20

defensereview.com
http://www.defensereview.com/dr-exclusive-hyperstealth-quantum-stealth-passive-adaptive-camouflagecloaking-technology-for-the-21st-century-future-soldierwarfighter-beyond-smartcamo-color-changing-hybrid-camouflage-beyond/

DR Exclusive Interview!: HyperStealth Quantum Stealth (QS) Light-Bending Passive Adaptive Camouflage (Camo)/Visual Cloaking Technology for the 21st Century Future Soldier/Warfighter: Beyond SMARTCAMO Color-Changing Hybrid Camouflage, Beyond Fictional Alien Predator's Active Electro-Optical Camouflage/Invisibility Cloaking Tech!

David Crane

By David Crane
defrev (at) gmail (dot) com

May 12, 2011
Last updated on 5/14/11.



DefenseReview (DR) has been publishing articles on adaptive camouflage/cloaking technology for military camouflage (combat/tactical camouflage) applications for several years, now. Well, on May 10, 2011, DefenseReview conducted what turned out to be a very interesting interview with Guy Cramer of HyperStealth Biotechnology Corp. about a new HyperStealth-developed adaptive camouflage/visual cloaking technology (i.e., "invisibility cloak") called Quantum Stealth (QS), which is a *passive* adaptive camouflage/cloaking tech that Mr. Cramer claims actually works and is viable for military applications.

Hypertealth designs and develops military/combat/tactical and hunting camouflage patterns (including SMARTCAMO color-changing hybrid camouflage, soon to be marketed by ADS, Inc.), which DR has also reported on over the last several years, including HyperStealth's PSD Urban digital camo pattern, which the Kindom of Jordan's Jordanian Security Forces (JSF) adopted in late 2004, and the HyperStealth KA2 Night (Blue) and Woodland digital/digitized camouflage patterns that debuted at SHOT Show 2005 and were adopted by Jordanian Special Forces around the same time. We've alway been interested in HyperStealth's tactical camouflage designs, but Quantum Stealth is a completely different discipline and way more intriguing than anything else they've ever done (that we know about).

Anyway, this interview (edited exerpt below) quickly became one of the two most jaw-dropping interviews DR has ever conducted, the other being an interview we've been sitting on for a few years that involves high-order explosives technology, which we may publish soon. But back to Quantum Stealth. So far, Hyperstealth has only published the following snippet on it, which is buried all the way down at the very bottom of the HyperStealth SMARTCAMO info page:

Earlier this year Cramer announced that he had developed "Quantum Stealth" a true cloaking technology for air,

sea and land vehicles over the broad spectrum of visual and electronic detection measures.

Part of the Quantum Stealth technology is based on Quantum Mechanics and the prototype material has demonstrated the ability to actually cloak targets as visually undetectable (invisible to the viewer).

Remember, if you can't see it, you can't kill it. And, conversely, if you can't be seen, you can't be killed.

Below is an edited excerpted (for readability) portion of DR's interview with Mr. Cramer on Quantum Stealth. We may publish more of the interview at a later date. Then again, we may not. We've chosen to start the excerpted portion with a very provocative and rather mind-blowing statement by Mr. Cramer about the Quantum Stealth (passive) adaptive camo/cloaking technology.

Edited and excerpted portion of David Crane Interview with Guy Cramer conducted on 5/10/11:

Guy Cramer: Well, SmartCamo isn't the next-step thing for us, it's the [Quantum Stealth] adaptive camo we're workin' on. Someone had actually asked me "why would you release this information on SmartCamo?" I said "'cause it's already obsolete," (laughing) so that's [Quantum Stealth] the next big thing. And, it's something that the military is involved with, so I really can't say too much about it, other than we are bending light, and it does work, and it works like you see in the movie "Predator" [1987], so we're there already.

The Canadian military is looking to head up the [Quantum Stealth] program. SOCOM [USSOCOM] will be working under a Memorandum of Understanding with the Canadian Government on these [SmartCamo and Quantum Stealth tech], as will the British Military
We haven't talked about it. Everyone keeps trying to equate it to the Predator movie, and we've gotten it there and beyond. And, it works in the visual, the infrared, ultraviolet [light spectrums].

David Crane: And how are you able to capitalize on quantum mechanics? How are you able to utilize quantum mechanics?

Cramer: Um, it's not necessarily quantum mechanics, but the resulting material came about because of what we saw happening in a quantum mechanics experiment.

Crane: So who developed the material?

Cramer: I can't get into the details of that, but we've got the material.

Crane: Right, but is it your material, or is it developed outside?

Cramer: It's developed by another group.

Crane: O.k., is that the British guys?

Cramer: Oh, no. The British are…they were nowhere near on this technology. There was an article that came out that the British have made something completely disappear [laughing]. I met with the doctor that was involved in that program, and he goes "aahh, that's the British media." He said "I tried getting that article corrected, and they wouldn't do it." But he said nothin' disappeared. He said "we're not even close to what they were saying, suggesting we did." They basically took what he said they were hoping to one day do if everything…like a fantasy world existed, and what they were currently doing in the field, and he said "they just mixed it all together and put it out there and said this is what I said." So, yeah, those stories about the British making a tank completely disappear, he said "I was there. The tank never disappeared."

Editor's Note: During the interview, Defense Review also brought up the "smart clothes" project being led by Dr. Yoel Fink at the Department of Materials Science and Engineering (DMSE), MIT (Massachusetts Institute of Technology), in which Fink and his team advanced earlier work in which they placed sensors in relatively large polymer fibers by stretching the 25mm polymer fiber strands into much thinner fibers while maitaining the relative positions of the sensors. Mr. Cramer replied that it was not the same material.

Cramer: Something like what we're using, you're lookin' at $100 per soldier. It's cheap and effective. So, you're

not lookin' at the multi-million dollar program that MIT's lookin' at for their programs.

Crane: Hm. Umm, that's interesting. So, cheap and it's effective. That's interesting...

Cramer: Yeah, that' doesn't happen too often.

Crane: Wow. Uhhh [laughing], wow. Aw'right, o.k., how did you even find this material?

Cramer: It's something that's been developed over the last two years.

Crane: O.k., but how did you find it? How did you even know it existed?

Cramer: Everything in science is typically an accident, and you can say the same thing occurred here. Teflon [polytetrafluoroethylene (PTFE)] was an accident, right? When the DuPont researcher was workin' on something completely different, and he gets this big Teflon block out of the results, going "what the heck is this?" And then once they learned what it was, they're going "well, now what can we use it for?" Well, now you look at all the uses, and you're going "how did it come about?" Well, that was never his intention, and its the same idea here. Umm, the intended results [are] not what we were looking for. It's something that we kinda' accidentally stumbled upon, and then started to work with and upscale to the point that we can make a person or a vehicle *gone*.

Crane: O.k., so is this something that you developed, or something that was actually developed by an outside firm, and you just happened to find them and find out what they were doing, and then you're applying it to your thing.

Cramer: No, it's something that I've developed.

Crane: So you developed it in-house.

Cramer: Yeah, and again I can't go into detail.

Crane: O.k., so, but in other words, this is not somebody else's product that you're incorporating into your own use, or whatever. This is not like a fiber or a fabric that somebody else is making that you say "oh, yeah, we can use that for our applications or for what we're doin'". This is not that.

Cramer: Yeah, this is something that we're workin' on the intellectual property for, so I can't...we can't disclose anything about the nature of the product, itself.

Crane: Is it an active electronic system [active camouflage system] that's applied?

Cramer: [No], it's not active in any way shape or form. SmartCamo is active. SmartCamo needs a battery to operate, or a power source.

Crane: And this is passive.

Cramer: Yes.

Crane: Jesus. Wowww. Aw'right, um...very interesting. Very interesting. Uh, this would be, I mean, look, if this works as you're kind of quasi-advertising it, at the moment, um, uh, this would be the most important development in military camouflage in history, probably.

Cramer: Yeah, and I can't...I wish I could show everyone out there. I mean, that's how science works, but you're sittin' there goin' there's a military aspect to it that doesn't allow me to go beyond a certain descriptive point. I've never lied to you before, and I can't...I have clients that depend on me to tell the truth.

Crane: So, SMARTCAMO's essentially, I mean compared to this new Quantum Stealth, essentially SmartCamo's bullshit. I mean, it's just...

Cramer: No, no, SMARTCAMO will have a place. Definitely, it will have a place. Um, it may not be on the soldier of the future, which is where everone's focused right now. Um, it's too expensive right now, and there's limitations

when you gotta' carry around anything that adds weight, and the battery is gonna' add weight to the soldier, and it's gonna' limit his dwell time in the area of operations. Those are limiting factors. Wheras the Quantum Stealth [technology] doesn't have any of those.

Crane: Right, but which is more effective in actually camouflaging the object?

Cramer: The Quantum [Stealth technology].

Crane: O.k., so it's more effective...

Cramer: It is, but if you're looking at an aircraft, a helicopter, a tank [main battle tank], a ship, there'll be areas where the Quantum [Stealth] may not work as well as the SmartCamo does. Um, we don't know until we get up to those scales what we're dealing with on each [respective] technology.

Crane: But on a human being, you already know it's [Quantum Stealth] superior.

Cramer: Yes.

End edited excerpted portion of 5/10/11 David Crane interview with Guy Cramer.

According to Cramer, Quantum Stealth is already proven to work effectively in the visible light spectrum, night vision/near-IR (infrared) spectrum, and ultraviolet light spectrum and should also prove to work effectively in the thermal/IR spectrum, which HyperStealth will be testing very soon. Cramer is highly confident that the thermal/IR spectrum test(s) will be successful.

DR is curious if Quantum Stealth will be able to defeat synthetic aperture radar (SAR). Whatever the case, HyperStealth Quantum Stealth soldier/warfighter cloaking technology will obviously obsolete conventional printed military camouflage pattern designs. Once you have Quantum Stealth, the only reason you'd want to wear a conventional camouflage pattern BDU (Battle Dress Uniform) is for redundancy/backup. However, since Quantum Stealth is a passive-rather-than-active system, and DR hasn't yet seen it or how it works, we don't know how it could fail.

It of course goes without saying that Defense Review will continue to follow Quantum Stealth's development as closely as we can, particularly since it would appear that it can potentially obsolete not only their SmartCamo hybrid camo tech, but also Blucher Systems' Ghost and Spectralflage thermal/IR camouflage technology.

It should be noted that while conducting the interview, DR communicated to Mr. Cramer that there's a disturbing aspect to the Quantum Stealth (and SmartCamo) tech in that it can potentially be misused and abused by malevolent governments against their respective domestic civilian populations/citizens, giving those governments a signficant tactical advantage over their civilian populations. Quantum Stealth can theoretically negate/obviate even an armed citizenry's capability to defend its lives and liberty. Mr. Cramer acknowledged this malevolent potential, but stated that he chooses to have faith in his government, which makes sense, since Mr. Cramer is Canadian. A little joke, there. Couldn't resist.

Assuming Quantum Stealth is the "real deal" and works as advertised, it's just another example of "if we can think it, we can achieve it."

Editor's Note: *Soldier Systems* reported on the HyperStealth SMARTCAMO hybrid camo tech in February (2011).

Photo(s) Credit: Davis Entertainment and/or 20th Century Fox

Company Contact Info:

Guy Cramer, President/Owner
HyperStealth Biotechnology Corp.
P.O. Box 21134
Maple Ridge Sq.

Maple Ridge, B.C., V2X 1P7
Office Phone: 604-961-7046
Email: info@hyperstealth.com
Website: http://www.hyperstealth.com

© Copyright 2011 DefenseReview.com. All rights reserved. This content/material may not be republished, broadcast, rewritten or redistributed without first receiving permission and providing proper credit and appropriate links.

Related Articles:

Hyde Definition PenCott Multi-Environment Camouflage Patterns (PenCott-GreenZone, PenCott-Badlands, and PenCott-Standstorm) Go into Production: Digital Combat Camo for the 21st Century!

Mystery Low-Observable/Stealth Helicopter Used for Usama Bin Laden (UBL) Compound Kill Operation/Raid: Is it a Stealthified Sikorsky MH-60M Black Hawk Helicopter? Here's what we know…

Tiger Stripe Products (TSP) Develops and Introduces All Terrain Tiger (ATT) Multi-Environment/Multi-Terrain Combat Camouflage Pattern for Tactical Operations

Sikorsky X2 Coaxial Compound Helicopter Technology Demonstrator Aircraft Achieves 287.69 MPH: Is the Sikorsky S-97 Raider Compound Helicopter the U.S. Army's Future Light Tactical Helicopter?

ELTICS Black Fox Active, Adaptive IR Stealth System / Electronic Thermal Infrared Countermeasure System: Multi-Spectral Thermal/IR (Infrared) Adaptive Camouflage/Cloaking System for Combat Vehicles, Helicopters, and Warships Coming soon to a Battlespace/Theator of Operations Near You!

Blucher Systems Ghost Soldier Camouflage and Spectralflage Vehicle Camo: Multispectral Combat Camouflage Fabric Technology that Provides Anti-Thermal/IR (Infrared) Camo for 21st Century Special Warfare (SPECWAR)

SSFN ExtremePro LandCamo Terrain-Specific/Mission-Specific Digital Combat Camouflage Patterns

STS Arms Advanced Ceramic Coatings for Tactical Firearms: Tactical AR Rifle/Carbines Go Super-Slick and Anti-Night Vision (NV)/Near Infrared (IR) Detection

Centurion Armor Tactical Armor Carriers by Personal Protective Systems (P2 Systems): Best Tactical Body Armor on the Planet? DR Looks at the Latest Centurion Armour Hard Armor Plate Carriers, Battle Belt, MOLLE Backpack System, and Passive Ventilation Channels/Removable Padding System at SHOT Show 2011 (Photos and Video!)

Is Numa Tactical Protective Eyewear the Baddest Ballistic Eyepro on the Planet?: DR's SHOT Show 2011 Video Report Shows just how Tough these Sunglasses are. (Photos and Video!)

U.S. Army "Family of Camo Patterns" (FOP) Program Phase IV Next-Generation Combat Camouflage Competition Update: Army Camouflage Improvement Industry Day

Metaflex Flexible Metamaterial (Flexible MM): The Future of Adaptive Camouflage / Visual Cloaking Technology? The quest for invisible infantry soldiers continues.

Will Future U.S. Military Submarines Be Invisible to Enemy Sonar Detection?: Enter Acoustic Metamaterial Cloaking Tech

Update: AAE IR/NV-Stealth and Visibility-Stealth Cloaking Technology

Are Anti-Tank Guided Missiles the New Primary Threat in Urban Warfare/MOUT?

Is 'Invisibility Cloak' for Combat Uniforms/BDUs Here Right Now?

Is Cloaking Technology for U.S. Infantry Warfighters Finally Possible?

Robo-Soldier Ready for Combat Deployment to Iraq for Urban Warfare/CI Ops

Crye Precision MultiCam Multi-Environment Camo Coating for Tactical Small Arms

Jordanian SPECOPS Adopt New High-Tech Night and Woodland Digital Camo

DefRev Scoop: Jordan Adopts Hyperstealth Advanced-Tech PSD Urban Digital Camo

Tactical Assault Camouflage (TACAM): Multi-Environment Counterterrorism Camo