

## Supporting Statement – Part A

**Title of information collection:** NASA Aviation Safety Reporting System (ASRS) and Related Voluntary Safety Reporting System (VSRS).

**OMB control number:** 2700-0172

**Type of information collection:** Renewal of a previously approved collection

**Abstract:** The NASA Ames Research Center's Human Systems Integration Division oversees voluntary safety reporting systems (VSRS), including the National Aeronautics Space Administration (NASA) Aviation Safety Reporting System (ASRS) and the Confidential Close Call Reporting System (C3RS), which allow individuals involved in the safety-critical domains of aviation and railway operations to report safety incidents, events, or situations. This voluntarily submitted safety data is utilized by NASA, the Federal Aviation Administration (FAA), the Federal Railroad Administration (FRA), and other organizations to identify deficiencies and discrepancies in the transportation system and strengthen human factors safety research. Both ASRS and C3RS collect information on incidents, near-misses, and close calls in transportation safety, excluding accidents and criminal events.

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

The NASA Ames Research Center, Human Systems Integration Division, manages voluntary safety reporting systems (VSRS) to collect and share safety information including the Aviation Safety Reporting System (ASRS) and the Confidential Close Call Reporting System (C3RS). Both systems are voluntary reporting systems for the reporting of safety incidents, events, or situations. Respondents include any participant involved in safety-critical domains such as aviation or railway operations including commercial and general aviation pilots, rotorcraft pilots, drone operators, air traffic controllers, flight attendants, ground crews, maintenance technicians, dispatchers, train engineers, conductors, and other members of the public.

NASA operates the ASRS serving as the independent third party for the FAA. The work is conducted under an Interagency Agreement and the governing document is published by the FAA in advisory Circular 0046F

[https://www.faa.gov/documentLibrary/media/Advisory\\_Circular/AC\\_00-46F.pdf](https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_00-46F.pdf)

NASA operated the C3RS serving as the independent third party for the FRA. This work is conducted under an Interagency Agreement between NASA and the FRA. The operation of the program is detailed in Memorandum of Agreements between the FRA and railroad carriers

<https://railroads.dot.gov/railroad-safety/divisions/safety-partnerships/C3RS/participating-railroads>

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

The information collected is used to improve safety in the national transportation system, (specifically the aviation and rail domains).

The reporting programs enable the identification of hazards and system deficiencies and issues alert messages to persons and agencies in a position to address/correct them. Managed through NASA Ames Research Center (ARC), the ASRS database serves the FAA, aviation industry, NASA, and other organizations world-wide who are engaged in research and the promotion of flight safety. C3RS serves the FRA and the railroad industry.

The reported safety data are used to:

- Identify deficiencies and discrepancies in the national transportation system to facilitate remedy by appropriate authorities.
- Support planning and process improvements.
- Strengthen the foundation of transportation safety research. This is particularly important since it is generally conceded that over two-thirds of all aviation accidents and incidents have their roots in human performance errors
- Enhance the basis for human factor research and recommendations for future procedures, operations, facilities, and equipment.

**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.**

Over 99 per cent of the voluntary reports are submitted through secure, electronic methods; although paper report submissions are also accepted because it is vital that no member of the transportation sectors be excluded from reporting a safety concern. The electronic format may be completed and filed on-line through secure transmission. The ability to receive reports electronically increases the efficiency of report processing.

The ASRS reports are accessed at <https://asrs.arc.nasa.gov>

The C3RS reports are accessed at <https://C3RS.arc.nasa.gov>

**4. Describe efforts to identify duplication.**

There is no duplication as there are no other sources available to collect this information. NASA was selected by the FAA and FRA to perform the analysis of safety information as an independent, third-party between the regulator and the industry, due to the public's trust in NASA. By reporting directly to NASA, rather than an employer or the regulatory/enforcement agency, reporters are assured confidentiality and protections against punitive actions thus ensuring a steady stream of vital safety data. The NASA role provides a unique avenue to obtain

safety information not available through other means. The nature of this agreement between FAA and NASA is established in the FAA Advisory Circular 00-46F ([https://www.faa.gov/documentLibrary/media/Advisory\\_Circular/AC\\_00-46F.pdf](https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_00-46F.pdf))

In cases where commercial companies already collect safety reports, we facilitate an electronic transfer of the data directly to ASRS to eliminate duplication of effort and reduce the burden of reporting.

**5. If the collection of information impacts small businesses or other small entities (Item 5 of the OMB Form 83-I), describe the methods used to minimize burden.**

There is no impact on small businesses or other small entities. Reports that are submitted are from individuals and not business entities.

**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.**

Any reduction in voluntary reporting would significantly reduce the availability of safety information provided voluntarily that describe safety events; some very hazardous. There is no other voluntary, confidential, non-punitive reporting option available to many of these individuals. Respondents are not required to file these reports with any frequency, rather the respondents decide when and how often to submit.

Under AC-0046-F (ASRS) and per Memorandum of Understanding between Rail Carriers and FRA, reporters are entitled to protection against civil fines, certificate action, and or employment action. If these protections are removed, there would be a significant loss of safety data.

**7. Explain any special circumstances that would cause an information collection to be conducted in an exceptional manner.**

There are no special circumstances. The collection of information is conducted in a manner consistent with the guidelines in 5 CFR 1320.6.

**8. Provide the date and page number of publication in the Federal Register for the 60-day and 30-day FNRS, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB.**

**60-day FRN:** [90 FR 19007](#) on 5/5/2025. Comments were received. Summary below.

**30-day FRN:** [90 FR 43644](#) on 9/10/2025.

60-Day Comments summary: In total, 640 comments were received expressing overwhelming support for the value of the voluntary reporting programs citing the importance of these safety data for training and sharing lessons learned, contributing to safety culture and making improvements in the national transportation systems. Comments received, attachments, and comments posted to the docket can be found in the following link:

<https://www.regulations.gov/docket/NASA-2025-0004>

Comments are summarized in each section below.

- (1) Whether the proposed collection of information is necessary for the proper performance of the functions of NASA, including whether the information collected has practical utility.

These excerpts from the 640 submitted comments highlight the perceived value and practical utility of the voluntary reporting systems:

- "ASRS is one of the most important aviation safety tools"
- "ASRS is probably the most important aviation safety advance since seat belts.
- .... [ASRS] "encourages honest reporting of mistakes and safety issues, which is vital for identifying and addressing systemic risks."
- ... "It allows for the reporting of safety concerns without fear of reprisal, which is crucial for maintaining and improving aviation safety."
- "The Reporting System is critical to researchers planning for a more modern ATC system"
- "ASRS facilitates the identification of latent systemic issues... Without ASRS, these subtle but critical trends might remain undetected until a serious incident brings them to light."
- "The ASRS is valuable for both general and commercial aviation, providing insights that are difficult to detect through other means."
- "ASRS fills critical gaps in both reporting and analysis, particularly for private operators, individual pilots, and smaller companies."

Comments also highlighted the value of the ASRS for generating data-driven Improvements in the National Aviation System (NAS)

- "The ASRS plays an essential role in identifying safety trends before they lead to accidents."
- "We were able to use the Reporting Tool as one of the means for doing capacity planning. This use, outside of the anticipated capability of the Reporting System, aided in the controlling of cost and planning for ADS-B."

- "Reports collected through the ASRS have led to meaningful changes in flight procedures, airspace design, and training programs."
- "ASRS data is a rich source of information for human factors analysis and training improvements... Analysis of these reports can directly inform and improve pilot and controller training programs, emphasize critical communication techniques, and lead to the development of better tools and procedures that account for human limitations, ultimately reducing the likelihood of human error-related accidents."
- "As new technologies such as eVTOL and drones evolve and form a larger part of the national aerospace system we should be expanding and promoting the ASRS program"

Several comments emphasized the important role that NASA plays as the independent third party citing that NASA is the best agency to operate the reporting programs as a trusted third party

- "NASA is trusted to handle this data due to its commitment to confidentiality and non-enforcement."
- "NASA provides a trusted government resource that is not associated with nor has any enforcement action."
- "In summary, the ASRS is crucial for NASA's role in enhancing aviation safety. The information collected is indispensable for identifying safety issues, promoting a culture of safety, and implementing data-driven improvements in aviation procedures and training."

- (2) The accuracy of NASA's estimate of the burden (including hours and cost) of the proposed collection of information.

Comments indicated that the estimate of 30 minutes per report is reasonable and appropriate also noting that those who chose to submit to ASRS or C3RS do so voluntarily with the goal of improving transportation safety.

- (3) Ways to enhance the quality, utility, and clarity of the information to be collected.

One Commenter stated that NASA has minimized the burden on reporters through electronic submission options and clear reporting templates.

Commenters noted that more promotion of the ASRS program would increase use and the availability of safety data noting that the promotion should include real world examples of certificates being and safety research performed and to "Get the word out on how this gets back into the pilot safety briefings and meetings." Commenters would like to see better use made of the data that NASA makes available in the public database by identifying trends and communicating these to the aviation community.

- (4) Ways to minimize the burden of the collection of information on respondents, including automated collection techniques or the use of other forms of information technology.

Some commented that NASA could consider reducing the burden by developing a dedicated mobile app and integrating with commonly used private flight planning platforms. One person commented that "There is a need for continued investment in modern, user-friendly, and secure reporting platforms that will reduce the burden on users and increase participation across the industry." Another recommendation to reduce the burden include the development of a mobile-friendly report form, perhaps one that allowed for pre-filled details, voice-to-text input and adaptive questions and use of AI for report processing. One comment recommended the use of Large Language Models (LLMs) for summarizing and understanding safety issue within the safety reports. In contrast, one user noted that "Any use of autonomous means to collect data or process it that cannot guarantee anonymous reporting without traceability will likely have negative impacts on aviation safety."

NASA RESPONSE. NASA is grateful for the members of the public who provided comments. NASA agrees with the commenters' characterization of the value of the ASRS and C3RS reports and the important contribution they make for aviation and rail safety. While, secure transfer protocols already exist to allow commercial airlines, corporate aviation companies, and safety management system (SMS) providers to securely transfer reports to ASRS reducing the burden on the user to report in two separate places, NASA is receptive to feedback to further reduce the burden of reporting. The recommended augmentations for a mobile friendly report form with adaptive questions and enhanced processing techniques are items that are under consideration by NASA and the FAA to further reduce the burden of reporting, pending resource availability.

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

No payments or gifts are provided to respondents.

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

NASA offers assurance of confidentiality to its reporters under FAA Advisory Circular 00-46F and title 14 of the Code of Federal Regulations (14 CFR) part 91, § 91.25. Release of personally identifying information is protected from FOIA requests under Exemptions 5 (Deliberative Process Privilege) and 6 (Information that if disclosed would invade another individual's personal privacy)

In order to provide the confidentiality, each report is de-identified through a NASA analytic process using subject matter experts. ASRS analysts de-identify each report to protect the individual by removing all references that could directly or indirectly reveal the identity of the reporter. After de-identified, reports are reviewed for quality assurance. Thereafter, reports can only be retrieved by the assigned Accession Control Number, which cannot be traced back to the respondent.

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

Questions of a sensitive nature are not included in this information collection.

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

Using the best estimate of the upper range of report intake numbers, NASA may expect based on 2025 report intake numbers through September 1, 2025, to receive 130,000 safety report submissions across both ASRS and C3RS. Each is estimated to take approximately 30 minutes, for a burden of 65,000 hours.

Category of Respondent	Number of Respondents	Participation Time	Burden (hours)
Individual or households	130,000	30 minutes	65,000 hours

The following table presents the total number of submission reports by the three reporting mechanisms: Respondents may submit a paper form, submit electronically via secure website, and we receive data indirectly from airline partners who forward safety reports. These airline partners have generated their own safety forms. These forms are not created by, or sponsored by, NASA. The airline partners share select data fields via electronic transmission of xml files.

ASRS total shown below includes all variants of the ASRS forms; C3RS total includes all variants of the C3RS forms. The forms are nearly identical, and each carry the same reporting burden -- approximately 30 minutes to complete regardless of reporting mechanism.

Forms include: ASRS General (ARC# 277B), ASRS ATC (ARC #277A), ASRS Maintenance (ARC #277D), ASRS Cabin (ARC #277C), ASRS UAS/Drone (ARC #277U), ASRS Rotorcraft (ARC 277# XXX not in use), C3RS Transportation (ARC # 277F), C3RS Mechanical (ARC #277G), C3RS Engineering (ARC #277H).

Form	Paper	Electronic	Indirect	Time to	Burden (hours)
------	-------	------------	----------	---------	----------------

				Complete	
ASRS	240	18660	107100	30 min	63,000 hours
C3RS	25	3975	0	30 min	2,000 hours

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

The estimate of annualized cost to respondents for the hour burdens use the Department of Labor, Bureau of Statistics annual wage rates averaged for occupations of individuals submitting ASRS reports. The total hour burden estimate is 65,000 hours. Approximately 65% of respondents (42,250) can be considered highly skilled with an approximate average hourly rate of \$60.00. Approximately 35% (22,750) are lesser skilled with an approximate average hourly rate of \$35.00 per hour. Therefore, the annualized cost would be estimated at \$2,332,117.

	Burden hours	Hourly Rate	Total
Skill Category 1	42,250	60*	\$2,535,000
Skill Category 2	22,750	35 **	\$ 796,250
Total	65,000		\$ 3,331,250

\* Average salary for airline pilot

\*\* Average salary for airline mechanics, flight attendants, railroad employees

When respondents submit paper responses by mail they may use postage-paid envelopes. The cost to the federal government for postage is approximately \$193 [(240 + 25) \* .78 = 206.70]

**14. Cost to the Federal Government: Provide estimates of annualized costs to the Federal government.**

NASA manages report form processing under contract. The contract cost associated with processing these forms is approximately 3 M annually for each program. This is broken down as follows: Labor: 2.84 M

Equipment & Facilities: 100 K

Other Direct Costs (e.g. Materials, Software, Publications): 60 K

**15. Changes in Burden: Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I, if applicable.**

Adjustments to Items 13 and 14 reflect escalation in labor costs and postage rates and an increase in safety report submissions.

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

Reports are selected for safety content, de-identified, and published to the publicly available online database. (<https://asrs.arc.nasa.gov/search/database.html>). The data are made available to federal agencies (NASA, FAA, FRA) for their own analyses. This is an on-going operational program with no foreseeable end-date.

**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.**

NASA is seeking approval to not display the expiration date on the electronic and paper forms associated with this information collection as this is an on-going reporting system with no changes anticipated to the forms. An exemption from printing the expiration date is requested based on the high cost of updating webforms and reprinting paper forms. Printed forms are distributed to break rooms at participating airline and rail carriers and should remain effective without expiry. Recalling unchanged paper forms and replacing with new forms in which the only change is a new date is not an appropriate use of government dollars.

**18. Explain any exception to the below certification statement.**

*The NASA Sponsor to this information collection must address the certification below and enter their name and position title. The NASA Office of the Chief Information Officer must concur on any exceptions requested by the information collection sponsor, or the package will not be forwarded to OMB.*

*The proposed collection of information –*

- (a) is necessary for the proper performance of the functions of NASA, including that the information to be collected will have practical utility;*
- (b) is not unnecessarily duplicative of information that is reasonably accessible to the agency;*
- (c) reduces to the extent practicable and appropriate the burden on persons who shall provide information to or for the agency, including with respect to small entities, as defined in the Regulatory Flexibility Act (5 U.S.C. 601(6)), the use of such techniques as:
  - (1) establishing differing compliance or reporting requirements or timelines that take into account the resources available to those who are to respond;*
  - (2) the clarification, consolidation, or simplification of compliance and reporting requirements; or*
  - (3) an exemption from coverage of the collection of information, or any part thereof;**
- (d) is written using plain, coherent, and unambiguous terminology and is understandable to those who are targeted to respond;*
- (e) indicates for each recordkeeping requirement the length of time persons are required to maintain the records specified;*

*(f) has been developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected, including the processing of the information in a manner which shall enhance, where appropriate, the utility of the information to agencies and the public;*  
*(g) when applicable, uses effective and efficient statistical survey methodology appropriate to the purpose for which the information is to be collected; and*  
*(h) to the maximum extent practicable, uses appropriate information technology to reduce burden and improve data quality, agency efficiency and responsiveness to the public; and*  
*(i) will display the required PRA statement with the active OMB control number, as validated on [www.reginfo.gov](http://www.reginfo.gov)*

The NASA office conducting or sponsoring this information collection certifies compliance with all provisions listed above. Certifying individual is a civil service employee.

Name: Becky Hooey

Title: Director, Aviation Safety Reporting System and Confidential Close Call Reporting System

Email address: [Becky.L.Hooey@nasa.gov](mailto:Becky.L.Hooey@nasa.gov)

Date: 9/3/2025