UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD

MICHAEL P. HUERTA,
ADMINISTRATOR,
FEDERAL AVIATION ADMINISTRATION,

Complainant,

v.

Docket CP-217

RAPHAEL PIRKER,

Respondent.

AMICUS CURIAE BRIEF OF FORMER FAA OFFICIALS

Mark E. McKinnon
Lawrence S. Ebner
Mark A. Dombroff
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, NW
Washington, DC 20006-1102

Counsel for Amici Curiae
John McGraw and Nick Sabatini

TABLE OF CONTENTS

INTRODUCTION

Amici curiae file this brief pursuant to 49 C.F.R. § 821.9(b) to address substantial issues of public interest that are not adequately addressed by either party and will seriously impact the safety of the public and users of the national airspace.[1]

Amici curiae are former FAA officials with a unique perspective on the safety and policy issues implicated by the current matter. On March 6, 2014, a National Transportation Safety Board Administrative Law Judge issued an order seemingly invalidating the FAA's attempts to apply the Federal Aviation Regulations to small unmanned aircraft systems (UAS).[2] This has led to a widespread but erroneous public perception that the ALJ's decision has created a regulatory holiday for unrestricted commercial UAS operations. For example, Texas EquuSearch has filed suit against the FAA in the U.S. Court of Appeals for the District of Columbia Circuit claiming that the FAA is unable to restrict the organization's UAS search and rescue operations after the *Pirker* decision.[3] This perception is due largely to some unfortunate dicta in the ALJ's opinion speculating that nothing short of a full rulemaking will suffice to restore the FAA's authority to place any limitation on commercial UAS operations. Decisional Order at 8.

---

[1] *Amici curiae* have contemporaneously filed a Motion for Leave to File this Brief in accordance with 49 C.F.R. § 821.9(b).

[2] *See* Decisional Order, Docket CP-217 (March 6, 2014).

[3] *See Texas EquuSearch Mounted Search and Recovery Team v. Federal Aviation Administration*, Case No. 14-1061 (D.C. Cir. April 21, 2014).

Amici do not take a position in favor of either party on the core issue before the Board, but urge that the Board clarify that the ALJ's dicta is incorrect, and that the passage of the FAA Modernization and Reform Act of 2012 (the 2012 Act) has the effect of limiting the application of the ALJ's decision (if affirmed by the Board) to incidents that predate its enactment. In addition, *amici* request that the Board address significant issues overlooked by the ALJ regarding Respondent's alleged careless and reckless operation of the UAS in question within 100 feet of an active helipad and at altitudes of up to 1,500 feet, well within controlled airspace. Both of these omissions have created an incorrect view in the media that the FAA is powerless to place any restrictions on commercial or other private UAS operation in the United States. This creates serious issues for the safety of flight operations and ignores the FAA's supremacy and exclusivity in matters affecting the safety of the national airspace.

STATEMENT OF INTEREST OF *AMICI CURIAE*

The following former FAA official *amici* have individualized and collective interests in the issues in the pending appeal and its outcome. *Amici*'s years of service at the FAA involve all aspects of air operation, the certification of aircraft, mechanics and flight crew, and the integration of new technology. As a result, they bring a unique perspective to the Board on issues related to UAS regulation and the accommodation of all private and public users of the national airspace.

John McGraw: Before leaving the FAA, John McGraw was the Deputy Director of the Federal Aviation Administration's Flight Standards Service. As Deputy Director,

he oversaw the Flight Standards' divisions that produce policy and work instructions for aviation safety inspectors and guidance for the aviation industry. His previous assignments in the FAA include Manager of Flight Standards' Flight Technologies and Procedures Division, AFS-400, where Mr. McGraw was responsible for the implementation of new technologies into a performance-based national airspace system. Before joining Flight Standards, Mr. McGraw worked in the Aircraft Certification Service as Acting Assistant Manager, Aircraft Engineering Division; Acting Manager, Transport Airplane Directorate Standards Staff; and Manager, Airplane and Flight Crew Interface Branch in the Transport Airplane Directorate. His earliest assignment in the FAA was in 1995, as a Senior Systems Engineer in the Atlanta Aircraft Certification Office. Mr. McGraw was a Test Pilot and Flight Test Engineer for the Department of Defense prior to joining the FAA.

Nick Sabatini: Nick Sabatini became the Associate Administrator for Aviation Safety, effective October 15, 2001, and remained in that position until he retired on January 3, 2008. He was responsible for the certification, production approval, and continued airworthiness of aircraft, as well as the certification of pilots, mechanics, and others in safety-related positions. He was also responsible for certification of all operational and maintenance enterprises in domestic civil aviation, development of regulations, civil flight operations, and the certification and safety oversight of over 7,000 U.S. commercial airlines and air operators. Mr. Sabatini oversaw approximately 6,800 employees at FAA Washington Headquarters, nine regional offices, and more than 125 field offices throughout the world. Mr. Sabatini was Director of FAA's Flight Standards

Service, Manager of the Flight Standards Division for FAA's Eastern Region, and served in a variety of aviation operations and management positions in the agency's Eastern Region, as a principal operations inspector, aviation safety inspector, Manager of the Flight Standards Division Operations Branch, and Assistant Manager of the Flight Standards Division.

SUMMARY OF ARGUMENT

The ALJ's Decisional Order limited its analysis to the application of 14 C.F.R. § 91.13 and whether Respondent's UAS was an aircraft. The ALJ left unaddressed allegations that the UAS operated carelessly and recklessly in both navigable airspace and controlled airspace. Because these were actions that, on their face, potentially endangered aircraft operations, the ALJ should have considered the merits of these separate and distinct claims. The ALJ's ruling in this regard left the mistaken impression with the public that hobbyists are free to operate in both navigable and controlled airspace.

In addition, the Board should clarify that the ALJ's determination (if correct) that the UAS at issue here was a model aircraft and free from regulation cannot apply to any conduct occurring after the passage of the 2012 Act. That statute reaffirmed the FAA's interpretation of UAS as aircraft and UAS operators as pilots in command of aircraft. If this matter is not addressed, it will have a serious impact on the FAA's ability to obtain voluntary compliance with the regulations necessary to preserve the safety of the national airspace.

ARGUMENT

I. THE ALJ FAILED TO RECOGNIZE FAA'S PREEXISTING AUTHORITY TO PROTECT AIR SAFETY AND THE USE OF THE NAVIGABLE AIRSPACE REGARDLESS OF WHETHER THE UAS WAS CONSIDERED A MODEL AIRCRAFT

The ALJ's Decisional Order treated the classification of Respondent's UAS as a model aircraft as both the starting and ending point of its analysis. Once it was determined that the UAS was a "model aircraft," the ALJ found there were no limits on its operation beyond the voluntary guidelines contained in FAA Advisory Circular 91-57 (AC 91-57). *See* Decisional Order at 7. *Amici* urge the Board to clarify that a second step to the analysis must be performed regardless of whether the UAS was a model aircraft.

While AC 91-57 arguably provided a safe harbor to hobbyists at the time of this incident, it only did so if these guidelines were followed. Even assuming, *arguendo*, that Respondent's arguments are correct, by its own terms, this safe harbor can only extend to the edge of navigable airspace; it cannot excuse operations into navigable airspace or controlled airspace. *See* AC 91-57.[4] Accepting the ALJ's premise would lead to the

[4] It should be noted that the 2012 Act casts substantial doubt over the existence of any altitude based safe-harbor. In creating the "Specific Rule for Model Aircraft" in Section 336, Congress specifically stated that "[n]othing in this section shall be construed to limit the authority of the Administrator to pursue enforcement action against any persons operating model aircraft who endanger the safety of the **national airspace system**." P.L. 112-95 § 336(b) (emphasis added). It is significant that section is not limited to "navigable airspace," but instead broadly refers to the national airspace, which is not limited by altitude. *See* FAA Aeronautical Information Manual, §§ 3-2-1, 3-3-1.

nonsensical conclusion that a hobbyist operating a model aircraft has free reign to enter into, for example, airspace being actively used by aircraft for take-off and landing.

Since Respondent's Motion was to dismiss and not for summary judgment, the allegations contained in the pleadings were taken as true. Decisional Order at 2. It is important to note that in its Order of Assessment, the Administrator alleged that Mr. Pirker's UAS had been operated at altitudes up to 1,500 feet. *See* Order of Assessment at ¶ 10. In addition, the UAS was operated within 100 feet of an active helipad. *Id.* at ¶ 9.[5] The Administrator alleged that this operation was careless and reckless because no effort had been made to take precautions to avoid collisions with other aircraft that may have been in the vicinity. *Id.* at ¶¶ 9(l), 10.[6]

The ALJ's Decisional Order fails to adequately take into account the legal framework created by Congress to govern all aviation matters. The United States has exclusive sovereignty over its airspace. 49 U.S.C. § 40103(a)(1). Congress has delegated exclusive authority to control the use of the navigable airspace to the FAA. *See* 49 U.S.C. § 40101(d)(4); 49 U.S.C. § 40103(b). The navigable airspace is defined by statute as the airspace above the minimum flight altitudes prescribed by regulation, including the airspace needed to ensure safe takeoff and landing. *See* 49 U.S.C. § 40102(a)(32).[7] In general, the navigable airspace is considered to be 500 feet above

---

[5] *See, e.g.*, Advisory Circular 150/5390-2B (guidance for heliport design and operation).

[6] *See* 14 C.F.R. § 91.13.

[7] *See also* Congressional Research Service Report 7-500, *Pilotless Drones: Background and Considerations for Congress Regarding Unmanned Aircraft Operation in the National Airspace System*, at 20.

ground level (AGL). 14 C.F.R. § 91.119. In the eastern United States, class G airspace lies between the surface and 700/1200 feet AGL, depending on the location. FAA Aeronautical Information Manual, §§ 3-2-1, 3-3-1. Navigable airspace can be below these levels depending on the proximity to airports, helipads, etc. *Id.* While that airspace is not generally subject to air traffic control, it is regulated. *Id.* Airspace above that altitude is subject to air traffic control. *Id.*

The domestic airspace accommodates more than 70,000 flights per day.[8] The safety of each of these flights is dependent on the FAA's ability to control hazards to navigation. *See, e.g.,* 14 C.F.R. Part 77 (Safe, Efficient Use, and Preservation of the Navigable Airspace).[9] Regardless of the outcome of the appeal, the Board should not allow the propriety of the alleged operation of the UAS within navigable or controlled airspace to go unaddressed and uncommented upon. Thus, while *Amici* take no position on the question of whether Respondent's UAS was a model aircraft, the Board should address the failure of the ALJ to consider the additional question of the FAA's ability to restrict operation of a UAS into controlled airspace and within 100 feet of an active helipad.

---

[8] U.S. Government Accountability Office, *Unmanned Aircraft Systems: Use in the National Airspace System and the Role of the Department of Homeland Security*, Statement of Gerald L. Dillingham, Ph.D., Director, Physical Infrastructure Issues, before the Subcommittee on Oversight, Investigations, and Management, Committee on Homeland Security, House of Representatives, July 19, 2012, GAO-12-889T.

[9] 14 C.F.R. Part 77.1 establishes, among other things, "the standards used to determine obstructions to air navigation . . . ." This includes "an existing object, including a mobile object . . . if it is of greater height than any of the following heights or surfaces: (1) A height of 499 feet AGL at the site of the object." 14 C.F.R. § 77.17 (a)(1). Those heights can be lower based on the object's proximity to airports, terminal obstacle clearance areas, etc. 14 C.F.R. § 77.17.

II. THE BOARD SHOULD CLARIFY THAT THE ALJ'S RULING DOES NOT AFFECT THE FAA'S AUTHORITY TO TREAT ANY UAS AS AN AIRCRAFT AND TO APPLY THE STANDARDS OF PART 91 TO CURRENT UAS OPERATIONS

The ALJ's decision is based entirely on the question of whether Mr. Pirker's UAS is an aircraft. The ALJ found that the term UAS, as it was applied at the time of this incident in 2011, was ambiguous, and that the public could not reasonably have known that UAS operations were governed by 14 C.F.R. Part 91. *See* Decisional Order at 4, 7-8. The ALJ then added, in dicta, that a new formal rulemaking might be the only way for the FAA to address this issue. *Id.* at 8. *Amici* believe that this dicta is not only incorrect, but has contributed to an enormous amount of confusion among the public, UAS operators, and state legislators as to the current state of the law. The ALJ failed to adequately consider the effect of the FAA Modernization and Reform Act of 2012 has on the resolution of the perceived ambiguity of whether UAS are also aircraft. *Amici* urge that the Board squarely address this issue and clarify that the ALJ's holding (if correct) is limited to pre-2012 activity and has no impact on the FAA's current authority to enforce Part 91 in the context of commercial UAS operation.

A. Prior to 2012, the FAA Consistently Treated UAS as Aircraft

In order to understand the intent of Congress in passing the 2012 Act, it is important to understand how the FAA treated UAS prior to 2012. It is indisputable that the FAA consistently classified UAS as aircraft for purposes of Part 91, with a special exception for hobbyists. The FAA's Interim Operational Approval Guidance ("IOAG")

08-01 was promulgated on March 13, 2008. IOAG 08-01 established a framework for approval of UAS operations into the national airspace system. The guidance clearly is based on the premise that UAS are aircraft. The guidance starts with the proposition that, by their nature, UAS are not compliant with the requirements of Title 14 of the Code of Federal Regulations, including the requirement for a pilot on board who can perform "see-and-avoid." As a result, the guidance was intended to provide information on alternate means of compliance with aircraft regulations. The document prominently states:

> ***Note: In general, and as a minimum, applicants must observe all applicable regulations of 14 CFR parts 61 and 91. This document is intended to identify alternate methods of compliance with the regulations when evaluating proposed UAS operations.***

UAS Interim Operational Approval Guidance 08-01 at 1.0 (emphasis in original).[10] Thus, as of 2008, the FAA did not treat "model aircraft" as *sui generis*, but rather as aircraft with limitations in their capabilities.

Similarly, FAA Notice JO 7210.766, which was issued on February 23, 2011, explicitly stated that AC 91-57 was limited to hobbyists, and that commercial operators of UAS had to possess a special airworthiness certificate. Thus, the FAA clarified that the ability of any person to use AC 91-57 as a safe harbor was dependent solely on the use made of the UAS, with different standards applying to hobbyists and commercial users. JO 7210.766 also contained the following warning:

---

[10] IOAG 08-01 superseded AFS UAS Policy 05-01, which set initial operational approval requirements. AFS UAS Policy 05-01 also specifically addressed the need for UAS to comply with 14 C.F.R. Part 91.

> *NOTE: The FAA recognizes that people and companies other than modelers might be flying UAS with the mistaken understanding they are legally operating under the authority of AC 91-57. AC 91-57 only applies to modelers and specifically excludes its use by persons or companies for business purposes.*

FAA Notice JO 7210.766 (emphasis in original). Thus, at the time of the passage of the 2012 Act, the FAA's position that UAS were aircraft was fully formed and clearly expressed.

B. The 2012 Act Affirmed the FAA's Position that UAS are Aircraft

When Congress passed the 2012 Act, it did not invalidate any of the FAA's positions on how UAS are treated. In fact, the 2012 Act specifically codified these definitions, including the FAA's limited AC 91-57 safe harbor for hobbyists.

After passage of the 2012 Act, the ambiguities that the ALJ found troubling disappeared. The 2012 Act defines an Unmanned Aircraft as "an aircraft that is operated without the possibility of direct human intervention from within or without the aircraft." P.L. 112-95 § 331(8). It then defines Small Unmanned Aircraft as a subset of this group, i.e., "an unmanned aircraft weighing less than 55 pounds." P.L. 112-95 § 331(6). It further defines Unmanned Aircraft System as an unmanned aircraft and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the pilot in command to operate safely and efficiently in the national airspace system." P.L. 112-95 § 331(9). Thus, with the passage of the 2012 Act,

here is now a statutory definition of UAS that specifically refers to the operator as a "pilot in command," the same term used in 14 C.F.R. Part 91.[11]

The statute also goes on to provide a specific definition for Model Aircraft. In order to qualify as a Model Aircraft, the device must be capable of sustained flight in the atmosphere, flown in visual line of sight by the operator, and flown for hobby or recreational purposes. P.L. 112-95 § 336(c). Finally, the legislative history makes clear that when the statutory carve-out for model aircraft was agreed to by the House of Representatives, it insisted on additional language clarifying that "nothing in this provision will interfere with the Administrator's authority to pursue enforcement action against persons operating model aircraft who endanger the safety of the national airspace system." Conference Report 112-381 at 199.

Therefore, after passage of the 2012 Act, there are statutory definitions of unmanned aircraft, small unmanned aircraft, UAS, and Model Aircraft, as well as an indication from Congress that a UAS operator is a "pilot in command." These clarifications are all consistent with the current method used by the FAA to regulate commercial UAS operations pending a final rulemaking. Thus, the Board needs to clarify that if the same incident happened today, there would be a different outcome and that the *Pirker* decision only applies to pre-2012 incidents.

[11] *See* 14 C.F.R. § 91.3 (setting out the responsibility and authority of the pilot in command).

C. Without Clarification, the ALJ's Ruling Will Seriously Impair Effective Integration of UAS into the National Airspace

The FAA's roadmap for UAS integration indicates that we are still far from a completed formal rulemaking.[12] The unfortunate dicta in the ALJ's opinion -- that without a new formal rulemaking the FAA cannot put any limitations on UAS use -- has obvious implications for public safety.

Rapidly evolving UAS technology presents difficult questions that must be resolved before these systems can be fully integrated into the national airspace. This is not, however, the first time the country has had to deal with transformative transportation systems.

In the 1940s, the country was still grappling with core issues surrounding the rapid growth in air commerce. The United States Supreme Court was asked to address the extent to which the states should be involved in regulating air commerce in *Northwest Airlines v. Minnesota*, 322 U.S. 292 (1944). In his concurring opinion, Justice Jackson noted that air travel in the 1940s was only in a stage of development "roughly comparable to that of steamship navigation in the 1820s." *Id.* at 302. Justice Jackson noted that in the 1820s, local governments were permitted to extensively exercise local control of navigable waters alongside federal control, and this had led to a proliferation of conflicting standards and an enormous burden on commerce. Justice Jackson warned that only through a careful system of purely federal supremacy in air commerce regulation

---

[12] *See* Federal Aviation Administration, *Integration of Civil Unmanned Aircraft Systems (UAS) in the National Airspace System (NAS) Roadmap (2013)*, at 4-5

could a repeat of those problems be avoided. *Id.* "Local exaction and barriers to free transit in the air would neutralize its indifference to space and its conquest of time." *Id.*

Justice Jackson then went on to elegantly describe how pervasive and effective the national regulation of the airspace was, even in the 1940s:

> Congress has recognized the national responsibility for regulating air commerce. Federal control is intensive, and exclusive. Planes do not wander about in the sky like vagrant clouds. They move only by federal permission, subject to federal inspection, in the hands of federally certified personnel and under an intricate system of federal commands. The moment a ship taxies onto a runway, it is caught up in an elaborate and detailed system of controls. It takes off only by instruction from the control tower, it travels on prescribed beams, it may be diverted from its intended landing, and it obeys signals and orders. Its privileges, rights, and protection, so far as transit is concerned, it owes to the Federal Government alone, and not to any state government.

Id. at 303.

Justice Jackson recognized that it was impossible in the 1940s to know where technology would take air commerce, but he knew that the country would never reach this destination unless there was a single governmental agency that spoke with authority on the use of the national airspace:

> The ancient idea that landlordism and [local] sovereignty extended from the center of the world to the periphery of the universe has been modified. Today the landlord no more possesses a vertical control of the air above him than a shore owner possesses horizontal control of all the sea before him."

Id. at 302-303.

Compared with future developments, UAS technology is still in its infancy. Like Justice Jackson, we cannot see where this technology will lead the country over the next seventy years. But what we do know is that this technology will never live up to its true potential for safe and effective service unless there is a single federal regulatory authority

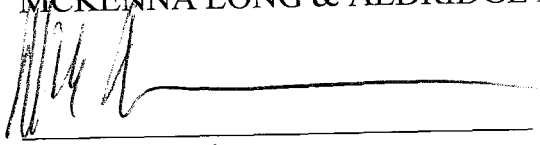
-- the FAA -- that sets national rules based on the input of the public and industry stakeholders. As a result, the Board should clarify that any decision it renders is limited to the law as it existed at the time of the incident and does not affect current FAA regulatory authority under the 2012 Act.

CONCLUSION

The national airspace only functions safely when those using it understand what actions are permissible and what actions are prohibited. *Amici* have serious concerns that the ALJ's unwarranted and incorrect dicta is contributing to confusion and uncertainty among commercial UAS operators, hobbyists, and state and local government leaders. This confusion undermines the clear intent of Congress in passing the 2012 Act to ensure that there is full integration of UAS into the national airspace without interfering with current users. Accordingly, *amici* respectfully request the Board address the issues raised in this brief in its ultimate resolution of this appeal.

Respectfully submitted,

MCKENNA LONG & ALDRIDGE LLP



Mark E McKinnon
Lawrence S. Ebner
Mark A Dombroff
1900 K Street, NW
Washington, DC 20006-1102
202-496-7500 Phone
mmckinnon@mckennalong.com
lebner@mckennalong.com
mdombroff@mckennalong.com

Counsel for Amici Curiae John McGraw and Nick Sabatini

CERTIFICATE OF SERVICE

I hereby certify that on this 16th day of May, 2014, a copy of the foregoing was served upon the following by First Class U.S. Mail to:

Brendan M. Schulman, Esq.
Kramer, Levin, Naftalis & Frankel, LLP
1177 Avenue of the Americas
New York, NY 10036
BSchulman@kramerlevin.com

Susan Caron, Esq.
Federal Aviation Administration
Office of the Chief Counsel
800 Independence Avenue, S.W.
Washington, D.C. 20591
Susan.caron@faa.gov

Brendan A. Kelly, Esq.
Office of the Regional Counsel
FAA Eastern Region
1 Aviation Plaza
Jamaica, NY 11434
Brendan.kelly@faa.gov

Attorney

Albany
Atlanta
Brussels
Denver
Los Angeles
Miami
New York

McKenna Long
& Aldridge LLP
1676 International Drive • Penthouse
McLean, VA 22102
Tel: 703.336.8800
mckennalong.com

Northern Virginia
Orange County
Rancho Santa Fe
San Diego
San Francisco
Washington, DC

MARK A. DOMBROFF
703.336.8700

EMAIL ADDRESS
mdombroff@mckennalong.com

May 16, 2014

BY PERSONAL DELIVERY
David Tochen, Esq.
General Counsel
National Transportation Safety Board
490 L'Enfant Plaza East, S.W.
Washington, D.C. 20594

Re: ***Huerta v. Pirker***
Docket CP-217

Dear David:

Enclosed please find courtesy copies of the following documents, which have been filed today in the above-referenced matter: (1) Motion for Leave to File *Amicus Curiae* Brief of Former FAA Officials; and (2) *Amicus Curiae* Brief of Former FAA Officials.

Should you have any questions regarding these submissions, please do not hesitate to contact me.

Very truly yours,

Mark A. Dombroff

Enclosures