



December 2006

Quinte Amateur Radio Club Inc. Newsletter

PO Box 23039 BELLEVILLE Ontario K8P 5J3

SPECIAL EDITION

International Space Station Contact

On Monday November 20, 2006 students of Madoc Public School and Centre Hastings Secondary School had the opportunity to ask ISS Commander Michael Lopez-Alegria (KE5GTK) a total of 21 questions.

Co-organizers **Liza Allan**, Educational Assistant at Madoc Public School and **Rob Allan**, Teacher at Centre Hastings Secondary School and students in the Space Club, along with members of the Quinte Amateur Radio Club have been preparing for this day for close to a year. The students have been researching Expedition 14 and learning techniques for communicating by amateur radio.

The contact is possible through ARISS—Amateur Radio on the International Space Station. ARISS arranges amateur radio contact between astronauts and school children. These events provide valuable learning opportunities for young people by introducing them to communications technology.

The radio equipment used was provided and operated by members of the Quinte Amateur Radio Club **David Ward VE3BIP**, **Tim Pekkonen VE3UO**, and **Peter Hodgson VE3UR**. Additional equipment and advice were provided by Canadian ARISS Mentor/ Coordinator **Steve McFarlane VE3TBD**, and **Lori McFarlane**.

This was contact number 258 in the ARISS program, the 14th in Canada, and the 5th in Ontario since the first ARISS contact was made on December 21, 2000.

Dave VE3BIP, Tim VE3UO, and Peter VE3UR would also like to thank the following Amateurs for their assistance and moral support on the day of the contact:

Brian Smith VA3BS, Keith Harvey VA3KRV, Kevin Maylin VA3THB, Paul Davidson VE3UUM, and Joe Davidson VA3JAD.

Transcript of the actual contact

The following was produced by QARC Secretary, Bob Moore VE3QWB. The questions were taken from the ARISS website, as they are usually made public ahead of time and the Astronauts on the ISS know what is to be asked. Bob VE3QWB transcribed the answers given by Michael Lopez-Alegria KE5GTK.

Here is the transcript:

Madoc (VE3BIP, Dave): NA1SS NA1SS VE3UR How copy ?

ISS: Victor Echo Three Uniform Romeo, this is November Alpha One Sierra Sierra - How do you hear me ?

Madoc (VE3BIP, Dave): Ok, good copy, we have a bunch of students here want to ask you questions.

#1 Madoc: With each supply shipment to the ISS sending more water from Earth, we are taking away a precious resource. A colony on the Moon would need lots of water, which would be obtained from our finite supply on Earth. Will this water be returned or is it lost forever ? Over

ISS: Rebecca that's a very good question. As it turns out, we don't actually use all that much water up here and the reason is that we can recycle condensate, which is stuff that happens from sweating and from breathing, and on station we don't do it yet, but we plan to start recycling urine, believe it or not. Doesn't sound very good but it actually works pretty well, and at that point of course we will have almost zero consumption, net consumption, of water so it shouldn't be an issue in the future.

#2 Madoc: With business tycoons like Richard Branson looking to expand their companies into the cosmos via commercialized space travel, has it now been decided that space travel is to become a routine commercial practice ? Over

ISS: Graham, I think that is in fact the way of the future, I'm not sure I would call it routine just yet, but I think that probably not in the too distant future we will start to see it develop like the airline industry did you know about a hundred years ago or so.

#3 Madoc: The Canadian Space Agency and NASA are having you test your hand-eye co-ordination on the shuttle. Do you play video games on the ISS as well as doing this experiment ? Over

ISS: We don't have any video games but we will be participating in that very same experiment called TRACK so it should be very interesting. It is pretty challenging to do on the ground anyway we'll see how it is in space. Over

#4 Madoc: Chris Hadfield was calm when he told us about the Russian Progress 23 cargo ship having difficulties docking with the ISS and the ISS losing power. Are all astronauts that calm when under pressure ? Over

ISS: Of course we are! Well seriously we train for those kinds of situations so hopefully we can not get too emotional when the chips are down.

#5 Madoc: What is your favourite song to play on the guitar while on the ISS ? Over

ISS: Sarah, I don't play the guitar up here Thomas (Reiter) does I try to play the piano once-in-a-while. My favourite song – he actually is a very good guitar player and I have several songs that he plays that I like very much. Over

#6 Madoc: Mr Hadfield told us Russian bread has a four year shelf life, does it taste the same after four years of not being eaten? Over.

ISS: I'm not sure, what do you think? I'm guessing it doesn't taste so good after almost four years. But luckily the food we have up here isn't even close to approaching it's life expectancy, so it tastes ok.

#7 Madoc: Your mission has four EVA's, have you ever stood on the end of the Canada Arm two ? Over

ISS: Meghan, I have never had the pleasure of standing on the end of the Canada Arm two, I have stood on the end of the Canada Arm One, even though I don't think we call it that, the one that's on the shuttle, but not on the one attached to the space station. Over

#8 Madoc: Luke Skywalker fought a spherical droid in Star Wars. Are the two spheres on the ISS like pets to you ? Over.

ISS: Well they're not really like pets, they are pretty cool to watch but you have to spend a lot of time setting up and programming them, so it's not like they are hanging around all the time. Over.

#9 Madoc: Can you see Heaven from the ISS ? Over.

ISS: We can see what I would call "The Heavens" from ISS, we usually end up looking down toward the Earth though, so if we expect heaven to be above us, then we don't really have any windows that look in that direction. Over

10 Madoc: If you get appendicitis while on the ISS what can you do about it ? Over

ISS: Well there are a few things that could happen, appendicitis being one of them that would cause us to have to go home. Our Soyuz craft that brought us up here we have on standby like a permanent life boat, so we would just hop in that and in a few hours we could be on Earth. Over

#11 Madoc: You are doing a study related to immune function and virus activity. Has an astronaut or cosmonaut ever fallen ill while aboard the ISS, and if so, what health measures were taken ? Over.

ISS: Well Rebecca we have lots of medical equipment up here and we get lots of training but fortunately nobody has ever gotten ill in a very serious way or even in a minor way, it turns out there is not very much in the way of germs up here, so we stay pretty healthy.

#12 Madoc: In your personal opinion do you believe that there is, or ever was, life on other planets such as Mars ? Over

ISS: I'm not sure about Mars but I am convinced that there is life elsewhere other than just on our planet, the solar system, I should say the universe, is too large for us to be the only one with intelligent life. Over

#13 Madoc: On the ISS are there any communications problems between the crew due to language or cultural differences ? Over

ISS: That is a good question Tess, all of us speak each other's language at certain times and it can be difficult to make yourself understood, but we do a pretty good job, we get a lot of training and I think we are doing ok. Over

#14 Madoc: When the Progress cargo ship was docking you had a problem with the antenna, ARISS became your mode of communication to Earth. How did you fix the antenna reaction problem ? Over

ISS: We haven't fixed it yet, in fact we are going to be doing a space walk in a couple of days and that is one of the things we are targeting to see how that thing is doing and put it back in it's place if necessary. Over

#15 Madoc: Mr Hadfield said he brought a guitar to the ISS. Does it go out of tune more in space then on earth ? Over

ISS: Sarah, I'm not sure, I would guess that it does not go out of tune because I think the force of gravity is pretty small compared to the force of tension in the strings, but I haven't studied that to be precise.

16 Madoc: How do you protect yourself from germs with limited amounts of water on the ISS ? Here we hand wash. Over

ISS: As I said before, there aren't that many germs up here it turns out, so we do ok, and we do stay very clean. We have a lot of towelettes that are premoistened with a disinfectant solution, so we end up staying pretty clean up here. Over

17 Madoc: Spheres are like Tamagotchies, do the red and blue ones shut down when you go to bed ? Over

ISS: Meghan I have to confess I have no idea what a Tamagotchie is, but yes, they do shut down, they power down until we get them out every once-in-a-while, so normally they are in their little boxes. Over

#18 Madoc: When you look out the windows of the ISS do you see the planets and which one is your favourite ? Over

ISS: You know the view of the sky from here isn't terribly different than it is from Earth, of course the benefit is that we don't have any light pollution so when we turn off the lights inside we can see the planets, and especially the stars, pretty well. I haven't really taken the time to look at anything but the moon yet but that's on my list of things to do. Over

Madoc (Liza Allan): Good luck on your space walk Wednesday, Expedition Fourteen, we hope that you have 'Caught the Spirit' of Centre Hastings Secondary. Here is one last question:

#19 Madoc: You're measuring the exposure of cosmic radiation of your crew. Are you concerned about getting cancer ? Over

ISS: I don't think I am any more concerned than the average citizen, of course it is a terrible disease. But you are right we take measurements of exposure that we get and I just want to pass on that I did 'Catch The Spirit' of your school. I wish you all the best and Happy Thanksgiving coming up. Bye Bye

#20 Madoc: One last question. You are trying to grow Lentil seeds in artificial gravity, have they sprouted ? Over

ISS: We haven't started that experiment yet but we have had good success growing plants in the past up here so I think we will be ok. Over.

21 Madoc: For Mikhail Tyurin: Would a hole in one be hitting the Canadian E21 golf ball into a crater on the moon ? Over

ISS: I have to say Rebecca that would be pretty spectacular, I wish him well but I don't think he will be able to hit it that far. But thanks for your questions you guys, it was great talking to you.

Madoc: Thank you commander - (many voices say: " 73 to the ISS – Over " followed by group cheers & applause)

ISS: 73 to Centre Hastings Secondary, have a nice day you guys. Bye Bye.

Ernie Parsons Members Statement in Ontario Legislature – November 14, 2006

QUINTE AMATEUR RADIO CLUB

Mr. Ernie Parsons (Prince Edward-Hastings): There are about a hundred thousand reasons why I'm proud to represent the riding of Prince Edward-Hastings, that number reflecting the number of individuals who live in my area.

I would like today to recognize a group of my constituents who since 1947 have very quietly contributed to our community. They're the members of the Quinte Amateur Radio Club. This club was formed by a group of engineers from Northern Electric, now Nortel. While obviously the club was formed to enable hams to communicate with each other, they have considerably extended the services they provide to our community. The Quinte Amateur Radio Club has regularly become involved in such events as the Super Cities Walk for MS, the Cheerios Mother Daughter Walk for Heart and Stroke, the Belleville Community Policing Halloween Safe Streets project and the Prince Edward County Marathon. They performed yeoman service during the ice storm a few years ago.

I'm particularly excited by the most recent project, which is supporting one of our schools, Centre Hastings Secondary School, to have direct radio contact with astronauts on the International Space Station, scheduled to happen on Monday, November 20. This will be only the 14th radio contact by a school with ISS in Canada and the fifth in Ontario. I am especially proud that this will be the only contact for this space station crew with any school in North America. This fantastic experience for the students is possible only because of this radio club and the wonderful work done by the teachers in our school system.

I would like to take this opportunity to congratulate the Quinte Amateur Radio Club on their 60th anniversary and to thank them for the tremendous contribution to our community and province.

NOTE: MP3 Audio files of the previous two transcripts can be found at the Quinte ARC website: <http://www.qarc.on.ca/ariss.htm>



Lori McFarlane, Liza Allan, Rob Allan, Steve McFarlane and the students of the Madoc Space Club



Tim Pekkonen VE3UO Peter Hodgson VE3UR Dave Ward VE3BIP

Summary of Canadian ARISS Contacts

#258 November 20, 2006 16:35 UTC, Centre Hastings Secondary School, **Madoc ON** VE3UR
Contact with: Expedition 14 (Michael Lopez-Alegria KE5GTK)

#239 May 4, 2006 18:08 UTC, Jaaimmarik, Kuujjuaq QC (telebridge -VK5ZAI)
Contact with: Expedition 13 (Jeff Williams KD5TVQ)

#233 March 21, 2006 18:17 UTC, Sir James Lougheed Elementary, Calgary AB VE6AFO
Contact with: Expedition 12 (William McArthur KC5ACR)

#209 December 2, 2005 17:59 UTC, Ralph McCall School, Airdrie AB VE6JBJ
Contact with: Expedition 12 (William McArthur KC5ACR)

#184 June 17, 2005 13:34 UTC, Ecole De la Source, Mascouche QC VE2CRL
Contact with: Expedition 11 (John Phillips KE5DRY)

#155 December 9, 2004 17:17 UTC, Manordale Public, **Ottawa ON** VE3KID
Contact with: Expedition 10 (Leroy Chiao KE5BRW)

#154 November 30, 2004 16:17 UTC, Ecole Secondaire Fernand-Lefebvre, Sorel-Tracy QC
VE2DWE - Contact with: Expedition 10 (Leroy Chiao KE5BRW)

#101 June 14, 2003 17:29 UTC, Ecole Primaire de L'Apprenti-Sage, Quebec, QC VE2CQ
Contact with: Expedition 7 (Ed Lu KC5WKJ)

#100 June 12, 2003 19:22 UTC, Lively District Secondary School, **Lively ON** VE3CWJ
Contact with: Expedition 7 (Ed Lu KC5WKJ)

#98 April 21, 2003 18:15 UTC Cowichan Secondary School, Duncan BC VE7CVA
Contact with: Expedition 6 (Donald Pettit KD5MDT)

#73 September 27, 2002 13:41 UTC Joamie Ilniarvik, Iqualuit, Nunavut (telebridge ZS6BTD)
Contact with: Expedition 5 (Peggy Whitson KC5ZTD)

#43 Celebration of Marconi's First Transatlantic Wireless – Memorial University NFLD
December 12, 2001 19:31 UTC, St John's Nfld VO1S
Contact with: Expedition 3 (Frank Culbertson KD5OPQ)

#39 November 23, 2001 10:47 UTC, McKenzie Public School **Almonte ON** VE3AKV
Contact with: Expedition 3 (Frank Culbertson KD5OPQ)

#5 February 22, 2001 18:29 UTC, Merivale Public School, **Ottawa ON** VE3TBD
Contact with: Expedition 1 (William Shepherd KD5GSL)

QARC Christmas Dinner

The QARC Christmas Dinner will be on Wednesday December 13, 2006 at the Swiss Chalet Restaurant, 15 Bell Blvd, Belleville. 'Meet and Greet' at 6:30 PM - Dinner at 7:00 PM. Please RSVP to Mike Papper ve3ox@rac.ca at 613-969-1744. Be sure to include how many in your party will be attending.

From the Executive

On behalf of the executive of the QARC "have a Merry Christmas and Happy Holidays". Thanks to all of our Club members for their participation in the many events that took place in 2006. Your participation is the reason the Club has flourished for 60 years.

60th Anniversary in 2007

We are working on several projects for our 60th Anniversary. As the Kingston Amateur Radio Club also celebrates it's 60th, we will have a joint dinner, most likely in late April or early May in Napanee. More information will be available early in 2007.

We are also planning an 'Open House' style of meeting for April 18, 2007, and plans are underway to take a group photo in June.

Tour of the County Foxhunts

The Spring and Fall dates have been tentatively set for Saturday May 5, 2007 and Saturday October 13, 2007. This event has been occurring for a few years now and if nothing else is a good excuse for wandering around 'The County'. There are three transmitters hidden somewhere within the boundaries of Prince Edward County which have to be located in a three hour period. Further information about this event can be found on the club's website at <http://www.qarc.on.ca/countyfox.html> .

Speakers Wanted !

The Executive is always looking for speakers to share some knowledge of what part of the amateur radio hobby you are interested in. Whether it's DX'ing, building projects, foxhunting, working satellites, etc, your fellow club members would like to hear about it! If you have a topic you would like to talk about but feel it's only a 15 – 20 minute presentation let us know about that too. Perhaps one of our upcoming meetings could be an evening of two or three smaller presentations. Contact Mike VE3OX with your topics and suggestions.