

ARTICLES

CONTRIBUTING TO CRASHES: APPLYING TORT PRINCIPLES TO CERTAIN FAA PROCEEDINGS

ANDREW LAMBERT*

In ensuring air safety, the Federal Aviation Administration (FAA) reviews applications for certificates and denies them if appropriate. However, when a corporate entity holds a certificate revoked by the FAA, there is little to prevent the individuals from forming a new company and applying for a new certificate—one without a violation history including the revocation. Balancing the interests of air safety and the fiction of corporate personhood, the FAA has issued regulations to look beyond the formal corporate applicants and consider whether certain key individuals had “materially contributed” to a previous revocation of an entity’s certificate. This article analyzes those regulations and suggests adopting certain tort principles in applying and enforcing those regulations.

Introduction	2
I. Materially Contributing to Air Carrier Revocations	4
A. Legislative History Justifies an Inclusive, Information-Based Inquiry	5
1. The History of Material Contribution in Part 135	6
2. The Origin of Material Contribution in the Aviation Regulations: Parts 121, 42, and 45	8
B. Judicial Interpretation of Material Contribution	10
II. Materially Contributing to Repair Station Revocations	12
A. The NTSB Recommends Regulations	12
B. Section 145.51 and Analysis	13

* Andrew Lambert is an attorney for the Federal Aviation Administration, Office of Chief Counsel–Enforcement. The views expressed in this article are those of the author and do not necessarily reflect the views of the Federal Aviation Administration (FAA), Department of Transportation (DOT), or the United States.

III. Material Contribution in Non-Aviation Contexts..... 15

 A. Material Contribution Helps Find Causation in Tort Law..... 16

 B. Policy Goals of Material Contribution in Toxic Tort Cases.... 18

IV. Who Materially Contributes to Revocations?..... 20

 A. Applying Tort Principles to Aviation Regulations 20

 B. Addressing Concerns with This Approach..... 22

 C. Proposed Framework for Notifying Bad Actors 24

Conclusion 26

INTRODUCTION

Over two and a half million people fly in and out of U.S. airports every single day.¹ Annually, one billion passengers travel throughout the United States’ National Airspace (NAS).² At any given moment, there are as many as five thousand aircraft operating within the NAS.³ Based on the obvious need for safety in flight, the Federal Aviation Administration (FAA) is tasked with drafting and enforcing regulations to govern pilots,⁴ mechanics,⁵ aircraft,⁶ air traffic controllers,⁷ air carriers and operators,⁸ flight schools,⁹ and aircraft repair shops.¹⁰ Despite the relative safety of commercial air flight,¹¹

1. *Air Traffic by the Numbers*, FED. AVIATION ADMIN., https://www.faa.gov/air_traffic/by_the_numbers (last updated June 6, 2019).

2. *Id.*

3. *Id.*

4. *See generally* 14 C.F.R. pts. 61 & 67 (2019) (governing requirements to hold airman certificates and airman medical certificates, respectively).

5. *See generally* 14 C.F.R. pt. 65 (2019) (outlining the eligibility requirements for a mechanic certificate).

6. *See generally* 14 C.F.R. pts. 21–49 (2019) (providing standards, maintenance requirements, and among other things, initial and continued safety requirements for aircraft).

7. *See generally* 14 C.F.R. pt. 65 (regulating the qualifications, requirements, and credentials necessary for air traffic control tower operators).

8. *See generally* 14 C.F.R. pts. 119, 121, 135 (2019) (governing commercial and commuter aircraft).

9. *See generally* 14 C.F.R. pts. 141–42 (2019) (outlining qualifications for pilot schools and training programs for other aircrew).

10. *See generally* 14 C.F.R. pt. 145 (2019) (describing the qualifications necessary to obtain a repair station certificate).

11. *See Preventable Deaths*, NAT’L SAFETY COUNCIL, <https://injuryfacts.nsc.org/all-injuries/preventable-death-overview/odds-of-dying/> (last visited Jan. 21, 2020) (showing that the odds of dying as a passenger on an airplane are 1 in 188,364, whereas the odds of other modes of travel are comparatively higher (1 in 4,047 for bicyclists; 1 in 858 for motorcyclists; 1 in 556 for pedestrians; and 1 in 103 for motor vehicle passengers)).

there is a significant risk that bad actors can move from one company to another, continuing their bad habits with respect to regulatory compliance and undermining the safety of air traffic and commerce.¹² This article aims to address the regulations passed by the FAA and proposes a framework for identifying, notifying, and tracking those “bad actors.”

Consider the following hypothetical scenarios. On the one hand, if a pilot shows that he lacks the qualifications to hold an airman certificate—e.g., he flies while impaired or falsifies a logbook—his certificate is revoked.¹³ Further, he is generally prohibited from reapplying for another pilot certificate for twelve months.¹⁴ If he tried to apply any earlier, his social security number and name would be run through the FAA’s database and, if the system is working, his application would be denied.¹⁵ On the other hand, corporate entities—e.g., flight schools, air carriers, and repair stations—can hold certificates from the FAA.¹⁶ Suppose a manager for a certificated repair shop was willfully falsifying maintenance records. He himself may hold no certificates, but his company’s repair shop certificate could be revoked. There is no twelve-month waiting period for a corporation to apply for a new certificate.¹⁷ Further, there is nothing to stop the individual from founding a wholly new entity and applying for a completely new certificate so that there is no violation history for the new company. The bad actor, in this scenario, could go on violating the federal aviation regulations and undermining air safety.

12. See, e.g., NAT’L TRANSP. SAFETY BD., A-04-01 AND -02, SAFETY RECOMMENDATION 1–2 (Feb. 9, 2004), https://www.nts.gov/safety/safety-recs/reletters/A04_01_02.pdf [hereinafter NTSB Safety Recommendation] (referencing the Beech 95 plane crash in which the Safety Board’s investigation revealed that all four of the plane’s propellers were improperly installed at a repair station run by a chief inspector who previously headed another repair station with a revoked certificate).

13. See generally 14 C.F.R. § 61.19 (2019) (explaining that a certificate is valid until surrendered, suspended, or revoked).

14. See 14 C.F.R. § 61.13(d) (2019) (detailing that if a certificate has been revoked, the previously certified individual cannot reapply until one year after the date of revocation).

15. Flight Standards Information Management System (FSIMS), FAA Order No. 8900.1, Vol. 5, ch. 2, § 5-320(c) (Dec. 14, 2018), http://fsims.faa.gov/wdocs/8900.1/v05%20airman%20cert/chapter%2002/05_002_005rev1.pdf.

16. See generally 14 C.F.R. pts. 119, 141, 145 (2019) (providing certification requirements for these pilot schools, air carriers, and repair stations).

17. See 14 C.F.R. § 61.13(d)(2) (2019) (specifying that if “a *person* whose pilot, flight instructor, or ground instructor certificate has been revoked may not apply for any certificate, rating, or authorization for 1 year after the date of revocation” and not providing any such limitations for corporations) (emphasis added). See generally 14 C.F.R. § 145.51(e) (2019) (highlighting that the FAA “may deny” a certification application if “[t]he applicant holds a repair station certificate in the process of being revoked”).

This article examines two attempts from the FAA to correct the above-described scenario. More specifically, the FAA has promulgated regulations which apply to individuals who “materially contributed” to circumstances causing an entity’s certificate revocation. However, this standard is not defined in the regulations, legislative history, or case law. Ultimately, I argue that the FAA and courts should adopt a wide-ranging, totality-of-the-circumstances approach in identifying, notifying, and tracking these bad actors. This approach is supported by the purpose for the regulations, the legislative history of the regulations, and by analogous tort law principles.

Part I introduces the regulation for air carriers and the “bad actors” who may cause a revocation of an air carrier. The background to this regulation reveals the practical need for this type of regulation, and the scant case law will ultimately support this article’s argument. Part II will turn to the more recent regulation applying to certificated repair stations. This part will show that the section is modeled after the air carrier regulation, and the newer regulation specifically addresses certain challenges raised by the aviation industry. Part III will consider the nuances of material contribution in other contexts and will guide the article’s ultimate conclusion. Finally, Part IV offers specific guidance for the FAA and courts to use in determining what material contribution means and how the regulations can be implemented effectively for air safety and fairly for the individuals involved.

I. MATERIALLY CONTRIBUTING TO AIR CARRIER REVOCATIONS

A direct air carrier is “a person who provides . . . air transportation and who has control over the operational functions” conducted during that transportation.¹⁸ Currently, Part 121 of Title 14 of the Code of Federal Regulations governs large scale air carriers.¹⁹ These include the everyday airlines such as American Airlines, Delta, and Southwest. Smaller air carriers, including smaller chartered aircraft used for personal or professional purposes, are governed by Part 135.²⁰ Despite this regulatory split, the certification process for both types of air carriers is laid out in Part 119.²¹

Part 119 contains the general requirements for air carriers—including the process by which one applies for an air carrier certificate.²² Section 119.39

18. 14 C.F.R. § 110.2 (2019).

19. *See generally* 14 C.F.R. pt. 121 (2019) (listing the types of aircraft that would fall under this provision, such as turbine-engine powered planes).

20. *See generally* 14 C.F.R. pt. 135 (2019) (specifying that this part applies only to certain categories of aircraft such as small transport planes).

21. *See generally* 14 C.F.R. pt. 119 (2019) (providing the certification processes for air carriers and commercial operators).

22. *See generally* 14 C.F.R. pt. 119, subpart C (2019) (describing application requirements).

sets out the grounds for the Administrator either issuing or denying an air carrier certificate.²³ More pertinent for this article, “[a]n application . . . may be denied if the Administrator finds that[.]” *inter alia*:

(3) The applicant intends to or fills a key management position listed in § 119.65(a) or § 119.69(a), as applicable, with an individual who exercised control over or who held the same or a similar position with a certificate holder whose certificate was revoked, or is in the process of being revoked, and that individual *materially contributed to the circumstances causing revocation* or causing the revocation process;

(4) An individual who will have control over or have a substantial ownership interest in the applicant had the same or similar control or interest in a certificate holder whose certificate was revoked, or is in the process of being revoked, and that individual *materially contributed to the circumstances causing revocation* or causing the revocation process²⁴

It is important to note that these applications are filed by juridical entities—corporations, partnerships, limited liability companies, etc. Nevertheless, a juridical entity is ultimately composed of individual persons. Accordingly, the entire application may be denied (1) if a person who is part of the application had previously held a “key management position” or substantial ownership interest in a previously revoked air carrier certificate and (2) if that person “materially contributed to the circumstances causing the revocation.”²⁵

Notably the phrase *materially contributed* is not defined anywhere in Parts 119, 121, or 135, or anywhere in Title 14 generally. What follows is an examination of the legislative history behind this phrase and the scant case law interpreting the language. It shows that the FAA’s interest in this information is based on operational experience, that past behavior can be an indication of future performance, and that the FAA should take a broad totality-of-the-circumstances approach in considering who materially contributed to a prior revocation.

A. *Legislative History Justifies an Inclusive, Information-Based Inquiry*

As discussed above, Part 119 governs the certification process for two types of air carriers, informally referred to as “Part 135 air carriers” and “Part 121 air carriers.” Before Part 119 was promulgated, both air carriers had their own subparts and sections governing their respective certification process.²⁶

23. 14 C.F.R. § 119.39 (2019).

24. 14 C.F.R. § 119.39(b)(3)–(4) (2019) (emphases added).

25. *Id.*; see 14 C.F.R. §§ 119.65(a), 119.69(a) (2019) (explaining that the “key management position[s]” specified in § 119.39(b)(3) are (1) Director of Safety; (2) Director of Operations; (3) Chief Pilot; (4) Director of Maintenance; and (5) Chief Inspector).

26. See Commuter Operations and General Certification and Operations Requirements,

Furthermore, each of the two Parts had their own material contribution clause in the certification process before being combined into the current section in Part 119. How and why these sections came into law will help inform how the FAA and courts should interpret this phrase under the current regulations.

1. *The History of Material Contribution in Part 135*

The FAA undertook significant revisions to Part 135 in 1977 and 1978 as part of an overall streamlining of aviation regulations.²⁷ The purpose of the revisions was “to upgrade the level of safety for operations conducted by . . . air carriers.”²⁸ The FAA noted the “strong . . . average annual passenger traffic increase” as the cause for regulatory concern.²⁹ The FAA wanted to give the passengers of on-demand charter flights the same level of safety as that provided in the larger, commercial Part 121 operations.³⁰ If passengers feel safer taking chartered flights, presumably they would use them more often. As part of these revisions, the FAA invited comments on the Part 135 regulations, including § 135.13 dealing with the eligibility to hold a certificate. Section 135.13(b) read almost identically to the current 119.39:

The Administrator may deny any applicant a certificate under this part if the Administrator finds . . . (2) That a person who was employed in a position similar to general manager, director of operations, director of maintenance, chief pilot, or chief inspector, or who has exercised control with respect to any ATCO operating certificate holder, air carrier, or commercial operator whose operating certificate has been revoked, will be employed in any of those positions or a similar position, or will be in control of or have a substantial ownership interest in the applicant, and that the person’s employment or control contributed materially to the reasons for revoking that certificate.³¹

Commenters to this section objected to its existence from the beginning.³² Industry professionals worried that such a section would “prevent[] an otherwise competent individual from obtaining employment” with the new air

60 Fed. Reg. 65,832, 65,879 (Dec. 20, 1995) (to be codified at 14 C.F.R. pts. 91, 119, 121, 125, 127, 135) (the final rule for combining Parts 121 and 135 into the new Part 119).

27. Regulatory Review Program; Air Taxi Operators and Commercial Operators, 43 Fed. Reg. 46,742, 46,742 (Oct. 10, 1978) (to be codified at 14 C.F.R. pts. 121, 127, and 135) (discussing the general revisions to Part 135).

28. *Id.*

29. *Id.*

30. *Id.* at 46,743.

31. 14 C.F.R. § 135.13(b) (1979) (effective on December 1, 1978, 43 Fed. Reg. at 46,786, and later codified into § 119.39(b) pursuant to 60 Fed. Reg. 65,832, 65,889 (Dec. 20, 1995)).

32. *See, e.g.*, Air Taxi Operators and Commercial Operators, 42 Fed. Reg. 43,490, 43,490 (Aug. 29, 1977) (to be codified at 14 C.F.R. pts. 121, 135) (announcing the Notice of Proposed Rule Making (NRPM) for pt. 135).

carrier.³³ Further, commenters raised the issue of the section creating a “life sentence” for individuals—that being labeled by this section would create a sort of indelible Mark of Cain.³⁴ The FAA addressed these concerns and emphasized the need for this regulation.

First, the FAA recognized that “[o]perating experience has shown that the compliance disposition of an operator and persons serving in key positions is a reliable indication of future performance.”³⁵ Thus, it was the practical experience of the FAA that bad acts in the past can indicate possible bad acts in the future. Furthermore, given the “dynamic growth of the industry,” it was important for the FAA to track those bad actors as they may move from carrier to carrier.³⁶ For every new application for an air carrier certificate there could be one or more bad actors working for the new applicant. For this reason, “[n]oncompliance data is a significant factor to consider with an application for an [air carrier] operating certificate.”³⁷ This information is all the more relevant when one considers that the “FAA revokes an operating certificate only for a very serious infraction of the regulations.”³⁸ The FAA is not generally plucking certificates for venial sins—it is only the most significant errors that cause the FAA to revoke an entity’s operation certificate. Because those entities are ultimately operated by individuals, it is thus critical to know who exactly caused those significant violations.

Regarding the “life sentence” concern, the FAA responded that this section does not act as an automatic barrier to re-entry into the air carrier world.³⁹ It is simply one factor that the local Flight Standards District Office (FSDO) will consider in granting or denying the certificate application. This determination will “var[y] from case to case.”⁴⁰ After all, the section only states that the Administrator “may” deny the application on this basis.⁴¹ The converse of this position is equally as valid: if the FAA does not have this information on who may have caused the prior revocation, they cannot consider it at all. Given the gravity of operating revocations, this would seriously

33. Regulatory Review Program; Air Taxi Operators and Commercial Operators, 43 Fed. Reg. 46,742, 46,762 (Oct. 10, 1978) (to be codified at 14 C.F.R. pt. 121, 127, 135).

34. *Id.*

35. Air Taxi Operators and Commercial Operators, 42 Fed. Reg. at 43,495 (the NPRM for § 135.13).

36. *Id.* at 43,491.

37. Regulatory Review Program; Air Taxi and Commercial Operators, 43 Fed. Reg. at 46,762.

38. *Id.*

39. *Id.*

40. *Id.*

41. 14 C.F.R. § 119.39(b) (2019); Regulatory Review Program; Air Taxi and Commercial Operators, 43 Fed. Reg. at 46,742.

undermine air carriers in the future if the FAA did not have this information.

In addition to the FAA's arguments above, the FAA noted that the section is substantially similar to § 121.51 in the Part 121 regulations.⁴² If the goal of the Part 135 revisions were to "upgrade the level of safety" to that of Part 121 operations, then certainly the FAA could and should adopt the standards imposed on those larger commercial operations.⁴³

2. *The Origin of Material Contribution in the Aviation Regulations: Parts 121, 42, and 45*

Perhaps unsurprisingly, the relevant section in Part 121 was very similar to the subsequent Part 135. The Administrator could deny a Part 121 application if a person to be employed by the applicant had previously held a management position or ownership interest in a previously revoked carrier and "the person's employment or control contributed materially to the reasons for revoking that certificate."⁴⁴ There is no commentary explaining the change in phrasing, such as changing the arrangement of the verb and adverb "contributed materially." Presumably, no substantive change was meant by that. This stylistic change also does not definitively answer what this phrase means or how it should be interpreted. The only assistance offered in the legislative history to Part 121 is that this section was based on yet another, earlier part of the aviation regulations.

The Notice of Proposed Rule Making for Part 121 states that its purpose was to consolidate even older parts of the aviation regulations into the newly proposed Part 121.⁴⁵ These older parts included Part 42 covering "Supplemental Air Carriers, Large Commercial Operators, and Certificated Route Air Carriers Engaging in Charter Flights or Other Special Services"⁴⁶ and

42. Regulatory Review Program; Air Taxi and Commercial Operators, 43 Fed. Reg. at 46,742.

43. *Id.*

44. *See* Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft, 29 Fed. Reg. 19,186, 19,193 (Dec. 31, 1964) (to be codified at 14 C.F.R. pts. 1, 40, 41, 42, 121) (addressing the final rule for Part 121 regulations, including § 121.51).

45. *See generally* Certification and Operations; Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft, 29 Fed. Reg. 12,182, 12,182 (Aug. 26, 1964) (to be codified at 14 C.F.R. pts. 40, 41, 42, 121, 123, 125) (stating this proposed rule features a consolidation of many previously proposed rules).

46. *See generally* Aircraft Certification and Operation Rules for Supplemental Air Carriers, Large Commercial Operators, and Certificated Route Air Carriers Engaging in Charter Flights or Other Special Services, 27 Fed. Reg. 8356, 8356 (Aug. 22, 1962) (to be codified at

Part 45 covering “Commercial Operator Certification and Operation Rules.”⁴⁷ In fact, in the proposal for § 121.51, the text specifically states that it was based on § 42.14.⁴⁸

Interestingly, these earliest sections covering air carriers did not always ask who might have materially contributed to a previous air carrier’s revocation. In Part 42, the legislative materials simply reveal that the FAA could deny an applicant “when any person who will be in control of or have a substantial ownership interest in the applicant has previously exercised control over any other operator whose air carrier . . . certificate has been revoked.”⁴⁹ It was apparently of no matter whether those persons actually contributed to the revocation. When the analogous section was proposed in Part 45, there was similarly no mention of “material contribution” to the prior revocation.⁵⁰ It was only noted that the section aimed to “disclose to the Administrator pertinent information regarding persons holding management positions and other persons in control of, or having an ownership interest in, the applicant.”⁵¹ The FAA also “pointed out that requirements for the disclosure of control relationships with respect to Federally regulated businesses are quite common—as for example, in the case of railroad, trucking, broadcasting, and shipping industries subject to Federal regulations.”⁵² Despite this apparently common practice, there is no mention as to the rationale for such disclosures.

It was not until the final passage of the Part 45 regulations that the idea of “material contribution” came into play.⁵³ Again, these regulations and revisions came as a result of the increased usage of air carriers, even as far back as 1963.⁵⁴ This increase in passengers necessitated the applicants “to disclose pertinent information regarding persons” involved in the management and

14 C.F.R. pt. 42) (revising the Civil Air Regulations for supplemental air carriers, large commercial operators, and certified route air carriers when conducting charter flights, among other things).

47. Commercial Operator Certification and Operation Rules, 27 Fed. Reg. 12,376, 12,376 (Dec. 13, 1962) (to be codified at 14 C.F.R. pt. 45).

48. Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft, 29 Fed. Reg. at 12,187.

49. Aircraft Certification and Operation Rules for Supplemental Air Carriers, Large Commercial Operators, and Certificated Route Air Carriers Engaging in Charter Flights or Other Special Services, 27 Fed. Reg. at 8357.

50. *See* Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft, 27 Fed. Reg. at 12,378.

51. *Id.* at 12,377.

52. *Id.*

53. Commercial Operator Certification and Operation Rules, 28 Fed. Reg. 2000, 2000–01 (Mar. 1, 1963) (to be codified at 14 C.F.R. pt. 45).

54. *Id.* at 2001.

ownership of the applicants.⁵⁵ It is needed “to prevent the use of mere business names or corporate devices to obtain certificates when not otherwise justified.”⁵⁶ Without this information, “the Administrator does not have sufficient detailed and reliable information . . . [to] make a sound determination regarding an applicant’s ability to conduct operations” safely.⁵⁷ Nevertheless, the FAA noted that the regulations were initially proposed without regard to whether the individuals contributed to the revocation and whether this was too wide of a net to cast. Accordingly, the revised and promulgated regulation was “amended so as to apply only to persons whose employment contributed materially to the reasons for which that certificate was revoked.”⁵⁸ Thus, we have the origins for the phrase in question.

It appears that the idea of materially contributing to a revocation originated as a compromise. The FAA would not concern itself with every single employee from a previously revoked air carrier—only those who contributed materially to the entity’s demise. Nevertheless, this history illuminates several important reasons for continuing to ask whether applicants contributed to a revocation. First, it was the actual “operating experience” of the FAA that past performance can be an indicator for the future. This is all the more important when one considers that the FAA only revokes air carrier certificates for egregious violations. Relatedly, the FAA is interested in gathering all “pertinent” data with respect to applicants. This information does not automatically blackball an applicant, but it is still vital that the Administrator have all information relevant to the application. It is impossible to consider information if it is never asked for or provided. Ultimately, this information-based inquiry is for the safety of the passengers. The FAA wants to not only encourage the use of air carriers but also ensure the safety of those operations. Preventing individuals from using “corporate devices” to skirt aviation regulations promotes air safety and encourages future use of commercial air travel.

B. *Judicial Interpretation of Material Contribution*

Despite its usage since the 1960s, the phrase “material contribution” has not garnered much judicial attention.⁵⁹ In fact, to date, there appears to be only one decision by an administrative law judge (ALJ) that addresses what it means to materially contribute to a revocation.⁶⁰

55. *Id.*

56. *Id.*

57. *Id.*

58. *Id.*

59. *See, e.g.,* *Canfield Aviation, Inc. v. NTSB*, 854 F.2d 745, 746, 748 (5th Cir. 1988) (avoiding the issue of “material contribution” and dismissing the case for lack of standing).

60. *See* *BG Aviation, Inc.*, Docket No. 13-85-4, No. 85NM640003, slip op. at 5 (U.S.

In the court's opinion in *BG Aviation, Inc.*,⁶¹ the FAA denied an application filed by BG Aviation, Inc. for a Part 135 certificate.⁶² The listed owners of the company-applicant were two women whose husbands were brothers and were the owners of Aero Sport, Inc., a Part 135 operation whose certificate had been revoked. BG Aviation, as the applicant, appealed the denial of the application. The ALJ upheld the denial on two bases: the proposed Director of Maintenance had worked for Aero Sport and materially contributed to its revocation, and the former owners of Aero Sport materially contributed to the revocation and would have substantial control and ownership of BG Aviation.⁶³

As to the first issue, the ALJ acknowledged that the proposed Director of Maintenance held an apparently nonmanagerial role in Aero Sport. However, the ALJ looked behind the employee's title and found that he acted as the "de facto Director of Maintenance for Aero Sport."⁶⁴ This holding was supported by the fact that the listed Director of Maintenance for Aero Sport testified that he had no technical background and did not actually perform any functions of the position.⁶⁵ With respect to the employee's material contribution, the ALJ noted that, "[o]f the twenty-nine instances of improper maintenance" that ultimately led to the revocation, the employee had been "involved in eighteen of them."⁶⁶ Based on that percentage alone, the ALJ held that the employee had materially contributed to the circumstances surrounding the revocation; BG Aviation hardly challenged that determination.⁶⁷

The more interesting and illuminating discussion in the case centered on the listed owners of BG Aviation. First, the ALJ found it unconvincing that the husbands would have no interest or control over their wives' new air carrier.⁶⁸ The couples had been married for over twenty-five years, and the wives had no real experience in operating an air carrier whatsoever. Of course, it was untenable that the husbands would exert no influence over their wives' new business. The ALJ noted that "there can be little doubt that BG Aviation is just a substitute for Aero Sport."⁶⁹ This point was corroborated by the fact that the new application was filed so shortly after Aero

Dep't of Transp. Mar. 27, 1986) (finding an employee's conduct materially contributed to the revocation of Aero Sport's certificate) (finding employee's conduct materially contributed to the revocation of Aero Sport's certificate).

61. Docket No. 13-85-4, No. 85NM640003 (U.S. Dep't of Transp. Mar. 27, 1986).

62. *See id.* at 5 (affirming Notice of Proposed Denial issued by the FAA to BG Aviation, Inc.).

63. *Id.* at 5-6, 10.

64. *Id.* at 3-4.

65. *Id.* at 4.

66. *Id.*

67. *Id.* at 4-5.

68. *Id.* at 6-7.

69. *Id.*

Sport's certificate was revoked—and by inexperienced applicants, no less.⁷⁰ This sort of corporate device to get around the regulations was precisely what 14 C.F.R. § 119.39 (or its ancestor, more specifically) was designed to prevent. However, the ALJ did not stop there; he held that the application would have been denied even in the absence of the marriage between the owners of BG Aviation and the owners of Aero Sport.⁷¹ BG Aviation's manual was based on Aero Sport's manual; “[t]he aircraft proposed to be used by BG Aviation were [] owned [and used] by Aero Sport;” Aero Sport's management officials were going to be employed by BG Aviation; and BG Aviation was going to take over some of the same business contracts previously operated by Aero Sport.⁷² This amount of overlap between the companies indicated that the previous owners would clearly exert significant influence over the new business operations.

At first glance, the *BG Aviation* case appears to fall squarely within 14 C.F.R. § 119.39's intent. Bad actors should not be able to simply create a new company and continue underperforming air carrier operations. The decision is informative, however, when one compares its rationale against the regulation's language. The regulation questions whether the owners of the applicant materially contributed to a *previous* revocation. The regulation's language looks backwards: In the past, did someone contribute to a revocation? On the other hand, the rationale regarding the overlapping business operations appears to look forward: Will the applicant continue to use the same manual, equipment, and personnel in the *future*? Although this inquiry is not necessarily captured in the express language of the regulation, it is nevertheless wholly consistent with the regulation's history. The FAA should question whether companies are simply going to continue their bad operations in the future based on what occurred in the past. This totality-of-the-circumstances approach is precisely what the regulations envisioned and is precisely how the FAA should continue to enforce these provisions.

II. MATERIALLY CONTRIBUTING TO REPAIR STATION REVOCATIONS

A. *The NTSB Recommends Regulations*

Unfortunately, a fatal accident led to the development of the term “material contributions” in the repair station context.⁷³ On January 24, 2003, a

70. *See id.* at 7 (noting that Aero Sport's certificate was revoked on September 5, 1984 and the new application was filed on September 12, 1984).

71. *Id.* at 8.

72. *Id.* at 7–8.

73. *See generally* NTSB Safety Recommendation, *supra* note 12, at 1–2 (describing a January 24, 2003, plane crash that prompted the NTSB to issue safety recommendations).

Beach 95 crashed, which resulted in the death of the pilot, the only person aboard. The National Transportation Safety Board (NTSB) then investigated. The investigation revealed that the cause of the accident was a two-and-a-half-foot section of a blade separating from the propeller.⁷⁴ An improper overhaul performed on that propeller caused the detachment. Disturbingly, the chief inspector of the company who overhauled the propeller had previously worked for another repair station whose certificate had been revoked for improper maintenance and overhauls on aircraft propellers.

As a result of the investigation, the NTSB made a safety recommendation. The Board noted its concern over the FAA's lack of regulations "preventing individuals who have been associated with a previously revoked repair station . . . from continuing to operate through a new repair station."⁷⁵ In fact, the Board pointed out that such a preventative regulation exists for air carriers in Parts 121 and 135.⁷⁶ In the Board's view, the same limitations on air carrier personnel "should also apply to repair stations."⁷⁷

B. Section 145.51 and Analysis

In 2014, the FAA issued the Final Rule to implement, *inter alia*, 14 C.F.R. § 145.51.⁷⁸ As expected, the FAA noted that the section "was influenced to a large extent by" § 119.39.⁷⁹ Accordingly, the section reads, in pertinent part:

(e) The FAA may deny an application for a repair station certificate if the FAA finds that:

...

(2) The applicant intends to fill or fills a management position with an individual who exercised control over or who held the same or a similar position with a certificate holder whose repair station certificate was revoked, or is in the process of being revoked, and that individual materially contributed to the circumstances causing the revocation or causing the revocation process; or

(3) An individual who will have control over or substantial ownership interest in the applicant had the same or similar control or interest in a certificate holder whose repair station certificate was revoked, or is in the process of being revoked, and that individual materially contributed to the circumstances causing the revocation or causing the revocation process.

74. *Id.* at 1.

75. *Id.* at 2.

76. *Id.*

77. *Id.* at 3.

78. *See generally* Repair Stations, 79 Fed. Reg. 46,971 (Aug. 12, 2014) (to be codified at 14 C.F.R. pt. 145) (allowing the FAA to deny applications for new repair stations certificates based on whether material contributions to a previous certificate revocation occurred).

79. *Id.* at 46,976.

(f) If the FAA revokes a repair station certificate, an individual described in paragraphs (e)(2) and (3) of this section is subject to an order under the procedures set forth in 14 C.F.R. [§] 13.20, finding that the individual materially contributed to the circumstances causing the revocation or causing the revocation process.⁸⁰

The FAA considered and addressed several concerns to the passage of this section. The FAA specifically rejected injecting a “knowing” element into the section.⁸¹ This was because “in general, the purpose of the provision is to help ensure that persons who have committed serious . . . violations of the regulations are not able to continue doing so under a newly issued repair station certificate.”⁸² Similar to the passage of the air carrier regulations, commenters raised the specter of a “blacklist” or lifetime ban on working for a repair station.⁸³ Again, the FAA responded that the information on key management officials and owners is merely one of many factors to consider in granting or denying a certificate.⁸⁴ It is not automatic.

Two aspects of the repair station regulation are worth highlighting. First, the section retains the broad inquiry into the circumstances causing the revocation or the revocation process from the air carrier arena.⁸⁵ This does not question whether the applicant’s managers or owners actually caused the revocation (e.g., it does not ask whether the person actually falsified a maintenance document). Rather, it asks about the *circumstances* leading to the revocation. Second, the newer regulation includes a sub-section (f) regarding the notice process to which a potential bad actor is entitled.⁸⁶ That process involves sending a notice to the potential bad actor and setting out the facts underpinning the inspector’s opinion that the person materially contributed to the circumstances causing a revocation.⁸⁷ That person can appeal the notice and have an evidentiary hearing which can also be appealed.⁸⁸ This subsection was included to address due process concerns.⁸⁹

Additionally, in passing the regulation, the FAA intended this inquiry into

80. *Id.* at 46,984.

81. *Id.* at 46,976–77.

82. *Id.*

83. *Id.* at 46,977.

84. *Id.* (stating “no ‘ex post facto imposition of a penalty’ issue could arise”).

85. *Id.* at 46,984.

86. *Id.* at 46,977–78.

87. *Id.* at 46,978; *see also* 14 C.F.R. § 13.20(b) (2019).

88. *See generally* 14 C.F.R. §§ 13.33, 13.35 (2019) (providing information on the hearing and appeal process).

89. *See Repair Stations*, 79 Fed. Reg. 46,971, 46,978–79 (Aug. 12, 2014); *see also* *Canfield Aviation, Inc. v. NTSB*, 854 F.2d 745, 749 n.6 (5th Cir. 1988) (avoiding constitutional issues based on standing and withholding “the constitutionality of the FAA regulations”).

possible bad actors to be “continuing and ongoing.”⁹⁰ Otherwise, the problem would be that a bad actor who owned or managed a revoked repair station would simply have a family member or friend apply for a certificate and act as a puppet for the bad actor. This would clearly undermine the intent of the regulation and overall air safety. The FAA cited to the air carrier regulations in stating that the regulation is also “an ongoing and continuing [] requirement” for the certificate holder.⁹¹ Without citing specifically to the decision, this analysis of the regulations is consistent with the *BG Aviation* decision. Just as the husbands could not use their wives to apply for a new air carrier certificate, so too could a bad actor not use a stand-in applicant for a new repair station certificate. In fact, in serious cases, if a bad actor comes back into an otherwise properly certificated repair station, the FAA may take action against the certificate based on that bad actor’s employment there.⁹²

The FAA has thus taken steps to prevent bad actors from continuing to undermine air safety. However, the regulations themselves beg the question of what it means to “materially contribute[] to the circumstances causing the revocation.”⁹³ More succinctly, the regulations do not define who the bad actors are. From this historical and textual analysis, we can certainly glean certain aspects of who those bad actors might be. The FAA wants to gather as much information to make an informed decision in granting or denying a certificate. It is safety-oriented to encourage air commerce; it questions not only what happened in the past but also what the applicant plans on doing in the future; and it is an ongoing and continuing requirement for the certificate holder. The next section considers what it means to materially contribute in other contexts—namely in tort law—to further guide the FAA in how to identify these bad actors.

III. MATERIAL CONTRIBUTION IN NON-AVIATION CONTEXTS

The idea of “material contribution” comes up in other non-aviation contexts. For instance, the Department of Veterans’ Affairs (VA) considers “whether the service-connected disability contributed to death,” for purposes

90. See *Repair Stations*, 79 Fed. Reg. at 46,978.

91. *Id.* (citing *Alphin Aircraft, Inc.*, FAA Order No. 97–10, 1997 WL 93230, at *3 (Feb. 20, 1997)).

92. *Id.* (“In other words, the FAA would look with disfavor on the actions of a certificate holder who, sometime after obtaining the certificate with no association with key personnel identified in those paragraphs, becomes associated with one or more of the persons the regulation was designed to preclude from controlling repair station operations. In egregious cases, such a repair station could be subject to an enforcement action under § 145.51(e) based on its not meeting the original certification requirement.”).

93. *Id.*

of pensions and other benefits in which case “it must be shown that it *contributed* substantially or *materially*.”⁹⁴ The Social Security Administration (SSA) considers whether alcohol or drug use contributes to one’s disability for purposes of administering benefits.⁹⁵ The regulation states that it “must determine whether your drug addiction or alcoholism is a *contributing factor material* to the determination of disability.”⁹⁶ The SSA goes so far as to attempt to define this concept by specifying that it “will examine in determining whether drug addiction or alcoholism is a contributing factor material to the determination of disability is whether we would still find you disabled if you stopped using drugs or alcohol.”⁹⁷ Despite the use of this phrase in regulatory and other areas,⁹⁸ it is doubtful that they can illuminate the meaning of material contribution with respect to air carriers and aviation repair shops. Nowhere in the legislative materials—particularly those for the original air carrier regulation capturing the idea of “material contribution”—is there mention of adopting the language from the SSA or VA regulations.⁹⁹ Further, the air carrier regulation was passed well before the VA regulation.¹⁰⁰ Nevertheless, the idea of “material contribution” comes up more generally in the area of tort law.

A. *Material Contribution Helps Find Causation in Tort Law*

For a plaintiff to be successful in any negligence lawsuit, she must establish certain elements: that the defendant owed a certain duty to the plaintiff, that the defendant breached that duty, that the plaintiff suffered some harm, and that the defendant’s breach caused that injury.¹⁰¹ Causation is often a tricky

94. 38 C.F.R. § 3.312(c) (2018) (emphases added).

95. 20 C.F.R. § 416.935 (2019).

96. 20 C.F.R. § 416.935(a) (emphasis added).

97. 20 C.F.R. § 416.935(b)(1).

98. See, e.g., Romualdo P. Eclavea, Annotation, *Liability as “Vicarious” or “Contributory” Infringer under Federal Copyright Act*, 14 A.L.R. Fed. 825 (1973) (discussing “contributory infringement” under the Federal Copyright Act); Brian J. McBrearty, *Who’s Responsible? Website Immunity Under the Communications Decency Act and the Partial Creation or Development of Online Content*, 82 TEMP. L. REV. 827, 829 (2009) (discussing material contribution exception to immunity under the Communications Decency Act of 1996).

99. See generally Federal Aviation Agency, 28 Fed. Reg. 2000, 2000–01 (March 1, 1963) (to be codified at 14 C.F.R. pt. 45) (discussing certification regulations).

100. Compare *id.* at 2001 (coming into effect in May 1963), with Federal Old-Age, Survivors, and Disability Insurance and Supplemental Security Income for the Aged, Blind, and Disabled; Benefit Reforms for Individuals Disabled Based on Drug Addiction or Alcoholism, 60 Fed. Reg. 8140, 8140 (Feb. 10, 1995) (to be codified at 20 C.F.R. pts. 404, 416) (taking effect in March 1995).

101. See generally 57A AM. JUR. 2D *Negligence* § 1 (2019) (noting the jurisprudential use of “negligence” in American law).

question.¹⁰² The traditional test for causation is the “but-for” test. The court (or jury) will ask “but for the defendant’s actions, would the plaintiff have suffered the loss?” A seemingly straightforward approach, this test is not always clear cut.¹⁰³

Consider, for example, a well-known example of how but-for causation can be muddied in a negligence case. A defendant negligently starts a fire in one location which spreads; lightning strikes in another location which also starts a spreading fire; the plaintiff’s property lies between the fires.¹⁰⁴ The property is destroyed by fire, and the plaintiff sues the defendant if only because he cannot sue Zeus for the thunderbolt. In this scenario, either fire was sufficient to cause the damage, but the defendant’s fire was not necessarily the actual cause of the loss. But for the defendant’s negligent fire, the plaintiff still would have lost the property due to the lightning fire. Nevertheless, in this scenario courts (or juries) can employ a different causation test. In this case, the court found the defendant guilty because his negligence was a “substantial factor” in the plaintiff’s loss.¹⁰⁵

The “substantial factor” test acknowledges that a loss can occur for many different reasons, yet that should not prevent the plaintiff from recovering against a defendant.¹⁰⁶ This test, “sometimes called the ‘material and contributing factor test,’ recognizes that ‘[a]n event without millions of causes is simply inconceivable.’”¹⁰⁷ Indeed, different jurisdictions will use different adverbs, asking if the defendant’s actions “substantially,” “proximately,” or “materially” caused the plaintiff’s loss.¹⁰⁸ No matter the adverb, the idea is

102. See generally Erik S. Knutsen, *Ambiguous Cause-in-Fact and Structured Causation: A Multi-Jurisdictional Approach*, 38 TEX. INT’L L.J. 249, 250–52 (2003) (declaring the alleged straightforwardness of cause-in-fact inquiries to be a myth).

103. See, e.g., 57A AM. JUR. 2D *Negligence* § 456 (2019) (“Every incidental factor that arguably contributes to an accident is not a ‘but-for’ cause in the legal sense. An event may be one without which a particular injury would not have occurred, but if it merely provided the condition or occasion affording an opportunity for the other event to produce the injury, it is not the proximate cause thereof.”).

104. *Kingston v. Chicago & N.W. Ry. Co.*, 211 N.W. 913, 914 (Wis. 1927).

105. See *id.* at 915.

106. See, e.g., 65 C.J.S. *Negligence* § 221 (2019); see also Danielle Conway-Jones, *Factual Causation in Toxic Tort Litigation: A Philosophical View of Proof and Certainty in Uncertain Disciplines*, 35 U. RICH. L. REV. 875, 887 (2002) (“The ‘substantial factor’ test assumes that events may occur practically simultaneously to set in motion the happening of other resultant events.”).

107. Shelly Brinker, *Opening the Door to the Indeterminate Plaintiff: An Analysis of the Causation Barriers Facing Environmental Toxic Tort Plaintiffs*, 46 UCLA L. REV. 1289, 1297 (1999) (quoting *Elam v. Alcolac, Inc.* 765 S.W.2d 42, 174 (Mo. Ct. App. 1988)).

108. See generally M.C. Dransfield, Annotation, *Sufficiency of Instruction on Contributory Negli-*

to loosen the standard for causation when the traditional “but-for” test appears too strict.¹⁰⁹

B. Policy Goals of Material Contribution in Toxic Tort Cases

A more specific area where the but-for test fails is environmental or toxic tort cases.¹¹⁰ If someone lives near a large industrial plant that is emitting toxic waste and that person develops cancer, who can say that the plant’s emissions caused the injury? But for the emissions, is it not possible that the person’s personal habits or family history would have caused him to develop that cancer? No amount of current scientific evidence could trace the link of causation from the plant’s emissions directly and unquestionably to the plaintiff’s cancer.¹¹¹

Scholars have noted the benefits of a looser causation test in environmental and toxic torts cases. First, it serves the twin goals of tort law: compensating a victim and deterring a defendant from continuing its bad behavior.¹¹² Additionally, in a scenario where there are multiple defendants none of

gence as Respects the Element of Proximate Cause, 102 A.L.R. Art. 411 (1936) (discussing jury instructions for negligence lawsuits and causation).

109. See Knutsen, *supra* note 102, at 250 (“Where the ‘but for’ test fails, courts have reached for the substantial factor, or material contribution to injury, approach to divine what role a defendant had in causing injury to a plaintiff.”); Lynda M. Collins, *Material Contribution to Risk in the Canadian Law of Toxic Torts*, 91 CHI. KENT L. REV. 567, 575 (2016) (“A rigid application of the but-for test produces manifest injustice where the defendant has exposed the plaintiff to an unreasonable risk of developing a particular illness that she does in fact contract, but causation is in doubt because of a lack of data concerning the substance in question.”).

110. See Brinker, *supra* note 107, at 1298 (outlining the traditional burden of proof for toxic torts); see also Michael Byers et al., *The Internationalization of Climate Damages Litigation*, 7 WASH. J. ENVTL. L. & POL’Y 264, 281–82 (2017) (“Courts in the United States have favored the material contribution approach in environmental and toxic torts cases where a chemical or environmental factor could have independently caused the injury at issue.”); Conway-Jones, *supra* note 106, at 886 (“No issue is more difficult in environmental tort litigation than resolving the question of ‘whether the exposure to a toxic substance is the cause in fact of a plaintiff’s harm.’”).

111. See, e.g., Clifford Fisher, *The Role of Causation in Science as Law and Proposed Changes in the Current Common Law Toxic Tort System*, 9 BUFF. ENVTL. L.J. 35, 59–60 (2001) (noting that causation “poses a problem for plaintiffs in toxic tort cases when there is only speculative and inconclusive evidence linking their ailment to the specific form of pollution or other product”).

112. Collins, *supra* note 109, at 582 (“From the perspective of tort law’s traditional goals of compensation and deterrence, it would seem clear that a broad form of liability for material contribution to risk would improve tort law’s ability to meet its objectives. More plaintiffs who are tortiously harmed by toxic wrongdoing would receive compensation, and the manufacturers and emitters of toxic substances would have an increased incentive to exercise care in the investigation and dissemination of chemical products and pollution.”).

whose conduct is a but-for cause of an injury, it prevents the defendants from escaping liability “simply because others behaved wrongfully towards the victim too.”¹¹³ Besides, a looser causation standard can prevent a “willful ignorance” defense.¹¹⁴ If a company chooses not to test its products or emissions, then a plaintiff will have a much more difficult case to prove causation without enough data.¹¹⁵ Ultimately, cases where a defendant has acted negligently but the plaintiff cannot pinpoint causation to her injury can “nag at one’s sense of justice.”¹¹⁶

This approach to causation is beneficial to understanding “material contribution” in the aviation context. Again, on an individual level (e.g., a pilot falsifies his logbook), causation is easy because only the individual’s actions effected the breach of the regulations. However, revocations of entities’ certificates occur only for very serious violations.¹¹⁷ Many different people can contribute to a very serious violation. For example, if a repair station employs mechanics who are falsifying maintenance records, those individuals may have their individual certificates revoked. If, however, the accountable manager was aware of the issue and continued to employ those individuals, the entire repair station’s certificate may be revoked. Can we say that but for the manager’s actions, there would have been no regulatory breach? Not necessarily—the manager could have never touched a part or falsified a single record. Therefore, the traditional but-for standard might nag at our sense of justice because surely, he should have done something to prevent the breaches from occurring or continuing. Thus, it is correct to ask whether his actions, or inactions, materially contributed to the regulatory infractions. In that way, a responsible party is prevented from escaping liability simply because there were multiple factors or because the manager chose to turn a blind eye to a problem in the company.

The following section takes the history and purpose of the aviation regulations, couples them with the looser causation approach from toxic torts, and suggests a framework for the FAA and courts to determine who materially contributes to a certificate revocation.

113. Ken Oliphant, *Causation in Cases of Evidential Uncertainty: Juridical Techniques and Fundamental Issues*, 91 CHI. KENT L. REV. 587, 593 (2016).

114. See Collins, *supra* note 109, at 582 (“The defendant who does not study its substance at all . . . will undoubtedly be in breach of the duty of care, but will simultaneously make it impossible for the plaintiff to prove a material contribution to risk since there will be a complete lack of data.”).

115. Collins, *supra* note 109, at 582.

116. Knutsen, *supra* note 102, at 251.

117. Regulatory Review Program; Air Taxi Operators and Commercial Operators, 43 Fed. Reg. 46,742, 46,762 (Oct. 10, 1978) (to be codified at 14 C.F.R. pts. 121, 127, 135).

IV. WHO MATERIALLY CONTRIBUTES TO REVOCATIONS?

Because the purpose of the regulations is to promote air commerce vis-à-vis safety,¹¹⁸ and because the FAA needs data on noncompliance to ensure that safety,¹¹⁹ the FAA and courts should take a broad view in considering who materially contributes to a revocation. If the FAA does not have the information on managers or owners who previously worked at a revoked entity, it cannot consider whether those persons pose a continuing risk to air safety. A narrow definition of “material contribution” limits the number of people who would fall under the regulation, thus depriving the FAA of potential data.

It is axiomatic that any analysis of a law or regulation begins with the text of the law itself.¹²⁰ The language of the material contribution regulations justifies a broad interpretation. The regulations do not ask if the person in question *caused* the revocation. Rather, they ask whether the person materially contributed to the *circumstances causing* the revocation.¹²¹ Similar to “material contribution” in the toxic tort sense, these regulations recognize that there can be more than one person culpable for the entity’s certificate revocation. It takes more than one bad actor for a violation to rise to the very serious level of revoking an entity’s certificate.¹²² Thus, the language of the regulations captures this requirement in asking who contributed to those general circumstances. This is not necessarily a satisfactory conclusion because it almost begs the question of what it means to materially contribute to those overall circumstances. Here, too, tort law principles can aid the FAA and judges making this determination.

A. *Applying Tort Principles to Aviation Regulations*

The easiest example of material contribution would involve intent. An owner or manager who willfully or intentionally assists another in violating the regulations would surely be found to have materially contributed to the circumstances leading to a resulting revocation. However, the regulations should be interpreted to include negligent conduct as well. Borrowing from tort law, the FAA and judges can apply different negligence standards to the managers and owners covered by the material contribution regulations.

118. *Id.* at 46,742.

119. *Id.* at 46,762.

120. *See, e.g.,* *Murphy v. Smith*, 138 S. Ct. 784, 787 (2019) (“As always, we start with the specific statutory language in dispute.”); 16 AM. JUR. 2D *Constitutional Law* § 62 (2019).

121. 14 C.F.R. § 119.39(b)(3) (2019).

122. *Id.*

First, the FAA should utilize the “reasonable person” standard from tort law in determining whether someone contributed to the circumstances of a revocation. Generally speaking, this standard establishes negligence by asking whether a reasonable person in the same or similar circumstances would have done something different from the defendant.¹²³ The FAA should similarly determine whether an owner or manager should have done something different to prevent a regulatory breach. This inquiry will allow the FAA and judges to examine what the manager or owner knew and question that person’s actions or inactions. If, based on industry standard or operating experience, the manager or owner should have done something differently, then that person should be found to have materially contributed to the circumstances causing the revocation. It acknowledges the fact that multiple people can lead to a systemic or “serious” violation causing an entity’s revocation, and this approach is consistent with tort principles and material contribution overall.

Second, the FAA should utilize a “negligence per se” standard for determining material contribution. This standard looks to other statutes or laws in determining whether someone acted negligently.¹²⁴ For instance, if a defendant breaks a law in causing someone else an injury, the plaintiff can use that law as the standard below which the defendant acted in arguing that the defendant was necessarily negligent. Similarly, the aviation regulations require certain personnel for air carriers¹²⁵ and delineate responsibilities for some of those positions.¹²⁶ Additionally, the regulations also require certain personnel for repair stations and define some of those positions’ responsibilities.¹²⁷ Repair stations also must have repair station manuals that “identify[] . . . [t]he duties, responsibilities, and authority of each management position”¹²⁸ If a manager falls below the duties imposed by the aviation regulations or his own company’s manual which is related to the eventual revocation, the manager should be found to have materially contributed to

123. See, e.g., 57A AM. JUR. 2D *Negligence* § 133 (2019) (“The phrasing of the standard of care in negligence cases in terms of the ‘reasonable person’ is firmly implanted in the American law of negligence. The standard of care is often stated as the ‘reasonably prudent person standard,’ or some variation thereof, or in other words, what a reasonable person of ordinary prudence would have done in the same or similar circumstances.”) (internal citations omitted).

124. See generally 57A AM. JUR. 2D *Negligence* § 754 (2019) (noting that “[j]urisdictions are divided on the application of a negligence per se rule to the violation of a regulation”).

125. See 14 C.F.R. §§ 119.65(a), 119.69 (2019) (listing management personnel required for air carriers).

126. See, e.g., 14 C.F.R. § 121.537(b)–(c) (2019) (discussing some responsibilities for the pilot and director of operations).

127. See, e.g., 14 C.F.R. § 145.3(a) (2019) (defining the position of “accountable manager”); 14 C.F.R. § 145.151–145.165 (listing personnel requirements).

128. 14 C.F.R. § 145.209(a)(3) (2019).

the circumstances causing the revocation. Either the FAA, through its regulations, or the company itself, through its own manual, has determined that the person should act a certain way. The FAA has a significant interest in knowing whether individuals failed to live up to those standards and if such failures led to an entity's revocation.

B. Addressing Concerns with This Approach

One argument against these proposals may be that they impose too high of a burden on an owner or employees of an air carrier or repair station. This is not necessarily the case. Regarding managers, the air carrier regulation specifies which managers are covered. These key management officials are higher ranking than a given employee and, thus, should be held to a higher standard. Although the managers are not specified in the repair station regulation, it still speaks to the "management position," which does not necessarily include lower-level employees. By using the reasonable person and negligence per se standards, the FAA would actually avoid capturing employees who should not be expected to act under this type of heightened duty. Regarding owners, there is no requirement in the regulations that the owner of an air carrier or repair shop be actively involved in the day-to-day operations of the business. In fact, with the regulations requiring certain maintenance and operational personnel, it appears that an owner can delegate those responsibilities and corresponding duties to someone else. If, however, an owner decides to inject himself into the day-to-day operations, he is undertaking those responsibilities to prevent very serious violations that may lead to a revocation. In this way, there is a spectrum from passive ownership to active ownership wherein any given owner may fall. By asking what the owner did, what the owner knew, and what the owner could have or should have done differently, the FAA can decide whether the owner exerted such influence over the operations so as to fall under the "material contribution" regulations.

Nor are these standards too broad. For instance, a repair shop may have several managers: an accountable manager, a quality control manager for maintenance repairs, a manager in charge of employee training, and a manager in charge of the equipment room. If the repair station's certificate is revoked because the technicians were falsifying maintenance records and the quality control manager knew about it yet did nothing, then it is not difficult to see how that manager's inaction led to the circumstances causing the revocation. The reasonable person standard would not include the equipment manager because he had no colorable contribution to the circumstances leading to the revocation. The repair station manual would also list the equipment manager's duties, which likely would not touch on the falsification of the maintenance records, so the negligence per se standard would also be

an appropriate standard to use. Somewhere in the middle might be the employee training manager. If he were improperly training the technicians on how to fill out the records or perform the actual maintenance, then it would be reasonable to find that the training manager also contributed to the circumstances causing the revocation. If, however, he acted properly and reasonably in training the technicians and he violated no regulations or duties imposed by the company's manuals, then it would not make sense to find that he contributed to the circumstances causing the revocation. These tort principles can assist in the case-by-case determinations to give clarity to an undefined term of "material contribution."

Applying these tort standards is also consistent with the policy justifications for using the "material contribution" test in toxic torts. There, defendants could not escape liability simply because there were multiple bad actors or because they were willfully ignorant of the harm they were causing. Similarly, simply because multiple people within an air carrier or repair shop could lead to the serious violation does not mean that managers who could have or should have known about it can escape liability. Additionally, a manager or owner cannot benefit from willful ignorance if a reasonable person would have known about it or if a regulation or manual requires that person to know about the possible infractions and to do something about them. Thus, tort principles are a perfect fit for understanding how the FAA should identify and monitor these bad actors.

One other concern with implementing these regulations is embedded in the language of the regulations themselves. Both regulations ask whether the person materially contributed to the circumstances causing the revocation or the revocation process. After the FAA issues an emergency revocation of a certificate, the respondent has ten days to respond if he wants a hearing within thirty days,¹²⁹ or twenty days for a nonemergency hearing process.¹³⁰ The hearings are conducted before an ALJ who can affirm, deny, or modify the order of revocation.¹³¹ In between issuing the order and the eventual hearing is generally the typical litigation process involving pleadings, discovery, and prehearing motions. Once the ALJ issues her decision, the respondent can appeal to the full NTSB if the ALJ affirmed the revocation, or the

129. See 49 C.F.R. §§ 821.53(a), 821.56(a) (2018) (requiring an appeal be filed within ten days of receipt of an emergency order from the FAA and setting a hearing within thirty days of a filed appeal).

130. See 49 C.F.R. § 821.30(a) (2018) (requiring an appeal be filed within twenty days of receipt of nonemergency order from FAA).

131. See 49 C.F.R. §§ 821.1(a), 821.35(b) (2018) (defining the law judge's position and listing powers during hearings).

FAA can appeal if the revocation is denied.¹³² From there, the parties appeal to the federal appellate court system.¹³³

On their face, the material contribution regulations do not appear to require a successful or even completed revocation in order to apply to a certain individual. The regulations simply refer to the “revocation” or the “revocation process.”¹³⁴ There may be a number of reasons why an ALJ may modify a revocation to a suspension or civil penalty, but the regulations do not condition the material contribution issue on a completely successful revocation. Simply starting the revocation process appears sufficient. Further, the legislative background to the repair station regulation supports this view. In its own recommendation, the NTSB noted that an entity might surrender its certificate “prior to completion of an enforcement investigation that is based on charges that could be grounds for revocation.”¹³⁵ Thus, the NTSB suggested that the FAA “complete the investigation” and “document all available facts relating to the fitness of the involved individuals”¹³⁶ Allowing a company to simply fold, surrender a certificate to avoid litigation, and reorganize and reopen as a new “company” is precisely what these regulations aim to prevent. Thus, the individuals who materially contribute to that process should not be able to avoid the material contribution regulations simply because no revocation order materializes. Furthermore, if a company fires its bad actors after a revocation order is issued, the ALJ might reverse the revocation since the company is now in compliance.¹³⁷ It is nonsensical, then, to think that the person who was fired should benefit from his being fired only because the underlying revocation was reversed. Thus, it should be enough that the FAA initiates the revocation process—successfully or unsuccessfully—that triggers the application of the material contribution regulations.

C. Proposed Framework for Notifying Bad Actors

Given the regulations’ background and applicable tort principles, the FAA is better equipped to identify bad actors in the aviation industry. Whenever an air carrier or repair station has its certificate revoked, the FAA

132. See 49 C.F.R. §§ 821.47(a), 821.57(a) (2018) (providing a timetable for appeals filed based on nonemergency revocations and emergency revocations).

133. See 49 C.F.R. § 821.64 (2018).

134. 14 C.F.R. § 119.39(b)(3) (2019).

135. NTSB Safety Recommendation, *supra* note 12, at 3.

136. *Id.*

137. See, e.g., *Del Balzo v. Okla. Exec. Jet Charter, Inc.*, NTSB Order No. EA-3928, 1–2, 6–7 (ordered on July 1, 1993), <https://www.nts.gov/legal/alj/onodocuments/aviation/3928.pdf> (affirming the ALJ’s decision to modify a revocation of an air carrier’s certificate to a civil penalty).

should consider all persons who may fall within the material contribution regulations. The FAA inspectors should consider intentional and unintentional conduct, and they should consider the person's actions and inactions in leading to or contributing to the revocation process. These considerations should be made with the following two tort principles in mind: Would a reasonable person have acted differently under similar circumstances, or are there duties established by law or company policy which required the individuals to have acted differently? Finally, the FAA need not wait for an actual revocation to be issued (or affirmed by the courts) to notify these individuals that they contributed to the circumstances of the revocation or revocation process.

In addition to the tort principles above, the FAA and courts can look to the case law for material contribution under *BG Aviation* to make these determinations. Under *BG Aviation*, the ALJ not only looks backwards to what the person did or did not do to materially contribute to the revocation but can also look to the future to see if the applicant will simply continue the revoked company's business.¹³⁸ Accordingly, during its investigation the FAA should consider whether the individuals intend to use the same physical facilities, equipment, or aircraft; employ the same people; or take over the same business contracts as the originally revoked certificate. This totality-of-the-circumstances approach is consistent with the case law and comports with the information-gathering purpose for the regulations.

Regarding the FAA's notification to these individuals, the FAA should adopt the notice and procedure from the repair station and apply it in practice to air carrier regulations. This is despite the fact that the air carrier regulation makes no mention of the FAA actually sending a notice to the person. However, whatever due process concerns were addressed with the passage of subpart (f) to the repair station regulation apply with equal force to the air carrier regulation. Accordingly, the FAA should amend the air carrier regulation to formally include that notice process, and it should apply it in practice before the amendment is finalized. Per the regulation's background, this notice would include notifying the respondent of the facts of the underlying revocation, the facts supporting the determination of the person's material contribution, the fact that the respondent will be included in a database of individuals who materially contributed to a revocation, and that inclusion on this database may be the basis of denial for a future application.¹³⁹ The FAA

138. See *BG Aviation, Inc.*, Docket No. 13-85-4, No. 85NM640003, slip op. at 5 (U.S. Dep't of Transp. Mar. 27, 1986).

139. See generally *Repair Stations*, 79 Fed. Reg. 46,971, 46,977-78 (Aug. 12, 2014) (to be codified at 14 C.F.R. pt. 145) (listing the different possible components of a notice which would be mailed to the respondent).

should develop and maintain a database of people who have been identified and notified of their material contribution.

Finally, inclusion on this list should not result in an automatic denial of a future application. Information from this database is simply one of many data points that the FAA should consider in granting or denying applications. Factors such as passage of time, retraining, and proven compliance with the regulations since the revocation should weigh in favor of applicants whose managers or owners had previously contributed to a revocation. Knee-jerk denials would not further air safety and would justify the original concerns with these regulations—that they needlessly keep out otherwise capable people from working in the industry.

CONCLUSION

The FAA is charged with regulating air safety. A noticeable problem presents itself when bad actors use the shield of corporate personhood to continue their bad acting. The FAA has attempted to correct this issue by identifying individuals who materially contribute to an entity's certificate revocation; however, this term is not defined legislatively or jurisprudentially. This article concludes that the FAA and the courts considering this issue should employ a broad definition of "material contribution" in the interest of gathering as much information on certificated entities as possible. This broad definition would include actions and inactions, as well as intentional and negligent acts; it should look to the reasonable person standard and negligence per se doctrine as guidance for making the ultimate determination of material contribution. Finally, to protect the person's due process rights, the FAA should issue a notice and should maintain a database of all those individuals who fall within the regulations. Enforcing the regulations in this way guarantees that the FAA can fulfill its role of encouraging air commerce by ensuring air safety.