

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 Houston, TX

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 Houston, Texas.

Wing is proposing to conduct UA retail package delivery operations from up to 75 “nests” in the Houston, Texas metropolitan and surrounding areas using Wing’s Hummingbird 7000W-B and 8000-A. Wing’s intent is to offer service throughout the Houston 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 1050.1G, *FAA National Environmental Policy Act Implementing 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

The federal action subject to review under NEPA is the FAA's decision whether to approve a modification to Wing's OpSpecs under 14 CFR Part 135. The modification would authorize Wing to expand its commercial package delivery operations using UA operations in the Houston metro area.

The purpose of the proposed FAA action is to enable the agency to carry out its statutory responsibilities to ensure the safety and efficiency of the National Airspace System, while considering potential environmental effects consistent with NEPA and FAA Order 1050.1G. The need for the proposed action arises from Wing's application for expanded operating authority to extend its current commercial UA delivery service to the Houston metro area. 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 Houston metropolitan and surrounding areas. Under the proposed action, Wing would establish up to 75 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 75 nests in the operating area, additional NEPA reviews would be required. Nests would be distributed throughout the Houston 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.

Remote pickup infrastructure consisting of an autoloader would be installed within existing or proposed nests or at offsite locations (i.e., partner locations offering Wing delivery services) and would also be located within commercial 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 100–300 autoloaders distributed throughout the operating area. The autoloaders would consist of Y-shaped passive stands designed for automated pick up of packages without landing. Autoloaders would not require ground disturbance for installation and would be anchored through existing pavement, to existing poles, or ballasted for temporary use. The autoloaders would be controlled and operated by Wing and its partners, and would be approximately 10 feet tall, 7 feet wide at the mouth, and 6 feet long, and would include a clear zone of approximately 2 parking spaces.

See Section 2.2 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 Houston. 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 1050.1G. 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: 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).

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.

- **Aviation Emissions and Air Quality, EA Section 3.3.1.** Air emissions related to the proposed action could include those associated with the operation of generators; vehicular traffic to and from the sites for installation, maintenance, and package drop-offs; and any incidental emissions from construction or maintenance activities, such as the use of small equipment or delivery vehicles. Vehicular traffic and incidental emissions from installation and maintenance are not carried forward for further analysis because they are infrequent, temporary, and minimal. The focus of the analysis is the generator usage during nest installation. This assessment of the proposed action includes the use of generators during the initial phases of site installation, referred to as "transition power." Transition power would serve as a temporary energy source during the lag period between the installation of nests and their connection to the power grid at a rate of up to 1,700 hours of generator operation per year per nest. Because 8 study area counties are in nonattainment for O₃, a screening analysis was conducted and found that the emissions associated with the proposed action generators are less than

the *de minimis* thresholds established under the Clean Air Act and a general conformity determination is not required. No significant impacts on air quality are expected under the Proposed Action.

- **Biological Resources, EA Section 3.4 and Appendix E.** There would be no ground construction or habitat modification associated with the proposed action, as the nests would be located in lots that are already developed with commercial uses. 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 whooping crane, eastern black rail, red-cockaded woodpecker, West Indian manatee, Alligator Snapping Turtle, Green Sea Turtle, Hawksbill Sea Turtle, Kemp's Ridley Sea Turtle. On April 3, 2026, the FAA submitted an informal consultation request to the USFWS in accordance with Section 7 of the ESA and requested concurrence with the FAA's determination. The FAA received concurrence from the USFWS on May 28th, 2026, of its determination. The USFWS and FAA correspondence are provided in Appendix E. USFWS recommended that Wing implement measures to avoid or substantially reduce flight in areas where large congregations of birds occur, including federally listed species. These recommendations will be integrated into the delivery operations. The Proposed Action would not result in significant impacts on biological resources.
- **Department of Transportation Act Section 4(f), EA Section 3.5, Appendix B.** Under the proposed action, there would be no physical or constructive use of Section 4(f) resources because nests and autoloader would be sited in commercially zoned areas outside of Section 4(f) property boundaries and occasional flyovers in the study area would not result in substantial impairment of Section 4(f) properties. No physical occupancy of Section 4(f) resources would occur as a result of the proposed action. As discussed in Section 3.7, *Noise and Noise-Compatible Land Use*, and Appendix D, the proposed action would not result in significant noise levels at any location within the

study area. As further described in Section 3.8, *Visual Effects*, 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 the diversification of flight paths, the frequency of overflights would inversely scale as the distance from a nest increases. The FAA has determined that UA overflights and nest and autoloader siting as described in the proposed action would not cause substantial impairment to any of the Section 4(f) resources in the study area and are therefore not considered a constructive use of any Section 4(f) resource. The Proposed Action would not result in significant impacts on Section 4(f) resources.

- **Historical, Architectural, Archaeological, and Cultural Resources; EA Section 3.6, Appendix F.** Wing UA operations would only incur intermittently, with minor visual and audible effects on historic properties. While delivery noise and potential visual impacts were considered for historic properties where a quiet setting or an unobstructed sky contributes to significance, any effects would be negligible and temporary. 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 loading operations would occur at least 45 feet away from any historic properties, adhering to standoff requirements for noise-sensitive areas. On April 23, 2026, the FAA submitted a consultation request with the Texas SHPO. FAA's consultation with the Texas SHPO is provided in Appendix F. The FAA received concurrence from the Texas SHPO on April 29, 2026 of its determination of no adverse effect by the proposed action. The Proposed Action would not result in significant impacts on historical, architectural, archaeological, or cultural resources.
- **Noise and Noise-Compatible Land Use, EA Section 3.7, 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 35 feet of a nest perimeter and DNL 60 dB occurs within 65 feet. As described in Section 2.2, *Proposed Action*, nests would be located at least 65 feet away from noise sensitive areas. In addition, when nests are planned to be within the controlled surface areas of Class B, Class C, and Class D airspace, nests would be placed 120 feet away from noise sensitive areas. Offsite package autoloader would not occur within 80 feet of noise-sensitive areas when the autoloader is located within the controlled surface area of Class B, Class C, and Class D airspace and 45 feet away from noise-sensitive areas in all other areas within the study area. The Proposed Action would not result in significant impacts on noise and noise-compatible land use.

- **Visual Effects (Visual Resources and Visual Character), EA Section 3.8.** The Proposed Action would make no changes to any landforms or land uses; thus, there would be minimal effect on the visual character of the area, as the nests and autoloaders would be located in established commercial areas. The short duration when each UA flight could be seen from any resource in the study area and the low number of overflights within any given location would minimize any potential for significant visual impacts. The Proposed Action would not result in significant impacts on visual resources or visual character.

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

As most of the proposed action's impacts discussed in Chapter 3, *Affected Environment and Environmental Consequences*, were found to be minimal and given that the drone flight is limited in its ability to interact with other outside actions due to its short duration, the proposed action's contribution to reasonably foreseeable impacts in the study area would

largely be from noise and are discussed solely in Section 3.7, *Noise and Noise-Compatible Land Use*. Wing will communicate and coordinate with other operators to limit operations occurring concurrently in the same area to avoid any significant impacts.

Public Involvement and Coordination

The FAA created a Notice of Availability (NOA) with information about the Draft EA and provided it to local, state, and federal officials, interest groups, and federally recognized tribes. The NOA provided information about the proposed action and requested public review and comments on the Draft EA, which was available on the FAA's website for a 30-day comment period from May 4 to June 3, 2026. Interested parties were invited to submit comments on any environmental concerns related to the proposed action. The FAA did not receive any comments. 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:

- Nests would be located at least 65 feet away from noise sensitive areas. In addition, when nests are planned to be within the controlled surface areas of Class B, Class C, and Class D airspace, nests would be placed 120 feet away from noisesensitive areas.
- Offsite package autoloader would not occur within 80 feet of noise-sensitive areas when the autoloader is located within the controlled surface area of Class B, Class C, and Class

D airspace and 45 feet away from noise-sensitive areas in all other areas within the study area;

- Maintain communication with Texas Parks & Wildlife 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, with a recommended avoidance buffer of 700 to 1,000 feet;
- Avoid Galveston Bay and surrounding shorelines; avoid colonial waterbird nesting sites during peaks nesting seasons March to July, with a recommended avoidance buffer of 700 to 1,000 feet;
- Avoid extensive contiguous unfragmented areas of undeveloped habitats, including but not limited to nature preserves, nature parks, etc.;
- Report monitoring and avoidance measures to Texas Parks & Wildlife and USFWS Region 2 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 75 "nests" in the Houston, Texas 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: _____

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.