Supporting Statement for The NASA Human Exploration Rover Challenge (formerly NASA's Great Moonbuggy Race) Collections

TYPE OF INFORMATION COLLECTION: Existing Collection in use without an Office of Management and Budget (OMB) Control Number

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.

Introduction to the NASA Human Exploration Rover Challenge

Through this clearance, NASA's Marshall Space Flight Center's Academic Affairs Office seeks to collect information from members of the public to plan, conduct, and register participants and volunteers for the NASA Human Exploration Rover Challenge, which supports science, technology, engineering, or mathematics (STEM) education, and was formerly known as NASA's Great Moonbuggy Race. During calendar year 2013, NASA Officially changed the event name to the *NASA Human Exploration Rover Challenge*. Calendar year 2013 marked the 20th anniversary of the Moonbuggy event.

NASA is introducing a new engineering design challenge to engage students worldwide in the next phase of human space exploration. The NASA Human Exploration Rover Challenge is a more complex follow-on to the successful NASA's Great Moonbuggy Race. With the agency taking a stepping-stone approach to building capabilities necessary for sending astronauts to Mars, this student design challenge represents a logical next step.

The competition is open to high school (children above the age of 13) and college students, both domestic and international, and challenges them to create a vehicle designed to traverse the simulated surface of another world. The student teams will be timed, ranked, and scored based on design, safety, and how well they traverse the set course. The competition is designed to teach students to troubleshoot and solve problems during the engineering-based challenge, and demonstrates NASA's continuing commitment to inspiring new generations of scientists, engineers, and astronauts. Teams are diverse, including those participating in extracurricular activities as well as classes who wish to incorporate the challenge into class curricula. The results of the competition will contribute to the design process for NASA's future exploration goals.

The culminating event of the NASA Human Exploration Rover Challenge is scheduled for April 2014 at the U.S. Space and Rocket Center (USSRC) in Huntsville, which is home to U.S. Space Camp and serves as the official visitor center for Marshall. NASA collaborates with the USSRC

through a Space Act Agreement to plan and conduct the event. The USSRC does not fund any activities. No NASA funds are used for awards, team travel, shipping, food, lodging, etc. Corporate sponsors will award prizes for winning components of the challenge. The USSRC and its foundation serve as a co-sponsor, collecting and managing the non-federal sponsor funding, which pays for all prizes (plaques, certificates, cash awards, etc.). The project is a unique competition, and there is no unnecessary duplication regarding this collection.

Top prizes are awarded to the three teams in each division (high school division and college/university division) that finish fastest, with the fewest penalties. The NASA Human Exploration Rover Challenge complies with NASA Prize Authority and Section 2B.1(6) Education Support.

Approximately 100 teams participated in the 2012 race, with 960 respondents to the various Moonbuggy information collection instruments. A summary of each instrument is provided on the Clearance Abstracts document (Attachment A) as well as in the response to Question 2 below.

Justification for Program

Education plays a role in NASA's mission to "Drive advances in science, technology, and exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth."¹ As documented in the NASA 2011 Strategic Plan, NASA's Strategic Goal 6 is to "share NASA with the public, educators, and students to provide opportunities to participate in our mission, foster innovation, and contribute to a strong national economy," with the following outcome statements to support the goal:

6.1 Improve retention of students in STEM disciplines by providing opportunities and activities along the full length of the education pipeline.

6.2 Promote STEM literacy through strategic partnerships with formal and informal organizations.

6.3 Engage the public in NASA's missions by providing new pathways for participation.

6.4 Inform, engage, and inspire the public by sharing NASA's missions, challenges, and results.

This commitment to STEM education as reflected in NASA's Strategic Plan supports our Nation's need for a robust STEM workforce. Students in STEM fields provide the workforce for vital military, government, and industry jobs, as well as supply the great thinkers needed to maintain U.S. leadership in technology and innovation.

¹ National Aeronautics and Space Administration (2011), *2011 NASA Strategic Plan*. Retrieved May 16, 2013, from: <u>http://www.nasa.gov/pdf/516579main_NASA2011StrategicPlan.pdf</u>.

There is a serious shortage of young people entering STEM fields today. This fact, combined with the high-tech workforce needs of the 21st Century and the lagging test scores indicate a lack of STEM proficiency among the next generation of explorers, and poses a bleak picture of an America that could soon be left behind.

According to the Science and Engineering (S&E) Indicators 2012*, S&E occupational employment has grown from 2.6% of the workforce in 1983 to 4.8% of all employment in 2010. Occupational Employment Statistics Survey (OES) projections for 2008 to 2018 indicate S&E occupations will grow at a faster rate than the total workforce. The report also cites data from the National Science Foundation's Science and Engineering Statistical Data System, which shows that collectively, Asians, blacks, Hispanics, and other ethnic groups (Native Americans/Alaska Natives) constituted 28% of workers in S&E occupations,² demonstrating a need to diversify the STEM workforce. STEM education research indicates that if women and minorities participated in the science and engineering workforce proportional to their presence in the general population, there would be no U.S. talent gap. STEM challenges, such as the NASA Human Exploration Rover Challenge, contribute to increasing and diversifying the STEM workforce by helping young people build self-confidence, knowledge and life skills while motivating them to pursue opportunities in math, science, and technology careers. Research on similar activities has demonstrated that increased STEM engagement and increased knowledge and skills are reasonable expectations for this type of activity.³

Authorization

NASA's founding legislation, the Space Act of 1958, as amended, directs the agency to expand human knowledge of Earth and space phenomena and to preserve the role of the United States as a leader in aeronautics, space science, and technology. High achievement in STEM education is essential to the accomplishment of NASA's mission. NASA's education investments will contribute to the agency's human capital needs.

The America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (H.R. 2272, S. 761) focused on three primary areas of importance to maintaining and improving United States' innovation in the 21st Century: (1) increasing research investment, (2) strengthening educational opportunities in science, technology, engineering, and mathematics from elementary through graduate school, and (3) developing an innovation infrastructure.

² National Science Board (2012), *Science and Engineering Indicators 2012*. Retrieved May 16, 2013 from: <u>http://www.nsf.gov/statistics/seind12/start.htm</u>.

³ See, for example, L. Jeffers (2003), *Evaluation of NYC FIRST*!, NYC: Education Development Center, Inc. Retrieved January 29, 2013, at <u>http://cct.edc.org/sites/cct.edc.org/files/publications/NYCFirst03_Report.pdf</u>.

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.

NASA promotes this event and coordinates all participant registration, largely because (1) the NASA brand/logo is highly recognized throughout the world and (2 NASA programs capture the attention of young, aspiring scientists, mathematicians, engineers, creative thinkers, and visionaries, etc., who see NASA as both a path to adventure and as an Agency with a proven track record for innovation and advancing visions into reality.

Project coordinators at Marshall Space Flight Center in Huntsville, Alabama, work with NASA contractors to promote the upcoming registration season for the NASA Human Exploration Rover Challenge and to direct those interested to NASA websites and Listservs for more information, such as registration forms and annual schedules/response dates.

NASA collects the information through two distinct data systems: one that gathers information on teams/participants, and another that collects information on volunteers to support the NASA Human Exploration Rover Challenge. The systems are managed by one NASA contractor, who performs system development and maintenance onsite at Marshall Space Flight Center. Systems are protected through e-authentication and NASA single sign-in password, with only the system administrator having access to the data that has been entered. The developer has full read/write access to the application and databases.

Team advisors from interested schools complete the registration form for the team, and are responsible for obtaining the parental consent for participants under 18 years of age. NASA designed the following forms to facilitate the information collection: Participation is voluntary; however, applicants must register in order to participate in the event.

NASA's Privacy Act Officer gathered facts about the data the application will gather and how it will be managed and determined that neither COPPA nor Privacy Act are applicable. Information in the participant system is retrieved by school name, not by an individual's name/unique identifier. The data in the volunteer system is used to print a list of volunteers, positions, and T-shirt sizes, which is used at the volunteer meeting and at the event. Communications with volunteers is done via mass email that is auto-populated and sent directly from the database. . Information will be retained for 5 years according to NASA Record Retention Schedule 1/68 C.

1.System One: U.S. Team Registration Form (MSFC Form 4605) – This Web form /information collection instrument is posted to the project website during the annual open registration season only (Quarters 2 and 3 of each fiscal year.) It is used by U.S. high school and college advisors to register teams of two to six members to participate in the NASA Human Exploration Rover Challenge. Often the school advisor differs from the designated team lead; therefore, information (name and email address) is collected from both contacts. Also, advisors might not travel to the actual

event in Huntsville, Alabama, so the team lead is used as the onsite point of contact during the actual race and for any team emergencies.

The form also collects the school name/address and participating student information to include T-shirt sizes.

Advisors also use this form to voluntarily authorize NASA to share their email address with other registered team advisors.

The information collected is used by NASA to plan and coordinate the event. Additionally, the data collected is entered into NASA's Office of Education Performance Management system, and is used by Headquarters' staff to respond to reporting requests from NASA management and others. Beginning in FY14 the project will begin submitting annual performance reports; inquiries may include requests for data in keeping with the Agency Office of Education Near-Term and Long-Term Outcomes, as well as reporting data to OMB on progress related to our Annual Performance Goals. Additionally data is/may be used in reporting to education leads in sponsoring NASA mission directorates.

2. System One: International Team Registration Form (MSFC Form 4606) -

This Web form /information collection instrument is posted to the project website during the annual open registration season only (quarters 2 and 3 of each fiscal year.) It is used by international high school and college advisors to register teams of two to six members to participate in the NASA Human Exploration Rover Challenge. Often the school advisor differs from the designated team lead, therefore information is collected from both contacts (name and email address). Also, advisors might not travel to the actual event in Huntsville, Alabama, so the team lead information is included as the onsite point of contact during the actual race and for any team emergencies.

The form also collects the school name/address and participating student information to include T-shirt sizes.

Advisors also use this form to voluntarily authorize NASA to share their email address with other registered Rover team advisors and team leads.

The information collected is used by NASA to plan and coordinate the event. Additionally, the data collected is entered into NASA's Office of Education Performance Management system, and is used by Headquarters' staff to respond to reporting requests from NASA management and others. Beginning in FY14 the project will begin submitting annual performance reports; inquiries may include requests for data in keeping with the Agency Office of Education Near-Term and Long-Term Outcomes, as well as reporting data to OMB on progress related to our Annual Performance Goals, as. Additionally data is/may be used in reporting to education leads in sponsoring NASA mission directorates.

3. **System One: Student Data Form (MSFC Form 4607)** – Each student identified by the team advisor completes this Web form /information collection instrument, providing school type (high school or college/university), advisor name, team name, school, student's first, middle, and last name, college address, city, state, zip code, phone number, and foreign country district/state/mail code, if applicable. Students may advise NASA on any special medical, physical, or dietary needs to enable NASA to plan for proper facilities and services. Gender, race, and ethnicity are also requested voluntarily. Information collected via this form is used to develop a list of participants for (1) planning and coordinating the event, and (2) reporting to NASA and others as required. Participant data is reported through the Office of Education Performance Management system at NASA Headquarters. Data is then pulled by Headquarters' staff as needed for internal performance monitoring, as well as for responding to other requests they may receive.

Advisors register a Rover team. As such, a team may comprise students from more than one college/university or high school. In this instance, citizenship must be determined to ensure students are not from an excluded country. While it may seem redundant to capture the school address on this form as well as the team registration form, the address is needed for cross-referencing.

International teams must receive a letter of invitation to facilitate their Visa acquisition process. The NASA Office of International and Interagency Relations (1) checks team registration data against the list of designated countries (countries determined by the Department of State to support terrorism, countries under sanction or embargo by the United States, and countries of missile technology concern) + View PDF and (2) also checks the legitimacy of the actual school with the NASA desk officers for those particular countries.

4. <u>**Team Photo Submission**</u> – Advisors are asked to submit a team photo. The request is sent in the confirmation email, and photos are generally submitted electronically via email. Team photo submissions are voluntary, and the photos are shown at the awards ceremony. The email reads: "Your NASA Human Exploration Rover Challenge registration is confirmed. Please don't forget to complete your student data forms by **Date** and send a team photo by **Date**. See you in April!"

Team photos were requested for the first time in 2013. Of 86 teams, only eight did not submit a photo.

5. **System Two: Volunteer Registration Form (MSFC Form 4604)** – This Web form resides on a separate system with internal access only to NASA employees and

contractors who may register to volunteer to work the NASA Human Exploration Rover Challenge. Information collected on participants includes their name, email, phone number, shift preferences, T-shirt size, employment category (civil servant, contractor, other), and contractor's name of employer where applicable. Employment category information is used for reporting participation rate to employers, when requested. Employees and contractors may also register family and friends ages 13 years or older as volunteers. There is no public access to this system, and a separate privacy assessment is being conducted since this is a separate system. Staff who have volunteered previously are notified by mass email when volunteer registration opens. A database script written in ColdFusion auto-populates the email addresses/respondent names for the greeting in the email, which is sent en mass automatically. If there are still slots available after previous volunteers register, a message is posted on a local intranet site. Volunteers receive an email from the database with confirmation of dates/shifts/positions, as well as to inform them of the date/time/location of the volunteer meeting, which is held prior to the race.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

Previously, some forms were available in PDF format; however, the system has been redesigned, and all collection instruments are now Web based. The data will be collected electronically through secure online forms. The data will be used by management to plan, coordinate, and conduct the event, to allocate resources, and to collect participant data for reporting purposes. Collecting the data electronically enables NASA to secure, maintain, and access more efficiently and cost effectively. Information will be retained for 5 years according to NASA Record Retention Schedule 1/68 C.

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.

There is no duplication involved. Applicant data are distinct and specific to this project. While students may participate in the event annually, new registration is required to ensure the most current information is obtained from advisors and students.

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

Some charter schools may operate as small businesses; however, to date, we have no record of schools operating as small businesses participating in the event. We do not collect this information, so we have no means of knowing if a charter school operates as a small. The

primary entities for information collection efforts described in this package are high school and college students, advisors, and team leads.

Additionally, NASA employees and NASA contractors may complete the volunteer registration form to volunteer themselves and family members to work the event.

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.

Without gathering the data collected through these instruments, NASA will not have the information necessary to plan and conduct the NASA Human Exploration Rover Challenge. NASA intends to collect this information annually in alignment with the competition. This is the least frequent data collection that will allow NASA to plan the annual competition. The data will be collected during the first and second quarters of each calendar year.

The minimal amount of information is collected to plan/conduct the event and to fulfill reporting requirements. The project manager works with NASA's Office of International and Interagency Relations (OIIR) to approve international participants. OIIR checks the designated countries list to ensure the country from which the team/participant is registering is not on the list. The list of "Designated Countries" is a compilation of countries with which the United States has no diplomatic relations, countries determined by the Department of State to support terrorism, countries under sanction or embargo by the United States, and countries of missile technology concern. OIIR also checks the legitimacy of the actual school requesting to participate.

There are logistical, and perhaps legal, obstacles to reducing burden for international participants. The need for preparing for international travel (passports, visas, etc.) increases their burden.

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

- requiring respondent to report information to the agency more often than quarterly; N/A
- requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it; N/A
- requiring respondents to submit more than an original and two copies of any document; $\rm N/A$
- requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years; N/A

- in connection with a statistical data classification that has not been reviewed/approved by OMB; N/A
- 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; N/A
- 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. N/A

There are no special circumstances associated with this data collection.

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.

<u>60-day Federal Register Notice</u>: The original notice was published on January 28, 2013 (FRN 2013-01648) for a 60-day review period; a revised notice was posted on Feb. 15, 2013 (FRN 2013-03527), with updated burden information. No comments from the public were received.

<u>30-day Federal Register Notice</u>: The notice was published on Oct. 3, 2013 (FRN 2013-24225), and no comments from the public were received.

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.

In FY13 the project team informally tested various forms with less than 10 adults, high school, and college students in Huntsville, Ala., in December 2012 to help determine burden estimates. With this knowledge, NASA consolidated forms and collects only essential information necessary to plan and conduct the event.

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

The NASA Human Exploration Rover Challenge complies with NASA Prize Authority and Section 2B.1(6) Education Support. As previously stated, no NASA funds are used for competition prizes, food, travel/lodging, or T-shirts for participants. Top prizes are awarded to the three teams in each division that finish fastest, with the fewest penalties, and all funding for prizes is provided by/through the USSRC.

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

Users will be presented a privacy statement specific to this collection and a link to the NASA Web Privacy Policy, as well as a notice before entering data that will include a Paperwork Reduction Act (PRA) statement, which is shown on the mockup versions of the forms provided. The notice will explain what information will be collected, under what authority, how the information will be used and by whom, and will provide a contact for updating or correcting their information.

NASA staff are informed of their duties under the NASA Privacy Procedural Requirements (NPR 1382.1), and NASA Information Technology Security Handbooks in collecting, handling, storing, and accessing privacy data. Additionally, NASA civil servants and contractors who have access to privacy data are required to sign NASA Form 1783, NASA Employee Protection of Personally Identifiable Information (PII) Responsibilities Statement annually. Both civil servants and contractors are required to complete Information Technology Security training annually, through which they learn of their responsibilities for safeguarding controlled unclassified information (CUI)/privacy data.

Records will be kept for 5 years according to NASA Retention Schedule 1/68 C.

PII will be stored on a moderate-level server at NASA's Marshall Space Flight Center. Systems are protected through e-authentication and a NASA single sign in password with only the contractor's system administrator having access to the data that has been entered. Any reporting provided to those outside of the system will be done by the administrator. The system developer has full access to the application and databases using role-based access to protect the data. Passwords are a minimum of eight characters and must be a combination of uppercase, lowercase, and special characters. The contractor assures that all data files on multi-user systems will be under the control of a database manager, with access limited to project staff on a "need-to-know" basis only. Respondents do not have access to participant data after it is submitted to NASA. Should advisors/students need to update information, they are directed to email that information to the NASA project manager, who will send a request to the system administrator to make the update. This ensures the data are protected properly. Servers are housed at Marshall Space Flight Center. All data collection servers are housed in a facility that has redundant power, expandable bandwidth and a high level of physical security. The onsite contractor's security measures comply with NASA's privacy and security requirements.

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.

Participants will not be asked any questions considered to be of a sensitive nature. Participants will be asked to provide information on any special physical, medical, or dietary needs; this information is used by staff to ensure proper accessibility (facility, audio, etc.) and appropriate nutrition are available during the event, as well as to define any special resources needed (staff, equipment, etc.

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.

Respondent counts and burden vary per form, and are based on past participation rates. A burden table displaying respondent count, frequency of response, completion time, total burden time, and cost to participant per IC instrument are provided below. In addition to general feedback received from participants over the years, we conducted informal testing of each instrument with six people to generate these burden estimates. The burden estimate is not expected to vary widely.

All information collections will be electronically submitted for fiscal year 2014. Users may print the form before submitting the data to NASA; however, they may not save/retrieve/update forms within the system once the forms have been submitted.

Estimates of Annualized Burden Hours and Cost for the NASA Human Exploration Rover Data Collections							
Data Collection Sources	Number of Respondents	Frequency of Response	Total Minutes per Respondent	Total Response Burden in Hours	Estimated Cost Per Hour	Total Cost Burden	
U.S. Team Registration (advisors: 64 local/state gov and 16 private sector)	80	1	6	8	\$27.71ª	\$221.68	
International Team Registration (advisors: local/state gov)	20	1	6	2	\$27.71ª	\$55.42	
High School and College Students Data (individuals)	610	1	3.5	36	\$7.25 ^b	\$261	
Confirmation Email (all advisors— state/local gov)	100	1	1	2	\$27.71ª	\$55.42	
Team Photo Submission (all advisors —state/local gov)	100	1	10	17	\$27.71ª	471.07	
Volunteer Registration (individuals)	250	1	3	13	\$24.98°	\$324.74	
Total Burden for Evaluation	960*			78		\$1,389.33	
Notes:		<u>I</u>					
^a Estimated cos college educato week). Based o <u>http://www.bls</u>	t per hour for advi prs (\$62,050) and h n Department of L <u>s.gov/ooh/educati</u> <u>s.gov/ooh/educati</u>	sor is calculated nigh school educ .abor statistics f <u>on-training-and</u>	l based on the me cators (\$53,230) (or 2010. -library/high-sch -library/postseco	an of the nation ~27.71 per hou <u>ool-teachers.ht</u>	ual median inco r, assuming a 4 <u>m</u> s.htm	me of 0 hour work	
^b Estimated cos http://www.do ^c Estimated cos assuming a 40-	t per hour for stud <u>I.gov/dol/topic/w</u> t per hour for Volu hour work week) f	ents is based on ages/minimum unteers is based for 2011 accord:	the U.S. federal wage.htm#.UO2c on the national m	minimum wage 50HNkYI nedian income o t Population Sui	hourly rate.	.06 per hour,	

* Advisors complete multiple forms; therefore, the respondent count shown eliminates duplication and reflects only unique participants.

13. Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (DO NOT INCLUDE THE COST OF ANY HOUR BURDEN SHOWN IN ITEMS 12 AND 14).

N/A

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 related expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from items 12, 13, and 14 in a single table.

Expense	Cost	FY13
Annual Labor (Programmer/Developer, Support Staff, Overhead)	\$10,084.12	.11 WYE
Server Administration Labor (Engineer/Programmer, Support Staff, Overhead)	\$6,248.02	.05 WYE
Server Structure (Software, Overhead)	\$331.74	
Total Annualized Cost	\$16,663.88	

The total *annualized* cost to the Federal Government is estimated at \$16,663.88. This estimate captures operational expenses associated with the implementation, operation, and maintenance to support the online collection instruments. Estimate includes software, labor, and overhead expenses during the most recent completed year (FY13). This estimate does not include research and labor associated with preparing and completing the privacy assessments and the 83-I, Supporting Statement, and pertinent documentation for seeking the PRA clearance.

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

This is an existing collection in use without an OMB control number, and NASA is taking steps to remedy/achieve compliance with the Paperwork Reduction Act. Over the years, the project team has adapted the forms based on general informal feedback from participants, resulting in the minimal collection of information necessary to plan, conduct, and report on the event/participants.

16. For collections of information whose results will be published, outline plans for tabulations 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.

Information collected will be used to plan, organize, and conduct the NASA Human Exploration Rover Challenge. Information gathered is not collected for external publication and will not be tabulated. Participant data is entered into NASA's Office of Education Performance Management system at NASA Headquarters. HQ staff may pull that data for various reports to the agency for internal performance monitoring, to OMB, to Congress, or to others as directed by NASA. Complex analytical techniques will not be used. Data will be collected during Q1 and Q2 annually.

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.

The agency plans to display the expiration date for OMB approval of the information collection on all instruments.

18. Explain each exception to the certification statement in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.

No exceptions are requested.