

.458 DEVASTATOR

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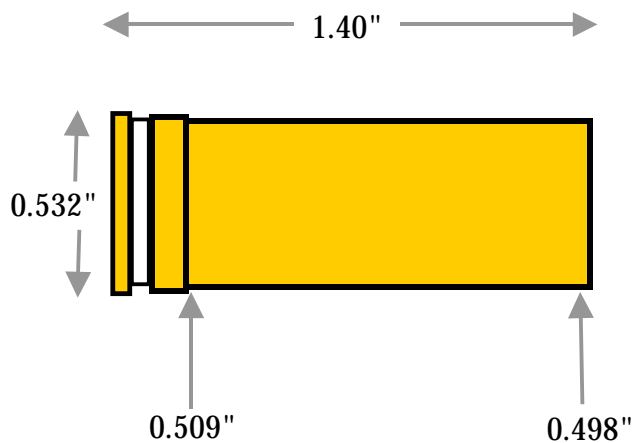
The .458 Devastator was not an attempt to reinvent the wheel. Instead it was an economical approach to the .454 Casull and a caliber that provided for a wider range of jacketed bullets (350 grains and above). Secondly, the Devastator could outpace 5-shot .45 Colts and still safely be housed in a Ruger Blackhawk. That's essentially how it all got started back in December of 1994.

Like most of our wildcats, the cartridge was born as a result of a conversation that I had with my father over big bore single-actions. Three years into building custom cylinders we had yet to tackle a 5-hole conversion. Naturally we tossed around the idea of doing a .454, but that created the problem of brass acquisition. If I remember correctly, Freedom Arms was the only component supplier in 1994 and empty cases were expensive. The .45 Colt (5-shooters) was a sound alternative, but additional powder capacity could be obtained with hardly any effort. Knowing that we wanted to use .458" diameter bullets, the parent case was to either be shortened .45-70s or cut down .458 Winchester Mags. What really inspired the use of the Win Mag though was all of the ruined brass that we had accumulated over the years. Many of these so-called "throw aways" were belted magnum rounds that had split necks or crumpled shoulders (from wildcatting gone horribly wrong). Basically, if the last 1.40" of the shell was salvageable they could be used for our .458 Devastator.

To belt or not to belt. The next question was whether to keep or remove the case's belt. Though it's tempting to eliminate it to keep as much steel as possible between chambers, it does make headspacing the round easier. Under no circumstance were we willing to headspace off the front of the case due to the need to closely monitor overall length. Moreover, machining the belt was an extra step in brass preparation that had no functional justification. Once this was agreed upon, the rest simply involved cutting the case slightly oversized (~1.50"), neck expanding, reaming to an inside diameter of .458", and trimming to the length of 1.40". I should add that the Devastator

was designed to maintain a neck-wall thickness of 0.020"; unquestionably we knew going into this that case pressure would equal or exceed 55,000 cup. This was another advantage over going the .45 Colt route.....now trust me, I love the .45 Colt and am not trying promote the "weak brass" myth. It's just as strong as any magnum pistol brass, which certainly includes the .44 Magnum. The Devastator (like the Casull) operates like a rifle cartridge though and as such I'll take the strongest brass available. Final dimensions are as follows:

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Building a 5-shot cylinder required some thought. Initially, our six-shot cylinders were based on the standard Blackhawk geometry that involves a 60-degree rotation. Five-shooters obviously are based upon a 72-degree rotation which involves some ratchet modification. A test cylinder was built using a piece of scrap aluminum and after some fiddling on a Bridgeport mill, we found the proper configuration. Since the tail end of the .458 case is wide (due to the belt) a slight recess had to be machined into the ratchet wall. This "half moon" cut as I like to call it requires that the pawl also be altered. As we found, when the cylinder is rotated the pawl tends to get pinched in the recess and impairs the cocking mechanism. To alleviate this, we simply ground a small portion of the pawl's second step to eliminate such engagement. With chamberings such as the .500 Linebaugh, these recesses are so deep that it necessitates a radius cut be made between the ratchet cogs. Otherwise the pawl will hang in the crevices and get wedged against the recoil plate. I've always liked how custom pistolsmiths imply that the "free-wheeling" feature is an additional step in doing a five-shot conversion. Granted, this quality is desirable especially when heavy bullets jump the cylinder gap upon recoil. Ironically though, with cartridges like the .500 I know of no other way to make the cylinder. The ratchet alterations that are required mandate that the cylinder be "free-wheeling".

We built two Devastators in '94 and each was based on the Ruger Super Blackhawk. Barrels were by Douglas and cut to a 6-inch, heavy lugged configuration with aluminum blade sights. Knowing that the recoil would be sizeable, my dad's version included an Uncle Mike's rubber grip and barrel porting (5 ports on each side of the front sight). Though functional, I hate synthetic grips and as such kept the Goncalo Alves; I also chose not to use barrel porting. Some engraving was done to my pistol which included an elephant on the top-strap and my monogram on the underside of the frame (just in front of the backstrap). As with all of our conversions, chambering reamers were done in house using a Cincinnati #2 Tool and Cutter grinder. Reloading dies were also home-built.

The guns were tested in early '95 with initial loads being 26.0 grains of AA#9 and a 300 grain Hornady bullet. Pressure was reasonable, accuracy was excellent, and case extraction was effortless. Like most magnum-type pistol rounds though, the .458 Devastator is at its best when loaded with ball powders.....namely H110 and W296. Early on, our reloads were comprised of a 300 grain jacketed bullet and a lot of H110. Maximum capacity was determined to be around 34.0 grains which is 3-4 grains higher than that of a top-end .454 Casull. Now as much as I liked this bullet, ideally I wanted to use a heavier weight. The next step was to a 325 grain, gas-checked lead bullet that we cast ourselves. This slug maxed out around 32.5 grains of H110 and was every bit as accurate as the jacketed 300. Finally, we worked up to 350 grains which I consider to be the best bullet weight for this wildcat. Selected loads include:

BULLET WT (grs)	POWDER TYPE	POWDER WT (grs)	~VEL (fps)
300	H110	34.0	1,750
325	H110	32.5	1,700
350	H110	31.0	1,640

I would again like to stress that H110/W296 are the best powders for optimal performance. We did work a little with AA#9 but couldn't get anywhere near the same results. 2400 could be another option for mid-level loads, but I find it somewhat fast when pursuing maximum velocity. All of our reloads have made use of a slight taper crimp to eliminate bullet displacement.

Pressure and recoil. Before you look at the performance that the round returns, you have to consider these variables. I can't speak to the exact pressure that it generates, but I'd say it easily approaches 60,000. I can say that I blew a lot of large-magnum pistol primers with the Devastator.....it's never a good sign when you open the loading gate and pieces of primer fall out. As a result, I strongly recommend using large rifle primers. In doing so though, you may find that the standard Ruger mainspring is not strong enough to ignite the primer. The workaround involves either a

stronger spring or simply removing a couple of coils from the factory version. Now recoil is something that I have no cure for in that the Devastator is one of the hardest recoiling single-actions I own. For years I've experimented with Linebaughs, Casulls, SSK Handcannons, Maximums, .450 BFRs, etc., and find this cartridge to be the most punishing. Comparatively speaking, the .458 shouldn't be that much more wrist wrenching than a .454. I do have a Casull that we did on a 4 5/8" stainless Blackhawk that involved no porting or Bisley conversion. As a matter of fact, I kept that standard backstrap and grip panels and in doing so did nothing to tame recoil. I've worked with the gun for 5 years now using every top-end Casull load known to man and it is far more pleasant to shoot than the Devastator. The next question is whether porting and grip configuration helps or not. Well, my dad's version is ported and he recently installed a Bisley backstrap to make the gun more manageable. In spite of these efforts it's still brutal on the hand. I can say that whereas the Linebaugh rounds have more of slow shove, the Devastator has very fast recoil and a lot of left-to-right torque. Regardless, the gun isn't so bad that accuracy is affected and in time I got quite used to shooting it.

One idea that I've kicked around is using bullets of 380 – 405 grains in weight. I haven't thus far because all of my brass is bored to handle up to the 350 Hornady (405s would require a deeper depth with respect to inside case reaming). As a rough estimate though, I'd say 27-28 grains of H110 with a 380 and 25-26 with a 405 would work well. Even when limiting myself to the 300 – 350 grain class, I'm more than pleased with what the Devastator provides: A) Over 1 ton of muzzle energy, B) Excellent penetration, and C) Very good accuracy. Now I'll admit that the .454 can deliver all of the aforementioned and as such I'm not suggesting that the Devastator is a reason to upgrade from the Casull. It is however a very powerful pistol cartridge that is adequate for all types of big game and would be viable for silhouette shooting. Originally, I had thought of doing one with a 7.5 – 8" barrel but will probably reserve such a gun for our .450 Bonecrusher.

A photo of a 458 Devastator conversion can be found in the gallery section.

If you have any questions or feedback, please feel free to contact me at lee@singleactions.com

NOTE: These loads work in my guns and have not proved unsafe. I am however not responsible for these loadings in any other firearm. As always, maximum loads should be approached with care.