

**I. Abstract**

The National Aeronautics and Space Administration (NASA) is leading an Urban Air Mobility (UAM) vehicle noise cooperative human response study involving multiple testing locations, other US government agencies, academia, and industry. Overarching study goals are:

1. Obtain a wide range of UAM vehicle sounds for use in human response studies.
2. Provide insights into human response of UAM vehicle noise that will collectively be challenging for any single agency or organization to acquire.
3. Create an open database of human response to UAM vehicle noise to support follow-on studies.

The UAM vehicle noise cooperative human response study is currently divided into two phases: A Feasibility Phase (Phase 1) and Phase 2. Each phase executes one or more psychoacoustic tests. Phase 1 seeks to demonstrate and refine the test methodology that will be used in Phase 2. Since UAM vehicle noise may be challenging to acquire as stimuli, the Phase 1 psychoacoustic test will use other types of aircraft noise as stimuli. Phase 2 will focus on capturing human response to UAM vehicle noise stimuli.

This information collection is for the Phase 1 psychoacoustic test. A remote psychoacoustic testing platform will allow recruited test subjects to listen to NASA-provided test sound stimuli over the internet using their own computers and headphones and register their annoyance rating for each.

The outcome of the Phase 1 psychoacoustic test is a demonstrated capability for ranking of sound stimuli by annoyance ratings from remote test subjects.

**II. Methods of Collection**

Test subjects will electronically indicate their annoyance rating to test stimuli into an interface displayed on their own computers.

**III. Data**

*Title:* Remote Psychoacoustic Test for Urban Air Mobility Vehicle Noise Human Response.

*OMB Number:*

*Type of review:* New.

*Affected Public:* Individuals.

*Estimated Annual Number of*

*Activities:* 1.

*Estimated Number of Respondents*

*per Activity:* 60.

*Annual Responses:* 60.

*Estimated Time per Response:* 80 minutes.

*Estimated Total Annual Burden Hours:* 80 hours.

*Estimated Total Annual Cost:* \$3,200.

**IV. Request for Comments**

*Comments are invited on:* (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; (2) the accuracy of NASA's estimate of the burden (including hours and cost) of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (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.

Comments submitted in response to this notice will be summarized and included in the request for OMB approval of this information collection. They will also become a matter of public record.

**Lori Parker,**

*NASA PRA Clearance Officer.*

[FR Doc. 2021-19445 Filed 9-7-21; 8:45 am]

**BILLING CODE 7510-13-P**

**NATIONAL SCIENCE FOUNDATION****Notice of Permits Issued Under the Antarctic Conservation Act of 1978**

**AGENCY:** National Science Foundation.

**ACTION:** Notice of permit issued.

**SUMMARY:** The National Science Foundation (NSF) is required to publish notice of permits issued under the Antarctic Conservation Act of 1978. This is the required notice.

**FOR FURTHER INFORMATION CONTACT:** Polly Penhale, ACA Permit Officer, Office of Polar Programs, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314; 703-292-8030; email: [ACApermits@nsf.gov](mailto:ACApermits@nsf.gov).

**SUPPLEMENTARY INFORMATION:** On August 27, 2021, the National Science Foundation published a notice in the **Federal Register** of a permit application received. The permit was issued on August 30, 2021, to:

**Permit No. 2022-004**

1. Dale Andersen

**Erika N. Davis,**

*Program Specialist, Office of Polar Programs.*

[FR Doc. 2021-19467 Filed 9-7-21; 8:45 am]

**BILLING CODE 7555-01-P**

**NATIONAL SCIENCE FOUNDATION****Notice of Permits Issued Under the Antarctic Conservation Act of 1978**

**AGENCY:** National Science Foundation.

**ACTION:** Notice of permits issued.

**SUMMARY:** The National Science Foundation (NSF) is required to publish notice of permits issued under the Antarctic Conservation Act of 1978. This is the required notice.

**FOR FURTHER INFORMATION CONTACT:** Polly Penhale, ACA Permit Officer, Office of Polar Programs, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314; 703-292-8030; email: [ACApermits@nsf.gov](mailto:ACApermits@nsf.gov).

**SUPPLEMENTARY INFORMATION:** On July 23, 2021, the National Science Foundation published a notice in the **Federal Register** of permit applications received. The permits were issued on August 2, 2021, to:

**Permit No. 2022-002**

1. George Watters

**Permit No. 2022-003**

2. George Watters

**Erika N. Davis,**

*Program Specialist, Office of Polar Programs.*

[FR Doc. 2021-19469 Filed 9-7-21; 8:45 am]

**BILLING CODE 7555-01-P**

**NATIONAL SCIENCE FOUNDATION****Notice of Intent To Seek Approval To Establish an Information Collection**

**AGENCY:** National Science Foundation.

**ACTION:** Notice and request for comments.

**SUMMARY:** The National Science Foundation (NSF) is announcing plans to request approval for the collection of research and development data through the Directorate for Computer and Information Science and Engineering Research Experiences for Undergraduates Sites and Supplements Evaluation. In accordance with the requirement of the Paperwork Reduction Act of 1995, we are providing opportunity for public comment on this action. After obtaining and considering public comment, NSF will prepare the submission requesting that OMB approve clearance of this collection for no longer than 3 years.

**DATES:** Written comments on this notice must be received by November 8, 2021 to be assured of consideration. Comments received after that date will be considered to the extent practicable.

**FOR FURTHER INFORMATION CONTACT:**

Suzanne H. Plimpton, Reports Clearance Officer, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314; or send email to [splimpto@nsf.gov](mailto:splimpto@nsf.gov). Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339, which is accessible 24 hours a day, 7 days a week, 365 days a year (including federal holidays).

**SUPPLEMENTARY INFORMATION:**

*Title of Collection:* Computer and Information Science and Engineering Research Experiences for Undergraduates Sites and Supplements Evaluation.

*OMB Approval Number:* 3145-NEW.

*Expiration Date of Current Approval:* Not applicable.

*Type of Request:* Intent to establish an information collection.

*Abstract:* Every year the National Science Foundation (NSF) funds hundreds of Research Experience for Undergraduates (REU) activities through its REU program. The Directorate of Computer and Information Science and Engineering (CISE) is seeking to evaluate the effectiveness of the CISE REU program.

The REU program provides undergraduate students at US higher education institutions with opportunities to work with faculty on a research project. They can take the form of REU Sites or REU Supplements. REU Sites are based on independent proposals to initiate and conduct projects that engage a number of students in research. REU Supplements are included as a component of proposals for new or renewal NSF grants or cooperative agreements or may be requested for ongoing NSF-funded research projects.

By offering this opportunity to undergraduate students, the REU program seeks to expand student participation in all kinds of research—both disciplinary and interdisciplinary—encompassing efforts by individual investigators, groups, centers, national facilities, and others. The REU experience integrates research and education to attract a diverse pool of talented students into careers in science and engineering, including teaching and education research related to science and engineering.

The current data collection project intends to measure the impact of the undergraduate REU Sites and REU Supplements programs sponsored by NSF CISE. The project will conduct online surveys to track NSF CISE REU participants over time—including pre-

program, post-program and one-year post-program measurement—alongside two comparison groups: (1) Students participating in other undergraduate research, and (2) students who do not participate in research. The researchers will supplement REU participants' survey data with demographic and background information collected via the NSF Education and Training Application (ETAP). The evaluation and research questions guiding this project include the following:

1. Who are the students reached through the NSF REU Program, and how do they compare to students participating in other types of research experiences and to students in the broader CISE community?

2. How do CISE REU Sites and REU Supplements differ from other research experiences (e.g., other REUs, internships, and independent research projects)?

3. To what extent are the goals of the NSF REU Program being met by the individual projects within the program, including recruitment and retention of students in science and engineering fields and increasing diversity in these fields?

4. In what ways does participation in REU Sites, REU Supplements, internships, and/or other independent research experiences impact student attitudes and pathways to CISE careers and other research experiences?

5. In what ways does participation in the REU Sites and REU Supplements impact recruitment and retention of students who are underrepresented in computing?

Ultimately, the findings from this data collection will be used to understand and improve the impact of the CISE REU program, including increasing recruitment and retention in science and engineering and promoting a diverse group of computing/STEM careers.

*Use of the information:* The information collected through this survey will be used to evaluate the NSF CISE REU Program.

*Respondents:* There will be three types of survey respondents: NSF CISE REU Site and Supplement participants, a comparison group of undergraduate students who participate in other, non-NSF REU research experiences, and a comparison group of undergraduate students who do not participate in research.

NSF CISE REU participants will include undergraduate students who participate in REU projects in which the project's Principal Investigator chooses to use NSF-sponsored program evaluation services. Participants from

the two comparison groups will be identified and recruited from a pool of undergraduates in computing fields who have participated in a prior survey of the Computing Research Association and have agreed to be contacted for future data collection.

*Estimated number of respondents:* The study's data collection activities will occur over a span of 2½ years. It is estimated that during this time, there will be approximately 3,500 NSF CISE REU survey respondents and 6,000 comparison group survey respondents, for a total of 9,500 respondents.

*Average time per reporting:* Each online survey is designed to be completed in 20 minutes or less.

*Frequency:* Each NSF CISE REU participant will be asked to complete three surveys: (1) A pre-test before they begin their REU project; (2) a post-test, after their REU ends; and (3) a one-year follow-up survey. Within the data collection timeline for this project, this will allow for two full data collection cycles, plus a third subset of Year 3 summer REU participants who will only complete a pre-test and a post-test, but no follow-up survey. Each comparison group participant, including both those with a different research experience and those with no research experience, will be asked to complete a pre-test survey and a follow-up survey occurring approximately one year later. There will be two full data collection cycles for comparison group participants.

*Estimate burden on the public:* For REU participants, there will be two full cycles of data collection (pre-test, post-test, and follow-up) and one partial cycle. It is expected that a total of 3,500 REU respondents will complete a 20-minute pre-survey in the project. Of these 3,500 REU participant respondents, we expect that approximately 70%, or 2,450, will complete a 20-minute post-survey. For the follow-up survey, only the REU participants from the first two years of the data collection would be able to complete the survey within the time range of the study (N=3,000). It is expected that approximately 50% of these respondents, or 1,500, will complete a 20-minute one-year follow-up survey. This would result in a total of 7,450 20-minute surveys completed by REU respondents, for a total of 2,483 burden hours for this subset of respondents.

For comparison group participations, there will be two full cycles of data collection. It is expected that a total of 6,000 respondents will complete a 20-minute pre-survey in the project. Of these 6,000 comparison group respondents, approximately 50%, or

3,000, are expected to complete a 20-minute one-year follow-up survey. The total estimate for this collection is 9,000 surveys completed by

comparison group respondents, for a total of 3,000 burden hours. Together, the total estimated survey burden for the

project is 5,483 hours. The calculations are shown in Table 1.

TABLE 1—ESTIMATED SURVEY BURDEN

Category of respondent	Number of year 1 responses	Number of year 2 responses	Number of year 3 responses (partial year)	Participation time (mins each)	Burden (hours)
REU participant Pre-survey .....	1,500	1,500	500 .....	20	1,166.67
REU participant Post-survey (70% of original) .....	1,050	1,050	350 .....	20	816.67
REU participant Follow-up survey (50% of original).	750	750	Not conducted .....	20	500
Comparison participant Pre-survey .....	3,000	3,000	Not conducted .....	20	2,000
Comparison participant Post-survey (50% of original).	1,500	1,500	Not conducted .....	20	1,000
<b>Total surveys completed .....</b>	<b>7,800</b>	<b>7,800</b>	<b>850 .....</b>	<b>20</b>	<b>5,483</b>

*Comments:* Comments are invited on:

- Whether the proposed collection of information is necessary for the evaluation of the CISE REU Sites and Supplements Program.
- The accuracy of the NSF's estimate of the burden of the proposed collection of information.
- Ways to enhance the quality, utility, and clarity of the information on respondents, including through the use of automated collection techniques or other forms of information technology.

Dated: September 1, 2021.

**Suzanne H. Plimpton,**

*Reports Clearance Officer, National Science Foundation.*

[FR Doc. 2021-19286 Filed 9-7-21; 8:45 am]

**BILLING CODE 7555-01-P**

**NATIONAL SCIENCE FOUNDATION**

**Notice of Permits Issued Under the Antarctic Conservation Act of 1978**

**AGENCY:** National Science Foundation.

**ACTION:** Notice of permit issued.

**SUMMARY:** The National Science Foundation (NSF) is required to publish notice of permits issued under the Antarctic Conservation Act of 1978. This is the required notice.

**FOR FURTHER INFORMATION CONTACT:** Polly Penhale, ACA Permit Officer, Office of Polar Programs, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314; 703-292-8030; email: [ACApermits@nsf.gov](mailto:ACApermits@nsf.gov).

**SUPPLEMENTARY INFORMATION:** On July 27, 2021, the National Science Foundation published a notice in the **Federal Register** of a permit application received. The permit was issued on September 2, 2021, to:

**Permit No. 2022-05**

1. Leidos Innovations Group: Antarctic Support Contract

**Erika N. Davis,**

*Program Specialist, Office of Polar Programs.*

[FR Doc. 2021-19468 Filed 9-7-21; 8:45 am]

**BILLING CODE 7555-01-P**

**NUCLEAR REGULATORY COMMISSION**

**Seeks Qualified Candidates for the Advisory Committee on Reactor Safeguards**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Request for resumes.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) seeks qualified candidates for the Advisory Committee on Reactor Safeguards (ACRS). Submit resumes to Ms. Makeeka Compton and Ms. Jamila Perry, ACRS, Mail Stop: T2B50, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or email [Makeeka.Compton@nrc.gov](mailto:Makeeka.Compton@nrc.gov) and [Jamila.Perry@nrc.gov](mailto:Jamila.Perry@nrc.gov).

**SUPPLEMENTARY INFORMATION:** The ACRS is a part-time advisory group, which is statutorily mandated by the Atomic Energy Act of 1954, as amended. The ACRS provides independent expert advice on matters related to the safety of existing and proposed nuclear reactor facilities and on the adequacy of proposed reactor safety standards. Of primary importance are the safety issues associated with the operation of commercial nuclear power plants in the United States and regulatory initiatives, including risk-informed and performance-based regulation, license renewal, power uprates, and the use of mixed oxide and high burnup fuels. An

increased emphasis is being given to safety issues associated with new reactor designs and technologies, including passive system reliability and thermal hydraulic phenomena, use of digital instrumentation and control, international codes and standards used in multinational design certifications, materials, and structural engineering, nuclear analysis and reactor core performance, and nuclear materials and radiation protection.

In addition, the ACRS may be requested to provide advice on radiation protection, radioactive waste management, and earth sciences in the agency's licensing reviews for fuel fabrication and enrichment facilities, and for waste disposal facilities. The ACRS also has some involvement in security matters related to the integration of safety and security of commercial reactors. See the NRC website at <https://www.nrc.gov/about-nrc/regulatory/advisory/acrs.html> for additional information about the ACRS.

Criteria used to evaluate candidates include education and experience, demonstrated skills in nuclear reactor safety matters, the ability to solve complex technical problems, and the ability to work collegially on a board, panel, or committee. The Commission, in selecting its Committee members, also considers the need for specific expertise to accomplish the work expected to be before the ACRS. ACRS Committee members are appointed for four-year terms with no term limits. The Commission looks to fill one vacancy as a result of this request. Candidates for this position must have extensive experience in nuclear fuel cycle chemistry, structural integrity, and/or metallurgy applicable to nuclear facilities and/or nuclear power plant systems or components. It would be useful if candidates also have