

The Los Angeles Silhouette Club

The Bullets of SSK

By: Glen E. Fryxell

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We have learned much over the last century about what makes an accurate, and hard-hitting cast bullet. An extended bearing surface was found to ensure better bullet alignment within the throat, leading to better concentricity of the bullet while it's being engraved, which in turn leads to a more stable, accurate flight. However, this longer bearing surface requires additional lubrication, so the most successful of these designs decorated their longer bearing surfaces with multiple lube grooves, as exemplified by the Loverin designs (which are still among the most accurate cast bullets designs available today). Many cast bullet designs have also featured a bore-riding nose section, the purpose of which is to ride the top of the lands, helping to center the bullet as it's leaving the throat and starting to be engraved. The role of the meplat in crushing meat and opening wound channels has been well-recognized for several generations. Elmer Keith put big, flat noses on his SWC's back in the late 1920's for exactly this reason, and his classic designs have proven themselves as killers of the first order for the last 70+ years. Others have followed his lead by putting a large meplat onto their hunting bullets, most recently would be the wide-flat-nosed (WFN) designs available through Rob Applegate.

SSK Industries (www.sskindustries.com) has been making precision-crafted guns and accessories for over 25 years now. They are perhaps best known for their finely made custom Contender and Encore barrels, available in a wide assortment of cartridges, many of which originated at SSK. More recently, J. D. Jones et al. have also made a name for themselves doing big-bore conversions on Ruger Number 1's. They also do specialty work for law enforcement involving full-auto and suppressed weapons as well.

J. D. is also a globetrotting handgunner, traveling the world over to hunt diverse species in exotic locales, field-testing the products of his shop. He subscribes to a very simple philosophy when it comes to hunting – do whatever it takes to make 2 holes (entrance *and* exit) in whatever critter you're hunting, from whatever angle the shot is presented. This philosophy has been manifested by using high-performance wildcat cartridges, premium controlled expansion projectiles, and heavyweight cast bullets. The key is to make sure that the cartridge does not stress the bullet beyond its structural limitations, and that the bullet has sufficient weight and sectional density to penetrate deeply. This philosophy is blatantly obvious in J.D.'s cast bullet designs. The SSK flat-pointed (FP) bullets are designed to provide maximum penetration capability for their respective cartridges. These heavyweight cast bullet designs aren't needed for light, thin-skinned game like whitetail and pronghorn (and in fact J. D. himself recommends expanding jacketed bullets for these animals), but they earn their keep when the quarry gets bigger, hairier and of nastier disposition. High velocity lightweight bullets can kill spectacularly, but then again, they can also fail spectacularly. A heavyweight, big-bore

FP revolver bullet will do neither, it will just plow through flesh and bone, and leave a big, leaky hole in its wake. If well-placed by the hunter, such a wound channel will reliably result in a dead critter in relatively short order. I can testify that a good sixgun loaded with SSK's heavyweight FP's is a very comforting companion in bear country...

J.D.'s extensive hunting experiences have led to some firmly held convictions about what a good cast bullet for hunting should look like, and these features were incorporated into the SSK mould designs. The design features that are common throughout the SSK line are a healthy meplat on top of a truncated cone ogive, that runs into a short bore-riding nose, and a small forward driving band, a crimping groove (sometimes 2, for different OAL's), and lots of bearing surface, usually with multiple lube grooves. Adequate amounts of bearing surface are a critical component of determining whether or not a cast bullet will be capable of good accuracy. The SSK designs all have more than ample bearing surface (generally .550" to .600"), and all have delivered excellent accuracy in my guns. This extra bearing surface goes hand in hand with the extra bullet weight that was targeted for exceptionally deep penetration. The SSK designs were made in plain-based, bevel-based and gas-checked forms, so the customer could get exactly what he (or she) wanted. J. D. contracted with NEI (www.neihandtools.com) to have these moulds manufactured according to his specifications. Originally, these mould blocks were only available through SSK. The blocks of the moulds were stamped "SSK" and so that's what I've gotten used to calling them, but, in point of fact, they were originally marketed under the "JDJ" label. Some time later, JD sold the rights to the JDJ mould designs to Pete Pi at Cor-Bon (www.cor-bon.com), and the moulds were subsequently available for a short time through Cor-Bon (this is no longer true). Cor-Bon at one point incorporated these bullets into their hard-cast hunting line of ammunition, but this ammo has featured LBT cast bullets for the past several years, which means a shooter must cast his own if he wants to shoot the JDJ sledgehammers today. The internet has made finding the SSK moulds on the used market fairly straightforward, both through businesses specializing in used moulds and via the electronic auction houses.

These are heavy bullets. As with any heavy bullet, they are best served by big, strong guns as their launching pad; the SSK FP cast bullets just seem to go hand in hand with Ruger revolvers and the T/C Contender.



The .41 Magnum - NEI #225B, a PB variation on the .411-300-GC theme.

As is my usual habit for magnum revolver bullets, I tend to cast these bullets out of WW alloy with about 2% added tin, and then water quench the bullets as they fall from the blocks. This gives a bullet that has a hardness of around 16-18 BHN, is not the least bit brittle, and weighs as much as 5% more than the listed linotype weight. I lube these (as I do virtually all my cast bullets) with my homemade moly lube (50/50 by weight of beeswax and Sta-Lube Extreme Pressure Moly-Graph Grease). No significant leading was encountered with any of the loads described.

We'll start with the littlest of the big bores, the .41 Magnum. The SSK bullet for .41 is listed as a 275 grain FP, that runs 286 grains when cast as described above. It is .900" long, has a meplat that measures .275" in diameter (i.e. identical to Elmer Keith's

time-proven 429421). Some .41 Magnum revolvers don't shoot long, heavy bullets like this very accurately, but my Redhawk slept through that particular sermon. It shoots these just fine, usually keeping 12 in about 1 ½" to 1 ¾" at 25 yards (but only if I don't have that second pot of coffee in the morning!). I must confess that I haven't done much load development with this bullet, the first load I tested was 18.5 grains of Winchester 296 over a CCI 350 primer, which delivered 1376 fps from the 7 ½" Redhawk.

It continues to deliver such consistent, accurate performance that I've just stopped looking for other loads (it's not uncommon for the standard deviation for a shot string to be less than 4 fps). Long range plinking with this combination reveals that this bullet at this velocity is remarkably flat-shooting. Some guns are interesting simply because of what they are (the Model 1950 Target, the timeless 1911, the Flat-Top Super Blackhawk); some guns require a little "dressing up" to achieve a similar level of desirability. The Redhawk is not among my favorite revolvers, but the way it shoots the .41 SSK bullet, it's such a flat-shooting, accurate, hard-hitting package, that it's hard for me to ignore!

In terms of handgun hunting cartridges, the .44 Magnum is truly a definitive landmark. Likewise, in terms of handgun hunting bullets, the SSK .44 FP has an equally important and unique niche in handgun hunting history. This bullet loaded into .44 Magnum revolvers has penetrated the thick, tough, pithy skulls of bull elephant, and slain them in their tracks. It has laid low Cape buffalo, bashed the big bears, and slain kudu bulls and tough zebra stallions. While other bullets (e.g. the 429421) may be better suited to deer/antelope sized game, the SSK .44 FP has a truly remarkable history of killing very large and very tough animals. It weighs 323 grains cast of WW alloy (linotype weight is listed as 310 grains). It is .940" long and has a meplat of .275" (which just so happens to be identical to the 429421), and it seems to penetrate flesh and bone like a drilling-rig punches through soil. You know how sometimes different guns get assigned specific tasks? I have a stainless 7 ½" Super Blackhawk that is my "heavy bullet .44" (so I don't have to make sight corrections each time I'm working with different bullet weights). This gun takes to the SSK FP like my 130 lb. black lab takes to a deer's leg bone! Launched with 20.5 grains of W296, this bullet leaves the SSBH at 1274 fps, and 12 shot groups consistently hover right at 1 ½" (as with all of my .44 magnum loads, the spark is provided by the CCI 350 primer). Even after a busy afternoon and hundreds of rounds of this load, the barrel is shiny and clean. The only drawback to this bullet is that when loaded into .44 Mag cases, the OAL of the loaded round is just long enough that most of the common 50 round ammo boxes won't close. That's OK, because a 20 round slip-top box works just fine.



The .44 Magnum NEI #266, a PB variation on the 429-330-GC theme.

The SSK .44 Magnum bullet has a gas-checked big brother. It weighs 349 grains checked and lubed, when cast of WW alloy. It's .985" long and has a meplat of .290" and very similar ogive and bore-riding nose to the lighter .44 plain-based bullet described above. In my opinion, this bullet is too heavy for the .44 Magnum, but would

be right at home in the .445 SuperMag or, in one of my all-time favorites, the .444 Marlin Contender. Over the years, I've learned a few things about loading the .444

Marlin for a 14" Contender: for bullets under 300 grains, it's hard to beat 4198 and



The .444 Marlin Contender (NEI #266, 429-330-GC)

Re 7, for bullets heavier than 300 grains, H322 and AA 2520 are superb, and magnum primers give superior uniformity across the board. My first .444 Marlin Contender barrel was cut with a SAAMI spec reamer, and while it shoots reasonably well, I've never been able to get it to shoot below about 1 ½ MOA on any kind of regular basis, presumably due to the .008-.009" slop between the dimensions of a loaded round and the chamber. A custom reamer was made up with only .003" clearance (which just *barely* cleaned up the T/C .44 Magnum chamber), and a somewhat more civilized leade, and this reamer was used to re-chamber a stainless 14"

Hunter .44 Magnum barrel. The 1 in 20" twist used in the T/C barrels makes them ideally suited for heavy bullets like the 349 grain SSK GC-FP. My favorite load for the SSK 350 grain FP bullet in the .444 Marlin Contender is 42.0 grains of H322, sparked with a Fed 215 primer to give right at 1650 fps. 5-shot groups at 50 yards are typically 1 ragged hole with this combination. This is a very accurate cast bullet, and with 350 grains of bullet metal flying at 1650 fps, topped with the SSK meplat/ogive, it punches a deep straight hole through pretty much anything a hunter is going to steer it towards.

The .45 Colt is one of the truly great revolver cartridges, and the SSK bullet design allows the timeless Colt round to be all that it can be. NEI actually made two closely related designs for SSK, design #320A and design #320B. #320A drops from the blocks at 335 grain when cast of WW alloy (linotype weight is listed as 325 grains), is .875" long and has a meplat diameter of .300" (just for reference, this is almost exactly halfway between the 429421 and the 454424). The 335 grain slug loaded on top of 21.0 grains of Winchester 296 leaves a 7 ½" Ruger Bisley Blackhawk at 1245 fps, and provides exceptional accuracy (12 shot groups of 1 ¼" or less are not unusual). Like its .44 Magnum "little brother", this bullet penetrates like a jack-hammer. It punches through heavy, dense, creosote-saturated railroad ties like they're not even there.



The .45 Colt - (NEI #320A, .451-325-PB)



The .45 Colt - NEI #320B, 451-345-PB.

The somewhat chunkier #320B weighs 349 grains when cast as described, is .895" long and has a meplat of .320" (similar to Elmer Keith's 454424). When loaded on top of 19.0 grains of W296 and sparked with a CCI 350, the 350 grain SSK bullet leaves my 7 ½" Ruger Bisley at 1125 fps. While not quite as accurate in this gun as the 335 grain bullet described above, it nonetheless typically turns in 12 shot groups right around 1 ¾", well inside "minute of Cape Buffalo" (a highly technical concept, mathematically derived from the level of accuracy required to hammer large animals at halitosis distances). With

the additional bullet weight and the fatter meplat, this is an outstanding hunting load!

In summary, J. D. Jones designed a series of first-class hunting cast bullets. The SSK designs provide ample bullet weight, sectional density, meplat diameter, bearing surface, and bullet lube to give the handgun hunter excellent accuracy, reliable penetration and the ability to put 2 holes in just about any critter hunted with handguns. What happens after that just depends on *where* the handgunner puts those two holes...

- Glen E. Fryxell

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