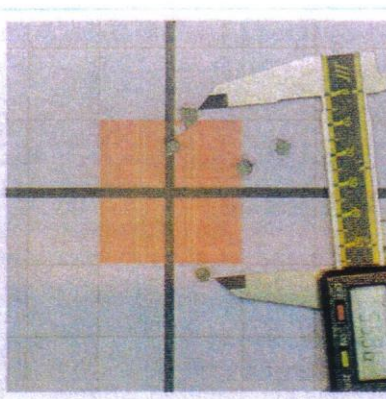
by PHILLIP H

Hornady's Critical Duty

Defence ammunition for your handgun

The retrieved bullet fired into gelatine. It performed exactly as advertised.

Three shots fired over a rest at 10m.



Five shots fired offhand from a standing p

Finding the ideal carry load for my 9mmP is a never ending quest, and over the years I have tested hundreds of different bullets to find one that will satisfy my need for a 9mm projectile that can be counted on to stop an attacker.

In recent years, new manufacturing techniques, materials and designs have lifted the 9mmP from what I regarded as a mediocre performer – I used to carry a .357 Magnum – to a serious contender as a self-defence weapon. Loaded with the right bullets, the 9mmP performs admirably and can compete with larger calibres in ballistic tests.

In June 2017, I managed to obtain a box of Hornady Critical Duty ammunition (135gr) and was keen to test this reputable brand. According to Hornady, the Critical Duty load was designed with law enforcement and tactical professionals in mind. It's an advanced 21st century handgun ammunition that delivers the most consistent and reliable urban barrier performance. The Flex Tip (a red polymer insert in the tip of the bullet) and the design of the new FlexLock bullet eliminates clogging and aids bullet expansion. Its large mechanical jacket-to-core InterLock band (an interior belt, integral to the jacket) prevents the jacket and core from separating, providing maximum weight retention and proven terminal performance in all FBI test barriers.

HORNADY SAYS THE core is made of high-antimony lead, making it extremely tough, and delivering controlled expansion for excellent terminal performance. It's also more economical than similar bonded bullets.

The cases are nickel-plated to resist corrosion, provide a smoother surface for better feeding and to facilitate low-

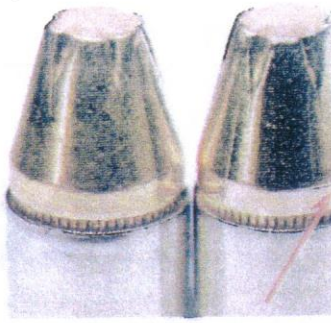
light chamber checks. All this s
impressive.

I was sure that the ammu
would live up to the promises, ho
I found that the cartridges we
chambering properly in my pisto
racking the slide to chamber a ca
I found that the pistol's slide st
about 5mm short and the barrel
lock up. I ejected the round, lock
slide back and fed in a round by p
the slide release. This time the
chambered, but I had to apply co
able force to eject the cartridge.
several more rounds and found
duced the same problem. In co
a variety of other brands chan
as normal and ejected without
It seemed, therefore, that the p
was specific to the 135gr bullet.

After some head-scratching
cluded that the bullets must be
ing the lands of the rifling. The
ady's overall cartridge length me
28.52mm, slightly longer th
other cartridges I use. Also, the
Duty 135gr bullet's shape is su
the cylindrical section extends 2

The cartridge on the left is the standard factory load. The one on the right has the bullet seated slightly deeper to eliminate feeding problems in my pistol.

The slide would not fully close when feeding Critical Duty cartridges from the magazine.



The bullet on the right clearly show mark where it touched when it was into the chamber.

upwards of the cannelure before the ogive starts. The bullets are factory-seated so that the milled surface of the cannelure is clearly visible. Closer inspection of the bullets that I chambered also revealed clear marks at the start of the ogive, caused by the lands on chambering the round.

I decided to seat a few bullets deeper into the case for an overall length of 28mm. This resolved the problem and these cartridges chambered without effort. I was worried that the deeper seated bullets might increase pressures, but the modified rounds clocked the same velocity over the chronograph as the factory-seated ammo.

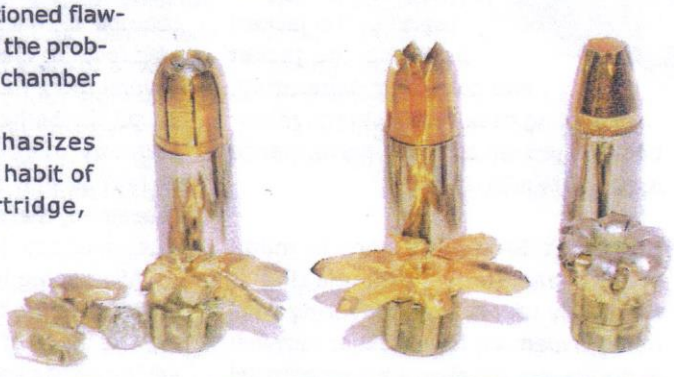
I EXPECT QUALITY factory ammunition to work perfectly out of the box as my CZ pistol has fed most other factory or handloads I have used during the last 20 years without problems. I have had only one stoppage ever, and that was with a cast bullet. However, when I tested the Hornadys in four other 9mmP pistols they functioned flawlessly, which proved that the problem lies with my pistol's chamber and/or throat.

This incident emphasizes that you should form a habit of chambering every cartridge, whether factory or handloaded, in the specific firearm BEFORE you intend to use it for hunting, sport shooting or defensive carry.

With the feeding problem resolved, I tested the ammunition on the range. The average velocity was 1 062fps for 338ft-lbs of energy, compared to Hornady's claim of 1 010fps for 305ft-lbs. The Critical Duty +P load is advertised to deliver 1 110fps for 369ft-lbs of energy.

I then proceeded to fire the bullet into 10% ballistic gelatine (1 part gelatine with 9 parts water) to see whether the bullet would perform as advertised. The idea was not to replicate the tests Hornady has already done (see their website for details), but to see if my handgun could match the penetration in bare gelatine that Hornady achieved in their tests.

I used three blocks of gelatine, each 20cm long, stacked next to each other to form a barrier 60cm deep. The 135gr bullet penetrated the first two and came to a stop in the third – total penetration 52cm (20.47 inches) of gelatine. The recovered bullet weighed 133.6gr – 98.96% of th inal weight – and opened to 13 (.545"). Hornady's own result 15.25" penetration, expansion and 99.9% recovered weight from the deeper penetration in atine, the rest of the results v close to the manufacturer's cl one could hope for.



TO TEST FOR accuracy, I fired fiv offhand at a target 10m awa result was a pleasing 55mm g then fired a couple of three-shot while seated at a bench using a as a rest. Both groups had a shots touching – impressive from my pistol's 3.75-inch barre

The felt recoil was about th as that of the 124gr handload for practice, and firing two s quick succession with the Horn got both bullets on target in th time as I could with my handloa feeding was reliable and I expe no malfunctions.

Hornady's Critical Duty a tion is an excellent choice f carry, and at R510 for 25 it is compared with other factory ammunition. For a distributor n contact Inyathi Sporting Sup 012-808-9911.

Hornady's Critical Duty (right), co to locally produced bullets from A into the same gelatin. Read more the September 2017 edition.

by **PHILLIP HAYES**

ASP Self Defence Handgun Bullets

The packaging of the ASP monolithic defence bullets is neat and the containers can be re-used.

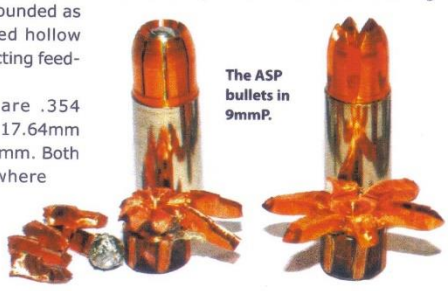
When your life depends on a bullet's ability to stop a threat decisively, only the best will do. Advanced Shooting Products (ASP), a Gauteng-based bullet manufacturer, produces a range of bullets in most calibres to fit this bill.

I received two types of 9mm bullets for testing, the Single Metal Expanding-Copper (SME-C) and the Single Metal Jagged Hollow Point-Copper (SMJHP-C). Both are 'monolithic', and the SME-C has in its centre an aluminium ball between its eight petals; the ball aids expansion when the bullet is fired through barriers, such as the windscreen of a car. In contrast, the SMJHP-C has just six petals, the tips of which are sharp and not rounded as those of most other jacketed hollow points tend to be. I was expecting feeding problems here.

Both bullet diameters are .354 inches; the SME-C's length is 17.64mm while the SMJHP-C's is 19.06mm. Both bullets are turned so that where the ogive and shank meet, the diameter of the shank is undersized for the first few millimetres. The rest of the shank measures .354. Thus while the cartridge overall length (COL) may be slightly longer than that of other 9mmP rounds, these chamber without the bullets touching the lands as the undersized section enters the bore.

I started by loading PMP cases with 4.2gr MP200 for a COL of 27mm (determined by my magazine length, not the crimping grooves). However, when seating the bullets I found that the PMP case walls bulged slightly. I then tried Hornady cases which have slightly thinner walls and this solved the problem. The primers were Sellier & Bellot.

I fired the two bullet types over a chronograph: the SME-C clocked 1 092fps and the SMJHP-C averaged 1 162fps. The higher velocity of the latter may be the result of seating these bullets slightly deeper, though in my experience, small variations in seating depths don't normally alter velocities by much, if at all.



The ASP bullets in 9mmP.

Both loads were comfortable to shoot, showed no signs of excessive pressure and fast follow-up shots were possible. Group sizes averaged 74mm at 10m – the same as my Frontier 124gr reloads, and recoil was also similar. By comparison, Winchester Defender +P ammunition had a distinct bite.

However, these bullets are not about group size, they're about terminal performance. To test this I used 10% ballistic gelatine marketed by ASP as a package: container, gelatine, preservative and instructions.

I followed the instructions and ended up with blocks of gel roughly 15.6kg in weight, 37.5cm long, 24.5cm wide and 16.5cm high. ASP says its gel's consistency is similar to that used by America's FBI.

I then placed four layers of denim in front of the gel, and fired the two ASP bullets as well as Peregrine's 100gr monolithic (see our test report in *Magnum*, November 2016), the 124gr Winchester Defender +P and a 135gr Hornady Critical Duty (*Magnum*, August 2017) into the gelatine to compare results.

The bullets tested in gelatine. From left a SMJHP-C (bone and gel), 90gr Peregrine SD bullet, SME-C that lost some of its petals, the SMJHP-C, Hornady Critical Duty and Winchester Defender.

The SMJHP-C opened to 23.59mm after penetrating the four layers of denim and the first 1 1/5 inches of gel; it went on to stop after a total penetration of 10.5 inches. The six petals opened perfectly and the bullet retained 100% of its original weight.

The SME-C opened to maximum diameter (25.42mm) after penetrating only 1¼ inches of gel, shedding five of its eight petals over the next eight inches, and stopped after penetrating 14.7 inches of gel. Retained weight was 110gr.

By comparison, a 100gr Peregrine bullet opened perfectly and penetrated 9.5 inches. The Winchester Defender penetrated 14.7 inches, and the Critical Duty went straight through the gelatine block.

The SMJHP-C's performance was impressive, creating a permanent wound channel of just over 2 inches at its widest in the gel. The SME-C's wound channel measured 1½ inches.

Clearly, the SME-C penetrated deeper because it lost some petals. However, these petals formed secondary wound channels, which would cause more bleeding.

The surprise with both ASP bullets is the muzzle velocity, which is achieved with very modest recoil. The 115gr SMJHP-C generated muzzle energy of 345ft-lb, and the SME-C generated 305ft-lb – adequate for a daily carry load.

AS A TORTURE test, I fired an SMJHP-C bullet through thick bone (12mm) and meat (6mm) into the gel. The boned deformed some of the petals, two opening only slightly, two opened to about 40% and two to about 80%. It was clear that the bullet opened up while penetrating the bone, and went on to penetrate almost the entire length of the block of gel while cutting a wide wound channel through the first third of the block. Weight retention was 100%.

These bullets performed to the manufacturer's claims and should be an excellent choice for home defence. My initial doubt about possible feeding problems with the SMJHP-C was unfounded, as both bullets performed without a hitch, and fed every time, despite my deliberately trying to cause a jam by cycling them through my pistols literally hundreds of times.

The newer version of the ASP bullets (right) has a slight boat tail to make seating easier.

The SME-C would probably be my choice if car windows or more solid barriers were to be encountered; for defence against attack in my home I'd opt for the SMJHP-C – though both performed more than well enough to qualify as excellent carry loads.

A friend who joined me for the test shoot, commented that the ASP bullets did exactly what he expected from a premium self-defence bullet, with the added benefit of extremely quick follow-up shots being possible.

Both are premium bullets with excellent threat-stopping ability, and naturally, are priced accordingly: the SME-C bullets sell for R685 per pack of 20, and the SMJHP-C for R595 per 20. ASP is ready to market factory-loaded ammunition in both versions. They make similar bullets in 380ACP/9mmK, .38 special, .357 Mag, .357Sig, .40S&W, .44mag, .45ACP, and .50 Cal.

For more information contact Dawid van Reenen on 082-303-6790.

The broken petals of the SME-C in the gelatine block.