Starting in 2007 the TSA began using whole body scanners instead of just metal detectors as a primary security screening method. In response to a lawsuit by the Electronic Privacy Information Center, a federal appeal court ordered the TSA to provide the public with a notice and comment period, as is normally required for federal agency rulemaking.

There are several questions that need to be addressed.

1. **Are the machines effective in detecting bombs and weapons on passengers?**

The main purpose of whole body scanners is to detect non-metallic weapons and explosives that terrorists now have been attempting to use to bring down commercial airliners.

There are two types of scanners, one uses low level X-rays called backscatter and the other uses radio waves called millimeter wave. Millimeter wave can be active which means you have a machine projecting waves or passive meaning that the machine merely receives waves that are emitted by the or through the body.

There are reports that they are not that effective, some saying the detection rate is as low as 10% in tests. But the test design and results are classified, so the public does not really know, but we also do not want terrorists to have access to detailed information so that they can defeat the system. While there may be some utility in pretending they are effective, the real answer is to improve the machines to be at least 80% effective in order to be credible.

There is also the question of the false alarm rate. The millimeter wave reportedly has a significantly higher false alarm rate, but with software to pinpoint anomalies that need direct inspection by a screener, this is less significant.
FlyersRights.org believes that the best course is for the test data to be released to a subcommittee of the TSA’s Aviation Security Advisory Committee that includes a representative of FlyersRights.org (as the largest passenger group) with security clearance, and the unions representing the flight attendants and pilots, as these interests are most directly impacted by the TSA whole body scanning programs.

2. **Are the machines an unwarranted invasion of personal privacy?**

The courts have said a balancing test is required to determine whether a search is constitutional, balancing the need for an “administrative search” (searches of persons not suspected of wrongdoing) against the searches invasiveness and alternative methods.

The TSA claims that it has removed all machines that show a nude image of the passengers and replaced them with machines that use a generic image showing the location on the image of any anomalies on the person that warrant a more direct search. A passenger can opt out of the x-ray machine and receive a manual pat down search, but this involves delay and many people feel is even more degrading and invasive.

Recently, TSA has said it is exempting most handicapped persons, young children and elderly over 85. Also, so called trusted passengers that have passed a TSA security review and flight crew members may be exempted.

3. **Are the machines safe?**

TSA claims that it has thoroughly tested them but some outside experts question their safety especially for frequent travelers as all x-rays cumulatively increase cancer risk. Millimeter wave machines have no known safety or health risks, but they have yet to be rigorously tested and evaluated by outside experts.

The machines need to be tested and vetted for safety by experts independent of the TSA and its machine suppliers who have a vested interest, and also by the TSAs Aviation Security Advisory Committee and key Congressional committees with oversight jurisdiction (who should be holding stakeholder hearings before new invasive security methods involving hundreds of millions of passengers are imposed).
The TSA should also hold public hearing and forums in the future before imposing new procedures and policies. The TSA should still have the authority to declare emergency regulations and procedures without public hearings or a comment period, but as the courts have clearly stated the use of whole body scanners as primary screening did not meet the emergency rule standard.

4. Are the machines too expensive?

While such machines are expensive at about $170,000 each, a cost benefit analysis would certainly justify them if they were effective in deterring aviation terrorism and based on the alternatives of hand searches.

The Cato Institute, other libertarian oriented groups, some private security screening firms argue that since only a few thousand Americans have been killed in aviation terrorism attacks, the TSA has not caught a terrorist and US government security is expensive, we should abolish it and return security to the airlines and airports who provided security prior to 9/11. This argument is specious. By this logic, the U.S. should unilaterally eliminate its nuclear weapons and missile defenses because no Americans have been killed in nuclear attacks and maintaining this arsenal is expensive.

The fact remains that prior to the establishment of the TSA after the 9/11 terrorists attacks killed nearly 3,000 Americans, there were scores of aviation terrorist attacks involving dozens of hijackings and at least three bombings killing hundreds (Pan 103 jumbo jet over Lockerbie, Scotland in 1988 (270 killed), Air India jumbo jet in 1985 over the Irish Sea (329 dead) and UTA jet over Niger in 1989 (170 dead including 7 Americans and wife of a US ambassador). Since government takeovers of aviation security in late 2001 there have been no successful aviation terrorist attacks on US commercial aviation and most other countries have copied the US system.

Re-privatizing aviation security will mean non uniform security by low wage security screeners with questionable authority to conduct searches or detain persons and would no doubt be welcomed by Al Qaeda and other groups with the strong desire and ability to attack America using aviation terrorism, the most deadly form of terrorism and mass murder to date.
5. Are there less invasive, safer and more cost effective alternatives?

The main alternative being pursued is so called risk based security that attempts to pre-profile passengers who pose a greater or lesser risk, and then gauge security screening accordingly. This includes so-called trusted traveler programs for frequent fliers, eliminating whole body screening for passengers over 85 or under 6 years old, reduced security for flight crews and disabled passengers. There are also passengers on watch lists or no fly lists which are in the tens of thousands. There are also selectees who are designated based on criminal history, travel history, suspicious behavior or just random selection that receive enhanced security screening that can involve enhanced pat down and questioning.

The US Government claims that it will not profile passengers based on ethnicity, religion, national origin or sex, however, this ignores that fact that nearly all aviation terrorist attacks on US aviation have been by male Muslims between the ages of 18 and 35 who were not US citizens or whose parents were of non-US national origin. Such policies may or may not be justified as social policy, but undermine risk based security by eliminating whole classes of persons who have a higher risk profile. Trusted passenger programs reduce security on whole classes of passengers. For example, Mohammad Atta, the leader of the 9/11 terrorists might well have qualified for trusted passenger status. And US Army Major Nidel Malik Hasan who committed mass murder at Fort Hood (13 killed, 30 injured) was not classified as a security risk despite ample warning signs.

All security screening involves trade-offs. All effective security involves some inconvenience, expense (presently less than $10 per passenger), and invasion of privacy.

The TSA needs to increase its use of public and semi-public vetting, and should consider relegating whole body screening or pat down searches to secondary rather than a primary screening procedure consistent with the current threat level.

The TSA also needs to consider robustly testing canine bomb detection, face recognition, explosive residue machines, suspicious behavior systems at least for secondary screening, as these have the potential to reduce the need for whole body
scanners and invasive pat down searches, while also providing for increased deterrence.

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Paul Hudson
Pres. FlyersRights.org
Member, FAA Aviation Rulemaking Advisory Committee 1993-present, Executive Committee and Occupant Safety Issue Group
Member, FAA/TSA Aviation Security Advisory Committees 1997-2007, co-chair of Public Education Issue Working Group
Pres., Families of Pan Am 103/Lockerbie (1989-93)
author of articles on aviation security and terrorism-

800-662-1859

4411 Bee Ridge Rd. #274
Sarasota, Florida 34233

Organizational Statements

FlyersRights.org (fka the Coalition for an Airline Passengers’ Bill of Rights) was founded in 2007 as non-profit corporation to advocate for the rights and interests of airline passengers by Kate Hanni after she was stranded on the tarmac for many hours with 10,000 others. It organized a coalition that successfully advocated for the adoption of the 3 Hour Rule adopted by the DOT in 2009 that prohibits airlines from confining passengers on the tarmac for extended periods without returning to the terminal. In 2012, a passenger rights section it supported was included in the FAA Reauthorization Act that encouraged the DOT to issue further aviation consumer protections.

In 2013, FlyersRights.org joined the flight attendants in a formal legal petition that in successfully opposed a TSA policy to begin allowing pocket knives back on airliners starting in April 2013.
With over 25,000 member-supporters it is the largest airline passenger organization in the U.S. It publishes a weekly newsletter, maintains a free emergency telephone hotline 1-877-FLYERS-6 to assist airline passengers and an anonymous tips hotline. It relies on individual donations and receives no funding from government or the airline industry.

The Aviation Consumer Action Project (ACAP) was founded in 1971 as a 501 (c)(3) nonprofit corporation to act a voice for air travelers on national aviation issues, especially safety and airline passenger consumer rights. It is funded by contributions from individuals and foundation grants. It receives no funding and has no business relationships with the airline industry or any government agency. ACAP has been a principal advocate for truth in scheduling, lost baggage and bumping compensation, medical kits on airliners, realistic emergency evacuation testing, passenger cabin air standards, smoking ban, and airline competition. It organized a coalition after 9/11 to advocate for the establishment of the TSA and much stronger aviation security.

Its activities include public education, publication of consumer guides and research reports, serving on national advisory committees (FAA Aviation Rulemaking Advisory Committee, TSA Aviation Security Advisory Committee, American Society of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE) Committee on Aviation Cabin Air Quality), representation of aviation consumer and the public interest in rulemaking and litigation activities, testifying before legislative bodies and national and international commissions.

Paul Hudson has been executive director of ACAP since 1997 and president of FlyersRights.org since 2012. He is a New York attorney who has advocated for airline passenger rights and interests in the Courts, before Congress, the Executive Branch and in the public and professional media since 1989. He lost his daughter in the terrorist bombing of Pan Am 103 and led the Pan Am 103 family group Families of Pan Am 103/Lockerbie from 1989-93 which advocated successfully for enactment of the Aviation Security Improvement Act of 1990, the aviation terrorist reward program, and for compensation of terrorist victims and their family members. Mr. Hudson has testified approximately 8 times before Congress on aviation security issues.