**Request for Clearance**

**Women In STEM High School Aerospace Scholars (WISH) Pilot Project**

**Section A**

Introduction

Women In STEM High School Aerospace Scholars (WISH) will encourage our nation’s youth to explore the exciting possibilities of careers in science, technology, engineering and mathematics (STEM) with space exploration as its central theme. At the NASA Higher Education Fall 2009 Planning Meeting, the percentage of documented females participating in NASA programs was 35%. There is clearly a need to increase the number of females entering STEM disciplines and careers and this effort supports President Obama’s Council for Women and Girls.

WISH will provide an interactive, online learning experience for female high school juniors. In addition to recruiting this underrepresented group, emphasis will also be placed on recruiting students representing the ethnic and geographic diversity of our nation.

By applying, students will be considered to participate in the on-line community and summer experience, a one week summer academy where they will work with NASA JSC engineers and co-ops/interns on a mission to Mars.

WISH supports Objective 2.3, Students are inspired to study STEM disciplines, of the Elementary and Secondary Program objectives

**A.1 Circumstances Requiring the Collection of Data**

National Aeronautics and Space Administration (NASA) Johnson Space Center Office of Education (OE) seeks clearance to request applications from qualified candidates for consideration to participate in WISH, a project encouraging females to pursue STEM degrees and careers.

**A.2. Purposes and Uses of the Data**

Interested applicants will voluntarily submit an application, transcript, and letter of recommendation electronically via the Women In STEM High School Aerospace Scholars website. The information provided will then be used to select qualified participants for the project.

There is no way to determine the number of applicants who will apply but 140 applications would be a successful pool to select 70 qualified students to participate in the on-line curriculum.

Both student and parent/legal guardian will receive independent notification of the student’s application prior to selection. Both will be notified of the student’s eligibility to participate via mail and email, ensuring they have received the information.

Upon selection, students will be contacted via email, and as necessary phone, regarding project announcements, curriculum reminders, and feedback. It is necessary to have the parent/legal guardian’s information to communicate as needed.

U.S. Representatives and Senators will be notified of the names and cities of their constituents who participate in the project.

Following the summer academy, we will send emails, letters or phone calls to participants for up to six year following the event to learn of their college and career plans. This information will be used to assist NASA in determining the impact of the project. Personally identifiable information will not be disclosed.

WISH will follow Retention Schedule1 Item 32 Sub-Item A.

**A.3 Use of Information Technology to Reduce Burden**

It complies with Section 508, the 1998 amendment to the Federal Rehabilitation Act, which mandates that the electronic and information technology used by Federal agencies be made accessible to all people with disabilities.

**A.4 Efforts to Identify Duplication**

There is no duplication of information to be collected since students will apply to WISH for consideration only once. As mentioned in the response to item A.1. the Circumstances Requiring the Collection interested students who are qualified to participate in a NASA education project.

**A.5 Small Business**

Not Applicable

**A.6 Consequences of Not Collecting the Information**

The consequence to not collecting the applicant information will be that candidates cannot be considered unless the information is provided and informed decisions cannot be made in selection of the best qualified candidates.

**A.7 Special Circumstances Justifying Inconsistencies with Guidelines in 5 CFR 1320.6**

All data will be collected in a manner consistent with the guidelines of 5 CFR 1320.6.

**A.8. Consultation Outside the Agency**

Not Applicable

**A.9. Payments or Gifts to Respondents**

Not Applicable

**A.10. Assurance of Confidentiality**

Students will need to register before applying. In doing so, they will receive a pop-up that states the Privacy Act and will be asked to check the box “I understand” after reading the Privacy Act statement before proceeding to the application.

Applicants will be required to submit limited personally identifiable information electronically. The information will be used only to determine qualified participants for the project and is available to the program manager by a valid login and password. Applicants will only have access to their own data with a valid login and password. A Privacy Impact Assessment is being completed and submitted by the Privacy Act Manager at Johnson Space Center.

This project falls under SORN NASA 10EDUC – NASA Education Program Evaluation System.

**A.11. Questions of a Sensitive Nature**

Only questions relevant to the students’ qualifications to the project or other demographic data on the applicant will be gathered. All data gathered will only be used in conjunction with this project.

Questions will include those asking for Personal Identifiable Information, name, date of birth, address, email, phone numbers, as well as parent’s name, email and phone number. Students who are selected to participate in the summer academy will be asked to provide medical/special needs should an emergency arise during their visit.

**12. Estimates of Response Burden**.

Seventy student participants will be selected to participate in this project. It is unknown how many applicants will apply as it is available to qualified students across the U.S. The announcement along with a PDF flyer will be sent to the following individuals/groups asking them to share with the targeted population in their areas.

* Girl Scouts of America
* Each state’s Education office
* Professional organizations such as The Society of Women Engineers (SWE)
* Each state’s Space Grant office
* NASA Education Resource Centers
* Summer of Innovation POCs at each NASA Center
* NASA K-12 Program Managers at each NASA Center

Using other educational opportunities as a guideline such as Texas High School Aerospace Scholars that has been in existence for over ten years and has an applicant pool of approximately 800, an excellent response would be 140 applications. The application will require no more than one hour to complete per applicant for a total of approximately 140 burden hours.

**A.12.1 Number of Respondents, Frequency of Response, and Annual Hour Burden**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Customer | Collection  Instruments | Frequency | Estimated  Number of Respondents | Expected Response Rate | Completion Time (Minutes) | Total Estimated Burden Hours |
| 1 | Student Applicant | On-line application | Once | 140 | 100% | 60 minutes | 140 |
|  |  |  | **Total Number of Respondents** | 140 |  | **Total Hours** | 140 |

**A.12.2 Hour Burden Estimates by Each Form and Aggregate Hour Burdens**

There is no cost to respondents other than the time it takes to complete the application.

**A.13 Estimate of Total Capital and Startup Costs/Operation and Maintenance Costs to Respondents or Record Keepers**

Not Applicable

**A.14. Estimates of Costs to the Federal Government**

**A.15 Change in Burden**

New collection

**A.16 Plans for Publication, Analysis, and Schedule**

The requested information will be used in an internal report to be shared with NASA JSC Office of Education Leadership and consequently Senior Leadership in NASA Office of Education at NASA Headquarters.

**A.17 Approval to Not Display Expiration Date**

Not Applicable

**A.18 Exceptions to Item 19 of OMB Form 83-I**

Not Applicable

### Introduction

### B.1. Respondent Universe and Sampling Methods

**Students**

The universe of students for this data collection is 140 qualified female high school juniors students.

**B.2 Information Collection Procedures/ Limitations of the Study**

The data collection uses a web-based application. Since response to the application is required for participation in the WISH pilot, a response rate of 100% is expected.

### B.2.2. Estimation Procedure

Not applicable.

### B.2.3. Degree of Accuracy Needed for the Purpose Described in the Justification

Not applicable.

### B.2.4. Unusual Problems Requiring Specialized Sampling Procedures

Not applicable.

### B.2.5. Use of Periodic (Less Frequent Than Annual) Data Collection Cycles

Not applicable.

### B.3. Methods for Maximizing the Response Rate and Addressing Issues of Nonresponse

Email reminder will be sent encouraging students to complete the application to be considered for participation.

### B.4. Tests of Procedures or Methods

Not applicable

### B.5. Names and Telephone Numbers of Individuals Consulted

**Agency Unit**

Linda K. Smith, Program Manager, Office of Education, NASA JSC 281-483-7086

Rick Gilmore, NASA Glenn Educational Programs Office, 216-433-5493

Steve Chance, INSPIRE Program Manager, KSC, 321.867.4194