

Quantum Stealth material designed to make target invisible

December 16 2012, by Nancy Owano



(Phys.org)—Scientists are exploring better methods of camouflage, a so-called scientific invisibility cloak, and news has spread fast about a Canadian company with substantial claims on how far they have come with camouflage technology. The company, HyperStealth Biotechnology, has developed Quantum Stealth camouflage material,

which renders its wearers invisible by bending light waves around them. Their work has obvious implications for the defense industry. How can the enemy hit targets they cannot see or defend themselves from attackers who are invisible? Theoretically, any soldier could put on the material and get it working with no power source required.

Defense scenarios in which Quantum Stealth could be used include a combatant in enemy territory but is safe as invisible; the fighter decked out with the super material is capable of confusing an enemy fighter with no clue as to location. The material removes thermal signatures.

Guy Cramer, the [CEO](#) of HyperStealth [Biotechnology](#), said that pictures on his website page do not show the real technology but instead were mockups to show the media the concept. He said he did not wish to show actual photos, which could be analyzed.



"This is mock-up of our 'Quantum Stealth' (Light Bending) material with my assistant behind it. No cameras and no projectors are used. These photos are to show the Media the concept, for [security issues](#) we can not show the actual technology. With the real material you would only see about 5% of the shadow on her and the ground as we've determined a 95% reduction of shadow in testing." Many comment-makers to sites reporting on the material said they had a difficult time accepting the claims of invisibility. As one comment responder said, "I'll believe it when I don't see it." Sebastian Anthony of [ExtremeTech](#) offered this assessment:

"In theory, Quantum Stealth works by bending light around the target, and Cramer certainly uses the right words to support his case—nanotechnology, metamaterials." Anthony commented that it is not impossible, "but it's improbable. I want to say that there's a clue in the name—that Quantum Stealth somehow uses some neat glitch in quantum mechanics to provide invisibility—but really,"

Cramer nonetheless has made presentations of Quantum Stealth to military personnel and according to his report on his site: "Two separate command groups within the U.S. Military and two separate Canadian Military groups as well as Federal Emergency Response Team (Counter Terrorism) have seen the actual material so they could verify that I was not just manipulating video or photo results," Cramer said.

"Groups now know that it works and does so without cameras, batteries, lights or mirrors... It is lightweight and quite inexpensive. Both the U.S. and Canadian military have confirmed that it also works against military

infra-red scopes and thermal optics," he said. Cramer has announced the Quantum Stealth material as "light-bending material," which is "non-powered adaptive camouflage that portrays what is behind the user in-front of the user bending the light around the target."

More information: www.hyperstealth.com/Quantum-Stealth/index.html

© 2012 Phys.org

Citation: Quantum Stealth material designed to make target invisible (2012, December 16)
retrieved 10 April 2024 from
<https://phys.org/news/2012-12-quantum-stealth-material-invisible.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--