## UNMANNED AERIAL VEHICLE STUDY GROUP

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Docket Operations, M-30 U. S. Department of Transportation 1200 New Jersey Avenue SE West Building Ground Floor, Room W12-140 Washington DC 20597-0001 Via Fax: (202) 493-2251 Copy via Hand Delivery Received by:

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RE: P

Public Comment

Special Rule for Model Aircraft (FAA-2014-0396)

Ladies and Gentlemen:

Senate Concurrent Resolution 124 of the 2014 Regular Session of the Louisiana Legislature established and provided for a group of stakeholders to study the use and application of Unmanned Aerial Vehicles (UAV's, UAS's or drones) for agricultural purposes and to recommend any action or legislation that the study group deems necessary or appropriate. The UAV study group is comprised of 16 participants (see attached member list) from various sectors of the agriculture, aviation, public safety, and emergency response industries, as well as, representatives from our public university systems. Attached is a copy of the resolution passed by the Louisiana Legislature.

During discussions, the UAV Study Group agreed on certain principles and areas of concern regarding the use of UAS's for agricultural purposes. Our discussions indicate the need for commercial use of UAS's to be regulated by guidelines separate from the established regulations for remote control (RC) aircraft and civil or commercial aircraft. Furthermore, states should be given the ability to develop additional regulatory policies beyond the general operation and safety guidelines established by the Federal Aviation Authority (FAA). This process would allow specific tailoring of regulations and guidelines for commercial use of UAS's in agricultural applications.

When used properly, UAS's have the potential to become a highly lucrative, efficient, and money-saving tool in forestry and agriculture. From surveying diseased plants in crop fields to identifying insect outbreaks in forests, UAS's have the potential to provide a detailed view without

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the costs of renting or owning the standard aircraft in operation today. While it is apparent there are inherent risks in operating UAS's, attempts to severely regulate their use beyond the scope of other manned aircraft would be a grave disservice to the agriculture industry as a whole, as well as, to responsible UAS users going forward. Thank you in advance for your consideration of our comments.

Please consider the following points as our response to the Public Comment Period to the FAA regarding the Special Rule for Model Aircraft (FAA-2014-0396):

- Establish a clear definition of unmanned aerial systems (UAS); a definition which shall include but not be limited to drone, remote control aircraft, unmanned aerial vehicle or other such craft that is controlled autonomously by computer or by remote control from the ground. The future of this technology is yet to be realized in the US and includes far more than just the aircraft and a single operator within line of sight of the device.
- The policies and regulations for agricultural use of UAS's cannot be completely defined with the guidelines of RC hobby aircraft or that for governing civil and commercial aviation. A new and completely separate section of policy is needed to address the complexity of UAS from all aspects including safety, privacy, and general operations.
- In final policy, there should be no distinctions made among aerial control systems for flights (tethered or pre-programmed) when used for exploratory developmental agricultural research. The guidelines for agricultural research should not be limited to those needs for other UAS research and development due to the rural nature of this specific use. A further exemption for commercial use of UAS's in agricultural applications should be considered, or at a minimum there should be clear policy using UAS's in commercial agricultural applications for obtaining images and other data useful to improve agricultural production practices.
- The Federal Aviation Administration (FAA) Centers of Excellence (COE) for Unmanned Vehicles are inappropriate and greatly restrict research opportunities in agriculture. Although the FAA COE's will serve some disciplines, agriculture is not one of those. The policies and regulations for UAS's with regard to research and teaching by public institutions of higher education should allow for statewide FAA Certificates of Authorization (COA's) for an individual UAS.

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- States should be allowed to develop regulatory policies beyond general operation and safety guidelines established by the FAA. In most states, this oversight should be defined by the State Departments of Agriculture when uses are specifically directed for agricultural purposes. State policies for private pilots who operate commercial aerial pesticide/seed/pesticide application businesses already exist and could serve as model rules for UAS use in agriculture.
- Private landowners, producers, tenants, lessees or other contracted personnel working
  on private property for or in commercial agricultural operations should be allowed
  to use UAS within the confines of that property with permission of the landowner or
  entity controlling commercial use of that property.
- Private landowners should be given rights of airspace for UAS above their property to a specified height that allows for effective use of UAS use in agricultural operations.
- Safety guidelines should be established in agricultural areas that are commonly used by commercial aerial applicators. Flight indicators (visual or radio frequency) should be required as part of an overall standard general warning system identifying UAS use in agriculture to other aircraft, regardless of agricultural or non-agricultural uses. In addition, UAS's should be restricted in flight areas within specified distances from public airports and runways.
- UAS ownership and liability must be clearly defined in all agricultural and non-agricultural uses.

Thank you for your time and consideration. If you have any questions, please do not hesitate to contact my office.

Sincerely,

Francis C. Thompson

Chairman

FCT/cms

Enclosures

## A CONCURRENT RESOLUTION

To establish and provide for a group to study the use and application of Unmanned Aerial Vehicles ("UAVS" or "drones") for agricultural purposes and to recommend any action or legislation that the study group deems necessary or appropriate.

WHEREAS, the Association for Unmanned Vehicle Systems International predicts that eighty percent of the commercial market for drones will eventually be for agricultural uses; and

WHEREAS, once the Federal Aviation Administration establishes guidelines for commercial use, the drone industry expects more than one hundred thousand jobs to be created and nearly half a billion in tax revenue to be generated by 2025, much of it from agriculture purposes; and

WHEREAS, drones equipped with infrared cameras, sensors and other technology collect invaluable data which can identify insect problems, spot watering issues, assess crop yields and track down cattle that have wandered off; and

WHEREAS, farmers can also use drones to tailor their use of pesticides, herbicides, fertilizer and other applications, known as precision agriculture, which saves the grower from unnecessarily overusing resources, while at the same time reducing the amount of runoff into nearby rivers and streams; and

WHEREAS, there are many areas of concern in the UAV agriculture industry yet to be addressed or studied including risks to crop dusters and the need for visual markers, registration, licensing, and enforcement requirements, limits on altitude and size, flight plan registration, and training courses; and

WHEREAS, a study of these issues and concerns is essential for the continued development and success of this sector of Louisiana's agricultural economy.

THEREFORE, BE IT RESOLVED that the Legislature of Louisiana hereby creates the Agriculture Unmanned Aerial Vehicle Study Group to study the use and application of UAVS or drones for agricultural purposes and to recommend any action or legislation that the study group deems necessary or appropriate.

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BE IT FURTHER RESOLVED that the study group created herein shall include the following members:

- (1) The vice president of agriculture from Louisiana State University or his designee.
- (2) The chancellor of the Southern University Agricultural Center or his designee.
- (3) The president of the University of Louisiana at Monroe or his designee.
- (4) A representative from the Louisiana Association of Independent Colleges and Universities.
- (5) The commissioner of the Department of Agriculture and Forestry or his designee.
- (6) A representative of the Louisiana Agriculture Aviation Association.
- (7) A representative of the Louisiana Landowners Association, Inc.
- (8) A representative of the Louisiana Agriculture Consultants Association.
- (9) A representative of the Louisiana Forestry Association.
- (10) The president of Louisiana Farm Bureau or his designee.
- (11) A representative from the Federal Aviation Administration.
- (12) The chair and vice chair of the Senate Committee on Agriculture, Forestry, Aquaculture and Rural Development or their designees.
- (13) The chair and vice chair of the House Committee on Agriculture, Forestry,

  Aquaculture and Rural Development or their designees.
- (14) A representative of the Governor's Office of Homeland Security and Emergency Preparedness.
- (15) A representative of the office of state police.
- (16) The chairman of the study group may appoint additional members as deemed appropriate.

BE IT FURTHER RESOLVED that the members of the study group shall serve without compensation, except per diem or expenses reimbursement to which they may be individually entitled as members of the constituent organizations.

BE IT FURTHER RESOLVED that a majority of the total membership shall

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constitute a quorum and any official action by the study group shall require an affirmative vote of a majority of the quorum present and voting.

BE IT FURTHER RESOLVED that the study group shall elect a chair at the first meeting and may conduct such meetings at such times as it may deem necessary or convenient to accomplish the objectives and purposes of this Resolution.

BE IT FURTHER RESOLVED that in the event that the study group makes a report of its findings and recommendations, with suggestions for proposed legislation, if any, such report shall be made to the legislature no later than sixty days prior to the convening of the 2015 Regular Session.

PRESIDENT OF THE SENATE

SPEAKER OF THE HOUSE OF REPRESENTATIVES