACTURER'S VIEWPOINT

Hornady importer, The Korth Group, provided some insight into the Canadian popularity of 20-gauge SST sabot slugs.

"I think with new technologies there has been an increased push on the 20 gauge," said Korth sales manager, Troy Flasch. "The challenge is what the demand is versus what is actually being filled. The 20 gauge seems to be more challenging to obtain than 12 gauge, even with regular birdshot ammunition. So, although there might be some intent/demand to increase, if the availability isn't there, it doesn't jive with the numbers."

Korth sales figures show sales of 12 gauges were nearly three times that of 20 gauges for Hornady SST options in Canada.

"What is really hard to assess the last two to three years is what sales numbers could look like if we filled all our order needs," Flasch said. "I know that 20-gauge availability this year in Ontario was brutal and we pretty much missed the season with Hornady on it. So, there are numbers there, but what could they look like if we had product?"

The overall situation is different in the US. A spokesperson for Federal said there has been a "pretty steady ratio" between 12 gauge and 20 gauge. Rem-



The 20-gauge Remington Accu-Tip beside a 12-gauge Winchester Deer Season. The difference in the projectile size translates into a difference in recoil.



The dissected Remington Accu-Tip shows the felt wad and plastic wad behind the sabot housing the bullet.

ington reported a higher percentage of 20-gauge slugs over 12, but the popularity of the Accu-Tip is driving that.

"Overall, it does look like 20 gauge is growing, but overcoming the sheer volume of 12-gauge guns on the market will take some time," said the Federal spokesperson. "Current open order positions definitely show that the market is looking for 20-gauge slugs in higher levels than the past. It is taking longer to fill the 20-gauge pipeline than it has for the 12 gauge. We continue to put effort towards developing and improving the effectiveness of 20-gauge sabot slugs, as we have identified that as a market need."

Winchester did not return my queries about their products before press

deadline. There are several great sabot slug options in their line-up, including the recently released Deer Season XP copper.

GUN CHOICES

The firearms available with a rifled slug barrel are not reflective of the increased demand the manufacturers are reporting.

For blind or still hunters wanting long range, a bolt-action is the standard. While Marlin, Browning and Mossberg manufactured bolt-action shotguns in the past, some with rifled barrels, the only current offering is the Savage 220. This gun is renowned for its accuracy and shots out to 200 yards are entirely possible. For those looking

on used gun racks, there are Browning A-Bolts in 20 gauge, although they are hard to find, and the price might be almost as much as a new Savage 220.

Hunters participating in driving deer, or those looking for a multi-purpose shotgun with two barrels, have more options in pumps and semi-automatics, but not as many as in 12 gauge.

Since the restructuring of Remington, their only slug gun is a 12-gauge

A selection of the popular 20-gauge sabots available today, with the individual cartridges displayed in front of the respective boxes left to right.

Model 870. Perhaps more options are coming? Mossberg is still manufacturing a 20-gauge slug gun in its pump line. The company offers a few combinations of vented rib/deer guns, including several with variable-length stocks in its Bantam line designed to grow with youth shooters. There are no 20-gauge semi-automatics currently being made by Mossberg, but a company source has said they have discussed the possibility.

Winchester leads the way in the number of 20-gauge options with rifled slug barrels. The SXP pump is available in both a deer version and a buck/bird combo with both a rifled and vent rib barrel. The SX-4 semi-automatic comes in a cantilever buck model.

Browning has semi-automatic cantilever rifled slug versions in both its Sil-

ver and Maxus II lines. With a lot of the rifled slug guns only being available in black, Browning offers camouflage versions. Benelli's M2 is a semi-automatic in rifled slug 20 gauge, and Ithaca's Deerslayer pump is also available in 20 gauge. Beyond manufacture-designed deer guns, there is also the possibility of purchasing an aftermarket rifled barrel.

Overall, I think the 20-gauge rifled slug gun is a market that has room for more options. If this will occur is the big question, as many of the American states that required shotguns are moving to allow straight-wall rifle cartridges also.

OPTICS OPTIONS

With the increased range provided by sabot slugs, it only makes sense to use some sort of optical sight to take advantage of the extended shooting distance possible. Red dots are popular, but I prefer to use a low-power optical scope for my hunting. For those sitting on stands overlooking a field, a 3-9 may be a better choice.

Many manufacturers have shotgun-specific scopes. My present scope is a Bushnell 1-4 Prime, which I chose not only for the magnification range, but also the EXO waterproof barrier to assist in dealing with the wet conditions often seen in southern Ontario's shotgun hunts.

HUNTING WITH A 20-GAUGE

This year, during our local shotgun season, I decided to use the 20 gauge my daughter usually carries instead of my 12 gauge, as she was away at university. I found it a lot lighter to carry on deer drives and have always found it much more enjoyable to shoot while sighting it in. Unfortunately, the deer weren't cooperating with my experiment, and I didn't see one within range. I have noted in the past though that the members of our group that use a 20 gauge kill as many deer as the 12-gauge users. Asking Larry Donovan, who uses his 20-gauge pump over his 12-gauge autoloader, why he converted, I was told, "It's lighter and just as effective."

For those considering a slug gun purchase for the first time, don't hesitate to give the 20 gauge a serious look. Hunters who are looking for an excuse to buy a new gun, or a lighter gun, should also give it consideration. 🦌



The Savage 220 is the standard in accuracy for 20-gauge slug guns. This one is topped with a Bushnell 3-9x.





The Savage Arms AccuTrigger offers a light, clean trigger pull, with no creep, and prevents the firearm from discharging if jarred or dropped

BARGAIN HUNTER

Reviewing the Savage 12FV
BY LOWELL STRAUSS

My friend always promised his family he wouldn't talk about hunting for the month of January. It was a sound policy drafted in the interest of good family relations. Unfortunately, I think and talk about hunting year-round. Thankfully, my family is okay with that. Honestly, it's not as bad as it sounds. Yes, my words often involve fur and feathers, but sometimes, I'm hunting good deals. When I scope out excellent prices on guns, ammunition and gear, I go on about it with whoever will listen, even if it's only my dog.

I spotted Cabela's exclusive Savage 12FV from across the Internet. At under \$500, this target rifle looked too good to pass up. So, I pulled the trigger on the purchase (and soon after, the rifle) and here are my impressions.

THE RIFLE

The 12FV has been around for a few years now and, like everything else, the price has steadily climbed; still, this rifle is an outstanding value

because it features bells-and-whistles I expect in a target or varmint hunting rifle: a long, heavy barrel, quality trigger, oversized bolt and intuitive controls, to name a few. This model 12 comes chambered in 308 Win or 6.5 Creedmoor; I chose the latter for this review.

For full marks, a rifle must check all the boxes for performance, function, quality, and looks. Price factors too, and a budget rifle that shoots well earns bonus points from me. Honestly, despite its glowing reviews online, I lowered my expectations because of its price point.

I received this rifle by mail and was pleasantly surprised at the green security tape, signed and dated, indicating the firearm had been safety checked. Inside the box, I discovered three more safety-conscious considerations. The bolt was out of sight and packaged in a bag, and in its place, a bright red chamber flag clearly indicated an empty chamber. The trigger wore a matching red screw-style trig-

ger lock, while a warning label about reading the instructions hung from the trigger guard. Savage Arms and Cabela's get bonus points for safety.

Next, I noticed the receiver was drilled and tapped to accept optic mounts. Interestingly, the holes were not plugged with setscrews or plastic plugs; not a big deal for a rifle that doesn't include iron sights, but not what I was expecting. A close inspection revealed the threads were clean and ready for bases. Many of Savage's centerfire models accept the same scope bases, which is convenient when searching for these parts.

Savage touts its first-of-its-kind AccuTrigger as a system that is easily adjusted by the end user. It offers a light, clean trigger pull, with no creep, and prevents the firearm from discharging if jarred or dropped. I've shot many rifles with the AccuTrigger and I generally like how they feel. No, they're not as nice as a custom aftermarket trigger, but they are an upgrade from a standard Savage trigger and a nice >



addition to this rig. What's not to like? The trigger performs as advertised, breaking at a crisp two-and-a-half pounds from the factory. Savage includes a small wrench to adjust the trigger at home.

Some rifle shooters prefer a detachable magazine for fast reloads, while others prefer an internal magazine for cartridge security in the field. The 12FV comes with an internal box magazine, which has the advantage of not losing ammunition. The rifle's steel magazine is undoubtedly durable, but loading was difficult out of the box, and feeding seemed a little rough. Unloading is a bit slow too. The magazine is okay for a hunting rifle, especially if I take time to smooth and chamfer its sharp edges. The magazine is a deal-breaker -- I wouldn't consider this a target rifle. But it's also an opportunity to upgrade the stock to fit standard AICS magazines.

The 12FV features a synthetic stock with cut checkering on the pistol grip, swivel studs and super-soft recoil pad. If a manufacturer is cutting corners to keep the pricing competitive, the stock is the best place to do it -- and the one on my rifle is nothing special. It's hollow and the forend flexes easily. One thing I do like about it is the shape. The slim pistol grip feels good in the hand and a wide forend is easy to hold. It looks like it was designed with the heavy barrel profile in mind, which is a good thing.

The 12FV uses the same footprint as several other Savage rifles, making it easy to customize. MDT builds several chassis systems that fit this rifle; any

TOP: The Savage 12FV is a heavy yet manageable hunting rifle.

BELOW: The 6.5 Creedmoor and .308 Win are the two cartridge options for the Savage 12FV.



would be a nice upgrade from the factory sporter-style stock. A chassis provides a better grip, upgraded magazines, rails for accessories and, most notably, rigid support for the barrel and action for improved accuracy. I have a chassis on order; if time and space allow, I may report back to CFJ readers with an update.

Savage knows the secret of making barrels that deliver outstanding accuracy. And the 26-inch, free-floated, button-rifled, varmint profile barrel, finished with an 11-degree target crown on the 12FV, can certainly shoot. Using Federal ammunition loaded with 95-grain Hornady V-Max bullets, the first three-shot group at 100 yards measured a varmint-crush-

ing 0.69 inches. Two more five-shot groups measured 0.85 and 0.77 inches, respectively. Switching to a Federal Premium load and a 130-grain Berger bullet delivered similar sub-MOA groups. The carbon-steel barrel on the 6.5 Creedmoor has a one-in-eight-inch twist for stabilizing the long, sleek bullets that enhance the Creedmoor's performance in the wind and its long-range ballistic performance. I have little doubt this rifle is an omnivore, shooting a wide range of ammunition accurately.

Smooth-cycling bolts allow for fast follow-up shots. The 12FV's oversized bolt knob helps; however, I found the rifle's bolt a bit gritty out of the box. Friction between the bolt and the

magazine hindered its movement. I needed to look at what was happening for cycling, rather than keeping my eyes on the target. Understandably, a budget-priced rifle doesn't get the extra time for polishing these non-critical surfaces. In time, I'd guess the rifle will smooth out, but until then, I'll need to slow my reload pace to prevent binding. The jewel on the bolt dresses it up a little and helps hold an oily film, improving cycling.

Savage lists the bare rifle's weight at 8.75 pounds. A scope and bipod added an extra couple of pounds, bringing my rig's total weight to 10.75 pounds. The 6.5 Creedmoor cartridge has relatively light recoil, and with a good recoil pad and a heavy rifle like the 12FV, it is a pleasure to shoot -- perhaps why it shot so well.

A budget rifle is sure to have some fit and finish deficiencies because there are fewer quality control check-points along the way. A few less-than-perfect things I noted on my rifle include a minor misalignment of the recoil pad and the butt, an off-centre barrel channel and visible seam marks on the moulded-plastic stock. On the flip side, two features that pleasantly surprised me were a steel trigger guard and an internal steel box magazine.

FINAL THOUGHTS

I went deal hunting and I bagged myself a trophy. The Savage 12FV is excellent value for a target/varmint-

RIGHT: The Savage 12FV is a heavy yet manageable hunting rifle.

BELOW: Shooting coyote targets from field positions is a humbling exercise; still, despite a larger group than from the bench, any of these shots would have killed a real coyote.



style rifle. This model 12 drives tacks, as a good varmint rifle should, and has many features that make it easy and fun to shoot.

The 12FV only comes in two medium-bore cartridges, which for small varmints is overkill, and at over 10 pounds, it's a hefty rifle for carrying to a predator stand. The rifle is accurate enough for target shooting but falls short with its internal box magazines and plastic sporter-style stock. Upgrading to a chassis system would improve the rifle's performance considerably and make it a serious consideration for an entry-level long-range competition gun.

The Savage 12FV has earned a place in my trophy room (a.k.a. gun safe). I'll treasure the memory of this hunt and my reward. 🏆



TOP TIER RIMFIRE

Reviewing the Anschutz 1761

BY TIMOTHY FOWLER

One could argue Anschutz makes the best rimfire rifles in the world, which is exactly what I'm going to do. For starters, the company has been building guns for 160-plus years and at the last winter Olympics in Beijing, 100 per cent of the gold medalists in biathlon were shooting Anschutz rifles. And 52 out of 60 medals awarded were earned with Anschutz guns. That tells me they must be on to something and makes it easy to argue Anschutz makes the best shooting rimfire rifles on the planet.

But first, a digression and a little background. My son recently sold his near-mint condition 1995 Crown Victoria LX HPP. While he drove it happily for the last 10 years, it first belonged to his grandfather. He wanted to use part of the proceeds to purchase something timeless, memorable and durable -- sort of a tribute to the original owner. He earmarked part of the sale proceeds to acquire a top-tier rimfire, a nod to grand-dad, who loved to hunt rabbits with a .22 rimfire.

Josh searched the market for a top-tier hunting rifle chambered in 22 Long Rifle to be used to hunt grouse, rabbits and gophers, eventually landing on Anschutz products. The German company offers a few variations on the 1761, but Josh chose the Classic model with a 20-inch heavy barrel in a matte-finished walnut stock and blued steel. There are two trigger weight ranges available: heavy and light. He chose the heavier range

trigger because this will be a hunting gun. The single-stage trigger range is 800 to 1200 grams (1.75 to 2.65 pounds) and is currently adjusted to 1,000 grams (2.2 pounds), perfect for hunting and excellent for target shooting. For shooters more inclined to sporting competition, the lighter two-stage trigger option is adjustable between 250 to 450 grams (0.5 to one pound).

"It feels like a real rifle. Lots of .22s feel sort of like toys relative to a centrefire. This one feels very nice," Josh said.

MULTIPLE IMPROVEMENTS

The Model 1761 was three years in development and is Anschutz's most recent version of this sporting/hunting rifle, which is manufactured in Ulm, Germany. The 1761 features a collection of improvements to nearly every aspect of the gun and is available chambered in 17 HMR, 22 LR and 22 WMR.

Anschutz wanted to update the rifle and ended up with a completely new trigger design. The bolt lift was increased from 53 to 60 degrees, allowing the locking lugs to be moved to the middle of the bolt to improve the ergonomics. This change and the modification to the firing pin make the bolt shorter than in previous models. The extraction mechanism was reworked to better hold the spent casing for ejection and the angle of ejection was reduced to kick casings clear to avoid bouncing off the scope and back into the chamber.

The new barrel fitting process involves a pair of V-blocks to allow shooters the option of switching barrels, compared to the previous press-fit barrels which required a gunsmith to execute the change. The receiver was shortened 40 millimetres and the solid billet chromoly receiver is now machined to be flat-bottomed with an integral recoil lug. This produces an action with improved rigidity. The magazine is manufactured from a combination of stainless steel and polymer. Magazines for all three calibres are identical in exterior dimensions to ensure consistent fit in the rifle, but the internal apparatus varies to accommodate the different rimfire rounds.

We found the magazine was easy to load, fit perfectly and positively on insertion and was easily released by pushing the button inside the trigger guard. Just move your trigger finger forward to push on the release and drop the magazine. The safety was enlarged and redesigned to be more easily engaged and can be moved to the fire position slowly and quietly in a hunting situation.

SCOPE CHOICE

The action comes with a clean 11-millimetre machined dovetail (no longer drilled and tapped.) This means that rings can be mounted directly to the receiver, which is what Josh did. Pica-tinny rails remain an option and the three-millimetre slot in the back of the action locks the rail. Josh mounted >



The Anschutz 1761 is a pretty gun, especially to those who like classic walnut and blued steel.

a Leupold VX-3HD 3.5-10x40 CDS ZL scope with duplex reticle, which requires one-inch rings. The scope choice reflects the use of the gun -- primarily hunting. The scope magnification works perfectly for the intended use.

RANGE RESULTS

Because of shipping delays and a shrinking hunting calendar, there was only time for one rabbit and grouse hunt prior to writing this piece. While that hunt was unsuccessful, there was time to put a few rounds down range and Josh reported the rifle performed perfectly, was a joy to walk with and a pleasure to shoot. This is the perfect rifle to elevate the game of hunting rabbits and stalking grouse. When spring rolls around on the prairie, the 1761 will be ideal for gophers.

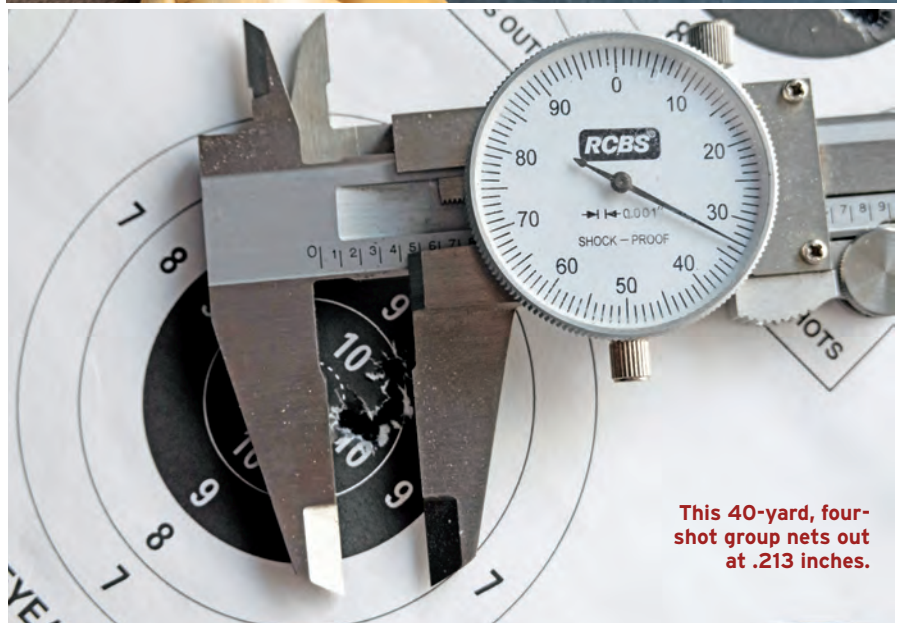
The range day proved the rifle is better than either of us could shoot consistently. We shot targets at 40 yards, with the best five-shot group printing 0.415 inches. We shook our heads noting there were a few tiny four-shot groups and even one that was a single hole with a group calculated at .213 inches. The gun can shoot. It's clear we need more practice to eliminate those flyers.

RIMFIRE PRACTICE

Speaking of practice, the rimfire rifle is a long-gun shooter's best coach. The shooter at the indoor range booth next to where I was trying to let rimfire shots go was dialing in his muzzle-braked magnum Christmas present. This was a sonic reminder of how lovely that little pop from a 22 Long Rifle is. The absence of significant recoil and muzzle blast gives the shooter the opportunity to focus on the fundamentals, mechanics and process of the shot. The most significant shooting improvement I have experienced is on the trigger of a rimfire. Everything learned from



The bolt knob and safety are both easily found and manipulated, with no need to take your eyes off target.



This 40-yard, four-shot group nets out at .213 inches.

shooting rimfires transfers perfectly to centrefire big game rifles. And considering the price and poor availability of centrefire ammunition, rimfire practice and hunting make sense. Shooters can enjoy every aspect of shooting with lower costs and reduced muzzle blast.

Think of the Anschutz 1761 as a proper hunting rifle and a potential family heirloom. This is not a plinker. And it costs what a proper European centrefire costs, with Nordic Sportsman listing this gun at \$1,795. Not cheap, but it is the best in the world. 🏆

SHOT REPORT— 2023

What's hot and what's not
BY AL VOTH



The annual pilgrimage to America's desert that we call the SHOT Show happened again in mid-January. After being cancelled completely in 2020 and then held at a significantly reduced level in 2021 due to lingering COVID, the Shooting Hunting and Outdoor Trade Show was back in full force at its Las Vegas home in the Venetian Conference Center. The type of work I do makes my attendance a necessity, so I joined the other 52,000 people there. The following comprises some of the notable products and the trends I found.

TRENDS

It was no surprise that a large segment of the show was devoted to AR-15 pattern rifles, suppressors and concealed carry of handguns. As a Canadian, that made it easy to walk by many booths. The quantity of companies trying to make their mark in these markets means they had a significant chore trying to stand out from the rest. The biggest splash was likely made by the firm who brought in a now wrecked Ford Mustang used to shoot many of the scenes in the film John Wick 2.

In news more relevant to the Canadian market, I noted that products for long-range and extreme long-range shooting continue to grow. This includes the popularity and near-standardization of the ARCA rail. Indications are it'll eventually be as common on the bottom of rifles as the Picatinny rail is on top. Coupled with this is the continued popularity of chassis systems for all types of rifles.

Other trends include the pop-up of small ammunition companies, which seems to indicate the big manufacturers aren't keeping up with demand. The presence of firms selling large commercial ammunition production machines reinforces this. I'm not talking about bench-mounted machines here, but entire high-speed production lines that would more than fill up a typical garage. And

speaking of pop-up companies, the trend for small firms to contract the manufacture of optics with offshore companies and create their own brand continues unabated.

The last trend item of note was the absence of many major companies from SHOT. The list includes Weatherby, Vortex, SIG, Crosman, Redding, Timney and others with no booth presence. Rumor had it that reps from these companies were certainly present at the show, but they all decided the high financial cost of a SHOT Show booth is better spent in other areas.

BELOW: The 375 EnABLER (beside a 6.5 Creedmoor) is being promoted by CADEX as the largest cartridge allowed under Canada's 10,000-joule limit.



The Marlin 1894 and 336 will both be back in production in 2023.



RIFLES

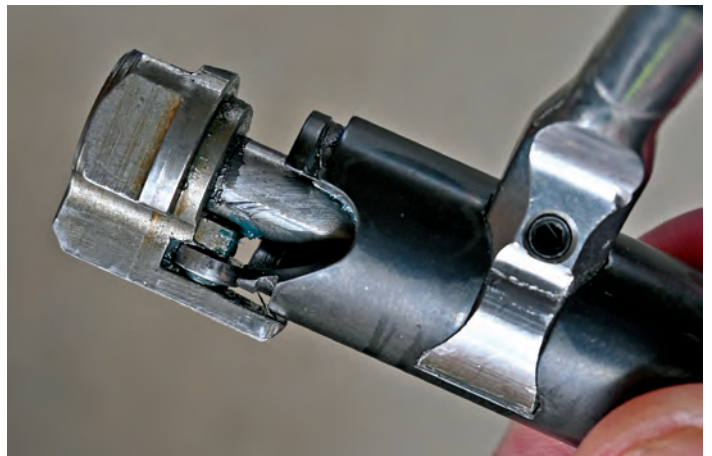
Most of the new product news relevant to Canadians this year seems focused on rifles, making that a good place to begin.

Ruger-built Marlins are finally starting to come into Canada in some numbers, although still not nearly enough to meet demand. The 45-70 line is being expanded and now includes SBL, Trapper and Guide variations. And now more classic Marlins have been announced, including the 336 in 30-30 Winchester and an 1894 in 44 Remington Magnum. Both look very nice, but considering demand, don't expect them on this side of the border for a long time.

CADEX let me shoot a new long-range rifle built specifically for the Canadian market. With the government now labeling any firearm capable of more than 10,000 joules of energy to be prohibited, they have settled on a cartridge called the 375 EnABLER, claiming it'll be just under the legal limit. If so, it'll likely be the go-to cartridge for ELR competition in Canada, and it won't give up much in the way of performance to any of the other long-range offerings.

Another Canadian company called Pristine is also manufacturing actions now. Based in BC, their product takes the best features from a variety of other rifles and blends them into a bolt-action notable for its modularity. Included are a roller cocking cam, six-lug floating bolt head which can be swapped out, Sako-type extrac-

TOP, RIGHT AND BOTTOM: The Canadian-made Pristine action features a roller on the cocking cam and six-lug bolt head.



tor, dual ejectors, Remington 700 footprint and the ability to accept any Savage pre-fit barrel. Price is \$1,299 CAD, with only the short action size currently available.

A rifle which Americans barely glanced at, but which caught my attention, was the 600 TA1 Trail on display at the CZ USA booth. Available

in 223 Remington and 7.62x39mm, it's a compact bolt-action with a sliding buttstock that shortens to 27.2 inches when the stock is collapsed. A 16.2-inch barrel is fed using commonly available magazines and the safety selector will feel familiar to AR-15 users. Suggested retail in the US is \$1,079. >



SHOTGUNS

I didn't see much in the way of new shotgun designs this year, but there were plenty of new variations of old models announced. Many of them were new offerings in the smaller gauges, ranging from 20 gauge down to 410 Bore. To go along with those smaller bores, there was new ammunition featuring bismuth and tungsten shot to make them more effective.

Benelli has added a steel receiver to their 828U, which was previously only available with an aluminum receiver featuring a steel insert. This will, of course, add some weight and should make traditionalists feel more comfortable regarding the gun's longevity.

There was plenty of speculation by the Canadians at SHOT about whether the prohibition of "variations" of assorted Benelli shotguns will result in the prohibition of many other shotgun brands which have copied their inertia system since the patent's expiry. Retay is major candidate here, as are many others.

OPTICS

Optics is one area which continues to forge ahead in the use of technology. More manufacturers are offering binoculars with rangefinding capability built in. Leupold has finally joined that group, with a model that also offers 25 pre-determined ballistic profiles which the owner can choose from to offer firing solutions. Price is about \$1,500 USD.

The next step up is something like

Leica's new Geovid R, which has complete environmental sensing built into the binocular. It feeds that information into an Applied Ballistics program that spits out custom firing solutions. But all that tech comes at price. In this case, \$3,300 USD.

Apex Optics is a relatively new optics company which has started up in Calgary, Alta. They were showing off three rifle scopes and three binoculars at SHOT, all reportedly made in Japan. The scopes include a 1-10X carbine optic, a 3-15X for hunters and a 4-32x56 for long-range competitors. Pricing runs from \$1,400 to \$2,300 CAD.

HANDLOADING

A bullet seating press from AMP (Annealing Made Perfect) was easily the most fascinating handloading device at SHOT. The sole objective of the press is to create ammunition with uniform neck tension. Designed for use with inline bullet seating dies, the AMP Press combines a motor-driven ram, a distance sensor and a load cell to deliver extremely accurate and precise force/distance bullet seating measurements. The results are fed into a user-supplied computer where they can be displayed and sorted in multiple ways. Price is \$1,400 USD.

In keeping with the precision shooting theme, Hornady is showing off their new laboratory-grade powder scale. It's claimed to be accurate down to .01 grain, which is less than a single kernel of some stick powders, meaning you'll have

to break some powder kernels in half to use all of this scale's capability. Pricing will be around \$500 USD.

Forster was showing off a new version of their famous Co-Ax reloading press specifically designed for the large cartridges used in ELR competition. Capable of handling everything up to and including the 50 BMG, this press isn't in production yet, but it looks like a good choice for shooters working with the big ones.

AMMUNITION

One of the new cartridges unveiled at SHOT was created by Remington and called the 360 Buckhammer. Obviously intended to compete with Winchester's 350 Legend, the Buckhammer is also a .35 calibre cartridge, but differs in that it uses a rimmed case. Like the Legend, it's a straight-wall case intended to comply with some US state's hunting restrictions which specify only straight-wall cases can be used for deer hunting. Velocities are reported to be slightly higher than the 350 Legend, and it'll be loaded with 180 and 200-grain bullets. So far, Henry is the only rifle manufacturer committed to chambering their rifles for the cartridge.

A second new cartridge is the 7mm PRC, this one courtesy of Hornady. Intended to fill the gap between the 6.5 PRC and the 300 PRC, its specs call for a 1-8-inch twist to allow the use of long, high-BC bullets. I'm told a 175-grain slug should be capable of 3,000 feet per second, making it a very effective big-game cartridge.



LEFT: The 600 TA1 Trail on display at the CZ USA booth will be available in 223 REM and 7.62x39mm.

Numerous manufacturers are already chambering rifles for it.

Beretta has been acquiring again, with their most recent acquisition including the ammunition manufacturer Norma. I'm told that Stoeger Canada will therefore be distributing Norma in this country. That should make excellent Norma ammunition much more available here and give Canadian hunters and sport shooters another great ammunition option.

HANDGUNS

With the handgun market effectively frozen in Canada by government decree, I didn't spend a lot of time looking at guns only criminals will be able to purchase. However, there were some interesting handgun accessories seen at SHOT which can still be imported and used by Canadian handgunners. Chassis systems for handguns are certainly on that list, with several manufacturers displaying their wares. Included were systems by CAA, Recover and Flux. Conversion kits and parts upgrades such as slides and barrels, especially for the Glock, were also widely shown by companies like Lone Wolf and Polymer80.

Perhaps my favourite handgun item for Canadians was the new Glock trigger upgrade on display at the Trigger-Tech booth. This Canadian company has been taking a large part of the aftermarket trigger share for rifles, but this is its first foray into handguns. And judging by the sample I was able to dry-fire, their Glock retrofit will do the same for Glock handguns. If what I tried is typical of what this trigger is capable of, it'll become a must-have item for any Glock shooter.

ACCESSORIES

There were far more interesting accessories at SHOT than I have room to list, with one of the standouts being MDT's electronic trigger. They call it a zero creep trigger because there is no movement in it at all. Ever. It's simply a rigid lever which electronically releases its mechanism when enough force is applied. And that force can be adjusted from four to 64 ounces. Dry firing a rifle equipped with it is a unique experience. It's not hard to see this trigger becoming a must-have item on the rifle of every serious competition shooter. Unfortunately, it won't be available until mid-2024.

However, as Canadians we're used to an availability gap and I don't see that changing in the near future. At least the success of many Canadian companies will help reduce that for us. Now, if we could only get some primers. 🇨🇦

BELOW: APEX scopes are a new Canadian brand, manufactured in Japan.





The Latest Developments In The Saga Of Bill C-21

In late November 2022, the Liberal Party of Canada took everyone by surprise by filing two last-second amendments to Bill C-21 at the committee stage of the legislative process. The amendments were designated respectively as G4 and G46. This was a very unusual move, since amendments to a pending bill are usually not meant to expand upon its original scope.

Amendment G4 is only three pages long. Amendment G46 consists of a 307-pages-long schedule, listing prohibited firearms, many of which had never been prohibited before.

Then, on Feb. 3, 2023, after weeks of verbal rhetoric from both sides, a Liberal member of the committee announced the withdrawal of the two proposed amendments.

Much has been written and said about the two proposed amendments. The Liberals claim they did not target hunting firearms, whereas the Conservatives claim the opposite. So, who was telling the truth?

The Original Scope Of Bill C-21

Originally, Bill C-21 was mostly about prohibiting the transfer of handguns to individuals, except in extremely limited circumstances. There was nothing in it about what became the subject matter of Amendments G4 and G46.

Amendment G4

For over two years, the Liberals had been talking about enacting an “evergreen definition” of what they call military-style assault rifles. Indeed, in most previous regulatory efforts to prohibit firearms, the government had prohibited specific firearms by name. Such was the case of the May 1, 2020, Order in Council. This time around, the government purported to expand upon the existing Criminal Code definition of

“prohibited firearm” by adding the following paragraphs to the existing definition found at Section 84(1):

- “(e) a firearm that is capable of discharging a projectile with a muzzle energy exceeding 10,000 joules, other than a firearm designed exclusively to neutralize explosive devices,
- (f) a firearm with a bore diameter of 20 mm or greater, other than a firearm designed exclusively to neutralize explosive devices,
- (g) a firearm that is a rifle or shotgun, that is capable of discharging centrefire ammunition in a semi-automatic manner and that is designed to accept a detachable magazine with a capacity greater than five cartridges of the type for which the firearm was originally designed,
- (h) any unlawfully manufactured firearm, regardless of the means or method of manufacture, or
- (i) a firearm listed in the schedule to this Part;”

Let us take the paragraphs one by one.

Paragraph (e) purported to prohibit firearms that shoot high-energy cartridges, such as 460 Weatherby and 50 BMG. This was already covered by the May 1, 2020, OIC. However, by attempting to incorporate it in the Criminal Code, the government tried to make it harder for a future government to undo the prohibition, since it would require an amendment to the Criminal Code, via statute, as opposed to a mere OIC.

Paragraph (f) does the same thing as paragraph (e), but with respect to very large bore firearms.

Paragraph (g) proposes the so-called “evergreen definition” of the so-called military-style assault rifles. The definition includes

firearms such as the Simonov SKS, of which there are hundreds of thousands of samples in this country, many of which are used as hunting firearms.

Paragraph (h) purports to prohibit illegally manufactured firearms. According to the Liberals, its purpose is to address the “ghost guns” problem. Arguably, that paragraph could also capture firearms that, although otherwise legal and acquired legally, were made by anyone other than a licensed manufacturer, such as an independent gunsmith.

Paragraph (i) refers to the 307-page Schedule, which is Amendment G46.

Amendment G46 (the List)

The list can be described as containing these sub-sets of prohibited firearms:

1. Firearms that had already been prohibited by way of Regulations prior to the May 1, 2020, OIC (e.g., the AK-47) These are covered in paragraphs 1 to 86 of the new Schedule;
2. Firearms that were expressly mentioned in the May 1, 2020, OIC (e.g., the AR-15, Ruger Mini-14, etc.) These are covered in paragraphs 87 to 96 of the new Schedule; and
3. Additional firearms that were never previously designated by name as prohibited firearms, many of which appear to be common hunting firearms. The latter appear after paragraph 96, but may also appear in paragraphs 87 to 96, as additions to the firearms already listed in the May 1, 2020, OIC.

The list does not purport to be exhaustive. In other words, firearms that fit one of the definitions will be considered as prohibited, albeit not listed by name.

The list is also redundant, in

that it reiterates the definitions of paragraphs (e) to (h) but expands upon the same. This is important, since the language used (i.e., the use of the word “including” and even more so the French language version) suggests that the firearms listed are included irrespective of whether they meet the underlying definition.

The Simonov SKS rifles, Chinese Type 81 and 97 rifles and Kel-Tec Sub 2000 are on the list. Those fit the definition of paragraph (g) and their presence on the list does not come as a surprise.

More surprising is the inclusion of the M1 Garand rifle, since it does not feature an external magazine.

Even more puzzling is the following, and these are only a few examples amongst many:

1. The Ruger #1 is mentioned within the list of firearms that are deemed to be capable to fire a projectile with kinetic energy greater than 10,000 joules at the muzzle. The list does not mention a specific chambering of the Ruger #1. The only currently prohibited Ruger #1 listed on the FRT is a custom 460 Weatherby chambering. This particular provision may well be interpreted by a court of law as prohibiting all Ruger #1 rifles, irrespective of the chambering. Murray Smith, an individual who works for the RCMP and claims to be a firearms expert, has testified before the Public Safety Committee that the mention of the Ruger #1 is meant to cover only those rifles that are indeed capable of firing a projectile with kinetic energy greater than 10,000 joules at the muzzle. I have two comments about Mr. Smith’s opinion: i) it is not binding upon a court of law, and ii) it is not in line with the rules of statutory interpretation and the way in which the amendment is drafted.

1. The Weatherby Mark V is also mentioned in the list of firearms that are deemed capable of firing a projectile with kinetic energy greater than 10,000 joules at the muzzle, although only one of the Weatherby chamberings, the 460 Weatherby Magnum, meets the criteria. The list does not mention a specific chambering. The same considerations apply.
3. Mauser Sporter rifles are in the same predicament. Mauser never made a rifle called the Sporter. The designation refers to various rifles built by multiple manufacturers and gunsmiths based upon a Mauser action, the design of which dates back to the 19th century. There are hundreds and thousands of those rifles in Canada and the vast majority of them are hunting rifles. Will all of them be considered as prohibited?
4. Parker shotguns are mentioned amongst the list of firearms with a bore greater than 20 millimetres. Smith testified that this purports to capture only those chambered in eight gauge, since 10 and 12 gauge have bore diameters under 20 millimetres. If so, why not just say so explicitly in the schedule? Again, the mention of every single model of Parker shotgun suggests that all will be prohibited.
5. Parker shotguns in good condition are collector items and they typically have very high values. The last samples in eight gauge were manufactured in 1890 and eight-gauge ammunition is not commercially available. Up until now, you did not even require a licence to buy an eight gauge shotgun, as they were prescribed as antiques. With Bill C-21, they will be viewed as such a public safety concern that they will become illegal for anyone to possess. To my

knowledge, no crime has ever been committed with an eight-gauge Parker shotgun.


Again, these are just a few examples of incongruities; not an exhaustive list.

Potential Effect Upon Pending OIC Litigation

By incorporating the May 1, OIC prohibitions of certain firearms into the Criminal Code, the government purports to obviate any challenge to the effect that the May 1, 2020, OIC went beyond the scope of the government’s powers to act via OIC. Said otherwise, the government tried to change the rules of the game before the challenges are heard.

A Seemingly Botched Document Legislative texts are drafted by a team of trained and competent lawyers at the justice department. Before a legislative text is released, it undergoes multiple levels of quality control. These particular amendments did not fit the bill (no pun intended). Indeed, G-46 was filled with typos, redundancies, poor drafting and incongruities. These amendments had every appearance of a document that was hastily put together at the urgent request of some politician.

The amendments were also silent on grandfathering or any future compensation scheme. Neither did they mention how or when these new prohibitions would have been implemented. Unless an amnesty order had been issued concurrently with these provisions coming into effect, Parliament would have turned hundreds of thousands of law-abiding gun owners into overnight criminals.

Because of the withdrawal of these amendments, this has been averted, for now. Unfortunately, the rest of Bill C-21 is still pending, and it is bad legislation that will not, in any way, improve public safety. 



Rubrique Juridique

Guy Lavergne, avocat

Les Derniers Développements De La Saga Du Projet De Loi C-21

Vers la fin de novembre 2022, le Parti libéral du Canada a pris tout le monde par surprise en déposant deux amendements de dernière minute au projet de loi C-21, à l'étape de l'étude en comité. Les modifications furent désignées respectivement comme amendements G4 et G46. Il s'agit d'une démarche inhabituelle, car les amendements à un projet de loi sous étude ne visent généralement pas à élargir sa portée initiale.

L'amendement G4 ne compte que trois pages. L'amendement G46 consiste en une annexe de 307 pages, énumérant les armes à feu prohibées, dont beaucoup n'avaient jamais été prohibées auparavant.

Puis, le 3 février 2023, après des semaines de rhétorique acrimonieuse de la part des deux camps, les Libéraux annoncèrent le retrait des deux amendements.

Beaucoup de choses ont été écrites et dites au sujet des modifications proposées. Les libéraux prétendent qu'ils ne ciblaient pas les armes de chasse, alors que les conservateurs prétendaient le contraire. Alors, qui a dit la vérité?

La Portée Initiale Du Projet De Loi C-21

À l'origine, le projet de loi C-21 visait essentiellement à interdire la cession d'armes de poing à des particuliers, sauf dans des circonstances extrêmement limitées. On n'y trouvait aucun élément de ce qui est devenu l'objet des amendements G4 et G46.

Amendement G-4

Depuis plus de deux ans, les libéraux parlent d'adopter une « définition évolutive » de ce qu'ils appellent les « fusils d'assaut de style militaire ». En effet, dans la plupart des efforts réglementaires antérieurs visant à prohiber des armes à feu, le gouvernement avait interdit nommément certaines armes à feu. Tel

a été le cas (du moins en partie) du décret du 1er mai 2020.

Cette fois-ci, le gouvernement prétendait élargir la définition actuelle d'« arme à feu prohibée » dans le Code criminel en ajoutant les paragraphes suivants à la définition actuelle du paragraphe 84(1):

- e) arme à feu pouvant tirer un projectile avec une énergie initiale de plus de 10 000 joules, autre qu'une arme à feu conçue exclusivement pour neutraliser des engins explosifs;
- f) arme à feu dont l'âme a un diamètre égal ou supérieur à 20 mm, sauf celle conçue exclusivement pour neutraliser des engins explosifs;
- g) arme à feu qui est un fusil semi-automatique ou un fusil de chasse semi-automatique, qui peut tirer des munitions à percussion centrale d'une manière semi-automatique et qui est conçue pour recevoir un chargeur amovible d'une capacité supérieure à cinq cartouches du type pour lesquelles l'arme à feu était conçue à l'origine;
- h) arme à feu fabriquée illégalement, peu importe le moyen ou la méthode de fabrication;
- (i) arme à feu figurant à l'annexe de la présente partie.

Prenons les paragraphes un par un. L'alinéa e) vise à interdire les armes à feu qui tirent des cartouches à haute énergie, telles que les 460 Weatherby et 50 BMG. Cela était déjà couvert par le décret du 1er mai 2020. Cependant, en incorporant cette prohibition dans le Code criminel, le gouvernement voulait rendre plus difficile pour un gouvernement futur de remédier à l'interdiction, puisque cela exigera une modification du Code criminel, par voie législative, plutôt qu'un simple décret.

L'alinéa f) est essentiellement au même effet que l'alinéa e), mais en ce qui concerne les armes à feu de très

gros calibre.

L'alinéa g) édicte la « définition évolutive » des « fusils d'assaut de type militaire ». Cette définition inclut des armes à feu comme le Simonov SKS, dont il existe des centaines de milliers d'échantillons au Canada, dont une grande proportion est utilisée pour la chasse.

L'alinéa h) vise à interdire les armes à feu fabriquées illégalement. Les Libéraux disaient viser les armes fantômes. Toutefois, cet alinéa pourrait également viser des armes à feu qui, bien que par ailleurs légales et acquises légalement, ont été fabriquées par quelqu'un d'autre qu'un fabricant autorisé, comme un armurier indépendant.

L'alinéa i) renvoie à l'annexe de 307 pages, qui constitue l'amendement G46.

Amendement G46 (La Liste)

La liste peut être décrite comme contenant les sous-ensembles suivants:

1. Les armes à feu qui avaient déjà été prohibées par voie réglementaire, avant le Décret du 1er mai 2020 (p. ex. l'AK-47) (elles sont mentionnées aux paragraphes 1 à 86 de la nouvelle annexe);
2. Armes à feu visées par le décret du 1er mai 2020 (p. ex. AR-15, Ruger Mini-14, etc.) Ces armes à feu sont traitées aux paragraphes 87 à 96 de la liste; et
3. D'autres armes à feu qui n'ont jamais été désignées nommément comme armes à feu prohibées, dont bon nombre semblent être des armes à feu de chasse courantes. Ces dernières apparaissent après le paragraphe 96, mais peuvent également apparaître aux paragraphes 87 à 96, en tant qu'ajouts aux armes à feu déjà énumérées dans le décret du 1er mai 2020.

La liste ne prétend pas être exhaustive. Autrement dit, les armes à feu qui correspondent à l'une des définitions seront considérées comme prohibées, bien qu'elles ne soient pas nommément désignées.

La liste est également redondante, en ce sens qu'elle reprend les définitions des alinéas e) à h) mais les développe. C'est important, car le langage utilisé (particulièrement dans la version française) suggère que les armes à feu désignées nommément sont prohibées, qu'elles répondent ou non à la définition sous-jacente.

Par exemple, les carabines Simonov SKS, les carabines chinoises Type 81 et Type 97, tout comme la Kel-Tec Sub 2000 sont sur la liste. Celles-ci correspondent à la définition de l'alinéa g) et leur présence sur la liste n'est pas une surprise.

Plus surprenant est l'inclusion du M1 Garand, car il ne comporte pas de chargeur détachable.

Encore plus déroutants sont les suivants, et ce ne sont que quelques exemples parmi tant d'autres:

1. Le Ruger #1 est mentionné dans la liste des armes à feu qui sont considérées comme pouvant tirer un projectile avec une énergie cinétique supérieure à 10 000 joules. La liste ne mentionne pas de chambrage spécifique de Ruger #1. Le seul Ruger #1 actuellement répertorié comme étant prohibé est un chambrage personnalisé en 460 Weatherby. Cette disposition particulière peut très bien être interprétée par un tribunal comme interdisant tous les Ruger #1, quel qu'en soit le chambrage. Murray Smith, un individu qui travaille pour la GRC et dit être un expert en armes à feu, a témoigné devant le Comité de la sécurité publique que la mention du Ruger #1 vise uniquement ceux qui sont effectivement capables de tirer un projectile avec une énergie cinétique supérieure à 10 000 joules. J'ai deux commentaires à formuler au sujet de l'opinion de M. Smith: i) elle ne lie pas un tribunal et ii) elle n'est pas conforme aux règles d'interprétation des lois et à la façon

dont la modification est rédigée.

2. Le Weatherby Mark V est également mentionné dans la liste des armes à feu pouvant tirer un projectile avec une énergie cinétique supérieure à 10 000 joules, bien qu'un seul des chambrages, soit le 460 Weatherby Magnum, réponde à ce critère. La liste ne mentionne pas de chambrage spécifique. Les mêmes questions se soulèvent.
3. Les fusils Mauser « Sporter » sont également visés. Mauser n'a jamais fabriqué d'arme à feu appelée « Sporter ». La désignation fait référence à diverses carabines provenant de divers fabricants et armuriers sur la base d'une carcasse de type Mauser, dont la conception remonte au 19ème siècle. Il y a des centaines de milliers de ces armes à feu au Canada et la grande majorité d'entre elles sont des armes de chasse. Seront-elles toutes considérées comme prohibées?
4. Les fusils de chasse Parker sont mentionnés dans la liste des armes à feu dont l'âme a un diamètre supérieur à 20 MM. Monsieur Smith a témoigné à l'effet que cela ne vise que ceux chambrés en calibre 8, puisque les calibres 10 et 12 ont des diamètres d'alésage inférieurs à 20 mm. Si c'est le cas, pourquoi ne pas simplement le dire explicitement dans l'annexe. Encore une fois, la mention de chaque modèle de fusil de chasse Parker suggère que tous seront prohibés.

Les fusils de chasse Parker en bon état sont des objets de collection de grande valeur. Les derniers échantillons de calibre 8 ont été fabriqués en 1890 et les munitions de calibre 8 ne sont pas disponibles dans le commerce. Jusqu'à présent, vous n'aviez même pas besoin d'un permis pour acheter un fusil de chasse de calibre 8, car ils étaient considérés comme des « antiquités ». Avec le projet de loi C-21, ils seront considérés comme tellement dangereux qu'ils deviendront illégaux pour quiconque. Je n'ai pas souvenir qu'un quelconque crime n'ait jamais

été commis au Canada avec un fusil de chasse Parker de calibre 8.

Encore une fois, ce ne sont là que quelques exemples d'incongruités que l'on retrouve dans les amendements proposés au projet de loi C-21; il ne s'agit pas d'une liste exhaustive.

Effet Potentiel Sur La Suite Du Litige Concernant Les Décrets De Mai 2020

En tentant d'incorporer les dispositions du décret du 1er mai 2020 dans le Code criminel, le gouvernement visait à éviter que le décret du 1er mai 2020 ne soit invalidé parce que le gouvernement aurait outrepassé la portée de son pouvoir réglementaire. Autrement dit, le gouvernement a tenté de modifier les règles du jeu à son avantage avant que les tribunaux n'entendent la cause.

Un Document Apparemment Bâclé

Les textes législatifs sont rédigés par une équipe d'avocats spécialisés du ministère de la Justice. Avant qu'un texte législatif ne soit publié, il est soumis à plusieurs niveaux de contrôle de qualité. Ces amendements ne semblent pas correspondre aux standards habituels. En effet, l'annexe est remplie de fautes de frappe, de redondances, de mauvaise rédaction et d'incongruités. Cela a toutes les apparences d'un document qui a été élaboré à la hâte, à l'insistance d'un politicien.

Les amendements sont également muets quant à d'éventuels droits acquis ou à tout régime d'indemnisation futur. Ils ne mentionnent pas non plus comment ni quand ces nouvelles prohibitions entreraient en vigueur. À moins qu'une ordonnance d'amnistie ne soit émise simultanément, le Parlement transformerait des centaines de milliers de propriétaires légaux d'armes à feu en criminels, du jour au lendemain.

Le retrait de ces amendements a évité le pire. Malheureusement, le reste du projet de loi C-21 est toujours vivant et il s'agit d'une loi néfaste qui ne contribuera aucunement à l'amélioration de la sécurité publique. ❗

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NDR Shooting Supplies -- Tikka Magazines

As an avid shooter of Tikka firearms, as well as a devoted handloader, I know it can sometimes be a daunting task to get the ultimate performance out of a rifle in its factory configuration.

Depending on the cartridge, the downside for many factory magazines is the overall cartridge length they will accommodate. This typically allows for factory ammunition to run flawlessly, but it can be a deterrent to the handloader when loading long, heavy-for-calibre, high-ballistic-coefficient projectiles. This is where the aluminum magazines from NDr Shooting Supplies come in handy, as they allow a handloader trying to achieve maximum accuracy with handloads the ability to adjust COAL (cartridge overall length) through a wider range of seating depths.

The magazines allow for a maximum COAL of 3.42 inches in their long-action magazine, which is amazing, especially for short magnums such as the 6.5 PRC rifle cartridge, 300 WSM and 338 RCM. These tend to be limited in factory magazines to a COAL of 2.85 to 2.955 inches, depending on chambering. The magazine even allows the handloader to run longer than SAAMI maximum COAL specs on cartridges like the 300 Winchester Magnum or the 30-06 Springfield. NDr says their magazines are made from 6061-T6 aluminum and have Type 2 anodizing.

A lot of handloaders have turned to changing the bottom metals and switching over to AICS-style magazines to achieve a longer COAL, but this has a significant cost increase as it requires a complete restructuring of the rifle and replacement of all magazines. I have used the NDr magazine to test some longer-than-factory COAL 150-grain Accubond



LR rounds in my 6.5 PRC, as well as factory match ammunition for my 6.5x55 in the same magazine without issue. All without having to modify my action and stock in any way, as these magazines work with the rifle's factory bottom metal as if it came with the rifle from the manufacturer.

These magazines come in a few different shapes and sizes, which can all be checked out on the company's web page. Options include 10-rounders for Tikka's long, short and 223 Rem. actions, as well as five-rounders for the long and short actions. There's even a 15-round option for the Tikka T1x rimfire. These magazines are designed and produced in Canada, which is something I like to hear these days, as wait-

ing for dealers to get product from the US or for customs to clear a package is usually a long, drawn-out process.

Founder and CEO Nelson Drolet has this to say on their web page at www.ndrshootingssupplies.com: "NDR Shooting Supplies is a small family business. Combining our passion for shooting, our engineering and designing background, we are happy to design new products for the shooting community and give more options to the shooters when it comes to customizing their rifles. NDR Shooting Supplies is dedicated to bringing high-quality products, developed and made in Canada, to the hunters and to the emerging sport of long-range and positional shooting. Happy shooting!"

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