

SURVIVAL RELOADING, ZEROING AND USE

DISCLAIMER: In this era of gene pool rejects, the incompetent, indolent and ignorant survive and thrive through the power of surrogates called trial lawyers whose highest and best uses are questionable at best. However, acknowledging their temporary influence, the Author is offering this donated information under the pen name of "Overbore" on a take it or leave it basis. No shooting related company affiliations exist nor are there any efforts made to give absolute mandates beyond safety dictates. All loading information must be reduced by 10% before working up to the suggested loads and all safety precautions must be observed at all times.

BACKGROUND:

The author has about 55+ years of sound shooting experiences in many disciplines including long-range hunting, long-range target shooting, national competitive silhouette shooting, pistol qualifications and skeet shooting combined with engineering and gunsmith experiences all combined into highly successful results. I am still building my own rifles for long-range target uses. The only factory rounds I have fired in all these years are 22 Long Rifle's and I use five different loading presses.

EXAMPLES:

In the 1970s a group was shot, prone, iron sights at 1,000 yards, 198/7X, and this past year another individual shot a group under 1.5 inches, 1k yards, with a scoped bench rifle; both shooters used their own home gun-smithed rifles and their own hand loads. This is what can be done if the correct reloading procedures are followed and the correct components are selected and assembled properly and carefully. This selection and assembly process is called hand loading. The uses fall into two simple categories: new components, "Loading" and reusing components (brass), is "Reloading".

Since another well-qualified author in Guns-to-Grab has selected some survival firearms for your consideration, I will build upon his good information and confirm that when all of us are worm food, some types of rifles will still be functioning and doing the job. Such as the M-1 Garand (30-06), the 7.62 (308) in Springfield Armory M1A, Browning Izzy 7.62 or bolt versions and the .223/ 5.56mm which are the main focus of this article. In current form, the Garand is a great and cost effective \$400 defense weapon when purchased in "Rack Grade" from the Director of Civilian Marksmanship. www.odcmp.com Got the hint? This gas gun has special powder requirements that are easily met with these suggested loads but the bolt versions of the 30-06 are hard to screw up. Still, we all know people who could mess up a 200# anvil with a fork—The M1A is an improved variant of this reliable gas system with the advantage of a NATO round and ample detachable magazines and brass.

Allowing for a slight detour, Savage, Remington and Winchester all make good pillar bedded rifles that are the basis for any sustained accurate shooting. I happen to believe that the Wal-Mart models of the Savage in three shot magazine flavor with a .308 bolt face (.473"), same primers for all, offer the added benefits of lower cost, high accuracy, composite stocks, stainless, (finally) good triggers and the potential to switch barrels into smaller calibers such as 260 Remington and the 22-250. What is not to like about that?

The real crux of the survival issue facing all of us is what do we do for ammunition when the "balloon goes up" or the store is closed when quarantine, martial law or executive orders are enforced because of a plethora of pending international problems, ranging in causes from natural disasters to the ever increasing danger of a WMD attack or some underpaid nut case in Russia salvoing off a bunch of MIRVED nuke missiles? Note that our nation is installing a partial missile defense from the direction of everyone's favorite tyrant in North

Korea and his bigger, badder brothers in Red China—

That defense system is going up for a very good reason just as you and I have car insurance- we never know what nut case is going to impact our lives--What is supply chain management in a true crisis such as a probable attack? It is your and my abilities to make do with what we have now, can defend and to improvise for what we lack. This is the basis of survival loading and reloading; the little brown truck will be parked and we will be on our own. This is stark reality probably closer than we know. In that dire scenario, all moral laws and basis become secondary to personal survival and he who has the means and will to use protection will be (self) protected. The balance will be called victims.

For the moment we will go off into specific supplies and tools required and where to find them now, then later we will come back into how they are used. Since I believe in the keep it simple and reliable concept, we will only discuss one rifle powder that has proven itself over and over to be the core basis of making our own ammunition and that powder is H-4895. It is used for 30-06, 308, 223 and many other calibers but it is the most reliable, adaptable, available and cost effective powder for our rifle needs. Widners sold it for \$112 for eight pounds before the November 08 election; 7000 grains to the pound, and a big case '06 uses 46 grains while the .223 only uses 26.2 grains; very cost effective. At the end of this article, I will tabulate the specifics into one cogent and succinct data base. A 7.62 load with a 150 gr bullet is just up to the neck—in a pinch.

For Handguns the answer is also simple: Unique and for shotguns the answer may be Red Dot, or the cleaner burning VV series my son prefers.

To digress even further before returning to simple instructions, I strongly urge all of you, especially those with young sons or grandsons to view or keep a copy of Mel Gibson's movie, The Patriot. I used that movie as a great teaching tool for my 12 year old adopted grandson who is now reloading 223's in his own Mini-14 and shooting three shot clover leafs with iron sights. He happens to be using my favorite all around load 26.2 gr of, you guessed it, H-4895 with 55gr bullets. The movie also shows the need for bullet casting and accurate shot placement as well as the use of additional basic close quarter weapons as we used in Viet Nam; the non reloadable, split personality maker, the tomahawk, aka the quality (one piece steel) hatchet.

As to bullets, I have shot most of them and know about the rest from my semi-professional hunter son, so to keep your inventory simple and reliable, stick with Nosler, www.nosler.com, for meat, the jacketed hollow points for long range and the ballistic tips if you are really serious about stopping someone from taking your life or your ability to live. The Book says "the thief comes to Kill, rob and destroy" – a direct quote. Note the sequence and how long that survival advice has been in place. You must decide who has the greater right to live; you and your family or the hordes of "have-nots" that will surely flow like locusts from cities devouring all in their path.

I can tell you from personal experiences, in Africa, that if the lead mad dogs or dog goes down, (marksmanship with semi-automatic fire with M-2 red dot sights) the pack will turn to another easier target-- If you are dealing with a sophisticated enemy, start at the back and work to the front. Forget the MilSpec bullets, the full metal jackets are useful for shooting vehicles, some ballistic vests and meet the Geneva Convention. We need one round perp stoppers, ..., when our lives are at risk. Use the Partitions or AccuBonds for hunting, and the other two for keeping yourself alive. If your budget allows [for] only one bullet selection, make it a Ballistic Tip from Nosler. I happen to also shoot custom made target bullets and use bulk boxes of moly Sierra Match Kings regularly because they are

good quality but we are reducing this to one item survival uses. You may add to the supply and tooling list, end, but I am outlining minimum specifics with well-tested reliable products. Survival is not a testing period; it is a "using" period.

For handguns, you have a greater bullet selection latitude with the older design of steel revolvers or "wheel guns" as you are not concerned with feeding problems that must be addressed with semi-autos. If you are in the basic protection mode with a .38/357 type weapon and are forced to hand load, use the cast 147 gr wad cutters (hollow base) for practice then mount them hollow base forward for a close range .60 cal hole maker (not a typo) for the wife or young adults to use. If you are pre-planning, the core to survival, and if the budget allows, one brand of factory ammo is the finest for strictly personal defense. It is MagSafe, a pre-fragmented round that leaves massive damage and is FBI rated at > 100% stopping power. It is not a loadable component item as a JHP (jacketed hollow point) is. They will not penetrate vests or heavy clothing---

For the semi-autos, and particularly those loading for weapons with specific and limiting feed ramp requirements, find out what that weapon will feed reliably, herein defined as 101% of the time, and stock up on the bullets, cases and primers now while they are "gettable". If you do not think events impact supplies and prices, try to buy \$38 gold!!! A 25 cent silver quarter is now selling for what??? And you last saw one when?? If you missed the hint, stock up on the appropriate MagSafe ammo for your close quarters protection now. In certain weapons, such as the Savage 24 survival shotgun/pistol caliber combi-weapon, the .357 becomes a close quarters deer (whitetail not muley) rifle over a 20 ga. shotgun; a great base camp type weapon. My personal favorite is the .45 Long Colt, which is multi-versatile as a potent perp stopper and a short range .410 shotgun for stopping snakes--of any height. Since I have .45 semi-autos and 357's I have settled upon one reliable powder for those loading uses in a wide variety of weapons. Yes, it is Unique. The Speer brand of pistol bullets has always fed and expanded for me so I am suggesting it. Never ever, unless you are buying for your enemies, use the cheap Russian "Wolf" brand 223 ammo. It is absolute junk and will get you killed in an emergency; which just might explain why they are selling it here in the United States.

Where to purchase is easy. If you are reading this you are internet literate and can find Widners, hint (1-800-615-3006) Cabela's, Midway and Sportsman's Guide on the net as primary supply sources but your search engine may find dozens of other closer good suppliers that are out there. The foot stomping point is do it now; just do it and I will guide you through the easy loading steps. We are not buying a gallon of milk whose short shelf life is a key consideration. Last week I shot a group of five rounds with my .45ACP using 185 grain JHP's, 20 year old primers, cases and Unique; 72 year old eyes. Storage must be done under controlled climate conditions; translation. Keep the components cool, sealed and in a low humidity environment with a simple dehumidifier. Five shots inside a coffee cup diameter circle is not too shabby on the shooting end but not too good if you are on the receiving end.

Enough background:

Let us get straight to what you need which begins with a small space free from children, open flames, organic vapors or gas fumes and high humidity; no exceptions. If you are just starting off in loading/reloading, after the location, your next need is a secure bench to work upon which, to keep things simple, is nothing more than a used solid core wood door mounted on two sturdy saw horses. We are starting with cost effective entry-level work and simple tools to start with so bear with us as we will get into advanced techniques and costly equipment. On that workbench whose height is adjusted so that the "table" is at an appropriate height for your height and comfort, the first and main item you need is a good pair of long, large tweezers to hold and handle your primers. The next item sounds silly but

it is accurate. Buy a can of sardines; feed them to the cat or eat them, your choice. Throw away the lid but double wash and dry the can, as it is what we are after. It is now a 75-cent primer holder that prevents spills. Primer flippers are sold by Dillon and others.

Decide next what equipment you can purchase. If funds are really limited you can do good but slow loads with the Lee series of tools and measures that use scoops to measure powder. Follow their instructions explicitly and the end results will be accurate ammunition. www.leeprecision.com. Their collet type dies are a good value and of good quality. I suggest the small portable Lee set as packable for a sustained away from base uses.

For the sake of initial discussions, let us use the 7.62/308 as our base caliber to load, fire, then reload. We will need a supply of new cases, primers, powder and bullets on hand; basic inventory. The typical Remington / Winchester products are (just) adequate for survival needs but are not up to accuracy requirements for more serious requirements such as serious hunting. They are cheap but in adequate supply. As a comparison, the .338 Lapua Magnum cases, not a misprint, are about \$1.40 each while the bulk prices for our mass brass is in the order of \$.16 each. If you can find it, use IMI brass as it is military specification, has close tolerances and a long life. In an emergency, once fired, Grade 1 brass may be used but be aware of the potential for case stretching -- machine gun firings and head space problems.

My personal preference for mid level tools for loading/ reloading is the one press that can do it all with high volume and accuracy and it is the \$307 Redding T-7 turret press. Their "Boss" cast iron single stage press is a good value and lifetime low investment at \$143 list. I have an old Pacific single stage cast iron press that will outlast my grandson's grandson. Other presses of this type are good and the RCBS brand is about the most widely used brand of presses, dies and accessories. I operate three Dillon presses as well but they are above initial survival needs. The selected press is bolted to your door-work table so that you have room on the right side for supplies and on the left you have room for finished rounds. Your operating hand must be free to make a full, non-stop, press handle travel motion. If we are tightly budgeted, empty cigar boxes will suffice but I urge inexpensive plastic loading blocks holding 50 round each be placed on either side of your press. I made wood 30-378 loading blocks for the "loudenboomer-eargersplitten" shoulder cannon my son uses to make instant "minced moose."

Into your press you must have no less than a two die rifle or three die pistol set that is adjusted for your caliber, bullet and brass. A four die set is better. If we are working at Ford/Chevy levels and using RCBS dies, their instructions are more than adequate but they neglect to mention that you need a correct shell holder to match the case head for the press and one more if you prime separately. If your die brand offers a carbide neck expander button, go for it as it will save a processing step of inside case neck lubing.

Do not get side tracked into using the RCBS priming system that features primers on a tape. The primers most widely used are made by CCI and for the .308/ 06 family of case heads, use the Large Rifle, #200 size. In an emergency, large rifle primers from Rem 91/2, Federal and others may be interchanged safely as can the Match grade of primers such as the Federal 210M. In addition the magnum level primers will give satisfactory service if primer supplies are very limited.

The magnum primers generate a hotter flame to ignite slower powders than the standard primers but may be safely used with these modest loads. Since we are single loading, the individual small primer supply trays are dumped into our clean "primer box" then picked up with the tweezers for individual inserting and seating to the correct depth into the case

base.

For semi-auto shooters, the 0.003" specified primer seating depth is very important as the military weapons are prone to slam fires from more sensitive civilian primers. To prevent this nasty event, allow the (gas gun) bolt to strip the round into the chamber from the semi-auto magazine. Bolt gun, no problems. Never, ever allow a high primer unless you want to lose fingers, eyes and rifles; do I have your attention?? If you cannot afford a simple depth micrometer, the primers must be seated to the bottom of the primer pocket with a very slight crush fit so that the rim of the pocket is easily seen. This is the LAR method that can work -- looks about right -- if you compare your loads with factory loaded rounds.

FYI: in over 20,000 rounds assembled and fired, no problems; hitting the X, yes; mechanicals, none.

Small Rifle primers are, naturally, smaller and are a different number, i.e. #400, for the smaller .223/5.56 mm cases but the seating depth requirement is the same. They may not be interchanged with large rifle sized primers; ever. Never; no way Jose! Fond of your fingers? Your precious five must be kept clear of the loading port in the Mouse Guns as a precaution for pre-ignition. Fond of loud noises? Drop primers on the hard floor and step on them. Toes in trouble? What toes? Safety dictates no rug rats, no booze, no smokes, no open flames, chemical fumes, dusts or sparks and no distractions. Keep your concentration focused on what you are doing; later, Darling—

Speaking of eyes, learn to sing like Ray Charles if you don't wear safety glasses; you will be wearing his black ones-- .38 cal plastic practice rounds are powered by only primers; got the picture? They are explosives and dangerous!! Note the steel primer shields used on better progressive presses. When, not "if", you mess up seating a primer, particularly inverted from a magazine tube, never, ever, try to push it back out – it will explode! Soak the case in water for a week to inert it. Your priming step is done by you placing one primer, single stage press, into the primer holder on the press with the tweezers and moving the ram fully to seat the primer into the case. The turret type presses have a primer magazine that is not used until the seating depth of one primer is correct. Individual depth adjustments vary in procedure by manufacturer; follow them carefully and completely.

To adjust the sizing die, screw it into the shell plate so that when the handle has moved the ram to its full up motion, the shell holder is just softly touching the bottom of the sizing die. This is a great way to start. Lock it down using the lock ring and set screw, if installed. Same procedure single stage or progressive press but if we are using the single stage press, as I do for all target loads, remove the sizing die by the large lock ring and clean the inside surfaces and put it back into its box until we will use it for re-loading; remember we are doing a loading of new cases.

With many side trips for amplification, we are now sitting at our loading bench, with a supply of new brass (empty cases), primers and a sizing die adjusted and locked into place on a multi-stage press like the T-7 and our sizing die in its box for single stage presses. If we are using a turret type press, mount the powder measure to the tool head by means of the 7/8-14 adapter which is screwed into the tool head, next station...

Powder and bullets are the next items we will discuss. We will not get into different powder lots nor differences in the same bullets as this is basic reloading and we are not producing bench rest quality rounds as you do not shoot a bench rest rifle in survival. Suffice to say, I

do produce rounds with 0.0005" accuracy but we are keeping things simple for now. We have one primed case sitting in our shell holder so powder is next. Remember we are using one specific powder, H-4895, so we must now insert a specific amount of powder into that case. The small Lee system uses powder dippers to get to the specific amount of powder but we have decided to agree that for teaching purposes, we are using a 165/168 grain .308 round as our example.

We agreed because I have the keyboard and you have the glasses. That load specific is for 41 grains of H-4895. If we are going to use other than the Lee line of basic products to determine our powder weight, we need a powder measure and an accurate scale to verify that volume of powder is being dispensed. I happen to prefer a measure threaded into the next die station of our turret press for large quantities of ammo. For single stage reloading, the measure is mounted to the front edge of your door-bench so that the bullet trays fit along each side of it. Some brand specifications are Redding, Lyman, www.lymanproducts.com RCBS, Dillon etc but brand is not the issue, rather, does it throw repeatable accurate weights? Is it manual and not electric? That is the main criteria.

An inexpensive powder measure, such as the Lyman #55, can be made to throw more accurate weights if you take a small, 3" length of 1" wide aluminum sheet (say 1/16th") , carefully fold it in half and drill a 1/2" hole through both sides. You have now made a powder baffle that is placed into the bottom of the empty measure by opening the drilled parts to cover the dispensing hole with an inverted V bridge cover. This way a tall powder column, full measure, will not force more powder into the exit hole thence into our empty case. Consistency is required in all reloading steps.

We next need to use a small and cheap plastic power funnel that fits over the case mouth and allows the powder measure to put all the powder into our case. How much powder is being "thrown" by the measure is not known until we adjust the measure by means of a powder scale such as a Lyman Pro 500 beam balance and check weights. This is a low cost but sufficiently accurate tool. Lyman does make one excellent high end unit, the electronic 1200DPS but we do not need it and if the power is off, better have that standby generator running.

We do need, however, to keep our scale free of damaging vibrations by mounting it on either thick foam rubber under a ply base or, preferably, place the scale on an individual mounting surface such as a sturdy side table. The requirement is that we find out how much powder is being dispensed each time the powder handle is cycled in a repeatable and rhythmic pattern. One technique, yours, is required. Just repeat it every cycle.

Since metal moves with temperature changes, we use the small check weights to verify that our scale is set properly at 41 grains then we use the scale to set the measure. Simple. It takes less time to actually do it than it takes to type this out. With our scale calibrated and our powder measure set and locked, we throw our first real powder charge; not into the case but into the scale container to re-verify that we are throwing 41 grains. Fine adjust as necessary and repeat every 10 loads to verify nothing has slipped or your throwing technique has changed.

Now with the case empty, place the powder funnel between the two, cycle the measure handle to throw the first powder charge. Pour it onto the scale powder holder to see if any powder has leaked between the funnel and the case, place the powder back into the hopper and start again with full confidence that all is correct. Put the primed case under the funnel under the measure and throw your first real powder charge. Look at your powder level in an accurately charged case and use it as a visual crosscheck for all following loads. It is like

landing an airplane, large or small, the eye picture must be valid or the results will be very wrong, loud and expensive.

Even though H-4895 is reasonably fine in grain structure, you will occasionally feel a resistance to cycling the handle as we are cutting some of the grains. This vibration must be kept from damaging the bearings of your scale. Crosscheck those loads with your scale. For a turret press, advance the tool head to the next station where there is nothing. A personal suggestion is that loading is smoother and you will have less wasted brass if you expand the case mouths slightly with a correct expander die, RCBS, Lee etc that opens or 'bells' the case mouth slightly to allow easier bullet seating. A boat tail bullet such as the Ballistic Tip does not require this expansion but flat base bullets do require it. For a single stage press, this is just another die to be screwed into the top of the press, adjusted, used and placed back into its box after use. Bell your case mouths if the budget allows.

Next we will install the bullet seating/crimping die into either the tool head or the single stage press. Follow the printed die instructions which will have the die almost touching the ram again. Note that there is no large center stem on this die but note that there is lube/antirust preservative that must be removed before any case is inserted into this die. When the die is clean and dry, turn the adjustment counterclockwise so that the length of the seated round is too long. We will decrease the total length rather than increasing the length to save bullets. Place one bullet into the charged case and cycle the handle and see where, to what length, the bullet is seated. For the cost conscious, there are fixed inexpensive gages to measure overall cartridge length or there is a simple ruler for LAR uses but we have been given 2.800" for good reasons in the .308. That is where your rifle's chamber is cut/reamed and the dimensions of your magazines, or should be. Simple inexpensive dial calipers are suggested but they too must be zeroed for your actual operating temperatures. When the correct loaded cartridge length is set, lock this die in place; your volume loading can begin.

What about bullets with cannalure or crimping grooves? The bullet should be set into the groove. Those most likely are FMJ mil-spec bullets that we decided not to use, remember? Shorter rounds are ok with lighter bullets but Never-Ever go beyond 2.800" unless you are an expert hand loader loading into the lands for velocity and accuracy reasons. You run the risk of excessive pressures and more 'bang' than your bucks or knucks can stand. FYI, most accurate rounds are seated about 0.005" off the lands but that is not for us here.

CAUTION:

DO NOT place a loaded round with lube on it into your rifles' chamber and fire it, because it will cause another destructive experience. Never, ever, do that. The lube prevents the case from gripping the chamber walls and all the force will be against the bolt face; your face is next--!! Use a safe method to remove case lube in the re-loading steps such as paper towels moistened with rubbing alcohol.

The last step is to visually check each and every round for proper primer seating, crimp on the bullet and heft it to see if you forgot the powder. Store it in sealed containers until ready for use and never ever for any reason allow WD-40 or similar high volatile lubes or solvents to get anywhere near the primers which will be inerted by that exposure. Fingertip oil will do the same fatal job. People have died from this inert primer problem. Carefully chamber your first dry round with your finger away from the trigger and safety on to verify proper chambering of your product. You are now ready to produce your own ammo supplies after you zero in that load.

To continue our sequence of loading one, firing it and reloading it, let us, for example, take

our (empty) rifle to a 25 yard range along with a rifle rest that absolutely allows for no motion of the rest after the only shot we will take to zero our rifle. With a colminated new rifle scope and new ammo, we are solving two problems at once acting as if every round of our ammo is precious, as well it may be. Secure the rifle on the bags of the rest and take excessive time to get the rifle secure, snug and the level crosshairs pointing at the center of your grid line target. If you ever slowly "squeeeezed" off one shot, make it this one and never move the rifle as it recoils or afterwards. The Caldwell Lead Sled is inexpensive and good. Load it up with weight. Look through your scope without moving the rifle to find the bullet hole. Carefully and delicately, move the internal or external knobs of your scope until the one bullet hole is centered in your crosshairs. You are now zeroed! Eject the one fired round into your hand if possible and keep it clean.

We are now going to reload your single fired round for instructional purposes. Examine your case. Any splits, cracks, bulges or signs the primer is pierced or was the bolt handle hard to lift? If not, your load is safe for that rifle. If your case(s) are all clean they may enter the re-loading sequence but if they are the least bit gritty, sooty or dirty, they must be cleaned to prevent scoring the inside of your expensive dies. A simple pass through the washing machine inside and old pillowcase will suffice to clean the cases if only hot water and detergent are used. Never use ammonia in the water as it will damage the brass. Case tumblers, vibratory cleaners all work well but to produce the most clean cases for the least cost, this is a safe way to go (if Momma is not at home). Drain and dry the case(s) making absolutely certain that all soap and water is gone and dry. Put the case(s) in our reloading blocks and we are ready to begin by either screwing in the resizing die into our single stage press or rotating the tool head to the resize/deprime die.#1 position.

When you examined your cases, you probably did not note that the case has expanded larger in diameter than it was before it was first fired; it has, and we are going to force it back into a smaller size. This forcing process absolutely requires that the case body surfaces have a very light coating of lube on it otherwise the case will stick inside your expensive die and you then have more problems than Momma coming home during the case washing machine scenario—

There are stuck case removal kits that are expensive – these procedures are free. The most cost effective method of lubing cleaned cases is a multiple layer of paper towels soaked with a high viscosity lube like STP and its derivatives from your auto parts store. A little goes a long way; too much will cause your resized case to have "lube dents" in it. A slight slippery feel is just right on each case. I personally also lube the inside of my case necks with graphite to prevent expander ball wear from the high volume of cases processed. Motor mica works well as a substitute but Brownell's and many others sell good products and tools for this purpose. If your paper towels are on the table, you have a mess, if they are inside or on an old cookie sheet, you have invented a case lube tool -- Just don't get caught—

Since this is our first reloading cycle of the expected five re-used minimum case life cycles, we will not address the neck length growth that will happen after about three or four reloadings. FYI the intensity of the loads generates a high gas pressure (about 60,000psi) inside the case which expands to the dimensions of your chamber. Bigger chambers and thinner (cheaper) brass = more expansion of the brass = less uses before it fails by splitting. These suggested loads are low intensity to maximize case life and generate high accuracy; they are not maximum which will shorten case life. We are cold working metal, our case necks, which makes it brittle from the resizing process; therefore, beyond the intended scope of this article but necessary at about five reloadings, is case neck annealing, which heat realigns the metal grain structure @ 650F for longevity purposes thereby increasing case life of good cases to about 12 cycles. A real clue to the end of case life is

loose primer pockets, which you will determine by primer seating feel. Easy seating = loose pocket = bad case. After the spent primer is removed, the pocket should be cleaned.

The reloading process from this point is now almost identical to our original loading procedures with two exceptions: we are first going to resize the case and push out the spent primer and greater attention must be paid to final case lube removal. Load development for accuracy, is repeating the load, fire, measure the shot group reload sequence but now we are firing multiple three shot groups to see if we need to change bullet seating depth for greater accuracy.

NOTE: Handgun procedures are almost identical. Consult the manuals for OAL and specifics.

The final key point is to answer the question of "I have blithered and dithered and now there are no bullets—"The Book, "The Art of Bullet Casting" is the long answer. The short answer is melted, used wheel weights, a (30 cal) Saeco 311291 bullet mould and time. With some thinking, you can have a reliable 100yd bullet by casting for dire emergencies. Commercial grade pots and ladles may be had now from McMaster-Carr Supply Corp. (hint-hint) and the many reloading suppliers and manufacturers such as Lyman. For full details and help, go to <http://castboolits.gunloads.com/>.

Meanwhile, back in the swamp, the Colonel was casting his bullets—you did see the movie The Patriot by now, didn't you? A good mold is a good investment, but skip the electric furnace unless you think you will cast regular large quantities; outdoors before trouble happens. I happen to know that gas check cast bullets will foul your bore less and give higher velocities and accuracies. A great hobby with commensurate satisfaction is to teach the next generation(s) how bullets were and can be made, then used safely. All survival skills will be at a premium in an emergency; shooting is but one of them. Even sailors can contribute their knowledge of the self-dogging Swedish Watch System so that when you need to set a "home defense watch cycle," this variant of the 4-on-4-off can be used to shorten the "hour of the wolf" with multiple persons guarding your survival unit (the family) during the time of most likely (home) attack: 2am to 4am.

No attempt is made to cover every contingency or possibility, rather, an in-depth view of what, why, with what and how has been shared with you in hopes that some new insights will be given into survival mode reloading and what you must do now to use that insight. Final hint: Stock up now!! Reloading manuals are required to complete your knowledge and understanding but remember rifles are like wives, even ones the same size, (no, we are not getting into Magnum discussions) are different and like different food. All of the ingredients listed are about as non-controversial as hot dogs are for kids but just look at your grocery store to see how many different types 'dogs are sold.

Do not substitute different weights of powder or bullets from what is specified unless you are in an emergency. Change one factor and you must change something else. ALWAYS Consult reloading manuals for specific differences and changes.

If you are not familiar with ballistic tables and the vital importance of a 25 yard impact height, get familiar now. The PDA world is upon us and simple and inexpensive ballistic software from Pesja Ballistics, Pesj@sprintmail.com is just the ticket to field computations of zeros at various yards with a base 25 yard number. You do not need a set of chrony screens to measure MV with the tables. The actual impact heights at accurate distances are vital so get a 25 yard height and a 100 yard impact height without sight changes and you are off and running.

Horus Vision, www.horusvision.com, and others have good PDA data that should be integral parts of your survival rifle planning and actual uses now. Make a range card and tape it to your rifle after you have determined where it shoots with what loads; under stress you will have one less thing to remember and greater confidence of first round hits. The computer program results are predictions; your actual results are the results that are placed on the cards. Where you live determines what your zero distances should be as Wyoming has open long range shot potentials but Cleveland is another story. Police use a 100 yd urban zero, some Army uses are for a 200 yd zero, my preference, Silhouette shooters may use a 300 yd zero and the Corps prefers a 600 yd zero for its snipers. Zero according to the distance likely targets will appear. A struggling musician once asked a fellow bus passenger how to get to Carnegie Hall. The answer was "practice, practice, practice." How do you get to be a reloader and then a good shot? ..., ...,

If we are to be faced with a hoard of barbarian types coming at us and our families, isn't it better for us to have the equipment and skill to hit them at 500-600 yards before their typical Tech 9's and AK's can be effective? Aim first at the long gun carriers as they probably have not spent the practice time improving their long-range skills and do not have the proper ammo/twist combos and skill to score hits on you. It is far easier and safer for you and your loved ones to keep the hordes hunkered down at a safe distance rather than rising a lucky shot by them at close ranges. Never give them an equal or fair chance to take you out. Unless you plan to become an expert with a 12ga and 00 or 000 buck at long range, your best chance for sustained survival requires the same answer as the musician: practice, practice, practice. Loading your own ammo gives you the ability to become self sufficient and more importantly self proficient. I hope this article has given you some good tips and ideas; put them into PRACTICE!!!

SPECIFIC SUGGESTIONS:

1. LOADING MANUALS: Sierra, Nosler, Hogdon, Speer
2. Presses, basic, turret, high accuracy, high volume:
 - a. Lee Hand press, noting more basic and cost effective
 - b. Redding cast iron single stage, "Boss"; long life
 - c. Lyman Crusher 2 : low price
 - d. RCBS
 - e. Redding turret T-7, accuracy with speed & life cycle value
 - f. Bonanza Co-Ax; highly accurate, can't use Redding Comp. dies
 - g. Dillon Square Deal, pistol/revolver: basic faster production
 - h. Dillon 550, rifle only; not to be used for pistol, double charge potential
3. Dies:
 - a. Lee collet
 - b. Lyman M neck expander die
 - c. RCBS carbide
 - d. Dillon carbide rifle set: has built in stuck case remover
 - e. Forster
 - f. Redding
 - g. Redding bushing, competition; the finest
4. Case length gages& trimmer
 - a. Forster
5. Powder Measures:
 - a. Lyman #55; used by me for a very long time
 - b. RCBS Uniflow
 - c. Redding BR-30; high quality

6. Scales:
 - a. RCBS RC130
 - b. Lyman Pro 500
7. Rifle bullets:
 - a. Nosler Ballistic Tips; most versatile, Hornady polymer tips
 - b. Barnes XLC; 80% weight retention, great long range
 - c. Sierra moly MK in bulk boxes, cleaner bores
8. Pistol bullets
 - a. Speer JHP: tested in smg's, polymer semi-autos & revolvers
 - b. Remington
9. Rifle powder:
 - a. H-4895, 8# kegs
 - b. IMR-4895, 8# kegs; now owned by Hogdon
 - c. N-530 only sold in 2# bottles
10. Handgun powder
 - a. Unique
11. Loaded Rifle Ammo:
 - a. Black Hills new and remanufactured; the best, except your own!
12. Advice: equipment mfgs., reloading web pages- all free and accurate.

QUICK REFERENCE LOAD DATA RIFLE, GAS OR BOLT

Cal. Bullet Wts Charge weight Powder Primer Total length

30-06 173/175 46grains 49.0Max H-4895 Large Rifle 3.340"
 165/168 47 gr 52.0Max H-4895 Large Rifle 3.340"
 147/150 49 gr 53.0 Max H-48-95 Large Rifle 3.250

.308/7.62 X 51mm

173/175 40.0gr 41.3 Max H-44895 Large Rifle 2.801 max
 165/168 40.5gr 43.5grMAX H-4895 Large Rifle 2.801 max
 150/155 41.0gr 47.3grMax H-4895 Large Rifle 2.801 max
 45.5 gr MAX 1919 Browning

.223/5.56mm: NOTE: 2.244" MAX LENGTH FOR MINI-14'S chamber and magazines

50/52 25.9GR 26.7grMax H-4895 Small Rifle 2.244"
 55 26.0GR 26.2grMax H-4895 Small Rifle 2.244"
 MilitaryM193 (Nam) 3,250fps! 55gr suggested Perp stopper
 M855 (longer range) 60-62gr 3,150 fps
 63gr 25.3 gr MAX
 PISTOL OR REVOLVER

.45ACP 230 gr. 6.4gr UNIQUE LARGE PISTOL 1.270"
 200gr 7.0gr UNIQUE LARGE PISTOL 1.155"
 185gr 7.5gr UNIQUE LARGE PISTOL 1.185"
 Gold Dot: 7.9gr MAX about 1.200fps!!!
 .357 157gr 7.9gr UNIQUE CCI-550 1.585"
 125gr 9.0gr UNIQUE CCI-550 1.585"
 110gr 10.0gr UNIQUE CCI-550 1.585"

.38 158gr 5.9gr UNIQUE CCI-500 1.450"
147gr 6.4gr UNIQUE CCI-500 1.450"
125gr 6.5gr UNIQUE CCI-500 1.450"
. 110gr 6.6gr UNIQUE CCI-500 1.450"

EMERGENCY PRIMER INTERCHANGES

RIFLE: Any large rifle size primer brand and type may be interchanged. Specifically, Match, Bench Rest and different brands may be mixed and used. MAGNUM PRIMERS WILL GIVE HIGHER PRESSURES BUT ONLY IN EMERGENCIES MAY BE USED WITHOUT TESTING. The same applies for Small Rifle sizes and brands.

Emergency Powder Interchanges

Rifle: In survival situations, H-4895, IMR-4895, Reloader 12, and N530 may be substituted/interchanged for the above rifle loads only. In addition, N530, IMR 4320 and Varget powders may be used at a 5% greater weight in survival emergencies only.

!! ALWAYS CONSULT RELOADING MANUALS FIRST !!

Frugal Tips:

Case lube:

Go to Wally World and get their inexpensive bottles of baby gel. A water soluble case lube that works well and goes a long way.

Saving cases:

- 1.If the primer pocket is loose, a swager is sold that will tighten the pocket.
- 2.Buy once fired military cases with two cautions:
 - A. The primer is crimped and that crimp must be removed! In a pinch, a screwdriver may be used. I use a Dillon swager tool.
 - B. Most probably the case was fired in a machine gun with loose headspace which stretched the case. I use a Dillon carbide resizing die with a one pc depriming pin that is tough! You still must lube the cases! The case will need to be trimmed and de-burred.
3. If you have a gas gun and a bolt gun of the same caliber, do not interchange brass unless in an emergency. The reason is the brass will, after about three firings, expand to full conform to the specific chamber. After 3-5 reloadings and cold working the brass, it becomes hard and will split unless it is annealed. Neck size your bolt gun reloads for greater life.
4. If you plan to build a legal semi-auto 1919 Browning belt feeder in 7.62 Izzy form, short rounds, below 2.700" will not feed reliably so make them the proper length of 2.800-2.805". <http://1919a4.com/forums/index.php>. Foreign loads will not feed reliably; too short' belts or links.
5. If you load to the accurate load level suggested by Hodgdon, or Sierra, <http://www.hodgdon.com/>, not the max level, you will increase case life.

Bullets:

6. Not all bullets of the same description and brand are of the same length! Manufacturing tolerances of the nose, meplat, vary widely. To set your dies, grab two bunches of 10 bullets. Measure each one and find the longest one. This is your master round for a semi-auto / gas gun load to fit the magazine; the critical length. A bolt gun is not that length sensitive excluding 300wsm.
7. A crimping groove may not be made at the proper length for a semi-auto! It is not necessary to set the bullet into the crimping groove if a Lee crimping die is used as it grips very tightly if properly adjusted.

PRIMERS:

8. In 2009 they are in very short supply but Wolf brand may be available; they are reliable-just a tad on the outer limits of diameter tolerances.
9. Additional help: go to <http://www.handloadersbench.com/>. If you need specific questions

or help, send me a pm; I am here to help- free.

10. Decide upon your threat factors: How many, what distance, how armed, what time of day are the basic questions; Answer those for yourself then prepare accordingly. For example a group of rural perps at 800 meters. AR? No! .30 cal time! In your room? Glock time--Know your drops and ranges.

Laus Deo Overbore 