Mail Online

Ready, fire, aim! U.S. Army's new self-steering bullet comes with tiny fins that guide it to its target

By Katie Silver

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A bullet that can steer itself has been developed by national security researchers for widespread use by the army.

US military researchers have developed the technology that will see regular army soldiers shooting with the accuracy of snipers.

In fact the four-inch-long, dart-like bullet is so effective that it can hit a target, guided by a laser, two kilometers away.

Wartime game-changer: The four-inch-long bullet has a sensor that activates tiny fins to steer it to its target

It works through an optical sensor in the nose of the bullet which detects a laser beam on a target.

The sensor then sends information to guidance and control electronics that uses an algorithm to calculate direction.

The bullet then steers itself, via tiny fins, to the target.

The game-changing ammunition was designed by Sandia – the US government arm which develops science technologies to improve national security.

'This is intended for Private Snuffy, not for a highly trained Special Forces guy,' developer Red Jones told The Register.

‘We’re making it simple for everyone to use.’

Sandia is now seeking a private company partner to finish testing and produce the bullet:

‘We have a very promising technology to guide small projectiles that could be fully developed inexpensively and rapidly,’ said Jones who hunts in his spare time.

A tiny LED attached to a self-guided bullet at Sandia National Laboratories shows a bright path during a nighttime field test that proved the battery and electronics could survive the bullet's launch

Unlike most bullets which have grooves or rifling to enable them to spin and fly straight, the new design is smooth-bore.

To enable a bullet to turn in flight toward a target and to simplify the design, the spin had to go, Jones said.

Now it flies straight both because it is aerodynamically stable and the tiny fins enable it to fly without spin, just as a dart does, he said.

While engineering issues remain, computer modelling has shown the new design could prove very accurate.

Using a computer simulation, an unguided bullet could miss a target one kilometer away by 9.8 yards whereas the guided bullet was only off by 8 inches.

With regular gunpowder, the bullet can travel up to 2,400 feet per second.

With customised gunpowder, researchers are sure this could be faster.

‘We’re confident in our science base and we’re confident the engineering-technology base is there to solve the problems,' Jones said.

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Great now you too can have a bullet with your name on it ..crazy military.

- Jason, ohio usa, 01/2/2012 23:05

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"Brilliant, there are thousands starving and dying in this world through desease and starvation , and the Americans come up with another way to kill people!!!" "I guess this is what they needed to save their economy and come out of recession, right???" Well there are too many people and it is unsustainable.! The only way forward is better technology so this is a plus.. Suprised this was not done a few years back the tech was there especially to fit in a 50 cal. And why do you need the laser. Any decent soldier can get it close to the target , surely the bullet could be given enough intelligence to "Home" in in the last 100 metres or so even sacrificing terminal velocity if neccesary

- Alan, Not the UK, 01/2/2012 19:38

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@ Bret, Bournmouth. The 'case' you see being ejected is a plastic 'sabot' this stops the projectile damaging/being damaged by the bore on it's travels. It also creates a gas proof seal so that the pressure created by the rapidly expanding gasses don't escape around the projectile and so making sure the whole thing works. The sabot is like a case the projectile sits in, usually designed to open up as soon as it exits the barrel, thus letting the projectile fly free.. quite often found in specialised shotgun cartridges. hope that helps. Paul

- Paul Hennessey, Stockton, UK, 01/2/2012 13:04

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Brilliant, there are thousands starving and dying in this world through desease and starvation , and the Americans come

up with another way to kill people!!!

- S. I. Mather, Bradwell, UK, 01/2/2012 12:43

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That's great, until the enemy pick one up and reverse engineer it and have that 'advantage' too.

- mrmark1977, worthing, 01/2/2012 11:37

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So all you have to do is point the gun in the rough direction you want fire and the bullet hits the target fantastic……. Which way is France

- Phil the honest worker, Isleworth, 01/2/2012 07:49

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I guess this is what they needed to save their economy and come out of recession, right???

- Leo, uk, 01/2/2012 02:40

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I guess this is what they needed to save their economy and come out of recession, right???

- Leo, uk, 01/2/2012 02:38

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The US military is marvellous at inventing ever more expensive ways of killing the bad guys. And yet they still can't beat the taliban, who live in caves, have little training, and are armed with nothing more than simple AK47s and homemade explosives. - Miserable Taxpayer, London, 31/1/2012 6:49 >>>>>>>>>>> You forgot to mention that the Taliban don't wear uniforms of any kind to distinguish themselves from the civilians they use as human shields. You also forgot to mention that Britain has some gee-whiz technology of its own and has been no more successful against the Taliban than we have.

- Evan, Cleveland USA, 31/1/2012 23:26

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Just what America needs in a severe recession.

- SearchForTheTruth, Humble Historian Home, 31/1/2012 22:49

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