

Star Wars-style laser technology to reach battlefield

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Star Wars-style technology is about to take to the battlefield for the first time with the launch of a laser system to shoot down enemy missiles and mortars.

Laser beam technology is being rushed into service to combat the threat of insurgent missiles and mortars raining down on British and American military bases in Iraq and Afghanistan.

After decades of delay and billions of pounds spent, it will be simple commercial lasers rather than the hugely expensive US Department of Defence technology that could be used to save hundreds of troops' lives.

In just 18 months the American defence firm Raytheon has turned a laser used in the car manufacturing industry into a weapon that can hit incoming rounds at the speed of light, melting the outer casing and detonating the explosive inside.

A laser has already been used in a test to destroy a 60mm mortar round and in September the company plans its first "shoot down" of a shell in flight in a test to be conducted with the US military. If successful it could be used on battlefields as early as next year.

The Ministry of Defence is also already in discussions with the company for the new weapon that will be mounted alongside the current Phalanx Gatling gun system that uses thousands of 20mm bullets to shoot down missiles physically.

During one attack when The Daily Telegraph was present at Basra airbase in February two out of four 107mm rockets hurtling towards the accommodation area were shot down. But one of the two that penetrated the defences landed on a shower block killing a RAF serviceman.

With the new laser technology it is hoped that all bombs fired at the base will be shot down before they get a chance to inflict damage.

"This is a huge enhancement of Phalanx. It will have accuracy to shoot down these targets," said Raytheon's chief of directed energy weapons, Mike Booen, speaking at the Farnborough Air Show.

"When you trade photons for bullets you have an unlimited magazine you can shoot forever as long as you have electricity,"

Protecting commercial aircraft from the threat of terrorist missiles has also become a major concern for airlines and airports.

It will cost an estimated \$30 billion (£15 billion) to install effective defensive devices on board all America passenger jets if one was shot down.

Terrorists have already fired SAMs at an Israeli jetliner in Kenya in 2002 and a freight jet in 2003 outside Baghdad.

The Vigilant Eagle system will create a "dome of protection" around a major airport protecting all aircraft at the most vulnerable phases of take-off and landing.

It shoots electromagnetic energy that disrupts the missile's circuit boards diverting it away from the

aircraft.

"This is not just restricted to US airspace because any terrorist with a shoulder-launched missile can use them," said Mike Booen. "If a commercial aircraft got shot at tomorrow we would have an order for 10 of these immediately."

Energy beams have also been developed that can fire a laser with pinpoint accuracy to drive away potential suicide bombers, rioters or hostage takers.

The Silent Guardian system fires millimetre wave beam at individuals that cause an excruciating burning sensation without causing any damage.

The beam travels at the speed of light, penetrating the skin and causing an intolerable burning sensation causing suspects to flee.

With dozens of helicopters being destroyed by Taliban and Iraqi insurgent missiles, technology advances have seen a device that has been shrunk from the size of a football to a tennis ball that will fire lasers to confuse infra-red guidance inside a missile.

Story from Telegraph News:

<http://www.telegraph.co.uk/news/newsttopics/frontline/2301164/Star-Wars-style-laser-technology-to-reach-battlefield.html>

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