Comments of the UAS and AAM industries on Texas Transportation Commission Advisory Committee Report and Recommendations

General comments

The UAS and AAM industries offer extensive safety, sustainability, economic, and other benefits of these technologies. We are pleased that the Texas Transportation Commission has recognized these benefits, and we are grateful for the opportunity to work with the state to be a leader in these technologies for the benefit of its constituents. While some of our members participated in the Advisory Committee, we do not believe that the draft Report and Recommendations (the "Report") reflects a consensus view of the Committee. Over the course of the past year, those members have explained in detail their concerns with the perspective voiced by some Committee members of a restrictive view of FAA's regulatory authority and the suggestion – in our view, wholly erroneous – that property owners maintain rights in the airspace above their land that allows them to exclude or prevent aircraft overflight. We had hoped that the Report would reflect these concerns and would set out a narrative and framework on which the full Advisory Committee could agree.

Instead, the Report recites several positions that are at best controversial interpretations of disputed areas of law and at worse flatly inaccurate statements. We therefore provide the following comments on the Report, with the hope that the final Report can still be amended to reflect a consensus view of the entire Advisory Committee.

Our main concern is with the analysis on pages 11-12 entitled "Regulatory Overview." As set forth below, this analysis is replete with imprecise and, in some cases incorrect, statements of the law and, as such, would require a substantial overhaul at a minimum to address these fundamental flaws. This Regulatory Overview is also superfluous and beyond the scope of the Committee's charge under its enabling legislation to assess current Texas law and whether there is any need to change Texas law. The Regulatory Overview injects the Advisory Committee into a debate about the scope of airspace regulation on which it simply need not take a position. Because this section is not necessary as a basis for the rest of the Report and Recommendations, we believe that the simplest way to mitigate our concerns is to delete this section of the Report in its entirety. If staff believes that the final Report must contain a Regulatory Overview section, we urge that changes be made to address the following issues.

Specific comments on Regulatory Overview

The Regulatory Overview repeatedly employs the concept of "surface airspace," a term that appears to have been very recently coined by certain property rights activists based on outdated court decisions from a century or more ago, long before enactment of the Federal Aviation Act of 1958. The term betrays a bias in favor of a state and local police power role over navigable airspace, a role that does not exist under our constitutional system, in which Congress has vested the Federal Aviation Administration ("FAA") with exclusive authority over navigable airspace. Because there is no actual legal concept of "surface airspace," this term should be removed from the Report.

The Regulatory Overview should also be removed because portions appear to be taken nearly verbatim from a 2020 Mercatus Working Paper, without attribution to this paper. Moreover, statements in the Regulatory Overview are contradicted by statements in other portions of the Report.

The first paragraph (page 11) claims that the "biggest legal question seems to be who has authority to regulate" and that "Congress has not clarified the division between federal and state roles regarding airspace issued [sic]." Neither

proposition is correct. In fact, Congress has very clearly delineated federal and state roles regarding airspace issues. The Report (page 11) recognizes that Congress has granted the federal government exclusive sovereignty over U.S. airspace. As the Supreme Court put it in *Causby*, "the air is a public highway." *United States v. Causby*, 328 U.S. 256, 261 (1946). Congress has also given plenary authority to the FAA to define and regulate the navigable airspace, as the Report elsewhere acknowledges ("the FAA's full regulatory authority over the airspace") (page 28). "Navigable airspace" in the Federal Aviation Act includes not just the airspace above FAA-set minimum safe altitudes, but also any airspace necessary for takeoff and landing of aircraft, and the definition of "aircraft" includes UAS (or drones) and eVTOL aircraft.

Further, the FAA has been regulating the operations of UAS for more than a decade. In its Part 107 rule adopted in 2016, the FAA has clearly established that small UAS operations should—and, indeed, in nearly all circumstances *must*—take place below 400 feet above the ground, which of necessity means that the "navigable airspace" for small UAS is from 0 to 400 feet. *See* 14 C.F.R. § 107.51. Based on the foregoing, there is no state or local role in regulating aircraft operations in the navigable airspace, and thus there is no "division" of roles for Congress to clarify. *See* Report at 28.

The Regulatory Overview also incorrectly states at page 11 that the "federal government has not stated its legal position." The FAA's position was stated in its December 2015 Fact Sheet, *see* State and Local Regulation of Unmanned Aircraft Systems, (UAS) Fact Sheet, https://www.faa.gov/uas/resources/policy_library/media/UAS_Fact_Sheet_Final.pdf, and its Busting Myths document on its website: "The FAA is responsible for the safety of U.S. airspace from the ground up."

Simply put, state and local police powers are limited to designating landing and takeoff areas and protecting citizens from torts such as invasions of privacy, aerial trespass, and nuisance. They do not extend to regulating flight operations themselves.

While there have been proposals in Congress and by non-government organizations to create a line in the sky, below which state or local authorities would govern drone and eVTOL aircraft operations, these efforts have to date not been adopted and should not purport to reflect current law.

Indeed, while the first paragraph of the Regulatory Overview section refers to "influential law drafters" to include the Uniform Law Commission ("ULC") and the American Law Institute's ("ALI") draft "airspace trespass" provision, neither body has yet produced an operative text in this area. After studying the matter for two years, the ULC elected not to adopt a drone tort law and is currently not engaged on this matter. And while the ALI is in the process of drafting the Restatement (Fourth) of Property, the ALI's charter is to *restate* the law and not draft new law. The drone industry raised this very issue in opposing ALI's proposed "trespass-by-overflight" provision. At this point there is no clear indication of what the Restatement might say on this point when and if a draft is ultimately adopted. In any event, whatever the contours of an aerial trespass or trespass-by-overflight provision, the FAA's authority over aircraft operations in the navigable airspace is clear. Lastly, the citation links to an FAA page about Urban Air Mobility and Advanced Air Mobility; the cite is wrong and instead should likely reference the 2020 Mercatus Working Paper by Brent Skorup identified in note 14.

Furthermore, the preemption law discussion is muddled at best and suffers from several incorrect assertions. Rather than cite to a law review or state bar association article, the Report should cite solely to judicial precedent.

The Regulatory Overview also incorrectly states that the Supremacy Clause "requires that federal laws preempt any conflicting state or local regulations" (page 11). A federal law may permit a conflicting state or local regulation if that statute so provides. The Supremacy Clause declares that federal law is the supreme law of the land. It operates to invalidate state or local laws, not federal laws. It is not a command to Congress to enact preemption statutes. The sentence should be deleted.

The next sentence should be revised to state: "Congress does not need to explicitly state a purpose to preempt; a court may infer preemption from the federal law, in which case a court concludes that Congress has impliedly preempted state law."

It is also not correct that "[t]here are two types of preemption: Field preemption and Conflict preemption" (page 11). These are two types of *implied* preemption, as opposed to express preemption, where Congress uses express language to prohibit state and local regulation. In the aviation context, for example, Congress has expressly preempted a range of state and local powers in the Airline Deregulation

Act, which prohibits these governments from regulating prices, routes, and services of an air carrier providing air transportation.

Notably, the FAA explicitly referenced field preemption in its 2015 Fact Sheet when it explained that a "patchwork quilt" of differing state and local restrictions could hamper FAA flexibility in promoting safe and efficient air traffic flow. Fact Sheet at 2. The Report is too quick to dismiss the importance of field preemption in aviation safety, given the FAA's insistence that "[a] navigable airspace free from inconsistent state and local restrictions is essential to the maintenance of a safe and sound air transportation system." *Id.* (collecting cases). Quoting from the Supreme Court decision in *Arizona v. U.S.,* 567 U.S. 387, 401 (2012), the Fact Sheet stated "Where Congress occupies an entire field . . . even complementary state regulation is impermissible. Field preemption reflects a congressional decision to foreclose any state regulation in the area, even if it is parallel to federal standards." *Id.* at 2-3.

The statement (page 11) that conflict preemption "is when compliance with both state and federal regulations is impossible" is too narrow. Where compliance with both federal and state law is impossible, that indeed poses a conflict. But so-called "impossibility preemption" is only one type of conflict preemption. A conflict may also exist where a state law imposes an additional requirement than the federal law. For instance, a state may seek to require eVTOL aircraft to be equipped with ADS-B, even though the FAA has not so required. That would be a conflict, but it would not be impossible to comply with both federal and state law. A third type of conflict preemption is "obstacle" preemption, where the state or local law stands as an obstacle to the objects and purposes of federal law.

Moreover, the use of "regulations" in the text quoted above is underinclusive. Federal law preempts inconsistent state or local law no matter what form either takes. That is true whether the federal law is a provision in the federal Constitution, a federal statute, or a regulation.

The Report's statement that the court in *Singer v. City of Newton* "found that FAA explicitly contemplates state or local regulation of pilotless aircraft" (page 11) is taken out of context. The *Singer* court was referencing the FAA's 2015 Fact Sheet, which distinguishes "any regulation of the navigable airspace" from traditional police powers. If the final Report references *Singer,* it should explain that the court ultimately found that the city's drone ordinance *was* preempted, because its restrictions on drone use below 400 feet conflicted with federal law.

The next paragraph contains another general statement of preemption. This statement is an amalgam of express and implied preemption principles. It is largely duplicative of the preceding text, without classifying the preemption principles as a court decision would do. It would be preferable to quote from a court decision rather than a secondary source. The first category, "(1) Congress expresses a clear intent to preempt state law[,]" may be intended to describe "express preemption," although that doctrine follows the *words* in a statute or regulation, as this is how a "clear" expression of "intent" is shown.

Furthermore, it is incorrect to state that *Causby* "set the stage for future trespass and privacy cases involving airspace above private property" (page 12). First, *Causby* is a Takings Clause decision premised on interference with the use of property rather than rights to airspace above private property. *Causby* did set the stage for the *aerial* trespass tort in section 159 of the Restatement (Second) of Torts (1965). There is no reference to aerial trespass in the entire "Regulatory Overview," and yet it is the aerial trespass tort (as opposed to a traditional trespass tort) that is the progeny of *Causby.* Second, the *Causby* decision has had no effect on privacy law.

The statement "Surface airspace has typically been treated as real property by the courts" (page 12) is simply wrong—indeed, as noted above, *Causby* led to the creation of a specific "aerial trespass" tort that was distinct from traditional trespass precisely because courts and commentators recognized that there is a difference between traversing property on the surface and flying over the same property. As a result, aerial trespass contains elements of both property and nuisance law. While a property owner can prove trespass on the surface by merely showing that the tortfeasor intruded on her property, to prove *aerial* trespass the property holder must demonstrate that the aircraft substantially interfered with her use and enjoyment of the land. This additional element in the aerial trespass tort exists to acknowledge the reality, as *Causby* held, that the sky is a public highway and that aircraft are entitled to make use of it, so long as they do not engage in flights that are so low and frequent as to cause injury to those below. *See Causby* at 266.

Moreover, the source for this statement also appears to be incorrect. It likely should be another reference to the Skorup article at note 14, not an FAA document. As noted above, "surface airspace" is a wholly invented term and not one that has any meaning in the case law. A reading of that Working Paper does not show any

court decision in which the term "surface airspace" was used. And using the passive present perfect tense ("has typically been treated") disguises the fact that all the court decisions cited by the Working Paper antedate the Federal Aviation Act of 1958 by decades. They have no relevance in determining whether a state has jurisdiction over any airspace. At most, they concern a landowner's property rights, but the Court in *Causby* also stated that the airspace is a public highway, adding that *ad coelum* doctrine upon which many earlier cases relied "has no place in the modern world." *Causby* at 261.

It is also not correct to state that *Causby* "created an upper and lower airspace" (page 12). The citation incorrectly points to a NextGen document. It is likely instead a quote from a state bar association publication (note 18). The quoted passage refers to a 500-feet altitude, which is not part of *Causby*, but appears to be taken from a comment on Restatement (Second) of Torts 159. And while 500 feet is set by the FAA as the minimum safe altitude in many circumstances, it is not a universal dividing line. Helicopters routinely fly below 500 feet. Small UAS are generally limited by rule to less than 400 feet. And all aircraft, no matter how large or small, must "navigate" the airspace below 500 feet to take off and land.

Moreover, even if 500 feet could be said to be a dividing line between navigable and non-navigable airspace (and it cannot), the Report does correctly note that *Griggs* held that a taking of an easement can occur even in the navigable airspace. So where is this purported division between upper and lower airspace? Neither *Causby* nor *Griggs* "created" this upper-lower division, as it simply does not exist.

Finally, the quotation from the Michigan Court of Appeals decision in *Long Lake Township v. Maxon* should be removed as the Michigan Supreme Court on May 20, 2022, vacated the judgment of the Court of Appeals and remanded the case for further proceedings. It would be inappropriate at this point to rely on the reasoning in *Maxon.*

Specific comments on other portions of the Report

Page 15, the fact that Texas's attempt to regulate small UAS flights has been struck down on First Amendment grounds warrants substantially more discussion than a single, throw-away sentence.

Page 16, "Air Rights." The reference to the Texas administrative code provision on leasing of air rights should not be taken as a general license for the state to lease air

rights. Serious constitutional questions would be raised with any attempt to lease airspace.

Page 17 states that new rules may be needed in several enumerated areas, without noting that Texas may have no lawful role in promulgating rules in the first four subjects.

Pages 24-25. The concept of "airspace monitoring" is nebulous and should be clarified.

Pages 28-29, Airspace Design and Regulatory Environment. This section should be revised to clarify the limited authority for state and local governments to play a role "in airspace design." Zoning, noise, and land use may well inform airspace design, but that does not mean that states would be allowed to "govern" advanced air mobility operations in the navigable airspace, even if limited to the conceptual UAM Operating Environment (UOE), as the Report correctly notes the "FAA's full regulatory authority over the airspace."

Page 30. The statement at bottom of page 30 – "Potential state or local regulation would cover landing areas and space requirements or separations from residential areas, airspace and the potential need for traffic management at lower altitudes." – goes too far as we have explained. State and local governments may not regulate the airspace or engage in traffic management at any altitude.

Pages 31-32. The reference to leasing airspace does not appear to be relevant to the subject of placement, policy, and permitting of infrastructure considerations. It refers to an airspace leasing proposal, the legality and efficacy of which are very much in doubt. It also refers to the Scorecard of state laws published by Brent Skorup of the Mercatus Center. The UAS industry has developed a rejoinder to this Scorecard, which is attached to these comments. The paragraph ending on page 31 and continuing onto page 32 should be removed from the sentence beginning with "A proposed solution."

Page 34. The need to align with the FAA is stated three times, and these statements are necessary. Therefore, the statement that alignment with the FAA "will require both state and federal oversight of operations under local jurisdictions" is unclear and should be clarified.

Page 38, Operational Safety. The first sentence on federal and state roles is unobjectionable. The next statement – that "airspace is a more complex area for

regulation" – is not correct. Airspace regulation is within the FAA's purview, not the purview of state or local governments.

In sum, for the reasons explained above, the "Regulatory Overview" section should be removed from the Report in its entirety. In addition, the issues and inaccuracies identified in other sections of the Report should be addressed.

We hope that these comments are helpful in laying out the sources of disagreement and potential controversy in the Report, and that they also help illuminate some of the factual and legal errors in the Report as currently drafted. The commercial UAS and AAM industries look forward to continuing to work productively with the Advisory Committee to the extent that the Committee's mandate is extended. We believe it is imperative, however, that the final Report adopt the suggested revisions above to reflect the consensus of the Committee's members and be considered as a trusted, neutral source of information for Texas regulators and lawmakers.

Association of Uncrewed Systems International

Commercial Drone Alliance

Consumer Technology Association

Small UAV Coalition

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Attachment