Full-Body Scanners: Full Protection from Terrorist Attacks or Full-On Violation of the Constitution?

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“They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety.”

Benjamin Franklin
Historical Review of Pennsylvania, 1759

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I. INTRODUCTION

In a post-9/11 world, it is hardly debatable that there must be some sort of security measures to “welcome” air travelers as they prepare to board commercial airplanes. After the 2009 Christmas Day bombing attempt aboard U.S.-bound Northwest flight 253, the Transportation Security Administration (“TSA”) announced plans to step up its use of state-of-the-art “advanced imaging technologies,” or full-body scanners.1 TSA has plans to make the advanced imaging technologies a “primary . . . rather than secondary . . . screening measure.”2 Currently, air travelers can be subjected to a millimeter wave or backscatter full-body x-ray search in more than fifty airports in the United States.3 In March 2010, TSA began deployment of 450 backscatter machines.4

This paper first discusses the historical context in which security screening became a necessity, including the birth of TSA. The paper then moves into its major focus, an examination of whether constitutional

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4. Id.
prohibitions on unreasonable searches and seizures or the right to privacy protect air travelers from TSA's use of full-body scanners. The paper ends with a brief discussion of whether full-body scanners will deter terrorists and finally concludes that TSA's plan to make full-body scanners a primary screening measure is unconstitutional.

II. BRIEF AVIATION HISTORY

In 2009, U.S. carriers operated 8.8 million domestic and international flights. However, in 1903, the dream of flight was just beginning to be realized. Flight continues to captivate the human mind and probably has done so since the first bird was spotted floating effortlessly through the sky. The chase to accomplish the dream of flight started long before August 8, 1908, but on that special day Wilbur Wright completed his first public flight near France's Le Mans, Hunaudieres racetrack. That simple flight earned the Wright Brothers “first place in the history of flying machines.”

Since that day, the airplane has improved dramatically. It affects the daily lives of billions by turning ordinary people into globe trotters and creating new industries, allowing the far corners of the globe to be opened to international commerce. Additionally, “[t]he frail contraption of wood, wire, and fabric [has] evolved into the definitive weapon of the century, a machine that redefined the way in which we fight our wars, and radically altered our traditional notions of what constitutes a battlefield and who qualifies as a combatant.”

While some, such as novelist Herbert G. Wells (whose 1908 novel depicted German aerial vessels attacking New York), offered a dark vision of the fast-approaching air age, many others were not initially convinced of the airplane's potential military power. In March 1913, French General Ferdinand Foch—who would eventually be named Su-

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7. Id.
10. Id. (quoting THE LONDON TIMES, August 14, 1908).
11. Id. at 10-11.
12. Id. at 10.
13. Id. at 8-9 (citing H.G. WELLS, THE WAR IN THE AIR, AND PARTICULARLY HOW MR. BERT SMALLWAYS FARED WHILE IT LASTED (George Bell and Sons 1908)).
14. CROUCH, supra note 9, at 151.
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premier Commander of the Allied armies during World War I—stated, "aviation is fine as a sport... as a weapon of war, it is worthless."\(^\text{15}\)

After having observed test flights in 1908, Secretary of War Luke E. Wright stated, "airplanes are remarkable in that they represent the actual conquest of the air, but until they are further developed, I do not think they will be of much service from a military standpoint."\(^\text{16}\)

After the start of World War I and after having seen the increased use of the airplane in warfare, a surprised Orville Wright commented in 1917 that "when my brother and I built the first man-carrying flying machine, we thought that we were introducing into the world an invention which would make further wars practically impossible."\(^\text{17}\)

However, just a few short years later, the chief of the Engineers Directorate and commander of the French army’s first aeronautical unit Colonel Pierre August Roques disagreed with General Foch and stated that the airplane was "as indispensable to armies as cannons or rifles."\(^\text{18}\)

A. WARFARE, CRIMINALS, AND TERRORISTS: THE AIRPLANE AS A WEAPON

It didn’t take long for the airplane to become an indispensable part of warfare. "On October 5, 1914, Pilot Sgt. Joseph Franz and his observer, Quenault, of l’Aviation Militaire, brought down a German Taube with a forward-firing machine gun mounted on their Voisin pusher,\(^\text{19}\) scoring the first aerial victory in history."\(^\text{20}\)

Fast forward to the skies above Pearl Harbor at 7:55 A.M., on the morning of Sunday, December 7, 1941.\(^\text{21}\) The Japanese conducted a surprise attack that would be remembered as the ‘Day of Infamy.’\(^\text{22}\)

The Japanese successfully brought the United States into World War II with their airplanes: forty-nine bombers, forty torpedo bombers, fifty-one dive-bombers, and forty-three fighters.\(^\text{23}\)

As aircraft technology advanced beyond the imagination of its early

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\(^\text{15}\) Id.

\(^\text{16}\) Id. at 8 (quoting New World Aeroplane Records Established, Journal of Commerce, September 10, 1908).

\(^\text{17}\) Id. at 9 (citing with some alteration MIRACLE AT KITTY HAWK: THE LETTERS OF WILBUR AND ORVILLE WRIGHT, Letter from Orville Wright to C.H Hancock, June 21, 1917 405) (Fred C. Kelly ed., Da Capo Press 2002) (1951).

\(^\text{18}\) CROUCH, supra note 9, at 151.


\(^\text{20}\) CROUCH, supra note 9, at 154.

\(^\text{21}\) Id. at 396.

\(^\text{22}\) President Franklin D. Roosevelt, Presidential Address to Congress (Dec. 8, 1941).

\(^\text{23}\) CROUCH, supra note 9, at 396.
creators, the airplane's capabilities became more apparent to those seeking new weapons that could be used to "intimidate and terrorize." In one dramatic moment, terrorists "can exert leverage out of all proportion to the small weapon [they] hold" by threatening to kill hundreds of people and destroying "a technological symbol of society." In the early 1920's, "pillagers" used gunfire to force a French airplane down in the Spanish Sahara. They eventually took control of the aircraft and held it and its crew for ransom. The first recorded "hijacking" of an airplane was accomplished by Peruvian revolutionaries in 1931. The hijackers used the plane to drop anti-government pamphlets.

Upon walking into an airport in 1950, it was common to see travelers purchasing flight insurance from coin-operated vending machines just before boarding their flights. On November 1, 1955, John Gilbert Graham planted a bomb on a United Airlines flight that his mother was on in hopes of collecting her life insurance. The bomb ended the lives of thirty-nine passengers and five crew members. Graham confessed to placing a timer and twenty-five sticks of dynamite in his mother's suitcase. Ironically, because his mother's suitcase exceeded the weight limit by thirty-seven pounds, she had paid a $27.82 surcharge to get it on the plane. It wouldn't be until after the September 11, 2001 terrorist attacks, nearly forty-six years after Graham stashed explosives in his mother's baggage, that Congress would mandate that all checked baggage be screened by an explosive detection system. While all passenger bags are currently being screened, not all air cargo is: TSA is still working on complying with a congressional mandate to screen 100 percent of cargo transported on passenger aircraft.

When it came time for United States Attorney Donald Kelley to charge Graham with blowing up the plane, Mr. Kelley was shocked to

25. Id.
26. Id. at 9-4 (citing R. CHAMBRE, HISTOIRE DE L'AVIATION 304-10 (1948)).
27. Id.
29. Id.
31. Id.
32. Id. at 12.
33. Id. at 66.
34. Id.
36. Id.
discover that there was no federal statute on the books that made it a crime to blow up an airplane. 37 About eight months later in July 1956, President Eisenhower signed a bill providing for up to twenty years in prison for acts of aircraft sabotage not resulting in death, and the possibility of the death penalty for any person convicted of committing an act of aircraft sabotage that resulted in death. 38

As air travel increased, more deadly hijackings occurred. Between 1949 and 1985, 1,539 people were killed in eighty-seven aircraft bombings. 39 During that same timeframe, there were a staggering “498 successful and 281 failed hijacking attempts worldwide.” 40 In 1969, there were more than fifty hijackings or attempts made on U.S. operated airlines. 41 January 1969 alone saw eight U.S. airliners hijacked to Cuba. 42 In February 1969, the Federal Aviation Administration (“FAA”) was desperate to do something. Its Task Force on the Deterrence of Air Piracy recommended using profiling and constructed a hijacker profile from shared behavioral characteristics of past hijackers. 43 “When used in conjunction with a FAA-developed magnetometer weapons screening device, the profile system offered a promising method of preventing potential hijackers from boarding aircraft.” 44

Despite the use of profiling techniques and the magnetometer screenings, the threat of hijackings continued. 45 FAA realized that it had to do more, and in December 1972, it issued a “landmark emergency rule” that required U.S. air carriers to scan each passenger with a metal detector and inspect all carry-on baggage for dangerous items, beginning in January 1973. 46 If a metal detector was not available, the rule required that a “physical search, or pat down,” be conducted and provided that anyone refusing to consent to the physical search would not be permitted to board the plane. 47 In August 1974, President Nixon signed the Anti-

37. Field, supra note 30, at 67.
38. Id. at 236.
40. Id.
41. Field, supra note 30, at 239.
43. Id.
44. Id. The new method in fact was very promising. In 1970, not a single flight where the passengers had undergone the new FAA screening was subjected to a hijacking attempt. Id.
45. Id. at 40-44. The infamous D.B Cooper successfully parachuted from a Boeing 727 after demanding $200,000. In the following seven months, eighteen more extortion attempts on U.S. air carriers were made. Id. at 42-43.
46. Id. at 44.
47. Id.
Hijacking Act of 1974 which, among other things, required the FAA to keep its new security screening procedures in place and allowed the FAA to use federal personnel to supplement law enforcement officers in airport security programs.\textsuperscript{48}

On the morning of September 11, 2001, nineteen terrorists hijacked four U.S. domestic airplanes after having penetrated security at three major airports.\textsuperscript{49} Three of those planes were turned into jet-powered missiles that killed thousands, destroyed the World Trade Center in New York City, and damaged the Pentagon in Arlington, Virginia.\textsuperscript{50} Realizing the hijacker’s plans, the courageous passengers of United Flight 93—one of the four hijacked planes—fought back. At 10:03 A.M., their plane crashed in Stony Creek Township, Pennsylvania, killing all on board.\textsuperscript{51}

At 9:04, one minute after United Flight 175 crashed into the south tower of the World Trade Center, FAA’s Boston Air Route Traffic Control Center stopped all air departures in its jurisdiction.\textsuperscript{52} Not long after, FAA decided that drastic measures were needed and, for the first time in U.S. aviation history, instituted a national ground stop—banning takeoffs of all civilian aircraft regardless of destination.\textsuperscript{53} It was not until September 19 that the FAA lifted most restrictions on U.S. registered general aviation aircraft.\textsuperscript{54}

B. THE CREATION OF THE FEDERAL AVIATION ADMINISTRATION

The sensation of freedom and success undoubtedly felt by Wilber Wright during his first public flight in 1908 has since been undermined by numerous rules and regulations.\textsuperscript{55} The first significant legislation involving the airplane was the Air Mail Act of 1925.\textsuperscript{56} Not only did this legislation begin the contractual relationship between the Post Office and airlines to carry the mail, it “facilitated the creation of a profitable commercial airline industry, and airline companies such as Pan American Airways, Western Air Express, and Ford Air Transport Service began commercial passenger service.”\textsuperscript{57}

\textsuperscript{48} Id. This was to become the Civil Aviation Security Service. \textit{Id.}

\textsuperscript{49} Id.

\textsuperscript{50} Id.

\textsuperscript{51} Id. at 127.

\textsuperscript{52} Id.

\textsuperscript{53} Id.

\textsuperscript{54} Id. at 128.


\textsuperscript{56} See generally KRAUS, supra note 42, at 1.

\textsuperscript{57} Id. Instead of insisting on cargo aircraft, the postmaster general spurred the passenger segment of commercial airlines by encouraging the airlines to use passenger aircraft to deliver the mail. \textit{Id.}
At the urging of the aviation industry, President Calvin Coolidge signed the Air Commerce Act in 1926, which charged the Secretary of Commerce with licensing pilots, certifying aircraft, establishing airways, issuing and enforcing air traffic rules, fostering air commerce, and operating and maintaining aids to air navigation.\footnote{58} Having been charged with the responsibility for aviation oversight, the Department of Commerce created the Aeronautics Branch, which began focusing on safety rulemaking.\footnote{59} Wanting to take more control of the aviation industry after a series of midair collisions, Congress repealed the Air Commerce Act of 1926, along with other aviation related acts,\footnote{60} and replaced it with the Federal Aviation Act.\footnote{61}

C. THE EMERGENCE OF THE TRANSPORTATION SECURITY ADMINISTRATION

FAA would not be in charge of aviation security forever; after September 11, 2001, President George W. Bush signed the Aviation and Transportation Security Act into law.\footnote{62} This created a new agency—the Transportation Security Administration ("TSA") within the Department of Transportation—that would take over responsibility for aviation security.\footnote{63} By the end of 2002, "passage of the Homeland Security Act (Public Law 107-296) brought TSA into the new Department of Homeland Security\footnote{64}"

Continuing in the legacy of the Aeronautics Branch, TSA has continued to focus the federal government's eye on aviation security. Notwithstanding the fact that "over the past two decades the number of flight hours logged by air carriers ha[s] almost doubled and the number of departures ha[s] increased by 50 percent,\footnote{65} the period "[b]etween 2001 and 2007, aviation witnessed one of its safest periods for scheduled air carriers."\footnote{66} Years earlier in 1972, however,

\[\text{one airline executive expressed surprise that the screening procedures [then enacted] were so readily accepted. 'It seems ironic...we find ourselves}\]
in a situation where each and every air traveler in the United states [sic] is treated as a suspect as soon as he enters an airline terminal. It would seem ironic to the citizen of 1937 that air travelers today not only submit willingly to searches of their person and carry on baggage, but actually laud the virtues of and need for such action.67

With TSA rolling out full-body scanners, one can only imagine what this airline executive, not to mention a citizen of 1937, would think of the security screening measures of today.

III. SECURITY SCREENING PROCEDURES AND THE FOURTH AMENDMENT

Responding to the increased hijackings of the day, FAA “mandated passenger profiling in the 1960sFalse”68 If a passenger fit the profile—twenty-five characteristics compiled from historical data on known terrorists69—only then was the passenger subjected to further scrutiny.70 However, FAA believed the practice was ineffective and abandoned profiling in 1972.71 Instead, FAA implemented X-ray searches of all carry-on luggage at global security checkpoints.72 The idea of profiling as a means of screening passengers did not come to the forefront again until TWA Flight 800 exploded soon after takeoff in 1996.73

Shortly after the tragedy aboard TWA Flight 800, President Bill Clinton created the “White House Commission on Aviation Safety and Security”—commonly known as the “Gore Commission.”74 Having been charged with “develop[ing] and recommend[ing] to the President a strategy designed to improve aviation safety and security, both domestically and internationally,” the Gore Commission made several “recommendations including the revitalization and reformulation of passenger profiling from the 1960s.”75 Northwest Airlines was the first to develop a computer passenger profiling system in 1996 under a grant from the FAA and “released the profiling software to other airlines through the FAA in 1997.”76

The government avoided calling the “Computer Assisted Passenger
Prescreening System” (“CAPPS”) a profiling system, but instead tried to sell it as a “management tool,” whose goal was “not to pick a needle out of the haystack . . . but to make the haystack smaller.”77 While the government will not—and possibly more importantly cannot reveal—why a traveler would be identified by CAPPS as a potential threat, as a “selectee” of CAPPS, the traveler is “subject to secondary screening.”78 Despite promises to modify the system,79 TSA abandoned CAPPS II in July 2004, amid growing opposition that was hard to ignore, especially after the United States General Accounting Office (“GAO”) expressed privacy concerns.80

After failing to garner public acceptance of both CAPPS and CAPPS II, TSA implemented the “Secure Flight” program in August 2004.81 This program, too, has met with opposition.82 While CAPPS and CAPPS II were criticized for spreading the net too wide and bearing too many “false positives” and “false negatives,”83 TSA hoped that, by taking over the airlines’ duty of checking government watch lists before a passenger is issued an airplane ticket, Secure Flight will “reduce the number of domestic airline passengers pulled aside for more rigorous screening while increasing the chance of catching known or suspected terrorists.”84

On September 19, 2005, Secure Flight was dealt a serious blow when

77. Id. at 11-12 (quoting Bill Dedman, FAA Looking To Expand System, BOSTON GLOBE, Oct. 12, 2001, at A27).
78. Id. at 12-13.
79. Id. at 18. TSA offered to modify CAPP II in three specific ways: (1) TSA would “erase most passenger information in the CAPPS II system within seven days after passengers completed their scheduled travel,” (2) TSA would provide an appeals process for those passengers that were erroneously targeted, and (3) TSA would “limit[ ] the use of private commercial data to compose a traveler’s security profile.” Id.
80. Id. at 19. The GAO added insult to injury when it stated that “[u]ntil TSA finalizes its privacy plans for CAPPS II and addresses such concerns, we lack assurance that the system will fully comply with the Privacy Act.” Id. (quoting U.S. GEN. ACCOUNTING OFFICE, AVIATION SECURITY: Computer-Assisted Passenger Prescreening System Faces Significant Implementation Challenges 42 (2004)).
81. Id. The 9/11 Commission Report recommended that TSA take over watch list matching from the airlines. This recommendation was codified by the Intelligence Reform and Terrorism Prevention Act of 2004 (“IRTPA”). IRTPA requires Homeland security and TSA to take over from the airlines the function of conducting pre-flight comparisons of airline passengers’ information to federal government watch lists. The Secure Flight Rule is an attempt to comply with this Congressional mandate. Id. at 20. See also Transp. Security Admin., Secured Flight: Frequently Asked Questions, http://www.tsa.gov/what_we_do/layers/securedflight/faqs.shtm#Basics (last visited Oct. 9, 2010) [hereinafter, TSA FAQ].
82. Ravich, supra note 28, at 22; see also Yevgenia S. Kleiner, Racial Profiling In The Name Of National Security: Protecting Minority Travelers’ Civil Liberties In The Age Of Terrorism, 30 B.C. THIRD WORLD L.J. 103, 134-35 (2010).
83. Ravich, supra note 28, at 8.
84. Id. at 19-20.
the Secure Flight Working Group ("SFWG")—a panel of nine experts in security and privacy—and the Aviation Security Advisory Committee both refused to recommend the program to TSA. Despite these concerns, TSA's Secure Flight Final Rule required, as of October 31, 2009, all airlines to request, collect, and transmit to TSA Secure Flight Passenger Data ("SFPD"). "Secure Flight is being phased in with each airline. Implementation with all domestic airlines is scheduled to be completed in the Spring of 2010 and international carriers by the end of 2010." To address SFWG's concerns TSA has now posted on its website the goals of the program.

Collecting SFPD and sending it to a one-stop shop to compare it with government watch lists may be a better solution than having numerous private airlines, whose primary focus should be on safely flying the plane from point A to point B, do the checking. Not only may this be the most effective way by cutting the amount of personnel needed by numerous airlines down to just TSA personal, but it may also be the best way in regards to privacy issues for two reasons. First, the fewer people pouring over individuals' records the better. Second, SFPD is information that, when requested by the government, can hardly be called an invasion of privacy. SFPD includes date of birth and gender, both of which are found on a Certificate of Live birth, which is usually kept by a state or local government agency.

A. STATE-OF-THE-ART ADVANCED IMAGING TECHNOLOGY

Regardless of whether the threats have become so great or the technology has advanced to such a degree (or both), "TSA began deploying state-of-the-art advanced imaging technologies in 2007." TSA claims that, in only a matter of seconds, "[t]his technology can detect a wide range of threats to transportation security," and will protect passengers and airline crews. TSA currently utilizes two types of imaging technol-

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85. Id. at 24. SFWG's primary concern was that TSA had not articulated specific goals for Secure Flight and had no way of knowing whether TSA's goals were realistic, attainable, or how TSA would achieve them. Id.
86. Id.
87. TSA FAQ, supra note 81. SFPD consists of: name as it appears on government-issued I.D. when traveling, date of birth, gender, and a redress number (if applicable). Id.
88. Id.
89. Id. TSA articulates five goals for Secure Flight on its website: (1) "[i]dentify known and suspected terrorists," (2) "[p]revent individuals on the No Fly List from boarding an aircraft," (3) "[s]ubject individuals on the Selectee List to enhanced screening to determine if they are permitted to board an aircraft," (4) "[f]acilitate passenger air travel," and (5) "[p]rotect individuals' privacy." Id.
90. Imaging, supra note 3.
91. Id.
logy: the backscatter and the millimeter wave machines. The millimeter wave full-body scanner produces "an image that resembles a fuzzy photo negative," a three-dimensional image of your naked body. If the backscatter full-body scanner is used instead, the TSA claims that it will produce a two-sided “image that resembles a chalk etching” of your naked body. Some have called this a “virtual strip search” or “nude” scanners.

The above image is an example of the millimeter wave technology.

92. Id.
94. Testimony, supra note 1, at 6.
95. Id.
98. TSA, How it Works, supra, note 94.
In addition to privacy concerns and concerns regarding the efficacy of full-body scanners, many have also expressed concerns that full-body scanners expose air travelers to radiation emitted from the machines. However, according to TSA, "[b]ackscatter technology projects low level X-ray beams over the body to create a reflection of the body displayed on the monitor." TSA also claims that "[m]illimeter wave technology bounces harmless electromagnetic waves off the body to create a black and white three-dimensional image." Regardless of how scientific and harmless TSA tries to make these machines sound, many commentators have called the screening technique highly invasive and a "virtual strip-search."

99. Id.


101. TSA How it Works, supra, note 94 (emphasis added).

102. Id. (emphasis added).

B. FOURTH AMENDMENT HISTORY AND ITS APPLICATION IN AIRPORTS

Although Colonial residents could not imagine a "virtual strip search," or modern air travel, they were all too familiar with the abuses of personal privacy that transferred from Great Britain to the American Colonies. Having been subjected to general warrants and writs of assistance, the Founding Fathers had good reason to protect against such abuses in the Constitution.

The immediate object of the Fourth Amendment was to prohibit the general

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104. This picture was taken August 11, 2010, by the author at the Denver International Airport. The words “All persons and property are subject to additional screening beyond this point” greet passengers just after some passengers have been searched by full-body scanners. The sign is probably ignored by most passengers, but it begs the question of when enough is enough. While this article will not discuss screening that occurs after passengers have gone through the security checkpoint to get into the airport, which is where the search by full-body scanners takes place, TSA has announced that they will begin randomly swabbing passengers' hands and luggage in conjunction with Explosive Trace Detection technology used not only at the security checkpoint but also after they have passed through the security checkpoint in the boarding areas. Transp. Security Admin., TSA Expands Use of Explosive Trace Detection Technology at Airports Nationwide, February 17, 2010, available at http://www.tsa.gov/press/releases/2010/0217.shtml.


106. Id. at 15. General warrants and writs of assistance were both used in colonial times. General warrants “required no oath or affirmation to support their claims, no grounds explaining the basis of suspicion as to why someone had broken the law, and placed no limits on the locations to be searched or the objects which could be seized.” The general warrant was “limited to a single specific event that created the cause behind the search. Writs of assistance were similar, but ... continued in operation until six months after the death of the sovereign under whom they were issued.” The Court of the Star Chamber was created to broaden the broad search and seizure powers of the government and approved of the King’s messengers’ practice of searching “any subject at any time, day or night, to enforce the laws ...” Id. at 15-16.
warrants and writs of assistance that English judges had employed against the colonists [internal citations omitted]. That suggests, if anything, that founding-era citizens were skeptical of using the rules for search and seizure set by government actors as the index of reasonableness.107

Soon after declaring independence, eight states included protections against abusive searches and seizures in their state constitutions; five states proposed amendments to the United States Constitution providing similar protections during the ratification debates.108 When all was said and done, the Fourth Amendment of the United States Constitution was sent to the states and ratified in 1791.109 The Fourth Amendment guarantees:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched and the persons or things to be seized.110

The issue with advanced imaging technology is whether it infringes on the “right of people to be secure in their persons” from “unreasonable searches” in an airport setting. The threshold question is whether the Fourth Amendment is applicable in an airport setting. When one walks into an airport, he or she is typically greeted by long lines of people being herded barefoot through metal detectors and x-ray machines while their bags are also being screened. Congress has mandated that “[t]he Under Secretary of Transportation Security shall provide for the screening of all passengers and property,”111 and that “the screening shall take place before boarding and shall be carried out by a Federal Government employee.”112

The answer to whether the Fourth Amendment applies to security searches at airports is an easy one, thanks to the explicit wording in 49 U.S.C.S. § 44901113 calling for all passengers to be screened by federal government employees. Years before the statute was enacted, the United States Supreme Court, in Burdeau v. McDowel, made it clear that the Fourth Amendment “protection applies to government actions.... it was intended as a restraint upon the activities of sovereign authority, and was not intended to be a limitation upon other than government agen-

108. McNINNIS, supra note 105, at 19.
109. Id. at 20.
110. U.S. CONST. amend. IV.
112. Id. (emphasis added).
113. Id.
The Fourth Amendment is needed more than ever to protect against unfettered airport security screening—the modern-day equivalent of a general warrant—where suspicion is not based on probable cause, where there is no sworn oath or affirmation, and where one’s body and luggage are subject to invasive searches.

As a general rule, in order to be considered reasonable under the Fourth Amendment, searches must be based on probable cause and “conducted pursuant to a judicially issued warrant.” Courts have managed to come up with numerous justifications to keep airport security screenings within the bounds of the Fourth Amendment. For example, courts have found airport searches reasonable where “exigent circumstances” exist, or when the right to be free from unreasonable searches has been waived, and courts have even distinguished airport searches as administrative searches. However, courts have found the “critical zone” or border theory most persuasive because an “airport, like the border crossing, is a critical zone in which special fourth amendment considerations apply.”

In *United States v. Skipwith*, the Fifth Circuit Court of Appeals applied the critical zone test. In 1971, unwilling to present identification and having met the FAA anti-hijacking profile, Lee Skipwith III was de...

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116. Dempsey et al., *supra* note 24, at 9-54.; see Katz v. United States, 389 U.S. 347, 357 (1967) (stating, “Searches conducted without warrants have been held unlawful ‘notwithstanding facts unquestionably showing probable cause’ for the Constitution requires ‘that the deliberate, impartial judgment of a judicial officer . . . be interposed between the citizen and the police . . . . Over and again this Court has emphasized that the mandate of the [Fourth] Amendment requires adherence to judicial processes,’ and that searches conducted outside the judicial process, without prior approval by judge or magistrate, are per se unreasonable under the Fourth Amendment—subject only to a few specifically established and well-delineated exceptions.”) (internal citations omitted) (citing Wong Sun v. United States, 371 U.S. 471, 481-482 (U.S. 1963); U.S. v. Jeffers 342 U.S. 48, 51 (1951); Agnello v. United States, 269 U.S. 20, 33 (U.S. 1925)).
117. While this paper will not discuss exceptions to the warrant requirement imposed by the Fourth Amendment outside the context of airport searches, there are many United States Supreme Court cases that do discuss exceptions in various scenarios. See, e.g., United States v. Robinson, 414 U.S. 218, 224 (1973) (discussing warrantless searches incident to arrest); Warden, Maryland Penitentiary v. Hayden, 387 U.S. 294, 310 (1967) (stating warrantless searches are justified if officers are in “hot pursuit”); Coolidge v. New Hampshire, 403 U.S. 443, 465. (1971) (declaring that “under certain circumstances the police may seize evidence in plain view without a warrant.”).
120. United States v. Moreno, 475 F.2d 44, 51 (5th Cir. 1973).
121. *Skipwith*, 482 F.2d at 1274-77.
tained at the Eastern Airlines boarding gate at the Tampa International Airport and questioned by a deputy United States marshal. The court noted that Skipwith had not simply been stopped and frisked by the marshal, but Skipwith had reported to the boarding area where “he knew or should have known all citizens were subject to being searched.” The court found that the airport search of Skipwith at the boarding gate was constitutional because

the standards for initiating a search of a person at the boarding gate should be no more stringent than those applied in border crossing situations. In the critical pre-boarding area where this search started, reasonableness does not require that officers search only those passengers who meet a profile or who manifest signs of nervousness or who otherwise appear suspicious.

While endorsing the critical zone theory, the court set forth a three-part balancing test. The court stated that while the dangers posed by air piracy were even greater than the dangers at border crossings, necessity alone does not make a non-probable-cause search reasonable. “Reasonableness requires that the courts must weigh more than the necessity of the search in terms of possible harm to the public.”

The court identified three factors in its balancing test: (1) public necessity, (2) efficacy of the search, and (3) degree of intrusion.

C. The Tripartite Test To Determine The Reasonableness Of Airport Searches

Applying this test to TSA’s plan to implement advanced imaging technology, the dangers posed by terrorists and other evil-doers makes factor one—public necessity—not even debatable. There is no question that public safety calls for a thorough and effective screening pro-

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122. Id. at 1273.
123. Id. at 1274; see also Terry v. Ohio, 392 U.S. 1, 27 (1968) (creating exception to warrant requirement in situations where a law enforcement officer would be allowed to “stop and frisk” someone without probable cause in search of a weapon if law enforcement officer had reasonable suspicion that he might be in danger).
124. Skipwith, 482 F.2d at 1274.
125. Id. at 1276.
126. Id. at 1275.
127. Id.
128. Id.
129. Id.; see also Herzbrun, 723 F.2d at 775 (embracing three part analysis set forth in Skipwith); Albarado, 495 F.2d at 805 (considering need for search, “inefficiency” of search, and intrusion on privacy interests).
130. Imaging, supra note 3.
131. See United States v. Davis, 482 F.2d 893, 910 (9th Cir. 1973) (concluding that deterring and preventing airplane hijackings is “unquestionably grave and urgent”), overruled by United States v. Aukai, 497 F.3d 955 (9th Cir. 2007); United States v. Hartwell, 296 F. Supp. 2d 596, 602 (E.D. Pa. 2003) (stating “[l]ittle controversy exists regarding the first two factors, public neces-
cess. However, we should be just as skeptical as the founding-era citizens were "of using the rules for search and seizure set by government actors as the index of reasonableness."

The second factor—efficacy of the search—is much more controversial. In fact, a lawsuit filed July 2, 2010, by the Electronic Privacy Information Center ("EPIC") may eventually bring this issue before the United States Supreme Court. EPIC is arguing for the suspension of the deployment of the full-body scanners because it claims they violate the Privacy Act, the Administrative Procedure Act, the Religious Freedom Restoration Act, and the Fourth Amendment. EPIC specifically cited the invasive nature of the devices and TSA's disregard of public opinion. In its lawsuit, EPIC also stated that full-body scanners are "unlawful, invasive, and ineffective." The President of the EPIC previously testified before Congress asking it to halt the plan to deploy the full-body scanners.

Under Skipwith, "virtual strip searches" that full-body scanners offer are not effective enough to be constitutional when compared to how invasive they are. While many, such as EPIC and the American Civil Liberties Union ("ACLU") are questioning whether the new security screening will be very effective, so too is the GAO. In a report released on March 17, 2010, the GAO stated "it remains unclear whether the AIT (advanced imaging technology) would have detected the weapon used in

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134. Electronic Privacy Information Center, supra note 132.
135. Id.
136. Id.
137. Id.
138. American Civil Liberties Union, supra note 96.
140. Testimony, supra note 1, at 8-10.
the December 2009 [Christmas Day bombing attempt] incident. An argument is being made that terrorists can hide explosives by molding them against their body, putting them in body cavities, or placing them in folds of skin. This would make explosives and the like impossible to detect with a full-body scan. Rumors have even been reported that women suicide bombers, recruited by al-Qaida, are having explosives inserted into their breasts using techniques similar to breast augmentation surgery. As the screening technology adapts so do the terrorists. This is not to say that it is a winless battle, but it makes it that much more imperative to ensure that law-abiding Americans are not subjected to humiliating, intrusive, and most importantly, unreasonable searches that in the end are not as effective at stopping terrorists as one might think. We must be very careful when asking citizens to trade their privacy in the hope for safety.

In 2009, CBS News reported that an al-Qaeda terrorist was able to smuggle a pound of high explosives (and the detonator) in his rectum, all in an attempt to assassinate Prince Mohammed Bin Nayef, head of Saudi Arabia’s counterterrorism operations. Luckily, the assassination attempt only left the victim slightly wounded. Before making his way to the prince, the “Trojan bomber” had avoided detection by airport secur-

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141. A Nigerian national attempted to blow up Northwest Flight 253 from Amsterdam to Detroit on December 25, 2009. OFFICE OF THE PRESS SECRETARY, WHITE HOUSE, White House Review Summary Regarding 12/25/2009 Attempted Terrorist Attack, Jan. 7, 2010, available at http://www.whitehouse.gov/the-press-office/white-house-review-summary-regarding-12252009-attempted-terrorist-attack. The attempt failed and the plane landed safely after the terrorist had been restrained. Id. President Obama directed the Assistant to the President for Homeland Security and Counterterrorism to complete a complete review of the terrorist watchlisting system and required key departments and agencies provide input into the review. Id. While applauding the strides that have been made since September 11, 2001, the preliminary White House review blamed “human errors and a series of systematic breakdowns” for failing to stop the terrorist from boarding the plan to the United States. Id.

142. GAO also recognized that TSA has yet to complete a cost-benefit analysis and recommended that they do so. Testimony, supra note 1, at 10. GAO estimates increases in staff alone to cope with TSA’s plan to increase the use of advanced imaging technology as a primary search device could cost up to $2.4 billion over the plan’s expected service life. Id.


146. MacVicar, supra note 146.
ity, including metal detectors and palace security. It is unlikely that a full-body scanner would be any more effective in detecting the explosives. GAO reports that advanced imaging technology only performed as well as physical pat downs in operational tests.

Italy has found the same problems and says that the scanners actually take longer than a physical pat down. The Italian daily Corriere della Sera recently reported that after six months of testing, Italy will stop using full-body scanners at security checkpoints in airports. In fact, the scanners are already no longer in use at airports in Rome, Venice, and Palermo because the Italian government not only found them to be slow, but also to be ineffective for detecting weapons and explosives.

While the technology can see beneath clothing, the image produced by a full-body scanner does not reveal items beneath the surface of the skin. According to TSA’s website, the full-body scanner “detects metallic and non-metallic threats, including weapons, explosives and other items that a passenger is carrying on his/her person, without physical contact.” Some believe that the “carrying on” the person is not the same as “carrying in” the person, thereby making the new machines ineffective in detecting “Trojan” or “bosom” bombers.

Another problem with the machines’ efficacy could be the fact that their locations are published. TSA has published plans to deploy 450 full-body imagers by the end of 2010, with maps easily accessible on the TSA website of where these machines currently are and where they will be located. Terrorists can easily avoid the airports that contain this technology simply by looking at TSA’s website. Only time will tell if a successful argument can be made that giving legitimate air travelers who have been subjected to the electronic full-body search a false sense of security (when in fact the terrorists are avoiding airports that use full-body scanners) in and of itself makes the search unreasonable.

147. Id.
148. Testimony, supra note 1, at 9.
151. Id.; Italian Airport Security Axing Body Scanners, supra note 148.
152. Electronic Privacy Information Center, supra note 132.
154. American Civil Liberties Union, supra note 96.
155. Imaging, supra note 3.
156. Id.
The third and final prong\textsuperscript{157} of the test—degree of intrusion—could spell doom for airport virtual strip searches. The \textit{Skipwith} court recognized the intrusion of airport searches as "inconvenient and annoying, in some cases it may be embarrassing, and at times it can be incriminating."\textsuperscript{158} However, it spent very little time discussing the intrusive nature of the searches and instead addressed the factors that it claimed made airport searches less offensive than in other contexts.\textsuperscript{159} The court stated that the search of \textit{Skipwith} was not intrusive to the degree of unreasonableness because of the "almost complete absence of any stigma" of being searched at the airport, a known and designated search point.\textsuperscript{160}

Distinguishing airport searches from those conducted on "dark and lonely streets at night," the court was confident that the "circumstances under which the airport search is conducted make it much less likely that abuses will occur."\textsuperscript{161} The argument that there was no stigma attached to \textit{Skipwith}'s search would not have held water had \textit{Skipwith} been searched by a full-body scanner. Abuses and indiscretion are sure to follow a virtual strip search. One need only ask Rolando Negrin, a TSA worker at the Miami International Airport, about the stigma associated with being searched by the full-body scanners.\textsuperscript{162} Mr. Negrin finally snapped after being subjected to jokes about the size of his genitalia on a daily basis.\textsuperscript{163} The daily teasing started when Mr. Negrin stepped through a full-body scanner as part of a training exercise and his supervisor started to make fun of his genitalia, which was made visible by the machine.\textsuperscript{164} Because the search reveals intimate and private areas of one's body, the stigma is inherent.

The court in \textit{Skipwith} focused on the fact that for one to be subjected to an airport search, one must go to the airport and voluntarily enter the boarding area where the searches are conducted.\textsuperscript{165} Accordingly, "the offensiveness of the screening process is somewhat mitigated" by this fact.\textsuperscript{166} At least two federal circuit courts of appeal disagree.\textsuperscript{167}

\begin{footnotesize}
\begin{enumerate}
\item[157.] \textit{Skipwith}, 482 F.2d at 1275.
\item[158.] \textit{Id}.
\item[159.] \textit{Id} at 1275-76.
\item[160.] \textit{Id}.
\item[161.] \textit{Id} at 1276.
\item[163.] Shepard & Hamacher, supra note 161.
\item[164.] \textit{Id}.
\item[165.] \textit{Skipwith}, 482 F.2d at 1275-76.
\item[166.] \textit{Id}.
\item[167.] United States v. Kroll, 481 F.2d 884, 886 (8th Cir. 1973) see also \textit{Albarado}, 495 F.2d at
\end{enumerate}
\end{footnotesize}
United States v. Kroll, the Eighth Circuit affirmed the district court’s order granting defendant’s motion to suppress evidence after having been subjected to a mandatory, warrantless search at the airport. The defendant fit the airline’s terrorist profile and was required to pass through a magnetometer machine before being granted entry to his commercial flight.

The court rejected the government’s argument that the suppressed evidence should have come in because the defendant had consented to the search by attempting to board the plane. The Eighth Circuit agreed with the district court that this act alone did not constitute consent in any meaningful sense. Compelling the defendant to choose between exercising Fourth Amendment rights and his right to travel constitutes coercion; the government cannot be said to have established that the defendant freely and voluntarily consented to the search when to do otherwise would have meant foregoing the constitutional right to travel.

Compelling travelers to submit to a virtual strip search before exercising their constitutionally guaranteed right to travel (especially when the search’s degree of intrusiveness is much greater than its efficacy) can hardly be called free and voluntary consent.

According to TSA, the use of full-body scanners is currently optional. However, passengers who refuse to submit to this search are required to submit to “an equal level of screening, including a physical pat-down.” Thus, it is “optional” in that the sense that one has a choice between a rock and a hard place. This does not constitute consent when the other option is to submit to a physical pat-down or forfeit your flight all together. Additionally, the “option” to avoid the full-body scanners will not last very long. According to a GAO report, “TSA plans to procure and deploy 1,800 AITs by 2014 and use them as a primary screening measure.” A primary screening measure is conducted on all airline passengers before they are allowed to board a commercial flight, as opposed to secondary screening, which occurs when a passenger trig-

806-07 (stating that “[t]o make one choose between flying to one’s destination and exercising one’s constitutional right appears to us, as to the Eighth Circuit, . . . in many situations a form of coercion, however subtle. While it may be argued there are often other forms of transportation available, it would work a considerable hardship on many air travelers to be forced to utilize an alternate form of transportation, assuming one exists at all.”).

168. Kroll, 481 F.2d at 887.
169. Id. at 885.
170. Id. at 886-87.
172. Imaging, supra note 3.
173. noagendapdfs.org, supra note 152.
174. Testimony, supra note 1.
bers an alarm during primary screening and is then selected for additional screening.\textsuperscript{175}

The United States Supreme Court has found that while the word “travel” is not found in the Constitution, it is nonetheless a constitutional right.\textsuperscript{176} There is, however, an argument that traveling by plane is simply a mode of transportation and that the mode is not constitutionally protected. The Second Circuit has addressed the mode of transportation question, specifically as it applies to travel by plane.\textsuperscript{177} It stated that consent, based on the mere fact that a passenger has notice of a mandatory search before being allowed to board an airplane, was analogous to the government announcing that all telephones would be tapped in order to counter an outbreak of political kidnappings.\textsuperscript{178}

The court rejected the proposition that anyone using a telephone consented to a search, even if the public were aware of the government’s wiretapping plan and had the opportunity to avoid using the phone.\textsuperscript{179}

It would not matter that other means of communication exist—carrier pigeons, two cans and a length of string; it is often a necessity of modern living to use a telephone. So also is it often a necessity to fly on a commercial airliner, and to force one to choose between that necessity and the exercise of a constitutional right is coercion in the constitutional sense.\textsuperscript{180}

The court’s statement is truer today than when it was made in 1974.\textsuperscript{181} Certainly the expectations of the twenty-first century dictate that a business person occasionally must be in New York City one day and in Los Angeles the next.

Considering other modes of transportation, the airplane is not only the fastest and cheapest way, but it is the only way to make it from New

\textsuperscript{175} Id.

\textsuperscript{176} See Saenz v. Roe, 526 U.S. 489, 498-99 (1999) (stating that “[t]he word ‘travel is not found in the text of the Constitution. Yet the ‘constitutional right to travel from one State to another’ is firmly embedded in our jurisprudence.”); Shapiro v. Thompson, 394 U.S. 618 (1969) (viewing the right to travel as “fundamental” and triggering strict scrutiny of classifications impinging on that right that would otherwise receive rationality review), overruled in part by Edelman v. Jordan, 415 U.S. 651 (1974); United States v. Guest, 383 U.S. 745, 757 (1966) (stating “freedom to travel throughout the United States has long been recognized as a basic right under the Constitution.”).

\textsuperscript{177} Albarado, 495 F.2d at 807.

\textsuperscript{178} Id.

\textsuperscript{179} Id.

\textsuperscript{180} Id.

\textsuperscript{181} According to the National Transportation Safety Board, an independent U.S. Federal agency charged by Congress with investigating every civil aviation accident in the United States, Americans feel the need to fly now more than ever. See Kraus, supra note 42, at 173. In 1978, four years after the Albarado court, there were 328 million enplanements—paying customers—in the United States. Id. In 2008 that had more than doubled to 776 million enplanements. Id. In 1978 there were 13,830 airports. Id. By 2008 there were 19,815. Id.
York City to Los Angeles in one day. A ticket from John F. Kennedy International Airport to Los Angeles International would cost around $149 and would take about six and half hours in the air. Taking the train would cost about $197, take sixty-seven and a half hours, and would require at least one train change. Another option would be to drive. Driving a car would take about forty-two and half hours behind the wheel, cost about $358 in fuel, and cost about $39.20 a day to rent the car. It goes without saying that in the modern era, traveling by plane can sometimes be, effectively, the only way to travel—the definition of a necessity. It can hardly be said that one is willingly and freely consenting to a full-body search simply by attempting to board a plane, especially when flying may be the only way to get to one’s destination.

Returning to the intrusive prong of the test, TSA boasts that there is no physical contact when submitting to the new screening technology, but that the millimeter wave full-body scanner produces “an image that resembles a fuzzy photo negative,” a three-dimensional image of your naked body. If the backscatter full-body scanner is used instead, TSA claims that it will produce a two-sided “image that resembles a chalk etching” of your naked body. Some have called this a “virtual strip search” or “nude” scanners. Unlike previous airport searches where

183. Not including taxes, one-way adult ticket with a two-week notice, requires five-and-a-half-hour stop and train change in Chicago. Amtrak, www.amtrak.com (last visited April 6, 2010).
186. Rental cost calculated with renting a car for three days to make the trip from JFK to LAX, pick-up at JFK and drop-off at LAX, pricing an economy car. Dollar Rental Car, www.dollar.com (last visited April, 6 2010).
187. Imaging, supra note 3.
188. Testimony, supra note 1, at 6.
189. Id.
one simply walked through a magnetometer, the government's search technique has become much more intrusive because air travelers are now being forced to allow Uncle Sam see them naked.

D. HAS THE AIRPORT SEARCH EVOLVED INTO A "VIRTUAL STRIP SEARCH"?

Similar to the full-body scanners, a "visual strip search" does not involve physical contact. A visual strip search does require one to remove one's clothing, but full-body scanners make the physical removal of clothing unnecessary. Another difference is that "[t]he application of the Fourth Amendment to warrantless strip searches has been developed largely in cases involving such searches in prisons and in schools," while the "virtual strip search" takes place in airports prior to boarding the airplane. And while both searches are highly invasive search techniques that reveal the subject's sexual anatomy, TSA's virtual strip search is not conducted pursuant to a warrant, let alone suspicion. In Reynolds v. City of Anchorage, a female police officer conducted a "visual strip search" where she instructed each person subject to the search to remove their clothing and undergarments and "bend over to allow a visual inspection of [their] rectal area." 

Considering these circumstances, the Reynolds court quoted Bell v. Wolfish and determined that the reasonableness of a strip search requires the court to balance "the need for the particular search against the invasion of personal rights that the search entails." Applying the Fourth Amendment to warrantless strip searches has largely been tested by cases involving such searches in prisons and schools. Despite the difference in settings, Reynolds and Bell are still instructive in the Fourth Amendment inquiry because the searches are similar and because airports are "unique places[s] fraught with security dangers," like prisons

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193. Id.
194. Imaging, supra note 3; see also Testimony, supra note 1, at 5-6.
195. Reynolds, 379 F.3d at 362.
196. Id. at 361.
197. Id.
199. Reynolds, 379 F.3d at 364 (quoting Wolfish, 441 U.S. at 559).
200. Id. at 362.
201. The full-body scanners bounce x-ray or electromagnetic waves off of one's body allowing a TSA agent to see beneath the clothing without having to remove the clothing of the person subject to the search. Testimony, supra note 1, at 5-6. There is no physical contact. Id. A "visual strip search" allows the searcher to visually inspect the subject of the search without clothing on. Reynolds, 379 F.3d at 361. There is no physical contact. Id.
Additionally, cases dealing with both the Fourth Amendment and strip searches focus on balancing "the need for the particular [strip] search against the invasion of personal rights that the search entails."203

In balancing the needs for a search against the invasion of personal rights imposed by such a search, courts "must consider the scope of the particular intrusion, the manner in which it is conducted, the justification for initiating it, and the place in which it is conducted."204 Strip searches have then been deemed reasonable in their "scope when the measures adopted are reasonably related to the objectives of the search and not excessively intrusive in light of the age and sex of the [subject of the search] and the nature of the infraction."205

First, the scope of the intrusion caused by full-body scanners is aimed at finding weapons and explosives. Second, the manner in which TSA conducts the searches appears to be straightforward. The subject of the search will walk into the "imaging portal," be asked to remain still while assuming different positions, all while the full-body scanner "creates an image of the passenger in real time." The manner in which the search is conducted seems to be minimally embarrassing, but that does not mean that the search is not—as the TSA agent at the Miami airport could testify. The image that is created and studied remotely by a Transportation Security Officer206 is highly personal. TSA claims that the image produced cannot be used for personal identification but the Department of Homeland’s Security Privacy Impact Assessment Update for TSA Whole Body Imaging report is quick to point out that the image quality is continually improving.207

Third, the justification for full-body scanners is to keep the public safe and avoid another September 11th type attack. While this justification is laudable, the means seem to be a little too broad. The scanners will eventually be the primary search technique used to screen all commercial airline passengers regardless of the fact that the overwhelming majority of passengers are completely suspicionless. However, the September 11th attacks were carried out by only a small group of terrorists. Fourth, the search will end up being carried out in every airport that caters to those flying on commercial flights. Courts must then balance the

202. Reynolds, F.3d at 362 (quoting Wolfish, 441 U.S. at 559).
203. Id. (quoting Wolfish, 441 U.S. at 559).
204. Id. (quoting Wolfish, 441 U.S. at 559).
205. Id. at 363 (quoting New Jersey v. T.L.O., 469 U.S. 325, 342 (1985)).
207. Id.
above criteria against the need of the search, which, admittedly, is very high. However, considering that Uncle Sam is taking a photo of travelers' naked bodies, this invasion of personal rights is at an all-time high level. The questions remains, if this type of invasion of personal rights imposed by the search does not outweigh the need for the search, how far are we willing to allow our government to invade into our personal privacy.

Moving on to address the reasonableness aspect, TSA has adopted full-body scanners in an attempt to address holes in security that were exposed by the 2009 attempted Christmas Day Bomber. While this appears to be reasonably related to the objectives of the search, full-body scanners should still face scrutiny because they are inherently intrusive in addition to the fact that their use has not been qualified as to the age or sex of the subject. And as mentioned above, the government itself has doubts as to whether the full-body scanner would have been effective in spotting the Christmas Day Bomber—the whole reason for the step-up in plans to deploy full-body scanners. Additionally, the only infraction that those who are being subjected to the full-body scanners are guilty of—at least before the search—are showing up at the airport to exercise their constitutional right to travel.

E. THE RIGHT TO PRIVACY MEETS ADVANCED IMAGING TECHNOLOGY

Like the right to travel, the Constitution does not explicitly mention any right to privacy. Also like the right to travel, the United States Supreme Court has found that a right to privacy exists, and has used it to protect personal privacy against unlawful intrusion by the government. The right to privacy has been found to protect against unjustified government interference with personal decisions relating to education, marriage, procreation, contraception, family relationships, and child rearing.

Being broad enough to encompass a woman's reproductive decisions, it isn't a stretch of the imagination to believe that the right to privacy includes the right to keep an image of one's naked body from being scrutinized by an unknown federal employee in a remote area.

208. Testimony, supra note 1, at 1.
209. See Imaging, supra note 3.
210. Testimony, supra note 1, at 9
211. See Albarado, 495 F.2d at 806-07.
213. Id.
While claiming that the machines will not be used to store and send images, Homeland Security has admitted that they can store images.\textsuperscript{216} This only adds further questions and debate, including questions regarding whether these machines will violate other federal laws, such as laws against the sexual exploitation of children.\textsuperscript{217}

The two final prongs of the \textit{Wolfish} test seem to go hand in hand. The justification for initiating the full-body search is to keep explosives and other weapons off airplanes. The reason the search is conducted in an airport is because that is where people go to board the airplane. It appears to be clear from the statistics and cases already cited in this paper that the justification is more than reasonable. The location of the search actually takes place in two places. The first location of the search takes place in plain sight right out in the open space of the airport, where the subject of the search walks into the full-body scanner.\textsuperscript{218} But then the machine makes an image of the subject and transmits it to a transportation security officer (“TSO”) in some remote location where the image is studied and searched for prohibited items.\textsuperscript{219}

To the \textit{Reynolds} court, it was important to the reasonableness of the visual strip search that it was made in the “privacy” of a private room and in the presence of only one other person.\textsuperscript{220} Likewise, when the full-body scanner creates the naked image the search will be conducted in a private room.\textsuperscript{221} However, it will be in a secured and remote room that is off-limits to and away from the naked image’s “owner.” Essentially, the search isn’t even conducted in the presence of the subject of the search: “the TSO will not be able to see the actual individual” and the individual will not be able to see the TSO.\textsuperscript{222} This seems to make the search even more intrusive because one never has any actual personal knowledge of what happens to that image. It is up to one’s own imagination to picture what actually is going on when one’s own naked image is being searched. Perhaps that is how the government is trying to address the right to privacy issue: how can one have a right to privacy when one is not even physically present when the intrusive aspect of the search is conducted?

However, the location of the full-body scanner is in the open for all to see.\textsuperscript{223} “Courts across the country are uniform in their condemnation

\textsuperscript{216} U.S. DEP’T OF HOMELAND SECURITY, supra note 205, at 7.
\textsuperscript{217} See 18 USCS § 2252(a) (2010) (containing laws against sexual exploitation and other abuses of children).
\textsuperscript{218} Imaging, supra note 3.
\textsuperscript{219} Id.
\textsuperscript{220} Reynolds, 379 F.3d at 365.
\textsuperscript{221} Imaging, supra note 3.
\textsuperscript{222} U.S. DEP’T OF HOMELAND SECURITY, supra note 205, at 5.
\textsuperscript{223} Imaging, supra note 3.
of intrusive searches performed in public." Albeit discussing strip searches conducted by police officers in a holding cell, at least one court has stated that a strip search is, as a matter of law, not reasonable when it is conducted "in an area exposed to the general view of persons known to be in the vicinity whether or not any actually viewed the search," and is an invasion of the right to privacy. Likewise, the full-body scanners will perform a search in a public area, but where the general public will not "actually view[ ] the search."226

F. ALTERNATIVES TO THE FULL-BODY SCANNER

There are many other tactics that the government could use to screen and protect privacy rights. One is the possibility of reduced or eliminated government involvement. The "Registered Traveler" program is a privatized effort to develop profiling systems that operate on a voluntary basis. Under the Registered Traveler program, "Trusted Travelers" voluntarily submit biographical information, fingerprints, iris images, and pay a membership fee. After successfully passing a security threat assessment (conducted by TSA), a Trusted Traveler is able to bypass airport screening processes and head straight to a special screening lane. One of the problems with Registered Traveler is that only a few passengers are going to be Trusted Travelers.

While the Registered Traveler has limited government interferences, another option is to take the government out of the security screening business. Much like Hotwire, Travelocity, and other internet travel agencies set up flights now, a private business could connect airline passengers with smaller chartered planes to bypass TSA checkpoints all together. If purchasers of airline tickets were united in their purchasing power, passengers could ensure that the person next to them is not a terrorist by flying on a private chartered plane. Private companies could act as the middle-man and connect persons wanting to travel to particular destinations with other passengers wanting to go to that destination. Those wanting to get on to these smaller chartered planes could go through a private (as opposed to government mandated) thorough screening and background check before being allowed onto the plane.

While there may be problems with increased air traffic and other problems, a system could be worked out that would assure passengers that not only are they safe to fly, but so is the passenger next to them.

224. Campbell v. Miller, 499 F.3d 711, 719 (7th Cir. 2007).
226. Id.
228. Id. at 25-26.
229. Id.
While “profiling” has acquired a strong negative connotation, another avenue in protecting our citizens may be to follow Israel’s lead when it comes to passenger screening. This paper does not focus on the pros and cons of adopting a behavioral profiling system such as Israel’s, but there is an “important, irrefutable, field-tested assertion: persons about to hijack an airplane and end their own lives behave differently than do other persons; these behavioral differences are subtle, but observable to the trained eye.” If someone were to trip the behavioral profile, that would give probable cause for TSA to do a more invasive search, something similar to a full-body scan. Unfortunately in this day and age, it appears that there will have to be some sort of trade off of privacy for safe skies. In the end, it would be better to voluntarily give up some privacy for a more secure flight than to be stripped naked by an Uncle Sam for only a false sense of security.

IV. AFTER ALL IS SAID AND DONE, ARE FULL-BODY SCANNERS A DETERRENT TO TERRORISTS?

According to a USA Today/Gallup (“Gallup”) poll conducted January 5-6, 2010, seventy-eight percent of participants approved of U.S. airports using full-body scanners on air travelers. How a respondent reacted to Gallup depended on his or her gender. At forty-one percent and twenty-six percent respectively, female air travelers were more likely to express discomfort than male travelers when asked if they would be comfortable with being personally subjected to the scan. Regardless of

230. Id. at 37.
231. It has been noted by commentators that Israel may have the most successful aviation system in the world. US Airport Directors Study Israeli Passenger Screening, ISRAEL NEWS, May 7, 2007, available at http://www.ynetnews.com/articles/0,7340,L-3397480,00.html; see also David A. Harris, RACIAL PROFILING SYMPOSIUM: New Risks, New Tactics: An Assessment of the Re-Assessment of Racial Profiling in the Wake of September 11, 2001, 2004 Utah L. Rev. 913, 942 (2004). It certainly considered a major target for terrorists, yet it has successfully defended itself from terrorist attacks for thirty years.
232. Harris, supra note 230, at 942.
233. Gallup, In U.S., Air Travelers Take Body Scans in Stride, http://www.gallup.com/poll/125018/air-travelers-body-scans-stride.aspx (last visited May 4, 2010). The question posed was: One method of airport security that is expected to be used more widely at U.S. airports is a full body scan of passengers as they go through the security checkpoint. The full body scan would show a graphic image of a person’s body underneath his or her clothes. The image would be viewed only by federal screeners in a separate, private room. Do you approve or disapprove of U.S. airports using the full body scan on airline passengers?
234. Results based on telephone interviews with 542 adults who had taken two or more flights in the past twelve months. Id. For results based on the sample of 542 adults who have taken two or more air trips in the past year, the maximum margin of error is ±5 percentage points. Id.
235. Id.
the disparity in comfort level among the genders, Gallop reports that respondents overwhelmingly believed that full body scans would deter or prevent terrorists from being able to carry out their attacks (eighty-four percent said scans would be effective in preventing terrorists from smuggling explosives or other dangerous items onto planes, and thirty-eight percent believe that full-body scans would be very effective).236

Despite the respondents' confidence that full-body scans would be effective at stopping terrorists, as noted above, the many departments that are within the federal government do not all share that confidence.237 GAO doubts that advanced image technologies, or full-body scanners, would have effectively prevented the attempted bombing of the Northwest flight on Christmas Day 2009.238 And also mentioned above, Italy, a United States' ally in the War on Terror, has already pulled the plug on the full-body scanner because it believes that they are not effective.239

As the threat of terrorists hiding explosives in body cavities, Trojan bombers or bosom bombers, becomes more of a reality, the current full-body scanners would not be effective because they can only spot things above the skin.240 Not being effective at stopping terrorists, the current full-body scanner would not be a deterrent to terrorists, and the federal government is in effect only screening law-abiding American citizens that have sacrificed their constitutional rights for a false sense of security.

V. CONCLUSION

The Wright Brothers believed that their flying machine would bring the end of all wars, but over the years, and especially after World War II and September 11, 2001, airline travel requires intrusive searches before one can even enjoy the exhilaration that comes with flying. Keeping in mind that it is the Constitution that protects the American public from unreasonable searches and protects the right to travel and the right to privacy, it behooves us to never allow terrorists to strip us of those protections out of fear. Fear can cause the government to be less effective in its search for the real enemy and more intrusive into the lives of the governed. The fear that the Christmas Day Bomber of 2009 caused has spurred TSA to roll out the full-body scanners with an eye to use them as a primary search measure. While it is unclear whether these machines would have been effective in preventing the bomber from boarding the

236. Id.
237. Testimony, supra note 1, at 9.
238. Id.
239. Italian Airport Security Axing Body Scanners, supra note 148; see also Italy to Abandon Airport Body Scanners, supra note 149.
240. Imaging, supra note 3.
plane, it is clear that we have become desensitized to our freedoms slipping away when the government can virtually strip away our clothing before allowing us to exercise the constitutional right of boarding a plane.

Finally, the need for some type of security screening at airports cannot be emphasized enough; however, the government needs to find a solution that will be more effective at spotting terrorists, more of a deterrent to terrorists, less intrusive of the American citizenry, and more respectful of the right to privacy. While there are many that believe the Fourth Amendment has been so weakened by its numerous exceptions to the point that it could not possibly be of any protection in an airport scenario, this paper has found enough strength in the Fourth Amendment that the end result should be that subjecting millions of suspicionless, law-abiding American citizens to questionably effective “virtual strip searches” before boarding a commercial flight is not constitutional.