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Cover Page Footnote

I would like to sincerely thank Mr. Joe Zeis, Jr., J.D., University of Dayton School of Law, 2016, for the time and expertise he provided to me as I began developing my thoughts for this Comment. In addition, I would like to thank Mr. Ryan (RJ) Smith whom, in conjunction with Joe, provided me with additional expertise and guuiance that aided in my understanding of the practical implications of my Comment's proposal. I would also like to extend a special thanks to Professor Sheila Miller, my Law Review Faculty Advisior for providing me with meaningful critiquesand insights that allowed me to strengthen my writing skills and abilities beyond this Comment. Finally, I would like to thank my family for their continuous support and encouragement as I work diligently to accomplish my goals.

SHARING THE SKY: REGULATING UNMANNED AIRCRAFT IN AMERICAN AIRSPACE *VIA* COOPERATIVE FEDERALISM

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I. INTRODUCTION

On Friday, July 31, 2015, JetBlue Flight 1834, reported sighting a drone at 2:24 p.m., while approaching John F. Kennedy International Airport (JFK)—which was, at the time this Comment was written, the fifth busiest commercial airport in the United States in terms of passenger enplanements (boardings)—in Queens, New York.[1] According to the pilot of that JetBlue flight, while approaching the airport for landing at approximately 800 to 900 feet in altitude, a drone was flying right below the aircraft's nose.[2] On that very same day, at approximately 5:00 p.m., Delta Flight 407, carrying 154 people on board, was also preparing to land at JFK.[3] As this flight was preparing to land, the cockpit reported a drone sighting approximately 100 feet below its right wing.[4] Immediately following the cockpit's report, the air traffic controller can be heard alerting all other aircraft in the proximate area.[5] JetBlue Flight 1834 and Delta Flight 407 did not have to take any evasive action, and both landed safely; however, both aircrafts came dangerously close to a possible in-flight emergency.[6]

These are just two close calls out of the 764 incidents that have been documented in the Federal Aviation Administration's (FAA) August 2015 published list of reported drone encounters in the National Airspace System (NAS).[7] This list detailed drone sightings that were reported to the FAA

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[1] Joshua Berlinger & Aaron Cooper, *2 Airliners Fly Within 100 Feet of Drone Above New York*, CNN (Aug. 3, 2015, 6:42 PM), http://www.cnn.com/2015/08/01/us/drone-airliner-jfk/; *Enplanements at All Commercial Service Airports (By Rank)*, FAA (Sept. 22, 2015), https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/media/cy14-commercial-service-enplanements.pdf.

[2] Berlinger & Cooper, *supra* note 1.

[3] *Id.*

[4] *Id.*

[5] *Delta 407 Seeing a DRONE Over Canarsie Landing JFK*, LIVEATC.NET (Aug. 1, 2015, 8:53 PM), http://www.liveatc.net/recordings.php.

[6] Berlinger and Cooper, *supra* note 1.

[7] *UASEventsNov2014-Aug2015-4*, FAA (Aug. 21, 2015), http://www.faa.gov/uas/media/UASEventsNov2014-Aug2015.xls.

starting on November 13, 2014, until August 20, 2015.[8] Previous to the August 2015 list, the FAA issued a similar list in November 2014, which detailed reported sightings from February 22, 2014, to November 11, 2014.[9] In the November 2014 list, there were 193 events reported to the FAA, a number four times less than the amount of reported sightings in the FAA's August 2015 report.[10] The dramatic increase in drone sightings is certain to raise in-flight safety concerns. But, moreover, as this Comment suggests, the increase in sightings proves that the composition of American airspace has changed, whether we like it or not.[11]

As will be explained, the federal government's approach to regulating the new American airspace has restricted rather than promoted unmanned aircraft operations. The changing airspace, however, should be embraced, but that can only be accomplished if the federal government is willing to pragmatically modernize its approach to aviation regulation. To definitively embrace the changing airspace, the federal government must resign its exclusive sovereignty of the NAS. Rather than expanding congressional and executive agency authority, the opposite should happen. Utilizing a Cooperative Federalism system—similar to the federal government's approach to environmental regulation—the federal government through legislative action would resign its exclusive sovereignty over national airspace regulation. This resignation would allow the FAA to reclassify the NAS to include a state controlled and regulated Airspace Class designated for civilian unmanned aircraft system (UAS) operations— specifically recreational UAS operations.

This Comment will examine the constitutional concerns that could inhibit a state's ability to protect its citizens; the impracticability of the federal government's current approach to building an UAS regulatory framework; and the principles of Cooperative Federalism and its application to American aviation regulation. Finally, this Comment will propose a remedy that allocates control over a specific Airspace Class to the states for purposes of regulating recreational UAS operations in the NAS.

Specifically, Section II of this Comment will identify the two principals responsible for regulating the NAS under a cooperative system; present a breakdown of the National Airspace System; and provide an overview of the current and proposed legal framework regulating unmanned

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[8] *FAA Releases Pilot UAS Reports*, FAA (Aug. 21, 2015), http://www.faa.gov/news/updates/?newsId=83544.

[9] Alan Levin, *Pilot Close Calls With Drones Grow Rapidly, FAA Reports*, BLOOMBERG (Nov. 26, 2014, 11:21 AM), http://www.bloomberg.com/news/articles/2014-11-26/drone-safety-incidents-almost-one-per-day-in-u-s-faa-reports.

[10] *See id.*

[11] *See generally* Jack Nicas, *Drones Boom Raises New Question: Who Owns Your Airspace?*, WALL ST. J. (May 13, 2015, 12:43 PM), http://www.wsj.com/articles/drones-boom-raises-new-question-who-owns-your-airspace-1431535417.

aircraft in the United States.

Section III will first analyze the barriers to state regulation of American airspace. Second, Section III will go on to examine the inadequacies of the federal legislation governing UAS regulation. Third, this Section will introduce Cooperative Federalism's core principles and will begin to apply those principles to aviation regulation.

Finally, Section IV of this Comment will offer a proposal to supplant the federal government's exclusive sovereignty over the NAS by applying Cooperative Federalism principles to the NAS regulatory structure that would allow the FAA to reclassify the NAS to include a state controlled Airspace Class.

II. BACKGROUND

A. Unmanned Aircraft Systems vs. Small Unmanned Aircraft Systems

The term, "unmanned aircraft systems," or simply "UASs,"[12] is the technical and proper term that is employed by the FAA and the aviation industry at large when referring to drones.[13] In addition to UASs, there is a subclass of unmanned aircraft systems known as small-unmanned aircraft systems, or "sUASs."[14] Again, this is a technical term used within the industry and describes a drone weighing less than 55 pounds.[15] Notwithstanding the technical definitions, this Comment will assume the term "sUASs" means non-commercial unmanned aircraft systems operated only for recreational operations. It is these types of unmanned aircraft systems that are at the center of this Comment's focus.

B. The Principals of Aviation Regulation

1. The Federal Government as the Primary Principal

The United States Government has exclusive sovereignty of airspace in the United States.[16] In addition to this authoritative role, the federal government has the primary responsibility of protecting its citizens and ensuring national security. To carry out these responsibilities in the context of aviation regulation, the federal government operates as a single entity comprised of two separate institutions. These two institutions are the United States Congress (Congress) and the FAA. Thus, the federal government is

[12] Occasionally, unmanned aircraft systems will be referred to as unmanned aerial vehicles (UAVs); however, UAVs are generally used to describe military vehicles used to conduct surveillance or airstrike missions.

[13] *See Unmanned Aircraft Systems*, FAA, https://www.faa.gov/uas/ (last visited Dec. 1, 2017).

[14] FAA Modernization and Reform Act of 2012, 112 Pub. L. No. 95, § 331, 126 Stat. 11, 72 (2012).

[15] *Id.*

[16] 49 U.S.C. § 40103(a)(1) (2012).

presumed to be the primary principal in advancing and maintaining a legal framework governing unmanned aircraft operations in the NAS.

a. Congress as the Primary Lawmaker

Since the creation of the FAA in 1967,[17] Congress has traditionally relied on congressional oversight as its primary tool for directing federal aviation regulation priorities.[18] However, in 2012—as a response to growing concerns and advancements in unmanned aviation technology—Congress passed the FAA Modernization Reform Act of 2012 (FMRA).[19] This piece of legislation has since been the keystone to the current legal framework governing unmanned aircraft.

As will be discussed infra, the FMRA has designated the United States Secretary of Transportation (the "Secretary") as the governing authority responsible for overseeing the development of a roadmap and comprehensive plan to integrate unmanned aircraft into the NAS.[20] In addition to this designation, in passing the FMRA, Congress mandated several key deadlines by which the Secretary had to approve final regulations governing unmanned aircraft operations.[21]

b. The Secretary of Transportation viz. the FAA as the Primary Regulator

As the head of the Department of Transportation (DOT), the Secretary is tasked with overseeing the development of transportation policy.[22] In this capacity, amongst other responsibilities, the Secretary administers the process by which DOT agencies promulgate regulations.[23] Under this structure, an agency having jurisdiction over a specific transportation field is responsible for crafting the regulations that control that field.[24] In the context of aviation regulation, this agency is the FAA.[25] Thus, although the FMRA appoints the Secretary as the governing authority responsible for the integration of civil unmanned aircraft into the NAS, it is the FAA that becomes the fundamental regulator.

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[17] *See A Brief History of the FAA*, FAA, http://www.faa.gov/about/history/brief_history/#origins (last visited Dec. 1, 2017).

[18] JOHN W. FISCHER, BART ELIAS & ROBERT S. KIRK, CONG. RESEARCH SERV., U.S. AIRLINE INDUSTRY: ISSUES AND ROLE OF CONGRESS 10 (2008), http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1519&context=key_workplace.

[19] *See generally* FAA Modernization and Reform Act of 2012, 112 Pub. L. No. 95, 126 Stat. 11 (2012).

[20] FAA Modernization and Reform Act of 2012 § 332, at 73.

[21] *See id.*

[22] *Office of the Sec'y, Overview*, DOT, http://www.transportation.gov/office-of-secretary. (last visited Dec. 1, 2017).

[23] *See generally Our Admin.*, DOT, https://www.transportation.gov/administrations. (last visited Dec. 1, 2017).

[24] *See generally id.*

[25] *Id.*

With this empowerment, however, the FAA also becomes wholly responsible for ensuring that congressional mandates are executed. After all, the Executive branch is constitutionally required to execute the laws passed by Congress.[26] However, despite its constitutional role in executing laws, and its congressional designation as the fundamental aviation regulator, at the time this Comment was written, the FAA had failed to meet almost every internally and congressionally mandated deadline to promulgate rules governing unmanned aircraft operations.[27]

One of the most critical deadlines was September 30, 2015, which was a deadline mandated by the FMRA.[28] By this date, the FAA was to have issued final regulations, approved by the Secretary, governing all unmanned aircraft operations in the NAS.[29] In February 2015—as a step towards meeting the September 2015 deadline, and following proper rule making procedure—the FAA released its proposed regulations addressing the operation of civil unmanned aircraft systems.[30] Despite some progress, the FAA ultimately missed the September deadline; according to a FAA spokesperson, "the agency [was] still reviewing around 4,500 public comments it received for the pr[opposed civil] drone rules it published . . . in February [2015]. [Yet, t]he FAA hopes to have its final regulations for [civil] drone use in place by spring of 2016."[31] The FAA ultimately missed the spring deadline as well, but it did act in December 2015, and again in June 2016, by taking the first steps, albeit minimal ones, for regulating sUASs and UASs.[32]

First, on December 21, 2015, the FAA announced new rules for sUASs requiring current and new operators to register their sUASs before operating them in the NAS.[33] Second, on June 21, 2016, the first day of summer, the FAA at last finalized the first rules commercial unmanned aircraft operations rules mandated by the FMRA.[34] The June 2016 rules are outside the scope of this Comment, but the rules require commercial UAS

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[26] *See* U.S. CONST. art. II

[27] Jason Koebler, *The FAA Has Missed Its Congressionally Mandated Deadline to Regulate Drones*, MOTHERBOARD (Oct. 1, 2015, 10:11 AM), http://motherboard.vice.com/read/the-faa-has-missed-its-congressionally-mandated-deadline-to-regulate-drones.

[28] *See* FAA Modernization and Reform Act of 2012, Pub. L. No. 112–95, § 332, 126 Stat. 11, 73 (2012).

[29] *See id.*

[30] *See generally* Operation and Certification of Small Unmanned Aircraft Systems, 80 Fed. Reg. 9544 (proposed Feb. 23, 2015) (to be codified at 14 C.F.R.).

[31] David Murphy, *FAA Misses Deadline for Drone Rules, Shifts to Spring*, PC MAG (Oct. 4, 2015, 1:46 PM), http://www.pcmag.com/article2/0,2817,2492506,00.asp.

[32] Press Release, FAA, FAA Announces Small UAS Registration Rule (Dec. 14, 2015), https://www.faa.gov/news/press_releases/news_story.cfm?newsId=19856; Press Release, FAA, DOT and FAA Finalize Rule for Small Unmanned Aircraft Systems (June 21, 2016), https://www.faa.gov/news/press_releases/news_story.cfm?newsId=20515.

[33] FAA Announces Small UAS Registration Rule, *supra* note 32.

[34] DOT and FAA Finalize Rules for Small Unmanned Aircraft Systems, *supra* note 32.

operators to obtain remote pilot licenses and maintain visual sight of UASs.[35]

In sum, the federal government is the primary principal in promulgating unmanned aircraft regulation because of its fundamental responsibility to protect American citizens; its exclusive sovereignty over the national airspace; and its role as both the primary lawmaker and regulator in the United States. Cooperativeness is, however, the foundation for establishing a pragmatic regulatory framework for the new American airspace. That is, the foundation for establishing a modernized framework is the close cooperation and partnership with the secondary principal: State and Local Governments.

2. State and Local Governments as the Secondary Principal

The federal government's failure to timely regulate unmanned aircraft operations in the national airspace has forced state and local governments to assume a larger role in protecting citizens. Understanding that final, federal regulations were anything but certain, these governments began enacting their own laws in an attempt to regulate unmanned aircraft operations, specifically sUAS operations, within their respective territorial boundaries.[36] At the time this Comment was written, at least seventeen states had passed laws restricting how private citizens may operate unmanned aircraft, and many other state legislatures were debating proposed regulations.[37]

The necessity for sUAS regulation has also been recognized at the local government level.[38] For example, in Pittsburgh, PA, city council has considered legislation that would prohibit sUASs from being flown over city parks and playgrounds.[39] In support of city council's considerations, Pittsburgh Mayor Bill Peduto issued the following in a public statement, "[D]rones could interfere with emergency medical helicopters that often fly low over major city parks," and therefore, "pledged [his] full support for the bill."[40] Undoubtedly, states and local governments are entitled to be concerned about the well being of their citizens. Because of this responsibility, state and local governments have been brought to the forefront of the controversy as the secondary principal in developing a sUAS regulatory framework.

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[35] *Id.*

[36] *Id.*

[37] Nicas, *supra* note 11.

[38] *See generally* Bob Bauder, *Pittsburgh Considering Legislation to Ban Drone Activity from City Parks, Playgrounds*, TRIBLIVE (Oct. 7, 2015, 4:48 PM), http://triblive.com/news/allegheny/9226964-74/parks-drones-park#axzz3or84PrYr.

[39] *Id.*

[40] *Id.*

C. *Breaking Down the National Airspace System: A General Overview of the Airspace Classes within the NAS*

"The NAS is 'the common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas . . . .'"[41]

"The most recent major adjustment to the nation's airspace design arrived in 1993 when the current system of [A]irspace [C]lass went into place."[42] At that time, the FAA organized this "common network of airspace" into six classes: Classes A, B, C, D, E, and G.[43] These six classes were then further categorized as either controlled or uncontrolled airspaces.[44] Table 1 below provides a useful description for each of these six classes.

Table 1 - Airspace Class Descriptions[45]

Airspace Classification	Description
A	Class A encompasses the en route, high-altitude environment used by aircraft to transit from one area of the country to another. Class A airspace exists within the United States from 18,000 feet Mean Sea Level (MSL)[46] to and including 60,000 feet MSL.

[41] FAA, *Law Enforcement Guidance for Suspected Unauthorized UAS Operations*, 1 n.3, http://www.faa.gov/uas/resources/uas_regulations_policy/media/FAA_UAS-PO_LEA_Guidance.pdf (last visited Dec. 1, 2017).

[42] Adam Clark Estes, *A Brief History of Airspace Design*, GIZMODO (Nov. 26, 2013, 10:00 AM), http://gizmodo.com/a-brief-history-of-airspace-design-1469196960.

[43] *National Airspace System Overview*, FED. AVIATION ADMIN. app. A at A-2, https://www.faa.gov/air_traffic/nas/nynjphl_redesign/documentation/feis/media/Appendix_A-National_Airspace_System_Overview.pdf (last visited Dec. 1, 2017).

[44] *Id.*

[45] *Id.* at A-3 tbl.A.1. Table 1 is a reproduction of the Airspace Classifications table as originally published in the FAA's National Airspace System Overview Appendix A for the purpose of defining the six Airspace Classes; however, the information contained within the description fields of Table 1 has been edited by the Author to remove technical terms and phrases that are peripheral to the main subject matter of this Comment.

[46] For the purposes of this Comment, a complete understanding of MSL is not required, but it is important to know that MSL is used in aviation to measure altitude above sea level.

Airspace Classification	Description
B	All aircraft in Class B airspace are subject to positive control from Air Traffic Control (ATC). Class B airspace exists at 29 high-density airports in the United States as a means of managing air traffic activity around the airport. It is designed to regulate the flow of air traffic above, around, and below the arrival and departure routes used by air carrier aircraft at major airports. Class B airspace generally includes all airspace from an airport's established elevation up to 12,000 feet MSL, and, at varying altitudes, out to a distance of about 30 nautical miles from the center of the airport. Aircraft operating in Class B airspace must have specific radio and navigation equipment, including an altitude encoding transponder, and must obtain ATC clearance.
C	Class C airspace is defined around airports with airport traffic control towers and radar approach control. Variations in the shape of this airspace are often made to accommodate other airports or terrain. The top of Class C airspace is normally set at 4,000 feet Above Ground Level (AGL). The FAA had established Class C airspace at 120 airports around the country. Aircraft operating in Class C airspace must have specific radio and navigation equipment, including an altitude encoding transponder, and must obtain ATC clearance.
D	Class D airspace is under the jurisdiction of a local Air Traffic Control Tower (ATCT). The purpose of an ATCT is to sequence arriving and departing aircraft and direct aircraft on the ground; the purpose of Class D airspace is to provide airspace within which the ATCT can manage aircraft in and around the immediate vicinity of an airport. Aircraft operating within this area are required to maintain radio communication with the ATCT. The configuration of each Class D airspace area is

Airspace Classification	Description
	unique. Class D airspace is normally a circular area with a radius of five miles around the primary airport. This controlled airspace extends upward from the surface to about 2,500 feet Above Ground Level (AGL).
E	Class E airspace is a general category of controlled airspace, but aircraft are not required to maintain contact with ATC. In the eastern United States, Class E airspace generally exists from 700/1200 feet Above Ground Level (AGL) to the bottom of Class A airspace at 18,000 feet MSL. It generally fills in the gaps between Class B, C, and D airspace at altitudes below 18,000 feet MSL.
G	Airspace not designated as Class A, B, C, D, or E is considered uncontrolled, Class G, airspace. ATC does not have the authority or responsibility to manage of air traffic within this airspace. In the Eastern U.S., Class G airspace lies between the surface and 700/1200 feet Above Ground Level (AGL).

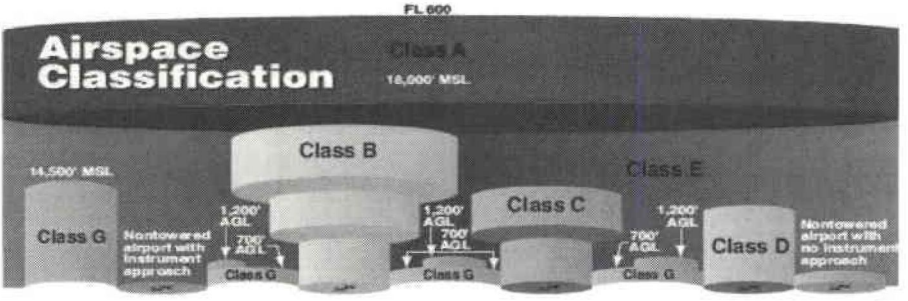
Classes A, B, C, D, and E are categorized as controlled airspaces, while Class G has been designated as an uncontrolled airspace.[47]

Within this categorization system, Class A and Class G essentially establish two ends for the national airspace spectrum. Class A represents the end of the spectrum that is designated to the strictly regulated jetways, while Class G airspace, on the opposite end, is the airspace closest to the ground and is *completely* uncontrolled.[48] The airspace classes between these two ends are categorized around the location of airports and the amount of air traffic that flows in and out of those airports. "Airspace around busy airports is [designated as] Class B, while Class C is reserved for airports with moderate traffic, and Class D for airports with very little traffic. Everything

[47] *National Airspace System Overview*, *supra* note 43.
[48] Estes, *supra* note 42 (emphasis added).

else between 1,200 feet and 18,000 feet is Class E airspace."[49] To help visualize the Airspace Classes, Figure 1 below depicts the horizontal and vertical dimensions of each Class within a hypothetical portion of the NAS.

Figure 1 – Airspace Classifications Visual Chart[50]



The main takeaway from Table 1 and Figure 1 is that each Class, with the exception of Class G, has a specific and authoritative function within the NAS. As this Comment further develops, the Airspace Classes will become more important in the proposal to allocate airspace control to the secondary principal. In particular, Class G airspace will become a significant Class in the reclassification scheme. As this Comment proposes, Class G airspace should become the "foundation" for sUAS operations regulated by the states with oversight from the federal government. At this point in the discussion, the construct of the NAS theoretically makes sense; the construct, however, begins to fall apart as sUASs infiltrate the NAS.

III. ANALYSIS

It should now be relatively apparent the federal government, despite its responsibilities, has failed the aviation community. In an effort to fill this void, state and local governments have attempted to rectify the lack of sUAS regulation by enacting laws and regulations governing sUAS inside state boarders. Therefore, in addition to the lack of clear-cut regulation, to the extent that such regulation exists, a complex constitutional dilemma has been created: states are enacting aviation laws in direct conflict with the federal government's exclusive sovereignty over the NAS.

As this Comment suggests, the dilemma is a product of the exclusive federal sovereignty over the NAS, which is an archaic approach to regulating the new American airspace. Thus, in order to adequately and pragmatically regulate sUAS in the NAS, the federal government must embrace a modern approach to regulating the NAS. This approach can best be characterized as

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[49] *Id.*

[50] FAA, CHAPTER 15: AIRSPACE: PILOT'S HANDBOOK OF AERONAUTICAL KNOWLEDGE, 15-1, 15-2 fig. 15-1 (2016), https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/media/17_phak_ch15.pdf.

an approach by which the federal government "shares the sky." The federal government can embrace this new approach by implementing Cooperative Federalism principles into the regulatory framework governing American airspace.

A. Barriers to State Regulation

1. Federal Law Supremacy and the Rise of the Archaic Approach to Aviation Regulation

In the field of Aviation, proposing a remedy that allows state governments to enact aviation laws and regulations, in coordination with the federal government, i.e., Cooperative Federalism, will inherently raise constitutional questions and concerns.

> It is well established principle of constitutional law that where the exercise of control by the federal government is necessary and imperative and the subject is national in character . . . and requires uniformity of regulation alike in all the states, sovereignty in, and control by, the federal government becomes paramount and exclusive.[51]

In the mid-1940s, the Supreme Court produced the federal government's exclusive role in aviation regulation.[52] In *Northwest Airlines v. Minnesota*, Justice Jackson, writing a concurring opinion, explained the relationship between the federal government and aviation regulation as follows:

> Planes do not wander about in the sky like vagrant clouds. They move only by federal permission, subject to federal inspecting, in the hands of federally certified personnel and under an intricate system of federal commands. . . . Its privileges rights, and protection, so far as transit is concerned, it owes to the federal government alone and not to any state government.[53]

Fourteen years after Justice Jackson's concurring opinion, Congress enacted the Federal Aviation Act of 1958.[54] "Following World War II, air travel increased, but with the industry's growth came new problems. In 1956, a midair collision over the Grand Canyon killed 128 people."[55] "The skies were getting too crowded for the existing systems of aircraft separation, and

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[51] ROWLAND W. FIXEL, THE LAW OF AVIATION 22 (4th ed. 1967).
[52] *See* 322 U.S. 292, 303 (1944).
[53] *Id.*
[54] *See* 49 U.S.C. § 40103 (2006).
[55] *A Brief History of the FAA*, FAA, https://www.faa.gov/about/history/brief_history/#birth (last visited Dec. 1, 2017).

with the introduction of jet airliners in 1958 Congress responded by passing the Federal Aviation Act of 1958."[56] The "purpose of the . . . Act [was] to promote aviation safety[; t]his purpose extends to the safety of persons on the ground, as well as that of pilots and others aboard an aircraft."[57] The Federal Aviation Act of 1958 (the "1958 Act") was codified under Title 49 of the U.S. Code, which includes laws regulating transportation.[58] As part of the 1958 Act, the "United States Government [was granted] exclusive sovereignty of airspace of the United States."[59] Thus, "Congress has expressly asserted 'exclusive sovereignty' over the regulation of airspace,"[60] which thereby preempts any airspace regulation, or law, not promulgated, or not passed, by the federal government.[61]

In addition to exclusive sovereignty, "[t]he FAA's enabling act gave the [FAA] the responsibility to 'assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace.'"[62] As the Ninth Circuit proclaimed in *Montalvo v. Spirit Airlines*, "the voluminous regulations in place and the mandate by 49 U.S.C. § 40103(b) 'sufficiently demonstrate [the federal government's] . . . intent to occupy exclusively the entire field of aviation safety.'"[63] As such, courts have ardently preempted state laws involving the safe use of navigable airspace, pilot training, and pilot regulation.[64] Justice Jackson's concurrence, the passing of the 1958 Act, and the Ninth Circuit's opinion in *Montalvo*, however, must now be considered in the current context of American airspace.

Since *Northwest Airlines* was decided, the 1958 Act was passed, and the Ninth Circuit issued its opinion in *Montalvo*, the composition of American airspace has drastically changed by the infiltration of sUAS into the NAS. The drastic change is clearly evidenced by the FAA's 2015 report (this is true despite the fact that Montalvo was decided in 2007, not terribly long ago). Against the backdrop of the FAA's August 2015 report, one thing is clear: it is true, as Justice Jackson stated, "[p]lanes do not wander about in the sky like vagrant clouds . . . ,"[65] but sUASs are fundamentally different than airplanes, and the federal government cannot continue to approach aviation regulation as it has from the mid 1900s through the early 2000s, as we no longer live in that age of aviation. Despite this reality, however, there remains a significant

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[56] FAA, INSTRUMENT PROCEDURES HANDBOOK, 1-2 (2007), http://www.sheppardair.com/download/faa-h-8261-1A.pdf (last visited Dec. 1, 2017).

[57] Starr v. United States, 393 F. Supp. 1359, 1364 (N.D. Tex. 1975); 49 U.S.C.S § 40103 (2006).

[58] 49 U.S.C. § 40103.

[59] *Id.* § 40103(a)(1).

[60] *Id.*; Ray Carver, Note & Comment, *State Drone Laws: A Legitimate Answer to State Concerns or a Violation of Federal Sovereignty*, 31 GA. ST. U. L. REV. 377, 378–79 (2015).

[61] *See* Carver, *supra* note 60, at 378–79.

[62] *Id.* at 395.

[63] *Id.* (*citing* 508 F.3d 464, 471 (2007)).

[64] *Id.* at 395–96.

[65] Nw. Airlines v. Minn., 322 U.S. 292, 303 (1944).

barrier to change: constitutional preemption.

As Mr. Joseph Zeis, retired United States Air Force Colonel and graduate of the University of Dayton School of Law, examined this barrier in an independent research study he conducted in the course of his legal studies: "Current Issues in Unmanned Aviation and Aerospace Law."[66] As Mr. Zeis explains, the Federal Aviation Regulations possibly preempt expressly state law in many state law areas, with certain exceptions to criminal law.[67] Zeis further asserts that it is unclear whether FAA regulations preempt state law because incidents involving state regulation of UASs or sUASs have not yet been challenged for a lack of state jurisdictional authority.[68]

Mr. Zeis provides an example of this jurisdictional and preemption issue surrounding UAS regulation.[69] As Mr. Zeis explains in his study, a sUAS operator in Clark County, Ohio, was flying near the scene of a car accident and was using a sUAS to film the events as they unfolded.[70] The operator, however, refused to land the sUAS when ordered to do so by local law enforcement officials.[71] The operator was subsequently charged with a felony for obstructing official business by refusing to land the sUAS.[72] Thus, as Zeis, contemplates in his study, we are left with a very interesting question: Whose law governs this type of sUAS situation, federal aviation regulations or the laws of the state or local governments?

It is an interesting question because, as Zeis emphasizes, American courts have not yet decided the answer, which leaves the state governments, local law enforcement officers, and sUAS operators to deal with pervasive legal issues in the absence of federal action.[73] But despite no legal challenges to date, it is only a matter of time before a citizen challenges the constitutionality of state laws that regulate airspace.[74] Mr. Zeis is not alone in analyzing this problem; in fact, the issue has become an extremely popular legal subject for academic and professional publications around the country.

Mr. Raymond Mariani, a career litigator of aviation disputes, also raised the preemption issue in a 2014 article, "Rise of the Drones, The Growing Proliferation of Unmanned Aircraft in the National Airspace."[75] Mr.

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[66] *See* Joseph E. Zeis, Jr., Comment, Current Issues in Unmanned Aviation and Aerospace Law: A Survey and Review of the Legal Implications of an Emerging Sector in Aerospace 67 (Jan. 1, 2015) (unpublished independent study, University of Dayton School of Law) (on file with the Author).

[67] *Id.*

[68] *See id.*

[69] *Id.*

[70] *Id.*

[71] *Id.*

[72] *Id.*

[73] *See generally id.*

[74] Conversation with Joe Zeis, J.D., University of Dayton School of Law, and R.J. Smith, Director, Ohio UAS Operations, in Dayton, Ohio (Nov. 13, 2015).

[75] *See generally* Raymond L. Mariani, *Rise of the Drones, The Growing Proliferation of Unmanned Aircraft in the National Airspace System*, 43 THE BRIEF 18 (2014).

Mariani, as did Mr. Zeis, identified that "[i]ssues of federal preemption with regard to airspace regulations may become more focused as . . . states continue to enact restrictions on [s]UASs . . . ."[76] As Mr. Mariani recognizes, "While nobody will challenge the rights of the FAA to control airspace for the flights of aircraft over any particular state, low-altitude UAS flights raise different questions . . . ."[77] In addition to Zeis and Mariani, Mr. Ray Carver, a graduate from the Georgia State University College of Law, wrote extensively on the issue in his recently published law review Comment.[78] Mr. Carver believes state laws that regulate any flight or flights are prone to preemption in the area of aviation safety.[79] Specifically, as Mr. Carver wrote, "Because the FAA Administrator has the sole responsibility to regulate navigable airspace to ensure its safe use, if states attempt to restrict flights or limit their proximity to populated areas due to safety concerns, their laws would likely not survive a challenge."[80]

As Zeis, Mariani, and Carver have indicated, it is apparent that there are a number of inherent preemption issues with states enacting legislation that governs airspace safety and sUAS operations, but despite the apparent issues the courts have not yet answered, or attempted to answer, the questions. Until then, and arguably even after the FAA issues its FMRA mandated UAS rules, the states are going to inevitably run the risk of having laws preempted by federal law and regulation. This problem, however, can be minimized if not completely eliminated, but that will require the federal government to first understand the new American airspace.

2. The Current Approach to Aviation Regulation Is Incompatible with sUAS

To emerge from an archaic approach to aviation regulation, the United States must take a modern and pragmatic approach to regulating a changed airspace.[81] The new American airspace presents an ideal opportunity for the federal government to contemplate a progressive revolution that fundamentally redesigns the NAS. The federal government is not the only one looking at the issue through the lens of an outdated scope; "[t]o date, most of the scholarly and legislative activity relating to [civilian] . . . drones has centered on the devices' potential impact on privacy rights and criminal evidence gathering."[82] Furthermore, academics and lawmakers continue to analyze current aviation issues using an outdated approach, which, to this point in time, has proven to be a complicated, piecemeal resolution to

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[76] *Id.* at 23.
[77] *Id.*
[78] *See* Carver, *supra* note 60.
[79] *Id.* at 396.
[80] *Id.*
[81] *See generally* Troy A. Rule, *Airspace in an Age of Drones*, 95 B.U. L. REV. 155 (2015).
[82] *Id.* at 158.

integrating sUASs into the NAS.[83]

With that in mind, no one would seriously argue against the fact that "[t]he law of aviation [occupies] . . . a distinctive field of its own because aircraft and airmen operate in a different medium from any other agency of transportation and consequently require new rules to circumscribe their activities . . . ."[84] An archaic approach, however, has unfortunately failed all who operate within the NAS. Therefore, the time is ripe to begin thinking about a new framework that incorporates state regulation of the NAS.

Mr. Mariani, in his article, recognizes that, to which there should be little debate, "[t]he national airspace system involves a close cooperative partnership between the FAA and the departments of transportation in each state that regulate aviation at the state and local level."[85] But Mr. Mariani goes on to suggest that the regulatory framework for UAS operations should be developed under the same model used for manned aircraft.[86] It is this school of thought this Comment precisely rejects.

While there is no need, nor is it practical, to completely eliminate the federal government from the NAS, one problem has yet to resonate with the federal government. That is, the current NAS framework is incompatible with sUASs. Rather, the archaic mindset—of not only the federal government, but also of academics and historians—is constructed around the assumption that dual jurisdiction over the transit, control, and regulation of airspace is completely unworkable.[87] "[S]ince regulation of air commerce and air transit in the airspace above the United States is conceded to be a national responsibility . . . the control and regulation of air commerce and air traffic of all kinds in the United States is recognized to be a federal function."[88] Airspace regulation as a sole federal responsibility, however, is no longer a legitimate perspective because the NAS has become heavily populated with sUASs. This has created a problem in American airspace; a problem almost identical to the one the United States faced in the 1950s.[89]

Overcrowded airspace is once again a problem, the only difference is unmanned aircraft, and not manned aircraft as was the case in 1958, have heavily populated the skies.[90] Yet, the federal government has failed to remedy the problem. It failed to adequately integrate sUASs into the NAS by failing to construct a pragmatic legal framework for the NAS, which has only exacerbated the problem. To be forthright, however, it would be inaccurate

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[83] *See* Zeis, *supra* note 66, at 74.
[84] FIXEL , *supra* note 51, at 15.
[85] Mariani, *supra* note 75, at 23.
[86] *Id.*
[87] FIXEL, *supra* note 51, at 22.
[88] *Id.* at 23–24.
[89] *See A Brief History of the FAA*, FAA, https://www.faa.gov/about/history/brief_history/#birth (last visited Dec. 1, 2017).
[90] *See* INSTRUMENT PROCEDURES HANDBOOK, *supra* note 56.

to wholly categorize the federal government's actions as failures. Congress did recognize a need to modernize the NAS due to the influx of unmanned aircraft by passing the FMRA in 2012. After all, a primary purpose of the Act was to successfully integrate UASs and sUASs into the NAS, but the federal government has failed to fulfill that purpose.

As the preemption discussion alludes, the federal government continues to maintain that regulating the national airspace is beyond the constitutional authority of the states. This has essentially shut out the states from developing any type of relationship with the federal government. The result is that the federal government has created barriers to successfully developing a regulatory framework that gives states and sUAS operators clear direction. As Justice Breyer wrote in his book, *Breaking the Vicious Circle*, one of his many books on government regulation, "[t]unnel vision [is] a classic administrative disease . . . ."[91] Unfortunately, the disease has plagued the federal government's efforts to integrate sUASs into the NAS, especially in recent years as unmanned aircraft have rapidly increased the airspace population. Therefore, the new American airspace is greatly in need of a modern and pragmatic solution.

B. The FMRA is NOT the Answer

The FMRA has broadened the FAA's authority, and Congress, through this Act, has crowned the FAA as the sole regulatory body for integrating sUASs into the NAS. The current legislation and regulation, however, will only further inhibit technological growth and freedom of flight. Not only does the current legislation largely enable sUAS operators to "self-regulate" their conduct, the federal government, more specifically the FAA, simply lacks the resources and abilities to actively and meaningfully enforce the existing regulations. The effect of such shortcomings results in a NAS that has changed very little since the enactment of the Federal Aviation Act of 1958 and the current NAS classification system first adopted by the FAA in 1993. That must change.

1. The Path of Federal Legislation and Regulation is Moving in the Wrong Direction

The FMRA was a missed opportunity. "In passing the FAA Modernization Act, Congress effectively ushered in the 'era of the UAS.'"[92] Although Congress may have ushered in the era, the federal government's response to the boom in UAS operations, specifically in regards to the growing number of sUASs entering the NAS, has been to create more federal

[91] STEPHEN BREYER, BREAKING THE VICIOUS CYCLE: TOWARD EFFECTIVE RISK REGULATION 11 (1993).

[92] Brandon Bellows, Comment, *Floating Toward a Sky Near You: Unmanned Aircraft Systems and the Implications of the FAA Modernization and Reform Act of 2012*, 78 J. AIR L. & COM. 585, 602 (2013).

authority. The FMRA laid the groundwork for UAS integration into the NAS by including a provision that required the FAA to have finalized sUAS rules in place by September 2015.[93] As discussed *supra*, however, the FAA missed not only this imperative deadline, but also every other congressional deadline established by the FMRA.[94] The missed deadlines are direct evidence that the problem is too large for the federal government to resolve alone, but aviation regulation remains under the exclusive jurisdiction of the federal government.

The FMRA contains special rules dedicated solely to sUAS, and it restricts the FAA from regulating sUASs that meet all the criteria required for regulation exemption.[95] Amongst other requirements, the FMRA, require that for sUAS to fall outside of the FAA's regulatory jurisdiction, "the aircraft must be 'flown strictly for hobby or recreational use' and must be 'operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization.'"[96] Moreover, recreational UASs must yield the right-of-way to and avoid interference with manned planes.[97] As stated by the FAA, in its proposed rules issued in February 2015, "[T]he FAA's regulations currently require each person operating an aircraft to maintain vigilance 'so as to see and avoid other aircraft.' This is one of the fundamental principles for collision avoidance in the NAS."[98] These regulations are meaningless, however, as sUAS operators are left to "self-regulate" their operations without any real fear that sanctions will be imposed on them for not following the rules.

In effect, this self-regulation system creates lawless airspace where sUAS operators are free to, intentionally or not, operate recklessly.[99] Allowing the states to regulate the NAS would abolish this self-regulation system created by the federal government. Therefore, rather than expanding authority through federal legislation, the federal government should move in the opposite direction to reduce its exclusive sovereignty and allow states to permissibly occupy a portion of the NAS. In addition to the preposterous notion of self-regulation, the FAA simply does not have the ability to enforce the law.[100]

2. The Federal Government's Overbroad Regulation Inhibits It from

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[93] *Id.* at 602–03.

[94] *See generally* Koebler, *supra* note 27.

[95] *See* discussion *supra* Section III.B.1.

[96] Bellows, *supra* note 92, at 604.

[97] *See* FAA Modernization and Reform Act of 2012, 112 Pub. L. No. 95, § 336, 126 Stat. 11, 77 (2012).

[98] Operation and Certification of Small Unmanned Aircraft Systems, 80 Fed. Reg. 9548 (proposed Feb. 23, 2015) (to be codified at 14 C.F.R.).

[99] *See generally* REED SMITH , CROWDED SKIES: OPPORTUNITIES AND CHALLENGES IN AN ERA OF DRONES (2015), https://www.reedsmith.com/files/Publication/79fd9c03-b51a-42dc-89e0-b9ac73544129/Presentation/PublicationAttachment/16626f59-fd80-4321-9b96-91356377fe76/CrowdedSkies.pdf.

[100] Conversation with Zeis and Smith, *supra* note 74.

Enforcing the Law

In Ohio, there are only three FAA Inspectors charged with the enforcement of FAA UAS regulations.[101] These inspectors are based in three major Ohio cities: Cleveland, Columbus, and Cincinnati; yet, they are charged with enforcing UAS regulations over the entire state.[102] Under this enforcement regime, it is near impossible for the FAA to reasonably enforce the current regulations. In fact, even the FAA, in its own publication, admits that states and local law enforcement agencies are in "the best position" to pursue law enforcement actions to stop unauthorized or unsafe UAS operations.[103] At the same time, however, the FAA adamantly "retains the [sole] responsibility for enforcing Federal Aviation Regulations, including those applicable to the use of [s]UAS."[104] Therefore, the question is again presented: whose laws should govern the airspace, the states' or federal government's? The answer to this question should be that both principals' laws govern the NAS.

C. Cooperative Federalism: A Paradigm Framework

Cooperative federalism is a collaboration between the federal and state governments in matters traditionally reserved to one side of the dual federalism equation; in the context of aviation regulation, these matters are reserved to the federal government.[105] "This concept is [best] . . . understood in the context of power distributed from the federal government to the state or local government . . . ."[106] The concept of allowing states to occupy an area primarily regulated by the federal government is not new; its application to American aviation regulation, however, is starting to gain traction.[107] It is possible that the solution to the problems presented by the new American airspace can be found in a structure where both federal and state governments develop and maintain a regulatory framework. Such a structure has been successfully adopted for environmental regulation. The current environmental regulatory framework is the product of the cooperative federalism structure: "The field of environmental law has proven the most fertile ground for creating variations on the theme of cooperative federalism."[108]

It is first worth conducting a brief exploration of cooperative

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[101] *Id.*

[102] *Id.*

[103] *Law Enforcement Guidance for Suspected Unauthorized UAS Operations*, *supra* note 41, at 5.

[104] *Id.* at 1.

[105] H. Brendan Burke, *Dynamic Federalism and Wind Farm Siting*, 16 N.C. J.L. & TECH. 1, 52 (2014).

[106] *Id.* at 52–53.

[107] *See generally* Margot E. Kaminski, *Drone Federalism: Civilian Drones and the Things They Carry*, 4 CAL. L. REV. CIR. 57 (2013) (suggesting a state-based approach to privacy regulation that governs drone use by civilians); *see also* Robert L. Fischman, *Colloquium Article: Cooperative Federalism and Natural Resources Law*, 14 N.Y.U. ENVTL. L.J. 179, 188–89 (2005).

[108] Fischman, *supra* note 107, at 188.

federalism's underlying principles to assist in their application to aviation regulation.[109] At its core, "[c]ooperative federalism is fundamentally about the relationship between levels of government, which is worked out principally in statutes and through the actions of agencies."[110] There are two separate, but related, concepts, either of which can be used to employ a cooperative federalism approach to government regulation.[111]

First, there is a broad conception in cooperative federalism, which includes all programs that provide incentives to the states to help advance federal law objectives.[112] Second, there is a narrow conception to cooperative federalism, which focuses on programs designed to allow the federal government to establish minimum standards that states may voluntarily choose to adopt, as well as to adopt their own set of state standards in accordance to federal baseline policies.[113] To also assist in the application to aviation regulation, it is also worth examining cooperative federalism's application to the environmental regulation, specifically in regards to the application of the narrow conception.

Under the narrow conception, the federal government must create a minimum regulatory floor by which states may tailor certain regulatory standards.[114] In environmental regulation, for example, pollution control programs created by the states—authorized first by Congress when it enacts a new federal environmental law—are allowed to be stricter, but not inferior to the federal standards set forth under the new law.[115] In order to ensure that states do not "de-regulate" below the federal floor, the states are required to comply with federal oversight.[116] Although subject to federal regulatory minimums, cooperative federalism programs typically allow state standards to be significantly customized.[117] For example, under the Clean Water Act, "states have a great deal of discretion in determining water quality standards by defining designated uses and their applications to particular bodies of water."[118] "[However], states are subject to penalties for failure to fulfill agreements with the federal government or to meet statutory requirements."[119]

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[109] At the time this Comment was written, cooperative federalism has not been directly applied to aviation regulation, but some commentators have alluded to its application. *Cf.* Kaminski, *supra* note 107 (Kaminksi, although briefly alluding to a federal floor for "simple" regulatory matters, primarily advances a traditional federalism approach to civilian drone regulation due to the complex nature of certain technological matters implicated by civilian drone usage, whereas this Comment advances a cooperative federalism approach that requires considerable federal oversight of state drone regulations).

[110] Fischman, *supra* note 107, at 183.

[111] *Id.* at 193.

[112] *Id.*

[113] *Id.* at 190.

[114] *Id.* at 191.

[115] *Id.*

[116] *Id.* at 191–92.

[117] *Id.* at 192.

[118] *Id.*

[119] *Id.*

In addition, while states alone may tailor standards to regional economic and social priorities, the narrow conception permits the federal government to provide assistance for the aspects of the regulatory process that require funding and expertise.[120] For example, water quality standards are measured against criteria that the Environmental Protection Agency establishes through its labs and funded experiments.

Similarly, in the context of aviation regulation, states may need—due to the lack of resources or specialized knowledge—FAA officials to provide expertise or consultation pertaining to new sUAS technological capabilities. This type of cooperation should be promoted within administrative and regulatory frameworks, not discouraged. This is especially true when attempting to resolve the problems presented by the new American airspace.

IV. A COOPERATIVE FEDERALISM PROPOSAL: DILUTING FEDERAL SOVEREIGNTY OVER THE NAS IN THE NEW AMERICAN AIRSPACE

States are not wholly incapable of promulgating regulation that governs a general airspace scheme within the NAS.[121] A high degree of participation by the federal government, however, would be required for states to properly regulate airspace. Thus, it seems logical—based on the increasing number of sUASs entering the NAS and the importance of maintaining order in the sky—to transform the archaic approach to regulation into a Cooperative Federalism-type framework that would allow the states and federal government to "share the sky." Under this framework, states would have constitutional authority to regulate a portion of the NAS in cooperation the federal government.

As a practical matter,

> [t]he states oversee more local concerns of how airborne vehicles interact with their citizens on a day-to-day basis with regard to safety on the ground . . . . [Thus, t]here is room . . . [in the aviation context] for [a] . . . close cooperative partnership that has endured for decades with regard to manned aircraft and the national system of airports.[122]

As this Comment suggests, this partnership can be taken to the next level in a regulatory system that is designed using Cooperative Federalism concepts. This type of system would allow both the primary and secondary principals to effectively regulate all airspace operations while fulfilling their respective responsibilities.

The federal government vis-à-vis the FAA has centered its focus for

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[120] *Id.* at 193.
[121] Mariani, *supra* note 75, at 23.
[122] *Id.*

civil UAS regulation around the safety of the NAS.[123] At the same time, several state and local governments, under pressure from constituents, have recognized that the lack of federal action requires these governments to take their own action. But, again, this pattern of federal inaction and state action has given rise to certain constitutional conflicts. The constitutional tension created by this dilemma, however, can be eradicated through the implementation of a Cooperative Federalism system. In implementing this type of regulatory system,

> [i]t will take a combination of familiar tactics and new ideas to find the right balance between the free use of [s]UAS and national security. . . . By fully implementing available tools and encouraging cooperation between federal, state, and local governments and the private sector, it is possible to create a safe NAS that protects critical infrastructure and privacy.[124]

Although the future role of the secondary principal in the context of unmanned aircraft regulation remains uncertain,[125] it should not mean that its role becomes non-existent. Instead, the federal government will only successfully develop sUAS regulation in the national airspace through the utilization of the secondary principal in a Cooperative Federalism structure.

A. Cooperative Federalism Concepts Applied to Aviation Regulation

Giving states complete autonomy to govern airspace regulation is unrealistic, and using the current archaic approach to formulate a sUAS regulatory structure has proved to be inadequate. Therefore, Cooperative Federalism is logically the more appropriate approach for incorporating states into the regulatory framework. Under this type of system, states will be free to enact laws governing all sUAS operations, but strong oversight by the federal government is, nonetheless, required and necessary to ensuring a safe NAS. Thus, this Comment proposes that the narrow conception of Cooperative Federalism would better suit aviation regulation since the federal government is traditionally more specialized and knowledgeable in the field.

This Comment's proposal should not be construed to mean that states have free reign in establishing aviation policy or regulation; as stated above, that type of system is unrealistic due to the distinct characteristics of aviation. Furthermore, this proposed remedy would not exceed constitutional boundaries because, in using Cooperative Federalism principles, future

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[123] Zeis, *supra* note 66, at 25.

[124] Michelle Tonelli, *Flying in the Dark: How a Legal Loophole Endangers Critical Infrastructure*, 80 J. AIR L. & COM. 693, 716 (2015).

[125] Zeis, *supra* note 66, at 36.

federal legislation would not require states to act.[126] In fact, it is just the opposite; the states would be free to choose whether or not to opt into the system.[127] Under the narrow conception, opting into the system would also provide states with the opportunity to work closely with the federal government and to utilize federal resources and expertise.[128]

"First, the FAA stands alone among government agencies—federal and state—in its understanding of the intricacies of aviation management and how to best approach the day-to-day challenges posed by recreational flight."[129] Second, by engaging the states collaboratively with its expertise, the FAA is in a strong position to influence the laws and policies that states choose to enact.[130] Again, this type of structure is analogous to the regulatory approach used in the environmental context; under the Clean Water Act, states have a great deal of discretion in determining water quality standards, however, states are subject to penalties for failure to meet statutory requirements.[131] Thus, while the Cooperative Federalism structure provides state regulatory authority, establishing the structure must be accomplished in accordance with baseline policies established by the federal government. But again, these federal policies are only the baseline standards, and it by no means requires states to act; instead, the states choose whether or not to opt into the system.[132]

A long-standing principle of our federalist model of government is that "the Federal Government may not compel the States to implement, by legislation or executive action, federal regulatory programs."[133] Simply put, "the Framers rejected the concept of a central government that would act upon and through the States, and instead designed a system in which the state and federal governments would exercise concurrent authority over the people . . . ."[134] Applying Cooperative Federalism's narrow conception to aviation regulation fits squarely within the Framers' intentions for our federalist model of government. Moreover, applying this conception to aviation regulation successfully terminates the archaic approach to aviation regulation.

B. "Sharing the Sky": Reclassifying Airspace Class G as State-Controlled Airspace

This type of concurrent authoritative framework can be accomplished if states are constitutionally allowed to enter the field of airspace of

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[126] Fischman, *supra* note 107, at 190.
[127] *Id.*
[128] *Id.*
[129] Bellows, *supra* note 92, at 613.
[130] *Id.*
[131] Fischman, *supra* note 107, at 191–92.
[132] *Id.* at 190.
[133] Printz v. United States, 521 U.S. 898, 925 (1997).
[134] *Id.* at 919–20.

regulation. Even the FAA recognizes that the sUAS problem will require a better use of the airspace. As Steve Kelley, who is responsible for the FAA's redesign, stated, "Inevitably, the system's only going to get more complex, and therein lies the challenge. . . . 'The airspace is the airspace, ... No one's going to give us more of it. We just have to use it better.'"[135] This Comment suggests that there is a practical solution to using the airspace "better." This solution requires the federal government to resign its exclusive sovereignty over the airspace and allow states to enter this field.

To do this, Congress must take legislative action to resign its exclusive sovereignty, which subsequently will allow states to regulate a portion of the NAS. Recall, Airspace Class G is an unregulated airspace that lies between the surface and 700/1200 feet AGL.[136] Thus, if Congress allows the states to enter this field, the FAA would be constitutionally authorized to re-classify Airspace Class G as "State Controlled Airspace."[137] Furthermore, by applying the narrow conceptions of Cooperative Federalism, Congress's legislative action would also have to include specifications that establish a sUAS regulatory baseline for states choosing to enact state sUAS regulations. Again, this would not be a federal mandate. Practically speaking, it does not need to be. Airspace Class G is currently uncontrolled; therefore it would remain uncontrolled if a state chooses not to act.

C. The Role of the Two Principals in New Age of American Aviation

1. Federal Government will Control Airspace Classes A, B, C, D, E

Under the proposed framework and reclassification of the NAS, the federal government, as the primary principal governing aviation regulation, would remain in exclusive control over the Airspace Classes that possess the overwhelming majority of air traffic; those are, Airspace Classes A, B, C, D, E.[138] This structure would allow the federal government to continue regulating manned aircraft commerce and transit within the NAS. To this point, Justice Jackson's comments in his concurring opinion still hold true, "[planes] move only by federal permission, subject to federal inspection, in the hands of federally certified personnel and under an intricate system of federal commands."[139] But that is not true for sUASs; at this time, sUASs are free to move within the NAS without the need to obtain air traffic control permission. And, as explained above, even if sUASs were required to obtain

[135] Estes, *supra* note 42.

[136] *See supra* Table 1.

[137] The Author recognizes that the proposal to allow states to obtain control over national airspace may raise issues in the manned aircraft context, especially for recreational pilots who fly solely within Airspace Class G. Conversation with Zeis and Smith, *supra* note 74. However, it is presumed in this Comment's proposal that any type of federal legislation that resigns sovereignty over the national airspace would come only in terms of sUAS regulation, not manned aircraft regulation.

[138] *See supra* Table 1.

[139] Nw. Airlines v. Minn., 322 U.S. 292, 303 (1944).

permission or comply with federal flight regulations, the federal government is virtually unable to enforce sUASs regulations due to a lack of personnel resources. Under this proposal, however, lack of enforcement power is no longer a problem because the states can fill the void by regulating Class G Airspace.

2. State Governments Will Control and Regulate Airspace Class G

By leaving sUASs free of the more burdensome regulations set to fall on public and commercial UASs, there is an opening for the states to tailor a collaboratively designed, uniform law in ways that local populations prefer.[140] Assuming the necessary congressional action is taken to resign federal sovereignty, states would be left to control Airspace Class G in accordance with the federal baseline standards. Giving the states this option would allow each state to control and enforce the sUAS laws governing the airspace above its borders free of federal preemption concerns. Having laws and regulations that are enforceable, through state action, would give sUAS operators an incentive to follow the operating standards under which they are governed, and under the threat of meaningful penalties. Moving forward with the development of this cooperative system is a constitutionally permissible alternative; moreover, it is a necessary alternative that allows states to protect citizens from the concerns associated with a improperly regulated NAS.[141]

V. CONCLUSION

The composition of American airspace has changed drastically in the course of only a few years. The federal government has, to this point, failed to recognize and implement a pragmatic solution to the growing concerns about the safety and stability of a NAS now heavily populated with unmanned aircraft. If the federal government were serious about promoting unmanned flight and technology, it would allow the states to enter the aviation regulation field. This would not be the first time that the federal government acted in such a manner. As we have seen in the context of environmental regulation, the Cooperative Federalism system allows this type of regulatory structure. Constructing this arrangement, however, can only be accomplished once the federal government realizes that its archaic approach to aviation regulation is no longer feasible to solve the problems presented by the new American airspace.

[140] Bellows, *supra* note 92, at 613.

[141] There are a host of public concerns presented by the new American airspace ranging from privacy concerns to mid-air collisions between sUASs and manned aircraft.