

## Summer 2012 USLI Advanced Rocketry Workshops

Each year NASA MSFC, NASA ESMD and ATK sponsor 2 rocket competitions: SLI for pre-college students, and USLI for college/university teams. General information and last year's NASA USLI Handbook of competition rules and regulations can be found at: [http://www.nasa.gov/offices/education/programs/descriptions/University\\_Student\\_Launch\\_Initiative.html](http://www.nasa.gov/offices/education/programs/descriptions/University_Student_Launch_Initiative.html). The Alabama Space Grant Consortium assists NASA in recruiting and training entry-level college and university teams, as preparation for the NASA-managed competition, to be held in April 2012 at Bragg Farms, Huntsville, Alabama. This is a notice advising you of the summer 2011 training workshops to be held prior to the 2011-2012 competition year.

This past academic year, the activity culminated in April 2011, when 17 SLI teams and 32 USLI university teams attended from all over the country. The teams participated in a Rocket Fair at NASA, MSFC and then launched their high-powered competition rockets near Huntsville, AL.

The NASA University Student Launch Initiative, or USLI, is a competition that challenges university-level students to design, build and fly a reusable rocket with a scientific payload to one mile in altitude. The competition engages students in scientific research and real-world engineering procedures used by NASA engineers. Teams propose to participate in USLI during the fall of the year prior to competition. Once selected, teams design their rocket and payload throughout the school year. NASA requires 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 science experiment and the overall flight performance. These reviews are conducted by panels of scientists and engineers from NASA and their contractors.

Workshops are managed by ASGC, with participation from NASA. Attendance at a workshop is not mandatory for acceptance into USLI, but is highly recommended for those who have not competed before. Most of the cost of the workshops is waived by the organizers.

This year, ASGC will be conducting the Advanced Rocketry Workshops in **TWO** locations:

Advanced Rocketry Workshop #1

Dates: **July 6-9, 2011**

Location: **Huntsville, Alabama** (launch location will be Manchester, TN)

Advanced Rocketry Workshop #2 (co-hosted by the New Mexico Space Grant Consortium)

Dates: **July 20-23, 2011**

Location: **Las Cruces, New Mexico** (launch location will be Las Cruces, NM)

**Workshops Registration Website:**

**<http://www.uah.edu/ASGC/USLI.php#AdvRocketryWksp>**

For the Huntsville, AL Workshop #1, a block of rooms under the group name of “NASA Advanced Rocketry Workshop” has been reserved at:

Holiday Inn Huntsville Downtown

401 Williams Avenue, Huntsville, Alabama 35801

Reservations for the Holiday Inn - Downtown, the host hotel for the July 6-9 workshop, can be made by calling 1-800-HOLIDAY (465-4329) reservation line and referencing the NASA Advanced Rocketry Workshop or use Group Code DNA or on-line at

<http://www.holidayinn.com/huntsvilleal> and using Group Code DNA. The rooms are \$89 plus tax per night. The room block deadline is June 27th, 2011.

Reservations received after the deadline may be accepted based on rate and availability. Check in is at 3:00 pm and check out is at 12:00 noon.

For the Las Cruces, NM Workshop #2, a block of rooms under the group name of “NASA Advanced Rocketry Workshop” has been reserved at:

Hotel Encanto de Las Cruces

705 South Telshor Blvd., Las Cruces, NM 88011

Reservations for the Hotel Encanto, the host hotel for the July 20-23 workshop, can be made by calling the hotel directly at [\(575\) 522-4300](tel:5755224300) or [1-866-383-0443](tel:18663830443) and referencing the NASA Advanced Rocketry

Workshop group rate. The rate is \$79 plus tax and \$2.50 convention center fee per night. The deadline to make a reservation at this group rate is Wednesday, July 6th. All rooms must be guaranteed with one night's deposit in the form of a check, money order, or credit card. Reservations received after the deadline will be accepted on a space and rate available basis only. Check in is at 3:00 pm and check out is at 12:00 noon.

You may choose to stay at any hotel, and all other 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.

During your time with us, you will: learn more about rockets, the necessity of NAR certification, go on a tour, speak with NASA engineers and safety personnel, learn how to propose to participate in the 2011-2012 NASA Student Launch Initiative program, speak with experienced SLI and USLI past participants, and many other great things, such as eating large amounts of food.

The workshops are organized into teams of 1 to 3 people. 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 rocket capable (if executed properly) of earning you NAR Level-1 certification. NAR rules allow that only one team member can certify per rocket and each must be a paid-up

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 are then able to purchase and fly commercial H and I class motors (motors up to 640Ns total impulse).

The USLI competition rules follow the process used by NASA for the design, fabrication and launch of Space Hardware. If you have not attended a previous USLI competition 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.

**Registration and Costs:**

\$100/person registration fee.

(The rest of the fees are being waived. Your main expense will be travel).

**Participation of Foreign Students:**

There is no requirement for U.S. citizenship in order for a student or adviser to participate in the USLI competition. However, visits and tours of MSFC in Huntsville and other secure facilities in New Mexico associated with (but not actually part of) the workshops will not be open to anyone who does not have US citizenship. Please call John Gregory [256-824-6028](tel:256-824-6028) to discuss this.

**Anticipated Schedule of Events:**

Day 1: Travel Day. Orientation at 6:00 pm at Hotel.

Day 2: Workshop and Rocket Building.

Day 3: Tour Day. SLI/USLI Competition Discussion (evening).

Day 4: Launch Day.

Day 5: Travel Day.

NOTE: Transportation will be provided for the activities listed on days 3 & 4.

If you will be participating in this event, please register by Monday, June 27th. In order to visit Marshall Space Flight Center or other tours, your driver's license number is required. For those who sign up, more information will follow regarding directions, 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 SLI or USLI competitions, please contact Julie or Eddie (contact information below).

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