



Kingswood Space Flight Center Highlights

Kingswood Regional High School

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Knight Space Academy Graduates 11 Cadets

The Knight Space Academy recently graduated eleven future space scientist and engineers. Participants begin as cadets and progress through the ranks each year they attend the Academy. Cadets graduating to the rank of Mission Specialist were **Tyler Roberts and Benjamin Tessier**. Graduating from Mission Specialist to Pilot were **Ryan Camp, Evan O'Dowd, Vincent Reichheld, and William Tessier**. Graduating from Pilot to Commander were **Danny Roberts, Brandon Whitmore, Sam Coache, PJ Tessier, Colin Amidon**.

As always, model rocketry was the highlight of the week. The future rocket scientists designed and built their models, discussed solid fuel motor codes, and launch safety before launching out on the test range.

Other activities included planting cinnamon basil seeds that flew on the STS 118 shuttle mission last August, learning to fly the flight simulator, building Lunar Plant Growth Chambers, studying the origin and phases of the moon and solar science.

Shuttle Main Landing Gear Tire Project

The Technology Education Department at Kingswood Regional High School has been granted a three year loan of a space shuttle main landing gear tire from NASA.

Throughout this school year, students and teachers will

construct an exhibit to honor New Hampshire astronauts and will use the tire as its centerpiece. "The project started as a collaboration between the Art and Technology Education Departments," said project manager, **Dan Caron**. "Other teachers expressed an interest while we were writing the proposal. Now that the tire is here, even more teachers are showing an interest in working on the project." Students and teachers could participate either directly by researching or building a part of the exhibit, or indirectly by organizing space awareness activities. The following departments are planning to participate: **Technology Education, Art, Music, Math, Science, Social Studies, and English**.

The tire was flown on shuttle Discovery as part of the STS 92 mission in October of 2000. That mission was the 100th mission of the shuttle program and delivered the first truss segment to the International Space Station. When told about the tire project, New Hampshire astronaut **Jay Buckey** commented, "When you realize how fast the Shuttle is going when it lands, and see the smoke that comes off these tires when they touch the runway, you know how important they are." He continued to say that he is always pleased to see students involved in space awareness activities such as this. Since five of the six astronauts with ties to New Hampshire have participated in the shuttle program, it made perfect sense to use the tire as a major component of the exhibit. The six astronauts to be honored include: **Alan B. Shepard, Jr. (Rear Admiral, USN, Ret.), S. Christa Corrigan McAuliffe (Teacher in Space Participant), Richard A. Searfoss (Colonel, USAF, Ret.), Jay Clark Buckey, Jr., M.D., Richard M. Linnehan DVM, and Lee M.E. Morin, MD., Ph.D. (Captain, USN)**.



Kingswood owes a special thanks to the **BG Harrison Thyng Chapter of the Air Force Association** for granting the money to cover transportation charges and to the **NH Aviation Museum** for their help and support of this project. In June, 2009, the exhibit will be transferred to the NH Aviation Museum, in Manchester, NH, where it will be displayed for the remainder of the loan period.

Kingswood Mentors

Kingswood Aerospace, Metals Tech and Energy, Power and Transportation classes are currently looking for email mentors. All Aerospace students are required to communicate with a mentor while only students wishing to earn honors credit for Metals and Energy and Power will work with a mentor.

Students communicate with their mentors about once every 2 weeks. Each time, they are provided with a sets of questions for the mentors to answer. These questions are designed for the student to receive information about the mentors education, career, current projects, etc. Oassionally, a student and mentor connect really well and many emails are exchanged even after the mentorship has officially ended.

We still have a need for 20 more mentors. Special thanks to the folks who have already come forward from NASA, FAA, AFA and the ANG.

If you would like more information about the program, please email Dan Caron at the address below.

What Do You Know About Shuttle Tires?

Do you have a contact at Michelin Tire? The Aerospace class has a number of questions about the shuttle tire and inside information might be the only way to find the answers.

- * What does a cross section of this tire look like? How many belts and what material are they made of?
- * How much tread was on the tire before hitting the runway?
- * Is the rubber a special formula?

If you know anyone who might know the answers to questions like this, please have them drop us an email and I'll have a student follow up.

Shuttle Tire Identification

The Aerospace Class is constructing a Shuttle Display to place in the Kingswood Library in celebration off NASA's 50th Anniversary. In order to build a little excitement, we wanted to have a contest for students to identify which tire on STS 92 we had. An email to 20+ NASA/contractor contacts on our email list resulted in an answer within 24 hours. A picture of STS 92, Discovery, landing at Edwards Air Force Base is placed near the tire. Students can complete a form to indicate which tire they think is ours. All the correct answers will be placed in a box and the lucky entry that is drawn will receive a 2 stage Loadstar model rocket. We wish to thanks all the individuals who forwarded our request to their contacts. The chain with the quickest result started from author **Lonnie Schorer** (Kids To Space), to **Lonnie Moffit** (JSC), to **Carlisle Campbell** (JSC). Thanks again to everyone who helped on this. We'll publish the information in the next letter (after the contest!). Now...does anyone have a contact at Michelin? (See above)

For additional Information concerning any of the above activities, contact:

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