Full-Body Scanners: TSA's New "Optional" System for Airport Searches

by Stuart A. Hindman*

Introduction

The events of September 11, 2001 can be said to have been a wakeup call revealing the weaknesses in the world's aviation transportation system. The weapons were commercial aircraft, not rigged with an explosive device, but simply flown – fully fueled, weighing 300,000 pounds, at 300 miles per hour – by individuals who were intent on death and destruction. On that fateful day, the face of civil aviation changed forever.

Since September 11, aviation security has seen the emergence of new technologies to help airport security screeners root out aviation disaster plans by would-be terrorists. The most recent addition to the arsenal of airport security screening is the full-body scanner [hereinafter FBS]. These devices allow security workers to do a "virtual strip search" by using x-rays to create a naked image of the traveler to detect if he or she is carrying any concealed or contraband items. This technology has been the source of much controversy regarding its use, potential for abuse, and effectiveness at preventing terrorist attacks. Issues have begun to arise over the extent to which airline passengers, and the country

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The maximum weight of a Boeing 767, one of the aircraft used in the September 11th attacks, is 395,000 pounds, with a typical cruising speed of 530 miles per hour. See Boeing, General Technical Characteristics 767-200ER, http://www.boeing.com/commercial/767family/pf/pf_200prod.html

Stephen Vina, Comment, Virtual Strip Searches at Airports: Are Boarder Searches Seeing Through the Fourth Amendment?, 8 Tex. Wesleyan L. Rev. 417 (2002).

at large, will tolerate the increasingly invasive nature of airport security screening. With all these considerations in mind, one question stands out: are these full-body scans constitutional?

This paper discusses and analyzes several facets of FBSs and their counterpart, the "enhanced" pat-down. Part I provides a general overview of the law, as defined by decisions of the United States Supreme Court and the various circuit courts of appeals, regarding the status of "airport searches" under the Fourth Amendment and also the "right to privacy" under the Fifth Amendment Due Process clause.3 In addition to the constitutional implications, other federal and state laws that could be implicated by the use of FBSs will be discussed.⁴ Part II details the technology behind the full-body scanners, followed by an explanation of how FBSs are used as a primary and secondary means of airport security, including a discussion of the policy arguments underlying the use of FBSs and "enhanced" pat-downs.⁵ Following this legal and factual groundwork, Part III argues that FBSs, combined with their use and application in today's airports, are an unreasonable search under the Fourth Amendment and an unconstitutional invasion of a person's right to privacy under the Fifth Amendment. As a subset to this position, this paper argues that the airport search becomes unreasonable when the Transportation Security Administration [hereinafter TSA] classifies a passenger as "suspect," thereby forcing him or her to endure an invasive and "enhanced" pat-down procedure, simply because s/ he refuses to submit to a full-body scan at an airport.⁷ The penultimate section discusses how public opinion has impacted the FBS issue, including how a powerful airline pilots' union is calling for a total protest of all FBSs by its members.8 Finally, this

The analysis of how FBSs implicate the Due Process clause appears infra Part III.

Infra Part I.C.

Infra Part II.

TSA is an agency within the federal government's Department of Homeland Security [hereinafter DHS] that is charged with the responsibility of screening passengers at airport checkpoints. See infra Part II.A.

⁷ The TSA has stated that FBSs are optional for all passengers. However, those who refuse the scan are subjected to a physical pat-down. See Jim Barnett, TSA to Phase In New Pat-down Procedures at Airports Nationwide (CNN television broadcast Oct.29, 2010), http://www.cnn.com/2010/ TRAVEL/10/28/airline.security.pat.down/index.html?hpt=Sbin. about the procedures of an "enhanced" pat-down will be discussed infra Part II.C.1.

Infra Part IV.

paper suggests a "middle ground" approach that would protect passengers' constitutional rights while providing them with a level of comfort regarding FBSs, and accommodate the TSA's overwhelming compelling interest⁹ in protecting the nation by securing the air transportation network. 10

I. Overview of the Current State of the Law Regarding Airport Searches, Right to Privacy, and other Federal and State Laws Implicated by FBSs

TSA's use of full-body scanners at airports implicates two important provisions of the U.S. Constitution, and also interacts with several federal and state laws. Before delving straight into a legal and policy discussion of FBSs at airports, it is necessary to lay the legal foundation for the constitutionality of warrantless searches in airports and discuss where the law currently stands on the major constitutional and statutory provisions that could be triggered by full-body scanners.

A. Airport Searches Under the Fourth Amendment

The Fourth Amendment of the U.S. Constitution states:

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.¹¹

As pronounced by the Supreme Court in the seminal case of United States v. Katz, searches conducted by a governmental body, without a warrant, are per se unreasonable under the Fourth Amendment unless the search can be fit into "a few specif-

See United States v. Hartwell, 436 F.3d 174, 181 (3d Cir. 2006) ("[T]he State has an overwhelming interest in preserving air travel safety ").

Throughout this paper, both FBSs and "enhanced" pat-downs will be discussed and analyzed. However, since they are different methods of airport passenger security screening, the discussion will vary somewhat. The paper will make distinctions between the two, but the constitutional and legal analysis is essentially identical for both.

U.S. Const. amend IV.

ically established and well-delineated exceptions."12 This famous quote from the *Katz* decision by Justice Potter Stewart is the cornerstone for Fourth Amendment jurisprudence, essentially stating that any search without a warrant is presumed to be invalid. That statement aside, there are, as Justice Stewart notes, several categories of exceptions to the warrant requirement of the Fourth Amendment.¹³ If a search can be placed within one of these exceptions, the "reasonableness" clause of the Fourth Amendment predominates and becomes the baseline from which a court must decide if a search has been conducted outside the bounds of the Constitution.¹⁴ When deciding the dictates of "reasonableness" in any given search, the Court has stated that "[w]hat is reasonable, of course, 'depends on all of the circumstances surrounding the search or seizure and the nature of the search or seizure itself." 15 Context, therefore, is the key in any search.

As airport searches of passengers are conducted without a warrant, in order for them to be permissible under the Fourth Amendment, they must fall into one of the warrant exception categories of which Justice Stewart spoke. Of all the categories, 16 airport searches historically have been placed in one of these: administrative searches; special needs searches; or consent searches.17

Administrative Searches

An administrative search is a search conducted by a government agency that is not aimed at thwarting criminal behavior, but is instead designed to ensure compliance with some sort of regulatory scheme or practice. 18 When the government is not intruding upon a person or conducting a search in the name of

³⁸⁹ U.S. 347, 357 (1967).

See id. at n.19 and accompanying text.

See Camara v. Mun. Court, 387 U.S. 523 (1967).

Skinner v. Ry. Labor Executives' Ass'n, 489 U.S. 602, 619 (1989) (quoting United States v. Montoya de Hernandez, 473 U.S. 531, 537 (1985)).

Acceptable warrantless search or seizure categories include, inter alia, arrests in public, exigent circumstances, stop and frisk searches, and the automobile exception. See generally Theodore Metzler, Warrantless Searches and Seizures, 89 GEO. L.J. 1084 (2001).

See Sara Kornblatt, Comment, Are Emerging Technologies in Airport Passenger Screening Reasonable Under the Fourth Amendment?, 41 Loy. L.A. L. Rev. 385, 391-404 (2007).

Camara, 387 U.S. at 534.

crime prevention, the Supreme Court will allow warrantless searches so long as: (1) there is a substantial governmental interest in the regulatory scheme underlying the search; (2) the warrantless search is necessary to further the government's interest; and (3) the regulatory scheme provides some constitutionally adequate substitute for a warrant.19 These requirements must be met any time the government seeks to justify a warrantless search on the grounds that the search is in conformance with a valid administrative purpose. However, an administrative search is not a blanket authorization for the search to be conducted in any way the government deems fit. The Supreme Court has stated that even when administrative security interests are "legitimate and substantial," the interests "cannot be pursued by means that broadly stifle fundamental personal liberties when the end can be more narrowly achieved."20 This means that any time the government engages in an administrative search, that search, and how it is conducted, must still conform to the requirements of the reasonableness clause of the Fourth Amendment, and cannot be more intrusive than necessary.

It is within this category – administrative searches – that courts have frequently upheld the warrantless search of passengers at airport security checkpoints. The U.S. Court of Appeals for the Ninth Circuit, in United States v. Davis, stated that searches of passengers and their luggage at airport checkpoints are administrative searches because they are "conducted as part of a general regulatory scheme in furtherance of an administrative purpose, namely, to prevent the carrying of weapons or explosives aboard aircraft, and thereby to prevent hijackings."21 Subsequent courts of appeals have routinely upheld warrantless airport searches under the administrative searches exception.²²

The Ninth Circuit, based upon its own holding in Davis, detailed a test to determine whether an airport search is reasonable under the Fourth Amendment: "[A] particular airport security

New York v. Burger, 482 U.S. 691, 702-03 (1987) (internal quotations omitted).

²⁰ Shelton v. Tucker, 364 U.S. 479, 488 (1960).

⁴⁸² F.2d 893, 908 (9th Cir. 1973), overruled on other grounds by United States v. Aukai, 497 F.3d 955 (9th Cir. 2007) (en banc).

See, e.g., United States v. Marquez, 410 F.3d 612, 616 (9th Cir. 2005) ("Airport screenings of passengers and their baggage constitute administrative searches and are subject to the limitations of the Fourth Amendment.").

screening search is constitutionally reasonable provided that it 'is no more extensive nor intensive than necessary, in the light of current technology, to detect the presence of weapons or explosives . . . [and] that it is confined in good faith to that purpose." 23 So long as airport searches are reasonable when considering the technological equipment being used, and so long as the searches are not being used as a means to effectuate criminal investigation ends, airport searches will be upheld as a reasonable warrantless search under the Fourth Amendment. The issue that FBSs implicate in terms of an administrative search is the reasonableness of that search, taking into consideration the intrusiveness of the search and the available technology. As the Supreme Court stated in Shelton, the reasonableness of the search must be a factor taken into consideration when deciding the constitutionality of any administrative search.24

Special Needs Searches

The second category commonly used to uphold warrantless airport searches is the so-called "special needs search." Special needs searches are warrantless searches that occur in "exceptional circumstances in which special needs, beyond the normal need for law enforcement, make the warrant and probable-cause requirement impracticable "25 Special needs searches are justified on the basis that obtaining a warrant would result in unnecessary delay when the harm to the person being searched is at a minimum.26

The Ninth Circuit used the "special needs" doctrine to uphold a standard checkpoint search at an airport that ultimately revealed bricks of cocaine that a passenger was attempting to smuggle.²⁷ The "special needs" doctrine has been used to uphold searches with purposes very similar to airport searches. The Second Circuit has upheld warrantless searches for passengers on large seagoing vessels for the purpose of preventing terrorism.²⁸ Special needs searches have also been approved for the random, warrantless inspection of baggage being carried on New York City's sub-

²³ Aukai, 497 F.3d at 962 (quoting Davis, 482 F.2d at 913).

²⁴ See infra Part III.

New Jersey v. T.L.O., 469 U.S. 325, 351 (1985) (Blackmun, J., concurring). 25

²⁶ See United States v. Edwards, 498 F.2d 496, 500-01 (2d Cir. 1974).

²⁷ Marquez, 410 F.3d at 615.

Cassidy v. Chertoff, 471 F.3d 67 (2d Cir. 2006).

way system, also in the name of terrorism prevention.²⁹ Although courts tend to rely more on the administrative search exception when validating warrantless airport screenings, which are designed specifically to thwart potential terror attacks and hijackings, the special needs doctrine can also be used to uphold warrantless searches at airports.

Consent Searches

The third exception category that has been used to uphold warrantless airport searches is the consent doctrine. This doctrine is premised upon the idea that an individual has waived his constitutional protections by granting permission to the governmental agent to conduct a search of his belongings without a warrant.³⁰ In terms of airport searches, voluntary consent to search is assumed when passengers present themselves to a security checkpoint in anticipation of their upcoming flights.³¹ The prevailing rule, established by the *Davis* court, was that an airport search was only constitutional under the consent doctrine as long as the passenger could refuse the search by electing not to fly.32

The notion that consent can be used as a basis for justifying warrantless airport searches has been met with hostility from recent courts. The Ninth Circuit, in United States v. Aukai, held that the consent doctrine is no longer a justifiable warrantless search exception for airport searches in the world after September 11th.³³ The Ninth Circuit, sitting en banc in *Aukai*, discussed the concern that a would-be terrorist could test the limits and vulnerabilities of an airport checkpoint by submitting to searches and then withdrawing consent before contraband was detected.34 The Aukai court further stated that since airport searches can be justified on other grounds, consent of the passenger is not needed to effectuate the search.³⁵ This decision has been cited favorably by several subsequent courts³⁶ and, as such, consent is no longer needed to validate warrantless airport searches.

²⁹ MacWade v. Kelly, 460 F.3d 260 (2d Cir. 2006).

³⁰ See United States v. Drayton, 536 U.S. 194 (2002).

See Davis, 482 F.2d at 914. 31

Id. at 913.

³³ 497 F.3d 955, 960 (9th Cir. 2007) (en banc).

Id. at 960–61.

³⁵ Id. at 962.

E.g., United States v. Fofana, 620 F. Supp. 2d 857 (S.D. Ohio 2009) and United States v. McCarthy, 672 F. Supp. 2d 1085 (D. Haw. 2009).

The epicrisis of this section is that airport checkpoint searches are justifiable as both administrative searches and special needs searches because "the compelling public interest in curing air piracy generally outweighs their limited intrusiveness."³⁷ However, simply because airport searches pass constitutional muster under the Fourth Amendment does not mean other constitutional provisions, such as the Due Process clause, are not implicated and could be violated or that the intensity of the search has not become unreasonable.

It should be noted that all of the above-mentioned cases have upheld warrantless airport searches that involve magnetometers (standard walk-through metal detectors) and pat-downs as the means to effectuate the search.³⁸ Airport security searches have been using magnetometers as the primary means of screening passengers since the 1970s.³⁹ The standard walk-through magnetometers, which are frequently viewed as more annoying than intrusive, continue to be used as a primary means of screening passengers at airports.⁴⁰ These procedures for airport security searches have upheld as valid warrantless searches.⁴¹

B. Right to Privacy under the Fifth Amendment

Because searches conducted by FBSs intrude upon the passenger's privacy, a brief discussion on the constitutional doctrine of "right to privacy" is in order.⁴² In *Griswold v. Connecticut*, the Supreme Court first announced that a general unenumerated right to privacy exists within the "penumbras, formed by emanations" of the First, Third, Fourth, Fifth, and Ninth Amendments.⁴³ This oft-quoted statement by Justice William Douglas is

³⁷ United States v. Doe, 61 F.3d 107, 109–10 (1st Cir. 1995).

³⁸ See, e.g., Marquez, 410 F.3d at 614; see also Fofana, 620 F. Supp. 2d at 860.

³⁹ Kornblatt, supra note 17, at 404.

⁴⁰ Id. at 404–05.

It is argued *infra* that the use of the new FBSs now makes the search unreasonable, because the level of intrusiveness is not outweighed by the level of security they provide.

⁴² See Phil Gast, Growing Backlash Against TSA Body Scanners, Pat Downs (CNN television broadcast Nov. 13, 2010), http://www.cnn.com/2010/TRAVEL/11/12/travel.screening/index.html?hpt=T1. How the technology behind FBSs is used to render an image of the passenger will be discussed infra, Part II. Through that discussion, it will be revealed how these machines could violate the passenger's right to privacy.

^{43 381} U.S. 479, 484 (1965).

the foundation for the unenumerated right to privacy that the Supreme Court continues to recognize. The right to privacy now is considered a liberty interest under the Due Process clause of the Fifth and Fourteenth Amendments.⁴⁴ As Justice Kennedy has stated, "[l]liberty protects the person from unwarranted government intrusions into a dwelling or other private places."45

The right to privacy would undoubtedly protect travelers from unwarranted and unnecessarily invasive searches at airport checkpoints which are produced at the hands of the government agents (the TSA) using FBSs. The invasive nature of FBSs, and how they operate to render a naked "image" of the traveler, will be used later in this paper to argue that FBSs are unconstitutional as applied.46

C. Other Federal and State Laws Implicated by FBSs

A handful of other federal laws potentially play a role in the application of FBSs at airports. While the list below is not exclusive, the following laws are examples of those that could be implicated when a passenger undergoes a full-body scan at an airport.

First, the Video Voyeurism Prevention Act prohibits the intentional capture of an image of the "private area of an individual without their consent, and knowingly does so under circumstances in which the individual has a reasonable expectation of privacy...."47 The punishment for violating this statute is a fine and/or up to one year in federal prison.⁴⁸

Another federal law that could be violated through the use of FBSs is the Religious Freedom Restoration Act.49 This law's edict, passed by Congress explicitly to overturn a Supreme Court decision, is that "[g]overnment shall not substantially burden a

⁴⁴ See Lawrence v. Texas, 539 U.S. 558 (2003).

⁴⁵ Id. at 562.

⁴⁶ Infra Part III.

⁴⁷ 18 U.S.C. § 1801(a) (2006).

⁴² U.S.C. § 2000bb et seq. (2006). As a note, when originally enacted, the Act's edict reached to both the federal government and the state government (through section five of the Fourteenth Amendment). However, in 1997, the Supreme Court struck down certain sections of RFRA in Boerne v. Flores, 521 U.S. 507 (1997), by opining that Congress overstepped its authority to use §5 of the Fourteenth Amendment as a "power source" to apply this law to the states. As such, the RFRA only curtails actions by the federal government.

person's exercise of religion even if the burden results from a rule of general applicability "50 The law provides that the government may restrict the exercise of religion if the government can meet the demands of strict scrutiny.⁵¹ The Religious Freedom Restoration Act could be implicated because certain religions prohibit men and women from viewing other men or women naked.⁵² Since FBSs operate to create a naked image of the traveler,⁵³ the dictates of certain religions could be violated when an adherent enters a FBS, a naked image is produced, and the TSA screener views the scan.

A third category of laws triggered by the use of FBSs includes state statutes barring public nudity or indecent exposure. As an example, the Virginia indecent exposure law states that "[e]very person who intentionally makes an obscene display or exposure of his person, or the private parts thereof, in any public place, or in any place where others are present, or procures another to so expose himself, shall be guilty of a Class 1 misdemeanor."54 Read literally, this law could be violated when the passenger's FBS image is viewed, because the passenger would have exposed his private parts in a public place. While this is just one example of an indecent exposure law, it is easy to see how simple it is to run afoul of benign-sounding laws just by entering a FBS.

Now that a foundation has been laid as to how checkpoint searches are interpreted under the Fourth Amendment, how a general right to privacy exists under the Due Process clause, and how other federal and state laws could play a role in deciding whether FBSs constitute an appropriate means of security at our nation's airports, Part II discusses the scanners themselves, how

⁵⁰ 42 U.S.C. § 2000bb-1.

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See Figh Council of N. Am., Statement on the Use of Full Body Scanners for Security at the Airports and Other Places (Feb. 9, 2010) http:// www.fiqhcouncil.org/Home/tabid/150/Default.aspx.

Infra Part II.B.

VA. Code Ann. § 18.2-387 (West 2010). Whether a naked image can constitute an obscene display, or whether the airport checkpoint or the "remote location" where the TSO views the image is a public place, is beyond the scope of this article. However, case law supports the idea that one can create an obscene display even while fully clothed. See, e.g., Moses v. Commw., 611 S.E.2d 607 (Va. Ct. App. 2005) (conviction for indecent exposure upheld in the case of a fully-clothed man who was masturbating in public, finding that his actions could constitute a "display").

the technology operates to create the image, and how FBSs are being used in airports today.

II. Full-Body Scans: Technology and Application

As detailed in Part I, warrantless searches at airports are justified so long as they are reasonable in terms of the invasiveness of the search, the technology used, and the governmental interest underlying the search.⁵⁵ To see how these factors are applied in today's airports, this section discusses how the TSA was initially created and has been given the authority to conduct checkpoint screenings at airports; the technology behind the two different types of FBSs;56 and, finally, how FBSs are being used as a primary and secondary means of passenger screening at airports.

TSA Enabling Act and Authority

Prior to the terrorist attacks of September 11, airport security was the responsibility of the airlines that operated at a given airport.⁵⁷ The airlines often contracted with private security companies to conduct checkpoint screenings.58 Immediately after September 11, Congress passed the Aviation and Transportation Security Act [hereinafter ATSA] which created a new federal agency, the Transportation Security Administration, within the Department of Transportation.⁵⁹ This agency was charged with the responsibility to "provide for the screening of all passengers and property, including United States mail, cargo, carry-on and checked baggage, and other articles, that will be carried aboard a passenger aircraft operated by an air carrier or foreign air carrier in air transportation or intrastate air transportation."60 ATSA placed the new agency within the existing Department of Transportation, headed by a new Undersecretary of Transportation for Security.⁶¹ The agency was also charged with the task of devel-

⁵⁵ Supra Part I.A.

The two types of FBSs are backscatter and millimeter wave devices.

See Daniel Morgan, Aviation Security Technologies and Procedures: Screening Passengers and Baggage, Congressional Research Service, Report No. RL31151 (Oct. 26, 2001).

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Aviation and Transportation Security Act of 2001, Pub. L. No. 107-71, 115 Stat. 597 (codified as amended in scattered sections of 49 U.S.C.).

Id. § 110(b).

Id. § 101. 61

opment, research, and engineering for advances in security technology.62 The newly-created TSA would operate in the Department of Transportation for the next year until the Homeland Security Act of 2002 was enacted to create the cabinet-level Department of Homeland Security [hereinafter DHS], headed by the Secretary of Homeland Security.⁶³ This new department was created to bring the various agencies that are charged with protecting the homeland in some form or another into one central department.64 Among the new components of DHS was TSA, transferred from the Department of Transportation. The Homeland Security Act also created new requirements for the TSA, as well as for the airports that would be working with these new agencies. 65 It is from both ATSA and the Homeland Security Act that TSA draws its authority to screen passengers at airport checkpoints and to implement new technologies as it deems necessary to carry out its mission to "[protect] the Nation's transportation systems to ensure freedom of movement for people and commerce."66

Full-Body Scanners – The Technology Behind the В. **Machines**

As previously mentioned, there are two different types of FBSs, backscatter devices and millimeter wave machines. The technology that each employs is slightly different; however, the overall operational aspects of each are similar. FBSs operate by emitting low amounts of radiation over the human body to create an image.⁶⁷ These scans are powerful enough to penetrate clothing in order to detect any concealed items, but are not strong enough to penetrate the skin to create an x-ray image like devices commonly

⁶² *Id.* § 112(b).

Homeland Security Act of 2002, Pub. L. No. 107-296, 116 Stat. 2135 (codified as amended in scattered sections of 6 U.S.C.).

Some of these agencies were the U.S. Secret Service (transferred from the Treasury Department), the U.S. Coast Guard (from the Transportation Department), and the Federal Emergency Management Agency (which was an independent federal agency).

E.g., Pub. L. No. 107-296, § 425 (requiring TSA to deploy explosives detection devices to airports).

Transp. Sec. Admin. [hereinafter TSA], Mission, Vision and Core Values, http://www.tsa.gov/who we are/mission.shtm.

Vina, supra note 2, at 420. 67

used by the medical profession.⁶⁸ It is at this point that the two machine types differ on how the radiation scan is processed.

Backscatter devices use low-intensity x-rays that deflect off the human body back onto the machine to be processed.⁶⁹ The processing unit takes the reflected x-rays and converts them to create a black and white image of the passenger.⁷⁰ The amount of radiation emitted by the backscatter device is approximately the same as the amount of radiation to which a passenger is exposed by flying in an aircraft, at 35,000 feet, for about sixty seconds.⁷¹ Since the x-rays do not penetrate the body, the resulting image has been described as a chalk etching of a naked body.72

Millimeter wave machines utilize electromagnetic beams of radio frequency energy that are projected on the passenger.⁷³ These waves are then reflected back to the machine which creates a three-dimensional image of the body, including any items that are contained thereon, in 1.8 seconds.⁷⁴ The amount of radiation absorbed by a passenger during a millimeter wave scan is 100,000 times less than the energy emitted during a cellular telephone conversation.⁷⁵ The image produced by millimeter wave devices resembles a photo negative.76,77

⁶⁸ Id.

⁶⁹ Id.

⁷⁰ Id.

⁷¹ Id.

See TSA, AIT: How it Works, http://www.tsa.gov/approach/tech/ait/ how it works.shtm.

Tobias Mock, Comment, The TSA's New X-ray Vision: The Fourth Amendment Implications of "Body-Scan" Searches at Domestic Airport Security Checkpoints, 49 Santa Clara L. Rev. 213, 227–28 (2009); See also Julie Solomon, Comment, Does the TSA Have Stage Fright? Then Why Are They Picturing You Naked?, 73 J. AIR L. & Com. 643, 657 (2008).

Solomon, *supra* note 73, at 657.

MIKE GOLDEN, DHS, PRIVACY IMPACT ASSESSMENT FOR TSA WHOLE Body Imaging (2008), http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_tsa_wbi.pdf.

See Appendix I for examples of the images created by both backscatter and millimeter wave devices.

As a corollary, as of early 2011, TSA is testing new technology used in conjunction with the FBS which, instead of displaying the scan in the manner so described, a generic and cartoon-like outline of a person is used. If the scanners detect any anomalies or latent objects, a yellow box appears on that area of the body. This new technology, named "automatic target recognition software" is currently being tested at two airports, and TSA will make a determination later in 2011 if this new way of reading the scan should be rolled out nationwide. See Tom Fitzgerald, TSA Dem-

C. FBSs and Their Use at TSA Checkpoints

Airport Checkpoints Before FBSs

The first FBS was operated on a trial run at Phoenix, Arizona's Sky Harbor Airport in February, 2007.78 When TSA took over the responsibilities of screening passengers at airports in 2001, they did so, for the most part, by picking up where their predecessors left off. Prior to 2007, the chief method of screening passengers was the walk-through magnetometer and an x-ray scan for luggage.⁷⁹ If the machine detected a pre-set level of metallic composition, the machine would "alarm," and the passengers would remove excess metallic items from their persons and walk through the metal detector again.80 If the TSA officer [hereinafter TSO or Transportation Security Officer] could not resolve the alarm, the passenger was directed to secondary screening. Secondary screening included a less intrusive pat-down (which did not involve touching a passenger's private areas) by a TSO of the same sex as the passenger in order to resolve the alarm.⁸¹ The pat-down continued until the TSO removed all items from the passenger and concluded that s/he was not carrying any contraband or prohibited items.82

onstrates New Body Scanning System at Reagan National Airport (WTTG Fox 5 D.C. television broadcast Feb. 8, 2011). If this technology is implemented throughout the nation, it would, in my opinion, alleviate some of the privacy concerns involving FBSs. It would not, however, have any effect on the health issues, or on the concerns raised by the subsequent "enhanced" pat-down that continues to be used by airport screeners. See Appendix II for an example of an image generated by this new software.

On the subject of the levels of radiation being emitted from these devices, in March, 2011, TSA ordered its contractors to reassess the actual level of radiation being used by these devices after it was discovered that initial testing was inconsistent, missing data, and otherwise flawed. TSA has ordered its contractors to be retrained in how to measure the radiation levels from these machines, and also has promised to post all future radiation checks for public review. See Mike Ahlers, TSA Orders 'Re-tests' of Radiation Levels on Airport Body Scanners (CNN television broadcast Mar. 12, 2011).

- Solomon, *supra* note 73, at 653.
- Mock, *supra* note 73, at 217-218.
- 80 M. Madison Taylor, Bending Broken Rules: The Fourth Amendment Implication of Full-Body Scanners in Preflight Screening, 17 Rich. J.L. & Tech. 4, ¶8 (2010), http://jolt.richmond.edu/v17i1/article4.pdf.
- 81 Mock, *supra* note 73, at 220-222.
- 82 Taylor, supra note 80.

FBSs as a Primary and Secondary Means of

After the initial field test of FBSs at the Phoenix airport, TSA expanded the tests of the new devices to include Los Angeles International Airport and John F. Kennedy International Airport in New York City.⁸³ During 2008, TSA expanded the use of FBSs to more airports across the country, and began using FBSs as a primary means of screening for select passengers.84 Once field tests were concluded on both backscatter and millimeter wave devices, TSA sped up the nationwide deployment of FBSs, with funds provided by the American Recovery and Reinvestment Act of 2009,85 by equipping another eleven airports with FBSs.86 As of March, 2011, TSA has deployed more than 486 FBSs at seventy-eight airports across the country, with both of those numbers rapidly increasing every month.⁸⁷ Each FBS costs approximately \$150,000 to \$180,000, for a total purchase cost of somewhere between \$72 million and \$87 million.88 TSA expects to have more than 1,000 FBSs at airports nationwide by the end of 2011.89

Checkpoint Searches

Since FBSs are now being used as a primary means of checkpoint security, random passengers are confronted with the FBS when they reach the checkpoint. When a passenger reaches a FBS, a TSO instructs the passenger to walk into the machine, maintain a pose with hands over the head, feet shoulder-width apart until the machine renders its scan.⁹⁰ The machine, as described above, creates an image of the passenger, which is viewed by a different TSO in a remote location.⁹¹ The officer viewing the

Press Release, TSA, TSA Announces Bi-coastal Launch of Millimeter Wave Imaging Technology (Apr. 17, 2008), *available at* http://www.tsa.gov/press/releases/2008/0417.shtm.

Thomas Frank, 10 Airports Install Body Scanners, USA Today (June 6, 2008, 12:18 AM), http://www.usatoday.com/travel/flights/2008-06-05-body scan N.htm.

Pub. L. No. 111-5, 123 Stat. 115. This is the well-known "recovery act."

Aaron Smith, 11 Airports Get New Body Scanners, CNN Money, Mar. 5, 2010, http://money.cnn.com/2010/03/05/news/companies/body_scanners_airports/.

⁸⁷ TSA, Advanced Imaging Technology, Frequently Asked Questions, http://www.tsa.gov/approach/tech/ait/faqs.shtm (last visited Mar. 14, 2011).

⁸⁸ Smith, supra note 86.

⁸⁹ Gast, supra note 42.

TSA, *supra* note 72; *see also* informational videos posted by TSA via the same link.

⁹¹ Solomon, *supra* note 73, at 658–59.

image will never see the passenger.92 Once the viewing officer determines that the passenger is not carrying any contraband items, s/he communicates to the first officer that the scan is clear, and the passenger is allowed to collect all belongings and proceed beyond the checkpoint.⁹³ If the TSO viewing the image determines there is some anomaly with the scan, or indicates that the passenger needs to be further screened, the passenger will continue to secondary screening, and be subjected to TSA's "enhanced" pat-down procedures.94 Passengers who decline the FBS, because the scan is "optional"95 after all, are immediately directed to secondary screening to receive the enhanced patdown.⁹⁶ Since FBSs have not fully replaced the standard magnetometers, some passengers may not encounter a FBS at all during their airport adventure.97 However, any passenger who is directed through secondary screening, whether to resolve an alarm or because of a refused FBS, receives the enhanced pat-down.98

In October, 2010, TSA announced the implementation of a new, "enhanced" pat-down procedure to supplement the secondary screening process at checkpoints.99 The new pat-downs have been described as "invasive and humiliating," and often include same-sex officers running their hands over intimate areas of passengers' bodies. 100 The new pat-down procedure has been analogized to being "groped" by TSA officers, and has led to thousands of complaints to both the TSA and civil rights organi-

⁹² Id.

⁹³ Id.

TSA, supra note 87; see also Barnett, supra note 7.

I use the word "optional" because, as will be argued in Part III, infra, a passenger who declines FBS screening is automatically subjected to an enhanced pat-down.

TSA, supra note 87.

It should also be mentioned that TSA does not have a policy of excluding minors from FBS screening. If a passenger between the ages of 12 and 18 years old reaches a checkpoint with a FBS, s/he is expected either to accept or decline the scan, leading to the same pat-down procedure as any other passenger would face. In November, 2010, TSA announced that minors under the age of 12 who require a pat-down will receive a less intrusive, "modified" pat-down. See Ashley Parker, Airport Pat-Down Procedures Defended by Security Officials, N.Y. Times, http://www.ny times.com/2010/11/17/us/17security.html (Nov. 16, 2010). However, if a minor decides to enter the FBS, the image produced will resemble a naked

TSA, Pat-Downs, http://www.tsa.gov/travelers/pat_downs.shtm.

Barnett, supra note 7.

¹⁰⁰ See Gast, supra note 42; see also Barnett supra note 7.

zations.¹⁰¹ TSA has defended the procedure by stating that: (1) Pat-downs are conducted by same-gender officers; (2) All passengers have the right to request private screening at any point during the screening process; and (3) Anyone has the right to have a traveling companion present during screening in the private screening area. 102 TSA has further stated that only a small percentage of passengers will actually receive a pat-down, either because an anomaly occurred during the primary screening or the passenger refused a full-body scan. 103

The Policy Behind FBSs D.

While FBSs have been subjected to extreme criticism by advocacy groups, pilots' unions, and the news media, 104 TSA and DHS have advocated that the policy benefits underlying the use of FBSs - including the steps TSA has taken to ensure passenger privacy – outweigh any unintended consequences or privacy concerns. TSA has stated that a FBS allows officers to observe any hidden items that passengers may be concealing which may not necessarily be picked up by standard magnetometers. 105 A search using a full-body scan allows a TSO to quickly, generally within seconds, determine if passengers are carrying any contraband items on their persons without the need for any physical contact between an officer and a passenger.¹⁰⁶ TSA has indicated that FBSs will dramatically increase the speed at which passengers can proceed through the checkpoint and will ultimately increase safety for the entire traveling public. 107

TSA's policy and practices for FBSs are aimed at ensuring passenger privacy. TSA claims it has made certain that the officer viewing the naked image is in a remote location, away from the checkpoint and incapable of personally identifying the subject of

¹⁰¹ See Am. Civ. Liberties Union, The Audacity of Grope: TSA's new Pat-Down, http://www.aclu.org/technology-and-liberty/audacity-grope-tsasnew-pat-down.

The TSA Blog, New TSA Pat-Down Procedures, Nov. 11, 2010, http:// blog.tsa.gov/2010/11/new-tsa-pat-down-procedures.html.

¹⁰³ Id. See also infra Part III.A for discussion regarding a passenger refusing a FBS screening.

¹⁰⁴ See infra Part IV for a further discussion on this subject.

¹⁰⁵ TSA, supra note 72.

¹⁰⁶ See Golden, subra note 75.

¹⁰⁷ Id.

the scan. ¹⁰⁸ TSA has also mandated that the FBSs cannot store. capture, print, or otherwise save the image, and that a new image cannot appear on the monitor until the prior one has been removed.¹⁰⁹ TSA further prohibits the officer viewing the images from carrying any electronic device that has the capability of capturing visual images while the officer is performing official duties.110

The policy aspects of FBSs from TSA's perspective are strong. However, commentators have continued to speculate regarding whether FBSs: (1) actually make air travel safer; and if they do, (2) whether the significant cost of these devices outweighs the benefits that they may produce.

1. FBSs Provide a Ouestionable Level of Extra Security

On Christmas day, 2009, would-be terrorist Umar Farouk Abdulmutallab attempted to blow up a transatlantic airliner with a bomb stitched into his underwear that he was able to get through airport security in Amsterdam. 111 After this event, the federal government pushed even harder to have FBSs deployed at airports across the country. 112 The rationale was that had Abdulmutallab gone through a FBS prior to boarding his flight, the scanners would have detected the device hidden in his trousers and he would have been prevented from boarding the plane. 113 However, that solution was called into question by the Government Accountability Office when the agency announced to Congress that it was "unclear whether the [FBS] would have detected the weapon used in the December 2009 incident."114

¹⁰⁸ *Id*.

¹⁰⁹ Id.

¹¹⁰ Id.

¹¹¹ See generally Anahad O'Connor, U.S. Says Plane Passenger Tried to Detonate Device, N.Y. Times, Dec. 26, 2009, http://query.nytimes.com/ gst/fullpage.html?res=9E01E7D61731F935A15751C1A96F9C8B63.

¹¹² Spencer S. Hsu, GAO Says Airport Body Scanners May Not Have Thwarted Christmas Day Bombings, Wash. Post, Mar. 18, 2010, http:// www.washingtonpost.com/wp-dyn/content/article/2010/03/17/AR201003 1700649.html.

¹¹⁴ Id. (quoting Steve Lord, Government Accountability Office, Testimony before the Subcomm. on Transp. Sec. and Infrastructure Protection, H. Comm. on Homeland Sec., Mar. 17, 2010, available at http://www.gao. gov/new.items/d10484t.pdf.) [hereinafter GAO testimony].

This report by the GAO explicitly places doubt upon FBSs and questions if they are in fact providing more security to our air transportation system.

Are FBSs Worth the Cost?

Whether or not FBSs actually provide a level of security that current checkpoint operations could not, a cost-benefit issue has arisen. The same GAO report indicated that TSA intends to purchase 1,800 additional FBSs by 2014.115 Combined with the 385 units operational at the time, these additional machines would be able to cover sixty percent of the checkpoints which TSA has deemed to be the highest-priority. 116 Based upon financial estimates from TSA related to staffing, operating, and maintaining these devices, the GAO believes the overall cost of these machines is anywhere from \$2.3 to \$3 billion over the next eight years.117

In addition to the concerns raised by the GAO over the financial implications of FBSs, a researcher at the Heritage Foundation, a conservative think-tank, has stated that FBS technology is "a 'waste of money,' because the results will be minimally better than the current screening process."118 The researcher, Dr. James Carafano, continued by saying "[y]ou're never going to keep every bad thing off a plane – unless people fly naked and are asleep . . . [t]here are still people that could use their thumb and could kill you."119 In addition, Dr. Carafano opined that FBSs are "time consuming" and "not justified based on the threat."120

With all the criticism of the policies behind the use of FBSs, there has been no empirical evidence offered by the government which conclusively shows that FBSs provide a higher level of security than prior procedures. In addition, the GAO recommended to TSA that it conduct a cost-benefit analysis before continuing with the deployment of FBSs. 121 TSA has a high bar

¹¹⁵ *Id.* (citing GAO Testimony).

¹¹⁶ Id.

¹¹⁷ Id.

¹¹⁸ Monisha Bansal, Full Body Airport X-Rays Expensive, Raise Privacy Concerns, CNS News, July 7, 2008, http://www.cnsnews.com/news/article/23724 (quoting Dr. James Carafano).

¹¹⁹ *Id*.

¹²¹ Hsu, *supra* note 112 (quoting GAO Testimony).

to clear in terms of justifying spending up to \$3 billion over the next eight years if these machines cannot do what is expected of them.

In summary, this Part detailed how FBSs are used in airport security checkpoints as both a primary and secondary means of conducting searches and discussed the policies underlying FBSs. Part III argues that by applying the law, as outlined in Part I, to the practices of TSA, as discussed in Part II, the use of full-body scanners is an unreasonable search under the Fourth Amendment and is an unconstitutional invasion of privacy under the Fifth Amendment. 122

III. The Use of Full-Body Scanners Is Not Constitutional

As detailed in Part I, courts have routinely upheld airport searches that involve a walk-through magnetometer and the follow-up pat down under the administrative search or special needs search doctrines. The prevailing test, as outlined by the Ninth Circuit, is that airport searches are reasonable so long as: (1) they are no more extensive or invasive than necessary, in light of available technology to prevent weapons from being brought on board an aircraft; and (2) they are conducted in good faith to satisfy that purpose. 123 In addition to this test, the Supreme Court's decision that any administrative search "cannot be pursued by means that broadly stifle fundamental personal liberties when the end can be more narrowly achieved" is still the law of the land and must be considered.¹²⁴ With these requirements in mind, this Part argues that the use of FBSs, implemented using the current practices and procedures of TSA, does not meet the constitutional requirements of the Fourth and Fifth Amendments. Further, TSA's use of "enhanced" pat-downs is overly zealous and is an unconstitutional invasion of privacy. This section also highlights the pendente lite, filed by the Electronic Privacy Information

Since TSA is a federal agency, only the Due Process clause of the Fifth Amendment is implicated, not the same clause of the Fourteenth Amendment. As such, all references to the Due Process clause herein are to the Fifth Amendment.

¹²³ United States v. Aukai, 497 F.3d 955, 962 (9th Cir. 2007) (en banc).

Shelton v. Tucker, 364 U.S. 479, 488 (1960).

Center¹²⁵ and others, to have FBSs declared unconstitutional, citing many of the same legal concepts included herein.

A. Full-Body Scanners Are an Unreasonable Search under the Fourth Amendment

It cannot be seriously argued that TSA should be estopped from using new and emerging technologies when these breakthroughs could provide much needed assistance to airport security screeners. It is possible that full-body scanners might provide an extra level of security for the flying public. However, based on the practices and procedures that TSA uses to operate FBSs at airports, the devices cannot meet the reasonableness test outlined by the Supreme Court and the Ninth Circuit.

1. FBSs and Their Procedures Are Too Extensive and Invasive to be Considered "Reasonable"

FBSs, along with the practices and procedures used to implement them, are unreasonable under the Fourth Amendment. First, the courts have never approved the use of strip-searches or forced x-rays without, at minimum, some showing of reasonable suspicion. A FBS is essentially the technological equivalent of a strip search. Even though the passenger is not actually forced to remove all clothing in the presence of a TSO and the officer viewing the image does not know the identity of the passenger, based upon the images that are produced from the FBS, the passenger is nonetheless seen naked. This naked search is conducted without any implication that the passenger is suspected of wrongdoing.

Second, TSA has no provision that allows for the automatic exemption of minors from undergoing FBS screening. The lack of such an exemption requires minors, or their parents, to decide on the spot whether to allow an unknown screener to see the naked image of the child, or to have the minor subjected to an en-

The Electronic Privacy Information Center is a public interest research center that focuses its attention on civil liberty issues to protect privacy, the First Amendment and other constitutional ideals. *See* EPIC, About EPIC, http://epic.org/epic/about.html.

¹²⁶ See, e.g., United States v. Montoya De Hernandez, 473 U.S. 531 (1985) (holding that reasonable suspicion is required, at a minimum, in order to detain and search a suspected drug smuggler by customs officials).

hanced pat-down. Without a policy that allows minors to bypass the FBS without the pat-down, a FBS screening is not reasonable.127

Third, a passenger cannot be considered suspect, and subjected to a physically invasive pat-down, simply because he or she refuses the full-body scan. The fact that TSA will subject any passenger to a pat-down search which includes touching and groping of the most intimate areas of a person's body simply because the person declines to submit to a machine that will allow the unseen "man behind the curtain" to view the person naked does not even approach the dictates of "reasonableness." 128 Having experienced an "enhanced" pat-down personally, the author can attest that it is just as invasive and humiliating as has been described. A TSO conducts an entire manual feel of just about every part of the traveler's body, including under clothing, putting his/her hands around the travelers neck, and even pulling out the passenger's waistline, thus revealing the passenger's underwear (or lack thereof). Without some sort of justifiable, articulated grounds for believing that the passenger is carrying contraband that can satisfy, at minimum, reasonable suspicion, the procedures for employing FBSs and enhanced pat-downs have crossed the line of "invasive and extensive" that the Supreme Court and Ninth Circuit detailed in Aukai.

Fourth, even though TSA has attempted to implement procedures designed to ensure passenger privacy, TSA's continued use of FBSs and enhanced pat-downs violates the Fifth Amendment's mandate of a right to privacy. As indicated *supra*, the Supreme Court has stated that the right to privacy contained

As an interesting side note, the United Kingdom has a policy that exempts all minors from being scanned using full-body scanners in British airports because of potential consequences from the Protection of Children Act 1978, 1978 ch. 37. That act is an anti-child pornography statute that generally prohibits the making, distributing, or procurement of child pornography. Out of concerns that screeners could be prosecuted for creating child pornography by using a FBS on a minor, passengers under the age of 18 are exempted from FBS screening in British airports. See Charlie Leocha, Full-Body Scanners Banned for Kids in U.K., Likened to Child Porn, Consumer Traveler, Oct. 21, 2009, http://www.consumertraveler.com/today/full-body-scanners-banned-for-kids-in-u-k-likened-tochild-porn/.

See, e.g., United States v. Whitted, 541 F.3d 480 (3d Cir. 2008) (highly intrusive searches of the person that implicate the dignity and privacy interests of the person being searched require reasonable suspicion (citing United States v. Flores Montano, 541 U.S. 149 (2004)).

within the liberty provision of the Due Process clause protects "the person from unwarranted government intrusions "129 Having a federal officer view the naked image of a person who is in no way suspected of wrongdoing constitutes an unwarranted government intrusion. Even worse, being subjected to the humiliating and public exercise that the "enhanced" pat-down has become clearly warrants protection under the right to privacy. If full-body scans and enhanced pat-downs are deemed to be an unwarranted intrusion under the Fifth Amendment, it would be inapposite for those same procedures to be deemed "reasonable" under the Fourth Amendment. Even further, if the search is invasive under the Fifth Amendment, it would surely fail the Supreme Court's requirement from *Shelton* that an administrative search must not stifle individual personal liberties.

Fifth, the interplay that FBSs and enhanced pat-downs could have with other federal and state laws must call into question their reasonableness. As an example, under the aforementioned Religious Freedom Restoration Act, if a person's seriously held religious belief prohibits full-body scans, the only option is an invasive pat-down. Essentially, the TSA is asking this person to choose between the lesser of two evils, both of which could violate the passenger's religious beliefs, not to mention notions of common decency. Next, the Video Voyeurism Prevention Act all but prohibits the TSA from capturing an image of a passenger's private area without the passenger's consent. 130 Does a passenger impliedly consent to this image capture by stepping into the device? Is that consent valid? These unresolved issues are serious concerns when FBSs are considered under the voyeurism statute, calling into question the devices' overall constitutionality. Further, broadly written and generally applicable state laws, such as the previously cited Virginia indecent exposure law, can effortlessly be read to make a full-body scan a criminal act. By having the passenger enter the scanner, the TSO has "procur[ed] another to so expose himself," in violation of the criminal statute. 131 Obviously, an argument can be made that the virtual image of a naked person does not violate the statute, but until a court decides that such a visual depiction does not violate an indecent

¹²⁹ Lawrence v. Texas, 539 U.S. 558, 562 (2003).

¹³⁰ Supra Part I.C.

¹³¹ VA. CODE ANN. § 18.2-387 (West 2010).

exposure law, a TSO could be arrested and charged with violating such a law.132

Finally, the financial toll of FBSs has to be considered when determining if their use is a reasonable means to effectuate the airport search. The GAO has indicated that full-body scanners will cost up to \$3 billion over the course of eight years. 133 That is an extremely high price tag for devices that have questionable reliability and efficiency but severely infringe upon and stifle individual personal liberties. While not the strongest legal argument, this policy question deserves serious consideration. Could three billion dollars be better spent to protect our nation from terrorists who seek to board aircraft? That is a matter for policy experts and appellate court judges to consider.

Taken alone, any one of these factors could be used as a basis to declare that FBSs and enhanced pat-downs are unnecessarily invasive and extensive. When the factors are considered together, it becomes incontrovertible that full-body scanners, combined with the subsequent enhanced pat-downs, render the airport search unreasonable and violative of the Constitution.

Good Faith Requirement

The second requirement for airport searches to be valid administrative searches under Aukai is that they must be carried out in good faith and confined to the prevention of terroristic acts on airplanes. There is no evidence to suggest that TSA has any purpose for conducting these searches other than the agency's statutory duty of ensuring the safety of the flying public. 134

Since, however, the Ninth Circuit's test is conjunctive, both factors must be met. Even though the use of FBSs survives the good faith prong, it fails the first prong of reasonableness. In this case, FBSs are seriously excessive, unnecessarily invasive, possibly violative of other laws, and reflective of questionable policy.

¹³² The author acknowledges that the likelihood of a TSO being arrested and charged with procuring indecent exposure is highly unlikely. However, that does not dilute the point that the use of a FBS could violate such a law, albeit a technical violation. Further, a discussion of the doctrines of federal preemption and official immunity is beyond the scope of this article, but if a case is ever brought against a TSO for such a violation, these issues are most likely to be raised in defense of the officer.

¹³³ Supra Part II.D; see also supra note 114 and accompanying text.

¹³⁴ See supra Part II.A (detailing TSA's statutory authority and charge).

Full-body scanners, "enhanced" pat-downs, and the procedures used to implement them render these means of search unreasonable under the Fourth Amendment, excessively invasive under the Due Process clause of the Fifth Amendment, and, therefore, unconstitutional.

B. Pending Litigation Regarding FBSs

This paper argues that FBSs are unconstitutional under the Fourth and Fifth Amendments of the U.S. Constitution. One group, the Electronic Privacy Information Center [hereinafter EPIC, has filed a lawsuit challenging the decision to implement FBSs because DHS and TSA failed to follow the requirements of the Administrative Procedures Act. 135 EPIC claims that the Department of Homeland Security violated the APA when: (1) the department failed to act upon a petition for review of DHS's decision to implement full-body scanners at airports; (2) a TSA Order refused to process a petition for review submitted by EPIC; and (3) TSA used rulemaking to promulgate a regulation permitting the use of full-body scanners as a primary means of airport security. 136 Along with the petition for review, EPIC immediately filed a motion for an emergency stay of DHS's plan to use FBSs at airports nationwide in an effort to prevent DHS from implementing full-body scanners during the pendency of the case. 137 To support its motion for the emergency stay, EPIC argues that travelers will suffer irreparable harm if TSA is permitted to continue the use of FBSs pending this review.¹³⁸ EPIC further argues that the loss of constitutional freedoms, including rights guaranteed by the First, Fourth, and Fifth Amendments (which will occur if FBSs are permitted to be used as a means of screening) constitutes irreparable harm. 139

¹³⁵ Elec. Privacy Info. Ctr. v. Napolitano, No. 10-1157 (D.C. Cir. filed July 2, 2010). In this case, EPIC is the Petitioner and Secretary Napolitano and DHS are Respondents. All references herein to litigation documents refer to this case. The Administrative Procedures Act [hereinafter APA] is found at 5 U.S.C. § 500 et seq. (2006). 49 U.S.C. §46110(a) grants jurisdiction to the D.C. Circuit to hear petitions for review regarding TSA's security duties and powers.

¹³⁶ Pet'r Pet. for Review 1-2. The APA, 5 U.S.C. § 553(e), requires administrative agencies to allow interested persons the right to petition for the issuance, amendment, or repeal of an administrative rule.

¹³⁷ See Pet'r Mot. for Emergency Stay.

¹³⁸ *Id*.

¹³⁹ Id. at 18.

In its attempt to have FBSs shut down at airports, EPIC bases most of its arguments on APA grounds, while relying to some extent on the constitutional grounds that this paper has discussed. DHS filed an opposition to the motion for an emergency stay, and EPIC followed with a reply to DHS's opposition. ¹⁴⁰ As of this writing, the U.S. Court of Appeals for the D.C. Circuit has failed to issue the requested stay. EPIC filed its opening brief with the court on November 1, 2010.¹⁴¹ DHS filed its opposition brief on December 23, 2010, and EPIC's Reply Brief was filed on January 6, 2011.¹⁴² As this case is in its infancy, any attempt to speculate in this paper on the outcome would be, at best, premature. Oral arguments were heard by Judge Ginsburg, Judge Sentelle, and Judge Tatel. 143 The court has not indicated when it will rule. It would be fair to mention that courts, especially the Supreme Court, have a tendency to grant significant deference to the Executive Branch when deciding issues of national security.144 However, that level of deference has been waning somewhat in recent years in connection with Supreme Court decisions regarding the war on terror.145

In addition to the APA challenges filed by EPIC, a lawsuit has been filed by two Harvard law students, Jeffrey Redfern and Anant Pradhan, who are seeking to have full-body scanners and enhanced pat-downs declared unconstitutional under the Fourth Amendment.¹⁴⁶ The case has been filed in the United States Dis-

¹⁴⁰ See Elec. Privacy Info. Ctr., EPIC v. DHS, http://epic.org/privacy/ body scanners/epic v dhs suspension of body.html.

¹⁴¹ Pet'r Opening Br., Nov. 1, 2010.

Elec. Privacy Info. Ctr. v. Napolitano, No. 10-1157 (D.C. Cir. filed July 2, 2010) (Order Granting Motion to Extend Time to File Brief). EPIC has also posted all litigation documents on its Internet webpage dedicated to this lawsuit. See http://epic.org/privacy/body_scanners/epic_v_dhs_suspension of body.html.

See Circuit Court of Appeals for the D.C. Circuit, Sixty Day Public Calendar from 9/13/2010 through 4/18/2011, available at http://www.cadc.us courts.gov/internet/sixtyday.nsf/fullcalendar?OpenView&count=1000.

¹⁴⁴ See, e.g., Dep't of the Navy v. Egan, 484 U.S. 518 (1988) (showing deference to an Executive Branch decision to revoke the security clearance of a civilian employee of the Navy).

¹⁴⁵ See David Sloss, Judicial Deference to Executive Branch Treaty Interpretations: a Historical Perspective, 62 N.Y.U. Ann. Surv. Am. L. 497, 489 (2007); see also Hamdan v. Rumsfeld, 548 U.S. 557 (2006).

¹⁴⁶ Don Jeffrey, U.S. Sued by Harvard Law Students over Airport Scans, Pat-Downs, Bloomberg Businessweek, Dec. 2, 2010, http://www.business week.com/news/2010-12-02/u-s-sued-by-harvard-law-students-over-airport-scans-pat-downs.html.

trict Court for the District of Massachusetts, seeking a declaration that FBSs are violative of the Fourth Amendment and an injunction preventing TSA from continuing to use FBSs at airports. 147 Both Redfern and Pradhan were subjected to enhanced patdowns when they declined a FBS screening while traveling on separate flights in November 2010.¹⁴⁸ The two students detailed their encounter with the enhanced pat-down in their complaint, calling the process "highly intrusive." 149

The lawsuits by EPIC and the Harvard law students are not the end of the litigation involving full-body scanners. Other cases have been filed in various federal district courts, all challenging TSA's use of full-body scanners and enhanced pat-downs. 150 In addition to the declaratory and injunctive suits currently pending against TSA, a lawsuit has been filed for monetary damages that allegedly resulted from an incident at Richmond International Airport.¹⁵¹ Aaron Tobey was arrested there when he removed his shirt before going through a FBS to reveal he had written part of the text of the Fourth Amendment on his chest.¹⁵² Though charges against him for disturbing the peace were dropped, he brought a civil rights lawsuit against both TSA and the Richmond Airport Police for violations of his First, Fourth, and Fourteenth Amendment rights.¹⁵³ The claims against TSA are for free speech violations, while the claims against the Richmond Airport Police involve unreasonable search and seizure, unlawful arrest, and false imprisonment.¹⁵⁴ The lawsuit, filed in federal court, seeks monetary, declarative, and injunctive remedies from all de-

¹⁴⁷ Redfern v. Napolitano, No. 10-cv-12048 (D. Mass. filed Nov. 29, 2010).

¹⁴⁸ Jeffrey, supra note 146.

¹⁴⁹ Id. For a copy of the complaint, see http://images.universalhub.com/ images/2010/tsa-complaint.pdf. TSA has since moved to dismiss the suit for lack of jurisdiction. A hearing on the motion was held in April 12, 2011, with the judge reserving a ruling, opting to take the motion under advisement.

See Christopher Elliott, Lawsuits Against TSA are Piling Up Quickly, Consumer Traveler, Dec. 3, 2010, http://www.consumertraveler.com/ today/lawsuits-against-tsa-are-piling-up-quickly.

See Press Release, The Rutherford Institute, Rutherford Institute Files Free Speech Lawsuit Over Student Arrested for Removing Shirt, Displaying 4th Amendment in Protest of Airport Scanners (Mar. 10, 2011), available at http://www.rutherford.org/articles db/press release.asp?article id= 889.

¹⁵² *Id*.

See Compl. Tobey v. Napolitano, No. 11-cv-00154 (E.D. Va. filed Mar. 9, 2011).

fendants for the alleged constitutional violations. 155 It seems certain that TSA will have its hands full in the coming months and years defending full-body scanners and pat-downs against legal challenges in federal courts.

Lawsuits, however, are not the only means by which to assess a particular subject. In addition to the pending litigation regarding FBSs, a bill has been introduced in the New Hampshire legislature that would deem "the touching or viewing with a technological device of a person's breasts or genitals by a government security agent without probable cause a sexual assault."156 If enacted, this measure would prevent TSA officers at airports in New Hampshire from using FBSs or conducting enhanced patdowns without satisfying the requirements of probable cause. 157 An officer in violation of this law would be required to register as a sex offender in New Hampshire. 158 There is no sure way to predict what kind of support this bill will ultimately obtain in the legislature, or whether it would survive federal preemption should it be enacted into law, but the mere fact that it has been proposed lends credence to the thought that the consternation felt by passengers is not falling on the deaf ears of lawmakers.

In addition to the judicial and legislative actions that will inevitably impact this issue, public opinion also can have a strong impact, especially when the political branches of government are involved. The next Part briefly discusses the public reaction to full-body scanners.

IV. Public Opinion Regarding Full-Body Scanners

Public opinion regarding FBSs, especially as of late, has been the subject of increased media coverage and scrutiny. TSA relies heavily on both internal and external polling numbers to claim on its Internet website that public opinion overwhelmingly supports the use of FBSs. 159 Nevertheless, certain passenger advocacy groups, along with airline pilots' unions and others, have launched campaigns within the last few months in the hopes of

¹⁵⁵ *Id*.

¹⁵⁶ H.B. 628-FN, 162nd Leg., Reg. Sess. (N.H. 2011).

¹⁵⁸ Id.

¹⁵⁹ See TSA, Advanced Imaging Technology, More Information, http://www. tsa.gov/approach/tech/ait/reading.shtm.

changing public opinion regarding the use of FBSs and enhanced pat-downs at airports.

TSA quotes several pieces of polling data to claim that passengers overwhelmingly concur with the use of FBSs for security purposes. TSA initially supposes that ninety-nine percent of passengers choose to be screened using an FBS rather than undergo a pat-down. 160 TSA does not detail how it reached this "consensus" by travelers, but the agency cites several independently conducted polls and studies to support its position that FBSs are widely accepted by travelers. 161 TSA proffers five independent polls which show that at least seventy-three percent of passengers accept FBSs. 162 In a poll conducted by Gallup, seventy-eight percent of respondents indicated that they approve of full-body scanners at airports. 163 This same poll, however, also found that seventy percent of respondents are more uncomfortable with the enhanced pat-down procedure than full-body scans.¹⁶⁴ Gallup also discovered a gap between the genders in acceptance of FBSs. Forty-one percent of women, compared to only twenty-six percent of men, find FBSs to be uncomfortable. 165

It appears, however, that TSA may have slanted the results of these polls to support its own position. In one poll relied upon by TSA to show acceptance of FBSs, the two questions posed to passengers were "Should Airports Use Full-Body X-ray Machines?" and "Is Ethnic Profiling at Airports Justified?" 166 The questions asked did not implicate the respondent's desire to be scanned using a FBS, but merely asked whether airports should have the devices. The poll conducted by Travel Leader also asks a ques-

¹⁶⁰ TSA, Advanced Imaging Technology, http://www.tsa.gov/approach/tech/ ait/index.shtm.

¹⁶¹ TSA, *supra* note 159.

¹⁶² TSA has provided links to independent reports conducted by CBS, Gallup, Trip Advisor, and Travel Leader, all of which indicate favorable thoughts towards FBSs. See TSA, Advanced Imaging Technology, More Information, http://www.tsa.gov/approach/tech/ait/reading.shtm. also Part IV, infra.

Jeffrey Jones, In U.S., Air Travelers Take Body Scans in Stride, GALLUP, Jan. 11, 2010, http://www.gallup.com/poll/125018/Air-Travelers-Body-Scans-Stride.aspx.

¹⁶⁴ *Id*.

¹⁶⁵ Id.

See CBS News Poll: 11/15/10, Complete Data and Questions on the CBS News Poll on Airport Security, Nov. 15, 2010, http://www.cbsnews.com/ stories/2010/11/15/politics/main7057902.shtml?tag=contentMain;content Body.

tion not directed at the passenger's personal feelings about undergoing a full-body scan, merely whether airports should have them.¹⁶⁷ In actuality, only two of the polls TSA relies upon asked respondents about their personal apprehensions concerning being subjected to a FBS. Further, none of the polls relied upon by TSA discussed with respondents any hypothetical "third option" in airport screening. If respondents were given a chance to choose an option that was neither the FBS nor the pat-down, the results might not be as strong for TSA's position. Overall, to say that TSA has misstated the poll results might be an understatement.

The polls, on their own, cannot be the marker for the overall acceptance of FBSs by the public. Since passengers are not the only people being subjected to FBSs and pat-downs, the opinions and thoughts of a more discrete group must be considered: airport and airline employees and, more specifically, pilots. Two highprofile pilots' unions have spoken out against FBSs, imploring their members not to submit to these scans. David Bates, president of the Allied Pilots Association, the union representing over 11,000 American Airlines pilots, said "[i]t's safe to say that most of the APA leadership shares my view that no pilot at American Airlines should subject themselves to the needless privacy invasion and potential health risks caused by the [full] body scanners."168 The union representing over 5,000 pilots of US Airways also has urged its members to decline FBS screenings, further citing privacy and health risks. 169 Union leaders encouraged their pilots to request private pat-down screenings, with a witness present, to avoid unnecessary anxiety by onlooking passengers who might get upset at seeing the person about to pilot their aircraft in such a compromising situation.¹⁷⁰ One pilot has even described a recent pat-down as "sexual molestation."171

See George Dooley, Travel Leaders Study: Consumers OK with Airport Security, Travel Agent Central, Apr. 8, 2010, http://www.travelagent central.com/airline-policies/travel-leaders-study-consumers-ok-airport-security-20779.

¹⁶⁸ Marine Hunter, Pilots Urged to Avoid Body Scanning (CNN television broadcast Nov. 12, 2010), http://www.cnn.com/2010/TRAVEL/11/11/pilots.body.scanning/index.html?hpt=T2 (quoting David Bates).

¹⁶⁹ Id.

¹⁷⁰ Id.

¹⁷¹ Id.

The vocal concerns and active lobbying by the pilots' unions has led TSA to change its policy regarding flight crews being subjected to FBS screenings and pat-downs. On the eve of a potentially chaotic Thanksgiving 2010 holiday travel weekend, TSA altered its rules to exempt pilots from both full-body scans and pat-downs, so long as they present two forms of photo ID (one being their airline-issued credential) and pass through the metal detector.¹⁷² Assuming that the pilots' identification matches with a national database, they will be allowed to skip the scans and pat-downs.

The polls aside, passengers have been reacting vehemently against FBSs and enhanced pat-downs across the nation. Passengers have referred to these invasive procedures as "strip-searching" or "body groping." 173 U.S. Travel Association, a public interest group aimed at increasing travel to and from the United States, stated it had received over 1,000 email and telephone complaints from passengers within one week of TSA implementing the new pat-down procedures.¹⁷⁴ Therefore, while the statistical data may appear to support the idea that passengers accept FBSs, there is a very outspoken and powerful segment of the flying public, using the news media and Internet to get their message out that they do not accept FBSs as a means of airport security.

V. Recommendations for Change

This paper is not intended merely to argue for the unconstitutionality of FBSs, but to offer recommendations for change to bring full-body scans and other airport security measures into compliance with the Constitution. First, full-body scanning must be made completely optional for all passengers; optional to the extent that passengers have the choice of proceeding through a scan and possibly expediting their journey through security, or proceeding to the standard walk-through metal detector. Second, TSA cannot render a person automatically suspect for refusing a

¹⁷² David Koenig, US Pilots to be Exempt from Intrusive Screening (ABC News television broadcast Nov. 20, 2010), http://abcnews.go.com/Travel/ wireStory?id=12199048.

¹⁷³ Adam Geller, TSA at the 'Tipping Point': Passenger Anger at Airport Patdowns Threatens to Boil Over, Huffington Post, Nov. 21, 2010, http:// www.huffingtonpost.com/2010/11/21/tsa-pat-downs-passenger-anger_n_ 786493.html.

¹⁷⁴ *Id*.

full-body scan and thus subject them to an enhanced pat-down. Enhanced pat-downs should be reserved only for passengers who either alarm through the metal detector or who proceed through the FBS but trigger an unidentified anomaly. Only those passengers for whom TSA can provide articulable grounds to satisfy the standard of reasonable suspicion should be subjected to an enhanced pat-down. Third, passengers under the age of majority should be automatically exempt from full-body scans and enhanced pat-downs. TSA should create an alternative method of screening young fliers in order to avoid uncomfortable, inappropriate, and potentially unlawful situations. Fourth, TSA should work more closely with passenger advocacy groups to regularly and actively seek their input before implementing new security procedures. Finally, TSA should revisit the cost-benefit analysis of FBSs, weighing the overall operational costs of the scanners against provable and quantitative data supporting their effectiveness. These suggestions offer a balance which would allow TSA to continue to use FBSs as a method for airport security in furtherance of its mission, but also provide the necessary constitutional safeguards to passengers and rein in some of the agency's practices, which often are seen as reactionary, rather than proactive.175

Conclusion

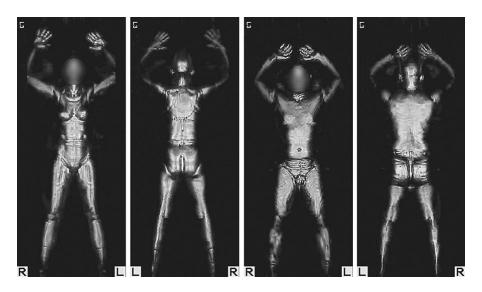
Air travel is not what it used to be; much of the elegance, the dedication to the passenger, and the stress-free environment that air travel once offered is gone. Today, traveling by air generally means crowded flights, long check-in lines, and fees for seemingly everything. Airport security is no exception. The days of passengers, and the general public, being allowed to enter airport concourses with ease have been done away with. Now, concourses are restricted to ticketed passengers, and only after they submit to potentially invasive and hostile security checks. Passengers are forced either to acquiesce to an unreasonable scan that is able to reveal to an unseen stranger the most intimate parts of the human body, or be subjected to a pat-down that has been termed by some as molestation. These options are anything but reasonable and far from constitutional. Until TSA implements changes at airport checkpoints to afford passengers more dignity and pri-

vacy, inappropriate and potentially unlawful incidents will undoubtedly occur. An even more frightening thought looms: If this is what TSA does now, how will they respond to the next attempt by a terrorist to launch an attack using an aircraft?

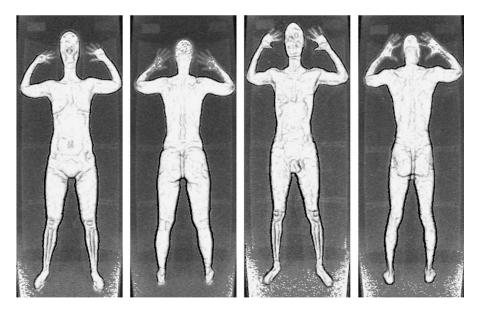
Appendix I

Released Examples of FBS Images

Millimeter Wave Image

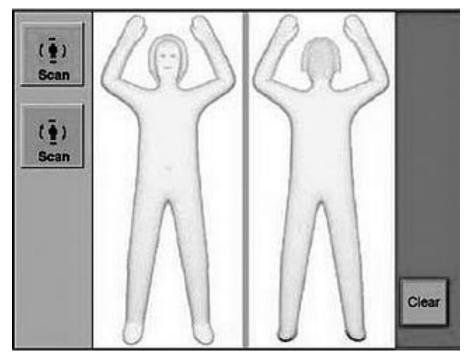


Backscatter Image



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Appendix II New Software for FBS Images Currently Being Tested



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