

## Radio Amateurs of Canada Youth Education Program

## **NEWSLETTER #5**

December 8, 2004

## **Grade 6 Space Studies Launched With Amateur Radio**

Neil Carleton - VE3NCE R. Tait McKenzie Public School, Almonte, Ontario December 8, 2004

As a grade 6 teacher, I know that amateur radio is a great way to reach out and bring the world, and space, into my classroom. Each year I use radio at school with my class, and as an after school club, to make connections across the curriculum. This week my students and I are using amateur radio to launch our grade 6 studies of space.

Tomorrow, on Thursday, December 9, as part of a national pilot project, my grade 6 students and I have been invited to monitor the amateur radio contact between the International Space Station (ISS) and students at Manordale Public School, in Ottawa. This exciting project is part of the Amateur Radio on the International Space Station (ARISS) program. For internet information about how students at your school can talk with an astronaut on the ISS, go <a href="http://www.rac.ca/ariss">http://www.rac.ca/ariss</a>

Just after recess on Thursday afternoon, we'll be connecting by amateur radio to the Internet Radio Linking Project (IRLP), a unique Canadian invention, and listening to the live ISS contact through an IRLP reflector in Saskatoon, Saskatchewan. Although the ARISS contact with the students at Manordale is scheduled for 1717 UTC, or 12:17 p.m. Eastern, it's possible that the contact will start a little later because the ISS is experiencing some greater than normal atmospheric drag.

My school in eastern Ontario, about 55 km west of Ottawa, has been invited to take part in this national IRLP pilot project as a participating school in the Radio Amateurs of Canada (RAC) Youth Education Program (YEP). Five Canadian schools, from coast to coast, will be listening in tomorrow as part of this unique opportunity to connect students at school with the wonders of space. They are, from east to west:

- New Germany High School, New Germany, Nova Scotia;
- R. Tait McKenzie Public School, Almonte, Ontario;
- Walter Murray Collegiate Institute, Saskatoon, Saskatchewan;
- Chestermere Lake Middle School, Chestermere, Alberta;
- Central Middle School, Victoria, British Columbia.

As we listen through repeater VE3KJG, at Lavant in eastern Ontario, my grade 6 students will be carefully following each question from Manordale, and writing down the answers from space as the ISS passes high overhead in orbit. We'll be preparing for the contact by reading and talking about the ISS, and learning about the activities of the expedition 10 crew. On the blackboard will be a large poster of the Space Station, and we'll be figuring out what each component is used for. After the contact, we hope to exchange greetings by amateur radio with the students at each of the other four participating schools in Canada.

Amateur radio is one of three space projects at our school this week. We have a display, complete with thank-you banners in front of the school office, of three telescopes that have been generously donated to our classroom by community residents. If you were able to visit our school, you'd also see an exhibit about comets, in front of the school library, from our regional conservation authority.

On November 23, 2001, at 5:46 a.m., before most people are even awake, our school was the second in Canada to have students speak by amateur radio with an astronaut in orbit on the ISS. Thanks to a small army of generous community volunteers, including the dedicated and talented members of the Almonte Radio Repeater League, nine students from kindergarten to grade 8 at our school took turns stepping up to microphone and speaking by amateur radio with the Commander of the ISS. Before the Space Station disappeared over the horizon, the audience of more than 400 parents, students, staff and other community residents broke into enthusiastic cheers, applause and whistles to let the Commander know that this remarkable event would be remembered for many, many years in our community. For months afterwards, it was not uncommon for people to stop me in the street, or at the post office, to talk about what a special event our ARISS contact had been.

Details of our school's successful ARISS contact, including a digital recording of the event, can be found at the web site of the Almonte Radio Repeater League, at <a href="http://www.igs.net/~va3aar/">http://www.igs.net/~va3aar/</a>. Dr. Marc Garneau, Canada's first astronaut in space, and the President of the Canadian Space Agency (CSA), invited each of the participating students at our school to write an essay about their experience. The student essays, and the transcript of our school's 2001 ARISS contact, are available at <a href="http://www.space.gc.ca/asc/eng/youth">http://www.space.gc.ca/asc/eng/youth</a> educators/kidspace/creations/text/iss.asp

The next class project here in room 22 is to organize a night sky viewing session. On the first clear night in December, everyone in class will be outside at school with family members exploring the night sky with our donated telescopes, looking for the ISS, and marveling at the wonders of space. Thanks to amateur radio, we'll also have a whole new perspective of the Space Station when we see it as a bright light crossing the night sky over our small part of the world.

Thanks, Neil, for an excellent report. A lot of people will be cheering for the success of Thursday's undertaking.

73,
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