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Terminal Bullet Performance Login/Join

Biebs One of Us posted 11 May 2012 20:19 Hide Post
Michael, regarding Terminal Bullet Performance; I think that reading this 237-page diatribe from start to finish would be TERMINAL!!!! :-)
Posts: 19907 | Location: **Very NW NJ up in the Mountains** | Registered: 14 June 2009

boom stick One of Us posted 12 May 2012 04:10 Hide Post

The 416 Raptor looks sweet!
You could load them up with ogive or Pinocchio tips I guess. Correct me if I'm wrong but the nose cavity is the same as the 416 Non Con. Maybe 416 Tarzan might like the extra BC of the original High BC tip designed for the Non Con. Anyone what to hunt with their 416 Barrett?
[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)
we band of 45-70ers (Founder)
Single Shot Shooters Society S.S.S.S. (Founder)
Posts: 27557 | Location: **Where tech companies are trying to control you and brainwash you.** | Registered: 29 April 2005

RIP one of us posted 12 May 2012 04:49 Hide Post
quote:
Originally posted by boom stick:
The 416 Raptor looks sweet! ... Anyone what to hunt with their 416 Barrett?

Nice 300-grain hunting bullet for any .416.
Very good to 300 yards with +2500 fps and a BC near 0.4. 🙌
Barrett M99 bullpup with 32" heavy barrel weighs only 25 pounds, and gets the 400-grainer up to about 3250 fps in a 1:12" twist.
Maybe the 300-grain ESP-Raptor could be pushed to +3600 fps/+Mach 3.
Could some strange new phenomenon be discovered, or duplicated with a rig like that?
Posts: 28032 | Location: **KY** | Registered: 09 December 2001

Norwegianwoods One of Us posted 12 May 2012 12:45 Hide Post

quote:
Originally posted by michael458:
quote:
Originally posted by boom stick:
Any terminal performance tests on the 100 grain 308?
Curious to see the cutting edge new and really improved 30-30 performance 🙌

Friend and B&M Owner from VA has been here for a couple of days, and we have been busy on the range. We did accomplish quite a bit, and I have loads of data to input on several various things.
One of the main things my buddy needed to work on was some sub-sonic rifle for his "canned" 308. So we did a lot with that, which is a pain of course. But, also learned some things about the 100 gr ESP Raptor in both 308 and 30/30 while we were at it. Working with a rifle with a can is about like working with a double rifle-look at it cross eyed and POI changes!
Also, this has me behind on other projects that I wanted to work on, like 338 data, LVSP on the new .510 cavity (99.9% sure about that anyway), but still gotta know 100%. And many other things. I got both of my 223s back with the new 1:8 twist barrels, kinda wanted to play with some Raptors with them as well!
But, I was curious about how the 30/30 would do with it's new HI SPEED 100 ESP Raptor!



308 Winchester

30/30 Winchester

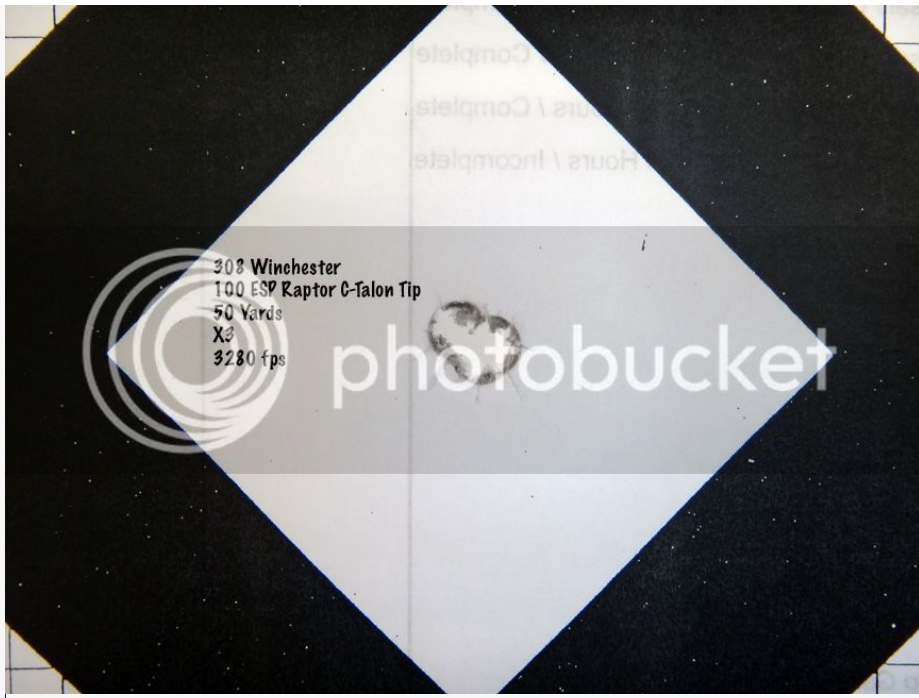


Couple of points to ponder-- Adding the C-Talon Tip gave the bullet an extra 321 fps at 48 yard Impact! That is significant to say the least! This extra impact velocity as you can see gave it an extra 2 inches of penetration. More important than the extra penetration was the extra Trauma inflicted and a slightly different shearing of the blades. Blades were much longer and penetrated deeper with the extra velocity provided by the Talon Tip, than without. Well, naturally one CANNOT use the Talon tip in the magazine tube of a lever gun. But, one most certainly can load that first round in the chamber with a Talon Tip for that all important Shot #1. It's worth the extra effort to enhance the capabilities of the 1st shot. Of course in a bolt gun like 308 or others then tips are standard and work great.

I am so sorry, I have very little interest in .308 caliber. In fact, if it were not for these bullets, I doubt you could interest me enough to mess with it at all. And even now, my interest is starting to fade somewhat. I had to play with 308 Winchester today, only working with AA 2520, and no, I am not going to put anymore effort into 308. I have the 100 gr ESP Raptor at 3280 fps, zero issues, and nearly out of powder capacity, so that is about all I am going to do with it. I will test a couple of loads with the same powder with the 130 ESP Raptor, and that is all I am messing with it. I have better things to do than dick around with a .308.

OK, how does the above terminal tests compare with other 30 cal bullet terminals I have done?? I did not remember either, so I looked back on my own .308 terminal test data! I found exactly only 3 entries recorded. So I have only tested 3 other bullets in .308 in my life! That should say something to you! First was a 165 Swift A Frame at 2929 fps muzzle--50 yard impact 13 inches total penetration. Then a 180 gr Woodleigh PP at 2831 fps muzzle--50 yd Impact 14 inches total penetration. Last a 180 gr Nosler Ballistic Tip at 2902 fps muzzle--50 yd impact 9 inches total penetration. All done on 5/7/2007, no impact velocities taken. And NO I am not messing with testing other bullets in .308. I don't have the time, nor the interest. Maybe the 130 Raptor, and that will be it.

Which, I have to say, I have been very envious of RIP's shooting abilities of late, and some of the targets he has posted! I have also been trying my best to out shoot the RIPPER, but have just not made it quite yet--today that 308 and the 100 Raptor may have come close? I keep trying!



Looking great Michael!

Posts: 46 | Location: Norway | Registered: 10 November 2011
 My biggest is a .375, but hopefully I one day can get a proper gun.

michael458
 One of Us



posted 12 May 2012 14:47
 This post makes me consider getting a .308 gun again.
 I wonder what bullet will perform in a 300 WSM.

[Hide Post](#)

Dan has been shooting the 130 in his 300 WSM at 3300 and shooting it well, and very long. He will be using the 130 in Africa in a few weeks. I expect pretty good results. This 100 is incredible in the 30/30--breaths new life into that old cartridge for sure. I suppose you would be 3500 + in a 300 WSM with the 100. Surely without issue, since in 308 I am almost at 3300.

M

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
 Live Outside The Box of "Conventional Wisdom"

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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008

338User
 One of Us

posted 12 May 2012 15:18

[Hide Post](#)

Hi Michael458.

I worked up a new load today for my 416 Rigby. I can get 3028fps, and 0.5 MOA accuracy with the 300gn Barnes TSX. Zeroed at 220 yards my load is +/- 2.1 inches from direct line of sight all the way to just past 250 yards.

Just wondering if you could comment on how you think the 300gn 416 cal Raptor would compare, both in flight (i.e BC) and with respect to terminal performance.

Posts: 424 | Location: Australia | Registered: 11 August 2007

michael458
 One of Us



posted 12 May 2012 16:07

[Hide Post](#)

338

As for BC, from what Tanz calculated the 300 Raptor and the 300 Barnes are similar, close enough anyway. What I don't know is how deep you would have to seat the Raptor in the 416 Rigby to fit the magazine of your rifle, assuming it is a bolt gun. Also not sure of powder you are using and if you can run the 300 Raptor to the same speed, simply because of capacity and seating depth to fit the tips and the magazine??? You may not be able to get as much velocity from the Raptor because of that, I just don't know?

As for terminals, there is no comparison there. The 300 Raptor will out perform most all 416 available bullets period, regardless. As a comparison of the 416s I have tested here;

- 300 TSX 15 inches
- 325 North Fork 17 Inches
- 330 Lehigh NonCon 21 inches
- 330 GSX 16 inches
- 350 Barnes X 18 inches
- 350 Swift 18 inches
- 400 Swift A Frame 21 inches
- 400 Hornady 14 inches
- 370 North Fork 21 inches
- 400 Nosler Partition 21 inches
- 400 Barnes TSX 22 inches
- 375 BBW #13 NonCon 28 Inches
- 325 BBW #13 NonCon 30 Inches
- 300 ESP Raptor 23 Inches.

The only thing to penetrate deeper are the other BBW #13 NonCons.

Trauma inflicted to test medium---Raptors and NonCons very much ahead of everything else. Nothing can compare to them when it comes to Terminals. At least nothing I have ever seen either in the test work, or in the field now. And according to other field reports on various game, same story.

The only bullet that can even compare with a NonCon--is another NonCon!

M

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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008

416Tanzan
One of Us



posted 12 May 2012 20:20

Hide Post

quote:

As for BC, from what Tanz calculated the 300 Raptor and the 300 Barnes are similar,

Actually, the Raptor should outperform the 300 grain TSX in trajectory, but you will need to adjust your figures a bit. The Raptor that Michael just posted is .380 BC, while the Barnes 300 grain is only .298 BC. That is a significant difference if shooting in a breeze or soft wind after 200 yards. (The OLD Barnes X 300 grainer was .390 BC, similar to the Raptor. Not so the TSX.)

For example, the TSX at 3025 fps (=6096 ftlbs.) will drift 10 inches in a 10mph wind at 300 yards. It will also drop -6.4 inches at 300 yards when sighted in at 1.9" at 100, and 2.1" is the max-arc above line of sight.

Now for comparison, you will need to drop down to 3000 fps because the Raptor is actually 311 grains with the tip installed. At 3000 fps the Raptor will produce 6216 ftlbs., which is not too hot for most modern Rigbys and the CZ 550's or Rugers, in particular. That 3000 fps Raptor also needs to be sighted in at 1.9" in order to maintain a 2.1" max-arc. However, because of the better BC, it will only be -5.7" low at 300 yards and will only drift 7.5 inches in a 10mph wind at 300 yards. That is a saving of 2.5 inches. I would call that significant. Plus, at 400 yards the Raptor only drops -18.5 inches and drifts 14", while the TSX will drop -21" at 400 yards and will drift 18.8 inches. The Raptor wins convincingly, even though it starts out 25 fps slower.

As for seating depth and bullet length, you will need to set your own loading limits. The Raptor may take a couple of grains of powder less to reach the same pressure levels, or not. Do the normal testing with the normal precautions and you will probably find cases slipping out of the chamber easily at 3000 fps loadings.

+++++

"A well-rounded hunting battery might include:
500 AccRel Nyati, 416 Rigby or 416 Ruger, 375Ruger or 338WM, 308 or 270, 243, 223" --
Conserving creation, hunting the harvest.

Posts: 4253 | Registered: 10 June 2009



RIP
one of us

posted 12 May 2012 20:42

Hide Post

The lower "start pressure" of the brass NonCons, further reduced by the nonbearing portion of the banding, tend to compensate for losses to case capacity due to increased length.
It might be a wash when compared to the shorter copper bullet with the higher start pressure ... in QuickLOAD.
Don't forget to add in the case capacity gain effects of the "shaped base" boat tail of the ESP RAPTOR, versus the flat base TSX ... in QuickLOAD.

Better yet, shoot them both with max loads and let us know how fast they go. 🤔

Posts: 28032 | Location: KY | Registered: 09 December 2001



michael458
One of Us



posted 12 May 2012 20:53

Hide Post

Tanz & RIP

Thank you for clearing those sort of trajectory things up! You are much better at that than I am! RIP, concur with those finding as well, most of the time.

On the subject of 416 300 Raptor--just now took it over 2600 fps in a 20 inch 416 B&M at 62000 PSI--excellent load--finished with that development--Cross and MikeS (450NE), that is 75/AA 2520. Seated to work through the magazine with NEW R-Tip--which is fantastic!

Just FYI. Working 338s today as well. 338 Ultra does not like 175 Raptors at all. 1-1.5 inches at 50--not acceptable. 338 Ultra LOVES the 200 Raptor--1 hole at 50--3200-3275 fps. 338 WSM likes the 175 very well at 3000 fps. Remember, my 338 WSMs are 22 inch guns.

M

<http://www.b-mriflesandcartridges.com/default.html>

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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008



boom stick
One of Us



posted 12 May 2012 21:17

Hide Post

Michael, regarding the loads that are giving you trouble, are you using tips on those? If so have you tried without tips? Do you know your twist on the ultra? Wondering if the twist is no bueno for such a light bullet.

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

we band of 45-70ers (Founder)
Single Shot Shooters Society S.S.S.S. (Founder)

Posts: 27557 | Location: Where tech companies are trying to control you and brainwash you. | Registered: 29 April 2005



michael458
One of Us



posted 12 May 2012 21:51

Hide Post

Boomy

Twist rate is 1:10 on both 338 Ultra and 338 WSM. 338 WSM shoots both 200 and 175 1 hole at 50. 338 Ultra 1 hole with the 200s, but for some reason does not like the 175s. Yes, all have tips. In these guns, don't make much sense to load without the tip. One of those things I suppose, as long as the Ultra shoots the 200s, I am not going to waste time on them, I will never take them out anyway. I have a friend that does hunt with 338 Ultra, and I have him a good load with the 200s at 3220 fps with IMR 4831, and I get to get rid of some powder I don't use much of. Clear some of the shelves so to speak.

M

<http://www.b-mriflesandcartridges.com/default.html>

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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008



338User
One of Us

posted 13 May 2012 07:56

Hide Post

Michael458, 416Tanzan and RIP, thanks for your comments and for taking the time to do the comparisons. I will have to import some of those Raptors and try them out.

Posts: 424 | Location: Australia | Registered: 11 August 2007



Cross L
One of Us

posted 13 May 2012 10:16 [Hide Post](#)

quote:

Originally posted by michael458:
Tanz & RIP

Thank you for clearing those sort of trajectory things up! You are much better at that than I am! RIP, concur with those finding as well, most of the time.

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M

Michael

Just because I am lazy do you have the cart OAL on the 300 raptor w/tip?

Thanks

SSR

Posts: 6725 | Location: central Texas | Registered: 05 August 2010

boom stick
One of Us



posted 13 May 2012 11:04 [Hide Post](#)

I do think it would be interesting to test the hollow point ogive tips made of copper on the raptor. The soft copper will open up and add weight if desired.

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

we band of 45-70ers (Founder)
Single Shot Shooters Society S.S.S.S. (Founder)

Posts: 27557 | Location: Where tech companies are trying to control you and brainwash you. | Registered: 29 April 2005

416Tanzan
One of Us



posted 13 May 2012 11:55 [Hide Post](#)

quote:

Originally posted by boom stick:
I do think it would be interesting to test the hollow point ogive tips made of copper on the raptor. The soft copper will open up and add weight if desired.

Sounds good, but might get pricey. A copper tip would be an eighth projectile, though it might stay in the main wound channel, not receiving any of that outward thrust that the petals receive.

Here we are talking fourth generation Raptor and I don't even have my 500AccR sighted-in.

+++++

"A well-rounded hunting battery might include:
500 AccRel Nyati, 416 Rigby or 416 Ruger, 375Ruger or 338WM, 308 or 270, 243, 223" --
Conserving creation, hunting the harvest.

Posts: 4253 | Registered: 10 June 2009

capoward
One of Us



posted 13 May 2012 20:33 [Hide Post](#)

quote:

Originally posted by 416Tanzan:
Here we are talking fourth generation Raptor and I don't even have my 500AccR sighted-in.

Actually I believe the 'radius'd' R Talon Tip (.416 caliber) is the 4th generation tip shape... So maybe just add a '-C' to the 'R'...to give us R-C Talon Tip... Just a thought.

Boomy I'm surprised you're not pushing an aluminum tip rather than copper!

Jim 🙄
"Life's hard; it's harder if you're stupid"
John Wayne

Posts: 4954 | Location: Central Texas | Registered: 15 September 2007

RIP
one of us

posted 13 May 2012 20:37

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quote:

Originally posted by RIP:
The lower "start pressure" of the brass NonCons, further reduced by the nonbearing portion of the banding, tend to compensate for losses to case capacity due to increased length.
It might be a wash when compared to the shorter copper bullet with the higher start pressure ... in QuickLOAD.
Don't forget to add in the case capacity gain effects of the "shaped base" boat tail of the ESP RAPTOR, versus the flat base TSX ... in QuickLOAD.
Better yet, shoot them both with max loads and let us know how fast they go. 🤖

quote:

Originally posted by michael458:
... RIP, concur with those finding as well, most of the time.

M

Right, no absolutes.
The "compensation" sometimes allows use of a faster powder at lesser volume with the longer, slick-starting, brass NonCon, to get higher velocities, whereas the shorter, sticky-starting, copper bullet will not allow use of the faster powder, but requires a larger volume of slower powder.
Seems to be working that way in the 12.7x68 M/49-10, so far in both QuickLOAD and in perceived reality.
One example is the use of copper and brass CEB bullets, noted previously by QL predictions and reality-testing.
Another I am trying is the CEB 360-grain RAPTOR (ESP W350) against the Barnes 375-grain XFB-C.
Faster H4198 was best with the longer brass NonCon at 95.0 grains (102% fill).
Slower H322 was required for best performance with the shorter copper bullet from Barnes of similar weight, using 99.0 grains (105% fill).
This keeps predicted pressures for both near identical, and velocity of brass CEB predicted slightly faster than copper Barnes, with slightly less compression of the powder in the CEB load.
When weather allows chronograph outdoors. 🤖
Just one example where it is panning out:



This specific example is allowed by the magazine length and throat length of the 49-10.
But Doc M has observed some other such examples, I am sure. 🤖

Posts: 28032 | Location: KY | Registered: 09 December 2001



416Tanzan
One of Us



posted 14 May 2012 00:39

Hide Post

PS:

Has anyone measured the length of the 311 grain .416 bullet?

How far off would 1.45" be?

+++++

"A well-rounded hunting battery might include:
500 AccRel Nyati, 416 Rigby or 416 Ruger, 375Ruger or 338WM, 308 or 270, 243, 223" --
Conserving creation, hunting the harvest.

Posts: 4253 | Registered: 10 June 2009



michael458
One of Us



posted 15 May 2012 02:19

Hide Post

quote:

Originally posted by 416Tanzan:

PS:

Has anyone measured the length of the 311 grain .416 bullet?

As I calculate the 416 300 Raptor is 1.292 without R-Talon Tip, and 1.621 with Talon R-Tip.


1:14 it is happy! Hopefully will work up some loads this week in 416 Remington. Also, going to re-visit the 458 300 Raptor and H-4198 in the 458 B&M too!

I received some interesting .510s today, some Sam had ordered and I sneaked a few around the corner on him! HEH HEH..... If I was a .510 sort of chap, I think I would be looking very very seriously at this matched pair!





boom stick
One of Us



posted 15 May 2012 02:49

Is that first recessing from the tip for crimp or breaking point weakness undercut?

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

we band of 45-70ers (Founder)
Single Shot Shooters Society S.S.S. (Founder)

Posts: 27557 | Location: **Where tech companies are trying to control you and brainwash you.** | Registered: 29 April 2005

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srose
One of Us

posted 15 May 2012 03:16

I ordered them and you got yours before I got mine. I guess I know who is boss!

Posts: 2823 | Location: **NC** | Registered: 08 July 2006

[Hide Post](#)

srose
One of Us


posted 15 May 2012 03:24

Boom stick that groove is to identify the light bullets from the heavies as the nose projections are the same.

Posts: 2823 | Location: **NC** | Registered: 08 July 2006

[Hide Post](#)

boom stick
One of Us



posted 15 May 2012 06:08

A sharpee is just too uncivilized I see 😊
Not using the Nickel plated vs brass cases trick I see.
Interesting idea.

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we band of 45-70ers (Founder)

The New World Shooting Game and Conservation Society (Founder)
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RIP
one of us

posted 15 May 2012 07:00


The latest .510-caliber bullets are well designed.
Is there also a second shallow groove near the base?
I like the band spacing.
Should be a good fit for about all the .510-caliber "five hundreds."
Those shallow grooves also allow fine tuning of bullet weight, eh?

Any more thoughts on bands reduced to bore diameter by a long throat and a fast twist?
Is that lost brass from the bullet just sheared off and blown out the barrel?

Posts: 28032 | Location: **KY** | Registered: 09 December 2001

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416Tanzan
One of Us



posted 15 May 2012 09:56

quote:

Any more thoughts on bands reduced to bore diameter by a long throat and a fast twist?
Is that lost brass from the bullet just sheared off and blown out the barrel?

We're waiting for news from Buffalo and maybe for Michael to test with Jeffeoso's rifle.

++-++-++-++-++

"A well-rounded hunting battery might include:
500 AccRel Nyati, 416 Rigby or 416 Ruger, 375Ruger or 338WM, 308 or 270, 243, 223" --
Conserving creation, hunting the harvest.

Posts: 4253 | Registered: 10 June 2009

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buffalo
One of Us

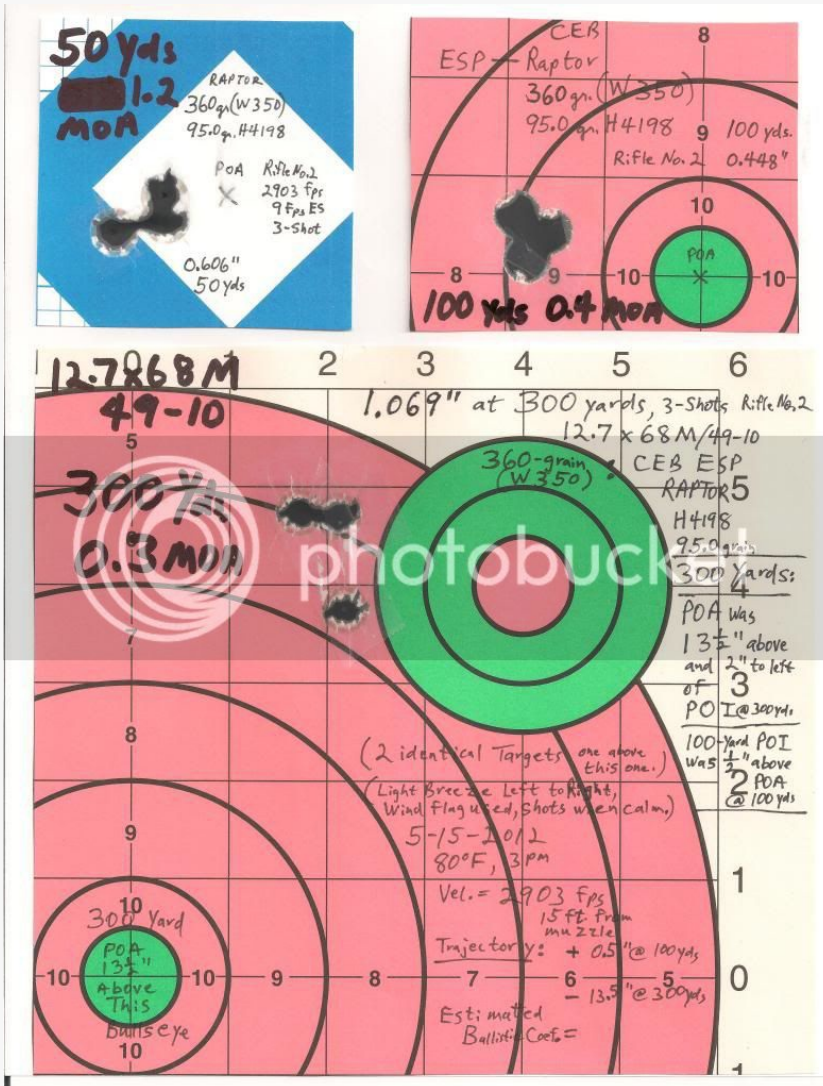
posted 15 May 2012 12:15

right Tanzan... And I am waiting for Hatting - he is busy until 16.May cause roebuck hunting starts the 16. here in Denmark... I have loaded some rounds to test asap.. But very unfortunate I dont have an indoor shooting range a la Michaels... Too bad - everybody should have one... 😊

Posts: 873 | Location: **Denmark** | Registered: 04 January 2005

[Hide Post](#)

The CEB .500-cal W350 ESP Raptor with tip (at +2900 fps in a 1:12" barrel with a "half-caliber" freebore length) gets more accurate with range:



Also, adding the 10-grain tip to the 350-grain NonCon, reduced the velocity insignificantly: from 2904.7 fps/ES 11 fps (350-grainer) to almost identical 2903.0 fps/ES 9 fps (360-grains with tip). This was with 95.0 grains of H4198.

The Barnes XFB-cannelured .500-cal/375-grainer gave one OK load out of 5 tried: 97.0 grains H322 gave 2705.3 fps/ES 32 fps for 3 shots, 0.585" at 50 yards. The 4 other charges gave 1 to 1.75" 3-shot groups And ES up to 83 fps for three shots (all with H322 in the 95, 96, 98, and 99 grain charges).



Estimated BC for this .500-cal W350/360-grain with tip? I forgot to do that, and past my bed time.

Sample problem:

2903 fps at 5 yards.
Scope line of sight is 1.75" above center of bore.
POI #0: -1.75" at 0.00 yards
POI #1: +0.5" high at 100 yards
POI #2: -13.5" low at 300 yards
80 degrees F
300 ft altitude
78% RH
29.91 mmHg baro.

Estimated BC? I'll sleep on it ... 😊



416Tanzan
One of Us



posted 16 May 2012 12:07

[Hide Post](#)

quote:

Originally posted by RIP:
Estimated BC for this .500-cal W350/360-grain with tip?
I forgot to do that, and past my bed time.

Sample problem:

2903 fps at 5 yards.
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POI #2: -13.5" low at 300 yards
80 degrees F
300 ft altitude
78% RH
29.91 mmHg baro.

Estimated BC? I'll sleep on it ... 😊

First of all, that's a great 300 yard group. It will put meat in the freezer, or over a smoking grill, African style.

Ron, your BC for that data set would be approximately .225.

That seems too low for a streamlined, heavy calibre.

one problem is the magnitude of error from shooting, vs. the magnitude of error from using two chronographs. Two chronographs are probably better than shooter's error. Except that your groups are TIGHT.

So I started tinkering. If your sight height is really 1.65" and your 100 yard zero was .3" instead of .5", then the BC would be approximately .250.

Eyeballing those bullets makes me think that the BC really ought to be closer to .300. Hmmm?!

That -13.5" drop is alot to account for, and slop in a chronograph is only supposed to be about 25fps. Running the tinkered data at 2878fps only produced a .260 BC.

So longrange shooters may appreciate your special run monometal from last year. It is not just 'drop' that we consider at 300 yards but winddrift, and that really starts sliding around as the BC lowers.

+++++
+++++

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Conserving creation, hunting the harvest.

Posts: 4253 | Registered: 10 June 2009



capoward
One of Us



posted 16 May 2012 14:09

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RIP & Tan,

Reading the target - presuming those are 1" squares - it states the POA was 13.5" above the bullseye but the mid-point POI of the three bullets is 4.5" above the bullseye. Wouldn't that be a 9" drop rather than a 13.5" drop? Or am I just overly tired from being up 4 hours past my roosting time?

Speaking of roosting...I'm off..

Jim 🤔
"Life's hard; it's harder if you're stupid"
John Wayne

Posts: 4954 | Location: Central Texas | Registered: 15 September 2007



416Tanzan
One of Us



posted 16 May 2012 14:32

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quote:

Originally posted by capoward:
RIP & Tan,

Reading the target - presuming those are 1" squares - it states the POA was 13.5" above the bullseye but the mid-point POI of the three bullets is 4.5" above the bullseye. Wouldn't that be a 9" drop rather than a 13.5" drop? Or am I just overly tired from being up 4 hours past my roosting time?

Speaking of roosting...I'm off...

Nice catch, Capo, for late at night. I didn't read the little bullseye. If that is correct it changes everything.

We're going to have a nice BC:

Assuming a -9.2" drop at 300 yards, with a 1.75" above bore scope (HIGH!), a 0.5" 100-yard sight-in, and the weather at 80F, 78%Hum, 29.91Hg, 300 ft elev, THEN

ta-tum...tum

...
the BC is

...
ta-tum ... tum

0.595 BC

And RIP has a sniping rig.

So is the BC .225 or .595, or what? both numbers are outside of expectations.

+++++
+++++

"A well-rounded hunting battery might include:
500 AccRel Nyati, 416 Rigby or 416 Ruger, 375Ruger or 338WM, 308 or 270, 243, 223" --
Conserving creation, hunting the harvest.

Posts: 4253 | Registered: 10 June 2009



338User
One of Us

posted 16 May 2012 15:14


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Well, I emailed CEB, and I found out that they have just lined up a distributor in Australia. So I have ordered 300 of those 300gn ESP Raptors in 416 cal. It looks like I will have to wait about 3 to 4 weeks before they arrive, but I am looking forward to working up a load. I am going pig hunting in two weeks, so I won't get them in time for that, but I will probably go out west again in September, so I will post the field results then.

Posts: 424 | Location: Australia | Registered: 11 August 2007



<p>michael458 One of Us</p> 	<p> posted 16 May 2012 15:31</p> <p>RIP</p> <p>Incredible shooting! VVExcellent in my book keeping methods. In fact, at 100 & 300 that might go down as Extreme Excellent!</p> <p>I suppose you win, no way I can see anything at 300 yards! I Yield to the master! HEH.....</p> <p>One day I am going have to visit H-4198 in the 500 MDM as well. Gave the 458 B&M a go with the 300 Raptor yesterday and H-4198. Because of taking up case capacity and seating deep to work through the magazine with the S-Tips, then best I could do in 20 inches was 2700 fps and 60000 PSI. Of course, 2700 is more than enough and works for me, but about 100 off the 295 BBW #13. So what!</p> <p>Just excellent shooting! M</p> <p>http://www.b-mriflesandcartridges.com/default.html</p> <p>The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List! Live Outside The Box of "Conventional Wisdom"</p> <p>I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.</p>	<p>Hide Post</p>
<p>michael458 One of Us</p> 	<p> posted 16 May 2012 15:35</p> <p>quote:</p> <div style="border: 1px solid black; padding: 5px;"> <p>Originally posted by 338User: Well, I emailed CEB, and I found out that they have just lined up a distributor in Australia. So I have ordered 300 of those 300gn ESP Raptors in 416 cal. It looks like I will have to wait about 3 to 4 weeks before they arrive, but I am looking forward to working up a load. I am going pig hunting in two weeks, so I won't get them in time for that, but I will probably go out west again in September, so I will post the field results then.</p> </div> <p>Excellent 338! I needed a load for Lionhunter to use with the 416 300 Raptor in 416 Remington. So I gave that a go with IMR 4064 yesterday with a couple of loads. One at 2640, the other at 2710. Again, more than enough to accomplish the mission. 1 hole at 50 as well. Shame you won't have them for you pig shooting mission coming up in a couple of weeks! However, we look forward to a report on them in September. Do keep us posted!</p> <p>Michael</p> <p>http://www.b-mriflesandcartridges.com/default.html</p> <p>The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List! Live Outside The Box of "Conventional Wisdom"</p> <p>I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.</p>	<p>Hide Post</p>
<p>RIP one of us</p>	<p> posted 16 May 2012 17:53</p> <p>416Tanzan, Jim, Doc M: Thanks. Better grouping at long range: Maybe I "flinched" at 50 yards? Or: Those first 50-yard shots came from a clean barrel, and it settled down with some fouling? BC: Will have to look back for any previous estimates on this bullet. Two velocities at different ranges: Mo' better. My shooting errors:</p> <p>Holding the rifle tighter will make the groups smaller and also make them shoot lower. Human error element. I was careless and loose at close range, but tightened up as the range increased? Better accuracy/lower POI from tighter hold-down on bench?</p> <p>(See the CEB/49-10 thread for the target pic confirmation of -13.5" @ 300 yards, target pic above is cropped on upper border too, can't use that to measure.):</p> <p>300-yard target board</p> <p>Anyway: Tips don't hurt accuracy. 🤔</p> <p>But, if the BC was .350 up to 2700 fps, it might be .370 at 2700-3300 fps, etc. 2903 fps at 5 yards would equal an MV of about 2916 fps, etc. Then if the shooter could hold consistently: Zeroing right on at 100 yards >>> 12 inches low at 300 yards. Zeroing 3" high at 100 yards >>> 3" low at 300 yards, etc.</p> <p>BC: Need better info to calculate, agreed. 👍</p>	<p>Hide Post</p>
<p>srose One of Us</p>	<p> posted 16 May 2012 18:08</p> <p>RIP,</p> <p>That's mighty fine shooting for a big bore and little stubby bullets.</p> <p>Sam</p>	<p>Hide Post</p>
<p>RIP one of us</p>	<p> posted 16 May 2012 20:16</p> <p>Sam, Thanks. Maybe this also re-confirms that a tight "hold-down" on the benchrest does shoot to lower POI than offhand or from the sticks.</p> <p>300-yard target board</p> 	<p>Hide Post</p>
<p>michael458 One of Us</p> 	<p> posted 16 May 2012 22:07</p> <p>As for BC on the .500 350 Raptor with tips, I came to .257 doing the terminals here. Now while that is a 48 yard impact--it is actually 42 yards between chronographs. This is just from the 2 velocities. I imagine that is fairly close??</p> <p>On all the other rat bullets Dan is getting a good 250 yard BC on everything. With these Raptors it seems that depending on the range the BC changes drastically. 250 yards should be a realistic BC that you can work with I think.</p> <p>Big bores, well, I have to leave the LONG RANGE TO--THE KING! King RIP!</p> <p>M</p> <p>http://www.b-mriflesandcartridges.com/default.html</p> <p>The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List! Live Outside The Box of "Conventional Wisdom"</p> <p>I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.</p>	<p>Hide Post</p>



capoward
 One of Us


 posted 17 May 2012 10:21 [Hide Post](#)

Ok... I really know squat about how to compute the BC of a bullet so QD designed a simulated 361gr .500 ESP Raptor with Talon Tip to play around with QL, and QT. Both QL and QT identify the G1 Std ICAO of the 361gr .500 ESP Raptor with Talon Tip as 0.296 BC... for whatever that's worth.



And playing a little further with QT, using RIP KUR's velocity QT indicates 1902 fps and 4440 ft-lbs at 300yds.

And... extremely nice shooting RIP KUR. Now I wonder what you'll do with the 430gr MTH at 300yds.

Jim 
"Life's hard; it's harder if you're stupid"
John Wayne

Posts: **4954** | Location: **Central Texas** | Registered: **15 September 2007** 

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