

## **Kids Reach For The Stars Astronaut's Parents Team Up With Local Hams To Emphasize Science & Technology**

A project by a local ham radio group to make contact between Col. Pamela Melroy, USAF (ret) current commander onboard space shuttle mission STS-120 and her parents, Dave and Helen Melroy from Rochester, has blossomed into an educational program that includes 10 school districts in Western N.Y. The goal is to inspire and excite the children about their science, math, and technology studies by giving them hands-on experience with practical applications for what they learn in the classroom.

RIT Amateur Radio Club advisor Jim Stefano – Electrical Engineering, was approached by an Amateur Radio group based in nearby Ontario County, to assist them in setting up a live Video Conference with NASA's Johnson Space Center in Houston, TX. The original plan a year ago was to contact Pam Melroy while orbiting the earth after docking with the International Space Station. Due to a change in the mission date and subsequent onboard schedule conflicts, the contact could not be made. Visits that Col Melroy had planned to 2 local schools in mid October also had to be postponed. That's when the Melroys and the Ham Operators, got the idea of putting together a program to supplement the visits. As word of the program spread, more schools were added, as well as two more Ham Radio organizations from Rochester and Buffalo. Ham Radio plays an integral part of technology in the space program and interestingly, an overwhelming majority of astronauts worldwide are also licensed Ham Operators.

The program includes school visits by the Melroys, where they talk about their daughter's experiences leading up to her becoming an astronaut along with experiences on previous missions. They also show educational videos from NASA and Col. Melroy made a video specifically for the project. The Hams do presentations on wireless technology, communications skills, emergency communications, and let the students talk to Hams around the world right from their classroom. On October 30, at 10 AM, there will be a live interactive Video Conference between all the schools and astronaut Sandy Magnus at Mission Control, Houston. The connections for the conference are being arranged through James Stefano, of the Electrical Engineering Dept. at RIT and Gurcharan Khanna, Director of Research Computing at RIT and Elaine Lauerman, Program Manager at Internet2. NASA has assigned an advisor from their Education Dept to answer teachers' requests for resources and information and is also providing projects such as the "Seeds From Space" program, promoted by Teacher In Space Barbara Morgan, on the last shuttle mission. Col. Melroy who grew up in Rochester, plans to visit the 2 schools in early 2008.

More information on Amateur Radio on the International Space Station can be found at <http://www.rac.ca/ariss/>.

For more information about this event, contact Jim Stefano at x5-2768 or [jvseee@rit.edu](mailto:jvseee@rit.edu).

# Kids Reach For The Stars

## Astronaut's Parents Team Up With Local Hams To Emphasize Science & Technology

Jim,

On behalf of the administration, faculty and especially the students of Marcus Whitman I want to thank you for all of your help with the NASA Video Conference. I appreciate the extra time you took to explain the ins and outs of video conference standards, equipment and procedures to us since we have not ventured down this road before. We could not have participated without your help.

I have heard many wonderful comments and feedback about today's event from both staff and students. Please let us know if there are other opportunities where we could participate, or if we can assist you in some project in the future.

Our sincerest thanks to you for your assistance,

Brenda

Brenda Lehman  
Technology Coordinator  
Marcus Whitman Central Schools  
Rushville, NY

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Gurcharan,

I want to thank you for arranging the NASA Video Conference through Internet2. The conference was an overwhelming success with 9 schools simultaneously participating in the event with the NASA Johnson Space Center in Houston. The video/audio was flawless and the students had quite an experience! See some of the feedback below.

Jim

James Stefano  
System Administrator, Electrical Engineering  
Rochester Institute of Technology  
Rochester, NY

Jim,

On behalf of the students and staff at Hamburg who participated in today's conference, I want to congratulate those responsible for initiating this conference.

It is new territory for us; we learned something about what it takes to get ready to participate, as well as something about the space station. We had two locations, one elementary and one high school. In both cases, the students were intrigued and attentive.

Tom Nemmer  
Director of Technology  
Hamburg Central Schools  
Hamburg, NY

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Elaine, Megan,

I want to thank you on behalf of RIT and the Rochester area schools that participated in a video conference with NASA on October 30, 2007. The use of I2 Commons facilities enabled nine schools to speak live with astronauts at the Johnson Spaceflight Center in Houston during the mission of STS-120 commanded by Col. Pamela Melroy, USAF (ret), a local high school graduate.

Everyone had a great experience and appreciates all the efforts made to facilitate it.

Thanks very much,

-gurcharan

Gurcharan Khanna  
Director of Research Computing  
Rochester Institute of Technology  
Rochester, NY