#### **Terminal Bullet Performance**

#### This topic can be found at: <u>https://forums.accuratereloading.com/eve/forums/a/tpc/f/4711043/m/2861098911</u>

#### michael458

#### **Terminal Bullet Performance**

15 January 2011, 02:19

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Originally posted by RIP: Doc M, I got the .458 CEB bullets, thanks. Will load and shoot in the .458 B&M. I have to wait for temps above freezing outdoors to chronograph. I am gone to look for your black lab coat ...

#### Yes, RIP, I must find a black Lab coat, no doubt!

I recently put the 450 #13 Solid in the Pressure trace with 77/AA 2520--2259 fps at 60488 PSI, the same 77/AA 2520 and the 420 #13 HP at 2254 fps and 52357 PSI, not having to push the weight! Which means you could bump up the 420 a good bit. This was 20 inches too. Find that AA 2520 gives the best results in the 458 B&M with heavy bullets--RL10X and RL7 with lighter bullets, 400 and under. Have not had time to look at the RLs with the 420 #13 HP. Probably worth taking a look at however.

I loaded some of the 480 #13 Solids and 450 #13 NonCons today, they are a tad longer, so I dropped to 75/AA 2520, see what happens, hopefully Monday!

No thanks needed.

Michael

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#### someoldguy

15 January 2011, 02:24

#### quote:

120 pages: This is an amazing bit of reading, at least humour a simple reader with fact and not half truth and outright fallacy!

I'm not sure what I did, but whatever it was brought you out of lurking mode, didn't it?

Glenn

# michael458

quote:

15 January 2011, 02:25

Originally posted by Jack D Bold: Mike was kind enough to send me the copper solids and noncons for a .470NE. Cannot wait to try them.

Does anybody have load data to share?

#### Jack

I know that Sam was loading 106/IMR 4831 and that was doing great with these last run of bullets giving 2142 in one test, and 2154 in another and running 42023 PSI.

We shot a bunch of loads with 106/IMR 4831! CHANGED

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## michael458

15 January 2011, 02:41

Why hello Alf! I see you have dragged yourself back, welcome as always!

SD really does not have the same meaning it might have had 25 yrs ago! The new solids and even the new NonCons, have made SD not as important a factor as it once might have been. Very simply there are several other factors that are far more important than SD. SD is not quite DEAD, yet, and is a factor only when two bullets have the same nose profile, meplat size, radius, velocity and twist rate, then it becomes a factor when comparing two exact bullets and these factors, with the only difference being SD. Not quite out the window and gone--but getting closer! These other factors are much more important.

I have forgot the grosswild thing, will have to go back to it to see what you boys are talking about! When I get more time. Out of time right now!

Michael

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#### **MikeBurke**

15 January 2011, 02:48

quote:	
Originally posted by Jack D Bold: Mike was kind enough to send me the copper solids	and noncons for a .470NE. Cannot wait to try them.
Does anybody have load data to share?	

test, and 2154 in another and running 42023 PSI. We shot a bunch of loads with 106/IMR 4198!

Sam will most likely give some advice as well!

Michael

Is it IMR4198 or IMR4831???

I believe a test looked good with H4831SC 110 grains also.

#### MikeBurke

Jack,

About halfway down this page there is a spreadsheet with 470 load and pressure info.

http://forums.accuratereloadin...3/m/2861098911/p/113

#### jeffeosso

15 January 2011, 03:28

15 January 2011, 03:05

Originally posted by ALF:

120 pages: This is an amazing bit of reading, at least humour a simple reader with fact and not half truth and outright fallacy!

To infer that SD does not work or does not apply in the case of certain bullets but "momentum density" does makes absolutely no sense! just as someone claiming that bullet motion in air is all about BC and SD is of no consequence.

How do you disconnect SD from moment density but still keep the concept valid?

And then to quote from web based sites like the above, <u>http://www.grosswildjagd.de/momentum.htm</u>

Are we to be convinced that the information contained on Grossswild is factually correct?

PLease! my 4th grader daughter at one time could tell me that there was a difference between states of matter and their mechanical behaviours and yet all here including the author of Grosswild cannot decern between the differences of solids and fluids, nor can some folks here!

Just making sure we keep an alf post for a change. SD is still important, just not as high as required for lead core bullets.

My preK niece understands 50 is more than 40.

#dumptrump

opinions vary band of bubbas and STC hunting Club

Information on **Ammoguide** about the<u>416AR</u>, <u>458AR</u>, <u>470AR</u>, <u>500AR</u> <u>What is an AR round?</u> Case Drawings <u>416-458-470AR</u> and <u>500AR</u>. <u>476AR</u>, <u>http://www.weaponsmith.com</u>

#### someoldguy

#### quote:

I have forgot the grosswild thing, will have to go back to it to see what you boys are talking about! When I get more time. Out of time right now!

No big deal, Michael. Don't even bother. That's just the page where I found the concept of momentum density and I took the rest of it from there. No idea what ALF was on about, except that he must disagree with what I wrote. (He didn't even address me. I just had to infer that he was.) No matter because since he chose to insinuate, insult, and generally act rudely instead of discussing rationally, I decided to pay him no mind.

Glenn

## ALF

# 15 January 2011, 03:31

15 January 2011, 03:30

# michael458

quote:

15 January 2011, 04:00

Drigii	nally posted by michael458:
	quote:
	Originally posted by Jack D Bold: Mike was kind enough to send me the copper solids and noncons for a .470NE. Cannot wait to try them.
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We shot a bunch of loads with 106/IMR 4198!

Sam will most likely give some advice as well!

Michael

Is it IMR4198 or IMR4831???

I believe a test looked good with H4831SC 110 grains also.

#### I USE TOO MUCH 4198-----YES--IMR 4831----NOT 4198!!!!!!

IMR 4831---Gees, I will get us all KILLED! I do that ALL the time with these two powders--somehow my fingers just type 4-1-9-8 and I can't make them stop-even if I think 4831.

#### Michael

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#### vapodog

15 January 2011, 04:01

15 January 2011, 04:02

#### quote:

What you guys are consistantly doing is to misinterpret what you believe you are seeing. This is the fallacy!

A body that moves in certain direction has mass, it has velocity and based on the spatial distribution of that mass has shape and form and that shape interacts through a certain reference surface area with the medium through wich the body moves.

The ratio of the body's mass to that surface area interacting with the medium through which motion occurs is termed Sectional Density. The ratio of sectional density to the factor of form is called Ballistic coefficient.

It is intergral and central to all 3 fields of ballistics, internal, intermediary and terminal.

If this is what 120 pages is comprised of, I'm damn glad I haven't read more of.....

What drivel!

"Socialism is a philosophy of failure, the creed of ignorance, and the gospel of envy, its inherent virtue is the equal sharing of misery." Winston Churchill

# michael458

# Mike

Thanks for that CATCH !!!!!!!! Must keep an eye on me!

М

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15 January 2011, 05:03

15 January 2011, 05:33

#### Cross L Alf,

Of course thats so. The question is what is the use of it. Functionality is what we are attempting to ascertain here. Applied physics so to speak.



SSR

# jeffeosso 15 January 2011, 05:04 auote: Originally posted by ALF: SD is SD it is what it is, it is integral to the concept simple Newtonian mechanics, no more no less, you cannot deminish or expand it's value. Without it there will be no penetration, in fact no physical act of motion of a body through a medium.

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The ratio of the body's mass to that surface area interacting with the medium through which motion occurs is termed Sectional Density. The ratio of sectional density to the factor of form is called Ballistic coefficient.

It is intergral and central to all 3 fields of ballistics, internal, intermediary and terminal.

Without it you cannot describe the physics of motion. To try and do so would be fallacy.

The motion of what you guys see as modern generation bullets is goverened just as much by SD as any other bullet projectile or body in fight, as much as it always was as much as it always will be !

Sources:

1. The physics and Biophysics of wound ballistics: Bellamy RF, Zajtchuk R Walter Reed Army Medical Centre Washington D.C.

Chapter 4. from Conventional warfare: Ballistic, Blast, and Burn Injury

2. Scientific foundations of Trauma: Cooper et al. Butterworth Heinemann Publishers First edition 1997 ISBN 0-7506-1585-0

Section 1. Penetrating injury by projectiles Chapters 1-8.

3. Sellier KG and Kneubeuhl BP. Wound ballistics and the Scientific background. Elsevier Publishers 1993 ISBN 0-44481511-2

and YOUR original reserach is where, doc?

#### #dumptrump

opinions vary band of bubbas and STC hunting Club

Information on Ammoguide about the416AR, 458AR, 470AR, 500AR What is an AR round? Case Drawings 416-458-470AR and 500AR. 476AR, http://www.weaponsmith.com

#### rcamuglia

quote:

Originally posted by vapodog:

quote:

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#### capoward

quote:

Originally posted by ALF:

SD is SD it is what it is, it is integral to the concept simple Newtonian mechanics, no more no less, you cannot diminish or expand its value.

Without it there will be no penetration, in fact no physical act of motion of a body through a medium.

What you guys are consistently doing is to misinterpret what you believe you are seeing. This is the fallacy!

Interesting choice of words...your "bolded" words.

What I believe I have seen on a rather consistent test basis – is that a properly designed FN solid of significantly less than .300 SD will consistently provide greater straight-line penetration than a "traditional RN solid having a SD of .300 or higher.

I see the results, I believe the results, and I am not misinterpreting the results. I've put my money where these test results have lead me and I believe I will be quite happy with my decision. Whether you agree or disagree with the results in this thread, or of my statement, or of my decision...I could care less.

Welcome back by the way.

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

ALF

15 January 2011, 07:26

15 January 2011, 07:40

15 January 2011, 05:33

If this guy worked for NASA they would still be folding paperplanes to prove they wouldnt fly.

SSR

Cross L

## someoldguy

15 January 2011, 07:46

quote:

Maybe Michael has a favorite color for the 458? Gold, red, purple?

I suppose it is important to shoot well-dressed, pretty bullets. Gives one confidence in the outcome.

Didn't Michael tell us one time how much he just adored pink? Yes, I'm sure of it. You don't even need to ask him, I'm so sure. So make his pink!

Glenn



ALF

#### capoward

# 15 January 2011, 09:04

15 January	2011,	09:27
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### quote:

Originally posted by ALF:

Ok I buy that with reservation! The question then is, did the test which you claim to be valid actually test for the validity of the statement :

#### "What I believe I have seen on a rather consistent test basis – is that a properly designed FN solid of significantly less than .300 SD will consistently provide greater straight-line penetration than a "traditional RN solid having a SD of .300 or higher."

The test I believe consits of a series of firings of various bullets through a medium made up of water soaked newsprint.

Please illuminate how this statement was validated at the hand of these "tests" ?

I ask this because there are glaring holes in the methodology of the test itself, beginnning with the intershot variation on test medium quality in terms of density, and mechanical structure, right through to the importance of pre impact yaw value...... I will put it to each and everyone here that the tests do not test for the premise stated regarding the effect of Sectional Density.

The only premise tested for can be the behaviour of a bullet when fired through a medium with a similar mass density of wet paper ( with the provision that the wet paper has the same mass density every time the test is conducted and more importantly compared to materials with the same mechanical poperties of paper ( a woven composite solid material) Therefore the only valid deductions made can be concerning the effects of similar density and similar mechanical properties on specific aspects projectile behaviour.

It does not test for the effect of intershot variation of yaw and velocity when fired from the same gun with the same bullet , nor different guns and loads, it certainly does not test for the behaviour of the same bullet fired into living tissue and above all, no valid deductions can be made about the nature of the wound in living tissue..... the simulation is not valid for this.

Now you may ask how can I state this.

First of all we need to look at the machanical properties of paper.

Newsprint is commonly made from woodpulp derived through a proccess called mechanical pulping, the pulp contains sellulose strands and lignine both are plant cell derivatives. Newprint in it's dried form as sheets have specific mechanical qualities.

Its density in dry form is around 400-500 Kg per cubic m ( some references cite 610-690 kg / cubic m ) with a dry moisture content of around 7.5-9%.

For interest pure water at 0deg C has density of 1000 kg/cubic m and porcine skeletal muscle is popularly cited as 1060 kg/cubic m. The lignine portion of paper is hydrophobic whilt the Sellulose part is hydroscopic. Wetting the newsprint increases the mass density of the simulant pack but decreases the tensile strength of the paper. The mechanical model of material behaviour of paper is classified as Elastic-plastic.

There is no living tissue in the body that resembles the material properties of wet paper.

When paper is penetrated by a ballistic penetrator such as a bullet it's mode of failure is very complex to model, because it fails much like Kevlar or other woven composite materials. Energy is absorbed by the strands of fibre ( sellulose) and these strands fail at some distance from the point of impact of the penetrator, each strand absorbs some of the energy of the projectile and then fails, these falied fibres are compacted in front of the ppenetrator and enlarges as a mass of material. If enough energy is bled from the penetrator the penetrator is captured by the woven material. This forms the basis of how Woven materials absorb energy and capture the bullet. The science of protection from penetrating trauma deals with this complex issue.

As such the paper stacks and compacts in front of the penetrator forming a plug and the plug itself becomes a projectile. This is apparent when through shots in wetpack are made as the plug is ejected as a mass of wet confetti.

When interpreting the size of holes though the witness cards in the wetpack one has to consider that the size of the hole has nothing to do with the bullet iself but rather the mass of paper pushed in front of the bullet.

Sand as medium does exactly the same. The scientists who design penetrators for sand have studied this, so have the designers of tyres for use in sand desert conditions.

The problem then with interpretation of comparitive data is that this mode of failure is quite unique has to be tested for when simulations are made.

Skeletal muscle which is a solid, acts like a solid ( model = rate dependent load) does not do this. Muscle is viscous, it is elastic and it is anisotropic! cavitation is based on the principles of solid material cavitation, it does not supercavitate in the same mode as a fluid does.

ALF,

This is not much different from what you postulated and then later deleted within the first 50 pages of this thread.

I believe within those same 50 pages or so it was acknowledged to no test material could replicate the use of the same bullets against the actual live hunted game... In the early 21st century it is impossible to lawfully shot hundreds of elephant, rino, hippo, cape buffalo, etc. with a very short time span in order to conduct a true bullet test. Therefore some replicable test medium is used with live game only being used as finances and international law permit. Such is life.

You dislike the test medium and testing methodology that Michael458 utilizes...again this was covered within the first 50 or so pages of this thread. That hasn't changed either...

Michael has stated that there is a correlation between his test box results and the use of the same bullets against hunted dangerous game. In support of his statements he has posted many photographs of deceased African plains game and dangerous game along with the recovered bullets shown side by side with the same bullets retrieved from his test box. And please remember, all of Michael's testing is being funded by his own pocket book, not by some government grant, and it is being done for his own personnel benefit. I as the online participant am free to use it or ignore it. I have chosen to use it, freedom is nice that way.

Alf you as well are free to use it or ignore it. Should you chose to do neither, perhaps rather than revisiting your earlier statements from the 1st 50 or so pages, you could post photographs of your testing efforts and results that refute Michael's testing results.

Gotta go now, it's been fun revisiting old conversations. Have a nice day.

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

ALF

15 January 2011, 09:58

15 January 2011, 10:16

#### Jack D Bold

quote:

Originally posted by Mike70560:

Jack,

About halfway down this page there is a spreadsheet with 470 load and pressure info.

http://forums.accuratereloadin...3/m/2861098911/p/113

Awesome, thanks. I leave tomorrow for a dream hunt - Sonora Mule deer!. When I get back, we will mix up a load and let you know how they work.

Thanks again mike

"You only gotta do one thing well to make it in this world" - J Joplin

#### someoldguy

15 January 2011, 14:09

quote:

ALF IS BAAAAAAACK!!! Welcome back Dr. Alf!

This thread's gonna go to 300 pages now.

# ٢

Before the single dot posts or after?

Sorry, Michael. I feel responsible.



Sorry, Michael. I reel responsible.

# 0

Glenn

No sorry needed, Alf is just Alf.

#### Alf

I see some things never change, and as normal, no reply is even required. Remember what I told you along about page 1 or maybe 2 or a tad over a year ago?

Thank you Alf for your input, always appreciated and noted, stored in the appropriate place.

Michael

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#### michael458

15 January 2011, 16:15

Now moving on to more productive thoughts.

Been talking to Dan, and we figure a really good way to get the best of both worlds is to have a "Bullet Kit"!

#### Little story;

I remember many years ago Billy B and I were on our way to the Charlotte gun show, early one Saturday morning. We stopped by a Bojangles, he ordered a "Chicken Biscuit". Drive through, got the order, hit the road. He is opening the bag, and here is a piece of chicken and a biscuit? The chicken was not between the biscuit of course, so we figured that was their "Chicken Biscuit Kit"! LOL

So Dan and I are thinking a "Hi BC Bullet Kit"---- 😔

OK OK--If he can sort out the plastic tips that are supposed to give you guys a higher BC, and they fit in the #13s, then we think we can provide the tips, and if you want a higher BC then you put the tip in yourself. DOn't need the higher BC, then no worries. This will be much more reasonable than anything else, and less costly than CEB doing it as that is another step in the bullet production.

While this is a great idea and a very simple solution for some, it may also be somewhat of an issue with the current bullets. The addition of the plastic BC tip may make the bullet too long overall to fit in the magazine properly with most magazine rifles and cartridges. The addition of a tip with any of my B&Ms and the CURRENT bullets will make OAL too long for magazines. Some other cartridges and rifles, maybe not. This will be the only hitch in that system.

Not a big deal to over come however, in most cases a lighter, shorter bullet can be made in all calibers that could easy work in that capacity.

I told Dan to get some tips to me to begin test work with them. Regardless of fitting out in the mag or not, the concept can be tested, BCs can be determined, and terminals can be tested in all areas, including low velocity to simulate longer range, 250 to 300 yds for instance. I am quite sure the #13 NonCon will do very well. I have noticed over and over that in most circumstances the #13 does very well and better than most in BC to begin with, although that is mostly done at short range, 22 yds to get impact velocities, but it has not been losing much velocity, and far less than some other bullets we have tested at the same range.

So we see what we see.

Any of you with a program can take my muzzle velocity and impact velocity and come up with a pretty close BC. I am not so trusting of my program in that capacity right now, so if someone would like to give that a shot do so and lets see what we come up with.

Once we confirm this is a viable, we may just make some runs of lighter bullet weights, #13 NonCons in several calibers and see what we get. I need some #13 NonCons anyway for the Super Shorts. .458, .474, and .500.

# Michael

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ALF

15 January 2011, 16:27

Any of you with a program can take my muzzle velocity and impact velocity and come up with a pretty close BC. I am not so trusting of my program in that capacity right now, so if someone would like to give that a shot do so and lets see what we come up with.

As for me, BC's are above my pay grade, but I'm interested and would like to see what the others come up with!

Glenn

#### michael458

Good Morning Alf

15 January 2011, 17:44

I see you have had a restless night, worrying and being concerned over this thread!

#### As well you should!

I want to thank you personally (while probably not your intention) for bringing some issues BACK to the front lines so that we as participants in this event may, re-state the mission and the successes we have had here for those that have joined in late, and have not read the entire thread.

First, I believe in testing before going to the field, and especially with something so vital to field operations as the bullet actually is. Hunts can be made or broken by the behavior of the bullet. Many of the participants of this thread, and many of the lurkers that watch and don't participate know this to be a Fact-pure and simple. Any test work, and in particular terminal test work, could always be conducted better, more thorough, more in depth, but unfortunately time & resources can be limited, so we do the best we can as testers. While ULTIMATELY the field is where the test work ends--it is just plain stupid to begin test work in the field with no idea how things work before hand. NO--I do not rely upon data provided to me by any Bullet Manufacturer, or other data that I am not really familiar with the methods, nor the incentive behind such data. Most bullet companies are more interested in selling bullets, making sure they feed and function in certain rifles, and have motivations other than that of PERFORMANCE in the field. So what are we to do? We test with our own facilities first, then we take it to the field ONLY if it is successful in the test work. This gives us as shooters, hunters, a far better chance of success than could otherwise be obtainable by doing NOTHING.

Do I believe in the test work we have been doing? Yes I do, not only have I been very involved in this test work, but in every case I have taken it to the field, on dangerous game and other game as well, and in EVERY case, if it was successful here in the lab, in the test work, in the test medium I work with, then it was successful IN THE FIELD AS WELL. This includes elephant, lion, bear, buffalo, leopard and many many other species that I have personally taken. This includes many animals taken by others as well, participants right here on this thread other than myself. The vast majority of bullets tested here in the last year have been taken to the field with great success. Some that come to mind recent, Sam Rose 577 Nitro BBW #13 Solid, elephant and buffalo with EXTREME SUCCESS, his friend Doug taking two buffalo with a 330 gr brass 416 caliber NonCon--with extreme success--465HH taking elephant with a .474 caliber CEB BBW #13 and with a Woodleigh Hydro in .474 caliber--With Extreme Success. While I don't recall testing .474 caliber Hydros-- we have tested 9.3-416-458 caliber hydros. All the bullets I have used on game have been tested before hand, and have been an extreme success in the field as well! I doubt very seriously that there is but a very small handful of bullets tested here that have not been in the field, either by myself, the participants in this thread, and by the lurkers that read without participation. I could be wrong, but I don't recall anyone stating that a bullet WE TESTED HERE, and taken to the field coming back and saying the "Test Work Was Wrong". This is after probably hundreds of bullets tested, hundreds of various animals taken by various folks using the same bullets that were tested.

Personally I know many of you have asked me to test a bullet that they planned to use on a hunt coming up. I did so many times, and in every single case where the bullet was successful in the test work, it was successful on the hunt, and performed in the same manner as which it did in the test work--no exceptions that I am aware of. In most all cases, the bullet performed BETTER in the field, than in the test work.

We embark upon 2011 hunting season with great anticipation that this trend will continue. In particular we are now taking NEW bullets, that we believe are superior in many cases to what we have used in our past history in the field. The test work looks extremely good with all our Solids and our various types of NonCons we have been working with. Preliminary reports from the field look really great as well. But we embark upon a time of discovery too. Have we discovered a superior bullet in performance on say buffalo and other dangerous game? Our test work looks good, but the only way we can learn these things for sure is in the field on dangerous game and other game that we pursue. I for one am very anxious to get field experience now with the new BBW #13 NonCons, the BBW #13 Solids, and the North Fork Expanding Cup Points. Many of our participants will take these bullets to the field this year as well. There will be a flood of REAL FIELD REPORTS here during 2011. We already have REAL FIELD REPORTS with these bullets from folks already mentioned above. By the end of this coming season I suspect strongly that our combined field reports will be positive, and very important field data gathered, and because of the test work done before hand it is my hope that our hunts, that are not only expensive, but important to us as shooters and hunters to be ethical by taking our game quickly and humanely, and in some instances may even save life and limb, by the decisions we make choosing the best bullet we can for the circumstances in which we embark.

Now everyone has a choice and it can only be made by the individuals that either participate in this thread, or the MANY interested parties that choose to not participate, but do support this thread and the test work involved, to either believe in it, or to throw it to the side as BS. That's fine with me and if one does not agree that is ok too. This is up to each of you.

For my part, I rather not go to the field stupid, I have done that before, and it has failed me. I won't do it again. But I am not satisfied with Just that simple statement! I want something BETTER than what I had in past years. Of course I have used the antiquated designs, some with success, some not so good. I am not satisfied with the antiquated, or the common, or the one most used, I want something that is better, something that might make me MORE successful, a bullet that may increase my chance of

success! So I will continue to learn, to test theories, to strive to be better than what I am, and what I have in hand! No thanks, I care not to remain in the dark, and I won't go to the field stupid again.

Well, that's my part, my story, and I am sticking to it!

Thanks again Alf, for bringing up wonderful points, and for allowing us to "Re-State" the mission at hand!

Michael

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#### michael458

Alf

ALF

Thank You! Sincerely!

#### quote:

As you are keen on going to the field armed with knowledge so am I, for me the interest stems from more than just having fun.

#### Absolutely, exactly right on point!

Well, I am off to the range this morning--Yippie! An opportunity that I did not expect today. However, it is a little chilly on the range, the coldest I have ever seen it--43 degrees F. So the big heaters are running now, and I am on the way out!

Stay warm Alf, shoveling snow is not my thing!

Thanks again!

Michael

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#### buffalo

auote:

15 January 2011, 20:34

15 January 2011, 18:16

15 January 2011, 18:31

Originally posted by michael458: Thank you Alf for your input, always appreciated and noted, **stored in the appropriate place.** Michael



#### hughman

#### Hi Michael,

I may have missed something, but what happened to the idea of hollow-based bullets? The last I heard, it appeared that the hollow based bullets gave equal penetration as their solid counterparts. Like a lot of people, I don't get a big kick out of kick! If we can get similar performance with a lighter bullet, we will have less recoil and for many folks, more accurate shooting as a result.

Hugh

ptaylor

15 January 2011, 20:47

quote:

Originally posted by michael458: Now moving on to more productive thoughts.

Been talking to Dan, and we figure a really good way to get the best of both worlds is to have a "Bullet Kit"!

Little story;

I remember many years ago Billy B and I were on our way to the Charlotte gun show, early one Saturday morning. We stopped by a Bojangles, he ordered a "Chicken Biscuit". Drive through, got the order, hit the road. He is opening the bag, and here is a piece of chicken and a biscuit? The chicken was not between the biscuit of course, so we figured that was their "Chicken Biscuit Kit"! LOL

So Dan and I are thinking a "Hi BC Bullet Kit"---- 🤤

OK OK--If he can sort out the plastic tips that are supposed to give you guys a higher BC, and they fit in the #13s, then we think we can provide the tips, and if you want a higher BC then you put the tip in yourself. DOn't need the higher BC, then no worries. This will be much more reasonable than anything else, and less costly than CEB doing it as that is another step in the bullet production.

While this is a great idea and a very simple solution for some, it may also be somewhat of an issue with the current bullets. The addition of the plastic BC tip may make the bullet too long overall to fit in the magazine properly with most magazine rifles and cartridges. The addition of a tip with any of my B&Ms and the CURRENT bullets will make OAL too long for magazines. Some other cartridges and rifles, maybe not. This will be the only hitch in that system.

Not a big deal to over come however, in most cases a lighter, shorter bullet can be made in all calibers that could easy work in that capacity.

I told Dan to get some tips to me to begin test work with them. Regardless of fitting out in the mag or not, the concept can be tested, BCs can be determined, and terminals can be tested in all areas, including low velocity to simulate longer range, 250 to 300 yds for instance. I am quite sure the #13 NonCon will do very well. I have noticed over and over that in most circumstances the #13 does very well and better than most in BC to begin with, although that is mostly done at short range, 22 yds to get impact velocities, but it has not been losing much velocity, and far less than some other bullets we have tested at the same range.

So we see what we see.

Any of you with a program can take my muzzle velocity and impact velocity and come up with a pretty close BC. I am not so trusting of my program in that capacity right now, so if someone would like to give that a shot do so and lets see what we come up with.

Once we confirm this is a viable, we may just make some runs of lighter bullet weights, #13 NonCons in several calibers and see what we get. I need some #13 NonCons anyway for the Super Shorts. .458, .474, and .500.

Michael

very elegant solution. I for one would love to see some pointy non-cons of lighter weight to shoot out of my .510. I missed a couple big pigs with it this year at ranges over 150 and like to think these would have helped. Could have been my poor shooting too though?

#### michael458

quote:

### 15 January 2011, 22:23

Originally posted by hughman: Hi Michael.

I may have missed something, but what happened to the idea of hollow-based bullets? The last I heard, it appeared that the hollow based bullets gave equal penetration as their solid counterparts. Like a lot of people, I don't get a big kick out of kick! If we can get similar performance with a lighter bullet, we will have less recoil and for many folks, more accurate shooting as a result.

Hugh

Hey Hugh

Well the Hollow Base bullets have not gone away, and I have some work slated to do with them, but I keep putting them on the back burner I suppose! Stay with me, and give me a bump here in a week or two again if I have not got to them, and I will get to work on it. I agree, there is something there to investigate no doubt about it. I might have our man Sam go to work with his bastard file on some of the Hollow Base CEBs we have now and see what we can come up with on those. We have a good stock to work with right now. Just lazy and have neglected them.

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#### michael458

ptaylor

15 January 2011, 22:33

#### quote:

very elegant solution. I for one would love to see some pointy non-cons of lighter weight to shoot out of my .510. I missed a couple big pigs with it this year at ranges over 150 and like to think these would have helped. Could have been my poor shooting too though?

Yes, I thought that was a pretty good solution myself, at least to get something moving and get some test work done with it. We know without doubt how the #13 NonCon works, the addition of a tip will be easy, and no worries about shearing and that effect. If it works and does give you guys a higher BC--then it's easy from that point on--it's just deciding what weight #13 you want in any given caliber! And, remember, NonCons penetrate deep once that shear occurs, so depending on exactly what you wish to hunt you can get away with a light bullet for many things. In thinking along these lines, let's just say one is thinking of hunting moose and elk--has anyone used a 338 for those jobs??? We tested every 338 caliber bullet known back last year, they are on this thread--Pick your favorite elk, moose bullet in 338--Something YOU KNOW works great--then compare those penetrations in the test work--with the penetration of the new light big bore NonCons! Then you will have a good idea of comparison of penetration. Same with other things as well.

Michael

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#### Macifej

quote: My preK niece understands 50 is more than 40.

# ٢

## **450NE**

Michael and Sam,

The long awaited Nitro Express, BBW #13's have arrived (I guess you can't rush perfection)!!! Woops! they are just too purty to shoot - oh well, I guess I can stick with those round nose things! No! No! No! I'll just have to order more #13's so I have some to look at (not roll in) and shoot the rest.

Thanks for all your work on the best bullets ever,

# Mike

#### peterdk

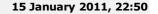
#### quote:

Originally posted by michael458:

#### quote:

Originally posted by hughman: Hi Michael,

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15 January 2011, 22:40

#### 16 January 2011, 00:05

Hugh
Hey Hugh
Well the Hollow Base bullets have not gone away, and I have some work slated to do with them, but I keep putting them on the back burner I suppose! Stay with me, and give me a bump here in a week or two again if I have not got to them, and I will get to work on it. I agree, there is something there to investigate no doubt about it. I might have our man Sam go to work with his bastard file on some of the Hollow Base CEBs we have now and see what we can come up with on those. We have a good stock to work with right now. Just lazy and have neglected them.
нен
Michael

 $\ensuremath{\mathsf{BUMP}}$  and  $\ensuremath{\mathsf{BUMP}}$  again, mate i am still pussled about this, and really need to know.

best

peter

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