michael458 **13 July 2014, 15:56**

Terminal Bullet Performance

quote:

> Scoop a case full of Trailboss, cram a 825gr NonCon on top and let 'er rip. It is going to be very interesting to see just how low it will still reliably shear.

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

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

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

drewhenrytnt **14 July 2014, 01:43**

Yes Michael, I understand it shears at 1441.

I went back and read all the data you published but I was unable to determine whether you tested at any velocities lower than 1441.

I want to know if it will reliably shear at 1200, 1000, or even 850?

I plan to mount a scope and work up a minimum velocity load, then work up to whatever I can safely shoot without getting magnum eyebrow. If there is enough metal a Leupy 2.5 Scout Scope would be the ticket. With that setup maximum velocity will be my desire.

One step at a time.

We Band of Bubbas
N.R.A Life Member
TDR Cummins Power All The Way
Certified member of the Whompers Club

tanks **14 July 2014, 02:24**

quote:

> Originally posted by drewhenrytnt:
> ...I can safely shoot without getting magnum eyebrow. If there is enough metal a Leupy 2.5 Scout Scope would be the ticket. With that setup maximum velocity will be my desire.
>
> One step at a time.

Or you can try an Eotech holographic sight and not worry about the magnum eyebrow

Hog Killer **14 July 2014, 03:38**

Drew, Nikon 1 - 4x Monarchs have plenty of eye relielf.

They will hold up to heavy recoil, better than Leo., (per) Michael458.

Keith

IGNORE YOUR RIGHTS AND THEY'LL GO AWAY!!!

We Band of Bubbas & STC Hunting Club, The Whomper Club

drewhenrytnt **14 July 2014, 08:41**

quote:

> Originally posted by tanks:
>
> Or you can try an Eotech holographic sight and not worry about the magnum eyebrow

Can I mount that on the front receiver ring?

We Band of Bubbas
N.R.A Life Member
TDR Cummins Power All The Way
Certified member of the Whompers Club

tanks **14 July 2014, 09:07**

You have to get a picattiny rail for the action and then you put the sight anywhere you wish on it.

Michael posted pics of my 500MDM with the rail over the action here:

http://forums.accuratereloadin...43/m/9111029801/p/66

michael458 **14 July 2014, 14:29**

quote:

> I went back and read all the data you published but I was unable to determine whether you tested at any velocities lower than 1441.
>
> I want to know if it will reliably shear at 1200, 1000, or even 850?

Drew....
No, I never tested below 1440 and that really was more of a fluke than a determined test for LVSP. Mass is pushing the blades with that big bullet, and I really don't know what LVSP would be? Will be looking forward to your work on this.....

As for the EoTech, I had Tanks mounted on my 500 MDM for awhile until his came in. One of my rifles has a forward rail from SSK on it and Tanks has the rail mounted on the receiver..... They work, no doubt, a bit bulky however.....

M

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

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416Tanzan **28 July 2014, 02:24**

I would like to suggest that the terminals testing is not over.

consider the following from another thread on Bib Bores:

quote:

> quote:
>
> :
> Originally posted by Saeed:
> As far as I am concerned, there are 4 types of bullets.
>
> 1- Jacketted soft points, like any of the normal SP you can buy from any manufacturer.
>
> 2- Partition bullets like Nosler and Swift A-Frame. The ones that have lead in the front half and rear half, seperated by a copper partition.
>
> 3- Solid shank bullets that have lead in tags front half, shrike the rear half is solid copper. Like the Trophy Bonded Bear Claws and Jensen bullets.

> 4- Then you have the various bullets made completely of copper, with various HP designs.
>
> For me, number 4 above is far superior to anything else.
>
> That is why they god only ones we use for hunting now.
>
> I have used all the above types for hunting all sorts of game.
>
> I have experienced some failures with the normal SP and partition bullets.
> But never with number 3 and 4 above.

It appears that there is now a fifth type:

5. all brass hollow point in which the front pieces break off on impact and radiate away from the line of trajectory at a significantly sharper angle than copper pieces and in which the remaining core is almost a full-cylinder, blunt nose solid that creates an impressive wound channel on its own.

See the terminals thread, last couple of hundred pages.
What remains is to get the BC and stability of these type-5 bullets optimized.

At the moment, the .375" 235grain ER raptor has a BC of .337 and is stable in normal twist barrels (12").

However, the .416", .458", and .510" bullets do not have high BC bullets that are stable in 16" barrels. The 350 grain tipped raptor in .500" only has a BC of .270.
It is probably possible to design something around .400 BC and stable by leaving the 13 degree "solid" formula and maybe by redesigning the nose instead of relying on a large plastic tip needing a hollow point itself.

+-+-+-+-+-+

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

416Tanzan **28 July 2014, 02:28**

PS: the benefit of a .400 BC is a bullet that retains wonder working energy at 150, 250, and 300 yards.
In addition, the bullet will shoot considerably flatter from 150-300 yards.

+-+-+-+-+-+

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

capoward **28 July 2014, 05:51**

Tanz,

The brass Solids and Raptors (formerly known as BBW#13 Solid and BBW#13 HP) were designed from the 'get go' as very deadly close range DG bullets, never as 400yd high-BC bullets. Dan and the CEB staff have done wonders with the Talon Tips to give the Raptors greater BC including the latest ER (Extended Range) Raptor iterations.

> quote:
>
> **It is probably possible to design something around .400 BC and stable by leaving the 13 degree "solid" formula and maybe by redesigning the nose instead of relying on a large plastic tip needing a hollow point itself.**

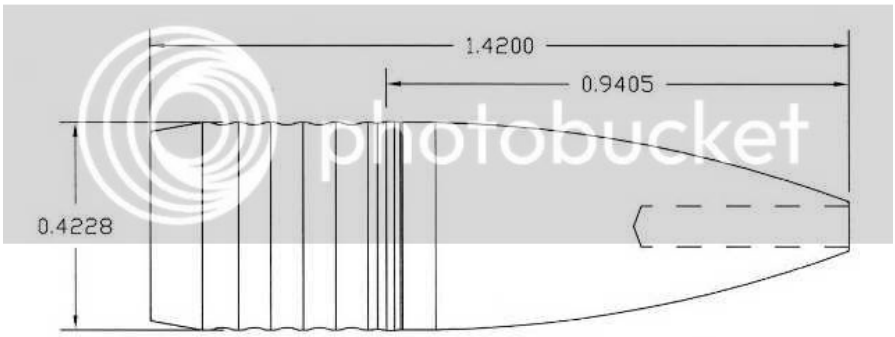
> quote:
>
> PS: the benefit of a .400 BC is a bullet that retains wonder working energy at 150, 250, and 300 yards.
> In addition, the bullet will shoot considerably flatter from 150-300 yards.

CEB does offer the high BC MTH (MTH = Match Tactical Hunting) bullets in .416 caliber:
MTH_V11:
Bullet Diameter: .416"
Bullet Weight: 350 grains
Bullet Length: 1.547"
Projection Length: .784"
Required Twist Rate: 1:17" or faster
G1 Ballistic Coefficient: .550

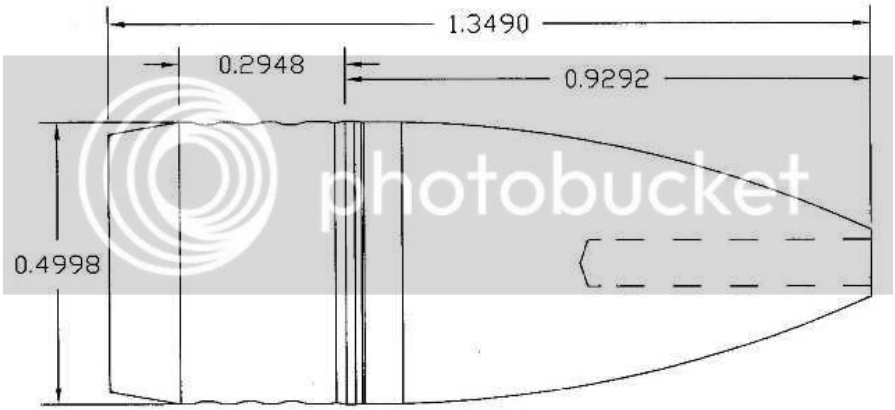
Their .510 caliber offering is much longer and heavier than you'd want to use for DG hunting purposes:
MTH_X04:
Bullet Diameter: .510"
Bullet Weight: 798 grains
Bullet Length: 2.501"
Projection Length: 1.809"
Required Twist Rate: Standard Twist
G1 Ballistic Coefficient: .970

However CEB is certainly willing to modify an existing MTH bullets specification or to create a new MTH bullet in a caliber they don't offer as a 'standard shelf' model. I in fact had Dan design two MTH bullets in .423 and .500 caliber, modified with the Multi-Narrow-Banding (MNB) from their discontinued FBH (Flat Base Hunting) bullets:

320gr .423 caliber CEB MTH Y01 Bullet Design



430gr .500 caliber CEB MTH Y01 Bullet Design



Here's a photograph of the FBH_C36 150gr .308 caliber bullet (450BC, .830" Nose Projection) that the banding on my MTH bullets is drawn from:

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

416Tanzan **28 July 2014, 09:55**

Capo,

Yes, those dimensions and designs are exactly the kind of thing necessary for the the long-range side of a bullet design. And by long range, we are including short range figures like 150-300 yards. As Michael noticed long ago on this thread, the energy figures and velocities drop off at a precipitous rate with a large meplat, so much so that he is interested in tips for dangerous game bullets. I am also interested in tips/BC for making a dangerous game bullet an all-around bullet.

However, the MTH copper design focuses on in-flight ballistics and leaves out the discussion of terminal ballistics. The MTH will allow the hunter to put the bullet on target, and it will also allow it to be used in California with those blacktail mule deer, but the question that I raise is whether or not the terminal ballistics would be improved by being done in brass rather than copper?

The materials question needs to be worked out in hollow point designs without reference to accompanying flatnose solids. The flatnose solid should remain as is, with a low BC (around .150--.200). The solids are primarily a backup bullet at fleeing game or for dangerous game work up close. Weight and bearing surface can be kept reasonably close to the hollow points in order to facilitate same PointOfImpact. However, POI considerations only apply out to about 100-125 yards. After that point the low BC of a non-tipped solid makes approximately similar POI (within 1") a physical impossibility.

After the materials question is worked out between copper and brass for ultimate BC and stability, a final question will concern ultimate nose tip design. Currently, the CEB bullets use a hollow point plastic tip in order to maintain stability and accuracy with the large plastic tips. With a redesigned nose in brass, would it be possible to design a small pointed plastic tip, like the Barnes blue-tips? Just what happens to stability with these hollow points and solid tips? I don't have a clue, myself. But I'm pretty sure that a "brass MTH" could be designed that would join the better in-flight characteristics of

the MTH design with the better terminal characteristics of the raptor design.

+-+-+-+-+-+

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

capoward **28 July 2014, 10:35**

Tanz,

You drove me to thumb back through the TBP pages to page 192 for this:

> quote:
>
> Originally posted by michael458:
> Ya'll gonna drive me totally !!!!!!!!!!
>
> I can hardly keep up as it is!
>
> OK, Capo and RIP, pay attention! I received the few over run bullets in your special run of CEB copper pointy things from Dan yesterday. I don't recall how many, 15-20 of them I think, so I gave them a good workout this morning whilst doing some other things, and since you have these in hand I thought you might like some info on them
>
> Good news--They are in my opinion a huge success! You did good!
>
> As you remember from a couple of years ago I was using a 470 Copper HP from Lehigh on the buffalo. Running at 2450 fps or so I was getting shear at less than 50-60 yards, then on out there getting a six bladed bullet from hell anyway. No real downside as I saw it, but the shear produced more reaction and more trauma from the buffalo. So I decided the shearing effect was very good and here we are today with shearing brass bullets!
>
> Now you two want to go back to copper, JHC, can't you just leave well enough alone? HEH HEH....
>
> But, these pointy things you guys had done are doing very well, even way down in velocity. Take a look!
>
> I loaded what I thought would be top end loads to see what was going to happen in both 50 B&M and the 500 MDM.
>
> 
>

Of course they are too long for the magazine in the 50 B&M.

Starting out at the higher end velocity in the 50 B&M and working my way down. Even at 2350 fps pressures were only 52672 PSI, so I could easy raise the velocity in the 50 B&M.


50 B&M
1:12 Twist Rate
10/8/2011
430 CEB Copper MTH Pointy
Things
Muzzle Velocity 2144 fps
22 yd Impact Velocity N/A
X3-20 Inches
Sheared, Massive Trauma


Muzzle Velocity 2144 fps
22 yd Impact Velocity N/A
X3-20 Inches
Sheared, Massive Trauma


50 B&M
1:12 Twist Rate
10/8/2011
430 CEB Copper MTH Pointy Things
Muzzle Velocity 1911 fps
22 yd Impact Velocity N/A
X2- 18 Inches
Sheared Good Trauma


50 B&M
1:12 Twist Rate
10/8/2011
430 CEB Copper MTH Pointy Things
Muzzle Velocity 1660 fps
22 yd Impact Velocity N/A
X1- 21 Inches

> Of course you know this, but almost all copper blades stay with the center wound channel, and that is ok and not a bad thing, there is a massive wound channel with these at velocity, and the copper blades assist with that. You don't see any, I got tired of looking for them, as I did brass Carnivores before these and spent half the morning sifting through paper pulp looking for blades! With these I was more interested in just making sure they are opening, and working, and that they are doing very very well! You guys have a good bullet!
>
> Michael

I don't believe there's an issue with the terminal performance of the CEB MTH bullets. And the primary difference between how the brass and copper petals, or blades, is how far they radiate away from the shank during penetration. The brass petals radiate wider while the copper petals radiate closer to the shank's wound channel – but the overall trauma enhancement is about the same.

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

Gerard **28 July 2014, 11:23**

The pictures of the 'pointy things' above, bear a striking resemblance to those made by GSC in South Africa since 1997. Of course these bullets are now made in Michigan USA as well.

Impact at 1600 fps.

Pardon the quality of some of these photos, some were done on film camera, they do go back a while.

Ackley Improved User **28 July 2014, 11:33**

quote:

> Originally posted by capoward:
> Tanz,
>
> The brass Solids and Raptors (formerly known as BBW#13 Solid and BBW#13 HP) were designed from the 'get go' as very deadly close range DG bullets, never as 400yd high-BC bullets. Dan and the CEB staff have done wonders with the Talon Tips to give the Raptors greater BC including the latest ER (Extended Range) Raptor iterations.
>
> quote:
>
> > **It is probably possible to design something around .400 BC and stable by leaving the 13 degree "solid" formula and maybe by redesigning the nose instead of relying on a large plastic tip needing a hollow point itself.**
>
> quote:
>
> > PS: the benefit of a .400 BC is a bullet that retains wonder working energy at 150, 250, and 300 yards.
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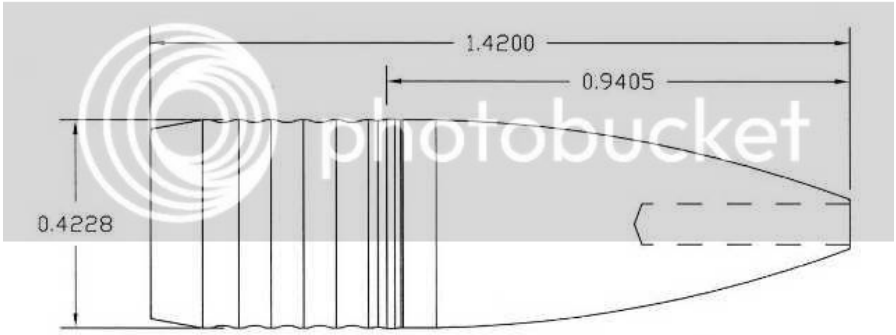
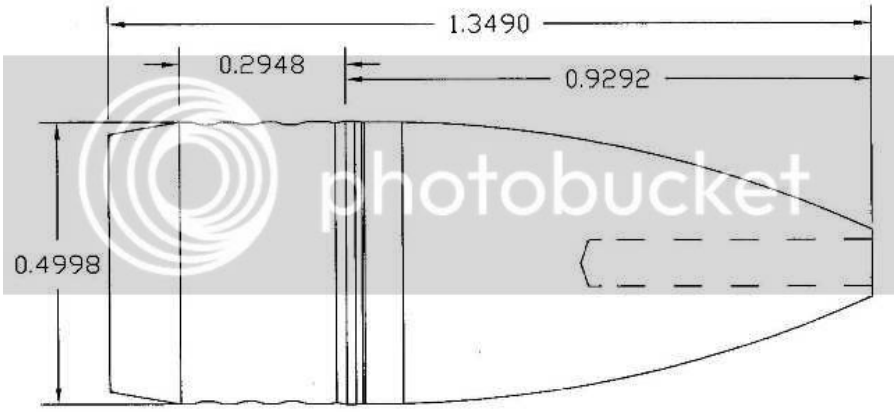


430gr .500 caliber CEB MTH Y01 Bullet Design



Here's a photograph of the FBH_C36 150gr .308 caliber bullet (450BC, .830" Nose Projection) that the banding on my MTH bullets is drawn from:

Capo, do you have testing data on the .416 350 gr MTH? AIU

Gerard **28 July 2014, 11:51**

It would depend what you want to do with your 416. If it is plains game that you are after, GSC makes a 330gr bullet with a good BC . This bullet has seen testing on the range at the design stage and then on plains game. It has been in use in Africa since 2002 and works well. For dangerous game, there is of course the GSC FN bullet.

capoward **28 July 2014, 12:04**

Ok, now to the discussion of a brass construction MTH style bullet with a small synthetic tip…

quote:

> Currently, the CEB bullets use a hollow point plastic tip in order to maintain stability and accuracy with the large plastic tips.

This is actually incorrect. The hollowed tip evolved from Michael's testing which indicated that in certain situations the original tips (lacking the hollowed tip) would break off at the bullet meplat leaving the tip shank within the bullet's hollow point causing the bullet to perform identical to a solid. I believe this was first identified with the larger caliber bullets and I don't recollect whether there was also an issue with the rat caliber tips.

Basically what you're talking about is the new CEB LAZER style tipped bullets – an MTH style high BC bullet with a small synthetic tip. Except that you desire it constructed in brass rather than copper and in .416 caliber.

Or perhaps the better answer is that you desire the current 350gr .416 MTH_V11 bullet to be modified to accommodate the LAZER style tip – and have it constructed from brass. At least that's my perception of what you're looking for. Would this work? Most likely it would – but – I believe first you'd need to identify the target game to assure that the petals would be of proper thickness and weight to correctly perform within the target game. And as Michael has demonstrated it'd be thinner for thin skinned game and thicker for buffalo and the largest plains game.

Stuff to think about…

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

capoward **28 July 2014, 12:10**

AIU,

Michael hasn't tested the .416 caliber MTH bullets so no bullet box results. I'm not sure what the CEB guys may have; phone them or email them and they'll certainly let you know.

Gerard,

From what I understand from Ron Berry, your 330gr .416 HV bullet will work just fine on buffalo as well as long distance for plains game.

A very good matched pair are your GSC HV and FN bullets. I'm sure both will see greater use now that they're readily available from your USA manufacturing site.

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

416Tanzan **28 July 2014, 15:40**

> quote:
>
> I don't believe there's an issue with the terminal performance of the CEB MTH bullets. And the primary difference between how the brass and copper petals, or blades, is how far they radiate away from the shank during penetration. The brass petals radiate wider while the copper petals radiate closer to the shank's wound channel – but the overall trauma enhancement is about the same.

I suppose that is part of the question at hand--is the overall copper trauma equal to the overall brass trauma? If it is, then the MTH will be fine, as well as GSC and TTSX. If not, then a brass version remains to be done.

The secondary question revolves around optimum BC and stability. I should probably mention here that I had trouble trying to get the 338WM to shoot the tipped raptors. I was not able to find a solution with the short windows of opportunity for me to test in the US and now I no longer have a 338WM for testing in the US. So by default we are staying with the .514 BC of the 225 TTSX. It is not a bad bullet, quite the opposite. And they were tested here on 'terminals' way back towards the beginning.

For other calibres related to BC and stability: thanks to the USA production of GSCustom I recently picked up a box of 330 grain .416" GSC HV's, but have not been able to fully test them. I've only shot a few bullets in order to extrapolate the grains-of-powder/velocity for Rel-17 powder. Accuracy will await my next opportunity to do load development, possibly not until 2015. Meanwhile, the BC of the GSC is .368" and the TTSX is .444. Both are acceptable for hunting out to 400 yards and the question for them will become which shoots better in the particular rifle(s). I am reluctant to go down to 225 grain CEB for buffalo as a first choice. I haven't yet tried the 300 grain CEB's and am looking foward to testing them in the 1:16.5" traditional twist of the 416 Rigby. On paper it should work, but CEB suggests 1:14". We'll see on my next stay in Calif. Michael gave me some .416s for testing and I think that some 300grainers are in the mix.

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

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

416Tanzan **28 July 2014, 15:50**

> quote:
>
> The hollowed tip evolved from Michael's testing which indicated that in certain situations the original tips (lacking the hollowed tip) would break off at the bullet meplat leaving the tip shank within the bullet's hollow point causing the bullet to perform identical to a solid.

Could you check on that? I'm not sure how you access results on the forum. My memory says that there were also stability/accuracy factors with the long plastic tips and that those were solved when they drilled a little hollow point in the plastic tip.

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

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

michael458 **28 July 2014, 16:04**

quote:

> Originally posted by 416Tanzan:
>
> quote:
>
> > The hollowed tip evolved from Michael's testing which indicated that in certain situations the original tips (lacking the hollowed tip) would break off at the bullet meplat leaving the tip shank within the bullet's hollow point causing the bullet to perform identical to a solid.
>
> Could you check on that? I'm not sure how you access results on the forum. My memory says that there were also stability/accuracy factors with the long plastic tips and that those were solved when they drilled a little hollow point in the plastic tip.

Tanz.....

The story is that when we got to the 9.3 caliber tips and up, the material the tips are made of was too dense and heavy at that caliber +. They would not break up and disintegrate like the smaller caliber tips. When this happened, the shear and TERMINAL stability was effected negatively to say the least. The Hollow Point running down into the stem of these tips solved all those issues. It not only weakened the tip internally, but I believe we also get a hydraulic action in aqueous material and tissue of course.... Since the HPs were done, there have been zero issues with the heavy caliber tips.....

Michael

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

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capoward **28 July 2014, 16:11**

quote:

> Originally posted by michael458:
>
> quote:
>
> > Originally posted by 416Tanzan:
> >
> > quote:
> >
> > > The hollowed tip evolved from Michael's testing which indicated that in certain situations the original tips (lacking the hollowed tip) would break off at the bullet meplat leaving the tip shank within the bullet's hollow point causing the bullet to perform identical to a solid.
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>
> Tanz.....
>
> The story is that when we got to the 9.3 caliber tips and up, the material the tips are made of was too dense and heavy at that caliber +. They would not break up and disintegrate like the smaller caliber tips. When this happened, the shear and TERMINAL stability was effected negatively to say the least. The Hollow Point running down into the stem of these tips solved all those issues. It not only weakened the tip internally, but I believe we also get a hydraulic action in aqueous material and tissue of course.... Since the HPs were done, there have been zero issues with the heavy caliber tips.....
>
> Michael

See, we just had to wait for Michael to wake up to give the full skinny!

I've spent the last 3 hours or so going through all the documents and discussions relating to the *Palmer v DC* decision that was issued on the 26th. A win at least at the district court level for our side (for a change). Now I'm off to roost for awhile.

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

416Tanzan **28 July 2014, 17:35**

Michael,

What was causing the stability/accuracy issues when tips were added?

You were giving examples of various weighted tipped bullets having trouble in individual guns. Apparently, this is not an issue with the short, non-tipped bullets.
Yes?

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

"A well-rounded hunting battery might include:
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Conserving creation, hunting the harvest.

michael458 **28 July 2014, 17:58**

quote:

> Originally posted by 416Tanzan:
> Michael,
>
> What was causing the stability/accuracy issues when tips were added?
>
> You were giving examples of various weighted tipped bullets having trouble in individual guns. Apparently, this is not an issue with the short, non-tipped bullets.
> Yes?

SLOW TWIST RATES..... Examples that come to mind.... 223... 1:12-1:14 Twists... I can take the standard 55 Raptor shoots great, NO TIP ADDED.... Add the Tip, sideways at 50 yards.... Bullet too long for those twist rates.... I use now standard 50 Raptor with tips, and they are fine in those slower twists, but I had two Win bolt guns rebarreled with 1:8 twists, all 1:9 do excellent with all....

Example... 308 with 1:12 twist..... Shoots great with 100 Raptors with tips, 1 tiny hole.... 130 with no tips great... Add tip to 130, bullet too long for twist, accuracy goes to crap..... Need 1:10 twist at max for 130s and tips.... But I use standard the 100 in all these rifles.....

Many of the slower twist guns will do fine with the ESP Raptors and no tips, but add that tip, they are way too long and cannot stabilize. Yes, crazy as it sounds, just the addition of the tip in slow twists makes the difference in length and stability.....

In the beginning Dan and I guessed all the weights in the rat guns too heavy, even if they were light for caliber, the addition of the tip was just too much, so going 10-=15 grains lighter (shorter) made all the difference in the world... CEB has some recommendations for various twist rates with these bullets, and they are spot on, so pay attention to those...

M

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

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capoward **28 July 2014, 23:02**

Not much downside to a "faster than standard" twist rate.

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

416Tanzan **28 July 2014, 23:50**

quote:

> Originally posted by capoward:
> Not much downside to a "faster than standard" twist rate.

Agreed.

So with the 500 AR Nyati we have a 1:12" twist. On JBMballistics it often generates stability factors of 7 to 10, which is far above typical expectations (1.5--2.5).

However, with the CZ 416 Rigby everything is traditional, including the 1:16.5" twist. The only way around this would be to rebarrel. What is surprising is that the 350grain TTSX works fine in the CZ, despite its 1.603" length and stability factor of 1.579.

So why wouldn't a 300grain tipped CEB work? The tipped .416" 300gn CEB is 1.623" long including the .332" tip. The JBM formula lists 2.036 as the stability factor, presumably plenty, but CEB says 14" is minimum twist.

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

Gerard **29 July 2014, 00:07**

When using the JBM Ballistics stability calculator for monometal bullets, make sure you use the McCoy based program. The Miller based system does not work with monos, only some jacketed lead core bullets.

http://www.jbmballistics.com/cgi-bin/jbmdrag-5.1.cgi

RIP **29 July 2014, 09:10**

quote:

> Originally posted by Gerard:

Impact at 1600 fps.

I'll vouch for that one.
It is a 340-grain/.395-caliber HV from my rifle that was caught by 5-gallon buckets of water at 25 yards,
using a reduced load with 40 grains of AA-5744 in the .395 Tatanka (1:12" twist).
I used Dacron fluff filler with that load of AA-5744.
MV was 1672 fps so it was indeed nigh onto 1600 fps at 25 yards.

Gerard got that bullet right on his first try with a custom order of a prototype "experimental" bullet,
with hitherto unknown barrel by McGowen,
of assumed .395 groove and .388 bore.
Historic. The Eagle landed safely.

More history from about 2007: That early "Noncon" from S&H
of 310-grain/.395-caliber brass hollow point make.
It looked about the same whether hitting water at either 1700 fps or 2800 fps, and worked well on game at top end,
just as devastating as the later CEB copycat bullets:

"Q Sign"

Exit wound:

Another Noncon "Q Sign":

More Noncon "Q Signs":


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photobucket

All one-shot kills except for the wart hog I gut shot through the "long grass," sorry to say, he required a second Noncon.
However the bigger baboon above got an insurance shot with an FN solid.

The Copper GSC HV might be more accurate and has a higher BC, and can also be driven to over 2700 fps in the .395 Tatanka.

Drop and windage check at 300 yards could be used to estimate the lower BC of that S&H Brass Noncon, the SHARRC "Velohexploder":

Ackley Improved User **29 July 2014, 22:14**

[QUOTE]Originally posted by capoward:
AIU,

Michael hasn't tested the .416 caliber MTH bullets so no bullet box results. I'm not sure what the CEB guys may have; phone them or email them and they'll certainly let you know.

QUOTE]

It would be nice to get some terminal ballistics data on this .416 bullet. If confirmed as a good hunting bullet, it would compete very well with the 350 TTSX from Barnes, but not suffer the "plastic tip" issues.

Gerard **29 July 2014, 23:12**

Throw this into the mix as well.

Field result from 2008.

Technical Data

capoward **30 July 2014, 00:05**

quote:

Originally posted by Ackley Improved User:

quote:

Originally posted by capoward:

> AIU,
>
> Michael hasn't tested the .416 caliber MTH bullets so no bullet box results. I'm not sure what the CEB guys may have; phone them or email them and they'll certainly let you know.

It would be nice to get some terminal ballistics data on this .416 bullet. If confirmed as a good hunting bullet, it would compete very well with the 350 TTSX from Barnes, but not suffer the "plastic tip" issues.

Why not should shoot Michael a PM asking if he'd do some .416 350gr MTH_V11 bullet penetration testing in the bullet box as time permits.

quote:

> Originally posted by Gerard:
> Throw this into the mix as well.
>
> Field result from 2008.
>
> Technical Data

Now that GSC has a USA manufacturing facility they're definitely on the table for use.

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

416Tanzan **30 July 2014, 00:20**

quote:

> Why not should shoot Michael a PM asking if he'd do some .416 350gr MTH_V11 bullet penetration testing in the bullet box as time permits.

I would second that.
It would be nice to see what the witness cards show on the spread of the petals, assuming he shoots them over 2600fps impact.

Or perhaps the .416 330 GSC HV, now that they are here in the US. Gina could probably get a couple boxes of bullets out pretty quickly.

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

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

Gerard **30 July 2014, 00:45**

That 330gr GSC HV bullet has been in use close to 10 years and it works very well indeed. It was not designed for point blank testing however, because that only tells a third of the story. Of course it must get the job done at close range and that it will do. We test at three distances to ensure that the bullet performs well over the entire range so that the window of application is guaranteed to be as wide as possible.

capoward **30 July 2014, 01:19**

quote:

> We test at three distances to ensure that the bullet performs well over the entire range so that the window of application is guaranteed to be as wide as possible.

Can you share the three distances and the 'materials' you use for each test with us?

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

Gerard **30 July 2014, 02:17**

Depending on the caliber it would be 25 to 50, 100 and 200 to 300 for HV and HP. Point blank, 50 and 100 for FN. I test on water only because how the bullet reacts is of importance. After range testing, the bullet is taken afield and not by me, by a variety of testers.

SP bullets are usually farmed out for testing. I do not have the equipment for the distances at which these bullets are used and point blank does not feature anyway.

capoward **30 July 2014, 02:47**

AIU,

It doesn't completely answer your terminal performance question, but this link to the CEB website videos can give you an indication of its longer range performance – third video from the bottom:
Buck taken with the MTH V15 Bullet:
PA buck taken at 700 yards with a .40 Hart rifle and the 340 grain .416 caliber MTH V15 bullet by Cutting Edge Bullets.
http://site.cuttingedgebullets.com/all_videos
Granted it's not the identical bullet – but – the hollow point depths are almost identical…

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

capoward **30 July 2014, 02:52**

quote:

> Depending on the caliber it would be 25 to 50, 100 and 200 to 300 for HV and HP. Point blank, 50 and 100 for FN. I test on water only because how the bullet reacts is of importance. After range testing, the bullet is taken afield and not by me, by a variety of testers.

This is good Gerard, identical/replicate able testing material (water) for expansion...

Thank you for sharing.

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

RIP **30 July 2014, 07:58**

Two or three Homer buckets full of water will stop most bigbore softpoints,
nesting lid to base in-line on their sides.

I started the tests with 10 buckets in a row, and soon found it did not take anywhere near 12 feet of water.

The first bucket is very rough on a high velocity bullet.

Three feet of water will make a blacktip 50 BMG AP bullet flip over and separate the steel core from the jacket.

Other testing I have done:

The smaller baboon above was sitting on his haunches chewing on a large palm nut held at upper chest level.
I shot him in his nut.
Clean pass-through of nut by S&H SHARRC Velohexploder, .395/310-grain at about 2700 fps impact velocity, a real nutbuster.
Last meal:


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capoward **30 July 2014, 08:26**

Yep I was thinking of your water filled Homer buckets...

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

Ackley Improved User **31 July 2014, 01:33**

quote:

> Originally posted by capoward:
> AIU,
>
> It doesn't completely answer your terminal performance question, but this link to the CEB website videos can give you an indication of its longer range performance – third video from the bottom:
> Buck taken with the MTH V15 Bullet:
> PA buck taken at 700 yards with a .40 Hart rifle and the 340 grain .416 caliber MTH V15 bullet by Cutting Edge Bullets.
> http://site.cuttingedgebullets.com/all_videos
> Granted it's not the identical bullet – but – the hollow point depths are almost identical…

Thanks Capo, I appreciate your input. AIU

capoward **31 July 2014, 01:48**

Welcome.

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