AIRSPACE CONSIDERATIONS FOR UNMANNED AERIAL SYSTEMS (UAS) WITHIN THE STATE OF KANSAS

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SUMMARY STATEMENT

Under the FAA Modernization and Reform Act of 2012, P.L. 112-95, Congress has tasked the Federal Aviation Administration (FAA) with integrating unmanned aircraft systems (UASs), sometimes referred to as unmanned aerial vehicles (UAVs) or drones, into the national airspace system by September 2015.


PROPOSAL

The passage of the FAA reauthorization bill in 2012 mandates the integration of sUAS into the civil NAS by 2015 with smaller agricultural and some public safety applications among the first to be approved.1

End-user applications notwithstanding, many technical and policy-related issues remain obstacles to easily accessible, controlled, yet open access to civil airspace for unmanned systems. Workable solutions to these challenges will need to involve multiple organizations and agencies including local, state, federal government organizations, industry and academia. The following are just a few potential missions for UAS:

- agriculture
- weather monitoring,
- emergency management and incident response,
- environmental observation and monitoring,

Introduction and use of unmanned systems within the state of Kansas is experiencing rapid growth across multiple constituencies and system requirements are being driven by a rapidly evolving end-user community.

Currently, the process for operation of unmanned aircraft systems in the NAS is the COA process which is currently constrained by a narrowly defined administrative request for access to the NAS. The result is limited access to the NAS for an emerging and exploding UAS market. In support of FAA efforts to integrate Unmanned Air Systems into the NAS, we are proposing a more holistic approach to the management of Kansas airspace through a phased introduction of controlled yet open skies method of allowing access for flight operations. This approach will incorporate existing areas with active COAs, the creation of flight corridors initially from Manhattan, Ft. Riley, Herington, Salina and the Smoky Hill ANG range west of Salina, to an integrated statewide COA-like approval for qualified operations. In executing this phased approach, Kansas and the FAA will be able to assist with gathering necessary operational and safety data needed to safely realize the integration mandate under the FAA Modernization and Reform Act.

This presentation will serve as the introduction to the airspace panel discussion identifying critical issues for consideration. Insights gained from the airspace panel will support follow on conference working group discussions centered on formulating specific deliverables for a phased
statewide approach for unmanned systems operations development. Working in collaboration with the FAA, Kansas stakeholders intend to implement and execute measures that address the myriad of challenges required for successful integration of unmanned air systems into the NAS by 2015. These measures may include discussion of the potential for designated airworthiness approval authority, operational responsibility and liability, and other topics necessary to authorize a statewide UAS operations area.

In partnership with government, industry, academia, and individual entities that currently use or operate unmanned systems within the state of Kansas, we will formulate a logical foundation to develop, and execute unmanned systems operations within the airspace above Kansas. This foundation will be in support of and in concert with the intent of the FAA Modernization and Reform Act of 2012. Discussions during the panel and follow-on working group will focus on relevant issues such as:

- airspace management
- risk mitigation considerations
- safety
- legal interests and policy considerations

Increased access to restricted airspace, development of integrated Kansas flight corridors and an eventual “conditional” COA enveloping the state of Kansas will require detailed, thoughtful, and rigorous discussion and debate. At the conclusion of the airspace working group session on the 16th, a conceptual framework will be formulated for the establishment of expanded statewide UAS operational authorization. Building on this framework, follow-on actions and activities will be designated for the detailed planning work to follow. Our goal is to have an executable plan by January of 2014.

REFERENCES

http://www.suasnews.com/2012/05/15670/faa-makes-progress-with-uas-integration/


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1The FAA Modernization and Reform Act, H.R. 658. 2nd Session 112 Congress; signed Feb. 14th 2012

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