To: Office of Information and Regulatory Affairs From: Wing Aviation LLC Date: October 29, 2020 Subject: Pending EO 12866 Regulatory Review

**Background** Wing, an Alphabet company, has built a small, lightweight aircraft and navigation system that can deliver small packages--including food, medicine and household items--directly to homes in minutes. Created in 2012, Wing has conducted more than 100,000+ flights across three continents and tens of thousands of flights to customers. We believe drone delivery will improve the way our cities operate by reducing road congestion and creating new economic opportunities for local businesses.

Wing's OpenSky is a technology platform that is designed to help drone operators safely access the sky. The OpenSky app is a CASA-approved drone safety application derived from the OpenSky platform that provides Australian drone flyers with the information they need to comply with rules and plan flights more safely and effectively.

The OpenSky app is currently available in the Australian Google Play and Apple app stores. A web version of the OpenSky app is available to users outside of Australia at opensky.wing.com.

**Remote Identification of Unmanned Aircraft Systems** Wing believes Remote ID of UAS is critical to advance UAS integration. It is also critical that Remote ID be implemented in a low cost, simple way that makes compliance easy and inexpensive. The ASTM Remote ID standard provides the technical standard that enables such a solution.

Wing has already demonstrated network Remote ID, including a scalable, open source framework for data sharing amongst UAS Service Suppliers (USS) that allows drones flying on any participating USS to be identified. Wing implemented voluntary Remote ID of our drones in Virginia beginning in 2019 and will continue to expand capabilities consistent with our demonstrations and the ASTM standard next year. In collaboration with other industry providers and NASA, we developed our approach specifically to support rapid innovation as technology, operator needs, and other requirements evolve.

Wing believes that a final rule should permit operators to use network Remote ID instead of broadcast Remote ID. Network Remote ID meets the objectives of the rule while also creating technical means to protect privacy, such as limiting the viewable area, obscuring sensitive or personal information related to an operation, and preventing data aggregation. To that end, the Remote ID rule must also address security interests of public safety and the general public, while being sensitive to the data security and privacy perspectives of multiple stakeholders, including drone operators and the end-user customers of drone operations. The approved ASTM Remote ID standard was drafted with considerable care given to privacy and security. Wing believes that the efforts made to protect privacy and create transparency in the ASTM standard will bolster community engagement, as well as promote the continued growth of the hobbyist community while protecting the privacy of operators and customers of drone service providers.

## Particulars

ASTM F38

- Wing supports the ASTM Remote ID standard which was published in February 2020.
- The standard supports both direct (broadcast) and connected (network) means of compliance.
- The standard has global participation including regulators from:
  - United States of America
  - Canada
  - European Union
  - France
  - United Kingdom
  - Switzerland
- And has been shared with:
  - Australia
  - o Japan
  - New Zealand
  - Singapore

Compliance

- Wing believes that the approved standard enables technology solutions in existence today to be compliant with Remote ID requirements.
- Wing recommends prioritizing resources for Remote ID solutions which are compliant with the Rule and the ASTM standard immediately.

Demonstrations

- Wing and industry partners have demonstrated interoperable network Remote ID solutions.
  - San Bruno (January 2019) <u>https://www.youtube.com/watch?v=oXeOiZVLENo</u>
  - San Bruno (September 2019) <u>https://www.youtube.com/watch?v=PeJpC3o8JBM</u>
  - Switzerland (September 2019)

## UTM

- The ASTM Remote ID standard for network solutions supports a federated UTM ecosystem whereby multiple industry Remote ID USS may provide concurrent Remote ID services.
- The ASTM Remote ID standard supports interoperability among Remote ID USS and with broadcast information which are aggregated at the Remote ID Display.