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LSA QUARTERLY

The Louisiana Shooting Association

Contents

- ANNUAL MEETING Page 3
- Part 2 Hunting Rifle for 21st Century Page 4
- Meet Your Board of Directors (ongoing) Page 8
- The Heir of the Hunt Page 8
- A New Match Rifle in 6mm Hagar Page 10
- 2012 Pistol Championship Report Page 19

On the cover: LSA President, Dan Zelenka with a 225 lb. 9 point killed near Monterey, LA with a 316 yard shot using a 6.5x55 caliber custom Ruger.

The Annual Meeting of the Members and Election of the Board of Directors

Door Prizes!

Door Prizes! will be held on

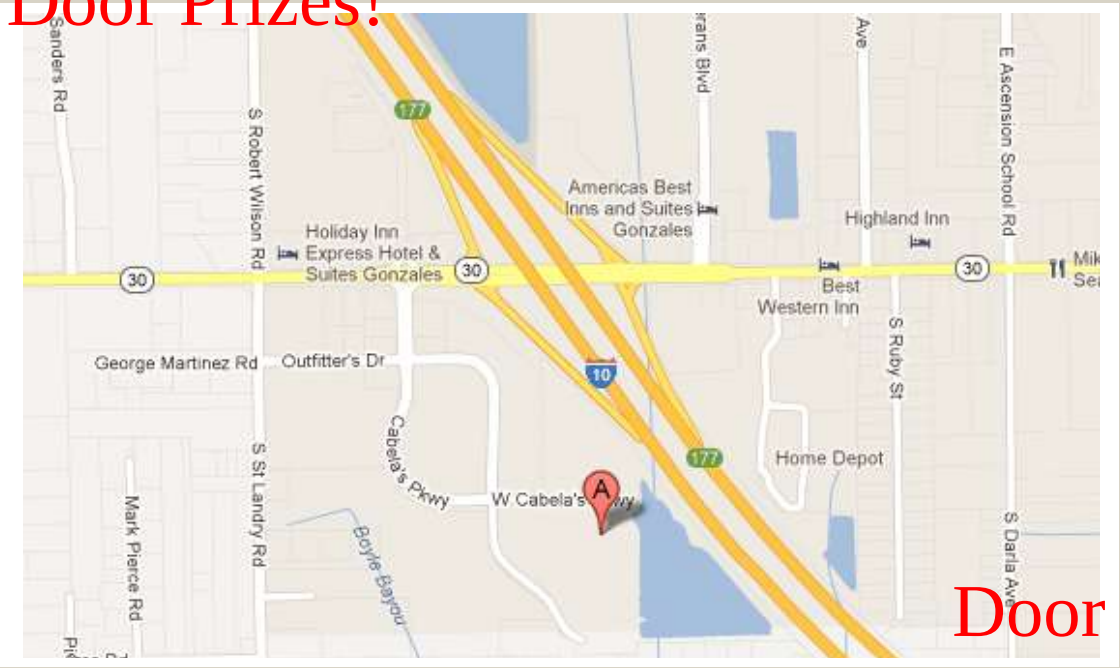
Sunday, February 17, 2013 at 9:30 AM

at

Cabela's
2200 W. Cabela's Parkway
Gonzales, LA 70737

Door Prizes!

Door Prizes!



Door Prizes!

Part 2: A Hunting Rifle for the 21st Century in 6.8 mm Remington SPC

By

Jay D. Hunt, Ph.D.

The loads mentioned in this article are safe in my particular rifle, but should not be used without first reducing the load in your rifle, and working up to maximum loads. Check your loading data against a reliable source before attempting to work up a load.

In Volume VI No. 2 (April - June 2012) issue of the *LSA Quarterly*, I described the new hunting rifle that I built in 6.8 Remington using the AR-15 platform, and promised to write a follow up article once I had gotten some more experience with the rifle, particularly its effectiveness on game. I also told you in that original article that LSA President, Dan Zelenka had also built a new hunting rifle in 6.8 Remington using the AR-15 platform, but that he had taken a very different approach to his hunting rifle.

I just got home from three days of hog hunting in Gonzales County, Texas, and now have some experience to report. Dan has likewise taken game with his 6.8 Remington. But, before we get into the performance of the round, let's first talk a bit about the two rifles.

My rifle (top) and Dan's rifle (bottom) demonstrate the versatility of the AR-15 component system. Dan's rifle was built on a carbine-length barrel that is free floated under the tube style hand guard. The skeletonized buttstock also significantly reduces the weight of the rifle.

In the previous article, I described, in detail, how I built my rifle. Briefly, I built my 6.8 Remington rifle around a Bison Armory stainless steel 20 inch barrel, with an SPR fluted profile and rifle length gas system in 1" in 11" (1:11) twist with a black Cerakote finish. The barrel weighs 2.4 pounds. I also equipped the rifle with fancy walnut furniture, which, by the way, I deeply regretted as I was stalking pigs over about 6 miles of walking. The walnut furniture sure looks good, but it added a lot of weight to the rifle making it a much better stand rifle than still hunting rifle. My rifle with a Leupold Rifleman 3-9X40 mm scope attached weighs 10.7 pounds.

Dan's much lighter rifle is far better for stalking and still hunting. His rifle was built around a Palmetto State Armory stainless steel 18 inch light profile, 6.8 SPC II chambered 1:11 twist barrel with a graphite black Cerakote finish weighing in at a spritely 1.75 pounds. In keeping with his goal of building a light weight carbine, Dan installed a Clark Custom Guns carbon fiber free float handguard and an Ace skeleton ARFX buttstock. The overall weight of his rifle with a Nikon 3-9X40 mm scope in a Burris P.E.P.R. mount is only 7.2 pounds. Although light, the rifle is capable of extremely good accuracy and leaves nothing on the table concerning effectiveness on game. If you are considering building a lightweight, stalking rifle, this is the way to go.

After considerable research by Dan, and discussions between the two of us, Dan and I decided that the Barnes 95 Gr. Tipped Triple Shock (TTSX) bullet would yield the ideal trajectory along with outstanding terminal performance on game. Both Dan and I independently worked up loads with this bullet. While Dan's rifle loved the Barnes 95 Gr. TTSX, my rifle hated it. In the previous article, I covered in great detail my attempted loads with that bullet, and I'm sorry to report that continued load development resulted in me abandoning the bullet. It is not at all clear why his 6.8 SPC II chambered barrel with a 1:11 twist likes the bullet, whereas my 6.8 SPC II chambered barrel with a 1:11 twist hates the bullet.

Itemized List and Associated Costs for Dan's Rifle

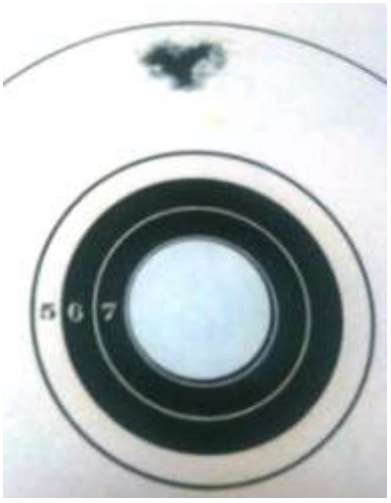
Item	Supplier	Cost
Barrel, lower parts kit, upper parts kit and gas block	Palmetto state Armory	$ 336.24
Bolt carrier and butt stock	PK Firearms	$ 210.00
Trigger (Geisselle SSA-E)	White Oak Armament	$ 210.00
Fore end	Clark's Custom Guns	$ 105.00
Gas tube	White Oak Armament	$ 15.00
Magazines (2)	Brownell's	$ 86.00
Crush washer		$ 3.00
Cerakote finish	Ritten Precision	$ 40.00
Upper and lower receivers		$ 225.00
Cost to assemble		$ 100.00
		$ 1,330.24

Dan suggested that I try the Nosler 110 Gr. AccuBond bullet, as he had heard good reports of terminal performance with this bullet from other hunters. Luckily, my rifle took to this bullet, and typically put the first two shots from the rifle into the same hole, with the third shot falling about one inch from the two-shot group. This pattern is of note, as I had previously not paid any attention to the placement of each shot in the previous groups. It is certainly possible that my rifle patterned the same way with the Barnes 95 Gr. TTSX bullets. Because the barrel on my rifle is not free floated (unlike the barrel on Dan's rifle), the heating of the barrel after two shots may move the point of impact resulting in larger 3-, 4-, or 5-shot groups. Interestingly, Dan's rifle did not shoot well with the 110 Gr. AccuBond bullets.

6.8 Remington Loads Developed for Hunting Hogs and Deer

Bullet	Powder	Charge Weight (Gr)	Muzzle Velocity (FPS)	Group Size (in) Jay's Rifle	Group Size (in) Dan's Rifle
95 Gr Barnes TTSX	RL-10X	29.5	2675 ± 09		0.25
110 Gr Nosler AccuBond	A2200	26.9	2553 ± 21	0.16	
		27.5	2599 ± 14	0.29	
		28.0	2628 ± 11	0.22	
		28.6	2706 ± 14	0.10	

Dan's load used Silver State Armory (SSA) brass and CCI 450 primers. Jay's loads used SSA brass and Remington 7½ primers.



Accuracy is excellent from Dan's rifle with the Barnes 95 G. TTSX.

The Barnes TTSX and the Nosler AccuBond are two very different hunting bullets. The newer design of the TTSX bullet is based on Barnes' original TSX bullet. In 2003 Barnes introduced the triple shock (TSX) bullet. Following feedback from hunters, Barnes improved the TSX by adding a streamlined polymer tip, resulting in the Tipped TSX. The bullet has a 100% copper body with multiple rings cut into the shank. The added polymer tip boosts ballistic coefficient and improves long-range ballistics. The tip and a nose cavity of the bullet

provide even faster expansion than was realized from the original TXS design. Terminal performance boasts complete penetration, near 100% weight retention, and four razor-sharp cutting petals that double bullet diameter. The TTSX creates tremendous internal damage from instant expansion, deep penetration, and quick kills.

Released in 2001, Nosler's AccuBond bonded core bullets deliver expansion and penetration with outstanding weight retention at all normal hunting velocities and ranges. The tapered, highly concentric bullet jacket is constructed from gilding metal that produces minimal fouling compared to most bonded core bullets that use pure copper jackets. The jacket is bonded to a lead alloy core that is engineered for balanced expansion. The bonding process eliminates component separation, resulting in 60-70% weight retention. The AccuBond bullet features a white polymer tip that prevents deformation in the magazine, boosts aerodynamic efficiency, and initiates expansion. This bullet also features a precisely formed boat tail that serves to reduce drag and provide a more efficient flight profile for higher retained energy at long range.

The 95 Gr. TTSX entered the chest on the left side, hit the bottom of the spine, and exited through the right chest wall. The damage to the off-side ribs is significant.

Dan drew first blood with his new rifle on a nice, big bodied doe that weighed 140 pounds. The doe was hit in the left chest by the 95 Gr. TTSX at 162 yards, and dropped in her tracks. With a muzzle velocity of 2675 FPS, the bullet was traveling at 2193 FPS when it hit the doe with 1014 ft-lbs of energy. The bullet entered through the left chest, nicked the spine, and then exited on through the right chest. The impact with the spine certainly contributed to the deer dropping in its tracks. Damage to the right chest area was dramatic, testifying to the rapid expansion of the TTSX bullet.

The 110 Gr. AccuBond entered the chest on the right side near the throat, hit the bottom of the spine, and exited on the extreme left rear of the rib cage. The large exit wound can be observed on the outside of the ribcage.

I took a nice 80 pound boar on my recent hunt in Texas. The shot was made from the standing position at 60 yards while the pig was staring straight at me. Although I was aiming for a head shot, I missed slightly to the left, causing the bullet to enter on the right side of the chest through the protective cartilage shield near the hog's throat. The extreme angle of the bullet caused the bullet to hit the spine, and exit well back on the right side through the ribs. Like Dan's doe, the pig dropped in its tracks probably as a result of the bullet impacting the spine. With a muzzle velocity of 2706 FPS, the bullet hit the pig at 2558 FPS with 1598 ft-lbs of energy. There was less apparent damage to the off-side ribs, but the size of the exit hole left no doubt that the bullet had expanded and had plenty of retained weight.

Dan and I are both thrilled with the performance of our rifles to date. Neither of us has taken any long shots on game, although the 6.8 Remington should be effective on light skinned game out to around 300-400 yards, depending on the load. Assuming that a bullet needs at least 1800 FPS of retained velocity to expand, Dan's load with the 95 Gr. TTSX will be effective out to 300 yards, although there is significant bullet drop for a rifle sighted in at 100 yards (Dan's rifle is not sighted in for 100 yards). My load with the 110 Gr. AccuBond will be effective out to 400 yards. These figures notwithstanding, neither Dan nor I are very unlikely to put ourselves into hunting situations where a shot that far is likely with these rifles. Both of us simply have too many tack drivers with much more energy that are the correct choice for long distance hunting shots.

Range	Barnes 95 Gr TTSX			Nosler 110 Gr AccuBond		
	Velocity	Energy	Trajectory	Velocity	Energy	Trajectory
(yds)	(FPS)	(ft-lb)	(in)	(FPS)	(ft-lb)	(in)
0	2675	1509	-1.5	2706	1788	-1.5
50	2520	1340	-0.07	2582	1629	-0.1
100	2371	1185	0	2462	1481	0
150	2226	1046	-1.48	2346	1344	-1.34
200	2087	919	-4.72	2232	1217	-4.25
250	1953	805	-9.96	2122	1099	-8.91
300	1825	702	-17.48	2014	991	-15.51
350				1910	891	-24.25
400				1810	800	-35.37

As a side note to this article, after LSA Member Bruce Record read the article he forwarded to me some of his pet loads for the 6.8 Remington. Keep in mind that I have not shot these loads, so I cannot attest to their safety or accuracy. Please be sure to consult a reloading manual before working with these, or any other loads.

Bullet	Powder	Charge Weight (Gr)
85 Gr Barnes TSX FB	A2200	31.0
	RL-7	29.0
	H4198	28.5
95 Gr Barnes TTSX	A2200	30.0
	H335	30.5
100 Gr Nosler AccuBond	A2200	29.6
110 Gr Hornady HPBT	A2200	28.6
	H322	29.2
	H335	30.5
	RL-10X	29.2
110 Gr Sierra ProHunter	A2200	28.6
	H322	29.2
	H335	30.5
	RL-10X	29.2

From LSA Member Bruce Record, who has a 6.8 Rem with 1:10 twist barrel

The 6.8 SPC AR-15 with an adjustable stock is great for young and small stature shooters. This 210 lb. 9 point was felled with a 174yd shoulder shot.

Don Hackford, Director

Originally elected to the Board in 2011, Don"s term expires in 2014.

Don was born in Buffalo, NY in 1954, but at age 10, Don moved with his family to Virginia. Fifteen years ago, Don moved to Mandeville, LA where he has lived ever since. Don is the father of two: a daughter named Alex and a son named John.

Don is extremely active in the shooting community. He holds NRA Pistol Instructor and NRA Chief Range Safety Officer certification, is a State of Louisiana Hunter Education Instructor, and also is a Civilian Marksmanship Program GSM Master Instructor.

Along with serving on the Board of the LSA, Don has served on the Board of Southeast Louisiana Firearms Safety, Inc (SELFS, Inc.). He has previously held the positions of President and Range Master , and currently severs in the role of Vice-President. SELFS, Inc. is a non-profit corporation that operates the Honey Island Shooting Range near Pearl River, LA. Don is also an active Range Safety Officer at the Honey Island Shooting Range. Don also shoots High Power Rifle competition, reloads, and enjoys Dove hunting.

The Heir of the Hunt

By Ted Torres

"I've been sitting here so many times in my mind that this air has nestled in my conscious as a home of sorts."

As a boy, I ventured north on long anticipated travels with my grandfather each year to make our annual deer hunt. The cold days following Thanksgiving and leading up to the New Year were spent walking the soybean fields and muddy forest floors of the Morganza Spillway. Well, it was a far north trip for a 13 year old anyway. We would hunt amidst some of the biggest cypress trees in Louisiana and I was often awestruck at the size of some of the stumps left behind from trees harvested years before. My love of the outdoors was nurtured and expanded on those trips and many fond memories are reflected on still today when I"m out in the field.

The camp bunkhouse would smell of stale hickory smoke, fresh cooked bacon, and scratch made biscuits generated by my grandfather, known to everyone as Bubba, rising at 4am each morning to get breakfast started. It was a unique aroma, an amalgam of scents that I've come to associate with "the camp". He was the eldest in the hunting club, well respected, and loved. He taught me the rules of hunting through those years, how to make an ethical kill by knowing when and when not to shoot, and how to judge if a deer is ok to harvest. I often refer back to those rules-of-thumb and remember his advice even now when I'm hunting.

Even though Pawpaw Bubba is nearing his mid-nineties now, his love of hunting still has him making a hunt or two when his body allows. As I get older and have my own hunting stories to share, we often find ourselves rocking away in his kitchen reviewing recent and not-so-recent hunts. I live for those talks and have thanked God many times that I've been able to have them so far in my lifetime. Each daybreak I spend in the cold wind watching over a powerline or cutover, and each nightfall that I get to look through covered mesh at a deer trail, brings me back to those days of hunting with him. The smell of a crisp northern wind blowing through tall pines, and the sound of frost covered pecan leaves underfoot all remind me of those boyhood hunts. His recipes, his humor, and his *joie de vivre*, will all be remembered for generations to come for sure, but his love of hunting and the outdoors can only be fully understood and shared by us fortunate few who were privileged to witness him in the woods, a man profoundly in his element.

Ted Torres, Director

Originally elected as an Alternate Director in 2011, and then as a full board member in 2012, Ted's term expires in 2015. He is the chief editor for the LSA newsletter.

Ted was born in Houma, Louisiana and currently resides there with his wife. He grew up hunting with his grandfather, father and brother amid the swamps and bayous of Terrebonne and Lafourche parishes.

His current day job is that of a drilling fluids plant supervisor in the oil and gas service industry. Ted started into mid-range rifle shooting in 2006 and then started competing in NRA High Power. In 2011 he started co-directing F-class and mid-range prone matches at Palo Alto and co-founded the Field Precision Rifle matches also held there. Currently a member of the national Precision Rifle Series, he travels from Texas to Florida to compete in tactical and precision rifle matches held throughout the year.

In 2011 Ted opened Ritten Precision, LLC operating as a gunsmith and rifle builder.

A New Match Rifle in 6 mm HAGAR

By Jay D. Hunt, Ph.D.

Okay, I admit it. I'm getting older. I'm not old, yet, but just older. For those of you who have been through this, you will already know that, for the most part, the change is very subtle. One day you wake up and you realize that you cannot do something you could do before. Right? This same sort of subtle change affects one's shooting as well.

And, now for another admission; I've never been a great prone 600 yard shooter. I have always been an adequate 600 yard shooter (I do hold a Master classification in high power rifle), but it was mastery of the other three stages (200 yard standing slow fire, 200 yard sitting rapid fire, and 300 yard prone rapid fire) that really got me that Master card. For many who cannot master the 600 yard line, the blames lies in the inability to call the wind; however, that was never my problem. In fact, I've called the wind the last four years for the Louisiana State Service Rifle Team at the National Matches at Camp Perry in Ohio.

The sight radius of an AR-15 service rifle is only 20 inches.

For me, the problem lately has been that by the time I get back to the 600 yard line, my older eyes are worn out. The short sight radius of the service rifle, combined with my tired, old eyes, leads to the front sight disappearing sometime around shot eight of the 22 shot string (two sighting shots and 20 shots for record). A disappearing sight is not conducive to high scores, as I tend to string shots high and low because I cannot seem to get the post front sight on my service rifle to be centered in the target mass. For those of you who have never fired an AR-15 service rifle, the sight radius (the distance between the rear sight and the front sight) is a mere 20 inches. And, although in the picture to the right the post and target are both in clear focus, in fact it is quite impossible in real life to get both the post and target in focus. Indeed, one of the most difficult lessons for a high power rifle novice is to convince him or her to let the target blur and to keep the front sight in focus. Although it sounds simple, in reality it is really hard. One's mind wants to see that target, but keeping the target in focus is a sure way to lose points as the front post wanders out of the center of the target.

The sight picture through the rear peep sight of the AR15 with the post front sight centered underneath the target is called a "6 O'clock Hold."

The shooter can either keep the target in focus (left) or the front sight in focus (right). The preferred sight picture is the one at right, which is hard for older eyes.

Now, enter my 50 year old eyes. As evidenced by the racks of "cheater" glasses at any Walmart or pharmacy, it gets harder and harder to see things up close as one ages. That target 600 yards away is a whole lot easier to keep in focus than the front sight that is only 20 inches away. So, my tired, old eyes give up and the front sight just disappears. And, as I work hard to try and see it, the target disappears. I don't mean it fades or blurs. I mean it freaking disappears! So, my new sight picture is a quite out of focus target and quite out of focus front sight. Argh!

A lot of time, money, and effort has gone into shooting glasses and lenses that insert into the rear sight hood of my service rifle (yes, the CMP does allow one to insert a lens into the rear sight hood). Although I'm not giving up on shooting my service rifle, a recent incident at the monthly mid-range prone match at Palo Alto Rifle & Pistol Club convinced me it was time. Time for what? Read on. The format for the mid-range prone match is three separate strings of 22 shots (two sighting shots and 20 shots for record) all from the prone position at 600 yards. To say the least, my first two strings of fire with my service rifle were downright horrible. I was just about to give up and not waste the ammunition shooting the third string

when my good friend, Buck Kliebert, suggested I shoot his Palma rifle. I greedily accepted his offer and fired a very respectable score with a rifle I had never shot before!

Palma is another discipline of high power rifle that involves shooting matches at 800, 900, and 1,000 yards. There are several major differences between a Palma rifle and a service rifle, but for the sake of this article, the main difference between the service rifle I was shooting and Buck's Palma rifle is the sights. The facts are that (1) the service rifle sights are battle sights that have been "improved" for use in shooting matches, and (2) the Palma sights are pure target shooting sights by design. The difference in the sights is dramatic, particularly for anyone over 40 years of age!

After firing Buck's Palma rifle, I immediately decided, "I've got to build one of these." I discussed this with Buck and friends, Bob and Bill Jenkins, who are both high master high power rifle shooters. Bob and Bill both urged me not to build a Palma rifle, but instead to build a "space gun," which would allow me to shoot both the mid-range (600 yards) and long range (800, 900, and 1,000 yards) prone matches, and also to shoot "across-the-course" matches (XTC matches are shot at 200, 300, and 600 yards). Perfect! The three outstanding shooters had solved two problems for me: (1) I would be able to shoot the longer range prone matches and (2) continue to shoot the XTC matches I love so much. Further, the rifle would be built on the very familiar AR-15 platform.

The sights found on the service and match rifles are shown. In panel A, the standard service rifle front sight is shown with a narrow post. In panel B, the modified rear sight is shown with a corrective lens in the hood. Panel C and D show the Stallings Machine "Rightsight." The iris is adjustable. In panel E, the Phoenix side-mount rear sight is shown.

Although it is easy to say, "I'm going to build a space gun," in reality there are so many choices that the process can be overwhelming. In my case, I wanted a rifle that I could use XTC, so many of the decisions were easier. The first decision was to determine which caliber I would use. The path of least resistance would have been to use .223 Remington. I have shot tens of thousands of .223 rounds through my service rifles over the last 15 years. I have a progressive press set up to load short line rounds (200 and 300 yards) with Berger 77 Gr. Match OTC bullets and 24.2 Gr. of Varget with Winchester Small Rifle primers (cartridge overall length, COAL, of 2.260" to fit in the standard AR-15 magazine). I have a Redding .223 caliber competition die set to seat Berger 82 Gr. match BT target bullets over 24.2 Gr. of Varget with Federal Premium Gold Medal Match GM205M primers for the long line (COAL of 2.445" in my service rifle). **[WARNING! Both of these loads exceed recommended pressure limits and the reader must not use these loads without first reducing powder charges by at least 10% and working up to this load. Note that my rifle has a Wylde chamber, and not a SAAMI .223 Remington chamber. These loads are UNSAFE in a standard .223 Remington chamber!]** But, Bob Jenkins recommended I go elsewhere. He recommended the relatively new 6 mm Hagar round. Unlike the .233 Remington, which has been a standardized cartridge for many years, the 6 mm Hagar has yet to be recognized with SAAMI standardization.

The 6 mm Hagar is built on the same case as the .30 Remington and 6.8 mm Remington SPC, with substantially more case capacity than the .223 Remington. The .223 Remington holds 28.8 Gr. of water, whereas the 6 mm Hagar holds 37.5 Gr., an increase of 30% in capacity. This additional case capacity allows one to propel heavier bullets, with their concomitant higher ballistic coefficients, at comparable velocities. As mentioned previously, most XTC shooters choose to shoot 75 or 77 Gr. bullets at the 200 and 300 yard lines. These bullets are designed to allow the shooter to seat the bullet into the .223 Remington case to a COAL of 2.260, which is the maximum length that will fit into the AR-15 magazine. Magazine length rounds are necessary, as there are rapid fire strings at both the 200 and 300 yard lines, and the rules of the game require the shooter to fire these rounds from a magazine.

Pictured from left to right are empty cases for the 6 mm BR Norma, 6 mm Hagar, 6.8 mm Remington SPC, and .223 Remington. The loaded cartridges are (left to right) .223 Remington loaded to magazine length with the Berger 77 Gr. OTC Match bullet, .223 Remington loaded with the Berger 82 Gr. BTHP bullet, 6 mm Hagar loaded to magazine length with the Berger 95 Gr. Hybrid bullet, and 6 mm Hagar loaded with the Berger 105 Gr. BTHP bullet.

In my rifle, I get 2853 FPS from Berger 77 Gr. Match OTC bullets. With the 6 mm Hagar, I can load Berger 95 Gr. Hybrid bullets to magazine length, and get the same velocity. However, the 95 Gr. bullet is 23.4% heavier than the 77 Gr. bullet, with a 14% increase in ballistic coefficient from 0.376 to 0.427. In a 10 MPH full value crosswind (blowing perpendicular from left to right or right to left across the path of the bullet), the 77 Gr. bullet will drift 8 inches (2.5 MOA) at 300 yards versus 6 inches (2 MOA) for the 95 Gr. bullet. While this may not seem like a lot to the uninitiated reader, the “X-ring” on the 300 yard target is only 3 inches wide, and the shooter typically will not have time to make adjustments to his or her sights during rapid fire shooting in which the competitor must fire 10 rounds in 70 seconds with a mandatory magazine change (when time begins, the shooter loads a magazine containing 2 rounds, fires those two rounds, and then changes to a magazine containing the remaining 8 rounds, and then fires those). A small change in wind velocity can have huge implications in one's score with lighter bullets.

The difference is far more dramatic for the “long line” ammunition. All firing from the 600 yard line is slow fire, where each round must be loaded into the rifle one at a time. This allows the competitor to fire long bullets that are seated out much too far to fit into the magazine. My 600 yard load for the .223 Remington uses the Berger 82 Gr. match BT target bullet seated to a COAL of 2.445 inches leaving the muzzle at 2750 FPS. In the 6 mm Hagar, I can drive the Berger 105 Gr. BTHP to 2872 FPS. The 105 Gr. bullet is 28% heavier than the 82 Gr. bullet, with an increase in the ballistic coefficient of 27%. At 600 Yards with a 10 MPH full value wind, the 82 Gr. bullet will drift 31 inches (5 MOA), whereas the 105 Gr. BTHP bullet will drift less than 25 inches (4 MOA). The "X-ring" on a 600 yard target is only 6 inches wide, so, again, a small change in wind velocity can have a huge impact on the location of the shot for small bullets with relatively low ballistic coefficients.

Okay, I see you scratching your head at this point and asking the obvious question. "If heavier bullets and high ballistic coefficients are better, why did you build a rifle in 6 mm instead of .30 caliber (7.62 mm)?" That indeed is a fair question and the answer can be found in the original requirements. I wanted to build a space gun based on the very familiar (to me) AR-15 platform. The AR-15 platform is limited in the length, diameter, and power of the cartridge that it can accept, and any .30 caliber cartridge is going to have

a seriously short case to caliber ratio, and be vastly underpowered. The 6 mm Hagar is an excellent compromise, using a heavier bullet in a standard, necked-down .30 Remington case.

So far, my tests with my new 6 mm Hagar space gun have proven that the Berger 105 Gr. BTHP bullet is extremely accurate using 29.1 to 29.7 Gr. of Hodgdon Varget, and anyone would be more than satisfied to use this load at 600 yards. However, Berger has an even better 105 Gr. bullet than the BTHP. Berger's new 105 Gr. Hybrid bullet has a ballistic coefficient of 0.547 versus 0.493 for the 105 Gr. BTHP bullet. As can be seen in the accompany table, the Hybrid bullet is longer and the ogive has been pushed forward; however, the longer bullet has a longer nose length. These features result in a much improved ballistic coefficient in a bullet of the same weight. Although the bullet promises better long range accuracy, so far my tests have been completely unsatisfactory. I have not been able to find a load that results in acceptable accuracy. For instance, the 0.36 inch spread at 100 yards with the 105 Gr. BTHP would result in an expected spread of 2.2 inches at 600 yards, which is more than adequate to keep the bullet in the 6 inch X-ring. On the other hand, the best accuracy I have achieved with the 105 Gr. Hybrid bullet is 0.80 inches at 100 yards, which would result in an expected extreme spread of almost 5 inches at 600 yards. The extreme spread is almost as big as the X-ring! But, fear not! I will keep on trying until I either get the 105 Gr. Hybrid bullet to shoot well, or I'll accept the slightly lower ballistic coefficient of the 105 Gr. BTHP bullet and use it for all of my 600 yard shooting.

This 10-shot group was fired at 100 yards using the Berger 105 Gr. BTHP bullet with 29.1 Gr. Hodgdon Varget and a GM205M primer in Hornady cases. Note that the single high left shot in the group was called "out" by the author as soon as it was fired.

Part No.	Weight	Design	OAL	Boat tail	Nose Length	Base to Ogive	Bearing Surface	Sectional Density	G1 BC	G7 BC
24428	105	BTHP	1.185	0.195	0.649	0.536	0.341	0.254	0.493	0.253
24433	105	Hybrid	1.292	0.180	0.731	0.561	0.366	0.254	0.547	0.278

Abbreviations: OAL, overall length; BTHP, boat tail hollow point; BC, ballistic coefficient

Range	Velocity	Trajectory	TOF	Drift
105 Gr. BTHP, 29.7 Gr. Varget				
0	2834	-1.5	0	0
100	2649	14	0.1095	-0.64
200	2472	24.53	0.2267	-2.65
300	2301	29.37	0.3525	-6.16
400	2137	27.63	0.4878	-11.35
500	1980	18.26	0.6337	-18.4
600	1828	0	0.7913	-27.52
105 Gr. Hybrid, 29.7 Gr. Reloader 15				
0	2867	-1.5	0	0
100	2698	13.12	0.1079	-0.57
200	2534	22.96	0.2226	-2.35
300	2376	27.38	0.3448	-5.46
400	2224	25.64	0.4754	-10.02
500	2077	16.85	0.6149	-16.17
600	1936	0	0.7645	-24.09

Abbreviation: TOF, time of flight

The Geissele Hi-Speed Match Rifle Trigger breaks at a crisp 2.5 pounds.

So, what are the components used to build the new space gun? The upper assembly was purchased from accomplished gunsmith and high power rifle competitor John Holliger of White Oak

Precision. As of the writing of this article, John was selling his 6 mm Hagar upper assembly exclusively through Creedmor Sports. The upper is built by John with a 28-inch stainless-steel Criterion match barrel with a 1 in 8 twist. I decided that I wanted an even longer sight radius, so I extended that 28-inch barrel by attaching Norm Houle's 6-inch "bloop" tube onto the end of my barrel. The tube assembly has a clamp-on locating ring plus a clamp-on "bloop" tube that positively indexes off a tapered pin that protrudes from the locating ring. The locating ring is light but very strong and absolutely stays put when one clamps it on the barrel end. The "bloop" tube part of the assembly has two clamp-on screws. With the "bloop" tube installed, the sight radius becomes a whopping 37.5 inches (take that 50 year old presbyopic eyes)!

The "bloop" tube is attached to the barrel.

Bullet	COAL	Powder	Charge	Muzzle Velocity	No. Shots in Group	Group Size
Berger 105 Gr. Boat tail Target (#24428) BC_{G1} = 0.493, BC_{G7} = 0.253	2.445	Varget	28.5	2754 ± 12	5	0.37
		Varget	29.1	2792 ± 8	10	0.36
		Varget	29.4	2812 ± 8	4	0.37
		Varget	29.7	2834 ± 10	10	0.36
Berger 105 Gr. Match Hybrid Target (#24433) BC_{G1} = 0.547 BC_{G7} = 0.278	2.445	Varget	29.4	2760 ± 19	10	0.84
		Varget	29.4	2801 ± 11	3	0.75
		IMR8208XBR	28.2	2815 ± 6	3	0.87
		H4895	28.6	2851 ± 4	3	1.47
		AA2495	28.0	2794 ± 6	4	0.77
		AA2520	29.7	2897 ± 9	10	0.87
		Reloader 15	29.7	2867 ± 4	10	0.80
		IMR4320	29.8	2893 ± 6	10	0.91
		BL-C(2)	30.7	2885 ± 18	3	0.99
Berger 95 Gr. Hybrid (#24570) BC_{G1} = 0.427 BC_{G7} = 0.219	2.285	Varget	29.0	2803 ± 17	10	1.25
		Varget	29.0	2751 ± 17	10	1.61
		Reloader 15	29.4	2849 ± 19	10	0.61
		IMR4320	29.4	2848 ± 15	10	1.00
Hornady 87 Gr. V-MAX (#22440) BC_{G1} = 0.400 BC_{G7} = 0.199	2.285	Varget	29.8	2886 ± 5	3	0.91
Hornady 75 Gr. V-MAX (#22420) BC_{G1} = 0.330 BC_{G7} = 0.160	2.285	Varget	31.7	3148 ± 28	3	1.37
		Varget	31.7	3148 ± 28	3	0.89

Abbreviations: COAL, cartridge overall length; BC_{G1}, ballistic coefficient using G1 drag function; BC_{G7}, ballistic coefficient using G7 drag function

Primers Used: Long range loads with 105 Gr. bullets used Federal GM205M

Short range loads with 75, 87, or 95 Gr. bullets used Remington 7 1/2

If the barrel of a rifle is its heart, then surely the trigger is the brains of the entire operation. A good trigger cannot be understated on a match rifle. I've been using the Geissele (pronounced *guys-lee*) service rifle trigger for several years and am ecstatic with its performance. In service rifle competition, the trigger must be able to support 4.5 pounds of weight without "breaking." However, with a match rifle, any safe weight is allowed. I chose to install the Geissele Hi-Speed Match Rifle Trigger in my new rifle. The Geissele Hi-Speed Match Rifle Trigger has a 1st stage of 1.5 to 2.5 pounds and a 2nd stage of 0.4 to 0.9 pounds. Because the trigger is designed for NRA High Power Match Rifle competition with highly modified, match-grade AR-15 rifles, its adjustability, lighter 1st and 2nd stage pull weights, and fast lock time enhances trigger control and accuracy while the full-power hammer spring provides uniform primer ignition for more consistent bullet velocity. In my rifle, the trigger is set at 2.5 pounds, which is about as light as anyone would want for XTC matches where rapid fire strings are shot.

The trigger was installed into an AeroPrecision lower receiver along with a White Oak Armament lower parts kit. I know that many shooters get completely "wrapped around the axel" about lower receivers. DON'T! I have used lower receivers from dozens of manufacturers over the years and I can tell you that I have not found a bad one yet. I have service rifles built on Bushmaster, Rock River Arms, and Armalite lower receivers, and hunting/zombie rifles built on other receivers. If you want to build your own space gun and you already have a lower receiver, use it. If you are planning to purchase one for your project, buy the cheapest alloy lower receiver you can find and build away!

The fully adjustable WOP buttstock was chosen for my space gun.

For the buttstock of my new rifle I chose the excellent White Oak Precision adjustable buttstock for a right handed shooter (yes, they make a left hand version as well). The stock has an easy to use thumbwheel adjustment for the cheek rest, and reference marks machined on the buffer tube and buttplate length of pull rod for repeatable adjustments. The cheekpiece housing and buttplate hanger are aluminum with an anodized finish and the buffer tube, length of pull rod and buttplate backer are made of steel for added weight. The complete assembly, with buffer and spring weighs four pounds. The cheekpiece does interfere with the operation of the standard AR-15 charging handle, so a bolt carrier-mounted handle is necessary. The White Oak Precision upper assembly comes with a bolt carrier-mounted handle. The White Oak Precision Adjustable Buttstock is adjustable for:

A. Buttplate Height
B. Cast-Off/On, 0-2"
C. Length of Pull 9-16" (AR-15 measured from trigger)
D. Buttplate Yaw
E. Camber
F. Cheekpiece Height

Although I specifically chose this buttstock because of the numerous possible adjustments, this has proven to be a double edged sword. The learning curve for getting all of the correct settings in the three positions of XTC shooting (standing, sitting, and prone) has been steep and I'm nowhere near comfortable in all three positions...yet.

Item	Manufactuer	Supplier	Cost
Upper Assembly	White Oak Precision	Creedmor Sports	$ 1,080.00
Bloop Tube	Norm Houle	White Oak Armament	$ 135.00
Trigger	Geisele Automatics	White Oak Armament	$ 279.00
Lower Receiver	AeroPrecision	Brownells	$ 85.00
Lower Parts Kit	Various	White Oak Armament	$ 40.30
Adjustable Buttstock	White Oak Precision	White Oak Armament	$ 425.00
Front Sight	Stallings Machine	Stallings Machine	$ 379.00
Rear Sight	Phoenix Precision	Phoenix Precision	$ 408.00
Rear Sight Base	Lipski	White Oak Armament	$ 64.50
Rear Sight Iris	Gehmann	Champion's Choice	$ 51.00
Anti-glare Tube	Gehmann	Champion's Choice	$ 14.00
			$ 2,960.80

When choosing the front sight, I spoke to Buck Kliebert about what he was using on his rifles. He suggested the Stallings Machine Rightsight. The Rightsight is built around a 30mm front sight tube, and was developed for high power rifle competition to have the best possible sight picture allowed by iron sight rules. The Rightsight comes with an adjustable iris made by Gehmann, and are available in 4 sizes: 2.4 - 4.4 mm, 2.9 - 4.9 mm, 4.0 - 6.0 mm, and 5.5 - 7.5 mm. Given that this was my first XTC match rifle, I called Wayne Fourche at Stallings Machine and discussed my needs. He suggested that I use the 4.0 - 6.0 mm for XTC competition. The adjustable iris is the same as the Gehmann 520 iris in a larger frame made to fit the Rightsight and other 30mm sights. The Rightsight also includes a 30mm, 0.5 diopter Crizal Alize anti-reflective lens, which enlarges the target when one looks through the sight. The base onto which the Rightsight is mounted has 50 MOA adjustment, allowing me to move the front sight when moving from 300 yards to 600 yards, with only minimal adjustments to the rear sight.

The Stallings Machine Rightsight was chosen for its flexibility, as it may be used for XTC, Mid-Range, or Long Range competitions.

For the rear sight, I used the Phoenix Precision rear sight with adjustment knobs that rotate in the same direction as a service rifle sight. For the uninitiated, a brief explanation is in order. The standard match rifle sights adjust just like a rifle scope. To move the impact of the bullet to the right, match sights and rifle scopes are adjusted counterclockwise. However, on a service rifle, to move the bullet impact to the right the shooter would adjust the knob clockwise. For me, who has been shooting service rifle competition for decades, the chose was a "no-brainer." For me, turning the knob clockwise will ALWAYS move the bullet impact to the right. I'm far too old to learn the new trick of adjusting the other way, so I purchased a match sight with service rifle adjustments. The sight was originally purchased years ago by me for a different project, and unfortunately is the side mount version. For the space gun it would have been better to have a top mount sight. To turn the side mount sight into a top mount sight, I purchased a Lipski rear sight base.

The completed rifle weighs 14.8 lbs. and is 57 in. long.

The rear sight comes without an iris so that the shooter can set up the sight as he or she wishes. I chose to install a Gehmann 0.5 - 3.0 mm iris on the sight. The Gehmann system of rear sight irises is based upon their patented fixed-seat iris design constructed with tempered stainless steel leaves attached to the iris body. All irises are built upon this principle, and all additional features connected to and within iris combinations benefit from this principle. As a result, the peephole seen by the shooter is absolutely circular throughout the full range of adjustments. The iris is

very important to the shooter, as it enables the shooter to achieve an extended depth of optical field to clearly see both the front sight and the target picture at the same time. All internal and external black surfaces are manufactured to give absolutely minimal light reflection, which is another cause of sight picture loss when shooting XTC in bright sunlight. And, speaking of bright sunlight, the final touch was to place a Gehmann 35 mm anti-glare tube on the front of the rear sight.

So, now that the rifle is finished, the hard part has begun. As luck would have it, though, the hard part is also the fun part! I'm slowly climbing that learning curve to get familiar and comfortable with the rifle in all three positions. So far, my standing scores have gone up nicely, mainly because the long sight radius is so forgiving as that front sight dances around the target. In contrast, my sitting position is a freaking mess! My scores have dipped dramatically, and will continue to be poor until I find that sweet spot. Finally, my all important prone position is getting better each time I fire the rifle, and it won't be long until I won't have an excuse for a shot out of the 10-ring.

Rick Stewart , Director

Originally elected as an Alternate Director in 2011, and then as a full board member in 2012, Rick's term expires in 2015.

Born and raised in Baton Rouge, Rick has taken full advantage of the "Sportsman's Paradise." Beginning at age 6, he has enjoyed hunting and shooting all his life. In 2009, Rick was off on a new adventure when he discovered High Power rifle matches He began by shooting service rifles, but transitioned from shooting service rifles across the course, to shooting F-class. Rick continues to enjoy his time shooting, but is now the Match Director for the Mid-Range Prone and F-Class matches at Palo Alto Rifle and Pistol Club near Donaldsonville, LA. He also co-created and is Match Director for the Field Precision Rifle matches at Palo Alto, as well as being on the Board of Directors for Palo Alto and serves as their Publicity Officer. Rick's day job is as a Project Manager for Turner Industries Group, LLC in Baton Rouge.

Michael G. Strikmiller, Director

Originally elected to the Board in 2007, Mike's term expires in 2014.

Mike is a Native of New Orleans having graduated from the University of New Orleans with a BS degree in Engineering in 1976. He is presently working as the Marketing Manager of an environmental testing laboratory serving the oil and gas industry.

After graduating from high school, Mike served in the US Navy Submarine service during the cold war era with deployment to the Western Pacific theatre during the late 1960s and early 1970s aboard a diesel fast attack submarine.

Mike got involved in the shooting sports late in life by taking the Hunter Education class and Hunter Instructor course in 1998 at the age of 46, and then going on to Fort Polk for an M1 Garand clinic. That was his first opportunity to shoot a rifle. He got hooked on shooting, so in 1999, he became a Range Office at the Honey Island Shooting Range in the Pearl River Wildlife Management Area . During this time, he also served as a Director for five years. He continues to be a Range Officer today, and is certified as an NRA Range Safety Officer.

Mike is also actively involved in High Power rifle competition since 1999, and has earned the Expert classification. He has gone to Camp Perry to compete in the National High Power Rifle Championships since 2005, and maintains a membership in the South Louisiana High Power Club. He has been the chief Safety Officer for this club for the past five years. Mike regularly competes with the AR15 service rifle, the M1 Garand, the 1903 Springfield, and the M1 Carbine.

Joseph "Jay" C. Meynier III, Member at Large

Originally appointed to the board as a second alternate in 2004 and elected to the board subsequently. His current term expires in 2013.
NRA Life Member.

Jay was born in New Orleans and grew up in Metairie. After graduating from Louisiana Tech University Jay entered active duty in the Marine Corps and served as both an infantry officer and a AH-1W SuperCobra attack pilot retiring from the Marine Corps Reserve in 2004.

In 2009 Jay was graduated from Embry-Riddle Aeronautical University with a Master of Aeronautical Science degree. Currently Jay works for the Department of the Navy at Marine Forces Reserve Headquarters in New Orleans.

It was in college when Jay was finally able to pursue his interest in shooting and competed in his first DCM match in 1984 using an un-tuned AR-15 SP-1 with no spotting scope against tuned M14s with spotting scopes. Of 20 competitors he came in 4th place and won $7.00. There would be a 16 year hiatus from competing until 2000 when Jay reengaged Service Rifle High Power Rifle competition and has not stopped since. Today Jay competes in Service Rifle, Mid-Range Rifle and Field Precision Rifle competition.

2012 Pistol Championship Report
By John Texada

On October 6, eleven shooters from Texas and Louisiana met at the Southwest Louisiana Rifle and Pistol range in Holmwood, Louisiana to compete for the 2012 Conventional Pistol Championship. MA Chris Guerro started things off winning the .22 Match with an 872-31. Expert and Sharpshooter classes were combined with EX Paul Sklar winning with 866-30; followed by EX John Hermann with an 857-20. Hermann started his bid for the championship winning the Center fire Match with 850-29, followed by Guerro"s 831-20 and Sklar"s 827-17. With the matches highest two shooters only four points apart going into the .45 Match, Guerro dropped out because of gun trouble. Hermann finished strong shooting another 850-29, followed by Sklar"s 834-17 and Ronnie Touchet with 820-22. Winning totals were John Hermann 2557-78, 2nd Paul Sklar 2527-64, 3rd Greg Hare 2472-56, and Ronnie Touchet (high senior) 2394-50.

Due to the lack of shooting team matches the last few years, we decided to hold a Service Pistol match again this year. Seven shooters attended. Greg Hare started the match with a 161-1 in the slow fire match, John Hermann followed that with a 148-0 and Skip Blanchard was third shooting 135-2. Hermann gained a few points back in the national match course, shooting 246-1 to Hare"s 244-2, and Blanchard again third with 223-1. Timed fire had Hermann with 181-5, Hare 178-2, and Sklar third with 169-3. Carrying an 8 point lead into the last stage of fire, Hare had Murphy jump up and bite him.

Having a dreaded alibi his 148-2 couldn"t keep up with Hermann"s very nice 177-1, giving Hermann the win with 752-7. Hare finished second and Louisiana Resident Champion with 731-9 and Skip Blanchard was third with 627-5.
Next was the EIC leg match. Distinguished Greg Hare took the Gold shooting 261-4. John Hermann took Silver and 6 points with 240-1 and Paul Sklar was Bronze shooting 219-2.

Last match of the day was the Distinguished Revolver. All last year Rob Hanson shot his revolver in the monthly matches during Center fire. All that thumb-cocking worked with Rob taking the win and his first Distinguished point with 235-0. Greg Hare was second with 217-2, and Skip Blanchard third 208-1.

2013 matches are scheduled at both Palo Alto Gun Club in Donaldsonville and SWLA Rifle and Pistol at the Holmwood range. Dates and contact information below:

Palo Alto- Donaldsonville (NRA short course)
Jan 26, Feb 23, Mar 23, Apr 27, May 25, June 22, July 27, Aug 25, Sept 23, Oct 27:
Skip Blanchard, 3324 Lake Trail Dr, Metairie, La 70003
504-427-0050 skip_blanchard@msn.com www.paloaltogunclub.com

SWLA Rifle and Pistol- Holmwood (2700 matches)
Feb 9, Mar 9, Apr 13, May 11, Jun 8, Sep 14, Oct 5 (Conventional Pistol Championship), Oct 6 (Service Pistol Championship), Nov 9
John Texada, 911 Inverery Dr., Lake Charles, LA 70605
337-477-5277 jtexada@suddenlink.net www.swla-rifleandpistol.org

Louisiana Shooting Association

An NRA-Affiliated State Association

www.louisianashooting.com

Civilian Marksmanship Program 22 October 2012

Affiliate Relations Department
P.O. Box 576
Port Clinton, OH 43452

Dear Sir:

This is the after action report for the Louisiana Shooting Association"s 2012 M1 Garand Raffle to raise funds for our junior marksmanship training programs. Ticket sales commenced on 01 February 2012 and were completed with the drawing of the winning ticket at the 2012 Louisiana State High Power Rifle Championship at the Palo Alto Rifle & Pistol Club in Donaldsonville, Louisiana on 20 October 2012. The winner is:

Chuck Cazenave
[redacted]
Vacherie, LA [redacted]
[redacted]

2012 Proceeds (Expenses) for M1 Garand Raffle

Expense Type	Amount
Advertising	$ (0.00)
Raffle Ticket Printing Expenses	$ (377.71)
Cost of M1 Garand Rifle	$ (200.00)
Proceeds from Ticket Sales	$ 4,359.00
Net Amount for Junior Shooting Programs	$ 3,781.29

These funds are designated exclusively to purchase gear (rifles, scopes, etc.) and to pay match expenses (travel, food, and lodging) for our junior shooters.

Sincerely,

Jay D. Hunt, III
Treasurer

2013 M1 Garand Raffle

All Proceeds Support Junior Shooting Programs in Louisiana

Previous Years' Totals
2010: $3793
2011: $5021
2012: $4359
Our Junior Shooters THANK YOU!

Donations are $1.00 per Chance!

The 2012 Winner was Chuck Cazenave of Vacherie, Louisiana
The 2013 Winner could be…YOU!

To obtain raffle tickets, please complete the form, make a check payable to the Louisiana Shooting Association, and mail to:

Louisiana Shooting Association
c/o Jay D. Hunt, Treasurer
350 Quill Ct.
Slidell, LA 70461

Drawing to be Held on **October 19, 2013**
Winner need not be present at drawing to win
Please $5.00 minimum purchase for mail orders.

M1 Garand Raffle Ticket Request Form

Name _____

Mailing Address

City _____ ST_____ Zip

E-mail Address _____

Daytime Phone Number _____

Please send me _____ tickets at $1.00 per ticket. Total Enclosed $_____

[ ] I would like to save the cost of postage by having the LSA hold my ticket stubs and send a confirmation e-mail that my donation was received.

[ ] I would prefer that the LSA mail my ticket stubs to me.

10:57 AM
12/19/12
Cash Basis

Louisiana Shooting Association, Inc.
Balance Sheet
As of November 30, 2012

	Nov 30, 12
ASSETS	
Current Assets	
Checking/Savings	
Checking	4,026.41
LSA Tower Gold Super Savings	54,745.04
Total Checking/Savings	58,771.45
Total Current Assets	58,771.45
Fixed Assets	
Air Rifles	5,250.00
AR-15 Service Rifles	8,600.00
AR15 Rim Fire Uppers	3,737.60
Gun Safe	848.28
Smallbore Rifles	2,850.00
Total Fixed Assets	21,285.88
TOTAL ASSETS	**80,057.33**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable	377.71
Total Accounts Payable	377.71
Total Current Liabilities	377.71
Total Liabilities	377.71
Equity	
Jr Program	
Donations Received	2,000.00
Equipment	-217.75
Grant Given	-2,481.80
M1 Raffle Ticket Expense	-755.42
M1 Raffle Ticket Sales	4,359.00
Match Fees	-60.00
Raffle Rifle Expense	-200.00
Retained Earnings	11,667.49
Shooting Supplies	-351.52
Total Jr Program	13,960.00
Opening Balance Equity	63,059.74
Retained Earnings	4,218.62
Special Projects	
Amicus Brief	-185.00
Rifle Usage Fee	221.20
Total Special Projects	36.20
Net Income	-1,594.94
Total Equity	79,679.62
TOTAL LIABILITIES & EQUITY	**80,057.33**

The Louisiana Shooting Association

An NRA-Affiliated State Association

Membership Application

Louisiana Shooting Association
c/o Jay D. Hunt
350 Quill Court
Slidell, LA 70461

☐ New Member ☐ Renewal

Name _____

Mailing Address _____

City, ST Zip Code _____

E-mail Address _____

Daytime Telephone _____

Evening Telephone _____

FAX _____

PLEASE PRINT!

It is the policy of the LSA to only use E-mail addresses for official, important LSA communication. You will not receive junk mail, offers, jokes, or any other non-essential e-mails from the LSA, nor will you name, address, telephone number, or e-mail address be shared with any outside party.

LSA Number (Renewal, if known) _____

NRA Number (optional) _____

USA Shooting Number (optional) _____

Shooting Club Memberships _____

_____

_____

NEW POLICY: Memberships will be valid for a period of 1 year from the date of application.

☐ Individual: $10.00/year _____ years

☐ Individual Life Membership: $200.00

☐ Club: $25.00/year _____ years

☐ Junior: $5.00/year _____ years
For those under age 20 only, Date of Birth_____

☐ Club Life Membership: $250.00

Signature _____

Date _____

Membership Amount _____
Convenience Fee (3% only if paying by credit card) _____
Total _____
Make Check Payable to Louisiana Shooting Association

Name of Referring Member, if any (PRINT!) _____

Credit Card No. _____
Expiration Date _____ CV2 _____
Name on Card _____
Signature _____

HAVE AN ARTICLE TO PUT IN THE NEWSLETTER?

I"d like to invite all LSA members to share any article they have written that pertains to the shooting sports or activities. With the growth of the organization over the years we have seen many experts over a wide range of disciplines and backgrounds join the association. We would like to welcome those of you to share your wealth of knowledge. If you have an article that you"d like to submit, please email it to thetedeo25@yahoo.com with "Article for LSA" as the topic.

CREATE AN ACCOUNT

If you joined LSA using a paper application form, please go to the LSA website, http://www.louisianashooting.com and create an account. By doing so, you will greatly assist the Association„s secretary in getting information to you. You will also be sent automatic renewal announcements. You must have an account to join or renew online or to purchase LSA merchandise from the LSA online store.

CMP
Civilian Marksmanship Program

NATIONAL RIFLE ASSOCIATION OF AMERICA
INCORPORATED 1871

LSA
Louisiana Shooting Association