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PREVENTING DRUNK FLYING: A LEGISLATIVE SOLUTION

JOHN SIVILS*

I. INTRODUCTION

A FUNDAMENTAL PRINCIPLE OF CRIMINAL LAW is that “citizens must be given fair warning that certain conduct might subject them to criminal sanction.”¹ Despite espousing this principle, courts have taken seemingly clear statutes that criminalize drunk driving and broadened them to the point that one need not be driving—or even in possession of a functioning car—to be convicted of drunk driving.² An intoxicated driver might have enough awareness to pull over and sleep off her buzz instead of putting lives in danger, but that same driver could face the same penalty as if she had been pulled over for swerving between lanes.³

Likewise, criminal flying statutes have been interpreted broadly and counterintuitively, to the point that pilots have been punished for illegally “operating” an airplane when merely performing a preflight inspection,⁴ taxiing the airplane,⁵ or filling the airplane with fuel an entire day before a planned flight.⁶ One unfortunate pilot was found to have been “operating” an

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¹ *United States v. Fitzgerald*, 906 F.3d 437, 448 (6th Cir. 2018).

² *See infra* Section III.

³ *See infra* note 38 (citing cases where the defendant was found guilty of drunk driving after being found asleep in a running car).

⁴ *Fitzgerald*, 906 F.3d at 441.

⁵ *Collins*, 2 N.T.S.B. 1494, 1495–96 (1975).

⁶ *United States v. St. Amour*, 886 F.3d 1009, 1015–16 (11th Cir.), *cert. denied*, 139 S. Ct. 205 (2018).

airplane when the airplane he attempted—and failed—to start was under maintenance and therefore unable to move.⁷

These broad interpretations of “operate” reflect a trend toward judicial imposition of heightened control over non-flight activities surrounding flight. Although there is relatively little caselaw offering broad definitions of “operating” an airplane, there is much scholarly concern and debate surrounding federal preemption of state claims arising from in-flight incidents and non-flight activities. The broadening of the statutory language regulating flights to encompass non-flight activity mirrors the trend of asserting preemption to subject airlines to more regulations and avoiding preemption when it would allow airlines to dodge state tort claims. More precisely, the judicial strategy of broadly interpreting statutes to effectuate policy goals can be better understood as another method of tightening control over aviation, as courts have done by finding federal preemption in some areas of the law and avoiding preemption in others.

Aside from the fact that these broad interpretations of “operating” seem to run afoul of the notice principle,⁸ they also lead to increased criminal punishment of non-flight pilot conduct. There are certainly safety concerns that would lead courts and legislatures to want to discourage dangerous conduct through criminal punishment; however, despite the seemingly logical argument that increased penalties will lead to decreased crime, one must wonder whether the benefits generated from increased penalization, if any, outweigh the costs associated with criminal punishment.⁹ In other words, does judicial tightening of penal control over non-flight activities through preemption and flexible statutory interpretation succeed in effecting legislative public safety goals? And if so, is this approach the best method, especially in light of technology that can detect pilot intoxication without the need of any visible signs?

Congress can easily make the number of drunk flying convictions drop to zero by requiring airlines to test a pilot’s blood-alcohol levels when she arrives for her shift. Pilots with dangerous blood-alcohol concentration (BAC) levels could then be sent home instead of being arrested and prosecuted, giving them no opportunity to endanger airplane passengers while also avoiding the costs of criminal punishment. There is a strong ar-

⁷ Dailey, 3 N.T.S.B. 1319, 1321–22 (1978).

⁸ See *infra* note 59 and accompanying text.

⁹ See *infra* Section IV (for a discussion of the costs of criminal punishment).

gument that overdisciplining pilots by punishing them before they actually put anyone in danger—referred in this Comment as the penal approach—is not as effective or as beneficial to the general public as preventing the crime from happening at all—referred to in this Comment as the impossibility approach. Coming to this conclusion requires: an examination of the judicial rationale for broadening criminal statutes to effectuate the penal approach (Section II); a comparison with similar judicial broadening of statutory language in the context of drunk-driving statutes (Section III); a consideration of the cost of a crime (Section IV); and an overview of the flight process and current regulation of pilots' preflight conduct (Section V). These issues are synthesized in the conclusion that a better method of effectuating the policy goal of air safety is for the federal government to mandate BAC testing of pilots before preflight checks.

II. THE PENAL APPROACH: WHY “OPERATING” DOESN'T ALWAYS MEAN “DRIVING”

On the morning that he was scheduled to fly from Michigan to Massachusetts, airplane pilot Sean Fitzgerald came to work late and “rip-roaring drunk.”¹⁰ Fitzgerald's eyes were bloodshot and his breath reeked of alcohol.¹¹ Thankfully, Fitzgerald was arrested before he ever set the airplane in motion. However, before law enforcement arrived, Fitzgerald “ordered fuel; completed a ‘walkaround’ inspection of the outside of the airplane; and entered the cockpit, where he calibrated the altimeter, programmed the flight-management system, turned on the auxiliary power unit, and requested flight clearance from air-traffic control.”¹² Fitzgerald never turned on the airplane's engines,¹³ nor did any passengers board the airplane.¹⁴

Fitzgerald's behavior led to his conviction under 18 U.S.C. § 342 for operating an aircraft while intoxicated.¹⁵ Fitzgerald appealed his conviction to the United States Court of Appeals for the Sixth Circuit on the grounds that operating a common carrier under this statute should at least require movement of the airplane.¹⁶ Thus, he argued that the broad and flexible defini-

¹⁰ United States v. Fitzgerald, 906 F.3d 437, 440 (6th Cir. 2018).

¹¹ *Id.* at 441.

¹² *Id.*

¹³ *Id.* at 442.

¹⁴ *Id.* at 440.

¹⁵ *Id.* at 441; *see also* 18 U.S.C. § 342 (2012).

¹⁶ *Fitzgerald*, 906 F.3d at 442.

tion adopted by the trial court led to an erroneous jury instruction and, consequently, an erroneous conviction.¹⁷ The Sixth Circuit rejected this argument, holding that a stricter definition requiring passengers aboard, engines on, and movement is “neither textually mandated nor practically sensible.”¹⁸ Thus, in the face of criticism from dissenting Justice Griffin, the court upheld Fitzgerald’s conviction.¹⁹

Recognizing that a word not defined in the statute should be given its “ordinary or natural meaning,” the majority began its *de novo* review with an examination of the plain meaning of “operate” in the context of the statute.²⁰ The court noted that if a text allows for multiple interpretations of a particular word, the court must choose the definition that serves, rather than frustrates, the legislative purpose.²¹ The majority found that any of the dictionary definitions for “operate” are sufficiently broad to encompass Fitzgerald’s preflight activities,²² but it chose to define “operate” as “to run or control” something.²³ Even though Fitzgerald’s actions in isolation were not sufficient to cause the airplane to take flight, they were necessary steps along the way.²⁴ Under this logic, “operating” encompassed Fitzgerald’s preflight activities.

Realizing that such a broad definition needed some limitation so as not to subject every person who comes into contact with a machine to criminal liability,²⁵ the majority added the requirement that “operate” must be interpreted in a way that “accounts for common carriers’ essential movement function.”²⁶ Since “the safe and effective movement of an airplane is not determined by actions taken only after passengers board or the engines start or the airplane moves,” the majority reasoned that Fitzgerald’s preflight actions could be within the scope of “operate.”²⁷ The fact that Fitzgerald’s preflight actions “may actually

¹⁷ *Id.*

¹⁸ *Id.* at 448.

¹⁹ *Id.* at 451.

²⁰ *Id.* at 442–43.

²¹ *Id.*

²² *Id.* at 443.

²³ *Id.*

²⁴ *Id.* at 443–44.

²⁵ *Id.* at 443.

²⁶ *Id.* at 444.

²⁷ *Id.*

directly control the function of the aircraft” added further justification for this definition.²⁸

Finally, the majority considered the safety-related purpose of § 342 to find that definition of “operate” requiring passengers and motion would defeat the purpose of “protect[ing] passengers on common carriers during movement.”²⁹ A narrower reading of operate would lead to the absurd result that “the drunk pilot would have to be traveling down the runway, with human lives strapped into a twenty-ton hunk of metal and fuel, hurtling toward 35,000 feet at 500 miles per hour, before federal law would prohibit his conduct.”³⁰ Such an interpretation would “defang” this law’s ability to effectuate its public safety purpose.³¹

This broad and flexible understanding of the term “operate” is not unique to this case or this statute. As noted by the Eleventh Circuit in a similar case interpreting “operating an aircraft” in the context of 49 U.S.C. § 46306(b)(9), a long line of administrative decisions have consistently held that the term “operating” includes any activity “preparatory or incident to the flight of [an] aircraft.”³² Although *Fitzgerald* and *St. Amour* involve different statutes, the definition of “operate” adopted by both circuits is similarly broad and flexible.³³ In fact, there is likely no functional difference in application of the definitions. This broad, malleable language gives courts and administrative agen-

²⁸ *Id.* at 445.

²⁹ *Id.* at 446–47.

³⁰ *Id.* at 447.

³¹ *Id.* at 447–48.

³² *United States v. St. Amour*, 886 F.3d 1009, 1014 (11th Cir. 2018) (citing *Hise*, 38 C.A.B. 1237, 1237 (1963) (holding that a person was operating an aircraft when he taxied to a tie-down area and stopped the aircraft but kept the engine running); *Ruhland*, 26 C.A.B. 799, 799 (1957) (holding that a person was not operating an aircraft by accidentally starting the engine in a maintenance hangar because he did not have intent to fly); *Dailey*, 3 N.T.S.B. 1319, 1319–20 (1978) (holding that a person was operating an aircraft by attempting to start the engine even though the aircraft was under maintenance and could not move) (affirmed by the Ninth Circuit in *Daily v. Bond*, 623 F.2d 624, 626 (9th Cir. 1980) (per curiam); *Collins*, 2 N.T.S.B. 1494, 1495–96 (1975) (holding that a person was operating an aircraft by taxiing the aircraft); *Pauly*, 2 N.T.S.B. 1369, 1369–71 (1975) (holding that a person was operating an aircraft by attempting to start the aircraft with jumper cables attached to a car)).

³³ *Fitzgerald*, 906 F.3d at 445 (defining “operates” to include pilot actions “directly and proximately linked to actual operational or functional requirements for the flight”); *St. Amour*, 886 F.3d at 1014 (defining “operating” to encompass “any use of an aircraft for the *purpose* of air navigation, including flight itself and actions that are preparatory or incident to flight”).

cies ample power to punish any activity, whether during flight or preflight, that could affect the flight itself.³⁴

Both circuits gave great weight to the perceived policy goal of flight safety in justifying their adoption of broad definitions.³⁵ Although the Eleventh Circuit does not explicitly say as much, its definition of “operating” reflects the Sixth Circuit’s finding that “preflight actions might well dictate the airplane’s movement once the engines are fired up and the plane is in the air.”³⁶ These definitions, although pragmatic, are arguably less logical than the interpretation offered by dissenting Justice Griffin in *Fitzgerald* that preparatory actions only constitute an unpunishable attempt to operate, since the legislature has included other attempt crimes in its aviation legislation yet failed to do so in the statute at issue.³⁷ Although *Fitzgerald* and *St. Amour* deal with different statutes, they share similar language and both lack an attempt provision.

III. COMPARISON TO DRUNK DRIVING

A. AN INTERPRETIVE MESS: DRIVING, OPERATING, AND ACTUAL PHYSICAL CONTROL

Judicial broadening of terms such as “operating” is not unique to aviation statutes. In fact, in the context of drunk-driving statutes, courts across the United States have struggled to define just what kind of activity constitutes “operating” or “driving” a motor vehicle. For example, some courts have held that a defendant can be liable for “operating” a vehicle while intoxicated when the defendant is asleep inside a running car.³⁸ Some

³⁴ *Fitzgerald*, 906 F.3d at 445 (“actions [can] only count as operating if they [are] connected to ‘the flight’ of the airplane.”); *St. Amour*, 886 F.3d at 1015 (“[t]he definitions do not speak in terms of time; they speak only of purpose.”).

³⁵ *Fitzgerald*, 906 F.3d at 448 (finding that a broad definition of “operating” is superior to a restrictive definition because it “would further § 342’s public-safety purpose, not frustrate it.”); *St. Amour*, 886 F.3d at 1014 (finding that a broad definition of “operates” promotes the aims of federal aviation legislation, including “assigning, maintaining, and enhancing safety and security as the highest priorities in air commerce”) (citing 49 U.S.C. § 40404(d)(1) (2012)).

³⁶ See *Fitzgerald*, 906 F.3d at 445.

³⁷ *Id.* at 453 (Griffin, J., dissenting).

³⁸ *Jacobson v. State*, 551 P.2d 935, 938 (Alaska 1976); *State v. Wiggs*, 760 A.2d 148, 150 (Conn. App. Ct. 2000); *People v. Johnson*, 353 N.E.2d 130, 131 (Ill. App. Ct. 1976); *Custer v. State*, 637 N.E.2d 187, 188 (Ind. Ct. App. 1994); *State v. Kendall*, 58 P.3d 660, 666 (Kan. 2002); *State v. Hudson*, 617 So. 2d 83, 85–86 (La. Ct. App. 1993); *People v. Wood*, 538 N.W.2d 351, 353–54 (Mich. 1995); *Cox v. Dir. of Revenue*, 98 S.W.3d 548, 550–51 (Mo. 2003); *State v. Hudson*, 114 P.3d 210, 213 (Mont. 2005); *People v. Totman*, 617 N.Y.S.2d 234, 234 (N.Y. App. Div.

do not even require the engine to be running.³⁹ Conversely, some courts, even courts in states that adopt broad definitions of “operate” for purposes of interpreting drunk-driving statutes, have declined to find “operation” when the defendant was found in the driver’s seat of a parked and running car.⁴⁰ To further complicate the issue, the South Dakota Supreme Court’s decision in *State v. Nekolite* arguably “grants a license to operate a vehicle while drunk, so long as the person is not in the driver’s seat and claims the control was impulsive or involuntary,” while at the same time, it “endorses convicting the intoxicated person who elects to ‘sleep off’ the buzz in the front seat, even when the vehicle has not moved”⁴¹ Thus, jurisdictions that refuse to adopt a bright-line rule (e.g., vehicle motion) for defining “operate” in drunk-driving statutes leave much room for varied, fact-specific, and sometimes conflicting holdings. The only clear, and somewhat counterintuitive, principle that can be gleaned from these cases is that being drunk while close to a vehicle could subject a defendant to liability for drunk driving, even if that defendant is not, as most would understand it, *driving* a vehicle. In fact, the car need not even be turned on for a conviction to lie.

Although all of the above inconsistencies relate to statutes that use “operate,” some legislatures employ terms such as “driving” or “being in actual physical control” for drunk-driving statutes.⁴² The difference in diction is salient, as “it is generally held that the word ‘drive,’ as used in statutes of this kind, usually denotes movement of the vehicle in some direction.”⁴³ However, courts tend to hold that the terms “operating” or “being in actual physical control” give the statutes a “broad scope not lim-

1994); *Garza v. State*, 846 S.W.2d 936, 937 (Tex. App.—Houston [1st Dist.] 1993, writ ref’d).

³⁹ *State v. Conley*, 754 P.2d 232, 236 (Alaska 1988); *Sengchanthong v. Comm’r of Motor Vehicles*, 917 A.2d 942, 946 (Conn. 2007); *State v. Rossignol*, 654 A.2d 1297, 1299 (Me. 1995); *Nelson v. Fischer*, 190 S.W.3d 404, 407–08 (Mo. Ct. App. 2006); *State v. Gill*, 637 N.E.2d 897, 900 (Ohio 1994); *State v. Kingsfield*, 630 N.W.2d 276, 276 (Wis. Ct. App. 2001).

⁴⁰ *State v. Haight*, 869 A.2d 251, 254–56 (Conn. App. Ct. 2005); *Clark v. State*, 611 N.E.2d 181, 181–82 (Ind. Ct. App. 1993); *Wells v. Commonwealth*, 709 S.W.2d 847, 850 (Ky. Ct. App. 1986); *Commonwealth v. Plowman*, 548 N.E.2d 1278, 1280–81 (Mass. App. Ct. 1990).

⁴¹ Kimberly B. McNulty, Comment, “No Hands”: *Reevaluating What Control Is Necessary to Establish Actual Physical Control Following State v. Nekolite*, 61 S.D. L. REV. 280, 309 (2016) (footnotes omitted).

⁴² *Mercer v. Dep’t of Motor Vehicles*, 809 P.2d 404, 412 (Cal. 1991).

⁴³ *Id.* at 411 (quoting *State v. Graves*, 237 S.E.2d 584, 586 (S.C. 1977)).

ited to or dependent on volitional movement of a vehicle.”⁴⁴ Thus, it is not uncommon for a court to construe an “operating” statute as encompassing not only driving but also “acts which engage the machinery of the vehicle that, alone or in sequence, will set in motion the motive power of the vehicle.”⁴⁵

Despite these variations in word usage, some courts still define “driving” expansively. For example, a California court held that a defendant was “driving” a moped even when the defendant was merely pedaling the moped without the motor on.⁴⁶ Other courts have held that a defendant was “driving” a car even when it was inoperable,⁴⁷ and that a defendant was “driving” a car when it was stuck in the mud.⁴⁸ A court in Washington found a defendant guilty of drunk “driving” even when his car was out of gas.⁴⁹ While one might conclude that courts support convictions under these situations based on the assumption that defendants were driving at one point, even though they were not actually driving at the time of being caught, many courts still uphold these convictions “even when it is not apparent the driver had recently been driving.”⁵⁰

B. POLICY CONCERNS FOR BROAD INTERPRETATIONS OF DRUNK-DRIVING STATUTES

In addition to the obvious lack of clarity in the definitions of what activity constitutes “operating” a vehicle, the expansion of criminal liability to non-driving activity suffers from other flaws. One such flaw is that criminalizing non-driving activity under drunk-driving statutes does not encourage drunk drivers to park their cars and sober up, as would a statute narrower in scope.⁵¹ It logically follows that a drunk driver—faced with the decision of either pulling over and waiting to sober up or taking the risk of driving the rest of the way home—may be more inclined to

⁴⁴ *Id.* at 412.

⁴⁵ *Id.* at 411 (quoting *Graves*, 237 S.E.2d at 586).

⁴⁶ *People v. Jordan*, 142 Cal. Rptr. 401, 407 (Cal. App. Dep’t Super. Ct. 1977).

⁴⁷ *People v. David W.*, 442 N.Y.S.2d 278, 279–80 (N.Y. App. Div. 1981).

⁴⁸ *State v. Dubany*, 167 N.W.2d 556, 559 (Neb. 1969).

⁴⁹ *State v. Smelter*, 674 P.2d 690, 693–94 (Wash. Ct. App. 1984).

⁵⁰ *State v. Conley*, 754 P.2d 232, 235 (Alaska 1988); *see also* *City of Cincinnati v. Kelley*, 351 N.E.2d 85, 85–88 (Ohio 1976) (where defendant’s conviction for driving drunk was upheld when he drove downtown sober, parked his car, began drinking, realized he was in no condition to drive, went to his car, called his wife to pick him up, and then slept in his car as he waited for her to arrive).

⁵¹ *See* *Mercer v. Dep’t of Motor Vehicles*, 809 P.2d 404, 414 (Cal. 1991).

try to get home to avoid being arrested for being drunk in a parked car.⁵²

Another flaw is that allowing convictions for drunk driving to lie from non-driving activities unduly prioritizes a state's interest in detecting and preventing drunk driving at the expense of punishing not only those who have committed a crime, but those who *might* commit a crime.⁵³ The effect is a judicially created attempt crime that the legislature did not intend to punish.⁵⁴ After all, “[t]he limitations of a text—what a text chooses *not* to do—are as much a part of its ‘purpose’ as its affirmative dispositions.”⁵⁵ Even if punishing attempted drunk driving would be in line with the legislature's policy goal of ensuring road safety, “purpose cannot be used to supplement a statute's text.”⁵⁶

There may also be legitimate concerns with judicially expanding these statutes to become overinclusive. Some argue that it is better for a statute to be underinclusive, allowing some who engage in unreasonable behavior to avoid suffering punishment, than to be overinclusive to the point that people are punished for engaging in reasonable behavior.⁵⁷ This argument relies on the sentiment that “[i]t is better to free ten guilty defendants than to punish one innocent defendant.”⁵⁸ There is also the principle of fair notice—“the idea that citizens must be given fair warning that certain conduct might subject them to criminal sanction”—that should give pause to judges who wish to stray too far from a clear, commonly understood definition.⁵⁹

While courts purport merely to be attempting to effect the legislature's intent by broadly interpreting drunk-driving statutes that use words such as “operating,”⁶⁰ they may in fact be

⁵² *See id.*

⁵³ *See* United States v. Fitzgerald, 906 F.3d 437, 453 (6th Cir. 2018) (Griffin, J., dissenting).

⁵⁴ *Id.*

⁵⁵ *Id.* at 454 (quoting ANTONIN SCALIA & BRYAN A. GARNER, *READING LAW* 57 (2012)).

⁵⁶ *Id.*

⁵⁷ *See, e.g.*, Douglas N. Husak, *Reasonable Risk Creation and Overinclusive Legislation*, 1 *BUFF. CRIM. L. REV.* 599, 604 (1998).

⁵⁸ *Id.*

⁵⁹ *Fitzgerald*, 906 F.3d at 448 (majority opinion).

⁶⁰ *E.g.*, State v. Conley, 754 P.2d 232, 236 (Alaska 1988) (“the general purpose of our drunk driving laws is to deter persons from driving while under the influence of alcohol or drugs.”); City of Cincinnati v. Kelley, 351 N.E.2d 85, 87 (Ohio 1976) (“The clear purpose of . . . the instant ordinance is to deter persons from

following the historical trend of ratcheting up punishment for drunk driving.⁶¹ Despite alarming rates of fatal car accidents, early enforcement of drunk-driving laws was “lax” and “inconsistent.”⁶² This lax enforcement may have been due to ignorance of the prevalence of drunk driving.⁶³ Moreover, lack of a method for testing BAC made it hard for law enforcement to prove intoxication.⁶⁴ There is also evidence that law enforcement did not consider drunk driving a “real” crime,⁶⁵ perhaps due, at least in part, to the prevailing idea that alcoholism was “more of a disease than a crime.”⁶⁶

Beginning with the federal push to raise the legal drinking age in all states to twenty-one,⁶⁷ social pressure led to increased attempts to apprehend drunk drivers through enforcement efforts such as sobriety checkpoints.⁶⁸ Data show that these were not very effective at actually increasing drunk-driving arrests,⁶⁹ but they were very effective in generating a lot of media attention.⁷⁰ This increased intrusion into driver behavior mirrored the similarly intrusive laws that were passed to ratchet up punishment for drinking, even drinking that bore no relationship to driving.⁷¹ It is no surprise, then, that drinking and driving became a “hot crime” garnering excessive punishment, media attention, and public vitriol.⁷²

Courts clearly consider the severity of drunk driving when issuing opinions.⁷³ Additionally, judicial vitriol toward drunk driv-

being found under circumstances in which they can directly commence operating a vehicle while they are under the influence of alcohol or particular drugs.”).

⁶¹ See Steven Grossman, *Hot Crimes: A Study in Excess*, 45 CREIGHTON L. REV. 33, 33–34 (2011) (“There came a point, however, when reaction turned into over-reaction and remedial measures became excessive.”).

⁶² *Id.* at 36.

⁶³ *Id.* (“[R]esearch into drunk driving did not begin in earnest until after the drunk driving problem was ‘federalized.’”).

⁶⁴ *Id.* at 37.

⁶⁵ *Id.* at 36 (“For example, until the 1990s, the FBI did not even include drunk driving related crimes in the national crime database.”).

⁶⁶ *Id.* at 37.

⁶⁷ *Id.* at 40.

⁶⁸ *Id.* at 43–44.

⁶⁹ *Id.* at 44–46.

⁷⁰ *Id.* at 49–50 (“In the words of U.S. Supreme Court Justice Stevens, ‘[S]obriety checkpoints are elaborate, and disquieting, publicity stunts.’”).

⁷¹ See *id.* at 56–57.

⁷² *Id.* at 42.

⁷³ See, e.g., *State v. Webb*, 274 P.2d 338, 339–40 (Ariz. 1954) (“It appears to us to be even more important for the legislature to prevent operators of cars who are under the influence of intoxicating liquors or who are at the time driving

ing and its potential for danger to the public pervades judicial opinions.⁷⁴ Recognition of drunk driving's dangers is warranted,⁷⁵ but the excessive focus put on drunk driving, driven primarily by interest groups such as Mothers Against Drunk Driving (MADD), has clearly led to a harsher view of drunk driving than crimes of equal or greater danger.⁷⁶ Thus, a person accused of drunk driving will bear the stigma of a heinous crime. This stigma that accompanies a conviction for a hot crime such as drunk driving carries with it many collateral consequences that impact far more people than just the accused.

IV. THE COST OF A CRIME

Despite the seemingly intuitive argument that increased punishment will generally have positive effects (e.g., reduced crime),⁷⁷ researchers warn that conviction and imprisonment bear many collateral consequences on not only the imprisoned but also the families of the imprisoned and the rest of society.⁷⁸

recklessly and in wilful and wanton disregard for the safety of persons or property, from entering upon the highways and into the stream of traffic than to permit them to enter thereon and after a tragic accident has happened to punish them for maiming or causing the death of those who are lawfully in the use of such highways.”) (quoting *State v. Harold*, 246 P.2d 178, 181 (Ariz. 1952)).

⁷⁴ See, e.g., *id.* at 340 (“An intoxicated person seated behind the steering wheel of a motor vehicle is a threat to the safety and welfare of the public.”); *Ebona v. State*, 577 P.2d 698, 701 (Alaska 1978) (“The significant dangers to persons or property that can possibly result when the operator’s capacity to control a motor vehicle is impaired are apparent. A vehicle out of control, even on a relatively deserted street, poses a significant threat to property or individuals in proximity to the vehicle.”).

⁷⁵ See Kelsey P. Black, Note, *Undue Protection Versus Undue Punishment: Examining the Drinking and Driving Problem Across the United States*, 40 SUFFOLK U. L. REV. 463, 463–64 (2007) (“Drunk driving is the nation’s most commonly perpetrated violent crime. Officials approximate that a drunk driver kills two people every hour. In 2003, police arrested one out of every 135 drivers for driving under the influence. In 2004, drunk drivers caused the deaths of thirty-nine percent of individuals involved in fatal motor vehicle accidents.”) (footnotes omitted).

⁷⁶ See Grossman, *supra* note 61, at 57–58. Grossman notes that MADD intervened in the release of low-level, nonviolent offenders from prison to have drunk drivers reclassified as violent offenders, while burglars and drug criminals were set free. *Id.* at 57. Grossman also points out that people who use cell phones while driving are not punished nearly as severely as drunk drivers, despite data showing that distracted driving is more dangerous than driving with a .08 BAC. *Id.* at 58.

⁷⁷ See John Hagan & Ronit Dinovitzer, *Collateral Consequences of Imprisonment for Children, Communities, and Prisoners*, 26 CRIME & JUST. 121, 121 (1999).

⁷⁸ See, e.g., *id.* at 122 (“The most obvious concern is that the effects of imprisonment damage the human and social capital of those who are incarcerated, their families, and their communities, including the detrimental impact of imprison-

For example, people with a criminal record face diminished employment prospects.⁷⁹ If the imprisoned person was contributing to the support of his or her family, then that incarceration causes financial strain on the other members of the family.⁸⁰ If the imprisoned was a parent, his or her imprisonment leaves the remaining parent with less money and time to invest in their children.⁸¹ Financial strain on a family could continue even after release from prison due to the difficulties a convicted criminal faces in finding meaningful employment and in receiving government assistance.⁸² The community of the imprisoned suffers from the loss of a productive worker who can contribute positively to the economy,⁸³ while also having to collectively bear the cost of a higher prison population.⁸⁴

Even general societal stigma, which ordinarily follows criminal conviction,⁸⁵ can have extreme consequences. In this context, stigma is defined as “someone’s reluctance to interact with someone else who has a criminal record.”⁸⁶ One explanation for this reluctance is that most people find crime morally repugnant and thus choose to avoid criminals.⁸⁷ An equally probable expla-

ing parents on their children.”); Michael Pinard, *Collateral Consequences of Criminal Convictions: Confronting Issues of Race and Dignity*, 85 N.Y.U. L. REV. 457, 490 (2010) (citing the following as some of the most prominent collateral consequences of imprisonment in the United States: “exclusion from public or government-assisted housing, employment-related legal barriers, ineligibility for public benefits, and felon disenfranchisement.”); Dorothy E. Roberts, *The Social and Moral Cost of Mass Incarceration in African American Communities*, 56 STAN. L. REV. 1271, 1281 (2004) (“Community harms affect more than the total number of residents who have been incarcerated. Indeed . . . community members other than inmates, including family members, friends, and neighbors of prisoners . . . suffer adverse consequences that flow beyond the prison gates.”).

⁷⁹ Hagan & Dinovitzer, *supra* note 77, at 122.

⁸⁰ *Id.* at 124.

⁸¹ *Id.*

⁸² Pinard, *supra* note 78, at 492–94.

⁸³ See Hagan & Dinovitzer, *supra* note 77, at 134.

⁸⁴ See *id.* at 130 (noting that prison investment “is so extensive that several large states now spend as much or more money to incarcerate young adults than to educate their college-age citizens. From the 1980s through the late 1990s, corrections spending has grown at a faster rate than any other state spending category, with state corrections budgets almost tripling, increasing from \$7 billion in 1986 to more than \$20 billion in 1996.”) (citations omitted).

⁸⁵ Alon Harel & Alon Klement, *The Economics of Stigma: Why More Detection of Crime May Result in Less Stigmatization*, 36 J. LEGAL STUD. 355, 355–56 (2007); see also Eric Rasmusen, *Stigma and Self-Fulfilling Expectations of Criminality*, 39 J.L. & ECON. 519, 520 (1996).

⁸⁶ Rasmusen, *supra* note 85, at 520.

⁸⁷ *Id.* at 521.

nation for this reluctance is that people associate criminal behavior with other undesirable characteristics,⁸⁸ such as low productivity.⁸⁹ Regardless of the reasons for attaching social stigma to criminals, the effect is clear: by imposing social detriments on criminals (e.g., difficulty getting a job), stigma serves as an efficient punishment.⁹⁰ Even when a person's surrounding community does not know of her criminal record, she can still experience self-imposed alienation out of fear that others will discover her identity.⁹¹ Some commentators point out that society may still impose guilt for a crime on the accused even after the accused has been proven innocent.⁹²

The wrongful conviction of Michael Toney illustrates how much of an effect society's perception of a person's guilt can have on that person's life. Despite the fact that Toney was exonerated from a bombing conviction after spending ten years on death row,⁹³ Toney was unable to escape harassment from law enforcement,⁹⁴ unsubstantiated insinuations by the state that Toney was guilty,⁹⁵ and public statements of his guilt by the victim's family.⁹⁶ Even exoneration in a court of law could not save Toney from going to his grave bearing the accusations of guilt of a heinous crime.⁹⁷

Toney's case provides a more extreme example of the possible effects, but the underlying stigma and its effects are still widely prevalent.⁹⁸ For example, the stigma of a drunk-driving

⁸⁸ *Id.*

⁸⁹ *Id.* at 522–23.

⁹⁰ *Id.* at 536–37.

⁹¹ See Note, *Shame, Stigma, and Crime: Evaluating the Efficacy of Shaming Sanctions in Criminal Law*, 116 HARV. L. REV. 2186, 2197–98 (2003).

⁹² See, e.g., Elizabeth S. Vartkessian & Jared P. Tyler, *Legal and Social Exoneration: The Consequences of Michael Toney's Wrongful Conviction*, 75 ALB. L. REV. 1467, 1468 (2012) (noting that, in some circumstances, the public may still question the innocence of an exonerated person).

⁹³ *Id.* at 1482–83.

⁹⁴ *Id.* at 1487.

⁹⁵ *Id.* “[T]he state . . . framed [Toney's] release in terms of a legal technicality and spoke of the need for more time to investigate rather than the fact that, after a review of the evidence, there was no credible evidence that Mr. Toney had committed the bombing.” *Id.* at 1482–83.

⁹⁶ *Id.* at 1486.

⁹⁷ See *id.*

⁹⁸ 42 MICHAEL E. REID & GARY W. LOVE, MISSOURI PRACTICE SERIES: MISSOURI DUI HANDBOOK, at intro. (2017 ed.), Westlaw (database updated Mar. 2017) (noting manifold collateral consequences of a drunk-driving conviction, such as an increase in car insurance premiums, suspension or expulsion from higher education, termination or suspension from employment, loss of a professional li-

conviction significantly affects one's employability. A person seeking employment encounters numerous obstacles once she receives even one conviction.⁹⁹ These take many forms, such as restrictions on granting occupational licenses to convicted criminals and required mandatory criminal background checks.¹⁰⁰ Regardless of the form, the effects of a person's criminal record are clear: that person is barred from the opportunity of obtaining any meaningful employment.¹⁰¹ Inability to gain meaningful employment is detrimental to the convicted's family and the community at large.¹⁰²

In sum, prosecuting one crime impacts far more people than merely the accused. The judiciary must expend resources hearing the case. The government must expend resources on the accused's incarceration. The accused's family must bear the loss of her contributions to the family. And, the accused's criminal record could plague her and her family for the rest of her life.

Additionally, pilots bear unique costs when they acquire a criminal record. One such cost is that these pilots will not be granted security clearance to enter certain secure areas.¹⁰³ Although obtaining employment with a criminal record is already difficult for the general population, pilots seeking commercial airline jobs face additional difficulties due to the competitive pool of candidates.¹⁰⁴ This disadvantage is compounded by the fact that airlines may not want to hire a pilot who may be barred from entering some countries due to her criminal record.¹⁰⁵ Some even warn that convictions such as driving under the influ-

cense, increased difficulty in leaving the country, and loss of child custody rights).

⁹⁹ See Pinard, *supra* note 78, at 492.

¹⁰⁰ *Id.* at 492–93.

¹⁰¹ *Id.* at 493–94.

¹⁰² Hagan & Dinovitzer, *supra* note 77, at 153 (noting that the “less direct but still highly consequential costs of imprisonment, includ[e] the diversion and direction of funds for prisons away from schools and from minority communities, the damaging effects of imprisonment on employment prospects, and the detrimental impact of imprisoning parents on their children.”).

¹⁰³ See *Pilot Careers: Can You Fly with a Criminal Record?*, ALLCleared (Jan. 10, 2018), <https://allcleared.com/blog/pilot-careers-can-fly-criminal-record/> [<https://perma.cc/G4P7-63GE>] (noting that Canada and the United States both may limit pilot access to certain areas based on their criminal records).

¹⁰⁴ See *id.*

¹⁰⁵ See *id.* (noting that a driving under the influence conviction will bar entrance into Canada).

ence (DUI) can be a “job killer.”¹⁰⁶ Since airlines are very wary of pilots that have DUI convictions,¹⁰⁷ they are certainly likely to use extreme caution when considering applicants with convictions for drunk flying.

In light of the massive collateral consequences associated with a pilot’s criminal record, broadening the scope of “operate” in the context of airplane crimes is, at best, an inefficient means of dealing with pilot misconduct and ensuring passenger safety. Even without such costs, common sense teaches that not all cognitively impaired pilots will be prevented from leaving the runway with passengers since, under the current system, breathalyzer tests are only administered if there is reason to believe that the pilot is impaired.¹⁰⁸ A flight crew that is busy with preflight checks may not notice a drunk pilot before they take flight. Moreover, researchers that have studied the relationship between criminal punishment and crime rates have noted that recidivism rates post-incarceration do not conclusively show a decline in criminal activity as a result of imprisonment.¹⁰⁹ Thus, the current system of preventing drunk flying is far from the best.

Pointing out these flaws, however, does not deal with the uncomfortable reality that preflight activities can make or break a flight. As explained below, the demand on pilots to be attentive to every detail long before passengers board the plane may account for the judiciary’s willingness to stretch the meaning of “operate” as far as it can reach.

¹⁰⁶ 6 *Student Pilot Mistakes that Can Ruin a Career*, UPPER LIMIT AVIATION (Aug. 14, 2015), <https://upperlimitaviation.edu/student-pilot-mistakes-that-can-ruin-career/> [<https://perma.cc/A9GQ-N3EH>].

¹⁰⁷ *Id.* (“Prospective employers are very concerned about driving records”); see also *Pilot Careers: Can You Fly with a Criminal Record?*, *supra* note 103 (“Some types of records, such as drug trafficking, DUI and dangerous driving may be considered particularly relevant to [an] application.”).

¹⁰⁸ See 14 C.F.R. § 91.17(c)–(d) (2006).

¹⁰⁹ See, e.g., Hagan & Dinovitzer, *supra* note 77, at 138; Daniel S. Nagin et al., *Imprisonment and Reoffending*, 38 CRIME & JUST. 115, 178 (2009) (“a key finding of our review is that the great majority of studies point to a null . . . effect of the prison experience on subsequent offending.”).

V. THE IMPORTANCE OF REGULATING PILOTS' PREFLIGHT ACTIVITIES

A. THE FLIGHT PROCESS

Many passengers do not realize that a “pilot’s working day does not begin and does not end with his performance in the cockpit.”¹¹⁰ The preflight checklist tends to be the longest checklist for the flight crew, having at times thirty or more steps.¹¹¹ The pilot in command has the final word on whether the aircraft is ready for flight even before getting into the cockpit.¹¹² The Aircraft Owners and Pilots Association (AOPA) calls flight preparation “the most important, yet most underappreciated part of any flight.”¹¹³ After all, preflight inspection is the one time for pilots to verify that all equipment is working properly before having an in-flight emergency.¹¹⁴ The National Transportation Safety Board (NTSB) has found that many aircraft fatalities could be prevented by reasonable preflight inspection,¹¹⁵ including inspection of areas not typically associated with causing improper landing.¹¹⁶ The average flyer likely does

¹¹⁰ *A Pilot’s Shift Starts Long Before the Cockpit*, PILOT CAREER NEWS (Apr. 13, 2012), <https://www.pilotcareernews.com/a-pilot%E2%80%99s-shift-starts-long-before-the-cockpit/> [<https://perma.cc/2HE5-4RSC>].

¹¹¹ *Flight Safety, Discipline and Importance of Checklists*, BAA TRAINING (Sept. 25, 2017), <http://www.baatraining.com/flight-safety-discipline-and-importance-of-checklists/> [<https://perma.cc/2ZLA-DUZA>].

¹¹² *Id.* (“It is stressed that the Pilot in Command is 100% responsible for verifying that the aircraft is perfectly safe to fly before even getting into the cockpit.”).

¹¹³ Dale Smith, *Preflight Precision: Turn a cursory Once-Over of the Airplane into a Proactive Safety Tool*, FLIGHT TRAINING MAG. (Nov. 5, 2004), <https://www.aopa.org/news-and-media/all-news/2004/november/flight-training-magazine/preflight-precision> [<https://perma.cc/YAV7-235P>] (*Flight Training Magazine* is a publication of the AOPA).

¹¹⁴ *Id.*

¹¹⁵ Peter Garrison, *Inadequate Preflight: The NTSB Often Cites Hasty or Neglected Preflight Inspections as an Accident Cause, but Is There More to the Story?*, FLYING MAG. (Dec. 1, 2003), <https://www.flyingmag.com/safety/accident-investigations/inadequate-preflight> [<https://perma.cc/6YMN-8Y4W>]. From the years 1993–2003, “the National Transportation Safety Board . . . used the phrase ‘inadequate preflight inspection’ in the probable causes of 15 fatal accidents.” *Id.*

¹¹⁶ *Id.* (“Other oversights include improperly latched baggage doors; various kinds of protective gear left in place, like pitot covers, control locks and foam air-intake plugs; oil filler or fuel tank caps unsecured; or failure to remove a boarding ladder or a chock. . . . Noteworthy about these causes is the fact that most of them—most especially unlatched baggage doors—should not have prevented the airplane from landing safely; but some pilots, rattled by the unfamiliar, lose control of perfectly flyable airplanes while returning to land.”).

not fully appreciate the amount of time pilots must invest in a single, short flight.

Due to the large number of airplane parts that must be checked on the ground,¹¹⁷ most pilots, regardless of the length of the flight, must arrive at the airport two hours before departure.¹¹⁸ Just like passengers, pilots must undergo security checks to enter the airport.¹¹⁹ Every flight crew must undertake four essential steps to properly prepare for a flight: “medical check, flight data analysis, briefing and aircraft check.”¹²⁰

The medical check is typically just a general examination and blood pressure check; however, a pilot may have to undergo additional tests, such as a blood test, if medical personnel are concerned about the condition of the pilot.¹²¹ Once medical personnel confirm that the pilot and flight crew are mentally and physically fit for flight, the crew undertakes the flight examination and analysis of flight data.¹²² Flight data includes information such as the weather forecast, a map of the flight route, and a landing chart.¹²³ The pilot and the first officer use this data to calculate the necessary amount of fuel.¹²⁴ After briefing the first officer and other personnel, the captain checks the external and internal aircraft systems.¹²⁵ This includes personally checking the engines, tail planes, and exterior for any deformities (e.g., ice formations), all while the airplane is being fueled.¹²⁶ The exterior walk-around check is usually performed by only one pilot.¹²⁷

Four of the most critical mechanical areas that must be checked to ensure flight safety are the “control surfaces, landing gear, engine, and the runup.”¹²⁸ For control surfaces, there is

¹¹⁷ See, e.g., *Functional Check Flight Compendium*, FLIGHT SAFETY FOUND. 24–31 (2016) https://flightsafety.org/files/FCF_Compendium.pdf [<https://perma.cc/P7V4-JKSU>] (last visited Nov. 19, 2019).

¹¹⁸ See *A Pilot’s Shift Starts Long Before the Cockpit*, *supra* note 110.

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ See *id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ John Cox, *Ask the Captain: Standard Procedure for Starting a Flight*, USA TODAY (Aug. 19, 2018), <https://www.usatoday.com/story/travel/columnist/cox/2018/08/19/standard-pilot-procedure-starting-flight/1009100002/> [<https://perma.cc/WZR6-KYA2>] (“One pilot then goes outside to visually inspect the airplane.”).

¹²⁸ Smith, *supra* note 113.

more to check than simply “does it move?”¹²⁹ Many flight accidents are caused by crossed controls (e.g., the control moves in the wrong direction), and scraping sounds during movement can be a sign of mechanical damage.¹³⁰ However, some surfaces, such as the tail’s vertical stabilizer and the antennae, should not move.¹³¹

While checking the landing gear, the pilot is mainly performing a visual inspection for cracks or deformities, as well as ensuring that the plane sits level.¹³² The engine check is the most difficult, but perhaps the most critical, part of the pilot’s preflight procedure.¹³³ The pilot must verify that there are no oil leaks, loose connectors, or other visibly damaged parts.¹³⁴ Further, listening to the engine once it is running can help the pilot identify “fouled plugs, exhaust leaks, a collapsed flame tube, [or] a stuck valve”¹³⁵ Although not every engine will fail outright, resulting in violent shaking and oil on the windshield as the plane loses altitude, if there is an issue, partial power loss from an engine defect could still result in altitude loss.¹³⁶ Once the pilot has landed, it is good practice to reinspect the airplane for the next flight.¹³⁷

Engine failure is not the only risk that preflight procedures can prevent. In certain situations (e.g., in bad weather conditions or at night), a vacuum pump failure or electrical failure can turn into a dire in-flight emergency.¹³⁸ Pilots also must be wary of control failures, although they are unlikely.¹³⁹ Lack of adequate preparation can also result in landing gear failure and

¹²⁹ *See id.*

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.*

¹³³ *See id.*; *see also* *Emergency Procedures*, AIRCRAFT OWNERS & PILOTS ASS’N, <https://www.aopa.org/training-and-safety/online-learning/safety-advisors-and-safety-briefs/emergency-procedures> [<https://perma.cc/Z2Y7-JPX6>] (last visited Aug. 22, 2019) (“[M]ost engine failures don’t just ‘happen.’ There’s a good chance that the engine has been giving hints about its poor health in the hours leading up to the failure. Abrupt changes in oil consumption, unusual engine monitor indications, failure to develop proper static rpm, or unusual noises or vibrations are all worth investigating.”).

¹³⁴ *See* Smith, *supra* note 113.

¹³⁵ *Id.*

¹³⁶ *Emergency Procedures*, *supra* note 133.

¹³⁷ *See* Smith, *supra* note 113 (“Tying down the airplane after a flight is a good time to begin the next preflight.”).

¹³⁸ *See Emergency Procedures*, *supra* note 133.

¹³⁹ *Id.*

weather-related difficulties, but these are typically less risky problems than engine, electrical, or vacuum pump failure.¹⁴⁰

Accident reports from the AOPA illustrate the importance of preflight procedures. For example, in 2001, engine failure caused a pilot attempting to depart from the Santa Monica Municipal airport to re-land on the runway.¹⁴¹ The pilot did not have sufficient runway to come to a complete stop, so the airplane ran “off the end of the runway, vaulted an embankment,” and then landed in a fiery and fatal crash.¹⁴² The NTSB determined that the pilot would not have experienced engine failure if he had removed the control gust lock prior to takeoff.¹⁴³ Although the pilot’s failure to abort the flight sooner also contributed to the tragic accident,¹⁴⁴ a more thorough preflight check would have allowed him to remove the control gust lock and prevent the emergency.

Similarly, in 2017, a Melbourne pilot’s plane failed to ascend properly, resulting in its crashing into a shopping center within ten seconds of takeoff.¹⁴⁵ The cause of the accident was the pilot’s failure to ensure that the plane’s rudder trim tab was not in a neutral position.¹⁴⁶ The Australian Transport Safety Bureau concluded that the pilot had five chances before flight to check the rudder trim tab, but he missed the error because he did not follow his preflight checklist.¹⁴⁷ The deaths of the pilot and his four passengers could have been avoided if he had performed a simple visual check of the rudder trim.

B. METHODS OF PILOT REGULATION

Clearly, due to the relative ease with which fatal failures can be prevented, the legislature has a reasonable motive for regu-

¹⁴⁰ *See id.*

¹⁴¹ *Preflight Check Complete?*, AIRCRAFT OWNERS & PILOTS ASS’N, <https://www.aopa.org/training-and-safety/air-safety-institute/accident-analysis/featured-accidents/epilot-asf-accident-reports-preflight-check-complete> [https://perma.cc/2BP5-RY8U] (last visited Nov. 19, 2019).

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.* (“The NTSB determined the cause of this accident to be the pilot’s failure to remove the control gust lock prior to takeoff and his failure to abort the takeoff with sufficient runway remaining to safely stop.”).

¹⁴⁵ *Essendon DFO Plane Crash Pilot Failed to Complete Checklist*, GUARDIAN (Sept. 23, 2018), <https://www.theguardian.com/world/2018/sep/24/essendon-dfo-plane-crash-pilot-failed-to-complete-checklist> [https://perma.cc/7T53-2CW3].

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

lating who is certified to be a pilot and for imposing criminal and civil penalties for failure to follow procedures and other dangerous activities. Like many other professions, pilots must meet periodic certification requirements to maintain their statuses as pilots. With the enactment of the Federal Aviation Act, every U.S. pilot must be examined and certified by the Federal Aviation Administration (FAA).¹⁴⁸ The FAA has the authority to modify, revoke, or suspend a pilot's certificate upon reexamination of the pilot's fitness and qualifications.¹⁴⁹

In addition to certifying who can become a pilot, governments at all levels have extensively regulated pilot consumption of alcohol. Federal restrictions regarding alcohol can chiefly be found in the Federal Aviation Regulations (FARs), and some penalties from the Federal Aviation Act appear in provisions of United States Code.¹⁵⁰ On top of these federal laws, state laws and commercial airline policies also regulate the use of alcohol by pilots—sometimes even more stringently than federal regulations.¹⁵¹ For example, 14 C.F.R. § 91.17 bars pilots from drinking within eight hours before a flight.¹⁵² Most major airlines, finding this rule too lenient, extend the “bottle-to-throttle” restriction period to up to twenty-four hours.¹⁵³ The myriad of rules control not only the “amount of time between drinking and flying” but also “the permissible BAC at the time of flight, the prerequisites for medical certification, and the availability of non-flight related evidence of alcohol problems.”¹⁵⁴ Pilots also must disclose whether they have any DUIs in their annual and semiannual medical evaluations.¹⁵⁵ Interestingly, despite the extent of regulations on pilots generally, and especially in relation to alcohol consumption, there is no federal law mandating alcohol testing of pilots without evidence of impairment.¹⁵⁶

¹⁴⁸ Jamey Holmes, Comment, *Is the Federal Aviation Administration “Kicking the Dog?”: Pilot Disciplinary Proceedings and the Self-Incrimination Privilege*, 57 J. AIR L. & COM. 297, 297 (1991).

¹⁴⁹ *Id.* Such a punishment can even be upheld when the only evidence is the pilot's own testimony.

¹⁵⁰ Denise Urzendowski Scofield, Comment, *Knowing When to Say When: Federal Regulation of Alcohol Consumption by Air Pilots*, 57 J. AIR L. & COM. 937, 948 (1992).

¹⁵¹ *Id.*

¹⁵² 14 C.F.R. § 91.17(a)(1) (2006).

¹⁵³ Scofield, *supra* note 150, at 949–50.

¹⁵⁴ *Id.* at 949.

¹⁵⁵ *Id.* at 961.

¹⁵⁶ *Id.* at 968.

This is clearly a major oversight for Congress's attempt to ensure flight safety. Due to the failure of the legislature and the flight industry to mandate BAC tests to prevent drunk pilots from ever having the opportunity to get near an airplane, federal courts have decided to pick up the slack by adopting broad definitions of "operating." These broad definitions not only seem to defy the common, intuitive definition of "operate," but they also: (1) forego clear, textual evidence to interpret "operate" more narrowly; and (2) overcriminalize pilots by imposing the stigma of a drunk flying charge before they ever endanger any airplane passengers.

VI. A NEW PROPOSAL: MANDATORY BAC TESTING BEFORE ENTERING THE COCKPIT

A more logical approach to ensure that pilots and other airplane personnel are not impaired by alcohol is to require mandatory BAC testing when crew members arrive for their shift.¹⁵⁷ This approach—the impossibility approach—is justified by: (1) the effectiveness of mandatory BAC testing on recidivist drunk drivers; and (2) the drastic collateral consequences that could result from an unnecessary conviction.

A. THE EFFECTIVENESS OF MANDATORY BAC TESTING

In recent years, several states have enacted laws allowing (or sometimes requiring) judges to mandate installation of alcohol ignition interlocks in the cars of drunk drivers.¹⁵⁸ Requiring installation of an interlock is usually a condition of restoring the driving privileges of a convicted drunk driver.¹⁵⁹ Such a punishment attaches in most states only after *multiple* DUI offenses,¹⁶⁰ although some state legislatures have proposed statutes mandating use of alcohol ignition interlocks after a single drunk-driving conviction.¹⁶¹

¹⁵⁷ This Comment speaks in terms of subjecting pilots specifically to BAC testing upon arriving for a shift, but the same policy concerns apply with equal force to requiring BAC tests of all flight personnel.

¹⁵⁸ Jay M. Zitter, Annotation, *Validity, Construction, and Application of Ignition Interlock Laws*, 15 A.L.R.6th 375 (2006).

¹⁵⁹ Gregory T. Neugebauer, *Alcohol Ignition Interlocks: Magic Bullet or Poison Pill?*, 2 U. PITT. J. TECH. L. & POL'Y 2 (2002) ("Today, over forty states . . . can require drivers convicted of multiple DUI offenses to install an ignition interlock device as a condition for restoration of driving privileges.").

¹⁶⁰ *See id.*

¹⁶¹ *See* Andrew Sullivan, Comment, *Ending Drunk Driving with a Flash of Light*, 21 RICH. J.L. & TECH. 15, 16 (2015); *see also* Joseph Marutollo, Comment, *No Second*

Alcohol ignition interlocks require the driver to blow air into it in order to start the car.¹⁶² The device prevents starting the car if the driver's BAC is over a certain limit.¹⁶³ Since a drunk driver could easily cheat the device by having a sober friend breathe into the interlock, most of the devices require periodic "running retests."¹⁶⁴ Failing a running retest may cause the car to honk and its lights to flash in an effort to alert law enforcement.¹⁶⁵

Abundant data show how effective alcohol ignition interlocks are in reducing drunk-driving arrests, particularly in recidivists. Alcohol ignition interlocks can reduce DUI re-arrests by up to 67%.¹⁶⁶ Within one year of adopting a law requiring ignition interlocks for first-time drunk-driving offenders, New Mexico prevented 63,000 drunk-driving events within its borders and reduced alcohol-related fatalities by 25%.¹⁶⁷

Regarding recidivism, the International Council on Alcohol, Drugs and Traffic Safety has found that "[i]n the aggregate, evidence spanning nearly ten years by [eight] or more research groups in the United States and Canada point toward 40%–95% reductions in recidivism while the interlock programs are in effect"¹⁶⁸ States that have studied recidivism rates among drunk drivers who are required to install ignition interlocks (versus rates among drunk drivers who are not) have found that ignition interlocks drastically reduce drunk-driving arrests.¹⁶⁹

Despite ample evidence showing the effectiveness of alcohol ignition interlocks in reducing drunk driving, they are underutilized¹⁷⁰ and subject to critical debate. Critics assert objec-

Chances: Leandra's Law and Mandatory Alcohol Ignition Interlocks for First-Time Drunk Driving Offenders, 30 PACE L. REV. 1090, 1090, 1098 (2010) (noting the proposal of New York's "Leandra's Law" and the adoption of New Mexico's law concerning first-time offenders).

¹⁶² Marutollo, *supra* note 161, at 1091.

¹⁶³ *Id.*

¹⁶⁴ *See id.* at 1092.

¹⁶⁵ *Id.*

¹⁶⁶ Sullivan, *supra* note 161, at 7.

¹⁶⁷ Marutollo, *supra* note 161, at 1099.

¹⁶⁸ *Id.* at 1097 (alteration in original); *see also* Zitter, *supra* note 158, § 2.

¹⁶⁹ *E.g.*, Marutollo, *supra* note 161, at 1097–98 (In Maryland, "researchers 'found statistically significant reductions in recidivism by multiple offenders who installed interlock devices in [their] vehicles.' An Ohio study found even more impressive results: 'recidivism rates were three times higher for offenders who received a license suspension compared with offenders placed in an interlock group.'") (alteration in original).

¹⁷⁰ Sullivan, *supra* note 161, at 8 ("[B]oth preventative and remedial measures to reduce drunk driving are grossly underutilized. In the case of breathalyzer-

tions against interlock programs primarily based on constitutional grounds, such as equal protection and separation of powers.¹⁷¹ Others maintain that alcohol ignition interlocks are just a Band-Aid solution that does not address the “root” of the drunk-driving problem: “hardcore alcohol abusers.”¹⁷² However, constitutional challenges against interlock statutes are typically not successful in court,¹⁷³ and even if the use of interlocks does not address the root of the drunk-driving problem, it still successfully reduces the rate of drunk driving.

Drunk-driving laws are very similar in function to pilot alcohol laws: they both protect public safety. Public safety is clearly enhanced by making particular criminal conduct impossible (i.e., preventing drunk driving through alcohol ignition interlocks); therefore, a similar type of mandatory BAC testing would better serve public safety than overcriminalization through broad statutory construction. Moreover, overcriminalization of flying has the potential to increase burdens on the accused, the court, and society generally.

B. INSTITUTING AN IMPOSSIBILITY APPROACH: MANDATORY PREFLIGHT BAC TESTING

A federal statute that requires pilots to take a BAC test prior to flying would be a more efficient and more effective method than the current penal approach. Not only would this method prevent the collateral consequences of convicting a pilot of drunk flying, but it would also be more effective at preventing pilots from flying while intoxicated by making it impossible to commit the crime.

Proponents of mandatory BAC testing of drivers with DUIs through ignition interlock devices have emphasized that preventing drunk driving saves thousands of lives and billions of dollars.¹⁷⁴ By preventing a crime from happening, society avoids the costs of investigating, prosecuting, and punishing the crimi-

based [ignition interlock devices (IIDs)] only 20% of eligible offenders were actually enrolled in a program requiring their installation.”) (footnotes omitted).

¹⁷¹ See Neugebauer, *supra* note 159.

¹⁷² Marutollo, *supra* note 161, at 1094.

¹⁷³ See Neugebauer, *supra* note 159 (“A constitutional challenge to an interlock statute faces a steep uphill battle because having a driver’s license is not a fundamental right and because of the judicial deference generally accorded public welfare and social legislation.”).

¹⁷⁴ *Id.* (“Alcohol-related, fatal traffic accidents cost Americans a staggering \$50 billion annually in medical expenses, property damage, lost productivity, and other expenses. If a universal interlock program targeted only legally intoxicated

nal conduct, and the perpetrator of the crime avoids the collateral consequences resulting from her conviction.¹⁷⁵ Ignition interlock devices have the power to address every incident of drunk driving that criminal proceedings cannot practically address.¹⁷⁶ In light of the manifold benefits of making drunk driving impossible following a DUI conviction, some have even argued for a federal regulation requiring all cars to have interlock type devices, regardless of the driver's criminal record.¹⁷⁷

Despite these benefits, some commentators have reservations about this approach due to privacy concerns and the possible negative consequences of circumventing judicial oversight of criminal conduct. In regard to privacy, the worry is that interlock devices in cars could store information on the driver's BAC level.¹⁷⁸ Even if the driver's BAC is well under the legal limit, plaintiff's attorneys could still use this information in claims for negligent driving.¹⁷⁹ The fear seems to be that the general public's risk of liability for otherwise legal driving would skyrocket. Another concern is that making certain crimes impossible robs the public of its chance to comment on or challenge the fairness of the law.¹⁸⁰

These concerns, however, are not relevant to the present proposal for the federal government to mandate that airlines perform BAC tests on pilots prior to preflight checks—Airlines could use BAC testing devices that do not store user data. While judicial discussion of the law may be stifled by making the crime impossible, the safety benefits of the proposed requirement far outweigh this loss. Moreover, asserting a strong federal rule requiring pilots to take a BAC test before every flight would affect the judicially recognized policy goals detailed in cases supporting federal preemption over aviation law. These goals include

drivers, up to 12,000 lives and \$40 billion could be saved annually.”) (footnotes omitted).

¹⁷⁵ Michael L. Rich, *Should We Make Crime Impossible?*, 36 HARV. J.L. & PUB. POL'Y 795, 805 (2013).

¹⁷⁶ Sullivan, *supra* note 161, at 74 (“Criminal proceedings cannot reasonably reach every one of the over 112 million annual incidences of drunk driving—but mandating the installation of IIDs . . . could prevent each of those incidences from ever occurring.”).

¹⁷⁷ *Id.* at 2.

¹⁷⁸ See Neugebauer, *supra* note 159 (noting that an interlock could be recording “every sip”).

¹⁷⁹ *See id.*

¹⁸⁰ *See* Rich, *supra* note 175, at 828.

upholding legislative intent to preempt airspace regulation, increasing passenger safety, and avoiding excessive airline liability.

C. PREEMPTION: THE FAA AND POLICY SUPPORT
FOR CENTRALIZATION

It is well established that “no aircraft or pilot can ever outfly the reach of Washington.”¹⁸¹ Justice Jackson recognized Congress’s broad authority to regulate the National Airspace System in a famous concurrence, stating that:

Federal control is intensive and exclusive. Planes do not wander about the sky like vagrant clouds. They move only by federal permission, subject to federal inspection, in the hands of federally certified personnel and under an intricate system of federal commands. The moment a ship taxis onto a runway it is caught up in an elaborate and detailed system of controls.¹⁸²

Indeed, there are many compelling arguments justifying strong central control. For example, airplane manufacturers would only have to meet one set of federal safety standards without fear that a state jury might find a design defect.¹⁸³ Greater certainty with respect to design standards may also give customers the benefit of technological advances used to meet those standards.¹⁸⁴ Moreover, it seems more logical to allow Congress, with its ability to consult scientists, engineers, and test pilots, to determine the standards of air safety rather than letting lay jurors decide what security measures airlines should be legally required to meet.¹⁸⁵ Similarly, it would be unreasonable to subject airline personnel to different standards of care as they cross several state lines in a single journey.¹⁸⁶

These policy concerns are bolstered by the argument that Congress’s intent to be the last word on aviation regulation is evidenced by its comprehensive regulations to “preempt the field,” and its desire to ensure not only passenger safety but also

¹⁸¹ *E.g.*, Sean S. Kelly, Comment, *Federalism in Flight: Preemption Doctrine and Air Crash Litigation*, 28 *TRANSP. L.J.* 107, 114 (2000).

¹⁸² *Nw. Airlines v. Minnesota*, 322 U.S. 292, 303 (1944) (Jackson, J., concurring).

¹⁸³ *See, e.g.*, Patrick J. Shea, Note, *Solving America’s General Aviation Crisis: The Advantages of Federal Preemption over Tort Reform*, 80 *CORNELL L. REV.* 747, 798 (1995).

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ *See, e.g.*, Kelly, *supra* note 181, at 121.

the health of the aviation industry.¹⁸⁷ Thus, even though federal regulations may, at times, leave plaintiffs wanting, they are the legislature's best effort at striking an optimal balance that not only safeguards customers but also promotes the health of the airline industry, a factor that juries deciding state tort claims are not expected to consider.¹⁸⁸

Much of the preemption debate in aviation law centers around how tort actions are affected by enactment of the Federal Aviation Act¹⁸⁹ and its subsequent amendments¹⁹⁰—the Airline Deregulation Act of 1978 (ADA)¹⁹¹ and the General Aviation Revitalization Act (GARA).¹⁹² When it comes to judicially created implied preemption, all federal circuits agree that the field of air safety is preempted; however, circuits are split on just how far preemption reaches.¹⁹³ Specifically, courts vary on what types of claims the federal standard of care articulated in 14 C.F.R. § 91.13¹⁹⁴ should apply to. Courts apply either implied preemption through the Federal Aviation Act, or express preemption through the ADA.

Congress enacted the Federal Aviation Act to centralize authority over airspace regulations in one entity: the FAA Administrator.¹⁹⁵ The law states explicitly that “[a] remedy under this part is in addition to any other remedies provided by law.”¹⁹⁶ GARA, which sets an eighteen-year time limit on claims “for death or injury, or damage to property, relating to general avia-

¹⁸⁷ *Id.* at 120.

¹⁸⁸ *See id.*

¹⁸⁹ Federal Aviation Act of 1958, Pub. L. No. 85-726, 72 Stat. 731.

¹⁹⁰ *See* Edward Boula, Brief, *Taking Flight or Landing: Implied Field Preemption Under the Federal Aviation Act of 1958 and Wyeth v. Levine*, 24 DCBA BRIEF 34, 35 (2012).

¹⁹¹ Airline Deregulation Act of 1978, Pub. L. No. 95-504, 92 Stat. 1705.

¹⁹² General Aviation Revitalization Act of 1994, Pub. L. No. 103-298, 108 Stat. 1552.

¹⁹³ Boula, *supra* note 192, at 34.

¹⁹⁴ 14 C.F.R. § 91.13 (2019) ((a) “No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another”; and (b) “No person may operate an aircraft, other than for the purpose of air navigation, on any part of the surface of an airport used by aircraft for air commerce (including areas used by those aircraft for receiving or discharging persons or cargo), in a careless or reckless manner so as to endanger the life or property of another.”).

¹⁹⁵ Michael J. Holland, *Federalism in the Twenty-First Century: Preemption in the Field of Air*, 78 DEF. COUNS. J. 11, 12 (2011).

¹⁹⁶ 49 U.S.C. § 40120(c) (2016) (originally enacted as Federal Aviation Act of 1958, Pub. L. No. 85-726, 72 Stat. 731, 798).

tion aircraft and their component parts,”¹⁹⁷ contains a similar savings clause.¹⁹⁸ In contrast, the ADA explicitly preempts the states from enacting any law, standard, rule, or regulation related to prices, routes, and services of any carrier.¹⁹⁹

While the trend less than ten years ago was toward increasing deference to federal law,²⁰⁰ courts in recent years have favored state law by finding no federal preemption for certain types of tort claims.²⁰¹ *Abdullah v. American Airlines, Inc.*,²⁰² the leading case on federal preemption of aviation law,²⁰³ illustrates the courts’ ambivalence to the preemption debate. The issue in this case was the appropriate standard of care for American’s airline personnel in tort suits brought by passengers injured by severe weather turbulence.²⁰⁴ The Third Circuit found that a federal standard of care preempted the state standard of care, but that state damage remedies still existed for breach of the federal standard of care.²⁰⁵

Although *Abdullah* has since been narrowed by the Third Circuit in *Sikkelee v. Precision Airmotive Corporation* so that state law products liability claims are not preempted by federal law unless they conflict with the FAA’s certification for aircraft design,²⁰⁶ the Fifth and Ninth Circuits have embraced the *Abdullah* holding.²⁰⁷ The Fifth Circuit held in *Witty v. Delta Air Lines, Inc.* that

¹⁹⁷ Timothy S. McAllister, Comment, A “Tail” of Liability Reform: General Aviation Revitalization Act of 1994 & the General Aviation Industry in the United States, 23 *TRANSP. L.J.* 301, 310–11 (1995).

¹⁹⁸ Holland, *supra* note 195, at 13.

¹⁹⁹ See 49 U.S.C. § 41713(b)(1) (2012) (originally enacted as General Aviation Revitalization Act of 1994, Pub. L. No. 103-298, 108 Stat. 1552).

²⁰⁰ Holland, *supra* note 195, at 11 (“Federal courts and, to a lesser degree, the state courts have shown an increasing deference to federal law in determining whether federal rather than state law governs issues of aviation safety . . .”).

²⁰¹ James Dick & Graham Keithley, *Recent Federal Preemption Developments in the Aviation Industry*, 30 *AIR & SPACE LAW.* 4, 4 (2017) (“Courts appear to increasingly disregard the Federal Aviation Administration’s (FAA’s) views or congressional intent to find state law claims viable absent clear express or conflict preemption.”).

²⁰² 181 F.3d 363 (3d Cir. 1999).

²⁰³ Holland, *supra* note 195, at 16.

²⁰⁴ *Id.* at 17.

²⁰⁵ *Id.*

²⁰⁶ *Sikkelee v. Precision Airmotive Corp.*, 822 F.3d 680, 708–09 (3d Cir. 2016) (holding that “[t]he field of aviation safety . . . identified as preempted in *Abdullah* does not include product manufacture and design, which continues to be governed by state tort law, subject to traditional conflict preemption principles.”).

²⁰⁷ See Holland, *supra* note 195, at 21–22.

the Federal Aviation Act's preemptive reach is broad enough to reach claims for failure to warn based on anything other than a federal standard of care.²⁰⁸ The Ninth Circuit in *Montalvo v. Spirit Airlines* examined the historical circumstances that led to the enactment of the Act, its legislative history, and the language used in it to conclude that "Congress intended to invest the Administrator of the Federal Aviation Administration with the authority to enact exclusive air safety standards."²⁰⁹ The court inferred the Administrator's preemptive intent to "displace all state law on the subject of air safety" from its enactment of "pervasive regulations."²¹⁰

One principle seems to be clear from the preemption debate: courts seek to centralize control of airspace, but they are also hesitant to leave plaintiffs wanting for a remedy. Allowing the federal standard of care to predominate while also refusing to find preemption of some state law tort claims seems to be an effort to allow plaintiffs' remedies wherever possible, balancing this with protecting the airline industry from crushing liability. Mandating BAC tests for pilots upon arriving for a shift would eliminate the need for this judicial struggle. Airlines could merely send pilots with high BAC levels home, making it impossible for them to commit flight-related criminal or tortious activity while drunk. Passengers receive more protection this way, and they do not have to relinquish any other potential state tort claims. Airlines also will not face any liability from drunken pilot conduct. While the procedure for enacting legislation requiring pilots to take BAC tests upon arriving for each shift is outside the scope of this Comment, such a law clearly supports the legislature's interests in centralizing airspace control, limiting airline liability, and increasing passenger safety.

VII. CONCLUSION

Courts that have examined statutes that prohibit "operating" an airplane under reckless circumstances (e.g., while drunk) have strongly emphasized the federal government's interest in air safety. The federal government could best pursue this safety interest through a uniform mandate requiring BAC testing of pilots prior to preflight checks. This approach is both more efficient and more effective than criminalizing a broad range of pi-

²⁰⁸ See *Witty v. Delta Air Lines, Inc.*, 366 F.3d 380, 386 (5th Cir. 2004).

²⁰⁹ *Montalvo v. Spirit Airlines*, 508 F.3d 464, 472 (9th Cir. 2007).

²¹⁰ *Id.*

lot conduct. The focus should be on preventing dangerous conduct and the collateral consequences of a criminal conviction, rather than making it easier for courts to slap pilots with a criminal record before any lives are put in danger.