## ANNOUCEMENT



### The Michigan STEM Partnership, with the National Center for Earth and Space Science Education, and the Arthur C. Clarke Institute for Space Education is offering a statewide Mission Patch Competition for High School Students.

This competition is linked to the Mission 9 <u>Student Spaceflight Experiments Program (SSEP)</u> that is about inspiring America's next generation of scientists and engineers, and engaging entire communities in the process. It is a national program delivered at the local level, with student teams across a community designing and proposing real experiments to fly in orbit as the core activity. But community-wide engagement and cross-disciplinary learning are also cornerstone

objectives in the context of the embraced <u>Learning</u> <u>Community Model</u> for STEM education. Currently, the space science experiment program has been operating in two Michigan communities, Traverse City and Warren MI, but a mission patch design opportunity is available to high school students in all Michigan communities.



As a historical note, mission patches have been part of human spaceflight since the days of Project Mercury in the 1960s (see, *e.g.*, <u>this page</u> at the NASA History Program Office). The SSEP Mission Patch competition therefore allows communities to engage in another authentic aspect of the space program.

For this competition, a <u>high school student, or a student team</u> from anywhere in Michigan may design a mission patch according to the criteria below. The design should reflect community pride and the inspiration and spirit of the space science experiment program. The winning design will fly as part of a flight mission to the International Space Station(ISS) later this year. On return to Earth, it's worth noting that the Mission Patch will have traveled 400,000 miles each day aboard ISS, as ISS orbited the Earth at an altitude of 260 miles.

Designs must meet the outlined criteria and must be submitted by the deadline below.

#### **Submission Requirements:**

- 1. Entries must be received by the end of day, February 26, 2016 to the Michigan STEM Partnership:
  - a. Entries will be submitted electronically as an attachment (jpeg design file or scanned image) to the submitting email. Entries may be designed by hand or digitally.
  - b. Entries should be submitted by a school contact person not by individual students.
  - c. Schools are asked to judge entries at the local level and submit no more than the 2 top entries.
  - d. Entries should be submitted to the Michigan STEM Partnership at info@mistempartnership.com
  - e. Entries should be attached as a jpeg design file or scanned image to the email and include the names of the student(s) designing the entries.
  - f. The email *must* have the contact information for the school contact person including name, position, phone number and email address.
  - g. The email <u>must</u> include a brief description that includes the total number of students that actually participated in the mission patch design competition from your school; the grade levels of the students that participated in the competition; and the total number of patches you received from your local competition(s).

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- 2. The design should reflect community pride and the inspiration and spirit of the space science experiment program. Community pride can be reflected in the design at the School, local community, region, and/or state level. The inspiration and pride of the Space Science Experiment Program can be reflected through representations of Science, Technology, Engineering and/or Math.
- 3. A Mission Patch designed by hand must be a piece of paper <u>NO LARGER than 3.5-inch x 3.5-inch</u>, and its design should reflect pride in your community, and your spirit and inspiration for space science and STEM. If the winning entry is hand designed, that entry will be priority mailed/shipped to the Michigan STEM Partnership once notification is made. This cost is the responsibility of the submitting school. A winning digitally designed entry will be printed on a high definition printer and submitted to the National Center for Earth and Space Science Education by the Michigan STEM Partnership.
- 4. There is no restriction on the type of paper or the inks to be used. But to fly, it must be <u>paper</u> not card stock or cardboard. Patches submitted on card stock or cardboard will be (and have been) rejected.
- 5. A Mission Patch can be black & white or full color.
- 6. A Mission Patch can only be composed/printed on a single sheet of 3.5-inch x 3.5-inch paper and the ink on the paper.
- 7. A Mission Patch cannot include multiple layers of paper glued or taped on top of one another.
- 8. The winning Mission Patch will be displayed on both the SSEP and Michigan STEM Partnership websites.
- 9. The Michigan STEM Partnership will cover the cost of shipment (*e.g.*, Priority Mail) for: 1) mailing the Mission Patch to NCESSE, and 2) for return to you after the flight.
- 10. You may email the Michigan STEM Partnership at info@mistempartnership.com with questions or inquiries.

### Additional Resources

Samples of previous mission patches can be viewed at <a href="http://ssep.ncesse.org/communities/mission-patches/">http://ssep.ncesse.org/communities/mission-patches/</a>

Video describing the SSEP <u>http://ssep.ncesse.org/2014/01/nasa-jsc-interview-dr-jeff-goldstein-ssep-program-director-on-orb-1-launch/</u>



Example: Winning Patch from Mission 7