

Mike Bergmann F Class Interview Summary

Hello F Class shooters,

When we split F class out as a separate discipline in 2012, one of our goals was to raise our level of competition so that we had people capable of competing at the national level. We've done fairly well in that regard and we now have shooters posting previously unimaginable scores. At the same time, we always have an influx of new people who are just beginning their learning curve, so I thought it would be instructive to interview a successful shooter and describe his regimen to the rest of the group.

The person I chose was Mike Bergmann, and if you've been competing this year you know he is currently the man to beat in open class. Mike is a man of few words, but I was able to coax a lot of information out of him and I don't think he is keeping any secrets. Although we were discussing open class shooting, most of this applies also to FTR. A skype interview was out of my capability, nor was I able to record the conversation, so I'll be paraphrasing what he said from my notes. If I can't control myself and have to interject some information I'll put that in parentheses so you know where it came from.

Mike lives in Cambridge, Iowa about half an hour north of Des Moines. His home club is the Des Moines Rifle and Revolver Club at Van Meter, Iowa. DMRRC holds two F class events a year in April and September, with the latter being the Iowa State Championship. Mike won the 2018 Iowa championship a few weeks ago with a 600-45X score. To put this in perspective, it was the first time anyone had shot a clean 600 in F class at Van Meter. There are some tricky winds there. Mike also holds the ENGC F class record with a 600-49X score. So how is he doing this?

When I asked him about his equipment I found the following: He shoots a standard 284 Winchester cartridge except that it has a neck diameter of .315 (SAAMI SPEC is .323) and a .220 throat (to enable seating the bullet further out). He uses a BAT M action which is pillar bedded and set in bedding compound in a McMillen F class stock. The barrel is a 31" Brux with 4 lands and a 1-9 twist. A Jewell trigger is mated to the action and it is set to about 6 ounces of pressure. A Nightforce 15-55X52 competition scope is mounted on the action and Mike tends to use 45 power magnification, more or less, depending on mirage.

Mike's front rest is a Shade Tree model with a joy stick. The rest is fitted with an Edgewood 3" front bag which he lubricates with a powdered bag wax from Bruno Shooters Supply. He finds the joy stick to be a little stiff so he makes his fine elevation adjustments with the rear leg screw of the rest. The rear of his stock rides in an Edgewood Protector bag with ears. He keeps the bag very tight and the ears looser to match the stock better. Mike has had a SEB NEO front rest on order for some time and is looking forward to the upgrade.

The 284 Winchester is an orphan cartridge so there is no factory ammo available; it all must be handloaded/reloaded. This is not a big deal since all serious shooters load their own ammo anyway. I asked Mike about his reloading practices and here is what he said:

Beginning with the brass; he has used both 284 Win Brass from Norma and 6.5-284 brass from Lapua, and both work well for him. The Lapua brass must be expanded to 7mm before use and he uses a 7mm expander mandrel for that.

Mike enjoys metal working and has a lathe that he uses to cut his own chambers. Since he has a custom reamer with a smaller neck diameter, he has to turn (machine down) the necks of his brass down to fit properly in the chamber. He does this with a Sinclair neck turning tool. Mike is a stickler for controlling the neck thickness of his brass and controlling the neck clearance of the brass in the chamber. (These eliminate any variability in how the brass releases the bullet upon firing.) His loaded rounds have .310 neck diameter which gives .005 clearance in the .315 chamber. (Working backwards from .310, if you subtract the bullet diameter, .284, you get .026, which means the finished neck thickness is .013. Virgin brass is in the neighborhood of .015, so he has turned .002+/- off his necks. Necks, even in good brass, can vary .0015 around the circle, so he has insured that they all have a uniform thickness.)

He cleans his fired brass with corncob media in a vibratory cleaner. He full length sizes every time using a custom Neil Jones neck and shoulder die, which simultaneously sets back the shoulder and resizes the neck while decapping and full length sizing the brass. (I don't know the details of how this works, but I'm going to look into it.) He anneals the brass with a Bench Source annealing machine about every third time. He cleans the primer pockets by hand but does not remove any brass as a primer pocket uniformer would. He does some light cleaning of the inside of the neck with a nylon or bronze brush. He trims the length occasionally if it needs it. Mike's brass lasts quite a while. He has some with up to 15 reloadings on it that still work well.

Mike's bullet is the 7mm, 180 gr. Berger hybrid. He has tried 183 gr. Sierras but they didn't work and he has some 184 gr. Bergers that he is testing now in a faster twist barrel. He shoots bare bullets (no coatings) and does not sort by weight or length (base to ogive). When he seats his bullets, he uses .002 neck tension (meaning the neck diameter of the brass before seating is .308). He uses a Wilson bullet seating die with an arbor press.

Concerning his load, he uses Hodgden 4831 SC powder at around 54 grains depending on the lot. He throws a slightly low load with a powder measure and then trickles it up to the nearest kernel, measuring with a beam scale. He seats his bullets slightly into the lands (.004 to .008) as determined by testing. He determines seating depth using a Hornady/Stony Point OAL gauge.

He uses mostly CCI BR2 primers (sometimes Tula) and does no sorting (some people sort primers by weight). He is currently pointing his bullets using a Whidden bullet pointing die.

When he breaks in a new barrel, Mike shoots 100-200 rounds through it and then does a ladder test to determine the best load. Then he varies the seating depth, as mentioned above, to find the smallest group. He shoots 10 shot groups at 600 yards to determine this, and is able to shoot 2.0 to 2.5 inch groups when everything comes together. He does his group testing when winds are not a factor. He said that he usually finds the sweet spot somewhere between 2820 and 2850 feet per second muzzle velocity.

I asked him what techniques he uses when shooting. He is a right handed shooter and his body lies off to the left slightly when he shoots. He keeps some shoulder pressure into the stock to keep the toe into the stop on the rest. He keeps a loose grip on the stock with his right hand and has light to moderate cheek pressure on the comb. He keeps the front rest level, and has an anti-cant bubble on the rifle. He watches mirage through his rifle scope (no separate spotting scope) and tries to find a flag that best represents the wind.

Mike recommends getting the rests very solid and stable and finding a hold that is comfortable and produces good results and then practice using the exact same hold every time. (Changing your hold will affect how the rifle recoils, which can change the point of impact.)

So this is the end of a rather long story, but it doesn't answer every possible question. If you have questions or want clarification, write to me and I'll try to get an answer. This is not intended to be a formula for success, but it does provide a general road map in that direction. Not everyone will have the time, energy or funds to do everything that Mike does and some may have slightly different practices, but in the final analysis it's hard to argue with success. But, did I really answer the question of how he does this? Not exactly, because I have been describing mechanical processes that anyone can do, and have ignored the element of skill, which is much harder to quantify. Obviously, Mike is a very skillful shooter, but that is a topic for another day and another author.