

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE SECRETARY OF TRANSPORTATION

AGENCY: U.S. Department of Transportation, Office of the Secretary of Transportation.

Action: Notice of the announcement of Requirements for the Secretary of Transportation's RAISE (Recognizing Aviation and Aerospace Innovation in Science and Engineering) Awards.

AUTHORITY: 15 U.S.C. 3719 (America COMPETES Act).

AWARD APPROVING OFFICIAL: Elaine L. Chao, Secretary of Transportation.

SUMMARY: Pursuant to a recommendation by the Future of Aviation Advisory Committee, the Secretary of Transportation, through the Federal Aviation Administration (FAA), is announcing the sixth annual competition to recognize students with the ability to demonstrate unique and innovative thinking in aerospace science and engineering. This competition includes a high school division and both a graduate and undergraduate university division. The Department of Transportation (DOT) intends to use this competition to incentivize students at high schools and universities to think creatively in developing innovative solutions to aviation and aerospace challenges, and to share their innovations with the broader community.

DATES: Submissions are being accepted between November 1, eastern time (ET) and noon on November 15, 2019.

FOR FURTHER INFORMATION CONTACT:

- Patricia Watts, Ph.D., Federal Aviation Administration
patricia.watts@faa.gov
- James Brough, Federal Aviation Administration
james.brough@faa.gov

SUPPLEMENTARY INFORMATION:

Subject of Challenge Competition: The Secretary's RAISE Award competition will recognize innovative scientific and engineering achievements that will have a significant impact on the future of aerospace or aviation. On behalf of the Secretary, the Federal Aviation Administration (FAA) will accept student submissions and will invite subject-matter-experts to conduct an evaluation of all qualifying entries in December.

Eligibility: To be eligible to participate in the Secretary's RAISE Award competition, students must be citizens of the United States or permanent residents. For the high school division, the students must have been enrolled in at least one semester (or quarterly equivalent) at a U.S. high school (or equivalent approved home school program) in 2019. For the university division, the student must have been enrolled in a U.S.-based college or university for at least one semester (or quarterly equivalent) during 2019. Students may participate and be recognized as individuals or in teams. Each member of a team must meet the eligibility criteria. An individual may join more than one team. There is no charge to enter the competition.

The following additional rules apply:

1. Candidates shall submit a project in the competition under the rules promulgated by the Department of Transportation (DOT);
2. Candidates shall agree to execute indemnifications and waivers of claims against the Federal government as provided in this Notice;
3. Candidates may not be a Federal entity or Federal employee acting within the scope of employment;
4. Candidates may not be an employee of the DOT, including but not limited to the FAA;

5. Candidates shall not be deemed ineligible because an individual used Federal facilities or consulted with Federal employees during a competition, if the facilities and employees are made available to all individuals participating in the competition on an equitable basis;
6. The competition is subject to all applicable Federal laws and regulations. Participation constitutes the Candidates' full and unconditional agreement to these rules and to the Secretary's decisions, which are final and binding in all matters related to this competition;
7. Submissions which in the Secretary's sole discretion are determined to be substantially similar to a prior submitted entry may be disqualified;
8. Submissions must be original, must be the work of the Candidates, and must not violate the rights of other parties. All submissions remain the property of the applicants. Each Candidate represents and warrants that s/he, or the team, is the sole author and owner of the submission, that the submission is wholly original, that it does not infringe any copyright or any other rights of any third party of which the Candidate is aware, and, if submitted in electronic form, is free of malware;
9. By submitting an entry, contestants and entrants agree to assume any and all risks and waive any claims against the Federal Government and its related entities (except in the case of willful misconduct) for any injury, death, damage, or loss of property, revenue or profits, whether direct, indirect, or consequential, arising from their participation in this contest, whether the injury, death, damage, or loss arises through negligence or otherwise;
10. The Secretary and the Secretary's designees have the right to request access to supporting materials from the Candidates;
11. The submissions cannot have been submitted in the same or substantially similar form in any previous Federally-sponsored promotion or Federally-sponsored contest, of any kind;
12. Each Candidate grants to the FAA, the DOT, as well as other Federal agencies with which it partners, the right to use names, likeness, application materials, photographs, voices,

opinions, and/or hometown and state for the Department's promotional purposes in any media, in perpetuity, worldwide, without further payment or consideration; and

13. The FAA Administrator collects personal information from Candidates when they enter this competition. The information collected is subject to the Challenge Post privacy policy located at <http://www.challengepost.com/privacy>.

Expression of Interest: Due by October 15

While not required, students are strongly encouraged to send brief expressions of interest to the FAA prior to submitting entries. The expressions of interest should be received by noon eastern time on Tuesday, October 15. Send the following to Patricia.Watts@faa.gov:

- 1) name of candidates;
- 2) name of educational institutions with which candidates are affiliated;
- 3) telephone and email addresses for nominating official and each candidate; and
- 4) a synopsis of the concept, limited to no more than two pages, providing a high-level overview of the proposed project and impact of the related research.

SUBMISSION REQUIREMENTS:

Complete submission packages shall consist of the following elements:

1. **Letter(s)**
 - a. **Cover Letter** – A formal nomination from a teacher, advisor, faculty member, or other as appropriate. Provide evidence of technical merit and following selection criteria based upon teacher (parent or legal guardian in the case of home schooled applicants), advisor, or faculty nomination and assessment of the submitted proposal, conducted research, written paper, results, and/or reports.

b. Additional Supporting Letters – no limit.

i. Technical Merit of the Concept – and additional selection criteria

ii. Professionalism and Leadership

Evidence of the professionalism and leadership should be in the form of, but not limited to:

- a) Membership and offices held in various groups
- b) Presentations made to various groups, meetings, and at symposia
- c) Leadership in student professional activities
- d) Community outreach activities

2. **Summary Statement** - An overall summary of the innovation, not to exceed one page, which includes a title of the project, a one paragraph synopsis, and a statement of the potential innovative impact the concept will have on the field of aviation or aerospace;
3. **Project Description** – A full description of the project, not to exceed 10 pages.
4. **Transcript** - A copy of each student's academic transcript or certified grade report (as applicable);
5. **Additional Materials** – no limit. Photographs and a copy of the paper(s) and related materials describing the innovative concept written by the student(s) being nominated may be included.

The FAA may request additional information, including supporting documentation, more detailed contact information, releases of liability, and statements of authenticity to guarantee the originality of the work. Failure to respond in a timely manner may result in disqualification. Electronic packages may be transmitted by email to Patricia.Watts@FAA.gov. Hard copies should be forwarded with a cover letter to the attention of:

Patricia Watts, Ph.D., L-28

Challenge Management Office

FAA William J. Hughes Technical Center

Atlantic City International Airport, NJ 08405

The submission period begins on Friday, November 1, 2019. Submissions must be received by noon on Friday, November 15, 2019. The timeliness of submissions will be determined by the postmark (if sent in hard copy) or time stamp if emailed. Competition administrators assume no responsibility for lost or untimely submissions for any reason.

Award:

The selectee is expected to be announced in 2020. A trophy with the student's name and date of award will be displayed at the Department of Transportation and a display copy of the trophy will be sent to the student's school/college/university. Each student will receive a plaque. At the option of the FAA Administrator, the FAA will pay for invitational travel expenses to Washington, DC for up to four representatives of the winning team(s) to attend an awards ceremony and for students who may also be invited to present their project(s) to FAA and DOT officials.

SELECTIONS WILL BE BASED UPON THE FOLLOWING:

The FAA will initially review entries to determine eligibility and will convene a panel of experts who may represent academia, government (officials including those within the FAA and the DOT), and representatives of the private sector. The panel members will judge the entries and rank order submissions. The FAA Administrator will review the most highly qualified entries and will make recommendations to the Secretary of Transportation. The Secretary will make the final selection(s). The Department reserves the right to not award the prize in either or both the high school category or the university category if the selecting officials believe that no submission demonstrates sufficient innovative scientific and engineering potential and/or achievements in its category.

Panel members will judge entries against other submissions from the same division or category based on the following selection criteria.

Technical Merit:

- Has the submission presented a clear understanding of the associated problems?
- Has the submission developed a logical and workable solution and approach to solving the problem/s?
- What are the most significant aspects of this concept?
- Has the submission clearly described the breadth of impact of the innovation?

Additional Criteria:

- **Originality**
 - Is this concept new or a variation of an existing idea, and in what way(s)?
 - How is this work unique?
 - Was the concept developed independently or in cooperation with others?
- **Impact**
 - To what extent does this project have the potential to make a significant impact and/or contribution to the future of the aviation and aerospace environment?
- **Practicality**
 - Who directly benefits from this work?
 - Can this program or activity be implemented in a practical fashion?
 - What are the costs anticipated to be incurred and saved by executing this concept?
- **Measurability**
 - How has this individual/group measured the impact on the aviation environment?
 - To what extent does the innovation result in measurable improvements?

- **Applicability**

- Can this effort be scaled?
- Is this work specific to one region, various regions, or to the entire nation?

All factors are important and will be given consideration; however, the advisory panel will give the “technical merit” factor the most weight in the screening process. The Secretary of Transportation retains sole discretion to select the winning entrant.

Additional Information:

- Federal grantees may not use Federal funds to develop COMPETES Act challenge applications.
- Federal contractors may not use Federal funds from a contract to develop COMPETES Act challenge applications or to fund efforts in support of a COMPETES Act challenge submission.

ISSUED on: September 24, 2019

Shelley Yak, Director

William J. Hughes Technical Center
