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**VIA ELECTRONIC FILING**

Docket Operations, M-30  
U.S. Department of Transportation (DOT)  
1200 New Jersey Avenue SE  
Room W12-140  
West Building Ground Floor  
Washington, DC 20590-0001

**Re: Operation of Small Unmanned Aircraft Systems Over People (Docket No.:  
FAA-2018-1087; Notice No. 18-07)**

To Whom It May Concern:

The U.S. Chamber of Commerce’s Technology Engagement Center (“C\_TEC”) appreciates the opportunity to provide comments to the Federal Aviation Administration (“FAA”) and the U.S. Department of Transportation (“DOT”) in response to the above-referenced proceeding.<sup>1</sup> Safely enabling advanced operations of unmanned aircraft systems (“UAS”) without requiring a waiver has the potential to provide substantial benefits to consumers and the general public. However, C\_TEC believes that several portions of the proposed rule will limit this potential and hinder the continued growth of the UAS industry.

1. Comments on Operations at Night:

C\_TEC supports the FAA’s proposed approach on enabling operations at night given its risk and performance-based approach. Waiver requests to allow for nighttime operations totaled 4,837 since Part 107 came into effect in August 2016, and is the most common type of waiver

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<sup>1</sup> 84 Fed. Reg. 3856 (Feb. 13, 2019) available at <https://www.govinfo.gov/content/pkg/FR-2019-02-13/pdf/2019-00732.pdf>.

request.<sup>2</sup> Allowing nighttime operations will provide additional flexibility, increase economic productivity, and reduce the FAA's workload given fewer waiver requests. Requiring anti-collision lighting and the additional testing requirement is sufficient to minimize the risks associated with nighttime operations while not placing an undue burden on the industry.

However, it is critical the final rule does not place overly prescriptive requirements through a specific color or type requirement, or mandate position lighting. Rather, the FAA should adhere to a performance-based approach to ensure visibility for up to 3 statute miles and allow industry to develop innovative technological solutions to achieve compliance. To ensure additional flexibility, C\_TEC believes that the anti-collision lighting requirement should be subject to a waiver if a novel solution can sufficiently mitigate the risk and provide the same level of safety.

## 2. Comments on Operations Over People:

Allowing operations over people in a non-restrictive and risk-based manner is a critical step to advancing the UAS industry forward. Operations over people will allow a plethora of new activities to flourish across a wide spectrum of industries ranging from entertainment to insurance, and will provide significant benefits for consumers.<sup>3</sup> In addition, firefighters, first responders, and law enforcement will be able to use UAS in an expanded capacity to enhance public safety.<sup>4</sup> Lessons from the FAA's UAS Integration Pilot Program ("IPP") and the approved waivers for operations over people underscore these benefits and highlight the need for this rulemaking.

Unfortunately, consumers and the public will not be able to realize the full benefits unless substantial revisions are made to the proposed rule. C\_TEC believes this proposed rule is overly restrictive and will make it challenging for many types of UAS operations to occur.

Specifically, C\_TEC has three concerns with the approach taken in this proposed rule. First, the proposed rule does not comport with similarly-positioned jurisdictions, particularly the European Union. Given the numerous commercial applications of operations over people, the FAA runs the risk of advancing a rule that puts the United States at a competitive disadvantage internationally and will shift the nascent UAS industry overseas.

Second, the impact kinetic energy limitations for Categories 2 and 3 does not fit with the FAA's stated risk and performance-based approach. The limitations of 11 ft-lbs (Category 2) and 25 ft-lbs (Category 3) are overly restrictive and would severely limit the types of UAS that could operate over people. Instead, the FAA should adhere to the research conclusions reached by ASSURE, the Alliance for Safety System of UAS through Research Excellence.<sup>5</sup> As the FAA's

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<sup>2</sup> Ibid, 3857.

<sup>3</sup> Alan Levin, *Groundbreaking U.S. Plan Would Permit Drone Flights Over Crowds*, Bloomberg (Jan. 14, 2019), <https://www.bloomberg.com/news/articles/2019-01-14/groundbreaking-u-s-plan-would-permit-drone-flight-over-crowds>.

<sup>4</sup> Dan Gettinger, *Public Safety Drones: An Update*, Center for the Study of the Drone (May 2018), <https://dronecenter.bard.edu/files/2018/05/CSD-Public-Safety-Drones-Update-1.pdf>.

<sup>5</sup> Task A14 Final Report, <https://ksn2.faa.gov/nextgen/TechCtr/RD/COE/COE-UAS/GroundCollision/SitePages/Home.aspx>.

UAS Center of Excellence, ASSURE conducted research to investigate injury risk associated with UAS to determine the appropriate balance between safety and allowing operations over people. The FAA should strongly consider using the research conducted by ASSURE as a basis for a final rule.

Third, C\_TEC believes that the FAA should take a broader view of risks associated with operations over people that more accurately balances the safety benefits and risks. For example, operations over people will enable UAS to efficiently inspect utility infrastructure in a populated area rather than requiring a person to conduct that inspection. At scale, increased use of UAS will likely reduce workplace injuries and improve overall safety. The FAA should also consider the probability that a UAS will harm an uninvolved person the ground, which may differ depending on the type of the operation as well as the safety capabilities of a UAS. For guidance and data, C\_TEC suggests that the FAA look to ASSURE's work on Task A11, which calculated the probability of a ground strike in a densely-populated location.<sup>6</sup>

### 3. Comments on Operations Over a Moving Vehicle:

C\_TEC has significant concerns over the proposal rule's continued prohibition of UAS operations over a moving vehicle. This prohibition places substantial limitations on all commercial UAS use given the number of adjacent roadways to those operations, and is particularly problematic in urban and suburban areas. For example, this approach would severely limit using UAS for uses including filmmaking, delivery, construction, and newsgathering. The FAA should take a risk-based approach to enable UAS operations over a moving vehicle, and should allow this operation in absence of a waiver in this rulemaking.

### 4. Comments on Remote Identification:

Safety and security of the national airspace system (NAS) remains of paramount importance to C\_TEC. The proposed rule notes that a final action on remote identification will occur before a final rule for operations over people and at night.<sup>7</sup> C\_TEC strongly agrees that the FAA must finalize its policy regarding remote identification to ensure the safe and secure integration of unmanned aircraft into the NAS. C\_TEC urges the FAA to conclude the remote identification proceeding expeditiously, considering that a remote identification framework essentially serves as the basis for all other rulemaking activity contemplated in the subject notice of proposed rulemaking.

### 5. Conclusion:

While C\_TEC supports the FAA's approach to enable nighttime operations, we have significant concerns with the proposed rule's approach to operations over people and operations over a moving vehicle. It is critical that the FAA take a risk and performance-based approach in regulating UAS to deliver economic benefits to consumers, and safety and security benefits to

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<sup>6</sup> Task A11 Final Report, <http://www.assureuas.org/projects/deliverables/a11/Final%20Report.pdf>

<sup>7</sup> 84 Fed. Reg. 3861 (Feb. 13, 2019) available at <https://www.govinfo.gov/content/pkg/FR-2019-02-13/pdf/2019-00732.pdf>.

the general public. C\_TEC thanks the FAA and the DOT for its leadership on UAS integration and looks forward to working with the FAA on these issues moving forward.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'TD', with a stylized flourish at the end.

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