AMMUNITION FOR THE SELF-DEFENSE FIREARM

Opinion by Anonymous

Preface by Chuck Hawks, Guns and Shooting Online Owner and Managing Editor

Perhaps a decade and a half ago, I decided to reproduce this rather long article on *Guns and Shooting Online*, because it addressed an important topic and it was clearly the author's desire that it be widely disseminated. Another reason was that it made interesting reading and I enjoy a good read as much as anyone. Although the author had some strong opinions and I didn't necessarily agree with all of them, they were informed opinions and worthy of consideration. Actually, I had an idea about the identity of "Anonymous," but I could have been mistaken.

Self-defense ammunition is a field in which improvements and changes are continually taking place and these have been especially rapid in the last 10 years. In order to keep this article reasonably timely, every couple of years or so I have taken the liberty of lightly revising some sections to include new information.

By 2016, so many new developments, especially in the area of bullet design, but also powders, had taken place that many of the loads originally discussed by the author had been superseded or discontinued by their manufacturers and completely new American manufacturers had begun offering factory loaded defensive ammunition. (Nosler and Sig Sauer would be examples.) It was clear that if the article were to remain useful, a complete revision was necessary. This was accomplished in July, 2016.

I have tried to retain as much of the original philosophy, language, style and information as possible, while including new ammunition developments from the major American ammunition manufacturers and the results of the latest testing and data. For example, we now have data from the ongoing Lucky Gunner ammunition tests, which is among the most extensive civilian ammunition testing programs ever, and this information has been included in the article. Future updates in this article will continue to be made as required. I hope you enjoy reading "Ammunition For The Self-Defense Firearm" and find it useful.

This is a guide to help you select the best ammunition for your defensive firearm. Most of these opinions are based upon the work of Massad Ayoob, Evan Marshall and Ed Sanow, police officers who have extensively studied the issue of firearms, ammunition and stopping power. I refer all interested parties to the excellent series by Ayoob (*In the Gravest Extreme*, *Stressfire*, *The Semi-Automatic Pistol in Police Service and Self-*

Defense, Stressfire II: Advanced Combat Shotgun) and the Stopping Power books by Marshall and Sanow.

In particular, it cannot be stressed too heavily that all gun owners should own a copy of *In the Gravest Extreme* and re-read it periodically. Once you have read it you will understand why.

These three policemen are the world's foremost authorities on choosing ammunition for real-world defensive use. Their views are based on exhaustive review of thousands of police and civilian shooting incidents, autopsies and ballistic gelatin tests. I have chosen to rely primarily on Ayoob, Marshall and Sanow when it comes to selecting my personal ammunition.

Some other authorities rely entirely on the latter (e.g. Dr. Martin Fackler, the FBI Wound Ballistics Lab, the National Institute of Justice Ballistic Research Laboratory), which is often insufficient to make reliable predictions. Human beings react differently to being shot than gelatin or other test media and this should be realized and understood.

Obviously, I cannot discuss every available load in an article of this nature. I urge you to research the sources listed for a more detailed discussion than is possible here.

I cannot stress too heavily that the primary determinant of stopping power is BULLET PLACEMENT. A cool, deliberate marksman with a little .32 Walther PPK will beat a panicky, inaccurate man with a .357 Magnum or \$1200 customized .45 auto every time.

Whatever firearm and caliber you select, you must practice firing hundreds, or thousands, of rounds in realistic defensive scenarios until you can confidently make disabling hits on your target. Tactics and marksmanship win gunfights, not having the latest wonder bullet in your gun.

Unfortunately, I cannot address tactics in this short essay, only recommend proven ammunition. You should seek competent training in tactics and marksmanship from a qualified instructor in your area.

Self Defense Ammunition Generally

American ammunition is the best in the world. Stick to Federal, Cor-Bon, Hornady, Remington, Winchester, Speer, CCI, Blazer, Sig Sauer, Nosler or other American made ammunition. Some foreign stuff is pretty good (PMC, IMI-Samson, Fiocci), some foreign stuff is great (Dynamit-Nobel, Norma, GECO), some foreign stuff is practice-only junk (e.g. Wolf, CDM - Mexico, military surplus), but no foreign stuff is as good as domestic ammunition when it comes to vanquishing hostile attackers. Buy American.

Never use hand loaded or reloaded ammunition for self-defense, unless it is absolutely unavoidable. You may encounter some joker who says he can hand-load ammunition so powerful it will knock anything on two legs down for the count, but don't buy it. This

junk will either misfire or ruin your gun. Use only fresh factory loaded cartridges from reputable manufacturers.

Handgun Ammo

One should carry ammunition loaded with bullets that expand or fragment rapidly upon impact in a defensive handgun. This generally means hollow point bullets, tipped bullets, or in some cases frangible or pre-fragmented bullets. Hollow point ammunition has much better stopping power than full metal jacket or round-nose lead and stopping power is what you need when being assaulted.

The point is not to wound or kill the adversary, the point is to stop him in his tracks and make him cease attacking you. Stopping power (sometimes called "knock-down power") refers to a particular bullet's ability to incapacitate an attacker; the greater that ability, the less chance that your attacker will be able to continue shooting, stabbing, or beating you after you have shot him.

Handguns are not death rays. Despite what you see in the movies, the vast majority of people (over 80%) shot with handguns survive. Handguns are weak compared to rifles and shotguns and you want every edge you can get. Great ammunition is no more expensive than mediocre ammunition, so carry the best. Rifles and shotguns have stopping power to spare; handguns do not. You must select your handgun load very carefully and the detail of the handgun ammunition section reflects this.

Hollow point ammunition is NOT more lethal than ball (full metal jacket) ammunition. You may have seen media hype about "killer dum-dum bullets," but this is nonsense. Hollow point bullets usually expand and stop in the human body and thus the attacker absorbs much more of the bullet's kinetic energy than if the bullet had merely zipped through him and left two small holes.

You are safer because your attacker is more likely to be incapacitated after one or two shots and thus unable to harm you. Furthermore, if your foe is incapacitated quickly he won't be spraying wild bullets around and endangering uninvolved third parties.

Innocent bystanders are safer because hollow point bullets are less likely to exit the attacker's body and go on to injure anyone else. The ricochet danger is also lower than with ball ammunition and hollow point bullets are less likely to penetrate walls or doors and strike uninvolved third parties.

A variation on the jacketed hollow point bullet is the tipped bullet. This is essentially a hollow point bullet with the hollow cavity filled or partially filled with a plastic plug. This plastic tip is intended to be driven back into the bullet's lead core upon impact, initiating expansion. Sometimes heavy clothing or barrier materials (wall board, wood, etc.) can plug the nose cavity of hollow point bullets, preventing the bullet from expanding properly. Tipped bullets are designed to eliminate this problem.

Another relatively recent innovation in handgun bullet design is the bonded core. This solders or chemically bonds the lead core of a jacketed bullet to the copper or gilding metal jacket material. This prevents core/jacket separation as the bullet expands, retaining weight and thus increasing penetration.

No single bullet design works optimally in all calibers and at all velocities. Higher impact velocity aids expansion, while lower velocity degrades expansion. This makes bullet performance more problematical with low velocity cartridges, such as .380 ACP and .45 ACP. Bullets that initiate expansion relatively easily are usually the best choice in such calibers. (Example: Speer Gold Dot, Federal HST, Remington SJHP, Winchester Silvertip and Winchester Defender.)

Remember, there is no universal Wonder Bullet. Here are some common jacketed hollow point (JHP) bullets and tipped bullets found in US factory loaded ammunition that generally give good results in most of the calibers in which they are loaded:

- Federal HST (JHP)
- Hornady FTX (tipped bullet)
- Remington SJHP (a JHP designed specifically for revolvers)
- Sierra JHC (used in Cor-Bon Self-Defense JHP loads)
- Sig Sauer V-Crown (JHP)
- Speer Gold Dot (JHP)
- Winchester Defender (bonded JHP)

There are some exceptions to the "carry only hollow points in a handgun" rule. Some older or cheaper semi-automatic pistols will jam with hollow point rounds. With these guns, one must use ball rounds (or "full metal jacket" rounds - the terms are synonymous) and I specify some "reliable with ball only" pistol models by caliber.

It is crucial for you to test your pistol to make certain it is reliable with specific loads; don't rely on my advice. My life will never depend on the reliability of your handgun. Your life may.

Rifle Ammo

Generally speaking, fast expanding bullets are the best choice for rifles. Hollow point and plastic tipped bullets usually expand rapidly. Some soft-point designs are recommended and these will be specified.

Shotgun Ammo

Use buckshot. Slugs and birdshot may be useful in some limited situations.

A Note On Exotic Ammunition

There are several exotic ammunition designs on the market, such as the Glaser Safety

Slug, Glaser Pow'RBall, Mag Safe, GECO BAT 9mm, DRT, et cetera. Generally speaking, I recommend that you avoid them.

Exotic ammunition is expensive, often inaccurate and often unreliable. These rounds cost so much (\$2-\$4 each, or more) that you will never adequately practice with them and thus will not be certain of their reliability and accuracy in your gun. This is a big mistake. You should not carry a particular type of ammunition until you have fired at least 100 rounds through your semi-automatic pistol to ensure reliable feeding. (This doesn't apply to revolvers, but you should still fire the ammunition you intend to carry to assure yourself of its accuracy).

Glaser Safety Slugs, made by Cor-Bon, are one exotic round I can fully recommend, but only for revolvers in a few scenarios. The Glaser is a proven man-stopper in typical civilian frontal-shooting situations and it has very good quality control.

However, it may not feed or cycle reliably in some automatic pistols. Because you probably cannot afford to fire enough Glasers to establish that it feeds reliably in your pistol (100 test-fire rounds will cost over \$300), I cannot recommend them for autoloading pistols. The Walther PPK, H&K P7 series and SIG P230, for example, are notorious for this failure-to-cycle problem with Glaser Safety Slugs.

With revolvers, feeding is not an issue, but there are other factors to consider. Glaser Safety Slugs use unusually lightweight bullets at higher than normal velocity. This means your gun will almost certainly shoot to a very different point of aim than it does with conventional ammunition.

The Glaser lightweight, pre-fragmented bullet is designed for easy break-up and minimal penetration. This is great for cutting down ricochet and over-penetration dangers, but drastically limits its ability to penetrate light cover between you and your foe. A car window, hollow-core door, particle board, or even exceptionally thick winter clothing between you and your assailant can cause the Glaser to disintegrate and leave him unharmed. Bad news for you, great news for him.

However, there are some situations where the Glaser is a good choice. I keep my bedside .357 revolver loaded with .38 Special +P Glasers, because I live in a thin-walled apartment building and want to be able to put down an intruder rapidly, without worrying about injuring my neighbors. I chose .38 Special over .357 Magnum, because I am likely to be in a just-awakened daze and would rather not be blinded and disoriented by the flash, kick and blast of firing a .357 Magnum in a darkened room.

You may have a similar situation, such as retail store defense, living in an apartment, or staying in trailer park, where injury to third parties is of concern and you'll likely be facing an assailant at extremely close range. The Glaser's inaccuracy and inability to penetrate cover will probably not be serious drawbacks in such situations. In these narrowly defined scenarios, the Glaser is a good choice, but keep a couple of speed

loaders of hollow points handy, just in case. I do.

Glaser Safety Slugs are available in "Blue" or "Silver" versions. The latter are a little heavier for better penetration, but performance is similar. I would be happy with either, but Sanow prefers the Silver. It's up to you.

Mag-Safes are imitations of Glasers and I cannot recommend them, due to a history of poor quality control. Reliability is the number one requirement of a self-defense handgun and Mag-Safes don't make the grade.

GECO "Blitz Action Trauma" or BAT 9mm rounds from Germany are a proven design. Called the "GECO Action Safety" in Europe, this is a high velocity (1400 feet per second) lightweight (86 grain) hollow bullet that has proven itself to be very reliable and successful on the street. I recommend them, but they are tough to find. Save yourself the trouble and use a good American-made hollow point.

Other exotics are best avoided. You may occasionally encounter "Thunderzaps," "Omni-Shocks," "Terminators," "Annihilators," "Kaswer Law Grabbers," and other such marginalia in gun shops. Stay away. If you want to gamble, go to an Indian reservation. Don't gamble with your life, or the lives of others. Glasers and GECO 9mm BATs are the only proven exotics.

Terminology

I have tried to keep specialized technical jargon to a minimum, but it will be helpful for you to understand a few terms and acronyms.

"Ball" is full metal jacketed ammunition. All military pistol and rifle ammunition uses full metal jacket bullets. Synonyms for ball include FMJ ("full metal jacket"), MC ("metal case") and TMJ ("totally metal jacketed," a term used only by the ammunition maker CCI).

Ball rounds do not expand, typically over-penetrate and are always the worst choice in a defensive round. The military traditionally uses ball ammo, because it feeds reliably (i.e. rarely jams) and penetrates well, but mostly because the military is required to use ball ammo by the Geneva Convention.

However, due to the poor stopping power of ball ammo in the Middle East conflicts, even the US military has started to move away from ball and is adopting JHP handgun ammunition. Fortunately, you are free to choose better ammunition and should use ball only for practice, unless your pistol will not feed anything else.

"Round nose lead" (RNL) are old fashioned revolver bullets without any jacket around the bullet. These generally do not expand and perform similarly to FMJ bullets for self-defense and I don't even use them at the range. If you come upon a bargain lot of RNL ammo, feel free to buy it for target practice. You will be scrubbing out your barrel until

the wee hours, however, as lead bullets scum up barrels something fierce. Use Flitz metal polish to scour out the grimy residue.

"Wadcutter" (WC) and "semi-wadcutter" (SWC) are sharp-shouldered, solid lead revolver bullets with an odd cylindrical or truncated cone appearance. They are designed to cut clean holes in paper targets. In self-defense use, they have statistically proven to be no more effective than RNL bullets. Factory loaded wadcutters are very low power rounds used for target shooting. Like all lead bullets, they leave lead residue in the barrel's grooves after use.

"Jacketed soft-points" (JSP) are jacketed bullets with exposed lead at the tip. They typically penetrate deeper and expand less than JHP bullets. They are usually designed for big game hunting and make poor anti-personnel rounds for handguns, but may be effective in rifles, due to the latter's high velocity. Avoid using JSP rounds in a handgun for self-defense, unless your only alternative is hard ball. (However, JSP bullets may be good choice for defense against large animal predators in the field, due to their superior penetration.)

"Jacketed hollow point" (JHP) bullets are usually the best choice for handguns and also many rifles. They are typically very accurate. JHP bullets have a hollow cavity in the nose and usually expand (and stop) in the body of your attacker, transferring all of their kinetic energy for maximum stopping power. They are the best handgun bullets available and less likely to over-penetrate than other conventional bullet designs.

"Jacketed Hollow Cavity" (JHC) is the term Sierra uses for their JHP bullets.

HANDGUN AMMUNITION BY CALIBER

.22 Long Rifle

You should really be using something bigger than a .22 for self-defense, but even a .22 LR beats nothing. (It also beats the .25 Auto.) Full size .22 handguns are usually very accurate and they are the best way to learn how to shoot a handgun. Their 4" and longer barrels extract considerably more velocity and energy from the little .22 LR cartridge than pocket models and their longer sight radius makes them much easier to aim. This makes them superior to pocket models for home defense.

There are some nice .22 pocket autos and mini-revolvers that make sense for special concealed carry situations (vest pocket carry, for instance, or a woman's dress purse). NAA mini-revolvers, at least the models with sights (Black Widow, etc.), are generally more accurate and more reliable than .22 pocket autoloaders. They are also quite safe to carry with the hammer down between two chambers. However, since they are single action revolvers, the user must be well acquainted with SA revolver operation before choosing an NAA mini for personal protection.

Choose any Federal, Remington, Winchester or CCI copper-plated 37 grain (or lighter),

high velocity hollow point round. I recommend CCI Stinger 32 grain or Remington Yellow Jacket 33 grain hyper-velocity hollow points, as they have been very reliable in my Beretta 21A and Walther TPH pistols and have the highest stopping power ratings.

Shoot a lot of rounds through your self-defense .22. The ammo is cheap and you want to be sure to pick a reliable round. If high velocity solids don't cycle reliably, try standard-velocity. There is little difference in power, but it may improve your gun's reliability (e.g. Jennings J-22 pistols are more reliable with standard-velocity solids). Marksmanship is crucial with such a tiny gun. Brain shots that destroy the medulla oblongata are the most reliable stoppers.

Keep your .22 autoloader meticulously clean; these tiny guns cannot function reliably with gunk in them. If you carry your .22 in a pocket, purse or ankle holster, inspect it daily and brush off any dust or grit with an old toothbrush. Lubricate it properly. This is very important.

.22 WMR

The .22 Magnum is much better than the .22 LR and perhaps better, in full size revolvers, than most calibers less powerful than the .32 ACP. 40 grain JHP loads are the traditional choice, with Winchester's 40 grain JHP load scoring highest in 4" and longer barrels. Winchester also offers a Defender 40 grain JHP self-defense load in .22 Magnum.

The Speer 40 grain GDHP-SB load was tailored for use in mini-revolvers with 2" and shorter barrels. The Hornady Critical Defense 45 grain FTX load, also developed for use in mini-revolvers, is another possibility. An NAA Black Widow mini-revolver in .22 Magnum is probably as good as "mouse guns" get.

.25 ACP (6.35mm)

Less powerful, less accurate and more expensive than the .22 LR, the .25 ACP's redeeming feature is that it was designed to function more reliably in semi-automatic pocket pistols. The best .25 load is the Hornady 35 grain XTP-HP round, but only if it is 100% reliable in your pistol. Fire 200 rounds through your gun to verify. If it jams, use any Federal, Remington, or Winchester 50 grain ball round.

Winchester has an odd 45 grain "Expanding Point" round that should be okay, if it is reliable in your gun. It seems to work fine in Beretta 950 pistols, for example, but don't expect more than a marginal improvement in performance over the 50 grain ball rounds. The excellent Walther TPH .25 pistol should be loaded only with ball ammo.

Ed Sanow recommends the pre-fragmented MagSafe 22 grain "Defender" and Glaser 40 grain Safety Slugs. This makes a lot of sense in this under-powered caliber, since the .25 Auto lacks the velocity and energy to reliably expand most hollow point bullets.

.32 ACP (7.65 mm Browning, 7.65x17mm)

Use the Winchester Super-X 60 grain Silvertip Jacketed Hollow Point, provided it is reliable in your gun. Hornady offers a 60 grain XTP-HP and Federal offers a 65 grain Hydra-Shok JHP to compete with the Winchester Silvertip load.

Many of the common .32 autos on the market are only reliable with 71 grain ball. These include the Llama, Walther PP and PPK, CZ-24, CZ-70, Davis P-32, Mauser HSc and others.

Worth mentioning is that, in a pinch, .32 ACP cartridges can be fired in .32 H&R Magnum and .327 Magnum single action (SA) revolvers. The .32 Auto is a semi-rimmed cartridge and it has enough rim to headspace in revolver cylinders. This small rim will not catch the extractor star of double action (DA) revolvers, but presents no problem for the external extractor rod of Ruger SA revolvers.

.32 Smith & Wesson Long

The best defense load for this obsolescent revolver caliber is the Federal Champion 98 grain lead wadcutter target load. Shoot very carefully. Remington and Winchester offer only 98 grain LRN bullets.

.32 H&R Magnum

An interesting revolver cartridge designed to approximate the stopping power of the .38 Special in a smaller caliber package. Excellent for those adverse to recoil and muzzle blast, but who want more power than the .32 Long, .32 ACP or .380 ACP.

Unfortunately, the .32 H&R Mag. has never caught-on in the marketplace, so the selection of good defensive ammo is very limited. Use the Federal Personal Defense 85 grain JHP or Hornady Critical Defense 80 grain FTX loads.

.327 Federal Magnum

This potent revolver cartridge is based on a lengthened version of the .32 H&R Mag. case loaded to much higher pressure. It is the flattest shooting of all the conventional magnum revolver cartridges. The .327 exceeds the .38 Special +P and 9mm Luger in energy and velocity. Like all ".32 caliber" handgun cartridges, the actual bullet diameter is .312".

Any .327 revolver can also shoot .32 ACP, .32 Long and .32 H&R Mag. ammo. The latter (.32 H&R Mag.) is a good choice for shooters and situations when the recoil, blast and muzzle flash of .327 Magnum loads is undesirable.

There is a reasonable selection of factory loaded ammunition in bullet weights from 85 to 115 grains available from the ATK combine (Federal, Speer, CCI, Blazer, Fusion and

American Eagle brands). The Federal Premium Low Recoil .327 Magnum 85 grain Hydra-Shok JHP at 1400 fps is specifically intended for personal defense and promises to be very effective.

Other .327 Magnum JHP loads from ATK include the Speer 100 grain Gold Dot and Speer 115 grain Gold Dot; both are full power loads. Specialty ammo maker Jamison offers a 90 grain Sierra JHC bullet (MV 1465 fps) in their Guardian Grade ammunition.

American Eagle brand .327 loads are available with 85 grain or 100 grain JSP bullets. Reserve these for hunting or practice, not self-defense.

.380 ACP (9mm Short, 9x17mm, 9mm Kurz)

The three or four best .380 JHP rounds have better stopping power than most bullets fired out of a 2" barrel .38 Special revolver, so the .380 can no longer be considered a "mouse gun" caliber. All of the well known US ammo manufacturers load good hollow points for this caliber, but getting them to expand out of the short barreled autos ("pocket pistols") typically favored for concealed carry is quite difficult. Bullets that expand properly when fired from a service pistol (Walther PP or Baikal IJ-70a, for example) may not expand at all when fired from little guns, such as a Walther PPK or Glock 42.

Good all-around .380 ACP loads:

Winchester 90 grain Defend - Top expansion in the Lucky Gunner .380 ammo tests (averaged .63")

Hornady Critical Defense 90 grain FTX - A soft-plastic-tipped bullet that is building a good reputation.

Sig Sauer Elite 90 grain V-Crown - Made by Sierra for Sig Sauer and performs well in FBI protocol gelatin tests, including Lucky Gunner.

Speer 90 grain Gold Dot JHP - A good all-around hollow point.

Reliability is crucial and thus you must test JHP rounds in your pistol before carrying. A hollow point load that feeds well in the Colt Government Model .380, H&K HK4, Taurus PT-58, older PP and PPK, Bersa .380, Beretta 70s, Makarov and Hungarian FEG is the Remington 88 grain JHP. These are all good guns that might choke on other hollow points, but they will probably feed the Remington fine. If your .380 chokes on other JHP loads, try fifty rounds of the Remington 88 grain through your gun and see if it improves.

Unfortunately, in the Lucky Gunner ballistic gelatin ammo tests, this load did not expand at all when fired from a Glock 42 with a short 3.25" barrel. Unlike revolvers, auto pistol barrel measurements include the chamber, so the actual effective barrel

length of the G42 is around 2.25".

.380 ACP hollow point loads to avoid:

Winchester Super-X 85 grain Silvertip - I really cannot recommend this jamprone round, although the Silvertip bullet expands more reliably than most in .380 caliber. It functions reliably in a few modern European guns (e.g. SIG P230/P232, Glock 42 and Beretta 84F), but the Silvertip may jam in many older Americanmade .380 automatics. The .380 Silvertip was once state-of-the-art, but it has since been superseded by newer designs.

PMC-Eldorado Starfire 95 grain JHP - This round is weak and jam-prone.

Federal 90 grain JHP (380BP) and Hornady 90 grain XTP (9010) - Both the Federal 380BP and the Hornady XTP seldom expand and may jam many guns, due to their truncated-cone bullet nose profiles. Pass by these two.

95 grain ball:

Use only ball ammo in the Davis P-380, Accu-Tek, EAA .380, Tanarmi, AMT/OMC/TDE Back-Up, Heritage, FIE, Jennings, Bryco, Lorcin, Llama and other bargain priced autos. Hollow points should not be used in these low-priced guns, due to reliability problems.

9mm Makarov (9x18mm)

Despite its "9mm" nomenclature, this cartridge actually uses an odd diameter bullet, about 9.2mm. The performance of the 9x18mm is virtually identical to the far more popular .380 ACP. The Russian Baikal IJ-70 commercial Makarov pistol was produced in both calibers, so if you have a choice, get the .380 version.

Alone among the major US ammo makers, Hornady offers a serious 9x18mm defensive load. This is the Critical Defense 95 grain FTX load (#91000).

.38 Special

- .38 Special ammunition is loaded to two pressure levels: standard pressure and +P. Standard pressure loads may be used in any .38 Special revolver, but +P loads should be used *only* in revolvers specifically rated by the manufacturer for such loads.
- +P ammo should not be used in most small, aluminum-framed, .38 Special revolvers. Firing a few +P loads in your aluminum-framed revolver may not destroy it or cause it to explode, but it will damage your revolver if you fire more than a hundred rounds. The main problem with carrying +P .38 Special loads in an aluminum-framed .38 Special revolver, besides excessive wear and tear on the gun, is that the kick is nasty and slows

repeat shots.

.38 +P ammunition is generally at its best when fired in 4" or longer barrels. These cartridges are typically loaded with more powder and slower burning powder than standard velocity cartridges and generally require at least a 4" barrel to achieve their intended velocity.

Fixed sight .38 revolvers are regulated at the factory to shoot to the point of aim with 158 grain bullets, as this was the weight of the long-time standard US and Canadian police load. Lighter bullets will normally shoot low (some very low). This is not a problem, of course, with revolvers equipped with adjustable sights

The best loads for .38 Special revolvers with 4" or longer barrels:

The Numero Uno .38 defense load for your 4" barrel revolver is the Cor-Bon .38 Special +P 125 grain JHP. It is a very high pressure load for a .38 Special and should be used only in modern revolvers specifically rated for +P ammunition. When I carry a 4" .38, I want it loaded with this cartridge. It has less felt recoil and muzzle flip than the #2 choice.

The second-best choice is the .38 Special +P 158 grain lead semi-wadcutter hollow point (LSWCHP) available from Winchester and Remington. Ayoob has found the latter to have the greatest expansion, so I would choose Remington (#R38S12). This unjacketed, all lead HP round (often called the "FBI load" or "Chicago load") is a proven man stopper when fired from a 4" barrel.

Other .38 Special loads for 4" barrel revolvers:

All major US manufacturers catalog .38 Special +P JHP loads with bullets weighing from 110 to 129 grains. (125 grains is the most common bullet weight.) As far as I know, none of these have yet proven as successful on the street as the Cor-Bon .38 Special +P 125 grain JHP or 158 grain +P LSWCHP, but most are effective loads and worthy of consideration, depending on your situation and requirements.

IMI-Samson offers a lightweight, very high pressure load, the 110 grain +P+ JHP. This is said to be a ballistic duplicate of the law enforcement only "Treasury" load that T-men used to carry.

Noteworthy exotic .38 Special loads:

The Glaser Safety Slug is a good choice for self-defense in a .38 revolver of any barrel length. (See caveats under "exotic ammunition" above). It is crucial to keep the chambers and frame interior absolutely free of oil or solvents when carrying Glasers, as you don't want any Breakfree CLP or Hoppe's #9 solvent seeping into the primer pocket and deactivating the round. This is important for all rounds, of

course, but the Glaser isn't known for particularly good sealing against such mishaps.

You may also want to consider carrying two Glasers as the first rounds to be fired and JHP loads for the rest. This gives you a bit of insurance if your assailant tucks himself behind a sheet rock wall, doorway or some other flimsy cover that JHP rounds can blast through.

PMC makes a bizarre 66 grain tubular hollow bullet load. Some enthusiastic gunshop salesman may try to sell it to you. Refuse politely.

A Special Note on Snub-Nose .38 Revolvers: The Cor-Bon .38 Special +P 125 grain JHP and 158 grain LSWCHP FBI load are not the best choice for 2" or 3" barrel revolvers. The short barrel does not provide enough velocity to ensure reliable expansion with these loads and the unpleasant and hard-to-control recoil hurts snub-nose accuracy (as well as your hand). Controllability is crucial and I recommend standard pressure (non +P) loads for any .38 snub-nose. If you carry an aluminum frame, snub nose .38 (e.g. S&W Models 38, 642, 442, 37 or Colt Cobra), I especially urge you to carry a standard pressure (non +P) .38 round.

Standard Pressure (non +P) loads for short barreled revolvers:

Federal Premium 125 grain NyClad HP (P38MA) - Known as the "Chief's Special" load, this is my preferred 2"-3" barrel snub-nose revolver load and it is the best load for both standard and +P rated snub-nose revolvers. The Nylon-coated hollow point was specifically designed to expand at lower velocities from short barreled .38s. For many years this load was available only to law enforcement agencies, but it is again available to the general public.

Other acceptable standard pressure .38 loads include the Winchester Super-X 110 grain Silvertip, Federal Low Recoil Personal Defense 110 grain Hydra-Shok JHP, Hornady Critical Defense 110 grain FTX and Sig Sauer Elite 125 grain V-Crown.

Loads ONLY for +P rated, 2"-3" barrel revolvers:

Federal Premium 129 grain +P Hydra-shok JHP

Hornady Critical Defense 110 grain FTX +P

Remington Premier 125 grain Golden Saber +P

Cor-Bon 110 grain +P JHP - I would recommend this high-pressure load only for the sturdy Ruger SP101 and LCR snub-nose .38s, or a .357 Magnum revolver.

If you have a J-frame Smith & Wesson snub-nose .38 (i.e. the five-shot Model 36/37 Chief's Special, Model 38/49/649 Bodyguard, or 640/642/442/940 Centennial), you can

greatly improve the controllability of your gun by installing Uncle Mike's "Boot Grip." This is a \$14 godsend. The skinny little wooden grips that come on these guns are worthless. Installing good grips does wonders for your ability to control your .38 snubnose revolver in rapid fire.

9mm Parabellum (9mm Luger, 9x19mm, 9mm NATO)

This is unquestionably the world's most popular pistol round. For this reason it has been the subject of a lot of experimentation. 9mm ball, used by every army in the Western world, is a mediocre man stopper. Jacketed hollow points are a must if one wishes to rely on the 9mm as a defense round. Use ball ammo only for practice.

Civilian 9mm ammunition is generally available in two pressure levels, standard and "+P." (There is also +P+ ammo, usually restricted for police use only.) The +P ammo should only be used in newer guns (made since 1985 or so) and is best used sparingly. 9mm +P loads are generally intended for use in service pistols with 4" or longer barrels.

I will only deal with commercially available ammunition. Civilians should not worry, as there are commercial loads as good as anything restricted to law enforcement usage.

The top rated 9mm Luger load for self-defense is the Cor-Bon 9mm 115 grain +P Jacketed Hollow point. It is the most street-proven man stopper available in this caliber. It is a high velocity (1350 fps) and high pressure round, more effective than loads restricted to law enforcement use.

Unfortunately, it is also likely to jam many older guns. For this reason I add a table at the end of the 9mm section discussing round suitability for different guns. Modern hollow points may either (a) jam, or (b) be too powerful for some older guns. This load is suitable only for First Class pistols (see table).

Here are high performance 9x19mm + P loads worth consideration:

Barnes 115 grain TAC-XPD +P Cor-Bon 115 grain DPX +P Cor-Bon 115 grain JHP +P Hornady Critical Duty 135 grain FlexLock +P Nosler 124 grain bonded core JHP +P Nosler 124 grain bonded core Tipped +P Remington 124 grain Golden Saber BJHP +P Winchester Defender 124 grain bonded core JHP +P

Good standard pressure 9mm loads include:

Federal Personal Defense 115 grain JHP Federal 124 grain HST Federal 147 grain HST Hornady Critical Defense 115 grain FTX Remington 147 grain Golden Saber BJHP Sig Sauer Elite 115 grain V-Crown JHP Sig Sauer Elite 124 grain V-Crown JHP Speer 115 grain Gold Dot Speer 124 grain Gold Dot Winchester Super-X 147 grain Defend

For guns that may jam with more aggressive hollow point bullets, the Remington 115 grain +P JHP is a good choice (R9MM6). For older guns I would try the Remington standard pressure 115 grain JHP (R9MM1).

Table of 9mm Pistols.

(Note: just because your pistol appears in Class 3 doesn't mean it is unreliable; it may indeed feed hollow points. However, you must fire at least 200 rounds of your chosen JHP carry load to determine if your pistol will feed them properly. I have placed pistols in each category according to reputation and experience. These are only meant as guidelines; your pistol may feed JHP rounds better - or worse - than this table indicates)

<u>First Class</u> pistols are ultra-reliable, high-quality new guns than can feed any hollow point and tolerate +P loads with no problems: All Glocks; all Ruger 9mm pistols; all SIG Sauer 9mm pistols; Czech CZ75 and CZ85; Walther P5, P5C and P88; Heckler and Koch USP and P7 series; Taurus PT-99, PT-92 and PT-92C; Steyr GB; Beretta 92 series; Browning BDM and Hi-Power (if it says "Portugal" on the slide); Smith & Wesson M&P models; Star M28, M30, M31 and all Firestars, Megastars and Ultrastars.

Second Class pistols are guns that may not feed all hollow points reliably. Remington 115 grain hollow points are recommended for these guns: Smith & Wessons with two or three digit model numbers (e.g. 659, 39-2, 469, 59, 39); Heckler and Koch VP70 and P9S; Beretta "Brigadier" M1951; Interarms Helwan; Colt Series 70 Government Model and Series 70 Commander; Astra A-70, A-75 and A-100; AMT On Duty; Daewoo; Bersa Thunder 9; EAA Witness and all other CZ-75 copies (e.g. Tanfoglio, Tanarmi, Springfield Armory P9); Taurus PT-908; Walther P4; Star BK, BKM, Model B and Super; Older Browning Hi-Powers (without the word "Portugal" on the slide); Llama Model 82; IMI Jericho and Kareen.

<u>Third Class</u> pistols should generally be loaded with ball for best reliability; experiment with your gun extensively before carrying JHP: Walther P38, P4 or P1; Luger P-08; Llama; Maverick; MKS Model JS; Intratec CAT-9, DC-9, KG-9, etc.; SWD Cobray Model 11/9 and similar models; Scarab Scorpion; Kimel AP-9; Bryco Jennings Model 59; all KBI Hungarian pistols (e.g. GKK, PJ9C, P9HK and other FEG products); Norinco and Sportarms Chinese Tokarev pistols; Lahti;

Radom; MAB P15 and Model 1950.

.38 Super

The .357 SIG appears to have put the older .38 Super on the road to obsolescence. (Both calibers shoot standard 9mm/.355" bullets faster than the 9x19mm.) Cor-Bon JHP, Winchester Super-X Silvertip and Sig Sauer Elite V-Crown loads are offered with 115-125 grain jacketed hollow points in .38 Super. I like the Cor-Bon 115 and 125 grain hollow points best. The Llama .38 Super pistol tends to jam with anything except ball.

.357 SIG

I am unsure what advantage this 9mm caliber is supposed to have over the .40 S&W from which it is derived, aside from a flatter trajectory, but it is a good stopper. .357 SIG ballistics are quite impressive.

Suggested loads:

Federal Premium 125 grain JHP Hornady Critical Duty 135 grain FlexLock Hornady Custom 147 grain XTP Winchester Defender 125 grain JHP Sig Sauer Elite 125 grain V-Crown

.357 Magnum

The most effective handgun round on the market, regardless of caliber, is the .357 Magnum 125 grain jacketed hollow point load. This load has more stopping power than any other handgun cartridge and this includes more powerful rounds like the .41 and .44 Magnums.

I advise all experienced revolver men to carry the legendary Federal Personal Defense 125 grain JHP or the equally good Remington 125 grain semi-jacketed hollow point (SJHP) in a .357 revolver. In the same general class are the Cor-Bon 125 grain JHP, Sig Sauer Elite 125 grain V-Crown, Winchester Super-X 125 grain JHP and Hornady Critical Defense 125 grain FTX. All of these are high velocity loads, with muzzle velocities around 1450 fps from a 4" barrel.

If for some reason you think you need deeper penetration, or just favor heavier bullets, Winchester offers a Super-X 145 grain Silvertip load, Hornady offers a Critical Duty 135 grain FlexLock and Federal offers a 130 grain Hydra-Shok in their Personal Defense Low Recoil line. None of these have the street credentials of the various 125 grain JHP loads, but they can definitely get the job done.

There is one caveat, however. These full-power .357 Magnums have a lot of blast and kick. If you are not comfortable with the buck and roar of full-house .357 Magnums, I

would strongly suggest that you use a lower-recoil round. Controllability is important and you will be able to fire lower-recoil rounds more rapidly and accurately. All .357 loads have excellent stopping power, so don't worry that you are giving up too much.

In descending order of severity of recoil (i.e. the Silvertip kicks the most) I recommend the Winchester Super-X Silvertip 145 grain JHP, Remington Golden Saber 125 grain JHP and Winchester 110 grain JHP.

The 110 grain jacketed hollow points by Winchester, CCI and Remington are all good for use in .357 Magnum 2.5" and 3" barrel snub-nose revolvers, such as the S&W Models 66, 19, 65, 13, Colt King Cobra, Ruger GP100 and especially the small-frame Ruger SP101. (Avoid the latter revolver unless you absolutely LOVE punishing recoil.)

If you still find that your .357 kicks too much, carry the Cor-Bon .38 Special+P 110 grain JHP discussed above. Two or three hits with good .38+P slugs beat any number of misses with .357 slugs.

Note: if you are using the factory wood stocks on your S&W or Taurus .357 revolver, you should try a set of rubber replacement grips. Ruger .357 Magnums come factory-equipped with recoil-absorbing rubber grips and I have no idea why S&W and Taurus continue to put wood grips on their .357 revolvers. The difference in control is enormous. Get some good, compact rubber grips from Uncle Mike's or Pachmayr and slap them onto your .357 revolver ASAP.

I used to cringe every time I fired a full-power load in my .357 Magnum snub-nose. Once I put some compact Pachmayr grips on it, however, I had no problem firing the C357B load accurately and rapidly.

To summarize, you can never go wrong with a 110-125 grain .357 jacketed hollow point load from one of the major US ammunition makers. All are great stoppers.

Avoid soft-points, semi-wadcutters, or any of the 158 grain or 180 grain JHP loads; these are for hunting, practice, target or rifle use. Stick to jacketed hollow points under 150 grains in weight. Lead (un-jacketed) bullets are okay for practice, but you will have to spend twice as long cleaning your gun.

.40 Smith & Wesson

This caliber has established an excellent track record on the street. Smith & Wesson and Winchester really hit the mark when they shortened the 10mm Auto case to create the .40 S&W.

The .40 S&W generates snappy recoil, especially in the lighter pistols designed for concealed carry. The 135-155 grain JHP loads generally kick less than the 165-180 grain JHP loads. I would carry the potent Cor-Bon 135 JHP, which appears to be a real

stopper, or the Cor-Bon 150 grain JHP.

Here are some high performance .40 S&W loads worthy of consideration:

Barnes 140 grain TAC-XPD

Cor-Bon 135 grain JHP

Cor-Bon 150 grain JHP

Federal 135 grain Guard Dog

Federal 155 grain Tactical Bonded

Federal 155 grain Hydra-Shok

Federal 180 grain HST

Federal 180 grain Hydra-Shok

Hornady Critical Defense 165 grain FTX

Nosler 200 grain bonded JHP

Nosler 200 grain bonded Tipped

Remington 165 grain Golden Saber

Remington 180 grain Golden Saber

Remington 180 grain Golden Saber Bonded

Speer 180 grain Gold Dot

Winchester Defender 165 Grain

Winchester Defender 180 Grain

Winchester 180 Grain Defend

Winchester Ranger 180 grain JHP

In short, you can hardly go wrong with the .40 S&W, unless you carry ball ammo. Choose a good hollow point and stick with it. Leave the ball loads for practice.

10mm Auto

The 10mm was thought to be the *ne plus ultra* of autoloading pistol rounds when introduced in the late 1980's. However, this big bore (.40 caliber) hasn't turned out to be markedly superior to the best .40 S&W or .45 ACP jacketed hollow point loads.

The FBI, looking for more power, adopted the 10mm to replace their 9x19mm service pistols. Some agents thought the big 10 *too* powerful, so the Agency developed the "10mm FBI Light" load. The big case wasn't necessary for the powder charge in the FBI Light load, so this led directly to Winchester's creation of the .40 S&W on a shortened 10mm case.

As a result, some 10mm loads have been discontinued and most of those remaining are midway between .40 S&W velocity and full power 10mm velocity. This isn't to say there is anything wrong with the 10mm Auto, as it is a fine stopper. Even with 10mm Light loads, it is ballistically identical to the .40 S&W and with midrange or full power loads it is the most powerful of the common autoloading pistol cartridges.

Here are the 10mm Auto JHP loads (and catalog MVs) currently offered by the major

US ammo companies:

Cor-Bon 135 grain JHP (MV 1400 fps)

Cor-Bon 150 grain JHP (MV 1325 fps)

Cor-Bon 155 grain DPX (MV 1200 fps)

Cor-Bon 165 grain JHP (MV 1250 fps)

Federal Premium Personal Defense 180 grain Hydra-Shok (MV 1030 fps)

Sig Sauer Elite 180 grain V-Crown (MV 1250 fps)

Winchester Super-X 175 grain Silvertip (MV 1290 fps)

All of these bullets will expand nicely when driven at these muzzle velocities, so any of these loads should really romp and stomp on bad guys. I would pick the Cor-Bon 135 grain JHP at 1400 fps or the Cor-Bon 150 grain JHP at 1325 fps for personal protection.

The full power Winchester Super-X 175 grain Silvertip and SIG Sauer Elite 180 grain V-Crown loads are good choices for experienced shooters who are used to considerable recoil. They should also be good choices for carrying in the field, where I might have to shoot big, cranky animals that seem interested in munching on my bodily parts. In this role the 10mm Auto excels, particularly when mated with the Glock and Sig Sauer "long slide" pistols. As always, ignore the 180 grain ball loads from Remington, Federal, Sig Sauer and others, except for practice sessions.

The 10mm Auto is making something of a comeback, with new guns and new factory loads appearing. Examples would be the Sig Sauer Elite ammunition and the Sig Sauer P220 Match Elite pistol.

.41 Remington Magnum

The .41 Magnum was conceived as a caliber midway between the .357 Magnum and the .44 Magnum, for those who wanted a big bore revolver, but were intimidated by the blast and recoil of the .44 Mag. There was also some law enforcement interest in a new, big bore revolver caliber.

However, when finally introduced by Remington, the .41 Mag. was quite similar in recoil and muzzle blast to the .44 Magnum. Consequently, the caliber has never become very popular.

The factory loaded JHP ammunition selection in .41 Mag. is not extensive. The best defense choices for this hard-kicking caliber are the Cor-Bon 155 grain DPX, Cor-Bon 170 grain JHP, Winchester Super-X 175 grain Silvertip and Federal Power-Shok 210 grain JHP.

Remington offers a single 210 grain JSP load that will shoot right through a perp (or two or three) and continue on its way. This is strictly a big game hunting load that should not be used for personal defense in populated areas.

.44 Special

The best choices for your .44 Special revolver are the Cor-Bon 165 grain JHP, Cor-Bon 200 grain DPX and Hornady Critical Defense 165 grain FTX loads. Glasers, the Winchester Super-X 200 grain Silvertip, Hornady Custom 180 grain XTP and PMC Bronze 180 grain JHP are also potentially good rounds. The newer Sig Sauer Elite 240 grain V-Crown load offers interesting possibilities for those who favor heavy bullets. Federal offers a 200 grain SWC-HP lead bullet in their Champion line.

Most other .44 Special loads come with 240 grain RN lead bullets loaded at low velocity. These are for practice or cowboy action shooting only, and then only if you are willing to waste time scrubbing lead from your revolver's barrel.

.44 Remington Magnum

The blast and kick of this powerful caliber make it less than optimum for defense use, despite what you may have seen in the movies. The Cor-Bon 165 grain JHP, Cor-Bon 225 grain DPX and Federal Power-Shok 180 grain JHP loads are the hands-down choices in this caliber. Glasers are probably the best alternative for use in heavily populated areas, due to the .44 Mag's penchant for over-penetration.

The Hornady Custom 200 grain XTP, Winchester Super-X 210 grain Silvertip, Federal Premium 240 grain Hydra-shok, Remington 240 grain SJHP and Sig Sauer Elite 240 grain V-Crown are hunting loads that might be acceptable choices under certain circumstances. Any .44 Magnum revolver can also fire the .44 Special loads mentioned above.

.45 ACP (Occasionally called the 11.43x23mm by some silly Europeans)

The .45 ACP is a recognized man stopper and there are a number of excellent loads in this caliber. On the other hand, you must be selective, because the .45 ACP operates at relatively low velocity and many bullet types that perform well in faster calibers, such as 9x19mm and .40 S&W, fail to expand at .45 ACP velocities. (Note: if you are one of those knuckleheads who install light springs in your gun to get a lighter trigger pull, you are asking for reliability problems.)

Here are some of the best standard velocity .45 ACP defense loads:

Cor-Bon 160 grain DPX
Federal Premium 155 grain Hydra-Shok
Federal Premium 165 grain Guard Dog
Federal Premium 180 grain Hydra-Shok
Federal Premium 230 grain HST
Remington Premier 230 grain Golden Saber
Speer 230 grain Gold Dot

Here are some of the best .45 ACP +P defense loads:

Cor-Bon 165 grain JHP +P
Cor-Bon 185 grain JHP +P
Cor-Bon 185 grain DPX +P
Cor-Bon 200 grain JHP +P
Cor-Bon 230 grain JHP +P
Federal Premium 230 grain HST +P
Hornady Custom 230 grain XTP +P
Nosler 230 grain +P bonded core JHP +P
Nosler 230 grain +P bonded core Tipped +P
Remington Premier 185 Golden Saber +P
Speer 200 grain Gold Dot +P

These powerful and hard-kicking +P rounds are best left to the experienced shooter. They are pretty hard on your gun, especially an aluminum-framed pistol like the SIG/Sauer P220 or Colt Lightweight Commander.

If you are sufficiently expert to confidently carry .45 +P loads, you probably don't need my advice. They really sledgehammer the bad guys.

Save the 230 grain ball (FMJ) loads for practice; they are highly over-rated for self defense. Carry FMJ ammo only if you must, because your gun jams with hollow points. The Llama, Federal Ordnance, AMT and Auto-Ordnance M1911A1 copies often jam with anything except 230 grain ball. Never compromise when it comes to reliability: if your gun only feeds ball, then ball is what you carry.

.45 Colt

With its much greater case capacity, this classic revolver cartridge can be loaded to do anything the .45 ACP can do, and more. Unfortunately, most .45 Colt factory loads come with 250-255 grain lead RN bullets. Good loads using JHP bullets are relatively scarce.

I would load a .45 Colt revolver with the Cor-Bon 200 grain JHP. The Blazer 200 grain JHP, Hornady Critical Defense 185 grain FTX, Federal 225 grain Lead Semi-Wadcutter Hollow point, Winchester 225 grain Defender and Winchester 225 grain Silvertip JHP are also good.

SHOTGUN AMMUNITION BY CALIBER (Gauge)

The shotgun is the *ne plus ultra* of man stoppers. No doubt you have heard a lot of nonsense about the lethality of "assault rifles," sub-machine guns and the like. The fact is that the shotgun is the most effective firearm for short-range personal defense. For example: an Uzi or Heckler & Koch sub-machine gun has about 340 ft. lbs. of impact

energy - a 12 gauge shotgun has 2500 to 3100 ft. lbs. of impact energy.

The shotgun is not a magic weapon that will slay all foes. Like all other guns, it must be *aimed* at a specific target. Buckshot loads will not "sweep" a room. "Close" still only counts in horseshoes. Aim your shotgun from the shoulder (like a rifle) if you intend to hit an aggressor.

I invoke the Ascended Master, Massad Ayoob: "It is perhaps the most efficient close-range killing machine in the world's arsenal of small arms." For a discussion of the shotgun's strengths and weaknesses I refer all interested parties to Ayoob's excellent and comprehensive book *The Truth About Self-Protection*. (Truly, the best \$8.95 investment you'll ever make.) This addresses every element of self-defense, from locks, chemical sprays and alarms to defensive driving, firearms and defending yourself against dogs.

A more in-depth treatment of the issue may be found in Ayoob's book-length volume on shotgun technique, *Stressfire II: Advanced Combat Shotgun*. Great reading for those who consider a tactical shotgun their primary defensive weapon.

A Note On Shotgun Ammo

Shotgun ammunition falls into three general categories:

BUCKSHOT - A shell loaded with large-diameter lead balls (.24" and up) used for big game hunting and self-defense. The number of pellets in 12 gauge, 2-3/4" (non-magnum) buckshot loads varies from eight .36" balls in #000 buck to 27 .24" pellets in #4 buck. (These figures are for Remington Express shells.) Avoid #000 buckshot loads for most self-defense applications, due to the low pellet count per shell and potentially excessive penetration.

Note that not all buckshot sizes are available in all gauges. The typical options in 12 gauge are numbers 000, 00, 0, 1 and 4. 20 gauge is generally limited to numbers 2 or 3 buck.

The more fragile the walls of your dwelling, the smaller the diameter of buckshot you should use. #00 works well outside and when more penetrations is required (as in police and farm use). #0, #1 and #2 are good for home defense in suburban houses with large yards. #3 and #4 are preferred for urban houses with small yards, mobile homes, duplexes and condos.

Buckshot ratings are archaic and hard to understand (as are shotgun specifications and ammunition in general), but thankfully there isn't much you need to learn. Simply write down the recommended loads, walk into your local gun shop and announce your desired ammunition.

Note that "00" is pronounced "double ought." Don't say "zero zero" or "oh-oh buckshot" in front of gun shop employees. Then, practice with both your selected defense load and

low-cost birdshot to fully familiarize yourself with the operation of your gun and its terminal performance (e.g. patterns at various distances, the startling effects of buckshot on melons).

BIRDSHOT- small-diameter pellets used for bird hunting. Its stopping power is poor, except when used at very close range. For that reason it is not generally recommended.

SLUGS - solid lead bullets for shotgun use. These are big, heavy, fat hunks of soft lead that have enormous stopping power. They also have too much penetration for most urban situations, especially in apartment buildings and mobile home parks.

A typical 12 gauge slug is .729" diameter and weighs 438 grains; compare this to a typical 9mm bullet, which is .355" diameter and weighs 124 grains. Slugs must be carefully aimed to be effective, just like a rifle bullet. Actually, shotguns must be carefully aimed and fired with any load, just like handguns and rifles.

.410 Bore

None of the above really applies to this weak caliber. The .410 is only a half-way decent man stopper with slugs. Choose the Federal Classic or Winchester Super-X 1/5 ounce (88 grain) hollow point slugs. Never use birdshot.

There are some odd buckshot loads for the .410 (with three 000 pellets) and I advise you to ignore them. Lose the .410 and buy a 20 gauge shotgun.

28 Gauge

The 28 gauge makes a good upland bird or skeet gun, especially in a fine double gun. However, as far as I know, there are no self-defense buckshot or slug loads available in the caliber.

20 Gauge

The 20 is an excellent self-defense caliber, particularly for those who dislike the recoil of the 12 gauge. For guns with 3" chambers there is the Federal 3" Magnum #2 buckshot load with 18 pellets. If your gun has a 2-3/4" chamber or your situation suggests it, use the Remington Express or Federal Vital-Shok #3 buckshot shells with 20 pellets. All of these loads provide definitive short range stopping power.

I specifically recommend the standard (not magnum) 2-3/4" 20 gauge shell for women and recoil sensitive men who dislike the blast and recoil of the 12 gauge. "Delivering roughly the ballistic force of two .44 Magnum rounds at once," comments the knowledgeable Ayoob, the 20 "delivers 75% of the lead for only 50-60% of the recoil". Many police departments have found their officers shoot much more accurately in realistic training exercises with the lighter kicking, but still potent, 20 gauge.

If you are new to shotgunning and considering getting one for self-defense I suggest the reliable and reasonably priced Mossberg Model 500, 18.5" barrel 20 gauge pump shotgun. The tried-and-true Mossberg 500 is the standard shotgun of the U.S. Armed Forces. You'll be much happier with the lighter-kicking 20 gauge than the 12 gauge version used by the military and, most importantly, you'll shoot the 20 more accurately and rapidly.

For an in-depth look at the 20-versus-12 gauge issue I recommend all shotgun owners and potential shotgun owners read *Stressfire II: Advanced Combat Shotgun* by Massad Ayoob. Perhaps I am beginning to sound like a broken record on the theme of Ayoob's books, but once you've read them you'll understand why I recommend them so highly (and repeatedly).

<u>Note</u>: Ayoob dislikes the 20 gauge Remington 870 pump shotgun and recommends you choose the Mossberg 500 in 20 gauge for general self-defense and home-defense use.

For *ultra-close range* home defense, birdshot will do the trick. Choose any #4, BB or larger high brass lead hunting load and have the balance of the magazine filled with buckshot, in case the birdshot doesn't put them down fast enough.

Avoid slug use in 20 gauge; you are better off defending yourself with buckshot. If you must use slugs, pick one of the standard velocity, 5/8 ounce, Foster type ("rifled") slugs. Using slugs requires careful aiming and rifle sights; few 20 gauge shotguns have the latter.

16 Gauge

The 16 has slipped in popularity with Americans to the point it has almost entirely been replaced by the 20 gauge. As a result, no shotguns made specifically for defense are available in 16 gauge. I know of no 16 gauge slug loads and the once common 16 gauge #1 buckshot load is difficult to find.

12 Gauge

If you simply want to know the best defense load, go out and buy some 12 gauge, 2-3/4" shells loaded with number 1, 0, or 00 buckshot. You shall live happily ever after, as this is the most effective man-stopping firearm cartridge yet devised by man.

I recommend the Federal Vital-Shok, Winchester Super-X or Remington Express loads as the most common and useful buckshot defensive rounds. The content of just one of these 00 shells is almost like a nine-round burst from a submachine gun, with every round hitting.

Effective shotgun technique, of course, requires that one hits with each shot. Don't think that you can merely point the shotgun in the general direction of your attacker and let fly. Read Ayoob's book *Stressfire II: Advanced Combat Shotgun* for the low-down on

good shotgun skills and then practice, practice, practice.

Many experienced shooters prefer #4 or #1 buckshot to #00. (Ayoob and many other authorities favor #1.) I really cannot argue, but Lt. Marshall is on record as stating that 00 is superior in penetration. (Obviously, as the heavier a round lead projectile is, the better it penetrates tissue.) #00 is good enough for me, but if your situation suggests #1 or #4 buckshot, go ahead.

Stay away from 2-3/4" Magnum or 3" Magnum loads, however. The brutal kick of these rounds makes them a bad choice and you gain little in stopping power over the 2-3/4" standard loads. Controllability is important, and standard 12 gauge shells have quite enough kick as it is.

A note on shotgun spread: firing your shotgun does not create a diabolical cone of doom destroying all in its path. If you have a typical tactical or riot gun with an 18"-20" Cylinder bore barrel, the pellets will spread out about 1" for every yard of range. This means that the spread of pellets fired across a large room (18') will be 6" or so, a circle the size of a coffee cup saucer. At 50 feet, the spread will be the size of a large pizza (16").

Test-fire your shotgun at various ranges, using big white butcher paper targets to get an idea of the pattern you can expect. It is a common misconception that blasting at foes ten feet away will take out two or three of them. The spread at that range is just three inches, so you can see that I meant it when I said a shotgun must be skillfully aimed and fired, just like handguns and rifles. The shotgun is simply more likely to stop the attacker.

Slugs are potent man stoppers, but have limited application for self-defense. Slugs have ferocious recoil and often over-penetrate. There are special situations where slugs might be preferred over buckshot (e.g. road-blocks, barricaded foes), but if you are interested in such esoterica I again direct you to Ayoob's masterful tome *Stressfire II: Advanced Combat Shotgun*. This guide is for civilian readers.

Don't be a knucklehead. Stay away from weirdo rounds like rubber buckshot or neoprene slugs. These are riot-control rounds designed for non-lethal, massed police use against mobs at a distance. Don't rely on such marginalia to save your life.

Two things to keep in mind about birdshot. The first is that birdshot is as lethal as buckshot at very close range and ineffectual at longer range. Birdshot is less likely to penetrate multiple interior walls and kill innocent people on the other side and generally has lower recoil than buckshot for faster follow-up shots.

I live in a thin-walled apartment house, which makes birdshot a viable alternative. However, if I lived in a solid house with a decent size yard, I would definitely choose buckshot.

The stopping power of birdshot should not be under estimated. At typical indoor ranges of 10 or 15 feet, birdshot is virtually a solid column of lead. Choose any 2-3/4" high brass (non-magnum) shell with 1-1/4 ounce of #4 lead shot. These are called "pheasant loads" (Winchester and Remington) or "Upland loads" (Federal). The muzzle velocity is 1220 fps (Winchester) or 1330 fps (Federal and Remington). I like the Winchester version for its lighter recoil. There is little terminal difference between the various brands; buy whichever you please.

Don't believe for a second that you can just wound someone with birdshot and he'll go on to live another day. If you aren't justified in killing a man, you aren't justified in wounding him, either.

10 Gauge

Yow. Load your 10 gauge with whatever the hell you want. Federal offers a 3-1/2" Magnum buckshot load with 18 - #00 pellets.

RIFLE AMMUNITION BY CALIBER

Rifles aren't a great choice for most self-defense applications. Quoth Ayoob: "The rifle is not well suited to the sudden, close-quarters deployment and maneuvering that is required of a defensive firearm. On the battlefield, yes. In civilian close combat, no way."

Ayoob adds that "the rifle is too bulky for maneuvering through doors and hallways, too long to quickly and surreptitiously pick up when the attacker drops his guard, and too easy for the criminal to take away if the homeowner's attention is diverted."

That being said, if all you have is a rifle, then a rifle is what you use. Some liberal-infested cities ban handgun ownership (Chicago, New York, Detroit, DC), so you are stuck using shotguns and rifles for home defense.

Take some comfort from the fact that rifles have better stopping power, are a strong visual deterrent and are much easier to hit with than any handgun. On a ranch or farm a rifle may be quite appropriate under certain circumstances today, just as it was on the frontier. Never use ball (FMJ) ammo for self-defense in a rifle.

.22 Long Rifle

A good .22 autoloading, pump, or lever action rifle, such as the Ruger 10/22 (auto), Remington Model 572 (pump), or Henry Golden Boy (lever), can do the job when nothing else is available. Use any high-velocity or hyper-velocity, copper-plated HP round (CCI Stinger, Remington Yellow Jacket, etc.) and fire repeatedly. Multiple hits are crucial with a .22. Shoot and shoot and shoot some more.

Stay away from the aftermarket large capacity magazines made by Ram-Line, Eagle,

Hot Lips, etc. These plastic nightmares are unreliable, jam-prone and easily breakable.

.22 Magnum (.22 WMR)

Use a 40 grain jacketed hollow point load. Try the Winchester Super-X 40 grain JHP, CCI Maxi-Mag 40 grain JHP, or Remington 40 grain JHP.

.223 Remington (5.56x45mm NATO)

This is the standard NATO rifle round and one of the best choices for a self-defense rifle. Many top notch rifles are (or were) available in this caliber: the Colt AR-15, Ruger Mini-14, Steyr AUG, FN FNC, et cetera.

All .223 hollow point, soft point and plastic tipped varmint bullets are good stoppers in civilian frontal shootings. These are usually in the 40-60 grain range. 55 grain bullets are the most popular weight and offered in the most loads, so consider that a clue. Nosler specifically recommends their 64 grain Bonded Solid Base soft point load for personal defense.

Avoid the heavy soft point bullets sold for hunting Class 2 game (hogs, deer and antelope). Save ball ammo for practice, as its stopping power is very unreliable.

Note: .223 rifles with a 1 in 12" rifling twist shoot more accurately with 35-60 grain bullets, as this is the bullet weight range for which they were designed. Rifles with a fast 1 in 7" twist (this includes the AR-15A2 and nearly all European models) prefer 55-75 grain bullets. Other .223/5.56mm barrels may have 1 in 8" or 1 in 9" twists. Ruger Mini-14 rifles have a 1 in 10" twist and do well with most any bullet weight up to 70 grains. They all adequately handle 55 grain bullets. Twist rate is only important at longer ranges, in any case.

.30 M1 Carbine

Never use ball in your M1 for defense! .30 Carbine ball sucks, but .30 Carbine hollow points work very well. Try the Winchester Super-X 110 grain Hollow Soft Point load. This provides a MV of 1990 fps and ME of 967 ft. lbs.

7.62x39mm Soviet (7.62 mm Russian Short, 7.62 mm M43 Combloc)

Some prefer this East Bloc cartridge to the .223 for defense use. It is an excellent round, most commonly used in SKS and AK-47 derived rifles, as well as the Ruger Mini-30. Use any 123-125 grain soft point or tipped bullet from Cor-Bon, Federal, Hornady, Winchester, or Remington. PMC makes a good, low-priced 125 grain soft point you might like if you have a lot of magazines to fill.

.30-30 Winchester

This old round has survived so long for a simple reason: it works. Load your Winchester, Henry, Mossberg, or Marlin .30-30 lever action carbine (16"-20" barrel) with any hollow point or plastic tipped factory load. I like the Federal 125 grain. Leave the 170 grain soft points for hunting, unless you live in the country.

A .30-30 carbine is excellent for use on a farm or ranch, but dangerously overpenetrative in most urban situations. The lever action carbines, properly equipped, make good "scout rifles." Fresh cartridges can be slipped through the loading gate to top-up the tubular magazine without taking the rifle out of service.

.308 Winchester (7.62x51mm NATO)

This is an excellent rifle cartridge, one of the best. Over penetration is the biggest problem. Use fast opening bullets of 150 grains or less in lever action, pump, or autoloading carbines. The Nosler Ballistic Tip, Hornady SST, Hornady V-Max and Remington Accu-Tip are examples of quick-opening bullets that are available in various brands of factory loaded ammunition. Carbine length .308 rifles also make excellent "scout rifles."

9mm Parabellum (9mm Luger, 9x19mm, 9mm NATO)

Generally the same as for pistols, see above. Heckler & Koch, Uzi and Colt 9mm carbines will feed anything. Any reliable hollow point is a good choice in a 9x19mm carbine and the long barrel makes for high velocity and increased effectiveness.

.30-06 Springfield

This excellent and time-proven cartridge has too many top-notch loads to list. Choose the same bullets mentioned in connection with the .308 Winchester (above) in lever action, pump, or autoloading carbines. As with the .308, the biggest concern is over penetration in populated areas.

.357 Magnum

This is the best of the self-defense handgun cartridges available in carbines and superior to the .30 Carbine cartridge. See the ammunition guidelines for revolvers, above, but avoid bullets lighter than 125 grains and Glasers or other exotic bullets.

The heavier 140-158 grain JHP bullets may shoot more accurately than lighter bullets in carbines. This is okay, as the carbine's higher velocity will cause more bullet expansion on impact.

For example, .38 Special +P 125 grain JHP loads fired from an 20" carbine barrel will hit as hard as full power magnums fired from a service revolver's 4" or 6" barrel. The Winchester Super-X 158 grain JHP factory load has a MV of 1830 fps and ME of 1175

ft. lbs. per the Winchester catalog.

The .357 makes an excellent self-defense round in Marlin, Henry, Uberti and Winchester lever actions, or the Action Arms/Israeli Military Industries "Timber Wolf" .357 pump action carbine. The recoil of full power .357 Magnum loads is very mild in a carbine.

.44 Magnum

Pick any good hollow point, using the guidelines for revolvers. Winchester figures quote a MV of 1760 fps and ME of 1650 ft. lbs. for the Super-X 240 grain JHP factory load from a 20" barrel. Don't be tempted to use soft points; these hunting rounds will blow right through your foe and anyone standing behind him. .44 Magnum recoil in a carbine is much more than a .357 Magnum, about like a .30-30.

.45 Colt

This revolver cartridge has rather recently been adopted to carbines, usually classic lever action designs, for cowboy action shooters. From a 20" barrel, its MV with full power loads (around 1150 fps for a 225 grain bullet), ME (around 670 ft. lbs.) and trajectory are very inferior to .357 and .44 Magnum carbines, but clearly superior to .45 handguns of all types. Recoil in a carbine is mild. Pick any good hollow point load, using the guidelines for revolvers.

THE END