United States Department of Transportation

Federal Aviation Administration

SUPPORTING STATEMENT

OMB 2120-0783

UNMANNED AIRCRAFT REMOTE IDENTIFICATION MESSAGE ELEMENTS

INTRODUCTION

The Department of Transportation (DOT) submits this

Supporting Statement to the Office of Management and Budget (OMB) in preparation for requesting an approval for information collections related to the final rule titled "Remote Identification of Unmanned Aircraft " (Remote Identification rule) (RIN 2120-AL31). The DOT requests that this information collection approval include information broadcast directly from certain unmanned aircraft, specifically standard remote identification unmanned aircraft and unmanned aircraft equipped with a remote identification broadcast module. With certain limited exceptions, the Remote Identification rule prohibits the operation of unmanned aircraft within the airspace of the United States unless the unmanned aircraft are capable of broadcasting certain remote identification message elements throughout their operation. An exception to the general rule is when an unmanned aircraft is not equipped with remote identification equipment but is operated within visual line of sight and within an FAA-recognized identification area.

A. JUSTIFICATION

1. ***Explain the circumstances that make the collection of information necessary.***

The FAA is integrating UAS operations into the airspace of the United States through a phased, incremental, and risk-based approach. An important next step in the integration process is the promulgation of regulatory requirements to enable the remote identification of unmanned aircraft operating in the airspace of the United States. Remote identification of unmanned aircraft is

necessary to ensure public safety and the safety and efficiency of the airspace of the United States. Section 2202 of the FAA Extension, Safety, and Security Act of 2016, Pub. L. 114-190 (July 15, 2016), requires the Administrator to convene industry stakeholders to facilitate the development of consensus standards for remotely identifying operators and owners of UAS and associated unmanned aircraft and to issue regulations or guidance based on any standards developed. The Administrator has authority under 49 U.S.C. 44805 to establish a process for, among other things, accepting risk-based consensus safety standards related to the design and production of small UAS. Under 49 U.S.C. 44805(b)(7), one of the considerations the Administrator must take into account prior to accepting such standards is any consensus identification standard regarding remote identification of unmanned aircraft developed pursuant to section 2202 of Pub. L. 114-190.

Additionally, section 44809(f) of 49 U.S.C. provides that the Administrator is not prohibited from promulgating rules generally applicable to unmanned aircraft, including those unmanned aircraft eligible for the exception for limited recreational operations of unmanned aircraft. Among other things, this authority extends to rules relating to the registration and marking of unmanned aircraft and the standards for remotely identifying owners and operators of UAS and associated unmanned aircraft.

Remote identification will provide airspace awareness to the FAA, national security agencies, and law enforcement entities. This information could be used to distinguish compliant airspace users from those potentially posing a safety or security risk. The remote identification framework provides UAS specific data, which may support the development of new technologies to facilitate future, more advanced operational capabilities, such as detect-and-avoid and aircraft-to-aircraft communications that support beyond visual line of sight operations.

The Remote Identification rule requires unmanned aircraft with remote identification equipment to broadcast remote identification message elements directly from the unmanned aircraft using radio frequency spectrum in accordance with 47 CFR part 15, where operations may occur without an Federal Communications Commission (FCC) individual license. These unmanned aircraft include standard remote identification unmanned aircraft and unmanned aircraft equipped with remote identification broadcast modules.

A standard remote identification unmanned aircraft must be capable of broadcasting the following remote identification message elements:
(a) The identity of the unmanned aircraft consisting of:
(1) A serial number assigned to the unmanned aircraft by the person responsible for the production of the standard remote identification unmanned aircraft; or
(2) A session ID.
(b) An indication of the latitude and longitude of the control station.
(c) An indication of the geometric altitude of the control station.
(d) An indication of the latitude and longitude of the unmanned aircraft.
(e) An indication of the geometric altitude of the unmanned aircraft.
(f) An indication of the velocity of the unmanned aircraft.
(g) A time mark identifying the Coordinated Universal Time (UTC) time of applicability of a position source output.
(g) An indication of the emergency status of the unmanned aircraft.

A remote identification broadcast module must be capable of broadcasting the following remote identification message elements:
(a) The identity of the unmanned aircraft consisting of the serial number assigned to the remote identification broadcast module by the person responsible for the production of the remote identification broadcast module.
(b) An indication of the latitude and longitude of the unmanned aircraft.
(c) An indication of the geometric altitude of the unmanned aircraft.
(d) An indication of the velocity of the unmanned aircraft.
(e) An indication of the latitude and longitude of the take-off location of the unmanned aircraft.
(f) An indication of the geometric altitude of the take-off location of the unmanned aircraft.
(g) A time mark identifying the Coordinated Universal Time (UTC) time of applicability of a position source output.

The collection of this information in the remote identification message elements is necessary to comply with the statutory requirement to develop standards for remotely identifying operators and owners of unmanned aircraft. The collection of this information will also provide airspace

awareness to enable the FAA, national security agencies, and law enforcement entities to distinguish compliant airspace users from those potentially posing a safety or security risk.

2. *Indicate how, by whom, and for what purpose the information is to be used.*

Unmanned aircraft with remote identification are mandated to broadcast the remote identification message elements addressed in this supporting statement, on occasion (when the unmanned aircraft with remote identification is operated in the airspace of the United States). This requires the disclosure of the unmanned aircraft.

The remote identification message elements that operators are required to broadcast under this rule are considered publicly accessible information as they may be available to the public. The remote identification message elements broadcast directly from the unmanned can be received by anyone who has an equipment that receives broadcast messages. The FAA considers that there is no more inherent right to privacy in the physical location of either the unmanned aircraft or the control station than there is in the location of manned aircraft.

The information broadcast in the message elements will be used by the FAA and other Federal partners to provide airspace awareness of unmanned aircraft operations in the airspace of the United States, which could be used to distinguish compliant airspace users from those potentially posing a safety or security risk.

3. *Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection.*

The collection of information through the broadcasting of the message elements from a standard remote identification unmanned aircraft or remote identification broadcast module is entirely automatic. The collection uses automated, electronic, and related technological collection techniques. This framework makes it relatively simple and straightforward for individuals to comply with the broadcast requirements by operating unmanned aircraft that are standard remote identification unmanned aircraft or unmanned aircraft equipped with a remote identification broadcast module, and are produced to meet the minimum performance requirements of the rule.

Persons operating unmanned aircraft may comply with the remote identification requirements in one of three ways. First, persons may use a standard remote identification unmanned aircraft that broadcasts the message elements directly from the unmanned aircraft. A person operating a standard remote identification unmanned aircraft that could no longer broadcast the message elements must land as soon as practicable.

Second, persons may use an unmanned aircraft produced without remote identification that is equipped with a remote identification broadcast module by either a software upgrade or by securing the module to the unmanned aircraft prior to takeoff. The broadcast module broadcasts the message elements directly from the unmanned aircraft. The person manipulating the flight controls of the unmanned aircraft system, where the unmanned aircraft is equipped with the remote identification broadcast module, must be able to see the unmanned aircraft at all times throughout the operation..

The third way to comply with the remote identification requirements is to operate an unmanned aircraft without remote identification at an FAA-recognized identification area. Because these types of operations do not involve the broadcast of message elements, they were not considered as part of this information collection.

A person can operate a standard remote identification unmanned aircraft only if: (1) it has a serial number that is listed on an FAA-accepted declaration of compliance; (2) its remote identification equipment is functional and complies with the requirements of the rule from takeoff to shutdown; (3) its remote identification equipment and functionality have not been disabled; and (4) the Certificate of Aircraft Registration of the unmanned aircraft used in the operation must include the serial number of the unmanned aircraft, as per applicable requirements of parts 47 and 48, or the serial number of the unmanned aircraft must be provided to the FAA in a notice of identification pursuant to § 89.130 prior to the operation.

A person can operate an unmanned aircraft equipped with a remote identification broadcast module only if: (1) the remote identification broadcast module meets the requirements of this rule; (2) the serial number of the remote identification broadcast module is listed on an FAA-accepted declaration of compliance; (3) the Certificate of Aircraft Registration of the unmanned aircraft used in the operation includes the serial number of the remote identification broadcast

module, or the serial number has been provided to the FAA on a notice of identification; (4) from takeoff to shutdown the remote identification broadcast module broadcasts the remote identification message elements from the unmanned aircraft; and (5) the person manipulating the flight controls of the unmanned aircraft system must be able to see the unmanned aircraft at all times throughout the operation.

Under the Remote Identification final rule, standard remote identification unmanned aircraft must be designed and produced such that the remote identification functionality is always enabled. Standard remote identification unmanned aircraft and remote identification broadcast modules must also be designed and produced to notify the person manipulating the flight controls of the unmanned aircraft of any remote identification malfunctions, failures, or anomalies.

All message elements are required to be broadcast directly from the unmanned aircraft without input from the operator.

4. *Describe efforts to identify duplication.*

The FAA does not anticipate receiving any duplicate data because there has not been any collection from this specific population before. The FAA knows of no other agency collecting the same information. The information sought is specific to unmanned aircraft being operated in the airspace of the United States. The information is only available from standard remote identification unmanned aircraft or unmanned aircraft equipped with a remote identification broadcast module, not from any other source.

5. *If the collection of information has a significant impact on a substantial number of small businesses or other small entities.*

The information collection makes no distinction between whether the unmanned aircraft operator is a private person, owner of a small business, or commercial operator.

6. *Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.*

Without this information collection, compliance with the statutory requirement will not be possible. As a result, the FAA will have a greatly diminished ability to ensure public safety and the safety and efficiency of the airspace of the United States. Absence of the information may delay the development of new technologies to facilitate future, more advanced operational capabilities, such as detect-and-avoid and aircraft-to-aircraft communications that support beyond visual line of sight operations. Furthermore, the inability to collect this information would prevent the FAA, national security agencies, and law enforcement entities from having airspace awareness, which could be used to distinguish compliant airspace users from those potentially posing a safety or security risk.

7. *Explain any special circumstances that require the collection to be conducted in a manner inconsistent with the general information collection guidelines in 5 CFR 1320.5(d)(2).*

The collection of information is consistent with the guidelines in 5 CFR 1320.5(d)(2)(i)-(viii).

8. *Describe efforts to consult persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.*

On December 31, 2019, the FAA published the Remote Identification of Unmanned Aircraft Systems notice of proposed rulemaking (NPRM) for public comment—along with it the proposed information collection on remote identification message elements. The NPRM and the proposed information collection on remote identification message elements provided the public with an opportunity to provide input concerning the proposed information collections. Though the public provided comments on the NPRM, no comments were provided specifically to the information collection. On January 15, 2021, the FAA published the final rule (86 FR 4390).

9. ***Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.***

There are no gifts or payments to respondents.

10. ***Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.***

No assurance of confidentiality is being provided. However, the FAA is not requiring that the identity of the owner of the unmanned aircraft be included in the message elements, because the message elements may generally be available to the public. The message elements that the FAA is requiring are the minimum necessary to achieve the FAA's safety and security goals. The FAA has determined that requiring other information would potentially raise privacy concerns. However, owner information will still be available to the FAA and law enforcement because the FAA retains the ability to correlate the serial number of a standard remote identification unmanned aircraft or broadcast module with the owner's registration information.

As noted, the remote identification message elements are publicly accessible. The FAA considers that there is no more inherent right to privacy in the physical location of either the unmanned aircraft or the control station than there is in the location of manned aircraft. The FAA requires in this rule that the broadcast message be sent using radio frequency spectrum in accordance with 47 CFR part 15, where operations may occur without a Federal Communications Commission (FCC) individual license, which means that this message could potentially be received by any device capable of receiving that broadcast.

Although the serial number or session ID could be associated with an individual through the FAA's registration database, at this time, the FAA does not intend to make registration data held under 14 CFR part 48 available to the general public. The FAA may provide registration data associated with a particular serial number or session ID to authorized persons from law enforcement or Federal Government.

11. ***Provide additional justification for any questions of sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.***

There are no questions of a sensitive nature.

12. ***Provide estimates of hour burden of the collection of information.***

To transmit remote identification message elements, each remote pilot would be required to operate either standard remote identification unmanned aircraft or unmanned aircraft equipped with a remote identification broadcast module. The collection of information through the broadcasting of the message elements is entirely automatic.

The following table shows the number of respondents who will be required to transmit remote identification message elements starting 18 months after the effective date of the final rule.

Table 1a: Respondents Transmitting Message Elements

Year	Total Respondents	Burden Hours
1		
2	269,600	Minimal Impact/Automated
3	1,160,669	Minimal Impact/Automated

This results in an average of 476,756 respondents per year.

13. ***Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information.***

There are no capital or start up costs or operation and maintenance components affiliated with the information collection.

14. ***Provide estimates of annualized cost to the Federal Government.***

There are no annualized costs to the Federal Government generated by the transmission of the remote identification message elements.

15. ***Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.***

This new collection of information will provide the identity and location of unmanned aircraft operating in the airspace of the United States, which could be used by the FAA, national security agencies, and law enforcement entities to distinguish compliant airspace users from those potentially posing a safety or security risk.

16. ***For collections of information whose results will be published, outline plans for tabulation and publication.***

No results of the information collection will be published.

17. ***If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.***

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

18. ***Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.***

There are no exceptions to the certification statement.