

Biennial NextGen Safety Issue Survey

A. Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

In 1997, the National Civil Aviation Review Commission (NCARC) report, A Consensus for Change, stated that the current course of the air transportation system would impair our domestic economy, reduce our standing in the global marketplace, and result in a long-term deterioration of aviation safety. One major recommendation of the Commission was that the FAA and the aviation industry develop a strategic plan to improve safety, with specific priorities based on objective, quantitative analysis of safety information and data.

In 2003, President George W. Bush and Congress took a significant step toward transforming the air transportation system with the enactment of the Vision 100 – Century of Aviation Reauthorization Act. The Vision 100 Act established a mandate for the Next Generation Air Transportation System (NextGen) initiative to achieve the goals of accommodating a significant increase in demand for air transportation, accommodate all users, and improve aviation safety. To manage these efforts, Congress created the Joint Planning and Development Office (JPDO) – a unique, cooperative partnership between public and private stakeholders. As part of the JPDO and in response to the NCARC recommendation, the Aviation Safety Working Group was charged with the development of a national strategic plan for aviation safety. To develop the strategic plan, the JPDO Aviation Safety Working Group chartered a Strategic Planning Standing Committee, comprised of public and private aviation stakeholders. The Standing Committee was charged with developing the National Aviation Safety Strategic Plan (NASSP) with strategies aligned with current and projected aviation safety issues. A major step in the development of the NASSP is the collection and analysis of worldwide safety issues.

As a member of the Joint Planning and Development Office (JPDO), NASA supports planning for the Next Generation Air Transportation System (NextGen) through the Aeronautics Research Mission Directorate. NASA made significant contributions to safety planning for NextGen and led the development of the National Aviation Safety Strategic Plan. As part of its support for maintaining the Plan, NASA is engaged in evaluating its efficacy. This will be accomplished through collection of safety concerns associated with the current and NextGen air transportation system.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

Aviation stakeholders will be contacted via electronic means and asked to respond by filling out a questionnaire. They will have the option of printing it and filling it out manually and then returning it via traditional mail, filling it out electronically and returning via email, or visiting a website where the questionnaire can be filled out online. The information will be collected by the JPDO Aviation Safety Working Group's Strategic Planning Subcommittee and used to determine the efficacy of the Aviation Safety Strategic Plan. The collected information will identify any additional strategies that should be included in the Plan, as well as substantiate the strategies currently contained in the Plan.

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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. Also describe any consideration of using information technology to reduce burden.

Respondents will have the following options: 1) printing the survey and filling it out manually and then returning it via traditional mail; 2) filling the survey out electronically and returning it via email; or 3) visiting a website where the questionnaire can be filled out online. The third option is preferred by the study team, and participants will be encouraged to use it.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

The JPDO Safety Working Group is comprised of representatives from DOT, DHS, DOC, DoD, NASA, FAA, OSTP, and stakeholders from the aviation industry. The Safety WG has confirmed that the data being collected in the proposed information collection is not being collected by any other organization. Therefore, no duplication is involved.

Information concerning today's aviation safety issues is collected and maintained by individual organizations, but is not collected into an integrated database. NextGen safety issues have been postulated by a limited number of safety experts, but an integrated dataset from a broad range of stakeholders has not been collected. The intent of this survey is to collect and analyze today's and tomorrow's safety issues from a broad set of stakeholders. This data set does not currently exist, nor does any similar one.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-1), describe any methods used to minimize burden.

Small businesses will not be impacted.

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.

A. NASA consequence

The NASA Aviation Safety Program requires that the Agency understand and address critical aviation safety issues to assure its resources are directed at the most important safety concerns, both in the near and far term. The data set collected and analyzed will provide valuable planning information.

B. JPDO consequence

The JPDO's Aviation Safety Strategic Plan will provide guidance to the participating agencies and departments as they plan and execute safety programs that address current and potential aviation safety concerns. The Strategic Plan will also provide a framework to assure the safety efforts at the various federal departments and agencies are coordinated and complementary.

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

* requiring respondents to report information to the agency more often than quarterly;

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* requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;

* requiring respondents to submit more than an original and two copies of any document;

* requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;

* in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;

* requiring the use of a statistical data classification that has not been reviewed and approved by OMB;

* that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or

* requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

It is intended that this survey be collected every two years and would not require any of the special circumstances described above.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden. Describe efforts to consult with 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. Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years - even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

N/A

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

No payment or gift to respondents will be offered as part of this information collection.

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

~~The information collected from individual survey respondents will be kept strictly confidential. At no time will individual results be released without a participant's written consent to anyone other than individuals working on the project. The information provided will not be associated with participants' names; only a participant number (i.e., Participant #1, Participant #2, etc.) will identify individuals during analyses and in any written reports of the research.~~

This information is protected by the Privacy Act of The Privacy Act of 1974, 5 U.S.C. § 552a, Public Law No. 93-579.

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Planned reporting against the information collected will be aggregate in nature, with individual responses separated from the individual reporting the information.

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. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent. No questions of a sensitive nature are being asked as part of this information collection.

12. Provide estimates of the hour burden of the collection of information. The statement should:
* Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.

* If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.

* Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 13.

It is estimated that fewer than 100 participants will complete this survey, spending an average of less than less than 2 hours each. This totals less than 200 hours every 2 years; less than 100 hours annually.

13. Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

* The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.

* If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collections services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day

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pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.

** Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.*

There is no cost to participants.

14. Provide estimates of annualized costs to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies may also aggregate cost estimates from Items 12, 13, and 14 in a single table.

This information collection is being conducted through a contract for services associated with NASA's support to the JPDO for NextGen Aviation Safety Strategic Planning. The annual cost to the government to perform this information collection in support of the strategic planning effort is estimated from the contract at approximately \$300,000 over three years, or \$100,000 annually.

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

N/A. This is a new survey.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

The Aviation Safety Strategic Planning Committee will summarize the results and use them to adjust (if necessary) the JPDO Aviation Safety Strategic Plan. The information will also be provided to NASA for use in their yearly replanning periodic planning or review of the NASA Aviation Safety Program. Only summarized, de-identified data will be published by NASA. The first biennial data collection will start in February 2010 and be completed in April 2010; the next collection will be performed in FY12.

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.

No request to not display the expirations date for OMB approval is being made for this 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.

None

B. Collections of Information Employing Statistical Methods

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The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When Item 17 on the Form OMB 83-I is checked, "Yes," the following documentation should be included in the Supporting Statement to the extent that it applies to the methods proposed:

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

This survey is not designed as a population sampling survey. It will not use sampling or other statistical methods to draw conclusions about a larger universe of potential respondents based on the responses of a subset of that universe.

Information will be collected from government and industry aviation stakeholders, along with impersonal data characterizing the respondents' organization's aviation responsibilities. Respondents will be asked to characterize their organizations' current and future safety concerns within a causal taxonomy that will be provided. Respondents will also be asked to characterize whether and to what extent the strategies in the National Aviation Strategic Safety Plan will address their current and future concerns.

This survey will be sent to a broad aviation stakeholder community, including federal government departments and agencies, national and international safety teams (commercial, helicopter, and general aviation), commercial airlines (including regional carriers), industry associations, large aircraft manufactures and maintainers, general aviation manufacturers and operators, and avionics manufacturers.-

2. Describe the procedures for the collection of information including:

- * Statistical methodology for stratification and sample selection,
- * Estimation procedure,
- * Degree of accuracy needed for the purpose described in the justification,
- * Unusual problems requiring specialized sampling procedures, and
- * Any use of periodic (less frequent than annual) data collection cycles to reduce burden.

Standard statistical methods will be used to analyze the collected data. Subjective inputs will be converted to objective data by assigning numerical values to the responses received. Simple summation of the data will be developed to identify the most critical safety issues, in priority order. No statistical stratification and sample selection will be utilized. No unusual problems requiring specialized sampling procedures are expected. The data will be collected on a two-year basis.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

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The Strategic Planning Standing Committee will make direct e-mail and telephone contact with individuals and organizations identified ~~and approved~~ by the JPDO Aviation Safety Working Group ~~to be~~ key stakeholders in the air transportation system.

The contractor team administering the survey will email intended survey participants prior to making the survey available online to announce the survey, and will provide an informational packet designed to familiarize the intended participants with the survey and encourage their participation. The packet will include materials that will assist the intended participant to complete the survey online. The contents of the package are to be determined.

The survey service used to enable world wide web-based collection of the information will be used to generate invitations to participate in the survey. The service will track completion of the survey by invited participants and will be programmed to send reminders to them to complete the survey during the period in which it is open for response. The text of these emails is to be determined.

The contractor team administering the survey will track responses online using the survey service's tools and will attempt to contact invited participants that have not completed the survey, by phone, to encourage participation as the survey period draws to a close. The script for these calls is to be determined.–

4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of test may be submitted for approval separately or in combination with the main collection of information.

The proposed survey will ask each respondent to name five (5) current and five (5) NextGen safety issues. Each respondent will ~~have the opportunity be asked~~ to narratively describe each named issue, ~~should they desire to~~. Each respondent will be provided information related to the NASSP and NextGen for reference. For each issue identified, Each respondents will be asked to select the NASSP Goal, and within that Goal, the Objective with the potential to address the issue. Within the Objective identified, respondents will be asked to rate the potential for each of the selected Objective's 36 NASSP strategies to address the current and NextGen safety issues they name issue. Each respondent will also be asked to rank the importance of the 36 NASSP strategies.

This is a straightforward survey, oriented toward a select group of individuals working within the aviation safety domain. No testing outside the development team is planned. Lessons learned from an earlier, similar though considerably ~~shorter~~longer, survey used to substantiate the current version of the NASSP have been applied to the development of the proposed information collection.

Rating the applicability of the NASSP strategies to the safety issues was part of the previous survey. The rating comparisons in the previous survey required rating the applicability of each of 36 strategies to each of ~~55-45~~ safety issues, a total of ~~1,980~~1,620 comparisons, each with 4 potential selections. In that survey, the safety issues being rated were not familiar to the respondent prior to participating in the survey. The currently proposed collection instrument asks that each respondent rate the potential of each of 36 only those NASSP strategies associated with the NASSP Goal and Objective selected as having the potential to address each of the 10 (5

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current and 5 NextGen) safety issues of their own naming (they will therefore be familiar with them), selecting one of four values. Each NASSP Objective has from 3 to 5 strategies, limiting the possible comparisons to only 30 to 50~~This requires only 360~~ total comparisons.

The currently proposed collection instrument may also asks-ask each respondent rank the importance of 36~~the~~ NASSP strategies in order of importance. ~~An identical~~A similar ranking task was part of the previous survey.

The proposed information collection was tested by the developers using data from the earlier collection. The ~~55-45~~ unfamiliar safety issues were categorized by each of two development team members using the taxonomy in the current collection instrument in less than two hours time (the proposed survey requires categorizing 10 familiar safety issues). The rating of the applicability of the NASSP strategies to the issues is reduced from ~~1980-1,620~~ comparisons to, 360-at most, 50 comparisons. The ranking of the NASSP strategies, if required, will be simplified~~remains unchanged~~. The previous survey activity required from four to eight hours time to complete. Given that the proposed collection instrument requires approximately ~~203~~% of the previous survey's responses, it is expected that not more than 25% of the previous survey's time will be required. This amounts to one to two hours for the proposed information collection.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Individuals consulted on statistical aspects of the proposed information collection design:

Stephen Darr 339.364-0955

Dr. Katherine Lemos 202.341-6456

Actual Data Collectors:

QED Consulting, LLC

Data Analysis:

NASA Langley System Analysis Branch (LaRC E-4)

Stephen Darr

Dr. Katherine Lemos