

Summer 2012 NASA Student Launch Projects Advanced Rocketry Workshop

Each year NASA Marshall Space Flight Center (MSFC), NASA Human Exploration and Operations (HEO) and ATK Aerospace Group sponsor the NASA Student Launch Projects (SLP) comprised of 2 project elements: NASA Student Launch Initiative (SLI) for pre-college students, and NASA University Student Launch Initiative (USLI) for college/university teams. SLI teams must first place in the top of the Team America Rocketry Challenge (TARC) or the Rockets For Schools (R4S) competitions to be invited to the workshop. However, USLI teams are not required to pre-qualify to participate in the workshop, nor is it a requirement to attend the workshop for university teams to submit a proposal.

The projects challenge students to design, build and fly a reusable rocket with a scientific or engineering payload to one mile above ground level. SLP engages students in scientific research and real-world engineering procedures used by NASA engineers. Teams propose to participate during the fall. Once selected, teams design their rocket and payload throughout the school year. SLP requires NASA reviews of design, safety and other elements at the preliminary, critical and pre-flight stages. After launch, teams complete a final report to include conclusions from their payload and the overall flight performance. These reviews are conducted by panels of scientists and engineers from NASA and their contractors.

In April 2012, the 2011-12 SLI and USLI teams attended a Rocket Fair at NASA MSFC and launched their rockets near Huntsville, AL. 15 SLI teams and 41 USLI university teams participated from all over the country. General information and last year's NASA Handbook of competition rules and regulations can be found at: <http://education.msfc.nasa.gov/sli> or <http://education.msfc.nasa.gov/usli>. The Alabama Space Grant Consortium assists NASA in recruiting and training students and educators, as preparation for the NASA-managed challenges.

During your time with us, you will: learn more about rockets, tour Marshall Space Flight Center, speak with NASA engineers and safety personnel, learn how to propose to participate in the 2012-2013 NASA Student Launch Projects, speak with experienced SLI and USLI past participants, and many other great things.

The workshop will provide entry-level instruction on rocketry, and a detailed description of the NASA competition process, from Proposal to Flight Readiness Review, with plenty of time for questions and answers. Each team will build a level 1 type rocket (National Association of Rocketry or NAR) in the workshop for a certification attempt. NAR rules allow that only one team member can certify per rocket and each must be a paid NAR member. If additional team

members want to certify, they must make arrangements through the ASGC to do so. Workshop attendees that successfully certify NAR Level 1 will be able to purchase and fly commercial H and I class motors (motors up to 640Ns total impulse).

The SLP rules follow the process used by NASA for the design, fabrication and launch of Space Hardware. If you have not attended a previous SLP event and are not familiar with requirements for the Preliminary Design Review (PDR), Critical Design Review (CDR), and Flight Readiness Review (FRR), you are strongly advised to send someone to a workshop.

Dates/Location:

Dates: July 18-21, 2012

Location: The Westin Huntsville, Alabama. Located at Bridge Street Town Centre (launch location will be Manchester, TN).

Hotel:

A block of rooms under the group name of "NASA Advanced Rocketry Workshop 2012" (from 7/18/12 - 7/20/12) has been reserved at:

The Westin Huntsville (<http://www.westinhuntsville.com/>)

Bridge Street Town Centre

6800 Governors West, NW

Huntsville, AL 35806

Make guest reservations by calling the Rooms Manager, Melissa Bowling, at (256) 428-5406 Monday - Friday between the hours of 8:00 am and 5:00 pm or by email at mbowling@westinhuntsville.com. Additionally, you can make online reservations at this website: <https://www.starwoodmeeting.com/Book/narw>

The block rate is for a traditional 2 double beds room at \$87 plus tax per room/per night.

The "cut-off date" for making reservations into this guest block is **June 27, 2012**.

The rooms include complimentary internet in the meeting and sleeping rooms, complimentary self-parking, state of the art fitness center open 24 hours per day, in-door/outdoor swimming pool and the hotel is located in Bridge Street Town Centre which is a shopping/dining/entertainment area (<http://www.bridgestreethuntsville.com/>).

Transportation needs will be your responsibility, however, we will be providing transportation for those taking any of the tours and transportation to/from the launch site.

Registration and Costs:

Registration Website:

[All workshop attendees must register at this website.](#)

Registration Fees:

Attend the workshop AND build a rocket (\$325 registration fee).

Attend the workshop ONLY (\$160 registration fee).

Participation of Foreign Students:

There is no requirement for U.S. citizenship in order for a student or adviser to participate in the Student Launch Projects. However, we are sorry that visits and tours of MSFC in Huntsville associated with (but not actually part of) the workshops will not be open to anyone who does not have U.S. citizenship. Please call John Gregory 256-824-6028, or Debora Nielson, 256-824-6800 to discuss this.

Anticipated Schedule of Events:

Wednesday, July 18th - Day 1: Travel to Huntsville day. Welcome reception and Student Launch Projects discussion at 6pm at Hotel.

Thursday, July 19th - Day 2: Tour Day/Student Launch Projects Discussion/Rocket Building.

Friday, July 20th - Day 3: Rocket Building/Student Launch Projects Discussion.

Saturday, July 21st - Day 4: Launch Day at Manchester, TN.

Sunday, July 22nd - Day 5: Travel home day.

NOTE: Transportation will be provided for the activities listed on days 2-4 for the tour and launch site.

If you will be participating in this event, please register no later than **Friday, July 6th**. In order to visit Marshall Space Flight Center or any other secure facility, your driver's license number is required. For those who sign up, more information will follow regarding directions, detailed agenda, etc.

We look forward to meeting each of you in the very near future. Please let us know if you have any questions.

Thank you,
John & Debora

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If you have questions regarding the Student Launch Projects (SLI/USLI) challenges, please contact Julie or Eddie (contact information below).

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