Senate Transportation Committee January 26, 2016

Testimony Presented By:

Jay Francis Secretary, Granite State Quiet Flyers, Hudson NH Member, Southern New Hampshire Flying Eagles, Merrimack NH Member, Academy of Model Aeronautics

My name is Jay Francis, I am a resident of the town of Merrimack and a model aircraft enthusiast. I am speaking today in opposition to SB 459.

As I'm sure you're aware, the lines have become blurred between what is now commonly called a drone and what has traditionally been referred to as a model aircraft. Regulations for drones may have unintended consequences for those of us who enjoy building and flying model aircraft as a hobby.

The Federal Aviation Administration (FAA) recently released draft rules concerning small unmanned aircraft systems (sUAS). Under these rules, sUAS operators are required to register any aircraft that weighs more than 0.55 lbs. before flying outdoors. If the sUAS is flown strictly for hobby or recreational purposes only, registration is the only FAA requirement. Since the registration is not a license nor certification, and is not required in all cases, the wording of section (a) in this bill could preclude model aircraft operations.

When learning to fly model aircraft, flight instructors will have student pilots fly at a high altitude, often referred to as "three mistakes high" for the obvious reasons. An altitude limit of 100 feet above land as specified in section (c) would present serious dangers. Additionally, the ability to fly at a reasonable altitude is an important element in other aspects of our hobby, such a when flying larger aircraft, sailplanes in thermals, etc. The FAA and the Academy of Model Aeronautics (AMA, a national model aviation organization) are currently in negotiations over exact altitude details for model aircraft. As it stands today, the FAA recommends not flying higher than 400 feet above ground.

Sections (b) and (d) are reasonable from a model aircraft operations point of view.

The insurance requirement of section (e) is excessive depending on the size of the aircraft, and places an unnecessary burden on certain model aviators. As a member of the Academy of Model Aeronautics, I carry \$2,500,000 general liability coverage while operating my model aircraft in adherence to the AMA's safety codes. However, the AMA also offers a "Park Pilot" membership option for those who only fly aircraft 2 lbs. or less, which carries \$500,000 liability insurance. Aircraft such as those that fit in the palm of your hand pose an even smaller risk. Insurance coverage for operation of model aircraft should be evaluated on an individual level.

To address my concerns, I believe sections (a) and (c) of this bill should be reworded to more closely align with the FAA sUAS draft rules and guidelines. Section (e) should be removed, or amended to eliminate the insurance requirement for model aircraft flown strictly for hobby or recreational purposes only.

Possible suggestions would be as follows, altering sections (a), (c), and (e):

- (a) The operator possesses a valid license, certification, or registration if required by the Federal Aviation Administration.
- (c) The drone flies no higher above ground level than specified in the Federal Aviation Administration regulations and guidelines in effect at the time.
- (e) If the operator is flying for other than strictly hobby or recreational purposes only, the operator maintains liability insurance to the amount or limit of at least \$1,000,000 on account of injury to or death of any person resulting from the operation of the drone.

If amendments are not made to address this bill's impact on model aviation, I ask that you **vote SB459 inexpedient to legislate.**

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What is a "Model Aircraft"?

Section 336 of the FAA Modernization and Reform Act of 2012 (Public Law 112-95) [Reference 1] contains the rules regarding operation of model aircraft and a definition:

SEC. 336. SPECIAL RULE FOR MODEL AIRCRAFT.

- (a) IN GENERAL.—Notwithstanding any other provision of law relating to the incorporation of unmanned aircraft systems into Federal Aviation Administration plans and policies, including this subtitle, the Administrator of the Federal Aviation Administration may not promulgate any rule or regulation regarding a model aircraft, or an aircraft being developed as a model aircraft, if—
 - (1) the aircraft is flown strictly for hobby or recreational use;
 - (2) the aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;
 - (3) the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
 - (4) the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and
 - (5) when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation (model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport)).
- (b) STATUTORY CONSTRUCTION.—Nothing in this section shall be construed to limit the authority of the Administrator to pursue enforcement action against persons operating model aircraft who endanger the safety of the national airspace system.
- (c) MODEL AIRCRAFT DEFINED.—In this section, the term "model aircraft" means an unmanned aircraft that is—
 - (1) capable of sustained flight in the atmosphere;
 - (2) flown within visual line of sight of the person operating the aircraft; and
 - (3) flown for hobby or recreational purposes.

How does the FAA define "Model Aircraft Operations"?

[Reference 2] https://www.faa.gov/uas/model_aircraft/

Model Aircraft Operations

Model aircraft operations are for hobby or recreational purposes only.

The FAA has partnered with several industry associations to promote Know Before You Fly, a campaign to educate the public about using unmanned aircraft safely and responsibly. Individuals flying for hobby or recreation are strongly encouraged to follow safety guidelines, which include:

- Fly below 400 feet and remain clear of surrounding obstacles
- · Keep the aircraft within visual line of sight at all times
- Remain well clear of and do not interfere with manned aircraft operations
- Don't fly within 5 miles of an airport unless you contact the airport and control tower before flying
- Don't fly near people or stadiums
- · Don't fly an aircraft that weighs more than 55 lbs
- Don't be careless or reckless with your unmanned aircraft you could be fined for endangering people or other aircraft

The statutory parameters of a model aircraft operation are outlined in Section 336 of Public Law 112-95 (the FAA Modernization and Reform Act of 2012) (PDF). Individuals who fly within the scope of these parameters do not require permission to operate their UAS; any flight outside these parameters (including any non-hobby, non-recreational operation) requires FAA authorization. For example, using a UAS to take photos for your personal use is recreational; using the same device to take photographs or videos for compensation or sale to another individual would be considered a non-recreational operation.

What are the current FAA registration requirements?

[Reference 3] http://www.faa.gov/uas/registration/

Unmanned Aircraft Systems (UAS) Registration

Effective December 21, 2015, anyone who owns a small unmanned aircraft of a certain weight must register with the Federal Aviation Administration's Unmanned Aircraft System (UAS) registry before they fly outdoors. People who previously operated their UAS must register by February 19, 2016. People who do not register could face civil and criminal penalties.

Who must register a UAS?

The owner must be:

- 13 years of age or older. (If the owner is less than 13 years of age, a person 13 years of age or older must register the small unmanned aircraft.)
- A U.S. citizen or legal permanent resident.

Which unmanned aircraft do I have to register?

Owners must register their UAS online if it meets the following guidelines:

 Weighs more than 0.55 lbs. (250 g) and less than 55 lbs. (25 kg). Unmanned Aircraft weighing more than 55 lbs. cannot use this registration process and must register using the Aircraft Registry process.

References

- 1. FAA Modernization and Reform Act of 2012 (Public Law 112-95) http://www.faa.gov/regulations_policies/reauthorization/media/PLAW-112publ95[1].pdf
- 2. FAA Model Aircraft Operations https://www.faa.gov/uas/model_aircraft/
- 3. FAA Unmanned Aircraft Systems Registration http://www.faa.gov/uas/registration/

Additional References

(not printed)

- 4. FAA State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet http://www.faa.gov/uas/regulations_policies/media/UAS_Fact_Sheet_Final.pdf
- 5. Academy of Model Aeronautics (AMA) http://www.modelaircraft.org
- 6. Academy of Model Aeronautics National Model Aircraft Safety Code http://www.modelaircraft.org/files/105.pdf