

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

michael458

28 January 2010, 23:21

Terminal Bullet Performance

A preview of things to come!



<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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capoward

29 January 2010, 00:00

quote:

Originally posted by Michael458:  
Holy Cow Boys, you have had me shooting nearly every day for 2 weeks now! Or at least it seems so! Whew.....about worn out!

Ok...Ok, you can take the rest of the day off. We know it's going to freeze there this weekend from the big storms headed in your direction and you need to prepare yourself!!! 🤖

Nice 45/70 lineup, should be an interesting test. 🎣🐟

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

michael458

29 January 2010, 00:49

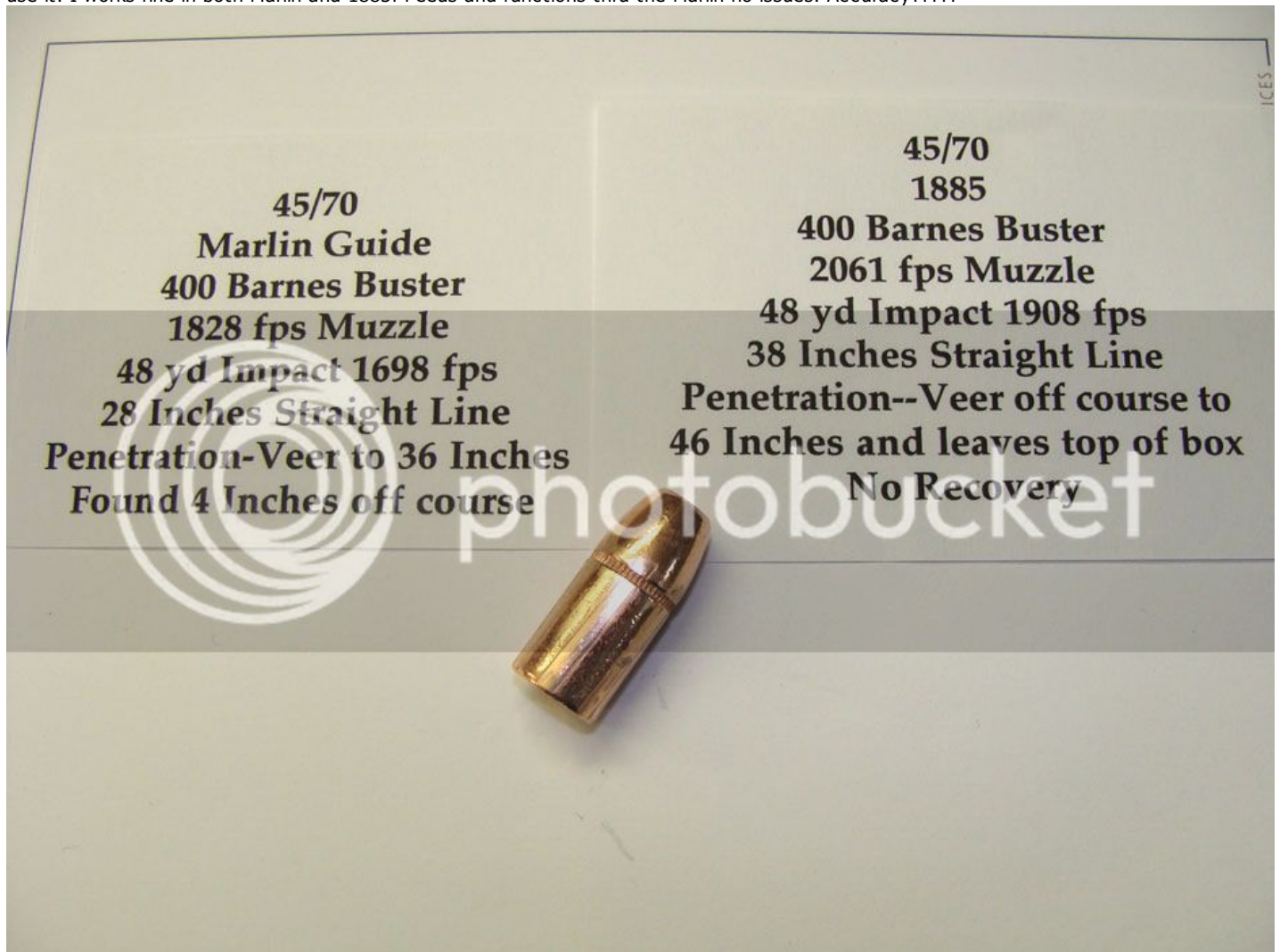
OK, a little taste!

At the top of MY agenda in 45/70 I had two bullets! 400 Barnes Buster and the 330 Barnes Banded Solid.

In looking back at my 45/70 load data it has been a long time since any entries had been made, 2004. I have not been to the field with 45/70 since 2002. We have lot's of new bullets since then! These being two of them. I had played with only 1 load in the 458 B&M and the Barnes Buster, accuracy came up a bit short, I did not get back to them since. I am not sure how the accuracy is in 45/70 either, fired two rounds in each rifle, one to spot POI, the other to test. With a variety of bullets I test, they all do not hit to the same POI of course. So I have a spotter loaded for that.

I am testing with two rifles in 45/70 currently, I have more than that, but chose a Marlin Guide Gun and a Browning (Secretly Winchester with Browning written on it) 1885. The 1885 giving a little more velocity per given load of course than the Marlin.

The Barnes Buster starts to veer off course with each gun. I did not recover the one fired in the 1885, it came out the top of the box and went into the berm. However in both the 1885 and the Marlin, straight line penetration was recorded before veering off course. Why off course? My opinion, meplat is a little small for caliber, as best I can measure about 55%-57% of caliber. But, please keep in mind, the straight line penetration given is more than enough for anything one would properly use a 45/70 for to begin with. Also, remember, this is a tough tough mix on solids and stability! I would not be surprised at all to hear this bullet would do very well on animal tissue, and I would use it. I works fine in both Marlin and 1885! Feeds and functions thru the Marlin no issues. Accuracy?????



The current "Benchmark" for penetration in these very early tests is for sure the 330 Barnes Banded. The nose is too long to feed in the magazine and action of the Marlin. I have not tried any of my 1886s yet. But it shoots extremely well in the 1885, and the data correlates very well to the tests I did with the 458 B&M at higher velocity, which at 200-300 fps more at impact gave 50 inches. Another case of the same bullet being driven at higher velocity giving deeper penetration. Dead straight line penetration here.

45/70

1885

330 Barnes Banded Solid

2138 fps Muzzle

48 yd Impact 1937 fps

41 Inches Straight line Penetration



I have more, but have some things to check first before getting them up.

Probably next day or so I imagine!

Michael

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**jwp475**

**29 January 2010, 02:18**

I believe ht the Barnes Buster does not have a wide enough meplat, coupled with the radiased sedges, to keep it from veering of course.

---

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

**capoward**

**29 January 2010, 02:18**

Michael,

Before you finish your 45/70 testing over the next few days, I have a "priority request" that I hope you'll accommodate.

Why a "priority" request you ask? Well I believe that you have the opportunity to prove one resolve an issue raised earlier in this thread.

As you're aware, we've had some controversy within this thread regarding the "impact of twist rate on particular bullets straight-line penetration performance".

I happen to belong to the "faster twist rate is better" belief group and Yes, I did just throw a can of gasoline into the flaming fire pit...for the "it makes no difference" belief group.

But as they say, proof is in the pudding. If memory serves me correctly, your 458 B&M SA M70 has a 14" twist rate barrel while your 45/70 1885 lever gun has a 20" twist rate barrel.

I, as a member of the "faster twist rate is better" belief group, believe that with all else being equal, that the 400gr Barnes Buster fired from the 14" twist rate barrel will result in deeper straight-line penetration performance than what was delivered from the 20" twist rate barrel.

So...would you please load a few 458 B&M rounds with the 400gr Barnes Buster, loaded to 2061fps muzzle velocity, same velocity as your displayed for your 45/70 1885 lever gun, and perform penetration tests for us out of your SA M70?

Your picture with data results, *should you accept this request*, will prove one set of "perception beliefs" to be incorrect.

Jim 🤔

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

**michael458**

**29 January 2010, 02:47**

I want to briefly mention and point out something to you guys, while I am thinking about it.

All paper print material mix is NOT created equal!!!!!!

I copied one of Finn Aagaards articles yesterday on 9.3X62 for a fellow here at AR. Finn was famous for testing in a mix of dry and wet phone books. Along with Jack Carter, they tested all the trophy bonded and developed the bullet that way. I took a look at some of Finns numbers, and he was getting more penetration than what I would get here on most things. So, Finn's mix was not the same as mine of course, so it would give different results.

Ross Seifreid a few years ago wrote in either Rifle or Handloader magazine that wet news print was the very best bullet testing medium available. As I recall. His words. I am not sure exactly what or how Ross made up his medium. I know I have that article somewhere, I have all those magazines, but what a mission to find it!

I notice there is another fellow here at AR that does some testing too. It appears mostly small bore calibers, but a few of his photos (which are premium photos) he is getting deeper penetration than what I do. No sure of what he uses exactly.

I know for a fact that straight wet news print will give deeper penetration than my current mix, and it appears in some cases substantially more.

Here is the mix I use. Starting at the back of the box with 2 inches of catalogs/magazines-6 inches of news print. I get a couple of these layers going and then start hosing it down, spreading the paper making sure water is getting through the mix. Then another layer, same story, until I get to the end of the box. So throughout the box you have 6 inches of wet news print-2 inches of catalogs. I keep wetting things down until the mix is soaked. Most of the time it sits overnight, ready to go first thing in the morning. First thing getting on the range, wet the box down, let it drip while getting things ready to shoot.

Now, there is not always exactly 6 inches of news print and not always 2 inches of catalogs. But it must be pretty close as I have been able to duplicate many times the same bullet and load within an inch or so. Exact consistency? Of course not. But close as I can.

Now if one changes anything in that mix, it changes everything you did in the past. I have an excellent source of news print and I get several inches of catalogs a day!

Point to ponder! My test medium is not the same as Finn's, or Ross, or probably most other testers, so we will not get the same results! The data will not correlate!

Michael

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**michael458**

**29 January 2010, 02:49**

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Jim

I think I can do that for you! I will try that out in the morning! Should not be too hard to sort out! A very worth while endeavor I think.

Michael

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**capoward**

**29 January 2010, 03:39**

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.....

Point to ponder! My test medium is not the same as Finn's, or Ross, or probably most other testers, so we will not get the same results! The data will not correlate!

Michael

Very good information to know.

quote:

Originally posted by michael458:  
I think I can do that for you! I will try that out in the morning! Should not be too hard to sort out! A very worth while endeavor I think.

Michael

Thank you, I look forward to the results.

Jim 



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

**boom stick**

**29 January 2010, 03:52**

Capo... do you have the brass to make a few dummies?

The capacity of the 577 Boom is just 2 grains shy of the 460 Wby and more than the 416 Rigby. The 500 Jeffery is about 150 grains. Interesting...

7,000 FPE in a short action would be a lot of fun  

quote:

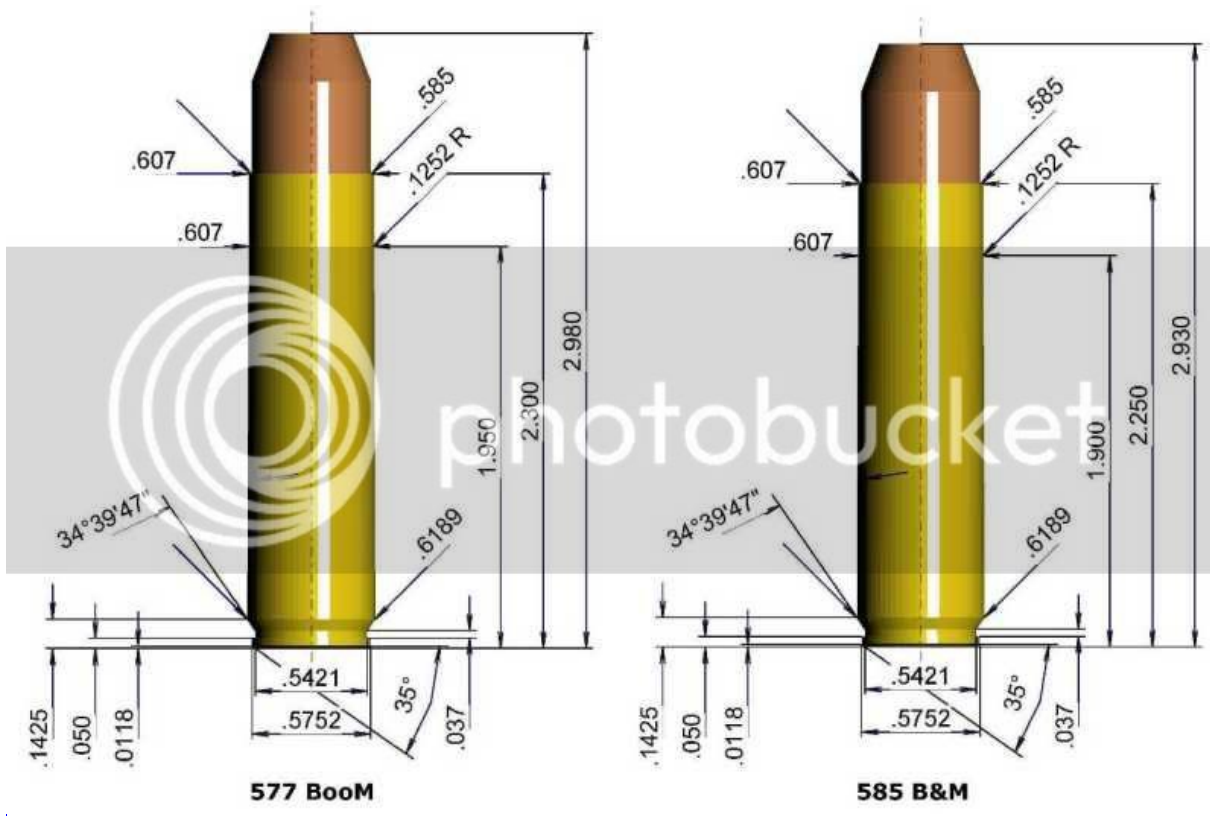
Originally posted by capoward:  
Boom,

Here's the CIP 05/15/2002 update data for 500 Jeffery:  
*Chamber Mini: Length to Shoulder = 57.48mm/2.2629in*  
*Cartridge Maxi: Length to Shoulder = 57.61mm (-.20mm)/2.2681in (-0.007874in)*

So unless you have access to basic brass the Jeff case will need to be straightened out in the shoulder through shoulder/neck junction before the case is cut to 2.3" length.

Ok, re-ran the QL data using the new 2.3" case length and using the basics of 18" barrels, max-load of H322 powder, and 700gr SST FN Copper Solid you'll pick up 40fps and 262ft-lbs @ +2.2K psi.

Here's the cartridge comparisons:  
*577 BooM (138.71 overflow case capacity): 2148fps and 7179ft-lbs @ 59.7K psi*  
*585 B&M (135.46 overflow case capacity): 2108fps and 6917ft-lbs @ 57.5K psi*



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)

**michael458**

29 January 2010, 04:11

Jim Capoward---Quickload/design Wizard!!!!!!!!!!!!

I quit using mine, it is much easier to tell Capo to do it!

Boom and Capo---Hey, just thought of something--You guys are neighbors! This is all coming together for me now! I knew there was something I was missing!

Dark over here in the east right now, time for me to go!  
In the morning!

Michael

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**boom stick**

29 January 2010, 04:41

LOL was thinking the 585 "Fat Bastard" might be a more apropro name for this bastardization of a cart

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**

29 January 2010, 04:49

Boomy,

I have neither Jeff cases nor correct diameter bullets to use for dummy cartridges. However there's a *Crossroads of the West* gun show at the fairgrounds this weekend so I'll see if I can pick up enough brass and bullets to make a few dummy rounds.

Case capacity: Here is the Overflow Case Capacity (Water) data drawn from QuickDESIGN (QD is made by same company that produces QuickLOAD and QuickTARGET):

416 Rigby = 135.4 grs  
450 Rigby = 145.8 grs  
460 Weatherby = 144.6 grs  
500 Jeffery = 160.1 grs  
505 Gibbs = 183.9 grs

As you see the Jeff case is a big jump up in capacity compared to the Rigby and Weatherby cases.

Ed Hubel uses the Gibbs case which is even larger yet for his 585 HE and 585 Short HE cartridges. Great cartridges but I just get kind of 🤔 when the .700" diameter bolt face is opened up for the Gibbs rim diameter...that one truly needs a .750" diameter bolt!

Michael...Boomy and I are neighbors? Quién sabe? Heck you and I are neighbors...just one of us lives on the wrong coast! 🤔

Jim 🤔

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

**capoward** **29 January 2010, 04:51**

quote:

Originally posted by boom stick:  
LOL was thinking the 585 "Fat Bastard" might be a more apropo name for this bastardization of a cart



🤔 That boy's eaten a few to many elephants! 🤔

Must take a freighter back home from African hunt as the airplane couldn't get off the ground! 🤔

Jim 🤔

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

**someoldguy** **29 January 2010, 11:54**

I've enjoyed the tests of the .45-70. It's an amazing cartridge to me. Almost 140 years old, still going strong, and knocking on the door of that upstart .458 Win Mag.


Glenn

**buffalo** **29 January 2010, 13:20**

quote:

Originally posted by michael458:

quote:

Originally posted by capoward:  
🤔  
🤔 🤔 🤔 🤔  
Tests...Yes We Want Tests! 🤔 🤔 🤔  


Holy Cow Boys, you have had me shooting nearly every day for 2 weeks now! Or at least it seems so! Whew.....about worn out!

Michael

Maybe we should give the poor guy a couple of days vacation 😊😊

**michael458** **29 January 2010, 17:26**

Glenn

I love 45/70! I have been playing with 45/70 for over 20 yrs! I retired from 45/70 work 7-8 yrs ago. Back then, not that long ago, there was not all that many really good bullets for it. I remember when Hornady took the 350 RN they have been making for the 458 Winchester forever, flattened the nose for the lever gun, it was a a fantastic addition for 45/70, and perhaps the best bullet on the market at that

time! It started things jumping for 45/70 then! I used it on several critters and they are all dead. I loved the rifles, Marlins and 1886s, and the 1885s. Still do. Now all the 45/70 crowd can jump up and down with my next few statements now! No matter what you do, 45/70 ain't no 458 Winchester! I have shot a few larger critters with 45/70, up to and including cape buffalo. Yes, all of them are dead, but none of which have been "knock'em off their feet" impressive! Good as I love a 45/70, it's not a fighting cartridge, for big things that bite you and stomp you. Of course this is my humble opinion and there are many that might disagree with that, and you are welcome to do so.

Today's 45/70 bullets are the best they have ever been. We have some really good ones out there. I have a few on hand and will test some of them in the coming days.

It is my hope to increase the effectiveness of 45/70 with "Super Bullets"---Or as we have termed, NonCons. Here is what my 305 Brass HP NonCon did yesterday.





45/70  
Marlin Guide  
305 Brass HP NonCon  
2046 fps Muzzle  
48 yd Impact 1855 fps  
12 Inches Penetration  
Tumbled at 9 Inches  
Found Base forward at 12"  
Retained Weight 225 grs.



The NonCons are dependent upon velocity in my opinion. The higher, the better! As is proven with the same bullet in my 458 B&M at 2700 fps. In one test I did 5/2/09 the 305 HP at 2452 fps impact drove to 20 inches of penetration, a second done just 12/8/09 at 2725 fps impact drove to 24 inches. This one with an impact of 1855 fps to 12 inches. Velocity driven! Increased effectiveness on animal tissue? Yes, I think so. I am sure also that this was a standard load, and I have spent zero time getting the velocity up in the 45/70. Every step up in velocity is a step up in effectiveness of this bullet in my opinion.  
Michael

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**michael458**

**29 January 2010, 21:47**

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But as they say, proof is in the pudding. If memory serves me correctly, your 458 B&M SA M70 has a 14" twist rate barrel while your 45/70 1885 lever gun has a 20" twist rate barrel.

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Jim

I have NO PHOTO---As I have no Bullet! But I do have data! Data counts, I assume, if you believe me!

Heres the deal, I did in fact load up the 400 Barnes Buster with 60/RL 7. Was not quite a shot in the dark as with one of the 20 inch guns 59 RL 7 had given right at 2050 with a 405 Remington,nice little light load to play with. Now, I figured to use an 18 inch gun, so I went to 60 grs RL 7 for the 400 Barnes Buster.

Now it was high priority, so I expedited. I did not fill the box back up with medium, I had 48 inches of ready medium in the box, I really figured that was going to be enough. I did not set the chrono up at the 48 yd mark, just snatched the box over, got it lined up and did the test. A spotter round gave 2040 fps at the muzzle, I figured close enough to the 2061 in the 1885. The round I fired into the mix gave 2039 fps, not too bad, figured close enough. I put phone books on top of the mix, figured it might go out the top!

Wrong! It bored straight through the 48 inches, close as I can tell, dead straight!  
Going from the 1885 twist rate, 1:20 or 1:18 in 45/70, I am not sure, to the 458 B&M with it's 1:14 twist rate, made a very big difference. Congratulations on this, today, with this bullet, with those two rifles and those two twists, you are 100% correct, made a huge difference.

The bullet exited the back of the box after going through 48 inches medium. No recovery. I really didn't think it would go that far. Obviously! You Win!

That was good thinking on your part by the way, we did in fact learn something I suppose! Thanks for giving us that little tip, I had not thought about it!

Michael


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**ALF** 29 January 2010, 22:12

**boom stick** 29 January 2010, 22:21

Interesting to note Michael that a .500" on a 2.25" Jeffery case would duplicate the 500 MDM 

[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)

**I Bin Therbefor** 29 January 2010, 23:10

Speaking of 500s. Dick Metcalf used a 500 S&W magnum hand gun to take a Cape Buffalo. 400 grain, lead, hard cast bullet. As I recall, it hit the socket of the shoulder, the bone shards took out the heart and lungs, the bullet continued through the liver to end up at the opposite hip joint. Buffalo ran about 100 yards, dropped and died. The pictue of the bullet in the article shows about 99% weight retention. Some flatening, I guess from the bone hit. One of the PHs pointed out that the ballistic specs of the 500 were better than those of many of the black powder calibers used by the hunters in the black powder days. 🍻🍻🍻

**someoldguy** 29 January 2010, 23:17

quote:

No matter what you do, 45/70 ain't no 458 Winchester!

I understand.

After I posted that, I've read a few flame wars over the capabilities of the .45-70. And like most flame wars, nothing is ever conclusively resolved.

In all honesty, I don't know. All I was going by was how the hot .45-70s looked on paper. And I should realize that ain't really enough. Field experience--good and bad--is enough. One thing I'll be looking out for is reports of a number of .45-70 rifles being found in the Zambezi river.



quote:

Originally posted by ALF:  
As they say in the classics:

**" oh Shit! what now ?"**

The "tests" are upsetting the AR big bore apple cart.... the 45-70 outpenetrating the Lott ?

Nope, it was the .458 B&M that out-penetrated the .45/70.

Was Randy Garret right and everyone who collectivley shat their panties about this issue wrong?

Nope again. No moderate velocity, heavy, hard cast, lead FNs pitted against faster round nose cup and core softs here.

And there is even pro or against "twist rate is factor" group.....

Yep. Many pro-fast-twisters here, and a few old farts who insist on the slowest possible twist for long range target accuracy, important past 500 yards only.

Confusing dont you all think? 🤔



Not at all.

Perhaps it's time to get back to basics, yes right down to it so we may understand what we are seeing here and why?

We are already there. Or do you have the unified field equations to explain to us today? Surely all is for naught until we build from there!

Letter Rip

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Originally posted by RIP:

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Letter Rip

RIP,

The problem is that we're using threads to work out our problems instead of "string theory". 🍻🍻🍻

ALF

29 January 2010, 23:44

ALF

29 January 2010, 23:46

boom stick

29 January 2010, 23:46

Twist wars part CXVIII

[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

29 January 2010, 23:55

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Originally posted by michael458:

quote:

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That was good thinking on your part by the way, we did in fact learn something I suppose! Thanks for giving us that little tip, I had not thought about it!

Michael

Michael,

No problem, thank you for quickly running my test request. I think this sums it up well:

quote:

It bored straight through the 48 inches, close as I can tell, dead straight! The bullet exited the back of the box after going through 48 inches medium. No recovery.

As a next step if you're still doing .458 stuff, "would you load this bullet at the same velocity indicated in your 458 B&M and retest in the same rifle used with the 400gr Barnes Buster?":

45/70  
Marlin Guide  
305 Brass HP NonCon  
2046 fps Muzzle  
48 yd Impact 1855 fps  
12 Inches Penetration  
Tumbled at 9 Inches  
Found Base forward at 12"  
Retained Weight 225 grs.



I'm again thinking that the bullet base, after it sheds its petals, will provide much greater straight-line penetration with the 14" twist rate in your 458 R&M rifle than it did in the 20" twist rate of your 45/70 Marlin rifle.

What do you think?

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

**boom stick**

**30 January 2010, 00:08**

Completely in left field but has anyone tried a heavy dart stabilized subsonic bullet say over 500 grains for the 45-70? for long range target fun?

[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)

**michael458**

**30 January 2010, 00:17**

I am back and forth from the range, very quickly looking through.

Jim--I did test the 400 Barnes Buster--in the 458 B&M.

Go back to my post on that. Confusion somewhere.

I think, hell maybe I am confused.

Anyway I think somewhere someone said I was testing the 330 today in the 458 B&M

No--400 Barnes Buster.

1;14 twist did much much better.

And Alf, I can shoot the shit 20 times or once, it will be the same!

Now back to the range with myself!  
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"

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RIP

30 January 2010, 00:32

quote:

Originally posted by I Bin Therbefor:

The problem is that we're using threads to work out our problems instead of "string theory". 🍻🍻🍻

IBT,

Excellent thought, but I think Alf is more interested in applying "Knot Theory" to our threads. 🍻🍻🍻

capoward

30 January 2010, 00:37

quote:

Originally posted by michael458:

I am back and forth from the range, very quickly looking through.

Jim--I did test the 400 Barnes Buster--in the 458 B&M.

Go back to my post on that. Confusion somewhere.

I think, hell maybe I am confused.

Anyway I think somewhere someone said I was testing the 330 today in the 458 B&M

No--400 Barnes Buster.

1;14 twist did much much better.

And Alf, I can shoot the shit 20 times or once, it will be the same!

Now back to the range with myself!

Michael

Michael,

It was my confusing post. Yes I read your test results of the 400gr Barnes Buster from your 458 B&M...again thanks.

I did ask if you would test the 305gr Brass NonCon out of your 458 B&M cartridge/rifle before you finished with the .458 caliber work. Again, to identify if the 14" twist rate would give a greater depth of straight-line penetration, after the petals are shed, than was given by the 20" twist rate. Again my poor post.

*Edit Comments Added:*

*Michael,*

*Alf made the comment about the 330gr in one of his posts. Not sure why as he started his post regarding the results of the 14" vis-a-vis 20" twist rate test (which used the 400gr Barnes Buster bullet) and then started discussing bullet rpm relating to the 20" twist rate (however forgot to include the 14" twist rate rpm) then out of the blue he started discussing the 330gr Barnes BND SLD. My mind was already wondering and he lost me about there.*

*Alf,*

*Call me crazy if you want but yes do believe that twist rate has impact upon the stability of a bullet not only pre-impact but also post-impact. And I believe it to be equally important for light weight slower moving bullets as it is for heavier weight faster moving bullets.*

*Here is the summary of Michael's paper mix penetration test:*

**400gr Barnes Buster bullet;**

**\*\*20" twist rate @ 2061fps MV & 48yd impact:**

**38in straight line penetration, veered off course and exited top of box at 46in.**

**\*\*14" twist rate @ 2039fps MV & 48yd impact:**

**48in straight line penetration, exited rear of box at 48in.**

*As they say a picture is worth a 1,000 words. Although this is not quite a picture...I believe it pretty well sums up what the pictures would have summerized.*

*Edit Additional Comments Finished.*

Jim 🍻

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

John Wayne

I Bin Therbefor

30 January 2010, 01:09

quote:

Originally posted by RIP:

quote:

Originally posted by I Bin Therbefor:

The problem is that we're using threads to work out our problems instead of "string theory". 🍻🍻🍻

IBT,

Excellent thought, but I think Alf is more interested in applying "Knot Theory" to our threads. 🍻🍻🍻

To be or knot to be, that is the question. 🍻🍻🍻

**michael458**

**30 January 2010, 01:46**

Jim

No, buddy, sorry I was in a hurry to get back on the range and I did not read proper! I was confused. However, Alf is been at the bar again, and JHChrist he is confused!

I am with you know, and up to speed (I THINK). You know it's been a long day of shooting when every single rifle you pick up that is scoped the cross hairs are canted? But NOT. I was quite sure the scope had turned in the 500 MDM! Damn! DAMN. Then I saw that it was not of course!

Now, you want to test the 305 Brass HP at the same speeds as what was done in the 45/70 correct? 1:20 or so, against 1:14! As you noticed we had our first NonCon tumble during the last part of penetration in the 45/70? Have not had that before with any of them, regardless of weight, but all were tested in 1:14 458s and 416s and 1:12 500s! Hmmmmmm?

Alf

Hey Buddy, would you consider sharing any of those drugs you taking? Must be some good stuff?

Converting twist rate to energy to increase penetration, from energy???????

Huhhhhhhh? Huhhhhhhh?

I must be about ignorant, I must apologize, cause I don't even have a clue as to where that could come from?

Being simple, like I obviously must be, I considered twist rates nothing more than stability of the bullet! Just goes to show how much I know!

Also being simple, as I obviously must be, it seems to me a very logical, simple deduction that increased twist rate aids in stability of said projectile during terminal penetration. In other words, when the bullet stops flying and starts working for a living!

I am no expert at this, not by far. However I can tell you for a fact in my .500 caliber rifles with both round nose and flat nose solids, going from a 1:18 twist rate to a 1:12 twist rate increased stability during penetration from totally useless to a bullet that would work. In particular with the round nose configuration terminal stability increased from 50-60% of total penetration to 90% of total penetration. With the Flat Nose solids there was less increase in terminal stability, from around 80-90% to 99.9% Energy? Rotational Energy? I don't think so, very simple, very easy to understand, no voodoo, no magic, no BS, just increased stability during penetration is all!

Makes good sense to me? Now we see it once again with the comparison between the 45/70 twist rates and the 458 B&M twist rates. Damn, how much more simple do you want it? I will also place bets that we will see the same with the NonCon bullet!

Twist War????? What in the world could that be about? No man, guess I missed that fortunately! What a waste of time that would have been!

Tell you what I think! Now I could be wrong, but some of these theories and BS I hear, maybe those folks should spend more time on the range doing shooting instead of typing. I know what we could do "Let's have a spelling contest instead" maybe that would even things out?

Nahhhh, not me, I am going to spend my days on the range shooting big bore rifles till my damn eyes fall out! Good stuff!

Now, please RIP, Jim, IBT, Boom, Glenn really, am I just being too simple with this twist thing? What am I missing? I mean honestly I really could be, it's all about stability to me, and makes good common sense to me, but I don't know anything about twist rates, hell I don't even know half the twist rates of my rifles for sure! I know the 500s! And after TWO SHOTS I made a decision to CHANGE EVERY SINGLE .500 made to 1:12 twist rates, and I promise that is not one rifle, but many rifles! All based on TWO SHOTS--NOT ONE. Pretty damn easy to see if you ask me!

Big fun today!!!!!!! I Love it when everything works!!!!!!!!!!!!!! Michael is a happy camper, 50 B&MSA working, shooting great, headspaces on the mouth! Ain't no control feed DPMS! HEH HEH HEH! That's about 150 rounds since yesterday now! Zero issues! 500 MDM--Holy crap! What can I say, big dog on the block in a very reasonable package, and now the case looks so much better! Had a few good old RSA boys here today visiting, shooting the 500 MDM and the 50 B&M and they could not believe it! They Have the I wish I had this in the RSA Blues!!!!!!!!!!!!!!

Oh wait, I have it! The twist nay sayers are correct!!!!!! Yes, it has crap to do with twist! It's the SUPERIOR 458 B&M CARTRIDGE AND RIFLE COMBO!!!!!! That must be it! 😊  
Michael

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

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**ALF** 30 January 2010, 02:06

**ALF** 30 January 2010, 02:20

**Phatman** 30 January 2010, 03:09

Hello,  
Ok, I am such a beginner compared to the rest of you it isn't funny. But I did find out one thing about this.  
A 9.3X62 only needs about a 15 to 1 twist to stabilize it. Then why does it have a 9.5 to 1 twist barrel? (my CZ)  
I asked some of the real old guys I know and they said that the bullet not only loses velocity on target but also rpm's.  
The 9.3x62 is overly stable so it penetrates straight in the target right to the very end of its energy. That is why it has the reputation that it has as a game killer beyond its size.

At least that is what I was told, and it makes sense.

John

Give me COFFEE and nobody gets hurt

**someoldguy** 30 January 2010, 03:36

quote:

Now, please RIP, Jim, IBT, Boom, Glenn really, am I just being too simple with this twist thing? What am I missing? I mean honestly I really could be, it's all about stability to me, and makes good common sense to me, but I don't know anything about twist rates, hell I don't even know half the twist rates of my rifles for sure! I know the 500s! And after TWO SHOTS I made a decision to CHANGE EVERY SINGLE .500 made to 1:12 twist rates, and I promise that is not one rifle, but many rifles! All based on TWO SHOTS--NOT ONE. Pretty damn easy to see if you ask me!

You're the one with the experience, Michael. I'm just an interested observer. If you say you get better terminal results with a certain twist, then by golly I believe you. 😊

When you get into twist rates, you get into rpms. And that I understand pretty well because of my long-time interest in automobile engines. When you get into rpms, you also stumble over the idea of torque. Which bullet would have the greater torque? The one with the longer torque arm: That is, the bullet radius. And this is necessarily going to favor the bigger diameter bullet. (Big surprise! We're big bore fans here! 🍷 ) And what do you get when you multiply rpms and torque? You get horsepower!

What does this mean? I don't know because I don't know the extent that a bullet spins once inside the target. It may not spin through the entire depth of penetration, but I think it's a fair bet that it will spin to some degree for at least a short period. (I would call this a "drilling effect.")

Anyway, I can well understand the insistence on twist and its effect on terminal performance. I can't say if it's right or wrong, but it's understandable. To me anyway.

Glenn

**<Andrew cempa>** 30 January 2010, 03:55

quote:

Originally posted by Phatman:  
Hello,  
Ok, I am such a beginner compared to the rest of you it isn't funny. But I did find out one thing about this.  
A 9.3X62 only needs about a 15 to 1 twist to stabilize it. Then why does it have a 9.5 to 1 twist barrel? (my CZ)  
I asked some of the real old guys I know and they said that the bullet not only loses velocity on target but also rpm's.  
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At least that is what I was told, and it makes sense.

John

John;



The math would state that bullet RPM would have to be in the 10s of million range to stabilize any bullet in tissue-meaning a twist on the order of one in .1 inches, and 3000 fps or so...

The idea that a .366 bullet kills so well is likely a function of construction, velocity, SD and shape, not rifling rate.

**capoward**

**30 January 2010, 04:12**

Alf,

I was going to quote your many posts since this morning explaining why faster twist rate played no part in the increased straight-line penetration of the 400gr Barnes Buster bullet.

My perception is that the 14" twist rate did have a positive impact on the bullet straight-line penetration within the test mix. It is also my perception that the increased straight-line penetration was not due to 22fps less muzzle velocity.

So...I guess I can say, "I politely disagree with all of your posts."

Now that we are in disagreement, I have a simple question for you that is awaiting a simple answer. Question is, "If twist rate played no part in the increased straight-line penetration of the 400gr Barnes Buster bullet fired from the 14" twist rate barreled rifle vs. the lesser straight-line penetration of the 400gr Barnes Buster bullets fired from the 20" twist rate barreled rifle, what did cause the additional straight-line penetration?"

Jim 🤖

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

*John Wayne*

**RIP**

**30 January 2010, 04:46**

Jim,

Alf will not accept the observation for consideration, until it has been verified by repeated similar results.

Get the sample size up to at least 95 percent confidence interval.

It may take 10 shots with the Barnes Buster in both the 20" twist and the 14" twist.

20 shots total.

Get statistics book out and analyze for needed sample size.

Only then will you get Alf to try to explain it by

"wound ballistics theory and practice." 🤖

My take is that the eggheads do not understand everything about twist and penetration.

Not magic, just m

np