

## **Revised 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.

We desire to expand the scope of WISH by offering High School Aerospace Scholars projects to both genders in specific states, Idaho, Texas, Virginia, Washington, and West Virginia, with the same goal of increasing the number of students pursuing STEM degrees and careers.

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 or industry engineers and scientists and co-ops/interns on a space exploration project.

All support 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

1. WISH, a project encouraging females to pursue STEM degrees and careers; and
2. Other High School Aerospace Scholars projects encouraging high school male and female students to pursue STEM degrees and careers.



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

Interested applicants will voluntarily submit an application, letter of recommendation, request for nomination from state senator or representative, release of information to obtain GPA, Class Rank and grade level via the specific project website. The information provided will then be used to select qualified participants for the project.

It is anticipated the total number of applicants for all the High School Aerospace Scholars will be approximately 1,600 which will provide a successful pool to select 1,350 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. and/or State Representatives and Senators will be notified of the names, mailing addresses, and schools of their constituents who participate in the project. In some cases, press releases announcing the student's participation in the project will be made sharing the students' names, schools, and cities and states. This information will only be released with the students' and parents' agreement.

Following the summer academy, we will send emails, letters or phone calls to participants to learn of their college and career plans.

WISH and the other High School Aerospace Scholars project 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 minimal duplication of information to be collected since students will apply to one project for consideration. There is the possibility a female student will apply to both WISH and her state's project. As mentioned in the response to item A.1. the Circumstances Requiring the Collection, applies only to 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 and informed decisions cannot be made in selection of the best qualified candidates unless the information is provided.

## **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 was completed and submitted by the Privacy Act Manager at Johnson Space Center for WISH and one expanding for NASA Aerospace Scholars has been completed and submitted to the JSC Privacy Act Manager.

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 and in limited cases their Social Security Numbers for travel reimbursements.

## 12. Estimates of Response Burden.

Approximately 1,600 student participants will be selected to participate in these projects. Announcements 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
- High Schools in each partner's states
- NASA On-line Educator Network (NEON)

Using the WISH collection in FY11 and other educational opportunities as a guideline, an excellent response would be 1600 applications. The application will require no more than one and one-half hours to complete per applicant for a total of approximately 2400 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
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							Hours
1	Student Applicant	On-line application	Once	1600	100%	90 minutes	2400
			<b>Total Number of Respondents</b>	1600		<b>Total Hours</b>	2400

### **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**

Approximately \$500 to include contractor labor hours and some government oversight.

### **A.15 Change in Burden**

Revision of an existing collection, population pool increases to 1600 potential applications from 140 for the pilot project.

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

The requested information will be used in an internal report to be shared with

1. NASA LaRC Office of Education Leadership only that which applies to their Center;

2. NASA JSC Office of Education Leadership as the project is managed at JSC 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 1600 qualified high school juniors students.

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

The data collection uses a web-based application or a PDF of the application via the web. Since response to the application is required for participation, 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**

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