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Respondent Raphael Pirker (“Pirker”) respectfully submits this Reply Memorandum of Law in Further Support of his Motion to Dismiss the Complaint of Michael P. Huerta, Administrator, Federal Aviation Administration (the “Administrator” or “Complainant”) in its entirety, pursuant to 49 C.F.R. § 821.17(a).

### **Preliminary Statement**

Our moving brief established that there is no regulation concerning the operation of a model airplane, that the FAA’s 2007 Policy Statement purporting both to regulate and ban the “business” use of a model aircraft was unenforceable for lack of notice-and-comment rule making, and therefore no civil penalty can be imposed for an alleged federal aviation regulation (“FAR”) violation. In response to these dispositive arguments, the FAA disavows that this proceeding has anything to do with its 2007 Policy Statement concerning commercial model aircraft operation, a transparent argument that is intended to evade scrutiny of that policy and that contradicts the FAA’s public statements about its enforcement approach.

As a substitute for the unenforceable policy statement, the FAA retreats to last-resort arguments granting itself the extraordinary power to regulate and penalize the operation of any device found in the air, at any location, and without prior notice to the public. This overextension is based on two seemingly simple but completely flawed premises: first, that the definition of “aircraft” in 14 C.F.R. § 1.1 is so broad that it has always included model aircraft, and, second, that the FAA’s jurisdiction extends to activity conducted even an inch above the ground and inside tunnels -- locations outside the navigable airspace.

Both of these propositions fail as a matter of law. The definition of “aircraft” is expressly stated in section 1.1 to rely upon context, and that context is unquestionably manned operations. Part 91 itself confirms that only persons “on board” aircraft are subject to *any* of its provisions. The alternative proposition suggested by the FAA leads to fundamental contradictions and unintended consequences,

including placing the NTSB in the awkward position of having failed to abide by its own regulations for decades. Moreover, this new theory contradicts the plain language of the definition as well as the conclusions of the *FAA's own researchers* as reported in 2009.

The jurisdictional proposition is equally erroneous. The FAA's attempt to capture all activity in airspace everywhere elides the historic record concerning the creation of the public navigable airspace as it was carved out from the property rights of land owners decades ago. In the delicate balancing act between the common-law ownership of airspace by land owners and the exigencies of a nascent aviation industry, the Supreme Court of the United States declared that only the airspace *above* the minimum safe altitude would be considered public and subject to federal control. In the FAA's organic statute, Congress correspondingly empowered the FAA only to regulate activity in that same "navigable airspace," generally defined as the airspace at and above 500 feet.

The Administrator, having first run afoul of the APA with an unenforceable Policy Statement, now overreaches both on statutory text and regulatory jurisdiction, all in an attempt to penalize conduct that indisputably has never been subject to regulation before. These litigation arguments should be rejected, and the Complaint dismissed.

### **Argument**

#### **I. THE ADMINISTRATOR'S DISAVOWAL OF THE 2007 POLICY STATEMENT IS INTENDED TO SHIELD THE UNENFORCEABLE COMMERCIAL BAN FROM LEGAL SCRUTINY**

The Administrator's opposition brief is remarkable for the lack of response on many points that confirm that model aircraft are not subject to current FAA regulation. The Administrator does not deny that his agency has never before sought enforcement of any FAR against the operator of a model aircraft. He is unable to cite a single example of any civil penalty assessed against a model aircraft operator. Nor does he deny that the FAA never investigates model aircraft accidents (even fatal ones), and that pilots of manned aircraft have been informed by the FAA's own FSDO representatives that "the FARs do not address" model

aircraft operation. Br. at 9.<sup>1</sup> These admissions, and the public record, confirm that the FAA has never issued a regulation applicable to the operation of a model aircraft. Only the 2007 Policy Statement contemplates the application of any FAR to model aircraft operation by claiming that “business” operation requires exemption from Part 21 or Part 91 via a COA or experimental certificate.

Rather than explain how the 2007 Policy Statement could possibly be enforceable, the Administrator admits that it is “not mandatory,” Opp. at 3. He then makes the disingenuous argument that the “the FAA's 2007 UAS Policy Notice . . . has nothing to do with the issue that is pending before the Board in this case.” Opp. at 3. On the contrary, there is an obvious explanation for why Mr. Pirker's model aircraft flight, which caused no damage or injury, is the only instance in the history of U.S. model aviation of attempted FAA enforcement, and that reason is spelled out in the allegation in paragraphs 2, 5 and 6 of the Complaint: Mr. Pirker “operated the flight referenced above for compensation,” he was “paid . . . to supply aerial photographs and video of the UVA campus and medical center” and, by policy, “[t]he aircraft referenced above is an Unmanned Aircraft System (UAS)”. The FAA would have this Board believe that these allegations in its Complaint are superfluous or coincidental. But they match precisely the FAA's current policy framework for *commercial* UAS operations.

The term “unmanned aircraft system” found in paragraph 2 of the Complaint is contained only in the 2007 Policy Statement, not in any of the FARs. And that statement includes “remotely controlled model aircraft” in its definition. Yet the policy reiterates that “for model aircraft the [operational] authority is AC 91-57” which was published “for the purpose of providing guidance to persons interested in flying model aircraft.” Thus, the *voluntary* guidelines in AC 91-57 still apply three decades later even though the Administrator argues in his Opposition that the growth in the uses of these devices and in their technical sophistication demands a different safety regime. Opp. at 6 (“the assertion that the aircraft piloted by the

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<sup>1</sup> We refer to our moving brief as “Br.” and to the Administrator’s Opposition as “Opp.”

Respondent in this case is akin to any type of line-of-sight model airplane that was publicly available in 1981, the year the Advisory Circular was published, strains credulity.”) There is no mention in the 2007 Policy Statement that model aircraft flown for recreational purposes are subject to any of the FARs or, specifically, to 91.13. Nor is there any distinction made among model airplanes based on their technical capabilities. In contrast, operation of the same device, in the same manner, in the same location, but for “business” purposes turns the model aircraft into an “unmanned aircraft system” that is purportedly subject to some or all of the FARs, including the requirement that a COA or experimental certificate be obtained prior to operation. It is the 2007 Policy Statement that attempts to apply regulations to a model aircraft *only if* it is operated for “business” purposes. The policy plays a central role in this proceeding.

Additionally, FAA officials have repeatedly announced to the public that the intended mechanism of enforcement of the commercial ban is the 91.13 recklessness standard. Earlier this year, Jim Williams, Manager of the Unmanned Aircraft Systems Integration Office, participated at the AMA Expo in Ontario, California. During a panel on UAS integration, he was asked to advise model aircraft operators who wanted to pursue commercial use of their model aircraft. Mr. Williams responded that “the bottom line is that until we get that [sUAS] rule out, it’s going to be very difficult to conduct commercial operations in the United States legally. If you are selling your services to take photographs of real estate, that’s not allowed under the current set of regulations that we have. It’s unfortunate, because I think that done safely there’s nothing wrong with doing that, but until we can catch the rules up to the technology it remains against the rules, against the law.” See AMA/FAA Forum AMA Expo 2013 (Feb. 10, 2013) at 37:00-38:45, <http://www.youtube.com/watch?v=hJECplst10M>. When asked about the possibility of enforcement against an operator who is paid by a company to fly a model aircraft, Mr. Williams responded that the FAA’s own lawyers have told him that “if you are getting paid to operate the [model] aircraft . . . then it’s a commercial operation,” but with respect to enforcement, “the bottom line is that *unless you cross that line into hazardous*

*or reckless behavior* or come to the attention of the FAA because you're operating a business illegally, *the key is operating safely*. And *if you're operating safely* and there's no obvious commerce going on, we're not going to get involved." *Id.* 53:35-55:19 (emphasis added). Notably, Mr. Williams does not suggest that the FAA would ever pursue safety enforcement against reckless *recreational* modelers even though the question posed to him contemplated the same operations using the same devices, with the only difference being a payment.

This enforcement approach to commercial model aircraft operations was reiterated in an August 8, 2013 Chicago Tribune article quoting FAA spokesperson Les Dorr:

The FAA says it will try to stop unauthorized commercial activity if it becomes known but adds that it will resort to civil penalties only in extreme cases. "We really would only pursue a civil penalty if someone was operating an unmanned aircraft in a reckless manner," said FAA spokesman Les Dorr.

*U.S. slowly opening up commercial drone industry*, Chicago Tribune, Aug. 8, 2013, available at

[http://articles.chicagotribune.com/2013-08-08/business/sns-rt-us-usa-drones-commercial-](http://articles.chicagotribune.com/2013-08-08/business/sns-rt-us-usa-drones-commercial-20130808_1_drone-industry-ben-gielow-faa)

[20130808\\_1\\_drone-industry-ben-gielow-faa](http://articles.chicagotribune.com/2013-08-08/business/sns-rt-us-usa-drones-commercial-20130808_1_drone-industry-ben-gielow-faa). Thus the FAA's enforcement regime is clear: recreational

model aircraft operations remain subject to the "voluntary" standards issued in 1981. Commercial

operations, even those using the same equipment in the same location, are "illegal" and, when such

operations come to the attention of the FAA, will be policed by aviation safety standards.<sup>2</sup> The validity of

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<sup>2</sup> The Administrator's opposition suggests that, in contrast to "any type of line-of-sight model airplane that was publicly available in 1981," the "sophisticated design and capabilities" of today's model airplanes "allow [an operator] to pilot the aircraft in such a dangerous manner." Opp. at p. 6. A knowledgeable observer of the model aircraft market would recognize that the opposite is true: this technology is safer and more reliable than ever before. In 1981, model aircraft were heavy (up to 55 pounds), powered by flammable fuel, subject to engine flame-outs, and operated by AM radios prone to interference. Today, popular model aircraft are constructed of lightweight foam and carbon fiber, weigh only a few pounds, are powered by batteries, carry low-voltage sensors, are controlled by computerized spread-spectrum radio systems, and may employ gyroscopic flight stabilizers and first-person-view systems providing a safer vantage point and precision control capability compared with line-of-sight operations. We do not rely on these observations in our motion to dismiss. However, the Administrator's misunderstanding of the technology highlights the important principle that if his agency wishes to regulate emerging technology, the appropriate way to do so is through a proper and informed rulemaking process, not by the ad hoc application of the § 91.13 recklessness standard to technology that has never before been subject to it.

the 2007 Policy Statement is squarely at issue because without its commercial/recreational distinction the FAA does not have even a pretext for applying 91.13 to the operation of model aircraft. It is the new commercial distinction within that policy statement that compels the FAA both to claim (falsely) that certain types of model aircraft operation are “against the law” and to pursue this unprecedented civil penalty against Mr. Pirker.

Mr. Pirker’s appeal challenges the enforceability of the policy statement containing the FAA’s commercial ban and its implication that model aircraft are subject to Part 21 and Part 91. After issuing cease-and-desist letters to aerial photographers and, most recently, two universities, and going on record with the press about the illegality of commercial model aircraft operations, the FAA understandably desires to preserve its illusion by making this proceeding appear to be about *anything other* than its invalid attempt to shut down commercial model aircraft operation. Evidently, the FAA originally hoped to use the civil penalty it seeks here, levied against a foreign citizen in contradiction of its own internal Order 2150.3B, as an example to further coerce other commercial model aircraft operators into shutting down. But in the absence of a valid regulation that treats commercial operation differently from recreational operation, there is no basis at all to apply *any* federal aviation regulation to Mr. Pirker’s model aircraft use, or to treat it any differently from the countless model aircraft flights (commercial and recreational) that have preceded it over the past 90 years -- none of which has been regulated or subject to any FAA enforcement.<sup>3</sup>

The Administrator’s misrepresentations about this proceeding do not stop there. He repeatedly asserts that our motion relies on contested facts. Opp. at 2, 3, 6. That is incorrect. As we expressly noted, Br. at 2 n. 2., 3 n. 4, the motion is premised on dismissal as a matter of law for lack of any enforceable regulation concerning model aircraft operation. Of course, the administrative law judge may

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<sup>3</sup> The Administrator incorrectly states that we have offered an argument about the safety of other commercial model aircraft operations. Opp. at 3. Rather, the examples illustrated the undisputed point that “individuals and corporations have utilized model airplanes for ‘businesses’ purposes in a variety of contexts” without prohibition. Br. at 23-27.

consider on a motion to dismiss facts within the public record that are not reasonably in dispute. *See* Br. at 2 n. 2. The Administrator’s suggestion that we would need to submit newspaper articles in which FAA officials are quoted, and other background materials and administrative documents, by affidavit on a future motion for summary judgment simply reflects the FAA’s desire to delay dismissal of this proceeding rather than any genuine dispute about the background facts we have provided.<sup>4</sup> Additionally, the Administrator’s reference to pleading standard cases, Opp. at 4, such as the plausibility requirement of *Ashcroft v. Iqbal*, 556 U.S. 662 (2009), misconstrues the nature of this motion. Our motion does not argue that the Administrator’s factual allegations are unclear, but rather that his civil penalty must be dismissed as a matter of law because there exists no enforceable regulation concerning model aircraft operation.

As we established in our opening papers, and as the FAA does not deny, a policy statement cannot substitute for valid rulemaking. The FAA’s new theory of the case -- that model aircraft always were subject to the FARs -- represents an even more dramatic overreach. The new theory introduces to the nation an agency with virtually unlimited jurisdiction to regulate and penalize all manner of activities, conducted in any location, even when its regulations are completely silent about the activity and when its enforcement history suggests precisely the opposite approach. This argument is even more problematic than the violation of the APA, and, as set out below, is equally invalid as a matter of law.

## **II. A MODEL AIRPLANE MUST NOT BE TREATED AS AN “AIRCRAFT” FOR REGULATORY PURPOSES**

Our moving brief established that there is no regulation concerning the operation of a model airplane, that the FAA’s 2007 Policy Statement purporting simultaneously to regulate and ban the “business” use of a model aircraft was unenforceable for lack of notice-and-comment rule making, and therefore that the FAA could not impose any FAR upon previously unregulated conduct. In response to these dispositive

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<sup>4</sup> Of course, we stand ready to submit any of the referenced information by affidavit if the administrative law judge would prefer.

arguments, the FAA has retreated to a “last resort” in which it has granted itself the extraordinary power to regulate and penalize the operation of anything found in the air, at any time and place, simply on the basis of the generic definition of “aircraft” in section 1.1. *See* Opp. at 5 (arguing that model airplanes “are aircraft as defined in 14 C.F.R. § 1.1.”). The FAA's argument is premised on the notion that model aircraft are “devices used for ‘flight in the air’” and ought to be treated for regulatory purposes the same way as a passenger aircraft. Opp. at 7. This approach runs afoul of regulatory law principles, the plain statutory and regulatory definitions of “aircraft,” and the 2009 report of *the FAA’s own researchers*.

A. The FAA's Regulatory Reversal Requires Prior Notice and Comment Rulemaking

As we established in our opening brief, courts have repeatedly held that when an agency takes one approach to regulation of an activity for decades, it cannot later take a significantly different approach to the same activity without first conducting the requisite notice and comment process pursuant to the APA. In the facts set out in *Alaska Professional Hunters Association, Inc., v. Federal Aviation Administration*, 177 F.3d 1030 (D.C. Cir. 1999), local FAA officials had for 30 years consistently advised hunting guide pilots in Alaska that they were governed by Part 91, not by Part 135 (commercial operator) regulations. *See* Br. at 34-5. The FAA's subsequent “Notice to Operators” announcing that Part 135 applied to these operators was struck down by the United States Court of Appeals for the District of Columbia Circuit, citing the lack of notice and comment rulemaking. As the court explained, “When an agency has given its regulation a definitive interpretation, and later significantly revises that interpretation, the agency has in effect amended its rule, something it may not accomplish without notice and comment.” *Alaska Professional*, 177, F.3d at 1034. *See also Shell Offshore, Inc. v. Babbitt*, 238 F.3d 622, 629 (5th Cir. 2001) (invalidating a new Department of the Interior policy because “the APA requires an agency to provide an opportunity for notice and comment before substantially altering a well established regulatory

interpretation”); *Syncor Int’l Corp. v. Shalala*, 127 F.3d 90, 94-95 (D.C. Cir. 1997) (“a modification of an interpretive rule construing a statute will likely require a notice and comment procedure.”).

These cases reflect the basic notion that before the government imposes monetary penalties, the public deserves fair notice of the applicable regulations, consistent with due process principles. Many courts have held that even a reasonable agency interpretation of a rule is not applicable in a penalty case (such as this one) where the respondent did not have notice of the interpretation at the time of the conduct. *See, e.g., Beaver Plant Operations, Inc. v. Herman*, 223 F.3d 25 (1st Cir. 2000); *Trinity Broadcasting of Fla., Inc. v. FCC*, 211 F.3d 618, 628 (D.C. Cir. 2000) (interpretation not “ascertainably certain” at time of conduct); *Upton v. SEC*, 75 F.3d 92 (2d Cir. 1996) (this principle applies in both civil and criminal cases).

The Administrator's Opposition offers no response to these authorities, which are directly applicable. Here, the FAA's national Director of Air Traffic Service (not merely local officials) published an Advisory Circular in 1981 notifying the public that model aircraft operators were subject to “voluntary” guidelines under AC 91-57, not to any of the FARs. This confirmed what was already evident from the FARs themselves: there was no regulation governing these devices. In the decades that followed, the FAA has never pursued FAR enforcement, even for incidents involving death, and even in the recent case of a mid-air collision at a Colorado airport that the NTSB blamed on the model aircraft operator. Br. at 7-8. The NASA ASRS database further confirms that the FSDO office advises concerned pilots that no FARs apply to model aircraft operations. Br. at 9-10. Even today, on its website, the FAA reaffirms that model aircraft operations remain subject to AC 91-57, with no mention of the FARs. *See Unmanned Aircraft (UAS)* [http://www.faa.gov/about/initiatives/uas/uas\\_faq/#Qn2](http://www.faa.gov/about/initiatives/uas/uas_faq/#Qn2) .

The FAA's about-face concerning the standard for model aircraft operation, purely for litigation posturing purposes in this proceeding, must be rejected under administrative law principles. Even if Section 1.1 could once have been read to include model aircraft within the generic definition of “aircraft,”

the FAA long ago established a regulatory approach that excluded model aircraft operations from Part 91. A change in this framework today would affect hundreds of thousands of model aircraft operators and corporations across the country, subjecting them to surprise fines on the basis of arbitrary operational parameters that cannot be found anywhere in the FARs. Such a significant change in the regulatory approach must not be permitted without prior notice and an opportunity to comment.

B. Model Airplanes are not “Aircraft”  
as Defined in FAR 1.1 for Regulatory Purposes

Even if the FAA's new approach were not prohibited by the doctrine set out in cases such as *Alaska Professional Hunters*, it would fail for the independent reason that the existing definition of “aircraft” must be read as referring only to manned flight, in light of legislative intent as well as the text of the definition itself.

When President Eisenhower signed the 1958 Federal Aviation Act, Public Law 85-726, creating the Federal Aviation Agency, his written message to Congress started by explaining: “Recent midair collisions of aircraft, occasioning tragic losses of human life, have emphasized the need for a system of air traffic management which will prevent, within limits of human ingenuity, a recurrence of such accidents.” 104 Cong. Rec. Part 8, June 13, 1958 at 11149. The President also noted the work of his aviation study group that had reported to him on “aeronautical developments and the needs of *our mobile population*.” *Id.* (Emphasis added.) The President's focus was squarely on passenger aircraft.

The original Federal Aviation Act of 1958 reflected the intent to regulate passenger transportation. It started off with a declaration of policy titled: “Factors for interstate, overseas, and foreign air *transportation*.” Pub. L. 85-726 (Aug. 23, 1958) § 102 (heading) (emphasis added). In recognition that the law would result in restrictions on manned flight, the Act reiterated a fundamental counter-balance to the new rulemaking authority: a “public right of *freedom of transit* through the navigable airspace of the United States.” *Id.* § 104 (emphasis added). The statute does not address what “right,” if any, an unmanned aircraft

has to transit the navigable airspace. That proposition would have been unthinkable in 1958, a decade before modern (but limited) unmanned aircraft systems were first put to use in any significant way -- in the Vietnam war. Congress was plainly concerned with the safety of domestic passengers in “transit,” and with their rights that would be affected by the coming regulations.

The statutory definitions reflect this intent. “Aircraft” is broadly defined as “any contrivance invented, *used*, or designed to *navigate, or fly in*, the air.” 49 U.S.C. § 1301(6) (1958) (emphasis added). The Administrator’s overbroad interpretation is not faithful to the text. This definition is written in passive voice; the unstated subject of “navigate, or fly in” is a *person* -- at a minimum, the pilot-in-command, and perhaps passengers. It is a *person* who uses an “aircraft” to “navigate” or “fly in” the air. To read the statute so as to make the “contrivance” itself the subject of “flight” ignores context and would capture under the regulations countless devices whose intended use includes the travel of the contrivance in the air, but that are clearly not regulated by the FAA, such as frisbees, golf balls, boomerangs, bullets, and children’s toys. All of these contrivances pose safety issues, but none pose in any way the type of danger of carrying a human being thousands of feet in the air, none were the concern of Congress in 1958 when enacting the Federal Aviation Act, and none are contemplated to be regulated by the FAA.

When the first set of FAA regulations emerged in 1963, their scope matched the legislative mandate concerning the regulation of manned passenger aircraft. In the FARs from 1963 through the present, the use of “aircraft” for decades has referred to *manned* flight. 14 C.F.R. § 1.1 defines “Aircraft” as “a device that is used or intended to be *used for flight* in the air” (emphasis added). As with the 1958 Act, the definition is in the passive voice, and it is clear that the unstated subject -- the one who “uses” the device to take “flight” -- is a person. If the intent were to capture all objects capable of their own flight, the definition would read instead: “a device that flies in the air.” It does not. It is a device *used* for flight -- by a person. This regulatory definition has remained the same since it was originally issued. Only in 2012 (after the

conduct at issue here) did Congress even establish a definition for an *unmanned* aircraft system, and the FARs still lack such a definition.<sup>5</sup>

C. Regulation of a Model Airplane as a Manned “Aircraft”  
Leads to Fundamental Regulatory Contradictions

The Administrator now argues for the broadest conceivable reading of the definition of “aircraft,” Opp. at 5-7, but fails to mention that 14 C.F.R. § 1.1 expressly provides at the outset that all of its definitions are functional “unless the context requires otherwise.” Thus, a general definition such as “aircraft” does not exist all-expansively in a vacuum; it must be understood in context. As we pointed out in our moving brief, many of the regulations confirm that “aircraft” refers to a device used for manned flight. Br. at 28-29. The Administrator makes light of this important point, claiming that our “convoluted” argument has something to do with interference with crewmembers, and he suggests a piecemeal approach to regulation. Opp. at 7. The issue is much more serious than the Administrator acknowledges: the FARs as they currently exist cannot simply be applied to model aircraft or unmanned aircraft systems in their unmodified form because of fundamental contradictions in the regulatory scheme.

For example, the Administrator ignores our point that if a model aircraft is considered an “aircraft” for regulatory purposes, there is no altitude at which it is permitted to fly. The minimum safe altitude for an “aircraft” is 500 feet. *See* 14 C.F.R. § 91.119. However, AC-91-57 sets a (voluntary) maximum of 400 feet. These cannot be reconciled. The Administrator's response that operators “must read the plain wording of each regulation to understand the scope of its applicability,” Opp. at 7, is far too dismissive, and leaves the public with no regulatory guidance at all.

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<sup>5</sup> This is also why a handful of unmanned devices, such as unmanned rockets, moored balloons, and kites, received separate treatment in Part 101 and are not subject to FAR 91.13. They are not aircraft, but regulations were crafted with the primary goal of protecting aircraft from collisions with them, just like fixed obstructions. Arguably, these regulations are outside the scope of the FAA's statutory authority because they purport to constrain the operation of devices that are not aircraft and that do not operate in the navigable airspace. *See infra* § III.

Moreover, the “plain wording” of Part 91’s applicability provision precludes the application of 91.13 to a model aircraft operator: “This part applies to *each person on board an aircraft* being operated under this part, unless otherwise specified.” 14 C.F.R. § 91.1(c) (emphasis added). The Administrator offers no response to this point, which establishes that every single FAR in Part 91, including 91.13, is intended to apply only to pilots and passengers on board manned aircraft.

The FAA’s overreaching definition would also have the unintended consequence of apparently criminalizing relatively trivial misconduct. 18 U.S.C. § 31 contains the definition of “aircraft” for purposes of various federal crimes, and it is as generic as the one found in the aviation statutes and regulations: “a civil, military, or public contrivance invented, used, or designed to navigate, fly, or travel in the air.” The sections of Title 18 that follow criminalize the disabling of, destruction of, or pointing a laser pointer at, an “aircraft.” 18 U.S.C. §§ 32, 39A. These provisions clearly are intended to criminalize actions that threaten passenger airplanes, though they do not say so expressly. They use the same passive-voice definition of “aircraft” found elsewhere. That definition surely does not apply to model aircraft, but under the Administrator’s conception the destruction of a model aircraft would be a federal crime.

The FAA’s expansive definition would also mandate a finding that the NTSB has for decades abdicated its express responsibility under 49 C.F.R. § 831 to investigate aircraft accidents and incidents. The NTSB “is responsible for the organization, conduct, and control of all accident and incident investigations . . . where the accident or incident involves any civil aircraft.” 49 C.F.R. § 831.2. “Civil aircraft means any aircraft other than a public aircraft.” 49 C.F.R. § 830.2. An “[i]ncident means an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.” *Id.* An “aircraft accident” includes an occurrence in which any person “suffers death or serious injury.” *Id.* Both “incidents” and “accidents” involving model aircraft are rare, but they do

occur. Yet they are never investigated by the NTSB.<sup>6</sup> Section 830.5 requires aircraft operators to notify the nearest NTSB office when there is a flight control malfunction, a collision in flight, or release of a portion of a propeller blade from an aircraft, among other occurrences. 49 C.F.R. § 830.5. Model aircraft operators would be surprised to learn that they are required to contact a federal agency when any of these problems occur in their backyards. Notwithstanding all of these obligations on the part of both the operators and the NTSB, the Administrator does not deny that neither the FAA nor the NTSB actually investigates incidents involving model aircraft operation.

The expansive definition of “aircraft” to include model airplanes would also have the unintended effect of replacing state tort law standards nationwide. Courts have recognized that state negligence standards concerning aircraft safety have been preempted by the FAA's standards in the FARs, including 91.13. See *Abdullah v. American Airlines, Inc.*, 181 F.3d 363, 371 (3d Cir. 1999) (holding that “[b]ecause the legislative history of the FAA and its judicial interpretation indicate that Congress's intent was to federally regulate aviation safety, we find that any state or territorial standards of care relating to aviation safety are federally preempted”). It would come as quite a surprise to litigants, insurers, the Academy of Model Aeronautics, and courts throughout the country to learn that the state law that they have applied to tort cases involving *model aircraft* was actually preempted in 1958. It would undermine decades of existing case law, and require reopening countless personal injury decisions. For example, in 2008, the Court of Appeals of Ohio considered state law negligence principles, not federal aviation regulations, when addressing a claim brought by an individual against the operator of a model airplane that had injured him. See *Rowe v. Striker*, 2008 Ohio 5928 (Ct. App. 9th Dist. 2008). The outcome of the negligence claim turned on whether the plaintiff had failed to take steps to protect himself from the impact after hearing the operator shout a warning about his loss of control, a scenario that required application of Ohio negligence principles. The FAA's

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<sup>6</sup> The only known exception is the incident in Colorado described in our opening brief which involved the collision of a manned biplane and a model aircraft at an airport. Br. at 7-8.

sweeping new position would prevent state courts, such as the one in *Rowe*, from continuing to apply settled principles of their own state tort regimes, and substitute that law with a completely undefined set of federal standards.

Indeed, the FAA's approach could ironically have the effect of making it more difficult for plaintiffs to pursue claims against negligent model aircraft operators. The courts have found that “91.13(a) is reserved only for egregious misconduct where the potential for harm is incontestably high.” *Allen v. American Airlines, Inc.*, 301 F. Supp. 2d 370, 376 (E.D. Pa. 2003) (dismissing negligence claim). Indeed, the 91.13 standard is only violated when there is a “threat of imminent, dire physical injury.” *Id.* at 377. Such danger is inherent for manned aircraft operations -- when a person is traveling, by regulation, at least 500 feet in the air, and on an aircraft weighing thousands of pounds and loaded with fuel. A five-pound battery-powered styrofoam model poses no threat of “dire physical injury.” The suggestion that it is reckless under the 91.13 standard to operate these devices in proximity to persons on the ground (which is precisely how they are designed to be operated) would outlaw their very use for any purpose, including recreation – a position that not even the FAA believes in. And it would contradict the decades of extraordinarily safe use that the FAA has never before sought to regulate.<sup>7</sup>

Any attempt to apply existing regulations concerning manned aircraft to model airplanes on the premise that they broadly fit the regulatory definition of “aircraft” triggers several fundamental incongruities that cannot be dismissed by the FAA’s lackadaisical argument instructing model aircraft operators to take a piecemeal approach to the FARs. These contradictions underscore the conclusion that

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<sup>7</sup> It remains puzzling how the FAA, with not a single specific regulation on the books concerning model aircraft operation, no safety data, no prior enforcement history, and no actual damage or injury, will carry its burden of proof at trial to establish that Mr. Pirker’s operation posed an “incontestably high” potential for harm. State tort law already provides adequate remedies for persons who are actually injured by small airborne objects, such as baseballs and model airplanes. The penalty power in 91.13 was never intended to give the FAA authority to penalize the operators of such devices, let alone when (as here) there is no actual property damage or injury. (Our motion does not, of course, turn on any finding relating to the safety of Mr. Pirker’s operation. We simply preview the challenges of enforcement in the absence of regulation.)

model aircraft and manned aircraft always were, and continue to be, distinct for regulatory purposes, notwithstanding any litigation position about the generic definition of “aircraft.”

D. The FAA’s Own Research Study Confirms that the FARs Do Not Apply to Model Aircraft

Most strikingly, the FAA’s new position concerning the section 1.1 definition contradicts the conclusions reached by *the FAA’s very own researchers* in 2009. In September 2009, the FAA sponsored and published an “Unmanned Aircraft System Regulation Review” study performed by the Center for General Aviation Research (CGAR). *See* Final Report No. DOT/FAA/AR-09/7, available at [www.tc.faa.gov/its/worldpac/techrpt/ar097.pdf](http://www.tc.faa.gov/its/worldpac/techrpt/ar097.pdf) (the “Report”). The study was completed in March 2007 but the Report was published two years later. It was intended to assess the applicability of Title 14 regulations to UAS operating in the NAS “based on their face values, i.e. not the intent of the rule, rather a direct understanding of the text.” *Id.* at vii. “The objective of this study was to provide a systematic regulatory review to identify top-level gaps in existing regulations to facilitate the requirements of the FAA’s decision- and rulemaking processes.” *Id.* at 1.

The report indicates that:

14 C.F.R. 1.1 is a list of definitions but does not provide a definition of a UA or a UAS. As the remainder of 14 C.F.R. is examined, it is clear either that there is no guidance for the current or future UAS developer or operator or that such individuals or entities are governed by all current and applicable regulations. The latter option fails to consider whether the aircraft or rotorcraft is piloted by an onboard human being or is operated remotely by a human being using a form of data link and communications technology.”

*Id.* at 5.

Of particular interest to the researchers was how model aircraft fit into this undefined regulatory scheme. They revisited this point several times in the Report, each time reiterating a lack of regulation:

- Model aircraft, “having a long history of self-regulation, fell outside the FAA’s area of interest.” *Id.* at vii.

- On a chart concerning the definition of “aircraft” the Report asks, “Does size, weight, speed, intended use, or navigation/communication capability have any bearing on the definition? *What about model aircraft?*” *Id.* at 6 (emphasis added).
- Radio controlled model aircraft are “unregulated flying devices” that were “not contemplated by the authors of [the] regulations” and they “remain an unregulated UA.” *Id.*
- With respect to the text of AC 91-57: “This publication and the *lack of a regulatory definition for either a model aircraft or UA and UAS*, blurs the line between what has been acceptable *self-regulation* of the model aircraft community and the growing pressure for, as yet *undefined*, UA operations.” *Id.* 13 (emphasis added).
- The Report notes that “the framers of the regulatory scheme and their successors *clearly never envisioned* the inclusion of UA or unmanned rotorcraft in the NAS.” *Id.* at 17.
- The Report identifies “challenges to the FAA in regulating UAS operations,” one of which is to “define those UAs conventionally known as model aircraft and to determine if they are to be allowed *continued self-regulation.*” *Id.* at 17 (emphasis added).

The Report pervasively reaffirms the principle that model aircraft are not subject to regulation, and do not fall within the existing FAR definition of “aircraft.”<sup>8</sup> The Report concludes:

Due to the sheer number of existing regulations that clearly apply or could apply by interpretation or amendment, the burden that falls on the rulemakers is either (1) to go through every regulation and statute and appropriately amend each one to resolve any ambiguity as to whether and how it applies to UAS design, manufacture, and operation, or (2) to create an entirely new subpart of 14 C.F.R. that specifically addresses the particular issues that arise from UAS operations

*Id.* at 18.

The FAA has utterly failed to fulfill this burden. In 2007, the same year this research was completed, the agency instead took the approach of articulating a policy purportedly banning commercial

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<sup>8</sup> The Technical Report Documentation Page indicates that “[o]n February 6, 2007, the Federal Aviation Administration (FAA) issued a notice in the Federal Register clarifying that an unmanned aircraft system falls in the definition of aircraft.” This qualification unfortunately taints the researchers' mission to report on the “face value” and “direct understanding” of the regulations' text. It is also incorrect. The 2007 Policy Statement, actually *does not* address or even cite the section 1.1 definition of “aircraft.” Rather, it announces a new policy that *commercial* model aircraft operations are regulated, and it reaffirms that recreational model aircraft operations are subject only to the voluntary standards in AC 91-57. It is telling that, even after being unduly influenced by the 2007 Policy Statement, the report's authors repeatedly reaffirm that model aircraft are “unregulated flying devices.”

model aircraft operations outright, and implicitly subjecting these “unregulated flying devices” to an unknown number of FARs for the very first time. Now, nearly seven years later, the exact same regulatory framework remains in place and no notice of proposed rulemaking has been issued concerning UAS. The FAA’s definition of “aircraft” proposed here is not only a *post hoc* rationalization for seeking an unprecedented and inappropriate penalty, but it directly contradicts the FAA researchers’ prior considered judgment in 2009 that model aircraft were not governed by the existing FARs.

As set out in our moving brief, an agency’s litigating positions ought to be rejected when they are “merely appellate counsel’s post hoc rationalizations’ for agency action.” Br. at 32 (quoting *National Wildlife Federation v. Browner*, 127 F.3d 1126 (D.C. Cir. 1997)). An agency’s interpretation is also subject to challenge when “there is reason to suspect that the interpretation does not reflect the agency’s fair and considered judgment on the matter in question.” *Id.* (quoting *W. Radio Servs. Co. v. Qwest Corp.*, 678 F.3d 970, 984-85 (9th Cir. 2012)). Here, the FAA’s interpretation of the section 1.1 definition is demonstrably a *post hoc* rationalization rather than a reflection of fair and considered judgment, and it must be rejected.

### **III. THE FAA’S REGULATORY AUTHORITY OVER ACTIVITY IS LIMITED TO THE NAVIGABLE AIRSPACE**

Even were the Administrator correct with respect to the devices that are regulated by Part 91, his agency lacks jurisdiction over activity in the airspace in which Mr. Pirker is alleged to have operated. We argued in our moving brief that the FAA lacks jurisdiction in locations outside of navigable airspace, such as in a tunnel. Br. at 10. The FAA’s response is that the definition of “navigable airspace . . . does not in any way, explicitly or implicitly, define the outer limits of the FAA’s authority to regulate airspace.” Opp. at 5. On this fundamental point, the United States Supreme Court and the FAA’s organic statute stand in sharp disagreement with the Administrator.

The federal government’s aviation laws have always been tempered by property rights.

From the founding of the United States and for nearly two centuries thereafter, the nation's skies were considered to belong to the land owners below under the principle *cujus est solum ejus est usque ad coelom* – the land owner owns the skies “to the heavens.” See generally, Stuart Banner, *Who Owns the Sky?*, Harvard Univ. Press (2008) at 167-202. The advent of the airplane in the early part of the 20th Century posed a serious conflict with this property rights doctrine. For years, the courts rendered divergent decisions, while state bar associations, legal scholars and affected constituencies advocated conflicting positions, and the legal framework for permitting and regulating the operation of aircraft remained unsettled. *Id.*

In 1926, Congress addressed this legal dilemma in the Air Commerce Act, by permitting the public to travel through the “navigable airspace” defined as the minimum altitude established by the Department of Commerce. Pub. L. No. 69-254, 44 Stat. 568. At higher altitudes above land, the public was effectively granted an easement to travel in what previously was considered private property. Section 3 of the Civil Aeronautics Act of 1938 extended this framework to all manned flights, providing for “a public right or freedom of transit in air commerce through the navigable airspace of the United States.”

Jurisdiction over, and control of, activity in the *lower* airspace remained unsettled, however, until the United States Supreme Court had the occasion to address the issue in the case of *United States v. Causby*, 328 U.S. 256 (1946). In *Causby*, plaintiffs were North Carolina farmers who claimed that very low overflights by U.S. military planes on approach to an adjacent airfield resulted in livestock deaths and constituted a property taking under the Fifth Amendment of the United States Constitution. *Id.* at 258-59. The Court started its analysis with reference to the common law *ad coelom* property doctrine, which it found to have “no place in the modern world.” *Id.* at 261. But the Supreme Court placed an important limit on public airspace: “it is obvious that if the landowner is to have full enjoyment of the land, he must have exclusive control of the immediate reaches of the enveloping atmosphere. . . . The landowner owns at least as much of the space above the ground as he can occupy or use in connection with the land.” *Id.* at 264.

The remaining question for the Supreme Court concerned where private airspace ends and public, federally regulated airspace begins. The Supreme Court answered that question by finding that “[t]he navigable airspace which Congress has placed in the public domain is ‘airspace above the minimum safe altitudes of flight prescribed by the Civil Aeronautics Authority.’ 49 U.S.C. § 180.” *Id.* at 263. Because the over-flights in question in *Causby* were very low to the ground, they were found to be below public airspace, and were deemed a Fifth Amendment taking requiring just compensation to the Causbys. The fact that the Civil Aeronautics Authority regulated such a flight “does not change the result.” On the contrary, the Supreme Court wrote that “[i]f that agency prescribed 83 feet as the minimum safe altitude, then *we would have presented the question of the validity of the regulation.*” *Id.* at 263 (emphasis added). In other words, the federal aviation agency has regulatory jurisdiction over navigable airspace high above, not private airspace low to the ground.

In response to the *Causby* decision, Congress modified the definition of navigable airspace to the text that still exists today, adding language to include within its scope the airspace within a glideslope: “airspace above the minimum altitudes of flight prescribed by regulations . . . includ[ing] airspace needed to insure safety in the take-off and landing of aircraft.” 72 Stat. 739. In *Griggs v. Allegheny County*, 369 U.S. 84 (1962), the Supreme Court took note of this amendment but reiterated its framework in *Causby* that “the use of land presupposes the use of some of the airspace above it” and “[a]n invasion of the ‘superadjacent airspace’ will often ‘affect the use of the surface of the land itself.’” *Id.* at 89.

This legal distinction between navigable airspace and the airspace adjacent to land and buildings continues into the modern era. For example, in *Air Pegasus of D.C. Inc. v. United States*, 424 F.3d 1206 (Fed. Cir. 2005), a heliport operator objected to the FAA flight ban implemented in the Washington D.C. area in the wake of the September 11 terrorists attacks. The flight ban drove the heliport out of business. In analyzing the plaintiff’s claim, the Federal Circuit Court of Appeals recognized that “the government has

long exercised dominant control over the navigable airspace in regulating the public right of transit.” *Id.* at 1219. But the court then cited *Causby* for the proposition that a landowner has “exclusive control of the immediate reaches.” *Id.* at 1217. The court next made an important distinction: “Air Pegasus’s claimed property interest is not merely a right to access the airspace over its heliport, but a right to access the *navigable* airspace from its heliport.” *Id.* (Emphasis in original, citing *Causby*.) This distinction was important because it meant that the court “need not consider the extent to which Air Pegasus, as a lessee of the South Capitol Street property, has the right to use the non-navigable airspace immediately above its leasehold.” *Id.* Thus, while the courts recognize that the FAA was granted broad authority to regulate activity conducted in the navigable airspace, that authority does not extend to activity in “non-navigable” lower airspace. The two types of airspace are legally distinct.

It is well-settled that agencies do not possess inherent powers, but instead derive authority only as delegated by Congress. *See Louisiana Pub. Serv. Comm’n v. FCC*, 476 U.S. 355, 374 (1986). It is therefore a fallacy to suggest that the FAA controls what people do in every cubic inch of airspace above American soil simply by virtue of being the nation’s federal “aviation” agency. Rather, the authority of each agency always has been limited by its organic statute. The fundamental distinction concerning public regulated airspace identified in *Causby* continues to be reflected in the language of the current Federal Aviation Act, which defines “navigable airspace” as “airspace above the minimum altitudes of flight prescribed by regulations under this subpart and subpart III of this part, including airspace needed to ensure safety in the takeoff and landing of aircraft.” 49 U.S.C. § 40102(a)(32). Accordingly, the statute refers to the public right of transit through “navigable airspace,” 49 U.S.C. § 40103(a)(2).

Most importantly, the regulatory authority granted to the FAA matches the legal framework established by the Supreme Court. In the policy scoping section of the Federal Aviation Act, the section relating to Safety Considerations in Public Interest indicates that the FAA is authorized to “control[] the use

of the *navigable airspace* and regulating civil and military operations *in that airspace* in the interest of the safety and efficiency of both of those operations.” 49 U.S.C. § 40101(d)(4) (emphasis added). The statute also provides that with respect to “Use of Airspace[,] The Administrator of the Federal Aviation Administration shall develop plans and policy for the use of the *navigable airspace*.” 49 U.S.C. § 40103(b)(1) (emphasis added).<sup>9</sup> As the Administrator acknowledges, navigable airspace generally begins 500 feet above ground level as defined in 49 U.S.C. 40102(32) and prescribed in 14 C.F.R. § 91.119. Opp. at 5. Thus, even if Congress *could* authorize FAA regulation of activity in airspace below 500 feet without violating the principles in *Causby*, it has not done so. Rather, the FAA’s organic statute empowers the agency to regulate only the activity in “navigable airspace.”<sup>10</sup>

Here, the FAA seeks to penalize the low-altitude operation of a model aircraft above the property of a university that invited Mr. Pirker to engage in the activity. Nearly the entirety of the FAA’s complaint concerns the proximity of his model aircraft to buildings, vehicles, trees, sidewalks and even inside a tunnel -- locations that are in non-navigable airspace as defined in the FARs.<sup>11</sup> The FAA’s ban on commercial operations at this level, and its attempt to assess a civil penalty on Mr. Pirker, run afoul of the

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<sup>9</sup> Other sections of the statute reinforce this scope. *See, e.g.*, 49 U.S.C. § 44718 (authorizing the FAA to intervene when structures “result in an obstruction of the navigable airspace”); 49 U.S.C. § 44501 (requiring the FAA to make “long range plans” for the “use of the navigable airspace”);

<sup>10</sup> The authorities cited by the Administrator are inapposite. Opp. at 5. *United States v. Christenson*, 419 F.2d 1401, 1404 (9th Cir. 1969) concerned the question of whether Part 91 flight rules applied to the public aircraft being operated by an FAA official. It quotes legislative history to show the intent of Congress to establish a unified system for both civil and public aircraft. *City of Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 638-39 (1973) rejected a community attempt to enforce a curfew on jet flights out of Hollywood-Burbank Airport. The Supreme Court held that FAA and EPA regulations preempt state and local aircraft noise ordinances. Neither of these cases touches on the distinction between navigable airspace and non-navigable airspace below, nor do they address the origin of that distinction in property law and Supreme Court jurisprudence.

<sup>11</sup> The only allegation that implicates navigable airspace is paragraph 10 alleging that Mr. Pirker operated at altitudes between 10 and 1500 feet when manned aircraft “may have been flying within the vicinity.” Because there is no allegation that a manned aircraft actually was flying in the vicinity, this claim must be dismissed as well, for all the reasons set out in our other sections, but also for failure to allege that this aspect of the flight “endangered the life or property of another.” The maximum altitude specified in AC 91-57 is “voluntary.”

principle articulated in *Causby* that “the landowner . . . must have exclusive control of the immediate reaches of the enveloping atmosphere.” *Causby*, 328 U.S. at 264. Even if the FAA regulations could be read to apply to model aircraft operations, the FAA currently lacks jurisdiction to control or prohibit what people do with those devices at altitudes below 500 feet. The FAA’s assertion in its Opposition that it has been empowered to regulate activity inches above the ground contradicts the FAA’s statutory scope of authority, ignores the United States Supreme Court’s guidance, and would erase the fundamental 67-year-old property law distinction between public navigable airspace and the immediate reaches above private land.

**Conclusion**

For the foregoing reasons and those set out in his moving brief, Respondent Raphael Pirker respectfully requests that the Administrative Law Judge dismiss the Complaint in its entirety and with prejudice, and grant such other and further relief as the tribunal may deem just and proper.

Dated: New York, New York  
December 10, 2013

KRAMER LEVIN NAFTALIS & FRANKEL LLP

By:  \_\_\_\_\_

Brendan M. Schulman  
1177 Avenue of the Americas  
New York, New York 10036  
Phone: (212) 715-9100  
Fax: (212) 715-8220

bschulman@kramerlevin.com

*Attorneys for Respondent Raphael Pirker*

I hereby certify that I have this day served the foregoing Motion to Dismiss on counsel for Complainant, Brendan A. Kelly, Esq., Supervisory Attorney, Federal Aviation Administration, U.S. Department of Transportation, 1 Aviation Plaza, Jamaica, New York, 11434, by United States First Class Mail.  
Dated December 10, 2013

  
\_\_\_\_\_  
Brendan M. Schulman  
Counsel for Respondent Raphael Pirker