FIREARMS NEWS®

GUN SALES, REVIEWS, & INFORMATION

AUGUST 2019 | ISSUE 16

J&G SALES DELIVERS THE STAR BM 9MM PISTOL

21ST CENTURY PERFORMANCE IN A SURPLUS HANDGUN!

A VISIT TO THE BARNAUL CARTRIDGE PLANT

MOVIE GUNS: *RED DAWN* (1984)

SIG SAUER ASP20 AIR RIFLE, PART 2

ROMANIAN WORLD WAR II SMALL ARMS, PART I

DISPLAY UNTIL 9/2/19
$5.99 U.S. $7.99 Canada
16
0 74470 71202 2
FIREARMSNEWS.COM

FIREARMS NEWS
ROAD TRIP!

The box might be new to you, but the ammo inside isn't. Barnaul Cartridge Plant has been exporting reliable yet economical ammunition to the US commercial market for decades.

WE HEAD TO SIBERIA TO VISIT THE BARNAUL CARTRIDGE PLANT

By David M. Fortier

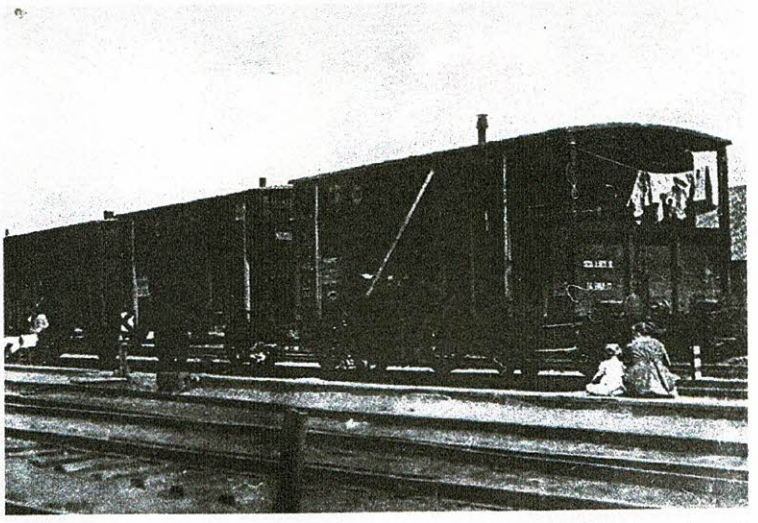
These are great days to be into firearms and shooting. Prices are low, especially when it comes to ammunition, so your dollar buys more. While prices will not stay at these levels forever, it's nice to be able to take advantage of it while we can. "Buy it cheap and stack it deep" are words of wisdom to live by. While you are looking for deals on ammunition, you may notice a name you might not be familiar with, Barnaul ammunition. While the name might be new to you, the ammunition likely isn't. Barnaul Cartridge Plant is one of Russia's largest and most respected ammunition manufacturers. They produce a wide variety of cartridges for military, LE, hunting, competition and recreational shooters.

In years past, commercial ammunition from Barnaul Cartridge Plant was imported into the United States and sold under a few different popular brand names, but not theirs. While Barnaul will continue to work with their longtime US partners, they have recently begun selling ammunition in the US under their own name. This new development was made possible through a deal with MKS Supply, LLC. MKS Supply is a small family run business which has been hugely successful over the last 30 years. They are best known for being the exclusive distributors of Hi-Point Firearms and Inland Firearms. Recently they added the Barnaul brand to their stable to market and distribute here in the US.

Let's take a quick look at the history of this interesting Russian ammunition manufacturer before we delve into what they currently offer. The plant's lineage is linked directly to that of Russia and the Soviet Union. Today the factory is located in the city of Barnaul in the Altai Krai or Altai Region of Siberia. This puts it far from both Moscow and the heavily populated western portion of Russia. The Altai region is beautiful and rich in natural resources, but has very long and very cold winters while the summers are hot and dry. Geographically, the Altai Krai borders the Republic of Kazakhstan, Novosibirsk Oblast and Kemerovo Oblast. During my visit to the factory I flew into the city of Novosibirsk and drove the 144 miles from there to Barnaul.

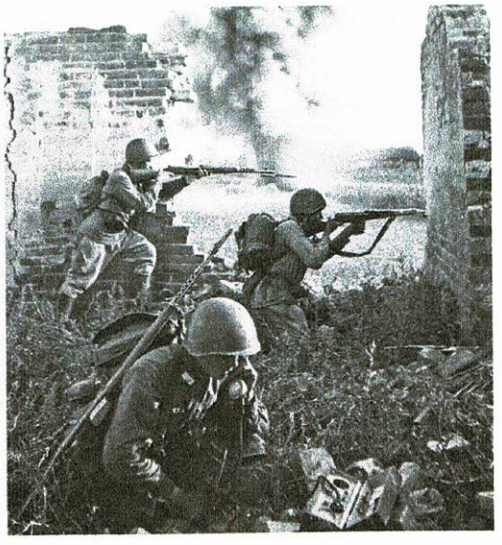
Why is such an important factory, located so far from Moscow and western Russia? Good question. If we were to nitpick, you can trace the lineage of this factory back to the 19th Century, but you have to leave Siberia and travel over 2,000 miles west to Saint Petersburg to do it. Saint Petersburg was founded by

Barnaul Cartridge Plant played a key role during World War II supplying 1.8 billion rounds of small arms ammunition to the Red Army.



When Arsenal P was relocated from Saint Petersburg to Podolsk in 1920 the equipment and workers traveled by simple train cars like these seen here. (Photo courtesy NPZ)

Many Soviet factories were dismantled, shipped east and reassembled to prevent their capture by the Germans in 1941. Factory 17 in Podolsk was shipped to Siberia between October and November 1941. (Photo courtesy NPZ)



The factory produced ball, Tracer, AP and API, for the 7.62x54mmR cartridge during World War II for use in both rifles like these SVT-40s and machine guns.

Tsar Peter the Great, became the cultural capital of Russia and was the city of the Tsars. The Imperial capital was a port city situated on the Neva River at the head of the Gulf of Finland on the Baltic Sea. This location was a sensible place to build an ammunition plant, designated as "Arsenal P", keeping in mind the borders of 19th Century Russia looked very different than they do today.

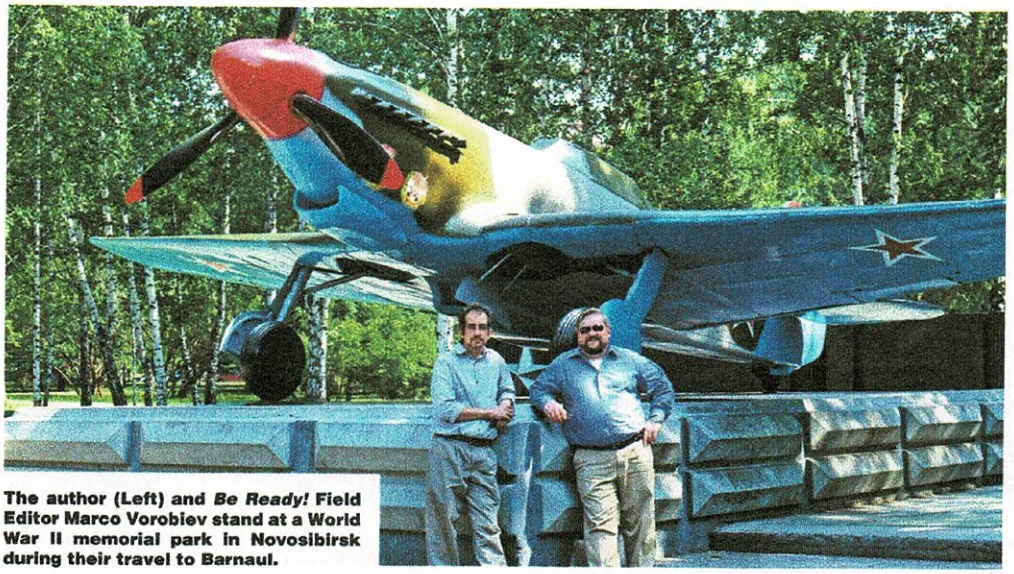
The Saint Petersburg Arsenal P was the first Russian ammunition factory to begin production of 7.62x54mmR ammunition after its adoption. The original round nose 210-grain FMJ load was placed into production in 1891, and blanks for training were produced as well. This was the standard issue load which cut down waves of Japanese infantry during the 1904/05 Russo-Japanese War. Combat experience revealed improvements could be made, and in 1908 the factory began producing the new Spitzer style 148-grain Light ball or "Type L" load. This had superior exterior ballistics to the original round nose load.

Ammunition production was greatly increased and continued throughout the First World War. The Great War had a dramatic effect on Imperial Russia, but the 1917 Revolution signaled her demise. Ammunition production at Arsenal P ceased in 1918 when the country descended into the bloody chaos of civil war with Reds fighting Whites for the very soul of Mother Russia. In 1918/1919 the factory was disassembled and its equipment, engineers and workers began to be moved. Some went to an ammunition plant in Simbirsk. The city was renamed Ulyanovsk in 1924 after Vladimir Ulyanov (better known by the pseudonym "Lenin") who was born there. This is a side note to our story though, what is of interest to us is where the rest of the equipment and workers from Arsenal P in Saint Petersburg ended up.

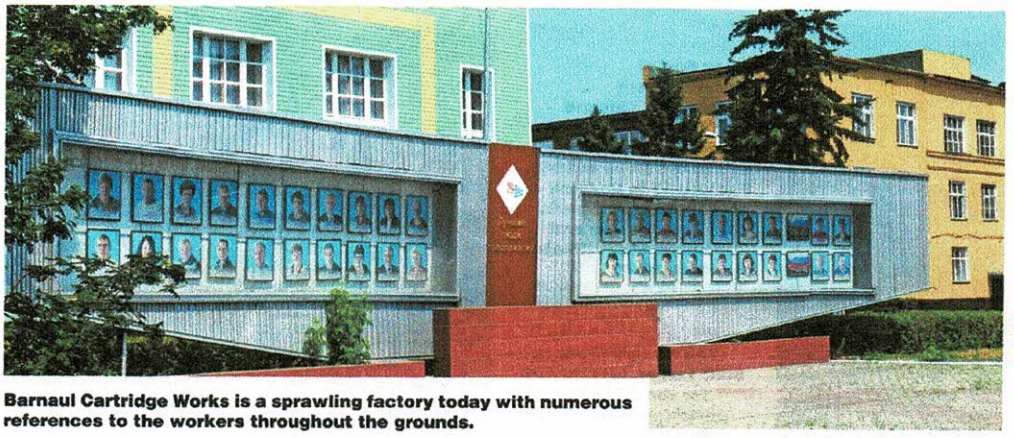
They were shipped by rail a bit over 400 miles to one of the most industrialized cities in Russia at the time, Podolsk. This was the home to Singer's huge Russian sewing machine factory with over 5,000 workers. It was a logical fit as there was a pool of skilled mechanical savvy workers. The civil war disrupted everything in Russia but the factory was operational with its old Arsenal P designation by 1920. By the mid-1920s the Whites were either dead or had fled, and with the Communists in firm control the new Soviet state pushed into the future.

In 1928, the Imperial stain was washed away and the factory was renamed with the simple numeric code of Factory 17. During the Red Army's 1930 modernization program a variety of new 7.62x54mmR loads were adopted to improve its performance and versatility. Many of these were subsequently produced by Factory 17 at Podolsk including T-30 Tracers, B-30 AP and B-32 API ammunition. Production of a new beveled 7.62x54mmR case head replaced the original round one and special purpose ShKAS aircraft machine gun cartridges, including the new PZ exploding bullet, was performed. Production of economical steel cartridge cases also began in the 1930s.

It was Nazi Germany's 1941 invasion of the Soviet Union though which would lead to the entire Podolsk Factory 17 being boxed up and hastily shipped far beyond the invader's reach. As Hitler's Panzers blitzkrieged their way towards Moscow, train cars were loaded in September of 1941 with equipment, documents and people to be shipped to Barnaul. After frantically disassembling their entire factory, their orders were to move it to Siberia, reassemble it and put it back into production to continue the fight against the invaders. The plant's new home would be on the grounds of a linen factory which had been under construction at the start of the war.

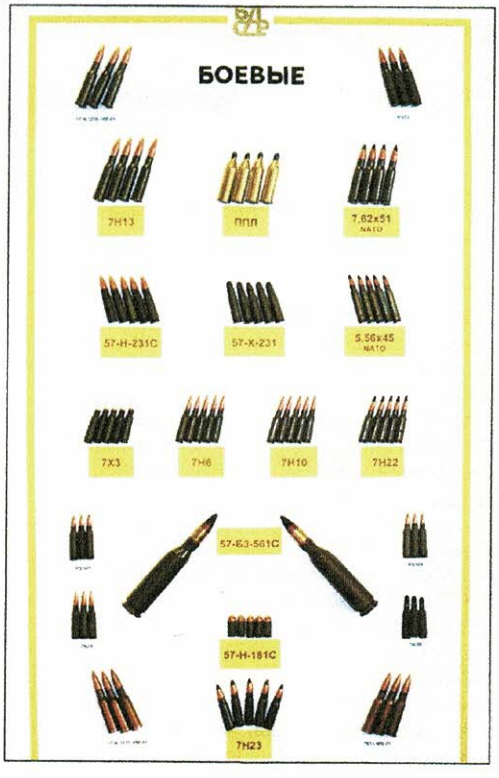


The author (Left) and *Be Ready!* Field Editor Marco Vorobiev stand at a World War II memorial park in Novosibirsk during their travel to Barnaul.



Barnaul Cartridge Works is a sprawling factory today with numerous references to the workers throughout the grounds.

I spied and photographed this company cartridge board on display showing a sampling of the commercial cartridges offered by Barnaul for pistol, rifle and shotgun.



A small number of military cartridges produced by Barnaul, ranging up to 14.5mm, are displayed on this cartridge board.

Equipment, gear, and people began arriving in September and continued into October. The trains were unloaded at all hours of the day and night as fast as possible upon their arrival. The majority of equipment was unloaded by hand, and wrestled through sheer willpower to their new home. As the engineers and factory workers arrived they were housed wherever possible, at first in the homes of Barnaul's citizens. Then as more continued to arrive construction of barracks began. Buildings and barracks were hastily designed and constructed by a team of gas pipe layers from Gorky, military engineer troops, railroad troops as well as the workers themselves.

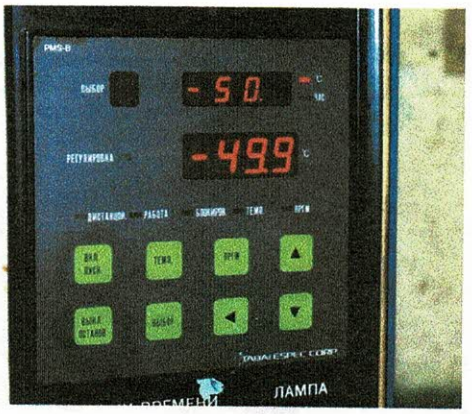
Overseeing this entire project was G. Solomko the plants first Director, as well as head engineers V. Podobryanskiy, I. Esaulov, N. Mayorov and many others. It was a herculean task difficult to imagine today. With winter approaching in Siberia, the machines were unloaded, organized and put back into production as the factory buildings were constructed around them. Initially, workers simply labored with the sky above them out in the elements as they brought production back online. The hours were long and the stress level was high. As the days and weeks went by walls slowly appeared around them, and then finally a roof.

Barnaul Cartridge Plant was the first factory evacuated to Altai Krai to be back in production. Despite the lack of sleep, lack of food, lack of housing, working around the clock without enough lights and facing the elements the workers had the plant operational in just 2.5 months. On 24th November 1941 they sent their first ammunition shipment to the front. This date remains an important anniversary with the factory to this day. A short time later the German advance on Moscow would falter and stall before starting to recede under the blows of Soviet counter-attacks.

During the Great Patriotic War, the plant produced 7.62x25mm, 7.62x54mmR, 12.7x108mm, and 14.5x114mm ammunition in staggering quantities. In 1942 alone production output was increased seven times due to the efforts of the workers. This was a very different war than World War I for the Russian people; it was a war of national survival. With this in mind, the factory workers made enormous sacrifices. 500 teenagers were conscripted and sent to bolster the workforce in January 1942. Men, women and young teenagers worked endless hours in harsh conditions in support of the war effort. Despite a lack of sleep and always short on food they persevered in their new Siberian home pushing to increase their daily outputs. Top performing workers who greatly exceeded their quotas were held up as heroes for the other workers to emulate. In this way the simple men and women, girls and boys of the factory played a role in the war effort,

[Cont. to page 34]

A technician in Barnaul's ballistic laboratory is seen here performing a pressure test on a sample of cartridges during the author's visit.



Ammunition is tested at both temperatures extremes (-58 F is seen here) to ensure it remains within specifications.

As you would expect there was a chess board set up and waiting in Barnaul's ballistic laboratory. The crew was quick to challenge visitors to a friendly game.

[Cont. from page 32]

and the ultimate defeat of their foes. How much of a role? They produced over 1.8 billion rounds during the war. To put this in perspective, this is more than all the Imperial Russian factories combined produced during World War I.

The years following the defeat of Germany and Japan saw many Russian ammunition factories closed down, but not Barnaul. They became a key supplier to the Russian military during the Cold War. Barnaul also produced ammunition for foreign military sales as well as domestic and foreign commercial use. After the fall of the Soviet Union all the Russian ammunition manufacturers fell on difficult times. Government orders ground to a halt and money dried up. One light at the end of the tunnel was the US commercial market. Here they found a huge market whose thirst was never quenched. Building commercial ammunition for American shooters has become an important cornerstone of Barnaul Cartridge Plant's business.

In the early days when Barnaul's ammunition first came available to American shooters and sportsmen there was a definite narrowness to their product line. You could have whatever you wanted as long as it was 7.62x39mm, 5.45x39mm or 9x18mm Makarov FMJ. Today their offerings have expanded to cover many of the cartridges popular with American shooters. In addition to traditional ComBloc calibers they also offer American favorites like the .223 Rem, .308 Win, .30-'06, 9mm Parabellum, .40 S&W and .45 ACP. All of this is new production non-corrosive ammunition priced so the average blue collar worker can afford a fair bit of recreational shooting, plinking and practice with family and friends.

One of the hallmarks of Barnaul's line-up is the use of economical steel cartridge cases. The factory pioneered the use of steel for manufacturing cartridge cases in the 1930s. The use of inexpensive steel allows Barnaul to reduce their costs, price their ammunition lower and pass the savings on to the shooter who gets more time on the range. Non-corrosive Berdan primers are standard.From their rather humble beginnings Barnaul Cartridge Plant has grown to be a major force on the US commercial ammunition market. Every year American shooters consume vast quantities of economical Russian ammunition. The only difference now is the ability to buy it in a proper Barnaul box.

When it comes to handgun ammunition Barnaul offers the traditional favorites. These include 9mm Parabellum, .40 S&W and .45 ACP. Of course they also offer 9x18mm Makarov as well. Full metal jacket projectiles are standard across the pistol ammunition line to ensure reliable feeding in a wide range of handgun models. These loads work well for marksmanship practice, training and recreational shooting.

Barnaul produces a wide variety of rifle calibers with many of these available here in the US. Offers currently available to American shooters range from the traditional Russian 7.62x54mmR, 7.62x39mm and 5.45x39mm to .223 Rem, .308 Win, 6.5mm Grendel with others on the way. Offerings include traditional Full Metal Jacket, Soft Point and Hollow Point projectiles for recreational shooting, hunting, training and self-protection. MKS Supply is slowly but steadily expanding their line of Barnaul ammunition.

To see how the ammunition is produced I traveled to Altai Krai Siberia and visited the factory while poking about in Russia. I had been exploring Novosibirsk, which is a beautiful city and science center of Russia when the opportunity arose to visit Barnaul Cartridge Plant. A short ride later and I was in the colorful city of Barnaul. I found the people here

[Cont. to page 36]

A member of Barnaul's Quality Control team runs a sample of cartridges through a gauge by hand during an inspection to ensure they are within specifications.

Manual inspection of cartridges is a tedious but necessary process to ensure quality is maintained.

***Be Ready!* Field Editor Marco Vorobiev stands with our hosts and members of the ballistic lab on the Barnaul indoor shooting range.**

An example of four FMJ handgun loads available to American shooters (L to R) 9mm Makarov, 9mm Parabellum, .40 S&W, and .45 ACP.

Adopted with the PM pistol chambered for it in 1951, the 9x18mm Makarov cartridge replaced the 7.62x25mm M1930 cartridge in Soviet service.

[Cont. from page 34]

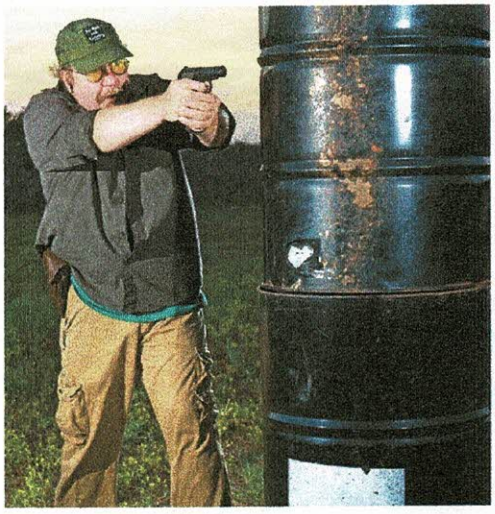
pleasant, the food to my liking and the June weather beautiful. The accommodations in a Tsarist era hotel were simple, as one would expect on an adventure.

At the factory I was assigned a security escort who was a pleasant fellow who said he had been a T-72 tank commander during his Army days. He wanted to practice his English and we chitchatted as I got my first look at the grounds of the Barnaul Cartridge Plant. Now, I have been to many ammunition factories here in North America, the Middle East and throughout Europe. Barnaul though is staggering in size. To put it in perspective there is a complete railroad yard inside the company grounds. The huge size is very much a reminder of the factories World War II origins and Cold War era expansion. Walking around the plant grounds you'll see pictures of workers on display.

After a meeting with management I had the opportunity to visit their ballistics laboratory. Here I had the chance to see how a variety of testing was conducted, ask questions and talk to their engineers. They showed me a variety of the testing they did. This included testing at extreme temperatures where a batch of test ammunition was placed in a freezer at -58 degrees F and left for different amounts of time and then removed and fired to verify velocity and pressure were within specifications. High temperature testing was also conducted in a similar manner. Their ballistics lab was equipped with fairly modern equipment and the staff appeared very well versed on the subject matter. I also noted quite a number of marksmanship trophies won by the crew which were on display in their area. These were shooters. As you would expect, a chess board or two were at the ready in their break room.

During my exploration of the factory I also had a chance to see some of their quality control procedures. Final QC checking is done by hand, the old fashioned way. The conclusion of my visit was at their indoor range where I had the chance to test some of their ammunition. As they were hosting an American, they brought out some .45 ACP and posted targets. It was at this point my security escort decided he wanted to be part of the fun, and wanted to have a friendly competition. Fresh targets were posted, magazines were reloaded and when the last empty hit the ground I had edged him out by a fender.

How well does Barnaul's ammunition actually perform? To find out I gathered together four popular loads in traditional Russian calibers and tested them on my home range back in Kansas.



Barnaul's 9x18mm Makarov load performed very well during testing and provided a fun day on the range with zero issues encountered.

Accuracy of Barnaul's 9x18mm Makarov load was quite good as can be seen by this 5 shot group fired at 25 yards.

9mm Makarov 94-grain FMJ

The 9x18mm Makarov cartridge sits midway between the .380 ACP (9x17mm) and 9x19mm Parabellum in size. Performance wise the 9x18mm Makarov cartridge is closer to the .380 ACP than the Parabellum. Adopted to replace the Soviet's 1930s vintage 7.62x25mm cartridge, the 9x18mm Makarov is a very different design. While the 7.62x25mm M1930 cartridge features a bottleneck cartridge case, small bore .30 caliber projectile which runs at high velocity the 9x18mm Makarov uses a short straight-wall case with a moderate diameter projectile pushed to moderate velocity. The pistol/cartridge combination was

ACCURACY RESULTS

Load	Distance (yards)	Average Group size (inches)
Barnaul 9x18mm 94-grain FMJ	25	2.5

Groups are an average of four five-shot groups fired from rest.

VELOCITY RESULTS (FPS)

Barnaul 9x18mm Makarov 94-grain FMJ	
Average:	1,037
High:	1,074
Low:	1,016
Extreme Spread:	58
Standard Deviation:	16

Velocity readings recorded using a LabRadar Doppler radar chronograph at 1,030 feet above Sea Level at an ambient temperature of 80 degrees F. Velocity expressed in feet per second.

While not as popular as it once was among American shooters, the 5.45x39mm still has a strong following and Barnaul offers a number of loads for them to choose from.

A 1997 vintage Intrac Mk II rifle was used for testing Barnaul's 5.45x39mm ammunition at 100 and 300 yards.

ıntended to be accurate, easy to shoot with mild recoil ınd report. Terminal performance was intended to be ;imilar to 9mm Parabellum FMJ ammunition. The ɔistol is compact and easy to carry and served Rus-;ian troops for over 50 years.

Barnaul's load features a 94-grain round nose bullet vith a flat base. The projectile is .362-inch in diameter ınd features a bimetallic jacket and lead core. The ɔrojectile is loaded into a steel cartridge case. This 'eatures a non-corrosive Berdan primer and a charge ɔf ball type smokeless powder. It comes packed in 50-round boxes with plastic trays.

I began with a visual examination of 250 rounds. This revealed zero problems or cosmetic issues. Prim-ers and projectiles were uniformly seated. The projec-iles do attract a magnet. For testing I selected a Circle .0 marked Bulgarian PM Makarov pistol. Four five-hot groups were fired from a sandbagged rest at 25 ards. While the Makarov is sized similar to a pocket ɔistol I chose to test it at a full 25 yards. Accuracy ɔroved quite good, which is a trait of this design. Four -shot groups averaged a respectable 2.5 inches. Next fired a 10-shot group at 25 yards which measured .2 inches. Velocity averaged 1,037 fps. Running this ɔad through a variety of drills from 5 to 15 yards re-ealed it to have mild recoil allowing fast follow-up shots. Extending the range I was able to score 80% hits firing offhand at a ShootSteel.com silhouette at 100 yards. Overall I was very pleased with this load's performance. It proved accurate and reliable with zero issues encountered.

ACCURACY RESULTS

Load	Distance (yards)	Average Group size (inches)
Barnaul 5.45x39mm 55-grain HPBT	100	2.8

Groups are an average of four five-shot groups fired from rest.

VELOCITY RESULTS (FPS)

Barnaul 5.45x39mm 55-grain HPBT

Average:	2,860
High:	2,897
Low:	2,834
Extreme Spread:	61
Standard Deviation:	26.9

Velocity readings recorded using a LabRadar Doppler radar chronograph at 1,030 feet above Sea Level at an ambient temperature of 80 degrees F. Velocity expressed in feet per second.

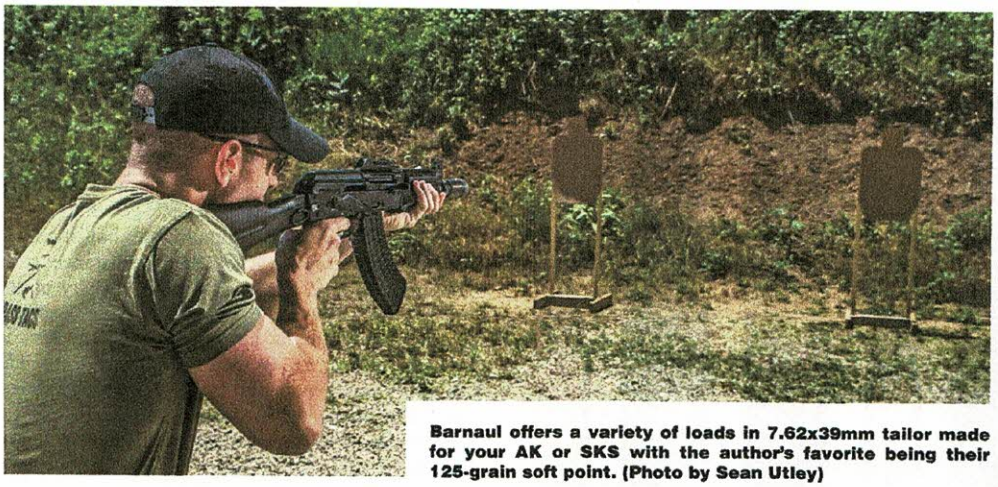
5.45x39mm 55-grain HPBT

Adopted by the Soviet's in 1974 as a replacement for the 7.62x39mm M43, the 5.45x39mm has never achieved the popularity of the cartridge it replaced. Introduced with the AK74, the 5.45x39mm M74 has proven to be an excellent rifle cartridge. It features a tapered case with a thicker rim than the 5.56x45mm NATO, both of which aid reliability. Its case design makes it very well suited for use in automatic weapons. Accuracy is typically quite good and a noticeable improvement over your run of the mill 7.62x39mm rifle. Trajectory is flat and *Firearms News'* testing using Hornady Ballistic Laboratory's Doppler radar has shown the military issue 52-grain 7N6 ball round to have a relatively high Ballistic Coefficient of .352 G1 and .190 G7. Recoil is very mild. The Russian military 7N6 ball round has a steel penetrator core and an air space in the nose. This load is known for its rapid yaw cycle in soft tissue.

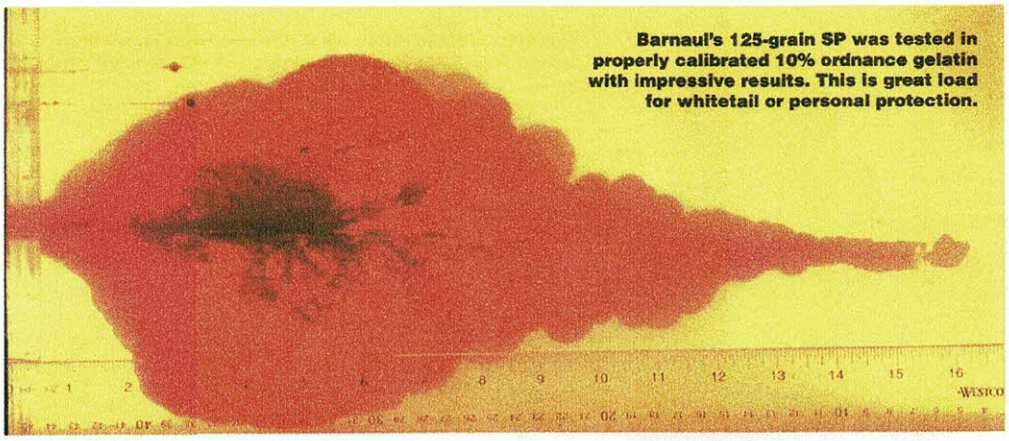
Barnaul offers a number of loads in this caliber so I selected their 55-grain HPBT. The projectile is .221-inch in diameter and features a bimetallic jacket and lead core. Sectioning a projectile reveals a noticeable air pocket in the nose of the jacket. The projectile is loaded into a steel cartridge case. This features a non-corrosive Berdan primer and a charge of ball type smokeless powder.

I began with a visual examination of 250 rounds. This revealed zero problems or cosmetic issues. Primers and projectiles were uniformly seated. Be aware the projectiles do attract a magnet. For testing I selected a 1997 dated Intrac Mk II 5.45x39mm AK74 rifle manufactured in Romania. This was topped with a IOR Valdada 4x24mm M2 scope mounted using an old K-VAR side-mount. I've had this rifle since it was brand new and know it is capable of excellent accuracy at distance.

Accuracy testing was conducted from a rest using a rear bag at 100 yards. My best 5-shot group measured just 2 inches while all four averaged a respectable 2.8 inches. Like I said, this particular AK shoots well. Average velocity for 10-shots was 2,860 fps with a SD



Barnaul offers a variety of loads in 7.62x39mm tailor made for your AK or SKS with the author's favorite being their 125-grain soft point. (Photo by Sean Utley)



Barnaul's 125-grain SP was tested in properly calibrated 10% ordnance gelatin with impressive results. This is great load for whitetail or personal protection.

The recovered 7.62x39mm SP had a retained weight of 106.8 grains and had expanded to an average diameter of .656 inch after penetrating to a depth of 16.25 inches.

BARNAUL 7.62X39MM 125-GRAIN SOFT POINT PERFORMANCE IN 10% ORDNANCE GELATIN

Load	Velocity (fps)	Penetration (inches)	Largest Recovered Diameter (inches)	Retained Weight (grains)
Barnaul 125 grain Soft Point	2,379	16.25	.694	106.8

Load was fired from a 16-inch barrel AK47 test rifle at a distance of 12 feet. Testing was performed at Black Hills Ammunition's Ballistic Laboratory using properly calibrated 10% Ordnance Gelatin.

ACCURACY RESULTS

Load	Distance (yards)	Average Group size (inches)
Barnaul 7.62x39mm 125-grain SP	100	3

Groups are an average of four five-shot groups fired from rest.

VELOCITY RESULTS (FPS)

Barnaul 7.62x39mm 125-grain SP

Average:	2391
High:	2416
Low:	2355
Extreme Spread:	62
Standard Deviation:	20.4

Velocity readings recorded using a LabRadar Doppler radar chronograph at 1,030 feet above Sea Level at an ambient temperature of 80 degrees F. Velocity expressed in feet per second.

of 26.9. Extending the range a bit, this load averaged 7.7 inches at 300 yards. This load fed, fired, extracted and ejected flawlessly with zero problems encountered.

7.62x39mm 125-grain Soft Point

The world's most popular intermediate cartridge, the 7.62x39mm dates from World War II. Developed as an answer to Nazi Germany's 7.92x33mm Kurz, the 7.62x39mm filled the gap between the 7.62x25mm in submachine guns and the 7.62x54mmR in rifles. It quickly replaced the old Imperial 7.62x54mmR in Soviet infantry rifles during the post-war years. Firing a fairly light 123-grain .310-inch projectile at a moderate velocity of 2,330 fps, the 7.62x39mm was well suited for ranges out to 400 meters. Adopted by the Soviet Union, the Warsaw Pact, China and many countries in Asia, Africa and the Middle East it can be encountered around the world. While not noted for its accuracy, it has respectable barrier penetration capabilities and terminal performance when loaded with modern expanding bullets.

Barnaul's 125-grain Soft Point is a traditional expanding load with excellent performance. It is loaded with a 125-grain soft point bullet with a flat base. The projectile is .310-inch in diameter and features a bimetallic jacket and lead core. The projectile was designed for hunting medium size game such as white tail. The projectile is loaded into a steel cartridge case with a non-corrosive Berdan primer and a charge of extruded type smokeless powder. Inside each 20-round box is the familiar paper packet with each layer of cartridges separated by a piece of paper.

I began with a visual examination of 250 rounds. This revealed zero problems or cosmetic issues. Primers and projectiles were uniformly seated. Be aware the projectiles do attract a magnet. For testing I selected a Century Arms produced vz. 2008 rifle. This was fitted with a Precision Reflex, Inc. mount and a red dot sight.

Accuracy testing was conducted from a rest using a rear bag at 100 yards. My best 5-shot group measured just 2.7 inches while all four averaged a respectable 3 inches. I fired one 10-shot group and put nine shots into 2.8 inches and all 10 into 3.7 inches. Average velocity for 10-shots was 2,391 fps with a SD of 20.4. Firing prone off the magazine this load went 10 for 10 on a man-size silhouette at 300 yards.

While this load is designed to expand, I was curious as to how well it would actually perform. So we tested it in properly calibrated 10% ballistic gelatin (per FBI protocol) at Black Hills Ammunition's ballistic laboratory. Test rifle was an AK47 and the distance to the block was 12 feet. Recorded muzzle velocity of the test shot was 2,379 fps. On impact the soft point bullet began expanding immediately as seen by the neck in the block measuring less than one inch in depth. The temporary cavity measured 11.5 inches by 7.25 inches. The bullet penetrated to a depth of 16.25 inches. It had a retained weight of 106.8 grains (85%). It had an average expanded diameter of .656 inch with the

[Cont. to page 40]

Three FMJ offerings from Barnaul (L to R) 123-grain 7.62x39mm, 148-grain 7.62x54mmR and 168-grain .308 Winchester.

Barnaul's 148-grain 7.62x54mmR load performed well when teamed with a Tiger SVD, ringing steel out to 500 yards.

ACCURACY RESULTS

Load	Distance (yards)	Average Group size (inches)
Barnaul 7.62x54mmR 148-grain FMJ	100	1.7

Groups are an average of four five-shot groups fired from rest.

VELOCITY RESULTS (FPS)

Barnaul 7.62x54mmR 148-grain FMJ

Average:	2,763
High:	2,785
Low:	2,732
Extreme Spread:	53
Standard Deviation:	12.4

Velocity readings recorded using a LabRadar Doppler radar chronograph at 1,030 feet above Sea Level at an ambient temperature of 80 degrees F. Velocity expressed in feet per second.

[Cont. from page 38]

widest portion measuring an impressive .694 inch. This is ideal performance for personal protection or hunting soft skinned medium size game.

Barnaul's 125-grain Soft Point is an excellent choice for anyone looking for an expanding 7.62x39mm load. It is accurate, expands reliably and penetrates within FBI requirements. Not only that but it is inexpensive allowing it to be used for practice and recreation just like FMJs. This load has really impressed me and has become my favorite 7.62x39mm load. Why buy FMJ's when for a few dollars more per case of 1,000 you can have an impressive performing soft point load. The only down side to this load is it may be hard to find locally so you might have to order it online.

7.62x54mmR 148-grain FMJ-BT

The 7.62x54mm Rimmed is an old warhorse that refuses to be put out to pasture. Dating from 1891 it has outlived both the Imperial Russian and Soviet empires. Adopted just three years after the French 8x50mmR Lebel introduced the world to smokeless powder, it remains in frontline service to this day. With the exception of the archaic rim, the 54mm cartridge case is well suited for use in auto-loading firearms. It is slightly tapered, has a long neck and is capable of very good accuracy when properly loaded. Various bullet weights and types have been loaded down the decades for use in rifles, various types of machine guns and sniper rifles. Today the standard Russian ball load drives a 148-grain FMJ-BT with a steel core at approximately 2,830 fps. While soldiering on in its 126th year of service, there is no retirement in sight for the old "54R".

Barnaul offers a number of loads in this caliber. I selected their 148-grain FMJ for testing. The projectile is .310-inch in diameter and features a bimetallic jacket and lead core. The projectile is loaded into a steel cartridge case with a non-corrosive Berdan primer and a charge of extruded type smokeless powder. Inside each 20-round box is a paper packet with each layer of cartridges separated by a piece of paper.

Following a visual examination of 250 cartridges I fired four 5-shot groups from a rest at 100 yards using a Russian Tiger SVD. Average group size was 1.7 inches. Muzzle velocity averaged 2,763 fps with a SD of 28.4 for a ten-shot string. This is a great load for shooting through a Mosin-Nagant or SVT-40.

Today MKS Supply is importing huge quantities of new production commercial ammunition from Barnaul to the United States. Inexpensively priced, this steel cased ammunition is excellent for economical practice, training, recreational shooting and plinking. It is also well suited for long term storage. With the prices low due to the current political climate now is the time to "buy it cheap and stack it deep". Personally, would not be able to shoot nearly as much as I do if it were not for the low prices of economical Russian ammunition. FN

CONTACT:

MKS Supply
8611-A North Dixie Drive, Dayton, Ohio 45414
Phone: (877) 425-4867, Fax: (937) 454-0503
MKSSupply.com

A variety of .223 Rem loads are offered such as this 55-grain FMJ-BT load which is perfect for plinking and recreational shooting.

Barnaul's .223 Rem loads performed well when teamed with Brownell's new BRN-180 upper and provided a lot of fun on the range.