

**DEPARTMENT OF TRANSPORTATION**  
**Federal Aviation Administration**  
**Finding of No Significant Impact and Record of Decision**  
**for**  
**Environmental Assessment for Wing Aviation, LLC Proposed Drone**  
**Package Delivery Operations in Central Florida**

**Summary**

The Federal Aviation Administration (FAA) prepared the attached final Environmental Assessment (EA) to analyze the potential environmental impacts of amending the Operations Specifications (OpSpec) of Wing Aviation, LLC (Wing), a subsidiary of Alphabet Inc., per its 49 United States Code (U.S.C.) Section 44807 exemption and Part 135 certificate that allow Wing to carry the property of another for compensation or hire beyond visual line of sight (BVLOS) using its Hummingbird Unmanned Aircraft System (UAS). Wing is seeking to amend its OpSpec to conduct unmanned aircraft (UA; also referred to as a drone) commercial package delivery operations in central Florida.

Wing is proposing to conduct UA retail package delivery operations from up to 150 “nests” in the Central Florida metropolitan and surrounding areas using Wing’s Hummingbird 7000W-B and 8000-A. Wing’s intent is to offer service throughout the Central Florida metro and surrounding areas from a network of nests, where each would serve a specific area, thereby avoiding an over-concentration of flights surrounding any given nest. Each nest houses up to 24 aircraft and each has a delivery range of approximately 6 miles, with operations initially occurring between 7:00 a.m. and 7:00 p.m. and then extending to 7:00 a.m. to 10:00 p.m.

This EA was prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA; 42 U.S.C. § 4321 et seq.), and FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*.

After reviewing and analyzing available data and information on existing conditions and potential impacts, the FAA has determined that the Proposed Action would not significantly affect the quality of the human environment. Therefore, the preparation of an Environmental Impact Statement is not required, and the FAA is issuing this Finding of No Significant Impact (FONSI) and Record of Decision

(ROD). The FAA has made this determination in accordance with applicable environmental laws and FAA regulations. The EA is incorporated by reference into this FONSI/ROD.

## **Purpose and Need**

Wing's request to amend its OpSpec to conduct drone delivery operations in central Florida requires FAA review and approval. The FAA has a statutory obligation to review Wing's request to determine whether the amendment would affect safety in air transportation or air commerce and whether the public interest requires the amendment.

The purpose of Wing's proposal is to implement drone delivery operations in central Florida, and is related to the FAA's role and responsibility to review applications for safe flight and certification under Part 135. The proposed action is needed to meet consumer demand for package deliveries in Central Florida as identified by Wing, and to implement BVLOS for those drone package delivery operations.

See Section 1.3 of the EA for detailed discussion.

## **Proposed Action**

The Proposed Action is the FAA approval of an amendment to Wing's B050 OpSpec, Authorized Areas of En Route Operations, Limitations, and Provisions, specifically to a reference section titled Limitations, Provisions, and Special Requirements. The amendment would add a new paragraph with descriptive language about the introduction of Wing's UA commercial delivery service to the Central Florida metropolitan and surrounding areas. Under the proposed action, Wing would establish up to 150 nests within the operating area. Operating hours would occur from 6:00 a.m. to 10:00 p.m. with flights only leaving the nest area between 7:00 a.m. and 10:00 p.m. while maintaining the current operational limit of 400 deliveries per nest per operating day. In addition, operations would include low altitude (<8ft) in-nest hover checks (referred to as FitBITs) between 6:00 a.m. and 7:00 a.m. in preparation for the normal operational day which would begin no earlier than 7:00 a.m. The exact timing and pace of nest installation is dependent on market conditions. If, in the future, Wing wanted to exceed 150 nests in the operating area, additional NEPA reviews would be required. Nests would be distributed throughout the Central Florida metro area following a measured rollout plan to be developed with Wing's partners and continuing best practices from Wing's established community outreach program. Wing's nests would be located in established parking lots of commercial areas whose use is consistent with local zoning and land use requirements, such as shopping centers, large individual retailers, and shopping malls. Wing

must comply with all local requirements, including zoning, to maintain consistency with community planning.

Wing would also conduct offsite operations of limited remote pickup and delivery flights in which the drone would transit from the nest to an offsite location, pick up a package, then deliver the package to the customer before returning back to the nest. Remote pickup infrastructure consisting of an autoloader would be installed within proposed nests or at offsite locations, utilized during limited remote pickup and delivery operations, and would also be located within commercially zoned areas. Individual autoloader locations (either within a nest or offsite) would typically include up to three autoloaders within or in the vicinity of most nest sites, with a handful more distributed locations having up to 10 autoloaders, depending on market demand, for a total installation of 200-600 autoloaders distributed throughout the operating area.

See Section 2.1 of the EA for further information.

## **Alternatives**

Alternatives analyzed in the EA include the Proposed Action and the no action alternative. Under the no action alternative, Wing would not introduce commercial UA package delivery operations in Central Florida. Consumers in the areas not served by UA would be expected to continue to use personal ground transportation to retrieve small goods. This alternative does not support the stated purpose and need.

See Section 2 of the EA for further information.

## **Environmental Impacts**

The potential environmental impacts of the Proposed Action and no action alternative were evaluated in the EA for each environmental impact category identified in FAA Order 1050.1F. Chapter 3 of the EA describes the affected environment within the project study area and identifies the following environmental impact categories that are not analyzed in detail: Air Quality and Climate, Coastal Resources; Farmlands; Hazardous Materials, Solid Waste, and Pollution Prevention; Land Use; Natural Resources and Energy Supply; Socioeconomics; Children's Environmental Health and Safety Risks; Visual Effects (Light Emission Only); and Water Resources (Wetlands, Floodplains, Surface Water, Groundwater, and Wild and Scenic Rivers). Pursuant to recent Executive Orders and Department of Transportation guidance, the EA does not analyze environmental effects related to environmental justice.

Chapter 3 also evaluates the potential environmental consequences of the Proposed Action for each of the remaining environmental impact categories and documents the finding that no significant environmental impacts would result from the Proposed Action. A summary of the documented findings for each impact category, including requisite findings with respect to relevant special purpose laws, regulations, and executive orders, is presented below.

- **Biological Resources, EA Section 3.3 and Appendices E and K.** Operations would occur mostly in an urban environment, typically well above the tree line and away from sensitive habitats, and given the short duration of increased ambient sound levels, the Proposed Action is not expected to significantly influence biological resources in the area. Given these factors, FAA determined that the Proposed Action *may affect, but is not likely to adversely affect* the Florida bonneted bat, tricolored bat, Florida panther, SEBM, West Indian Manatee, crested caracara, eastern black rail, Everglade snail kite, Florida scrub-jay, piping plover, red-cockaded woodpecker, red knot, wood stork, American crocodile, Atlantic salt marsh snake, blue-tailed mole skink, eastern indigo snake, green sea turtle, hawksbill sea turtle, leatherback sea turtle, loggerhead sea turtle, and sand skink. On December 17, 2024, the FAA submitted a biological evaluation and informal consultation to the U.S. Fish and Wildlife Service (USFWS), in accordance with Section 7 of the ESA, and requested concurrence with the FAA's effect determination for the proposed project. USFWS did not provide concurrence or non-concurrence with FAA's determination even though over 120 days elapsed since the FAA's submission to USFWS. The scope of the Proposed Action and the effects on biological resources and listed species resemble other actions that have received USFWS concurrence. In light of the limited effects to listed species from the Proposed Action, as described in the EA, and the lapsed time during informal consultation, FAA considers the *may affect, not likely to adversely affect* determination appropriate. Wing has also agreed to implement a bald eagle (*Haliaeetus leucocephalus*) monitoring plan which includes routine monitoring of nests within the affected area and the establishment of 1,000 feet avoidance areas surrounding established nests. In response to Florida Fish and Wildlife Conservation Commission (FWC) comments and to further minimize impacts to migratory birds, Wing has also agreed to establish 330 foot avoidance buffers for imperiled wading bird colonies, breeding sites, critical brood rearing sites, and roosting sites as documented in ShoreMapper and the FWC Imperiled Wading Bird Colony viewer. In addition, the Proposed Action would not result in long-term or permanent loss of wildlife species; would not result in substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or populations; and

would not have adverse impacts on reproductive success rates, natural mortality rates, non-natural mortality, or ability to sustain the minimum population levels of any species. Therefore, no significant impacts on biological resources are expected under the Proposed Action.

- **Department of Transportation Act Section 4(f), EA Section 3.4, Appendix B.** The FAA has determined that drone operations would not cause substantial impairment to Section 4(f) resources that could occur in the study area and would not be considered a *constructive use* of any Section 4(f) resource. Occasional flyovers would not result in significant noise levels at any location within the study area, and the short duration of en route flights (approximately 15 seconds) would minimize any potential for significant visual impacts. In addition, Wing’s flight planning software is designed to increase variability in flight paths to minimize overflights of any given location; with diversification of flight paths, the frequency of overflights would decrease as the distance from a nest increases. Wing has established a direct line of communication with the State of Florida to discuss any concerns regarding parkland noise and will carefully coordinate any parkland delivery operations that may occur with the appropriate managing parkland entities. Therefore, the Proposed Action would not result in significant impacts on Section 4(f) resources.
- **Historical, Architectural, Archaeological, and Cultural Resources; EA Section 3.5, Appendices F and G.** The Proposed Action would not significantly influence historical, architectural, archaeological, and cultural resources. Drone effects on historic properties are limited to non-physical, reversible impacts (i.e., the introduction of audible and/or visual elements). Wing projects up to 400 delivery flights per operating day per nest, meaning any historic or cultural resource would experience few overflights per day, if any. Additionally, Wing’s flight planning software minimizes overflights of any specific location by varying flight paths. All takeoff and landing operations would occur at least 300 feet away from any historic properties, adhering to standoff requirements for noise-sensitive areas. Additionally, the FAA conducted a noise exposure analysis for the proposed action—as described in Section 3.6, Noise and Noise-Compatible Land Use—and concluded that noise levels would be below the FAA’s threshold for significance, even in areas with the highest noise exposure. Based on the information available, the FAA made a finding of “*no adverse effect*” in accordance with 36 CFR Part 800, on December 18, 2024. The FAA received concurrence from the SHPO on January 17, 2025, that there would be *no adverse effect* on historic properties by the proposed action. Therefore, the Proposed

Action would not result in significant impacts on historical, architectural, archaeological, or cultural resources.

- **Noise and Noise-Compatible Land Use, EA Section 3.6, Appendix D.** The Proposed Action is not anticipated to result in any significant changes in the overall noise environment within the affected area. Noise impacts would be significant if the action would increase noise by day-night average sound level (DNL) 1.5 decibel (dB) or more for a noise-sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe. The maximum noise exposure levels attributable to the Proposed Action are associated with nest operations, where DNL 65 dB occurs within 45 feet of a nest perimeter and DNL 60 dB occurs within 65 feet. However, nests would be located at least 65 feet away from noise-sensitive areas, as described in the Proposed Action. In addition, when nests are planned to be within the controlled surface areas of Class B, Class C, and Class D airspaces, the nest would be placed 120 feet away from noise-sensitive areas, as described in the Proposed Action. Therefore, no significant impacts on noise and noise-compatible land use are expected under the Proposed Action.
- **Visual Effects (Visual Resources and Visual Character), EA Section 3.7.** Impacts on visual resources are expected to be less than significant. The Proposed Action would make no changes to any landforms or land uses; thus, there would be no effect on the visual character of the area, as the nests would be located in established commercial areas. Drone operations would not introduce new light emissions, and the short duration of overflights as well as the low number of overflights within any given location would minimize the potential for substantial visual impacts. Therefore, no significant impacts on visual effects are expected under the Proposed Action.

Please refer to Chapter 3 of the Supplemental EA for a full discussion of the analysis for each environmental impact category.

Chapter 4 of the EA provides an analysis of the potential additional impacts of the Proposed Action when added to other past, present, and reasonably foreseeable actions. The FAA has determined that the Proposed Action would not result in significant reasonably foreseeable impacts in any environmental impact category.

## Public Involvement and Coordination

On December 20, 2024, the FAA published the draft EA for a 30-day public comment period. The FAA received six substantive comments during the comment period for this EA, which closed on January 20, 2025. The FAA considered all public comments when preparing the EA. Comments were received in writing at [9-FAA-Drone-Environmental@faa.gov](mailto:9-FAA-Drone-Environmental@faa.gov).

See Section 1.4 and Appendix L of the EA for further information.

## Mitigation

In conducting package delivery operations under the proposed action, Wing has agreed to use the following avoidance, minimization, and mitigation measures:

- Locate nests at least 120 feet away from noise-sensitive areas in the controlled surface portions of Class B, Class C, and Class D controlled airspace;
- Locate nests at least 65 feet away from noise-sensitive areas outside of the controlled surface portions of Class B, Class C, and Class D controlled airspace;
- Maintain communication with State of Florida to discuss any potential concerns on impacts to wildlife or habitat, including impacts to migratory birds, and on parkland noise;
- Implement a monitoring plan for bald eagle nests and avoid areas near bald eagle nests during the breeding season;
- In response to FWC comments and to further minimize impacts to migratory birds, Wing has also agreed to establish 330 foot avoidance buffers for imperiled wading bird colonies, breeding

sites, critical brood rearing sites, and roosting sites as documented in ShoreMapper and the FWC Imperiled Wading Bird Colony viewer.

- Report monitoring and avoidance measures to FWC and USFWS Regional Migratory Bird permit office;
- Employ best management practices to mitigate stormwater and soil erosion impacts; and
- Coordinate with other UA operators and FAA to mitigate potential impacts in locating operations or from concurrent operations in the same area.

## **Finding of No Significant Impact**

The FAA finding is based on a comparative examination of environmental impacts for each of the alternatives studied during the environmental review process. The EA discloses the potential environmental impacts for each of the alternatives and provides a full and fair discussion of those impacts. Based on the FAA's review and analysis and consideration of comments, it has determined that there would be no significant impacts on the natural environment or surrounding population as a result of the Proposed Action.

The FAA believes the Proposed Action best fulfills the purpose and need identified in the EA. In contrast, the no action alternative fails to meet the purpose and need identified in the EA. An FAA decision to take the required actions and approvals is consistent with its statutory mission and policies supported by the findings and conclusions reflected in the environmental documentation and this FONSI/ROD.

After careful and thorough consideration of the facts contained herein and following consideration of the environmental impacts described, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101 of NEPA and other applicable environmental requirements, and will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA. As a result, an Environmental Impact Statement will not be prepared by the FAA.

## **Decision and Order**

The FAA recognizes its responsibilities under NEPA and its own directives. Recognizing these responsibilities, the undersigned has carefully considered the FAA's goals and objectives in reviewing the environmental aspects of the Proposed Action to approve Wing's request to conduct UA retail package

delivery operations from up to 150 “nests” in the Central Florida metropolitan and surrounding areas. Based upon the above analysis, the FAA has determined that the Proposed Action meets the purpose and need.

The environmental review included the purpose and need to be served by the Proposed Action, alternatives to achieving them, the environmental impacts of these alternatives, and conditions to preserve and enhance the human environment. This decision is based on a comparative examination of the environmental impacts for each of these alternatives. The EA provides a fair and full discussion of the impacts of the Proposed Action. The NEPA process included appropriate consideration for avoidance and minimization of impacts, as required by NEPA and other special-purpose environmental laws, and appropriate FAA environmental orders and guidance.

The FAA has determined that environmental concerns presented by interested agencies and the public have been addressed in the EA. The FAA believes that, with respect to the Proposed Action, the NEPA requirements have been met. FAA approval of this environmental review document indicates that applicable Federal requirements for environmental review of the Proposed Action have been met.

Accordingly, under the authority delegated to me by the Administrator of the FAA, I approve and direct that agency action be taken to carry out implementation of the Proposed Action.

Issued on: \_\_\_\_\_

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Derek Hufty  
Manager, General Aviation and Commercial Operations Branch  
Emerging Technologies Division  
Office of Safety Standards, Flight Standards Service

## **Right of Appeal**

This FONSI/ROD constitutes a final agency action and a final order taken pursuant to 49 U.S.C. §§ 40101 et seq., and constitutes a final order of the FAA Administrator, which is subject to exclusive judicial review by the Courts of Appeals of the United States in accordance with the provisions of 49 U.S.C.

§ 46110. Any party having substantial interest in this order may apply for a review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110.