Before the
TRANSPORTATION SECURITY ADMINISTRATION
Arlington, V.A., 22202

In the Matter of	)	
Notice of Proposed Rulemaking	)	Docket No. TSA–2013–0004
For Passenger Screening Using	)	
Advanced Imaging Technology	)	
	)	

COMMENTS OF THE COMPETITIVE ENTERPRISE INSTITUTE AND ROBERT L. CRANDALL FORMER CHAIRMAN & CEO OF AMR AND AMERICAN AIRLINES

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1. Executive Summary

The Competitive Enterprise Institute (CEI) is a non-profit, non-partisan public interest organization dedicated to promoting consumer well-being by empowering individuals to make their own choices in a free market. Founded in 1984, CEI participates in cases involving civil liberties, public safety, overregulation, and governmental checks and balances.[1] CEI also filed an *amicus curiae* brief on behalf of a diverse coalition of organizations and individuals in the judicial proceeding that led to TSA's publication of the proposed rule.[2]

Robert L. Crandall is the former Chairman and CEO of AMR and American Airlines, and a current frequent flyer.

On March 26, 2013, TSA proposed a rule regarding passenger screening using advanced imaging technology after a federal appeals court ordered the agency to do so in 2011. In conducting this rulemaking, however, TSA has flouted the 2011 court order by proposing a rule that does not comport with the federal law that governs agency rulemaking. TSA has also failed to demonstrate that the proposed rule's benefits exceed its considerable costs.

2. Argument

a. Agencies Must Conduct Notice-and-Comment Rulemaking Before Imposing Substantive New Regulations Under Administrative Procedure Act

The Administrative Procedure Act ("APA") governs how administrative agencies of the United States federal government create regulations.[3] In general, when an agency seeks to regulate, it must engage in the rulemaking process described by section 553 of the APA.[4] Under Section 553, an agency must, among other things, publish a notice of its proposed rulemaking in the Federal Register and accept written comments from interested persons

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[1] *See Competitive Enterprise Institute v. NHTSA*, 956 F.2d 321 (D.C. Cir. 1992) (challenge to agency rule that ignored impact on safety); *Free Enterprise Fund v. Public Co. Accounting Oversight Bd.*, 130 S.Ct. 3138 (2010) (co-counsel for petitioners); *Sackett v. EPA*, 132 S.Ct. 1367, 1375 (2012) (citing CEI *amicus* brief).

[2] Brief for Competitive Enterprise Institute et al. as Amici Curiae Supporting Petitioner, *In re EPIC* (D.C. Cir. July 19, 2012) (No. 12-1307), *available at* http://cei.org/sites/default/files/CEI%20TSA%20Amici%20Brief%20in%20Support%20of%20EPIC's%20Petition%20for%20Writ%20of%20Mandamus.pdf.

[3] 5 U.S.C. §§ 551-59 (2012) [hereinafter APA].

[4] 5 U.S.C. § 553 (2012).

about the rulemaking.[5] The agency must take these comments into consideration before adopting a final rule.[6]

Not all agency actions are subject to the APA's rulemaking requirements. In general, an agency's "interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice" are exempt from the rulemaking requirement.[7] An agency may also forgo APA rulemaking when it finds "for good cause . . . that notice and public procedure [about a proposed regulation] are impracticable, unnecessary, or contrary to the public interest."[8]

When an agency seeks to make new substantive rules that will bind the general public, however, it must follow the APA's procedural requirements.[9] An agency's substantive, "legislative-type" rules "affect[] individual rights and obligations" and thus have "the force of law."[10] Conversely, an agency's "interpretive" rules "merely remind[] parties of existing duties," while statements of general policy enable agencies to announce their "tentative intentions for the future without binding themselves."[11]

b. When TSA Commenced AIT Scanning of Passengers, It Exercised Quasi-Legislative Authority Without Following APA's Rulemaking Requirements

In July 2011, the U.S. Court of Appeals for the District of Columbia Circuit ordered the Transportation Security Administration ("TSA") to "promptly" commence APA rulemaking regarding the agency's use of Advanced Imaging Technology ("AIT") scanners in U.S. airports.[12] The appeals court held that when TSA announced plans to deploy AIT scanners in airports nationwide,[13] the announcement "purport[ed] to bind"

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[5] *Id.* § 553(b)-(c)

[6] *Id.* § 553(c)

[7] *Id.* § 553(b)(A)-(B)

[8] *Id.*

[9] *Chrysler Corp. v. Brown*, 441 U.S. 281, 302 (1979) (holding that agencies must conform with Congress's procedural requirements when exercising quasi-legislative powers pursuant to statutory authority); *Am. Hosp. Ass'n v. Bowen*, 834 F.2d 1037, 1044 (D.C. Cir. 1987).

[10] *Chrysler Corp.*, 441 U.S. at 302 (citing *Morton v. Ruiz*, 415 U.S. 199, 232-36 (1974)).

[11] *Am. Hosp. Ass'n*, 834 F.2d at 1046 (citing *Pacific Gas & Electric Co. v. FPC*, 506 F.2d 33, 38 (D.C.Cir.1974) (internal quotations omitted)).

[12] *EPIC v. DHS*, 653 F.3d 1, 12 (D.C. Cir. 2011), *available at* http://www.cadc.uscourts.gov/internet/opinions.nsf/B3100471112A40DE852578CE004FE42C/$file/10-1157-1318805.pdf.

[13] *See* Joe Sharkey, *Whole-Body Scans Pass First Airport Tests*, N.Y. TIMES, Apr. 7, 2009, at B6,

the traveling public.[14] Rules that bind the public are by definition substantive and "legislative." [15] Therefore, because TSA's plans to implement AIT scanners appeared to bind the public, the agency should have conducted notice-and-comment rulemaking pursuant to the APA, yet failed to do so.[16] TSA argued that its statement regarding AIT scanners was procedural, or alternatively, either an interpretive rule or a general statement of policy—and, therefore, exempt from the APA's rulemaking procedure. But the court disagreed, concluding that the AIT rule constituted a substantive legislative rule.[17]

In an attempt to comply with the D.C. Circuit's 2011 order, TSA published a notice of proposed rulemaking ("NPRM") in the Federal Register on March 26, 2013 regarding passenger screening using advanced imaging technology.[18] TSA proposed adding the following language to its current passenger screening regulations at 49 C.F.R. Part 1540.107:

> (d) The screening and inspection described in (a) may include the use of advanced imaging technology. For purposes of this section, advanced imaging technology is defined as screening technology used to detect concealed anomalies without requiring physical contact with the individual being screened.[19]

This brief, open-ended proposal is a far cry from the clear, informative rule the D.C. Circuit ordered TSA to promulgate.

c. TSA's Proposed Rule Merely Restates a Vague Principle Without Notifying Passengers of Their Rights and Obligations

When the D.C. Circuit ordered TSA to conduct this rulemaking, the court emphasized that "the purpose of the APA would be disserved if an agency with a broad statutory command . . . could avoid notice-and-comment rulemaking simply by promulgating a comparably broad regulation . . . and then invoking its power to interpret that statute and

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available at http://www.nytimes.com/2009/04/07/business/07road.html.

[14] *Id.* at 7-8 (citing *Gen. Elec. Co. v. E.P.A.*, 290 F.3d 377, 383-84 (D.C. Cir. 2002)).

[15] *Am. Hosp. Ass'n*, *supra* n. 9, at 1046.

[16] *EPIC, supra* n. 12, at 12.

[17] *Id.* at 5.

[18] Passenger Screening Using Advanced Imaging Technology, 78 Fed. Reg. 18287-302 (proposed Mar. 26, 2013) (to be codified at 49 C.F.R. Part 1540) [hereinafter NPRM], *available at* http://www.regulations.gov/contentStreamer?objectId=0900006481245267&disposition=attachment&contentType=pdf.

[19] *Id.* at 18296.

regulation in binding the public to a strict and specific set of obligations."[20]

Yet TSA's proposed rule does little to cure the defect identified by the court. Rather, the rule leaves passengers uncertain as to whether AIT screening is mandatory and as to which technologies TSA might someday deploy. Consider the proposed rule's single-sentence definition of advanced imaging technology (AIT): a "screening technology used to detect concealed anomalies without requiring physical contact with the individual being screened." [21]

This definition of AIT encompasses myriad technologies, including not only millimeter-wave and backscatter scanners[22]—the two "whole-body imaging" technologies the TSA has deployed throughout U.S. airports in recent years—but also every other tool, extant or otherwise, that screens passengers without making physical contact with them. A magnetometer (metal detector) also meets TSA's definition of AIT, as the device can detect whether a passenger has a metallic object on their person.[23]

Why isn't this "pat down" option mentioned in the Code of Federal Regulations?

AIT also includes "trace-detection portals," colloquially known as "puffers," which blow air on passengers to search for explosives ("concealed anomalies").[24] Puffer units are far less invasive than whole-body imaging scanners, as they do not reveal any aspects of passengers' bodies beyond the presence of explosives (or lack thereof). From 2004 to 2006, TSA deployed 94 puffer units in 37 airports, but phased out the units in 2008 due to insufficient reliability and effectiveness.[25] Yet from the

[20] *EPIC*, *supra* n. 12, at 10.

[21] NPRM, *supra* n. 18, at 18296.

[22] *Id.* at 18294-95 (explaining millimeter wave and backscatter units).

[23] *See, e.g.,* Blogger Bob, *Advanced Imaging Technology Off To a Great Start* [sic], TSA Blog (Apr. 20, 2010), *at* http://blog.tsa.gov/2010/04/advanced-imaging-technology-off-to.html.

[24] Eric Lipton, *Screening Tools Slow to Arrive in U.S. Airports*, N.Y. Times, Sep. 3, 2006, *at* http://www.nytimes.com/2006/09/03/us/03research.html.

[25] JOINT MAJORITY STAFF REPORT, 112TH CONG., AIRPORT INSECURITY: TSA'S FAILURE TO COST-EFFECTIVELY PROCURE, DEPLOY AND WAREHOUSE ITS SCREENING TECHNOLOGIES 6 (May 9, 2012),

traveling public's perspective, TSA's proposed rule offers absolutely no guidance as to whether they will be subjected to puffers, magnetometers, whole-body imaging screeners, or any other distinct screening technology the agency might conceive.

In this proceeding, TSA proposes a "broad regulation."[26] Yet the agency also maintains a comprehensive set of policies detailing the nature of the scanners deployed at airports and the screening options from which passengers may select when entering an airport security checkpoint.[27] For example, the TSA website and signs posted near airport security checkpoints suggest that passengers may "opt out" of backscatter or millimeter wave screening, and instead opt for pat-down screening. The proposed rule, however, makes no mention of this "opt out" option. As the D.C. Circuit held, however, it is impermissible for TSA to promulgate an indefinite rule through APA rulemaking and subsequently adopt explicit policy statements and interpretive rules that outline passengers' obligations when traveling.[28]

d. TSA Fails to Justify its Proposed Rule on Risk-Based and Cost-Benefit Grounds

TSA purports to comply with federal requirements under which an agency may "propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs."[29] Although TSA rightfully factors the fiscal costs of deploying whole-body imaging (WBI) scanners into the aggregate cost estimate of the proposed rule, the agency omitted many other crucial elements of a proper cost-benefit analysis. For instance, the NPRM's assessment of costs associated with WBI scanner deployment exclusively considers accounting costs, while it ignores opportunity costs.[30] Accounting costs refer to mere expenses such as labor and equipment; opportunity costs, also known as economic costs, refer to the value of best alternative not undertaken in a given effort.

Nowhere does TSA attempt to estimate relevant economic costs of the NPRM, including

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available at http://oversight.house.gov/wp-content/uploads/2012/05/5-9-2012-Joint-TSA-Staff-Report-FINAL.pdf.

[26] *See generally* NPRM, *supra* n. 18; *see also EPIC*, *supra* n. 12, at 10.

[27] *See* Bob Burns, *Opting Out of AIT (Body Scanners)*, TSA Blog (Nov. 19, 2012), *at* http://blog.tsa.gov/2012/11/opting-out-of-ait-body-scanners.html.

[28] *See generally EPIC*, *supra* n.12.

[29] NPRM, *supra* n. 18, at 18297 (citing Executive Order (E.O.) 12866, Regulatory Planning and Review (58 Fed. Reg. 51735, Oct. 4, 1993), as supplemented by E.O. 13563, Improving Regulation and Regulatory Review (76 Fed. Reg. 3821, Jan. 21, 2011)).

[30] NPRM, *supra* n. 18, at 18299.

costs stemming from passengers shifting from relatively safe modes of transportation to less safe ones—*e.g.*, from airliners to automobiles—due to the onerous security practices, time-consuming waiting lines, and missed flights that WBI scanners exacerbate.

TSA claims it has done its due diligence with respect to risk management. But, as the agency notes in the NPRM, "the results of TSA's risk-reduction analysis are classified."[31] To be sure, we recognize that TSA rightfully wishes to classify certain sensitive aspects of WBI scanners. But this does not justify the agency's refusal to release a redacted version, or at least a summary, of its risk-reduction analysis of WBI deployment. In proposing this rule, TSA is obligated to disclose whether WBI scanners are cost-effective in reducing risk, given that the invasiveness of WBI scanners and other security procedures are likely causing potential flyers to take to the far more deadly roads, which has led to an estimated 500 additional annual road fatalities due to this modal substitution.[32]

Professors John Mueller of Ohio State University and Mark G. Stewart of the University of Newcastle in Australia are noted experts in the subjects of aviation security risk management and cost-benefit analysis. In 2011, Oxford University Press published a book by Professors Mueller and Stewart, *Terror, Security, and Money: Balancing the Risks, Costs, and Benefits of Homeland Security*, in which Mueller and Stewart analyze the economics of TSA's passenger screening policies.

In the NPRM, TSA estimates the multi-year "2012-2015 total [WBI]-related costs will be approximately $1.5 billion (undiscounted), $1.4 billion at a three percent discount rate, and $1.3 billion at a seven percent discount rate"[33]—in other words, TSA's WBI cost estimate averages $375 million per year. Mueller and Stewart in their 2011 book provide an estimate of $1.2 billion annually.[34] A 2012 Congressional Research Service study confirms Mueller and Stewart's cost estimate.[35]

The discrepancy between TSA's cost estimate and recent independent estimates appears to largely be explained by assumptions related to the quantity of WBI scanners actually deployed in airports. Mueller and Stewart correctly note that WBI passenger screening

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[31] *Id.*

[32] John Mueller and Mark G. Stewart, *Terror, Security, and Money: Balancing the Risks, Costs, and Benefits of Homeland Security*, New York: Oxford University Press, 2011, at 148 (citing Garrick Blalock et al., *The Impact of Post-9/11 Airport Security Measures on the Demand for Air Travel*, 50 J. LAW. ECON. 731-755 (2007)).

[33] NPRM, *supra* n. 18, at 18289.

[34] Mueller and Stewart, *supra* n. 32, at 148.

[35] Bart Elias, "Airport Body Scanners: The Role of Advanced Imaging Technology in Airline Passenger Screening," *CRS Report for Congress* R42750, Washington, D.C.: Congressional Research Service, Sep. 20, 2012, at 3.

would only be effective if TSA fully deploys 1,800 AIT scanners in all airport general passenger screening lines, as a potential terrorist intent on downing an airliner with body-borne explosives would need only to observe which airports or security areas lack WBI scanners to defeat the security measure. The significantly lower cost estimates contained in the NPRM fail to include an estimate of the number of WBI scanners TSA anticipates will be deployed, while other assumptions are neither explained nor even referenced by TSA in the NPRM or RIA.

After reviewing the literature, Mueller and Stewart concluded that (1) the expected cost of a successful attack that brings down an airliner is $26 billion,[36] and (2) universal deployment of WBI scanners reduces by an additional 8.6 percent the likelihood that a terrorist will succeed in downing an airliner with body-borne explosives.[37]

The benefits of WBI, as with any screening device, depend not only on the effectiveness of the technology in detecting threats, but also on the "baseline" annual attack probability—that is, the likelihood that a successful attack will occur in any given year absent WBI deployment. In other words, as the frequency with which terrorists attempt to smuggle body-borne explosives onto airliners increases, so too do the risk benefits of WBI.

To determine whether investing in a proposed safety enhancement passes the muster of a cost-benefit analysis, risk assessments typically employ the following basic equation:

$$(1) \qquad \frac{Cost}{(Damage)(Risk\ Reduction)}$$

Based on Mueller and Stewart's estimate of annual WBI deployment costs ($1.2 billion), their estimated cost of a downed airliner ($26 billion), and the additional airliner loss risk reduction from WBI scanners (8.6 percent), they arrive at the annual attack probability:

$$(2) \qquad \frac{1.2}{(26)(0.086)}$$

$$(3) \qquad \frac{1.2}{2.236} = 0.537 = 53.7\%^{38}$$

In other words, the benefits of deploying WBI scanners justify the costs only if the baseline annual probability of a successful attack (absent WBI scanners) exceeds 53

[36] Mueller and Stewart, *supra* n. 32, at 149.

[37] *Id.* at 151.

[38] *Id.* at 152.

percent—or one downed airliner every two years. This analysis assumes TSA will fully deploy 1,800 WBI scanners, while TSA's cost estimates imply a significantly lower or slower rollout. Taken together, one must conclude the actual risk reduction of WBI deployment is far lower than the above estimate.

However, a doubling of both the estimated average loss of a successful body-borne explosive airliner attack ($26 billion to $52 billion) and the additional airliner loss risk reduction from WBI scanners (8.6 percent to 17.2 percent), the annual likelihood of a successful attack absent WBI scanners would need to exceed 13 percent—or about once every eight years. Outside of two coordinated detonations in the Russian Federation in 2004, there have been no documented successful body-borne explosive attacks bringing down airliners. Given the complete absence of successful body-borne explosive attacks downing airliners in developed countries at any time in history, this revised probability still fails to justify the costs of WBI deployment.

As Mueller and Stewart conclude:

> Since it appears that exceedingly few suicide terrorists with body-borne explosives have planned, yet alone attempted, to board an aircraft anywhere, the likelihood of a successful attack, absent body scanners, is unlikely to be anywhere near one every two years. By this criterion, the scanners fail a cost-benefit analysis quite comprehensively, and the $1.2 billion per year in taxpayer money might be used more productively elsewhere.[39]

Before critical public and independent expert review can take place, TSA must declassify the results of its AIT risk-reduction analysis. Again, references to specific threats or security practices can justifiably be redacted, but withholding the results in their entirety undermines both the legitimacy of the current aviation security regime and the public's right to meaningfully examine the costs and benefits of controversial and consequential technology currently deployed in airports.

3. Conclusion

For the reasons above, TSA should immediately reverse its decision to deploy WBI scanners in airports nationwide. Instead, TSA should adopt regulatory alternative 3,[40] whereby "Walk Through Metal Detectors" remain the primary passenger screening technology, augmented by Explosives Trace Detection. Until TSA is able to show the benefits of WBI exceed its costs, alternative 3 is the only prudent option.

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[39] *Id.* at 152.

[40] NPRM, *supra* n. 18, at 18301.

Respectfully Submitted,

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