

The Quantum Optics Holophoto™ Three-Dimensional Process and Camouflage Technology

By Stanley H. Kremen

In his treatise on “The Art of War,” Chinese general, Sun Tzu, wrote that war is the art of deception. You make an enemy think you are in one place when you are really in another. You make an enemy think you are going to attack one target, while you plan to attack another. Deception often involves concealment. To accomplish this, military minds developed the art of camouflage.

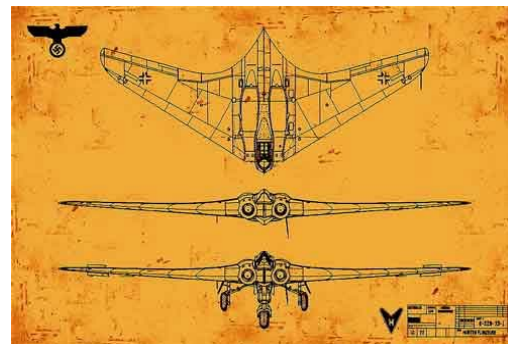
Camouflage is as old as war itself. Military uniforms are designed to blend soldiers into the environment. Different colored uniforms are used for jungle warfare as opposed to desert warfare.

Sun Tzu’s teachings are as valid today as they were in his time. However, following World War II, we discovered that it is technology, and not soldiers, that wins wars. Technology has reformed camouflage as well.



***USS Eldridge
(October 28, 1943)***

It is rumored that sometime in 1943, the US Navy performed an experiment designed to make the USS Eldridge invisible. It is also rumored that the experiments were performed under a program called, “Project Rainbow.” Details of this project are not available (possibly because they are classified), and it is not known whether the rumors regarding these experiments are true. However, a science fiction account of “Project Rainbow” was made into a motion picture entitled, “The Philadelphia Experiment.”



The NAZI Stealth Bomber

Among captured NAZI documents following World War II, the blueprint shown above represents German plans to build a stealth bomber. Whether or not the Germans actually built this airplane is not known. However, we know that they had jet planes toward the end of the war. Given this fact, it is obvious that they possessed the technology to build a bomber that would have been radar invisible.



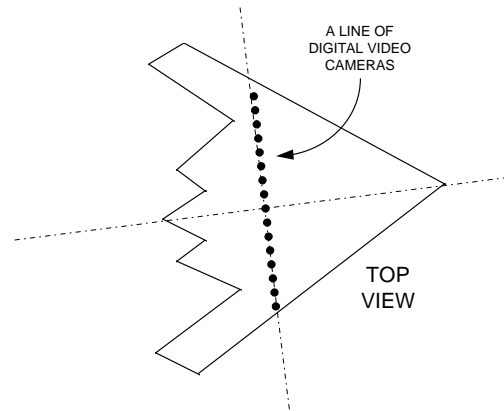
Modern US Stealth Bomber

Many years later, the United States developed its own stealth bomber, which looked very much like its NAZI counterpart. This aircraft is practically invisible to radar. However, it is visible to the human eye, and it has an acoustic and a heat signature. It also creates air turbulence in its wake. Therefore, it is not completely invisible. Enemy missiles can track its heat signature and shoot it down.

But, why would a missile be fired off to shoot down a stealth bomber over enemy territory. The answer is simple. Radar can only partially eliminate an early warning. However, the airplane can be seen. Once it is sighted by the enemy, a missile will be fired. Once the missile is airborne and tracking the bomber, the pilot's only recourses are to take evasive maneuvers and launch decoys.

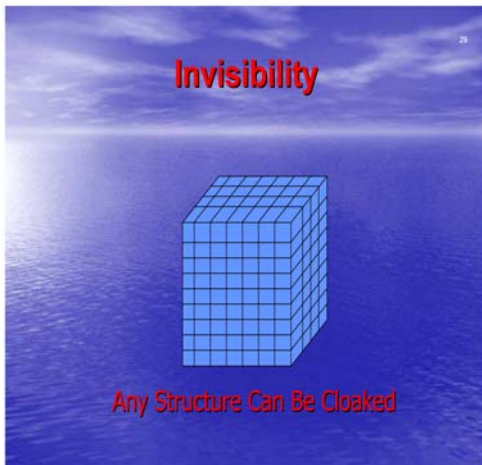
What if a stealth bomber would not only be undetectable by radar, but also truly invisible. It would still have a heat signature. It would still make noise, and it would still cause air turbulence in its wake. However, an enemy would only fire a missile if it knew that a plane was in

its vicinity. If they could not see it and their radar devices could not detect it, there would be no reason to shoot down what is not there.



***Concept of the Holophoto™
Stealth Bomber***

An airplane can be made invisible to the human eye. This can be done using the Quantum Optics Holophoto™ Three-Dimensional Process. The concept is illustrated in the above drawing. The top of the aircraft is equipped with a line of many digital video cameras. A special Holophoto™ screen is affixed to the bottom surface. The digital video images from all of the cameras are fed to an onboard computer, and the processed image is sent to the screen. A three-dimensional image of what is above the airplane is transmitted to the bottom of the plane. This image is visible in broad daylight. A person looking up at the plane from the ground would see the image on the screen in three-dimensions. This is a moving picture of the scene that is above the aircraft — namely, the sky. The viewer would only see sky and clouds. The plane would be invisible. The airplane would be cloaked as is done in science fiction space movies, such as Star Trek.



Using the Quantum Optics Holophoto™ Three-Dimensional Process, any structure can be cloaked or camouflaged. This may be accomplished in any of two ways.

First, we place closely spaced tiny digital video cameras in a matrix surrounding the entire structure. The lenses have a line of sight through small holes in the structure. We then affix a Holophoto™ screen to all exterior surfaces of the structure. The screen has tiny holes that permit the cameras to capture video images. The images from the cameras are processed by a computer, and the processed image is transmitted to every opposite surface of the structure. The structure is now completely invisible. A person looking at the structure will see what is behind the viewing surface in true three-dimensions.

With the second method, we affix a Holophoto™ screen to each and every surface of the structure. A Holophoto™ screen can be fabricated in virtually any size and shape. A computer generated three-

dimensional image is then transmitted to each screen. The structure now appears like whatever the computer says it should look like.

Camouflage on a structure encased by Holophoto™ screens can combine both methods. For example, a building can be made to appear as a structure having invisible walls with visible activity occurring within. People looking at the structure would actually be watching a three-dimensional motion picture. However, instead of watching the movie from within a theater, the spectators are outside looking in.

Many vehicles can be made visually secure and completely enclosed. Yet, the operator can see outside the vehicle in 3-D using a head-up display, and proceed to the target or destination. This would apply to:

- automobiles,
- tanks,
- airplanes, and
- helicopters.

Does all this seem like science fiction? Well, the technology is at hand to accomplish all of this. Science fiction often precedes science fact. The concept is first invented in the mind of someone who has no idea of how to implement it, but who realizes how it can be used. Once having this idea, others are able to make it practical. The Quantum Optics Holophoto™ Process naturally lends itself to camouflage technology.