

This topic can be found at:

<https://forums accuratereloading.com/eve/forums/a/tpc/f/4711043/m/2861098911>

boom stick

20 June 2012, 22:26

Terminal Bullet Performance

That second wildebeest shot is awesome. Amazing to think that at that impact velocity you could have done the same thing shooting the same bullet out of a 30-30 at 100 or so yards!

[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)

RIP

20 June 2012, 22:37

All involved deserve to "crow" about the "NonCon" external and terminal ballistics of the CEB ESP Raptors. 🙌🙌

Hope Terry Wee-wee-land learns something from the crow sandwich. Brain food.



michael458

20 June 2012, 22:52

I think this bears repeating on this page again, the comments from Andrew.

quote:

It was the 3rd time i saw the CEB bullets performing in the field and once again I was very impressed with the performance of the bullets. I kind of expect the 458/295 non con performing the way it did,killing animals fast even with not so good shots. I have to say that the little 130gr 30cal. raptor did some amazing things. I will let michael do all the detailed reports.At first I was not sure what the penetration will be on the long range shots on the larger animal but after Dan shot a big oryx bull at 300 yards through both shoulders and exited I was more relaxed to give the go ahead on the long shots. The 458B&M rifle that Nathan was using with the 295 non con proved to be an excellent plainsgame package for Africa.Dan and Nathan are excellent shots,it just happened a couple of times with Nathan that the animals were in a bad angle,quortering towards us and made for a difficult shot. Both times once with his impala and then with his oryx the bullet entered behind the shoulder.With the same shot that i have seen many times with the conventional bullets,will take you for a long walk on the tracks of a wounded animal but neither of these animals went far before they were down and dusted.

Michael

<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"

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.

brent ebeling

21 June 2012, 01:10

Ok, now we are talking. The second wildebeest shot is impressive. Taking a shoulder with that light of a bullet and still getting a 50 yard trail, nice. That is the story I was waiting to hear. Hello Alberta mule deer, meet my little friend the raptor>

michael458

23 June 2012, 01:20

I have another field report for you! This was sent to Dan earlier, and Dan has talked to Jeffe a couple of times and hopefully we got the info correct.

This is from an acquaintance of our own Aaron Neilson. Aaron sent Jeff Quinn over to speak with Dan about using the 300/275 BBW#13 Solids and NonCons in his 375 Weatherby. Dan and Larry from Superior Ammunition got things sorted out, and Dan provided Larry the bullets and Superior loaded the ammo for Jeff. Here is the rest of the story I have.

Hunter-Jeff Quinn

His PH was Andy Hunter.

Location- Save Valley Conservancy in Zimbabwe out of the Senuko Safari Lodge and Shangani Safaris

The ammo Jeff used was loaded by Superior ammunition with the .375 275gr NonCon's and 300gr solids and both produced around 1/2 inch groups.

Jeff shot hyrax, klipspringer and genet with the solids to prevent hide damage.

All other animals were shot with the 275 BBW#13 NonCons including zebra, giraffe, bushpig, buffalo, lion and a bunch of impala. All

were down to the count in less than 43 yards like he mentions in the email below except for the buffalo. It was a frontal shot only taking out one lung with the base recovered in the right hip. He must have been off slightly to one side of dead center to only get one lung. The only animal that dropped to the shot was the 250lb bushpig which was quartering to and he hit it at the point of the shoulder and the base passed out of his off hip.

From Jeff

Dear Dan,

I am happy to report that your bullets are the most accurate, devastating bullet on everything from the smallest hyrax, genet and klipspringer to the larger antelope, zebra, giraffe, cape buffalo and the lion. The petals complete the destruction of veins, arteries and in most cases lungs and the remaining hard core serves for complete penetration. Both the lion and buffalo were hit fully in the center of the chest with one bullet. The lion, hit at 61 yards, died within 43 yards with the bullet recovered on the far left hip; you can actually see the bullet in that hip from the photo! The buffalo hit at 175 yards, died within 300 yards with the bullet recovered on the far right hip. Both of these bullets passed through the center chest wall and penetrated through the entire animal. **As PH Andy Hunter stated, these bullets are the most impressive he has ever witnessed in over 30 years of experience in Africa. Swift soft tissue destruction and complete penetration.** He never lets a client shoot dangerous game beyond 80 yards but after witnessing the results on the giraffe the zebras he had no hesitation on letting me shoot the buffalo at 175 yards when the large herd restricted any further approach on this very old gray Dugga boy. All this with a 275 grain CEB in my .375 Weatherby.

I have pictured of all 15 animals taken with CEB. All one shot kills. Most expired within 5 to 40 yards except the buffalo. I have pictures with your bullets showing the entry and in some cases the exit holes. I have pictures of the recovered bullet with the animal. You can call me and I will walk through the shot and destruction on each of the animals. After our discussion and if you would like I will put in writing the results with pictures for your use. I have attached a couple of photos. Thanks for making the best bullets in the world and allowing me to use them. It made for one fantastic safari.

Sincerely,

Jeff Quinn

More on the Giraffe

Dear Dan,

The first shot was a quartering away at 200 yards. The bullet was on the inside shoulder, penetrated the chest cavity, both lungs and exited. The giraffe stumbled and turned facing me. It was dead but as still standing I placed a 2nd shot dead center. It went all the way through and was found in the rear hip skin.

More from Jeff

Remember, the .375 is a Weatherby ballistics are similar to a .416. Still a 275 grain instead of a 400 grain .416! That is why the one lung frontal shot on the buffalo allowed it to go 300 yards. However, if I had hit both lungs it would have been the standard 50 yards or less. It was a slight quartering and I misjudged the angle slightly at 175 yards. Even so, the PH said it was the best shot of the safari and one of the best he has seen. The giraffe hit both lungs and at the same distance and exited! And the giraffe is 50% bigger than the buffalo. As you can tell I am really excited about your bullets. The advantage to me is the .375 shoots like a .22 magnum. No recoil makes for very precise shooting vs the flinch factor on the 400 and larger. We had elephants around us at times and Andy Hunter, PH said he had no doubt the NonCon would do the job on an elephant if required. Your solid would be preferable but in a charge it would take care of the brain. By the way, on these recovered bullets, the solid core has no damage other some sharp edges where the petals broke off. The giraffe went through the 1 1/2" thick rib bone and still went the full length. Bones fragments destroyed the lungs as well as the petals.

Please feel free to forward these emails to Larry Barnett at Superior with my recommendation that he provide these bullets in his normal selection of bullets. I will be wanted him to load some more.







If and as I get anymore information I will get it up soon as possible.

Congratulations Jeff Quinn, great job!

Maybe Aaron will tell Jeff he is now famous, and Jeff will come over and have a look, tell us more!

Michael

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

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capoward

23 June 2012, 01:56

Very nice! And the reports just keep coming in. 🍷

Jim 🤖

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

boom stick

23 June 2012, 03:25

Thanks for sharing! Hope you post soon. Good to see more results coming in and such high praise from PH's with decades of experience. An advertisement could be just a pic of the bullets and all the praise from respected PH's. With so many reports of Excelent penetration and quick expiration the hunting and bullet world will have to take notice and say this is a new standard or be discredited like Terry Weiland. On a Safari you want the best. The best now has a new standard.

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)

srose

23 June 2012, 04:14

Excellent report!

LionHunter

23 June 2012, 08:34

Well done, Jeff!

Mike

DSC

DRSS (again)
SCI Life
NRA Life
Sables Life
Mzuri
IPHA

"To be a Marine is enough."

BaxterB

23 June 2012, 12:32

Good stuff!

Anyone yet calculated BC on the 275gr .375 Non-con to see what it looks like down range at Weatherby (2900 or so) velocities?

CEB strikes again! (Did anyone forward this link to TW?)

416Tanzan

23 June 2012, 13:54

quote:

Originally posted by BaxterB:
Good stuff!

Anyone yet calculated BC on the 275gr .375 Non-con to see what it looks like down range at Weatherby (2900 or so) velocities?

CEB strikes again! (Did anyone forward this link to TW?)

Most non-cons have come in quite low on BC.

If we use .14 as the BC without a tip, then the following is the result of a 275grain non-con .375", fired at a 2.0" sight-in at 100 yards, 2900 fps muzzle velocity.

At 300 yards the 275 gn. 2900fps bullet has:

300yds - 15.9" in drop!(excessive, but manageable with a rangefinder) 27.6" winddrift 10mph!(needs extensive sniper training and experience) 1350.7 fps remaining vel, 1113.8 remaining ft.lb. (like hunting with a 243 at 300yds!)

In other words, at 300 yards the non-con becomes a whimper, (Nobody is saying that it will not work since a 243 will also work. But it is a whimper of its starting roar.) Consequently, non-cons are the bullet of choice only out to about 150 yards. For longer shots a talon tip needs to be added in order to guarantee remaining energy and flatter flight path with less winddrift. 27 inches winddrift is intolerable and makes potential non-fatal wounding an uncomfortable probability.

With respects to Michael, BC considerations are important to the whole hunting picture and they will eventually lead to the ultimate Raptor. We are trusting in Dan's interests to see this through.

And for Jeff--CONGRATULATIONS on a wonderful hunt.

The 175 yard buffalo was a great shot and shows what a CEB can do even on the margins of its range. A talon tip would only improve the already impressive results. Michael's tests have suggested that the tips increase the spread of the petals. They also impart more energy by conserving the remaining downrange velocity and impact energy.

Thank you for the pictures as they let us all gather experience and knowledge for our outings that are less-frequent than desired.

+ + + + +

"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.

RIP

23 June 2012, 18:29

416Tanzan,

Nice analysis.

Is there any CEB or MIB Laboratory estimate of BC for this bullet?

□

Putting a tip on that might make for stability issues in a 1:12" twist.

But then there is the brass ESP Raptor .375/230-grainer, with "Ballistic Beak" added from CEB.

They are proven accurate to 600 yards by Trapper's shooting at the CEB range, 1:12" twist .375 H&H, IIRC:

□

I have stocked up on that one and will be trying it in the .375/404JS, with both 12" and 10" twists.

I will be pouring over past pages of this thread looking for any BC indications on these .375 bullets ... 🤖

Retained velocity, energy, trajectory and wind drift for these two bullets would be interesting to compare from muzzle to 300 yards.

I don't need to be shooting at game past that. 🌍

416Tanzan

23 June 2012, 19:54

RIP,
I just checked CEB and they listed .15 for the tipless 230 gr. .375. If so, the 275 would be a tad higher, maybe .175. Many of the small calibre tipless are down around BC .12.

+ + + + +

"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.

brent ebeling 23 June 2012, 22:15

I am new to the CEB world, but am a believer. Has there been any experimentation with the a VLD boat tail, like on a berger?

capoward 23 June 2012, 23:28

quote:

Originally posted by brent ebeling:
I am new to the CEB world, but am a believer. Has there been any experimentation with the a VLD boat tail, like on a berger?

Brent,

I'm not sure if you're referring to a VLD in relationship to the BBW#13 style of hunting bullet or to a VLD style of bullet period. If you'll visit the CEB website and select the 'Available Calibers' bar in the upper right of the pagemit'll take you to a page with the different styles of bullets CEB currently offers. The MTH (Match/Tactical/Hunting) bullets would be the bullets of interest.

Michael and RIP have both tested a hybrid MTH that Dan designed for our use in the .500 caliber. This bullet uses the narrow banding from the FBH (Flat Base Hunting) bullet's with the VLD shape of the MTH bullets; predetermined bullet weight dictated it's length and the BC that could be derived from its shape. If memory serves me correctly it has a 0.600 G1 BC (Dan's computation) which works right well for a 430gr .500 caliber bullet.

Now back to the 275gr .375 BBW#13 Talon Tipped HP NonCon...I don't recollect Dan ever providing the near or far velocities for this bullet - only the very small 600yd group they shot with it. Another thing to remember, the bullet tested was the original smaller diameter HP with the High BC Pointed Talon Tip so it would have a higher BC than the new larger diameter HP with the radiused Talon Tip.

Perhaps Dan can come online and give us the information relating to their long range testing of the original Pointed-Talon Tipped bullet compared to the replacement Radiused-Talon Tipped bullet.

Also, if memory serves me correctly, Michael had no stability issues using the standard BBW#13 HP NonCon with the Pointed-Talon Tipped bullets...all of his stability issues related to the longer-heavier weight ESP Raptors using the Pointed-Talon Tips.

Sorry for all the 'if memory serves me correctly'...I'm using my iPad rather than my laptop so I don't have acces to my electronic notes. 🙄

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

I Bin Therbefor 24 June 2012, 00:34

"The advantage to me is the .375 shoots like a .22 magnum. . . . Larry Barnett at Superior with my recommendation that he provide these bullets in his normal selection of bullets."

IMHO, the Weatherby Co needs to jump on this band wagon pronto and start offering Weathery factory loadings using the CEB bullet line. Who knows, the CEB bullet line may tame the 378, and 460. 🍻🍻🍻

Anyone know how to get the info to Weatherby? Perhaps the safari report by the hunter directly to Weatherby might get some attention. 🙄

brent ebeling 24 June 2012, 05:03

capoward,
Thanks for the reply. I have seen those bullets on the CEB web page that you refered to. I was thinking of all brass and trying to increase the BC. I realize when it comes to ballistics I am novice. I was also thinking specifically of the 308 in the 130 gr. I do like to shoot critters out there, so BC does concern me. Having not experimented with teh CEB in 130 yet, I am wondering on how to prepare my drop chart with this bullet. New 300 should be here in a few weeks so I will be getting some hands on experimentation then. Unitl then I am just curious.

MeplatFS 24 June 2012, 09:09

Guys

I haven't been on the site for a while as I was away for four weeks and am just catching up on things now.

For those of you in Australia, take note that CEB projectiles will soon be available for purchase domestically, from Meplat Firearm Services. Currently, CEB are pulling together the projectiles for my first order. Included are hunting projectiles from .223 to .620 in calibre, and even a selection of match bullets for the competition shooters as well. I've ordered lots of Talon Tips in many calibres,

so that they're available for those who want them for either Raptors or BBW#13 HPs.

My website is nearing completion, but we still have the big job of attaching projectile images to all the CEB offerings. Not a quick thing for 182 different projectile offerings. The web address is www.meplat.com.au I'll let you know when it goes live, hopefully in about 2 - 3 weeks time. Please note that I have included much information about BBW#13 Solids, HPs and Raptors on the site. This is for those people who don't have the time to read all 243 pages on this site and need a synopsis. So even if you're not in Australia, you'll probably find this a good site to point your friends to in order to learn about CEB projectiles, B&M rifles and hunting rifle considerations in general.

Also, in the August edition of Australian Shooter magazine (Australia's highest circulation shooting magazine) there will be an article called "The Shape of Things to Come" which I wrote about Michael's work developing the BBW#13's and Raptors. I'll post a link to it on this site when it comes out. I had better not do that before the article comes out as I'm sure the folks at the magazine wouldn't like that very much!

I'll also shortly be ordering some B&M rifles to keep here in stock for immediate sale to converts to compact, hard hitting big game rifles.

If you have friends in Australia who want to purchase CEB projectiles or B&M rifles, they can contact me at info@meplat.com.au

Meplatfs

capoward

24 June 2012, 11:50

quote:

Originally posted by brent ebeling:
capoward,
Thanks for the reply. I have seen those bullets on the CEB web page that you referred to. I was thinking of all brass and trying to increase the BC. I realize when it comes to ballistics I am novice. I was also thinking specifically of the 308 in the 130 gr. I do like to shoot critters out there, so BC does concern me. Having not experimented with teh CEB in 130 yet, I am wondering on how to prepare my drop chart with this bullet. New 300 should be here in a few weeks so I will be getting some hands on experimentation then. Unitl then I am just curious.

Brent,

I believe Dan should have the information you need regarding the 130gr .308 - I recommend you submit an inquiry on the website, his response should follow with little delay.

Jim 

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

RIP

26 June 2012, 22:46

In the "Reloading" forum, ALF is showing the patience of Job in explaining some fundamental truths. Note the reference to Terry Wieland in the latter bold lines in this quote. This is from pg. 3 of the "Use of Sectional Density" thread:

quote:

Originally posted by ALF:
SR4759:

Material properties for one.

One of the limitations in testing of projectile behaviour when fired and impacting at high velocities is the fact that they undergo ductile deformation.

This poses a problem for the tester as the reference area of the deformed projectile changes and as SD is such an important factor on how the projectile is going to behave and ultimately how the wound will look this deformation under the stress of the drag force confounds test results.

In order to establish standardized tests ballisticians often will use steel balls for their testing.

By choosing a round ball variables in SD are negated thus primary principles can be established. But even these balls will deform if the drag force is large enough.

The material properties of mass density, tensile strength, and elastic modulus differs from material to material and this ultimately influences SD by virtue of the propensity of the projectile to deform under stress.

The question is how important is this entity of SD really? the answer is very much ! because SD is the measure of how much energy the projectile is going to shed to the target and ultimately how much potential or real damage is going to be done due to the shedding of this energy. it comes down to efficiency and outcome.

As evidenced by observing the volumes of displacement of gelatine when projectiles of low and high SD are fired into the gelatine.

I have stated that SD is a measure of the amount of mechanical energy that will be deposited to the target,;

mechanical energy is the energy that does the real damage because it is the energy that has the ability to move and

transport target material away from the passing projectile.

Some think it is the bullet that does the damage, it is not ! it is the transfer of mechanical energy by the bullet that is the real agent of injury

Low SD projectiles induce large forces of drag and in turn to overcome these forces the projectile has to shed large amounts of mechanical energy..... hence then large volumes of displaced gelatine at the expense of penetration.

High SD projectiles induce less drag (they are by definition low drag projectiles due to their relative inertia to change in motion) and thus they shed less energy per unit distance penetrated and ultimately penetrate deeper relative to the low SD projectile.

The evidence in real life for this comes from our observations of wound profiles created by high and low SD missiles.

Fragments of projectiles whether fragmentation occurred prior to target impact vs those which fragment in target show this very well. Typically ultra velocity very low SD missiles are involved in wounds created by explosions.

The wounds produced by these are typically shallow and of large volume. In addition to this the effective radius of these types of missiles are low because they lose velocity very rapidly.

The same scenario applies to a projectile that fragments in target. typically the fragments have very low SD so their penetration is poor, yet because of their low SD they produce large volume wounds at point of fragmentation. This again evidenced by the volume of displacement of target material.

The behaviour of these fragments are interesting in that they typically do not follow the usual patterns of in target behaviour as intact oblong projectiles.

They typically turn side on and oscillate about their centre of gravity so that they, as a net effect maintain a constant SD, usually the lowest possible for that particular shape.

So when Mr Weiland claimed in rifle magazine that he had doubts about fragmentation projectiles and their effectiveness he obviously had done his homework and research.

What he omitted to concede or even consider though was that with some designs it is possible to combine the effects of low and high SD in one projectile.

His mistake is to dismiss a type of projectile without consideration of the ballistics involved.

ie a projectile that blows its nose off producing a number of low SD fragments thus a large volume shallow wound at point of fragmentation and then a secondary wound that is deep with a smaller wound volume per unit distance penetrated caused by the remaining high SD base portion of the projectile.

Gerards HV bullets do this, Barnes does it and now Cutting edge bullets and SAX munition have expanded on the concept by designing bullets where the nose fragments are limited to a fixed number and also of greater SD than say those who fragment randomly into multiple smaller fragments.

Is this non- conventional or new ? can we really call these non con bullets?

No not really it is simply application of ballistics that has been a feature of modern 20th and 21st century projectiles.

Perhaps non conventional to some because they have failed to consider or consult the body of literature on the subject out there.

What is more those who advocate for Cutting Edge here on AR claim SD to be dead or of little importance when in fact SD underlies the very premise of how their favourite bullet works in target ! a direct willful manipulation of SD as a factor through design to achieve a specific outcome.

I have been blasted and vilified here on AR by Micheal and others for my position when in fact they do not realize that I am actually a proponent and advocate of his product and others on what it achieves.

Go here for more: <http://forums accuratereloadin...043/m/5671035371/p/3>

michael458

26 June 2012, 23:18

quote:

I have been blasted and vilified here on AR by Micheal and others for my position when in fact they do not realize that I am actually a proponent and advocate of his product and others on what it achieves.

Anytime SD has been discussed with Alf it is pertaining to The Factors of Solid Terminal Performance, and nothing more. All about solids where the following factors that have been identified;

1. Nose Profile
2. Meplat Size
3. Twist Rate

4. Velocity
5. Construction/Material
6. Radius
7. Nose Projection
8. SD

quote:

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Again directed at me and taken out of context.

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boom stick

27 June 2012, 01:31

Numbers 1,2,6 and 7 all deal with what I coin "terminal coefficient". The ease at which a bullet passes through the animal. Think of it as BC for the inside of the animal. Some bullets are more efficient and some are designed to not be efficient. Looking at just the radius it allowed the bullet to go deeper based on making it more efficient terminally. You can determine the terminal coefficient by how deep it goes in a certain media. It's not the starting SD that matters as much as the terminal coefficient. Yes Higher SD can help but it's just one factor. The .2 SD Raptors out penetrate the .3 Barnes X because of a better TC.

[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)

capoward

27 June 2012, 02:04



I tried to interject comments into the conversation but decided it wasn't worth any additional effort.

Alf did make some decent comments but "everything is still dictated by Sectional Density" and his "dynamic SD" literally covers everything; e.g., SD controls aerodynamics, BC controls fluid dynamics, SD controls terminal performance, etc. ...

Myself, I believe that SD is important to the end result of aerodynamics, fluid dynamics, and terminal performance - but it does not control the results of any.

We however already know from the laboratory and field testing in the TBP thread that, within the same caliber, bullet design and bullet construction are more important than the bullet's BC; meaning a properly designed lower BC bullet will give greater terminal performance than a higher BC improperly designed bullet.

I think the 9.3 (.366 caliber) is perfect to illustrate the above statement. The terminal performance of the 260gr CEB BBW#13 FN Solid (0.277 static SD and 57" dead straight penetration) is greater than the 286gr Barnes FN Banded Solid (0.305 static SD and 14" straight penetration and then tumbled sideways and downward to 22" total). Both of these bullets are banded monometal construction having an angled nose leading to a flat meplat of different diameters, have approximately the same aerodynamic shape hence approximately the same Ballistic Coefficient (BC), and both are designed to not deform during terminal penetration.

Jim 

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

capoward

27 June 2012, 03:42



'Terminal Coefficient'... 'Dynamic Section Density'...

Boomy both you and Alf are attempting to coin a colloquialism to cover many things associated with a bullet stationary within a loaded in cartridge/chambered in a rifle, the bullet's delivery to the target (covered by External Ballistics), and finally how the bullet performs within the target (covered by Terminal Ballistics).

Alf refuses to produce a written document that would explain how all of this comes together, scientifically and mathematically, as 'Dynamic Sectional Density'... instead he solely references the work product of other individuals whose work also does not cover the spectrum covered by his 'dynamic SD'.



Will 'terminal coefficient' fall within the same 'black hole' or do you have something on the horizon that will explain it all?

Jim 

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John Wayne

capoward

27 June 2012, 03:52

I think this was the most cogent post on that Reloading Forum 'The use of Sectional Density' thread.

quote:

quote:

quote:

Your statement would only be true if you assume SD to be defined as $SD = m/A$ ie a static value.

Yes. And Sectional Density IS a static value, that's all it is or ever was and your formula is correct. Note there is no way to inject velocity, flying sideways or any wet orthopedics into it.

Estimating penetration was the single reason for the concept of Sectional Density for bullets. But bullet construction is so varied today that computing SD is worse than meaningless about how a bullet will penetrate because, if used as intended, it's badly deceptive. And bothering to calculate or look up something meaningless is a waste of potentially meaningful time!

Jim 

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John Wayne

capoward

27 June 2012, 03:55

quote:

Originally posted by michael458:

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7. Nose Projection
8. SD

quote:

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Again directed at me and taken out of context.

Michael

Michael even for expanding bullets, SD falls below the design and construction of the bullet.

Jim 

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

aliveincc

27 June 2012, 04:27

Got my latest issue of Handloader yesterday. It's clear as Gin. wee-wee is shilling for Swift. Wonder what the price was ? Sling mud, then praise the payer. Dirty,dirty,dirty. It also refers to Swift coming out w/ a new bullet-probably a solid. Wonder what that will look like. Wanna guess ?

RIP

27 June 2012, 04:46

quote:

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Jim,
That quote is utter BS.

Alf is absolutely, scientifically correct in all he asserts.

SD is indeed the basis of internal ballistics, inside the chamber and bore of a firearm, or any adiabatic, internal combustion engine.

SD is indeed the basis of external ballistics, "it drives the BC."
A pointy feather has very poor BC.

SD is indeed the basis for terminal ballistics,
it does indeed drive bullet penetration,
and it drives bullet expansion.

The only problem here is need of an attitude adjustment.
I believe ALF has crossed the bridge from the old to the new rules.
SD is still of prime importance, but so many other factors, as listed by Doc M are at play here,
we all just need to be more accepting of a .2 SD instead of .3 SD,
as long as the bullet material and design are up to the task.
Yes, greater penetration by higher velocity sometimes happens.

I just thought it was great that ALF took Terry Wee-wee-Land to task.

Did not mean to stir up any ALF-antipathy.
He is a great resource.
I truly think he has the patience of Job in dealing with us bubbas in need of some education.

capoward

27 June 2012, 05:57

RIP,

Yes I know the quote wasn't factual but it did fit my mood after reading through those posts. Kind of one of those moments. 🙄



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

michael458

27 June 2012, 15:48

RIP

I do concur with what you have to say, and that for pure science there is no dispute concerning Alf and his SD. It does play and will always play an important role, however, way too much is made of it for everyday use. I went down to look, and there is just way more there than I WANT TO KNOW, or waste time on. As normal with Alf, way too much information and time spent on that subject. Absolutely I have far too many things to accomplish than spending time on that.

Gave me a F*****G Headache.





JIM-----

Exactly! My point as well!

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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RIP **27 June 2012, 22:22**

Alf has taken a turn for the worse on that thread.
He is now feigning misinterpretation of Doc M's explanations.
He has got to be faking it.
As smart as he is, there is no way he could misunderstand so badly.
Just making an excuse for further pontifications.
It truly has devolved into mental masturbation, again, on that thread.
I will not go there again.

Alf is also ignoring, or ignorant of, the real world terminal ballistic evidence offered on this thread.
Still saying "wet pack" results are no indication of wounding potential on game, etc ...


Alf needs to do some reading on this thread, I hope.
I hope he is just ignorant, and not dishonestly ignoring the real world results.

I am calling on ALF to educate himself some more. See if he does.


capoward **28 June 2012, 01:41**

I believe Alf has been reading the 'TBP' or similar threads else he wouldn't be as aware of CEB as it appears he is. Unfortunately I believe Alf is still slinging stuff against the wall to determine what will stick regarding his 'Dynamic SD'.

But at least the conversation does appear to be acknowledging that bullet shape and construction is very important to the performance of the bullet whether via aerodynamics or terminal performance from impact until the bullet rests (which could be well after it has done it damage to the target game and exited)


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

michael458 **28 June 2012, 04:21**

Why on earth Alf insists on attacking the damned test medium and go on for page after page after page of  that is of little consequence in the big scheme of things, I DO NOT KNOW.

Well, look at it like this, we test in what Alf calls the "WET PACK", and BY GOD every single test we have done and the bullet was successful in this terrible evil "WET PACK" (Stupid F*****G Term) has been successful in the field. Every bullet we have tested in the evil "WET PACK" and observed it's behavior in the test work, has in fact BEHAVED exactly as tested in real ANIMAL TISSUE--I rest my case, End Of Story!

We developed an entire line of bullets, both solids, and noncons, based on the test work done right here. These bullets have proven themselves in the field, and continue to do so, time, after time, after time. Test work done here with the bullets concerning pressures, and even barrel strain has proven out as well. All of this work done here, at my cost, my sweat, my blood, and no compensation and don't want any. I spend more on bullets in a year than Alf makes in a year total, I really don't want to hear shit out of him! He has no validity and nothing but typing skills and mouth! End of Story #2! LOL..... Enough already!

I will do well not to hear of his ignorant  again, thank you very much!



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boom stick **28 June 2012, 05:38**

Michael Mix or Geletin or Animals... They work. Alf is smart and well educated on the subject but he is a round noser through and through. He detests the "Wetpack" I think because it shows the weaknesses of the RN. We all know wet newsprint is not animal tissue but it does tell us a lot. In the end it's about killing animals quickly and reliably and these bullets developed here do that with flying colors.

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)

RIP **28 June 2012, 05:41**

Doc M,
That is a lot of bullets annually!
Alf has never acknowledged the game animal necropsies presented here as a validation of the Non-Con soft and BBW#13 solid, products of MIB Lab R&D.

Does he want you to shoot live animals in the lab? 🤖
Too bad Alf has retired to armchair ballistic theory and rehashing of 40-year-old wound debridement principles.
I was a 17-year-old Army Cadet when they called off Viet Nam. I got over it. 🤖

RIP **28 June 2012, 06:32**

I swear, I opened this page, and scanned to the bottom.
Lo and behold, there was a post by ALF, and it said this:

". "

I rubbed my eyes, refreshed the page, and the single punctuation mark posted by ALF was gone.
Oops ... maybe I am hallucinating.

I think Alf has finally met more than his match in Michael.

capoward **28 June 2012, 09:48**

quote:

Originally posted by RIP:
I swear, I opened this page, and scanned to the bottom.
Lo and behold, there was a post by ALF, and it said this:
". "
I rubbed my eyes, refreshed the page, and the single punctuation mark posted by ALF was gone.
Oops ... maybe I am hallucinating.
I think Alf has finally met more than his match in Michael.



🤖 I have that thread saved as a pdf file so if the '.' start showing up I'll still have the discussion.

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

michael458 **28 June 2012, 18:12**

Excellent, we can leave this subject and move to something FAR MORE PRODUCTIVE!!!!!!!!!!!!

Hey, for those that watch terminals and may miss out on some other things, go check this new thread out about Lionhunter and my new LEATHER GUY!!!!!!!!!!!!

<http://forums accuratereloadin...4711043/m/8891027671>

Michael

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

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quote:

It also refers to Swift coming out w/ a new bullet-probably a solid. Wonder what that will look like. Wanna guess ?

Whatever it is, it won't be lathe turned...

Alf taught me:

1. The "Ignore" button is my friend;

and

2. Quote everything Alf writes if I intend to respond since it will either be substantially edited to suit his purpose or deleted by him in its entirety;

and

3. The "Ignore" button is my friend so that #2 above is never necessary

NRA Lifer; DSC Lifer; SCI member; DRSS; AR member since November 9 2003

STILL waiting for my Taksdale double or a refund

Don't Save the best for last, the smile for later or the "Thanks" for tomorrow