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**michael458**  
One of Us



posted 02 January 2010 17:31

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Con

Yes it is somewhat cumbersome, and unless one really reads very carefully, for me I might have to do so a couple of times to make sure I don't make a mistake on it. Brunette-ish, oh my yes, that is a passion, seems several of my ex's are just that, and of course the current for sure is! Hmmm

LOL

Michael

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

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!  
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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**

**Jagter**  
One of Us



posted 02 January 2010 17:44

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Warrior,

Why do you automatically assume that the undersize that is mentioned is with GSC bullets? The under size bullets that are mentioned are the Superpenetrators not GSC. You immediately call into question the GSC quality control system.

As usual you fail to comprehend the written word and see only what suits your agenda. You stand ready to criticise GSC even if you are so wrong that it is laughable. Crawl back into your hole and leave grown men to discuss matters here.

As usual your second post is equally laughable. You quote the speeds and penetration numbers that show that at higher speed the 410gr 416 results in 6 inches more penetration depth but you conclude: "That means clearly that at higher velocity we have more drag and as a result penetration will suffer."

Do you read the rubbish you write?

My apology to all forum members on behalf of a fellow South African that can't read and interpret what is written by others correctly 😊

OWLS

My Africa, with which I will never be able to live without!

Posts: **654** | Location: **RSA, Mpumalanga, Witbank.** | Registered: **21 April 2005**



Warrior

Thanks for bringing the Quality issue up, and catching that nearly perfectly. I do also think that .002 in a drive band would cause serious bullet slop, that's the reason I brought it up. I contribute the issue directly to that fact and not the design of the bullet.

But I think that you missed a very important point, It was not the GS Custom bullet, not Gerards bullet that was undersized, it was the 458 caliber Super Penetrator that was undersized to .456 and not .457. The three bands were only .456 caliber. These bullets seem a bit soft too. The 416 caliber bullet was sized .415 on the driving bands and performed much better than it's bigger cousin. But even then the engraving seemed shallow, maybe look back at the photo of the 416 super penetrator and I think you can see that. Also the recovered super penetrator actually compressed some, see that photo compared to the unfired bullet. Leads me to believe the bullet was a little soft. I have not experienced any compression with other mono bullets, or at least none I paid any attention to, or that was apparent to the eye.

I only had a few samples sent of these.

But please note, it was not Gerards GS Customs that were undersized.

Also of great import and note;

""Anything over 50 inches is basically moot, and thus for close range DG-hunting I would pick the lower velocity in favour of the undue recoil at high velocity. The lower velocity did not give much away, and in a practical situation on buffalo the difference is not even an issue.""

Warrior, you are 110% CORRECT. This is exactly the point, we know that in the wet print mix various round nose bullets will go to around 30 inches before veering off course. (This is not to simulate exact conditions in animal tissue please note) Now we also know that these various round nose designs have killed many a damn elephant and many a damn buffalo over the last 100 yrs or so, correct? So we can therefore make an assumption that if 30 inches of straight line travel with a RN is good enoughh, then my god man, anything over that is REAL DAMN GOOD, EH?

Velocity difference, yes in some cases, so we know anything over 30 is real good, so even at lower velocity we are far ahead of that, so I to most of the time would choose the lower velocity, and double that especially if I am trying to get the bullet to the same POI as my soft point, as I did in September with my 458 B&M.

Let me explain. I wanted to try out several bullets in 458 on the Aussie buffalo. But most of the lighter bullets I wanted to play with would not shoot with my PRIMARY BASE LINE LOAD---450 gr Swift A Frame at a touch over 2200 fps! Now, I was not completely satisfied with my backup solid POI--450 Barnes Banded Solid. It too was a touch over 2200 at 2230 fps, but POI was a little off by about 1.5 inches at 50 yards. By dropping the velocity to only 2170 fps with the solid it brought the POI exactly the same as the 450 Swift. Just a couple grs of powder less is all. This still gave me 56-57 inches of dead 100% straight line penetration in the mix, no different penetration at all than 2230 fps! I did not recover any of these from buffalo, and I shot the poor buggers to pieces too, I am not one to shoot once to see what happens, if it moves I shoot and most of the time that's 3 rounds before I even pay attention to if it still moves, then load up again and shoot some more! I go to shoot and that's what I love to do, my goal is to not bring any ammo back home with me!

So therefore having shot a bunch of these solids thru buffalo from every angle, none recovered, all straight thru, then penetration was far more than "sufficient" as I see it, even at 2150-2200 fps, makes little difference.

Next:

""However, the 410 gr solid is too long imo for a .416 caliber and would agree that the 380 grainer is the better option. A 380 grainer at say 2,250 fps would be more pleasant to shoot and as ideal as can be for buffalo. Also a whole lot less chamber pressure and stress on the rifle. Recoil of 410 gr @ 2,527 fps is some serious recoil - do the sums and compare.""

This was my conclusion also with help getting there from Gerard and RIP concerning the 410 Solid. To long to stabilize. 370-380 better in that particular rifle.

Thanks  
Michael

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**michael458**

One of Us



posted 02 January 2010 18:25

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Jagter

Oppps, I see that some are not always in agreement! Welcome, damn glad to have you with us! I hope to have straightened Warrior out on the issue concerning the GS Customs not being undersized, but in fact the .458 caliber Super Penetrator.

In some defense of Warrior, he does make a couple good points that I am glad were brought back to light however, as mentioned above.

That is some formula concerning the penetration and velocity. I have to admit, that I have always felt that there was a point of diminishing returns concerning velocity and solids. I don't know exactly what that point is, and also believe that nose profile would be a very important factor in such. But nothing that I can prove definitively. Most of the time I hover in that 2100 fps to 2300 fps range with most 458s and up, and it always works great and straight, with flat nose designs. So as long as that continues to be so, most likely that is what I will do .

Of course in the case of expanding and NonCon bullets, velocity makes all the difference in the world, sometimes more is good, sometimes less is better. Depends on the bullet, but that's yet another discussion.

No apology needed at all, no worries. We love South Africans here on the compound, in fact my Wife is from Pretoria!

Thanks and very much welcome to the thread.

Michael

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



**VWarrior**

One of Us



posted 02 January 2010 18:25

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Hey Warrior,  
You've been away for five weeks and as soon as you are back you do a number on yourself. Where ya been, to dumschool for more lessons?

Michael, you are a gentleman and a scholar, being so kind to one so undeserving. I salute you!

VWarrior

Posts: **127** | Location: **South of the Zambezi 2** | Registered: **22 March 2008**



**michael458**

One of Us



posted 02 January 2010 18:35

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VV

Welcome! I suppose I am missing some history somewhere, but that's ok. I am a quick learner, will catch up sooner or later! But until then I will leave those sort of things between you guys.

Thank you, I do my best to be a gentleman and try not to be too rude. However, make no mistake that could change in a millisecond if need be. And when that occurs, I take no prisoners, only scalps and ears!



Glad to have you here, I seem to recall reading some of your work and thoughts on bullets somewhere in the past! Not sure what, or where or the jest of the matter, but certainly would welcome a refresher course on your thoughts thereof!

Please, Please Please, to all concerned, I would welcome some fresh thoughts and discussion here, some of your personal data, experiences and so forth. Don't be shy and you, and all, are welcome to contribute thoughts, ideas, theory, anything!

Michael

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

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



**ALF**

one of us



posted 02 January 2010 19:00

[Hide Post](#)

Posts: **7852** | Registered: **16 August 2000**





Alf,

Good morning. I was just catching up on comments since yesterday and read your test. My first thought that it's similar to airflow displacement so why wouldn't a small airflow chamber depict a similar pictorial flow displacement?

But then I thought that while they'd both depict displacement flow that perhaps fluid flow displacement might not be the same...so then a couple of other questions cropped up so I thought I'd go ahead and throw them out:

1st Would standard household water pressure, I believe it's around 60-65psi be sufficient? Or would something like the increased water pressure from a portable pressurized car wash pump be required? And, 2nd Will the short distance of the metal shank between the base of the bullet and the bend adversely impact the water flow and disrupt the cavitation?

Anyway, it's a very interesting test proposal...I'd definitely like to see the results!

Jim

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



Something I wondered about the Superpenetrator bullets was why they were not designed with an additional band near the bullet base which would perhaps give a better gas seal as well as additional stability while traveling through the barrel. Obviously I didn't design the bullet so perhaps it's not needed. Just one of those mental questions that I thought I'd throw out.

Jim

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



**michael458**

One of Us



posted 02 January 2010 20:45

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Alf

What you have there is a very interesting concept and would appear to be a good test, for cavitation I suppose. I really don't have a good way to try and set that up, nor the expertise in putting the bullets in the wire thingy you have there! Looks interesting however, and I would like to see photos of that.

Jim

Those 3 bands you see on the Super Penetrator, that's it for bearing surface! And those are sized .456. All others are .457. The Barnes has that bottom base for bearing, the JDJ has that bottom band, and the North Fork is very interesting, that wee band at the very base is bearing surface too along with all the tiny bands. The Super Penetrator has little bearing surface compared to the Barnes and North Fork, about equal with the JDJ bands, but the bad part is it seems to be soft, and undersized too.

Michael

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

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



**capoward**

One of Us



posted 02 January 2010 21:22

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Well the GSC seems to compress slightly in the nose area and that doesn't appear to hurt its performance...perhaps the SuperPenetrator softness has something to do with the manner in which they affix the disc to the bullet nose.

Decided to check further on the SuperPenetrator so went to their website, interesting reading:

<http://www.grosswildjagd.de/penetrat.htm>

Found it interesting that the bullet tested doesn't look like the picture of the SuperPenetrator bullets depicted on their website:



Though, I guess the first article does cover quite a number of differing bullet shapes...just kind of wonder why they didn't go with one of the four band monometal bullets pictured in the article rather than the 3 band monometal bullets that were sent to Michael? Hum...guess its something that someone more familiar with the SuperPenetrators will have to answer.

*Edited...forgot the 2nd photograph*

Jim



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

John Wayne

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



**I Bin Therbefor**

One of Us



posted 03 January 2010 02:18

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capoward;

I supplied the superpenetrator bullets. Got a couple more if they're needed. They were very difficult to obtain. This is a description of the actual bullets purchased

.416 / 410gr. Super Penetrator

.416/410gr., Gewicht 26,6g. Einzelpreis 2,64 €, Packungsgröße 25 Stück  
Super Penetrator nach Original Dr. Norbert Hansen

.458 / 500gr. Super Penetrator

.458/500gr., Gewicht 32,4g. Einzelpreis 2,80 €, Packungsgröße 25 Stück  
Super Penetrator nach Original Dr. Norbert Hansen

Look at the site you referenced under "Penetration". At the bottom of the page you'll see a picture of a "SuperP copper/steel" in the three band design. Apparently the steel refers to the nose cap and the copper to the body and driving bands.

Also, in Germans, in the links you'll find the link to the manufacturer Reichenberg Spezialgeschosse.

Posts: **404** | Registered: **08 May 2005**



capoward  
One of Us



posted 03 January 2010 03:03

[Hide Post](#)

IBT,

Thanks I found it. Had to use the German hyperlink as a major chunk of the information was missing from the English hyperlink. Of course I had to translate the webpage in Babel Fish so that could read it.

Very interesting that he tested disc diameters between 5mm (.1968") and 8.5mm (.3346") with the .458 caliber bullets (percentages of diameter respectively of 42.95% to 73.05%) but determined that the optimum disc diameter range is 6mm (.2362") to 7.5mm (.2952") for that caliber bullet (percentages of diameter respectively of 51.57% to 64.45%).

Again, thanks for the additional information and proper link.

Jim 

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

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



I Bin Therbefor  
One of Us



posted 03 January 2010 17:09

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Capoward,  
My pleasure.

Did you note that the author prefers a 458 caliber with a 500 gr bullet at 2400 f/s? He is primarily an ele hunter using a 458 Lott, but goes on to suggest that a 458 Lott is an ineretsing caliber for a one gun safari.

Al,

Your test set up looks interesting. Watch out for the "wall effect". The tube must be large enough so that the waves created do not reflect back from the wall and that the wall does not constrain the formation of whatever is going to occure. Of course a set up that spun the bullet would help the simulation. I haven't talked to my CFD buddies but it's possible that code exists to do an initial computational simulation.

Posts: **404** | Registered: **08 May 2005**



ALF  
one of us



posted 03 January 2010 19:42

[Hide Post](#)

.

Posts: **7852** | Registered: **16 August 2000**





quote:

So now we come back to our application of these bullets. What is abundantly clear is that when compared to RN or ogved bullets these FN bullets or shall we say Semi cilindrs are stable for the distance it takes drag to bring them to a complete stop in the target.... which is all we can ask for.

Now we talking Alf! Regardless of anything I would add only one thing to your statement above, and that is this, "That the distance these bullets take for drag to bring them to a complete stop in the target is more than enough to accomplish our hunting goals, which is to drive said bullet into and through animal vitals of particular animal in which we wish to dispatch!" In this case the heavies, elephant, hippo, buffalo.

I really believe you mean well, and are very intelligent, and freely admit that while I understand the concepts of "supercavitation" and many of the other terms we use, my intent, my goals, and my needs are far more simple. All I want to know is whether it "Does" or it "Does Not". If it "Does" then I am going to go shoot something with it and see for myself! If it "Does Not", then I am going to look for something that

"Does", then I am going to go shoot something with it and see for myself! 😊👍😊

I know this is a very simplistic way to look at it, I know it ain't very scientific, I know that this comes up very very short of that, and I truly wish I had the time and inclination to get extremely serious about diving deeper into this, as it is extremely interesting to study, as a shooter of many sorts of firearms, and the background I have involving all sorts of different aspects of shooting. But none the less I don't have the time, and if done properly I would in fact need a hired staff to assist in these matters. But even as simplistic as it is, this thing I do, it seems to have worked for me for a very long time, and quite a few and various sorts of dead critters, regardless of the many shortcomings my little bit of work has!

I will leave other such matters and extremely complicated formulas and science up to those far better qualified than I to undertake, such as yourself. So thanks for bringing many things to light and doing your best to teach the ignorant, such as myself!

Have a fantastic day!

someoldguy  
GLENN

Along the same lines of what I just said to Alf concerns the site you posted. Again, I just this morning skimmed over some of this, and this body of work makes what I do look childish in comparison. Also it seems this chap is rather well qualified to undertake the study, as not only is it his hobby but his profession as well! I bow to this expertise I suppose you might say! Now I have not gone over this in detail, my patience is too short at times I am afraid. While it might have some shortcomings I have not seen, I don't think the shortcomings are of consequence! This is a fantastic, detailed, data gathered, looks pretty scientific to me, body of work. Also appears it takes in others that have done some study too, and I really saw nothing that I had any issues with at all, and in fact I have to look closer as some of it does appear to help validate some of the amateurish work I have done! What I have done pales in comparison to this. But again, I suppose there are different end goals desired between the two issues.

Regardless thanks for sending that and posting it. I hope everyone reading anything to do with this thread takes time to visit that site and read this stuff! It's fantastic!

Michael

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

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**michael458**

One of Us



posted 03 January 2010 20:48

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quote:

Originally posted by someoldguy:  
Here is the site of another shooter/hunter/researcher whose findings closely agree with Michael's:

<http://www.rathcoombe.net/sci-...istics/wounding.html>

I just wanted to bring this forward again for anyone that might have missed it.

Michael

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

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



**DWright**

One of Us



posted 03 January 2010 21:36

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<http://www.mazamasportinggoods.com>

Posts: **1324** | Location: **Oregon rain forests** | Registered: **30 December 2007**



**I Bin Therbefor**

One of Us



posted 03 January 2010 21:56

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The military applications of cavitation of which I am familiar are all stabilized by some means other than spinning. IMO that's due to the cannon launched ones coming from a smooth bore in order to achieve the necessary velocity and in the case of underwater missiles, the method of launch.

Anyone have any references to spin stabilized supercavitation? Or for that matter, what spinning does to the formation of the supercavitation "bubble"?

The RAMICS missiles which are launched by a 30mm cannon have an absolutely facinating shape. Not all what I expected. <http://www.globalsecurity.org/...tions/mk258-pics.htm>

Posts: **404** | Registered: **08 May 2005**



**someoldguy**

One of Us



posted 03 January 2010 22:53

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quote:

someoldguy  
GLENN

Along the same lines of what I just said to Alf concerns the site you posted. Again, I just this morning skimmed over some of this, and this body of work makes what I do look childish in comparison.

No, I certainly don't think what you do is childish! I think some data from that website are taken from other sources like the Linebaugh seminars. (BTW the accepted medium for the Linebaugh penetration testing is wet newsprint, in case you didn't know.) But you do your own independent testing at your own expense, so there's a big difference IMO.

One of the things on that website that I have issue with is the attempt to come up with a formula to predict penetration depth based only on meplat diameter, without consideration of the bullet diameter. That just frankly ain't gonna work IMO. I'll show why I think so in a seperate post.

I have to confess that I do have a scientific background of my own: I can estimate power and torque of automobile engines with a pretty high degree of accuracy. Because of this I've been able to help some local race-car engine builders to know the capabilities of their engines. (I live only about 10 miles from the Talladega Speedway.) Of course, this doesn't necessarily qualify me in the area of terminal ballistics, but I am able to use more than basic math fairly accurately.

So I might be a little more than just some geek with a calculator. 🤖

-----  
Glenn

Posts: **942** | Location: **Alabama** | Registered: **16 July 2007**







Meplat diameter.

Now that my lack of qualifications has been settled, I'd like to show why (I think) that a meplat diameter might be beneficial to terminal bullet performance.

I will have to use some math to do this, but I don't think that it's very forbidding.

I have in mind one group of bullets in particular: A round nosed bullet but with a blunted front. I don't know if it might apply to any other bullets. I didn't want to use oval, conical, or elliptical shaped bullets because they're a pain for me to deal with. I'm just using the simplest example I can think of.

If you consider that a round-nose bullet is essentially half a sphere (hemisphere), then it's easy to estimate the frontal area based on using the formula for a sphere and dividing by 2. This is:  $\text{area} = \text{radius}^2 \times \pi \times 2$ .

I'm going to look at two bullets: One a 500 grain, .458 caliber bullet with a .280 inch meplat and the other a 400 grain .458 bullet with a .336 inch meplat. (These don't necessarily look like the bullets from the chart that ALF has so kindly provided.) Most of us can figure very easily that the conventional sectional density of the two bullets are **.341** and **.272** respectively.

First, we figure the frontal area of a .458 diameter (.229 radius) bullet according to the formula. We get about **.329** square inches of frontal area.

But this is the area of a hemisphere and we are looking at a flat-nosed bullet. So let's consider that a flat-nosed bullet is simply the area of the hemispherical round nose, but with a smaller hemisphere with the meplat diameter lobbed off. So if we have a 0.28" diameter (0.14" radius) meplat, then we can figure the amount that will be deducted from the .329 inches of the rounded area: About **0.123** sq. ins. So the frontal area of a .458 diameter bullet with a .280 meplat is about  $0.329 - 0.123$  or **.206 sq. ins.**

The bullet with the .336 inch meplat is treated similarly, only with the larger-diameter hemisphere cut off. A .336" diameter hemisphere is about **.177 sq. ins.**

So the frontal area of the second .458 bullet is  $0.329 - 0.177$  or **.152 sq. ins.**

If we divide these areas into the bullet weight in pounds, we get a new set of possible sectional density numbers in pounds per square inch:

$500/7000/.206 = \mathbf{0.347}$  lb / sq.in. (Close to the original SD number)

And

$400/7000/.152 = \mathbf{0.376}$  lb/sq.in. (Notice the change.)

I don't want to suggest that the 400 grain bullet might penetrate better than the 500 grain bullet, but just to point out how I think that the size of the meplat might make a difference.

Class dismissed.



-----  
Glenn



michael458

One of Us



posted 04 January 2010 21:56

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Glenn

That's a lot of ciphering you have done! I don't know, but looks pretty interesting to me, if I ever figure it out! Nahhhh, I think I sorta almost got the jest of it! Looks good, Now the way I have it figured, it would really come into play with two bullets that are the same weight and diameter, and all other things being equal, with different size meplats, correct??

Thanks!

Guys we have covered a hell of a lot of ground since beginning this thread. I have a few things coming in from 465 HH to put in the box, mostly from one of my 458 Lotts. Now I realized that from the beginning I had been testing bullets that I wish to use and work with, and most of that over the last few years have been with my various .500 calibers, and the rest of the B&M series. I have not done much if any work with many of the other cartridges I have in recent years. Most of my old data with various cartridges is with older bullets, and bullets then not available and so forth. Got to thinking last night about some of the new bullets we have now, and how that would apply to some of the work done years ago, along with cartridges or rifles I have not worked with in a long time.

At the top of the list in my mind is our venerable old 45/70! Damn near everyone has one of these, some of us have several of them, and if you don't have one you need to get one! It has been a long time since messing with any of my 45/70s, actually a few years. Since then we have a lot of bullets to play with. Some that come to mind, the Barnes Busters, and the 330 Barnes FN Solid, and a few of the NonCons that were tested in 458 B&M. I think I will go through my .458 bullets and see what I can come up with on 45/70. Over the next week or two might take a look at some of those.

Anyone with any thoughts along these lines?

I am also still in the process of looking at the site Glenn sent, maybe we can get some good ideas from that too!

Michael

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

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



someoldguy

One of Us



posted 04 January 2010 22:41

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quote:

Now the way I have it figured, it would really come into play with two bullets that are the same weight and diameter, and all other things being equal, with different size meplats, correct??

That would be my guess too. I was really concerned about disproving the idea that a smaller meplat always meant more penetration.

That was the notion that was more or less advanced in that website that I posted. I smelled bull!

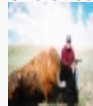


-----  
Glenn

Posts: **942** | Location: **Alabama** | Registered: **16 July 2007**



jwp475  
One of Us



posted 04 January 2010 23:39

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quote:

Originally posted by someoldguy:

quote:

Now the way I have it figured, it would really come into play with two bullets that are the same weight and diameter, and all other things being equal, with different size meplats, correct??

That would be my guess too. I was really concerned about disproving the idea that a smaller meplat always meant more penetration. That was the notion that was more or less advanced in that website that I posted. I smelled bull!



I'd wager that a smaller meplat does not guarrenty more penetration

-----  
A 9mm may expand to a larger diameter, but a 45 ain't going to shrink

Men occasionally stumble over the truth, but most of them pick themselves up and hurry off as if nothing had happened.  
- Winston Churchill

Posts: **5077** | Location: **USA** | Registered: **11 March 2005**



michael458  
One of Us



posted 05 January 2010 00:17

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Well all I know that I can tell you is this, a solid that has a meplat from 60% of diameter up to 73% or so of diameter does a fine job of penetrating. Between I'd say 65% of diameter and 73% of diameter being real good! This is just on the bullets I have tried. I wager that smaller meplat per given diameter, gives less straight line penetration, in our wet print mix in calibers from 416 up. Hard to say about those mediums and smalls as I fall back on testing some 9.3 and 6.5s that out penetrates nearly everything.

In general of course, a "rule of thumb" IMO, and probably exceptions out there that I have not seen yet.

Michael

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

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



someoldguy  
One of Us



posted 05 January 2010 01:27

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quote:

In general of course, a "rule of thumb" IMO, and probably exceptions out there that I have not seen yet.

Sometimes it seems like the only rule in this terminal ballistics game is that there are no rules. Just exceptions. 😊

That's why I like to see tests that are backed up by actual performance in the field, just like you're doing.

-----  
Glenn

Posts: **942** | Location: **Alabama** | Registered: **16 July 2007**



ALF  
one of us

posted 05 January 2010 04:30

[Hide Post](#)

Posts: **7852** | Registered: **16 August 2000**



ALF  
one of us

posted 05 January 2010 07:27

[Hide Post](#)

Posts: **7852** | Registered: **16 August 2000**



someoldguy

One of Us



posted 05 January 2010 11:29

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OK, I need to stick with car engines.



ALF, what do you think of this formula from the website that I posted? It seems that my brain must have been out to lunch, or it's not functioning properly because of the cold weather.

**PEN(FN) (inches) = Bullet Weight (lbs) x Impact Velocity (fps) / Meplat Diameter (inches) / 5**

PEN(FN) is the predicted penetration depth in wetpack.

-----  
Glenn

Posts: **942** | Location: **Alabama** | Registered: **16 July 2007**



Gerard

one of us

posted 05 January 2010 13:22

[Hide Post](#)

Hi Alf,  
You say:

quote:

Sectional density times velocity or if you wish momentum divided by the cross sectional area of the wetted surface in contact with the target..... so much so for those who still cling to notion that somehow SD is of no consequence!

Given three styles of .50" caliber bullets, a one caliber round nose, a 65% meplat FN and a 10 caliber secant ogive spitzer with a .15 caliber meplat, which has the smallest wetted area in a dense medium such as tissue? The samples above all weigh the same, strike the target at 2500fps and are made out of nondeformium (from the same supplier as unobtainium).

quote:

yep because BC is nothing more than the ratio of a bullets sectional density to it's coefficient of form.

Why do Sierra, Berger and our data show different BC values at different Mach numbers? The SD and coefficient of form remain the same, or do they? what changes?

Chris/Truvellosooter/Warrior,

Your lack of an apology or correction shows that the intent of your post is driven by malice, as usual. Nothing has changed in the last ten years that you have been finding imaginary faults with GSC products, while ignoring gross shortcomings of your fave manufacturers. You have learned nothing but your agenda remains the same. For the last decade you have remained as stupid as a sack full of hammers. As ignorant as you were at the turn of the century, so ignorant you remain today.

I apologise for the above paragraph guys but, if I say how I really feel, I may become insulting.

Posts: **2848** | Registered: **12 August 2002**



someoldguy

One of Us



posted 05 January 2010 14:04

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quote:

I'd wager that a smaller meplat does not guarrenty more penetration

It's too soon after Christmas for me to wager too much, but I'd make that bet myself. I found two quarters in my coat pocket!

Another thing that bugs me about very small meplats vs. a tough medium like muscle, hide, etc.: The large amount of pressure exerted on the smaller area by the resisting force. Will the bullet be strong enough to hold its shape, unless it is made from "nondeformium?"

-----  
Glenn

Posts: **942** | Location: **Alabama** | Registered: **16 July 2007**



**michael458**

One of Us



posted 05 January 2010 15:45

[Hide Post](#)

Jesus H! I never seen so much ciphering in all my days over a bullet! I really don't think I have a calculator with that many numbers on it! Gives me a headache! If hunting season was in I swear I think I would have to go shoot something just to relieve the pressure! It's also a little cool here too, makes being outside a little rough on a warm weather southern boy! I reckon I will just go load something up and go to the range and see what I can kill out there today, maybe some thin paper targets to test penetration on. You boys keep ciphering, I going to go shoot something.

Michael

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

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



**ALF**

one of us



posted 05 January 2010 18:27

[Hide Post](#)

Posts: **7852** | Registered: **16 August 2000**



**michael458**

One of Us



posted 05 January 2010 19:51

[Hide Post](#)

Micheal 😊



But it's you that let the dogs out with you testing 😏

Alf

Exactly, I turned the damn dogs loose, but I got a cure for stray dogs!



Thank You!

Cheers! 🍻🍻🍻

I think all of you should chunk your calculators out the window, load some, and go shoot! Make you feel better that way! I just come off the range doing just that, some 50 B&M and 416 B&M. Getting a couple rifles ready to go to Australia and one to Ohio! That's more fun than punching numbers! Well, gotta get back to the range now, more fun!

Michael

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

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



**someoldguy**

One of Us



posted 05 January 2010 21:57

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quote:

Exactly, I turned the damn dogs loose, but I got a cure for stray dogs!

Aw, you don't have to do that. Just throw me out some stale cornbread. I'll eat it, scratch my fleas, lick myself, and move on down the block. 🍞

Glenn

Posts: **942** | Location: **Alabama** | Registered: **16 July 2007**



**michael458**

One of Us



posted 05 January 2010 22:01

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Damn if I am throwing the cornbread to the dogs, save that for myself!

M

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

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



**someoldguy**

One of Us



posted 05 January 2010 22:56

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quote:

Damn if I am throwing the cornbread to the dogs, save that for myself!

Ah, spoken like a true Southerner! We know the true value of cornbread!

So my new year's resolution is to cypher less and shoot more. At present, my only big bore is a .45 Colt revolver, but that could change by year's end.

-----  
Glenn

Posts: **942** | Location: **Alabama** | Registered: **16 July 2007**



**michael458**

One of Us



posted 05 January 2010 23:30

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Glenn

That's right, good cornbread is hard to come by!

In revolvers that is all I have, 45 Colts! Does everything I need to do. Also have several little 45 Colt rifles to go with them too, now that is fun! And, they are big bore too. I figure a 45 Colt in a little 16 inch M94 is a damn sight more of a big bore than a (375) anything, DW right where are you! That's by my cyphering! Ciper or Cypher? You know I just looked that up in my computer dictionary, and both ways give the same exact define! How about that! You see the things you can learn here?

Getting concerned about my buddy Capoward? Where are you too?

Michael

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



**Warrior**  
One of Us



posted 05 January 2010 23:52

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quote:

Chris/Truvellos shooter/Warrior,  
Your lack of an apology or correction shows that the intent of your post is driven by malice, as usual. Nothing has changed in the last ten years that you have been finding imaginary faults with GSC products, while ignoring gross shortcomings of your fave manufacturers. You have learned nothing but your agenda remains the same. For the last decade you have remained as stupid as a sack full of hammers. As ignorant as you were at the turn of the century, so ignorant you remain today.

I apologise for the above paragraph guys but, if I say how I really feel, I may become insulting.

Gerard,

I did not respond to your disciples as it was not worthy of a response. There was no attack or any agenda as you vindictively allege. I thought that it was a GSC bullet, but I was mistaken, and that is no crime or attack, but let us look at the operative words .... and what it really says:

**"This must have been a dud run, because this is not normal. Question remains valid ... how did it pass QC?"**

**I am sure GSC would supply replacement bullets to get a more equitable comparison"**

Firstly, I hinted at the likelihood of a dud run, and then very importantly I said that it is not normal. Not normal for GSC bullets, yes, as I have mentioned countless times that GSC bullet are precision turned - did you forget it, or are you being deceptive again to conveniently ignore it, hey?

I went further and I hinted that if it were to be the case, then I am sure GSC would remedy the situation by supplying new bullets. Now where is the attack in all of this. It is only in your mind as a paranoid person that sees things that are not real. If anything I underscored the fact that you would stand behind your product. But you only see the bad because that is all that you want to see, and that my friend is your agenda to try and discredit me.

So there is no need for any apology.  
Your response is demonstrated proof that you remain as an incurable paranoid as ever.

Have a good day  
Warrior

Posts: **2273** | Location: **South of the Zambezi** | Registered: **31 January 2007**



**VWarrior**  
One of Us



posted 06 January 2010 00:24

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quote:

**This must have been a dud run, because this is not normal. Question remains valid ... how did it pass QC?  
I am sure GSC would supply replacement bullets to get a more equitable comparison**

There is no doubt about what you meant. Get yourself another spin doctor, the one you have is broken.



VWarrior

Posts: **127** | Location: **South of the Zambezi 2** | Registered: **22 March 2008**



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