

Federal Aviation Administration

SUPPORTING STATEMENT

Airspace Authorization in Controlled Airspace under 49 U.S.C. 44809

INTRODUCTION

This is to request the Office of Management and Budget's (OMB) three-years approval for a new information collection titled Airspace Authorizations in Controlled Airspace under 49 U.S.C. § 44809. The request will allow the Federal Aviation Administration (FAA) to leverage automated means of collecting and processing airspace authorizations for a new population of respondents.

Part A. Justification

1. Circumstances that make collection of information necessary.

Congress enacted the FAA Reauthorization Act of 2018 (the Act), which was signed into law by the President on October 5, 2018. Included within the Act is 49 U.S.C. § 44809(a), which established what are referred to as limited recreational operations of unmanned aircraft.¹ Among the listed limitations that must be met, 49 U.S.C. § 44809(a)(5) requires that these small unmanned aircraft (sUAS) operators receive an authorization from the FAA prior to conducting any flight operation of a sUAS in Class B, Class C, Class D, or within the lateral boundaries of the surface area of Class E airspace designated for an airport.

The FAA is proposing to allow respondents for this new collection to submit airspace authorizations to conduct sUAS flight operations in controlled airspace through two different means: (1) The Low Altitude Authorization and Notification Capability (LAANC) and (2) a web portal. Both LAANC and the web portal currently process airspace authorizations submitted by sUAS operators who fly under 14 CFR part 107 (certificated remote pilots) pursuant to OMB Control Number 2120-0768. The systems will collect and handle authorization requests from respondents for this new collection in the same manner as they are under part 107.

Low Altitude Authorization and Notification Capability (LAANC)

LAANC is a tool provided by the FAA and UAS Service Suppliers (USSs) to sUAS respondents to process requests for authorization to conduct sUAS 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 sUAS respondents and the FAA to facilitate the authorization request process. LAANC USSs develop and operate software applications that transmit requests for authorization to the FAA and communicate the FAA's response (authorization or denial of authorization) to the UAS operator. A list of approved USSs is located on the FAA website.²

¹Limited recreational operations are those operations otherwise excepted from FAA certification and operating authority by adhering to all of the limitations listed in 49 U.S.C. 44809(a)(1) thru (8). Please note that limited recreational operators fall under a broader category of individuals known as sUAS operators and will generally be referred to as sUAS operators in this document. However, all calculations regarding respondents, burden, and costs will only pertain to the new limited recreational operations.

² https://www.faa.gov/uas/programs_partnerships/data_exchange/. This list is continually updated to reflect current status of USSs and will indicate if a USS provides services to the public under 49 U.S.C. § 44809, 14 CFR Part 107, or both.

Using LAANC, a sUAS respondent submits a request for authorization to operate a sUAS 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. The FAA developed UAS Facility Maps to allow for the authorization of flights in controlled airspace. The maps include a number of grid cells surrounding airports; each grid cell is a square mile in size and are assigned an approved flight altitude between 0 and 400 feet. The FAA has determined that any authorization request below the assigned altitude may fly with airspace authorization without requiring a person to analyze the request. The request for airspace authorization is sent from the USS to the FAA and automatically validated against the UAS Facility Maps. A response is then provided by FAA through the USS to the sUAS respondent advising whether the request for authorization is approved or denied.

The information requested from a sUAS 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 DroneZone web portal is an enterprise IT solution developed to consolidate several sUAS support systems 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 in restricted airspace. 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 sUAS 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 sUAS in the NAS.

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

Respondents are sUAS operators who are seeking to fly in controlled airspace under 49 U.S.C. § 44809(a)(5) (sUAS operators flying “limited recreational operations” also referred to as “recreational flyers”). Respondents are required to provide their name, telephone number, email address, and information related to the date, time, place, and altitude of any planned flight operations in controlled airspace. Reporting this information is required for recreational flyers to receive authorization to fly a sUAS in controlled airspace. There are no record-keeping or disclosure requirements.

The information requested from respondents 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 airspace.³

The FAA uses the information provided by respondents via either LAANC or the web portal for the same purposes. 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 sUAS in controlled airspace. sUAS operating in controlled airspace will be entering airspace potentially occupied by a variety of other aviation vehicles. FAA’s Air Traffic Control must provide

³ See, 49 U.S.C. §§ 40103 and 44701; 49 U.S.C. § 44807

authorization of planned sUAS 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 sUAS operations, whether through LAANC or via the web portal, is used by the FAA to provide (or deny) authorization to conduct a sUAS operation consistent with the FAA's legal mandate to maintain a safe and efficient airspace.

3. Extent of automated information collection.

Airspace authorizations are requested via LAANC and the web portal. Each possesses different degrees of automation. Submissions are made electronically under both systems. The FAA has chosen to use LAANC and the web portal to process airspace authorization requests from sUAS operators because by automating the process and providing an electronic manner of compliance, the FAA is making the process less burdensome and more efficient for the respondents.

LAANC

LAANC is a highly automated system that provides near real time authorizations. All information for requests for airspace authorization that fall within the UAS Facility Map altitudes, 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.

4. Efforts to identify duplication.

LAANC

The FAA is the only government entity that collects or requests information from recreational flyers related to requests to conduct sUAS operations in class B, C, D, or within the lateral boundaries of the surface area of class E airspace adjacent to an airport. 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 requests information from recreational flyers related to requests to conduct sUAS operations in class B, C, D, or within the lateral boundaries of the surface area of class E airspace adjacent to an airport. 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.

5. Efforts to minimize the burden on small businesses.

LAANC

The requested information is limited to the minimum information needed for the FAA to approve or deny a requested sUAS 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 businesses to request and receive authorization to conduct sUAS 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 sUAS 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.

6. Impact of less frequent collection of information.

The FAA has a statutory mandate to control and maintain a consistently high level of civil aviation safety. The information requested for airspace authorizations is necessary to ensure that each unique operation will be conducted safely. If the FAA did not collect this information from respondents, then the respondents would not be able to request authorization or conduct any sUAS operations in controlled airspace.

7. Special circumstances.

There are no special circumstances for this information collection.

8. Compliance with 5 CFR 1320.8.

A Federal Register Notice published on March 11, 2018 (84 FR 8778) solicited public comment. No comments were received.

9. Payments or gifts to respondents.

No gifts or payments are provided to respondents.

10. Assurance of confidentiality

There is no assurance of confidentiality provided to respondents.

11. Justification for collection of sensitive information .

The only information collected that may be considered “sensitive in nature” is the personal information associated with the sUAS 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 sUAS operators in the event of a hazardous

condition or if any other situation arises that requires a sUAS operator to cease the flight operation. Records subject to the Privacy Act will be managed in accordance with the submitted update for the Department of Transportation system of records notice (SORN) DOT/FAA 854 – Small Unmanned Aircraft Systems (sUAS) Waivers and Authorizations(84 FR 32512, July 8, 2019).

12. Estimate of burden hours for information requested.

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

Previously, limited recreational operators were exempt from seeking authorization to fly in controlled airspace. Therefore, the FAA does not possess historical data specific to how many limited recreational operators will seek to fly sUAS in controlled airspace. The FAA will make an estimate of the number of anticipated limited recreational sUAS operations and corresponding burden based upon the FAA Aerospace Forecast: Fiscal Years 2019-2039⁴, the number of recreational sUAS registrations, and the number of airspace authorizations requested by part 107 sUAS operators. As part 107 sUAS operators have been required to request airspace authorization since late 2016, the FAA does have historical data specific to the number of requests made in comparison to the number of part 107 registrations.

As of the end of January 2019, recreational sUAS operators had registered 990,764 sUAS with the FAA. As a point of comparison, 313,279 part 107 sUAS registrations were recorded. LAANC has been gradually rolled out to facilities nationwide since October 2017. As of September 2018, LAANC was rolled out at all federal facilities. For the purposes of calculating the estimated burden on the limited recreational respondents, the FAA will use the ratio of requests received between LAANC and the web portal since September 2018 for part 107 sUAS operators.

From September 1, 2018 – January 27, 2019, the FAA received 41,359 airspace authorization requests from part 107 sUAS operators. Extrapolated over the course of the full year this would be 99,694 requests. With a fleet of 313,279 part 107 sUAS, this is a ratio of .318 requests per part 107 registration. Of the 41,359 authorization requests, 35,249 or 85.2% were received through LAANC and 6,110 or 14.8% through the web portal. When calculating the estimated burden on the limited recreational respondents for this collection, the FAA will use the same ratio of .318 requests per registration and 85.2% of the requests received through LAANC and 14.8% through the web portal.

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 2018-2038⁵. Since the publication of the 60-Day Notice, the FAA Aerospace Forecast for 2019-2039 has been released, which alters the earlier published numbers as the FAA is now forecasting the size of the small

⁴ Aerospace Forecast is found at https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2019-39_FAA_Aerospace_Forecast.pdf

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

UAS recreational fleet will be less than previously estimated. The new FAA Aerospace Forecast projects that recreational number of sUAS will increase at a rate of 4.8% from 2018 to 2019, 3.6% from 2019 to 2020, and 1.5% from 2020 to 2021. Based on the 990,764 recreational registrations and using the growth rate and ratio described above, the FAA estimates there 330,186 respondents in 2019, 342,073 in 2020, and 347,704 in 2021. The FAA estimates that a respondent will require 5 minutes (or .08 hours) to complete the authorization request form using LAANC and 30 minutes (or .5 hours) using the web portal. Because the web portal is not as automated as LAANC, the FAA estimates that respondents will take longer to input data related to the flight plan and values such as those contained in the UAS Facility Maps.

See Table 1, below, for an estimated calculation on the burden hours on respondents requesting airspace authorizations.

Table 1. Burden on Respondents using Web Portal and LAANC.

| Period | Respondents | LAANC Submissions | Web Portal Submissions | Burden (hours) |
|----------------|-------------|---------------------------|---------------------------|--|
| Year 1 (2019) | 330,186 | 330,186(.852) = 281,318 | 330,186(.148) = 48,868 | 281,318(.083) + 48,868(.5) = 47,877 hours (23,443 for LAANC and 24,434 for Web Portal) |
| Year 2 (2020) | 342,073 | 342,073(.852) = 291,446 | 342,073(.148) = 50,627 | 291,446(.083) + 50,627(.5) = 49,601 hours (24,287 for LAANC and 25,314 for Web Portal) |
| Year 3 (2021) | 347,704 | 347,704(.852) = 296,244 | 347,704(.148) = 51,460 | 296,244(.083) + 51,460(.5) = 50,417 hours (24,687 for LAANC and 25,730 for Web Portal) |
| Total | 1,019,963 | 1,019,963(.852) = 869,008 | 1,019,963(.148) = 150,955 | 869,008(.083) + 150,955(.5) = 147,895 hours |
| Annual Average | 339,988 | 289,669 | 50,319 | 49,299 hours (24,139 for |

| | | | | |
|--|--|--|--|--|
| | | | | LAANC and 25,160 for 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 49,299 (24,139 for LAANC respondents and 25,160 for web portal respondents). The FAA calculates the average wage of respondents (including overhead and fringe benefits to be \$42.49/hour. This number is based on the average wage across all occupations as outlined in the U.S. Bureau of Labor Statistics “Employer Costs for Employee Compensation – December 2018⁶”, which calculates the average wage at \$36.32 across all occupations. This wage includes fringe benefits, but not costs for overhead. The FAA increased the hourly wage by 17 percent to account for overhead costs such as rent, utilities, and office equipment⁷ for a total wage of \$42.49. Based on the annual estimate of 49,299 hours, the total cost will be \$2,094,714.51 (\$1,025,666.11 for LAANC respondents and \$1,069,048.40 for web portal respondents).

13. Estimate of total annual costs to respondents.

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 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 authorizations.

14. Estimate of cost to the Federal government.

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.

⁶ See, <https://www.bls.gov/news.release/pdf/ecec.pdf>

⁷ Source: Cody Rice, U.S. Environmental Protection Agency, “Wage Rates for Economic Analyses of the Toxics Release Inventory Program” (June 10, 2002), <https://www.regulations.gov/document?D=EPA-HQ-OPPT-2014-0650-0005>

Table 4. Estimated System Sustainment and Maintenance Costs

| | 2019 | 2020 | 2021 |
|------------------------|--------------------|--------------------|--------------------|
| Web Portal Sustainment | \$650,00 | \$650,000 | \$650,000 |
| LAANC Sustainment | \$1,800,00 | \$2,300,000 | \$2,800,000 |
| Total | \$2,450,000 | \$2,950,000 | \$3,450,000 |

Personnel Costs

The FAA currently employs eight contractors and two federal employees to process airspace authorization requests from respondents. As LAANC is rolled out at more sites nationally in 2019-2021, the FAA expects the number of contractors used to process airspace authorization requests will decrease. As LAANC availability increases, the FAA expects more respondents to choose to use LAANC rather than the web portal, thereby increasing automation of the process.

The cost for contractors is \$267,688.90 per year. The cost for federal employees in 2018 was \$129,869 and a 1.4% annual increase will be applied per the Office of Personnel's Salary Table for 2018. This number was determined by using the average wage of Grade 12, Step 5. See Table 5 for a calculation of these costs.

Table 5. Cost of Contractors and Federal Employees to Process Airspace Authorization Requests.

| ATO | 2019 | 2020 | 2021 | Total |
|-------------------|---|---|---|-----------------------|
| Contractors | 6 contractors x \$267,688.90 = \$1,606,133.40 | 4 contractors x \$267,688.90 = \$1,090,755.60 | 4 contractors x \$267,688.90 = \$1,090,755.60 | \$3,787,644.60 |
| Federal Employees | 2 employees x \$131,687.17 = \$263,374.33 | 2 employees \$133,530.79= \$267,061.58 | 2 employees \$135,400.22.79= \$270,800.44 | \$801,236.35 |
| Total | \$1,869,507.73 | \$1,357,817.18 | \$1,361,556.04 | \$4,588,880.95 |

The total cost to the government including both employee costs and system sustainment and maintenance cost is \$13,438,881 or \$4,479,627 per year.

15. Explanation of program changes or adjustments.

This is a new information collection.

16. Publication of results of data collection.

The FAA will not be publishing any data related to airspace authorizations or requests for authorizations covered by this request to collect information.

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.