Frequently Asked Questions v8

This info is current as of 3 July 2025

Note: Information presented here continues to evolve and is subject to change without notice.

Overview: The FAA has recently changed the Part 91 waiver process to expedite waivers for qualified Public Aircraft Operators (PAOs) as defined in 49 USC 40102(a)(41) who also meet the definition of Public Safety Organization (PSO) as defined in 49 USC 44806(e). This expedited waiver process enables Visual Line of Sight (VLOS) operations, Beyond Visual Line of Sight (BVLOS) operations, operations over people, and operations over moving vehicles with safety mitigations, at varying altitudes and distances depending on aircraft safety equipage and detection (and avoidance) technology employed in the operations by the applicant. These operations are conducted under 14 CFR Part 91.

Frequently Asked Questions:

1. Q: Who is eligible for these 91.113 PAO/PSO waiver?

A: This waiver is currently available to

- **Public Aircraft Operators (PAO)** as statutorily defined in 49 USC 40102(a)(41), who are also
- Public Safety Organizations (PSO) as statutorily defined in 49 USC 44806(e).

NOTE: See Advisory Circular 00-1.1B Public Aircraft for more information about Public Aircraft Operations. Volunteer organizations (VFDs, SARs, 501(3)(c) entities for example) are typically *not eligible* for Public Aircraft status, and Part 107 is the only option for them, but there is a near equivalent BVLOS waiver available under Part 107. A public safety organization, as defined by the 2024 FAA Reauthorization Act, Public Law 118-63, section 926(e) (codified in 49 USC 44806(e)), is an entity that "primarily engages in activities related to the safety and well-being of the general public, including law enforcement, fire departments, emergency medical services, and other organizations that protect and serve the public in matters of safety and security." This waiver is only available to entities that meet both criteria.

2. Q: How do I get one of these 91.113 PAO/PSO waivers?

A: Eligible applicants should first determine which of the two waivers they want to apply for then send an email to <u>9-AVS-AFS-750-91.113Waivers@faa.gov</u>, requesting a PAO/PSO 91.113 waiver packet.

- a. 200' Obstruction Shielded Ops (typically 87% of departments go for this), or
- b. 400' using acceptable Detection and Avoidance (DAA) systems

3. Q: What items come in the 91.113 PAO/PSO waiver packet?

A: Currently (this is subject to change without notice), you will get

- 91.113 PAO/PSO waiver checklist(s),
- a blank FAA Form 7711-2 (waiver application)
- a sample letter, and

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 If applying for the 400' waiver using FCC-acceptable for aviation use, and ASTM and/or RTCA standards compliant DAA systems, you will also get a document called "Criteria for Making Decision-Detect And Avoid (CMD-DAA),

Complete the requirement documents, sign, date, and return them all as attachments to email address 9-AVS-AFS-750-91.113Waivers@faa.gov.

4. Q: How long is this 91.113 PAO/PSO waiver good for?

A: These waivers have a validity period of 48 months.

5. Q: Does this waiver replace the Tactical BVLOS, First Responder BVLOS, Blanket, and Jurisdictional COAs?

A: These new waivers incorporate features from earlier issued public safety COAs (blanket, jurisdictional, tbvlos, fr-bvlos) into one combination waiver and airspace authorization form 7711-1. Those COAs are no longer available for new applicants, but remain valid until cancelled or expired for existing COA holders. They will not be renewed when they expire because they have been replaced by this combination waiver + airspace authorization.

6. O: Is this a waiver for BVLOS operations?

A: This waiver provides relief to 14 CFR 91.113(b), and a number of other 14 CFR regulations, enabling both VLOS and BVLOS operations with altitude limits and required equipage. Depending on the technology employed to detect and avoid (DAA) other aircraft, there are typically two versions of 91.113 waivers being issued:

- One version relying on obstruction shielding as the primary anti-collision mitigation (commonly called "shielded ops"). Approximately 87% of applicants' mitigations fit with this waiver.
- One version relying on DAA systems (electronic aircraft detection systems FCCapproved for aviation use and ASTM and/or RTCA standards compliant) as the primary mitigation for collision avoidance. Approximately 13% of applicants have these systems.

NOTE: Requests for routine altitudes above the UASFM in controlled airspace or above 400' AGL in uncontrolled airspace, or at any altitude in controlled airspace where UASFM's are not applicable, such as E3 or E4 Airspace, will require a second step and obtain a separate airspace authorization (COA) issued by the FAA Air Traffic Organization via CAPS/CADZ after obtaining the 91.113 waiver.

7. Q: Is this a DFR (Drone as a First Responder) waiver?

A: DFR is a concept, not a special set of flight regulations. Conversations with public safety suggest a concept that usually means a semi-autonomous BVLOS flight of a drone being flown out some (undefined) distance at some (undefined) altitude in order to do something (undefined), but that's the point at which the "DFR" concepts begins to diverge. "DFR" means many things to many people, and "DFR" concepts are highly variable in terms of mission and technology employed.

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Irrespective of the concept, Title 14 of the Code of Federal Regulations, Part 91 is the rule that governs flights as a public aircraft, and this set of regulations require all pilots to "see and avoid" each other <u>from</u> (inside) their aircraft (see 14 CFR 91.113). Obviously, regulation 14 CFR 91.113(b) and other 14 CFR part 91 regulations cannot be complied with in a drone operation (because the drone pilot is not 'in' the aircraft), so some rules need to be waived or exempted to permit the operation.

Applicants must evaluate their proposed "DFR" operation in terms of compliance with 14 CFR part 91, then apply for waivers to those 14 CFR part 91 regulations they need relief from in order to operate the drone safely per their concept. Equivalent levels of safety need to be addressed by applicants when seeking relief from a rule. These expedited waivers leverage pre-identified hazards, risks, and mitigations that provide equivalent levels of safety acceptable to the FAA. These expedited waivers are intended to meet the needs of most public safety agencies conducting public safety missions as a public aircraft, balanced against the safety needs of the National Airspace System.

8. Q: What kind of operations are permitted under this PAO-PSO 91.113 waiver?

A: There are, generally speaking, three kinds of operations permitted under this waiver, with variations depending on the airspace and systems used:

- Visual line of sight (VLOS), or
- BVLOS relying on obstruction shielding as a primary BVLOS safety mitigation, with or without Visual Observers (VOs), or
- BVLOS relying on a higher tech solution using technology, namely FCC-approved for aviation use and ASTM and/or RTCA standards compliant systems, as the primary means of detecting and avoiding (DAA) other aircraft, including those not transmitting ADS-B Out (aka non-cooperative traffic). This technology is typically electronic: radar, acoustic, or visual based, or a combination thereof. The technology employed should be described in detail in the attachments (see optional CMD-DAA) or by documentation of the applicant's choice, and must be acceptable to the FAA. Currently, only 13% of applicants have these sophisticated systems. See Question #27 for more on the altitudes.

NOTE: Requests for routine altitudes above the UASFM in controlled airspace or above 400' AGL in uncontrolled airspace, or at any altitude in controlled airspace where UASFM's are not applicable, such as E3 or E4 Airspace, will require a second step which is to obtain a separate airspace authorization (COA) issued by the FAA Air Traffic Organization via CAPS/CADZ. That step is taken after obtaining the 91.113 waiver.

9. O: Can I operate in controlled airspace with this 91.113 PAO/PSO waiver?

A: This waiver includes an airspace authorization <u>up to</u> the UAS Facility Map (UASFM) grid height depicted in UASFM at LAANC enabled airports, or 200' AGL, whichever is lower (see https://www.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754a d).

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For emergency operations when the waiver holder needs to exceed the limitations of the issued COW/A on a temporary, emergency basis, a request for a Special Governmental Interest (SGI) COA/Waiver must be made to the FAA's Systems Operations Support Center (SOSC). More information about this process can be found at https://www.faa.gov/uas/advanced_operations/emergency_situations/

10. Q: What process do we follow if we want to operate with the 91.113 waiver in controlled airspace at an altitude *higher* than the UASFM altitudes or *higher* than 400' AGL in uncontrolled airspace, or in controlled airspace where UASFM's are not applicable, such as E3 or E4 Airspace, on a routine basis?

A: Those requests require a second step to obtain a separate airspace authorization (COA) issued by the FAA Air Traffic Organization via CAPS/CADZ. Do this <u>AFTER</u> you receive your 91.113 waiver.

- After obtaining the 91.113 waiver, apply for an Air Traffic Organization (ATO) COA in CAPS/CADZ at https://caps.faa.gov/coaportal, requesting the airspace and attach the waiver as supporting documentation.
- The UAS Facility Maps (UASFM) at LAANC enabled airports change from time to time.
 See
 - $\underline{\text{https://www.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6}}\\ \underline{\text{a06754ad}} \text{).}$
- For emergency operations when the waiver holder needs to exceed the limitations of the issued COW/A on a temporary, emergency basis, a request for a Special Governmental Interest (SGI) COA/Waiver must be made to the FAA's Systems Operations Support Center (SOSC). More information about this process can be found at https://www.faa.gov/uas/advanced_operations/emergency_situations/.

11. Q: Can I operate with this 91.113 PAO/PSO waiver in airspace defined by a Temporary Flight Restriction (TFR)?

A: No flight is permitted in a TFR without additional steps being taken. To operate in a TFR, the waiver holder must contact the SOSC for an SGI authorization. A TSA waiver **may also be required**, depending on the nature of the TFR. Check the TFR NOTAM for more information.

12. Q: Can I operate in Visual Line of Sight (VLOS) with this 91.113 PAO/PSO waiver? A: VLOS operations are permitted with this waiver.

13. Q: How far out from the Remote Pilot can I fly the drone with this 91.113 PAO/PSO waiver?

A: There is no set distance established in this waiver. If using an FCC-acceptable for aviation use electronic, acoustic, or visual DAA system, the limit is driven by the technology and the distance stated in the waiver application. The responsibility to avoid other aircraft is not waived, no matter the distance. If relying solely on obstruction shielding and ADS-B In, there is no maximum distance limitation imposed by the waiver, but the responsibility to avoid being a

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hazard to other aircraft remains (see 14 CFR 91.111). See Advisory Circular 90-48E Pilot's Role in Collision Avoidance for more information about reaction times and collision avoidance.

14. Q: Can I operate at night with this 91.113 PAO/PSO waiver?

A: Operations are permitted 24/7 under this waiver, including night, with lighting and training requirements.

15. Q: Do I need an anti-collision light to operate with this 91.113 PAO/PSO waiver?

A: Yes. The sUA must be equipped with anti-collision lighting to increase the conspicuity of the sUA to 3 statute miles for civil twilight and/or night operations. The anti-collision lighting must be on and functioning at a sufficient flash rate to avoid a collision whenever the drone is in the air, day or night. The intensity of the anti-collision lighting may be reduced if, because of operating conditions, it would be in the interest of safety to do so. "Lights out" operations are not permitted due to the unacceptably high risk an unlighted drone poses to manned aircraft, especially when operating the drone BVLOS, even during daylight.

16. Q: Do I need a Parachute Recovery System (PRS) for drones used under this 91.113 PAO/PSO waiver?

A: No, but if you want to operate over people with a drone for other than life-safety emergency operations, you must:

- Use a part 107, subpart D category compliant drone, or
- Equip the drone as follows:
 - o If the drone is not a part 107, subpart D category compliant drone and it weighs 0.88 lbs. or less, it must be equipped with prop guards.
 - o If it weighs more than 0.88 lbs. it must be equipped with a PRS conforming to the ASTM F3322-18 or newer standard, or
- Request a Special Governmental Interest (SGI) COA/Waiver from the FAA's Systems
 Operations Support Center (SOSC). More information about this process can be found
 at https://www.faa.gov/uas/advanced_operations/emergency_situations/.

NOTE: Operators must consider hazards and risk of injury to persons on the ground balanced against the risk of loss of life when operating over people or moving vehicles without a category compliant sUA. For example, every call out is not a life-safety emergency, and operating over open-air assemblies of people are typically not life-safety emergencies. If you intend to routinely dispatch the drone for every call out, consider equipping with a category compliant drone or a PRS (depending on weight), due to the risk of injury to persons on the ground from that drone should it fail unexpectedly, since not every call out is a life safety emergency.

17. Q: Can I operate from a moving vehicle with this 91.113 PAO/PSO waiver?

A: Operations from a moving vehicle are permitted in uncongested areas. Operators are cautioned to update their return to home settings often when operating from a moving vehicle because new obstacles may be encountered depending on the route of flight.

18. Q: Does this waiver cancel or supersede my other existing 91.113 COA's?

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A: This waiver does not cancel or supersede prior 91.113 COAs. However, those older COAs will not be renewed when they expire.

19. Q: Do we have to file NOTAMs under this 91.113 PAO/PSO waiver?

A: NOTAMS are not required to operate under this waiver.

20. Q: Are there any reporting requirements under this 91.113 PAO/PSO waiver?

A: NTSB accident/incident reporting requirements of 49 CFR 830.2 are not waived. The waiver requires incident reporting to the FAA, but no regular reporting to the FAA is required. Some records of flights may be requested by the FAA, but this is only required upon request. If you intend to operate under any of your previously issued COAs, you still must comply with the reporting requirements of those COAs (see your COA for your reporting requirements).

NOTE: The pilot records database (PRD) requirements of 14 CFR Part 111 have not changed and are still required of **Public Aircraft** when a PRD report triggering event occurs. See 14 CFR Part 111, subpart C and AC 120-68 for more information about Public Aircraft reporting requirements for the PRD.

21. Q: Do I need Visual Observers (VOs) to operate under this 91.113 PAO/PSO waiver?

A: The use of VOs is encouraged but not required under this waiver. This is because the waiver uses obstruction shielding, anti-collision lighting, and ADS-B In as mitigations or other technology to enable detection and avoidance (DAA) of other aircraft. Remember that 14 CFR 91.111 is *not* waived, so vigilance is always required to not be a hazard to other aircraft.

22. Q: Do I still need to use the COA Online Application Processing System (CAPS)?

A: In most cases, proponents would no longer use CAPS to submit their application. There may be individual cases, depending on the CONOP proposed, that may be directed to use CAPS however.

- For all sUAS altitude requests in controlled airspace above the UASFM altitudes, above 400 feet above the ground or further than 100 feet of an object in Class G, or at any altitude in Classes E3 or E4 airspace, the operator must apply for an Air Traffic Organization (ATO) COA at https://caps.faa.gov/coaportal after they get the 91.113 waiver.
- New applications for, and the renewal of, Tactical BVLOS (TBVLOS) and First Responder BVLOS (FR-BVLOS) waivers are no longer accepted. New applications for the new PAO/PSO 91.113(b) waiver should be made to the email address <u>9-AVS-AFS-750-91.113waivers@faa.gov</u>.

23. Q: What are the weather minima for this 91.113 PAO/PSO waiver?

A: The waiver requires a minimum of 3 Statute Miles (SM) visibility, and the drone must remain 500 feet below and 2000 feet horizontally from clouds.

24. Q: Can this 91.113 PAO/PSO waiver be used to operate a drone from a command post?

A: This concept is possible under either the 200' obstruction shielding ops waiver or the 400' using DAA waiver, depending on the technology used for collision avoidance. As you develop

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your CONOP, the main question will be "how will the RPIC "see (detect) <u>and avoid</u>" other aircraft (including non-cooperative traffic) with the systems and procedures you propose to employ <u>and</u> how will your drone not be a hazard to others in the air and on the ground?"

25. Q: Is Standard Remote ID required to operate with this 91.113 PAO/PSO waiver?

A: Yes, unless otherwise authorized in writing by the FAA, Standard Remote ID is required per 14 CFR part 89 to operate BVLOS. Check your drone's remote ID compliance here: https://uasdoc.faa.gov/listDocs?docType=rid

26. Q: What's the maximum weight UAS that can be operated under this 91.113 PAO/PSO waiver?

A: This waiver permits operations with a UA that weighs up to 55 pounds, including the UA and all attachments. Operations with UA weighing 55 pounds or more are possible, but those applications will be reviewed on a case-by-case basis and may be directed to use CAPS.

27. Q: If we want to operate BVLOS in Class G airspace or in controlled airspace without using electronic detection and avoidance systems, will there be altitude limitations on those operations?

A: Without FCC-approved for aviation use, and ASTM and/or RTCA standards compliant electronic detection and avoidance systems, the operator will be relying on obstruction shielding coupled with ADS-B In and an anti-collision light as anti-collision mitigations. The BVLOS altitudes in these cases are limited to:

a. In Class G Airspace,

- 1) at or below 200 feet above the ground, or
- 2) 100 feet above the height of any obstruction (natural or man-made) that is within a 100 foot radius of the sUA, not to exceed 400 feet AGL, or

b. In Class B, C, D or E (Surface Area) Airspace,

- 1) at or below 200 feet above the ground, or
- 2) below the UASFM altitude, whichever is lower;

NOTE: To operate BVLOS higher than 200 feet AGL or more than 100 feet from an obstruction in Class G airspace, an electronic detection and avoidance system that is FCC-approved for aviation use, and ASTM and/or RTCA standards compliant and acceptable to the FAA, in addition to ADS-B In and an anti-collision light, will be required.

28. Q: Does this waiver allow for one RPIC to many sUA (aka 'one to many') operations?

A: This *expedited* waiver is based on a one RPIC to one sUA concept. It is based on predetermined hazards, risks, and mitigations intended to meet the needs of most public safety agencies who are operating as a public aircraft. "One to many" operations are possible with acceptable technology and mitigations, but those applications must be evaluated on a case-bycase basis, and may be complicated by airspace issues that arise depending on where those operations occur.

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29. Q: Where can I go to find out if the DAA system we are considering is FCC-approved for aviation use?

A: Active systems (such as radar) may require an FCC issued Station License before the operator can use them in aviation service. Passive systems may not require an FCC issued Station License. See 47 CFR part 87, subpart B, and reach out to the FCC with specific questions about your situation. Ask your vendor to show you documentation that it is 47 CFR Part 87 compliant, and what steps you need to take to be able to use that system in aviation service.

