

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

Air Traffic Organization Policy



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SUBJ: Processing of Unmanned Aircraft Systems Requests

This order provides information and guidance for Headquarters, Service Centers, and Air Traffic Managers on processing of Section 44809, 14 CFR Part 107, Small Unmanned Aircraft Systems (sUAS) and 14 CFR Part 91, Certificate of Waiver and Authorization (COA) applications.

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Table of Contents

Chapter 1. Introduction	
1-1. Purpose of This Order	3
1-2. Audience	
1-3. What This Order Cancels	
1-4. Explanation of Change	
1-5. Where to Find This Order	
1-6. Distribution	
1-7. Policy	
1-8. Related Publications	
Chapter 2. Processing of Section 44809 Authorization Requests	
2-1. Section 44809 Request	4
2-2. Section 44809 Request, Above UAS Facility Map Altitudes	
2-3. Section 44809 Request, Night Operations	
2-4. Section 44809 Request, Length of Authorization	
2-5. Section 44809 Request, Area Covered by Authorization	
2-6. Section 44809 Request, On-Airport Operations	
Chapter 3. Processing of 14 CFR Part 107.41 Airspace Authorization Request	
3-1. Proponent submits request through DroneZone	7
3-2. Night Operations	
3-3. Other Operational Waivers	8
3-4. Length of Authorization	9
3-5. Area Covered by Authorization	
3-6. On-Airport Operations	10
Chapter 4. Processing of 14 CFR Part 107 ATO Operational Waiver Requests	
4-1. 14 CFR Part 107.51(b), Operating limitations for small-unmanned aircraft – Altitude	12
4-2. 14 CFR Part 107.37(a), Operation near aircraft; right-of-way rules	
CI	
Chapter 5. Processing of 14 CFR Part 91.113 Waiver Requests	10
5-1. Beyond Visual Line of Sight (BVLOS)	13
Chapter 6. Part 91, Certificate of Waiver or Authorization (COA) Processing	
6-1. FAA Form 7711-1 COA Processing	15
6-2. On-Airport Airspace Certificates of Waiver or Authorization	17
6-3. Military Operations Interface Offices	18
Chapter 7 Definitions	10
Chapter 7. Definitions	19
Appendix A. Section 44809, Exceptions for Limited Recreational Operations of Unmanned Aircraft Authorization processing	
Appendix B. Processing of 14 CFR Part 107 ATO Operational Waiver Request	24

Chapter 1. Introduction

- 1-1. Purpose of This Order. This order provides guidance for Headquarters, Service Centers, and Air Traffic Managers on air traffic policies and prescribes procedures for the planning, coordination, and services involving the processing of applications for the operation of Unmanned Aircraft Systems (UAS) in the National Airspace System (NAS). Unless otherwise indicated in this order, all applications are processed at the Service Centers. However, in the case of certain high priority applications, the Headquarters may choose to process the application.
- **1-2. Audience.** Air Traffic Services and all associated air traffic control facilities, Mission Support Services, Safety and Technical Training, System Operations Services, and Flight Standards Service.
- **1-3. What this Order Cancels.** This order cancels FAA Order JO 7200.23B, Processing of Unmanned Aircraft Systems Requests.
- **1-4. Explanation of Change.** These changes include the processing of requests for on airport operations under Section 44809, 14 CFR Part 107 and Part 91.
- **1-5. Where Can I Find This Order?** This order is available on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices/ and on the FAA website at https://www.faa.gov/regulations-policies/orders-notices/.
- **1-6. Policy.** This order establishes air traffic policy for the processing of authorization and waiver requests for UAS operations in the NAS. An unmanned aircraft system that is operated underground for mining purposes must not be subject to regulation or enforcement by the FAA under title 49, United States Code, Section 355.

1-7. Related Publications.

- a. AC 91-57B, Exception for Limited Recreational Operations of Unmanned Aircraft (UA)
- b. AC 107-2, Small Unmanned Aircraft Systems (sUAS)
- c. COA Processing System (CAPS) User Guide
- d. FAA Reauthorization Act of 2018, Section 44809
- e. FAA Order JO 7110.65, Air Traffic Control
- f. FAA Order JO 7200.20, Voluntary Safety Reporting Program (VSRP)
- g. FAA Order JO 7210.3, Facility Operation and Administration
- h. FAA Order JO 7210.632, Air Traffic Organization Occurrence Reporting
- i. FAA Order JO 7400.11, Airspace Designations and Reporting Points
- j. FAA Order JO 7610.4, Special Operations
- k. FAA Order 8130.34, Airworthiness Certification of Unmanned Aircraft Systems and Optionally Piloted Aircraft
- 1. Flight Standards Information Management Systems (FSIMS) 8900.1 Volume 16
- m. Title 14, Code of Federal Regulations, Part 91 and Part 107

Chapter 2. Processing of Section 44809 Authorization Requests

2-1. Proponent submits request through DroneZone. The request is for authorization to conduct operations under Section 44809 within Class B, Class C, or Class D airspace, or within the lateral boundaries of the surface area of Class E airspace designated for an airport.

- a. The processor selects the application from the queue within DroneZone.
- b. If the request complies with UAS Facility Map (UASFM) altitudes for the impacted ATC facility, the processor will prepare an authorization for the request in accordance with Appendix A.
- c. Once completed and signed, the processor will distribute via DroneZone.

Note: Processing of letters of agreement for fixed sites is covered in FAA Order JO 7210.3, Chapter 4, Section 3.

2-2. If the request does not comply with the UASFM altitude.

- a. When the requested area is not in a 0 ft. grid square, the processor will:
 - (1) Issue an airspace authorization (AA) for the maximum altitude in the requested square (e.g., request is for 300 ft. but UASFM altitude is 200 ft., issue an AA for 200 ft.);
 - (2) Change the altitude parameters within the authorization to match the altitude that the AA is being issued for;
 - (3) Annotate in the comment section "AA issued at 200 ft., which is the maximum altitude allowed by the UASFM for the area requested."
 - (4) If a separate email is sent to the proponent with a copy of the AA including an explanation as to why the AA was issued for the lower altitude, attach a .pdf copy of the email to the DroneZone control.
- b. When requested area is in a 0 ft. grid square, issue a denial letter with the statement "Operations at altitudes above the UAS Facility Map (UASFM) are currently not authorized under Section 44809, Exception for Limited Recreational Operations of Unmanned Aircraft."

2-3. Night Operations.

- a. All authorizations will include the statement, "This Authorization and the Special Provisions shall be in effect between civil sunrise and civil sunset local time. Night operations are not currently authorized."
- b. If the proponent requests both day and night operations, process the authorization as daylight only. Uncheck "night" in the DroneZone interface prior to downloading a draft Form 7711-1, and ensure that Form 7711-1 includes the statement in paragraph 3a.
- c. If the proponent only requests night operations, issue a denial letter.

2-4. Length of Authorization.

a. A request for operations in airspace managed by a Low Altitude Authorization and Notification Capability (LAANC) enabled facility should be issued an authorization permitting the operation for a single day only. If multiple days are requested, the airspace authorization should be issued for the first day of the proposed operation or as otherwise coordinated by the Service Center, but not longer than a single day.

- b. In order to help inform proponents, when issuing an authorization that requested multiple days add the statement, "This facility is LAANC-enabled. For future authorization requests in this vicinity, consider using LAANC for near-real time approvals. More information can be found at https://www.faa.gov/uas/programs partnerships/data exchange/."
- c. A request for operations in airspace managed by a facility that is not LAANC-enabled should be issued an authorization with an expiration date of no later than twenty-four (24) months from the date of issuance.

2-5. Area Covered by Authorizations.

- a. LAANC-Enabled Facilities.
 - (1) An authorization should only be issued for the area specified in the request using the Section 44809 Airspace Authorization Specific Area Template. (Appendix A)
 - (2) A wide area authorization request (e.g., all of Class D) will be issued a denial letter stating, "Wide area authorizations will not be issued for airspace managed by a LAANC-enabled facility. All requests must specify a Latitude, Longitude, and radius."
- b. Non-LAANC-Enabled Facilities.
 - (1) A request for operations in airspace managed by a facility that is not LAANC-enabled can be issued either a specific area or a wide area authorization based on the request.
 - (2) Use the appropriate template based on the type of operation requested.

2-6. On-Airport Operations

a. Requests for on-airport operations involving a fixed site request must be submitted to 9-AJT-UAS-integration@faa.gov.

NOTE: This includes LAANC-enabled facilities since further coordination cannot be accomplished via LAANC.

- b. All requests for on-airport operations must be coordinated by the appropriate Service Center (SC) using the following:
 - (1) Verify that the airport authority has approved the operation. At towered airports, coordination with the local airport authority must be performed in collaboration with the ATM.
 - (2) If the request cannot be approved based on input from the local airport authority, the SC must coordinate with the Regional Office of Airports unmanned aircraft systems liaison prior to issuing a denial letter.

(3) Contact the appropriate Service Center Technical Operations POC in the Spectrum Engineering Services Group (AJW-1500) and request that they determine whether or not a spectrum analysis needs to be completed for the proposed operation and, when necessary, appropriate licensing has been obtained.

- (4) Contact the ATM and begin the airspace analysis for possible impacts to air traffic operations (may be performed in conjunction with para 6.b.(1).
- c. The ATM must follow FAA Order 1000.37, ATO Safety Management System and the ATO Safety Management System Manual, when conducting local safety risk management.
- d. If required, a safety risk management panel must be convened to determine the potential hazards of the operations and required mitigations.
- e. All required air traffic limitations and mitigations must be listed and mutually agreed upon by Letter of Agreement in accordance with FAA Order JO 7210.3, Chapter 4.
- f. The Letter of Agreement must be in accordance with FAA Order JO 7210.3 Chapter 4.
- g. When operations are unable to be approved, the Service Center will ensure the reason for the denial is included in the response.

Chapter 3. Processing of 14 CFR Part 107.41 Airspace Authorization Request

3-1. Proponent submits request through DroneZone. Request for operations under 14 CFR Part 107.41 within Class B, Class C, or Class D airspace or within the lateral boundaries of the surface area of Class E airspace designated for an airport.

- a. The processor selects the application from the queue within DroneZone.
- b. If the request is in compliance with the UASFM altitudes for the ATC facility, the processor will prepare an authorization for the request.
- c. Once the authorization is completed and signed, the processor will distribute it via DroneZone.
 - (1) If authorization is for a LAANC-enabled facility and does not incorporate a 14 CFR Part 107 operational waiver, add an additional provision to the Contact Information section of the Special Provisions that states, "This facility is LAANC-enabled. For future authorization requests in this vicinity, consider using LAANC for near-real time approvals. More information can be found at https://www.faa.gov/uas/programs_partnerships/data_exchange/."
 - (2) The statement in the above paragraph should not be included if the operation is at a non-LAANC-enabled facility or if the authorization incorporates a 14 CFR Part 107 operational waiver.
- d. If the request does not comply with the UASFM altitude, the processor will coordinate with the impacted ATC facility.
 - (1) If the ATC facility approves the requested altitude, the processor will issue an authorization for the requested altitude and include any additional provisions provided by the ATC facility.
 - (2) If the ATC facility does not approve the requested altitude and the operation is not in a 0 ft. grid square, the processor will:
 - (a) Issue an AA for the maximum altitude in the requested square (e.g., request is for 300 ft. but UASFM altitude is 200 ft., issue airspace authorization for 200 ft.);
 - (b) Change the altitude parameters within the authorization to match the altitude for which the AA is being issued;
 - (c) Annotate in the comment section "AA issued at" which is the maximum altitude allowed by the UASFM for the area requested;
 - (d) If a separate email is sent to the proponent with a copy of the AA, include an explanation as to why the AA was issued for the lower altitude and attach a .pdf copy of the email in the DroneZone control.
- e. If the requested operation is in a 0 ft. grid square and the ATC facility does not approve the operation, the processor will issue a denial letter.

3-2. Night Operations.

a. By default, all draft authorizations downloaded in DroneZone include the statement, "This Authorization and the Special Provisions shall be in effect between civil sunrise and civil sunset local time. Night operations are not currently authorized." If night operations are not requested, process authorization and leave the aforementioned default language in place.

- b. Night operations require an operational waiver to 14 CFR Part 107.29. If the request is to operate at night, the processor will verify that the proponent has a valid 14 CFR Part 107.29 waiver.
 - (1) If the proponent has a valid 14 CFR Part 107.29 waiver, replace the default statement from paragraph 2a with the following statement: "Night operations authorized at the altitude stated in this authorization and in accordance with Special Provisions established in 14 CFR Part 107.29 Daylight operation waiver 107W-20XX-XXXXX."
 - (2) If the proponent does not have a valid 14 CFR Part 107.29 waiver and has requested to operate during both the day and night, the processor will issue a standard, daylight only authorization. When preparing the authorization in DroneZone, the processor will uncheck the night box prior to downloading the draft 7711-1 and will leave the default statement from paragraph 2a in place. This will notify the proponent that the FAA has changed the timeframe of operations parameters from the initial request.
 - (3) If the proponent does not have a valid 14 CFR Part 107.29 waiver and only requests night operations, issue a denial letter.

3-3. Other Operational Waivers.

- a. Authorization requests may incorporate other 14 CFR Part 107 operational waivers. If an authorization incorporates an operational waiver, the processor will:
 - (1) Include the incorporated waiver numbers in the Special Provisions section of the authorization;
 - (2) Include any additional provisions added by the ATC facility in the Special Provisions section, if coordination is required by Paragraph 3b;
 - (3) If requested by the Air Traffic Manager (ATM), provide a copy of the approved incorporated waiver with the authorization.
- b. ATC facility coordination is required prior to issuing an authorization incorporating any of the following 14 CFR Part 107 operational waivers:
 - (1) 14 CFR Part 107.37(a), Yielding the right of way;
 - (2) 14 CFR Part 107.51(b), Operating limitations for small unmanned aircraft Altitude.
- c. ATC facility coordination is not required prior to issuing an authorization incorporating any of the following 14 CFR Part 107 operational waivers:
 - (1) 14 CFR Part 107.25, Operation from a moving vehicle or aircraft;
 - (2) 14 CFR Part 107.29, Daylight operation;

- (3) 14 CFR Part 107.31, Visual line of sight aircraft operation;
- (4) 14 CFR Part 107.33, Visual observer;
- (5) 14 CFR Part 107.35, Operation of multiple small unmanned aircraft;
- (6) 14 CFR Part 107.39, Operations over human beings;
- (7) 14 CFR Part 107.51(a), Operational limitations for small unmanned aircraft Groundspeed;
- (8) 14 CFR Part 107.51(c), Operational limitations for small unmanned aircraft Flight Visibility;
- (9) 14 CFR Part 107.51(d), Operating limitations for small unmanned aircraft Distance from clouds.
- d. An airspace authorization should never incorporate a 14 CFR Part 107.41, Operation in certain airspace.

3-4. Length of Authorization.

- a. LAANC-Enabled Facilities.
 - (1) A request for operations in airspace managed by a LAANC-enabled facility and that complies with the UASFM altitudes should be issued an authorization permitting the operation for a single day only. If the request is for multiple days, the airspace authorization should be issued for the first day of the proposed operation or as otherwise coordinated by the Service Center, but not longer than a single day.
 - (2) In order to help inform proponents, when issuing an authorization that requested multiple days, add the statement, "This facility is LAANC-enabled. For future authorization requests in this vicinity, consider using LAANC for near-real time approvals. More information can be found at: https://www.faa.gov/uas/programs_partnerships/data_exchange/."
 - (3) A request for operations not in compliance with the UASFM altitudes in airspace managed by a LAANC-enabled facility may be issued an authorization for multiple days, but only with the specific approval from the facility's air traffic manager that multiple days are approved. In requesting facility approval for multiple days, the proponent should provide a valid reason for requesting multiple days (e.g., a multiple day construction project). The reason for a multiple day request should involve a planned event with set timeframes. The following parameters shall be followed when considering such requests:
 - (a) Non-first responder UAS operations must be in support of a <u>pre-defined project</u> with a <u>specified operations area</u> (non-wide area) with a <u>predetermined start and end date</u>. This would prevent non-specific operators (ex. realtors) while supporting construction projects, educational institutions (project = class, start/stop = academic semester or year), etc.

NOTE: Although not in line with the 'pre-defined/specific' logic above, first responders should be granted relief from the single-day policy requirements. This is currently outlined in the SGI process.

(b) The multi-day approval has to serve as a benefit and agreed to and/or requested by the Air Traffic Control Facility (ATCF). If not beneficial to the affected ATCF (workload or paperwork reduction, etc.) then the application is not eligible for multi-day.

- (c) Each multi-day operation has to be vetted by Service Center team manager or delegate for visibility and to stay within the intended scope. It is imperative this process is standardized and the same UAS operations are eligible across the Service Areas (SAs).
- (d) All multi-day approvals should be above UASFMs. Proponents can obtain an airspace authorization for at or below UASFM altitudes in near real time via LAANC. A reduction of at or below UASFM altitude authorizations does not reduce ATCF workload.

NOTE: This change does not affect airspace authorizations that incorporate a Part 107 operational waiver. Due to limitation in LAANC, they are processed manually through DroneZone and may be issued to up to 24 months or the earliest expiration date of any operation waiver associated with the authorization.

- (4) If the facility is not able to approve multiple days then the airspace authorization should be issued for the first day of the proposed operation or as otherwise coordinated by the Service Center, but not longer than a single day.
- b. Non-LAANC-Enabled Facility.

Any authorizations issued for operations in airspace managed by a facility that is not LAANC-enabled should contain an expiration date of no later than twenty-four (24) months from the date of issue.

3-5. Area Covered by Authorizations.

- a. LAANC-Enabled Facilities.
 - (1) An authorization should only be issued for the area specified in the request using the 14 CFR Part 107 Airspace Authorization Specific Area Template, (Appendix B).
 - (2) A wide area authorization request (e.g., all of Class D) will be issued a denial letter stating, "Wide area authorizations will not be issued for airspace managed by a LAANC-enabled facility. All requests must specify a latitude, longitude, and radius."
- b. Non-LAANC-Enabled Facilities.
 - (1) A request for operations in airspace managed by a non-LAANC-enabled facility can issue either a specific area or a wide area authorization based on the authorization request.
 - (2) Use appropriate template based on the type of operation approved. (Appendix B).

3-6. On-Airport Operations.

- a. Submit all airspace authorization requests for on-airport operations through DroneZone, even for LAANC-enabled facilities.
- b. All requests for on-airport operations must be coordinated by the appropriate Service Center (SC) using the following:

(1) Verify that the airport authority has approved the operation. At towered airports, coordination with the local airport authority must be performed in collaboration with the ATM.

- (2) If the request cannot be approved based on input from the local airport authority, the SC must coordinate with the Regional Office of Airports unmanned aircraft systems liaison prior to issuing a denial letter.
- (3) Contact the appropriate Service Center Technical Operations POC in the Spectrum Engineering Services Group (AJW-1500) and request that they determine whether or not a spectrum analysis needs to be completed on the proposed operation and, when necessary, appropriate licensing has been obtained.
- (4) Contact the ATM and begin the airspace analysis for possible impacts to air traffic operations (may be performed in conjunction with 6. b. (1).
- c. The ATM must follow FAA Order JO 1000.37, ATO Safety Management System, and the ATO Safety Management System Manual when conducting local safety risk management.
- d. If required, a safety risk management panel must be convened to determine the potential hazards of the operations and required mitigations.
- e. When operations are unable to be approved, the Service Center must include the reason for the denial in the response.

Chapter 4. Processing of 14 CFR Part 107 ATO Operational Waiver Requests

4-1. 14 CFR Part 107.51(b), Operating limitations for small unmanned aircraft – Altitude

- a. Proponent submits a request through DroneZone for operations under 14 CFR Part 107.51(b), Operating limitations for small unmanned aircraft Altitude.
- b. AFS-800 determines if the proposed operation has an acceptable level of residual ground risk, and has proposed air risk mitigations which may lead to an acceptable level of residual air risk after an airspace analysis has been performed.
- c. If AFS-800 determines the application does not meet the guidelines above in 4.1.b, AFS-800 will send the proponent a disapproval letter.
- d. If AFS-800 recommends approval for the application, they will forward the application to headquarters or the appropriate service center.
- e. Processors will select the application and perform an airspace analysis.
- f. If the requested operating area is in uncontrolled airspace, the waiver can be approved without any further coordination.
- g. If the requested operating area is in Class E airspace, the processor must coordinate with the appropriate TRACON or ARTCC and include in the coordination any additional provisions required by the controlling ATC facility.
- h. If the operating area is within Class B, C, D, or within the lateral boundaries of the surface area of Class E airspace designated for an airport, the application must be in conjunction with a 14 CFR Part 107.41 airspace authorization.
 - (1) Include the 14 CFR Part 107.41 waiver identification number in the Special Provisions section of the airspace authorization.
 - (2) Include any additional provisions added by the ATC facility.
 - (3) If requested, include a copy of the waiver to the ATCF.

4-2. 14 CFR Part 107.37(a), Operation near aircraft; right-of-way rules.

- a. Proponent submits request through DroneZone for operations under 14 CFR Part 107.37(a) Operation near aircraft Right-of-way rules.
- b. AFS-800 and ATO jointly determine if the operation can be conducted with an acceptable level of residual risk.
- c. If it is determined the proposed operation cannot be conducted with an acceptable level of residual risk, AFS-800 will send the disapproval letter to the applicant.
- d. If AFS-800 recommends approval for the application, they will forward the application to headquarters or the appropriate service center.
- e. Processors will select the application and perform an analysis of the impacts to other aircraft operations.

Chapter 5. Processing of 14 CFR Part 91.113 Waiver Requests

5-1. Beyond Visual Line of Sight (BVLOS). A Beyond Visual Line of Sight (BVLOS) waiver is required when neither the pilot nor the visual observer can see and/or maintain sight of the UAS in flight. These waivers are processed at the FAA Headquarters by the UAS Rules Team, AJV-P22.

5-2. Process.

- a. The proponent submits an email requesting a waiver to 14 CFR 91.113(b) to the waiver team via an email request to <u>9-UAS-91.113Waivers@faa.gov</u>. The email should state that they seek to obtain a waiver to 91.113(b), and should include a Concept of Operations (CONOPS) document for the proposed operation.
- b. The waiver specialist reviews the CONOPS and determine if proponent has provided, at a minimum:
 - (1) Concept overview,
 - (2) A detailed description of the airspace,
 - (3) A description of the system,
 - (4) Assumptions,
 - (5) Hazards, risks, and mitigation plans, lost link and emergency procedures,
 - (6) Description of operation (operational, communications, safety procedures), contingency procedures, and,
 - (7) Plan for accident and incident reporting and operations (after-action report).
- c. The waiver specialist then schedules and conducts an initial briefing with the proponent to review the application process and advise the proponent of any deficiencies with the application (i.e., information that may be missing from the application, etc.).
- d. Once the request is deemed sufficient, it is placed in the queue for a review by the 91.113(b) waiver team lead. This review consists of a full team review including both a Technical Review (AIR-1, AJW-133, AFS-400, AFS-800, AUS-200) and Air Traffic Review (AJV-P21, AJV-P22, AJT-3, AJR-2, NATCA national office and the applicable Service Center and ATC Facility). However, if the proposed mitigations do not include a technology solution (e.g., radar) and are only procedural in nature, the review team members may be limited to the ATO.
- e. The proponents are then required to make a presentation to the 91.113(b) waiver team after the Technical Reviews and Air Traffic Reviews have been completed (Step 4); the 91.113(b) waiver team lead will schedule this. This presentation can be made either in person or via teleconference. The proponents are asked to provide the waiver team with a detailed explanation for their proposed project. The waiver team will also have the opportunity to ask questions about the project to the proponent.
- f. After the presentation, the waiver team and technical specialists have five (5) business days to review the waiver application and, if necessary, record questions and/or comments to the proponent on a comment matrix. A member of the waiver team will complete the matrix and submit to the proponent for review and clarification.

g. Once the 91.113(b) waiver team lead concludes that the information submitted is correct, the proponent will be instructed to submit an application via the CAPS system.

- h. After the proponent has provided all of the information to the 91.113(b) waiver specialist, one of four decisions is enacted based on the proposed mitigations to 91.113(b):
 - (1) Already in use/no changes Waiver is approved.
 - (2) **Recommended changes, no significant concerns** updates to application are requested, once resubmitted if:
 - (a) Approved Impact to the National Airspace System (NAS) evaluated. If there is an impact to the NAS, then the application is submitted to the Safety Risk Management Panel. If there is no significant hazard to the NAS, the waiver is approved. If there is a significant hazard to NAS, the waiver is not approved. If the application is denied, it is rerouted back to the core work group for discussion with proponent and adjudication.
 - (b) Denied Rerouted back to the waiver team for discussion with proponent and adjudication.
 - (3) *Significant concerns* An FAA/proponent panel and adjudication is conducted, and the proponent is given the opportunity to update their application. If the update is approved, the impact to the NAS is then evaluated. If there is an impact to the NAS, then the application is submitted to a Safety Risk Management Panel. If there is no significant hazard to the NAS, the waiver is approved. If the application is denied, it is rerouted back to the core work group for discussion with proponent and adjudication.
 - (4) *Unacceptable means of compliance* The waiver is not approved and the proponent is advised of the rationale for denial.

Chapter 6. 14 CFR Part 91, Certificate of Waiver or Authorization (COA) Processing

- **6-1. FAA Form 7711-1 Certificate of Waiver or Authorization Processing.** This section prescribes the policies, guidance, and procedures regarding COA applications for UAS operations under 14 CFR Part 91.
 - a. Proponents requesting use of a UAS outside of restricted and warning areas must obtain a COA; exceptions to this requirement include:
 - (1) Operating in accordance with using agency FAA UAS MOA/MOU including the following:
 - (a) Memorandum of Agreement (MOA) between the Department of Defense (DOD) and the Federal Aviation Administration (FAA) this document sets forth provisions that allow increased access for DOD UAS into the NAS through accommodation, implementation of advanced mitigations, and integration, where applicable. The agreement assigns the DOD and the FAA specific tasks and responsibilities and applies to all DOD UAS operations, whether operated by Active, Reserve, National Guard, or other personnel of the United States Air Force, Army, Marine Corps, and Navy. Key provisions within the agreement include:
 - (i) Formalizes DoD's authority to conduct UAS operations in airspaces delegated to DoD for air traffic control service without coordination with FAA.
 - (ii) Enables ability to operate in Class G airspace in accordance with the MOA rather than a COA.
 - (iii) Simplifies the coordination processes required for DoD access and FAA approval of UAS operations in the NAS, resulting in significant workload reductions for both parties.
 - (b) Additionally, there are several other agreements in effect with other federal agencies such as NASA, Department of Interior, US Forest Service, and DHS-US Border Protection. The purpose of the agreements is to allow access to the NAS through the COA via Notification Process for sUAS in Class G Airspace. The process allows access to Class G without a COA if the following requirements are met:
 - (i) Notification of the FAA via the COA Online process.
 - (ii) Operations limited to at or below 1200 ft.
 - (iii) Within visual line of sight.
 - (iv) 24 hour NOTAM is published.
 - (v) Minimum standoff distance values to operate in the vicinity of airports are adhered to.
 - (c) An actively tethered UAS operated as a public aircraft that meet the requirements below:
 - (i) Rated at an altitude of less than 150 feet above ground level;

(ii) Operated within class G airspace; or at or below the ceiling depicted on the published UAS facility maps;

- (iii) Not flown directly over non-participating persons;
- (iv) Operated within visual line of sight of the operator;
- (v) Operated in a manner that does not interfere with and gives way to any other aircraft.
- (2) Proponents requesting to operate in designated airspace in which UAS flights are restricted will be required to provide additional information as set by the governing NOTAM.
- (3) Applications (including renewals) should be submitted at least 60 business days before the proposed start of UAS operations to allow a comprehensive operation and technical review.
- (4) The proponent must submit an application/renewal for a COA using the online application system at https://caps.faa.gov.
- (5) COAs must have a termination date not more than 2 years from the effective date unless renewed or extended. The COA expires on the stated termination date unless surrendered sooner by the proponent or revoked by the issuing agency.
- (6) Information related to the Special Airworthiness Certificate Experimental Category can be found in FAA Order 8130.34, Airworthiness Certification of Unmanned Aircraft Systems and Optionally Piloted Aircraft.
- (7) COAs for UAS operating under the authority of a 44807 Exemption will be processed in accordance with this chapter.
- (8) The Special Government Interests (SGI) process will be managed by Systems Operations Security as per FAA Order JO 7210.3.

b. Coordination.

- (1) When the application is received an initial review will be conducted and any initial mitigations will be included prior to sending the draft COA forward for processing and note that the application is ready for air traffic coordination.
- (2) The Service Center and ATC facility will determine any additional mitigations that are necessary for the Air Traffic Control Special Provisions portion of the COA.
- (3) UAS request for VFR operations wholly contained in Class G airspace do not need to be coordinated nor approved by the overlying air traffic facility. Additionally, a copy of the COA does not need to be sent to the ATC facility.
- (4) ATMs must ensure any operational requirements necessary for the safe operation of the UAS in the facility's airspace are provided so that they can be included into the COA. Examples of items to consider during the review may include, but are not limited to:
 - (a) Impact of UAS Operating Areas on local operations.
 - (b) Verify the lost link procedures will not interfere with other traffic.

(c) Any operational issues that may impact local air traffic procedures and operations.

- (5) Once the Service Center/ATC coordination is complete, the processor will complete the COA for final processing.
- (6) Once the final COA is signed, it will be distributed by the appropriate Service Center to the ATC facilities and the proponent.

6-2. On-Airport Airspace Certificates of Waiver or Authorization.

- a. All requests for on-airport operations must be submitted through CAPS.
- b. All requests for on-airport operations must be coordinated by the appropriate Service Center (SC) using the following guidance:
 - (1) Verify that the airport authority has approved the operation. At towered airports, coordination with the local airport authority must be performed in collaboration with the ATM.
 - (2) If the request cannot be approved based on input from the local airport authority, the SC must coordinate with the Regional Office of Airports unmanned aircraft systems liaison prior to issuing a denial letter.
 - (3) Contact the appropriate Service Center Technical Operations POC in the Spectrum Engineering Services Group (AJW-1500) and request that they determine whether or not a spectrum analysis needs to be completed on the proposed operation and, when necessary, appropriate licensing has been obtained.
 - (4) Contact the ATM and begin the airspace analysis for possible impacts to air traffic operations (may be performed in conjunction with para. 2.b.(1).
- c. The ATM must follow FAA Order 1000.37, ATO Safety Management System and the ATO Safety Management System Manual, when conducting local safety risk management.
- d. When operations are unable to be approved, ensure the reason for the denial is included in the response.

6-3. Military Operations Interface Offices. These POCs are provided for informational purposes. Direct coordination may need to occur with military representatives at the Service Center level. The information for Service Center level Military Representatives can be obtained by contacting the POCs below.

Military Operations Interface Offices

Branch	Address
U.S. Navy /U.S. Marine Corps	Department of the Navy Chief of Naval Operations N980A 2000 Navy Pentagon Washington, DC 20350-2000
U.S. Air Force	HQ USAF/A3OJ 1480 US Air Force Pentagon Room 4D755 Washington, DC 20330-1480
U.S. Army	Headquarters USAASA 9325 Gunston Road, Suite N319 Fort Belvoir, VA 22060-5582
U.S. Coast Guard	Headquarters COMDT (CG-711) Office of Aviation Forces 2702 Martin Luther King Jr. Ave, SE STOP 7331 Washington, DC 20593-7331

Chapter 7. Definitions

1. Actively Tethered UAS –

- Operated as a public aircraft in accordance with 14 CFR Part 1;
- Weighs 4.4 pounds or less, including payload but not including the tether;
- Is physically attached to a ground station with a taut, appropriately load-rated tether that provides continuous power to the unmanned aircraft and is unlikely to be separated from the unmanned aircraft; and
- Is controlled and retrieved by such ground station through physical manipulation of the tether.
- 2. Airspace Authorization (14 CFR Part 107.41) The mechanism by which an operator may seek approval to operate a small unmanned aircraft in Class B, Class C, or Class D airspace or within the lateral boundaries of the surface area of Class E airspace designated for an airport from Air Traffic Control (ATC).
- 3. Airspace Waiver (14 CFR Part 107.41) Deviation from 14 CFR Part 107.41 may be authorized provided the proposed small UAS operation can be safely conducted under terms of certificate of waiver. The proponent must demonstrate safety mitigations through equipage that their small UAS can safely operate in controlled airspace without seeking ATC authorization prior to each operation. Proponent should not submit a request for an airspace waiver unless they have been instructed to do so by the FAA.
- **4. Airworthy** UAS conformity to its type certificate (TC), if applicable, and has been determined to be in a condition for safe operation (Title 49 of the United States Code (49 U.S.C.) § 44704(d)(1)).
- **5. Beyond Visual Line of Sight (BVLOS)** The operation of a UAS beyond the capability of the flight crewmembers (i.e., remote pilot in command (PIC), the person manipulating the controls, and visual observer (VO), if used) to see the aircraft with vision unaided by any device other than corrective lenses (spectacles and contact lenses).
- **6. CAPS** COA Application System. A web application that provides an interactive online application process to request a COA for a specific flight operation, or a blanket COA (permitting nationwide flights in Class G airspace at or below 400 ft.) under Part 91.
- 7. Certificate of Waiver or Authorization (COA) A Certificate of Waiver or Authorization is an FAA grant of approval for a specific flight operation or airspace authorization or waiver.
- **8.** Low Altitude Authorization and Notification Capability (LAANC) Software used to automate sUAS operator requests for access to airspace and receive FAA issued authorizations for 14 CFR Part 107 and Section 44809 operations.
- 9. **Proponent** The person or organization responsible for the COA and operation of the UAS.

10. Special Governmental Interest (SGI) Process – Managed by SOSC to accommodate real-time application requests that will directly support a UAS operation benefiting a critical public good and addressing exigent circumstances.

- 11. UAS Facility Maps (UASFM) Grid maps around airports in controlled airspace that depict the altitudes below which automatic requests for airspace authorization can be issued through LAANC.
- **12.** Unmanned Aircraft (UA) A device used or intended to be used for flight that has no onboard pilot. This device can be any type of airplane, helicopter, airship, or powered-lift aircraft. Unmanned free balloons, moored balloons, tethered aircraft, gliders, and unmanned rockets are not considered to be a UA.
- 13. Unmanned Aircraft System (UAS) An unmanned aircraft and its associated elements related to safe operations, which may include control stations (ground, ship, or air based), control links, support equipment, payloads, flight termination systems, and launch/recovery equipment. It consists of three elements: unmanned aircraft, control station, and data link.
- 14. Visual Observer (VO) A person who is designated by the remote pilot in command to assist the remote pilot in command and the person manipulating the flight controls of the small UAS to see and avoid other air traffic or objects aloft or on the ground. The VO must be able to communicate:
 - The small UA's location, altitude, and direction of flight;
 - The position of other aircraft or hazards in the airspace, and;
 - The determination that the UA does not endanger the life or property of another.

APPENDIX A
Section 44809, Exceptions for Limited Recreational Operations of Unmanned Aircraft Authorization processing

LAANC Enabled Facility	Single or Multi Day	Method of Submissi on	IAW UASFM	Above UASFM	ATC Facility Coord. Required	Night Ops (see below)	Processor Actions Required	Additional Docs Req.
Yes	Single	LAANC	Yes	No	No	Yes or No	None	None
Yes	Single	DZ	Yes	No	No	Yes or No	Issue Airspace Authorization (AA) and inform proponent that LAANC is available for future requests.	None
Yes	Single	DZ	No	Yes	No	Yes or No	If the requested area is not in a 0 ft. grid issue an AA for the maximum allowable altitude in the requested square; (e.g., request is for 300 ft. but UASFM altitude is 200 ft. issue airspace authorization for 200 ft.). Change the altitude in DroneZone to match the altitude that the AA is being issued for and make an annotation in the comment section "AA issued at ft. which is the maximum altitude allowed by the UASFM for the area requested". If a separate email is sent to the proponent with a copy of the AA, include an explanation as to why the AA was issued for the lower altitude. Attach a .pdf copy of the email in DroneZone. If the requested area is in a 0 ft. grid, issue a denial letter with the statement "Operations at altitudes above the UASFM are not currently authorized under Section 44809, Exception for Limited Recreational Operations of Unmanned Aircraft.	None
Yes	Multiple **	DZ **	Yes	No	No	Yes or No	Issue an AA for a single day.	None

LAANC Enabled Facility	Single or Multi Day	Method of Submissi on	IAW UASFM	Above UASFM	ATC Facility Coord. Required	Night Ops (see below)	Processor Actions Required	Additional Docs Req.
Yes	Multiple **	DZ **	No	Yes	No	Yes or No	If requested area is not in a 0 ft. grid, issue an AA for the maximum altitude in the requested grid (e.g., request is for 300 ft. but UASFM altitude is 200 ft., issue airspace authorization for 200 ft.). Change the altitude parameters in DroneZone to match the altitude that the AA is being issued for and annotate in the comment section "AA issued at ft. which is the maximum altitude allowed by the UASFM for the area requested". If a separate email is sent to the proponent with a copy of the AA include an explanation as to why the AA was issued for the lower altitude and attach a .pdf copy of the email in DroneZone. If the requested area is in a 0 ft. grid issue a denial letter with the statement, "Operations at altitudes above the UASFM are currently not authorized under Section 44809 – Exception for Limited Recreational Operations of Unmanned Aircraft".	None
No	Single	DZ	Yes	No	No	Yes or No	Issue either wide area or specific area AA for single day per request.	None
No	Single	DZ	No	Yes	No	Yes or No	If the requested area is not in a 0 ft. grid, issue an AA for the maximum altitude in the requested grid (e.g., request is for 300 ft. but UASFM altitude is 200 ft., issue airspace authorization for 200 ft.). Change the altitude parameters within the DroneZone to match the altitude that the AA is being issued for; and annotate in the comment section "AA issued at ft. which is the maximum altitude allowed by the UASFM for the area requested". If a separate email is sent to the proponent with a copy of the AA include an explanation as to why the AA was issued for the lower altitude and attach a .pdf copy of the email in DroneZone. If the requested area is in a 0 ft. grid issue a denial letter with the attached statement "Operations at altitudes above the UASFMs are not currently authorized under Section 44809 – Exception for Limited Recreational Operations of Unmanned Aircraft."	None

LAANC Enabled Facility	Single or Multi Day	Method of Submissi on	IAW UASFM	Above UASFM	ATC Facility Coord. Required	Night Ops (see below)	Processor Actions Required	Additional Docs Req.
No	Multiple	DZ	Yes	No	No	Yes or No	Issue AA with expiration date NTE 24 months from date of issue.	None
No	Multiple	DZ	No	Yes	No	Yes or No	If requested area is not in a 0 ft. grid, issue an AA for the maximum altitude in the requested grid, (e.g., request is for 300 ft. but UASFM altitude is 200 ft., issue airspace authorization for 200 ft.). Change the altitude parameters in DroneZone to match the altitude that the AA is being issued for and annotate in the comment section "AA issued at ft. which is the maximum altitude allowed by the UASFM for the area requested". If a separate email is sent to the proponent with a copy of the AA include an explanation as to why the AA was issued for the lower altitude and attach a .pdf copy of the email in DroneZone. If the requested area is in a 0 ft. grid issue a denial letter with the attached statement, "Operations at altitudes above the UASFM are not currently authorized under Section 44809, Exception for Limited Recreational Operations of Unmanned Aircraft".	None

NOTE: For UAS Service Suppliers that have the capability, some request for operations above the UASFMs may be forwarded by the requestor to the ATC facility. No actions are required by the Service Center.

^{**} Currently, DroneZone does not allow entry of multiple days for LAANC equipped facilities. However, some proponents may request multiple days by indicating multiple days in the comments/remarks section.

APPENDIX B

Processing of 14 CFR Part 107 Airspace Authorizations

Facility Serviced by LAANC	SINGLE/ MULTI DAY	Method of Submission	Operational Waiver	IAW UASFM	ABOVE UASFM	ATC Facility COORD Required	Processor ACTION REQ'D	ADDITIONAL DOCUMENTATION
Yes	SINGLE	LAANC	No	Yes	No	No	None	N/A
Yes	SINGLE	DZ	No	Yes	No	No	Issue AA and inform proponent that LAANC is available for future requests.	N/A
Yes	SINGLE	DZ	Yes	Yes	No	If 107.37(a) or 107.51(b) only	Issue AA, coordinate with ATC facility if 14 CFR Part 107.37(a) or 14 CFR Part 107.51(b), and include waiver number and additional provisions (if any) in FAA Form 7711-1.	Approved Certificate(s) of Waiver
Yes	SINGLE	LAANC	No	No	Yes	Yes	See NOTE below.	N/A
Yes	SINGLE	DZ	No	No	Yes	Yes	Issue AA with any special provisions added by ATC facility.	N/A
Yes	SINGLE	DZ	Yes	No	Yes	Yes	Issue AA with any special provisions added by ATC facility.	Approved Certificate(s) of Waiver
No	SINGLE	DZ	No	Yes	No	No	Issue AA.	N/A
No	SINGLE	DZ	Yes	Yes	No	If 107.37(a) or 107.51(b) only	Issue AA and coordinate with ATC facility if 14 CFR Part 107.37(a) or 14 CFR Part 107.51(b). Include waiver number and additional provisions (if any) in FAA Form 7711-1.	Approved Certificate(s) of Waiver
No	SINGLE	DZ	No	No	Yes	Yes	Issue AA with any special provisions added by ATC facility.	N/A

Facility Serviced by LAANC	SINGLE/ MULTI DAY	Method of Submission	Operational Waiver	IAW UASFM	ABOVE UASFM	ATC Facility COORD Required	Processor ACTION REQ'D	ADDITIONAL DOCUMENTATION
No	SINGLE	DZ	Yes	No	Yes	Yes	Issue AA with any special provisions added by ATC facility.	Approved Certificate(s) of Waiver
No	MULTI	DZ	No	Yes	No	No	Issue AA with expiration date NTE 24 months from date of issue.	N/A
No	MULTI	DZ	Yes	Yes	No	If 14 CFR Part 107.37(a) or 14 CFR Part 107.51(b) only	Issue AA with expiration date NTE 24 months from date of issue. Coordinate with ATC facility if 14 CFR Part 107.37(a) or 14 CFR Part 107.51(b) and include waiver number and additional provisions (if any) in FAA Form 7711-1.	Approved Certificate(s) of Waiver
No	MULTI	DZ	No	No	Yes	Yes	Issue AA with any special provisions added by ATC facility with expiration date NTE Sep. 2021.	N/A
No	MULTI	DZ	Yes	No	Yes	Yes	Issue AA with expiration date NTE 24 months from date of issue, coordinate with ATC facility, and include waiver number and additional provisions (if any) in FAA Form 7711-1.	Approved Certificate(s) of Waiver
Yes	MULTI**	DZ**	No	Yes	No	No	Issue AA for single day operation.	
Yes	MULTI**	DZ**	Yes	Yes	No	If 14 CFR Part 107.37(a) or 14 CFR Part 107.51(b) only	Issue AA for single day operation. Coordinate with ATC facility if 14 CFR Part 107.37(a) or 14 CFR Part 107.51(b), and	Approved Certificate(s) of Waiver

Facility Serviced by LAANC	SINGLE/ MULTI DAY	Method of Submission	Operational Waiver	IAW UASFM	ABOVE UASFM	ATC Facility COORD Required	Processor ACTION REQ'D	ADDITIONAL DOCUMENTATION
							include waiver number and additional provisions (if any) in FAA Form 7711-1.	
Yes	MULTI**	DZ**	Yes	Yes	No	If 14 CFR Part 107.37(a) or 14 CFR Part 107.51(b) only.	Issue AA for single day operation. Coordinate with ATC facility if 14 CFR Part 107.37(a) or 14 CFR Part 107.51(b), and include waiver number and additional provisions (if any) in FAA Form 7711-1.	Approved Certificate(s) of Waiver
Yes	MULTI**	DZ**	No	No	Yes	Yes	May be issued for multiple days with a valid reason. If the ATC facility is unable, then issue AA for a single day operation and attach any special provisions added by ATC facility.	
Yes	MULTI**	DZ**	Yes	No	Yes	Yes	May be issued for multiple days with a valid reason. If the ATC facility is unable, then issue AA for a single day operation only and attach any special provisions added by ATC facility.	Approved Certificate(s) of Waiver

NOTE: For UAS Service Suppliers that have the capability, some request for operations above the UASFMs may be forwarded by the requestor to the ATC facility. No actions are required by the Service Center.

^{**} Currently, DroneZone does not allow entry of multiple days for LAANC equipped facilities. However, some proponents may request multiple days by indicating multiple days in the comments/remarks section.