

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Finding of No Significant Impact/Record of Decision for Environmental Assessment for Wing Aviation Drone Package Delivery Operations Christiansburg, Virginia

Summary

The Federal Aviation Administration (FAA) prepared the attached Environmental Assessment (EA) to analyze the potential environmental impacts of approving amendments to the Wing Aviation air carrier Operations Specifications (OpSpecs) to increase the pilot to aircraft ratio to 1:8. Wing is currently operating in this location with a 1:2 pilot to aircraft ratio. The amendment would allow Wing to have one pilot operate up to eight aircraft in the air when customer demand is high. Under this expanded approval, Wing projects that it would operate up to approximately 100 flight operations per operating day, although the number of flights could be lower.

The EA was prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA; 42 United States Code [U.S.C.] § 4321 et seq.); Council on Environmental Quality's NEPA implementing regulations (40 Code of Federal Regulations [CFR] parts 1500 to 1508); 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 the proposed action will 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.

For any questions or to request a copy of the EA, please email 9-FAA-Drone-Environmental@faa.gov. A copy of the EA may also be viewed on the FAA's website:

https://www.faa.gov/uas/advanced_operations/nepa_and_drones/

Purpose and Need

Wing's request to amend its OpSpecs to increase the pilot to aircraft ratio to 1:8 requires FAA review and approval. The FAA has a statutory obligation to review Wing's request to amend the OpSpecs and 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 request is to increase the number of aircraft a pilot is allowed to operate in the air at any time, which, in its business judgment, Wing has determined is appropriate for their operations.

See Section 1.3 of the EA for further information.

Proposed Action

In order for Wing to amend the OpSpecs in its Part 135 air carrier certificate it must receive an approval from FAA. The proposed action is FAA's approval of an amendment to the A003 OpSpec, *Airplane/Aircraft Authorization*, specifically to a reference under the configuration and operations table, to increase the pilot to aircraft ratio from the current 1:2 pilot to aircraft ratio to a 1:8 pilot to aircraft ratio.

See Section 2.1 of the EA for further information.

Alternatives (Section 2.2 of the EA)

Alternatives analyzed in detail in the EA include the proposed action and the no action alternative. Under the no action alternative, the FAA would not issue the OpSpec amendment for Wing to increase the pilot to aircraft ratio in Christiansburg. This alternative does not support the stated purpose and need.

Environmental Impacts

The potential environmental impacts from the proposed action and no action alternative were evaluated in the attached EA for each of the environmental impact categories identified in FAA Order 1050.1.F. Section 3 of the attached EA describes the physical, natural, and human environment within the project study area, and identifies those environmental impact categories that are not analyzed in detail, explaining why the proposed action would have no potential effects on those environmental impact categories. Those categories are Air Quality and Climate; Coastal Resources; Farmlands;

Hazardous Materials, Solid Waste, and Pollution Prevention; Land Use; Natural Resources and Energy Supply; Socioeconomic Impacts and Children's Environmental Health and Safety Risks; Visual Effects (Light Emissions Only); Water Resources (Wetlands, Floodplains, Groundwater, and Wild and Scenic Rivers).

Section 3 also provides detailed evaluations of the environmental consequences 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 category, including requisite findings with respect to relevant special purpose laws, regulations, and executive orders, is presented below:

- **Biological Resources (including Fish, Wildlife, and Plants)**, EA Section 3.2. There is no significant impact to biological resources. The operations will be taking place within airspace, and typically well above the tree line and away from sensitive habitats. The typical number of daily operations and characteristics of the flights are not expected to significantly influence wildlife in the area.

Wing has indicated it can keep aircraft at least 1,000 feet from any active Bald Eagle nests within the operating area during its breeding season, in accordance with the USFWS Bald Eagle Management Guidelines. And if Wing learns of any active Red-headed Woodpecker nests within the operating area, it has indicated that it would plan to keep aircraft a reasonable distance from the nesting tree to avoid any disturbance during its breeding season.

No impacts to bats, insects, fish, reptiles, or terrestrial mammal species are expected. The proposed action would not result in adverse impacts on any species' reproductive success rates, natural mortality rates, non-natural mortality, or ability to sustain the minimum population levels required.

- **Department of Transportation Act, Section 4(f) Resources**, EA Section 3.3. The FAA has determined that infrequent UAS overflights as described in the proposed action would not cause substantial impairment to Section 4(f) resources, and would not be considered a constructive use of any Section 4(f) resource. There will be no physical use of Section 4(f) resources. Noise and visual effects from Wing's occasional overflights are not expected to diminish the activities, features, or attributes of any resources in the study area.

- **Historical, Architectural, Archaeological, and Cultural Resources**, EA Section 3.4. The FAA has identified one historic site within the study area, although the nature of the site is such that it is not likely to be affected by infrequent UA operations. Based on a review of the information available, including the noise analysis and the operational information, and FAA’s knowledge with respect to the level of environmental impacts from UAS operations, FAA has determined that the proposed action has no potential to effect historic properties. FAA notified the SHPO of its determination. FAA has also determined that the impacts would not be significant. ..
- **Noise and Noise-Compatible Land Use**, EA Section 3.5. The proposed action is not anticipated to result in any significant changes in the overall noise environment within the affected area. There is no construction and therefore no construction noise that will result from the proposed action. Considering the noise impacts from the proposed flight operations, the FAA noise exposure analysis concluded that even in areas with the highest noise exposure, levels would still be well below FAA’s DNL 65 dB threshold for noise compatible land use. Additionally, when operational uncertainty had to be considered in the analysis, conservative assumptions that would over-predict the noise levels produced by the UA activity were used. The resulting DNL at the Christiansburg nest was estimated to only reach a potential DNL of 53.0 dB. These levels would occur at the nest location. Based in FAA’s noise analysis, the proposed action will not have a significant impact.
- **Environmental Justice**, EA Section 3.6. The proposed action would not result in adverse impacts in any environmental resource category. As noted in Section 3.5, Noise and Noise-Compatible Land Use, and the Noise Analysis Report in Appendix C, the UA’s noise emissions could be perceptible in areas within the operating area, but will stay well below the level determined to constitute a significant impact. Since the proposed action would not result in a disproportionately high and adverse effect on any population, it would not result in an adverse effect on a low-income or a minority population.
- **Visual Effects (Visual Resources and Visual Character)**, EA Section 3.7. Impacts to visual resources are not expected to be significant. The proposed action makes no changes to any landforms, or land uses, thus there would be no effect to the visual character of the area. The proposed action involves airspace operations that could result in visual impacts on sensitive areas where the visual setting is an important resource of the property. However, the flight operations would occur in daytime hours, and any visual impacts to people on the ground will

be brief and temporary. Additionally, Wing will typically be conducting flights only five days per week, and generally not on holidays.

- **Water Resources (Surface Waters)**, EA Section 3.8. The proposed action would not be expected to result in significant impacts to water quality. There are no construction activities occurring under the proposed action. The aircraft's Lithium-ion battery packs are not expected to detach from the aircraft or become lost in the event of a water landing. Wing is required to locate and secure any downed aircraft.

Finding

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. There would be no significant impacts to 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.

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(a) of the National Environmental Policy Act of 1969 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.

Responsible FAA Official:

**KEVIN A.
RAYMOND**

Digitally signed by KEVIN A.
RAYMOND
Date: 2021.12.17 08:49:09 -06'00'

Kevin Raymond
Acting Manager, General Aviation Operations Section
General Aviation and Commercial Division
Office of Safety Standards, Flight Standards Service

Record of Decision and Order

The FAA recognizes its responsibilities under NEPA, CEQ regulations, and its own directives. Recognizing these responsibilities, I have carefully considered the FAA's goals and objectives in reviewing the aeronautical and environmental aspects of the proposed action to approve Wing's OpSpec amendment request to increase its pilot to aircraft ratio in the Christiansburg operating area. Based upon the above analysis, the FAA has determined that the proposed action meets the purpose and need of the proposed project.

Having carefully considered the public safety and operational objectives of the project, as well as being properly advised as to the anticipated environmental impacts of the proposal, under the authority delegated by the Administrator of the FAA, I find the OpSpec amendment reasonably supported, and that it is the type of action that does not require an Environmental Impact Statement under NEPA.

Issued on: December 17, 2021

**KEVIN A.
RAYMOND**

Digitally signed by KEVIN A.
RAYMOND
Date: 2021.12.17 08:49:40 -06'00'

Kevin Raymond
Acting Manager, General Aviation Operations Section
General Aviation and Commercial Division
Office of Safety Standards, Flight Standards Service

Right of Appeal

This FONSI/ROD constitutes 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.