

Federal Aviation Administration

SUPPORTING STATEMENT

Waivers and ATC Authorization in Controlled Airspace under Part 107 2120-0768

INTRODUCTION

This Information Collection is submitted to the Office of Management and Budget (OMB) to request revision of an existing Information Collection currently authorized under Information Collection 2120-0768, “Waivers and ATC Authorization in Controlled Airspace under Part 107.” The request will allow the Federal Aviation Administration (FAA) to leverage automated means of collecting and processing airspace authorizations, airspace waivers, and operational waivers requested pursuant to 14 C.F.R. Part 107.

Part A. Justification

1. Circumstances that make collection of information necessary.

In 2012, Congress passed the FAA Modernization and Reform Act of 2012 (Public Law 112-95). Section 333 of Public Law 112-95 directed the Secretary to determine which types of unmanned aircraft systems (UAS) do not create a hazard to users of the national airspace system (NAS), the public, or pose a threat to national security. Based on such determinations, the statute required the FAA to establish requirements for the safe operation of UAS in the NAS prior to completion of the UAS comprehensive plan and rulemakings required by section 332 of Public Law 112-95.

Based on its consideration of the comments submitted in response to the notice of proposed rulemaking entitled Operation and Certification of Small Unmanned Aircraft Systems (80 FR 9543, February 23, 2015), and its experience with the certification, exemption, and Certificate of Waiver or Authorization process, the FAA issued the Operation and Certification of Small Unmanned Aircraft Systems final rule to enable certain small UAS operations to commence upon adoption of this rule and accommodate technologies as they evolve and mature (81 FR 42063, June 28, 2016).

The final rule, at 14 C.F.R. § 107.41, states:

No person may 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 unless that person has prior authorization from Air Traffic Control (ATC).

The Operation and Certification of Small Unmanned Aircraft Systems final rule allows the FAA to issue certificate of waivers from the requirements of Part 107, including § 107.41.

14 C.F.R. § 107.200(a) provides:

The Administrator may issue a certificate of waiver authorizing a deviation from any regulation specified in § 107.205 if the Administrator finds that a proposed small UAS operation can safely be conducted under the terms of that certificate of waiver.

Waivers of §107.41 are referred to throughout this document as “airspace waivers”; waivers of the other provisions listed in §107.205 are referred to as “operational waivers.” The FAA

submitted the previously approved Information Collection 2120-0768 to implement the requirements of Part 107 and allow respondents to request airspace authorizations, airspace waivers, and operational waivers to operate small UAS in controlled airspace. Flight operations conducted pursuant to 14 C.F.R. Part 107 are referred to as Part 107 operations.

Part 107 Airspace Authorizations

Part 107 authorizations under Information Collection 2120-0768 can be submitted via the Low Altitude Authorization and Notification Capability (LAANC) or through the FAA's web portal.

Low Altitude Authorization and Notification Capability (LAANC)

LAANC is a tool provided by the FAA and UAS Service Suppliers (USSs) to Part 107 respondents to process requests for authorization to conduct Part 107 operations in controlled airspace. USSs are FAA-approved industry partners. The USSs, in a private-public partnership with the FAA, act as a conduit between Part 107 respondents and the FAA to facilitate the request process. Using LAANC, a Part 107 respondent submits a request for authorization to operate a small UAS in a particular airspace location to the USS. The USS collects information regarding the date, time, and location of the proposed operation and processes the request to the FAA. A response is provided by FAA through the USS to the Part 107 respondent advising whether the request for authorization is approved or denied.

The information requested from a Part 107 respondent is the minimal amount of information necessary for the FAA to know where, when, and for how long an operation will occur. This information is necessary and essential to ensure the safe operation of small UAS in the NAS.

Web Portal

The web portal is an enterprise IT solution developed to consolidate several small UAS support systems¹ into a central location. Respondents will establish a single account on the web portal where they will be able to conduct multiple activities, including requesting authorization to fly pursuant to 14 C.F.R. § 107.41. Respondents communicate directly with the FAA when using the web portal. When a respondent requests an authorization to fly via the web portal, the FAA will manually process the request and provide an approval or denial to the respondent via the web portal. The information requested from a Part 107 respondent is the minimal amount of information necessary for the FAA to know where, when, and for how long an operation will occur. This information is necessary and essential to ensure the safe operation of small UAS in the NAS.

Part 107 Airspace Waivers

Web Portal

Under 14 C.F.R. § 107.205(h), Part 107 operators may request a waiver to the authorization requirements of § 107.41 or "airspace waiver". Respondents may use the web portal, which is the enterprise IT solution developed to consolidate several small UAS support systems² into a central location, to request airspace waivers. Respondents communicate directly with the FAA when using the web portal. When a respondent requests an airspace waiver via the web portal, the FAA will manually process the request and provide an approval or denial to the respondent

¹ Airspace Waivers and Operational Waivers are included in these systems and are addressed in separate sections.

² Part 107 Authorizations and Operational Waivers are included in these systems and are addressed in separate sections.

via the web portal. The information requested from a Part 107 respondent is the minimal amount of information necessary for the FAA to know where, when, and for how long an operation will occur. This information is necessary and essential to ensure the safe operation of small UAS in the NAS.

Part 107 Operational Waivers

Web Portal

Under 14 C.F.R. § 107.205, several operational requirements of Part 107 may be waived. These waivers, which are referred to as “operational waivers”, may also be requested via the web portal. Through the web portal, respondents will establish a single account where they will be able to conduct multiple activities, including requesting operational waivers pursuant to § 107.205. Part 107 respondents communicate directly with the FAA when using the web portal. When a respondent requests an operational waiver, the FAA will manually process the request and provide an approval or denial to the respondent via the web portal.

Operational waivers are those waivers to the regulations (except § 107.41) listed in § 107.205. To the extent a respondent seeks an operational waiver, the respondent will, via the web portal, provide the information required to make a safety determination, including the manner he or she will ensure the safety of the operation by mitigating any risks the operation presents. After an initial review, the FAA may also require the respondent submit additional information in support of his or her application. The respondent will be notified of approval or denial of requests for operational waivers via the web portal.

2. How, by whom, and for what purpose is the information used.

The information requested from respondents for all three categories, Part 107 airspace authorizations, airspace waivers, and operational waivers, is essential to FAA mission needs. The FAA is tasked with the exclusive management of airspace in the United States and must issue regulations and control the use of airspace to ensure the safe and efficient use of airspace³

Part 107 Airspace Authorizations

The FAA uses the information provided by respondents via either LAANC or the web portal for the same purposes and will address each together.

LAANC and Web Portal

To accomplish the FAA’s mandate of providing safe and efficient use of airspace, FAA’s Air Traffic Control must be aware of any planned operations of small UAS in controlled airspace. Small UAS operating in controlled airspace will be entering airspace potentially occupied by a variety of other aviation vehicles. FAA’s Air Traffic Control must provide authorization of planned small UAS operations prior to them occurring to ensure that the operations will not interfere with other air traffic.

The information provided by respondents to request authorization to conduct Part 107 operations, whether through LAANC or via the web portal, is used by the FAA to provide (or deny) authorization to conduct a Part 107 operation consistent with the FAA’s legal mandate to maintain a safe and efficient airspace.

³ See, 49 U.S.C. §§ 40103 and 44701; Pub. L. 112-95 § 333

Part 107 Airspace Waivers

Web Portal

The FAA uses information submitted by respondents via the web portal to determine whether the respondent can safely operate the small UAS under the terms of an airspace waiver that authorizes deviation from § 107.41. The FAA reviews and analyzes the information it collects from the respondent to determine the type and extent of the intended deviation from § 107.41. In general, the FAA will issue a certificate of waiver or authorization to the respondent (individuals and businesses) if the proposed operation does not create a hazard to persons on the ground or to other aircraft.

If the FAA did not collect this information, the FAA would not be able to grant certificates of waiver from § 107.41 as the information is used by the FAA to authorize (or deny) the requested airspace waiver consistent with the FAA's legal mandate to maintain a safe and efficient airspace.

Part 107 Operational Waivers

Web Portal

The FAA uses information submitted by respondents via the web portal to determine whether the respondent can safely operate the small UAS under the terms of a waiver that authorizes deviation from specific provisions of Part 107. The FAA reviews and analyzes the information it collects from the respondent to determine the type and extent of the intended deviation from Part 107's prescribed regulations. In general, the FAA will issue a certificate of waiver or authorization to the respondent (individuals and businesses) if the proposed operation does not create a hazard to persons on the ground or to other aircraft.

If the FAA did not collect this information, the FAA would not be able to grant certificates of waiver from the operational regulations listed in § 107.205 as the information is used by the FAA to authorize (or deny) the requested operational waiver consistent with the FAA's legal mandate to maintain a safe and efficient airspace.

3. Extent of automated information collection.

Part 107 Airspace Authorizations

Part 107 airspace authorizations are requested via LAANC and the web portal. Each possesses different degrees of automation.

LAANC

LAANC is a fully automated system that provides near real time authorizations. All information, including the submission, processing, and response to the respondent is automated.

Web Portal

The web portal is partially automated. The submission of a request and response from FAA is automated; processing requires human analysis conducted by the FAA.

Part 107 Airspace Waivers

Web Portal

Part 107 airspace waivers are collected via the web portal. The web portal is partially automated. The submission of a request and response from FAA is automated; processing requires human analysis conducted by the FAA.

Part 107 Operational Waivers

Web Portal

Part 107 operational waivers are collected via the web portal. The web portal is partially automated. The submission of a request and response from FAA is automated; processing requires human analysis conducted by the FAA.

4. Efforts to identify duplication.

Part 107 Airspace Authorizations

LAANC

The FAA is the only government entity that collects or request information from respondents related to requests to conduct Part 107 operations. Duplicate records for the same authorization request could exist if an operator voluntarily chooses to use the web portal and LAANC for the same operation. The requested information will be stored in the shared LAANC and web portal data repository. The information is not located in any other Federal data repository nor accessible in other government systems

Web Portal

The FAA is the only government entity that collects or request information from respondents related to requests to conduct Part 107 operations. Duplicate records for the same authorization request could exist if an operator voluntarily chooses to use the web portal and LAANC for the same operation. The requested information will be stored in the shared LAANC and web portal data repository. The information is not located in any other Federal data repository nor accessible in other government systems.

Part 107 Airspace Waivers

Web Portal

The FAA is the only government entity that collects or request information from respondents related to requests for waivers to § 107.41. The requested information will be stored in the shared LAANC and web portal data repository. The information is not located in any other Federal data repository nor accessible in other government systems.

Part 107 Operational Waivers

Web Portal

The FAA is the only government entity that collects or request information from respondents related to requests for waivers to regulations listed in § 107.205. The requested information will be stored in the shared LAANC and web portal data repository. The information is not located in any other Federal data repository nor accessible in other government systems.

5. Efforts to minimize the burden on small businesses.

Part 107 Airspace Authorizations

LAANC

The requested information is limited to the minimum information needed for the FAA to approve or deny a requested Part 107 airspace authorization. The FAA is legally mandated to maintain a safe and efficient airspace. No exception can be provided to any respondent, including small businesses, from providing the requested information as it is essential to maintaining a safe airspace. LAANC is an alternative method to request airspace authorizations from the web portal and is expected to take significantly less time for small business to request and receive authorization to conduct Part 107 operations, thereby greatly reducing the burden on small businesses.

Web Portal

The requested information is limited to the minimum information needed for the FAA to approve or deny a requested Part 107 airspace authorization. The FAA is legally mandated to maintain a safe and efficient airspace. No exception can be provided to any respondent, including small businesses, from providing the requested information as it is essential to maintaining a safe airspace.

Part 107 Airspace Waivers

Web Portal

The requested information is limited to the minimum information related to the requested waiver from § 107.41 necessary to ensure the safe and efficient maintenance of the NAS. The FAA has ensured that no information other than necessary to maintain a safe airspace has been requested. No exception can be provided to any Part 107 operator, including small businesses, from providing the requested information as the information is essential to maintaining safe airspace. If the respondent does not provide sufficient information to enable the FAA to approve or deny the request, the FAA will contact the respondent and request additional information.

Part 107 Operational Waivers

Web Portal

The requested information is limited to the minimum information related to the requested waiver from the regulations listed in § 107.205 necessary to ensure the safe and efficient maintenance of the NAS. The FAA has ensured that no information other than necessary to maintain a safe airspace has been requested. No exception can be provided to any Part 107 operator, including small businesses, from providing the requested information as the information is essential to ensuring operations meet an equivalent level of safety. If the respondent does not provide sufficient information to enable the FAA to approve or deny the request, the FAA will contact the respondent and request additional information.

6. Impact of less frequent collection of information.

Part 107 Airspace Authorizations

The FAA has a statutory mandate to control and maintain a consistently high level of civil aviation safety. The information requested for Part 107 airspace authorizations is necessary to ensure that each unique operation will be conducted safely. Without the information requested from respondents, the FAA would be unable to approve any airspace authorizations submitted under Part 107.

Part 107 Airspace Waivers

The FAA has a statutory mandate to control and maintain a consistently high level of civil aviation safety. The information collections for airspace waivers is necessary to ensure that each unique operation will be conducted safely. Without the information requested from respondents, the FAA would be unable to approve any airspace waivers submitted under Part 107.

Part 107 Operational Waivers

The FAA has a statutory mandate to control and maintain a consistently high level of civil aviation safety. The information collections for operational waivers is necessary to ensure that each unique operation will be conducted safely. Without the information requested from respondents, the FAA would be unable to approve any operational waivers submitted under Part 107.

7. Special circumstances.

There are no special circumstances for this information collection.

8. Compliance with 5 CFR 1320.8.

The FAA published its 60-Day Notice to the Federal Register on February 12, 2018 in Volume 83, Page 6082. The FAA received three comments during the published public comment period that began on February 12, 2018. One commenter asserted that the process for Part 107 operators to obtain authorization from ATC is overbearing and that Part 107 operators should be allowed to contact ATC directly via the telephone. The large number of potential telephone calls (estimated at over 200,000 from 2018 to 2020) makes this proposed solution unfeasible and such a process would increase the burden on Part 107 operators by creating unreasonably long wait times for approval and would increase uncertainty and inconsistency of authorization when ATC cannot be reached. Under the web portal process, which processes individual requests such as the one proposed here, the wait time for a response is 90+ days.

Another comment addressed procedures for implementing Control and Non-Payload Communications Links and does not pertain to the matters addressed in this Information Collection.

The final comment was from the Air Line Pilots Association, International (ALPA), which addressed a number of issues, grouped in two main categories. First, ALPA commented that the use of LAANC and the web portal to process authorization requests to conduct Part 107 flight operations in controlled airspace has not been subject to sufficient safety risk evaluation. Both LAANC and the web portal are administrative systems. Neither introduce change to the NAS enterprise architecture or any alteration to any established FAA processes including those that

involve safety. LAANC and the web portal provide another means for Part 107 operators to comply with Part 107's established requirements and safety processes. Both LAANC and the web portal are in alignment with Part 107.

Second, ALPA commented that the FAA has not determined through its SMS process the risk that UAS operating in controlled airspace introduce to the NAS and, therefore, ALPA is unable to determine if the information collected is adequate. This second category of comments was substantially the same as comments that ALPA submitted to the earlier Notice of Proposed Rule Making (NPRM) that was eventually implemented as a final rule at 81 FR 42063 on June 28, 2016 and codified as 14 C.F.R. Part 107. Part 107 addresses ALPA's safety concerns. The FAA analyzed the proposed information to be collected from the public for both authorization requests and waivers and determined that the information is sufficient for the FAA to meet the previously established requirements.

Additionally, the FAA has re-reviewed the nine comments that were received in response to the earlier published Federal Register notice for the emergency approval of the existing Information Collection 2120-0768, published on October 12, 2017 at 82 FR 47289. Six of these comments were positive and supported the implementation of an automated system to process authorization requests. Two comments discussed the wait times under the non-automated approval process and involved the commenters' disagreement with the requirements of Part 107. These comments pertain to matters not directly addressed in this Information Collection. The remaining comment made a recommendation to allow local emergency management officials to create temporary "no fly" zones to support emergency operations. This comment is also not directly related to the matters addressed in this Information Collection.

9. Payments or gifts to respondents.

No gifts or payments are provided for the processing of authorizations.

10. Assurance of confidentiality

There is no confidentiality requested or provided.

11. Justification for collection of sensitive information.

Part 107 Airspace Authorizations

The only information collected that may be considered "sensitive in nature" is the personal information associated with the Part 107 operation (aircraft operator name, telephone number, email address, and optionally provided registration number). This personal information is limited to what is necessary for the FAA to contact Part 107 operators in the event of a hazardous condition or if any other situation arises that requires a Part 107 operator to cease the flight operation. Any records collected containing personally identifiable information are covered by the Privacy Act and will be managed in accordance with the Department of Transportation system of records notice (SORN) DOT/FAA 854 - Requests for Waivers and Authorizations under 14 C.F.R. § 107 (81 FR 50789, Aug. 2, 2016).

Part 107 Airspace Waivers

The only information collected that may be considered "sensitive in nature" is the personal information associated with the Part 107 operation (aircraft operator name, telephone number, email address, and optionally provided registration number). This personal information is limited

to what is necessary for the FAA to contact Part 107 operators in the event of a hazardous condition or if any other situation arises that requires a Part 107 operator to cease the flight operation. Any records collected are covered by the Privacy Act and will be managed in accordance with the Department of Transportation system of records notice (SORN) DOT/FAA 854 - Requests for Waivers and Authorizations under 14 C.F.R. § 107 (81 FR 50789, Aug. 2, 2016).

Part 107 Operational Waivers

Web Portal

The only information collected that may be considered “sensitive in nature” is the personal information associated with the Part 107 operation (aircraft operator name, telephone number, email address, and optionally provided registration number). This personal information is limited to what is necessary for the FAA to contact Part 107 operators. Any records collected are covered by the Privacy Act and will be managed in accordance with the Department of Transportation system of records notice (SORN) DOT/FAA 854 - Requests for Waivers and Authorizations under 14 C.F.R. § 107 (81 FR 50789, Aug. 2, 2016).

12. Estimate of burden hours for information requested.

Part 107 Airspace Authorizations – Burden Hours

Respondents can submit Part 107 airspace authorization requests through either the web portal or through LAANC. The burden on respondents is intertwined between the two collection activities and will be addressed together below.

When the FAA initially published the 60-Day Notice to the Federal Register the burden hours were projected based on the FAA Aerospace Forecast for Fiscal Years 2017-2037⁴. Since the publication of the 60-Day Notice, the FAA Aerospace Forecast for Fiscal years 2018-2038 has been released⁵, which alters the earlier published numbers as the FAA is now forecasting the size of the small UAS fleet will increase more than the earlier projection from 2018-2020. The earlier projection of increases in the size of the fleet of 40% from 2017 to 2018, 30% from 2018-2019, and 19.6% from 2019 to 2020 has been increased. Therefore, the FAA will change its earlier projection of 160,766 requests over the 3-year period as follows: As of December 2017, the size of the Part 107 small UAS fleet was 102,800⁶. In 2017 (through December 1), the FAA received 29,691 authorization requests via the web portal to conduct Part 107 operations. With a fleet of 102,800 Part 107 small UAS, this results in a ratio of .29 authorization requests per small UAS Part 107 registration. The 2018-2038 forecast projects an increase in the size of the Part 107 small UAS fleet of 43.7% from 2017 to 2018, 44.4% from 2018 to 2019, and 36.1% from 2019 to 2020. The small UAS fleet size at the end of 2017 was 110,604. Therefore, the FAA estimates it will receive 41,736 authorization requests in 2018, 54,203 requests in 2019, and 64,827 requests in 2020. This equates to a total of 203,116 requests and a three-year annual average of 67,705 requests.

⁴ See, https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2017-37_FAA_Aerospace_Forecast.pdf

⁵ See, https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2018-38_FAA_Aerospace_Forecast.pdf

⁶ See, Administrator’s Fact Book – December 2017
(https://www.faa.gov/news/media/2017_Administrators_Fact_Book.pdf)

The FAA estimates that a respondent will require 5 minutes (or .08 hours) to complete the authorization request form using LAANC and .5 hours using the web portal. LAANC launched on October 23, 2017 at ten prototype sites. As of December 31, 2017, respondents have submitted 1,777 authorization requests at the prototype site since LAANC was launched. Of those, 1,641 authorization requests (92.3%) were submitted via LAANC and 136 (7.7%) were submitted via the web portal.

The FAA will begin implementing LAANC at more sites in the second quarter of 2018. This implementation will occur on a rolling basis with full implementation nationally by the end of the third quarter of 2018. As LAANC will not be fully implemented at all sites throughout all of 2018, the FAA will conservatively estimate that 25% of airspace authorizations will occur via LAANC throughout 2018. To estimate the burden on respondents in 2019 and 2020, the FAA will apply the ratio of authorizations requests split between LAANC and the web portal seen at the prototype sites thus far. See Table 1, below, for an estimated calculation on the burden hours on respondents requesting Part 107 airspace authorizations.

Period	Respondents	LAANC Submissions	Web Portal Submissions	Burden (hours)
Year 1 (2018)	46,081	46081(.25) = 11,520	46,081(.75) = 34,561	11,520(.08) + 34,561(.5) = 18,202 hrs
Year 2 (2019)	66,526	66,526(.923) = 61,404	66,526(.077) = 5,123	61,404(.08) + 5,123(.5) = 7,473 hrs
Year 3 (2020)	90,509	90,509(.923) = 83,540	90,509(.077) = 4,992	83,540(.08) + 6,969(.5) = 10,168 hrs
Total	203,116	156,464	46,653	156,464(.08) + 46,653(.5) = 35,844 hrs
Annual Average	67,705	52,155	15,550	11,948 hrs

Table 1 - Burden on Respondents using Web Portal and LAANC

Part 107 Airspace Waivers – Burden Hours

Since Information Collection 2120-0768 began in September 2016, there have been 6,790 requests for airspace waivers from §107.41, or 453 per month. The current growth rate for airspace waivers is flat. However, using an estimated 10% annual growth rate, there would be 7,469 requests in 2018, 8,215 requests in 2019, and 9,037 in 2020. The FAA estimates that completing the airspace waiver application form using the web portal takes .5 hours. See Table 2 below for estimated calculation of the total burden on respondents from 2018-2020 while using the web portal.

Period	Airspace Waiver Respondents	Burden (hours)
Year 1 (2018)	7,469	7,469(.5) = 3,734 hours
Year 2 (2019)	8,215	8,215(.5) = 4,108 hours
Year 3 (2020)	9,037	9,037(.5) = 4,519 hours
Total	24,721	24,721(.5) = 12,361 hours
Annual Average	8,240	4,120 hours

Table 2 - Burden on Respondents Submitting Airspace Waivers using Web Portal

Part 107 Operational Waivers – Burden Hours

In 2017, 4,166 respondents submitted operational waiver request applications through the web portal. The current growth rate for operational waiver requests is flat. However, using an estimated 10% annual growth rate, the FAA estimates 4,583 respondents would request operational waivers in 2018, 5,041 in 2019, and 5,545 in 2020. The total number of respondents over three years would be 15,169 for an average annual number of 5,056 respondents. The FAA estimates that completing the operational waiver application form using the web portal will take 0.5 hours. However, since the average respondent submits 1.3 waiver applications, the resulting average burden is 0.65 hours per respondent. See below Table 3 for a calculation of the total burden on respondents from 2018-2020 and the average annual burden while using the web portal.

Period	Respondents	Respondents Calculation	Burden (hours)	Burden Calculation
Year 1 (2018)	4,583	4,166 + 4,166(.1) = 4,583	2,979	Year 1 Respondents * 0.65 hours (4,583 * 0.65)
Year 2 (2019)	5,041	4,583 + 4,583(.1) = 5,041	3,277	Year 2 Respondents * 0.65 hours (5,041 * 0.65)
Year 3 (2020)	5,545	5,041 + 5,041(.1) = 5,545	3,604	Year 3 Respondents * 0.65 hours (5,545 * 0.65)
Total	15,169	Year 1 + Year 2 + Year 3 (4,583 + 5,041 + 5,545)	9,859	Year 1 + Year 2 + Year 3 (Burden Hours) (4,583 + 5,041 + 5,545) * 0.65
Annual Average	5,056	Total / 3 years	3,286	Total (Burden Hours) / 3 (9,859 / 3)

Table 3 - Burden on Respondents Submitting Operational Waivers Using Web Portal.

Part 107 Airspace Authorizations – Salary/Wages

LAANC & Web Portal

Respondents must use an appropriate web-capable electronic device (e.g., computer or smart phone) to request authorization via the web portal or LAANC. The FAA estimates that the annual burden hours on respondents will be 11,948 (4,173 for LAANC respondents and 7,775 for web portal respondents). The FAA calculates the average wage of respondents to be \$25.40/hour. This number is based on the average wage across all occupations as outlined in the Department of Transportation’s 2016 Departmental Guidance on Valuation of Travel Time in Economic Analysis⁷. Based on the annual estimate of 11,948 hours, the total cost will be \$303,479 (\$105,994 for LAANC respondents and \$197,485 for web portal respondents).

Part 107 Airspace Waivers – Salary/Wages

Web Portal

The FAA estimates that the annual burden hours on respondents requesting airspace waivers will be 4,120 hours. The FAA calculates the average wage of respondents to be \$25.40/hour. This

⁷ See, <https://www.transportation.gov/sites/dot.gov/files/docs/2016%20Revised%20Value%20of%20Travel%20Time%20Guidance.pdf>

number is based on the average wage across all occupations as outlined in the Department of Transportation's 2016 Departmental Guidance on Valuation of Travel Time in Economic Analysis⁸. Based on the annual estimate of 4,120 hours, the total cost will be \$104,648 for all respondents requesting airspace waivers.

Part 107 Operational Waivers – Salary/Wages

Web Portal

The FAA estimates that the annual burden hours on respondents requesting operational waivers will be 3,286. The FAA calculates the average wage of respondents to be \$25.40/hour. This number is based on the average wage across all occupations as outlined in the Department of Transportation's 2016 Departmental Guidance on Valuation of Travel Time in Economic Analysis.⁹ Based on the annual estimate of 3,286 hours, the total cost will be \$83,464.40 for respondents requesting waivers.

13. Estimate of total annual costs to respondents.

Part 107 – Airspace Authorizations

LAANC

The FAA assesses no charge to respondents who request authorizations using LAANC. An individual USS may assess a fee to a respondent to submit a Part 107 operation request through its individual service. This is determined by the USS provider. Since LAANC was launched on October 23, 2017, no USS has levied a fee to respondents

Web Portal

There is no fee to respondents to use the web portal to request Part 107 authorizations.

Part 107 – Airspace Waivers

Web Portal

There is no fee to respondents to use the web portal to request airspace waivers. No special equipment is required for persons to submit airspace waiver request under 14 CFR Part 107.

Part 107 – Operational Waivers

Web Portal

We estimate that there will be no additional start-up costs for this collection. No special equipment is required for persons to submit operational authorization request under 14 CFR Part 107.

⁸ See, <https://www.transportation.gov/sites/dot.gov/files/docs/2016%20Revised%20Value%20of%20Travel%20Time%20Guidance.pdf>

⁹ See, <https://www.transportation.gov/sites/dot.gov/files/docs/2016%20Revised%20Value%20of%20Travel%20Time%20Guidance.pdf>

14. Estimate of cost to the Federal government.

Part 107 Airspace Authorizations

LAANC and the web portal share resources and the costs are intertwined between the two programs. This sharing of resources allows the FAA to save money on cloud hosting fees and other sustainment costs. Additionally, the development of LAANC should result in reduced number of contractors evaluating authorization requests submitted via the web portal. The following costs have been broken out according to (1) system sustainment and maintenance and (2) personnel costs.

System Sustainment and Maintenance

The estimated cost of system sustainment and maintenance for both systems is captured in Table 4.

	2018	2019	2020
Web Portal Sustainment	\$1,600,000	\$1,100,500	\$1,100,500
LAANC Sustainment	\$1,300,000	\$1,800,000	\$2,300,000
Total	\$2,900,000	\$2,900,500	\$3,400,500
Annual Average			\$1,133,500

Table 4 - Estimated System Sustainment and Maintenance Costs

Personnel Costs

The FAA currently employs eight contractors and two federal employees to process Part 107 authorization request from respondents. As LAANC is rolled out at more sites nationally in 2018-2020, the FAA expects the number of contractors used to process Part 107 authorization requests will decrease.

The cost for contractors is \$267,688.90 per year. The cost for federal employees in 2018 will be \$129,869 and a 1.4% annual increase will be applied per the Office of Personnel's Salary Table for 2018. See Table 5 for a calculation of these costs.

ATO	2018	2019	2020	Total
Contractors	8 contractors x \$267,688.90 = \$2,141,511.20	6 contractors x \$267,688.90 = \$1,606,133.40	4 contractors x \$267,688.90 = \$1,090,755.60	\$4,838,400.20
Federal Employees	2 employees x \$129,869 = \$259,738	2 employees x \$131,687.17 = \$263,374.33	2 employees \$133,530.79 = \$267,061.58	\$790,173.91
Total	\$2,401,249.20	\$1,869,507.73	\$1,357,817.18	\$5,628,574.11
Annual Average				\$18,761,91.37

Table 5 - Cost of Contractors and Federal Employees to Process Part 107 Airspace Authorization Requests

Part 107 Airspace Waivers

The following costs have been broken out according to (1) system sustainment and maintenance and (2) personnel costs.

System Sustainment and Maintenance

The system sustainment and maintenance costs for Part 107 airspace waivers are captured in Table 4.

Personnel Costs

The FAA currently employs three contractors and three federal employees to process Part 107 airspace waiver requests. The FAA expects that number to remain consistent for 2018-2020. The cost for contractors is \$267,688.90 per year. The cost for federal employees in 2018 will be \$152,760 and a 1.4% annual increase will be applied per the Office of Personnel’s Salary Table for 2018. See Table 6 below for a summary of estimated costs.

ATO	2018	2019	2020	Total
Contractors	3 contractors x \$267,688.90 = \$803,066.70	3 contractors x \$267,688.90 = \$803,066.70	3 contractors x \$267,688.90 = \$803,066.70	\$2,409,200.10
Federal Employees	3 employees x \$152,760 = \$458,280	3 employees x \$154,898.64 = \$464,695.92	3 employees x \$157,067.22 = \$471,201.66	\$1,394,177.58
Total	\$1,261,346.70	\$1,267,762.62	\$1,274,268.36	\$3,803,377.68
Annual Average				\$1,267,793.56

Table 6 - Cost of Contractors and Federal Employees to Process Part 107 Airspace Waivers

Part 107 Operational Waivers

The following costs have been broken out according to (1) system sustainment and maintenance and (2) personnel costs.

System Sustainment and Maintenance

See above section for system sustainment and maintenance costs. Costs are captured in Table 4.

Personnel Costs

The FAA’s Flight Standards Service (AFS) currently employs six contractors and 12.5 federal employees to process operational waivers request from respondents. See Table 7 below for a breakdown of the respective roles for the contractors and federal employees. The FAA anticipates that as the web portal matures a reduction in time for processing operational waiver requests will result in a 14% decrease in FTE employees in 2020. See Table 7 for a calculation of the costs to process Part 107 operational waivers

AFS	Annual Salary	2018	2019	2020	Total
Contract Support Specialist	\$176,758	5 contractors x \$176,758 = \$883,792	5 contractors x \$176,758 = \$883,792	4 contractors x \$176,547 = \$707,034	\$2,474,618
Contract Supervisor	\$178,547	1 contractor x \$178,547 = \$178,547	1 contractor x \$178,547 = \$178,547	1 contractor x \$178,547 = \$178,547	\$535,641

AFS	Annual Salary	2018	2019	2020	Total
FAA Temp. Support Specialist	\$122,545	5 employees x \$122,545 = \$612,725	5 employees x \$122,545 = \$612,725	4 employees x \$122,545 = \$490,180	\$1,715,630
FAA Support Specialist	\$122,545	6.5 employees x \$122,545 = \$796,543	6.5 employees x \$122,545 = \$796,543	5.5 employees x \$122,545 = \$673,998	\$2,267,084
FAA Supervisor	\$142,284	1 employee x \$142,284 = \$142,284	1 employee x \$142,284 = \$142,284	1 employee x \$142,284 = \$142,284	\$426,852
Total	N/A	\$2,613,891	\$2,613,891	\$2,192,043	\$7,419,825
Annual Average					\$2,473,275

Table 7 - Cost of Contractors and Federal Employees to Process Part 107 Operational Waivers

The annual average cost to the government is \$4,277,484

Part 107 Authorizations/Systems =	\$1,133,500
Part 107 Authorizations/Personnel =	\$1,876,191
Part 107 Airspace Waivers/Personnel =	\$1,267,793
<u>Part 107 Operational Waivers/Personnel =</u>	<u>\$2,473,275</u>
	\$4,277,484

15. Explanation of program changes or adjustments.

Information Collection 2120-0768 was originally approved for 5 burden hours for airspace authorizations. An extension without change to 2120-0768 was subsequently approved that covered airspace authorizations, airspace waivers, and operational waivers and increased the approval to 9500 hours. Finally, an emergency collection was approved that covered airspace authorizations through LAANC and the approval was increased to 9501 hours.

Each of the collection activities under 2120-0768 (airspace authorizations, airspace waivers, and operational waivers) are brand-new activities to the FAA and to the Part 107 respondents. There is great interest in the public in conducting small UAS flight operations, but as the technology is new and the process of integrating small UAS into the NAS is new to the FAA, the FAA had to use its best estimate based on existing facts in each of the earlier requests for approval. The FAA has more data on which to base its estimated burden on respondents and will go through each collection activity in further detail below. This data has shown that the number of requests received across all the collection activities is greater than the requests used to estimate the earlier burden allocation for airspace authorizations, airspace waivers, and operational waivers.

Part 107 Airspace Authorizations

LAANC

In its most recent request, the FAA requested 1 hour of burden for Part 107 airspace authorizations using LAANC. At that time, it was unknown how many respondents would use LAANC over the web portal or if there would be any USSs available to process airspace authorization requests. LAANC launched on October 23, 2017 and has expanded to include ten prototype sites through November 9, 2017. As discussed earlier, 92.3% of airspace authorization

requests at these ten prototype sites were submitted through LAANC vs. the web portal. The FAA is using this ratio to estimate burden allocations in 2018-2020.

The earlier estimates of total airspace authorization requests received, including both LAANC and the web portal, were based on requests received at the time the estimates were made. The number of Part 107 airspace authorizations requests received were higher than anticipated. Based on actual usage through December 2017 and the FAA's calculation of growth of the small UAS fleet (43.7% in 2018, 44.4% in 2019, and 36.1% in 2020), the FAA is requesting an additional 11,831 hours (3,944 hours annually) for respondents using LAANC.

Web Portal

In its most recent request, the FAA requested 7,094 hours (to cover one year) for airspace authorizations using the web portal. At the time this was requested, the FAA had data only for the period covering September 2016 – December 2016. Based on actual usage through December 2017 and the FAA's calculation of the growth of the small UAS fleet (43.7% in 2018, 44.4% in 2019, and 36.1% in 2020), the FAA is requesting an additional 20,518 hours (6,839 hours annually) for respondents using the web portal to submit airspace authorizations. As LAANC is implemented nationally, it is anticipated that the burden on respondents using the web portal will be reduced over time as it is expected that more respondents will choose to use LAANC over the web portal. Therefore, despite the initial increase in burden on respondents, the FAA anticipates that over the course of the three years for the Information Collection that the burden on web portal respondents will decrease from the earlier request.

Part 107 Airspace Waivers

Web Portal

In its most recent request, the FAA requested 1,707 hours (for one year) for airspace waivers using the web portal. At the time this was requested, the FAA had data that covered only the period from September 2016 – December 2016. Based on actual usage through December 2017, the fact that airspace waiver requests have remained flat, and the FAA's projected growth of the small UAS fleet, the FAA is requesting an additional 10,654 hours (2,413 hours annually) for respondents submitting airspace waiver requests through the web portal.

Part 107 Operational Waivers

Web Portal

In its most recent request, the FAA requested 1,707 hours (for one year) for operational waivers using the web portal. At the time this was requested, the FAA had data that covered only the period from September 2016 – December 2016. Based on actual usage through December 2017, the fact that operational waiver requests have remained flat, and the FAA's projected growth of the small UAS fleet, the FAA is requesting an additional 8,152 hours (1,579 hours annually) for respondents submitting operational waiver requests through the web portal.

16. Publication of results of data collection.

Part 107 Airspace Authorizations

LAANC

The FAA does not plan on publishing any data related to Part 107 airspace authorizations or request for authorizations covered by this request to collect information.

Web Portal

The FAA does not plan on publishing any data related to Part 107 airspace authorizations or request for authorizations covered by this request to collect information.

Part 107 Airspace Waivers

Web Portal

The FAA does not plan on publishing any data related to airspace waivers or request for airspace waivers covered by this request to collect information.

Part 107 Operational Waivers

Web Portal

No requirement exists for any of the information collected to be published for statistical use. The FAA, however, posts online the waiver decisions, as described in DOT/FAA System of Records Notice 854 (Requests for Waivers and Authorizations under 14 C.F.R. Part 107), 81 FR 50789 (Aug. 2, 2016).

17. Approval for not displaying the expiration date of OMB approval.

The FAA is not seeking approval not to display the date of expiration of this information collection.

18. Exceptions to certification statement.

There are no exceptions to the certification statement for this information collection.