Written by **Joe Wolverton, II, J.D.** on January 6, 2010

Whole Body Scanners: Would They Have Detected the Detroit Bomb?

The new millimeter-wave body scanners soon to be deployed in airports throughout the United States would not have detected the explosive device smuggled aboard Northwest Flight 253 on Christmas Day by Umar Abdulmutallab, the Nigerian man reportedly trained by a Yemen-based al-Qaeda terrorist cell to destroy the plane over Detroit.

According to a report recently released by firms in the United Kingdom that have tested the hi-tech scanners, the chemical explosive carried by Abdulmutallab in his underwear would not have shown up had he passed through a scanner due to the low density of the material. In the analysis, experts warn that despite the nearly universal mandate by government officials to install the scanners in the wake of the thwarted terrorist attempt in Detroit, liquids, chemicals, and plastics are too low in density to be picked up by the waves used in the scanners, and only more traditional weapons (knives, guns, etc.) hidden under the clothing are effectively revealed by the devices.

The potentially lethal medium of mayhem chosen by Umar Abdulmutallab (or his superiors) was 80 grams of pentaerythritol tetranitrate (PETN) in powdered form that was to be detonated by a liquid accelerant contained in a syringe. Fortunately for the nearly 300 passengers on board Flight 253, the syringe malfunctioned and the bomb was not detonated.

Ben Wallace, a member of the U.K. Parliament and former executive of a British firm that researched the effectiveness of such scanners, told reporters that as early as 2005 his company informed the British government that the millimeter-waves used in the scanners pass through low-density objects such as those listed above, allowing them to be successfully smuggled aboard airplanes. It makes sense that such materials would be “invisible” to the scanners as they are essentially made of the same material as the clothing they so embarrassingly disregard.

“Body scanning is only half the story, though,” product manager at Qinetiq, one of the organizations that evaluated the scanners effectiveness back in 2005. “The government cannot ignore the liquid aspect any more. Liquid explosive became a high-agenda issue following the thwarted transatlantic bomb plot of 2006 and is clearly implicated in the attempted downing of Northwest Flight 253. If the

government skirts over this aspect it will be nothing short of a dereliction of duty," he continued. Murphy's comments should not be ignored given the knee-jerk reaction by governments across the globe to install these scanners as the panacea to the terrorism epidemic, and the subsequent fact that everyone travelling into the United States will be treated as a suspect, regardless of reasonable suspicion of questionable intent, and subjected to the scan and display of private areas of their bodies.

In defiance of the relevant scientific findings, however, the Transportation Security Administration (TSA) ordered $165 million worth of millimeter-wave whole body scanners from New York City-based defense contractor L-3 Communications. The purchase is stunning in light of the foreknowledge possessed by TSA authorities and their bosses in the Obama administration that the scanners simply will not, in fact cannot, detect the weapons whose existence they are using to justify the increase in security and concomitant decrease in personal liberty. The puzzling question becomes why would TSA and President Obama obstinately insist on the immediate installation of such machines knowing beforehand that they are incapable of performing the crucial task for which they are ostensibly being deployed?

Qinetiq is not completely a disinterested observer, however. This U.K.-based technology company has reportedly developed a whole body scanner called a "stand-off" scanner that will avoid embarrassing violations of privacy by not reflecting imagines of the naked body, rather it will highlight in red any contraband hidden on a body. A spokesman for Qinetiq admitted that while this new technology would not have detected the device hidden in Abdulmutallab's underwear, it would perform essentially the same task without the pesky privations.

Among the thorny issues raised by the use of devices that generate a naked image of those subjected to its waves is the potential violation of child pornography laws. In the U.K., for example, the Protection of Children Act of 1978 prohibits the creation of an indecent image or "pseudo-image" of a child. Civil liberties activists in the U.K. have raised the issue with the government and warned that they would seek legal remedies if children under 18 were not exempted from the scans. As a result, the British Department for Transport confirmed that the "child porn" issue was one of the many civil liberty problems being considered by the government in advance of the introduction of the millimeter-wave scanners throughout the U.K. following a mandate from Prime Minister Gordon Brown.

There are other issues, of course. With the proliferation of the Internet has come creation and subsequent expansion of the market for digital pornography, including specifically the dissemination of nude images of celebrities. A simple Google search for "nude celebrities" produces a list of over 760,000 websites. Some of these sites charge for the images, while others provide their wares gratis. The existence of this lucrative exchange is relevant to the discussion of the installation of millimeter-wave whole body scanners and the revealing images they produce. Imagine an under-paid, harried TSA employee with access to the database of images of passengers who have walked through the scanners. Most of the pictures produced would be worthless and unremarkable. Think how irresistible to such workers would be the temptation to profit from the sale of the image of the naked body of a traveler who also happens to be a celebrity. The ready access to such a commodity is a valuable by-product of a system that doesn't even have the redeeming virtue of actually protecting the United States from a bomb hidden under the clothing of a would-be terrorist.

When Richard Reid hid a bomb in his shoe, travelers thereafter had to remove their shoes. Along comes Umar Abdulmutallab with a bomb hidden in his underwear and travelers will soon be required to expose the most intimate parts of their bodies to a humiliating full-body scan. The next al-Qaeda gambit is

impossible to predict, but there are myriad locations where a bomb could be secreted. For example, there is the frightening prospect of a rectally implanted chemical bomb that is designed to be detonated by exposure to urine in an airplane bathroom. This is one of many similar scenarios that must just as easily occur to terrorists as to writers. What must also occur to those who would threaten the peace and security of the citizens of the United States and American interests abroad is that the government's response to the latest attempt to terrorize this country is inept, ineffective, and inexplicable given the published science and legitimate privacy issues.

Photo: AP Images